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TECHNICAL MANUAL

COMPREHENSIVE ENGINE MANAGEMENT SYSTEM ENGINE CONFIGURATION, STATUS AND TCTO REPORTING PROCEDURES

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CHAPTER 1

GENERAL INFORMATION - ENGINE REPORTING

1-1 INTRODUCTION TO ENGINE REPORTING.

1-1.1 This Technical Order (T.O.) provides policies and procedures for the uniform and efficient management of propulsion units. This T.O. provides the responsibilities and instructions for engine reporting. It applies to all regular Air Force, Air Force Reserve Command (AFRC), Air National Guard (ANG) and contractors performing services under contracts which require reporting to the Comprehensive Engine Management System (CEMS).

1-1.2 The primary objective of CEMS (Propulsion Unit Centralized Accountable Record (D042), Stock Record Account Number (SRAN) (FJ2031) is to obtain accurate information on the status, condition, and location of aircraft engines in the Air Force inventory. Selected components are also reported in CEMS to track certain life limiting parameters while the engine is installed. The FJ2031 account is the USAF accountable record for engines. Tracked components removed from the engine will be turned in and accounted for under normal supply accounting systems.

1-1.3 There are various methods of reporting data to CEMS; Core Automated Maintenance System (CAMS), direct line reporting (DLR) and mail. HQ AMC units are also required to report to CAMS for Airlift (G081). Base engine management FJXXXX account will be mechanized. AFTO Form 93, ENGINE TIME/ CYCLE ACCUMULATION; AFTO Form 95, SIGNIFICANT HISTORICAL DATA and AFTO Form 349, MAINTENANCE DATA COLLECTION RECORD transactions will be entered into the base level CAMS and CEMS through established interfaces. Activities with DLR will report status, configuration, and Time Compliance Technical Order (TCTO) data to CEMS directly. Computer data links have been established between some major contractors and CEMS. This provides a direct method of reporting new production data on engines and parts they produce. Activities without CAMS or DLR will employ mail/e-mail or fax to report data to the prime ALC for direct reporting input to CEMS. Appropriate AF Forms 1534, CEMS CDB REPORT; AFTO Form 93, Engine Time/Cycle Accumulation Report; and AF Form 1559, D042 TCTO STATUS REPORT can be used to facilitate this mail information to CEMS.

1-1.4 Commanders must ensure that controls are established to monitor and police the accuracy and timeliness of CEMS IAW this T.O. The reporting systems must maintain accurate and timely engine inventory, surveillance of the base repair, transportation, overhaul segments of the engine pipeline and historical data to forecast funding and replacement requirements. For information on accessing CEMS, use T.O. 00-25-254-2, for CAMS use AFCSM 21-558.

1-2 RESPONSIBILITIES.

1-2.1 Headquarters USAF will:

a. Maintain general surveillance and provide overall policy guidance for the management of engines and the CEMS reporting system.

b. Provide overall policy guidance and insure applicable Air Force managed engine Type, Model, and Series (TMS) are included in the FJ2031 accountable records as prescribed in AFMAN 23-110.

c. Appoint lead commands to conduct various engine management test programs.

1-2.2 Propulsion Product Group Manager (PPGM) (OC-ALC/LR) will:

a. Review and rewrite this T.O.

b. Periodically survey and analyze the policies and procedures used, collect, process, and distribute engine data.

c. Provide representatives to the CEM's conference when requested.

d. Ensure that ALC SRAN EM's submit AF Forms 1534, 93, and 1559 data as prescribed in this T.O.

e. Ensure that all aircraft SPOs, ALC EIMs or any other office/organization writing or responsible for a contract involving movement of aircraft and/or engines include the propulsion data reporting requirements in this T.O.

1-2.3 Command Engine Managers will:

a. Provide PPGM with changes to command directives on CEMS reporting.

b. Provide command engine management data, as prescribed in this T.O. or as requested by PPGM.

c. Ensure reporting directives for special projects are implemented.

d. Ensure each reporting activity in the command has an assigned EM and assistant at all times.

e. Ensure each assigned EM and assistant receives appropriate formal training in engine management.

f. Contact OC-ALC/TILC to solve reporting problems requiring clarification.

g. Contact PPGM on problems with reporting policies.

h. Convene periodic meetings with all BEMs in their command to clarify reporting procedures and to discuss and solve problems associated with base level engine management. OC-ALC/TILC and SSG/ILM are available to assist in clarifying and solving reporting and accounting problems.

i. Inform OC-ALC/TILC of a change in BEM in their command and ensure the new or outgoing BEM requests an inventory.

j. Inform OC-ALC/TILC of a change in BEM or assistant in their command so that SRAN directory can be updated.

k. Police CEMS reporting as required by this T.O. and initiate action to have CEMS reporting errors and variances corrected promptly.

1-2.4 Base Level and/or SRAN Engine Managers will:

a. Assume responsibility and maintain the FJXXXX account IAW this T.O. and AFMAN 23-110.

b. Administer the base engine management program and maintain currency of all engine status, transportation, and information management matters for the FJ account.

c. Establish local procedures requiring base organizations to provide data for CEMS reporting of engines, tracked components, TCTO compliance.

d. Reconcile data between engine and aircraft historical data as required.

e. Assign reports location codes to organizations that prepare CEMS reports.

f. Ensure each organization identifies personnel responsible for CEMS reporting and ensure training is provided and documented.

g. Monitor CEMS reporting from activities within their area of responsibility for accuracy and timeliness of data.

h. Review EMDL daily.

i. Submit error and/or variance correction report the day received IAW T.O. 00-25-254-2 and this T.O.

j. Ensure engine inventory report is completed and returned IAW this T.O. and AFMAN 23-110.

(1) The designated Alternate Engine Manager must fulfill this responsibility in the absence of the Assigned Base level and/or SRAN Engine Engine Manager.

k. Ensure engine flying time, status and TCTO reconciliation reports are completed and returned IAW this T.O.

l. Submit requests for changes to the SRAN directory to OC-ALC/TILC through their CEM.

m. Upon notification a new BEM has been assigned, the current BEM will request and accomplish a physical inventory IAW AFMAN 23-110 and this T.O. The old and new BEM must sign the inventory report, forward to OC-ALC/TILC and notify appropriate CEM upon completion.

n. Contact the CEM first to resolve reporting problems not covered in this T.O.

o. Investigate and resolve delays involving maintenance or supply.

p. Investigate and resolve transportation problems or delays.

q. Initiate tracer action to locate assets shipped or transferred to another SRAN when not received within the required time frame of (20) calendar days for a shipment, or (10) calendar days for a transfer.

r. Consider assets lost if not receipted within the above time frames and initiate ROS within (5) calendar days.

s. Obtain disposition instructions for excess engines from the CEM.

t. Ensure the handling, transportation, storage and receipt of shipping devices for engines are properly documented, maintained and reported.

u. Ensure parts requirements for engine not mission capable supply (ENMCS) are accurately reported and promptly requisitioned.

v. Ensure engine shipments are properly documented and authorized.

w. Notify the CEM of all transactions or condition codes ML or LL that cannot be processed to the CEMS CDB. Establish specific procedures for obtaining required reporting information from deployed activities when reporting responsibilities are retained at the home SRAN.

x. Maintain responsibility for propulsion assets when sent to a Contract Field Team facility. Do not transfer to nearest active SRAN. The policy applies regardless if the aircraft is intended to return to home station, or destined for another organization after the CFT.

(1) If an aircraft leaves a depot facility, going to a CFT enroute to it's intended gaining organization, that final gaining organization will assume responsibility for that aircraft upon release from the depot.

(2) In coordination with your command engine manager, establish a method of reporting status changes and updates to CEMS for propulsion assets temporarily possessed by Contract Field Teams (CFTs).

1-2.5 OC-ALC Commander will:

a. Appoint a propulsion unit accountable supply officer and provide a staff to maintain the USAF centralized record, FJ2031. Specific offices at OC-ALC responsible for developing and maintaining CEMS are identified as follows:

1-2.6 OC-ALC/TILC will:

a. Develop, integrate and maintain CEMS based on requirements approved by the Configuration Control Board (CCB).

b. Monitor and maintain the data gathered and reported by SRAN EM's and other CEMS reporting activities.

c. Operate the USAF FJ2031 centralized record for CEMS reporting covered by this volume and correspond directly with bases, major commands, contractors, SSG, other services and accounts on all maintenance policy and correction of the FJ2031 records.

d. Develop drafts of proposed changes to policies and procedures and forward a copy to the PPGM for approval.

e. Develop and maintain the EJ-FJ SRAN information directory.

f. Establish, publish, and maintain T.O. 00-25-254-2 and this T.O.

g. Provide representatives to the CEMs conferences.

h. Provide representatives to the Propulsion Management Committee (PMC).

i. Ensure full compliance with the responsibilities and duties prescribed in AFMAN 23-110 and AFI 21-104.

j. Monitor the timeliness, accuracy and responsiveness of CEMS.

1-2.7 OC-ALC/TILC will:

a. Develop, integrate and implement CEMS requirements based on approved C4SRDs.

b. Develop and maintain CEMS programs.

c. Monitor, process and maintain data gathered for CEMS.

d. Operate centralized USAF inventory control system for engines covered by this T.O.

e. Prepare and distribute CEMS output products.

1-2.8 USAF Base/Group Commanders will:

a. Ensure that maintenance, operations, transportation, data automation, distribution and supply personnel perform their assigned duties to ensure proper system operation.

b. Ensure the base level system is responsive to the needs of all CEMS users.

c. Ensure CAMS is maintained IAW the provisions of this T.O. and AFCSM 21-558.

d. Designate a formally trained BEM and assistant.

e. Request formal training through the CEM.

1-2.9 Prime Engine Management Office (PEMO) will:

a. Be responsible for the accuracy, completeness, timeliness of initialization and file maintenance of new part number data into CEMS.

b. Input CEMS data for contractors without direct line access to CEMS.

c. Establish, load and monitor TCTO master records in CEMS until completed or rescinded.

d. Assist CEMS technicians in correcting erroneous transactions.

e. Ensure contract coverage for CEMS reporting and compliance with reporting instructions for contracts administered by them.

f. Ensure that all duplicate S/Ns are processed IAW this T.O.

g. Ensure depot level SOWs adequately contain instructions for re-serialization in the case of duplicate S/Ns.

h. Ensure that contractors report Air Force engines in their possession if under contract to do so.

1-3 CEMS CONTINGENCY PLAN.

If CEMS has an interruption of service, it will be operated from another location or via message traffic. System users will be notified of the outage and when operation is expected to resume. Bases will work with the EIMs to resolve logistical problems. To facilitate recovery of CEMS data, users will retain data in date time order for input when CEMS operation resumes. CEMS users will restrict requests for output products during recovery.

1-4 ADDITION OF A NEW ACCOUNTABLE ASSET OR TRACKED PART.

1-4.1 CEMS is responsible for tracking accountable assets and identified tracked parts maintained by the AF. Action will be taken to initialize new items into CEMS as they enter the AF inventory. When a technical or engineering decision is made to initiate tracking of an engine or a part, a C4SRD must be prepared IAW AFI 33-103 by the PEMO or the appropriate Acquisition office.

1-4.2 C4SRD requirements for non-parts-tracked engines are as follows: If only whole-engine inventory tracking is necessary, an AF Form 3215 will suffice. These additions will not prompt a requirement for special reporting mechanisms or output products not already provided by CEMS.

1-4.3 C4SRD requirements for parts tracking is a requirement of the maintenance management plan for a new engine, a more thorough impact analysis will be required. A C4SRD specifying particular information is required to implement the engine in CEMS. Such information should include the quantity of engines, number of tracked parts, projected deployment locations, requirements for new output products, special computational algorithms and a brief synopsis of the maintenance concept to be used in conjunction with the new equipment. The initiator of the C4SRD must ensure it is properly prepared and coordinated. As a minimum, coordination must be secured from the affected major command(s), appropriate Engine Program Management office, PPGM and forwarded to OC-ALC/TILC. The C4SRD initiator will work with OC-ALC/TILC and SSG/ILM to ensure requirements are clearly defined.

1-4.4 OC-ALC/TILC will manage and monitor all actions required to add the new item for tracking. The C4SRD initiator will provide OC-ALC/TILC all information concerning the item to be tracked. (i.e.: noun, manufacturer's part number, type limit [hours or cycles], limit value, K factors, WUC, NHA, QPA, level of maintenance [base or depot], CII in the CEMS scheme, any additional tracking parameters necessary and end item application) An evaluation will be conducted by OC-ALC/TILC to determine what changes to CEMS will be required. They will also evaluate the necessity for back-fill data (location, age, NHA, etc) and determine the method of gathering back-fill data. If no actual data from past history is available, engineering estimates of cycle-engine time parameters will be used for back-filling. When such estimates are used, they should be acknowledged as such for reliability purposes.

1-4.5 PEMO will establish part numbers and S/Ns to initialize CEMS. Implementation load data will be sent to the affected bases for loading in CAMS at a pre-arranged time and date as specified. The implementation date will be coordinated with the affected major command(s) and SSG if appropriate.

1-4.6 Approximately 30 days prior to implementation the affected SRANs will be notified of the specific procedures to follow and target date for completing the loading operation. Approximately 23 days prior to the implementation date, one test SRAN will be selected and furnished initialization decks. Preferably a CONUS base with low volume and low activity will be selected to expedite debugging and avoid disruptions should technical problems develop during loading. Approximately 10 days prior to the implementation date all affected SRANs will be advised of test results. A date and time (Greenwich Mean Time) will be selected for follow-on initialization to remaining SRANs. Twenty-four hours prior to the implementation date all affected bases will cease transmission of tracking data. The CEMS database manager will provide data to each base for loading into the CAMS database. CEMS and CAMS data specialists will be available during loading to resolve any systems problems. Normal processing of data will resume when the CAMS database is fully loaded and operational.

1-4.7 Special Diagnostic Requirements. If a new item has special diagnostic requirements for other data systems, additional C4SRD(s) must be initiated. If the additional C4SRD(s) requires an interface, coordination must be obtained from the appropriate system offices.

1-5 EJ-FJ SRAN DIRECTORY.

1-5.1 For reporting and ID, each reporting activity is assigned an EJ (contractor reporting installations) or FJ (Air Force reporting installations) SRAN. OC-ALC/TILC is the accountable office for the official Air Force engine account FJ2031 and maintains the EJ-FJ SRAN information directory. This directory is available in CEMS as a browse product. It is updated weekly and contains only EJ and FJ engine related SRANs. OC-ALC/TILC is the control point for new and revised account numbers not reflected in the DoD directory. Additions, deletions or revisions to the EJ-FJ SRAN directory (i.e. EM change, telephone number changes, etc), will be forwarded through the CEM to OC-ALC/TILC electronically at https://cews.tinker.af.mil.

1-5.2 Requests for new SRAN numbers must be submitted and coordinated between the CEM and OC-ALC/TILC. The CEM will submit the request electronically specifying the effective date for the utilization of the new SRAN number. When it is determined that an activity will be closed, the CEM will initiate correspondence to OC-ALC/TILC at least 30 days in advance. All SRAN accountable assets must be reported as shipped and received by another SRAN before the closing SRAN can be removed from the EJ-FJ SRAN directory. The closing SRAN EM must clear all outstanding errors on the EMDL. OC-ALC/TILC will provide a special reconciliation to the closing SRAN EM. In addition, the following actions must be taken:

1-5.3 When there is a change of BEM, an inventory of accountable assets is required. OC-ALC/TILC will provide the inventory report when requested. If any assets cannot be accounted for, a ROS and subsequent certificate of deletion will be required IAW AFMAN 23-110 and this T.O.

1-5.4 The data elements for requesting a new SRAN or for changes to existing SRANs are on the CEMS website: https://cews.tinker.af.mil.

1-6 DOCUMENTATION.

1-6.1 Required documentation supporting SRAN accountability for use by the accountable SRAN officer, base, depot, contractor and other DoD agencies is:

1-6.2 Engine gain/loss documentation must be submitted to OC-ALC/TILC by depots, contractors, bases or any organization processing gain/loss transactions to/from AF ownership account codes.

A. GAINS - All engine serial number gains into Air Force ownership account codes must be accompanied by a receipt signed by an authorized government representative, a copy of which must be sent to, and maintained in, OC-ALC/TILC. This receipt document can be the DD Form 250, MATERIAL INSPECTION AND RECEIVING REPORT (preferred documentation for new production gains), or other approved official shipping/acquisition document. Gain reports other than a DD Form 250 must be an independently verifiable acquisition document from the gaining organization, and cannot be a CEMS product.

B. LOSSES - All engine serial number losses from Air Force ownership account codes must be accompanied by an independently verifiable disposition document (a Loss Report) signed by an authorized government representative. A copy of this document must be sent form the losing organization to, and maintained in, OC-ALC/TILC. This documentation includes, but is not limited to: EIM authorization correspondence, CEM coordination, SF Form 361, DD Form 200, etc. Accountable items are also considered "lost" if a shipment or transfer has been input to CEMS and a receipt has not been processed within the time provided in paragraph 1-2.4 q. Assets in this status require DD Form 200, ROS be submitted by the shipping BEM IAW paragraph 1-2.4 q. Accountable asset responsibility remains with the last possessing BEM until received by an authorized gaining organization, or proper documentation has been provided to OC-ALC/TILC and asset disposition requirements have been met.

1-6.3 DD FORM 200, FINANCIAL LIABILITY/INVESTIGATION OF PROPERTY LOSS, is used to resolve SRAN accountability discrepancies. Forward to OC-ALC/TILC for record keeping.

1-6.4 SF FORM 361, TRANSPORTATION DISCREPANCY REPORT, is used to document accountability discrepancies during transportation. Forward to OC-ALC/TILC for record keeping.

1-6.5 Termination of engine accountability will be accomplished IAW AFI 121-116 and this T.O.

1-6.6 DD FORM 1348-1A, ISSUE RELEASE/RECEIPT DOCUMENT. Prepared for engine shipments. (An alternate form for shipment is a DD Form 1149.) The shipping and receiving activity keeps this form IAW AFR 4-20. This form is prepared for each shipment as follows:

The Federal Stock Class (FSC) and TMS are entered in the stock/part number block.

The DCN/TCN is entered in the document number block with the proper two position engine identifier code.

The Required Delivery Date (RDD) is entered in the delivery date block.

The S/N of the engine being shipped is entered in the item nomenclature/description block.

The remarks/description block will contain the national stock number (NSN) of the container or transportation trailer or stand and transportation mounting adapters used in transporting the engine (see T.O. 00-85-20). Shipping device is an optional entry in CEMS.

Other blocks of the form are completed IAW AFMAN 23-110.

Destruction of accountable documents must be IAW AFMAN 37-139.

1-7 REQUIRED DELIVERY DATE (RDD).

The RDD will be consistent with the time standards in T.O. 2-1-18, Aircraft Engine Operating Limits and Factors and is a three-digit number that represents the Julian Day an engine is required to arrive at a receiving activity. Absence of an RDD on a shipping document will automatically authorize handling of shipments to satisfy DoD Instruction 4410.6, Uniform Materiel Movement and Issue Priority System (UMMIPS) requirements. The generating activity transportation personnel will ship an engine by the lowest cost mode capable of satisfying the RDD assigned. The EIM will assign an RDD for each shipment from the TRC and depot consistent with T.O. 2-1-18, Re-supply Transportation Times, and DoD Instruction 4410.6. Retrograde CONUS and overseas transportation times are in T.O. 2-1-18 and DoD Instruction 4410.6. To determine the RDD for retrograde shipments, the BEM will add the time standard allowed for retrograde engines in T.O. 2-1-18, to the date of the L condition code transaction. The RDD for engines may be adjusted by the EIM based upon engine TMS inventory levels. Refer to T.O. 2-1-18 to change RDD factors. The changed RDD factors will be provided by the EIM to the CEM who in turn will distribute the changed TMS RDD factors to the affected BEM.

Example: 144 (Julian Date of L condition code transaction) plus 12 (total retrograde transportation time allowed coming from area 4, T.O. 2-1-18) equals 156 RDD to the depot.

1-8 LIST OF DEFINITIONS AND ACRONYMS.

Accountable Asset - Any asset monitored in the EJ-FJ account from initialization into the Air Force inventory until the S/N is removed from the system.

Accountable Officer - The designated individual required to ensure accurate property records are maintained.

ADRSS - Automated Data Reporting Submission System

AFR - Air Force Reserve

AMARC - Aerospace Maintenance and Regeneration Center

ANG - Air National Guard

ASC - Aeronautical Systems Center

AWM - Awaiting Maintenance

Batch Reporting - A collection and transmission of multiple actions in one file.

BCC - Base Communication Center

BEM - Base Engine Manager

C4SRD - Command Control Communication Computer Systems Requirements Document, AF Form 3215

Calendar Day - A 24-hour period of time. A change in Julian date identifies an additional calendar day.

CAMS - Core Automated Maintenance System. Base level automated reporting system.

CAMS User Manual - AFSCM 21-558 for user procedures.

CCB - Configuration Control Board

CDB - Central Database

CEM - Command Engine Manager. Focal point for engine management matters for a command.

CEMS - Comprehensive Engine Management System

CEMS User Technical Order - T.O. 00-25-254-2 is a functional document that provides CEMS users with detailed instructions on reporting data into CEMS and obtaining output products.

CFP - CEMS Forwarding Program

CFT - Contract Field Team

CIVV - Compressor Inlet Variable Vane

COB - Close of Business

Component - Tracked item in support of the Reliability Centered Maintenance (RCM) concept.

CII - Configured Item Identifier. CEMS equivalent of a Work Unit Code.

DAMES - Defense Automated Message Exchange System

DAO - Defense Accounting Office

Data Currency - Elapsed time from when an event occurs until the data is accepted and posted to CEMS.

DPC - Data Processing Center

Deployed Engine - An engine physically located somewhere other than its owning SRAN.

Depot Repair Activity - An activity that performs depot level specialized repair, overhaul, or modification.

DLR - Direct Line Reporting. Real time reporting into the CEMS CDB.

Document Number - The control number entered on a DD Form 1348-1A for asset shipment.

DPC - Data Processing Center

DRMO - Defense Reutilization and Marketing Office

DTG - Date Time Group

EHR - Event History Recorder

EIM - Engine Inventory Manager. The ALC individual responsible for overall accountable asset management by TMSM.

ELP - Engine Load Program

EM - Engine Manager

EMDL - Engine Managers Data List

End Item - The NHA for an accountable asset or tracked item.

Engine Recorder - Any device which measures and collects engine operating parameters.

ENMCS - Engine Not Mission Capable Supply. (Reference Data Item Table in Chapter 9 of this T.O.)

EPM - Engine Program Management

ES - Equipment Specialist. Engine Technical Services representative in the ALC/LP organization.

FAA - Federal Aviation Administration

FHR - Flying Hour

FMS - Foreign Military Sales

FOD - Foreign Object Damage

FSC - Federal Stock Class

How Mal Code - How Malfunction Code

IBEMS - Integrated Base Engine Management System

IND - Indenture Level

IMS - Inventory Management Specialist

JEIM - Jet Engine Intermediate Maintenance

JOAP - Joint Oil Analysis Program

Loss From Inventory - An accountable asset removed from the inventory for any reason must be reported and supporting/authorizing documentation provided to OC-ALC/TILC. This documentation includes, but is not limited to EIM authorization correspondence, CEM coordination, SF Form 361, DD Form 200, etc. Assets will be considered "lost" if a shipment or transfer has been processed, but a receipt has not been input in the time frame provided in this T.O. and will require DD Form 200, ROS be submitted by the shipping BEM. Assets will not be removed from the last possessing BEMs account until the documentation is provided to OC-ALC/TILC.

MDR - Material Deficiency Report

MDS - Mission Design Series

MODULE - Major Assembly.

NHA - Next Higher Assembly

NLA - Next Lower Assembly

Non-Accountable Item - Assemblies and/or parts tracked by CEMS for reasons of life limitations or logistical criticality.

Obligated for Installation - Engines required to fill existing holes in aircraft or missiles.

OCM - On Condition Maintenance

OMB - Office of Management and Budget

OPR - Office of Primary Responsibility

PDM - Programmed Depot Maintenance - Depot modification and maintenance normally scheduled on a calendar time cyclic basis.

PEMO - Prime Engine Management Office. Example: OC-ALC/LPA.

Pipeline (Time) - The quantitative information of the number and average elapsed time engines spend in supply, transportation and repair segments.

PMC - Propulsion Management Committee

Possession - The physical custody of an asset by an organization, SRAN or command.

PPGM - Propulsion Product Group Manager

Pre-positioned Engine - An engine located at other than its home base.

PCN - Program Control Number

QEC - Quick Engine Change

QPA - Quantity Per Assembly

RCM - Reliability Centered Maintenance - A maintenance concept that allows the condition of the equipment to dictate the need for maintenance or the extent of repair-overhaul required.

ROS - Report of Survey

SAP - Security Assistance Program. - Foreign Military Sales (FMS) and grant aid.

SOW - Statements of Work

Spare Engine - An un-installed engine.

SPO - Special Project Office

SRAN - Stock Record Account Number

SRAN Directory - Product listing each EJ-FJ SRAN account number and accountable officer information.

SSG - Standard Systems Group

TCC Transaction Condition Code - The code for a transaction in CEMS

TCN - Transportation Control Number

TCTO - Time Compliance Technical Order

TDR - Teardown Deficiency Report

Tenant Organization - An organization located on, or attached to, a base operated by another major command.

TLC - Type Limit Code

TLCC - Type Limit Code Category

TMO - Traffic Management Officer

TMS - Type, Model, and Series

TMSM - Type, Model, Series, and Modification

T.O. - Technical Order

TRC - Technological Repair Center

TRIC - Transaction Identifier Code

TSN - Time Since New

TSO - Time Since Overhaul

TSOCM - Time Since On Condition Maintenance

WUC - Work Unit Code

CHAPTER 2

REPORTABLE ACTIONS AND EVENTS

2-1 DESCRIPTION OF REPORTABLE ACTIONS.

This chapter briefly explains which actions and events must be reported to CEMS. Organizations reporting by mail will complete AF Forms 1534, 93, or 1559 as appropriate. A reasonable facsimile is permissible if reporting electronically. (Refer to this T.O. for guidelines for preparation of these forms.) Status changes must be reported for all accountable assets. Status changes include changes in condition, command code, organization code, removal, and any other changes to accountable item records. Accountable assets are listed in this T.O. Configuration Tracked Engines and/or Components reports must be submitted for all tracked items. Configuration reports include engine updates, EHR window initialization, S/N initialization, adjustments to age factors, and others as listed in this T.O. Installation, removal, and work complete reports use the same TCC for tracked engines and components as are used for status reports. TCTO reporting on engines and tracked components must be submitted to CEMS. Reporting by any method should be accomplished no later than Close of Business (COB) next business day following the date/time of the occurrence. Ensure all transactions are reported and input in the order they occur.

2-2 REPORTABLE EVENTS AND ACTIONS.

Accounts Transfer - Accounts transfer reports are required when accountable assets are moved to or from Air Force accounts **(A, B, C, E, G, L, K, N, R, S, or Z)**, or when they are changed to or from the Army, Navy, Coast Guard, Federal Aviation Administration (FAA), SAP, foreign, or other government agency's account, **(D, H, J, F, P, T, or W)**. An Air Force activity gaining an accountable asset must process the gain report first and the account transfer second. An Air Force activity losing an accountable asset must process an account transfer report before the loss report. Accountable assets in non-Air Force accounts received by an Air Force activity for repair and return are not transferred to an Air Force account. Accountable assets requiring reimbursement should be transferred in an un-installed condition.

Addition or Subtraction - Use **(TCC's 6A or 6S)** to add or subtract time on end item/assemblies/parts. The values will be automatically added or subtracted on all installed lower indentured assemblies/parts.

AFTO Form 95 - All AFTO Form 95 data is maintained in CEMS in program **A295**. All entries will be input to this automated AFTO Form 95 program. CAMS automated AFTO Form 95 narrative history data must be input to CEMS.

Aircraft Engine Update - Use **(TCC 6F)**transaction to update time for all engines on an aircraft with a single transaction, against aircraft MDS/tail number. Use **(TCC 6H)** to update time on an aircraft one engine at a time, input via CII S/N.

Air Force Owned Engines Supported by a Contractor's Pool of Engines - Use **(TCC C_)** when an engine is gained from the contractor. Use **(TCC L_)** when an engine is removed from an aircraft and is to be returned to the contractor. Use **(TCC Z_)** following the removal to show loss.

Awaiting Disposition - Use **(TCC N_)** when disposition instructions have been requested from the EIM for an engine. This includes engines in long term storage, excess engines, Material Deficiency Report (MDR), designated engines, etc.

Bailment or Lease and Loaned - Use **(TCC T_)** and **(Account code B)** when engines are bailed or leased. Use **(TCC T_)** and **(Account code E)** when engines are loaned. Losing activity will submit this report. Engines loaned to a nonreporting activity will be retained on the records of the Air Force activity that is responsible for the engine. Reporting is not required while the engine is in the bailed or loaned account. A routine report indicating the applicable account code, normally A, is necessary to indicate termination of bailment, lease or loan when the engine is returned.

Cannibalization - Use **(TCC 2L)** when an engine is cannibalized at depot for component parts.

Change In Maintenance - Use **(TCC M_)** when a change in the level of maintenance or condition is required on engines. Use **(TCC MK)** when depot workload processes a minor overhaul.

Classified Project - Use **(TCC T_)** and **(Account code L)** to report engines to be assigned to a classified project, where status reporting would be in violation of security. While engines are in the **"L"** account, further reports are not required. Un-installed engines returning from classified projects are reported as routine. Engines used in support of a classified project, where status reporting will not violate security, are reported under routine procedures.

Command Code Change - The command code can change only if the engine status is FB, FR, RB, RR, or VA. To change an engine from one command to another, submit a routine **R type** report. Show the new command code in the command block, the losing command in the TO and/or FROM block, and other data on the transaction as required.

Condemnation - Use **(TCC 6C)** to condemn spare assembly/part S/Ns without lower indentured items. Use **(TCC 6G)** for assemblies with installed parts.

Crash Damaged Aircraft - Use **(TCC MZ)** to report an engine involved in a mishap. Reporting will be consistent with the requirements of AFI 21-103 reporting for the aircraft. Do not process removal transactions until the engine(s) are physically removed and the aircraft termination message specifically excludes engine(s). Use **(TCC TZ)** to report an engine when an aircraft is involved in a mishap at/or near some other SRAN that is taking possession or responsibility. This effort must be coordinated with the SRAN that will report the engine(s) with **(TCC RZ)** as of the same date. If the accident investigation board maintenance officer determines that the aircraft is reparable, or the engine(s) are excluded from the aircraft termination message, engine reporting will be accomplished as routine. Use **(TCC LL)** to remove the engine(s) and immediately notify the prime EIM. Use **(TCC SL)** to ship the engine to depot. Time occurrence will be the actual termination of flight (landing or crash) rounded to the nearest whole hour. Use **(TCC WZ)** to report an engine where the receipt of an aircraft termination message does not specifically exclude engine(s). Time of occurrence will be the time of the message rounded off to the nearest whole hour. This will delete both the aircraft and engines from the Air Force inventory. All open TCTOs will programmatically be coded 05 (lost from AF inventory).

Deployed and/or Prepositioned Accountable Items. Prepositioned and/or deployed engines may either be reported by the base where the engine is located or by the home base. If the engine is reported by the base where it is located, it will be reported using the major and subcommand code for which it is allocated. For example, an engine allocated to a HQ ACC tenant located on a HQ AMC host base will be reported by the HQ AMC host SRAN EM as a HQ ACC asset. If reporting is to remain with the home base, arrangements will be made by the home base to have reports prepared and sent to the home SRAN EM. In this case, if an engine is shipped to an activity other than the home base, it will be reported as a normal shipment by the home SRAN EM to the intended recipient SRAN EM. If it is shipped to the home base, no reporting is required.

End Of Month - On the last workday of the month, end of month reports, **Type A**, are required from batch reporting SRANs. This report is automatically generated and is the last sequence number transmitted to CEMS for the previous month plus one. SRANs that report by mail must send an AF Form 1534 to the prime ALC engine division office for input to CEMS.

Engine ID Change - Use **(TCC 6E)** when a parts tracked engine or module is being modified or re-identified to a new configuration. This transaction will change the Type, Model, Series, and Modification (TMSM) to be compatible with the new engine ID. Any unique tracked parts must be removed before the engine and/or module ID can be changed. Reference AFSCM 21-558 for CAMS TRIC CED instructions.

Exhaust Gas Temperature - Use **(TCC 6W)** to report and store an absolute number 0-999. When processed engine TSN for EGT (Cat 92) will be overlayed by the value input on the transaction without updating NLA. Applicable to F108 engine serial numbers only.

Gain Reports - A separate gain report is required for each engine whether installed or un-installed. Use **(TCC A_)** when reporting acceptance of a new engine into the USAF inventory from a new production manufacturer. Use **(TCC B_)** when reporting acceptance of an engine into the USAF inventory from a source other than new production (i.e., other US agency, foreign government, commercial airlines, etc.) and reimbursement by USAF to the previous owner is required. Use **(TCC C_)** when: (a) Reporting acceptance of an engine into the USAF inventory and reimbursement by USAF to the previous owner is NOT required. (b) To report accountable items received from other US agencies or foreign governments that are temporarily gained into USAF possession while undergoing repair and modifications using USAF funds. (c) To report assets found at a given SRAN that are not currently included in CEMS. Use **(TCC D_)** when an engine is to be gained into the USAF inventory in exchange for a like engine.

Ground Training Engines - Use **(Account code S)** when an engine is assigned to ground training. Engines assigned to S account require no subsequent reporting except when engines are installed, removed, or transferred, or when assignment to S account terminates. Engines installed and removed for training are to be considered as installed at all times.

Initialization of a (assembly/part) S/N - Use **(TCC 6N)** to initialize a newly tracked part/assembly in an installed or uninstalled status or to change possession (SRAN) of a part/assembly already in CEMS.

Inspections - Update of inspection criteria can be input via CEMS program A465. Use **(TCC LF)** with How Mal Code **878** to remove engines for inspections. If the inspection reveals that additional maintenance is required, report the How Mal Code applicable to the additional maintenance on the **FB** work completed report.

Installation - Use **(TCC V_)** when an engine, assembly or part is installed other than transient. **NOTE:** For installation of a transient engine, the transient SRAN EM will not submit the installation report. The transient SRAN EM will provide the home SRAN EM the necessary data to submit the report. If the engine that is installed belongs to the transient SRAN the transient SRAN EM will process a pseudo shipment into CEMS and advise the home SRAN EM of the engine installed and date of pseudo shipment. When the aircraft owner SRAN receives notice that the engine is intransit, that EM will submit a report, initialize the engine into the SRANs CAMS system (if applicable) and then report the VA installation of the engine on the aircraft. Use **(TCC U_)** when a non-parts tracked engine is installed by a transient SRAN that is a portion of the transient SRANs stockage objective. The transient SRAN EM will submit a **UA** for the installation that will cause the transient SRAN to lose possession and automatically transfer possession of the newly installed engine to the SRAN that owns the aircraft in CEMS. If the aircraft owner SRAN is a CAMS reporting base, it is the responsibility of the owner SRAN EM to initialize the newly installed engine into that base's CAMS reporting system. **NOTE:** Parts installed at a transient location will be reported to the SRAN EM for appropriate time update/initialization/install action.

Issue to Maintenance - Use **(TCC P_)** when an engine is issued to maintenance from reparable supply at a depot repair facility. Issue to maintenance transaction for crash damaged, Unsatisfactory Report (UR) exhibit, and TDR engines will include an appropriate "Reason for Return to Overhaul" code.

Loss - Use **(TCC W_)** when an engine is lost from the USAF inventory due to crash, fire, combat, launching, Act of God or transportation loss, etc. Use **(TCC X_)** when an engine is lost from the USAF inventory because it has been disassembled to reclaim parts. Use **(TCC Y_)** when an engine is lost to the USAF inventory by disposal action through DRMO. Use **(TCC Z_)** when an engine is lost from the USAF inventory to another US agency, foreign government, etc., through sale, donation or exchange. Enter command code 1M and the SAP country code of the receiving activity. All open TCTOs will programmatically be coded 05 (lost from AF inventory). In addition to an AF Form 1534, CEMS CDB Report, supporting documentation is required to provide an official record of the loss. Refer to AFMAN 23-220, Report of Survey for Air Force Property and DFAS Regulation AFR 177-19 (old AFM 75-35), The Air Force Freight Loss and Damage Claims System. When an engine is properly reported on AF Form 1534, the activity submitting the report is shown as the possessor in the central inventory records until another activity reports a receipt and acknowledges possession. If this report and acknowledgment is not done and the activity charged with possession cannot find an engine, it is considered lost.

Manual Time Change - Use **(TCC 6X)** to change time data on an engine, assembly or part without affecting the time on any indentured assemblies or parts. This transaction is password controlled; contact OC-ALC/TILC.

Mass Initialization - Use **(TCC 6I)** to initialize up to a maximum of twenty assembly/part S/Ns at one time. All S/Ns must be the same CII, Mission Design Series (MDS), and part number. This transaction is only for new production initialization. (Valid for DLR only)

Mass Installation - Use **(TCC VM)** to build an engine or an assembly via multiple installations of NLAs on a single transaction. (Valid for DLR only)

Mass Loss - Use **(TCC 6G)** to lose an entire assembly including all NLAs from CEMS. (Valid for DLR only)

Mass Removal - Use **(TCC LM)** to remove all NLAs one indenture level down from an engine or an assembly. (Valid for DLR only)

MDS/Position Number (QEC) - Use **(TCC 2P)** to change MDS or position number.

Monthly Operating Time Report (T Reports) - FHR (CAT 11) is required to be updated in CEMS as of last day of Month. The CDB will automatically generate T reports for all installed engines at DLR SRANs with Account Codes of A, G, N and R.

Organization Code Change - Use **(TCC 2M)** to change the organization code.

Part Number Change - Use **(TCC 6J)** to update/correct the P/N and MDS by batch reporting contractors. MDS will be updated on all lower assemblies.

Reactivation of a Condemned Tracked Part - Use **(TCC 6B)** to re-activate a tracked assembly/part previously condemned or retired for 18 months or less. TCTOs in open status at time part was condemned will reverse from 05 to its prior open status. Any part that has been condemned for over 18 months must be reinitialized and any required TCTOs reloaded against the S/N

Receipts - Use **(TCC R_)** when an accountable asset is received, either installed or uninstalled. For an uninstalled engine, the reportable event occurs as of the date and time the engine is delivered and accepted at the appropriate Jet Engine Maintenance area. On tracked component engines, submit one report on the complete engine and the CEMS programs will automatically generate receipts for the installed tracked components as applicable. The receipt report will contain the major and command code for the command who owns the asset.

Record Adjustments - Valid for OC-ALC/TILC and depot only. Use **Type 4** reports to correct data that is submitted in error to CEMS and that is not detectable by the system edit checks. The condition code should remain the same as previous for engines as authorized by the logical sequence of event table. Valid codes, S/Ns, item designations, SRAN numbers, etc., do pass the edit checks of the system and will be posted to history. When submitting a type 4 report, enter the correct data to be changed. All other entries show the same date as submitted on the original report.

Removal - Use **(TCC L_)** for any removal reason of engines and tracked assemblies/parts other than transient. Prior to accomplishing a removal of a major assembly or part, ensure all updates have been processed against the engine. This ensures time is correct on the assembly/part. Use **(TCC K_)** by the home SRAN for engines and tracked assemblies/parts removed transient. If it is determined that the transient SRAN is to retain possession of the engine, the home SRAN EM will submit a pseudo ship transaction and advise the transient SRAN EM when to submit the pseudo receipt transaction. Parts removed at a transient location will be reported to the home SRAN EM for appropriate time update/removal/initialization/install action. If it is determined that the removed item is to be returned to the home SRAN, the transient EM will physically return the item to the home SRAN.

SAP Reporting - All engines gained or transferred into the Air Force inventory from a SAP country must be reported. Engines received from a SAP country for repair must be reported in the **"J" account**. Two reports are required for the sale, donation, or exchange of an Air Force engine to a SAP country. The first report will be an account transfer **K type report** and the second will be the **loss report, ZA, ZB, ZF, ZG, or ZR**. Two reports are required to gain an engine from a SAP country under a purchase, donation, or exchange transaction. The first report will gain the engine to the inventory, the second, a **K type report**, will be an account transfer.

Shipments - Use **(TCC S_)** when possession of an accountable uninstalled asset is shipped to another SRAN, use the date and time the asset is shipped by TMO as the shipping date. If a deployed/pre-positioned engine is physically shipped to an activity other than the home SRAN, an example would be to a Depot, it will be reported as a normal shipment by the home SRAN who has possession in CEMS. If physically shipped to the home SRAN, no reporting is required.

TCTO Reporting - CAMS batch reporting will use **(TCC 7S)** when changing TCTO data as a result of compliance, de-compliance/reversal. The subsystem ID will always be **"T"**. Direct line users will report on CEMS program A240/A241.

Test Cell Reject - Use **(TCC G_)** when reporting an engine rejected from test cell if any of the following conditions apply:

(1) Engine fails the test cell run, after maintenance was performed, for the same reason identified during the pre-maintenance run or original cause for the removal.

(2) Engine fails due to a discrepancy induced or found in the same area in which maintenance was performed.

(3) Engine is rejected from the test cell for maintenance corrective actions that are beyond the corrective capability of test cell personnel and equipment or tooling.

Transferred - Use **(TCC T_)** when an installed accountable asset is transferred to another SRAN.

Update Maintenance Data - Use **(TCC 6P)** following depot repair or overhaul. This transaction has an option to set individual S/N limits for inspection, warranty expiration and next scheduled depot visit.

Update transaction - Use **(TCC 6U)** to update time. This update transaction is reported after each engine operation, flight day, or as required by the applicable T.O. 00-20-5-1-X. When engines are transferred, a "6U update" will be input by the receiving SRAN.

Window Value Initialization - Use **(TCC 6T)** to initialize the engine recorder values. This must be accomplished when a new engine recorder is obtained, upon repair or test of an engine recorder, immediately following installation of an engine recorder, parts tracked engine with a recorder or after any engine time corrections (i.e. 6A, 6S or 6X).

Work Completed - Use **(TCC F_)** when reporting "work complete." Ensure that all other CEMS reportable events occurring during the course of maintenance have been properly reported. Included are engine designation changes following modification and engine related How Mal Code describing the true or primary reason for maintenance action. If the repair action was different from the original reason for removal, enter the removal code that best describes the true reason for failure. For depots and depot level activities, this transaction code includes preservation and packaging of engine for storage and shipment. If periodic inspection or recondition maintenance is performed on an engine which is in maintenance, code the work complete report with How Mal Code 878. The How Mal Code is always required except upon completion of work from raw to build-up condition. Report "work complete" at **depot** after test cell acceptance, automated and/or manual records update, and completion of preservation and packaging

Work Started - Use **(TCC J_)** when starting or resuming work on an uninstalled engine. At depot level activities, this transaction code includes preservation and packaging of engine for storage and shipment.

Work Stoppage - Use **(TCC H_)** when reporting work stoppage on an engine (Other than ENMCS) for lack of manpower, tools, work space, or parts and a valid ENMCS situation does not exist. Work stopped transactions require entry of a Reason for Delay code. Use **(TCC E_)** when reporting work stoppage on an engine in "ENMCS" status.

2-2.1 The following are the transaction condition code reporting requirements, **APPLICABLE TO ALL TRACKED PARTS, COMPONENTS, AND/OR MODULES,** for reporting changes in condition, status, and level of maintenance (specific transaction condition codes may vary depending upon the organization reporting the event and level of maintenance required):

REMOVALS

A) JEIM/QB/2LM ('LB', 'LF', 'LL')
B) DEPOT ('LB', 'LL')
Report the action of any removal based upon the condition of item:

'B' = Serviceable
'F' = JEIM/QB/2LM Reparable
'L' = Depot Reparable

INSTALLS

A) JEIM/QB/2LM ('VA')
B) DEPOT ('VA')
Report the action of any installation of an item. The installs will be edited to ensure that the item is in a built condition, 'B'

CHANGE IN MAINTENANCE

A) JEIM/QB/2LM ('MB', 'MF', 'ML')
B) DEPOT ('MB', 'ML')
Report the action of any change in level of maintenance (Condition Code) to be performed similar to an engine. (i.e. This is to provide the correct level of maintenance performed, and the current condition of the item.)

WORK COMPLETED

A) JEIM/QB/2LM ('FB')
B) DEPOT ('FB')
Report the action for work complete for any tracked item similar to an engine. (i.e. This is to provide when work is completed on an item for depot reporting. An 'FB' following any 'L' condition transaction code should only be reported by the depot. Work complete should be reported following the '6P'.)

RECEIVE FROM SUPPLY

A) JEIM/QB/2LM ('6N') (SRAN OF RECEIVING BASE)
B) DEPOT ('6N') (SRAN OF RECEIVING DEPOT)
Report the action for receiving an item from supply. 'VA' can also be used if item is already built up and is installed immediately.

TURN IN TO SUPPLY

A) JEIM/QB/2LM ('6D') (SRAN 'UNKN')
B) DEPOT ('6D') SRAN 'UNKN' (OCALC CAN USE '6N' TO 'OCSU')
Report the action for an item turned in to supply.

CONDEMMED

A) JEIM/QB/2LM ('6C')
B) DEPOT ('6C')
Report the action when an item is condemned at the depot and for those items which are authorized to be condemned at base level.

DEPOT MAINTENANCE

A) DEPOT ('6P')
Report OVH/OCM or set time change. Must be followed by 'FB' to update condition.

2-2.2 HOW MAL/CONDITION CODE compatibility edits on removals and change of maintenance transactions will be the same for parts as are for engines. Change of maintenance and work complete transactions for parts will be reported like engines - separately into CEMS and not through IBEMS. The HOW MAL is the only required input on the CHANGE OF MAINTENANCE; it is optional on the work complete. Part installations will be edited similar to engines in that they must be in a built-up condition prior to installation.

CHAPTER 3

CEMS-CAMS REPORTING INSTRUCTIONS

3-1 REPORTING REQUIREMENTS.

Accountable assets are identified in table 9-15 of this T.O. Tracked assemblies and parts are identified by TMSM in the tables in Chapter 9. Modules are no longer accountable assets (status tracked) and are tracked in CEMS as major assemblies.

3-2 CAMS MATRIX.

Matrix Table 9-42 assists CAMS reporting activities in determining the correct TRIC to use. Reference AFCSM 21-558.

3-3 CEMS INPUT TRANSACTIONS.

CEMS file maintenance transactions submitted to the FJ2031 account must conform to the provisions of this T.O. The three primary reports used to report status, configuration or TCTO data for non-CAMS input are as follows: AF Form 1534, AFTO Form 93, and AF Form 1559. It is noted there are special cases that are addressed in a glossary of footnotes at the end of the matrix. Sample forms in this T.O. provide complete information required to properly prepare AFTO Form 1534 and AF Form 1559 as necessary to facilitate CEMS reporting.

3-3.1 IBEMS. Contact OC-ALC/TILC for instructions on CAMS/CEMS connectivity utilizing IBEMS software.

3-3.2 Direct Line Reporting. Transactions are input and corrected through a remote terminal. This method is restricted to organizations that have access to CEMS via remote terminals. For HQ AMC SRANs reporting to G081 and CEMS separate reports are required for each system.

3-3.3 Batch Reporting. This is for contractors without direct line capability. Contact CAMS Database Manager/OC-ALC/TILC for ADRSS connectivity to CEMS. All other non-AF locations should contact OC-ALC/TILC for connectivity. Continue to submit priority reports during MINIMIZE.

3-3.4 Mail Reporting. Activities without CAMS or direct reporting capability will mail, via first class mail, AF Form 1534, AFTO Form 93, and AF Form 1559 for subsequent input to CEMS as follows:

(1) Users reporting on hardware prime at OC-ALC will route all status, configuration and TCTO transactions to: OC-ALC/LPRI Tinker AFB, OK 73145-3020.

3-4 DESCRIPTION OF ENTRIES ON AF FORM 1534.

Block 1 - Place an X in appropriate block if additional forms are attached for engine recorder device reports.

Block 2 - Subsystem Identifier. Enter S for status reporting or C for configuration reporting. S will be used on all non-TCTO transactions for non parts tracked engines and for parts-tracked engines other than those specified in the following paragraph. C will be used on all 6-transaction codes and all parts tracked engine component installations and removals except intransit installations.

Block 3 - CII Designation. Direct reporting and mail-in enter CII as shown in the CII table. Batch reporting enter engine ID work unit code (WUC).

Block 4 - S/N. Enter the S/N as identified on the data plate. CEMS does not recognize a dash (-). If dashes (-) are encountered on the engine, assembly or part data plate, the dash will be replaced with a zero for reporting purposes. If data plate contains any other special character, contact OC-ALC/TILC for instruction.

Example: 629-1234 will be input to CEMS as "0062901234." The standard method of structuring serial numbers in CEMS is as follows:

MM = Manufacturer's Code (two position) (Table 9-12)
Z = Zero (0)
C = Engine module symbol as follows:

Basic Engine	E
Augmentor	A
Fan	F
Compressor	C
Turbine (LPT)	L
Turbine (HPT)	H
Gearbox	G
Turbine	T

X = An alpha or numeric character

NOTE

With the exception of the F107 engine, all century series engines (i.e. F100, F101, etc) and T56 and F110-404 engines use structure MMZCXXXXXX, where column 5 through 10 are the values obtained from the last 6 positions on the data plate. The field will be moved to the right and zero filled on the left.

Examples: F100-100 Engine "PW0E680092." "T56 engine S/Ns prior to 113432 will reflect the old S/N structure in CEMS of MMZZXXXXXX. T56 gearbox S/Ns prior to S/N 33641 will reflect the old S/N structure in CEMS of ZZMCXXXXXX. T56 engine 113432 and beyond will use MMZCXXXXXX"

Example: (AD0E113432), Gearbox 33641 and beyond will use MMZCXXXXXX

Example: (AD0G33641), All other aircraft engines use structure MMZZXXXXXX, where column 5 through 10 are values obtained from the last 6 positions on the data plate. The field will be moved to the right and zero filled on the left.

Example: J75-17 Engine "PW00611438." All tracked assemblies and parts and all non-F100 modules use structure 10 positions. All 10 positions are values obtained from the data plate. The field will be moved to the right and zero filled on the left. The alpha O will be converted to numeric 0 and the alpha I will be converted to numeric 1 for reporting purposes.

Block 5 - Occurrence Date and/or Hour. Enter the actual Julian date and time the status change occurred.

Block 6 - SRAN. Enter SRAN of the activity preparing report.

Block 7 - Command. Enter the applicable major and subcommand codes.

Block 8 - Organization Code. This block is authorized for local use and is one position alpha, excluding X.

Block 9 - Engine Ownership Account. Enter the one position engine ownership account code. Account codes A, B, C, E, G, K, L, N, P, R, S, and Z are Air Force assets. Transfers between these accounts will be made on routine reports (code R, block 10). Account codes D, F, H, J, T, and W are other than Air Force assets. Transfer between Air Force and other than Air Force accounts will be made on K type report (block 10). All un-installed engine transfers on K type reports must be documented and a copy of the document maintained as prescribed in this T.O. If account code J is reported, see instructions for block 21. Engines transferred to classified project (L account, routine report) will not be reported thereafter until returned or until the classified project is canceled. Returns from a classified project will be reported as a receipt to the A-account on a routine report. Engines assigned to ground training (S account) require no subsequent reporting except when engines are installed, removed, or transferred, or when assignment to S account terminates. Engines installed and removed for training are to be considered as installed at all times. Engines received from other than Air Force activities for repair and return are to be retained in the activity's account while on hand. If an exchange of engines with the Air Force is to be accomplished, the transfers between accounts will be made on K reports.

Block 10 - Engine Type Report. Enter the appropriate report code IAW this T.O.

Block 11 - Part Number. Enter the part number from the data plate.

Block 12 - Transaction Code. Circle the appropriate transaction code.

Block 13 - Condition Code. Circle the appropriate engine condition code.

Block 14 - To-From Command and/or SRAN. Enter the shipped to-from SRAN. Report the owning command code for tenant shipments and receipts. Block will be blank for reports of transfer to or from classified projects.

Block 15 - Type of Shipping Device. Optional or enter the four-position shipping device code from T.O. 00-85-20.

Block 16 - Sequence Control Number. Enter the sequence control number assigned to the report being prepared. CEMS uses sequence numbers to ensure receipt and processing of all CEMS reports. The sequence number is seven positions long. The first part is a number from 01-12 to designate the month of the reporting period. The code for the reporting period changes on the first of each month. The second part of the sequence number is composed of five numbers. These numbers start with 00001 for the first report submitted each monthly reporting period. Sequence numbers are assigned in ascending order.

Block 17 - Engine Related How Mal Codes. Enter the engine related How Mal Code that best identifies the symptom that is causing the removal.

Block 18 - Reason for Return to Overhaul. Enter appropriate reason for return to overhaul code.

Block 19 - Reparable Engine S/N. Optional or enter the S/N of the reparable engine being replaced by the serviceable shipment. This number or the word stock will be furnished by the EIM. If a number or the word stock is not furnished by the EIM, enter "Not Furn."

Block 20 - Blank

Block 21 - SAP number. On K reports for engines gained to or from a SAP country, enter the six position SAP ID number contained in the supplementary address field, card columns 45 through 50, of the DD Form 1348-1A. If the SAP number is not listed in the supplementary address field, contact the prime EIM.

Block 22 - Document Number-NSN. Enter the debit or credit number from the document covering gain and loss transactions. For all shipments and receipts of un-installed engines to-from a different SRAN reporting activity, enter the TCN from card columns 30 through 43 of the DD Form 1348-1A or block six of DD Form 1149, REQUISITION AND INVOICE/SHIPPING DOCUMENT. If not received with the engine, contact the previous SRAN EM for the TCN the engine was shipped with. Also, if the shipment has been reported to CEMS, the TCN will appear on part 2 of the EMDL. For un-installed reimbursable account transfer (K type report), to a non-Air Force account (SAP, Navy, Army, FAA, etc), report the requesting activities requisition number obtained from the prime EIM. The NSN, dashes omitted, is input in this field for cannibalization transactions.

Document numbers are constructed following the guidance in DOD 4000 25-1-M or per instructions in AFM 23-110 and/or applicable Supply Local Operating Instructions.

Position 1-6	DOD Activity Address - Code of Activity assigning the number e.g. FJ2039 (FJ suffix is used for Air Force reporting and EJ suffix is used for Contractor)
Position 7	Last digit of the calendar year
Position 8-10	Julian day of document assignment
Position 11-12	S/N assigned by activity
Position 13-14	Two digit alpha engine ID code

NSN is constructed as follows:

Position 1-4	Federal Stock Class, e.g. 2840
Position 5-6	Country Code, e.g. 01 (USA)
Position 7-13	National Item Identifier Number (NIIN) e.g. 5869746
Position 14-15	Material Management Code (MMC), e.g. RU, if applicable.

Block 23 - Engine Flying Time. For non-parts-tracked (status) engines, enter TSO. Time is recorded in days, hours, or minutes as required by engine TMSM. The number is right justified with a single decimal place. The fraction of hours are rounded (up or down) to the nearest tenth of an hour. Time will be reported in whole minutes for the J85-5, J69-20, J69-41A, and J69-406 engines. Time will be recorded in whole calendar days on the F107 and F112 engines.

Block 24 - Cycle Sortie Count. Enter cycle sortie count.

Block 25 - Error Sequence Number. Enter the sequence number from the transaction.

Block 26 - TMSM. Enter the TMSM for the engine that is being reported. TMSM is defined as a 12 position field for TMS and Modification of a given engine family.

TMSM will be structured as follows:

Position 1-3	Type (alphanumeric, right justified, prefix with spaces)
Position 4-7	Model (alphanumeric, right justified, prefix with zero's)
Position 8-10	Series (alphanumeric, right justified, prefix with zero's)
Position 11-12	Modification (alphanumeric, left justified, suffix with spaces) Reference TMSM table.

Block 27 - NHA Designation. When entry is required and the NHA is an aircraft, enter the seven position alphanumeric MDS; or enter the NHA seven position alphanumeric CII code. When entry is required and the report initialized (TCC 6N) an un-installed tracked item, fill all seven positions with nines.

Standard MDS structure is as follows:

Position 1-3	Mission (alphanumeric, right justified, prefix with spaces)
Position 4-6	Design (alphanumeric, right justified, prefix with zero's)
Position 7	Series (alphanumeric)

Block 28 - NHA S/N Structure. For aircraft S/N use YYNNNNNNNN where YY is year of manufacture and NNNNNNNN is the tail number prefixed with zeros. When an initialization entry (TCC 6N) is required on an un-installed tracked item, fill all 10 positions with nines.

Block 29 - Position Number. If the engine being reported is applicable to a single QPA, enter the digit one. For multiple engine aircraft, engines will be numbered from left to right from pilot's position. Missiles and tracked assemblies/parts are exempt from this entry.

Block 30 - Is used when additional information is required on AF Form 1534 i.e., Reason for Delay Codes.

CEMS CDB REPORT

1. REPORT CONTROL SYMBOL

FORM APPROVED
OMB NO. 0704-0188

Public reporting burden for this collection of information is estimated to average5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaing the dataneeded,and completing and reviewing the collecting of information. Send comments regarding this burden estimate or any otheraspect of this collection of information, including suggestions for reducing this burden, to the Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Managementand Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send your completedform to Headquarters, United States Air Force, Attn: AF/LGMY Washington, DC, 20330-1000.

2. SUB SYS ID | 3. CII DESIGNATION | 4. SERIAL NUMBER | 5. OCCURRENCE (5a DATE, 5b HOUR) | 6. SRAN | 7. COMD (MAJ, SUB) | 8. ORG | 9. ACCT | 10. TYPE REPORT

11 PART NUMBER

14. TO/FROM (CMD, SRAN; 14a, 14b) | 15. SHIPPING DEVICE | 16. SEQUENCE NO.

12. TRANSACTION (CIRCLE ONE) | 13. CONDITION (CIRCLE ONE)

GAIN		ENMCS	E	SERVICEABLE	
NEW PRODUCTION	A	WORK COMPLETED	F	BUILT-UP	B
REIMBURSABLE	B	TEST CELL REJECT	G	RAW	R
NON-REIMBURSABLE	C	WORK STOPPED	H		
EXCHANGE	D	WORK STARTED	J	REPARABLE	
		REMOVED TRANSIENT	K	CONDEMED	C
LOSS		REMOVED OTHER	L	WITH QEC	F
ATTRITION	W	CHANGE IN MAINT	M	WITHOUT QEC	G
FOR PARTS	X	AWAIT DISPOSITION	N	MINOR OVHL	K
SALVAGE/DPRO	Y	ISSUE MAINTENANCE	P	MAJOR OVHL	L
OTHER	Z				
		CAB/ORG CHANGE	2		
NON-GAIN/LOSS		CONFIGURATION	6		
RECEIVED	R			INSTALLED	
SHIPPED	S	INSTALLED TRANSIENT	U	ACTIVE	A
TRANSFERRED	T	INSTALLED OTHER	V	INACTIVE	Z

17. ENG RELATED HOW MAL CODE | 18. REASON FOR RETURN TO OVHL | 19. REPARABLE ENG. SERIAL NO.

20. PRIMARY/SECONDARY HOW MAL INDICATOR (CIRCLE ONE) P S | 21. SAP NO.

22. DOCUMENT NO./NSN

23. ENGINE FLYING TIME | 24. CYCLE/SORTIE

25. ERROR SEQUENCE NO. | 26. TMSM

27. NHA DESIGNATOR | 28. NHA SERIAL NO. | 29. POSITION NO.

30. REMARKS

AF FORM 1534, OCT 91 PREVIOUS EDITIONS ARE OBSOLETE.

*U.S. Government Printing Office: 1992 — 311-790/50073

H9239568

Figure 3-1. AF Form 1534, CEMS CDB Report

3-5 DESCRIPTION OF ENTRIES ON AFTO FORM 93.

Engine Time/Cycle Accumulation Report. Reference T.O. 00-20-5-1-1.

3-6 DESCRIPTION OF ENTRIES ON AF FORM 1559.

CEMS TCTO Status Reporting. This form is used to identify the compliance, de-compliance (reversal), and kitsparts-tools availability, etc or a TCTO-data code.

Block 1 - TCC. The TCTO status update code 7S is preprinted.

Block 2 - Sequence Number. Enter the assigned seven position (NNNNNNN) sequence number.

Block 3 - CII. For direct line and mail-in reporting, enter CII for S/N that TCTO status is being reported. For Batch reporting, enter engine ID-WUC.

Block 4 - DATA CODE. Enter the seven-position data code (NNNNNNN). This code can be obtained from upper right corner of TCTO cover page.

Block 5 - Status-How Mal Code. Enter the appropriate three-position How Mal Code (NNN) or the appropriate two position status code (NN) depending on the mode of input. For Batch input enter the How Mal Code.

Block 6 - Status Date. Enter Julian date (YYDDD) that TCTO compliance or status change was accomplished.

Block 7 - Accomplishing SRAN. Enter the four position SRAN (NNNN) that accomplished the TCTO action.

Block 8 - Accomplishing Command. Enter the two-position major and one position sub command code.

Block 9 - Actual Man-hours. Enter the number of man-hours expended to accomplish data code-TCTO, to the nearest tenth of an hour. Note: When actual man-hour reporting is not required the estimated man-hours from hard copy of TCTO will be entered.

Block 10 - Reversal Code. Enter X to reverse TCTO status from closed (codes 22, 01-05) to open (codes 06-21, 24).

Block 11 - N/A

Block 12 - Work Center. Enter the five-position work center code that performed the TCTO action.

Block 13 - Work Order Number. Enter the eight-position work order number.

Block 14 - S/N. Enter the S/N that the TCTO status applies to.

Block 15 - Batch reporting. The following data element entries are required for Batch input:

Block 15.a - Subsystem ID. T is preprinted.

Block 15.b - Federal Supply Class. Enter the four-position federal supply class (NNNN).

Block 15.c - Type Report. Enter the appropriate report code.

Block 15.d - Blank.

Block 16 - Error Sequence Number. Enter the sequence number of the erroneous transaction.

Block 17 - Old Part Number. Enter current part number of item to be modified. On non-parts-tracked engines, enter the CAMS TMSM in lieu of the part number.

Block 18 - New Part Number. Enter the new part number when the TCTO directs reID to a new part number upon compliance. On non-parts-tracking engines, enter the new CAMS TMSM in lieu of part number.

Block 19 - Remarks. Entry not required unless specified by local procedures.

D042 TCTO STATUS REPORT

Report Control Symbol

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 5 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington DC 20503. Please DO NOT RETURN your form to either of these addresses. Send your completed form to: HQ USAF, ATTN: CIY, Washington, DC, 20330-1000

TRANSACTION CONDITION CODE: 7S

SEQUENCE NO.

CONFIGURATION ITEM IDENTIFIED

DATA CODE

STATUS/HOW MAL

STATUS DATE

ACCOMPLISHING SRAN

COMMAND

MAJ

SUB

ACTUAL MANHOURS

REVERSAL CODE

REVERSAL HOURS

WORK CENTER

WORK ORDER NO.

