# **ACTION TAKEN (AT) CODES**

All codes listed below may be used for both on-equipment or off-equipment work unless otherwise noted.

#### A. Items of Repairable Material or Weapon/Support System Discrepancy Checked No Repair Required.

This code is used for all discrepancies which are checked and found that either the reported deficiency cannot be duplicated, or the equipment is operating within allowable tolerances. Adjustments may be made under this code if the purpose of the adjustment is to peak or optimize performance. When adjustments are made, the MAL code should reflect the reason for the adjustment, for example, A-127, A-281, A-282. If the purpose of the adjustment is to bring the equipment within allowable tolerances, AT Code C should be used, for example, C-127, C-281, C-282. Additionally, this code will be used on all MAF work requests for documenting local manufacture/fabrication.

# B. Repair or replacement of items, such as attaching units, seals, gaskets, packing, tubing, hose, and fittings, that are not integral parts of work unit coded items or components.

These parts are not identified by WUCs and are normally a connecting or attaching link between two or more components that do have WUCs assigned. Therefore, when items of this nature are repaired or replaced, this AT Code is used. In case of doubt regarding which component to identify, the WUC of the component serviced will be used.

# C. Repair

This code is entered when a repairable item of material which is identified by WUC is repaired. Repair includes cleaning, disassembly, inspection, reassembly, lubrication, and replacement of integral parts; adjustments are included in this definition if the purpose of the adjustment is to bring the equipment within allowable tolerances (see AT Code A). This code also applies to the correction of a discrepancy on a weapon/support system (when appropriate).

# D. Work Stoppage, Post and Predeployment, and Inter-Intermediate Maintenance Activity (IMA) Support

This code is entered to closeout MAF Copy 1 when component repair is to be performed at another facility (see Note).

# F. Failure of Items Undergoing Check and Test

(Work Request and I-level Assisting Work Center MAFs only.)

#### J. Calibrated - No Adjustment Required

This code is used when an item is calibrated and found serviceable without need for adjustment. If the item requires adjustment to meet calibration standards, use code K. This code applies to PME only.

# K. Calibrated - Adjustment Required

This code is used when an item must be adjusted to meet calibration standards. If the item needs repair in addition to calibration and adjustment, use another code indicating the proper maintenance action. This code applies to PME only.

#### L. Work Stoppage - Awaiting Parts

This code is entered when a maintenance action must be stopped or delayed while awaiting parts which are not available locally, and a component goes into an awaiting parts status. Use of this code is restricted to the I-level. No entries will be made in the (H-Z) Failed/Required Material block of the close out MAF.

# N. Work In Progress - Close out

This code is entered by an organizational activity when it becomes necessary to close out a maintenance action during or at the end of a reporting period for any reason, including SCIR change, WO close out. This code will be entered by an IMA to close out for any reason except awaiting parts (see AT Code L).

#### P. Removed

This code is entered when an item of material is removed and only the removal is to be accounted for. In this instance delayed or additional actions are accounted for separately (see also codes R, S, and T).

#### Q. Installed

This code is entered when an item is installed and only the installation action is to be accounted for.

# R. Remove and Replace

This code is entered when an item of material is removed due to a suspected malfunction and the same or a like item is reinstalled (see Note).

#### S. Remove and Reinstall

This code is entered when an item of material is removed to facilitate other maintenance and the same item is reinstalled. AT Code S is limited to MAL Codes 800, 804, and 811.

# T. Removed and Replaced for Cannibalization

This code is used when an item of material is removed and replaced as a cannibalization action.

#### Y. Troubleshooting

This code is used when the time expended in locating a discrepancy is great enough to warrant separating troubleshooting time from repair time. Use of this code necessitates completion of two separate documents, one for the troubleshooting phase and one for the repair phase. When recording the troubleshooting time separately from the repair time, the total time taken to isolate the primary cause of the discrepancy is recorded on a separate MAF, using the system, subsystem, or assembly WUC (as appropriate).

#### **Z.** Corrosion Treatment

Includes cleaning, treatment, priming, and painting of corroded items that require no other repair. This code is always used when actually treating corroded items, either on equipment or in the shop.

# 0.

The numeric 0 will be used in the Action Taken block on all source documents recording look phase manhours for acceptance, transfer, special, conditional, major aircraft and combined airframe and engine special inspections; and corrosion, preservation, and depreservation including the close out of man-hours on the look phase of those inspections at the end of the reporting period.

# **MALFUNCTION (MAL) CODES**

#### **Fiber Optics Components**

The following MAL codes are prescribed for fiber optic component defects only.

| F01 | Fiber Optic connector loose                                    |
|-----|--|
| F02 | Fiber Optic terminus dirty                                     |
| F03 | Fiber Optic terminus uncleanable                               |
| F04 | Fiber Optic terminus end face scratched, shattered, or cracked |
| F05 | Fiber Optic cable broken                                       |
| F06 | Fiber Optic cable improper installation                        |

# NOTE: Legacy NALCOMIS OMA will not be updated to reflect these codes.

# Wiring and Wiring Components

The following MAL codes are prescribed for use in the MDS for wiring and wiring component defects only. The codes are divided into two groups to aid in finding the most applicable code. The MAL code takes on added significance when used in conjunction with items under warranty since it may be used to determine a breach of warranty by the government. Therefore, it is imperative that the code most applicable to the malfunction be selected from the following groups.