SERIAL NO

AUTODIN/BATCH DATA

A. SUB SYSTEM ID

T

B. TYPE OF REPORT

C. FEDERAL SUPPLY CLASS

D.

ERROR SEQUENCE NO.

OLD PART NUMBER

NEW PART NUMBER

NAME

GRADE

TELEPHONE NO.

AF Form 1559, OCT 91 PREVIOUS EDITION IS OBSOLETE

H9239567

Figure 3-2. AF Form 1559, D042 TCTO Status Reporting

CHAPTER 4

CONTRACTOR REPORTING

4-1 INTRODUCTION.

This chapter contains the mandatory reporting events for contractors and provides information, requirements, and procedures for reporting engines and tracked assemblies/parts to CEMS. Procedures for reporting certain life limiting parameters and TCTO reporting are also included. Reporting requirements are held to the minimum necessary to supply the AF with essential engine management data. Different event reports are required from contractor organizations depending upon the type of contract service being performed.

4-2 TERMINOLOGY.

The basic terminology used throughout this T.O. is directed to USAF organizations and is not always compatible with terms normally associated with contractors. For clarification, the following terms should be construed as having specific meanings as indicated for contractors:

Base - This term identifies any military installation or contractor facility.

Commander - This term will identify the management levels within a contractor facility.

EM - This term will be used to identify the individual at a contractor facility who is responsible for the management or reporting of engines they are under contract to report.

SRAN - This term identifies the FJ at a military installation and the EJ at a contractor facility.

4-3 CONTRACTOR RESPONSIBILITIES.

The contractor will appoint an EM to be responsible for and maintain the engine EJ SRAN IAW this T.O. The EM will establish local procedures to insure accuracy and timeliness of information reporting to CEMS. These procedures will also address coordination actions by other internal organizations to provide continuity between reportable event data submission to CEMS and manual annotation of historical records, i.e. AFTO Form 95, etc. The EM will contact the appropriate PEMO to resolve reporting problems.

4-4 SCHEDULE OF CONTRACTOR REPORTABLE EVENTS.

IMS program A295 (Automated History) must be updated any time significant narrative history occurs. All reportable events will be made as they occur in the same time frame as an AF activity except for the inventory of accountable engines which are required semi-annually. See Chapter 2 for CEMS reportable events, Chapter 3 for reporting instructions, Chapter 8 for inventory and certificate of deletion requirements and Chapter 9 for applicable table(s).

CHAPTER 5

TRANSACTION CONTROL

5-1 LOGICAL SEQUENCE OF EVENT CODES.

Refer to table in chapter 9 of this T.O. for the logical sequence of event codes.

NOTE

Error and variance codes will be assigned to reported codes that do not follow the logical sequence. An engine with an assigned condition code cannot be shipped off base under another condition code without first reporting the change. Example: an engine in TCC JF must be reported with TCC ML prior to shipment as TCC SL. Gain and loss transaction codes have been excluded from the transaction and condition table as they can occur throughout the pipeline cycle. Loss codes have been omitted from the authorized codes because the next logical code would always be a gain transaction. Condition codes R and G are not valid for reporting major assemblies or F100, F101 and F110 engines. For those instances where specific disposition instructions are not provided, i.e., transfer to a museum, contact the appropriate PEMO for instructions.

5-2 CODES FOR USE WITH AN ACCOUNT TRANSFER.

K type reports are gain transactions B, C, and D with applicable condition code. The next logical sequence after a K type report is usually a loss report using the new account code.

5-3 CODES FOR USE BY DEPOT REPAIR ACTIVITIES.

In addition to the base level authorized codes depot repair activities are authorized additional codes. Refer to tables in the back of this T.O.

5-4 CODES AUTHORIZED FOR SRANS USING CAMS BATCH REPORTING ONLY.

Table 9-3 lists the additional authorized codes for use only by CAMS activities and are not transmitted to CEMS.

Example: 8X equates to RB and 8Y equates to RR. These TCCs permit the on-base reassignment of RB and RR engines when required. Reference AFSCM 21-558.

CHAPTER 6

CORRECTION OF DUPLICATE TRACKED PARTS S/NS

6-1 DUPLICATE TRACKED PART S/NS.

CEMS does not allow duplicate S/Ns within a CII. Any duplicate S/N reported to CEMS will be rejected. An error code will result if two different activities report the same S/N (Error Code 101 - Invalid Processor) or if a SRAN reports the same S/N (Error Codes 116 - Invalid NHA; or 118 - Item Already Installed) installed in two different NHAs. When a suspect S/N is physically verified as a true duplicate, the possessing SRAN may be requested to obtain a photograph or rub-off to be mailed to PEMO.

6-2 SRAN LEVEL.

When duplicate S/Ns appear on accessible assemblies/parts the following actions are required:

6-2.1 Verify the actual S/N on the item via physical inspection and report the S/N found on the part to OC-ALC/TILC via telephone or message. TILC will request a physical inspection by the activity that possesses the other item with the reported S/N. Appropriate action as indicated by the results of the physical inspections will be taken: If both pieces of hardware have the same S/N, TILC will notify the PEMO.

6-2.2 PEMO will determine which suffix should be assigned, A for first duplicate, B for second, etc. They will also send a message to the SRAN that received the error and instruct that a suffix be added to the S/N on all manual records; and to resubmit the erroneous transaction with the pseudo S/N.

6-2.3 The SRAN that received the error will remove and delete the duplicate S/N from CAMS if they are a CAMS reporting activity. Initialize and install the pseudo S/N in CAMS, resubmit the transaction and change the S/N in all manual records. If the inspections reveal that SRAN (A) received the error but reported the S/N incorrectly, there is no true duplicate. The SRAN (A) will report the correct S/N via a correction transaction to clear the error. If the inspections reveal that SRAN (A) received the error but reported the S/N correctly and SRAN (B) has been reporting the wrong, there is no true duplicate S/N. However, the data system must be corrected and TILC will coordinate actions between the affected SRANs. SRAN (B) will remove and delete the S/N from CAMS, initialize and install the correct S/N.

6-2.4 OC-ALC/TILC will submit a S/N change transaction to CEMS for the S/N that has been erroneously reported by SRAN (B). SRAN (A) will initialize and install the S/N it was attempting to report and submit an error correction transaction verifying that the reported S/N is correct. When duplicate S/Ns appear on non-accessible items, OC-ALC/TILC will notify the PEMO.

6-2.5 The PEMO will determine which suffix should be assigned, A for first duplicate, B for second, etc., and will notify SRAN (A) that received the error instructing them to add a suffix to the S/N in CAMS and in the manual records. SRAN (A) that received the error will remove and delete the S/N from CAMS if they are a CAMS reporting activity, initialize, install the pseudo S/N and submit an error correction transaction using the pseudo S/N.

6-3 DEPOT LEVEL.

Depot will request a configuration listing for all engines and/or-assemblies input for repair and examine the listing as well as the manual records accompanying the item for any S/Ns with an alpha suffix A-L. A suffix indicates that the tracked part S/N MAY be a duplicate and must be physically inspected if exposed during repair.

6-3.1 The required action depends upon the results of the physical inspection. If the S/N on the assembly/part is physically verified, the part will be physically re-serialized by permanent marking IAW the applicable repair manual. The suspect duplicate S/N suffix will be changed in CEMS via program A460. Suspect duplicate S/N “A” will be changed to “M,” “B” to “N,” “C” to “P.” If a suspect suffix higher than “C” is found during the records search, contact the PEMO.

6-3.2 If the actual S/N on the part does not match the basic S/N of the pseudo S/N in the data system or manual records, determine if the actual S/N is a spare in CEMS. Assume the part was installed with the wrong S/N. Therefore the age data accumulated since installation must be transferred to the correct S/N (actual S/N removed) in CEMS. Ensure that the manual records reflect the correct information and S/N.

6-3.3 When the depot repair activity attempts to process a transaction on a part-assembly that it has physical possession of, but, the CEMS CDB indicates the item is being possessed-installed at another activity, the depot repair activity will contact the PEMO.

6-3.4 The PEMO will coordinate with the possessor and request a physical verification. They will determine if the S/N is in error or is a suspect duplicate. If the S/N was initialized in error, the PEMO will instruct the activity to remove the incorrect S/N and install the correct S/N. Correction to the age data must be made to reflect time accrued on the S/N that is physically installed and time removed from the other S/N. Contact the applicable PEMO point of contact for assistance.

CHAPTER 7

CEMS TABLES FILE MAINTENANCE RESPONSIBILITY AND QUERY

7-1 GENERAL INFORMATION.

CEMS contains a number of tables and programs on which query by CEMS direct line users is authorized. Although data in the tables and programs is not classified, establishment, alteration or deletion of data in these tables is restricted to specified personnel. T.O. 00-25-254-2 contains procedures for query and file maintenance of these programs and tables.

7-2 TABLE FILE MAINTENANCE RESPONSIBILITY.

The OPR may delegate to other organizations the authority to accomplish file maintenance, but the responsibility for the technical content remains with the OPR.

7-3 ACCESS CONTROL AND MONITORING.

Specific users identified by the OPR to OC-ALC/TILC will be authorized access to tables files maintenance.

CHAPTER 8

INVENTORY, RECONCILIATION, FILE MAINTENANCE AND ERROR CORRECTION

8-1 SPECIAL REPORTING.

This chapter contains information for accomplishing special reporting.

8-2 QUARTERLY / SEMI-ANNUAL INVENTORY / STATUS REPORT.

8-2.1 Physical Inventory. AF Base Level Activities are required to accomplish a quarterly (December, March, June and September) physical inventory for all accountable assets. Depot and Contractor SRANs are required to accomplish a semi-annually (March and September) physical inventory for all accountable assets.

8-2.2 OC-ALC/TILC prepares and distributes the Inventory Status Reports (PCN CED042.BUA510.A10Q, A20Q, A30Q, and A40Q) on the 20th of December, March, June and September. These reports are provided to assist SRAN EM in accomplishing the reporting requirements. DLR SRANs will print this report using the L option of TSOA that will route the product to the SRANs' local printer. Two copies are required, retain one copy at the SRAN, sign and return the second copy to OC-ALC/TILC by the 5th workday of the new quarter.

A. A10Q PART I INSTALLED contains all reportable engines in accounts A, G, N and R that were last reported as installed and active.

B. A20Q PART II SERVICEABLE contains uninstalled accountable assets on hand in serviceable status.

(1) PART II REPARABLE contains total quantity of uninstalled accountable assets on hand in reparable status.

(2) PART II INSTALLED contains total quantity of accountable assets on hand in an installed status other than that mentioned in PART I INSTALLED above.

8-2.3 Command and SRAN Engine Managers shall notify OC-ALC/TILC by 15 Oct each Fiscal Year of known changes to the engine inventory which occurred prior to 20 Sep, but did not get reported to the CEMS until after that date. OC-ALC/TILC will then be responsible for ensuring that all correcting entries are properly posted to CEMS and the DAO informed of all changes.

8-2.4 Accountable SRANs are required to inventory deployed and/or prepositioned assets.

8-2.5 The inventory will be accomplished by visually comparing the data plates of accountable assets with the CED042.BUA510 products. If a data plate is not accessible for installed or containerized accountable assets, review aerospace vehicle engine flight document and AFTO Form 95 to find the engine S/Ns. Do not rely on S/Ns stenciled on containers.

8-2.6 The report should be annotated to reflect only changes up to the sequence number listed on part IV. While conducting the physical inventory if any discrepancy reflects a lower sequence number than the one listed on part IV, the report must be annotated. For example, if an accountable asset was previously shipped or transferred to another SRAN, line through the transaction and annotate the report with "shipped to" SRAN and date transferred or shipped. If the accountable asset has been in transfer status 10 days or in shipped status 20 days before receipt of the report, notify the shipped to SRAN to submit appropriate receipt reports. If an engine has been removed, line through S/N on A10Q and add to A20Q. If an engine was installed, line through S/N on A20Q and add to A10Q. If a spare engine changes status (i.e., LF to FB), all transactions must be annotated on the report. All changes annotated on the report will include TMS, S/N, TCC, transaction date and reporting sequence number. After the physical inventory has been conducted, the report should be compared with all documentation (i.e., DD Form 1348-1A) to determine if the discrepancies found during the physical inventory are valid. Any accountable asset added to the CED042.BUA510 product at the time of the physical inventory must be reported to CEMS.

8-2.7 Concurrent with accomplishing the physical inventory at CAMS Batch reporting activities, the SRAN EM is responsible for ensuring CAMS and CEMS contain the same information using CAMS TRIC ISR. If an accountable asset cannot be located and no record exists of the asset currently being at that SRAN, or if the item was shipped-transferred more than 60 days ago, a certificate of deletion must be submitted. When completing the certificate, include all known data that will help in an investigation. Submission of a certificate of deletion does not necessarily mean responsibility for the accountable asset by the SRAN EM ends. The FJ2031 accountable officer must be satisfied as to accountability before CEMS records will be adjusted. If no response to a certificate of deletion is received before the next inventory, include a statement on A40Q Certificate of Deletion previously submitted. Transfer the latest annotated status for each possessed accountable asset from the updated working copy to the original copy of the CED042.BUA510.A10Q, A20Q, A30Q, and update the totals on A40Q as of the end of the quarter. The SRAN EM will sign a copy of the inventory, certifying the accuracy of the annotated products. Attach the certificate of deletion, include a statement on A40Q Negative Certificate of Deletion or Certificate of Deletion previously submitted and mail to OC-ALC/TILC.

8-3 FOR NON-RECEIPT OF QUARTERLY INVENTORY REPORTS.

OC-ALC/TILC will:

A. Send reminder to DLR activities.

B. Produce a list of non-receipts on the 15th day of the new quarter. CEMS technicians will:

1. Contact Engine Managers.
2. Note pertinent information on listing.
3. Note PEMO on listing.
4. Return completed listing to the Quarterly Status Inventory Monitor no later than the 20th workday of the new quarter.

C. Notify Command Engine Managers/Contractors by official message or letter with an info copy to OC-ALC/LR and the applicable PEMO.

8-4 CEMS-CAMS BATCH REPORTING DATABASE RECONCILIATION FOR CONFIGURATION.

Each SRAN possessing tracked engines will reconcile the CAMS database a minimum of once every year with CEMS for tracked components possessed by that SRAN. The reconciliation and inventory process may be a combined effort, but may not conflict nor delay the completion of the inventory. Tracked component reconciliation schedules will be coordinated by OC-ALC/TILC with the individual SRANs. On the scheduled reconciliation date, CAMS will produce a reconciliation file using TRIC REC IAW AFCSM 21-558. Reconciliation transaction 6Z will start with the next sequence number. A cutoff transaction 6R will be passed to CEMS. This transaction will contain the reconciliation file beginning and ending sequence number. The file will be transmitted to OC-ALC/TILC via ADRSS or normal daily CAMS transmission method. CAMS will then resume normal processing. If the reconciliation file has not been received within five working days of the scheduled reconciliation date, the reconciliation will be canceled and rescheduled. CEMS, upon receipt of the cutoff transaction 6R will cease processing for the SRAN being reconciled. CEMS will flag all outstanding configuration error transactions for the reconciled base, and a temporary file will be produced for all CII-S/N records showing that SRAN as the possessor. A CEMS-CAMS configuration reconciliation discrepancy listing with error code and verbiage will be sent to the reconciling SRANs OPR. Upon receipt of the discrepancy listing, it will be compared with the SRAN reconciliation listing. Any discrepancies that exist in the SRAN level computer will be corrected. If CEMS is in error and SRAN level records are correct, the assigned technician in TILC will research CEMS and make corrections as required.

1. These engines are on the reconciliation list for this activity and should be deleted for the reasons indicated below:

a. An erroneous serial number has been reported.

TMS	SERIAL NUMBER	BASE NUMBER
	D042	ACTUAL

(1)

(2)

(3)

b. There is no base record to indicate the disposition of the engine.

(1)

(2)

(3)

c. The engine was previously at this base but was transferred or shipped to another base.

TMS	SERIAL NO	TRANSFER BASE NO	DATE	BILL OF LADING	IF INSTALLED - AIRCRAFT MDS
(1)					
(2)					
(3)					

2. I certify the above engines are no longer at this base and should be deleted from my inventory reconciliation listing.

NAME AND RANK	DATE	ORGANIZATION COMMAND AND SRAN NO

Figure 8-1. Sample Certificate of Deletion Format

8-5 SRAN LEVEL TCTO STATUS RECONCILIATION.

All CEMS reporting activities, except depots, are required to accomplish a TCTO quarterly reconciliation. Contractors serving in engine management capacities that report to CEMS must accomplish a quarterly TCTO reconciliation.

8-6 CAMS BATCH REPORTING SRANS.

OC-ALC/TILC will produce and provide quarterly a two-part TCTO Reconciliation Listing (CEDO42.BUA520.A10Q) by SRAN for engines and parts active TCTOs. CAMS will produce a TCTO status listing for SRAN assets using TRIC DCR or TCI IAW AFCSM 21-558. SRAN personnel will compare and annotate these listings. Any discrepancies will be compared with available records. Changes to CAMS will be input as a 7S TCTO transaction. The second copy of the CEMS reconciliation report will be used to report errors to CEMS. Changes (i.e. TCTO status, status date, etc) will be circled or marked through with red pen or pencil and annotated with the correct data immediately to the right or the most appropriate blank space on the report. Changes will be made in CEMS upon receipt of the listing by OC-ALC/TILC. The annotated copy of the TCTO report (CEDO42.BUA520.A10Q) must be returned within 30 days from the date of the TCTO report. Only pages with annotated corrections will be returned. If no corrections are required, forward a negative reply to OC-ALC/TILC. Include SRAN on all correspondence. Provide written notification to CEM that quarterly TCTO review has been accomplished.

8-7 DIRECT LINE SRANS.

SRANs reporting TCTO status directly to CEMS will compare TCTO status with available records. Input TCTO status corrections IAW T.O. 00-25-254-2. TCTO reconciliation must be accomplished and reported to OC-ALC/TILC and CEM within 20 working days after the end of each quarter by message/letter/fax/e-mail confirming completed review. Include SRAN on all correspondence.

8-8 EMDL.

The five part EMDL is prepared daily, including prior 30 days. The SRAN EM will correct EMDL immediately upon receipt. The product varies in output and contains only pertinent information. The EMDL will be reviewed daily. DLR SRANS will use (TSOA Option L).

8-8.1 EMDL for CAMS batch reporting SRANs: The first record of the message contains the addressee, product number, report number, message number (different from report number), and preparation date. The message numbers are sequential and begin with 01 for the first report transmitted to addressee each month. Also the first message to an addressee each month will have a record that shows the number of messages transmitted to the activity the previous month. All records within a message are numbered sequentially in columns 76 through 80. If they are out of sequence, rearrange them before processing. Number all records within a message sequentially in columns 76 through 80. The text trailer record signals the end of the message and contains the addressee, product number, batch message number, and total number of records. If message is not received or complete, contact OC-ALC/TILC. Output formats are contained in T.O. 00-25-254-2.

8-8.2 Part One of EMDL (Error or Variance Reports). Informs the EM a transaction has been rejected by CEMS and additional action is required before transaction will be accepted. (Exception: Error codes 070 and 071 indicate illogical sequence.) Also, Shipment/Transfer actions overage (Error 79 or 80) Part One contains: incorrect data on unit ID, S/N, error sequence number, TCC, engine ID, WUC, error date and contains a narrative message. Error(s) will appear on first processing day recognized and will not reappear until the 5th day to allow EM response time. If not corrected by 5th day, error(s) will repeat daily until appropriate follow-up action is taken.

8-8.2.1 Data Variance Correction. The two transaction type reports that correct error or variance are (C) for Correction and (V) for Verification. Reference AFCSM 21-558. To resolve processing problems, contact OC-ALC/TILC.

8-8.3 Part Two of EMDL (Due-In Accountable Assets). Provides information on asset(s) shipped or transferred by another SRAN. Shipment-transfer transaction appears the first day after shipment/transfer. Part Two contains: designation, S/N, document number (if un-installed) or aircraft data (if installed), TCC, SRAN of shipping activity, command code of destined user, hours and date of transaction.

8-8.4 Part Three of EMDL (Possession Exceptions). Provides information to the losing EM when another SRAN takes possession of an accountable asset. Informs any organization that acquires possession of an accountable asset that CEMS has processed a change in possession. Part Three contains: designation, S/N of the accountable asset, document number (if un-installed), or aircraft data (if installed), TCC, SRAN-command code gaining possession and date of occurrence.

8-8.5 Part Four of EMDL (Results of Corrective Actions): Provides corrective action taken on reports previously held in suspense. Part Four contains: correction, deletion, and verification reports that were received and rejected by CEMS again. In some instances, corrective actions can be made by OC-ALC/TILC. When such corrections are made, this portion of the EMDL will be used to inform the reporting activity. (Applicable to contract FTP data only.)

8-8.6 Part Five of EMDL (Obligations to Install). Furnishes data to the EM that an aircraft does not contain the required QPA. CEMS will provide data on accountable assets that are indicated as installed. Part Five contains: unit ID, aircraft S/N, TMSM, position and S/N of engine(s) installed. If no accountable assets are installed, a narrative is provided.

8-9 DLR DATA CORRECTION.

The transaction type (4) Record Adjustment is used to correct the error or variance at DLR SRANs. (Contact OC-ALC/TILC). Reference T.O. 00-25-254-2. It is advantageous to correct errors on-line.

8-10 ERROR CODE RESPONSIBILITIES.

The following error codes are the responsibility of OC-ALC/TILC. All other error codes are the responsibility of the BEM where the error occurs.

1	158	289-290
3-9	160-161	410
12-13	166-167	413
15-16	169-170	416-417
19-22	172-173	420
29-38	177-178	503-505
64	180	507-508
91	182	510-514
105-113	188	516-517
115-119	200-207	519-524
122	209-210	527-530
148-154	212-248	540-542
156	263-286	

8-11 CAMS ERROR CORRECTION ACTION KEYS.

1. Most error codes have been assigned more than one corrective action. This is primarily for two reasons: The first reason is that your corrective action may be different depending on whether the information in your CAMS system is correct or incorrect. Example: if you received an error code 069 and you knew you had made a mistake when you input the receipt in CAMS, you would simply make the correction (ESU, format 5, option 1) and you would not need to call OC-ALC/TILC. However, if the engine was in fact serviceable, you would call OC-ALC/TILC to explain pertinent details in addition to verifying (ESU, format 3, option 1) your transaction. The second reason error codes have been assigned more than one corrective action key is that many of the errors require more than one action. For example, many errors which require that you use ESU, format 5, option 1, to generate a corrective transaction to CEMS were actually caused by another mistake elsewhere in your CAMS records and will require that you correct your CAMS database. If you are unfamiliar with what must be done to correct CAMS, contact your host CAMS Data Base Manager for help. If they require further information or assistance, they are able to contact the SSG/ILM, Field Assistance Branch, 24 hours a day, seven days a week at DSN 596-5771/5401.
2. ESU, format 5, option 1.
3. ESU, format 5, option 2 (if this is used, ESU, format 5, option 1 must be run after this).
4. ESU, format 2, if required.
5. ESU, format 3, if required.
6. Call OC-ALC/TILC, Engine Systems Branch, Tinker AFB, OK.
7. Call SSG/ILMD (via the Field Assistance Branch, DSN 596-5771/5401).
8. Correct CAMS database.
9. Ensure batch were processed and transmitted through ADRSS
10. Not Used
11. COR, format 1.
12. COR, format 2.
13. TRIC PSC CAMS screen 79.
14. See AFCSM 21-558 for further explanation.

8-12 ERROR CORRECTION ASSISTANCE.

If problems are encountered while making corrections as defined in this T.O., contact OC-ALC/TILC as specified in CEMS IMSA program A301.

8-13 ERROR CODES.

CODE 001

Description: Assigned when command code is not in the CEMS table of valid command codes.
Possible Causes: Major command/sub-command code is invalid or has not been loaded into table.
Corrective Action for DLR: Enter correct command code. If valid, contact TILC to load new code.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 8.

CODE 002

Description: Assigned when account code is not valid.
Possible Causes: Incorrect account code entered.
Corrective Action for DLR: Enter correct account code.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 8.

CODE 003

Description: Assigned when type report is invalid.
Possible Causes: Selection of incorrect report type
Corrective Action for DLR: Enter correct type report.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 004

Description: Assigned when date of occurrence is in error.
Possible Causes: The date of occurrence is invalid.
Corrective Action for DLR: Enter correct date of occurrence.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 005

Description: Assigned when month code/date of occurrence combination is invalid.
Possible Causes: Error in month code or date of occurrence.
Corrective Action for DLR: Enter correct date.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 006

Description: Assigned when type report is invalid for this program.
Possible Causes: Type report code other than K, R, T, or 4 was used.
Corrective Action for DLR: Enter K, R, T, or 4 type report as applicable.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 007

Description: Assigned when sequence month number is not valid.
Possible Causes: Field is other than 01-12 or does not reflect previous month on a type A report.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 008

Description: Assigned when To-From SRAN number is not consistent with transaction or type report.
Possible Causes: Data is contained in To-From SRAN number block and TC is not coded as S, T, U or is not a gain, loss or type K report. TC is U but the To-From SRAN number block is blank.
Corrective Action for DLR: Enter the appropriate gain or loss transaction code.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 6.

CODE 009

Description: Assigned when command code in To-From SRAN block is not valid.
Possible Causes: Command code was reported in error or was blank.
Corrective Action for DLR: Enter correct command code. If correct contact, TILC to load new code.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 010

Description: Assigned when a T report has been previously reported and posted for the same date.
Possible Causes: A T report was previously reported or was generated by CEMUA145.

CODE 012

Description: Assigned when TCC reflects invalid or unacceptable combination of codes or no entry.
Possible Causes: Incorrect TCC combination or no entry or TCC codes EL, EK, JL, JK, or RK are reported by other than a depot repair activity.
Corrective Action for DLR: Enter correct codes.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 013

Description: Assigned when TCC is not valid with account code, and/or type report.
Possible Causes: Erroneous type report, account or TCC.
Corrective Action for DLR: Enter correct data.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 6.

CODE 014

Description: Assigned when a character other than an alpha/numeric is used for engine or part serial number.

Possible Causes: Invalid character entered in serial number field.

Corrective Action for DLR: Enter valid alpha/numeric character.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 8.

CODE 015

Description: Serviceable shipment without entry in reparable engine serial number block.

Possible Causes: TCC reflects codes "SR" or "SB," but reparable engine SN is invalid, or not left blank.

Corrective Action for DLR: Submit a type "C" report with the correct reparable engine serial number, the word "stock" or "not furn," as applicable.

CODE 016/017/18

Description: Assigned when condition code, NHA designator, and NHA S/N combination is not valid.

Possible Causes: Condition code does not reflect code A or Z (installed), but NHA designator and NHA S/N contains S/N.

Corrective Action for DLR: Enter correct condition code, NHA designator and NHA S/N.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 019

Description: Assigned when engine related How Mal Code or transaction code is in error.

Possible Causes: Engine related How Mal code erroneous, blank or TC is not F, G, L, K or M.

Corrective Action for DLR: Enter correct How Mal Code

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 020

Description: Invalid Container Type.

Possible Causes: Transaction code is "S," but shipping device code is invalid.

Corrective Action for DLR: Submit a type "C" report, with the correct shipping device code.

CODE 021

Description: Assigned when reason for return to overhaul is in error.

Possible Causes: TCC is LL, KL, or ML and reason for return to overhaul is blank or invalid.

Corrective Action for DLR: Enter the correct reason for return to overhaul code.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 022

Description: Assigned when Reason for return to overhaul code is in error.

Possible Causes: Reason for return to overhaul code is other than 9D, 9E, or 9F.

Corrective Action for DLR: Enter correct reason for return to overhaul code.

CODE 023

Description: Organization Code cannot be same as previous.

Possible Causes: Organization Code is the same.

Corrective Action: Enter organization code of "A" through "Z" excluding "X".

CODE 027/028

Description: Assigned when engine time is lower than previously reported or exceeds 500 hours.

Possible Causes: Engine time or S/N is incorrect. Major overhaul input by depot or hour meter changed.

Corrective Action for DLR: Enter correct engine S/N and correct operating time

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 3, and 6.

CODE 029

Description: Assigned when reason for delay code on work stopped report is in error. Reference Table 9-9.

Possible Causes: Incorrect reason for delay code.

Corrective Action for DLR: Enter correct code

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 030

Description: Assigned when engine related How Mal Code is not compatible with removal TCC combination. Reference Table 9-7.

Possible Causes: Engine related How Mal Code in error

Corrective Action for DLR: Enter correct code.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 031

Description: Assigned when maximum time or engine related How Mal Code (866 or 867) is inconsistent with the operating time on the engine.

Possible Causes: Engine related How Mal Code or engine time in error.

Corrective Action for DLR: Enter correct How Mal Code or engine time

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 032

Description: Assigned when an incompatibility exists between account code and SRAN when a gain or loss is reported.

Possible Causes: Account code, transaction code or to-from SRAN entry erroneous.

Corrective Action for DLR: Enter correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 033

Description: TCN not reported on un-installed account transfers, receipt reports, gains, or losses.

Possible Causes: TC incorrect or document number not entered.

Corrective Action for DLR: Enter correct data

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 7.

CODE 034

Description: Assigned when a K type report is submitted and the account code is the same as in CEMS or when account code Z is used with other than a VA or TCC.

Possible Causes: Incorrect account code, type report (should not have been K) or TCC.

Corrective Action for DLR: Enter correct data

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 6.

CODE 035

Description: Assigned when batch sequence number is higher than the sequence number reported on the type A report.

Possible Causes: Incorrect month code or sequence number entered.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 036

Description: Assigned when engine related How Mal Code or engine time, reported with TC E or J.

Possible Causes: Incorrect code or time

Corrective Action for DLR: Enter the correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 7.

CODE 037

Description: Assigned when an invalid document number is used on a K type report.
Possible Causes: Incorrect document number.
Corrective Action for DLR: Enter correct document number.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 038

Description: Assigned when transaction date is earlier than previously reported.
Possible Causes: Erroneous date entry or transactions submitted out of proper sequence.
Corrective Action for DLR: Enter correct date and any missing transactions.

CODE 039

Description: Assigned when transaction code reflects transaction code A which indicates a new production engine gain, but SRAN is not a new production contractor SRAN.
Possible Causes: Incorrect transaction code or account code.
Corrective Action for DLR: Enter the correct data.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 043

Description: Assigned when the date of occurrence of a K type report is earlier than CEMS.
Possible Causes: Date of occurrence in error or transfer report (K type) not submitted in proper sequence.
Corrective Action for DLR: Enter the correct data.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 7.

CODE 044

Description: Assigned when account code J on a K type report and SAP number was incorrect.
Possible Causes: SAP number erroneous or blank or account code erroneous.
Corrective Action for DLR: Enter the correct data.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 045

Description: Assigned when date and /or time less than previously reported.
Possible Causes: Transaction date of occurrence is less than previous transaction.
Corrective Action for DLR: Enter correct date.

CODE 047

Description: Assigned when transaction is not valid for a K type report. Valid codes are B, C, or D.
Possible Causes: Transaction code or Type report code erroneous.
Corrective Action for DLR: Enter correct TCC or type report.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 6.

CODE 051/55/56

Description: Assigned when an A type report is received at CEMS prior to the end of the month, invalid sequence number.
Possible Causes: Incorrect Type Report code or month code entered in sequence number or was submitted prior to the end of the month.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 057

Description: Assigned when error is detected in sequence numbers entered on a deletion report submitted to delete a block of consecutive sequence numbers.
Possible Causes: Month codes do not match or the sequence number is lower than previous.

CODE 058

Description: Assigned when other than a K type report is used to transfer engines between AF and non-AF accounts.
Possible Causes: Invalid/missing account code or type report code. Engine was previously reported in the incorrect account.
Corrective Action for DLR: Enter correct account code or type.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 059

Description: Assigned when the date of occurrence reflects a lapse in time in excess of 30 days.
Possible Causes: Untimely submission of report or incorrect date of occurrence.
Corrective Action for DLR: Enter correct date within last 30 days.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 060

Description: Assigned when TMSM is not compatible with the part number in the engine S/N record.
Possible Causes: Invalid TMSM, TCTO was accomplished to change the part number, and the work complete transaction does not reflect the new TMSM is not compatible with the part number. A TCTO was accomplished, but not entered and part number did not get updated.
Corrective Action for DLR: Enter the correct data including the TCTO action to change the part number.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 061

Description: Assigned when command code of asset being installed does not match NHA.
Possible Causes: Invalid command code
Corrective Action for DLR: Enter correct command code.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 062

Description: Assigned when the Ship To command code differs from the receiving command code or when the command code changes on any transaction.
Possible Causes: Erroneous command code or Command code is correct, but To SRAN is incorrect.
Corrective Action for DLR: Enter correct data.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 063

Description: Assigned when the engine TMSM is not in CEMS.
Possible Causes: Erroneous TMSM or has not been established in the CEMS table.
Corrective Action for DLR: Enter the correct TMSM, if TMSM is not in CEMS physically check the engine data plate and/or records to ensure that the designation is correct, and advise OC-ALC/TILC. When the designation has been validated and included in the CEMS table resubmit transaction
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 064

Description: Assigned when attempting to install a condemned/lost engine or part on a NHA S/N.
Possible Causes: NHA is not in the system or has been previously reported condemned or lost.
Corrective Action for DLR: Enter correct S/N. If the S/N is correct, contact TILC to add NHA.
Corrective Action for CAMS: See paragraph 8-11; keys 6 and 8.

CODE 065

Description: Assigned when engine S/N is reported as lost.
Possible Causes: Multiple loss reports submitted on the same engine. Erroneous engine S/N. Engine was erroneously reported as lost. Engine returned from a SAP country and gained.
Corrective Action for DLR: Gain the S/N to the inventory and enter correct data.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 6, and 8.

CODE 066

Description: Assigned when a gain transaction is submitted on an engine already in the inventory.

Possible Causes: Erroneous engine designation, engine S/N, transaction code.

Corrective Action for DLR: Enter correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 6, and 8.

CODE 067/068

Description: Assigned when a receipt has been input on an engine not been shipped/transferred.

Possible Causes: Engine S/N in error, engine not shipped/transferred or transfer reflected a different To-From SRAN. Erroneous To-From SRAN entry on a U transaction.

Corrective Action for DLR: Enter correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 6, and 8.

CODE 069

Description: Assigned when the previous report indicates the condition as reparable and the current transaction is attempting to report the condition as serviceable without work started or work completed status changes.

Possible Causes: Engine condition in error. Engine condition is serviceable and one or more reports were not received at the CEMS.

Corrective Action for DLR: Enter the correct condition code

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 6.

CODE 070/071

Description: Code 070 is assigned in conjunction with code 071, which reflects an illogical pipeline sequence. Code 070 provides information on the previous to the one that caused code 071 to be assigned. This information is provided to determine which pipeline sequence has been missed. For example: code 070 report reflects TCC codes LL. The report coded with code 071 reflects TCC codes VA. Inasmuch as an engine that is reparable for major overhaul (LL) cannot be logically installed (VA) without going through other reportable segments of the pipeline, the report of installation (VA) is assigned code 071. When compared with the variance code 070 report, the missing segments can be determined and the necessary reports submitted.

Possible Causes: Failure to submit one or more status reports. For non-parts-tracked engines, the engine will be programmatically removed when the removal pipeline segment has been by-passed. This is not true for parts-tracked engines.

Corrective Actions for DLR: Locate the report assigned code 71, which reflects the next transaction that caused both the code 70 and 71 to be generated. In the event the reporting activity that received the code 71 is not the same as the reporting activity that received the code 70, it is the responsibility of the activity receiving the code 71 to initiate communication with the activity that received the code 70 for correction of the problem. Determine the segments of the pipeline that have been missed and if the missed reports are the responsibility of the activity that received the code 70, then prepare the proper report(s) in the following manner: In each report, enter the date of occurrence when the missing pipeline segment occurred. Enter the word MISS (representing missed) in sequence number portion. Do not fill in the month portion. Complete all applicable data on each report that is being submitted.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 6.

CODE 072

Description: Assigned when an engine is reported installed in one end item and CEMS show it in another.

Possible Causes: Erroneous NHA S/N. The engine was removed from previously reported end item and reinstalled in another end item without submission of the necessary reports.

Corrective Action for DLR: Enter correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 6, and 8.

CODE 073

Description: Assigned when an engine is reported installed on an unacceptable end item.

Possible Causes: Incorrect NHA or engine ID. Valid engine/end item combination not loaded in CEMS. Incorrect family group code or the engine ID-TMSM table.

Corrective Action for DLR: Enter correct data and/or notify OC-ALC/TILC that the combination is valid.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 8.

CODE 074

Description: Assigned when the entry does not match a valid SRAN in the CEMS table, or is not valid for type item reported.

Possible Causes: Erroneous TO/FROM SRAN with other than an Account code "J" and not TC "B," "C," "D," or "Z", or attempting to report an engine at a parts only SRAN.

Corrective Action for DLR: Enter correct SRAN.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 075

Description: Assigned when a SRAN submits a report on an engine it previously shipped or transferred.

Possible Causes: Report of shipment or transfer was in error. Incorrect S/N or date of occurrence.

Corrective Action for DLR: Enter correct data or call OC-ALC/TILC

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 076

Description: Assigned when engine condition is reparable and are attempting to install the engine.

Possible Causes: One or more reports reflecting engine condition code changes were not received.

Corrective Action for DLR: Enter correct data in sequence.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 9.

CODE 079

Description: Assigned when engine is reported in transit and not reported as received by the allowable time, 10 days for transfers and 20 days for shipments. The shipping activity is responsible for engine in transit until receipt is reported.

Possible Causes: The activity to which the engine was shipped has not submitted a receipt report.

Corrective Action for DLR: The shipping activity must initiate follow-up action providing the necessary information to OC-ALC/TILC. The shipping activity will also furnish to the Ship To activity the S/N, shipping document number, date, method of transportation and other applicable data necessary to locate the engine. If confirmation is not received from the recipient within 10 days, the shipping activity will initiate tracer action through transportation. After tracer action has been taken and further assistance is required, advise OC-ALC/TILC. Submit a type 4 report with the correct To-From SRAN or to regain possession. Then submit a routine type report reflecting the shipment of the correct engine.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 080

Description: Assigned when an engine has been shipped and a receipt has not processed within the allowable time. (See Code 079 for allowable time.)

Possible Causes: Engine has been received and receipt has not been processed in CEMS.

Corrective Action for DLR: Enter the correct receipt data. If CEMS does not show that the engine has been shipped, contact the owning SRAN and request they input the correct transactions. If after five days action has not been taken, notify OC-ALC/TILC.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 4, and 6.

CODE 081

Description: Assigned when a loss report transaction code W, X, Y, or Z, is received with a date of occurrence earlier than reflected on CEMS records or the same date of occurrence with a sequence number lower than that reflected on CEMS records.

Possible Causes: Erroneous Transaction code or date of occurrence.

Corrective Action for DLR: Enter correct code or date.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 083

Description: Assigned when the MDS is not the same as that reflected in CEMS.

Possible Causes: The engine was modified, but the modification was not reported.

Corrective Action for DLR: Enter correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 6, and 8.

CODE 084

Description: Assigned when the NHA designator reported is not in CEMS.

Possible Causes: Incorrect NHA designator or is valid, but is not contained in the CEMS table.

Corrective Action for DLR: Enter the correct data or notify OC-ALC/TILC if a new NHA designator is required. Upon confirmation of validity, OC-ALC will load new designation in CEMS.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 6, and 8.

CODE 085

Description: Assigned when the transaction code is U or V or NHA S/N does not match.

Possible Causes: Erroneous transaction code or NHA S/Ns.

Corrective Action for DLR: Enter the correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 6, and 8.

CODE 088

Description: Assigned when CEMS records reflect an engine as installed and a status report with a transaction code other than K or L and a condition code other than A or Z is processed. No action is required on the report that generated the code 088; however, code 088 will continue each seven days until the removal report is processed.

Possible Causes: Removal assigned error-variance code. Removal report not submitted or received.

Corrective Action for DLR: Enter the correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 089

Description: Assigned when a removal report is processed and CEMS records reflect the engine as un-installed prior to the removal report. The removal has up-dated the master record and no action is required on this report; however, this error will continue each seven days until the installation report is processed.

Possible Causes:. Installation report not submitted, in error or received and not processed.

Corrective Action for DLR: Enter the correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 091

Description: Assigned when engine is reported lost from wrong end item.

Possible Causes: Erroneous transaction code or NHA S/Ns.

Corrective Action for DLR: Enter the correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 6, and 8.

CODE 101

Description: Assigned when possessor code does not match CEMS.

Possible Causes: Assigned when reporting on an item not possessed because it has been shipped off-base or an erroneous S/N.

Corrective Action for DLR: Enter correct data. If duplicate S/N is suspected, contact PEMO for assistance

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 8.

CODE 102

Description: Assigned when the SRAN reported is not in the CEMS table of valid SRAN codes, or is no longer an active CEMS reporting organization and is reflected in the SRAN table for history purposes.

Possible Causes: The SRAN code reported is invalid/inactive.

Corrective Action for DLR: Enter correct SRAN or contact OC-ALC/TILC to establish new SRAN.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 6, and 8.

CODE 103

Description: Assigned when the part number reported is not in the CEMS part numbers table.

Possible Causes: The reported part number is invalid or new part number not loaded.

Corrective Action for DLR: Enter the correct part number and/or contact the PEMO to load the new P/N.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 6, and 8.

CODE 104

Description: Assigned when part number reported does not match CEMS for the S/N reported.

Possible Causes: Part number is invalid.

Corrective Action for DLR: Enter the correct part number and/or contact the PEMO.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 6, and 8.

CODE 105/106

Description: Assigned when invalid engine position number is reported.

Corrective Action for DLR: Enter the correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, and 8.

CODE 107

Description: Assigned when date of occurrence not numeric or not valid 24 hour time range, eg 2615.

Corrective Action for DLR: Enter the correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 108

Description: Assigned when HS1-hrs 790-845 field is either blank or not numeric.

Corrective Action for DLR: Enter the correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 109

Description: Assigned when HS2-hrs 810-830 field is either blank or not numeric.

Corrective Action for DLR: Enter the correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 110

Description: Assigned when LCF-Events 790 field is either blank or not numeric.

Corrective Action for DLR: Enter the correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 111

Description: Assigned when manual cycle-event 550 field is either blank or not numeric.
Corrective Action for DLR: Enter the correct data.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 114

Description: Assigned when invalid S/N.
Corrective Action for DLR: Enter correct S/N
Corrective Action for CAMS: See paragraph 8-11; keys 1, 3, and 6.

CODE 115

Description: Assigned when 6U TCC valid for engine CII-WUC only.
Corrective Action for DLR: Enter 6U in the TCC field and engine CII-WUC.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 116

Description: Assigned when Invalid NHA.
Possible Causes: NHA S/N indicated on the transaction does not match that in CEMS.
Corrective Action for DLR: Enter the correct data.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 6 and 8.

CODE 117

Description: Assigned when attempt to over-install, exceeds the authorized installed QPA.
Possible Causes: A previous removal transaction has rejected thereby failing to create a vacancy.
Corrective Action for DLR: Correct and resubmit removal/installation transaction.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 118

Description: Assigned when item already installed.
Possible Causes: A previous removal transaction has rejected.
Corrective Action for DLR: Enter correct data.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 119

Description: Assigned when invalid or incorrect engine recorder S/N is reported.
Possible Causes: Erroneous engine recorder-engine combination reported or missing transactions.
Corrective Action for DLR: Enter correct engine recorder-engine combination.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 6, and 8.

CODE 120

Description: Assigned when action would result in negative time on NLA's by attempting to decrease the time by more than the total TSN of NLA's. Applicable to 6S transaction only.
Possible Causes: Erroneous entry.
Corrective Action for DLR: Enter correct time. Could require removal of the NLA(s) going negative, adjust the time on the NHA and re-install the NLA(s).
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 122

Description: Assigned when invalid catalog number is reported.
Corrective Action for DLR: Enter correct catalog number.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 123

Description: Assigned when Invalid unit ID is reported, must be alpha, cannot be X.
Corrective Action for DLR: Enter correct unit ID.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 124

Description: Assigned when duplicate sequence number, date and or time is reported.
Possible Causes: This transaction is either a duplicate or has been reprocessed.
Corrective Action for DLR: No corrective action is required.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 125

Description: Assigned when Flying time exceeds Flying time previously reported by more than maximum update limit.
Corrective Action for DLR: Enter correct flying time
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 126/127

Description: Assigned when EOT LCF-Event 790-minor cycle value exceeds that previously reported by more than maximum update limit.
Possible Causes: Aircraft has been on an extended flight and has accumulated more than the normal limit. Missing-unreported 6U or 6T transactions prior to the current update transaction. Engine recorder malfunction. Misread engine recorder, erroneous entry.
Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit transaction.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 128

Description: Assigned when HS1-Hrs 790-845-EG8 value increased more than EOT.
Possible Causes: Aircraft has been on an extended flight and has accumulated more than the normal maximum update limit. Missing-unreported 6U, or 6T transactions prior to the current update transaction. Engine recorder malfunction, misread or entered incorrectly.
Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 129

Description: Assigned when HS2-Hrs 810-830-EG9 value increased more than the EOT window value.
Possible Causes: Engine recorder malfunction, misread or entered incorrectly.
Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 130

Description: Assigned when the combination of HS1 and HS2 window value increases is greater than the EOT window value increase.
Possible Causes: Engine recorder malfunction, misread or entered incorrectly.
Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 131

Description: Assigned when delta hours 810-830-EG9 exceeds delta hours 790-845-EG8.

Possible Causes: Engine recorder malfunction, misread or entered incorrectly.

Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 132/133

Description: Assigned when FHR/EOT exceeds that previously reported by more than maximum update limit with extended flight indicator present.

Possible Causes: Aircraft has been on an extended flight and has accumulated more than the normal maximum update limit. Missing-unreported 6U, or 6T transactions prior to the current update transaction. Engine recorder malfunction, misread or entered incorrectly.

Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 134

Description: Assigned when LCF-events 790-minor cycles exceeds maximum update limit with extended flight indicator present.

Possible Causes: Assigned when aircraft has been on an extended flight and has accumulated more than the normal maximum update limit. Missing-unreported 6U, or 6T transactions prior to the current update transaction. Engine recorder malfunction, misread or entered incorrectly.

Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. FHR on F100 and TF34 and manual cycles on F100 must be increased with a 6A transaction. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 135

Description: Assigned when EOT value is less than that previously reported.

Possible Causes: Missing-unreported 6T or 6U transaction. Late or out of sequence 6U TCC. Engine recorder malfunction, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. FHR on F100 and TF34 and manual cycles on F100 must be increased with a 6A transaction. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 136

Description: Assigned when HS1-Hrs 790-845-EG8 value is less than previously reported.

Possible Causes: Missing-unreported 6T or 6U transaction. Late or out of sequence 6U TCC. Engine recorder malfunction, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. FHR on F100 and TF34 and manual cycles on F100 must be increased with a 6A transaction. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 137/138 /141

Description: Assigned when HS2-HRS 810-830-EG9/LCF-EVENTS 790/HSF/EVENTS 550 value is less than previously reported.

Possible Causes: Missing-unreported 6T or 6U transaction. Late or out of sequence 6U TCC. Engine recorder malfunction, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. FHR on F100 and TF34 and manual cycles on F100 must be increased with a 6A transaction. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 142/143

Description: Assigned when FHR/EOT reported differs from CEMS by more than the allowed variance.
Possible Causes: Missing-unreported 6A, 6S, or 6U TCC or erroneous entry.
Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 144/145

Description: Assigned when HS2-HRS 790-845/HS2-Hrs 810 reported differs from CEMS by more than plus or minus 10 hours.
Possible Causes: Missing, incorrect or-unreported 6A (add), 6S (subtract), or 6U (update) transactions.
Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 146

Description: Assigned when LCF-events 790 submitted differs from CEMS by more than plus or minus 100 cycles.
Possible Causes: Missing, incorrect or unreported 6A (add), 6S (subtract), or 6U (update) transactions.
Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 147

Description: Assigned when Manual Cycles-events 550 submitted differs from the CEMS by more than plus or minus 10 cycles.
Possible Causes: Missing, incorrect or unreported 6A (add), 6S (subtract), or 6U (update) transactions.
Corrective Action for DLR: Enter missing transactions and resubmit transaction with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 148/149/150/151/152

Description: Assigned when EOT/HS1-Hrs 790/HS2-Hrs 810/LCF-Events 790/Manual cycle-events 550 subtraction error. The transaction would result in ne value in the database if processed.
Possible Causes: Erroneous entry. Discrepancy between CAMS and CEMS databases, ie the transaction does not create a negative value in CAMS, but would if processed by CEMS.
Corrective Action for DLR: Enter correct value to subtract and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 155

Description: Assigned when WOW value is less than previously reported.

Possible Causes: Missing-unreported or out of sequence 6U transaction. Engine recorder malfunction.

Corrective Action for DLR: Enter missing transactions and resubmit with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 156

Description: Attempt to update an incomplete engine.

Possible Causes: Missing, unreported or erroneous installation transaction. Attempt to input work complete report FR-FB, report of maintenance (6P), or installed transfers-serviceable shipments on an incomplete engine.

Corrective Action for DLR: Enter missing transactions and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 157

Description: Assigned when attempting to initialize an engine S/N.

Possible Causes: Erroneous entry of CII-S/N.

Corrective Action for DLR: Enter correct data.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 158

Description: Assigned when attempting to use an invalid CII.

Possible Causes: Erroneous entry of CII or new CII not yet initialized in CEMS.

Corrective Action for DLR: Enter correct CII and/or contact OC-ALC/TILC.

Corrective Action for CAMS: See paragraph 8-11; key 6, 7 and 8.

CODE 159

Description: Assigned when missing card or transaction set is transmitted to CEMS from CAMS.

Possible Causes: Data not transmitted to the CEMS or transmission malfunction.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 7 and 9.

CODE 160/161

Description: Assigned when FHR/EOT is reported blank or is not numeric.

Possible Causes: Field blank or not numeric.

Corrective Action for DLR: Resubmit numeric value.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 162/163/164/165

Description: Assigned when FHR /SOR 100 ext. flight indicator/SOR maximum update limit/FHR and/or SOR reported as zero. No action required.

CODE 168

Description: Assigned when Major Cycles value exceeds that previously reported by more than the maximum update limit with extended flight indicator present.

Possible Causes: Aircraft has been on an extended flight and has accumulated more than the extended maximum update limit. Missing-unreported 6U or 6A transactions prior to the rejected report. Engine recorder malfunction or erroneous input.

Corrective Action for DLR: Enter missing transactions and resubmit with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 169

Description: Assigned when an invalid engine related How Mal Code has been entered.

Possible Causes: Improper or invalid entry.

Corrective Action for DLR: Enter correct code.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 170

Description: Assigned to FHR subtraction error, transactions would result in negative FHRs if processed.

Possible Causes: The number of hours have been improperly entered.

Corrective Action for DLR: Enter correct hours.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 171

Description: Assigned when Major Cycles value exceeds that previously reported by more than the maximum update limit with extended flight indicator present.

Possible Causes: Aircraft has been on an extended flight and has accumulated more than the extended maximum update limit. Missing-unreported 6U or 6A transactions prior to the rejected report. Engine recorder malfunction or erroneous input.

Corrective Action for DLR: Enter missing transactions and resubmit with extended flight indicator code. If recorder malfunctions, estimate data IAW T.O. 00-20-5-1-X, and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 172

Description: Assigned when attempting to delete an engine.

Possible Causes: An unauthorized attempt to delete an engine.

Corrective Action for DLR: Engines must be lost, input appropriate transaction for engine loss.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 173

Description: Assigned when attempting to change engine ID.

Possible Causes: Invalid engine ID submitted or a new engine identifier has not been loaded in CEMS.

Corrective Action for DLR: Enter correct engine ID. Contact OC-ALC/TILC to load the new ID.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 7.

CODE 174

Description: Assigned when reported tracked part life limit does not match CEMS, applies to TCC 6L only.

Possible Causes: The limit has been changed or entered incorrectly.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 6, 8, 11 and 12.

CODE 175

Description: Assigned when delta hours 840 exceeds delta hours 830.

Possible Causes: Engine recorder misread or malfunctioning.

Corrective Action for DLR: Re-read recorder or estimate value IAW the applicable T.O. 00-20-5-1-X series, and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 176

Description: Assigned when TCC is invalid for installed item.

Possible Causes: Missing removal report or incorrect S/N.

Corrective Action for DLR: Enter missing transactions, correct data and reenter.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 3 and 6.

CODE 177

Description: Assigned when sequence number is not found in error suspense file.

Possible Causes: Sequence number submitted was incorrect or is not in the suspense file.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 178

Description: Assigned when meter readings present for engines other than parts tracked engines.
Possible Causes: Engine identifier (TMSM-CII) has been erroneously entered.
Corrective Action for DLR: Determine correct meter readings and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 8.

CODE 179

Description: Assigned when attempting to update an engine while in NB, NR, FB, or FR status.
Possible Causes: Missing or incorrect entry.
Corrective Actions for DLR: Enter missing transactions and resubmit.

CODE 180

Description: Assigned when new engine ID does not match engine ID of NHA.
Possible Causes: Engine ID or NHA incorrectly reported. Engine TMSM not previously related to reported NHA has been authorized for the configuration being reported but has not been input to CEMS.
Corrective Action for DLR: Enter correct data, contact TILC to load new TMSM.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 181

Description: Assigned when FHR value input exceeds EOT
Possible Causes: Attempting to adjust only one value or a discrepancy between CAMS and CEMS.
Corrective Action for DLR: Enter correct value for FHR or EOT.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 182

Description: Assigned when S/N not found for an account transfer gain.
Possible Causes: CII-S/N submitted in error.
Corrective Action for DLR: Enter correct CII-S/N. If not in CEMS, contact TILC.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 6 and 8.

CODE 183

Description: Assigned when updating an engine with TCC 6U without engine recorder window initialized.
Possible Causes: Engine recorder S/N incorrectly entered on 6U or 6T transaction.
Corrective Action for DLR: Enter correct recorder S/N followed by a 6T then the 6U.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 8.

CODE 184

Description: Assigned when engine-ID of transaction does not match engine-ID of S/N to be changed.
Possible Causes: Engine-ID or S/N has been erroneously reported.
Corrective Action for DLR: Enter correct engine-ID or S/N.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 185

Description: Assigned when EOT equals previously reported and cycles-events greater than previous.
Possible Causes: Incorrect EOT/cycles-events or engine recorder malfunction.
Corrective Action for DLR: Enter correct EOT/cycles-events. If recorder is malfunctioning, estimate recorder data IAW T.O. 00-20-5-1-X, and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 186

Description: Assigned when updating an engine with manual cycles greater than LCF or with no LCF.
Possible Causes: LCF parameter omitted or LCF/manual cycles in error.
Corrective Action for DLR: Enter correct LCF. If recorder is malfunctioning, estimate recorder data IAW T.O. 00-20-5-1-X, and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 187

Description: Assigned when updating an engine, TCC 6U, with flag greater than 1.
Possible Causes: The update flag has been input erroneously.
Corrective Action for DLR: Verify engine recorder that the flag is ON or OFF and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 188

Description: Assigned when attempting to delete from CAMS an installed item.
Possible Causes: Erroneous entry of S/N or missing removal transaction.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 189

Description: Assigned when K-Factor does not match CEMS value on reconciliation transaction.
Possible Causes: The K-Factor is in error or the K-Factor in the part number database is in error.
Corrective Action for DLR: Contact the PEMO to correct the K-factors in the part number database.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 7 and 8.

CODE 190

Description: Assigned when WOW value is greater than the EOT value.
Possible Causes: The EOT/WOW value was omitted or erroneously entered.
Corrective Action for DLR: Enter correct data.
Corrective Action for CAMS: See paragraph 8-11, keys 1 and 7.

CODE 191

Description: Assigned when Flag subtraction error occurs.
Possible Causes: On TCC 6S, attempting to subtract more flag events than previously occurred.
Corrective Action for DLR: Verify number of flag events and resubmit. If the number of flag events is correct, a 6A transaction to add flag events is needed.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 192/193/194/195/ 196/199

Description: Assigned when EOT/HS2-HRS 790-845/HS2-HRS 810-830/LCF-Events/Manual Cycles-Events 550/Events 790 FHR addition error. Value must be greater than CEMS value.
Possible Causes: CAMS and CEMS databases are out of synchronization.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 200

Description: Assigned when LCY window value is less than previously reported.
Possible Causes: Missing, unreported or out of sequence 6U or 6T transactions prior to current update transaction. Engine recorder malfunctioning, misread or erroneous entry.
Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 201/202

Description: Assigned when LCY window value exceeds CEMS by more than maximum update limit with extended flight indicator.

Possible Causes: Aircraft has been on an extended flight and has accumulated more than the normal maximum limit. Missing-unreported 6U or 6T transactions prior to current update transaction. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and input correct value via 6A transaction and a 6T transaction to adjust the window values.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 203

Description: Assigned when LCY value must be greater than zero.

Possible Causes: Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Estimate recorder data IAW the applicable T.O. 00-20-5-1-X, and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 204

Description: Assigned when FTC window value exceeds that previous by more than maximum update limit.

Possible Causes: Aircraft has been on an extended flight and has accumulated more than the normal maximum limit. Missing-unreported 6U or 6T transactions prior to current update transaction. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 205

Description: Assigned when LCY value increased more than the FTC window value.

Possible Causes: Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 206

Description: Assigned when FTC value is less than that previous.

Possible Causes: Missing-unreported 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 207

Description: Assigned when CIC value increased more than 10 X Delta FTC value.

Possible Causes: Missing-unreported 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 208

Description: Assigned when CYC greater than max update limit without extended flight indicator.
Possible Causes: Aircraft has been on extended flight and has accumulated more than the maximum update limit. Missing-unreported 6U transactions prior to the rejected report. Erroneous input.
Corrective Action for DLR: Enter missing transactions and/or resubmit with extended flight indicator code. Correct erroneous data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 209

Description: Assigned when catalog value is either blank or not numeric.
Corrective Action for DLR: Enter correct catalog value.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 210

Description: Assigned when ABC value increased more than 5 x Delta FTC value.
Possible Causes: Missing-unreported 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.
Corrective Action for DLR: Enter missing transactions and resubmit If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 211

Description: Assigned when CYC greater than max update limit with extended flight indicator.
Possible Causes: Aircraft has been on extended flight and has accumulated more than the maximum update limit. Missing-unreported 6U transactions prior to the rejected report. Erroneous input.
Corrective Action for DLR: Enter missing transactions and/or resubmit with extended flight indicator code. Correct erroneous data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 212

Description: Assigned when CIC value is less than that previously reported.
Possible Causes: Missing-unreported 6T or 6U transaction, late or out of sequence 6U TCC or engine recorder malfunction. Misread engine recorder, erroneous entry.
Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 213

Description: Assigned when ABC value is zero with an ABT value.
Possible Causes: Missing-unreported 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.
Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 214

Description: Assigned when TT1 is less than that previously reported.
Possible Causes: Missing-unreported 6T or 6U transaction, late or out of sequence 6U TCC or engine recorder malfunction. Misread engine recorder, erroneous entry.
Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 215

Description: Assigned when TT1 value increased more than 0.5 x Delta EOT.

Possible Causes: Missing-unreported 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 216

Description: Assigned when TT2 value is less than that previously reported.

Possible Causes: Missing-unreported 6T or 6U transaction, late or out of sequence 6U TCC or engine recorder malfunction. Misread engine recorder, erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 217

Description: Assigned when TT2 value increased more than TT1.

Possible Causes: Missing-unreported 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 218

Description: Assigned when TT3 value is less than previously reported.

Possible Causes: Missing-unreported 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 219

Description: Assigned when TT3 value increased more than TT2 + 0.1.

Possible Causes: Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 220

Description: Assigned when TT4 value is less than previously reported.

Possible Causes: Missing-unreported 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 221

Description: Assigned when TT4 value increased more than TT3 + 0.1.

Possible Causes: Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 222

Description: Assigned when TT5 value is less than previously reported.

Possible Causes: Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 223

Description: Assigned when TT5 value increased more than TT4 + 0.1.

Possible Causes: Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 224

Description: FTC value is the same as previously reported. Applicable to 6U transactions.

Possible Causes: Missing-unreported 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 225/226

Description: Assigned when Add/Subtract transaction value must be equal to or greater than/equal to or less than CEMS value.

Possible Causes: Missing-unreported 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 227/228/229/230/231/232/233/234

Description: Assigned when Manual cycles/ABC/ABT/VMX/CY4/HS3/HS4/IFT window value is less than that previous; Also if man cycle = 0 and CY4 > 0 or man cycle > 0 and CY4 = 0.

Possible Causes: Missing-unreported 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 235/236/237/238/239

Description: Assigned when Manual cycles-events 550/ABC/ABT/VMX/CY4 window value exceeds that previously reported by more than maximum update limit.

Possible Causes: Aircraft has been on an extended flight and has accumulated more than the normal maximum limit. Missing-unreported 6U or 6T transactions prior to the current update transaction. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 240/241/242/243/244

Description: Assigned when HS3 window value increased more than the EOT window value. The HS1 window value increased more than the HS3 window value. The HS4 window value increased more htan the HS1 window value. The HS2 window value increased more than the HS4 window value. The IFT window value increased more than the EOT window value. Applicable to 6U transactions.

Possible Causes: Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 245/246/247/248

Description: Assigned when Manual cycles-events 550/ABT/VMX/CY4 window value exceeds that previous by more than maximum update limit with extended f indicator.

Possible Causes: Aircraft has been on an extended flight and has accumulated more than the normal maximum limit. Missing-unreported 6U or 6T transactions prior to the current update transaction. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit. If extended flight, use 6A to adjust time.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 249/250/251/252

Description: Assigned when ABC/ABT/VMX/CY4 submitted differs from the CEMS by more than the allowed variance.

Possible Causes: Missing 6A (add), 6S (subtract), or 6U (update) transactions. Erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 253/254/255

Description: Assigned when HS3/HS4/IFT submitted differs from the CEMS by more than the allowed variance. Applies to removal, installation, and ini transactions.

Possible Causes: Missing 6A (add), 6S (subtract), or 6U (update) transactions. Erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 256/257/258/259/260/261/262

Description: Assigned when ABC/ABT/VMX/CY4/HS3/HS4/IFT addition error. Transaction value must be equal to or greater than CEMS value.

Possible Causes: Missing 6S transaction. CAMS and CEMS databases are out of synchronization for unknown reason. Erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 263/264/265/266/267/268/269

Description: Assigned when ABC/ABT/VMX/CY4/HS3/HS4/IFT subtraction error. The transaction would result in negative value in the database if proce

Possible Causes: Erroneous entry. Discrepancy between CAMS and CEMS databases, ie the transaction does not create a negative value in CAMS, but would if processed by CEMS.

Corrective Action for DLR: Enter missing transactions and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 270/271/272/273/274/275/276

Description: Assigned when ABC/ABT/VMX/CY4/HS3/HS4/IFT field is either blank or not numeric.

Corrective Action for DLR: Enter correct numeric value.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 277/278

Description: Assigned when A-B cycle value increased more than 20 x Delta EOT/CIC value increased more than 5 x Delta FTC.

Possible Causes: Engine recorder malfunction. Misread engine recorder, erroneous entry.

Corrective Action for DLR: Estimate recorder data IAW T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 279/280/281/282/283/284/285/286

Description: Assigned when TT1/FTC/CIC/LCY/TT2/TT3/TT4/TT5 value differs from CEMS by more than the allowed variance.

Possible Causes: Missing 6A (add), 6S (subtract), or 6U (update) transactions or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 287/288

Description: Assigned when TT1/ABT value is greater than the Delta EOT value.

Possible Causes: Missing 6A (add), 6S (subtract), or 6U (update) transactions or erroneous entry.

Corrective Action for DLR: Enter missing transactions.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 289

Description: Assigned when CIC value is the same as previously reported.

Possible Causes: Missing 6T or 6U transaction or late or out of sequence. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit transaction. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 290

Description: Assigned when FTC window value exceeds that previously reported by more than maximum update limit.

Possible Causes: Aircraft has been on an extended flight and has accumulated more than the normal maximum limit. Missing, late or out of sequence 6T or 6U transaction. Engine recorder malfunctioning, misread or erroneous entry.

Corrective Action for DLR: Enter missing transactions and resubmit transaction. If recorder malfunction occurs, estimate recorder data IAW the applicable T.O. 00-20-5-1-X and resubmit. If extended flight, use 6A to adjust time.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 291

Description: Assigned when CII not applicable for engine ID.

Possible Causes: Attempt to change engine ID-TMSM of engine/module without first removing parts which are not applicable to the new engine ID-TMSM. Erroneous engine ID-TMSM entry.

Corrective Action for DLR: Remove non-applicable parts, correct engine ID-TMSM and resubmit.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 292

Description: Assigned when Batch file maintenance will not change engine ID for parts.

Possible Causes: Attempt to change engine ID-TMSM for an F-100 assembly via batch file maintenance.

Engine ID-TMSM changes are only applicable to depot repair activities.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 293

Description: Assigned when QPA for specified CII is not applicable for engine ID.
Possible Causes: Attempting to change engine ID-TMSM of engine without first adjusting QPA.
Corrective Action for DLR: Adjust QPA for new engine ID and/or correct engine ID and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 294

Description: Assigned when F100/T56 assembly TMSM not applicable to NHA TMSM.
Possible Causes: Engine/assembly TMSM has been changed as a result of modification, but corresponding TMSM change has not been made. Erroneous TMSM entry.
Corrective Action for DLR: Correct TMSM for assembly and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 295

Description: Assigned when attempting to change engine ID on an installed engine.
Possible Causes: The engine ID-TMSM change was not input prior to installations.
Corrective Action for DLR: Remove engine, How Mal Code 483, correct engine ID and reinstall engine.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 296

Description: Assigned when 6F/6H transactions are not applicable to the F108 engine.
Possible Causes: The F108 updates FHR via WOW (CAT 27).
Corrective Action for DLR: Do not use 6F or 6H for F108 engine.

CODE 297

Description: Assigned when attempting to update LCF, but with no Manual Cycles.
Possible Causes: Manual Cycle value has been omitted.
Corrective Action for DLR: Enter correct Manual Cycle value. In the event where the recorder is obviously giving an erroneous reading, estimate manual cycles as outlined in T.O. 00-20-5-1-X.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 298

Description: Assigned when attempting to update IFT with no LCY, CIC, or FTC.
Possible Causes: LCY, CIC, or FTC has been omitted.
Corrective Action for DLR: Enter correct cycle data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 300

Description: Assigned when FHR or CYC is reported as zero on engine update transactions or CYC less than 1 if F118101 engine.
Possible Causes: FHR or CYC value reported is in error.
Corrective Action for DLR: Correct erroneous data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 301

Description: Assigned when CYC is less than 1 on F118101 engine update.
Possible Causes: CYC value reported in error.
Corrective Action for DLR: Correct erroneous data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 302

Description: Assigned when RUN, FLT, CPU, IBR, or HSP exceed maximum update limit. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 303

Description: Assigned when RUN or CPU value reported is not greater than previous. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 304

Description: Assigned when RUN, CSC, FLT, CPU, IBR, or HSP reported is less than previous. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 305

Description: Assigned when CSC increased more than RUN. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 306

Description: Assigned when HS1 exceeds maximum update limit. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 307

Description: Assigned when HS2 increased more than HS1. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 308

Description: Assigned when HS3 increased more than HS2. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 309

Description: Assigned when HS4 increased more than HS3. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 310

Description: Assigned when transaction condition code (TCC) is not applicable for engine/CII.
Possible Causes: Erroneous entry.
Corrective Action for DLR: Do not use TCC for type engine reported.

CODE 311

Description: Assigned when multiple engine transfer is attempted on aircraft, but required quantity of engines are not installed.
Possible Causes: Unreported engine installations.
Corrective Action for DLR: Submit installation transaction of engine(s) on aircraft.

CODE 312

Description: Assigned when IFT increased but FLT did not increase. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 313

Description: Assigned when any F119 life usage values, catalogs 41-49, exceed maximum update limit. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 314

Description: Assigned when attempting to remove next lower assemblies of F100 HPT module before the module is removed.
Possible Causes: Unreported HPT module removal.
Corrective Action: Submit removal transaction for HPT module.

CODE 315

Description: Assigned when any F119 life usage value reported, catalogs 41-49, is less than previous. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 316-318

(Not being used)

CODE 319

Description: Assigned when EOT value reported is not greater than previous. Applicable to 6U transactions.
Possible Causes: Missing, late, or out of sequence 6U (update) transactions. Engine data misread or malfunctioning or erroneous entry.
Corrective Action for DLR: Enter missing transactions or correct data and resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 401

Description: Assigned when Engine ID/WUC does not represent a valid engine TMSM on a tracked item.

Possible Causes: Engine-ID and WUC have not been established or were input incorrectly.

Corrective Action for DLR: Correct engine-ID/WUC. Notify TILC to load new engine-ID/WUC.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 8.

CODE 402

Description: Assigned when S/N reported does not exist within a CII.

Possible Causes: Transaction is for a new production engine and the gain transaction has not been processed or is related to an assembly/part not in CEMS. The engine S/N was reported in error.

Corrective Action for DLR: Ensure that a Gain for engines or a 6n for parts has been accomplished.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 6, 8 and 13.

CODE 404/407

Description: Assigned when TCTO data code is not applicable to reported item S/N/invalid.

Possible Causes: Invalid S/N. S/N not loaded against TCTO.

Corrective Action for DLR: Notify the applicable PEMO to have the S/N loaded to TCTO master record.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 6, 8 and 13.

CODE 408

Description: Assigned when TCTO data code was rescinded or retired.

Possible Causes: TCTO rescinded/retired or incorrect data code entered.

Corrective Action for DLR: Enter correct data code. If TCTO is retired/rescinded, no further file maintenance will be accepted.

Corrective Action for CAMS: See paragraph 8-11; key 1.

CODE 410

Description: Assigned when How Mal not reported as 793, 796, 797, 798, 801, 802 or 911.

Possible Causes: Invalid How Mal Code reported.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 8.

CODE 413

Description: Assigned when reported How Mal Code will not replace the How Mal Code in CEMS.

Possible Causes: Status How Mal Code not reported in logical sequence.

Corrective Action for DLR: Correct status How Mal Code.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 8.

CODE 416

Description: Assigned when invalid card number, must be 1 or 2 for TCTO.

Possible Causes: Card number not compatible with reported data.

Corrective Action for DLR: Enter correct card number.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 417

Description: Assigned when subsystem identifier is not a T for TCTO, S for status, and C for configuration.

Possible Causes: Subsystem identifier not compatible with type data reported.

Corrective Action for DLR: Enter correct subsystem identifier code.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 420

Description: Assigned when date of occurrence (YYDDD) is invalid. Cannot represent a future date.
Possible Causes: Incorrect date format.
Corrective Action for DLR: Correct date.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 422/423

Description: Assigned when part number for engine ID-WUC, S/N and/or TCTO is invalid.
Possible Causes: Erroneous part number, S/N or engine ID-WUC. Part number not established.
Corrective Action for DLR: Enter correct P/N. Contact applicable PEMO to load new P/N.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 8.

CODE 424

Description: Assigned when attempting to change new part number.
Possible Causes: The new part number of the status record is equal to the part of the CII-S/N master upon compliance of a S/N.
Corrective Action for DLR: Reestablish part number(s) with program A415, then resubmit.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 8

CODE 425

Description: Assigned when reporting invalid actual man-hours.
Possible Causes: Actual man-hours entered was not numeric.
Corrective Action for DLR: Enter correct actual man-hours.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 8.

CODE 427

Description: Assigned when reporting invalid reversal status code.
Possible Causes: The input status code is 22, 01-05 and reversal code X has been entered
Corrective Action for DLR: User cannot reverse TCTO status from one closed status (codes 22, 01-05) to another closed status unless status code 10 with "X" in reversal block is reported.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 8.

CODE 428

Description: Assigned when reporting invalid TCTO status code.
Possible Causes: TCTO status is either spaces or greater than 22.
Corrective Action for DLR: Enter correct input status code (status codes 01-22).
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 430

Description: Assigned when reporting invalid reversal code, use X.
Possible Causes: Reversal code does not equal space or X.
Corrective Action for DLR: If reversal transaction is desired, enter X; if not desired, enter space.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 8.

CODE 432

Description: Assigned when reporting invalid status date.
Possible Causes: Status date is not numeric or is greater than the current date.
Corrective Action for DLR: Enter the corrected status date.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 8.

CODE 434

Description: Assigned when TCTO is already in closed status.
Possible Causes: Status code is (22, 01-05) and the current status code equals (22, 01-05).
Corrective Action for DLR: Enter correct status code for data code and S/N(s).
Corrective Action for CAMS: See paragraph 8-11; keys 1, 6 and 8.

CODE 435

Description: Assigned when existing TCTO is not complied with.

Possible Causes: TCTO status codes 06-21 will not reverse

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 436

Description: Assigned when reporting invalid function, use reversal.

Possible Causes: On a TCTO status update transaction, the input status code is 06-21, and the current status code is 22, 01-05. Attempting to update the status code of a S/N in a closed (22, 01-05) status code.

Corrective Action for DLR: Enter correct TCTO status. If the intent is to place the S/N back in open status, reenter the data with reversal code X and status code 10.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 2 and 8.

CODE 437

Description: Assigned when reporting invalid use of TCTO status code 05 (lost from AF inventory).

Possible Causes: TCTO status code 05 input to CEMS on S/N(s) that is/are not coded as a loss.

Corrective Action for DLR: Enter correct TCTO status. If this is correct TCTO status, then research to determine if S/N should be in a loss status. If S/N(s) should be in a loss status, process appropriate loss transactions, S/N's will programmatically be coded 05.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 438

Description: Assigned when Total man-hours for status codes 01, 02 or 03 are required.

Possible Causes: Man-hour field blank on entry of code 01, 02 or 03.

Corrective Action for DLR: Enter correct total man-hours.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 439

Description: Assigned when reporting invalid reversal status code.

Possible Causes: Input status code is 06-21 and current status code is 22, 01-05.

Corrective Action for DLR: To re-open TCTO from closed to open status, always use status code 10 with "X" in reversal block.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 500

Description: Assigned when there is a discrepancy in hour-cycle data between CAMS and CEMS.

Possible Causes: Missing transactions or erroneous entry.

Corrective Action for CAMS: See paragraph 8-11; keys 1, 8, 11 and 12.

CODE 501

Description: Assigned when an invalid CII is entered on 6T window value initialization.

Possible Causes: Invalid CII.

Corrective Action for DLR: Enter correct CII.

CODE 502

Description: Assigned when NHA designation field left blank.

Possible Causes: NHA designator field was left blank.

Corrective Action for DLR: Enter either the correct NHA designator or if a spare, fill all spaces with nines.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 503

Description: Assigned when reporting invalid aircraft MDS.

Possible Causes: MDS improperly entered. The aircraft MDS does not match the MDS in CEMS.

Corrective Action for DLR: Enter correct MDS.

CODE 504

Description: Assigned when reporting invalid aircraft S/N.

Possible Causes: S/N improperly entered. Aircraft S/N is not initialized in the aircraft record.

Corrective Action for DLR: Enter correct aircraft S/N. If correct, contact the aircraft system manager at the ALC prime for the aircraft being reported and TILC.

CODE 505

Description: Assigned when 6N reported is invalid for existing installed CII-S/N.

Possible Causes: 6N transaction, possessor change on an item still installed. A duplicate CII-S/N exists.

Corrective Action for DLR: Previous possessor must submit a removal transaction, then current possessor must resubmit the 6N possessor change transaction. If duplicate, contact PEMO.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 506

Description: Assigned when NSN being reported is invalid.

Possible Causes: Position 1-4 NSN is incorrect or not numeric.

Corrective Action for DLR: Enter correct NSN.

CODE 507

Description: Assigned when reporting invalid NLA S/N.

Possible Causes: NLA S/N in error.

Corrective Action for DLR: Enter correct S/N.

CODE 508

Description: Assigned when an installed item and NHA or P/N and MDS are incompatible.

Possible Causes: Incorrect S/N of either the NHA or NLA. Part number master table incomplete or is not applicable to NHA.

Corrective Action for DLR: Enter correct S/N. If correct, contact the applicable PEMO to change the part number master table.

CODE 509

Description: Assigned when S/N was previously initialized and installed on a F101, F108, or F110.

Possible Causes: Item had historical experience in another engine TMSM. Duplicate S/N problems.

Corrective Action for DLR: Contact the responsible PEMO to determine a resolution to the discrepancy.

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 510/511

Description: Assigned when reporting invalid Type Limit Code Category (TLCC) and/or limit.

Possible Causes: Limit being reported is not numeric. TLCC being reported not valid for the CII or S/N.

Corrective Action for DLR: Enter only numeric limits for applicable TLCC.

CODE 512

Description: Assigned when attempting to condemn a part which has next lower assemblies.

Possible Causes: Data on condemnation transaction erroneously entered. Some transactions are missing, causing CEMS to show parts installed which are actually spares. The part being condemned actually has NLAs on it.

Corrective Action for DLR: Verify NLA data. Installed parts must be removed from the NHA.

CODE 513

Description: Assigned when attempting to condemn an item that is installed.

Possible Causes: Item is installed.

Corrective Action for DLR: The item must be removed.

CODE 514

Description: Assigned when reporting a 2L transaction and current status is not NL, PL, or RL.

Possible Causes: (NL, PL, or RL must precede 2L).

Corrective Action for DLR: Submit an NL, PL, or RL transaction on the part being reported.

CODE 515

Description: Assigned when reporting incomplete data for correction report.

Possible Causes: Sequence number/SRAN not entered correctly when recalling an error for correction.

Corrective Action for DLR: Enter the proper sequence number and SRAN.

CODE 516

Description: Assigned when transaction will result in negative "TSN" at installation.

Possible Causes: Erroneous value entered on 6S, 6U, 6A, 6P, or 6X transaction.

Corrective Action for DLR: Enter missing transactions and correct value to be changed, increased or decreased.

CODE 517

Description: Assigned when reporting a 6S transaction that would result in a negative value on one or more NLAs to the engine.

Possible Causes: The 6S transaction is in error.

Corrective Action for DLR: Reverse the erroneous 6S hours with an appropriate 6A transaction. Enter a 6X transaction to increase the negative hours to the actual time on the component. This error is a probable indicator that other components on the engine have erroneous time which has not been gone negative.

CODE 518

Description: Assigned when reporting a condemn flag that is not X.

Possible Causes: Condemn flag field left blank.

Corrective Action for DLR: Enter X to indicate condemned.

CODE 519

Description: Assigned when an attempt is being made to condemn an engine.

Possible Causes:. CII-S/N erroneously entered.

Corrective Action for DLR: Enter correct data. If S/N is an engine, report appropriate loss transaction.

CODE 520

Description: Assigned when TCC being reported is not valid a part CII.

Possible Causes: An attempt is being made to perform a status report on a part.

Corrective Action for DLR: Enter correct data.

CODE 521

Description: Assigned when TCC is invalid for this program.

Possible Causes: TCC incorrect

Corrective Action for DLR: Enter correct TCC.

CODE 522

Description: Assigned when TCC is valid for engine S/N only.

Possible Causes: Attempting to execute an update transaction (6U) on a part.

Corrective Action for DLR: Enter the correct CII and S/N.

CODE 523

Description: Assigned when TLC value is not within plus-minus variance.

Possible Causes: TLC value entered not incorrectly. Missing transactions causing variance.

Corrective Action for DLR: Enter the correct TLC's and values. Process any missing transactions.

CODE 524

Description: Assigned when incorrect CII or S/N is entered for the 6U transaction.

Possible Causes: Erroneous entry of CII and S/N.

Corrective Action for DLR: Enter correct CII S/N.

CODE 525

Description: Assigned when attempting a 6S/6X transaction that would result in negative TSO or TSOCM. The transaction would cause TSN to be less than TSN-AT-OH or TSN-AT-OCM at last maintenance.

Possible Causes: Erroneous value entered and/or TSN-AT-OH and/or TSN-AT-OCM are in error.

Corrective Action for DLR: Determine correct TSN-AT-OH and/or TSN-AT-OCM and contact the PEMO to correct with a 6P, type 4. Then enter original 6X or 6S transaction.

CODE 526

Description: Assigned when Item is not in condemned status.

Possible Causes: An attempt was made to reactivate CII-S/N transaction 6B for an already active item.

Corrective Action for DLR: Determine correct CII-S/N. If correct, no action is required.

CODE 527

Description: Assigned when Item is already condemned.

Possible Causes: A 6C transaction has been submitted for a part that has previously been condemned.

Corrective Action for DLR: Determine correct CII-S/N. If correct, no action is required.

CODE 529

Description: Assigned when transaction would result in negative accumulated time on NLA's by attempting to decrease time by more than the accumulated value since installation of NLA's on the engine.

Possible Causes: The time error was caused by an error before the NLA was installed.

Corrective Action for DLR: Enter correct time. If error re-occurs, remove the NLA(s) which would go negative, adjust the time on the engine and re-install the NLA(s).

Corrective Action for CAMS: See paragraph 8-11; keys 1 and 7.

CODE 530

Description: Assigned when Item is already initialized.

Possible Causes: A 6N transaction has already been processed.

Corrective Action for DLR: Determine correct CII-S/N. If correct, no action is required.

CODE 531

Description: Assigned when reporting invalid type report.

Possible Causes: Type report submitted is not R or 4.

Corrective Action for DLR: Enter correct type report.

CODE 532

Description: Assigned when the SRAN reported is not a depot facility.

Possible Causes: Erroneous SRAN entry or attempting to update information authorized only for depot.

Corrective Action for DLR: Enter correct SRAN.

CODE 533

Description: Assigned when installing an item where the possessors for the item and NHA do not match.

Possible Causes: Erroneous SRAN entry. 6N transaction was not submitted to change possessor of part.

Corrective Action for DLR: Enter correct SRAN or submit a 6N transaction to change possessor, resubmit the installation transaction.

CODE 534

Description: Assigned when TCC is valid for installed item only.

Possible Causes: Failure to report removal transaction prior to reporting un installed receipt, shipment, transfer, gains or loss transaction. Previous installation transaction failed to post because of error. Erroneous TCC entry.

Corrective Action for DLR: Enter an install transaction followed by the installed receipt, shipment, transfer, gain or loss transaction.

CODE 535

Description: Assigned when TCC is valid for un-installed items only.

Possible Causes: Failure to report removal transaction prior to reporting the un-installed receipt, shipment, transfer, gain or loss transaction. Previous removal transaction failed due to errors. Erroneous TCC entry.

Corrective Action for DLR: Enter a removal transaction and resubmit the uninstalled receipt, shipment, transfer gain or loss transaction.

CODE 536

Description: Assigned when TCC is invalid for condemned item.

Possible Causes: Erroneous entry or failure to submit a transaction to reactivate the item before attempting to install it.

Corrective Action for DLR: Enter correct data or enter a transaction to reactivate the S/N and resubmit install transaction.

CODE 537

Description: Assigned when invalid TCC is reported without command code change.

Possible Causes: RR, RB, FR, FB, VA or VZ report were input back to back and command code was not changed.

Corrective Action for DLR: Enter correct command code.

CODE 538

Description: Assigned when UA and UZ TCC are reported for parts-tracked S/Ns.

Possible Causes: UA or UZ transaction entered on a parts tracked engine.

Corrective Action for DLR: Home SRAN should submit a VA transaction after receiving ownership.

CODE 539/540/541

Description: Assigned when attempting to input life used that is equal to/or greater than life limit.

Possible Causes: Life used input is equal to or greater than life limit in CEMS. CEMS value is incorrect.

Corrective Action for DLR: Review life limit T.O. and/or contact applicable PEMO to adjust CEMS.

CODE 542

Description: Assigned when the date the item is removed is less than the date contained in CEMS.

Possible Causes: Removal date less than last action date.

Corrective Action for DLR: Enter correct removal date.

CODE 543

Description: Assigned when MDS cannot be changed on an installed item.
Possible Cause: Incorrect S/N, the item is a spare or the removal transaction is missing or in error.
Corrective Action for DLR: Enter any missing transactions and/or correct S/N.

CODE 544

Description: Assigned when installing a serial number with a part number that is incompatible with its next higher assembly part number. The edit is based on data provided by the engine management office, LP.
Possible Causes: Incorrect part number(s) is reflected in CEMS; wrong item is being installed.
Corrective Action: Contact LP organization for part number correction or installation instructions.

CODE 545

Description: Assigned when installing a serial number with a part number that is incompatible with a previously installed part number/serial number. The edit is based on data provided by the engine management office, LP.
Possible Causes: Incorrect part number(s) is reflected in CEMS; wrong item is being installed.
Corrective Action: Contact LP organization for part number correction or installation instructions.

CODE 600

Description: Assigned when Warranty catalog number and category are duplicated within this transaction.
Possible Causes: More than one warranty for was submitted.
Corrective Action for DLR: Enter correct Warranty data.

CODE 601

Description: Assigned when Warranty EOT is not numeric.
Possible Causes: EOT for performance warranty was blank or not numeric.
Corrective Action for DLR: Enter the correct EOT for warranty.

CODE 602

Description: Assigned when TACs for warranty are not numeric.
Possible Causes: TACs for warranty not numeric
Corrective Action for DLR: Enter correct TACs for warranty.

CODE 603

Description: Assigned when performance warranty category is not P.
Possible Causes: Warranty category code blank or not P.
Corrective Action for DLR: Enter category code P for performance warranty.

CODE 604/605

Description: Assigned when performance warranty TT1/Calendar not numeric.
Possible Causes: TT1 warranty category code was blank or not 65P/Calendar warranty not 24Q.
Corrective Action for DLR: Enter category codes 65P for performance /24Q for calendar warranty.

CODE 607/608

Description: Assigned when reporting invalid calendar warranty date/category.
Possible Causes: Invalid calendar date (year or Julian date). Warranty category not P or Q.
Corrective Action for DLR: Enter correct date/category.

CODE 609/610

Description: Assigned when reporting invalid EOT (P)/FHR (Q) warranty category.
Possible Causes: Warranty category code blank or other than P/Q.
Corrective Action for DLR: Enter correct warranty category.

CODE 611

Description: Assigned when FHR for quality warranty not numeric.
Possible Causes: FHR for quality warranty was blank or not (11Q).
Corrective Action for DLR: Enter correct data.

CODE 612

Description: Assigned when catalog value is not numeric. Applies to 6P S/N limits only.
Possible Causes: Required field is blank or not numeric.
Corrective Action for DLR: Enter a seven digit numeric value, right justified.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 2.

CODE 613

Description: Assigned when category is invalid. Applies to 6P S/N limits only.
Possible Causes: Invalid category for catalog number or is left blank.
Corrective Action for DLR: Enter a valid one digit alpha character.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2 and 6.

CODE 614

Description: Assigned when TLCC has not been established for this CII. Applies to 6P S/N limits only.
Possible Causes: TLCC is not valid for this CII.
Corrective Action for DLR: Enter correct TLCC code.
Corrective Action for CAMS: See paragraph 8-11; keys 1 and 6.

CODE 615

Description: Assigned when Warranty has been previously established. Applies to 6P S/N limits only.
Possible Causes: CEMS has processed a prior transaction for this data.
Corrective Action for DLR: If transaction is to correct erroneous data, contact OC ALC/TILC.

CODE 800

Description: Assigned when CEMS TLC value does not match base TLC value for item being reconciled.
Possible Causes: TLC value on reconciliation from SRAN is not within allowable variance of CEMS value.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 8, 11 and 12.

CODE 801

Description: Assigned when TLCC and/or limit is invalid.
Possible Causes: The TLCC/limit for a specific part does not match CEMS.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 6, 8, 11 and 12.

CODE 802

Description: Assigned when Engine ID does not match CEMS.
Possible Causes: Engine ID from reconciliation transaction (6Z) does not match CEMS.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 6, 11, 12 and 13.

CODE 803/804

Description: Assigned when WUC/CII does not match.
Possible Causes: CEMS WUC/CII does not match CAMS.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 8 and 12.

CODE 805/806

Description: Assigned when position number/NHA does not match.
Possible Causes: CEMS position number/NHA does not match CAMS.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 2, 8 and 11.

CODE 807

Description: Assigned when K-Factor does not match.
Possible Causes: CEMS K-Factor does not match CAMS.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 6, 8, 11 and 12.

CODE 808

Description: Assigned when part number does not match.
Possible Causes: CEMS part number does not match CAMS.
Corrective Action for CAMS: See paragraph 8-11; keys 1, 8, 11 and 12.

CODE 920

Description: Assigned Family Group Code (FGC) not valid for engine.
Possible Causes: Incorrect engine ID/TMSM for Family Group Code.
Corrective Action: Submit removal transaction for HPT module.

CODE 921

Description: Assigned when an engine is reported installed on an unacceptable end item that has an engine with an incompatible engine ID/TMSM installed.
Possible Cause: A previous removal transaction has rejected in addition to incorrect family group code or engine ID-TMSM table.
Corrective Action for CAMS: See Paragraph 8-11; keys 1, 2 and 8.
Corrective Action for DLR: Correct input and/or notify OC-ALC/TILC that the combination is valid.

CHAPTER 9

TABLES

Table 9-1. Logical Sequence of Event Codes

AUTHORIZED CODES	NEXT LOGICAL TCCs
	GAINS
AA	KB, KF, KG, LB, LF, LG, LL, SA, TA
AB	JB, MF, ML, NB, SB, UA, VA, VZ
AR	JR, MG, ML, NR, SR
BB	JB, MF, ML, NB, SB, UA, VA, VZ
BF	JF, MG, ML, NF, SF
BG	JG, ML, NG, SG
BL	NL, SL
BR	JR, MG, ML, NR, SR
CA	KB, KF, KG, KL, LB, LF, LG, LL, SA, TA, MZ
CB	JB, JR, MF, MG, ML, NB, NR, SB, SR, TB, TR, UA, VA, VZ
CF	JF, MG, ML, NF, SF
CG	JG, ML, NG, SG
CL	NL, SL
CR	JR, MG, ML, NR, SR, TR
CZ	LB, LF, LG, LL, MA, SZ, TZ
DB	JB, MF, ML, NB, SB, UA, VA, VZ
DR	JR, MG, ML, NR, SR
DF	JF, MG, ML, NF, SF
DG	JG, ML, NG, SG
DL	NL, SL
	ENMCS
EB	HB, JB, MF, ML
EF	HF, JF, ML
EG	HG, JG, ML
ER	HR, JR, MG, ML
	WORK COMPLETED
FB	FB, JB, MF, ML, NB, SB, TB, UA, VA, VZ
FR	FR, JR, MG, ML, NR, SR, TR
	TEST CELL REJECT
GB	EB, FB, GB, HB, MF, ML, NB
GF	EF, FB, GF, HF, ML, NF
GG	EG, FB, FR, GG, HG, ML, NG
GR	ER, FB, FR, GR, HR, MG, ML, NR
	WORK STOPPED
HB	JB, MF, ML, NB, SB
HF	JF, ML, NF, SF
HG	JG, ML, NG, SG
HR	JR, MG, ML, NR, SR
	WORK START
JB	EB, FB, FR, GB, HB, MF, ML, NB
JF	EF, FB, GF, HF, MG, ML, NF
JG	EG, FB, FR, GG, HG, MF, ML, NG
JR	ER, FB, FR, GR, HR, MF, MG, ML, NR

Table 9-1. Logical Sequence of Event Codes - Continued

AUTHORIZED CODES	NEXT LOGICAL TCCs
	TRANSIENT REMOVAL
KB	JB, MF, ML, NB, SB, UA, VA, VZ
KF	JF, ML, NF, SF
KG	JG, ML, NG, SG
KL	NL, SL
	REMOVAL
LB	JB, MF, ML, NB, SB, TB, UA, VA, VZ
LF	JF, ML, NF, SF
LG	JG, ML, NG, SG
LL	NL, SL
	CHANGE IN LEVEL OF MAINTENANCE
MA	KB, KF, KG, KL, LB, LF, LG, LL, MZ, SA, TA, VA
MC	NC, SC
MF	JF, NF, SF
MG	JG, NG, SG
ML	NL, SL
MZ	LB, LF, LG, LL, MA, SZ, TZ
	AWAITING DISPOSITION
NB	JB, MF, ML, SB, UA, VA, VZ
NC	ML, SC
NF	JF, ML, SF
NG	JG, ML, SG
NL	MC, MF, MG, SL
NR	JR, MG, ML, SR
	INTRA AIR-FORCE RECEIPT
RA	KB, KF, KG, KL, LB, LF, LG, LL, MZ, SA, TA
RB	JB, MF, ML, NB, RB, SB, TB, UA, VA, VZ
RC	NC, SC
RF	JF, ML, NF, SF
RG	JG, ML, NG, SG
RR	JR, MG, NR, RR, SR, TR
RZ	LB, LF, LG, LL, MA, SZ
RL	MF*, SL (Queen Bee) * Used only by bases after a type 4 RL is used - does not post to a pipeline segment.
	INTRA AIR-FORCE SHIPMENT
SA	RA
SB	RB
SC	RC
SF	RF
SG	RG
SL	RL
SR	RR
SZ	RZ
	TRANSFER
TA	KB, KF, KG, KL, RA, RZ
TB	RA, RB, RC, RF, RG, RL, RR, RZ
TR	RA, RB, RC, RF, RG, RL, RR, RZ
TZ	RZ
	TRANSIENT INSTALLATION
UA	KB, KF, KG, KL, LB, LF, LG, LL, MZ, TA
	INSTALLED
VA	KB, KF, KG, KL, LB, LF, LG, LL, MZ, SA, TA, VA
VZ	LB, LF, LG, LL, MA, SZ, VZ

Table 9-2. Codes for Use by Depot Repair Activities

AUTHORIZED CODES	NEXT LOGICAL TCCs
AB	PB
AR	PR
BB	PB
BF	PF
BG	PG
BL	PL
CB	PB
CF	PF
CG	PG
CL	JL, PL
DF	PF
DG	PG
DL	PL
EK	JK
EL	JL
GK	EK, FB, FR, GK, HK, ML
GL	EL, FB, FR, GL, HL, MK
HK	JK, NK
HL	JL, NL
JK	EK, FB, FR, GK, HK, ML
JL	EL, FB, FR, GL, HL, MC, MK
KF	MK
KG	MK
KL	JL, MK
LF	MK
LG	MK
LK	JK, ML, PK
LL	JL, MK
MK	JK, NK
ML	JL
NB	PB
NC	PC
NF	PF
NG	PG
NK	MC, ML, PK, JK
NL	PL, 2L
NR	PR
PB	FB, JB, MF, MK, ML, NB, VA
PC	NC, XC
PF	JF, MK, ML, NF
PG	JG, MK, ML, NG
PK	JK, MG, ML, NK
PL	JL, MK, NL, 2L
PR	JR, MG, MK, ML, NR
RB	PB
RC	PC
RF	PF
RG	PG
RL	JL, MC, MK, PL, 2L
RR	PR

Table 9-3. Codes Authorized for SRANs Using CAMS Only

AUTHORIZED CODES	NEXT LOGICAL TCCs
LB	8A, 8Z
LF	8A, 8Z
LG	8A, 8Z
LL	8A, 8Z
FB	8B
FR	8R
RB	8X
RR	8Y
VA	8A, LK
VZ	8Z
8A	LB, LF, LG, LL
8Z	LB, LF, LG, LL
8B	FB, 8B, LB, LL, LG, LF, 8Y
8R	FR, 8R, LB, LF, LG, LL, 8X
8X	LB, LF, LG, LL
8Y	LB, LF, LG, LL
9R	RR, 9R, RC, RF, RG, RB, CR, DR, 8R, RB
9B	RB, 9B, RC, RF, RG, RR, BB, CB, DB, 8B

NOTE: Gain and loss transaction codes have been excluded from the transaction and condition table as they can occur throughout the pipeline cycle. Loss codes have been omitted from the authorized codes because the next logical code would always be a gain transaction.

Table 9-4. D042 Status Required Data Elements vs TCC (AF Form 1534)

NOTE

- An "X" in a block number field indicates a mandatory entry requirement.
- A numeric in a block number field indicates footnotes located at the rear of the matrix that may qualify or exempt information from that particular block for that type transaction.

	BLOCK NUMBERS																								
TCC	1	2	3-6	7	8	9	10	11	12-13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
											GAINS															
AA	27 28	23	X	24		24	25	27 28	X			23							6 28	5 6 28		X	X	X	17	
AB	27 28	23	X	24		24	25	27 28	X			23					4		6 28	5 6 28		X				
AR	27 28	23	X	24		24	25	27 28	X			23					4		6 28	5 6 28		X				
BB	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
BF	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
BG	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
BL	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
BR	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
CA	27 28	23	X	24		24	25	27 28	X	X		23							6	5 6		X	X	X	17	
CB	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				

Table 9-4. D042 Status Required Data Elements vs TCC (AF Form 1534) - Continued

										BLOCK NUMBERS															
TCC	1	2	3-6	7	8	9	10	11	12-13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
CF	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
CG	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
CK	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
CL	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
CR	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
CZ	27 28	23	X	24		24	25	27 28	X	X		23							6	5 6		X	X	X	17	
DB	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
DF	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
DG	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
DL	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				
DR	27 28	23	X	24		24	25	27 28	X	X	X	23					4	X	6 28	5 6 28		X				

Table 9-4. D042 Status Required Data Elements vs TCC (AF Form 1534) - Continued

TCC	1	2	3-6	7	8	9	10	11	12-13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
										BLOCK NUMBERS																
										ENG - ENMCS																
EB		23	X	24		24	25		X			23														
EF		23	X	24		24	25		X			23														
EG		23	X	24		24	25		X			23														
ER		23	X	24		24	25		X			23														
										WORK COMPLETED																
FB		23	X	24		24	25		X			23		3				19				18				
FR		23	X	24		24	25		X			23		3				19				18				
										TEST CELL REJECT																
GB		23	X	24		24	25		X			23	X													
GF		23	X	24		24	25		X			23	X													
GG		23	X	24		24	25		X			23	X													
GK		23	X	24		24	25		X			23	X													
GL		23	X	24		24	25		X			23	X													
GR		23	X	24		24	25		X			23	X													
									WORK STOPPED			NON-ENMCS														
HB		23	X	24		24	25		X			23														30
HF		23	X	24		24	25		X			23														30
HG		23	X	24		24	25		X			23														30
HK		23	X	24		24	25		X			23														30
HL		23	X	24		24	25		X			23														30
HR		23	X	24		24	25		X			23														30

Table 9-4. D042 Status Required Data Elements vs TCC (AF Form 1534) - Continued

TCC	1	2	3-6	7	8	9	10	11	12-13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
										BLOCK NUMBERS																
										WORK STARTED																
JB		23	X	24		24	25		X			23														
JF		23	X	24		24	25		X			23														
JG		23	X	24		24	25		X			23														
JK		23	X	24		24	25		X			23														
JL		23	X	24		24	25		X			23														
JR		23	X	24		24	25		X			23														
										TRANSIENT REMOVAL																
KB		23	X	24		24	25		X	X		23	X			16			6 11	5 6			9	9	17	
KF		23	X	24		24	25		X	X		23	X			16			6 11	5 6			9	9	17	
KG		23	X	24		24	25		X	X		23	X			16			6 11	5 6			9	9	17	
KL	27	23	X	24		24	25		X			23	X	20		16			6 11	5 6			9	9	17	
										REMOVAL																
LB		23	X	24		24	25		X			23	X			16			6 11	5 6			23 27	23 27	17	
LF		23	X	24		24	25		X			23	X			16			6 11	5 6			23 27	23 27	17	
LG		23	X	24		24	25		X			23	X			16			6 11	5 6			23 27	23 27	17	
LL	27	23	X	24		24	25		X			23	X	20		16			6 11	5 6			23 27	23 27	17	
LM			X						X				X													
LR		23	X	24		24	25		X			23	X			16			6 11	5 6			23 27	23 27	17	

Table 9-4. D042 Status Required Data Elements vs TCC (AF Form 1534) - Continued

	BLOCK NUMBERS																									
TCC	1	2	3-6	7	8	9	10	11	12-13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
									CHANGE IN LEVEL MAINTENANCE																	
MA		23	X	24		24	25		X			23											X	X	17	
MC		23	X	24		24	25		X			23														
MF		23	X	24		24	25		X			23														
MG		23	X	24		24	25		X			23														
MK		23	X	24		24	25		X			23														
ML		23	X	24		24	25		X			23	X	X												
MZ		23	X	24		24	25		X			23							13	13			X	X	17	
									AWAITING DISPOSITION																	
NB		23	X	24		24	25		X			23						19								
NC		23	X	24		24	25		X			23						19								
NF		23	X	24		24	25		X			23						19								
NG		23	X	24		24	25		X			23						19								
NL		23	X	24		24	25		X			23						19								
NR		23	X	24		24	25		X			23						19								
									ISSUE MAINTENANCE																	
PB		23	X	24		24	25		X		X	23						19								
PC		23	X	24		24	25		X		X	23						19								
PF		23	X	24		24	25		X		X	23						19								
PG		23	X	24		24	25		X		X	23						19								
PL		23	X	24		24	25		X		X	23						19								31
PK		23	X	24		24	25		X		X	23						19								
PR		23	X	24		24	25		X		X	23						19								

Table 9-4. D042 Status Required Data Elements vs TCC (AF Form 1534) - Continued

	BLOCK NUMBERS																									
TCC	1	2	3-6	7	8	9	10	11	12-13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
										INTRA - AIR FORCE RECEIPT																
RA		23	X	X	8	X	X		X			23						X	X	5			X	X	X	
RB		23	X	24		24	25		X		34	23						X								
RC		23	X	24		24	25		X		34	23						X								
RF		23	X	24		24	25		X		34	23						X								
RG		23	X	24		24	25		X		34	23						X								
RK		23	X	24		24	25		X		34	23						X								
RL		23	X	24		24	25		X		34	23						X								
RR		23	X	24		24	25		X		34	23						X								
RZ		23	X	24		24	25		X			23							13	13			X	X	17	
										INTRA - AIR FORCE SHIPMENT																
SA		23	X	24		24	25		X	X		23											X	X	17	
SB		23	X	24		24	25		X	X	34	23			X			X								
SC		23	X	24		24	25		X	X	34	23						X								
SF		23	X	24		24	25		X	X	34	23						X								
SG		23	X	24		24	25		X	X	34	23						X								
SK		23	X	24		24	25		X	X	34	23						X								
SL		23	X	24		24	25		X	X	34	23						X								
SR		23	X	24		24	25		X	X	34	23			X			X								
SZ		23	X	24		24	25		X	X		23											X	X	17	
										TRANSFER																
TA		23	X	24		24	25		X	X		23											X	X	17	
TB		23	X	24		24	25		X	X		23						X								
										TRANSIENT INSTALLATION																
UA		23	X	24		24	25	22	X	X		23							X	5			X	X	15	

Table 9-4. D042 Status Required Data Elements vs TCC (AF Form 1534) - Continued

TCC	1	2	3-6	7	8	9	10	11	12-13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
										BLOCK NUMBERS																
											INSTALLED															
VA	27	23	X	24		24	25	22	X			23							6	5 6			X	X	15	
VM			X						X																	
VZ		23	X	24		24	25	22	X			23							6	5 6			X	X	15	
											LOSS															
WA		23	X	24		24	25		X	X		23							13	5 13			X	X	15	
WC		23	X	24		24	25		X	X	X	23						X								
WF		23	X	24		24	25		X	X	X	23						X								
WG		23	X	24		24	25		X	X	X	23						X								
WK		23	X	24		24	25		X	X	X	23						X								
WL		23	X	24		24	25		X	X	X	23						X								
WR		23	X	24		24	25		X	X	X	23						X								
WZ		23	X	24		24	25		X	X		23							13	5 13			X	X	15	
XA		23	X	24		24	25		X	X		23							13	5 13			X	X	15	
XC		23	X	24		24	25		X	X	X	23						X								
XF		23	X	24		24	25		X	X	X	23						X								
XG		23	X	24		24	25		X	X	X	23						X								
XK		23	X	24		24	25		X	X	X	23						X								
XL		23	X	24		24	25		X	X	X	23						X								
XR		23	X	24		24	25		X	X	X	23						X								
XZ		23	X	24		24	25		X	X		23							13	5 13			X	X	15	
YA		23	X	24		24	25		X	X		23							13	5 13			X	X	15	

Table 9-4. D042 Status Required Data Elements vs TCC (AF Form 1534) - Continued

										BLOCK NUMBERS																
TCC	1	2	3-6	7	8	9	10	11	12-13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
YB		23	X	24		24	25		X	X	X	23						X								
YC		23	X	24		24	25		X	X	X	23						X								
YF		23	X	24		24	25		X	X	X	23						X								
YG		23	X	24		24	25		X	X	X	23						X								
YK YL		23 23	X X	24 24		24 24	25 25		X X	X X	X X	23 23						X X								
YR		23	X	24		24	25		X	X	X	23						X								
YZ		23	X	24		24	25		X	X		23							13	5 13			X	X	15	
ZA		23	X	24		24	25		X	X		23							13	5 13			X	X	15	
ZB		23	X	24		24	25		X	X	X	23						X								
ZF		23	X	24		24	25		X	X	X	23						X								
ZG		23	X	24		24	25		X	X	X	23						X								
ZR		23	X	24		24	25		X	X	X	23						X								
ZZ		23	X	24		24	25		X	X		23							13	5 13			X	X	15	
										CANNIBALIZATION																
2L		23	X	24		24	25		X			23						X								X
										ORGANIZATION LOCATION																
2M		23	X	24	X	24	25		X			23														
										CONFIGURATION REPORTING																
6A	X	23	X	24	28	24	25		X			23							6				17	17		
6B		23	X	24		24	23		X			23														
6C		23	X	24		24	23		X			23														
6D			X						X																	
6E		23	X				25		X			23														

Table 9-4. D042 Status Required Data Elements vs TCC (AF Form 1534) - Continued

	BLOCK NUMBERS																									
TCC	1	2	3-6	7	8	9	10	11	12-13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6F			X						X										X	5						
6G			X	X	X				X	X																
6H			X	X	X				X										X	5			X	X	X	
6I			X		X			X	X													1				2
6J			X				X	32	X			X											33			
6N	X	23	X	24	28	24	25	X	X			23							6				12	12		
6P	26	23	X	24	28	24	X		X			23							6							
6S		23	X	24	28	24	25		X			23							6				17	17		
6T	X	23	X	24	28	24	25		X			23							6				17	17		
6U	X	23	X	24	28	24	X		X			23							6				17	17	17	
6X	X	23	X	24	28	24	25		X			23							6				17	17		

1 Convert TMSM to Engine-ID.

2 Enter MDS.

3 Entry required when engine related How Mal Code is determined to be different from originally reported.

4 Required on type K reports only.

5 Cycle count required for TF33 and sortie required for J79.

6 Entry is not required for parts tracked engines.

7 Not used.

8 All "TP" users have the capability to add or change organization codes by serial number using TCC "2M."

9 NHA designator and NHA serial number are required for removals of tracked engines (F100/TF34), and components.

10 Not used.

11 Not used.

12 Not required for BATCH format for direct line reporting input if the item is installed and NHA CII and serial number is entered, the item will be initialized as installed; else, the item will be initialized as a spare.

13 Entry is not required for parts-tracked engines except F108, also AF FORM 1557 not required.

14 Document number is required only if previous transaction is "S."

15 Not used.

16 Optional:

Table 9-4. D042 Status Required Data Elements vs TCC (AF Form 1534) - Continued

17 Not required if item is installed.

18 Optional: When work is completed which changes the series or modification of engine designation, enter the new TMSM.

19 Document number is optional except as cited previously in this T.O.

20 Reason for return to overhaul required for accountable items; not required for non-CEMS-accountable tracked parts.

21 Not used.

22 Not used.

23 Entry not required for direct line reporting input.

24 Entry not required for non-CEMS-accountable items (both non-direct line reporting and direct line reporting input).

25 Entry not required for non-CEMS-accountable items input by non-direct line reporting mode.

26 Trailer from (AF FORM 1557) is required if type report is “4;” not required if type report is “R.”

27 Entry not required for non-parts-tracked engines reported via AUTODIN format.

28 Entry required for direct line reporting input only.

29 When submitting a 2L TCC add quantity of cannibalized parts to block 30 on AF FORM 1534. This is applicable to OC-ALC only.

30 Reason for delay code is required for “H” transaction.

31 Reason for return to overhaul code is optional for TCC PL.

32 Enter new PN.

33 Enter new or current MDS.

34 Optional (blank) or as required by T.O. 00-85-20.

Table 9-5. TCTO Status Codes vs Required Data Element Entries AF Form 1559 - TCTO Status Report

NOTE

An "X" in a block number field indicates a mandatory entry requirement. A numeric in a block field indicates footnotes located at the end of the matrix that may qualify or exempt data from that particular type transaction.

TCTO STATUS CODE	BLOCKS 1 THRU 8	BLOCK 9 ACTUAL MANHOURS	BLOCK 10 RVRSL CODE	BLOCK 11 RVRSL HOURS	BLOCK 12 WORK CENTER	BLOCK 13 WORK ORDER NUMBER	BLOCK 14 SERIAL NUMBER	BLOCK 15 AUTODIN BATCH DATA	BLOCK 16 ERROR SEQUENCE NUMBER	BLOCK 17 OLD PART NUMBER	BLOCK 18 NEW PART NUMBER	BLOCK 19 REMARKS
00(796)	X	-	-	-	7	7	X	3	4	X	-	6
01(801)	X	X	-	-	7	7	X	3	4	X	5	6
02(797)	X	-	-	-	7	7	X	3	4	X	-	6
03(798)	X	-	-	-	7	7	X	3	4	X	-	6
04	X	-	-	-	7	7	X	3	4	X	-	6
05	X	-	-	-	7	7	X	3	4	X	-	6
06(802)	X	X	1	2	7	7	X	3	4	X	-	6
07	X	-	1	2	7	7	X	3	4	X	-	6
08	X	-	1	2	7	7	X	3	4	X	-	6
09	X	-	1	2	7	7	X	3	4	X	-	6
10(911)	X	-	X	X	7	7	X	3	4	X	-	6
11	X	-	1	2	7	7	X	3	4	X	-	6
12	X	-	1	2	7	7	X	3	4	X	-	6
13	X	-	1	2	7	7	X	3	4	X	-	6
14	X	-	1	2	7	7	X	3	4	X	-	6
15	X	-	1	2	7	7	X	3	4	X	-	6
16	X	-	1	2	7	7	X	3	4	X	-	6
17(793)	X	-	1	2	7	7	X	3	4	X	-	6
18	X	X	1	2	7	7	X	3	4	X	-	6
19	X	-	1	2	7	7	X	3	4	X	-	6
20	X	-	1	2	7	7	X	3	4	X	-	6
21	X	-	1	2	7	7	X	3	4	X	-	6
22	X	-	1	2	7	7	X	3	4	X	-	6

Table 9-5. TCTO Status Codes vs Required Data Element Entries AF Form 1559 - TCTO Status Report - Continued

(1) How Mal Codes 793, 796, 797, 798, 801, 802, and 911 will be used by CAMS and AUTODIN facilities in lieu of the corresponding two position status code.

(2) TCTO status codes 01-18 are used by CEMS for updating. For a complete list of the TCTO status codes use this TO.

(3) Blocks 1 through 8 are:

[1] TCC

[2] Sequence Number

[3] CII

[4] Data Code

[5] Status-How Mal Code

[6] Status Date

[7] Accomplishing SRAN

[8] Accomplishing Command

NOTE

- Block 10 (reversal code) will need to be entered when status is changed from closed with (01-05/22) to open status.
- Block 11 (reversal hours) may be entered when there is a reversal code entry in Block 10.
- Block 15 (AUTODIN-batch data) consists of three data element headers that require entries for AUTODIN reporting. The three data element headers are: Block 15.a. - Subsystem ID; Block 15.b. - Type Report; Block 15.c. - Federal Supply Class.
- Block 16 (error sequence number) - Enter only when an error is being corrected. This is the sequence number for which an error is being corrected.
- Block 18 (new part number) - Enter the new part number if TCTO instructs change to a new part number upon compliance.
- Block 19 (remarks) - Entry required only when specified by local procedures. This block may be used for additional pertinent information.
- Blocks 12 and 13 are optional inputs. User may input data in these blocks if the need exists to record the accomplishing work center and/or the work order number.

Table 9-6. Engine Related "How MAL Codes"

CODES	CONDITION
006	CONTACTS, CONNECTORS OR CONNECTION DEFECTIVE
008	NOISY/CHATTERING
020	CUT, WORN, CHAFED, FRAYED OR TORN
025	CAPACITANCE INCORRECT
028	CONDUCTANCE INCORRECT
029	CURRENT INCORRECT
045	BATTERY REPLACED, NO OTHER DEFECT
069	FLAMEOUT
070	BROKEN SAFETY WIRE, HARDWARE, EXTERNAL PARTS OF COMPONENTS
086	SHIPPING OR HANDLING DAMAGE
105	LOOSE, DAMAGED OR MISSING HARDWARE (NUTS, BOLTS, CLAMPS, SAFETY WIRE, ETC.)
111	BURST OR RUPTURED
116	CUT
127	ADJUSTMENT OR ALIGNMENT IMPROPER
135	BINDING, STUCK OR JAMMED
136	DAMAGED-CRACKED FAN STATOR CASE
137	DAMAGED-CRACKED FAN STATOR VANES
138	FAN BLADE DAMAGE
139	CRACKED OR WARPED INLET GUIDE
140	FROZEN FAN
141	COMPRESSOR CASE FAILURE OR EXCESSIVE AIR LEAKAGE
142	COMPRESSOR DAMAGE DUE TO FAILURE OR SEIZURES
143	DAMAGED-CRACKED COMPRESSOR CASE
144	COMPRESSOR ROTOR CHANGE (OTHER THAN FOD)
145	CRACKED DIFFUSER CASES
146	COMBUSTION DAMAGE
147	COMBUSTION CASE BURN OR HOT SPOT
148	DAMAGED-CRACKED TURBINE FRAME-CASE (BURNED THROUGH)
149	FLAMEHOLDER OR FUEL RING-BARS DAMAGED
150	THROWN, DAMAGED OR FAILED BUCKETS
151	TURBINE WHEEL FAILURE
152	TURBINE NOZZLE FAILURE
153	TURBINE DAMAGE DUE TO MATERIAL FAILURE
154	ENGINE OR AFTERBURNER FIRE DAMAGE
155	ENGINE TO AC MOUNT FAILURE
156	AFTERBURNER OR AUGMENTOR PROBLEM REPAIR
157	THRUST REVERSER SYSTEM FAILURE
158	ACCESSORY DRIVE GEARBOX FAILURE (INCLUDES TURBOPROP GEARBOX)
159	INTERNAL REDUCTION GEAR FAILURE
160	BEARING AND/OR SUPPORT FAILURE
162	SCAVENGE PUMP FAILURE (INCLUDES TURBOPROP GEARBOX)
163	ENGINE DECOUPLED (TURBOPROP)
164	PROPELLER BRAKE FAILED (TURBOPROP)
165	POWER SECTION FAILURE (TURBOPROP)
166	REDUCTION GEARBOX FAILURE (TURBOPROP)
167	TENSION OR TORQUE INCORRECT
168	TORQUE METER FAILURE (TURBOPROP)
169	VOLTAGE INCORRECT
170	CORRODED MILD/MODERATE
171	IMPELLER OR INDUCER DAMAGE
172	SLIPPED BLOWER CLUTCH
173	TURBO SUPERCHARGE FAILURE
174	QEC DISCREPANCY
175	ADVERSE EGT-TIT TREND
176	ADVERSE RPM TREND
177	HIGH OR LOW FUEL CONSUMPTION
178	VIBRATION TREND
179	EXHAUST PRESSURE RATIO (EPR) TREND
180	ADVERSE OIL CONSUMPTION TREND
181	ADVERSE FUEL FLOW TREND

Table 9-6. Engine Related "How MAL Codes" - Continued

CODES	CONDITION
182	PERFORMANCE TREND INDICATES COMPRESSOR SECTION DETERIORATION OR DAMAGE
183	PERFORMANCE TREND INDICATES COMBUSTION SECTION DETERIORATION OR DAMAGE
184	PERFORMANCE TREND INDICATES TURBINE SECTION DETERIORATION OR DAMAGE
185	PERFORMANCE TREND INDICATES ACCESSORY SECTION DETERIORATION OR DAMAGE
186	REMOVED FOR FURTHER TEST CELL DIAGNOSTIC CHECK
187	BORESCOPE INDICATES COMPRESSOR SECTION DETERIORATION
188	BORESCOPE INDICATES COMBUSTOR SECTION DETERIORATION
189	BORESCOPE INDICATES TURBINE SECTION DETERIORATION
190	CRACKED
191	HIGH EGT
192	OVERTEMPERATURE
193	EXCESSIVE STALLS
194	HIGH BREATHER PRESSURE
195	EXCEEDING QUALITY CHECK TEMPERATURE LIMIT
196	EXCESSIVE OIL FROM BREATHER, OR HIGH PUMP PRESSURE
197	FUEL LEAKAGE
198	CONTAMINATED FUEL
199	HIGH OR LOW OIL CONSUMPTION
200	OIL LEAKAGE
201	CONTAMINATED OIL
202	LOW OIL PRESSURE
203	HIGH OIL PRESSURE
204	SMOKE OR FUMES IN COCKPIT
205	START OR OFF IDLE STAGNATION
206	STEADY STATE STAGNATION
207	AUGMENTOR INDUCED STAGNATION
208	AUGMENTOR NOZZLE MECHANISM DETERIORATION
209	INTERNAL NOISE ON SHUTDOWN-START
210	SERVICING WITH IMPROPER GRADE OR TYPE OF FUEL OR OIL
211	CORRODED INTERNAL SURFACES
212	CORRODED EXTERNAL SURFACES
213	LOW COMPRESSION
214	BLOW-BY OR DETONATION
215	MANIFOLD PRESSURE BEYOND LIMITS, OVERBOOST
216	LOW MANIFOLD PRESSURE
217	OIL IN INDUCTION SYSTEM OR COMPRESSOR SECTION
218	SUDDEN STOPAGE - REDUCTION OR EXCEEDED TORQUE LIMITS
219	INTERNAL FAILURE
220	LOSS OF TORQUE
223	CONTROL SYSTEM COMPONENT MALFUNCTION
224	BACKUP-EMERGENCY CONTROL SYSTEM FAILURE
225	BLEED AIR MALFUNCTION
226	ENGINE START TIME BEYOND LIMITS
227	REAR COMP VAR VANE (RCVV) GEOMETRY IMPROPER-AXIAL FLUTTER
228	COMPRESSOR INLET VARIABLE VAIN (CIVV) GEOMETRY IMPROPER
230	DIRTY, CONTAMINATED OR SATURATED BY FOREIGN MATERIAL
231	AUGMENTOR BLOWOUT
232	AUGMENTOR NO LIGHT
233	AUGMENTOR RUMBLE
234	TURBINE BORE - FIRE
242	FAILED TO OPERATE-SPECIFIC REASON UNKNOWN
253	MISFIRES
277	FUEL NOZZLE-OIL LINE COKING
279	SPRAY PATTERN DEFECTIVE
290	FAILS DIAGNOSTIC/AUTOMATIC TEST
300	FOREIGN OBJECT (NO DAMAGE)
301	FOREIGN OBJECT DAMAGE (FOD)
303	DAMAGE BY SEMI-SOLID FOREIGN OBJECTS (BIRDS)
314	INABILITY TO ACCELERATE, ALL POWER SETTINGS ABOVE IDLE
315	SURGES-FLUCTUATES

Table 9-6. Engine Related "How MAL Codes" - Continued

CODES	CONDITION	
317	HOT STARTS	
334	TEMPERATURE LIMITS EXCEEDED	■
350	INSULATION BREAKDOWN	
372	METAL IN SUMP-SCREEN OR ON MAG PLUG	■
381	LEAKING INTERNAL OR EXTERNAL	
410	LACK OF OR IMPROPER LUBRICATION	
425	PITTED, NICKED, CHIPPED, SCORED, SCRATCHED OR CRAZED	
458	OUT OF BALANCE	
464	OVERSPEED	
475	INABILITY TO START, GROUND OR AIR	
476	DAMAGE BY SOLID - FOREIGN OBJECT (METAL, STONE)	
477	DAMAGE BY SEMI-SOLID FOREIGN OBJECT (ICE)	
478	DAMAGE BY SEMI-SOLID FOREIGN OBJECT (RAGS, PLASTIC, RUBBER, ETC.)	
479	DAMAGE FROM SIMULATED COMBAT (AIR TO AIR - AIR TO GROUND)	
480	DAMAGE BY AIRCRAFT ACCIDENT BY INCIDENT	
481	EXPOSURE TO FIRE EXTINGUISHING AGENT	
482	EXCESSIVE "G" FORCE INSPECTION	
483	DUMMY ENGINE TRANSACTION	
484	BLADE SHINGLING	
513	COMPRESSOR STALLS (AFTERBURNER)	■
525	PRESSURE INCORRECT/FLUCTUATES	
537	LOW POWER OR THRUST	■
553	DOES NOT MEET SPECIFICATIONS	
561	UNABLE TO ADJUST TO LIMITS	■
567	RESISTANCE INCORRECT	■
585	SHEARED	■
599	TRAVEL OR EXTENSION INCORRECT	■
602	FAILED OR DAMAGED DUE TO MALFUNCTION OF ASSOCIATED EQUIPMENT	■
615	SHORTED	■
625	INDUCTANCE INCORRECT	■
644	BUILT-IN-TEST (BIT) INDICATED FAULT	
690	EXCESSIVE VIBRATION OR ROUGH OPERATION	■
698	FAULTY CARD, TAPE, PROGRAM OR DISK	■
718	IMPROPER RESPONSE TO MECHANICAL INPUT	■
721	IMPROPER RESPONSE TO ELECTRICAL INPUT	
731	BATTLE DAMAGE	■
750	MISSING	■
756	BLADE SEAL MISSING/DEFECTIVE	■
780	BENT, BUCKLED, COLLAPSED, DENTED, DISTORTED OR TWISTED	
793	NO DEFECT - TCTO KIT RECEIVED BY BASE SUPPLY OR PARTS ARE IN SUPPLY	
796	NO DEFECT - TCTO NOT APPLICABLE	
797	NO DEFECT - TCTO PREVIOUSLY COMPLIED WITH	
798	NO DEFECT - TCTO COMPLIED WITH BY RECORD RECORD CHECK OR INSPECTION	■
799	NO DEFECT	
800	NO DEFECT - PART REMOVED - REINSTALLED TO FACILITATE OTHER MAINTENANCE	
801	NO DEFECT - T.O. COMPLIED WITH, ALL APPLICABLE OPERATIONS COMPLETED	
802	NO DEFECT - PARTIAL TCTO COMPLIANCE	
804	NO DEFECT - REMOVED FOR SCHEDULED MAINTENANCE, MODIFICATION OR ASSESSMENT	■
812	NO DEFECT - DEFECT CAUSED BY ASSOCIATED EQUIPMENT MALFUNCTION	■
816	IMPEDANCE INCORRECT	■
844	HOLE WARE, OUT OF ROUND	
846	DELAMINATED	■
847	ABRASION, EROSION, PITS (COMPOSITES)	■
848	MISSING OR LOOSE FIBERS (COMPOSITES)	■
865	DETERIORATED, SEPARATION OF LAYERS (COMPOSITES)	
866	EXPIRATION OF MAXIMUM TIME, ENGINES OR COMPONENTS (T.O. DIRECTED)	
867	TRANSFER TIME LIMIT (T.O. 2-1-18)	
868	REMOVED - ROLLED BACK FOR FAILED EXTERNAL COMPONENT, REINSTALLED IN SAME AC	
870	REMOVED FOR RESEARCH, TEST OR DIAGNOSTIC EVENT	
872	REMOVED DURING AIRCRAFT PDM	

Table 9-6. Engine Related "How MAL Codes" - Continued

CODES	CONDITION	
874	STORAGE DAMAGE OR DETERIORATION	
875	REMOVED FOR REUSE (CANNIBALIZATION)	
876	NON-T.O. DIRECTED REMOVAL	
877	T.O. IDENTIFIED COMPONENTS	
878	REMOVAL TO PERFORM SCHEDULE - SPECIAL INSPECTION (T.O. DIRECTED)	
879	EXPIRATION OF MAXIMUM CYCLE - SORTIES FOR ENGINES OR COMPONENTS (T.O. DIRECTED)	
880	OPPORTUNISTIC MAINTENANCE REMOVAL OF TRACKED PARTS	
881	REMOVAL TO PERFORM MINOR INSPECTION (BORESCOPE - T.O. DIRECTED)	
884	LEAD BROKEN	■
890	LIGHTNING STRIKE DAMAGE	■
900	BURNED OR OVERHEATED	■
911	TCTO NOT COMPLIED WITH. TCTO COMPLIED WITH OR PLACED IN WORK IN ERROR	
916	JOAP REMOVAL	
917	IMPENDING FAILURE OR LATENT DEFECT INDICATED BY NDI	
932	DOES NOT ENGAGE, LOCK OR UNLOCK CORRECTLY	■
943	DATA ERROR	■
988	VACUUM LOSS OR INCORRECT	■

■ IDENTIFIES NEW CODES ADDED BY THE PROGRAM MANAGEMENT REVIEW CONDUCTED JAN 1998

Table 9-7. Authorized How MAL Codes for Removals/Change in Maintenance

TRANSACTION CODE	CONDITION CODE	DESCRIPTION
K - L - M	F or G	Any engine related removal code is authorized except 215, 483, 793, 797, 798, 799, 800, 802, 804, 867, 868, 870, 872, 875, and 911.
K - L	L	Any engine related removal code is authorized except 483, 796, 797, 798, 799, 800, 867, and 868.
K - L - M*	B	Only engine related codes 483, 797, 798, 799, 800, 801, 804, 812, 867, 868, 870, 872, 875, and 876 are authorized.
M	L	Any engine related removal code is authorized except 483, 796, 797, 798, 799, 800, 867, and 868.

* MB applies to parts only, not engines.

Table 9-8. TCTO Status and/or How MAL Codes

DATA ITEMS	TCTO STATUS CODES	HOW MAL CODES
TCTO Completely Complied With	01	801
TCTO Previously Complied With	02	797
TCTO Complied With by Record Check or Inspection	03	798
TCTO Not Complied With - Cancelled	04	
Equipment Permanently Transferred or Lost from AF Inventory	05	
TCTO Partially Complied With - Ready for Work	06	802
TCTO Partially Complied With - Kits, Parts and/or Tools Test Equipment on Order	07	
TCTO N/C/W - Condition Inspection Required	08	
TCTO N/C/W - Held in Abeyance	09	
TCTO N/C/W - Placed in Work or Reported C/W in Error	10	911
TCTO N/C/W - Kits and/or Parts on Order but not Received	11	
TCTO N/C/W - Prior Compliance of a Field and/or Depot TCTO Required	12	
TCTO N/C/W - Test and/or Support Equipment not Available	13	
TCTO N/C/W - Kits, Parts, and/or Test Equipment on Hand but Equipment not Available for Modification	14	
TCTO N/C/W - Event Type	15	
TCTO N/C/W - Depot Level TCTO Only	16	
TCTO N/C/W TCTO Ready for Work	17	793
Depot Level TCTO, Partially Complied With	18	
Technical Order not Released by the Prime ALC	19	
TCTO N/C/W - Kits on Hand, Parts on Order	20	
TCTO N/C/W - Established in CEMS CDB with Release and Rescission date. Applies to Organization/Intermediate Level TCTOs.	21	
TCTO Not Applicable to this Equipment	22	796
TCTO N/C/W - In storage at AMARC.	24	

NOTE

The seven engine related How Mal Codes listed above are the only codes used by all reporting activities. Systems use status code "22."

Table 9-9. Reason for Delay Code

CODE	DEFINITION
A	Manpower Shortage
B	Tooling Not Available
C	Work Space Not Available
D	Maintenance Stand Not Available
E	Build Up Stand Not Available
F	Other (Not Applicable at Depot Repair Activity)
G	Technical Data Not Available
H	Higher Priority Work (Depot Repair Activity Only)
J	Software Not Available
K	Test Cell Delay
M	Parts Shortage (Maintenance)
N	Parts Shortage (Supply) (TRC Only)
R	Revised Requirement (TRC Only)
S	Floating Stock Shortage (TRC Only)

NOTE

Codes A through F, K and M are usable in CAMS and DLR. All codes can be used by depot activities and contractors.

Table 9-10. Engine Reason for Return to Overhaul Codes

DATA ITEMS	DATA CODES
Expiration of Max Time	9A
Lack of JEIM Equipment, Tools, or Facilities	9B
Repairs Not Authorized	9C
Crash Damage	9D
UR Exhibit for TDR	9E
Special TDR	9F
Questionable Structural Integrity	9G
Directed by Higher HQ (Lack of Parts)	9H
Directed by Higher HQ (Lack of Manpower)	9J
Directed by Higher HQ (Other)	9K
Three Consecutive Test Cell Rejects for Same Reason	9L
Maintenance Economy	9M
Expiration of Maximum Cyc-Sorties	9R
Warranty Exhibit	9W
2 Level Maintenance	9T

Table 9-11. Engine Ownership Account Codes

DATA ITEMS AND EXPLANATIONS	DATA CODES
GENERAL ACCOUNT. Engine owned by the AF and possessed by AF or contractors for purposes other than bailment, research or development, load, Government Furnished Property (GFP), Government Furnished Aircraft Equipment (GFAE), Air National Guard (ANG), Air Force Reserve (AFR), ground training classified project, aero clubs, or DPDO.	A
BAILMENT OR LEASE. Engine on bailment or lease contract. AF owned engine on hand or received by a reporting activity that is covered by a bailment or lease contract. This includes installed engines when the end item is covered by a bailment contract.	B
RESEARCH OR DEVELOPMENT. Engine undergoing or used in conjunction with air or ground equipment that is undergoing research or development. This code is restricted for use by AFMC activities only.	C
DEPARTMENT OF THE ARMY. Engine owned by the army that is assigned to and possessed by the AF.	D
LOAN. Engine on loan. AF owned engine that is shipped or transferred to a non-reporting activity on a loan or facility agreement. This includes installed engines wherein the end item is on loan or facility agreement.	E
FAA. Engine owned by the FAA that is assigned to and possessed by the AF.	F
GFP. Engine owned by the AF that is possessed by an aircraft modification and/or repair contractor. This includes all installed engines and serviceable spare engines that are intended to be installed in other than new production aircraft.	G
COAST GUARD. Engine owned by the Coast Guard that is assigned to and possessed by the AF.	H
CLASSIFIED PROJECT. Engine owned by the AF and being used in support of a classified project, when reporting would be in violation of security.	L
SAP. Engine owned by SAP that is assigned to and possessed by the AF.	J
GFAE. Engine owned by the AF that is possessed by a contractor for installation (including those installed) in new production aircraft.	K
ANG. Engine possessed by the ANG.	N
EUROPEAN PARTICIPATING GOVERNMENT. History Only.	P
AFR. Engine possessed by the AFR.	R
GROUND TRAINING. School Engine.	S
DEPARTMENT OF THE NAVY. Engine owned by the Navy that is assigned to and possessed by the AF.	T
OTHER NON-AF ACTIVITIES. Engine owned by an AF auxiliary unit, NASA, school, other government agency, or commercial activity that is assigned to and possessed by the AF.	W
AIRCRAFT STORAGE SITE. Engine installed in an aircraft that was transferred to R and M. This code restricted for use by the aircraft storage site (FJ 2373).	Z

Table 9-12. Manufacturer's Codes

DATA ITEM AND EXPLANATION	DATA CODES
Aerojet	AJ
Allison Division, General Motors Corporation	AD
CFM International, Inc	CF
Air Force Aero Propulsion Laboratory	PL
Teledyne Continental Aviation and Engineering Corporation	CA
Curtiss-Wright Corporation	WA
Ford	FD
General Electric Company	GE
Lycoming Division, Avco Corporation	LD
Marquadt Company	MA
Microturbo, Toulouse, France	MT
Nash Kelvinator	NK
Rocketdyne	RD
Rolls Royce, Ltd	RR
Solar Division, International Harvester Corporation	SO
Pratt and Whitney Aircraft Division, United Aircraft Corporation	PW
United Aircraft of Canada, Ltd	CP
United Aircraft of West Virginia	WV
United Aircraft Research Laboratory	UA
United Technology Center	UT
Williams International	WR

Table 9-13. Special Status Code Table

CODE	DEFINITION
AWR	Awaiting Repair
AI	Accident Investigation
ACI	Analytical Condition Test
AMT	Accelerated Mission Test
CAB	Cannibalized
CAL	Test Cell Calibration Engine
DIS	Disassembled Engine
ENG	Engineering Evaluation
EWP	Engine Warranty Program
LTF	Lead The Fleet
OAR	Oil Analysis Report
ORF	Overhaul-Repair Facilities
PMG	Parts Missing
REC	Reclamation
SAF	Simulated Actual Flight Endurance
SSL	Special Serialized Limits
TDR	Teardown Deficiency Report
TRG	Training Items

Table 9-14. Authorized Tracking Methods

CAT NO	TLC NOUN	TLC	DEC POS
04	Low Cal Cy	LCC	1
05	Nr. Of Engine Runs	RUN	0
06	Emergency War Operations	EWO	0
07	Cycles-Sorties	SOR	0
08	Calculated Cycles	CCY	0
09	Engine Operating Time	EOT	1
10	Major Cycles	MAJ	0
11	Engine Flying Hours	FHR	1
12	Elapsed Days	DAY	0
13	Time Above Exhaust Gas Temperature 8	EG8	2
14	Time Above Exhaust Gas Temperature 9	EG9	2
15	Manual Cycles	MAN	0
16	Low Cycles Fatigue	LCF	0
17	Hot Section 1	HS1	2
18	Hot Section 2	HS2	2
19	Nr. Of Installed Shutdowns	CSC	0
20	Number of Flights	FLT	0
23	Minor Cycles	MIN	0
24	Calendar Date	CAL	0
25	Total Accumulated Cycles	TAC	0
26	In-Flight Shutdown	FSD	0
27	Time Weight Off Wheels	WOW	2
28	Total Accumulated Cycles (F119)	TAC	0
31	Time Above Temperature 7	T78	2
32	Time Above Temperature 8	TT8	2
34	Flag 8	840	0
35	Flag 9	927	0
36	Event 5	EV5	0
37	Event 7	EV7	0
40	Cycles	CYC	2
41	Fan Life Usage	FLL	0
42	HPC Life Usage	CLL	0
43	Diffuser/Combustor Life Usage	DLL	0
44	HPT Life Usage	HLL	0
45	LPT Life Usage	LLL	0
46	HPT Hot Usage	HAL	0
47	LPT Hot Usage	LAL	0
48	Nozzle Life Usage	NLL	0
49	Bearing Life Usage	BLL	0
50	Control System Power-ups	CPU	0
51	IBR Minutes	IBR	2
52	HSP Counts	HSP	0
53	ERL Hours	ERL	1
59	Low Cycle Fatigue	LCY	0
60	Full Thermal Cycle	FTC	0
61	Cruise Intermediate Cruise Cycle	CIC	0
62	Afterburner Cycles	ABC	0
63	Afterburner Time	ABT	1
64	Equivalent Low Cycle Fatigue	ELC	0
65	Time Above Temperature 1	TT1	1
66	Time Above Temperature 2	TT2	1
67	Time Above Temperature 3	TT3	1
68	Time Above Temperature 4	TT4	1
69	Time Above Temperature 5	TT5	1
70	Equivalent Time at Temperature	ETT	1
71	V-Max Time	VMX	2
72	Fatigue Cycles Type IV	CY4	0
73	Hot Section 3	HS3	2

Table 9-14. Authorized Tracking Methods - Continued

CAT NO	TLC NOUN	TLC	DEC POS
74	Hot Section 4	HS4	2
75	Calculated Flight Time	CFH	1
76	Safety Cycles	SCY	0
77	In Flight Time	IFT	1
80	PLA > 80	PL8	2
81	Time/Temp 1	TM1	2
82	Time/Temp 2	TM2	2
83	Time/Temp 3	TM3	2
84	Time/Temp 4	TM4	2
85	Time/Temp 5	TM5	2
86	Power Lever Angle	PLA	0
87	Stress Rupture Fatigue (HPT BSR)	SRF	2
88	Pressure Station 3A	P3A	0
89	Pressure Station 3B	P3B	0
90	Equivalent Fuel Thermal Cycles	EFC	1
91	Low Cycle Fatigue Partial	LCP	0
92	Exhaust Gas Temperature	EGT	0

Table 9-15. CII Table

TMSM FORMAT (NON-CAMS)	TMSM FORMAT (MMICS AND/OR CAMS)	NOUN	ENG ID	MFG CODE	CII
::F0100100::	:F0100100::	F100-100 Engine*	X1	PW	AF10010
::F0100100A:	:F0100100A:	F100-100A Engine*	X4	PW	AF10010
::F0100100B:	:F0100100B:	F100-100B Engine*	X5	PW	AF10010
::F0100100C:	:F0100100C:	F100-100C Engine*	X6	PW	AF10010
::F0100200::	:F0100200::	F100-200 Engine*	X2	PW	AF10010
::F0100200A:	:F0100200A:	F100-200A Engine*	X7	PW	AF10010
::F0100200B:	:F0100200B:	F100-200B Engine*	X8	PW	AF10010
::F0100200C:	:F0100200C:	F100-200C Engine*	X9	PW	AF10010
::F0100220A:	:F0100220A:	F100-220A Engine*	YF	PW	AF10010
::F0100220B:	:F0100220B:	F100-220B Engine*	YA	PW	AF10010
::F0100220C:	:F0100220C:	F100-220C Engine*	YJ	PW	AF10010
::F0100220D	:F0100220D::	F100-220D Engine*	YC	PW	AF10010
::F0100220E:	:F0100220E:	F100-220E Engine*	YD	PW	AF10010
::F0100220F:	:F0100220F:	F100-220F Engine*	YE	PW	AF10010
::F0100229A:	:F0100229A:	F100-229A Engine*	YG	PW	AF10010
::F0100229B:	:F0100229B:	F100-229B Engine*	YH	PW	AF10010
::F0101102::	:F0101102::	F101-102 Engine	HF	GE	AF10110
::F0103100::	:F0103100::	F103-100 Engine	HL	GE	AF10310
::F0107101::	:F0107101::	F107-101 Engine	HK	WR	AF10710
::F0108100::	:F0108100::	F108-100 Engine	HM	CF	AF10810
::F0108201::	:F0108201::	F108-201 Engine	JE	CF	AF10810
::F0109100::	:F0109100::	F109-100 Engine	XS	GA	AF10910
::F0110100::	:F0110100::	F110-100 Engine	XY	GE	AF11010
::F110100B::	:F0110100B:	F110-100B Engine	YP	GE	AF11B10
::F0110129::	:F0110129::	F110-129 Engine	XZ	GE	AF12910
::F0110400::	:F0110400::	F110-400 Engine	YK	GE	AN40010
::F0112100::	:F0112100::	F112-100 Engine	HQ	WR	AF11210
::F0117100::	:F0117100::	F117-100 Engine	PK	PW	AF11710
::F0118100::	:F0118100:	F118-GE100 Engine	PM	GE	AF11810
::F0118101::	:F0118101:	F118-GE101 Engine	PP	GE	AU11810
::F0119100::	:F0119100:	F119-100 Engine	YR	PW	AF11910
::F0404F102	:F0404F102	F404-F102 Engine	PA	GE	AF40410
::J0033035::	:J0033035::	J33-35 Engine	AB	AD	AJ03310

Table 9-15. CII Table - Continued

TMSM FORMAT (NON-CAMS)	TMSM FORMAT (MMICS AND / OR CAMS)	NOUN	ENG ID	MFG CODE	CII
::J0047025::	:J0047025::	J47-25 Engine	AF	GE	AJ04710
::J0057021A:	:J0057021A:	J57-21A Engine	HZ	FD/PW	AJ05710
::J0057021B:	:J0057021B:	J57-21B Engine	HW	FD/PW	AJ05710
::J0057023B:	:J0057023B:	J57-23B Engine	HX	FD/PW	AJ05710
::J0057029WA	:J0057029WA	J57-29WA Engine	JA	FD/PW	AJ05710
::J0057043WB	:J0057043WB	J57-43WB Engine	JC	FD/PW	AJ05710
::J0057059W:	:J0057059W:	J57-59W Engine	AR	FD/PW	AJ05710
::J0060003::	:J0060003::	J60-3 Engine	AS	PW	AJ06010
::J060003A:	:J0060003A:	J60-3A Engine	JF	PW	AJ06010
::J0060005A:	:J0060005A:	J60-5A Engine	AT	PW	AJ06010
::J0060005B:	:J0060005B:	J60-5B Engine	JD	PW	AJ06010
::J0060009::	:J0060009::	J60-9 Engine	VB	PW	AJ06010
::J0065005F:	:J0065005F:	J65-5F Engine	JM	WA	AJ06510
::J0069025::	:J0069025::	J69-25 Engine	AX	CA	AJ06910
::J0069025A:	:J0069025A:	J69-25A Engine	JU	CA	AJ06910
::J0069406::	:J0069406::	J69-406 Engine	JY	CA	AJ06910
::J0075017::	:J0075017::	J75-17 Engine	BB	PW	AJ07510
::J0075019::	:J0075019::	J75-19 Engine	BC	PW	AJ07510
::J0075019W:	:J0075019W:	J75-19W Engine	JZ	PW	AJ07510
::J0079015::	:J0079015::	J79-15 Engine	BG	GE	AJ07910
::J0079015A:	:J0079015A:	J79-15A Engine	KM	GE	AJ07910
::J0079015E:	:J0079015E:	J79-15E Engine	BR	GE	AJ07910
::J0079017::	:J0079017::	J79-17 Engine	BH	GE	AJ07910
::J0079017A:	:J0079017A:	J79-17A Engine	KQ	GE	AJ07910
::J0079017E:	:J0079017E:	J79-17E Engine	BZ	GE	AJ07910
::J0079017F:	:J0079017F:	J79-17F Engine	KS	GE	AJ07910
::J0079017G:	:J0079017G:	J79-17G Engine	CA	GE	AJ07910
::J0085005H:	:J0085005H:	J85-5H Engine	LB	GE	AJ08510
::J0085005J:	:J0085005J:	J85-5J Engine	LC	GE	AJ08510
::J0085005L:	:J0085005L:	J85-5L Engine	KX	GE	AJ08510
::J0085005M:	:J0085005M:	J85-5M Engine	KU	GE	AJ08510
::J0085005P:	:J0085005P:	J85-5P Engine	LK	GE	AJ08510
::J0085005R:	:J0085005R:	J85-5R Engine	KT	GE	AJ08510
::J0085007::	:J0085007::	J85-7 Engine	BK	GE	AJ08510
::J0085017A:	:J0085017A:	J85-17A Engine	LH	GE	AJ08510
::J0085021B:	:J0085021B:	J85-21B Engine	LG	GE	AJ08510
:PT0006A41::	N/A	PT6A-41 Engine	ZU	PW	AT00610
:PT0006A42::	N/A	PT6A-42 Engine	ZV	PW	AT00610
:PT0006A65B:	N/A	PT6A-65B Engine	ZW	PW	AT00610
::R2000004::	:R2000004::	R2000-4 Engine	BT	PW	A200010
::R2000007M2	:R2000007M2	R2000-7M2 Engine	FZ	PW	A200010
::T0053011A:	:T0053011A:	T53-11A Engine	CT	LD	AT05310
::T0053013B:	:T0053013B:	T53-13B Engine	ML	LD	AT05310
::T0056007::	:T0056007::	T56-7 Engine	VE	AD	AT05610
::T0056007B:	:T0056007B:	T56-7B Engine	MS	AD	AT05610
::T0056009B:	:T0056009B:	T56-9B Engine	VG	AD	AT05610
::T0056009C:	:T0056009C:	T56-9C Engine	VH	AD	AT05610
::T0056009D:	:T0056009D:	T56-9D Engine	MX	AD	AT05610
::T0056009E::	:T0056009E::	T56-9E Engine	MC	AD	AT05610
::T0056015::	:T0056015::	T56-15 Engine	EQ	AD	AT05610
::T0058003::	:T0058003::	T58-3 Engine	CX	GE	AT05810
::T0058005::	:T0058005::	T58-5 Engine	FC	GE	AT05810
::T0058100::	:T0058100::	T58-100 Engine	FE	GE	AT05810
::T0064007::	:T0064007::	T64-7 Engine	GG	GE	AT06410
::T0064100:	:T0064100::	T64-100 Engine	NL	GE	AT06410
::T0400400::	:T0400400::	T400-400 Engine	HD	CP	AT40010

Table 9-15. CII Table - Continued

TMSM FORMAT (NON-CAMS)	TMSM FORMAT (MMICS AND / OR CAMS)	NOUN	ENG ID	MFG CODE	CII
::T0700700::	:T0700700::	T700-700 Engine	HE	GE	AT70010
::T0700701C:	:T0700701C:	T700-701C Engine	GT	GE	AT70010
		CF6-50E (see F103)			
:JT003D003B:	JT003D003B:	JT3D-3B Engine	PF	PW	AJT3D10
:TF0030001::	TF0030001::	TF30-1 Engine	CG	PW	ATF3010
:TF0030007::	TF0030007::	TF30-7 Engine	GL	PW	ATF3010
:TF0030100::	TF0030100::	TF30-100 Engine	GN	PW	ATF3010
:TF0030103::	TF0030103::	TF30-103 Engine	XG	PW	ATF3010
:TF0030107::	TF0030107::	TF30-107 Engine	XH	PW	ATF3010
:TF0030109::	TF0030109::	TF30-109 Engine	XJ	PW	ATF3010
:TF0030111::	TF0030111::	TF30-111 Engine	XK	PW	ATF3010
:TF0030P414A::	TF0030P414A:	TF30-P414A Engine(NAVY)	FI	PW	ANA3010
:TF0033003::	TF0033003::	TF33-3 Engine	CH	PW	ATF3310
:TF0033005::	TF0033005::	TF33-5 Engine	CJ	PW	ATF3310
:TF0033007::	TF0033007::	TF33-7 Engine	CK	PW	ATF3310
:TF0033007A:	TF0033007A:	TF33-7A Engine	LN	PW	ATF3310
:TF0033009::	TF0033009::	TF33-9 Engine	CL	PW	ATF3310
:TF0033011A:	TF0033011A:	TF33-11A Engine	LQ	PW	ATF3310
:TF0033100A:	TF0033100A:	TF33-100A Engine	VV	PW	ATF3310
:TF0033102::	TF0033102::	TF33-102 Engine	LR	PW	ATF3310
:TF0033102A:	TF0033102A:	TF33-102A Engine	LS	PW	ATF3310
:TF0033102B:	TF0033102B:	TF33-102B Engine	LP	PW	ATF3310
:TF0033102C:	TF0033102C:	TF33-102C Engine	LL	PW	ATF3310
:TF0033103:	TF0033103:	TF33-103 Engine	LT	PW	ATF3310
:TF0033105:	TF0033105:	TF33-105 Engine	LM	PW	ATF3310
:TF0034100::	TF0034100::	TF34-100 Engine	T1	GE	ATF3410
:TF0034100A:	TF0034100A:	TF34-100A Engine	XR	GE	ATF3410
:TF0039001::	TF0039001::	TF39-1 Engine	CM	GE	ATF3910
:TF0039001C:	TF0039001C:	TF39-1C Engine	PC	GE	ATF3910

Table 9-16. CII Table - Engine Applicability

TMSM FORMAT (NON-CAMS)	NOUN	ENG ID	MFG CODE	CII	NHA CII	ENGINE APPLICABILITY
::F010023A::	Inlet Fan Module	X1	PW	DF10030	AF10010	X1,X2,X4,X5,X6,X7,X8,X9
::F010024A::	Inlet Fan Module	X2	PW	DF10030	AF10010	X1,X2,X4,X5,X6,X7,X8,X9
::F010025A::	Inlet Fan Module	YF	PW	DF10030	AF10010	YF,YA,YJ,YE,YD,YC
::F010034A::	Inlet Fan Module	Y1	PW	DF10030	AF10010	X1,X2,X4,X5,X6,X7,X8,X9,YF,YA
::F010034AA::	Inlet Fan Module	Y2	PW	DF10030	AF10010	X1,X2,X4,X5,X6,X7,X8,X9,YF,YA
::F010026A::	Inlet Fan Module	YG	PW	DF10030	AF10010	YG,YH
::F010023B::	Core Module	X1	PW	DF10040	AF10010	X1,X4
::F010024B::	Core Module	X2	PW	DF10040	AF10010	X2,X7
::F010034B::	Core Module	X5	PW	DF10040	AF10010	X5,X6,X8,X9
::F010025B::	Core Module	YF	PW	DF10040	AF10010	YF,YA,YJ,YE,YD,YC
::F010026B::	Core Module	YG	PW	DF10040	AF10010	YG,YH
::F010023H::	High Pressure Turbine Module	X1	PW	DF10050	DF10040	X1,X2
::F010024H::	High Pressure Turbine Module	X2	PW	DF10050	DF10040	X1,X2
::F010025H::	High Pressure Turbine Module	YF	PW	DF10050	DF10040	YA,YC,YD,YE,YF,YJ,X5,X6,X8,X9

Table 9-16. CII Table - Engine Applicability - Continued

TMSM FORMAT (NON-CAMS)	NOUN	ENG ID	MFG CODE	CII	NHA CII	ENGINE APPLICABILITY
::F010026H::	High Pressure Turbine Module	YG	PW	DF10050	DF10040	YG,YH
::F010023C::	Fan Drive Turbine Module	X1	PW	DF10060	AF10010	X1,X2,X4,X5,X6,X7,X8,X9
::F010024C::	Fan Drive Turbine Module	X2	PW	DF10060	AF10010	X1,X2,X4,X5,X6,X7,X8,X9
::F010025C::	Fan Drive Turbine Module	YF	PW	DF10060	AF10010	YF,YA,YJ,YE,YD,YC
::F010034C::	Fan Drive Turbine Module	Y1	PW	DF10060	AF10010	X1,X2,X4,X5,X6,X7,X8,X9,YF,YA
::F010034CA:	Fan Drive Turbine Module	Y2	PW	DF10060	AF10010	X1,X2,X4,X5,X6,X7,X8,X9,YF,YA
::F010026C::	Fan Drive Turbine Module	YG	PW	DF10060	AF10010	YG,YH
::F010023F::	Augmentor Module	X1	PW	DF10070	AF10010	X1,X4,X5,X6
::F010024F::	Augmentor Module	X2	PW	DF10070	AF10010	X2,X7,X8,X9
::F010025F::	Augmentor Module	YF	PW	DF10070	AF10010	YF,YA,YJ,YE,YD,YC
::F010026F::	Augmentor Module	YG	PW	DF10070	AF10010	YG,YH
::F010023G::	Gearbox Module	X1	PW	DF10080	AF10010	X1,X5
::F010024G::	Gearbox Module	X2	PW	DF10080	AF10010	X2,X8
::F010023GA:	Gearbox Module	X4	PW	DF10080	AF10010	X4,X6
::F010024GA:	Gearbox Module	X7	PW	DF10080	AF10010	X7,X9
::F010025G::	Gearbox Module	YF	PW	DF10080	AF10010	YF,YA,YJ,YD,YC,YE,X1,X2,X4,X5,X6,X7,X8,X9
::F010026G::	Gearbox Module	YG	PW	DF10080	AF10010	YG,YH

Table 9-17. CII Table - Status Engines

ENGINE ID	WUC	CI
HL	99999	AF10310
HK	99999	AF10710
XS	99999	AF10910
HQ	99999	AF11210
PK	99999	AF11710
AB	99999	AJ03310
AF	99999	AJ04710
AR	99999	AJ05710
HW	99999	AJ05710
HZ	99999	AJ05710
JC	99999	AJ05710
AS	99999	AJ06010
AT	99999	AJ06010
JD	99999	AJ06010
JF	99999	AJ06010
JM	99999	AJ06510
AX	99999	AJ06910
JX	99999	AJ06910
JY	99999	AJ06910
BB	99999	AJ07510
BC	99999	AJ07510
JZ	99999	AJ07510
BG	99999	AJ07810
BH	99999	AJ07910

ENGINE ID	WUC	CI
BZ	99999	AJ07910
CA	99999	AJ07910
KM	99999	AJ07910
KQ	99999	AJ07910
KS	99999	AJ07910
BT	99999	A200010
*ZU	99999	AT00610
*ZV	99999	AT00610
*ZW	99999	AT00610
CT	99999	AT05310
ML	99999	AT05310
CX	99999	AT05810
FC	99999	AT05810
FE	99999	AT05810
GF	99999	AT06410
GG	99999	AT06410
NL	99999	AT06410
HD	99999	AT40010
GT	99999	AT70010
HE	99999	AT70010
PF	99999	AJT3D10
CM	99999	ATF3910
PC	99999	ATF3910
PB	99999	ATF3910

*CLS ENGINES

Table 9-18. Distinctions Between Each Type of F100 Engine

TMSM	ENG ID	NOUN	PART NUMBER
F0100100	X1	-100 Engine	4045100
F0100100A	X4	-100 Engine plus Gear Fuel Pump	4074100
F0100100B	X5	-100 Engine plus 4000-Cycle Core	4069100
F0100100C	X6	-100 Engine plus 4000-Cycle Core and Gear Fuel Pump	4074200
F0100200	X2	-200 Engine	4061200
F0100200A	X7	-200 Engine plus Gear Fuel Pump	4065200
F0100200B	X8	-200 Engine plus 4000-Cycle Core	4073500
F0100200C	X9	-200 Engine plus 4000-Cycle Core and Gear Fuel Pump	4070200
F0100220A	YF	-220 Engine -F15 Application	4067220
F0100220B	YA	-220 Engine -F16 Application	4068220
F0100220C	YJ	-220 Engine -F15 Application	4074220
F0100220D	YC	-220 Engine -F15E Application	4078400
F0100220E	YD	-220 Engine -F15 Application	4075200
F0100220F	YE	-220 Engine -F16 Application	4075300
F0100229A	YG	-229 Engine -F15 Application	4068700
F0100229B	YH	-229 Engine -F16 Application	4068800

Table 9-19. Configured CII for TF30 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
TF30 Engine (All TMSM)	2	2	23000	ATF3010		FHR	FHRH
1st Stage T Disk	1	3	23ECH	LTF3011	ATF3010	FHR	FHRN
2nd Stage T Disk	1	3	23EDB	LTF3012	ATF3010	FHR	FHRN
3rd Stage T Disk	1	3	23EDF	LTF3013	ATF3010	FHR	FHRN
4th Stage T Disk	1	3	23EDH	LTF3014	ATF3010	FHR	FHRN
AB Fuel Pump	1	3	23SCO	LTF3015	ATF3010	FHR	FHRH
AB HYD Pump	1	3	23SEO	LTF3016	ATF3010	FHR	FHRH
Main Fuel Control	1	3	23RAA	FTF3017	ATF3010	FHR	NO LIMIT
AB Fuel Control	1	3	23SAA	LTF3018	ATF3010	FHR	NO LIMIT
Afterburner	1	3	23JAO	LTF3019	ATF3010	FHR	NO LIMIT
N1 Front Low Speed Compressor	1	3	23BBO	HTF3020	ATF3010	FHR	NO LIMIT
1st Stage Disk	1	4	23BBA	PTF3021	HTF3020	FHR	FHRN
2nd Stage Disk	1	4	23BBG	PTF3022	HTF3020	FHR	FHRN
3rd Stage Disk	1	4	23BBL	PTF3023	HTF3020	FHR	FHRN
4th Stage Disk	1	4	23BBN	PTF3024	HTF3020	FHR	FHRN
5th Stage Disk	1	4	23BBP	PTF3025	HTF3020	FHR	FHRN
6th Stage Disk	1	4	23BBQ	PTF3026	HTF3020	FHR	FHRN
7th Stage Disk	1	4	23BBR	PTF3027	HTF3020	FHR	FHRN
8th Stage Disk	1	4	23BBS	PTF3028	HTF3020	FHR	FHRN
9th Stage Disk	1	4	23BBT	PTF3029	HTF3020	FHR	FHRN
N2, Rear High Speed Compressor	1	3	23BHO	HTF3030	ATF3010	FHR	NO LIMIT
10th Stage Disk	1	4	23BHA	PTF3031	HTF3030	FHR	FHRN
11th Stage Disk	1	4	23BHB	PTF3032	HTF3030	FHR	FHRN
12th Stage Disk	1	4	23BHC	PTF3033	HTF3030	FHR	FHRN
13th Stage Disk	1	4	23BHD	PTF3034	HTF3030	FHR	FHRN
14th Stage Disk	1	4	23BHE	PTF3035	HTF3030	FHR	FHRN
15th Stage Disk	1	4	23BHF	PTF3036	HTF3030	FHR	FHRN
16th Stage Disk	1	4	23BHG	PTF3037	HTF3030	FHR	FHRN

TF30 EDITS

TRANSACTION	FLYING TIME
Initializations, Removals, Installations	Plus or minus 10 hrs
"6 U" Update Normal Limit Extended Flight	 10 hrs 25

Table 9-20. Configured CII for Navy TF30 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
TF30 Navy Engine		2	BM100	ANA3010		FHR	FHRN
Pressure Ratio BL Cntrl	1	2	BB200	LNA3011	ANA3010	FHR	FHRH
Main Gearbox ASM	1	3	B5200	LNA3012	ANA3010	FHA	FHRH
Main Fuel Pump	1	3	B6100	LNA3013	ANA3010	FHR	FHRH
Main Fuel Control	1	3	B6200	LNA3014	ANA3010	FHR	FHRH
Afterburner Fuel Pump	1	3	B7100	LNA3015	ANA3010	FHR	FHRH
Afterburner Fuel Control	1	3	B7200	LNA3016	ANA3010	FHR	FHRH
A/B Hydraulic Pump	1	3	B7700	LNA3017	ANA3010	FHR	FHRH
Module 1	1	3	BM100	HNA30A0	ANA3010	FHR	FHRN
N1 Low CMP Rotor ASM	1	4	B1A00	HNA30B0	HNA30A0	FHR	FHRH
1ST Stage Disc	1	5	B1A10	PNA30BA	HNA30B0	FHR	FHRN
1-2 Stage Airseal	1	5	B1230	PNA30BC	HAN30B0	FHR	FHRN
1-2 Stage Spacer	1	5	B1A12	PNA30BD	HNA30B0	FHR	FHRN
2nd Stage Disc	1	5	B1A20	PNA30BE	HNA30B0	FHR	FHRN
2-3 Stage Airseal	1	5	B1330	PNA30BG	HNA30B0	FHR	FHRN
2-3 Stage Spacer	1	5	B1A22	PNA30BH	HNA30B0	FHR	FHRN
3rd Stage Disc	1	5	B1A30	PNA30BJ	HNA30B0	FHR	FHRN
3-4 Stage Airseal	1	5	B1423	PNA30BL	HNA30B0	FHR	FHRN
3-4 Stage Spacer	1	5	B1A32	PNA30BM	HNA30B0	FHR	FHRN
4th Stage Disc	1	5	B1A40	PNA30BN	HNA30B0	FHR	FHRN
4-5 Stage Spacer/Airseal	1	5	B1A42	PNA30BP	HNA30B0	FHR	FHRN
5th Stage Disc	1	5	B1A50	PNA30BR	HNA30B0	FHR	FHRN
5th Stage Stator	1	5	B1760	PNA30B1	HNA30B0	FHR	FHRH
6th Stage Disc	1	5	B1A60	PNA30B2	HNA30B0	FHR	FHRN
6th Stage Stator	1	5	B1770	PNA30B3	HNA30B0	FHR	FHRH
7th Stage Disc	1	5	B1A70	PNA30B4	HNA30B0	FHR	FHRN
7-8 Stage Spacer	1	5	B1A72	PNA30B5	HNA30B0	FHR	FHRN
7th Stage Stator	1	5	B1780	PNA30B6	HAN30B0	FHR	FHRH
8th Stage Disc	1	5	B1A80	PNA30B7	HNA30B0	FHR	FHRN
8th Stage Stator	1	5	B1939	PNA30B8	HNA30B0	FHR	FHRH
9th Stage Disc	1	5	B1A90	PNA30B9	HNA30B0	FHR	FHRN
Module 2	1	3	BM200	HNA30D0	ANA3010	FHR	FHRN
N2 High CMP Rotor AS	1	4	B1B00	HNA30E0	HNA30D0	FHR	FHRH
Tie Rod Heat Shield	1	5	B1B14	PNA30EA	HNA30E0	FHR	FHRN
10th Blade Ret Plate/Airseal	1	5	B1B13	PNA30EB	HNA30E0	FHR	FHRN
10th Stage Disc	1	5	B1B10	PNA30EC	HNA30E0	FHR	FHRN
10th Stage Stator	1	5	B17A0	PNA30ED	HNA30E0	FHR	FHRH
10th Stage Spacer Airseal	1	5	B1B12	PNA30EE	HNA30E0	FHR	FHRN
11th Stage Disc	1	5	B1B30	PNA30EH	HNA30E0	FHR	FHRN
11th Stage Spacer Airseal	1	5	B1B32	PNA30EK	HNA30E0	FHR	FHRN
12th Stage Disc	1	5	B1B40	PNA30EL	HNA30E0	FHR	FHRN
12th Stage Spacer Airseal	1	5	B1B42	PNA303N	HNA30E0	FHR	FHRN
13th Stage Disc	1	5	B1B50	PNA303P	HNA30E0	FHR	FHRN
13th Stage Spacer Airseal	1	5	B1B52	PNA30E2	HNA30E0	FHR	FHRN
14th Stage Disc	1	5	B1B60	PNA30E3	HNA30E0	FHR	FHRN
14th Stage Spacer Airseal	1	5	B1B62	PNA30E5	HNA30E0	FHR	FHRN
15th Stage Disc	1	5	B1B70	PNA30E6	HNA30E0	FHR	FHRN
15th Stage Stator	1	5	B17F0	PNA30E7	HNA30E0	FHR	FHRH
15th Stage Spacer Airseal	1	5	B1B72	PNA30E8	HNA30E0	FHR	FHRN
16th Stage Disc	1	5	B1B80	PNA30E9	HNA30E0	FHR	FHRN

Table 9-20. Configured CII for Navy TF30 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
N2 High Turb Rotor ASM	1	4	B3300	HNA30F0	HNA30D0	FHR	FHRH
High Turbine Drive Shaft	1	5	B3310	PNA30F1	HNA30F0	FHR	FHRN
1st Stage Turbine Disc	1	5	B3320	PNA30F2	HNA30F0	FHR	FHRN
No 5 Bearing Airseal	1	5	B3311	PNA30F4	HNA30F0	FHR	FHRN
Compressor Case ASM	1	4	B1700	HNA3020	HNA30D0	FHR	FHRH
Compressor Case	1	5	B17G0	PNA3021	HNA3020	FHR	FHRH
No 2 Bearing Housing	1	5	B1720	PNA3022	HNA3020	FHR	FHRH
No 2 Bearing Seal	1	5	B1721	PNA3023	HNA3020	FHR	FHRH
No 3 Bearing Housing	1	5	B1730	PNA3025	HNA3020	FHR	FHRH
No 3 Bearing Seal	1	5	B1731	PNA3026	HNA3020	FHR	FHRH
Diffuser Case/ Stator ASM	1	4	B1800	HNA3030	HNA30D0	FHR	FHRH
Diffuser Case	1	5	B1870	PNA3031	HNA3030	FHR	FHRH
16th Stage Stator	1	5	B1820	PNA3032	HNA3030	FHR	FHRH
4/5 Scavenge Pump	1	5	B8400	PNA3033	HNA3030	FHR	FHRH
No 4 Bearing Housing	1	5	B1830	PNA3034	HNA3030	FHR	FHRH
No 4 Bearing Seal	1	5	B1831	PNA3035	HNA3030	FHR	FHRH
Tower Shaft Assy	1	5	B1860	PNA3037	HNA3030	FHR	FHRH
Comb Cham Outer Case	1	4	B2200	HNA3040	HNA30D0	FHR	FHRH
Module 3	1	3	BM300	HNA3050	ANA3010	FHR	FHRN
N1 Low Turb Rotor ASM	1	4	B3400	HNA3060	HNA3050	FHR	FHRH
Low Turbine Drive Shaft	1	5	B3410	PNA3061	HNA3060	FHR	FHRN
2nd Stage Turbine Disc	1	5	B3420	PNA3062	HNA3060	FHR	FHRN
2-3 Stage Turb Airseal	1	5	B3430	PNA3063	HNA3060	FHR	FHRN
3rd Stage Turbine Disc	1	5	B3450	PNA3064	HNA3060	FHR	FHRN
3-4 Stage Turb Airseal	1	5	B3460	PNA3065	HNA3060	FHR	FHRN
4th Stage Turbine Disc	1	5	B3470	PNA3066	HNA3060	FHR	FHRN
Frnt Comp Drive Turb Hub	1	5	B3414	PNA3067	HNA3060	FHR	FHRN
Stg 1 Turb Stator Assy	1	4	B3160	HNA3090	HNA3050	FHR	FHRH

Table 9-21. Configured CII for TF33 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
TF33 Engine (All TMSM)	8	2	23000	ATF3310		FHR, SOR	FHRH
T Disk, 1st Stage	1	3	23ECB	LTF3311	ATF3310	FHR, SOR	SORN
T Disk, 2nd Stage	1	3	23EDB	LTF3312	ATF3310	FHR, SOR	SORN
T Disk, 3rd Stage	1	3	23EDD	LTF3313	ATF3310	FHR, SOR	SORN
T Disk, 4th Stage	1	3	23EDF	LTF3314	ATF3310	FHR, SOR	SORN
N1 Front Low Speed Compressor	1	3	23BAL	HTF3320	ATF3310	FHR, SOR	NO LIMIT
Disk, 1st Stage	1	4	23BAM	PTF3321	HTF3320	FHR, SOR	SORN
Disk, 2nd Stage	1	4	23BAN	PTF3322	HTF3320	FHR, SOR	SORN
*Disk, 3rd Stage	1	4	23BAP	PTF3323	HTF3320	FHR, SOR	SORN
Disk, 4th Stage	1	4	23BAQ	PTF3324	HTF3320	FHR, SOR	SORN
Disk, 5th Stage	1	4	23BAR	PTF3325	HTF3320	FHR, SOR	SORN
Disk, 6th Stage	1	4	23BAS	PTF3326	HTF3320	FHR, SOR	SORN
Disk, 7th Stage	1	4	23BAT	PTF3327	HTF3320	FHR, SOR	SORN
Disk, 8th Stage	1	4	23BAU	PTF3328	HTF3320	FHR, SOR	SORN
Disk, 9th Stage	1	4	23BAV	PTF3329	HTF3320	FHR, SOR	SORN
N2, Rear High Speed Compressor	1	3	23BCA	HTF3330	ATF3310	FHR, SOR	NO LIMIT
Disk, 10th Stage	1	4	23BCL	PTF3331	HTF3330	FHR, SOR	SORN
Disk, 11th Stage	1	4	23BCM	PTF3332	HTF3330	FHR, SOR	SORN
Disk, 12th Stage	1	4	23BCN	PTF3333	HTF3330	FHR, SOR	SORN
Disk, 13th Stage	1	4	23BCP	PTF3334	HTF3330	FHR, SOR	SORN
Disk, 14th Stage	1	4	23BCQ	PTF3335	HTF3330	FHR, SOR	SORN
Disk, 15th Stage	1	4	23BCR	PTF3336	HTF3330	FHR, SOR	SORN
Disk, 16th Stage	1	4	23BCS	PTF3337	HTF3330	FHR, SOR	SORN
**Gearbox Assy	1	3	23CAO	HTF3340	ATF3310	FHR, SOR	FHRH

* Only -7(CK), -7A(LN), -100A(VV) engines track the 3rd stage disk (PTF3323).

* *Only -100A(VV) engines track the gearbox assy (HTF3340).

TF33 EDITS

TRANSACTION	FLYING TIME	SORTIES
Initializations, Removals, Installations	Plus or minus 10 hrs	Plus or minus 10 sor
"6U" Update		
Normal Limit	30 hrs	30 sor
Extended Flight	100 hrs	100 sor

Table 9-22. Configured CII for TF34 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
TF34-GE-100/A Engine	2	2	23C00	ATF3410		EOT, EV5, EV7, TT8, T78, FHR	NO LIMITS
Bearing, Ball NR 1	1	3	23CAJ	LTF3411	ATF3410	EOT	EOTN
Bearing, Roller NR2	1	3	23CAK	LTF3412	ATF3410	EOT	EOTN
Bearing, Ball NR3	1	3	23CK2	LTF3413	ATF3410	EOT	EOTN
Bearing, Roller NR4	1	3	23CLY	LTF3414	ATF3410	EOT	EOTN
Bearing, Roller NR5	1	3	23CLT	LTF3415	ATF3410	EOT	EOTN
Bearing, Roller NR6	1	3	23CSN	LTF3416	ATF3410	EOT	EOTN
Bearing, Roller NR7	1	3	23CSG	LTF3417	ATF3410	EOT	EOTN
Shaft, Fan Drive	1	3	23CAH	LTF3418	ATF3410	EV5, EV7	CCYN
Main Fuel Control	1	2	23DCA	LTF3419	ATF3410	EOT	EOTH
Frame, Combustion	1	3	23CL3	LTF341A	ATF3410	EV5, EV7	CCYN
Shaft, Fan Front	1	3	23CAE	LTF341B	ATF3410	EV5, EV7	CCYN
Accessory Gearbox	1	2	23CDO	LTF341C	ATF3410	EOT	EOTH
ETTR	1	3	55CAO	LTF341E	ATF3410	EOT	NO LIMITS
Drive Assy, PTO	1	3	23CE0	HTF3420	ATF3410	EOT	NO LIMITS
Bearing, Duplex, PTO	1	4	23CEF	PTF3421	HTF3420	EOT	EOTN
Compressor Stator	1	2	23CJO	HTF3430	ATF3410	EOT	EOTH
Compressor Rotor Assy	1	3	23CK0	HTF3440	ATF3410	EOT, EV5, EV7	NO LIMITS
Shaft, Comp Fwr	1	4	23CKT	PTF3441	HTF3440	EV5, EV7	CCYN
Disc, Stg 1 Comp	1	4	23CKS	PTF3442	HTF3440	EV5, EV7	CCYN
Disc, Stg 2 Comp	1	4	23CKU	PTF3443	HTF3440	EV5, EV7	CCYN
Spool, Stg 3-8 Comp	1	4	23CKV	PTF3444	HTF3440	EV5, EV7	CCYN
Disc, Stg 9 Comp	1	4	23CKW	PTF3445	HTF3440	EV5, EV7	CCYN
Spool, Stg 10.14 Comp	1	4	23CKX	PTF3446	HTF3440	EV5, EV7	CCYN
Shaft, Comp Rear	1	4	23CKY	PTF3447	HTF3440	EV5, EV7	CCYN
Seal, Comp Discharge	1	4	23CKZ	PTF3448	HTF3440	EV5, EV7	CCYN
HPT Rotor Assy	1	3	23CM0	HTF3450	ATF3410	EOT, EV5, EV7, TT8, T78	NO LIMITS
Shaft, HPT Rotor	1	4	23CMC	PTF3451	HTF3450	EV5, EV7	CCYN
Seal, Rotating Air, HPT	1	4	23CMB	PTF3452	HTF3450	EV5, EV7	CCYN
Plate, Stg 1 Fwd Cooling	1	4	23CMD	PTF3453	HTF3450	EV5, EV7	CCYN
Disc, Stg 1 HPT	1	4	23CME	PTF3454	HTF3450	EV5, EV7, TT8, T78	CCYN
Blade, Set, Stg 1 HPT	1	5	23CMF	STF3455	PTF3454	EV5, TT8, T78, EV7	CCYN, T78N, TT8N
Plate, Stg 1 Aft Cooling	1	4	23CMG	PTF3456	HTF3450	EV5, EV7	CCYN
Coupling, Torque-Inner	1	4	23CMU	PTF3459	HTF3450	EV5, EV7	CCYN
Coupling, Torque-Outer	1	4	23CMV	PTF345A	HTF3450	EV5, EV7	CCYN
Plate, Stg 2 Fwd Cooling	1	4	23CMJ	PTF345B	HTF3450	EV5, EV7	CCYN
Disc, Stg 2 HPT	1	4	23CMK	PTF345C	HTF3450	EV5, EV7, TT8	CCYN
Blade Set, Stg 2 HPT	1	5	23CML	STF345D	PTF345C	TT8	TT8N
Plate, Stg 2 Aft Cooling	1	4	23CMM	PTF345F	HTF3450	EV5, EV7	CCYN
LPT Rotor Assy	1	3	23CR0	HTF3460	ATF3410	EOT, EV5, EV7	NO LIMITS
Shaft, LPT	1	4	23CRP	PTF3461	HTF3460	EV5, EV7	CCYN

Table 9-22. Configured CII for TF34 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Disc, Stg 3 LPT	1	4	23CRA	PTF3462	HTF3460	EV5, EV7	CCYN
Seal, Stg 4 LPT	1	4	23CRE	PTF3463	HTF3460	EV5, EV7	CCYN
Disc, Stg 4 LPT	1	4	23CRC	PTF3464	HTF3460	EV5, EV7	CCYN
Seal, Stg 5 LPT	1	4	23CRH	PTF3465	HTF3460	EV5, EV7	CCYN
Cone, Turbine Drive	1	4	23CRM	PTF3466	HTF3460	EV5, EV7	CCYN
Disc, Stg 5 LPT	1	4	23CRF	PTF3467	HTF3460	EV5, EV7	CCYN
Seal, Stg 6 LPT	1	4	23CRL	PTF3468	HTF3460	EV5, EV7	CCYN
Disc, Stg 6 LPT	1	4	23CRJ	PTF3469	HTF3460	EV5, EV7	CCYN
Disc, Fan	1	3	23CAD	HTF3470	ATF3410	EV5, EV7	CCYN
Blade, Fan	28	4	23CAC	PTF3471	HTF3470	EV5, EV7	CCYN

TF34 EDITS

TRANSACTION	ENG HRS	HRS 790	HRS 810	EVENTS 790	EVENTS 550
Initializations, Removals, Installations	Plus or minus 10 hrs	Plus or minus 10 hrs	Plus or minus 10 hrs	Plus or minus 100 events	Plus or minus 10 events
"6U" Normal Limit Extended Flight DELTA HRS 790 Cannot Exceed Delta EOT DELTA HRS 810 Cannot Exceed Delta EOT DELTA HRS 810 Cannot Exceed Delta HRS 790	 10 hrs 50	 NONE	 NONE	 100 events 200	 25 events 36

Table 9-23. Configured CII for TF56 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
* T56 Engine		2	22ZAB	AT05610	A/C	FHR	FHRN
* Propeller Assy, Build-Up	1	3	32511	HT05630	AT05610	FHR	FHRH
* Propeller Blade	4	4	3251D	PT05631	HT05630	FHR	FHRH
* Compressor module	1	3	22200	DT05640	AT05610	FHR	FHRH
Rotor Assy, Compressor	1	4	22230	HT05670	DT05640	FHR	FHRN
Wheel Assy, 1st Stg, Comp	1	5	2223A	PT0567A	HT05670	FHR	FHRN
Wheel Assy, 2nd Stg, Comp	1	5	2223B	PT0567B	HT05670	FHR	FHRN
Wheel Assy, 3rd Stg, Comp	1	5	2223C	PT0567C	HT05670	FHR	FHRN
Wheel Assy, 4th Stg, Comp	1	5	2223D	PT0567D	HT05670	FHR	FHRN
Wheel Assy, 5th Stg, Comp	1	5	2223E	PT0567E	HT05670	FHR	FHRN
Wheel Assy, 6th Stg, Comp	1	5	2223F	PT0567F	HT05670	FHR	FHRN
Wheel Assy, 7th Stg, Comp	1	5	2223G	PT0567G	HT05670	FHR	FHRN
Wheel Assy, 8th Stg, Comp	1	5	2223H	PT0567H	HT05670	FHR	FHRN
Wheel Assy, 9th Stg, Comp	1	5	2223J	PT0567J	HT05670	FHR	FHRN
Wheel Assy, 10th Stg, Comp	1	5	2223K	PT0567K	HT05670	FHR	FHRN
Wheel Assy, 11th Stg, Comp	1	5	2223L	PT0567L	HT05670	FHR	FHRN
Wheel Assy, 12th Stg, Comp	1	5	2223M	PT0567M	HT05670	FHR	FHRN
Wheel Assy, 13th Stg, Comp	1	5	2223N	PT0567N	HT05670	FHR	FHRN
Wheel Assy, 14th Stg, Comp	1	5	2223P	PT0567P	HT05670	FHR	FHRN
* Turbine Module	1	3	22400	DT05650	AT05610	FHR	FHRN
* Rotor Assy, Turbine	1	4	22440	HT05660	DT05650	FHR	FHRH
Wheel Assy, 1st Stg, Turb	1	5	2244A	PT0566A	HT05660	FHR	FHRN
Wheel Assy, 2nd Stg, Turb	1	5	2244B	PT0566B	HT05660	FHR	FHRN
Wheel Assy, 3rd Stg, Turb	1	5	2244C	PT0566C	HT05660	FHR	FHRN
Wheel Assy, 4th Stg, Turb	1	5	2244D	PT0566D	HT05660	FHR	FHRN
Spacer Assy, 1-2 Stg, Turb	1	5	2244E	PT0566E	HT05660	FHR	FHRN
Spacer Assy, 2-3 Stg, Turb	1	5	2244F	PT0566F	HT05660	FHR	FHRN
Spacer Assy, 3-4 Stg, Turb	1	5	2244G	PT0566G	HT05660	FHR	FHRN
* Gearbox Module	1	3	22600	DT05680	AT05610	FHR	FHRH
Gear Ring	1	4	2261B	PT0568A	DT05680	FHR	FHRN
Gear Assy, Planet	5	4	2262C	PT0568B	DT05680	FHR	FHRN
Shaft Propeller	1	4	22621	PT0568C	DT05680	FHR	FHRN
Bearing, Ball, Prop Shaft	1	4	22623	PT0568D	DT05680	FHR	FHRN
Bearing, Roller, Prop Shaft	1	4	22624	PT0568E	DT05680	FHR	FHRN
* Shaftgear Assy, Pinion	1	4	2263A	PT0568F	DT05680	FHR	FHRN
Bearing, Roller, Carrier Rear	1	4	22631	PT0568G	DT05680	FHR	FHRN
Bearing, Roller Main Drive Gear	1	4	22635	PT0568H	DT05680	FHR	FHRN
Diaphragm, Main	1	4	22633	PT0568J	DT05680	FHR	FHRN
Gear Assy, Reduction, Main Drive	1	4	22634	PT0568K	DT05680	FHR	FHRN
Gear, Sun	1	4	22636	PT0568L	DT05680	FHR	FHRN

* CAMS will load and track only these items.

T56 EDITS

TRANSACTION	FLYING TIME
Initialization, Removals, Installations	Plus or minus 10 FHR
"6U" Update Normal Limit Extended Flight	 10 FHR 25 FHR

Table 9-24. Configured CII for J69-25A Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
J69-T25A Engine		2	23000	AJ06910	T037B	FHR	FHRN
Inner Combuston Shell	1	3	23DAE	LJ06911	AJ06910	FHR	FHRN
Outer Combuston Shell	1	3	23DAF	LJ06912	AJ06910	FHR	FHRN
Turbine Inlet Nozzle	1	3	23EAA	LJ06913	AJ06910	FHR	FHRN
Fuel Distributor	1	3	23EAK	LJ06914	AJ06910	FHR	FHRN
Rear Bearing	1	3	23FAG	LJ06915	AJ06910	FHR	FHRN
Rear Bearing Support	1	3	23FAQ	LJ06916	AJ06910	FHR	FHRN
Fuel Control	1	3	23GAB	LJ06917	AJ06910	FHR	FHRN
Fuel Pump	1	3	23GAC	LJ06918	AJ06910	FHR	FHRN
Starting Fuel Nozzle	2	3	23GAE	LJ06919	AJ06910	FHR	FHRN
Compressor Housing	1	3	23CAA	LJ0691A	AJ06910	FHR	FHRN
Turbine Shaft	1	3	23EAG	LJ0691B	AJ06910	FHR	FHRN
Turbine Housing	1	3	23DAA	LJ0691C	AJ06910	FHR	FHRN
Oil Pump	1	3	23HAB	LJ0691D	AJ06910	FHR	FHRN
Compressor/Inducer Rotor Assembly	1	3	23CAB	HJ06920	AJ06910	FHR	FHRN
Radial Compressor	1	4	23CAC	PJ06921	HJ06920	FHR	FHRN
Compressor Inducer	1	4	23CAD	PJ06922	HJ06920	FHR	FHRN

J69-25A EDITS

TRANSACTION	FLYING TIME
Initializations, Removals, Installatons	Plus or minus 10 FHR
"6U" Update Normal Update Extended Flight	 10 FHR 25 FHR

Table 9-25. Configured CII for J0085005 (all series) and J0085017A Engines

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
J85-5/17A Engine	2	2	23000	AJ08510	T38A/A37B	FHR, LCC	FHRH, LCCN
*A/B Control	1	3	23EBA	LJ08511	AJ08510	FHR	FHRN
*Main Control	1	3	23FAA	LJ08512	AJ08510	FHR	FHRN
*OSG	1	3	23EAJ	LJ08513	AJ08510	FHR	FHRN
*A/B Pump	1	3	23EBB	LJ08514	AJ08510	FHR	FHRN
*Main Pump	1	3	23EAB	LJ08515	AJ08510	FHR	FHRN
*Lube Pump	1	3	23EAA	LJ08516	AJ08510	FHR	FHRN
*T5 Motor	1	3	23HAL	LJ08517	AJ08510	FHR	FHRN
*Bleed Valve	2	3	23JAM	LJ08518	AJ08510	FHR	FHRN
*Exciter	1	3	23HAA	LJ08519	AJ08510	FHR	FHRN
Rotor Compressor	1	3	23BCS	HJ08540	AJ08510	FHR, LCC	FHRN, LCCN
Blades Stg 1	1	4	23BCT	PJ0854A	HJ08540	FHR	FHRN
***Disk Stg 1	1	4	23BC8	PJ0854B	HJ08540	LCC	LCCN
***Disk Stg 2	1	4	23BCC	PJ0854C	HJ08540	LCC	LCCN
Disk Stg 3	1	4	23BCD	PJ0854D	HJ08540	LCC	LCCN
***Disk Stg 4	1	4	23BCE	PJ0854E	HJ08540	LCC	LCCN
***Disk Stg 5	1	4	23BCF	PJ0854F	HJ08540	LCC	LCCN
***Disk Stg 6	1	4	23BCG	PJ0854G	HJ08540	LCC	LCCN
***Disk Stg 7	1	4	23BCH	PJ0854H	HJ08540	LCC	LCCN
**Spool, Fwd Stg 1 & 2	1	4	23BCB	PJ0854J	HJ08540	LCC	LCCN
**Spool, Rear Stg 4 & 8	1	4	23BCK	PJ0854K	HJ08540	LCC	LCCN
***Disk Stg 8	1	4	23BCJ	PJ08541	HJ08540	LCC	LCCN
***Spacer Stg 2	1	4	23BCL	PJ08542	HJ08540	LCC	LCCN
***Spacer Stg 3	1	4	23BCM	PJ08543	HJ08540	LCC	LCCN
***Spacer Stg 4	1	4	23BCN	PJ08544	HJ08540	LCC	LCCN
***Spacer Stg 5	1	4	23BCP	PJ08545	HJ08540	LCC	LCCN
***Spacer Stg 6	1	4	23BCQ	PJ08546	HJ08540	LCC	LCCN
***Spacer Stg 7	1	4	23BCR	PJ08547	HJ08540	LCC	LCCN
Labyrinth Seal	1	4	23BC5	PJ08548	HJ08540	LCC	LCCN
Drive Shaft	1	4	23BC2	PJ08549	HJ08540	LCC	LCCN
Rotor Turbine	1	3	23CBL	HJ08550	AJ08510	FHR, LCC	FHRN, LCCN
Wheel Stg 1	1	4	23CBD	PJ08551	HJ08550	LCC	LCCN
WHeel Stg 2	1	4	23CBJ	PJ08552	HJ08550	LCC	LCCN
Torque Ring	1	4	23CBF	PJ08553	HJ08550	LCC	LCCN
*AB Assembly	1	3	23DB0	HJ08560	AJ08510	FHR	FHRN
*VEN Actuator	3	4	23DCG	PJ08561	HJ08560	FHR	FHRN

*Part not tracked on J0085017A

**Part tracked on J0085005R only

***Part not tracked on J0085005R

Table 9-26. F0100100 Engine Configuration - X1 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F0100100 Engine	1	2	23Z00	AF10010		EOT, HS1, HS2, LCF, FHR, MAN	NO LIMITS
Duct - Fan, Outer, Front, Assy of	1	3	23QCB	LF1001A	AF10010	EOT	EOTN
Duct - Fan, Rear, Assy of	1	3	23QCA	LF1001B	AF10010	EOT	EOTN
Exciter - Ignition, Dual	1	3	23KAD	LF1001C	AF10010	EOT	EOTH
Exciter - Ignition, Single	1	3	23KAE	LF1001D	AF10010	EOT	EOTH
Pump - Fuel, Augmentor	1	3	23HAE	LF1001E	AF10010	EOT	EOTH
Pump - Fuel, Main	1	3	23HAD	LF1001F	AF10010	EOT	EOTH
Regulator, Air Press Exit Noz Cont	1	3	23PAC	LF1001G	AF10010	EOT	EOTH
Sensor - Hydromechanical, N2	1	3	23HAG	LF1001J	AF10010	EOT	EOTH
Sensor - Temperature Fan Exit (TT2.5)	1	3	23HAH	LF1001K	AF10010	EOT	EOTH
Stator - Generator	1	3	23KAH	LF1001L	AF10010	EOT	EOTH
Valve, Anti-Icing, Engine Inlet	1	3	23QA8	LF1001M	AF10010	EOT	EOTH
Events History Recorder	1	3	23QA4	LF1001R	AF10010	EOT	EOTH
Control - Engine Electronic	1	3	23HAB	LF10011	AF10010	EOT	EOTN
Control, Exhaust Nozzle Convergent	1	3	23PAB	LF10012	AF10010	EOT	EOTH
Control, Unified, Turbine Engine	1	3	23HAA	LF10014	AF10010	EOT	EOTH
Controller - Fuel Pump, Augmentor	1	3	23HAF	LF10015	AF10010	EOT	EOTH
Cooler - Oil, Fuel	1	3	23JAC	LF10017	AF10010	EOT	EOTH
Cylinder - Actg, Lin, CPR, Bleed	1	3	23QA7	LF10018	AF10010	EOT	EOTH
Cylinder - Actg, Lin Var VN, Rear CPR	2	3	23QA6	LF10019	AF10010	EOT	EOTH
Inlet Fan Module	1	3	23A00	DF10030	AF10010	FHR, LCF, MAN, EOT	CCYV
Seal, Air Compr, 2nd Stage	1	4	23ADT	PF1003A	DF10030	LCF, MAN	CCYN
Bearing, Main, No 1 Roller	1	4	23AAE	PF1003B	DF10030	EOT	EOTH
Contr & Cyl, Var Vane, Comp Inlet	1	4	23AAP	PF10031	DF10030	EOT	EOTH
Cyl - Actg, Lin Var Vane, Comp Inlet	1	4	23AAQ	PF10032	DF10030	EOT	EOTH
Disk & Hub, Compr, 1st Stage	1	4	23ADB	PF10033	DF10030	LCF, MAN	CCYN
Disk & Hub, Compr, 2nd Stage	1	4	23ADG	PF10034	DF10030	LCF, MAN	CCYN
Disk, Compr, 3rd Stage	1	4	23ADL	PF10035	DF10030	LCF, MAN	CCYN
Seal, Air, Compr Front, 1st Stage	1	4	23ADE	PF10036	DF10030	LCF, MAN	CCYN
Seal, Air, Front, Compr Inlet	1	4	23ADD	PF10037	DF10030	LCF, MAN	CCYN
Seal, Air Compr, Rear, 1st Stage	1	4	23ADJ	PF10038	DF10030	LCF, MAN	CCYN
Retainer, Compr, Blade Lock	1	4	23ADS	PF10039	DF10030	LCF, MAN	CCYN
Core Engine Module	1	3	23B00	DF10040	AF10010	FHR, LCF, MAN, EOT	CCYV
Spacer, Air, Compr, 13th Stage	1	4	23BJ7	PF1004A	DF10040	LCF, MAN	CCYN
Disk, Compr, 4th Stage	1	4	23BJA	PF1004B	DF10040	LCF, MAN	CCYN
Disk, Compr, 5th Stage	1	4	23BJE	PF1004C	DF10040	LCF, MAN	CCYN

Table 9-26. F0100100 Engine Configuration - X1 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Disk & Hub, Compr, 6th Stage	1	4	23BJH	PF1004D	DF10040	LCF, MAN	CCYN
Disk, Compr, 7th Stage	1	4	23BJL	PF1004E	DF10040	LCF, MAN	CCYN
Disk, Compr, 8th Stage	1	4	23BJP	PF1004F	DF10040	LCF, MAN	CCYN
Disk, Compr, 9th Stage	1	4	23BJS	PF1004G	DF10040	LCF, MAN	CCYN
Disk, Compr, 10th Stage	1	4	23BJV	PF1004H	DF10040	LCF, MAN	CCYN
Disk, Compr, 11th Stage	1	4	23BJY	PF1004J	DF10040	LCF, MAN	CCYN
Disk, Compr, 12th Stage	1	4	23BJ2	PF1004K	DF10040	LCF, MAN	CCYN
Disk, Compr, 13th Stage	1	4	23BJ5	PF1004L	DF10040	LCF, MAN	CCYN
Shaft, Rear, Compr, Drive	1	4	23BJ8	PF1004M	DF10040	LCF, MAN	CCYN
Bearing, Main, NBR 2, Ball	1	4	23BBD	PF1004N	DF10040	EOT	EOTH
Bearing, Main, NBR 3, Ball	1	4	23BEC	PF1004P	DF10040	EOT	EOTH
Bearing, Main, NBR 4, Roller	1	4	23BLK	PF1004Q	DF10040	EOT	EOTH
Diffuser Case	1	4	23BPD	PF1004R	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 4th Stage	1	4	23BJD	PF10041	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 5th Stage	1	4	23BJG	PF10042	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 6th Stage	1	4	23BJK	PF10043	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 7th Stage	1	4	23BJN	PF10044	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 8th Stage	1	4	23BJR	PF10045	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 9th Stage	1	4	23BJU	PF10046	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 10th Stage	1	4	23BJX	PF10047	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 11th Stage	1	4	23BJ1	PF10048	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 12th Stage	1	4	23BJ4	PF10049	DF10040	LCF, MAN	CCYN
High Turbine Assembly	1	4	23BN0	DF10050	DF10040	FHR, LCF, MAN	CCYV
Disk, 1st Stage, Turbine	1	5	23BNB	PF10051	DF10050	LCF, MAN	CCYN
Disk & Hub, 2nd Stage, Turbine	1	5	23BNL	PF10052	DF10050	LCF, MAN	CCYN
Plate, RTG, 2nd Stage, Turbine	1	5	23BNF	PF10053	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Front	1	5	23BNG	PF10054	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Rear	17	5	23BNK	PF10055	DF10050	LCF, MAN	CCYN
Fan Drive Turbine Module	1	3	23C00	DF10060	AF10010	FHR, LCF, MAN, EOT	CCYV
Disk, 3rd Stage, Turbine	1	4	23CBB	PF10061	DF10060	LCF, MAN	CCYN
Disk, 4th Stage, Turbine	1	4	23CBP	PF10062	DF10060	LCF, MAN	CCYN
Seal, Air, Turbine, 4th Stage	1	4	23CBL	PF10063	DF10060	LCF, MAN	CCYN
Bearing, Main, NBR 5, Roller	1	4	23CCD	PF10064	DF10060	EOT	EOTH
Seal, Air Turbine, 3rd Stage	1	4	23CBD	PF10065	DF10060	LCF, MAN	CCYN
Augmentor Duct and Nozzle Module	1	3	23F00	DF10070	AF10010	FHR, EOT, LCF, MAN	EOTN, CCYV
Augmentor, Comp Chamber Duct Assy	1	4	23FAA	PF10073	DF10070	EOT, LCF, MAN	CCYN
Actuator - Ballscrew, Prmry Conv Noz	1	4	23FAN	PF10071	DF10070	EOT	EOTH
Actuator - Ballscrew, Scndy Conv Noz	4	4	23FAP	PF10072	DF10070	EOT	EOTH
Gearbox Module	1	3	23G00	DF10080	AF10010	FHR, EOT	EOTH

Table 9-27. F0100100A Engine Configuration - X4 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F0100100A Engine	1	2	23Z00	AF10010		EOT, HS1, HS2, LCF, FHR, MAN	NO LIMITS
Duct - Fan, Outer, Front, Assy of	1	3	23QCB	LF1001A	AF10010	EOT	EOTN
Duct - Fan, Rear, Assy of	1	3	23QCA	LF1001B	AF10010	EOT	EOTN
Exciter - Ignition, Dual	1	3	23KAD	LF1001C	AF10010	EOT	EOTH
Exciter - Ignition, Single	1	3	23KAE	LF1001D	AF10010	EOT	EOTH
Pump - Fuel, Augmentor	1	3	23HAE	LF1001E	AF10010	EOT	EOTH
Regulator, Air Press Exit Noz Cont	1	3	23PAC	LF1001G	AF10010	EOT	EOTH
Sensor - Hydromechanical, N2	1	3	23HAG	LF1001J	AF10010	EOT	EOTH
Sensor - Temperature Fan Exit (TT2.5)	1	3	23HAH	LF1001K	AF10010	EOT	EOTH
Stator - Generator	1	3	23KAH	LF1001L	AF10010	EOT	EOTH
Valve, Anti-Icing, Engine Inlet	1	3	23QA8	LF1001M	AF10010	EOT	EOTH
Events History Recorder	1	3	23QA4	LF1001R	AF10010	EOT	EOTH
Pump - Gear, Main Fuel	1	3	23HAL	LF1001S	AF10010	EOT	EOTH
Valve - Fuel Bypass	1	3	23HAJ	LF1001T	AF10010	EOT	EOTH
Control - Engine Electronic	1	3	23HAB	LF10011	AF10010	EOT	EOTN
Control, Exhaust Nozzle Convergent	1	3	23PAB	LF10012	AF10010	EOT	EOTH
Control, Unified, Turbine Engine	1	3	23HAA	LF10014	AF10010	EOT	EOTH
Controller - Fuel Pump Augmentor	1	3	23HAF	LF10015	AF10010	EOT	EOTH
Cooler - Oil, Fuel	1	3	23JAC	LF10017	AF10010	EOT	EOTH
Cylinder - Actg, Lin, CPR, Bleed	1	3	23QA7	LF10018	AF10010	EOT	EOTH
Cylinder - Actg, Lin Var VN, Rear CPR	2	3	23QA6	LF10019	AF10010	EOT	EOTH
Inlet Fan Module	1	3	23A00	DF10030	AF10010	FHR, EOT, LCF, MAN	CCYV
Seal, Air Compr, 2nd Stage	1	4	23ADT	PF1003A	DF10030	LCF, MAN	CCYN
Bearing, Main, No 1 Roller	1	4	23AAE	PF1003B	DF10030	EOT	EOTH
Contr & Cyl, Var Vane, Comp Inlet	1	4	23AAP	PF10031	DF10030	EOT	EOTH
Cyl - Actg, Lin Var Vane, Comp Inlet	1	4	23AAQ	PF10032	DF10030	EOT	EOTH
Disk & Hub, Compr, 1st Stage	1	4	23ADB	PF10033	DF10030	LCF, MAN	CCYN
Disk & Hub, Compr, 2nd Stage	1	4	23ADG	PF10034	DF10030	LCF, MAN	CCYN
Disk, Compr, 3rd Stage	1	4	23ADL	PF10035	DF10030	LCF, MAN	CCYN
Seal, Air, Compr Front, 1st Stage	1	4	23ADE	PF10036	DF10030	LCF, MAN	CCYN
Seal, Air, Front, Compr Inlet	1	4	23ADD	PF10037	DF10030	LCF, MAN	CCYN

Table 9-27. F0100100A Engine Configuration - X4 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Seal, Air Compr, Rear, 1st Stage	1	4	23ADJ	PF10038	DF10030	LCF, MAN	CCYN
Retainer, Compr, Blade Lock	1	4	23ADS	PF10039	DF10030	LCF, MAN	CCYN
Core Engine Module	1	3	23B00	DF10040	AF10010	FHR, EOT, LCF, MAN	CCYV
Spacer, Air, Compr, 13th Stage	1	4	23BJ7	PF1004A	DF10040	LCF, MAN	CCYN
Disk, Compr, 4th Stage	1	4	23BJA	PF1004B	DF10040	LCF, MAN	CCYN
Disk, Compr, 5th Stage	1	4	23BJE	PF1004C	DF10040	LCF, MAN	CCYN
Disk & Hub, Compr, 6th Stage	1	4	23BJH	PF1004D	DF10040	LCF, MAN	CCYN
Disk, Compr, 7th Stage	1	4	23BJL	PF1004E	DF10040	LCF, MAN	CCYN
Disk, Compr, 8th Stage	1	4	23BJP	PF1004F	DF10040	LCF, MAN	CCYN
Disk, Compr, 9th Stage	1	4	23BJS	PF1004G	DF10040	LCF, MAN	CCYN
Disk, Compr, 10th Stage	1	4	23BJV	PF1004H	DF10040	LCF, MAN	CCYN
Disk, Compr, 11th Stage	1	4	23BJY	PF1004J	DF10040	LCF, MAN	CCYN
Disk, Compr, 12th Stage	1	4	23BJ2	PF1004K	DF10040	LCF, MAN	CCYN
Disk, Compr, 13th Stage	1	4	23BJ5	PF1004L	DF10040	LCF, MAN	CCYN
Shaft, Rear, Compr, Drive	1	4	23BJ8	PF1004M	DF10040	LCF, MAN	CCYN
Bearing, Main, NBR 2, Ball	1	4	23BBD	PF1004N	DF10040	EOT	EOTH
Bearing, Main, NBR 3, Ball	1	4	23BEC	PF1004P	DF10040	EOT	EOTH
Bearing, Main, NBR 4, Roller	1	4	23BLK	PF1004Q	DF10040	EOT	EOTH
Diffuser Case	1	4	23BPD	PF1004R	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 4th Stage	1	4	23BJD	PF10041	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 5th Stage	1	4	23BJG	PF10042	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 6th Stage	1	4	23BJK	PF10043	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 7th Stage	1	4	23BJN	PF10044	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 8th Stage	1	4	23BJR	PF10045	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 9th Stage	1	4	23BJU	PF10046	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 10th Stage	1	4	23BJX	PF10047	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 11th Stage	1	4	23BJ1	PF10048	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 12th Stage	1	4	23BJ4	PF10049	DF10040	LCF, MAN	CCYN
High Turbine Assembly	1	4	23BN0	DF10050	DF10040	FHR, LCF, MAN	CCYV
Disk, 1st Stage, Turbine	1	5	23BNB	PF10051	DF10050	LCF, MAN	CCYN
Disk & Hub, 2nd Stage, Turbine	1	5	23BNL	PF10052	DF10050	LCF, MAN	CCYN
Plate, RTG, 2nd Stage, Turbine	1	5	23BNF	PF10053	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Front	1	5	23BNG	PF10054	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Rear	17	5	23BNK	PF10055	DF10050	LCF, MAN	CCYN
Fan Drive Turbine Module	1	3	23C00	DF10060	AF10010	FHR, EOT, LCF, MAN	CCYV
Disk, 3rd Stage, Turbine	1	4	23CBB	PF10061	DF10060	LCF, MAN	CCYN
Disk, 4th Stage, Turbine	1	4	23CBP	PF10062	DF10060	LCF, MAN	CCYN

Table 9-27. F0100100A Engine Configuration - X4 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Seal, Air, Turbine, 4th Stage	1	4	23CBL	PF10063	DF10060	LCF, MAN	CCYN
Bearing, Main, NBR 5, Roller	1	4	23CCD	PF10064	DF10060	EOT	EOTH
Seal, Air Turbine, 3rd Stage	1	4	23CBD	PF10065	DF10060	LCF, MAN	CCYN
Augmentor Duct and Nozzle Module	1	3	23F00	DF10070	AF10010	FHR, EOT, LCF, MAN	EOTN, CCYV
Augmentor, Comp Chamber Duct Assy	1	4	23FAA	PF10073	DF10070	EOT, LCF, MAN	CCYN
Actuator - Ballscrew, Prmry Conv Noz	1	4	23FAN	PF10071	DF10070	EOT	EOTH
Actuator - Ballscrew, Scndy Conv Noz	4	4	23FAP	PF10072	DF10070	EOT	EOTH
Gearbox Module	1	3	23G00	DF10080	AF10010	FHR, EOT	EOTH

Table 9-28. F0100100B Engine Configuration - X5 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F0100100B Engine	1	2	23Z00	AF10010		EOT, HS1, HS2, LCF, FHR, MAN	NO LIMITS
Duct - Fan, Outer, Front, Assy of	1	3	23QCB	LF1001A	AF10010	EOT	EOTN
Duct - Fan, Rear, Assy of	1	3	23QCA	LF1001B	AF10010	EOT	EOTN
Exciter - Ignition, Dual	1	3	23KAD	LF1001C	AF10010	EOT	EOTH
Exciter - Ignition, Single	1	3	23KAE	LF1001D	AF10010	EOT	EOTH
Pump - Fuel, Augmentor	1	3	23HAE	LF1001E	AF10010	EOT	EOTH
Pump - Fuel, Main	1	3	23HAD	LF1001F	AF10010	EOT	EOTH
Regulator, Air Press Exit Noz Cont	1	3	23PAC	LF1001G	AF10010	EOT	EOTH
Sensor - Hydromechanical, N2	1	3	23HAG	LF1001J	AF10010	EOT	EOTH
Sensor - Temperature Fan Exit (TT2.5)	1	3	23HAH	LF1001K	AF10010	EOT	EOTH
Stator - Generator	1	3	23KAH	LF1001L	AF10010	EOT	EOTH
Valve, Anti-Icing, Engine Inlet	1	3	23QA8	LF1001M	AF10010	EOT	EOTH
Events History Recorder	1	3	23QA4	LF1001R	AF10010	EOT	EOTH
Control - Engine Electronic	1	3	23HAB	LF10011	AF10010	EOT	EOTN
Control, Exhaust Nozzle Convergent	1	3	23PAB	LF10012	AF10010	EOT	EOTH
Control, Unified, Turbine Engine	1	3	23HAA	LF10014	AF10010	EOT	EOTH
Controller - Fuel Pump Augmentor	1	3	23HAF	LF10015	AF10010	EOT	EOTH
Cooler - Oil, Fuel	1	3	23JAC	LF10017	AF10010	EOT	EOTH
Cylinder - Actg, Lin, CPR, Bleed	1	3	23QA7	LF10018	AF10010	EOT	EOTH
Cylinder - Actg, Lin Var VN, Rear CPR	2	3	23QA6	LF10019	AF10010	EOT	EOTH
Inlet Fan Module	1	3	23A00	DF10030	AF10010	FHR, EOT, LCF, MAN	CCYV
Seal, Air Compr, 2nd Stage	1	4	23ADT	PF1003A	DF10030	LCF, MAN	CCYN
Bearing, Main, No 1 Roller	1	4	23AAE	PF1003B	DF10030	EOT	EOTH
Contr & Cyl, Var Vane, Comp Inlet	1	4	23AAP	PF10031	DF10030	EOT	EOTH
Cyl - Actg, Lin Var Vane, Comp Inlet	1	4	23AAQ	PF10032	DF10030	EOT	EOTH
Disk & Hub, Compr, 1st Stage	1	4	23ADB	PF10033	DF10030	LCF, MAN	CCYN
Disk & Hub, Compr, 2nd Stage	1	4	23ADG	PF10034	DF10030	LCF, MAN	CCYN
Disk, Compr, 3rd Stage	1	4	23ADL	PF10035	DF10030	LCF, MAN	CCYN
Seal, Air, Compr Front, 1st Stage	1	4	23ADE	PF10036	DF10030	LCF, MAN	CCYN
Seal, Air, Front, Compr Inlet	1	4	23ADD	PF10037	DF10030	LCF, MAN	CCYN

Table 9-28. F0100100B Engine Configuration - X5 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Seal, Air Compr, Rear, 1st Stage	1	4	23ADJ	PF10038	DF10030	LCF, MAN	CCYN
Retainer, Compr, Blade Lock	1	4	23ADS	PF10039	DF10030	LCF, MAN	CCYN
Core Engine Module	1	3	23B00	DF10040	AF10010	FHR, LCF, MAN, EOT	CCYV
Spacer, Air, Compr, 13th Stage	1	4	23BJ7	PF1004A	DF10040	LCF, MAN	CCYN
Disk, Compr, 4th Stage	1	4	23BJA	PF1004B	DF10040	LCF, MAN	CCYN
Disk, Compr, 5th Stage	1	4	23BJE	PF1004C	DF10040	LCF, MAN	CCYN
Disk & Hub, Compr, 6th Stage	1	4	23BJH	PF1004D	DF10040	LCF, MAN	CCYN
Disk, Compr, 7th Stage	1	4	23BJL	PF1004E	DF10040	LCF, MAN	CCYN
Disk, Compr, 8th Stage	1	4	23BJP	PF1004F	DF10040	LCF, MAN	CCYN
Disk, Compr, 9th Stage	1	4	23BJS	PF1004G	DF10040	LCF, MAN	CCYN
Disk, Compr, 10th Stage	1	4	23BJV	PF1004H	DF10040	LCF, MAN	CCYN
Disk, Compr, 11th Stage	1	4	23BJY	PF1004J	DF10040	LCF, MAN	CCYN
Disk, Compr, 12th Stage	1	4	23BJ2	PF1004K	DF10040	LCF, MAN	CCYN
Disk, Compr, 13th Stage	1	4	23BJ5	PF1004L	DF10040	LCF, MAN	CCYN
Shaft, Rear, Compr, Drive	1	4	23BJ8	PF1004M	DF10040	LCF, MAN	CCYN
Bearing, Main, NBR 2, Ball	1	4	23BBD	PF1004N	DF10040	EOT	EOTH
Bearing, Main, NBR 3, Ball	1	4	23BEC	PF1004P	DF10040	EOT	EOTH
Bearing, Main, NBR 4, Roller	1	4	23BLK	PF1004Q	DF10040	EOT	EOTH
Diffuser Case	1	4	23BPD	PF1004R	DF10040	LCF, MAN	CCYN
Seal - RR Compr Inlet	1	4	23BJB	PF1004S	DF10040	LCF, MAN	CCYN
Chamber - Combustion, ASYO	1	4	23BPH	PF1004T	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 4th Stage	1	4	23BJD	PF10041	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 5th Stage	1	4	23BJG	PF10042	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 6th Stage	1	4	23BJK	PF10043	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 7th Stage	1	4	23BJN	PF10044	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 8th Stage	1	4	23BJR	PF10045	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 9th Stage	1	4	23BJU	PF10046	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 10th Stage	1	4	23BJX	PF10047	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 11th Stage	1	4	23BJ1	PF10048	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 12th Stage	1	4	23BJ4	PF10049	DF10040	LCF, MAN	CCYN
High Turbine Assembly	1	4	23BN0	DF10050	DF10040	FHR, LCF, MAN	CCYV
Disk, 2nd Stage, Turbine	1	5	23BNQ	PF1005A	DF10050	LCF, MAN	CCYN
Disk, 1st Stage, Turbine	1	5	23BNB	PF10051	DF10050	LCF, MAN	CCYN
Plate, RTG, 2nd Stage, Turbine	1	5	23BNF	PF10053	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Front	1	5	23BNG	PF10054	DF10050	LCF, MAN	CCYN
Hub - Turbine, Front	1	5	23BND	PF10056	DF10050	LCF, MAN	CCYN
Plate - RTG, Blade, Tur, Rear, 2nd Stg	1	5	23BNM	PF10057	DF10050	LCF, MAN	CCYN
Seal - Air, Turbine, 1st Stg	1	5	23BNH	PF10058	DF10050	LCF, MAN	CCYN

Table 9-28. F0100100B Engine Configuration - X5 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Seal - Air, Nr 4 Brng, R	1	5	23BMY	PF10059	DF10050	LCF, MAN	CCYN
Fan Drive Turbine Module	1	3	23C00	DF10060	AF10010	FHR, EOT, LCF, MAN	CCYV
Disk, 3rd Stage, Turbine	1	4	23CBB	PF10061	DF10060	LCF, MAN	CCYN
Disk, 4th Stage, Turbine	1	4	23CBP	PF10062	DF10060	LCF, MAN	CCYN
Seal, Air, Turbine, 4th Stage	1	4	23CBL	PF10063	DF10060	LCF, MAN	CCYN
Bearing, Main, NBR 5, Roller	1	4	23CCD	PF10064	DF10060	EOT	EOTH
Seal, Air Turbine, 3rd Stage	1	4	23CBD	PF10065	DF10060	LCF, MAN	CCYN
Augmentor Duct and Nozzle Module	1	3	23F00	DF10070	AF10010	FHR, EOT, LCF, MAN	EOTN, CCYV
Augmentor, Comp Chamber Duct Assy	1	4	23FAA	PF10073	DF10070	EOT, LCF, MAN	CCYN
Actuator - Ballscrew, Prmry Conv Noz	1	4	23FAN	PF10071	DF10070	EOT	EOTH
Actuator - Ballscrew, Scndy Conv Noz	4	4	23FAP	PF10072	DF10070	EOT	EOTH
Gearbox Module	1	3	23G00	DF10080	AF10010	FHR, EOT	EOTH

Table 9-29. F0100100C Engine Configuration - X6 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F0100100C Engine	1	2	23Z00	AF10010		EOT, HS1, HS2, LCF, FHR, MAN	NO LIMITS
Duct - Fan, Outer, Front, Assy of	1	3	23QCB	LF1001A	AF10010	EOT	EOTN
Duct - Fan, Rear, Assy of	1	3	23QCA	LF1001B	AF10010	EOT	EOTN
Exciter - Ignition, Dual	1	3	23KAD	LF1001C	AF10010	EOT	EOTH
Exciter - Ignition, Single	1	3	23KAE	LF1001D	AF10010	EOT	EOTH
Pump - Fuel, Augmentor	1	3	23HAE	LF1001E	AF10010	EOT	EOTH
Regulator, Air Press Exit Noz Cont	1	3	23PAC	LF1001G	AF10010	EOT	EOTH
Sensor - Hydromechanical, N2	1	3	23HAG	LF1001J	AF10010	EOT	EOTH
Sensor - Temperature Fan Exit (TT2.5)	1	3	23HAH	LF1001K	AF10010	EOT	EOTH
Stator - Generator	1	3	23KAH	LF1001L	AF10010	EOT	EOTH
Valve, Anti-Icing, Engine Inlet	1	3	23QA8	LF1001M	AF10010	EOT	EOTH
Events History Recorder	1	3	23QA4	LF1001R	AF10010	EOT	EOTH
Pump - Gear, Main Fuel	1	3	23HAL	LF1001S	AF10010	EOT	EOTH
Valve - Fuel Bypass	1	3	23HAJ	LF1001T	AF10010	EOT	EOTH
Control - Engine Electronic	1	3	23HAB	LF10011	AF10010	EOT	EOTN
Control, Exhaust Nozzle Convergent	1	3	23PAB	LF10012	AF10010	EOT	EOTH
Control, Unified, Turbine Engine	1	3	23HAA	LF10014	AF10010	EOT	EOTH
Controller - Fuel Pump Augmentor	1	3	23HAF	LF10015	AF10010	EOT	EOTH
Cooler - Oil, Fuel	1	3	23JAC	LF10017	AF10010	EOT	EOTH
Cylinder - Actg, Lin, CPR, Bleed	1	3	23QA7	LF10018	AF10010	EOT	EOTH
Cylinder - Actg, Lin Var VN, Rear CPR	2	3	23QA6	LF10019	AF10010	EOT	EOTH
Inlet Fan Module	1	3	23A00	DF10030	AF10010	FHR, EOT, LCF, MAN	CCYV
Seal, Air Compr, 2nd Stage	1	4	23ADT	PF1003A	DF10030	LCF, MAN	CCYN
Bearing, Main, No 1 Roller	1	4	23AAE	PF1003B	DF10030	EOT	EOTH
Contr & Cyl, Var Vane, Comp Inlet	1	4	23AAP	PF10031	DF10030	EOT	EOTH
Cyl - Actg, Lin Var Vane, Comp Inlet	1	4	23AAQ	PF10032	DF10030	EOT	EOTH
Disk & Hub, Compr, 1st Stage	1	4	23ADB	PF10033	DF10030	LCF, MAN	CCYN
Disk & Hub, Compr, 2nd Stage	1	4	23ADG	PF10034	DF10030	LCF, MAN	CCYN
Disk, Compr, 3rd Stage	1	4	23ADL	PF10035	DF10030	LCF, MAN	CCYN
Seal, Air, Compr Front, 1st Stage	1	4	23ADE	PF10036	DF10030	LCF, MAN	CCYN
Seal, Air, Front, Compr Inlet	1	4	23ADD	PF10037	DF10030	LCF, MAN	CCYN
Seal, Air Compr, Rear, 1st Stage	1	4	23ADJ	PF10038	DF10030	LCF, MAN	CCYN

Table 9-29. F0100100C Engine Configuration - X6 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Retainer, Compr, Blade Lock	1	4	23ADS	PF10039	DF10030	LCF, MAN	CCYN
Core Engine Module	1	3	23B00	DF10040	AF10010	FHR, EOT, LCF, MAN	CCYV
Spacer, Air, Compr, 13th Stage	1	4	23BJ7	PF1004A	DF10040	LCF, MAN	CCYN
Disk, Compr, 4th Stage	1	4	23BJA	PF1004B	DF10040	LCF, MAN	CCYN
Disk, Compr, 5th Stage	1	4	23BJE	PF1004C	DF10040	LCF, MAN	CCYN
Disk & Hub, Compr, 6th Stage	1	4	23BJH	PF1004D	DF10040	LCF, MAN	CCYN
Disk, Compr, 7th Stage	1	4	23BJL	PF1004E	DF10040	LCF, MAN	CCYN
Disk, Compr, 8th Stage	1	4	23BJP	PF1004F	DF10040	LCF, MAN	CCYN
Disk, Compr, 9th Stage	1	4	23BJS	PF1004G	DF10040	LCF, MAN	CCYN
Disk, Compr, 10th Stage	1	4	23BJV	PF1004H	DF10040	LCF, MAN	CCYN
Disk, Compr, 11th Stage	1	4	23BJY	PF1004J	DF10040	LCF, MAN	CCYN
Disk, Compr, 12th Stage	1	4	23BJ2	PF1004K	DF10040	LCF, MAN	CCYN
Disk, Compr, 13th Stage	1	4	23BJ5	PF1004L	DF10040	LCF, MAN	CCYN
Shaft, Rear, Compr, Drive	1	4	23BJ8	PF1004M	DF10040	LCF, MAN	CCYN
Bearing, Main, NBR 2, Ball	1	4	23BBD	PF1004N	DF10040	EOT	EOTH
Bearing, Main, NBR 3, Ball	1	4	23BEC	PF1004P	DF10040	EOT	EOTH
Bearing, Main, NBR 4, Roller	1	4	23BLK	PF1004Q	DF10040	EOT	EOTH
Diffuser Case	1	4	23BPD	PF1004R	DF10040	LCF, MAN	CCYN
Seal - RR CP Inlet	1	4	23BJB	PF1004S	DF10040	LCF, MAN	CCYN
Chamber - Combustion, ASYO	1	4	23BPH	PF1004T	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 4th Stage	1	4	23BJD	PF10041	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 5th Stage	1	4	23BJG	PF10042	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 6th Stage	1	4	23BJK	PF10043	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 7th Stage	1	4	23BJN	PF10044	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 8th Stage	1	4	23BJR	PF10045	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 9th Stage	1	4	23BJU	PF10046	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 10th Stage	1	4	23BJX	PF10047	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 11th Stage	1	4	23BJ1	PF10048	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 12th Stage	1	4	23BJ4	PF10049	DF10040	LCF, MAN	CCYN
High Turbine Assembly	1	4	23BN0	DF10050	DF10040	FHR, LCF, MAN	CCYV
Disk, 2nd Stage, Turbine	1	5	23BNQ	PF1005A	DF10050	LCF, MAN	CCYN
Disk, 1st Stage, Turbine	1	5	23BNB	PF10051	DF10050	LCF, MAN	CCYN
Plate, RTG, 2nd Stage, Turbine	1	5	23BNF	PF10053	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Front	1	5	23BNG	PF10054	DF10050	LCF, MAN	CCYN
Hub - Turbine, Front	1	5	23BND	PF10056	DF10050	LCF, MAN	CCYN
Plate - RTG, Blade, Tur, Rear, 2nd Stg	1	5	23BNM	PF10057	DF10050	LCF, MAN	CCYN
Seal - Air, Turbine, 1st Stg	1	5	23BNH	PF10058	DF10050	LCF, MAN	CCYN
Seal - Air, N 4 Brng, R	1	5	23BMY	PF10059	DF10050	LCF, MAN	CCYN
Fan Drive Turbine Module	1	3	23C00	DF10060	AF10010	FHR, EOT, LCF, MAN	CCYV
Disk, 3rd Stage, Turbine	1	4	23CBB	PF10061	DF10060	LCF, MAN	CCYN
Disk, 4th Stage, Turbine	1	4	23CBP	PF10062	DF10060	LCF, MAN	CCYN

Table 9-29. F0100100C Engine Configuration - X6 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Seal, Air, Turbine, 4th Stage	1	4	23CBL	PF10063	DF10060	LCF, MAN	CCYN
Bearing, Main, NBR 5, Roller	1	4	23CCD	PF10064	DF10060	EOT	EOTH
Seal, Air Turbine, 3rd Stage	1	4	23CBD	PF10065	DF10060	LCF, MAN	CCYN
Augmentor Duct and Nozzle Module	1	3	23F00	DF10070	AF10010	FHR, EOT, LCF, MAN	EOTN, CCYV
Augmentor, Comp Chamber Duct Assy.	1	4	23FAA	PF10073	DF10070	EOT, LCF, MAN	CCYN
Actuator - Ballscrew, Prmry Conv Noz	1	4	23FAN	PF10071	DF10070	EOT	EOTH
Actuator - Ballscrew, Scndy Conv Noz	4	4	23FAP	PF10072	DF10070	EOT	EOTH
Gearbox Module	1	3	23G00	DF10080	AF10010	FHR, EOT	EOTH

Table 9-30. F0100200 Engine Configuration - X2 Engine ID

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F0100200 Engine	1	2	23Z00	AF10010		EOT, HS1, HS2, LCF, FHR, MAN	NO LIMITS
Duct - Fan, Outer, Front, Assy of	1	3	23QCB	LF1001A	AF10010	EOT	EOTN
Duct - Fan, Rear, Assy of	1	3	23QCA	LF1001B	AF10010	EOT	EOTN
Exciter - Ignition, Dual	1	3	23KAD	LF1001C	AF10010	EOT	EOTH
Exciter - Ignition, Single	1	3	23KAE	LF1001D	AF10010	EOT	EOTH
Pump - Fuel, Augmentor	1	3	23HAE	LF1001E	AF10010	EOT	EOTH
Pump - Fuel, Main	1	3	23HAD	LF1001F	AF10010	EOT	EOTH
Regulator, Air Press Exit Noz Cont	1	3	23PAC	LF1001G	AF10010	EOT	EOTH
Sensor - Hydromechanical, N2	1	3	23HAG	LF1001J	AF10010	EOT	EOTH
Sensor - Temperature Fan Exit (TT2.5)	1	3	23HAH	LF1001K	AF10010	EOT	EOTH
Stator - Generator	1	3	23KAH	LF1001L	AF10010	EOT	EOTH
Valve, Anti-Icing, Engine Inlet	1	3	23QA8	LF1001M	AF10010	EOT	EOTH
Control - Fuel, Backup	1	3	23HBA	LF1001N	AF10010	EOT	EOTH
Valve - Transfer, BUC	1	3	23HBB	LF1001P	AF10010	EOT	EOTH
Valve - Shutoff, CENC	1	3	23HBC	LF1001Q	AF10010	EOT	EOTH
Events History Recorder	1	3	23QA4	LF1001R	AF10010	EOT	EOTH
Control - Engine Electronic	1	3	23HAB	LF10011	AF10010	EOT	EOTN
Control, Exhaust Nozzle Convergent	1	3	23PAB	LF10012	AF10010	EOT	EOTH
Control, Unified, Turbine Engine	1	3	23HAA	LF10014	AF10010	EOT	EOTH
Controller - Fuel Pump Augmentor	1	3	23HAF	LF10015	AF10010	EOT	EOTH
Cooler - Oil, Fuel	1	3	23JAC	LF10017	AF10010	EOT	EOTH
Cylinder - Actg, Lin, CPR, Bleed	1	3	23QA7	LF10018	AF10010	EOT	EOTH
Cylinder - Actg, Lin Var VN, Rear CPR	2	3	23QA6	LF10019	AF10010	EOT	EOTH
Inlet Fan Module	1	3	23A00	DF10030	AF10010	FHR, EOT, LCF, MAN	CCYV
Seal, Air Compr, 2nd Stage	1	4	23ADT	PF1003A	DF10030	LCF, MAN	CCYN
Bearing, Main, No 1 Roller	1	4	23AAE	PF1003B	DF10030	EOT	EOTH
Contr & Cyl, Var Vane, Comp Inlet	1	4	23AAP	PF10031	DF10030	EOT	EOTH
Cyl - Actg, Lin Var Vane, Comp Inlet	1	4	23AAQ	PF10032	DF10030	EOT	EOTH
Disk & Hub, Compr, 1st Stage	1	4	23ADB	PF10033	DF10030	LCF, MAN	CCYN
Disk & Hub, Compr, 2nd Stage	1	4	23ADG	PF10034	DF10030	LCF, MAN	CCYN
Disk, Compr, 3rd Stage	1	4	23ADL	PF10035	DF10030	LCF, MAN	CCYN
Seal, Air, Compr Front, 1st Stage	1	4	23ADE	PF10036	DF10030	LCF, MAN	CCYN
Seal, Air, Front, Compr Inlet	1	4	23ADD	PF10037	DF10030	LCF, MAN	CCYN

Table 9-30. F0100200 Engine Configuration - X2 Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Seal, Air Compr, Rear, 1st Stage	1	4	23ADJ	PF10038	DF10030	LCF, MAN	CCYN
Retainer, Compr, Blade Lock	1	4	23ADS	PF10039	DF10030	LCF, MAN	CCYN
Core Engine Module	1	3	23B00	DF10040	AF10010	FHR, EOT, LCF, MAN	CCYV
Spacer, Air, Compr, 13th Stage	1	4	23BJ7	PF1004A	DF10040	LCF, MAN	CCYN
Disk, Compr, 4th Stage	1	4	23BJA	PF1004B	DF10040	LCF, MAN	CCYN
Disk, Compr, 5th Stage	1	4	23BJE	PF1004C	DF10040	LCF, MAN	CCYN
Disk & Hub, Compr, 6th Stage	1	4	23BJH	PF1004D	DF10040	LCF, MAN	CCYN
Disk, Compr, 7th Stage	1	4	23BJL	PF1004E	DF10040	LCF, MAN	CCYN
Disk, Compr, 8th Stage	1	4	23BJP	PF1004F	DF10040	LCF, MAN	CCYN
Disk, Compr, 9th Stage	1	4	23BJS	PF1004G	DF10040	LCF, MAN	CCYN
Disk, Compr, 10th Stage	1	4	23BJV	PF1004H	DF10040	LCF, MAN	CCYN
Disk, Compr, 11th Stage	1	4	23BJY	PF1004J	DF10040	LCF, MAN	CCYN
Disk, Compr, 12th Stage	1	4	23BJ2	PF1004K	DF10040	LCF, MAN	CCYN
Disk, Compr, 13th Stage	1	4	23BJ5	PF1004L	DF10040	LCF, MAN	CCYN
Shaft, Rear, Compr, Drive	1	4	23BJ8	PF1004M	DF10040	LCF, MAN	CCYN
Bearing, Main, NBR, 2, Ball	1	4	23BBD	PF1004N	DF10040	EOT	EOTH
Bearing, Main, NBR, 3, Ball	1	4	23BEC	PF1004P	DF10040	EOT	EOTH
Bearing, Main, NBR, 4, Roller	1	4	23BLK	PF1004Q	DF10040	EOT	EOTH
Diffuser Case	1	4	23BPD	PF1004R	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 4th Stage	1	4	23BJD	PF10041	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 5th Stage	1	4	23BJG	PF10042	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 6th Stage	1	4	23BJK	PF10043	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 7th Stage	1	4	23BJN	PF10044	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 8th Stage	1	4	23BJR	PF10045	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 9th Stage	1	4	23BJU	PF10046	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 10th Stage	1	4	23BJX	PF10047	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 11th Stage	1	4	23BJ1	PF10048	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 12th Stage	1	4	23BJ4	PF10049	DF10040	LCF, MAN	CCYN
High Turbine Assembly	1	4	23BN0	DF10050	DF10040	FHR, LCF, MAN	CCYV
Disk, 1st Stage, Turbine	1	5	23BNB	PF10051	DF10050	LCF, MAN	CCYN
Disk & Hub, 2nd Stage, Turbine	1	5	23BNL	PF10052	DF10050	LCF, MAN	CCYN
Plate, RTG, 2nd Stage, Turbine	1	5	23BNF	PF10053	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Front	1	5	23BNG	PF10054	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Rear	17	5	23BNK	PF10055	DF10050	LCF, MAN	CCYN
Fan Drive Turbine Module	1	3	23C00	DF10060	AF10010	FHR, EOT, LCF, MAN	CCYV
Disk, 3rd Stage, Turbine	1	4	23CBB	PF10061	DF10060	LCF, MAN	CCYN
Disk, 4th Stage, Turbine	1	4	23CBP	PF10062	DF10060	LCF, MAN	CCYN
Seal, Air, Turbine, 4th Stage	1	4	23CBL	PF10063	DF10060	LCF, MAN	CCYN
Bearing, Main, NBR 5, Roller	1	4	23CCD	PF10064	DF10060	EOT	EOTH

Table 9-30. F0100200 Engine Configuration - X2 Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Seal, Air Turbine, 3rd Stage	1	4	23CBD	PF10065	DF10060	LCF, MAN	CCYN
Augmentor Duct and Nozzle Module	1	3	23F00	DF10070	AF10010	FHR, EOT, LCF, MAN	EOTN, CCYV
Augmentor, Comp Chamber Duct Assy.	1	4	23FAA	PF10073	DF10070	EOT, LCF, MAN	CCYN
Actuator - Ballscrew, Prmry Conv Noz	1	4	23FAN	PF10071	DF10070	EOT	EOTH
Actuator - Ballscrew, Scndy Conv Noz	4	4	23FAP	PF10072	DF10070	EOT	EOTH
Gearbox Module	1	3	23G00	DF10080	AF10010	FHR, EOT	EOTH

F0100/200 EDITS

TRANSACTION	EOT	HS1	HS2	LCF	MAN CY
Initializations, Removals, Installations	Plus or minus 10 hrs	Plus or minus 10 hrs	Plus or minus 10 hrs	Plus or minus 100 cycles	Plus or minus 10 cycles
"6U" Update Normal Limit Extended Flight DELTA HS1 Cannot Exceed Delta EOT DELTA HS2 Cannot Exceed Delta EOT DELTA HS1 Plus Delta HS2 Cannot Exceed Delta EOT	10 hrs 25	NONE	NONE	100 cycles 200	NONE NONE

Table 9-31. F0100200A Engine Configuration - X7 Engine ID

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F0100200A Engine	1	2	23Z00	AF10010		EOT, HS1, HS2, LCF, FHR, MAN	NO LIMITS
Duct - Fan, Outer, Front, Assy of	1	3	23QCB	LF1001A	AF10010	EOT	EOTN
Duct - Fan, Rear, Assy of	1	3	23QCA	LF1001B	AF10010	EOT	EOTN
Exciter - Ignition, Dual	1	3	23KAD	LF1001C	AF10010	EOT	EOTH
Exciter - Ignition, Single	1	3	23KAE	LF1001D	AF10010	EOT	EOTH
Pump - Fuel, Augmentor	1	3	23HAE	LF1001E	AF10010	EOT	EOTH
Regulator, Air Press Exit Noz Cont	1	3	23PAC	LF1001G	AF10010	EOT	EOTH
Sensor - Hydromechanical, N2	1	3	23HAG	LF1001J	AF10010	EOT	EOTH
Sensor - Temperature Fan Exit (TT2.5)	1	3	23HAH	LF1001K	AF10010	EOT	EOTH
Stator - Generator	1	3	23KAH	LF1001L	AF10010	EOT	EOTH
Valve, Anti-Icing, Engine Inlet	1	3	23QA8	LF1001M	AF10010	EOT	EOTH
Control - Fuel, Backup	1	3	23HBA	LF1001N	AF10010	EOT	EOTH
Valve - Transfer, BUC	1	3	23HBB	LF1001P	AF10010	EOT	EOTH
Valve - Shutoff, CENC	1	3	23HBC	LF1001Q	AF10010	EOT	EOTH
Events History Recorder	1	3	23QA4	LF1001R	AF10010	EOT	EOTH
Pump - Gear, Main Fuel	1	3	23HAL	LF1001S	AF10010	EOT	EOTH
Valve - Fuel Bypass	1	3	23HAJ	LF1001T	AF10010	EOT	EOTH
Control - Engine Electronic	1	3	23HAB	LF10011	AF10010	EOT	EOTN
Control, Exhaust Nozzle Convergent	1	3	23PAB	LF10012	AF10010	EOT	EOTH
Control, Unified, Turbine Engine	1	3	23HAA	LF10014	AF10010	EOT	EOTH
Controller - Fuel Pump Augmentor	1	3	23HAF	LF10015	AF10010	EOT	EOTH
Cooler - Oil, Fuel	1	3	23JAC	LF10017	AF10010	EOT	EOTH
Cylinder - Actg, Lin, CPR, Bleed	1	3	23QA7	LF10018	AF10010	EOT	EOTH
Cylinder - Actg, Lin Var VN, Rear CPR	2	3	23QA6	LF10019	AF10010	EOT	EOTH
Inlet Fan Module	1	3	23A00	DF10030	AF10010	FHR, EOT, LCF, MAN	CCYV
Seal, Air Compr, 2nd Stage	1	4	23ADT	PF1003A	DF10030	LCF, MAN	CCYN
Bearing, Main, No 1 Roller	1	4	23AAE	PF1003B	DF10030	EOT	EOTH
Contr & Cyl, Var Vane, Comp Inlet	1	4	23AAP	PF10031	DF10030	EOT	EOTH
Cyl - Actg, Lin Var Vane, Comp Inlet	1	4	23AAQ	PF10032	DF10030	EOT	EOTH
Disk & Hub, Compr, 1st Stage	1	4	23ADB	PF10033	DF10030	LCF, MAN	CCYN
Disk & Hub, Compr, 2nd Stage	1	4	23ADG	PF10034	DF10030	LCF, MAN	CCYN
Disk, Compr, 3rd Stage	1	4	23ADL	PF10035	DF10030	LCF, MAN	CCYN

Table 9-31. F0100200A Engine Configuration - X7 Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Seal, Air, Compr Front, 1st Stage	1	4	23ADE	PF10036	DF10030	LCF, MAN	CCYN
Seal, Air, Front, Compr Inlet	1	4	23ADD	PF10037	DF10030	LCF, MAN	CCYN
Seal, Air Compr, Rear, 1st Stage	1	4	23ADJ	PF10038	DF10030	LCF, MAN	CCYN
Retainer, Compr, Blade Lock	1	4	23ADS	PF10039	DF10030	LCF, MAN	CCYN
Core Engine Module	1	3	23B00	DF10040	AF10010	FHR, EOT, LCF, MAN	CCYV
Spacer, Air, Compr, 13th Stage	1	4	23BJ7	PF1004A	DF10040	LCF, MAN	CCYN
Disk, Compr, 4th Stage	1	4	23BJA	PF1004B	DF10040	LCF, MAN	CCYN
Disk, Compr, 5th Stage	1	4	23BJE	PF1004C	DF10040	LCF, MAN	CCYN
Disk & Hub, Compr, 6th Stage	1	4	23BJH	PF1004D	DF10040	LCF, MAN	CCYN
Disk, Compr, 7th Stage	1	4	23BJL	PF1004E	DF10040	LCF, MAN	CCYN
Disk, Compr, 8th Stage	1	4	23BJP	PF1004F	DF10040	LCF, MAN	CCYN
Disk, Compr, 9th Stage	1	4	23BJS	PF1004G	DF10040	LCF, MAN	CCYN
Disk, Compr, 10th Stage	1	4	23BJV	PF1004H	DF10040	LCF, MAN	CCYN
Disk, Compr, 11th Stage	1	4	23BJY	PF1004J	DF10040	LCF, MAN	CCYN
Disk, Compr, 12th Stage	1	4	23BJ2	PF1004K	DF10040	LCF, MAN	CCYN
Disk, Compr, 13th Stage	1	4	23BJ5	PF1004L	DF10040	LCF, MAN	CCYN
Shaft, Rear, Compr, Drive	1	4	23BJ8	PF1004M	DF10040	LCF, MAN	CCYN
Bearing, Main, NBR, 2, Ball	1	4	23BBD	PF1004N	DF10040	EOT	EOTH
Bearing, Main, NBR, 3, Ball	1	4	23BEC	PF1004P	DF10040	EOT	EOTH
Bearing, Main, NBR, 4, Roller	1	4	23BLK	PF1004Q	DF10040	EOT	EOTH
Diffuser Case	1	4	23BPD	PF1004R	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 4th Stage	1	4	23BJD	PF10041	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 5th Stage	1	4	23BJG	PF10042	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 6th Stage	1	4	23BJK	PF10043	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 7th Stage	1	4	23BJN	PF10044	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 8th Stage	1	4	23BJR	PF10045	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 9th Stage	1	4	23BJU	PF10046	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 10th Stage	1	4	23BJX	PF10047	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 11th Stage	1	4	23BJ1	PF10048	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 12th Stage	1	4	23BJ4	PF10049	DF10040	LCF, MAN	CCYN
High Turbine Assembly	1	4	23BN0	DF10050	DF10040	FHR, LCF, MAN	CCYV
Disk, 1st Stage, Turbine	1	5	23BNB	PF10051	DF10050	LCF, MAN	CCYN
Disk & Hub, 2nd Stage, Turbine	1	5	23BNL	PF10052	DF10050	LCF, MAN	CCYN
Plate, RTG, 2nd Stage, Turbine	1	5	23BNF	PF10053	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Front	1	5	23BNG	PF10054	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Rear	17	5	23BNK	PF10055	DF10050	LCF, MAN	CCYN

Table 9-31. F0100200A Engine Configuration - X7 Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Fan Drive Turbine Module	1	3	23C00	DF10060	AF10010	FHR, EOT, LCF, MAN	CCYV
Disk, 3rd Stage, Turbine	1	4	23CBB	PF10061	DF10060	LCF, MAN	CCYN
Disk, 4th Stage, Turbine	1	4	23CBP	PF10062	DF10060	LCF, MAN	CCYN
Seal, Air, Turbine, 4th Stage	1	4	23CBL	PF10063	DF10060	LCF, MAN	CCYN
Bearing, Main, NBR 5, Roller	1	4	23CCD	PF10064	DF10060	EOT	EOTH
Seal, Air Turbine, 3rd Stage	1	4	23CBD	PF10065	DF10060	LCF, MAN	CCYN
Augmentor Duct and Nozzle Module	1	3	23F00	DF10070	AF10010	FHR, EOT, LCF, MAN	EOTN, CCYV
Augmentor, Comp Chamber Duct Assy.	1	4	23FAA	PF10073	DF10070	EOT, LCF, MAN	CCYN
Actuator - Ballscrew, Prmry Conv Noz	1	4	23FAN	PF10071	DF10070	EOT	EOTH
Actuator - Ballscrew, Scndy Conv Noz	4	4	23FAP	PF10072	DF10070	EOT	EOTH
Gearbox Module	1	3	23G00	DF10080	AF10010	FHR, EOT	EOTH

Table 9-32. F0100200B Engine Configuration - X8 Engine ID

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F0100200B Engine	1	2	23Z00	AF10010		EOT, HS1, HS2, LCF, FHR, MAN	NO LIMITS
Duct - Fan, Outer, Front, Assy of	1	3	23QCB	LF1001A	AF10010	EOT	EOTN
Duct - Fan, Rear, Assy of	1	3	23QCA	LF1001B	AF10010	EOT	EOTN
Exciter - Ignition, Dual	1	3	23KAD	LF1001C	AF10010	EOT	EOTH
Exciter - Ignition, Single	1	3	23KAE	LF1001D	AF10010	EOT	EOTH
Pump - Fuel, Augmentor	1	3	23HAE	LF1001E	AF10010	EOT	EOTH
Pump - Fuel, Main	1	3	23HAD	LF1001F	AF10010	EOT	EOTH
Regulator, Air Press Exit Noz Cont	1	3	23PAC	LF1001G	AF10010	EOT	EOTH
Sensor - Hydromechanical, N2	1	3	23HAG	LF1001J	AF10010	EOT	EOTH
Sensor - Temperature Fan Exit (TT2.5)	1	3	23HAH	LF1001K	AF10010	EOT	EOTH
Stator - Generator	1	3	23KAH	LF1001L	AF10010	EOT	EOTH
Valve, Anti-Icing, Engine Inlet	1	3	23QA8	LF1001M	AF10010	EOT	EOTH
Control - Fuel, Backup	1	3	23HBA	LF1001N	AF10010	EOT	EOTH
Valve - Transfer, BUC	1	3	23HBB	LF1001P	AF10010	EOT	EOTH
Valve - Shutoff, CENC	1	3	23HBC	LF1001Q	AF10010	EOT	EOTH
Events History Recorder	1	3	23QA4	LF1001R	AF10010	EOT	EOTH
Control - Engine Electronic	1	3	23HAB	LF10011	AF10010	EOT	EOTN
Control, Exhaust Nozzle Convergent	1	3	23PAB	LF10012	AF10010	EOT	EOTH
Control, Unified, Turbine Engine	1	3	23HAA	LF10014	AF10010	EOT	EOTH
Controller - Fuel Pump Augmentor	1	3	23HAF	LF10015	AF10010	EOT	EOTH
Cooler - Oil, Fuel	1	3	23JAC	LF10017	AF10010	EOT	EOTH
Cylinder - Actg, Lin, CPR, Bleed	1	3	23QA7	LF10018	AF10010	EOT	EOTH
Cylinder - Actg, Lin Var VN, Rear CPR	2	3	23QA6	LF10019	AF10010	EOT	EOTH
Inlet Fan Module	1	3	23A00	DF10030	AF10010	FHR, EOT, LCF, MAN	CCYV
Seal, Air Compr, 2nd Stage	1	4	23ADT	PF1003A	DF10030	LCF, MAN	CCYN
Bearing, Main, No 1 Roller	1	4	23AAE	PF1003B	DF10030	EOT	EOTH
Contr & Cyl, Var Vane, Comp Inlet	1	4	23AAP	PF10031	DF10030	EOT	EOTH
Cyl - Actg, Lin Var Vane, Comp Inlet	1	4	23AAQ	PF10032	DF10030	EOT	EOTH
Disk & Hub, Compr, 1st Stage	1	4	23ADB	PF10033	DF10030	LCF, MAN	CCYN
Disk & Hub, Compr, 2nd Stage	1	4	23ADG	PF10034	DF10030	LCF, MAN	CCYN
Disk, Compr, 3rd Stage	1	4	23ADL	PF10035	DF10030	LCF, MAN	CCYN

Table 9-32. F0100200B Engine Configuration - X8 Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Seal, Air, Compr Front, 1st Stage	1	4	23ADE	PF10036	DF10030	LCF, MAN	CCYN
Seal, Air, Front, Compr Inlet	1	4	23ADD	PF10037	DF10030	LCF, MAN	CCYN
Seal, Air Compr, Rear, 1st Stage	1	4	23ADJ	PF10038	DF10030	LCF, MAN	CCYN
Retainer, Compr, Blade Lock	1	4	23ADS	PF10039	DF10030	LCF, MAN	CCYN
Core Engine Module	1	3	23B00	DF10040	AF10010	FHR, EOT, LCF, MAN	CCYV
Spacer, Air, Compr, 13th Stage	1	4	23BJ7	PF1004A	DF10040	LCF, MAN	CCYN
Disk, Compr, 4th Stage	1	4	23BJA	PF1004B	DF10040	LCF, MAN	CCYN
Disk, Compr, 5th Stage	1	4	23BJE	PF1004C	DF10040	LCF, MAN	CCYN
Disk & Hub, Compr, 6th Stage	1	4	23BJH	PF1004D	DF10040	LCF, MAN	CCYN
Disk, Compr, 7th Stage	1	4	23BJL	PF1004E	DF10040	LCF, MAN	CCYN
Disk, Compr, 8th Stage	1	4	23BJP	PF1004F	DF10040	LCF, MAN	CCYN
Disk, Compr, 9th Stage	1	4	23BJS	PF1004G	DF10040	LCF, MAN	CCYN
Disk, Compr, 10th Stage	1	4	23BJV	PF1004H	DF10040	LCF, MAN	CCYN
Disk, Compr, 11th Stage	1	4	23BJY	PF1004J	DF10040	LCF, MAN	CCYN
Disk, Compr, 12th Stage	1	4	23BJ2	PF1004K	DF10040	LCF, MAN	CCYN
Disk, Compr, 13th Stage	1	4	23BJ5	PF1004L	DF10040	LCF, MAN	CCYN
Shaft, Rear, Compr, Drive	1	4	23BJ8	PF1004M	DF10040	LCF, MAN	CCYN
Bearing, Main, NBR, 2, Ball	1	4	23BBD	PF1004N	DF10040	EOT	EOTH
Bearing, Main, NBR, 3, Ball	1	4	23BEC	PF1004P	DF10040	EOT	EOTH
Bearing, Main, NBR, 4, Roller	1	4	23BLK	PF1004Q	DF10040	EOT	EOTH
Diffuser Case	1	4	23BPD	PF1004R	DF10040	LCF, MAN	CCYN
Seal - RR CP Inlet	1	4	23BJB	PF1004S	DF10040	LCF, MAN	CCYN
Chamber - Combustion, ASYO	1	4	23BPH	PF1004T	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 4th Stage	1	4	23BJD	PF10041	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 5th Stage	1	4	23BJG	PF10042	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 6th Stage	1	4	23BJK	PF10043	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 7th Stage	1	4	23BJN	PF10044	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 8th Stage	1	4	23BJR	PF10045	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 9th Stage	1	4	23BJU	PF10046	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 10th Stage	1	4	23BJX	PF10047	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 11th Stage	1	4	23BJ1	PF10048	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 12th Stage	1	4	23BJ4	PF10049	DF10040	LCF, MAN	CCYN
High Turbine Assembly	1	4	23BN0	DF10050	DF10040	FHR, LCF, MAN	CCYV
Disk, 2nd Stage, Turbine	1	5	23BNQ	PF1005A	DF10050	LCF, MAN	CCYN
Disk 1st Stage, Turbine	1	5	23BNB	PF10051	DF10050	LCF, MAN	CCYN
Plate, RTG, 2nd Stage, Turbine	1	5	23BNF	PF10053	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Front	1	5	23BNG	PF10054	DF10050	LCF, MAN	CCYN
Hub - Turbine, Front	1	5	23BND	PF10056	DF10050	LCF, MAN	CCYN

Table 9-32. F0100200B Engine Configuration - X8 Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Plate - Rtg, Blade, Turb, Rear, 2nd Stg	1	5	23BNM	PF10057	DF10050	LCF, MAN	CCYN
Seal - Air, Turbine, 1st Stg	1	5	23BNH	PF10058	DF10050	LCF, MAN	CCYN
Seal - Air, NBR 4, Bearing, R	1	5	23BMY	PF10059	DF10050	LCF, MAN	CCYN
Fan Drive Turbine Module	1	3	23C00	DF10060	AF10010	FHR, EOT, LCF, MAN	CCYV
Disk, 3rd Stage, Turbine	1	4	23CBB	PF10061	DF10060	LCF, MAN	CCYN
Disk, 4th Stage, Turbine	1	4	23CBP	PF10062	DF10060	LCF, MAN	CCYN
Seal, Air, Turbine, 4th Stage	1	4	23CBL	PF10063	DF10060	LCF, MAN	CCYN
Bearing, Main, NBR 5, Roller	1	4	23CCD	PF10064	DF10060	EOT	EOTH
Seal, Air Turbine, 3rd Stage	1	4	23CBD	PF10065	DF10060	LCF, MAN	CCYN
Augmentor Duct and Nozzle Module	1	3	23F00	DF10070	AF10010	FHR, EOT, LCF, MAN	EOTN, CCYV
Augmentor, Comp Chamber Duct Assy.	1	4	23FAA	PF10073	DF10070	EOT, LCF, MAN	CCYN
Actuator - Ballscrew, Prmry Conv Noz	1	4	23FAN	PF10071	DF10070	EOT	EOTH
Actuator - Ballscrew, Scndy Conv Noz	4	4	23FAP	PF10072	DF10070	EOT	EOTH
Gearbox Module	1	3	23G00	DF10080	AF10010	FHR, EOT	EOTH

Table 9-33. F0100200C Engine Configuration - X9 Engine ID

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F0100200C Engine	1	2	23Z00	AF10010		EOT, HS1, HS2, LCF, FHR, MAN	NO LIMITS
Duct - Fan, Outer, Front, Assy of	1	3	23QCB	LF1001A	AF10010	EOT	EOTN
Duct - Fan, Rear, Assy of	1	3	23QCA	LF1001B	AF10010	EOT	EOTN
Exciter - Ignition, Dual	1	3	23KAD	LF1001C	AF10010	EOT	EOTH
Exciter - Ignition, Single	1	3	23KAE	LF1001D	AF10010	EOT	EOTH
Pump - Fuel, Augmentor	1	3	23HAE	LF1001E	AF10010	EOT	EOTH
Regulator, Air Press Exit Noz Cont	1	3	23PAC	LF1001G	AF10010	EOT	EOTH
Sensor - Hydromechanical, N2	1	3	23HAG	LF1001J	AF10010	EOT	EOTH
Sensor - Temperature Fan Exit (TT2.5)	1	3	23HAH	LF1001K	AF10010	EOT	EOTH
Stator - Generator	1	3	23KAH	LF1001L	AF10010	EOT	EOTH
Valve, Anti-Icing, Engine Inlet	1	3	23QA8	LF1001M	AF10010	EOT	EOTH
Control - Fuel, Backup	1	3	23HBA	LF1001N	AF10010	EOT	EOTH
Valve - Transfer, BUC	1	3	23HBB	LF1001P	AF10010	EOT	EOTH
Valve - Shutoff, CENC	1	3	23HBC	LF1001Q	AF10010	EOT	EOTH
Events History Recorder	1	3	23QA4	LF1001R	AF10010	EOT	EOTH
Pump - Gear, Main Fuel	1	3	23HAL	LF1001S	AF10010	EOT	EOTH
Valve - Fuel Bypass	1	3	23HAJ	LF1001T	AF10010	EOT	EOTH
Control - Engine Electronic	1	3	23HAB	LF10011	AF10010	EOT	EOTN
Control, Exhaust Nozzle Convergent	1	3	23PAB	LF10012	AF10010	EOT	EOTH
Control, Unified, Turbine Engine	1	3	23HAA	LF10014	AF10010	EOT	EOTH
Controller - Fuel Pump Augmentor	1	3	23HAF	LF10015	AF10010	EOT	EOTH
Cooler - Oil, Fuel	1	3	23JAC	LF10017	AF10010	EOT	EOTH
Cylinder - Actg, Lin, CPR, Bleed	1	3	23QA7	LF10018	AF10010	EOT	EOTH
Cylinder - Actg, Lin Var VN, Rear CPR	2	3	23QA6	LF10019	AF10010	EOT	EOTH
Inlet Fan Module	1	3	23A00	DF10030	AF10010	FHR, EOT, LCF, MAN	CCYV
Seal, Air Compr, 2nd Stage	1	4	23ADT	PF1003A	DF10030	LCF, MAN	CCYN
Bearing, Main, No 1 Roller	1	4	23AAE	PF1003B	DF10030	EOT	EOTH
Contr & Cyl, Var Vane, Comp Inlet	1	4	23AAP	PF10031	DF10030	EOT	EOTH
Cyl - Actg, Lin Var Vane, Comp Inlet	1	4	23AAQ	PF10032	DF10030	EOT	EOTH
Disk & Hub, Compr, 1st Stage	1	4	23ADB	PF10033	DF10030	LCF, MAN	CCYN
Disk & Hub, Compr, 2nd Stage	1	4	23ADG	PF10034	DF10030	LCF, MAN	CCYN
Disk, Compr, 3rd Stage	1	4	23ADL	PF10035	DF10030	LCF, MAN	CCYN

Table 9-33. F0100200C Engine Configuration - X9 Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Seal, Air, Compr Front, 1st Stage	1	4	23ADE	PF10036	DF10030	LCF, MAN	CCYN
Seal, Air, Front, Compr Inlet	1	4	23ADD	PF10037	DF10030	LCF, MAN	CCYN
Seal, Air Compr, Rear, 1st Stage	1	4	23ADJ	PF10038	DF10030	LCF, MAN	CCYN
Retainer, Compr, Blade Lock	1	4	23ADS	PF10039	DF10030	LCF, MAN	CCYN
Core Engine Module	1	3	23B00	DF10040	AF10010	FHR, EOT, LCF, MAN	CCYV
Spacer, Air, Compr, 13th Stage	1	4	23BJ7	PF1004A	DF10040	LCF, MAN	CCYN
Disk, Compr, 4th Stage	1	4	23BJA	PF1004B	DF10040	LCF, MAN	CCYN
Disk, Compr, 5th Stage	1	4	23BJE	PF1004C	DF10040	LCF, MAN	CCYN
Disk & Hub, Compr, 6th Stage	1	4	23BJH	PF1004D	DF10040	LCF, MAN	CCYN
Disk, Compr, 7th Stage	1	4	23BJL	PF1004E	DF10040	LCF, MAN	CCYN
Disk, Compr, 8th Stage	1	4	23BJP	PF1004F	DF10040	LCF, MAN	CCYN
Disk, Compr, 9th Stage	1	4	23BJS	PF1004G	DF10040	LCF, MAN	CCYN
Disk, Compr, 10th Stage	1	4	23BJV	PF1004H	DF10040	LCF, MAN	CCYN
Disk, Compr, 11th Stage	1	4	23BJY	PF1004J	DF10040	LCF, MAN	CCYN
Disk, Compr, 12th Stage	1	4	23BJ2	PF1004K	DF10040	LCF, MAN	CCYN
Disk, Compr, 13th Stage	1	4	23BJ5	PF1004L	DF10040	LCF, MAN	CCYN
Shaft, Rear, Compr, Drive	1	4	23BJ8	PF1004M	DF10040	LCF, MAN	CCYN
Bearing, Main, NBR, 2, Ball	1	4	23BBD	PF1004N	DF10040	EOT	EOTH
Bearing, Main, NBR, 3, Ball	1	4	23BEC	PF1004P	DF10040	EOT	EOTH
Bearing, Main, NBR, 4, Roller	1	4	23BLK	PF1004Q	DF10040	EOT	EOTH
Diffuser Case	1	4	23BPD	PF1004R	DF10040	LCF, MAN	CCYN
Seal - RR Compr Inlet	1	4	23BJB	PF1004S	DF10040	LCF, MAN	CCYN
Chamber - Combustion, ASYO	1	4	23BPH	PF1004T	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 4th Stage	1	4	23BJD	PF10041	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 5th Stage	1	4	23BJG	PF10042	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 6th Stage	1	4	23BJK	PF10043	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 7th Stage	1	4	23BJN	PF10044	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 8th Stage	1	4	23BJR	PF10045	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 9th Stage	1	4	23BJU	PF10046	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 10th Stage	1	4	23BJX	PF10047	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 11th Stage	1	4	23BJ1	PF10048	DF10040	LCF, MAN	CCYN
Seal, Air, Compr, 12th Stage	1	4	23BJ4	PF10049	DF10040	LCF, MAN	CCYN
High Turbine Assembly	1	4	23BN0	DF10050	DF10040	FHR, LCF, MAN	CCYV
Disk, 2nd Stage, Turbine	1	5	23BNQ	PF1005A	DF10050	LCF, MAN	CCYN
Disk 1st Stage, Turbine	1	5	23BNB	PF10051	DF10050	LCF, MAN	CCYN
Plate, RTG, 2nd Stage, Turbine	1	5	23BNF	PF10053	DF10050	LCF, MAN	CCYN
Plate, RTG Turb, 1st Stage, Front	1	5	23BNG	PF10054	DF10050	LCF, MAN	CCYN
Hub - Turbine, Front	1	5	23BND	PF10056	DF10050	LCF, MAN	CCYN

Table 9-33. F0100200C Engine Configuration - X9 Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Plate - Rtg, Blade, Turb, Rear, 2nd Stg	1	5	23BNM	PF10057	DF10050	LCF, MAN	CCYN
Seal - Air, Turbine, 1st Stg	1	5	23BNH	PF10058	DF10050	LCF, MAN	CCYN
Seal - Air, NBR 4 Bearing, R	1	5	23BMY	PF10059	DF10050	LCF, MAN	CCYN
Fan Drive Turbine Module	1	3	23C00	DF10060	AF10010	FHR, EOT, LCF, MAN	CCYV
Disk, 3rd Stage, Turbine	1	4	23CBB	PF10061	DF10060	LCF, MAN	CCYN
Disk, 4th Stage, Turbine	1	4	23CBP	PF10062	DF10060	LCF, MAN	CCYN
Seal, Air, Turbine, 4th Stage	1	4	23CBL	PF10063	DF10060	LCF, MAN	CCYN
Bearing, Main, NBR 5, Roller	1	4	23CCD	PF10064	DF10060	EOT	EOTH
Seal, Air Turbine, 3rd Stage	1	4	23CBD	PF10065	DF10060	LCF, MAN	CCYN
Augmentor Duct and Nozzle Module	1	3	23F00	DF10070	AF10010	FHR, EOT, LCF, MAN	EOTN, CCYV
Augmentor, Comp Chamber Duct Assy.	1	4	23FAA	PF10073	DF10070	EOT, LCF, MAN	CCYN
Actuator - Ballscrew, Prmry Conv Noz	1	4	23FAN	PF10071	DF10070	EOT	EOTH
Actuator - Ballscrew, Scndy Conv Noz	4	4	23FAP	PF10072	DF10070	EOT	EOTH
Gearbox Module	1	3	23G00	DF10080	AF10010	FHR, EOT	EOTH

Table 9-34. F0100220A-F Engine Configuration - YF, YA, YJ, YC, YD, YE Engine ID

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F0100220A/B Engine	1	2	23Z00	AF10010		FHR, ABC, EOT, HS1, ABT, HS2, LCF, HS3, CY4, MAN, HS4, IFT, VMX	CALQ, EOTQ, CCYP
Duct - Fan, Outer, Front, Assy of	1	3	23QCB	LF1001A	AF10010	EOT	EOTN, CALQ, EOTQ
Duct - Fan, Rear, Assy of	1	3	23QCA	LF1001B	AF10010	EOT	EOTN, CALQ, EOTQ
Exciter - Ignition, Dual	2	3	23KAD	LF1001C	AF10010	EOT	EOTH, CALQ, EOTQ
Pump - Fuel, Augmentor	1	3	23HHO	LF100AG	AF10010	EOT	EOTH, CALQ, EOTQ
Valve, Anti-Icing, Engine Inlet	1	3	23QA8	LF1001M	AF10010	EOT	EOTH, CALQ, EOTQ
Control - Fuel, Augmentor	1	3	23HEO	LF1001U	AF10010	EOT	EOTH, CALQ, EOTQ
Control - Fuel, Main	1	3	23HCO	LF1001V	AF10010	EOT	EOTH, CALQ, EOTQ
Detector - Light - Off	1	3	23HJO	LF1001W	AF10010	EOT	EOTH, CALQ, EOTQ
Diagnostic Unit - Engine	1	3	23KCO	LF1001Z	AF10010	EOT	EOTN, CALQ, EOTQ
Control, Exhaust Nozzle Convergent	1	3	23PBO	LF100AD	AF10010	EOT	EOTH, CALQ, EOTQ
Control - Digital Engine Electronic	1	3	23HFO	LF10013	AF10010	EOT	EOTN, CALQ, EOTQ
Controller - Fuel Pump Augmentor	1	3	23HGO	LF100AE	AF10010	EOT	EOTH, CALQ, EOTQ
Cooler - Oil, Fuel	1	3	23JAC	LF10017	AF10010	EOT	EOTH, CALQ, EOTQ
Cylinder - Actg, Lin, CPR, Bleed	1	3	23QA7	LF10018	AF10010	EOT	EOTH, CALQ, EOTQ
Cylinder - Actg, Lin Var VN, Rear CPR	2	3	23QA5	LF100AF	AF10010	EOT	EOTH, CALQ, EOTQ
Rotor - Generator	1	3	23KBB	LF100AA	AF10010	EOT	EOTH, CALQ, EOTQ
Stator - Generator	1	3	23KBA	LF100AB	AF10010	EOT	EOTH, CALQ, EOTQ
Pump - Gear, Main Fuel	1	3	23HA2	LF100AC	AF10010	EOT	EOTH, CALQ, EOTQ
Inlet Fan Module	1	3	23A00	DF10030	AF10010	FHR, IFT, LCF, MAN, CY4, EOT	CCYV, CALQ, EOTQ
Seal, Air Compr, 2nd Stage	1	4	23ADT	PF1003A	DF10030	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Bearing, Main, No 1 Roller	1	4	23AAE	PF1003B	DF10030	EOT	EOTH, CALQ, EOTQ
Contr & Cyl, Var Vane, Comp Inlet	1	4	23AAW	PF1003D	DF10030	EOT	EOTH, CALQ, EOTQ

Table 9-34. F0100220A-F Engine Configuration - YF, YA, YJ, YC, YD, YE Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Cyl - Actg, Lin Var Vane, Comp Inlet	1	4	23AAY	PF1003E	DF10030	EOT	EOTH, CALQ, EOTQ
Disk & Hub, Compr, 1st Stage	1	4	23ADB	PF10033	DF10030	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk & Hub, Compr, 2nd Stage	1	4	23ADG	PF10034	DF10030	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk, Compr, 3rd Stage	1	4	23ADL	PF10035	DF10030	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Compr Front, 1st Stage	1	4	23ADE	PF10036	DF10030	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Front, Compr Inlet	1	4	23ADD	PF10037	DF10030	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air Compr, Rear, 1st Stage	1	4	23ADJ	PF10038	DF10030	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Retainer, Compr, Blade Lock	1	4	23ADS	PF10039	DF10030	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Core Engine Module	1	3	23B00	DF10040	AF10010	FHR, IFT, LCF, MAN, CY4, EOT	CCYV, CALQ, EOTQ
Spacer, Air, Compr, 13th Stage	1	4	23BJ7	PF1004A	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk, Compr, 4th Stage	1	4	23BJA	PF1004B	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk, Compr, 5th Stage	1	4	23BJE	PF1004C	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk & Hub, Compr, 6th Stage	1	4	23BJH	PF1004D	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk, Compr, 7th Stage	1	4	23BJL	PF1004E	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk, Compr, 8th Stage	1	4	23BJP	PF1004F	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk, Compr, 9th Stage	1	4	23BJS	PF1004G	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk, Compr, 10th Stage	1	4	23BJV	PF1004H	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk, Compr, 11th Stage	1	4	23BJY	PF1004J	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk, Compr, 12th Stage	1	4	23BJ2	PF1004K	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk, Compr, 13th Stage	1	4	23BJ5	PF1004L	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Shaft, Rear, Compr, Drive	1	4	23BJ8	PF1004M	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Bearing, Main, NBR, 2, Ball	1	4	23BBD	PF1004N	DF10040	EOT	EOTH, CALQ, EOTQ
Bearing, Main, NBR, 3, Ball	1	4	23BEC	PF1004P	DF10040	EOT	EOTH, CALQ, EOTQ
Bearing, Main, NBR, 4, Roller	1	4	23BLK	PF1004Q	DF10040	EOT	EOTH, CALQ, EOTQ
Diffuser Case	1	4	23BPD	PF1004R	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ

Table 9-34. F0100220A-F Engine Configuration - YF, YA, YJ, YC, YD, YE Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Seal - RR CP Inlet	1	4	23BJB	PF1004S	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Chamber - Combustion, ASYO	1	4	23BPH	PF1004T	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Compr, 4th Stage	1	4	23BJD	PF10041	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Compr, 5th Stage	1	4	23BJG	PF10042	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Compr, 6th Stage	1	4	23BJK	PF10043	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Compr, 7th Stage	1	4	23BJN	PF10044	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Compr, 8th Stage	1	4	23BJR	PF10045	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Compr, 9th Stage	1	4	23BJU	PF10046	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Compr, 10th Stage	1	4	23BJX	PF10047	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Compr, 11th Stage	1	4	23BJ1	PF10048	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Compr, 12th Stage	1	4	23BJ4	PF10049	DF10040	LCF, MAN, CY4	CCYN, CALQ, EOTQ
High Turbine Assembly	1	4	23BN0	DF10050	DF10040	FHR, IFT, LCF, MAN, CY4	CCYV, CCYQ, CALQ
Disk, 2nd Stage, Turbine	1	5	23BNQ	PF1005A	DF10050	LCF, MAN, CY4	CCYN, CCYQ, CALQ
Disk 1st Stage, Turbine	1	5	23BNB	PF10051	DF10050	LCF, MAN, CY4	CCYN, CCYQ, CALQ
Plate, RTG, 2nd Stage, Turbine	1	5	23BNF	PF10053	DF10050	LCF, MAN, CY4	CCYN, CCYQ, CALQ
Plate, RTG Turb, 1st Stage, Front	1	5	23BNG	PF10054	DF10050	LCF, MAN, CY4	CCYN, CCYQ, CALQ
Hub - Turbine, Front	1	5	23BND	PF10056	DF10050	LCF, MAN, CY4	CCYN, CCYQ, CALQ
Plate - Rtg, Blade, Tur, Rear, 2nd Stg	1	5	23BNM	PF10057	DF10050	LCF, MAN, CY4	CCYN, CCYQ, CALQ
Seal - Air, Turbine, 1st Stg	1	5	23BNH	PF10058	DF10050	LCF, MAN, CY4	CCYN, CCYQ, CALQ
Seal - Air, Nr 4 Brng, R	1	5	23BMY	PF10059	DF10050	LCF, MAN, CY4	TACN
Fan Drive Turbine Module	1	3	23C00	DF10060	AF10010	FHR, IFT, LCF, MAN, CY4, EOT, HS3	CCYV, CALQ, EOTQ
Disk, 3rd Stage, Turbine	1	4	23CBB	PF10061	DF10060	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Disk, 4th Stage, Turbine	1	4	23CBP	PF10062	DF10060	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Seal, Air, Turbine, 4th Stage	1	4	23CBL	PF10063	DF10060	LCF, MAN, CY4	CCYN, CALQ, EOTQ

Table 9-34. F0100220A-F Engine Configuration - YF, YA, YJ, YC, YD, YE Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Bearing, Main, NBR 5, Roller	1	4	23CCD	PF10064	DF10060	EOT	EOTH, CALQ, EOTQ
Seal, Air, Turbine, 3rd Stage	1	4	23CBD	PF10065	DF10060	LCF, MAN, CY4	CCYN, CALQ, EOTQ
Augmentor Duct and Nozzle Module	1	3	23F00	DF10070	AF10010	FHR, IFT, EOT, LCF, MAN, CY4	EOTH, CALQ, EOTQ, CCYV
Augmentor, Comp Chamber Duct Assy.	1	4	23FAA	PF10073	DF10070	EOT, LCF, MAN, CY4	CCYN
Actuator - Ballscrew, Prmry Conv Noz	1	4	23FAN	PF10071	DF10070	EOT	EOTH, CALQ, EOTQ
Actuator - Ballscrew, Scndy Conv Noz	4	4	23FAP	PF10072	DF10070	EOT	EOTH, CALQ, EOTQ
Gearbox Module	1	3	23G00	DF10080	AF10010	FHR, IFT, EOT	EOTH, CALQ, EOTQ

F0100220A-F EDITS

TRANSACTION	EOT	HS1, HS2, HS3, HS4	LCF	MAN CY	AB CY	AB TIME
Initialization, Removals, Installations	Plus or minus 10 hrs	Plus or minus 9.98 hrs	Plus or minus 100 cy	Plus or minus 10 cy	Plus or minus 200 cy	Plus or minus 10 hrs
"6U" Update Normal Limit Extended Flight	 >0< = 10 hrs >0< = 25	 NONE NONE	 100 cy 200	 10 cy 20	 20 x EOT 20 x EOT	 .1 x EOT .2 x EOT

TRANSACTION	VMAX	CY4	IFT
Initializations, Removals, Installations	Plus or minus 1 hr	Plus or minus 100 cy	Plus or minus 10 hrs
"6U" Update Normal Limit Extended Flight	 0.00 hrs 1.00	 100 cy 200	 NONE NONE
DELTA HS2 Cannot Exceed Delta HS4 DELTA HS4 Cannot Exceed Delta HS1 DELTA HS1 Cannot Exceed Delta HS3 DELTA HS3 Cannot Exceed Delta EOT DELTA IFT Cannot Exceed Delta EOT If ABC = 0, ABT must = 0 If MAN = 0, CY4 must = 0 If MAN > 0, CY4 must be > 0			

Table 9-35. F0100229A Engine Configuration - YG Engine ID; F0100229B Engine Configuration - YH Engine ID

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F0100229A/B Engine	1	2	23Z00	AF10010		FHR,ABC,EOT, HS1,ABT,HS2, LCF,HS3,CY4, MAN,HS4,IFT, VMX,CAL	CALQ,IFTO, TACP
Control, Exhaust Nozzle	1	3	23PBO	LF100AD	AF10010	EOT	EOTH
Control - Engine, Digital Electronic	1	3	23HFO	LF10013	AF10010	EOT	EOTH
Controller - Fuel Pump Augmentor	1	3	23HGO	LF100AE	AF10010	EOT	EOTH
Cooler - Oil	1	3	23JAC	LF10017	AF10010	EOT	EOTH
Cylinder - Actuating, Compr Bleed	1	3	23QA7	LF10018	AF10010	EOT	EOTH
Cyl - Actg, Lin Var Vane, Rear Compr	2	3	23QA5	LF100AF	AF10010	EOT	EOTH
Duct - Fan, Front, Assy of	1	3	23QCB	LF100AH	AF10010	LCF,MAN,CY4	TACH/N
Duct - Fan, Rear, Assy of	1	3	23QCA	LF100AJ	AF10010	LFC,MAN,CY4	TACH/N
Exciter - Ignition, Dual	2	3	23KAD	LF1001C	AF10010	EOT	EOTH
Pump - Fuel, Augmentor	1	3	23HHO	LF100AG	AF10010	EOT	EOTH
Fuel Control - Augmentor	1	3	23HEO	LF1001U	AF10010	EOT	EOTH
Fuel Control - Main	1	3	23HCO	LF1001V	AF10010	EOT	EOTH
Detector - Light - Off, Augmentor	1	3	23HJO	LF1001W	AF10010	EOT	EOTH
Valve - Anti-Icing	1	3	23QA8	LF1001X	AF10010	EOT	EOTH
Diagnostic Unit - Engine	1	3	23KCO	LF1001Z	AF10010	EOT	EOTH
Rotor - Generator	1	3	23KBB	LF100AA	AF10010	EOT	EOTH
Stator - Generator	1	3	23KBA	LF100AB	AF10010	EOT	EOTH
Pump - Gear, Main Fuel	1	3	23HA2	LF100AC	AF10010	EOT	EOTH
Inlet Fan Module	1	3	23A00	DF10030	AF10010	FHR,IFT,LCF, MAN,CY4,EOT	TACV
Contr & Cyl, Var Vane	1	4	23AAW	PF1003D	DF10030	EOT	EOTH
Cyl - Actg, Lin Var Vane, Comp Inlet	1	4	23AAY	PF1003E	DF10030	EOT	EOTH
Seal, Air, Compr Front, 1st Stg	1	4	23ADE	PF10036	DF10030	LCF,MAN,CY4	TACN
Seal, Air, Front, Compr Inlet	1	4	23ADD	PF10037	DF10030	LCF,MAN,CY4	TACN
Seal, Air, Compr, Rear, 1st Stg	1	4	23ADJ	PF10038	DF10030	LCF,MAN,CY4	TACN
Retainer, Compr, 3rd Stg	1	4	23ADS	PF10039	DF10030	LCF,MAN,CY4	TACN
Seal, Air, Compr, Front, 2nd Stg	1	4	23ADT	PF1003A	DF10030	LCF,MAN,CY4	TACN
Bearing - Roller, No 1	1	4	23AAE	PF1003B	DF10030	EOT	EOTH
Disk - Drum Rotor, Front Compr	1	4	23AC5	PF1003C	DF10030	LCF,MAN,CY4	TACN
Core Engine Module	1	3	23B00	DF10040	AF10010	FHR,IFT,LCF, MAN,CY4,EOT, HS1,HS2,HS3, HS4	TACV
Disk & Hub, Compr, 6th Stage	1	4	23BJH	PF1004D	DF10040	LCF,MAN,CY4	TACN
Bearing - Ball, Flanged, Nr 2	1	4	23BBD	PF1004N	DF10040	EOT	EOTH
Bearing - Ball, Annular, Flanged, Nr 3	1	4	23BEC	PF1004P	DF10040	EOT	EOTH
Bearing - Roller, Cylindrical, Nr 4	1	4	23BLK	PF1004Q	DF10040	EOT	EOTH
Case - Diffuser, Assy of	1	4	23BPD	PF1004R	DF10040	LCF,MAN,CY4	TACN
Chamber - Combustion, Assy of	1	4	23BPH	PF1004T	DF10040	LCF,MAN,CY4	TACN
Disk - Drum Rotor, Rear Compr, Front	1	4	23BGH	PF1004U	DF10040	LCF,MAN,CY4	TACN
Disk - Drum Rotor, Rear Compr, Rear	1	4	23BGJ	PF1004V	DF10040	LCF,MAN,CY4	TACN
Case Set - Compr, 4 - 9th Stage	1	4	23BGE	PF1004W	DF10040	LCF,MAN,CY4	TACN
Case - Compr, 10 - 12th Stg, Assy of	1	4	23BGN	PF1004X	DF10040	LCF,MAN,CY4	TACN
Support - Nr 4 Bearing Seal, Front	1	4	23BMC	PF1004Y	DF10040	LCF,MAN,CY4	TACN
Support - Nr 4 Bearing Seal, Rear	1	4	23BMD	PF1004Z	DF10040	LCF,MAN,CY4	TACN
Seal Assy - Air, Mr 4 Bearing	1	4	23BMB	PF100AA	DF10040	LCF,MAN,CY4	TACN

Table 9-35. F0100229A Engine Configuration - YG Engine ID; F0100229B Engine Configuration - YH Engine ID - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Intermediate Case	1	4	23BFS	PF100AB	DF10040	LCF,MAN,CY4	TACN
Rotor & Stator Assy - Turb (HPT)	1	4	23BNO	DF10050	DF10040	FHR,IFT,LCF, MANCY4,EOT, HS1,HS2,HS3, HS4	TACV
Disk - Turb, 1st Stage	1	5	23BNB	PF10051	DF10050	LCF,MAN,CY4	TACN
Plate, RTG Blade, 2nd Stage	1	5	23BNF	PF10053	DF10050	LCR,MAN,CY4	TACN
Plate, RTG Turb, 1st Stage	1	5	23BNG	PF10054	DF10050	LCF,MAN,CY4	TACN
Hub - Turbine, Rear Compr Drive	1	5	23BND	PF10056	DF10050	LCF,MAN,CY4	TACN
Plate, RTG, 2nd Stage, Rear	1	5	23BNM	PF10057	DF10050	LCF,MAN,CY4	TACN
Seal - Air, Turbine, 1st Stg	1	5	23BNH	PF10058	DF10050	LCF,MAN,CY4	TACN
Disk - Turb, 2nd Stage	1	5	23BNQ	PF1005A	DF10050	LCF,MAN,CY4	TACN
Fan Drive Turbine (LPT)	1	3	23C00	DF10060	AF10010	FHR,IFT,LCF, MAN,CY4,EOT, HS1,HS2,HS3, HS4	TACV
Disk, 3rd Stage, Turbine	1	4	23CBB	PF10061	DF10060	LCF,MAN,CY4	TACN
Disk, 4th Stage, Turbine	1	4	23CBP	PF10062	DF10060	LCF,MAN,CY4	TACN
Seal - Air, Turbine, 4th Stage	1	4	23CBL	PF10063	DF10060	LCF,MAN,CY4	TACN
Bearing - Roller, Nr 5	1	4	23CCD	PF10064	DF10060	EOT	EOTH
Seal - Air, Turbine, 3rd Stage	1	4	23CBD	PF10065	DF10060	LCF,MAN,CY4	TACN
Shaft, LPT	1	4	23CBK	PF10066	DF10060	LCF,MAN,CY4	TACN
Hub - Turbine, Rear	1	4	23CBV	PF10067	DF10060	LCF,MAN,CY4	TACN
Augmentor Duct and Nozzle	1	3	23F00	DF10070	AF10010	FHR,IFT,EOT, LCF,MAN,CY4, ABC,ABT	TACV
Augmentor, Comp Chamber Duct Assy.	1	4	23FAA	PF10073	DF10070	EOT, LCF, MAN, CY4	TACN
Actuator - Ballscrew, Prmry	1	4	23FAN	PF10071	DF10070	EOT	EOTH
Actuator - Ballscrew, Scndy	4	4	23FAP	PF10072	DF10070	EOT	EOTH
Gearbox	1	3	23G00	DF10080	AF10010	FHR,IFT,EOT, MAN,LCF,CY4	EOTH

F0100229A/B EDITS

TRANSACTION	EOT	HS1,HS2 HS3,HS4	LCF	MAN CY	AB CY	AB TIME
Installations, Removals, Installations	Plus or minus 10 hrs	Plus or minus 9.98 hrs	Plus or minus 100 cy	Plus or minus 10 cy	Plus or minus 200 cy	Plus or minus 10 hrs
"6U" Update Normal Limit Extended Flight	 >0< = 10 hrs >0< = 25	 NONE NONE	 100 cy 200	 10 cy 20	 30 x EOT 30 x EOT	 .1 x EOT .2 x EOT

TRANSACTION	VMAX	CY4	IFT
Initializations, Removals, Installations	Plus or minus 1 hr	Plus or minus 100 cy	Plus or minus 10 hrs
"6U" Update Normal Limit Extended Flight DELTA HS2 Cannot Exceed Delta HS4 DELTA HS4 Cannot Exceed Delta HS1 DELTA HS1 Cannot Exceed Delta HS3 DELTA HS3 Cannot Exceed Delta EOT DELTA IFT Cannot Exceed Delta EOT If ABC = 0, ABT must = 0 If MAN = 0, CY4 must = 0 If MAN > 0, CY4 must be > 0		 200 cy 400	 NONE NONE

Table 9-35.1. F119 Engine Configuration - YR Engine ID

NOMENCLATURE	QPA	IND LEVEL	LCN	CEMS CII	NHA LCN	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
F119 Engine, Turbofan	1	2	720000	AF11910	F22	FHR, RUN, EOT, MAN, LCF, HS1, HS2, CSC, FLT, FLL, CLL, DLL, HLL, LLL, HAL, LAL, NLL, BLL, CPU, IBR, HSP, ABC, ABT, CY4, HS3, HS4, IFT	NONE
Diagnostic Unit-Eng Comp	1	3	775110	LF1191A	720000	EOT, CSC, CPU	EOTN
Fadec - Left	1	3	761110A01	LF1191B	720000	EOT, CSC, CPU	EOTN
Fadec - Right	1	3	761110A02	LF1191B	720000	EOT, CSC, CPU	EOTN
Gearbox Assembly	1	3	726110	LF1191C	720000	EOT	EOTN
Pump-Main Oil	1	3	792310	LF1191D	720000	EOT	EOTN, EOTV
Rotor Generator	1	3	741120	LF1191E	720000	EOT	EOTN
Stator Generator	1	3	741110	LF1191F	720000	EOT	EOTN
Pump - Actuator Fuel	1	3	731510	LF1191G	720000	EOT	EOTN
Fuel/Oil Cooler	1	3	792410	LF1191H	720000	EOT	EOTN
Air/Air Heat Exchanger	1	3	727125	LF1191J	720000	EOT, CSC	EOTN
Fuel/Air Heat Exchanger	1	3	752110	LF1191K	720000	EOT, CSC	EOTN
Exciter Ignition	1	3	741210	LF1191L	720000	EOT	EOTN
Detector-Light Off-Aug	1	3	772210	LF1191M	720000	EOT	EOTN
Sensor-N1 Speed	1	3	771110	LF1191N	720000	EOT	EOTN
Nozzle-Aug Fuel	15	3	731410A01-731410A15	LF1191P	720000	EOT, ABC, ABT	EOTN, EOTV
Nozzle-Aug Fuel, Ignition	1	3	731430	LF1191Q	720000	EOT, ABC, ABT	EOTN, EOTV
Liner Augmentor Assy	1	3	785115	LF1191R	720000	EOT, MAN, LCF, CY4, ABC, ABT	TCYN, TCYV
Aug Duct Assy	1	3	785110	LF1191S	720000	EOT, MAN, LCF, CY4	TCYN, TCYV
Tail Cone	1	3	720070	LF1191T	720000	EOT, MAN, LCF, CY4	TCYN
MEC Servocylinder	1	3	752220	HF11920	720000	EOT	EOTN
MEC Actua Tor Solenoid	1	4	752260	PF11921	752220	EOT	EOTN
Switch-Reed, MEC	1	4	752250	PF11922	752220	EOT	EOTN
Main Fuel Pump	1	3	731110	HF11930	720000	EOT	EOTN
Fuel Filter Delta P Trans	1	4	731112	PF11931	731110	EOT	EOTN
Main Fuel Throttle Valve	1	3	732210	HF11940	720000	EOT	EOTN
EHSV Module-Fuel Flow	1	4	732211A01	PF11941	732210	EOT	EOTN
EHSV Module-Ther Recirc	1	4	732211A02	PF11941	732210	EOT	EOTN
EHSV Module-By Pass	1	4	732211A03	PF11941	732210	EOT	EOTN
Solenoid Module-N1 Ov/Sp	1	4	732212A01	PF11942	732210	EOT	EOTN
Solenoid Module-Trans Vlv	1	4	732212A02	PF11942	732210	EOT	EOTN
Transducer Pt/Temp	1	4	732215	PF11943	732210	EOT	EOTN
VLV LVDT - Fuel Throttle	1	4	732213A01	PF11944	732210	EOT	EOTN
VLV LVDT - Ther Rec	1	4	732213A02	PF11944	732210	EOT	EOTN
Augmentor Fuel Control	1	3	732110	HF11950	720000	EOT	EOTN
EHSV, AFC, Zone 1	1	4	732111A01	PF11951	732110	EOT	EOTN
EHSV, AFC, Zone 2	1	4	732111A02	PF11951	732110	EOT	EOTN
EHSV, AFC, Zone 3	1	4	732121A03	PF11951	732110	EOT	EOTN
LVDT, AFC, Zone 1	1	4	732112A01	PF11952	732110	EOT	EOTN
LVDT, AFC, Zone 2	1	4	732112A02	PF11952	732110	EOT	EOTN

Table 9-35.1. F119 Engine Configuration - YR Engine ID

NOMENCLATURE	QPA	IND LEVEL	LCN	CEMS CII	NHA LCN	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
LVDT, AFC, Zone 3	1	4	732112A03	PF11952	732110	EOT	EOTN
Valve Anti-Ice, Eng Inlet	1	3	751110	HF11960	720000	EOT	EOTN
Solenoid, A/I Valve	1	4	751112	PF11961	751110	EOT	EOTN
Switch - Reed, A/I Valve	1	4	751111	PF11962	751110	EOT	EOTN
Servocylinder, Fan	1	3	753110	HF11970	720000	EOT	EOTN
Ehsv-Fvv Servocylinder, Ch.2	1	4	753111A02	PF11971	753110	EOT	EOTN
Servocylind, Compr Stator	1	3	753310	HF11980	720000	EOT	EOTN
EHSV-FVV Servocylinder, Ch.1	1	4	753311A01	PF11981	753310	EOT	EOTN
EHSV-Fvv Servocylinder, Ch.2	1	4	753311A02	PF11981	753310	EOT	EOTN
T/Solenoid, CVV Servo Cyl	1	4	753312	PF11982	753310	EOT	EOTN
Core Engine Module	1	3	720510	DF119C0	720000	EOT, MAN, LCF, HS1, HS2, CLL, DLL, HLL, HAL, BLL, IBR, HSP, CY4, HS3, HS4, IFT	TCYV, TCYN, ERLN
Bearing No. 2	1	4	723620	PF119CA	720510	EOT, BLL	EOTN, EOTV
Bearing No. 3	1	4	723630	PF119CB	720510	EOT, BLL	EOTN, EOTV
Compr Rot & Hub Axl 4 Stg	1	4	723510	PF119CC	720510	EOT, MAN, LCF, CLL, IBR, CY4	EOTN, EOTV
Compr Rotor, Axial 5 Stg	1	4	723516	PF119CD	720510	EOT, MAN, LCF, CLL, CY4	EOTN, EOTV
Compr Rotor, Axial 6 Stg	1	4	723521	PF119CE	720510	EOT, MAN, LCF, CLL, CY4	TCYV, TCYN
Compr Rotor, Axial 7 Stg	1	4	723526	PF119CF	720510	EOT, MAN, LCF, CLL, CY4	TCYN, TCYV
Compr Rotor, Axial 8 Stg	1	4	723531	PF119CG	720510	EOT, MAN, LCF, CLL, CY4	TCYN, TCYV
Compr Rot & Hub Axl 9 Stg	1	4	723536	PF119CH	720510	EOT, MAN, LCF, CLL, CY4	TCYN, TCYV
Seal, Hub, 9th Stage	1	4	724143	PF119CJ	720510	EOT, MAN, LCF, DLL, CY4	TCYN
Coupl Assy, Turbine Shaft	1	4	723625	PF119CK	720510	EOT, MAN, LCF, CY4	TCYN, TCYV
Case-Diffuser, Outer	1	4	724142	PF119CL	720510	EOT, MAN, LCF, DLL, CY4	TCYN, TCYV
Case-Diffuser, Inner	1	4	724144	PF119CM	720510	EOT, MAN, LCF, DLL, CY4	TCYN, TCYV
Combustor Assy	1	4	724110	PF119CN	720510	EOT, MAN, LCF, HS1, HS2, DLL, CY4, HS3, HS4	TCYN, TCYV
Nozzle-Fuel, Pri and Sec	10	4	731220A01-731220A10	PF119CP	720510	EOT	EOTN
Nozzle-Fuel, Secondary	14	4	731210A01-731210A14	PF119CQ	720510	EOT	EOTN, EOTV
High Pres Turbine Rotor Assy	1	4	725110	HF119H0	7200510	EOT, MAN, LCF, HS1, HS2, CLL, DLL, HLL, HAL, BLL, HSP, CY4, HS3, HS4, IFT	TCYN, TCYV, ERLN
Ring No. 4 Bearing-Inner	1	5	725510	PF119H1	725110	EOT, BLL	EOTN, EOTV

Table 9-35.1. F119 Engine Configuration - YR Engine ID

NOMENCLATURE	QPA	IND LEVEL	LCN	CEMS CII	NHA LCN	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
No. 4 Bearing Rear Air Seal	1	5	725512	PF119H2	725110	EOT, MAN, LCF, CY4, HLL	TCYN, TCYV
Seal, Rtg, Bld, Tb, Frt, 1 Stg	1	5	725113	PF119H3	725110	EOT, MAN, LCF, HLL, HSP, CY4	TCYN
Plate, Rtg, Tb, Front, 1 Stg	1	5	725118	PF119H4	725110	EOT, MAN, LCF, HLL, CY4	TCYN, TCYV
Seal - Hub, HPT 1st Stg	1	5	725115	PF119H5	725110	EOT, MAN, LCF, HLL, CY4	TCYN, TCYV
HPT Blade	58	5	725117	PF119H6	725110	EOT, MAN, LCF, HS1, HS2, HAL, CY4, HS3, HS4	TCYN, ERLN
Cover Plate, HPT Rear	1	5	725514	PF119H7	725110	EOT, MAN, LCF, HLL, CY4, IFT	TCYN
No. 4 Bearing Frt Air Seal	1	5	725513	PF119H8	725110	EOT, MAN, LCF, HLL, CY4	TCYN, TCYV
Disk & Hub, Turbine 1 Stg	1	5	725112	PF119H9	725110	EOT, MAN, LCF, HLL, HSP, CY4	TCYN, TCYV
Inlet/Fan Module	1	3	720410	DF119F0	720000	EOT, MAN, LCF, FLL, BLL, CY4, IFT	TCYN, TCYV
Bearing Rol, Cyl, Flgd. #1	1	4	723610	PF119FA	720410	EOT, BLL	EOTN, EOTV
Compressor Rotor & CWTSET	1	4	723110	PF119FB	720410	EOT, MAN, LCF, FLL, CY4	TCYN, TCYV
Comp Rotor - Axial 2 Stg	1	4	723120	PF119FC	720410	EOT, MAN, LCF, FLL, CY4	TCYN, TCYV
Comp Rotor - Axial 3 Stg	1	4	723130	PF119FD	720410	EOT, MAN, LCF, FLL, CY4	TCYN, TCYV
Hub-Front Compressor Rear	1	4	723111	PF119FE	720410	EOT, MAN, LCF, FLL, CY4	TCYN, TCYV
Inlet Case Assy	1	4	722110	PF119FF	720410	EOT, MAN, LCF, CY4	TCYN, TCYV
Fan Drive Turbine Module	1	3	720610	DF119L0	720000	EOT, MAN, LCF, HS1, HS2, LLL, LAL, BLL, ABC, ABT, CY4, HS3, HS4, IFT	TCYN, TCYV, ERLN
#4 Bearing-Outer, Flanged, ASYO	1	4	725525	PF119LA	720610	EOT, BLL	EOTN, EOTV
Bearing - Roller, CYL, #5	1	4	725540	PF119LB	720610	EOT, BLL	EOTN, EOTV
Case Asy, Turbine Exhaust	1	4	725810	PF119LC	720610	EOT, MAN, LCF, LLL, ABC, ABT, CY4	TCYN, TCYV
LPT Fwd Duct	1	4	725717	PF119LD	720610	EOT, MAN, LCF, CY4	TCYN, TCYV
LPT TOBI Duct Assy of	1	4	725712	PF119LE	720610	EOT, MAN, LCF, LLL, CY4	TCYN, TCYV
Shaft-Front Comp, Dr, Turb	1	4	725660	PF119LF	720610	EOT, MAN, LCF, LLL, CY4	TCYN, TCYV
Disk-Turbine, 2 Stage	1	4	725610	PF119LG	720610	EOT, MAN, LCF, LLL, CY4	TCYN, TCYV
Seal-Air, Turbine, 2 Stage	1	4	725612	PF119LH	720610	EOT, MAN, LCF, LLL, CY4	TCYN, TCYV
Plate, Rtg, Bld, Tb, Rear 2 Stg	1	4	725613	PF119LJ	720610	EOT, MAN, LCF, LLL, CY4	TCYN, TCYV
LPT ID Seal	1	4	725615	PF119LK	720610	EOT, MAN, LCF, LLL, CY4	TCYN, TCYV

Table 9-35.1. F119 Engine Configuration - YR Engine ID

NOMENCLATURE	QPA	IND LEVEL	LCN	CEMS CII	NHA LCN	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
LPT Blade	52	4	725617	PF119LL	720610	EOT, MAN, LCF, HS1, HS2, LAL, CY4, HS3, HS4	TCYN, ERLN
Nozzle Module	1	3	781010	DF119N0	720000	EOT, MAN, LCF, NLL, ABC, ABT, CY4	TCYN, TCYV
Liner, Divergent Seg Upper	1	4	781245A01	PF119NA	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Divergent Seg Lower	1	4	781245A02	PF119NA	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Convergent Seg Upper	1	4	781230A01	PF119NB	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Convergent Seg Lower	1	4	781230A02	PF119NB	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #1 Upper Left	1	4	781210	PF119NC	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #1 Lower Right	1	4	781216	PF119NN	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #2 Upper Left	1	4	781211	PF119ND	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #2 Lower Right	1	4	781217	PF119NP	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #3 Upper Left	1	4	781212A01	PF119NE	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #3 Lower Right	1	4	781212A02	PF119NE	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #4 Upper Left	1	4	781218A01	PF119NF	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #4 Lower Right	1	4	781218A02	PF119NF	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #5 Upper Left	1	4	781213A01	PF119NG	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #5 Lower Right	1	4	781213A02	PF119NG	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #6 Lower Left	1	4	781214A01	PF119NH	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #6 Upper Right	1	4	781214A02	PF119NH	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #7 Lower Left	1	4	781215A01	PF119NJ	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #7 Upper Right	1	4	781215A02	PF119NJ	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #8 Lower Left	1	4	781219A01	PF119NK	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #8 Upper Right	1	4	781219A02	PF119NK	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #9 Upper Right	1	4	781216	PF119NL	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #9 Lower Left	1	4	781227	PF119NQ	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #10 Lower Left	1	4	781228	PF119NR	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner, Seg, TDT #10 Upper Right	1	4	781217	PF119NM	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner Asy, SW, Aft Upper Right	1	4	781223A01	PF119NS	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN

Table 9-35.1. F119 Engine Configuration - YR Engine ID

NOMENCLATURE	QPA	IND LEVEL	LCN	CEMS CII	NHA LCN	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
Liner Asy, SW, Aft Lower Left	1	4	781223A02	PF119NS	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner Asy, SW, Aft Lower Right	1	4	781221A01	PF119NT	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner Asy, SW, Aft Upper Left	1	4	781221A02	PF119NT	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner Asy, SW, Fwd Lower Right	1	4	781220A01	PF119NU	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner Asy, SW, Fwd Upper Left	1	4	781220A02	PF119NU	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner Asy, SW, Fwd Upper Right	1	4	781222A01	PF119NV	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner Asy, SW, Fwd Lower Left	1	4	781222A02	PF119NV	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Nozzle Seg, Ext, Int, Upper	1	4	781125A01	PF119NW	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN, TCYV
Nozzle Seg, Ext, Int, Lower	1	4	781125A02	PF119NW	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN, TCYV
Nozzle Seg, Ext, Fwd, Upper	1	4	781130	PF119NX	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN, TCYV
Nozzle Seg, Ext, Fwd, Lower	1	4	781135	PF119NY	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN, TCYV
Nozzle Seg, Ext, Aft, Upper	1	4	781140A01	PF119NZ	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN, TCYV
Nozzle Seg, Ext, Aft, Lower	1	4	781140A02	PF119NZ	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN, TCYV
Liner Assy, Heatshield Air Pump Upper Left	1	4	781560A01	PF119N1	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner Assy, Heatshield Air Pump Lower Right	1	4	781560A02	PF119N1	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner Assy, Heatshield Air Pump Upper Right	1	4	781550A01	PF119N2	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Liner Assy, Heatshield Air Pump Lower Left	1	4	781550A02	PF119N2	781010	EOT, MAN, LCF, ABC, ABT, CY4	TCYN
Servocylinder Conv Nozzle (Up)	1	4	781710A01	HF119P0	781010	EOT	EOTN
EHV, Conv Nozzle Servo (Up)	1	5	781711A01	PF119P1	781710A01	EOT	EOTN
Servocylinder Conv Nozzle (Lo)	1	4	781710A02	HF119P0	781010	EOT	EOTN
EHV, Conv Nozzle Servo (Lo)	1	5	781711A02	PF119P1	781710A02	EOT	EOTN
Servocylinder, Divergent Noz (Up)	1	4	781610A01	HF119R0	781010	EOT	EOTN
EHV, Div Noz, Servocylinder (Up)	1	4	781611A01	PF119R1	781610A01	EOT	EOTN
Solenoid, Diver Noz S/C (Up)	1	5	781612A01	PF119R2	781610A01	EOT	EOTN
Servocylinder, Divergent Noz (Lo)	1	4	781610A02	HF119R0	781010	EOT	EOTN
EHV, Div Noz, Servocylinder (Lo)	1	5	781611A02	PF119R1	781610A02	EOT	EOTN
Solenoid, Diver Noz S/C (Lo)	1	5	781612A02	PF119R2	781610A02	EOT	EOTN

NOTE: QPA listed reflects QPA per nomenclature with exception of CIIs LF1191P, PF119CP and PF119CQ in which their QPA reflects same nomenclature.

F119 Edits
6U Update - Normal/Extended Flight Limits

Cat No.	TLC	EDITS
05	RUN	Delta Cat 05 (RUN) must be > 0 and < = 40
09	EOT	Delta Cat 09 (EOT) must be > 0.0 and < = 25.0
15	MAN	Delta Cat 15 (MAN) must be > = 0 and < = 40
16	LCF	Delta Cat 16 (LCF) must be > = 0 and < = 300 If delta Cat 16 (LCF) > 0, then delta Cat 15 (MAN) must be > 0
72	CY4	Delta Cat 72 (CY4) must be > = 0 and < = 300 If delta Cat 72 (CY4) > 0, then delta Cat 15 (MAN) must be > 0
20	FLT	Delta Cat 20 (FLT) must be > = 0 and < = 10
77	IFT	Delta Cat 77 (IFT) must be > = 0.0 Delta Cat 77 (IFT) must be < delta Cat 09 (EOT) If delta Cat 77 (IFT) > 0.0, then delta Cat 20 (FLT) must be > 0
62	ABC	Delta Cat 62 (ABC) must be > = 0 and < 98
63	ABT	Delta Cat 63 (ABT) must be > = 0.0 and < delta Cat 09 (EOT) If delta Cat 63 (ABT) > 0.0, then delta Cat 62 (ABC) must be > 0
17	HS1	Delta Cat 17 (HS1) must be > = 0.00 and < = 4.00
18	HS2	Delta Cat 18 (HS2) must be > = 0.00 Delta Cat 18 (HS2) must be = < Cat 17 (HS1) delta
73	HS3	Delta Cat 73 (HS3) must be > = 0.00 Delta Cat 73 (HS3) must be = < Cat 18 (HS2) delta.
74	HS4	Delta Cat 74 (HS4) must be > = 0.00 Delta Cat 74 must be = < Cat 73 (HS3) delta
19	CSC	Delta Cat 19 (CSC) must be > = 0 and < = Cat 05
50	CPU	Delta Cat 50 (CPU) must be > 0 and < = 200
49	BLL	Delta Cat 49 (BLL) must be > = 0 and < = 2
41	FLL	Delta Cat 41 (FLL) must be > = 0 and < = 2
51	IBR	Must be > or = 0.00 and < 4.00
52	HSP	Must be > or = 0 and < or =5
42	CLL	Delta Cat 42 (CLL) must be > = 0 and < = 2
43	DLL	Delta Cat 43 (DLL) must be > = 0 and < = 2
44	HLL	Delta Cat 44 (HLL) must be > = 0 and < = 2
46	HAL	Delta Cat 46 (HAL) must be > = 0 and < = 2
45	LLL	Delta Cat 45 (LLL) must be > = 0 and < = 2
47	LAL	Delta Cat 47 (LAL) must be > = 0 and < = 2
48	NLL	Delta Cat 48 (NLL) must be > = 0 and < = 2

Table 9-36. Configured CII for F101 Engine

NOMENCLATURE	OPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
F101-GE Engine	1	2	23Z00	AF10110		EOT, FHR, LCY, FTC, CIC, TT1-TT5, ABC, ABT	NONE
Bearing #1	1	3	23JAA	LF10111	AF10110	EOT	EOTN
Bearing #2	1	3	23JCA	LF10112	AF10110	EOT	EOTN
Bearing #3	1	3	23JDA	LF10113	AF10110	EOT	EOTN
Bearing #4	1	3	23JEA	LF10114	AF10110	EOT	EOTN
Bearing #5	1	3	23JGA	LF10115	AF10110	EOT	EOTN
Main Engine Control	1	3	23KBK	LF10116	AF10110	EOT	EOTN
Aft Control	1	3	23LRA	LF10117	AFF10110	EOT	EOTN
Augmentor Control	1	3	23KDE	LF10118	AF10110	EOT	EOTN, EOTV
Main Fuel Pump	1	3	23KBF	LF10119	AF10110	EOT	EOTN
Boost Pump	1	3	23KBA	LF1011A	AF10110	EOT	EOTN
Augmentor Pump	1	3	23KDA	LF1011B	AF10110	EOT	EOTN
Lube & Scavenge Pump	1	3	23NBA	LF1011C	AF10110	EOT	EOTN
Hydraulic Pump	1	3	23PBB	LF1011D	AF10110	EOT	EOTN
CITS/Digital Electronic Control	1	3	23LQA	LF1011G	AF10110	EOT	EOTN
Thrust Control Actuator	1	3	23LYA	LF1011N	AF10110	EOT, LCY, FTC, CIC	TACN
Eng Bleed Air Duct Sys	1	3	41AAA	LF1011P	AF10110	EOT, LCY, FTC, CIC	TACN
Fan Rotor Assy	1	3	23BEA	HF10130	AF10110	EOT, LCY, FTC, CIC	EOTN, TACN
Disk, ST 1 Fan Rotor	1	4	23BEJ	PF10131	HF10130	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Disk, ST 2 Fan Rotor	1	4	23BEK	PF10132	HF10130	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Front Shaft, Fan Rotor	1	4	23BEE	PF10133	HF10130	EOT, LCY, FTC, CIC	EOTN, TACN
Rear Shaft, Fan Rotor	1	4	23BEB	PF10134	HF10130	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Air Seal, ST 2 Fan Rotor	1	4	23BEG	PF10135	HF10130	EOT, LCY, FTC, CIC	EOTN, TACN
HPCR Rotor Assy	1	3	23DHA	HF10140	AF10110	EOT, LCY, FTC, CIC	EOTN, TACN
Spool, ST 1-2, Comp Rotor	1	4	23DHQ	PF10141	HF10140	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Disk, ST 3, Comp Rotor	1	4	23DHR	PF10142	HF10140	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Spool, ST 4-9, Comp Rotor	1	4	23DHS	PF10143	HF10140	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Air Seal, Rear, Comp Rotor	1	4	23DJD	PF10144	HF10140	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Front Shaft, Comp Rotor	1	4	23DHM	PF10145	HF10140	EOT, LCY, FTC, CIC	EOTN, TACN
HPT Rotor Assy	1	3	23GBA	HF10150	AF10110	EOT, LCY, FTC, CIC	EOTN, TACN
Fwd Shaft, HPT Rotor	1	4	23GBB	PF10151	HF10150	EOT, LCY, FTC, CIC	EOTN, TACN
Fwd Outer Seal, HPT Rotor	1	4	23GBC	PF10152	HF10150	EOT, LCY, FTC, CIC, TT1-TT5	EOTN, TACN, TACV
Retainer Blade, Fwd HPT Rotor	1	4	23GBD	PF10153	HF10150	EOT, LCY, FTC, CIC	EOTN, TACN

Table 9-36. Configured CII for F101 Engine

NOMENCLATURE	OPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
Retainer Blade, Aft HPT Rotor	1	4	23GBF	PF10154	HF10150	EOT, LCY, FTC, CIC	EOTN, TACN
Aft Shaft, HPT Rotor	1	4	23GBG	PF10155	HF10150	EOT, LCY, FTC, CIC	EOTN, TACN
Disk HPT Rotor	1	4	23GBE	PF10156	HF10150	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade, HPT Rotor	1	5	23GBH	SF10156	PF10156	EOT, LCY, FTC, CIC	EOTN, TACN
LPT Rotor Assy	1	3	23GDA	HF10160	AF10110	EOT, LCY, FTC, CIC	EOTN, TACN
Shaft, LPT Rotor	1	4	23GDB	PF10161	HF10160	EOT, LCY, FTC, CIC	EOTN, TACN
Retainer, ST 1, LPT Rotor	1	4	23GDD	PF10162	HF10160	EOT, LCY, FTC, CIC	EOTN, TACN
Disk, ST 1, LPT Rotor	1	4	23GDE	PF10163	HF10160	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade, ST 1, LPT Rotor	1	5	23GDC	SF10163	PF10163	EOT, LCY, FTC, CIC	EOTN, TACN
Air Seal, LPT Rotor	1	4	23GDF	PF10164	HF10160	EOT, LCY, FTC, CIC	EOTN, TACN
Retainer, ST 2, LPT Rotor	1	4	23GDM	PF10165	HF10160	EOT, LCY, FTC, CIC	EOTN, TACN
Disk, ST 2, LPT Rotor	1	4	23GDN	PF10166	HF10160	EOT, LCY, FTC, CIC	EOTN, TACN
Blade, ST 2, LPT Rotor	1	5	23GDL	SF10166	PF10166	EOT, LCY, FTC, CIC	EOTN, TACN
Spacer Seal, LPT Rotor	1	4	23GDP	PF10167	HF10160	EOT, LCY, FTC, CIC	EOTN, TACN
Support Cone, LPT Rotor	1	4	23GDQ	PF10168	HF10160	EOT, LCY, FTC, CIC	EOTN, TACN
Augmentor Assy	1	3	23HBJ	HF10170	AF10110	EOT, ABC, ABT	EOTN
Exhaust Duct Liner	1	4	23HDC	PF10171	HF10170	EOT, ABC, ABT	EOTN
Mixing Duct	1	4	23HBF	PF10172	HF10170	EOT, ABC, ABT	EOTN
Damper Ring	1	4	23HBG	PF10173	HF10170	EOT, ABC, ABT	EOTN
Flameholder	1	4	23HBC	PF10174	HF10170	EOT, ABC, ABT	EOTN
EGT Thermocouple (T5.6)	1	4	23LWA	PF10175	HF10170	EOT, ABC, ABT	EOTN
Aug Duct Liner	1	4	23HBB	PF10176	HF10170	EOT, ABC, ABT	EOTN
Accessory Gearbox	1	3	23ABA	HF10180	AF10110	EOT	EOTN
Coupling Shaft	1	4	23ABS	PF10181	HF10180	EOT, LCY, FTC, CIC	EOTN, TACN
Inlet Gearbox	1	3	23AEA	HF10190	AF10110	EOT, LCY, FTC, CIC	EOTN, TACN
Inlet Gearbox Bevel Gear	1	4	23AEC	PF10191	HF10190	EOT, LCY, FTC, CIC	EOTN, TACN
Fan Frame	1	3	23DBB	HF101A0	AF10110	EOT	EOTN
HPCS Assy (Fwd)	1	3	23DDA	HF101B0	AF10110	EOT	EOTN
Case Rear, Comp Stator	1	4	23DFC	PF101B2	HF101B0	EOT	EOTN
Rear Support, Comp Stator	1	4	23DFB	PF101B3	HF101B0	EOT	EOTN
HPT Shroud Assy	1	3	23FHA	HF1011E	AF10110	EOT	EOTN
HPT Nozzle Assy	1	3	23FFA	HF1011F	AF10110	EOT	EOTN
Front Frame	1	3	23BBB	HF101F0	AF10110	EOT	EOTN
Turbine Frame	1	3	23GKB	HF101G0	AF10110	EOT	EOTN
LPT Nozzle, ST 1 Assy	1	3	23GFA	HF101H0	AF10110	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
LPT Nozzle, ST 1	1	4	23GFB	PF101H1	HF10110	EOT, LCY, FTC, CIC	EOTN, TACN, TACV

Table 9-36. Configured CII for F101 Engine

NOMENCLATURE	OPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
LPT Nozzle, ST 2	1	3	23GHA	HF1011J	AF10110	EOT	EOTN
Combustor Case	1	3	23FBA	HF1011L	AF10110	EOT, LCY, FTC, CIC	EOTN, TACN
Fwd Inner Nozzle	1	4	23FBC	PF101L1	HF1011L	EOT, LCY, FTC, CIC	EOTN, TACN
Combustor	1	3	23FDA	HF1011M	AF10110	EOT, LCY,FTC, CIC	EOTN, TACV
Combustor Dome	1	4	23FDB	PF101M1	HF1011M	EOT, LCY,FTC, CIC	EOTN, TACN
Outer Combustion Liner	1	4	23FDC	PF101M2	HF1011M	EOT, LCY,FTC, CIC	EOTN, TACN
Inner Combustion Liner	1	4	23FDD	PF101M3	HF1011M	EOT, LCY,FTC, CIC	EOTN, TACN
Inner Cowl	1	4	23FDE	PF101M4	HF1011M	EOT, LCY,FTC, CIC	EOTN, TACN
Outer Cowl	1	4	23FDF	PF101M5	HF1011M	EOT, LCY,FTC, CIC	EOTN, TACN

F101102 EDITS

TRANSACTION	FHR	EOT	LCY	FTC	CIC	ABC	ABT	TT1	TT2	TT3	TT4	TT5
Removals, Installations	25	10.0	3	30	30	15	0.5	3.0	3.0	3.0	3.0	3.0
"6N" Possessor Change												
"6U" Update												
Normal Limit	75.0	>0<=10.0	3	60								
Extended Flight	–	>0<=25.0		200								

Additional 6U Edits:

1. 0.5 times delta EOT greater than TT1 greater than TT2 greater than TT3 greater than TT4 greater than TT5.
2. ABC less than or equal to 5 times delta FTC.
3. ABT less than or equal to .2 times delta EOT.
4. If ABC = 0, then ABT = 0.
5. 0. less than delta FTC less than 60.
6. 0. less than delta LCY less than or equal to delta FTC + 1.
7. 0. less than delta LCY less than or equal to 60.
8. Delta FTC less than or equal to delta CIC less than or equal to 10. times delta FTC.

Table 9-37. Configured CII for AF F108-100/201 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Engine	1	2	27000	AF10810		EOT, MAJ, FHR, EG9, EG8, MIN, WOW, EGT	MAJQ, CALQ, WOWQ
Power Management Control	1	3	27HAJ	LF10811	AF10810	EOT, WOW	CALQ, WOWQ
Main Engine Control	1	3	27HAC	LF10812	AF10810	EOT, WOW	CALQ, WOWQ
Pump, Fuel	1	3	27HAA	LF10813	AF10810	EOT, WOW	CALQ, WOWQ
Fan and Booster Assy	1	3	27AA0	HF10820	AF10810	EOT, MAJ, WOW	CALQ, WOWQ
Spool, Booster-Rotor	1	4	27AAH	PF10821	HF10820	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Seal, Rotating, Air Fwd	1	4	27AAM	PF10822	HF10820	EOT, WOW	CALQ, WOWQ
Disk, Assy-Fan Rotor Stg 1	1	4	27AAG	PF10824	HF10820	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
#1 & 2 Bearing Support Assy	1	3	27ABO	HF10830	AF10810	EOT, MAJ, WOW	CALQ, WOWQ
Shaft Assy-Fan	1	4	27ABA	PF10831	HF10830	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Bearing, Ball #1	1	4	27ABF	PF10832	HF10830	EOT, WOW	CALQ, WOWQ
Housing, #1 Bearing	1	4	27ABD	PF10833	HF10830	EOT, WOW	CALQ, WOWQ
Bearing, Roller #2	1	4	27ABJ	PF10834	HF10830	EOT, WOW	CALQ, WOWQ
Fan Frame Assy	1	3	27AD0	HF10840	AF10810	EOT, WOW	CALQ, WOWQ
Inlet Gearbox & #3 Bearing	1	3	27AC0	HF10850	AF10810	EOT, WOW	CALQ, WOWQ
Bearing, Thrust #3	1	4	27ACA	PF10851	HF10850	EOT, WOW	CALQ, WOWQ
HPC Rotor Assy	1	3	27AF0	HF10860	AF10810	EOT, MAJ, WOW	CALQ, WOWQ
Shaft, Rotor	1	4	27AF2	PF10861	HF10860	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Spool, Stg 1 & 2	1	4	27AFK	PF10862	HF10860	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Disk, Stg 3	1	4	27AFL	PF10863	HF10860	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Spool Assy-Rotor Stg 4-9	1	4	27AFM	PF10864	HF10860	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Seal, Rotating-Air Rear	1	4	27AFX	PF10865	HF10860	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
HPC Stator-Fwd Assy	1	3	27AG0	HF10870	AF10810	EOT, WOW	CALQ, WOWQ
HPC Stator-Rear Assy	1	3	27AH0	HF10880	AF10810	EOT, WOW	CALQ, WOWQ
Combustion Casing Assy	1	3	27AJ0	HF10890	AF10810	EOT, WOW	CALQ, WOWQ
Combustion Chamber Assy	1	3	27AK0	HF108A0	AF10810	EOT, WOW	CALQ, WOWQ
HPT Nozzle Assy	1	3	27AL0	HF108B0	AF10810	EOT, WOW	CALQ, WOWQ
HPT Rotor Assy	1	3	27AM0	HF108C0	AF10810	EOT, MAJ, WOW	CALQ, WOWQ
Shaft, HPT Front	1	4	27AMK	PF108C1	HF108C0	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Seal, Rotating Air-HPT Front	1	4	27AMD	PF108C2	HF108C0	EOT, MAJ, WOW	MAJN, CALQ, WOWQ

Table 9-37. Configured CII for AF F108-100/201 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Disk-HPT Rotor	1	4	27AML	PF108C3	HF108C0	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Shaft-HPT Rear	1	4	27AMN	PF108C4	HF108C0	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
LPT Stg 1 Nozzle Assy	1	3	27ANO	HF108DO	AF10810	EOT, WOW	CALQ, WOWQ
LPT Assy	1	3	27AW0	HF108E0	AF10810	EOT, MAJ, WOW	CALQ, WOWQ
Disk, LPT Rotor Stg 1	1	4	27AWG	PF108E1	HF108E0	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Disk, LPT Rotor Stg 2	1	4	27AWH	PF108E2	HF108E0	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Disk, LPT Rotor Stg 3	1	4	27AWJ	PF108E3	HF108E0	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Disk, LPT Rotor Stg 4	1	4	27AWK	PF108E4	HF108E0	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Support Conical	1	4	27AWL	PF108E5	HF108E0	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Seal, Rotating Air LPT Stg 1	1	4	27AWM	PF108E6	HF108E0	EOT, WOW	CALQ, WOWQ
Seal, Rotating Air LPT Stg 2	1	4	27AWN	PF108E7	HF108E0	EOT, WOW	CALQ, WOWQ
Seal, Rotating Air LPT Stg 3	1	4	27AWP	PF108E8	HF108E0	EOT, WOW	CALQ, WOWQ
Seal, Rotating Air LPT Stg 4	1	4	27AWQ	PF108E9	HF108E0	EOT, WOW	CALQ, WOWQ
LPT Shaft Assy	1	3	27AZ0	HF108F0	AF10810	EOT, MAJ, EG8, EG9, MIN, WOW	CALQ, WOWQ
Shaft, LPT	1	4	27AZR	PF108F1	HF108F0	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Shaft, Stub LPT	1	4	27AZS	PF108F2	HF108F0	EOT, MAJ, WOW	MAJN, CALQ, WOWQ
Bearing, Roller #4	1	4	27AZQ	PF108F3	HF108F0	EOT, WOW	CALQ, WOWQ
Bearing, Roller #5	1	4	27AZD	PF108F4	HF108F0	EOT, WOW	CALQ, WOWQ
Turbine Frame Assy	1	3	27A10	HF108G0	AF10810	EOT, WOW	CALQ, WOWQ
Transfer Gearbox Assy	1	3	27AP0	HF108H0	AF10810	EOT, WOW	CALQ, WOWQ
Accessory Gearbox Assy	1	3	27AQ0	HF108J0	AF10810	EOT, WOW	CALQ, WOWQ

F0108 EDITS

TRANSACTION	EOT	MAJ	EG8	EG9	MIN	WOW
Removals, Installations, "6N" Possessor	25.0	30.0	5.00	5.00	90	25.00
"6U" Update Normal Limit	99.9	100	Less than EOT	Less than EG8	Greater than 0 200	Less than EOT
Extended Flight	99.9	100	Less than EOT	Less than EG8	Greater than 0 200	Less than EOT

Table 9-38. Configured CII for (Navy and FMS) F108 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Engine	1	2	27000	AG10810		EOT, MAJ, FHR	EOTN, MAJN
Power Management Control	1	3	538XX	LG10811	AG10810	EOT, MAJ	EOTN, MAJN
Main Engine Control	1	3	5520X	LG10812	AG10810	EOT, MAJ	EOTN, MAJN
Pump, Fuel	1	3	531XX	LG10813	AG10810	EOT, MAJ	EOTN, MAJN
Fan & Booster Assy	1	3	51100	HG10820	AG10810	EOT, MAJ	EOTN, MAJN
Spool, Booster-Fan	1	4	51241	PG10821	HG10820	EOT, MAJ	EOTN, MAJN
Fan, Rotating, Airseal	1	4	53230	PG10822	HG10820	EOT, MAJ	EOTN, MAJN
Disk, Fan Stg 1	1	4	51220	PG10824	HG10820	EOT, MAJ	EOTN, MAJN
#1 & 2 Bearing Support	1	3	51300	HG10830	AG10810	EOT, MAJ	EOTN, MAJN
Shaft Fan	1	4	513B0	PG10831	HG10830	EOT, MAJ	EOTN, MAJN
Bearing, #1	1	4	51320	PG10832	HG10830	EOT, MAJ	EOTN, MAJN
Housing, #1 Bearing	1	4	51350	PG10833	HG10830	EOT, MAJ	EOTN, MAJN
Bearing, #2	1	4	51370	PG10834	HG10830	EOT, MAJ	EOTN, MAJN
Fan Frame	1	3	51500	HG10840	AG10810	EOT, MAJ	EOTN, MAJN
Inlet Gearbox Bearing	1	3	51400	HG10850	AG10810	EOT, MAJ	EOTN, MAJN
Bearing, #3	1	4	51470	PG10851	HG10850	EOT, MAJ	EOTN, MAJN
HPC Rotor Assy	1	3	52100	HG10860	AG10810	EOT, MAJ	EOTN, MAJN
Shaft, HPC	1	4	52140	PG10861	HG10860	EOT, MAJ	EOTN, MAJN
Spool, Stg 1 & 2	1	4	52110	PG10862	HG10860	EOT, MAJ	EOTN, MAJN
Disk, Stg 3 HPC	1	4	52150	PG10863	HG10860	EOT, MAJ	EOTN, MAJN
HPC Spool Stgs 4-9	1	4	52170	PG10864	HG10860	EOT, MAJ	EOTN, MAJN
HPC Aft, Rotating - Airseal	1	4	521F0	PG10865	HG10860	EOT, MAJ	EOTN, MAJN
HPC Fwd Stator Assy	1	3	5220X	HG10870	AG10810	EOT, MAJ	EOTN, MAJN
HPC Aft Stator Assy	1	3	5230X	HG10880	AG10810	EOT, MAJ	EOTN, MAJN
Combustor Case	1	3	5240X	HG10890	AG10810	EOT, MAJ	EOTN, MAJN
Combustor	1	3	5250X	HG108A0	AG10810	EOT, MAJ	EOTN, MAJN
HPT Nozzle Assy	1	3	5260X	HG108B0	AG10810	EOT, MAJ	EOTN, MAJN
HPT Rotor Assy	1	3	52700	HG108C0	AG10810	EOT, MAJ	EOTN, MAJN
Shaft, HPT Fwd	1	4	52740	PG108C1	HG108C0	EOT, MAJ	EOTN, MAJN
Seal, Rotating HPT Fwd Air-HPT Front	1	4	52730	PG108C2	HG108C0	EOT, MAJ	EOTN, MAJN
HPT Disk	1	4	52720	PG108C3	HG108C0	EOT, MAJ	EOTN, MAJN
Shaft-HPT Aft	1	4	52750	PG108C4	HG108C0	EOT, MAJ	EOTN, MAJN
LPT Stg 1 Nozzle Assy	1	3	52800	HG108DO	AG10810	EOT, MAJ	EOTN, MAJN
LPT Rotor Assy	1	3	53100	HG108E0	AG10810	EOT, MAJ	EOTN, MAJN
Disk, LPT Stg 1	1	4	53150	PG108E1	HG108E0	EOT, MAJ	EOTN, MAJN

Table 9-38. Configured CII for (Navy and FMS) F108 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Disk, LPT Stg 2	1	4	53150	PG108E2	HG108E0	EOT, MAJ	EOTN, MAJN
Disk, LPT Stg 3	1	4	53170	PG108E3	HG108E0	EOT, MAJ	EOTN, MAJN
Disk, LPT Stg 4	1	4	53180	PG108E4	HG108E0	EOT, MAJ	EOTN, MAJN
Support Conical	1	4	531B0	PG108E5	HG108E0	EOT, MAJ	EOTN, MAJN
LPT, Rotating Airseal Stg 1	1	4	53150	PG108E1	HG108E0	EOT, MAJ	EOTN, MAJN
LPT, Rotating Airseal Stg 2	1	4	531D0	PG108E7	HG108E0	EOT, MAJ	EOTN, MAJN
LPT, Rotating Airseal Stg 3	1	4	531E0	PG108E8	HG108E0	EOT, MAJ	EOTN, MAJN
LPT, Rotating Airseal Stg 4	1	4	531F0	PG108E9	HG108E0	EOT, MAJ	EOTN, MAJN
LPT Shaft Assy	1	3	53200	HG108F0	AG10810	EOT, MAJ	EOTN, MAJN
Shaft, LPT	1	4	53210	PG108F1	HG108F0	EOT, MAJ	EOTN, MAJN
Shaft, Stub LPT	1	4	53220	PG108F2	HG108F0	EOT, MAJ	EOTN, MAJN
Bearing, #4	1	4	532C0	PG108F3	HG108F0	EOT, MAJ	EOTN, MAJN
Bearing, #5	1	4	532D0	PG108F4	HG108F0	EOT, MAJ	EOTN, MAJN
Turbine Frame	1	3	53300	HG108G0	AG10810	EOT, MAJ	EOTN, MAJN
Transfer Gearbox	1	3	522XX	HG108H0	AG10810	EOT, MAJ	EOTN, MAJN
Accessory Gearbox	1	3	521XX	HG108J0	AG10810	EOT, MAJ	EOTN, MAJN

Table 9-39. Configured CII for F110-100 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
F110-GE-100 Engine	1	2	27Z00	AF11010	F16 C/D	EOT, ABC, ABT, LCY, FHR, FTC, CIC, TT1-TT5, IFT	NONE
Aft Control	1	3	27GPL	LF11011	AF11010	EOT	EOTN
Augmentor Control	1	3	27GDH	LF11012	AF11010	EOT	EOTN, EOTV
VSV Actuator	2	3	27GHC	LF11013	AF11010	EOT	EOTN
Pyrometer T4B	1	3	27GPP	LF11015	AF11010	EOT	EOTN
Lube & Hydr Tank	1	3	27GJA	LF11016	AF11010	EOT	EOTN
Fuel Oil Cooler	1	3	27GAU	LF11017	AF11010	EOT	EOTN
Hydraulic Heat Exchanger	1	3	27GMJ	LF11018	AF11010	EOT	EOTN
VSV Feedback Cable	1	3	27GG3	LF11019	AF11010	EOT	EOTN
Anti-Icing Valve	1	3	27GTA	LF1101A	AF11010	EOT	EOTN
IGV Actuator	1	3	27BFA	LF1101B	AF11010	EOT	EOTN
EMSP/DEC	1	3	27GPT	LF1101C	AF11010	EOT	EOTN
Alternator Rotor	1	3	27GPH	LF1101D	AF11010	EOT, LCY, FTC, CIC	TACN
Alternator Stator	1	3	27GPJ	LF1101H	AF11010	EOT, LCY, FTC, CIC	TACN
Front Frame Assy	1	3	27BAO	HF11020	AF11010	EOT	EOTN
#1 Bearing OR	1	4	27FAE	PF11021	HF11020	EOT	EOTN
Bare Front Frame	1	4	27BAA	PF11022	HF11022	EOT	EOTN
Fan Rotor Assy	1	3	27BDO	HF11030	AF11010	EOT, LCY, FTC, CIC, IFT	EOTN, TACN, TACV
Disk, Stg 1 Fan	1	4	27BDE	PF11031	HF11030	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stg 1 Fan	1	5	27BDB	SF11031	PF11031	EOT	EOTN
Disk, Stg 2 Fan	1	4	27BDF	PF11032	HF11030	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stg 2 Fan	1	5	27BDC	SF11032	PF11032	EOT	EOTN
Disk, Stg 3 Fan	1	4	27BDG	PF11033	HF11030	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Set, Stg 3 Fan	1	5	27BDD	SF11033	PF11033	EOT	EOTN
Fan Shaft, Rear	1	4	27BDA	PF11034	HF11034	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
#1 Bearing Inner Race	1	4	27FAF	PF11035	HF11030	EOT	EOTN
#2 Bearing	1	4	27FBM	PF11036	HF11030	EOT	EOTN
Fan Frame Assy	1	4	27CAO	HF11040	AF11010	EOT	EOTN
FDT Sensor (T2.5)	2	4	27GAW	PF11041	HF11040	EOT	EOTN
Fan Speed Sensor (N1)	1	4	27GPS	PF11042	HF11040	EOT	EOTN
Inlet Gearbox	1	4	27CCO	HF11050	HF11040	EOT, LCY, FTC, CIC	EOTN
Bevel Gear, IGB	1	5	27CCC	PF11051	HF11050	EOT, LCY, FTC, CIC	EOTN, TACV
Fan Stator Assy	1	3	27BCO	HF11060	AF11010	EOT	EOTN
Compressor Stator Assy, Fwd	1	3	27CDO	HF11070	AF11010	EOT	EOTN
Comp Stator Case Assy, Fwd	1	4	27CDA	PF11071	HF11070	EOT	EOTN
HPC Rotor Assembly	1	3	27CGO	HF11080	AF11010	EOT, LCY, FTC, CIC	EOTN, TACN
HPC Spool Stg 1-2	1	4	27CGD	PF11081	HF11080	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Set, Stg 1 HPC	1	5	27CGG	SF11081	PF11081	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Set, Stg 2 HPC	1	5	27CGH	SF11082	PF11081	EOT	EOTN
HPC Disk Stg 3	1	4	27CGE	PF11082	HF11080	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stg 3 HPC	1	5	27CGJ	SF11083	PF11082	EOT	EOTN

Table 9-39. Configured CII for F110-100 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
HPC Spool Stg 4-9	1	4	27CGF	PF11083	HF11080	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stg 4 HPC	1	5	27CGK	SF11084	PF11083	EOT	EOTN
HPC Fwd Shaft	1	4	27CGA	PF11084	HF11080	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
HPC Rotating Air Seal, Rear	1	4	27CGS	PF11085	HF11080	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
#3 Bearing	1	4	27FCG	PF11086	HF11080	EOT	EOTN
Compressor Stator Assy, R	1	3	27CFO	HF11090	AF11010	EOT	EOTN
Comp Stator Case Assy, R	1	4	27CFB	PF11091	HF11090	EOT	EOTN
Comp Stator Rear Support	1	4	27CFA	PF11092	HF11090	EOT	EOTN
Combustor Case	1	3	27CJA	HF110A0	AF11010	EOT, LCY, FTC, CIC, IFT	EOTN, TACN, TACV
Combustor	1	4	27CJG	PF110A1	HF110A0	EOT, LCY, FTC, CIC, IFT	EOTN, TACV
Combustor Dome	1	5	27CJH	PF110AA	PF110A1	EOT, LCY, FTC, CIC	TACN
Inner Comb Liner	1	5	27CJL	PF110AB	PF110A1	EOT, LCY, FTC, CIC	TACN
Outer Comb Liner	1	5	27CJK	PF110AC	PF110A1	EOT, LCY, FTC, CIC	TACN
Outer Cowl	1	5	27CJ2	PF110AD	PF110A1	EOT, LCY, FTC, CIC	TACN
Inner Cowl	1	5	27CJ1	PF1l0AE	PF110A1	EOT, LCY, FTC, CIC	TACN
HPT Shroud Assy	1	4	27CJT	PF110A2	HF110A0	EOT, LCY, FTC, CIC, IFT	EOTN, TACN, TACV
HPT Nozzle Assy	1	4	27CJM	PF110A3	HF110A0	EOT, IFT	EOTN
Fwd Inner Nozzle Support	1	4	27CJC	PF110A4	HF110A0	EOT, LCY, FTC, CIC	TACN
HPT Rotor Assy	1	3	27CLO	HF110B0	AF11010	EOT, LCY, FTC, CIC, IFT	EOTN, TACN
Shaft HPT Fwd	1	4	27CLA	PF110B1	HF110B0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Seal, Rotating Fwd	1	4	27CLB	PF110B2	HF110B0	EOT, LCY, FTC, CIC	EOTN TACN, TACV
Disk	1	4	27CLD	PF110B3	HF110B0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set	1	5	27CLG	SF110B3	PF110B3	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Retainer, Fwd	1	4	27CLC	PF110B4	HF110B0	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Retainer, Aft	1	4	27CLE	PF110B5	HF110B0	EOT, LCY, FTC, CIC	EOTN, TACN
Shaft, Aft	1	4	27CLF	PF110B6	HF110B0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
LPT Nozzle Assy, Stg 1	1	3	27DCO	HF110C0	AF11010	EOT, LCY, FTC, CIC	EOTN, TACN
LPT Nozzle, Stg 1	1	4	27DCA	PF110C1	HF110C0	EOT, LCY, FTC, CIC	EOTN, TACV, TACN
LPT Nozzle, Support, Stg 1	1	4	27DCB	PF110C2	HF110C0	EOT, LCY, FTC, CIC	EOTN, TACV, TACN
LPT Rotor Assy	1	3	27DAO	HF110D0	AF11010	EOT, LCY, FTC, CIC, IFT	EOTN, TACN
Shaft, LPT	1	4	27DAA	PF110D1	HF110D0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV

Table 9-39. Configured CII for F110-100 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
Retainer, Stage 1 Blade	1	4	27DAC	PF110D2	HF110D0	EOT, LCY, FTC, CIC	EOTN, TACN
Disk, Stage 1 LPT	1	4	27DAD	PF110D3	HF110D0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stage 1	1	5	27DAB	SF110D3	PF110D3	EOT, LCY, FTC, CIC	EOTN, TACN
Disk, Stage 2 LPT	1	4	27DAM	PF110D4	HF110D0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stage 2	1	5	27DAK	SF110D4	PF110D4	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Spacer, Seal	1	4	27DAN	PF110D5	HF110D0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Retainer, Stage 2 Blade	1	4	27DAL	PF110D6	HF110D0	EOT, LCY, FTC, CIC	EOTN, TACN
Seal, Air	1	4	27DAH	PF110D7	HF110D0	EOT	EOTN
Seal, Rotating Air	1	4	27DAJ	PF110D8	HF110D0	EOT	EOTN
#4 Bearing, IR & Roller Assy	1	4	27FDA	PF110D9	HF110D0	EOT	EOTN
#5 Bearing IR	1	4	27DAT	PF110DA	HF110D0	EOT	EOTN
LPT Nozzle Assy, Stg 2	1	3	27DDO	HF110E0	AF11010	EOT	EOTN
Turbine Frame Assy	1	3	27DEO	HF110F0	AF11010	EOT	EOTN
Mount Ring	1	4	27DED	PF110F1	HF110F0	EOT	EOTN
#5 Bearing OR- Roller Assy	1	4	27DEN	PF110F2	HF110F0	EOT	EOTN
Bare Turbine Frame	1	4	27DEA	PF110F3	HF110F0	EOT, LCY, FTC, CIC	TACN
Augmentor Assy	1	3	27EAO	HF110G0	AF11010	EOT, IFT, ABC, ABT	EOTN
Flameholder	1	4	27EAD	PF110G1	HF110G0	EOT, ABC, ABT	EOTN
Aug Duct Liner	1	4	27EAB	PF110G2	HF110G0	EOT, ABC, ABT	EOTN
Mixing Duct	1	4	27EAC	PF110G3	HF110G0	EOT, ABC, ABT	EOTN
Damper Ring	1	4	27EAQ	PF110G4	HF110G0	EOT, ABC, ABT	EOTN
EGT Thermocouple (T5.6)	1	4	27GPN	PF110G5	HF110G0	EOT, ABC, ABT	EOTN
Exhaust Nozzle Assy	1	4	27ECO	HF110H0	HF110G0	EOT, IFT	EOTN
Exh Nozzle Act Ring	1	5	27ECZ	PF110H1	HF110H0	EOT	EOTN
Hyd Syn Actuator	4	5	27EDC	PF110H2	HF110H0	EOT	EOTN, EOTV
Exhaust Duct Liner	1	5	27ECC	PF110H3	HF110H0	EOT, ABC, ABT	EOTN
Accessory Gearbox	1	3	27A00	HF110J0	AF11010	EOT, ABC, ABT	EOTN
Radial Draft Shaft	1	4	27CCK	PF110J1	HF110J0	EOT	EOTN
Gearshaft, Alt Drive	1	4	27ANA	PF110J2	HF110J0	EOT	EOTN
Gearshaft, Spur #1	1	4	27AHA	PF110J3	HF110J0	EOT	EOTN
Bevel Gear, AGB	1	4	27AEC	PF110J4	HF110J0	EOT	EOTN
Gearshaft Spur #2	1	4	27AHG	PF110J5	HF110J0	EOT	EOTN
Gearshaft, Bevel & Spur	1	4	27AGE	PF110J6	HF110J0	EOT	EOTN
Main Engine Control	1	4	27GAL	PF110J7	HF110J0	EOT	EOTN, EOTV
Main Fuel Pump	1	4	27GAH	PF110J8	HF110J0	EOT	EOTN, EOTV
Fuel Boost Pump	1	4	27GAA	PF110J9	HF110J0	EOT	EOTN, EOTV
Augmentor Fuel Pump	1	4	27GDC	PF110JA	HF110J0	EOT	EOTN, EOTV
Hydraulic Pump	1	4	27GMC	PF110JB	HF110J0	EOT	EOTN, EOTN
Lube-Scavenge Pump	1	4	27GJH	PF110JC	HF110J0	EOT	EOTN, EOTV
Coupling, Shaft	1	4	27AGB	PF110JD	HF110J0	EOT, LCY, FTC, CIC	TACN

Table 9-40. Configured CII for F110-100B Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
F110-GE-100B Engine	1	2	27Z00	AF11B10	F16 C/D	EOT, ABC, ABT, LCY, FHR, FTC, CIC, TT1-TT5, IFT	NONE
Augmentor Control	1	3	27GDH	LF11B12	AF11B10	EOT	EOTN, EOTV
VSV Actuator, Left Side	1	3	27GHG	LF11Bl3	AF11B10	EOT	EOTN
VSV Actuator, Right Side	1	3	27GHC	LF11B14	AF11B10	EOT	EOTN
Pyrometer T4B	1	3	27GPP	LF11B15	AF11B10	EOT	EOTN
Lube & Hydr Tank	1	3	27GJA	LF11B16	AF11B10	EOT	EOTN
Fuel Oil Cooler	1	3	27GAU	LF11B17	AF11B10	EOT	EOTN
Hydraulic Heat Exchanger	1	3	27GMJ	LF11B18	AF11B10	EOT	EOTN
VSV Feedback Cable	1	3	27GG3	LF11B19	AF11Bl0	EOT	EOTN
Anti-Icing Valve	1	3	27GTA	LF11B1A	AF11B10	EOT	EOTN
IGV Actuator	1	3	27BFA	LF11B1B	AF11B10	EOT	EOTN
DEC	1	3	27GPT	LF11B1C	AF11B10	EOT	EOTN
Alternator Rotor	1	3	27GPH	LF11B1D	AF1IB10	EOT, LCY, FTC, CIC	TACN
Alternator Stator	1	3	27GPJ	LF11B1H	AF11B10	EOT, LCY, FTC, CIC	TACN
Front Frame Assy #1	1	3	27BAO	HF11B20	AF11B10	EOT	EOTN
Bearing O/R & RLR	1	4	27FAE	PF11B21	HF11B20	EOT	EOTN
Bare Front Frame	1	4	27BAA	PF11B22	HF11B20	EOT	EOTN
Fan Rotor Assy	1	3	27BDO	HF11B30	AF11B10	EOT, LCY, FTC, CIC, IFT	EOTN, TACN, TACV
Disk, Stg 1 Fan	1	4	27BDE	PF11B31	HF11B30	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stg 1 Fan	1	5	27BDB	SF11B31	PF11B31	EOT	EOTN
Disk, Stg 2 Fan	1	4	27BDF	PF11B32	HF11B30	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stg 2 Fan	1	5	27BDC	SF11B32	PF11B32	EOT	EOTN
Disk, Stg 3 Fan	1	4	27BDG	PF11B33	HF11B30	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Set, Stg 3 Fan	1	5	27BDD	SF11B33	PF11B33	EOT	EOTN
Fan Shaft, Rear	1	4	27BDA	PF11B34	HF11B30	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
#1 Bearing Inner Race	1	4	27FAF	PF11B35	HF11B30	EOT	EOTN
#2 Bearing	1	4	27FBM	PF11B36	HF11B30	EOT	EOTN
Fan Frame Assy	1	4	27CAO	HF11B40	AF11B10	EOT	EOTN
FDT Sensor (T2.5)	2	4	27GAW	PF11B41	HF11B40	EOT	EOTN
Fan Speed Sensor (N1)	1	4	27GPS	PF11B42	HF11B40	EOT	EOTN
Inlet Gearbox	1	4	27CCO	HF11B50	HF11B40	EOT, LCY, FTC, CIC	EOTN
Bevel Gear, IGB	1	5	27CCC	PF11B51	HF11B50	EOT, LCY, FTC, CIC	EOTN, TACV
Fan Stator Assy	1	3	27BCO	HF11B60	AF11B10	EOT	EOTN
Compressor Stator Assy, Forward	1	3	27CDO	HF11B70	AF11B10	EOT	EOTN
Compressor Stator Case Assy, Forward	1	3	27CDA	PF11B71	HF11B70	EOT	EOTN
HPC Rotor Assembly	1	3	27CG0	HF11B80	AF11B10	EOT, LCY, FTC, CIC	EOTN, TACN
HPC Spool Stg 1-2	1	4	27CGD	PF11B81	HF11B80	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Set, Stg 1 HPC	1	5	27CGG	SF11B81	PF11B81	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Set, Stg 2 HPC	1	5	27CGH	SF11B82	PF11B81	EOT	EOTN

Table 9-40. Configured CII for F110-100B Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
HPC Disk Stg 3	1	4	27CGE	PF11B82	HF11B80	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stg 3 HPC	1	5	27CGJ	SF11B83	PF11B82	EOT	EOTN
HPC Spool Stg 4-9	1	4	27CGF	PF11B83	HF11B80	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stg 4 HPC	1	5	27CGK	SF11B84	PF11B83	EOT	EOTN
HPC Fwd Shaft	1	4	27CGA	PF11B84	HF11B80	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
HPC AFT Rotating Air Seal	1	4	27CGS	PF11B85	HF11B80	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
#3 Bearing	1	4	27FCG	PF11B86	HF11B80	EOT	EOTN
HPC AFT Compressor Stator Assy	1	3	27CF0	HF11B90	AF11B10	EOT	EOTN
HPC AFT Compressor Stator Case Assy, R	1	4	27CFB	PF11B91	HF11B90	EOT	EOTN
HPC AFT Compressor Stator Support	1	4	27CFA	PF11B92	HF11B90	EOT	EOTN
Combustor Case	1	3	27CJA	HF11BA0	AF11B10	EOT, LCY, FTC, CIC, IFT	EOTN, TACN, TACV
Combustor	1	4	27CJG	PF11BA1	HF11BA0	EOT, LCY, FTC, CIC, IFT	EOTN, TACV
Combustor Dome	1	5	27CJH	PF11BAA	PF11BA1	EOT, LCY, FTC, CIC	TACN
Inner Combustion Liner	1	5	27CJL	PF11BAB	PF11BA1	EOT, LCY, FTC, CIC	TACN
Outer Combustion Liner	1	5	27CJK	PF11BAC	PF11BA1	EOT, LCY, FTC, CIC	TACN
Outer Cowl	1	5	27CJ2	PF11BAD	PF11BA1	EOT, LCY, FTC, CIC	TACN
Inner Cowl	1	5	27CJ1	PF11BAE	PF11BA1	EOT, LCY, FTC, CIC	TACN
HPT Shroud Assy	1	4	27CJT	PF11BA2	HF11BA0	EOT, LCY, FTC, CIC, IFT	EOTN, TACN, TACV
HPT Nozzle Assy	1	4	27CJM	PF11BA3	HF11BA0	EOT, LCY, FTC, CIC, IFT	EOTN
Fwd Inner Nozzle Support	1	4	27CJC	PF11BA4	HF11BA0	EOT, LCY, FTC, CIC	TACN
HPT Rotor Assy	1	3	27CL0	HF11BB0	AF11B10	EOT, LCY, FTC, CIC, IFT	EOTN, TACN, TACV
Shaft, HPT Fwd	1	4	27CLA	PF11BB1	HF11BB0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Seal, Rotating Fwd	1	4	27CLB	PF11BB2	HF11BB0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
HPT Disk	1	4	27CLD	PF11BB3	HF11BB0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
HPT Blade Set	1	5	27CLG	SF11BB3	PF11BB3	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Retainer, Fwd	1	4	27CLC	PF11BB4	HF11BB0	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Retainer, HPT Aft	1	4	27CLE	PF11BB5	HF11BB0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Shaft, HPT Aft	1	4	27CLF	PF11BB6	HF11BB0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
LPT Nozzle, Assy Stg 1	1	3	27DCO	HF11BC0	AF11B10	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
LPT Nozzle, Stg 1	1	4	27DCA	PF11BC1	HF11BC0	EOT, LCY, FTC, CIC	EOTN, TACV, TACN

Table 9-40. Configured CII for F110-100B Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
LPT Nozzle, Support, Stg 1	1	4	27DCB	PF11BC2	HF11BC0	EOT, LCY, FTC, CIC	EOTN, TACN
LPT Rotor Assy	1	3	27DAO	HF11BD0	AF11B10	EOT, LCY, FTC, CIC, IFT	EOTN, TACN
Shaft, LPT	1	4	27DAA	PF11BD1	HF11BD0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Retainer, Stage 1 Blade	1	4	27DAC	PF11BD2	HF11BD0	EOT, LCY, FTC, CIC	EOTN, TACN
Disk, Stage 1 LPT	1	4	27DAD	PF11BD3	HF11BD0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stage 1	1	5	27DAB	SF11BD3	PF11BD3	EOT, LCY, FTC, CIC	EOTN, TACN
Disk, Stage 2 LPT	1	4	27DAM	PF11BD4	HF11BD0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stage 2	1	5	27DAK	SF11BD4	PF11BD4	EOT, LCY, FTC, CIC	EOTN, TACN
LPT Blade Spacer, Seal	1	4	27DAN	PF11BD5	HF11BD0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Retainer, Stage 2 LPT Blade	1	4	27DAL	PF11BD6	HF11BD0	EOT, LCY, FTC, CIC	EOTN, TACN
LPT Rotating Seal Housing	1	4	27DAH	PF11BD7	HF11BD0	EOT	EOTN
Seal, LPT Rotating Air	1	4	27DAJ	PF11BD8	HF11BD0	EOT	EOTN
#4 Bearing, IR & Roller Assy	1	4	27FDA	PF11BD9	HF11BD0	EOT	EOTN
#5 Bearing IR	1	4	27DAT	PF11BDA	HF11BD0	EOT	EOTN
LPT Nozzle Assy, Stg 2	1	3	27DDO	HF11BE0	AF11B10	EOT	EOTN
Turbine Frame Assy	1	3	27DEO	HF11BF0	AF11B10	EOT, LCY, FTC, CIC	EOTN
Mount Ring	1	4	27DED	PF11BF1	HF11BF0	EOT	EOTN
#5 Bearing OR-Roller Assy	1	4	27DEN	PF11BF2	HF11BF0	EOT	EOTN
Bare Turbine Frame	1	4	27DEA	PF11BF3	HF11BF0	EOT, LCY, FTC, CIC	TACN
Augmentor Assy	1	3	27EAO	HF11BG0	AF11B10	EOT, IFT, ABC, ABT	EOTN
Flameholder	1	4	27EAD	PF11BG1	HF11BG0	EOT, ABC, ABT	EOTN
Augmentor Duct Liner	1	4	27EAB	PF11BG2	HF11BG0	EOT, ABC, ABT	EOTN
Mixing Duct	1	4	27EAC	PF11BG3	HF11BG0	EOT, ABC, ABT	EOTN
Damper Ring	1	4	27EAQ	PF11BG4	HF11BG0	EOT, ABC, ABT	EOTN
EGT Thermocouple (T5.6)	1	4	27GPN	PF11BG5	HF11BG0	EOT, ABC, ABT	EOTN
Exhaust Nozzle Assy	1	4	27ECO	HF11BH0	HF11BG0	EOT, IFT, ABC, ABT	EOTN
Exh Nozzle Act Ring	1	5	27ECZ	PF11BH1	HF11BH0	EOT	EOTN
Hyd Syn Actuator	4	5	27EDC	PF11BH2	HF11BH0	EOT	EOTN, EOTV
Exhaust Duct Liner	1	5	27ECC	PF11BH3	HF11BH0	EOT, ABC, ABT	EOTN
Accessory Gearbox	1	3	27A00	HF11BJ0	AF11B10	EOT, LCY, FTC, CIC	EOTN
Radial Drive Shaft	1	4	27CCK	PF11BJ1	HF11BJ0	EOT	EOTN
Gearshaft, Alt Drive	1	4	27ANA	PF11BJ2	HF11BJ0	EOT	EOTN
Gearshaft, Spur #1	1	4	27AHA	PF11BJ3	HF11BJ0	EOT	EOTN
Bevel Gear, AGB	1	4	27AEC	PF11BJ4	HF11BJ0	EOT	EOTN
Gearshaft, Spur #2	1	4	27AHG	PF11BJ5	HF11BJ0	EOT	EOTN
Gearshaft, Bevel & Spur	1	4	27AGE	PF11BJ6	HF11BJ0	EOT	EOTN
Main Engine Control	1	4	27GAL	PF11BJ7	HF11BJ0	EOT	EOTN, EOTV
Main Fuel Pump	1	4	27GAH	PF11BJ8	HF11BJ0	EOT	EOTN, EOTV
Fuel Boost Pump	1	4	27GAA	PF11BJ9	HF11BJ0	EOT	EOTN, EOTV
Augmentor Fuel Pump	1	4	27GDC	PF11BJA	HF11BJ0	EOT	EOTN, EOTV
Hydraulic Pump	1	4	27GMC	PF11BJB	HF11BJ0	EOT	EOTN, EOTN

Table 9-40. Configured CII for F110-100B Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
Lube-Scavenge Pump	1	4	27GJH	PF11BJC	HF11BJ0	EOT	EOTN, EOTV
Coupling, Shaft	1	4	27AGB	PF11BJD	HF11BJ0	EOT, LCY, FTC, CIC	TACN

Table 9-41. Configured CII for F110-129 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
F110-GE-129 Engine	1	2	27Z00	AF12910	F16 C/D	EOT, ABC, ABT, LCY, FHR, FTC, ClC TT1-TT5, IFT	NONE
Digital Electronic Control	1	3	27GPL	LF12911	AF12910	EOT	EOTN, EOTV
Augmentor Control	1	3	27GDH	LF12912	AF12910	EOT	EOTN, EOTV
Anti-Icing Valve	1	3	27GTA	LF12913	AF12910	EOT	EOTN
IGV Actuator	1	3	27HFA	LF12914	AF12910	EOT	EOTN
Pyrometer T4B	1	3	27GPP	LF12915	AF12910	EOT	EOTN
Lube & Hydr Tank	1	3	27GJA	LF12916	AF12910	EOT	EOTN
Tri Oil Cooler	1	3	27GAU	LF12917	AF12910	EOT	EOTN, EOTV
VSV Actuator-Right	1	3	27GHD	LF12918	AF12910	EOT	EOTN, EOTV
VSV Feedback Cable	1	3	27GG3	LF12919	AF12910	EOT	EOTN
VSV Actuator-Left	1	3	27GHG	LF1291A	AF12910	EOT	EOTN, EOTV
Rotor, Alternator	1	3	27GPH	LF1291B	AF12910	EOT	EOTN, EOTV
Stator, Alternator	1	3	27GPJ	LF1291C	AF12910	EOT	EOTN, EOTV
Front Frame Assy	1	3	27BA0	HF12920	AF12910	EOT	EOTN, TACN
#1 Bearing OR	1	4	27FAE	PF12921	HF12920	EOT	EOTN
Fan Rotor Assy	1	3	27BD0	HF12930	AF12910	EOT, LCY, FTC, CIC	EOTN, TACN
Disk, Stg 1 Fan	1	4	27BDE	PF12931	HF12930	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stg 1 Fan	1	5	27BDB	SF12931	PF12931	EOT, LCY, FTC, CIC	EOTN, EOTV, TACN
Disk, Stg 2 Fan	1	4	27BDF	PF12932	HF12930	EOT, LCY, FTC, CIC	EOTN, TACV, TACN
Blade Set, Stg 2 Fan	1	5	27BDC	SF12932	PF12932	EOT	EOTN
Disk, Stg 3 Fan	1	4	27BDG	PF12933	HF12930	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Set, Stg 3 Fan	1	5	27BDD	SF12933	PF12930	EOT	EOTN
Fan Shaft, Aft	1	4	27BDA	PF12934	HF12930	EOT, LCY, FTC, CIC	EOTN, TACV, TACN
#1 Bearing Inner Race	1	4	27FAF	PF12935	HF12930	EOT	EOTN
#2 Bearing	1	4	27FBM	PF12936	HF12930	EOT	EOTN
Fan Frame Assy	1	3	27CA0	HF12940	AF12910	EOT, LCY, FTC, CIC	EOTN, TACN
FDT Sensor (T2.5)	2	4	27GAW	PF12941	HF12940	EOT	EOTV, EOTN
Fan Speed Sensor (N1)	1	4	27GPS	PF12942	HF12940	EOT	EOTN
Inlet Gearbox	1	4	27CC0	HF12950	HF12940	EOT, LCY, FTC, CIC	EOTN
Bevel Gear, IGB	1	5	27CCC	PF12951	HF12950	EOT, LCY, FTC, CIC	EOTN, TACV
Fan Stator Assy	1	3	27BC0	HF12960	AF12910	EOT	EOTN
HPC Compressor Stator Assy, Forward	1	3	27CD0	HF12970	AF12910	EOT	EOTN

Table 9-41. Configured CII for F110-129 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
Compressor Stator Case HPC, Forward	1	4	27CDA	PF12971	HF12970	EOT	EOTN, TACN
HPC Rotor Assembly	1	3	27CG0	HF12980	AF12910	EOT, LCY, FTC, CIC	EOTN, TACN
HPC Spool, Stg 1-2	1	4	27CGD	PF12981	HF12980	EOT, LCY, FTC, CIC	EOTN, TACV, TACN
HPC Stg 1 Blade Set	1	5	27CGG	SF12981	PF12981	EOT, LCY, FTC, CIC	EOTN
HPC Stg 2 Blade Set	1	5	27CGH	SF12982	PF12981	EOT	EOTN
HPC Fwd Shaft-Stg 3 Disk	1	4	27CGE	PF12982	HF12980	EOT, LCY, FTC, CIC	EOTN, TACV, TACN
HPC Stg 3 Blade Set	1	5	27CGJ	SF12983	PF12982	EOT	EOTN
HPC Spool, Stg 4-9	1	4	27CGF	PF12983	HF12980	EOT, LCY, FTC, CIC	EOTN, TACN
HPC Stg 4 Blade Set	1	5	27CGK	SF12984	PF12983	EOT	EOTN
HPC Rotating Air Seal, Rear	1	4	27CGS	PF12985	HF12980	EOT, LCY, FTC, CIC	EOTN, TACV, TACN
#3 Bearing	1	4	27FCG	PF12986	HF12980	EOT	EOTN
Compressor Stator Assy, Rear	1	3	27CF0	HF12990	AF12910	EOT	(NONE)
Compressor Stator Case Assy, R	1	4	27CFB	PF12991	HF12990	EOT	EOTN
Compressor Stator Rear Support	1	4	27CFA	PF12992	HF12990	EOT	EOTN
Combustor Case	1	3	27CJA	HF129A0	AF12910	EOT, LCY, FTC, CIC, IFT	EOTN, TACN
Combustor	1	4	27CJG	PF129A1	HF129A0	EOT, LCY, FTC, CIC, IFT	EOTN, TACV
Combustor Dome	1	5	27CJH	PF129AA	PF129A1	EOT, LCY, FTC, CIC	TACN
Inner Combustor Liner	1	5	27CJL	PF129AB	PF129A1	EOT, LCY, FTC, CIC	TACN
Outer Combustor Liner	1	5	27CJK	PF129AC	PG129A1	EOT, LCY, FTC, CIC	TACN
Cowl, Outer	1	5	27CJ2	PF129AD	PF129A1	EOT, LCY, FTC, CIC	TACN
Cowl, Inner	1	5	27CJI	PF129AE	PF129A1	EOT, LCY, FTC, CIC	TACN
HPT Shroud Assy	1	4	27CJT	PF129A2	HF129A0	EOT	EOTN
HPT Nozzle Assy	1	4	27CJM	PF129A3	HF129A0	EOT, LCY, FTC, CIC	EOTN, TACN
Fwd Inner Nozzle Support	1	4	27CJC	PF129A4	HF129A0	EOT, LCY, FTC, CIC	TACN
HPT Rotor Assy	1	3	27CLO	HF129B0	AF12910	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Retainer Segment HPT	1	4	27CLK	SF129B1	HF129B0	EOT, LCY, FTC, CIC	EOTN, TACN
Shaft, HPT Fwd	1	4	27CLA	PF129B1	HF129B0	EOT, LCY, FTC, CIC, EOT, LCY,	EOTN, TACN, TACV
Seal, Outer Fwd	1	4	27CLB	PF129B2	HF129B0	FTC, CIC, EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Disk, HPT	1	4	27CLD	PF129B3	HF129B0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set HPT	1	5	27CLG	SF129B3	PF129B3	EOT, LCY, FTC, CIC	EOTN
Blade Retainer, Fwd	1	4	27CLC	PF129B4	HF129B0	EOT, LCY, FTC, CIC	EOTN, TACN

Table 9-41. Configured CII for F110-129 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
Blade Retainer, Aft HPT	1	4	27CLE	PF129B5	HF129B0	EOT, LCY, FTC, CIC	EOTN, TACN
Shaft, HPT Aft	1	4	27CLF	PF129B6	HF129B0		EOTN, TACN, TACV
LPT Nozzle Assy, Stg 1	1	3	27DC0	HF129C0	AF12910	EOT, LCY, FTC, CIC	EOTN, TACN
LPT Rotor Assy	1	3	27DA0	HF129D0	AF12910	EOT, LCY, FTC, CIC	EOTN, TACN
Shaft, LPT	1	4	27DAA	PF129D1	HF129D0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Retainer, Stage 1 Blade	1	4	27DAC	PF129D2	HF129D0	EOT, LCY, FTC, CIC	EOTN, TACN
Disk, Stage 1 LPT	1	4	27DAD	PF129D3	HF129D0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stage 1	1	5	27DAB	SF129D3	PF129D3	EOT, LCY, FTC, CIC	EOTN, TACN
Disk, Stage 2 LPT	1	4	27DAM	PF129D4	HF129D0	EOT, LCY, FTC, CIC	EOTN, TACN, TACV
Blade Set, Stage 2	1	5	27DAK	SF129D4	PF129D4	EOT, LCY, FTC, CIC	EOTN, TACN
Blade Spacer, Seal LPT	1	4	27DAN	PF129D5	HF129D0	EOT, LCY, FTC, CIC	EOTN, TACN
Retainer, Stage 2 Blade LPT	1	4	27DAL	PF129D6	HF129D0	EOT, LCY, FTC, CIC	EOTN, TACN
Seal, Rotating Air LPT	1	4	27DAH	PF129D7	HF129D0	EOT	EOTN
Seal, Air Stationary LPT	1	4	27DAJ	PF129D8	HF129D0	EOT	EOTN
#4 Bearing, IR & Roller	1	4	27FDA	PF129D9	HF129D0	EOT	EOTN
#5 Bearing IR	1	4	27DAT	PF129DA	HF129D0	EOT	EOTN
LPT Nozzle Assy, Stg 2	1	3	27DD0	HF129E0	AF12910	EOT	EOTN
Turbine Frame Assy	1	3	27DE0	HF129F0	AF12910	EOT, LCY, FTC, CIC	EOTN
Mount Ring	1	4	27DED	PF129F1	HF129F0	EOT	EOTN
#5 Bearing OR	1	4	27DEN	PF129F2	HF129F0	EOT	EOTN
Bare Turbine Frame	1	4	27DEA	PF129F3	HF129F0	EOT, LCY, FTC, CIC	TACN
Augmentor Assy	1	3	27EA0	HF129G0	AF12910	EOT, IFT	EOTN
Flameholder	1	4	27EAD	PF129G1	HF129G0	EOT, ABC, ABT	EOTN
Aug Duct Liner	1	4	27EAB	PF129G2	HF129G0	EOT, ABC, ABT	EOTN
Mixing Duct	1	4	27EAC	PF129G3	HF129G0	EOT. ABC, ABT	EOTN
Damper Ring	1	4	27EAQ	PF129G4	HF129G0	EOT, ABC, ABT	EOTN
Thermocouple (T5.6)	1	4	27GPN	PF129G5	HF129G0	EOT, ABC, ABT	EOTN
Exhaust Nozzle Assy	1	4	27EC0	HF129H0	HF129G0	EOT, IFT	EOTN
Exh Nozzle Act Ring	1	5	27ECZ	PF129H1	HF129H0	EOT	EOTN
Hyd Syn Actuator	4	5	27EDC	PF129H2	HF129H0	EOT	EOTN, EOTV
Exhaust Duct Liner	1	5	27ECC	PF129H3	HF129H0	EOT, ABC, ABT	EOTN
Accessory Gearbox	1	3	27A00	HF129J0	AF12910	EOT, LCY, FTC, CIC	EOTN
Radial Drive Shaft	1	4	27CCK	PF129J1	HF129J0	EOT	EOTN
Gearshaft, Alt Drive	1	4	27ANA	PF129J2	HF129J0	EOT	EOTN
Gearshaft, Spur #1	1	4	27AHA	PF129J3	HF129J0	EOT	EOTN
Bevel Gear, AGB	1	4	27AEC	PF129J4	HF129J0	EOT	EOTN
Gearshaft, Spur #2	1	4	27AHG	PF129J5	HF129J0	EOT	EOTN
Gearshaft, Bevel & Spur	1	4	27AGE	PF129J6	HF129J0	EOT	EOTN
Control, Main Engine	1	4	27GAL	PF129J7	HF129J0	EOT	EOTN, EOTV
Pump, Main Fuel	1	4	27GAH	PF129J8	HF129J0	EOT	EOTN, EOTV

Table 9-41. Configured CII for F110-129 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHOD WITH LIMITS (TLCC)
Pump, Fuel, Boost	1	4	27GAA	PF129J9	HF129J0	EOT	EOTN, EOTV
Pump, Fuel, Augmentor	1	4	27GDC	PF129JA	HF129J0	EOT	EOTN, EOTV
Pump, Hydraulic	1	4	27GMC	PF129JB	HF129J0	EOT	EOTN, EOTV
Pump, Lube-Scavenge	1	4	27GJH	PF129JC	HF129J0	EOT	EOTN, EOTV
Coupling Shaft	1	4	27AGB	PF129JD	HF129J0	EOT, LCY, FTC, CIC	TACN

F1100100/100B/129 EDITS

TRANSACTION	FHR	EOT	LCV	FTC	CIC	ABC	ABT	TT1	TT2	TT3	TT4	TT5
Removals, Installations	50.0	10.0	15	80	400	20	1.0	3.0	2.9	2.8	2.7	2.6
"6N" Possessor Change		25.0				25	5.0	10.0	10.0	10.0	10.0	10.0
"6U" Update			60	60	60	50	10.0	20.0	20.0	20.0	20.0	20.0
Normal Limit	25.0	75.0	15	80								
Extended Flight			37	200								
"6F"/"6H" Update												
Normal Limit	25.0											
Extended Flight												

1. CIC less than or equal to 11 times delta FTC for F110-100/100B.
2. CIC less than or equal to 50 times delta FTC for F110-129.
3. ABC greater than or equal to 20 times delta EOT.
4. ABT greater than or equal to 0.10 times delta EOT for F110-100.
5. ABT greater than or equal to 0.20 times delta EOT for F110-129.
6. If ABC = 0, then ABT = 0.
7. TT1 greater than 0.5 times EOT.
8. Cycle values for LCY, FTC, and CIC must be greater than zero if IFT is reported.
9. EOT > 0.

Table 9-42. Configured CII for Navy F110-GE-400 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F110-GE-400 Engine		2	70000	AN40010		FHR, EOT, LCY, FTC, CIC, ABC	
Main Control	1	3	76200	LN40011	AN40010	EOT	EOTH
Augmentor Control	1	3	77200	LN40012	AN40010	EOT	EOTH
Pyrometer T4B	1	3	79440	LN40013	AN40010	EOT	EOTH
Augmentor Fuel Pump	1	3	77100	LN40014	AN40010	EOT	EOTH
HYD Pump	1	3	7C100	LN40015	AN40010	EOT	EOTH
Lube/Scavenge Pump	1	3	78100	LN40016	AN40010	EOT	EOTH
Main Fuel Pump	1	3	76100	LN40017	AN40010	EOT	EOTH
Fuel Boost Pump	1	3	76300	LN40018	AN40010	EOT	EOTH
Gearbox Fwd	1	3	75200	LN40019	AN40010	EOT	EOTH
Gearbox Aft	1	3	75300	LN40021	AN40010	EOT	EOTH
EMSP	1	3	79300	LN40022	AN40010	EOT	EOTH
Inlet Gearbox	1	3	75100	LN40024	AN40010	EOT	EOTH
HPT Rotor Assy	1	3	73300	HN40030	AN40010	EOT, LCY, FTC, CIC	
Shaft HPT Fwd	1	4	73310	PN40031	HN40030	EOT, LCY, FTC, CIC	TACN
HPT Fwd Rotating Seal	1	4	73320	PN40032	HN40030	EOT, LCY, FTC, CIC	TACN
HPT Disk	1	4	73340	PN40033	HN40030	EOT, LCY, FTC, CIC	TACN
Blade Retainer Fwd HPT	1	4	73330	PN40034	HN40030	EOT, LCY, FTC, CIC	TACN
Blade Retainer Aft HPT	1	4	73350	PN40035	HN40030	EOT, LCY, FTC, CIC	TACN
Shaft, Aft HPT	1	4	73360	PN40036	HN40030	EOT, LCY, FTC, CIC	TACN
LPT Rotor Assy	1	3	73400	HN40050	AN40010	EOT, LCY, FTC, CIC	TACV
Shaft, LPT	1	4	73430	PN40051	HN40040	EOT, LCY, FTC, CIC	TACN
Retainer, Stg 1 Blade LPT	1	4	73412	PN40052	HN40040	EOT, LCY, FTC, CIC	TACN
Disk, Stage 1 LPT	1	4	73410	PN40053	HN40040	EOT, LCY, FTC, CIC	TACN
Blade Set Stg 1 LPT	1	5	73411	SP40053	PN40053	EOT, LCY, FTC, CIC	TACV
Disk Stage 2 LPT	1	4	73420	PN40054	HN40050	EOT, LCY, FTC, CIC	TACN
Blade Set Stage 2 LPT	1	5	73421	SN40054	PN40054	EOT, LCY, FTC, CIC	TACV
Retainer Stg 2 Blade	1	4	73422	PN40055	HN40050	EOT, LCY, FTC, CIC	TACN
Seal, Spacer LPT BLD	1	4	734A0	PN40056	HN40050	EOT, LCY, FTC, CIC	TACN
Fan Rotor Assy	1	3	71A00	HN40070	AN40010	EOT, LCY, FTC, CIC	TACV
Disk Stg 1 Fan	1	4	71A10	PN40071	HN40070	EOT, LCY, FTC, CIC	TACN

Table 9-42. Configured CII for Navy F110-GE-400 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Blade Set Stg 2 Fan	1	5	71A21	SN40072	PN40072	EOT, LCY, FTC, CIC	TACN
Disk Stg 2 Fan	1	4	71A20	PN40072	HN40070	EOT, LCY, FTC, CIC	TACN
Disk Stg 3 Fan	1	4	71A30	PN40073	HN40070	EOT, LCY, FTC, CIC	TACN
Fan Shaft Aft	1	4	71A40	PN40074	HN40070	EOT, LCY, FTC, CIC	TACN
HPC Rotor Assy	1	3	71B00	HN40080	AN40010	EOT, LCY, FTC, CIC	TACV
HPC Spool Stg 1-2	1	4	71B10	PN40081	HN40080	EOT, LCY, FTC, CIC	TACN
HPT Disk Stg 3	1	4	71B30	PN40082	HN40080	EOT, LCY, FTC, CIC	TACN
HPC Spool Stg 4-9	1	4	71B40	PN40083	HN40080	EOT, LCY, FTC, CIC	TACN
HPT Shaft Fwd	1	4	71B20	PN40084	HN40080	EOT, LCY, FTC, CIC	TACN
Seal, Aft Rotating HPC	1	4	71B50	PN40085	HN40080	EOT, LCY, FTC, CIC	TACN
Combustor Case	1	3	72200	HN400A0	AN40010	EOT, LCY, FTC, CIC	TACN
Combustor Assy	1	3	72300	HN400B0	AN40010	EOT, LCY, FTC, CIC	EOTN, TACN
Combustor Cowl	1	4	72340	PN400B1	HN400B0	EOT, LCY, FTC, CIC	EOTN, TACN

Table 9-43. Configured CII for F118-100 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F118-GE-100 Engine	4	2	23Z00	AF11810	B002A	EOT, FHR, FTC, LCY, TT1-TT5	NONE
Control, EFT	1	3	23GPL	LF11811	AF10010	EOT	EOTN
VSV Actuator	2	3	23GHD	LF11812	AF11810	EOT	EOTN
Exciter, Ignition	1	3	23GSA	LF11813	AF11810	EOT	EOTN
Pyrometer	1	3	23GPP	LF11814	AF11810	EOT	EOTN
Tank, Lube	1	3	23GJA	LF11815	AF11810	EOT	EOTN
Cooler, Lube Oil/Fuel	1	3	23GAU	LF11816	AF11810	EOT	EOTN
Valve, De-Ice	1	3	23GTA	LF11817	AF11810	EOT	EOTN
Actuator, 16G	1	3	23BFA	LF11818	AF11810	EOT	EOTN
EMSP	1	3	23GPT	LF11819	AF11810	EOT	EOTN
Sensor Debris Monitor	1	3	23GJB	LF1181A	AF11810	EOT	EOTN
Control, Main Engine	1	3	23GAL	LF1181B	AF11810	EOT	EOTN
Pump, Fuel	1	3	23GAA	LF1181C	AF11810	EOT	EOTN
Pump, Lube & Scavenge	1	3	23GJH	LF1181D	AF11810	EOT	EOTN
Rotor Alternator	1	3	23GPH	LF1181E	AF11810	EOT	EOTN
Stator, Alternator	1	3	23GPJ	LF1181F	AF11810	EOT	EOTN
Sensor, Lube Oil Level	1	3	23GJG	LF1181G	AF11810	EOT	EOTN
Frame Assy, Front	1	3	23BA0	HF11820	AF11810	EOT	
Frame Front	1	4	23BAA	PF11821	HF11820	EOT	EOTN
Bearing #1, O.R.	1	4	23FAE	PF11822	HF11820	EOT	EOTN
Sensor, Fan Inlet	1	4	23GPK	PF11823	HF11820	EOT	EOTN
Rotor Assy, Fan	1	3	23BD0	HF11830	AF11810	EOT, LCY, FTC	EOTN, TACN
Disk Fan Stg 1	1	4	23BDE	PF11831	HF11830	EOT, LCY, FTC	EOTN, TACV, TACN
Blade Set (24), Fan Stg 1	1	5	23BDB	SF11831	HF11830	EOT	EOTN
Disk, Fan Stg 2	1	4	23BDF	PF11832	HF11830	EOT, LCY, FTC	EOTN, TACV, TACN
Disk, Fan Stg 3	1	4	23BDG	PF11833	HF11830	EOT, LCY, FTC	EOTN, TACV, TACN
Shaft Fan Aft	1	4	23BDA	PF11834	HF11830	EOT, LCY, FTC	EOTN, TACN, TACV
Seal, Air Stage 1	1	4	23BDL	PF11835	HF11830	EOT, LCY, FTC	EOTN, TACN
Ring, #1 Inner	1	4	23FAF	PF11836	HF11830	EOT	EOTN
Bearing #2	1	4	23FBM	PF11837	HF11830	EOT	EOTN
Frame Assy, Fan	1	3	23CA0	HF11840	AF11810	EOT	
Frame Fan	1	3	23CAA	PF11841	HF11840	EOT	EOTN
Sensor, FDY (T25)	2	4	23GAW	PF11842	HF11840	EOT	EOTN
Sensor, Fan Speed	1	4	23GPS	PF11843	HF11840	EOT	EOTN
Gearbox Assy, Inlet	1	3	23CC0	HF11850	AF11810	EOT, LCY, FTC	EOTN
Gear, Bevel Inlet	1	4	23CCC	PF11851	HF11850	EOT, LCY, FTC	EOTN
Case Assy, Fan Stator	1	3	23BC0	HF11860	AF11810	EOT	EOTN
Case Assy, Fwd Comp STA	1	3	23CD0	HF11870	AF11810	EOT	EOTN
Case, Front Stator, HPT	1	4	23CDA	PF11871	HF11870	EOT	EOTN
Rotor Assy HPC	1	3	23CG0	HF11880	AF11810	EOT, LCY, FTC	EOTN, TACN

Table 9-43. Configured CII for F118-100 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Spool, Stage 1 & HPC	1	4	23CGD	PF11881	HF11880	EOT, LCY, FTC	EOTN, TACV, TACN
Disk, Stage 3 HPC	1	4	23CGE	PF11882	HF11880	EOT, LCY, FTC	EOTN, TACV, TACN
Spool, Stage 4-9, HPC	1	4	23CGF	PF11883	HF11880	EOT, LCY, FTC	EOTN, TACN, TACV
Shaft Forward HPC	1	4	23CGA	PF11884	HF11880	EOT, LCY, FTC	EOTN, TACN
Seal, Rotating HPC (CDP)	1	4	23CGS	PF11885	HF11880	EOT, LCY, FTC	EOTN, TACV, TACN
#3 Bearing	1	4	23FCG	PF11886	HF11880	EOT	EOTN
Case, Assy, Aft Comp Stator	1	3	23CF0	HF11890	AF11810	EOT	EOTN
Case, Aft Stator HPC	1	4	23CFB	PF11891	HF11890	EOT	EOTN
Support, Comp Stator, Rear	1	4	23CFA	PF11892	HF11890	EOT	EOTN
Case Combustion	1	3	23CJA	HF118A0	AF11810	EOT, LCY, FTC	EOTN, TACV, TACN
Support, Inner Noz HPT	1	4	23CJC	PF118A1	HF118A0	EOT	EOTN
Seal, Stationary Inner	1	4	23CJD	PF118A2	HF118A0	EOT	EOTN
Seal, Aft Outer	1	4	23CJE	PF118A3	HF118A0	EOT	EOTN
Coupling, Shaft	1	4	23AGB	PF118A4	HF118A0	EOT, LCY, FTC	TACN
Combustor	1	3	23CJG	HF118B0	AF11810	EOT, LCY, FTC	EOTN, TACV
Inner Combustion Liner	1	4	23CJL	PF118B1	HF118B0	EOT, LCY, FTC	TACN
Outer Combustion Liner	1	4	23CJK	PF118B2	HF118B0	EOT, LCY, FTC	TACN
Combustion Dome	1	4	23CJH	PF118B3	HF118B0	EOT, LCY, FTC	TACN
Cowl, Outer	1	4	23CJ2	PF118B4	HF118B0	EOT, LCY, FTC	TACN
Cowl, Inner	1	4	23CJ1	PF118B5	HF118B0	EOT, LCY, FTC	TACN
Shroud Assy HPT	1	3	23CJT	HF118C0	AF11810	EOT	EOTN
Sprt/Hanger Shroud HPT	1	4	23CJV	PF118C1	HF118C0	EOT	EOTN
Nozzle Assy HPT	1	3	23CJM	HF118D0	AF11810	EOT	EOTN
Rotor Assy HPT	1	3	23CL0	HF118E0	AF11810	EOT, LCY, FTC	EOTN, TACN
Forward Shaft HPT	1	4	23CLA	PF118E1	HF118E0	EOT, LCY, FTC	EOTN, TACN, TACV
Seal Forward HPT	1	4	23CLB	PF118E2	HF118E0	EOT, LCY, FTC	EOTN, TACV, TACN
Disk HPT	1	4	23CLD	PF118E3	AF11810	EOT, LCY, FTC	EOTN, TACN, TACV
Blade Set (72) HPT	1	5	23CLG	SF118E3	PF118E3	EOT, LCY, FTC	EOTN, TACN
Retainer, Forward HPT Bld	1	4	23CLC	PF118E4	HF118E0	EOT, LCY, FTC	EOTN, TACN
Retainer, Rear HPT Blade	1	4	23CLE	PF118E5	HF118E0	EOT, LCY, FTC	EOTN, TACN
HPT Aft Shaft	1	4	23CLF	PF118E6	HF118E0	EOT, LCY, FTC	TACN, EOTN, TACV
Nozzle Assy Stg 1 LPT	1	3	23DC0	HF118FO	AF11810	EOT	EOTN
Rotor Assy, LPT	1	3	23DA0	HF118G0	AF11810	EOT, LCY, FTC	EOTN, TACN
Shaft LPT	1	4	23DAA	PF118G1	HF118G0	EOT, LCY, FTC	EOTN, TACN
Retainer, LPT Blade Stg 1	1	4	23DAC	PF118G2	HF118G0	EOT, LCY, FTC	EOTN, TACN
Disk Stage 1 LPT	1	4	23DAD	PF118G3	HF118G0	EOT, LCY, FTC	EOTN, TACN, TACV
Blade Set (108) Stg 1 LPT	1	5	23DAB	SF118G3	PF118G3	EOT, LCY, FYC	EOTN, TACN
Disk Stage 2 LPT	1	4	23DAM	PF118G4	HF118G0	EOT, LCY, FTC	EOTN, TACN

Table 9-43. Configured CII for F118-100 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Blade Set (94) Stg 2 LPT	1	5	23DAK	SF118G4	PF118G4	EOT, LCY, FTC	EOTN, TACN
Spacer, Rotor Seal, LPT	1	4	23DAN	PF118G5	HF118G0	EOT, LCY, FTC	EOTN, TACN
Retainer, Blade, Stg 2 LPT	1	4	23DAL	PF118G6	HF118G0	EOT, LCY, FTC	EOTN, TACN
Bearing #4	1	4	23FDA	PF118G7	HF118G0	EOT	EOTN
Bearing #5 Inner Ring	1	4	23DAT	PF118G8	HF118G0	EOT	EOTN
Seal Air	1	4	23DAE	PF118G9	HF118G0	EOT	EOTN
Nozzle Assy, Stage 2 LPT	1	3	23DD0	HF118H0	AF11810	EOT	EOTN
Turbine Frame Assy	1	3	23DE0	HF118J0	AF11810	EOT	EOTN
Turbine Frame	1	4	23DEA	PF118J1	HF118J0	EOT	EOTN
Ring, Mount	1	4	23DED	PF118J2	HF118J0	EOT	EOTN
Bearing #5 O.R.	1	4	23DEN	PF118J3	AF11810	EOT	EOTN
Gearbox Accessory	1	3	23A00	HF118K0	AF11810	EOT	EOTN

F118-100 EDITS

TRANSACTION	FHR	EOT	LCY	FTC	TT1	TT2	TT3	TT4	TT5
Remove, Install, "6N" Possessor Change	50.0	25.0	15	60	3.0	2.9	2.8	2.7	2.6
"6U" Update									
Normal Limit	50.0	25.0	15	60	3.0	2.9	2.8	2.7	2.6
Extended flight	50.0	75.0	30	120					

Additional 6U Edits:

1. LCY < = FTC + 1
2. 0 < = EOT ≤ 25
3. 0 < = LCY < = 15
4. 0 < = FTC < =
5. 0.3 X EOT > = TT1
6. TT1 + .1 > = TT2
7. TT2 + .1 > = TT3
8. TT3 + .1 > = TT4
9. TT4 + .1 > = TT5

Table 9-44. Configured CII for F118-101 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
118-GE101 Engine Assy	1	2	27Z00	AU11810	U002S	FHR, CYC	FHRV, FHRH, CYCN
IGV Actuator	1	3	27BFA	LU11811	AU11810	FHR	FHRN
Main Fuel Pump	1	3	27GAA	LU11812	AU11810	FHR	FHRN
MEC (Main Engine Control)	1	3	27GAL	LU11814	AU11810	FHR	FHRN
Fuel/Oil Cooler	1	3	27GAU	LU11815	AU11810	FHR	FHRN
VSV Actuator (Right)	1	3	27GHD	LU11817	AU11810	FHR	FHRN
VSV Actuator (Left)	1	3	27GHG	LU11818	AU11810	FHR	FHRN
Oil Tank	1	3	27GJA	LU11819	AU11810	FHR	FHRN
Oil (Temp & Level) Sensor	1	3	27GJG	LU1181A	AU11810	FHR	FHRN
Lube & Scavange Pump	1	3	27GJH	LU1181B	AU11810	FHR	FHRH
Engine AC Generator (ROT)	1	3	27GPH	LU1181C	AU11810	FHR	FHRN
Engine AC Generator (STAT)	1	3	27GPJ	LU1181D	AU11810	FHR	FHRN
EFT Control	1	3	27GPL	LU1181E	AU11810	FHR	FHRN
Oil Pressure Transmitter	1	3	27GPM	LU1181F	AU11810	FHR	FHRN
PYROMETER	1	3	27GPP	LU1181G	AU11810	FHR	FHRV
Ignition Exciter	1	3	27GSA	LU1181H	AU11810	FHR	FHRN
HPT Rotor Assy	1	3	27CL0	HU11820	AU11810	FHR, CYC	FHRV, CYCN
Fwd HPTR Shaft	1	4	27CLA	PU11821	HU11820	FHR, CYC	FHRN, CYCN, FHRV
Fwd HPTR Seal	1	4	27CLB	PU11822	HU11820	FHR	FHRN, FHRV
Fwd HPTR Retainer	1	4	27CLC	PU11823	HU11820	FHR	FHRN, FHRV
HPTR Disk	1	4	27CLD	PU11824	HU11820	FHR, CYC	FHRN, CYCN, FHRV
HPT Blade Set	1	5	27CLG	SU11824	PU11824	FHR	FHRN, FHRV
Blade Aft HPT Retainer	1	4	27CLE	PU11825	HU11820	FHR	FHRN, FHRV
Aft HPTR Shaft	1	4	27CLF	PU11826	HU11820	FHR, CYC	FHRN, CYCN, FHRV
Aft Rotating HPTR Seal	1	4	27CLK	PU11828	HU11820	FHR	FHRN, FHRV
LPT Rotor Assy	1	3	27DA0	HU11830	AU11810	FHR, CYC	FHRV, CYCN
LPTR Shaft	1	4	27DAA	PU11831	HU11830	FHR, CYC	FHRN, CYCN, FHRV
Stage 1 LPTR Ring BLD	1	4	27DAC	PU11832	HU11830	FHR	FHRN, FHRV
Stage 1 LPTR Disk	1	4	27DAD	PU11833	HU11830	FHR	FHRN, FHRV
Stage 1 LPT Blade Set	1	5	27DAB	SU11833	PU11833	FHR	FHRN, FHRV
Stage 2 LPTR Disk	1	4	27DAM	PU11834	HU11830	FHR, CYC	FHRN, CYCN, FHRV
Stage 2 LPT Blade Set	1	5	27DAK	SU11834	PU11834	FHR	FHRN, FHRV
Air LPTR Seal	1	4	27DAE	PU11835	HU11830	FHR	FHRV
Air LPTR RTTG Seal	1	4	27DAH	PU11836	HU11830	FHR	FHRV
Stage 2 LPTR RTN Blade	1	4	27DAL	PU11837	HU11830	FHR	FHRN, FHRV
Seal LPTR Spacer	1	4	27DAN	PU11838	HU11830	FHR	FHRN, FHRV
#5 Inner Bearing	1	4	27DAT	PU11839	HU11830	FHR	FHRV
Bearing #5	1	4	27FDA	PU1183A	HU11830	FHR	FHRV
LPT Stage 1 Nozzle Assy	1	3	27DC0	HU11840	AU11810	FHR, CYC	FHRV, CYCN
Stage 1 LPTN Segments	11	4	27DCA	PU11841	HU11840	FHR	FHRN, FHRV

Table 9-44. Configured CII for F118-101 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Stage 1 LPTN Support	1	4	27DCB	PU11842	HU11840	FHR	FHRN, FHRV
Stage 1 LPTN Shrouds	12	4	27DCC	PU11843	HU11840	FHR	FHRN, FHRV
Inner LPTN Air Seal	1	4	27DCD	PU11844	HU11840	FHR	FHRN, FHRV
Stage 2 LPT Nozzle Assy	1	3	27DD0	HU11850	AU11810	FHR, CYC	FHRN, CYCN, FHRV
Stage 2 LPTN Support	1	4	27DDA	PU11851	HU11850	FHR	FHRN, FHRV
Stage 2 LPTN Segments	15	4	27DDB	PU11852	HU11850	FHR	FHRN, FHRV
Stage 2 LPTN Shrouds	15	4	27DDD	PU11853	HU11850	FHR	FHRN, FHRV
Turbine Frame Assy	1	3	27DE0	HU11860	AU11810	FHR	FHRV
Turbine Frame	1	4	27DEA	PU11861	HU11860	FHR	FHRV
Turbine Frame Mounting Ring	1	4	27DED	PU11862	HU11860	FHR	FHRV
Bearing #5	1	4	27DEN	PU11863	HU11860	FHR	FHRV
Exhaust Duct	1	3	27ECA	HU11870	AU11810	FHR	FHRV
EGT Probles (Long)	4	4	27GP1	PU11871	HU11870	FHR	FHRN
EGT Probles (Short)	4	4	27GPN	PU11872	HU11870	FHR	FHRN
Accessory Gearbox Assy	1	3	27A00	HU118A0	AU11810	FHR	FHRV
Front Frame Assy	1	3	27BA0	HU118B0	AU11810	FHR	FHRV
Front Frame	1	4	27BAA	PU118B1	HU118B0	FHR	FHRV
Bearing #1	1	4	27FAE	PU118B2	HU118B0	FHR	FHRV
Fan Inlet Temp Sensor T12	1	4	27GPK	PU118B3	HU118B0	FHR	FHRN
Fan Stator Assy	1	3	27BC0	HU118C0	AU11810	FHR	FHRV
Fan Stator Case	1	4	27BCA	PU118C1	HU118C0	FHR	FHRV
Fan Rotor Assy	1	3	27BD0	HU118D0	AU11810	FHR, CYC	FHRV, CYCN
Aft Fan Shaft	1	4	27BDA	PU118D1	HU118D0	FHR	FHRV
Stage 1 Fan Disk	1	4	27BDE	PU118D2	HU118D0	FHR, CYC	FHRV, CYCN
Stage 1 Fan Blades	1	5	27BDB	SU118D2	PU118D2	FHR	FHRV
Stage 2 Fan Disk	1	4	27BDF	PU118D3	HU118D0	FHR, CYC	FHRV, CYCN
Stage 3 Fan Disk	1	4	27BDG	PU118D4	HU118D0	FHR, CYC	FHRV, CYCN
Stage 1 Fan Air Seal	1	4	27BDL	PU118D5	HU118D0	FHR	FHRV
Inner Bearing #1 Ring	1	4	27FAF	PU118D6	HU118D0	FHR	FHRV
Bearing #2	1	4	27FBM	PU118D7	HU118D0	FHR	FHRV
Fan Frame Assy	1	3	27CA0	HU118E0	AU11810	FHR	FHRV
Fan Frame	1	4	27CAA	PU118E1	HU118E0	FHR	FHRV
FDT Sensor (T25) (Upper)	1	4	27GAW	PU118E2	HU118E0	FHR	FHRN
FDT Sensor (T25) (Lower)	1	4	27GAX	PU118E3	HU118E0	FHR	FHRN
Fan Speed Sensor	1	4	27GPS	PU118E4	HU118E0	FHR	FHRN
Inlet Gearbox Assy	1	4	27CC0	HU118F0	AU11810	FHR	FHRV
Radial Drive Shaft	1	4	27CCK	PU118F1	HU11810	FHR	FHRV
Compressor Stator Fwd Assy	1	3	27CD0	HU118G0	AU11810	FHR	FHRV
Fwd HPCS Case	1	4	27CDA	PU118G1	HU118G0	FHR	FHRV

Table 9-44. Configured CII for F118-101 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Comp ST Aft Case Assy	1	3	27CF0	HU118K0	AU11810	FHR	FHRV
HPCS Rear Support	1	4	27CFA	PU118K1	HU118K0	FHR	FHRV
Aft HPCS Case	1	4	27CFB	PU118K2	HU118K0	FHR	FHRV
HPC Rotor Assy	1	3	27CG0	HU118M0	AU11810	FHR	FHRV
HPCR Fwd Shaft	1	4	27CGA	PU118M1	HU118M0	FHR	FHRV
Stage 1-2 HPCR Spool	1	4	27CGD	PU118M2	HU118M0	FHR	FHRV
Stage 3 HPCR Disk	1	4	27CGE	PU118M5	HU118M0	FHR	FHRV
Stage 4-9 HPCR Spool	1	4	27CGF	PU118M6	HU118M0	FHR, CYC	FHRV, CYCN
Rotating HPCR Seal	1	4	27CGS	PU118MD	HU118M0	FHR	FHRN
Gear, Bevel	1	4	27FCD	PU118ME	HU118M0	FHR	FHRN
Bearing #3	1	4	27FCG	PU118MF	HU118M0	FHR	FHRN
CDN Assy	1	3	27CJ0	HU118N0	AU11810	FHR, CYC	FHRV, CYCN
Combustion Case	1	3	27CJA	HU118P0	AU11810	FHR	FHRN, FHRV
HPT Inner Nozzle Support	1	4	27CJC	PU118P1	HU118P0	FHR	FHRN, FHRV
Stationary Inner Seal	1	4	27CJD	PU118P2	HU118P0	FHR	FHRN, FHRV
Aft Outer Seal	1	4	27CJE	PU118P3	HU118P0	FHR	FHRN
Combustion Chamber Assy	1	3	27CJG	HU118R0	AU11810	FHR, CYC	FHRV, CYCN
Nozzle HPT Assy	1	3	27CJM	HU118T0	AU11810	FHR, CYC	FHRV, CYCN
Outer HPTN Support	1	4	27CJN	PU118T1	HU118T0	FHR	FHRN, FHRV
Aft Inner Support	1	4	27CJR	PU118T2	HU118T0	FHR	FHRN, FHRV
Seal HPTN Support	1	4	27CJS	PU118T3	HU118T0	FHR	FHRN, FHRV
Shroud HPT Assy	1	3	27CJT	HU118V0	AU11810	FHR, CYC	FHRV, CYCN
HPT Shroud Hanger Support	1	4	27CJV	PU118V1	HU118V0	FHR	FHRN, FHRV

F118-101 EDITS

TRANSACTION	FLYING TIME	CYCLES
Initialization, Removals, Installations	60.0 FHR	20.00 CYC
"6U" Update		
Normal Limit	60.0 FHR	20.0 CYC
Extended Flight	100.0 FHR	40.00 CYC

Additional 6U Edits:

1. CYC = or > 1.00
2. FHR > 0.0

Table 9-45. Configured CII for F404-GE-F1D2 Engine

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
F404-GE-F1D2 Engine	2	2	23A00	AF40410	--F117A	FHR, EOT, LCY, PL8, TM1, TM2, TM3, TM4, TM5, PLA, SRF, P3A, P3B, LCP, EFC	FHRN, LCYN, PL8N, TM1N, TM2N, TM3N, TM4N, TM5N, PLAN, SRFN, P3AN, P3BN, EFCN, LCPN, EFCN, EOTN
Valve, Anti-ice	1	3	23TA0	LF40411	AF40410	EOT	EOTN
Control, Main Fuel	1	3	23PA0	LF40412	AF40410	EOT	EOTN
Control Assy, Electrical	1	3	23RA0	LF40413	AF40410	EOT	EOTN
Pump Assy, Main Fuel	1	3	23PE0	LF40414	AF40410	EOT	EOTN
Transmitter, CIT	1	3	23PB0	LF40415	AF40410	EOT	EOTN
Pump Assy, Lube & Scavenge	1	3	23SB0	LF40416	AF40410	EOT	EOTN
Harness Assy, T5	2	3	23RN0	LF40417	AF40410	EOT	EOTN
Actuator Assy, Fan VG	1	3	23AAE	LF40418	AF40410	EOT	EOTN
Fan Module	1	3	23AA0	HF40420	AF40410	EOT, LCY, LCP	EOTN, LCYN, LCPN
Bearing, No. 1	1	4	23AAF	PF40421	HF40420	EOT	EOTN
Frame Assy Frnt	1	4	23AAG	PF40422	HF40420	EOT, LCY, LCP	EOTH, LCYN, LCPN
Rotor Assy, Fan	1	4	23AE0	HF40430	HF40420	EOT, LCY, LCP	EOTN, LCYN, LCPN
Disk, Stg 1 Fan	1	5	23AEA	PF40431	HF40430	LCY, LCP, ELC	LCYN, LCPN, ELCN
Blade Set Stg 1 Fan Rotor Set	1	6	23AEB	SF40431	PF40431	LCY, LCP, ELC	LCYP, LCPN, ELCN
Disk, Stg 2 Fan	1	5	23AEC	PF40432	HF40430	LCY, LCP, ELC	LCYN, LCPN, ELCN
Fan Rotor Set, Stg 2	1	6	23AEH	SF40432	PF40432	LCY, LCP, ELC	LCYN, LCPN, ELCN
Disk, Stg 3 Fan	1	5	23AED	PF40433	HF40430	LCY, LCP, ELC	LCYN, LCPN, ELCN
Fan Rotor Set, Stg 3	1	6	23AEG	SF40433	PF40433	LCY, LCP, ELC	LCYN, LCPN, ELCN
Shaft, Fan Rear	1	5	23AEE	PF40434	HF40430	LCY, LCP, ELC	LCYN, LCPN, ELCN
Bearing, No. 2 Inner	1	5	23AEF	PF40435	HF40430	EOT	EOTN
Fan Stator Assembly	1	4	23AH0	HF404G0	HF40420	EOT, LCY, LCP	EOTN
Module, HPC	1	3	23AL0	HF40440	AF40410	EOT, LCY, LCP, ELC	EOTN, LCYN, LCPN, ELCN
Bearing, No. 2 Outer	1	4	23ALG	PF40441	HF40440	EOT	EOTN
Bearing, No. 3	1	4	23ALH	PF40442	HF40440	EOT	EOTN
Mid-frame	1	4	23ALJ	PF40443	HF40440	EOT, LCY, LCP	EOTN, LCYN, LCPN
Casting Combustor	1	4	23ARB	HF404F0	HF40440	EOT,LCP	EOTN, LCPN
Nozzle, Fuel Set	1	5	23PQ0	PF404F1	HF404F0	LCP	LCPN
Rotor Assy, Compressor	1	3	23AN0	HF40450	AF40410	EOT, LCY, LCP, ELC	EOTH, LCYN, LCPN, ELCN
Shaft, Compr Front	1	4	23ANB	PF40451	HF40450	LCY, LCP, ELC	LCYN, LCPN, ELCN
Spool, Compr Stg 1 & 2	1	4	23ANC	PF40452	HF40450	LCY, LCP, ELC	LCYN, LCPN, ELCN

Table 9-45. Configured CII for F404-GE-F1D2 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Disk, Stg 3 Compressor	1	4	23AND	PF40453	HF40450	LCY, LCP, ELC	LCYN, LCPN, ELCN
Spool, Compr Stg 4-7	1	4	23ANE	PF40454	HF40450	LCY, LCP, ELC	LCYN, LCPN, ELCN
Compressor Stator Assy	1	3	23ALK	HF40460	AF40410	EOT	EOTN
Case, Compr Forward	1	4	23ALL	PF40461	HF40460	EOT	EOTN
Case, Compr Aftward	1	4	23ALM	PF40462	HF40460	EOT	EOTN
Module Combustor	1	3	23AR0	HF40470	AF40410	FHR, EOT, P3A, P3B, EFC	EOTN, P3AN, P3BN
Combustion Liner	1	3	23ARC	PF40471	HF40470	FHR, EOT, EFC	FHRN, EOTN, EFCN
HPT Module	1	3	23AS0	HF40480	AF40410	EOT, LCY, LCP, ELC	EOTN, LCYN, LCPN, ELCN
Shaft, Fan Drive	1	4	23ASK	PF40481	HF40480	LCY, LCP, ELC	LCYN, LCPN, ELCN
Bearing, No. 4	1	4	23ASL	PF40482	AF40410	EOT	EOTN
HPT Rotor Assy	1	3	23ASB	HF40490	AF40410	EOT, LCY, LCP, ELC	EOTN, LCYN, LCPN, ELCN
Shaft, HPT Fwd	1	4	23ASC	PF40491	HF40490	LCY, LCP, ELC	LCYN, LCPN, ELCP
Shaft, HPT Aft	1	4	23ASD	PF40492	HF40490	LCY, LCP, ELC	LCYN, LCPN, ELCN
Seal, HPT Fwd Rotating	1	4	23ASE	PF40493	HF40490	LCY, LCP, ELC	LCYN, LCPN, ELCP
Plate, HPT Fwd Cooling	1	4	23ASF	PF40494	HF40490	LCY, LCP, ELC	LCYN, LCPN, ELCP
Plate, HPT Aft Cooling	1	4	23ASG	PF40495	HF40490	LCY, LCP, ELC	LCYN, LCPN, ELCP
Disk, HPT Rotor	1	4	23ASH	PF40496	HF40490	LCY, LCP, ELC	LCYN, LCPN, ELCP
Blade, HPT Set	1	5	23ASJ	SF40496	PF40496	EFC	EFCN
LPT Module	1	3	23AW0	HF404A0	AF40410	EOT, LCY, LCP, ELC	EOTN, LCYN, LCPN, ELCN
Bearing, No. 5	1	4	23AWM	PF404A1	HF404A0	EOT	EOTN
Exhaust Frame & C-Clamp Assy	1	4	23AWN	PF404A2	HF404A0	EOT, LCY, LCP, ELC	EOTN, LCYN, LCPN, ELCN
Rotor, Assy LPT	1	3	23AWG	HF404B0	AF40410	EOT, LCY, LCP, ELC	EOTN, LCYN, LCPN, ELCN
Shaft, LPT Conical	1	4	23AWH	PF404B1	HF404B0	LCY, LCP, ELC	LCYN, LCPN, ELCN
Seal, Fwd LPT Rotor	1	4	23AWJ	PF404B2	HF404B0	LCY, LCP, ELC	LCYN, LCPN, ELCN
Disk, LPT Rotor	1	4	23AWK	PF404B3	HF404B0	LCY, LCP, ELC	LCYN, LCPN, ELCN
Blade, LPT Set	1	5	23AWL	SF404B3	PF404B3	EOT	EOTN
Module, Exhaust	1	3	23AX0	HF404C0	AF40410	EOT, LCY, LCP, ELC	EOTN, LCYN, LCPN, ELCN
Mixer, Exh Duct	1	4	23AXA	PF404C1	HF404C0	EOT, LCY, LCP, ELC	EOTN, LCYN, LCPN, ELCN

Table 9-45. Configured CII for F404-GE-F1D2 Engine - Continued

NOMENCLATURE	QPA	IND LEVEL	WUC	CEMS CII	NHA CII	TRACKING METHOD (TLC)	TRACKING METHODS LIMITS WITH (TLCC)
Gearbox Assy, ACCESSORY	1	3	23AK0	HF404D0	AF40410	EOT	EOTN
Drive Assy, PTO	1	3	23AKF	HF404E0	AF40410	EOT	EOTN

F404 EDITS

TRANSACTION	EOT	FHR	LCY	PL8	TM1	TM2	TM3	TM4	TM5	PLA	SRF	P3A	P3B	EFC	LCP
Removals, Installations, "6N" Possessor	15.0	15.0	15	1.50	1.50	1.50	1.50	1.50	1.50	30	15.0	1	3	99.9	25
"6U" Update															
Normal Limit	15.0	15.0	15	1.50	1.50	1.50	1.50	1.50	1.50	30	15.0	1	3	99.9	25
Extended Flight	30.0	30.0	30	3.00	3.00	3.00	3.00	3.00	3.00	60	30.0	3	9	400.0	30

Additional 6U Edits:

1. EOT ≥ TM1 ≥ TM2 ≥ TM3 ≥ TM4 ≥ TM5.
2. EOT > ⊙ .
3. EOT is equal to or greater than FHR.
4. LCP is equal to or greater than LCY.

Table 9-46. CAMS Matrix

ACTION	TYPE ASSET	TRIC	TYPE TRANS	FORMAT	OPTION	REMARKS
NOTE All assets must be loaded to the CAMS data base before any action and/or event can be reported. Assets C, D, H, and K will not require manual loading when an "I" deck is used.	TEL	LOAD	1	E		
		TEL	LOAD	2	E	
		AHE		1	1	
	C,D	AUE	LOAD			
		TEL	LOAD	A/B/C/D/E	E	(as required)
	G,I,J	TEL	LOAD	1	P	
		TEL	LOAD	2	P	
	H,K	TEL	LOAD	A/B/C/D/E	P	(as required)
Automated History Events (optional)	A thru K	AHE	LOAD	1	1	(when required)
Receipt of Uninstalled Asset	A thru J	ESU		2	1	
	K		not applicable			
Receipt of installed asset (non-parts-tracked assets not currently loaded in CAMS data base as previously possessed and all parts tracked assets).	A,B,F	TEL	I	1	E	("R" in column 79)
	C,D	TEL	I	A	E	("R" in column 79)
	G,H,I,K		not applicable			
	J	TEL	I	2	P	("R" in column 79)
Receipt of installed asset (non-parts-tracked assets previously possessed and still loaded in CAMS data base with prior status of "TA" or "SA").	A,B,F,J	ESU	:	1	4	:
	C,D,G,H,I,K	:	not applicable	:	:	:
Request "I" Deck	A,B,F,G,I,J,K		not applicable			
	C,D	CIP		A	E	
	H	CIP		A	P	
Load TCTO Applicable to Asset	A thru K	TCD	LOAD	1		
		TCD	LOAD	2		
		TCD	LOAD	3		
		TCD	LOAD	4		
		TCD	LOAD	4(SIC)		
Change in Maintenance for TCTO Compliance	A thru K	TCD	4			
Work Started for TCTO Compliance	A THRU K	TJS				
Remove From NHA	A,B,F	RAE	R	1	E	
	C,D	TER	R	A	E	
	G,I,J	RAE	R	2	P	
	H	TER	R	B/C	P	

Table 9-46. CAMS Matrix - Continued

ACTION	TYPE ASSET	TRIC	TYPE TRANS	FORMAT	OPTION	REMARKS
	K	TER	R	C	P	
Remove from Transit NHA (reported by home base)	A,B,F	RAE	R	1	E	(Use "Y" transient indicator)
	C,D	TER	R	A	E	(Use "Y" transient indicator)
	G,I,J	JDC	R	2	P	(Use "Y" transient indicator)
	H	TER	R	B/C	P	(Use "Y" transient indicator)
	K		not applicable			
Installed on NHA	A,B,F	IAE	I	1	E	
	C,D	TEI	I	A	E	
	G,I,J	TEI	I	2	P	
	H	TEI	I	B/C	P	
	K	TEI	I	C	P	
Installed on Transit NHA (home base)	A,B,F	TEI	I	1	E	(Use "Y" transient indicator)
	C,D	TEI	I	A	E	(Use "Y" transient indicator)
	G,I,J	TEI	I	2	P	(Use "Y" transient indicator)
	H	TEI	I	B	P	(Use "Y" transient indicator)
	K		not applicable			
(Transit Base)	A thru J	ESU		4		
	K		not applicable			
Test Cell Reject	A thru F	ESU		2	4	
	G thru K		not applicable			
ENMCS	A thru J	ESU		2	4	
	K		not applicable			
Work Stopped Awaiting Maintenance	A thru J	ESU		2	4	
	K		not applicable			
Work Completed	A thru J	ESU		2	3	
	K		not applicable			
TCTO Complied With	A thru K	TCD				
TCTO Decompliance	A thru K	TCD	Change	4		
Identity Change Resulting from TCTO Compliance	A thru F					(Contact SSG)
	G thru K	TCD	Change	2		
Operating Time Update	A,B,F,G,I,J	OUU				
	C,D,H,K	EHR				

Table 9-46. CAMS Matrix - Continued

ACTION	TYPE ASSET	TRIC	TYPE TRANS	FORMAT	OPTION	REMARKS
Event Update (Cycles, Sorties, Mission, etc)	A,B,F,G,I,J C,D,H,K	OUU EHR				
Change in Maintenance	A thru J K	ESU	not applicable	2	4	
Awaiting Disposition	A thru J K	ESU	not applicable	2	4	
Shipped	A thru J K	ESU	not applicable	3	1	
Print Mechanized 95 Listing	A thru F G thru K	SHD SHD		2 3		
Transfer or Assets (Installed on ACFT)	A thru F,J G,H,I,K	ESU	not applicable	1	2	
Loss of Assets (Installed on ACFT or End Item)	A thru F,J G,H,I,K	ESU	not applicable	1	3	
(Uninstalled)	A thru J K	ESU	not applicable	2	2	
Asset Inbound (Not Installed on NHA)	A thru J K	ESU	not applicable	8	1	
Asset Gained to Inventory (non-reimbursable) (installed on NHA)	A thru F,J G,H,I,K	ESU	not applicable	1	1	
(Uninstalled)	A thru J K	ESU	not applicable	2	2	

The following matrix is to assist the CAMS reporting activities in determining which is the correct TRIC to use by the type actions to be reported qualified by the type of accountable asset being reported. It is to serve as a "Roadmap" reference to AFCSM 21-558.

LEGEND OF TYPES OF REPORTABLE ASSETS:

A = Standard (non-modular non-parts tracked engine) eg J57
B = Modular Engine eg T56-9
C = Parts Tracked Engine eg TF34
D = Modular and Parts Tracked Engine eg F100
F = SE Engine eg GTCP-85-397
G = Module (non-parts tracked) eg T56-C9
H = Module (parts tracked) eg F100-23A
I = Gearbox with engine as NHA eg G56-15
K = Tracked Component Part eg F100 Fuel Pump

Table 9-47. Batch Status Reports

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. SRAN	4AN	1-4	Your four position SRAN.
2. Unit Identification	1A	5	Cannot be "X".
3. Sequence Control Number	7N	6-12	See this T.O.
4. Card Number	1N	13	Constant "1". NOTE: Never more than one card for a status report.
5. Subsystem Identifier	1A	14	Constant "S" except for installation or removal of parts-tracked engines-components or when "6" transaction code is used.
6. Transaction Code	1AN	15	
7. Condition Code	1A	16	
8. Type Report	1AN	17	Normally "R".
9. Serial Number of Item Being Reported	10AN	18-27	
10. Command Code	3AN	28-30	
a. Major Command	2AN	28-29	Contractors use command code "1M-", dependent upon which USAF organization issued the contract.
b. Sub-Command	1AN	30	
11. Organization Code	1AN	31	For local use. Cannot be "X".
12. Ownership Account Code	1A	32	See paragraph 7-1.2.
13. Date of Occurrence			
a. Julian Date	3N	33-35	ie 15 Feb - 046
14. Time of Occurrence	2N	36-37	Two position military hour designator (24 hour clock) with time rounded to nearest hour, eg 0921 = 09, 1343 = 14.
15. Engine Identifier	2AN	38-39	Select correct engine identifier from column four of CII.
16. WUC	5AN	40-44	Use "99999" for non-parts-tracked engine or use WUC from applicable -06 T.O. or this T.O.
17. Installed Receipts (45-80 defined)			
a. Filler	6AN	45-50	Constant blank.
b. Engine Flying Hours	5N	51-55	Right justify, whole numbers, precede with zeros, as necessary.
c. Cycle-Sorties Count	5N	56-60	If applicable, justify whole numbers, prefix with zeros if necessary.
d. Aircraft MDS**	7AN	61-67	
e. Filler	1	68	Constant blank.
f. Aircraft Serial Number	10AN	69-78	
g. Position Number	1N	79	
h. Filler	1	80	Constant blank.
18. Removal (pos 45-80 defined)			
a. Filler	6	45-50	Constant blank.
b. Engine Flying Hours	5AN	51-55	Right justify, whole numbers, precede with zeros, as necessary.
c. Cycle-Sortie Count	5N	56-60	If applicable, right justify whole numbers, prefix with zeros if necessary.

Table 9-47. Batch Status Reports - Continued

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
d. Engine Related How Mal Code	3N	61-63	
e. Reason for Return to Overhaul	2AN	64-65	
f. Filler	13	66-78	Constant blank.
g. Primary or Secondary Reason for Removal	1A	79	Must be "P" or "S".
h. Filler	1	80	Constant blank.
19. Uninstalled Shipments (pos 45-80 predefined)			
a. Major Command (TO)	2AN	45-46	Ship to command and SRAN for which disposition has been given.
b. SRAN (TO)	4N	47-50	Destination SRAN.
c. Shipping Device Code	4AN	51-54	See T.O. 00-85-20.
d. Document Number	14AN	55-68	
e. Filler	1	69	Constant blank.
f. Reparable Engine Serial Number***	10AN	70-79	Serial number of engine that is being replaced.
g. Filler	1	80	Constant blank.
20. Gains and Losses (uninstalled) (cols 45-80 defined)			
a. Major Command	2AN	45-46	
b. SRAN	4AN	47-50	SRAN that the engine was gained from or lost to in the USAF inventory.
c. Shipping Device Code	4AN	51-54	If uninstalled, enter shipping code from T.O. 00-85-20.
d. Document Number	14AN	55-68	
e. Filler	3	69-71	Constant blank.
f. Security Assistance Program Number	8AN	72-79	If gained or lost to a SAP country, enter appropriate SAP case number.
g. Filler	1	80	Constant blank.
21. Uninstalled Receipts (cols 45-80 defined)			
a. Filler	6AN	45-50	Constant blank.
b. Shipping Device Code	4AN	51-54	See T.O. 00-85-20.
c. Filler	26AN	55-80	Constant blank.
22. Work Completed (cols 45-80 defined)			
a. Filler	16AN	45-60	Constant blank.
b. Engine Related How Mal Code	3N	61-63	
c. Filler	17AN	64-80	Constant blank.
23. Command Code Change (cols 45-80 defined)			
a. Major Command	2AN	45-46	Enter old major command code.
b. Filler	34AN	47-80	Constant blank.
24. Installation (cols 45-80 defined)			
a. Filler	16AN	45-60	Constant blank.
b. Aircraft MDS**	7AN	61-67	
c. Filler	1	68	Constant blank.
d. End Item Serial Number	10AN	69-78	
e. Position Number	1N	79	
f. Filler	1AN	80	Constant blank.
25. Transfer of an Installed Engine (cols 45-80 defined)			
a. Major Command	2AN	45-46	Major command to which an installed engine is being transferred.

Table 9-47. Batch Status Reports - Continued

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
b. SRAN	4AN	47-50	Destination SRAN.
c. Engine Flying Hours	5N	51-55	Right justify, whole numbers prefix with zeros.
d. Cycle-Sortie Count	5N	56-60	If applicable, right justify whole numbers, prefix with zeros.
e. Aircraft MDS**	7AN	61-67	
f. Filler	1AN	68	Constant blank.
g. End Item Serial Number	10AN	69-78	
h. Position Number	1N	79	
i. Filler	1	80	Constant blank.
26. Gains and Losses (installed) (cols 45-80 predefined)			
a. Major Command	2AN	45-46	
b. SRAN	4AN	47-50	SRAN the engine is gained from or lost to.
c. Engine Flying Hours	5N	51-55	Right justify, whole numbers prefix with zeros.
d. Cycle-Sortie Count	5N	56-60	If applicable, right justify whole numbers, prefix with zeros.
e. Aircraft MDS**	7AN	61-67	
f. Filler	1AN	68	Constant blank.
g. End Item Serial Number	10AN	69-78	
h. Position Number	1N	79	
i. Filler	1AN	80	Constant blank.
27. Installations (intransits) (cols 45-80 defined)			
a. Major Command	2AN	45-46	Command code of activity that removed the item while in intransit status.
b. SRAN	4AN	47-50	SRAN of activity that removed the item while in intransit status.
c. Filler	10AN	51-60	Constant blank.
d. Aircraft MDS**	7AN	61-67	
e. Filler	1AN	68	Constant blank.
f. End Item Serial Number	10AN	69-78	
g. Position Number	1AN	79	
h. Filler	1AN	80	Constant blank.
28. Work Stopped (cols 45-80 defined)			
a. Filler	20AN	45-66	Constant blank.
b. Reason for Delay Code	1A	65	
c. Filler	15AN	66-80	Constant blank.
29. Others (ENMCS, Change in Maintenance, etc) (col 45-80 defined)			
a. Filler	16AN	45-60	Constant blank.
b. Engine Related How Mal Code	3N	61-63	
c. Reason for Return to Overhaul	2AN	64-65	
d. Filler	15AN	66-80	Constant blank.

**Aircraft MDS is seven positions. When end item is other than aircraft or MDS, leave this field blank.

***Reparable engine serial number is used when a serviceable shipment is made to replace a reparable engine, otherwise enter "Stock" or "Not Furn".

Table 9-48. Configuration (Parts-Tracking) Reports

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. SRAN	4AN	1-4	Your four position SRAN.
2. Unit Identification	1A	5	Cannot be "X."
3. Sequence Control Number	7N	6-12	See this T.O.
4. Card Number	1N	13	Constant "1."
5. Subsystem Identifier	1AN	14	Constant "C."
6. Transaction Code	1AN	15	
7. Condition Code	1A	16	
8. Type Report	1AN	17	Normally "R."
9. Date-Time of Occurrence	9N	18-19	
a. Year	2N	18-19	Last two positions of calendar year (ie 84).
b. Julian Date	3N	20-22	
c. Time of Occurrence	4N	23-26	Time in 24 hour military clock (ie 0900).
10. Engine Identifier	2AN	27-28	Select correct engine identifier from column 4 of CII tables.
11. WUC	5AN	29-33	For all "6" type transactions, except "6U" or "6T," and all other type transactions, enter the WUC of the item being reported. For "6U" or "6T," enter the WUC of the engine. Select WUC from applicable -06 T.O. or this T.O.
12. Serial Number	10AN	34-43	For all "6" type transactions, except "6U" or "6T," and all other transactions, enter serial number of the item being reported. For "6U" or "6T," enter the serial number of the engine.
13. Part Number or Recorder Serial Number	15AN	44-58	For all "6" type transactions, except "6U" or "6T," enter the part number. For "6U" or "6T," enter serial number of the recorder. If the recorder serial number is input left justify (remaining field must be left blank).
14. NHA Serial Number	10AN	59-68	
15. Engine Related How Mal Code	3N	69-71	
16. Reason for Return to Overhaul or Extended Flight Indicator	2AN	72-73	On Update (6U) transactions, put an "X" in column 73 as an extended flight indicator. On removal (LL) transactions, enter the two position reason for return to overhaul code.
17. Correction Sequence Number	7N	74-80	Input original sequence number when type report = "C" or "V," else leave blank.

Table 9-49. Card #2 for All Transactions Except 6P

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Variable	4AN	1-4	Repeat all data from columns 1-12 from card #1.
2. Filler	1N	13	Constant "2."
3. Variable	3AN	14-17	Repeat all data from columns 14 - 17 from card #1.
4. Command Code	3AN	18-20	
a. Major Command	2AN	18-19	
b. Sub-Command	1AN	20	
5. Organization Code	1A	21	Optional for local use. Cannot be "X."
6. Position Number or Primary-Secondary Reason for Removal Code	1AN	22	On removal reports, indicate the number of the position from which item was removed.
7. Ownership Code	1A	23	
8. Filler	5AN	24-28	Constant blank.
9. Aircraft MDS	7AN	29-35	
10. Method of Tracking (occurs 5 times)		36-80	NOTE: For Update (6U) and window value initialization (6T) transactions, enter the window values from the recorder except for flying hours (catalog #11), manual cycles (catalog #15) and sorties (catalog #7), which are delta values. All other initializations, adds, subtracts, removals, and installations are absolute values.
a. Catalog Number	2N	36-37	
b. Catalog Value	7N	38-44	Value of catalog number in 36-37.
c. Catalog Number	2N	45-46	
d. Catalog Value	7N	47-53	Value of catalog number in 45-46.
e. Catalog Number	2N	54-55	
f. Catalog Value	7N	56-62	Value of catalog number in 54-55.
g. Catalog Number	2N	63-64	
h. Catalog Value	7N	65-71	Value of catalog number in 63-64.
i. Catalog Number	2N	72-73	
j. Catalog Value	7N	74-80	Value of catalog number in 72-73.

Table 9-50. Card #2 for 6P

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Variable	4AN	1-12	Repeat all data from columns 1-12 from card #1.
2. Card Number	1N	13	Constant "2."
3. Variable	4AN	14-17	Repeat all data from columns 14-17 from card #1.
4. Type of Maintenance-Limit	1A	18	"X" or "Y" or blank *.
5. Type of Maintenance	1A	19	"X" or blank *.
6. Maintenance Date	5N	20-24	Last two positions of calendar year.
7. Depot SRAN	4AN	25-28	
8. MDS	7AN	29-35	See this T.O.
9. Method of Tracking (occurs 4 times)			
a. Catalog Number	2N	36-37	
b. Category	1A	38	
c. Category Value	7N	39-45	Value of catalog number in 36-37.
d. Catalog Number	2N	46-47	
e. Category	1A	48	
f. Catalog Value	7N	49-55	Value of catalog number in 46-47.
g. Catalog Number	2N	56-57	
h. Category	1A	58	
i. Catalog Value	7N	59-65	Value of catalog number in 56-57.
j. Catalog Number	2N	66-67	
k. Category	1A	68	
l. Catalog Value	7N	69-75	Value of catalog number in 66-67.
10. Filler	5N	76-80	

*Enter "X" in column 18 for OCM - enter "X" in column 19 for overhaul - enter "Y" in column 18 for serial number limit.

Card #3 is needed only when the applicable engine requires more than five catalog number and values for reporting. It is used as an extension of the number of reportable catalog number and catalog number values from and catalog number values from card #2.

Table 9-51. Card #3 for All Transactions Except 6P

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Variable	12AN	1-12	Repeat all data from columns 1-12 from card #1.
2. Card Number	1N	13	Constant "3."
3. Variable	4AN	14-17	Repeat all data from columns 14-17 from card #1.
4. Methods of Tracking		18-80	See NOTE in columns 36-80 of card #2. Use columns 18-80 on this card to report seven additional sets of 2 numeric catalog numbers-7 numeric catalog values in the same manner that was used in columns 36-80 of card #2.

Table 9-52. Card #3 for 6P

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Variable	4AN	1-12	Repeat all data from columns 1-12 from card #1.
2. Card Number	1N	13	Constant "3."
3. Variable	4AN	14-17	Repeat all data from columns 14-17 from card #1.
4. Methods of Tracking			
a. Catalog Number	2N	18-19	
b. Category	1A	20	
c. Category Value	7N	21-27	Value of catalog number in 18-19.
d. Catalog Number	2N	28-29	
e. Category	1A	30	
f. Catalog Value	7N	31-37	Value of catalog number in 28-29.
5. Filler	43N	38-80	(blank)

Card #4 is required only when the applicable engine requires more than 12 catalog number and catalog number values. In no case may the catalog number-value exceed a total of four cards (total of 19 catalog numbers and catalog values) per item reported.

Table 9-53. Card #4

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Variable	12AN	1-12	Repeat all data from columns 1-12 from card #1.
2. Card Number	1N	13	Constant "4."
3. Variable	4AN	14-17	Repeat all data from columns 14-17 from card #1.
4. Method of Tracking		18-80	See NOTE in columns 36-80 of card #2. Use columns 18-80 on this card to report seven additional sets of 2 numeric catalog numbers-7 numeric catalog values in the same manner that was used in columns 36-80 of card #2.

Table 9-54. Engine ID Transaction

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. SRAN	4AN	1-4	
2. Unit Identification	1AN	5	
3. Sequence Control Number			
a. Sequence Month Code	2N	6-7	
b. Sequence Number	5N	8-12	
4. Card Number	1N	13	"1"
5. Subsystem Identifier	1AN	14	"C"
6. Transaction/Condition Code	2AN	15-16	"6E."
7. Type Report	1AN	17	"R", "C", "D", or "V."
8. Work Unit Code	5AN	18-22	
9. Part Number	15AN	23-27	(Left Justified)
10. Serial Number	10AN	38-47	(Right Justified)
11. From Engine Identifier	2AN	48-49	
12. To Engine Identifier	2AN	50-51	
13. Filler	22AN	52-73	(blank)
14. Correction Sequence Number	7AN	74-80	

Table 9-55. Limit Change/Load

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. SRAN	4AN	1-4	
2. Unit Identification	1A	5	
3. Sequence Control Number			
a. Sequence Month Code	2N	6-7	
b. Sequence Month	5N	8-12	
4. Card Number	1N	13	"1"
5. Subsystem Identifier	1A	14	"C"
6. Transaction/Condition Code	2AN	15-16	"6L"
7. Type Report	1AN	17	"T," "C," "D," "N," "E," "V."
8. Date of Transaction/Date of Occurrence	5N	18-22	
9. As of Time of Occurrence	4N	23-26	
10. Engine Identifier	2AN	27-28	
11. Work Unit Code	5AN	29-33	
12. Serial Number	10AN	34-43	
13. Part Number	15AN	44-58	
14. Catalog Number	2N	59-60	
15. Limit	7N	61-67	
16. Filler	6AN	68-73	(blank)
17. Correction Sequence Number	7AN	74-80	

Table 9-56. TCTO Reporting (Card #1)

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Stock Record	4AN	1-4	SRAN number reporting TCTO status update. Item being reported must be in possession of reporting activity.
2. Unit Identification	1A	5	Cannot be "X."
3. Sequence Number	7N	6-12	
4. Card Number	1N	13	Constant "1."
5. Subsystem Identifier	1AN	14	Constant "T."
6. Transaction Code	1N	15	
7. Condition Code	1A	16	
8. Type Report	1AN	17	Normally "R."
9. Engine Identifier	2AN	18-19	Select correct engine identifier from column four of CII tables.
10. WUC	5AN	20-24	Use "99999" for non-parts-tracked engines or use WUC from applicable -06 T.O. or this T.O.
11. Serial Number of Item Being Reported	10AN	25-34	
12. Data Code	1N	35-41	Data code from cover sheet of TCTO.
13. How Mal Code	3N	42-44	
14. Date of Occurrence			
a. Year	2N	45-46	Last two position of year (ie 84).
b. Day of year	3N	47-49	
15. Actual Manhours	5N	50-54	A five position field that to a tenth of an hour, the manhours expended to accomplish a TCTO (only use actual manhours with How Mal Code 801, else leave blank.) NOTE: If tenth of an hour is not involved, right justify with a zero ("0") in last position.
16. Command Code	2AN	55-56	
17. Federal Supply Classification	4N	57-60	Optional - ie 2840, 2915, etc.
18. Work Center	5AN	61-65	Optional-for local use.
19. Work Order Number	8AN	66-73	Optional-for local use.
20. Error Sequence Number	7N	74-80	Input original sequence number when input report = "C" or "V," else leave blank.

Table 9-57. TCTO Reporting (Card #2)

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Variable	12AN	1-12	Repeat all data from columns 1-12 from card #1.
2. Card Number	1N	13	Constant "2."
3. Variable	3AN	14-17	Repeat all data from columns 14-17 from card #1.
4. Old Part Number	15AN	18-32	See this T.O. Obtain from Data Plate.
5. New Part Number	15AN	33-47	See this T.O. As per TCTO instructions.
6. Filler	33	48-80	Constant Blank.

Table 9-58. End of Month Report

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. SRAN	4AN	1-4	Your four position SRAN.
2. Filler	1	5	Constant blank.
3. Sequence Number	7N	6-12	See this T.O.
4. Card Number	1N	13	Constant "1."
5. Subsystem Identifier	1A	14	Constant "S."
6. Filler	2AN	15-16	Constant blank.
7. Type Report	1A	17	Constant "A."
8. Filler	63AN	18-80	Constant blank.

Table 9-59. Monthly Operating "T" Report

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. SRAN	4AN	1-4	Your four position SRAN.
2. Filler	1AN	5	Constant blank.
3. Sequence Number	7N	6-12	
4. Card Number	1N	13	Constant "1."
5. Subsystem Identifier	1A	14	Constant "S."
6. TCC	2AN	15-16	Constant "VA."
7. Type Report	1AN	17	Constant "T."
8. Serial Number	10AN	18-27	
9. Command Code	3AN	28-30	
10. Organization	1A	31	Optional-for local use.
11. Ownership Account Code	1A	32	
12. Date of Occurrence	3N	33-35	Julian date.
13. As of Time of Occurrence	2N	36-37	Two position military hour designator (24 hour clock) with time rounded to the nearest hour eg 0921 = 09, 1343 = 14.
14. Engine Identifier	2AN	38-39	Select correct engine identifier from column four of CII tables.
15. WUC	5AN	40-44	Use "99999" for non-parts tracked engines or use WUC from applicable -06 T.O.
16. Filler	6AN	45-50	Constant blank.
17. Engine Flying Hours	5N	51-55	Whole numbers, prefix with zeros.
18. Cycles-Sorties	5N	56-60	Whole numbers, prefix with zeros.
19. Aircraft MDS**	7AN	61-67	If item is installed.
20. Filler	1AN	68	Constant blank.
21. Aircraft Serial Number	10AN	69-78	
22. Position Number	1N	79	
23. Filler	1AN	80	Constant blank.

**Aircraft and MDS are seven positions. When end item is other than aircraft or MDS leave this field blank.

Table 9-60. Header Card for All BATCH Reporting (Card #1)

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Precedence	1A	1	Constant “P”.
2. Language Media	2A	2-3	Constant “CC”.
3. Security	1AN	4	Constant “U”.
4. Content Indicator	4A	5-8	Constant “FUDE”
5. Filler	1AN	9	(blank)
6. Routing Identifier (from)	7AN	10-16	
7. Communications station serial number (from)	4AN	17-20	
8. Filler	1AN	21	(blank)
9. Time of Transmission 3 position julian date 4 position zulu time	7N 3N 4N	22-28 22-24 25-28	
10. Filler	1AN	29	(blank)
11. Record Count	4N	30-33	
12. Filler	1AN	34	(blank)
13. Classification Redundancy	4A	35-38	Constant “UUUU”.
14. Start of Routing Signal	2AN	39-40	Constant “--”.
15. Routing Identifier (to)	7A	41-47	Constant “RUVORIA”.
16. Communication Action Identifier	1AN	48	Constant “.”.
17. Filler	32AN	49-80	(blank)

Table 9-61. TEXHD Card Format for All BATCH Reporting (Card #2)

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Record Identifier	5A	1-5	Constant “TEXHD”.
2. Filler	1AN	6	(blank)
3. Security Code	1A	7	Constant “U”.
4. Filler	1AN	8	(blank)
5. Privacy Indicator	1N	9	Constant “1”.
6. Filler	1AN	10	(blank)
7. TEXT Identity	12AN	11-22	Constant “HAFLEYAR8215”.
8. Filler	3AN	23-25	(blank)
9. Submission Type	1A	26	Constant “N”.
10. Filler	1AN	27	(blank)
11. Processing Date (YYMMDD)	6N	28-33	
12. Filler	1AN	34	(blank)
13. Sequence Number	3N	35-37	Constant “001”.
14. Filler	1AN	38	(blank)
15. Logical Record Length	4N	39-42	Constant “0080”.
16. Filler	1AN	43	(blank)
17. Blocking Factor	2N	44-45	Constant “01”.
18. Filler	1AN	46	(blank)
19. Major Command code (from)	2AN	47-48	
20. SRAN Name (from)	14AN	49-62	
21. Filler	1AN	63	(blank)
22. Major Command Code (to)	2AN	64-65	Constant “1M”.
23. Filler	1AN	66	(blank)
24. Supplemental	11AN	67-77	Constant “OC-ALC/TILC”.
25. Filler	3AN	78-80	(blank)

Table 9-62. TEXTR Card for All BATCH Reporting (Card #3)

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Record Identifier	5A	1-5	Constant "TEXTR".
2. Filler	1AN	6	(blank)
3. Security Code	1A	7	Constant "U."
4. Filler	1AN	8	(blank)
5. Privacy Indicator	1N	9	Constant "1."
6. Filler	1AN	10	(blank)
7. TEXT Identity	12AN	11-22	CONSTANT "HAFLEYAR8215."
8. Filler	3AN	23-25	(blank)
9. Submission Type	1A	26	Constant "N."
10. Filler	1AN	27	(blank)
11. Processing Date (YYMMDD)	6N	28-33	
12. Filler	1AN	34	(blank)
13. Sequence Number	3N	35-37	Constant "001."
14. Filler	1AN	38	(blank)
15. Card Count	6N	39-44	Total number of cards in transmission including the AUTODIN header, TEXHR, TEXTR, and AUTODIN trailer cards.
16. Filler	36AN	45-80	(blank)

Table 9-63. End of Data, Trailer Card for All BATCH Reporting (Card #4)

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Filler	76AN	1-76	(blank)
2. End of Data	4A	77-80	Constant "NNNN."

Table 9-64. Warranty Reporting (Card #1)

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. SRAN	4AN	1-4	Your four position SRAN.
2. Reporting Unit	1AN	5	
3. Sequence Control Number	7AN	6-12	
4. Card Number	1AN	13	Constant “1/”
5. Subsystem Identifier	1AN	14	Constant “C.”
6. Transaction Code	1AN	15	Constant “6”.
7. Condition Code	1AN	16	Constant “P.”
8. Type Report	1AN	17	Constant “R.”
9. Date-Time of Occurrence	9AN		
a. Year	2AN	18-19	Last two positions of calendar year (ie 96).
b. Julian Date	3AN	20-22	
c. Time of Occurrence	4AN	23-26	example: “1200”
10. Engine Identifier	2AN	27-28	Select correct engine ID from column four of CII tables.
11. WUC	5AN	29-33	Select WUC from applicable table in this TO.
12. Serial Number	10AN	34-43	Enter serial number of warranted engine or part.
13. Filler	46AN	44-80	(blank)

Table 9-65. Warranty Reporting (Card #2)

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Variable	12AN	1-12	Repeat all data from columns 1-12 from card #1.
2. Card Number	1N	13	Constant "2".
3. Variable	4AN	14-17	Repeat all data from columns 14-17 from card #1.
4. Type of Maintenance	1AN	18	Constant "W".
5. Filler	17AN	19-35	(blank)
6. Catalog Number	2N	36-37	
7. Category	1AN	38	Type warranty ie "Q" = quality, "P" = performance or "W" = embedded non-tracked.
8. Catalog Value	7N	39-45	Examples: "0086216" = 4 AUG 86, or "0001000" = 1000 hours.
9. Catalog Number	2N	46-47	
10. Category	1AN	48	NOTE: Repeat catalog number, category and catalog value as necessary.
11. Catalog Value	7N	49-55	
12. Catalog Number	2N	56-57	
13. Category	1AN	58	
14. Catalog Value	7N	59-65	
15. Catalog Number	2N	66-67	
16. Category	1AN	68	
17. Catalog Value	7N	69-75	
18. Filler	5AN	76-80	

Table 9-66. Warranty Reporting (Card #3)

DATA ELEMENTS	LENGTH	CARD COLS	SPECIAL INSTRUCTIONS
1. Variable	12AN	1-12	Repeat all data from columns 1-12 from card #2.
2. Card Numbers	1N	13	Constant "3".
3. Variable	4AN	14-17	Repeat data columns 14-17 from card #2.
4. Catalog Number	2N	18-19	
5. Category	1AN	20	
6. Catalog Value	7N	21-27	
7. Catalog Number	2N	28-29	
8. Category	1AN	30	
9. Catalog Value	7N	31-37	
10. Catalog Number	2N	38-39	
11. Category	1AN	40	
12. Catalog Value	7N	41-47	
13. Catalog Number	2N	48-49	
14. Category	1AN	50	
15. Catalog Value	7N	51-57	
16. Catalog Number	2N	58-59	
17. Category	1AN	60	
18. Catalog Value	7N	61-67	
19. Catalog Number	2N	68-69	
20. Category	1AN	70	
21. Catalog Value	7N	71-77	
22. Filler	3AN	78-80	

NOTE

All three cards are required per serial number. Up to four warranty expiration limits can be on card two. Card three can be used to set additional limits if required starting on column 18.

Table 9-67. CEMS Table Maintenance Responsibility

(USE CEMS USERS MANUAL)	NUMBER	OC-ALC/TILC	PRIME ENGINE MANAGEMENT OFFICE (PEMO)
Part Number Compatibility Table	CEMUA101		X
Base Record	CEMUA301	X	
Aircraft-End Item Record	CEMUA302	X	
Family Group Header Table	CEMUA303	X	
TCC Table	CEMUA304	X	
CII-WUC Table	CEMUA305	X	
CAMS Initialization Data	CEMUA307	X	
Command Code Table	CEMUA308	X	X
Automatic Resupply Table	CEMUA309		X
Equation Constant Update Program	CEMUA310		X
Special Status Code Table	CEMUA311	X	
Master Grouping Table	CEMUA312		X
Catalog Numbers Table	CEMUA314	X	
Eng ID to TMSM	CEMUA315	X	
Cost Update	CEMUA315		X
* Unit Cost/Acq Data/Mfg Name	CEMUA315		X
Error Code Table	CEMUA316	X	
Engine Removal How Mal Table	CEMUA317	X	
Offical Failure Rate Table	CEMUA319		X
IMS Terminal Access Table	CEMUA320	X	
Unit Data Table Maintenance	CEMUA321	X	
Category of Aging Table	CEMUA322		X
CEMS Authorization Table	CEMUA325	X	
TMSM-to-TMSM Table	CEMUA326	X	
Logical Sequence to Pipeline Code Table	CEMUA327	X	
Pipeline Code Update	CEMUA328	X	
Pipeline Standards Table	CEMUA329		X
Part Number File Maintenance	CEMUA400		X
** TCTO Master Record	CEMUA415	X	X
*** CII-Serial Number Change-Delete	CEMUA460		X
Authorized Exception Code and Special Status Code	CEMUA465		X

* Depot EIMS and ASC must update unit cost, mfg name, and acq date for their engines before 30 September each year. Notify OC-ALC/TILC to obtain ID and password.
** Only TILC Analyst may change "Total Quantity of Items Affected".
*** TILC Analyst will delete engine gained in error (wrong serial number) upon documentation from the contractor when the correct engine serial number has already been gained. Note: The preferred method would be a serial number change from incorrect to correct instead of gaining another engine.

Table 9-68. Type Report Codes and Explanations

	DATA CODES
END OF MONTH. A report submitted by each reporting activity to denote that no further reports will be submitted for the reporting month. Report is submitted on the first day of the month showing total reports submitted during the preceding reporting period.	A
CORRECTION. A report submitted by affected reporting activity to correct information previously submitted in error.	C
DELETION. A report submitted by affected reporting activity to delete data previously submitted in error. This report is not used in CAMS.	D
ACCOUNT TRANSFER. A report submitted to effect an engine transfer between AF and other than AF accounts.	K
ROUTINE. A report submitted on all transactions other than those specifically identified.	R
INSTALLED ENGINE OPERATING TIME. A report submitted by affected reporting activity to update installed engine operating time as of the last day of each quarter.	T
VERIFICATION. A report to verify previously submitted data that appears as questionable on the EM data list products.	V
RECORD ADJUSTMENT. A report to correct a previously reported error when such data will not appear on the EM data list. This report is not used in CAMS.	4

NOTE

Only data codes “K”, “R”, “T”, and “4” are valid for direct line reporting.

Command Codes. The following command and subcommand codes are acceptable for reporting. Use of any code not listed below will result in error or variance code assignment. Three positions are available. The first position (numeric) and the second position (alpha), will designate the major command. The third position (alpha) will designate subcommand when applicable.

Table 9-69. Major and Subcommand Code Table

MAJ CMD	SUB CMD	COMMAND ACRONYM	COMMAND NAME	COMMAND ABBREV	SUBCOMMAND NAME
0B		HQ AFA	US AIR FORCE ACADEMY	AFA	NONE
*0D	A	HQ USAFE	US AIR FORCE IN EUROPE	AFE	HEADQUARTERS USAFE
*0D	C	HQ USAFE	US AIR FORCE IN EUROPE	AFE	THIRD AIR FORCE
*0D	E	HQ USAFE	US AIR FORCE IN EUROPE	AFE	SEVENTEENTH AIR FORCE
*0D	G	HQ USAFE	US AIR FORCE IN EUROPE	AFE	SIXTEENTH AIR FORCE
*0D	U	HQ USAFE	US AIR FORCE IN EUROPE	AFE	HQ AIR FORCE CONTRACT MAINT
1M	A	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	HEADQUARTERS AF MATERIEL COMMAND
1M	D	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	OKLAHOMA CITY ALC
1M	E	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	OGDEN ALC
*1M	F	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	SAN ANTONIO ALC
*1M	H	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	SACRAMENTO ALC
1M	J	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	WARNER ROBINS ALC
1M	M	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	AEROSPACE MAINTENANCE AND REGENERATION CENTER (AMARC)
1M	S	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	2750 AIR BASE WING
1M	X	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	ARNOLD EDC
1M	C	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	SMSC LOS ANGELES, AFB
1M	K	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	AIR FORCE FLIGHT TEST CTR
1M	G	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	ARMAMENT DEVELOPMENT AND TEST CTR
1M	U	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	AERONAUTICAL SYSTEMS CENTER
1M	V	HQ AFMC	AIR FORCE MATERIEL COMMAND	MTC	ELECTRONIC SYSTEMS CENTER
0J		HQ AETC	AIR EDUCATION AND TRAINING COMMAND	ETC	NONE
0M		HQ AFRC	AIR FORCE RESERVE COMMAND	AFR	NONE
0R	A	HQ PAF	PACIFIC AIR FORCE	PAF	HQ PACAF
0R	B	HQ PAF	PACIFIC AIR FORCE	PAF	5TH AIR FORCE/PACAF LOGSC
0R	C	HQ PAF	PACIFIC AIR FORCE	PAF	13TH AIR FORCE
0R	D	HQ PAF	PACIFIC AIR FORCE	PAF	NOT USED
0R	E	HQ PAF	PACIFIC AIR FORCE	PAF	326TH AIR DIVISION

* For history purposes only

Table 9-69. Major and Subcommand Code Table - Continued

MAJ CMD	SUB CMD	COMMAND ACRONYM	COMMAND NAME	COMMAND ABBREV	SUBCOMMAND NAME
0R	F	HQ PAF	PACIFIC AIR FORCE	PAF	NOT USED
0R	G	HQ PAF	PACIFIC AIR FORCE	PAF	15TH AIR BASE WING
*0U		HQ USS	US SECURITY SERVICE	USS	NONE
0V		HQ SOC	AIR FORCE SPECIAL OPERATIONS COMMAND	SOC	NONE
0W		HQ USN	US NAVY	USN	NONE
0Y		HQ CSV	AF COMMUNICATIONS CMD	CSV	NONE
1C		HQ CMB	AIR COMBAT COMMAND	CMB	
1L		HQ AMC	AIR MOBILITY COMMAND	MOB	
1S		HQ SPC	HQ SPACE COMMAND	SPC	NONE
4Z		NGB	AIR NATIONAL GUARD	ANG	NONE
4D		BAF	BELGIUM AIR FORCE	BAF	NONE
4E		DAF	ROYAL DANISH AIR FORCE	DAF	NONE
*4F		NAF	ROYAL NETHERLANDS AIR FORCE	NAF	NONE
4G		WAF	NORWEGIAN AIR FORCE	WAF	NONE
01		NONE	CONTRACTOR	CON	ANY CONTRACTOR
*02		NONE	GOVERNMENT AGENCY	GOV	NONE

* For history purposes only

Table 9-70. Status Transaction Codes

DATA ITEMS	DATA CODES
NEW PRODUCTION GAIN. Installed or uninstalled engine gained to the AF inventory from a new production contract. (Restricted to new production contractors only.)	A
REIMBURSABLE GAIN. Uninstalled engine gained to the inventory of the reflected engine ownership account from any source, other than new production contract, involving monetary reimbursement.	B
NON-REIMBURSABLE GAIN. Engine gained to the inventory of the reflected ownership account from any source when monetary reimbursement is not involved.	C
EXCHANGE GAIN. Engine gained to the inventory of the reflected ownership account through negotiated exchange agreement where a reparable engine is exchanged for a serviceable engine or vice versa and repair cost is involved. Used only when transferring between AF and other than AF accounts.	D
ENMCS. Uninstalled engine undergoing repair or build-up where work stoppage resulted because spare parts from local resources were not available and required parts have been requisitioned.	E
WORK COMPLETED. Engine repair or build-up has been completed.	F
TEST CELL REJECT. An engine rejected from the test cell for maintenance corrective action required that is beyond the corrective capability of test cell personnel or equipment tooling.	G
WORK STOPPED. Uninstalled engine undergoing repair or build-up where work stoppage results from other than shortage of repair parts.	H
WORK STARTED. Engine on which actual maintenance has been started or resumed after a work stoppage.	J
REMOVAL TRANSIENT. Engine removed from a transient aircraft and the reporting activity is gaining possession of the removed engine.	K
REMOVED OTHER. Engine removed from an end item when the reporting activity is the possessor.	L
CHANGE IN MAINTENANCE. Engine that is being reported to show an authorized change in condition status.	M
AWAITING DISPOSITION. Engine on which disposition instructions have been requested from the EIM and have not been received.	N
WORKLOAD PROCESSING. Uninstalled engine removed from the supply warehouse to the overhaul line (restricted to depot repair activities only).	P
RECEIVED. Engine received by a reporting activity.	R
SHIPPED. Uninstalled or installed engine shipped or transported from the reporting activity to another reporting activity.	S
TRANSFERRED. Installed aircraft engine that is transferred (flown) from the reporting activity to another reporting activity, also used when installed and uninstalled engines are transferred to a classified project (L account) and loan (E account).	T
INSTALLED TRANSIENT. Engine installed on a transient aircraft and the reporting activity is losing possession of the installed engine. Not applicable to parts tracked engines.	U
INSTALLED OTHER. Engine installed on an end item when the reporting activity is the possessor.	V
ATTRITION LOSS. Engine lost from the inventory due to fire, Act of God, combat, crash, firing, launch, or transportation loss.	W

Table 9-70. Status Transaction Codes - Continued

DATA ITEMS	DATA CODES
RECLAIMED FOR PARTS LOSS. Engine disassembled on a maintenance work order or contract in order to reclaim useable parts and dispose of the residue.	X
SALVAGE-DPDO LOSS. Engine that has been over to DPDO or is salvaged by a contractor.	Y
OTHER LOSS. Engine in other than an AF account that is lost from the inventory (eg, Army, Navy, MAP, etc).	Z
CAB-ORG CHANGE. A multi-purpose code (for use by depot repair activities only) used in establishing or updating cannibalization registers or issuing engine to maintenance facilities for other than categorization. The use of this code does not change the status of the engine.	2
CONFIGURATION. A transaction that updates data on parts-tracked engines, modules or component parts. The use of this transaction code "6" does not change the status of the item being reported.	6

Table 9-71. Status Condition Codes

DATA ITEMS	DATA CODES
INSTALLED ACTIVE. Engine installed in an active aircraft including aircraft undergoing Progressive Aircraft Repair Cycle (PARC) or PDM. Engine installed in an AF owned and possessed missile that is on a pad and ready for firing or launch. Engine installed in active or inactive aerospace ground equipment end item except reparable aerospace ground equipment end item at the depot repair activity awaiting or undergoing repair.	A
SERVICEABLE BUILT-UP. An engine with all externally mounted equipment and any additional items if necessary (Quick Engine Change (QEC) kit, etc) and is considered ready for installation. (F100 engines and modules are delivered ready for installation.)	B
REPARABLE CONDEMNED. Engine that has been condemned or otherwise held in inactive status pending determination of disposal or rehabilitation action.	C
REPARABLE WITH QEC. Engine, built-up in a power pack configuration, that requires or is undergoing base maintenance.	F
REPARABLE WITHOUT QEC. Engine, not built-up in a power pack configuration, that requires or is undergoing base maintenance.	G*
REPARABLE MINOR. Engine located at a depot or contractor overhaul site that requires or is undergoing minor overhaul.	K
REPARABLE MAJOR. Engine that requires or is undergoing major overhaul.	L
SERVICEABLE RAW. An engine without all externally mounted equipment, that by its configuration cannot be installed directly onto an aircraft or missile without additional time in a maintenance shop to install a QEC kit or other hardware.	R*
INSTALLED INACTIVE. Engine installed in an inactive aircraft that is in extended storage, authorized for reclamation, is used for ground training, or involved in accident (or incident) and disposition is pending. Missile engine possessed by a contractor that is installed in a missile, including a missile that is operationally ready. AF possessed missile engine that is installed in an inactive missile (off the pad). Engine installed in reparable aerospace ground equipment end item at the depot repair activity awaiting or undergoing repair.	Z

*This condition code is not applicable to all modules.

Table 9-72. TCTO-Configuration TCCs

DATA ITEMS	DATA CODES
CHANGE MDS/POS NR. Changes MDS and/or position number (QEC kit).	2P
CHANGE IN MAINTENANCE. Updates condition of spares when level of maintenance changes to provide correct level of maintenance performed:	
Serviceable	MB
Base Reparable (JEIM/QB/2LM)	MF
Depot Reparable	ML
ADDITION. Adds time or cycles to engines, modules, or components.	6A
RE-ACTIVATE. Re-activation of a condemned-retired non-CEMS-accountable tracked item.	6B
CONDEMNATION. Shows a tracked component as lost to the system.	6C
POSSESSOR CHANGE. Changes possessor of existing SRAN to UNKN SRAN on non-accountable items, to indicate a part in supply.	6D
ENGINE ID CHANGE. Changes engine ID-TMSM of parts-tracked engine or module.	6E
AIRCRAFT ENGINE UPDATE. Update flying hours for all engines on an aircraft with a single transaction.	6F
NON-ACCOUNTABLE LOSS. Loses a non-accountable module/assembly from the USAF inventory.	6G
AIRCRAFT ENGINE UPDATE. Updates flying hours and/or cycles/sorties.	6H
MASS INITIALIZATION. Initializes multiple serial number (direct line reporting only).	6I
SERIAL NO INITIALIZATION. Initializes a serial number to the system or transfer location.	6N
WINDOW INITIALIZATION. Initializes an engine recorder window value to CEMS.	6T
UPDATE TRANSACTION. Updates engine time-cycle counts based on engine recorder readings.	6U
EGT. Exhaust Gas Temperature (F108 ENG. only)	6W***
MANUAL TIME CHANGE. Updates operating time on an engine, module, or component. Does not change time on lower assemblies.	6X
UPDATE MAINTENANCE DATA. Updates maintenance data and/or establishes a serial number limit.	6P
CUTOFF BATCH PROCESSING. Cuts off batch processing and establishes beginning and ending transactions of the configuration reconciliation.	6R
SUBTRACT. Subtracts time or cycles to engines, modules, or components.	6S
RECONCILIATION TRANSACTION. Updates CEMS when the time submitted in the base's reconciliation tape is within the allowable variance.	6Z
TCTO UPDATE. Changes status of a TCTO, ie shows compliance, decompliance, or any other status change.	7S
UPDATE OF TCTO. "When to Accomplish Date" identifies transaction where only the "When to Accomplish Date is Updated."	7W

Table 9-72. TCTO-Configuration TCCs - Continued

DATA ITEMS	DATA CODES
CAMS AUTOMATED HISTORY. Adds, changes or deletes CAMS narrative history information into CEMS.	AH**
REMOVAL. Removal of a component part:	
Depot Reparable	LL
Removed Serviceable	LB
Base Reparable (JEIM/QB/2LM)	LF
INSTALLED OTHER. Active.	VA
MASS REMOVAL. Disassemble on engine module/assembly.	LM
MASS INSTALLATION. Assembles an engine module/assembly.	VM
WORK COMPLETE - To report when maintenance is complete for component parts; should be reported following the ′6P′.	FB

**AH transaction used to indicate incoming CAMS narrative history data input in CEMS A295 program.

***6W available on CAMS screen 712.