#### **Inspection (Potential) Failure Group**

W18

Use these codes when a need for maintenance exists to prevent an actual wiring or wiring component failure.

#### Harness/Wire Chafing

| W00 | Chafing against combustible/bleed airlines                |
|-----|---|
| W01 | Chafing against structure/components/non-combustible line |
| W02 | Chafing against control cables/flight control components  |
| W03 | Chafing against other wire/wire bundle assembly           |
| W04 | Chafing against chafe protection material/components      |
| W05 | Chafed/frayed grounding/bonding strap                     |
|     | Circuit Breakers/Relays                                   |
| W06 | Loose circuit breaker (not properly secured)              |
| W07 | Improper terminals  |
| W08 | Loose terminals   |
| W09 | Loose relay terminal                                      |
| W10 | Missing/damaged relay cover                               |
| W11 | Loose relay (not properly secured)                        |
| W12 | Corroded relay/hardware                                   |
|     | Connectors  |
| W13 | Corroded connector/backshell (external)                   |
| W14 | Loose/improper/missing/damaged hardware                   |
| W15 | Improper/damaged/missing potting, seal plugs, or sealant  |
| W16 | Missing/damaged rubber boot                               |
| W17 | Improper/damaged/loose connector (including keyway)       |
|     | Dielectric (Insulation)                                   |
|     |   |

Cracked/brittle/deteriorated insulation

| W19   | Fluid soaked insulation  |  |  |
|---|--|--|--|
| W20   | Nicked insulation  |  |  |
| W21   | Torn insulation  |  |  |
| W22   | Peeling/flaking topcoat insulation   |  |  |
| W23   | Evidence of carbon tracking/arcing   |  |  |
|   | Installation/Security  |  |  |
|   | ·  |  |  |
| W24   | Improper wire routing (for example, under flammable fluid carrying line(s))  |  |  |
| W25   | Incorrect bend radius  |  |  |
| W26<br>W27  | Improper wire bundle slack   |  |  |
| W27<br>W28  | Damaged/missing/improper potting at feed through Improper /damaged/missing chafe prevention material - includes grommets, strips, tubing, insulation |  |  |
|   | sheeting, and insulation tape  |  |  |
| W29   | Loose/missing/broken standoff  |  |  |
| W30   | Insufficient clearance   |  |  |
| W31   | Improperly installed wire bundle assembly cushion clamp, includes rubber slipped, wires against metal,   |  |  |
|   | wires clamped to metal, missing clamp, or clamp cushioning material  |  |  |
| W32   | Loose/improper or damaged clamp  |  |  |
| W33   | Missing/broken/improper ties   |  |  |
| W34   | Loose/missing/broken safety wire   |  |  |
| W35   | Oversized/undersized clamps  |  |  |
| W36   | Fluid soaked/deteriorated clamps   |  |  |
|   | Terminal Boards/Modules/Points   |  |  |
| W37   | Terminal boards - improper/damaged/loose terminals (studs)   |  |  |
| W38   | Terminal modules - missing sealing plugs   |  |  |
| W39   | Damaged/missing terminal boards, modules, separators, or covers  |  |  |
| W40   | Loose terminal boards, modules, or points  |  |  |
| W41   | Loose solder joints and crimps   |  |  |
| W42   | Overstripping/understripping   |  |  |
| W43   | Improper/missing endcaps   |  |  |
| W44   | Improper/damaged/loose terminals (does not include relays or circuit breakers)   |  |  |
| W45   | Corroded terminals, posts, etc.  |  |  |
| Functional Failure Group  |  |  |  |
| Use these codes when a need for maintenance exists because of an actual wiring or wiring component failure. |  |  |  |
| W46   | Arced/burned/shorted wiring - due to chafing against structure, equipment or fluid/pneumatic lines (including overheat detection elements)           |  |  |
| W47   | Arced/burned/shorted wiring - due to unknown or other causes (including overheat detection elements)   |  |  |
| W48   | Broken/open wiring (including overheat detection elements)   |  |  |
| W49   | Broken splice  |  |  |
| W50   | Broken terminal lugs/studs   |  |  |
| W51   | Broken grounding/bonding strap   |  |  |
| W52   | Connectors - missing, recessed, bent or broken pins/contacts   |  |  |
| W53   | Connectors - fluid contaminated  |  |  |
| W54   | Connectors - corroded (internal)   |  |  |
| W55   | Burned/overheated terminal lugs/studs  |  |  |
| W56   | Damaged relay/circuit breaker terminals  |  |  |
| W57   | Damaged/defective relays   |  |  |
| W58   | Damaged/defective circuit breakers   |  |  |
| W59   | Damaged wiring (chafed through/gouged/pinched/nicked/torn) with center conductor exposed/bare  |  |  |
| W60   | Terminal modules - bent or recessed pin(s)   |  |  |
| W61   | Fluid soaked insulation with center conductor exposed  |  |  |
| W62   | Defective fuse(s), switches, diodes, light bulbs, and other consumables  |  |  |

# **Alphabetical List**

The following MAL codes are prescribed for use in the MDS. The codes are divided into three logical groups to aid in finding the most applicable code. The MAL code takes on added significance when used in conjunction with items under warranty since it may be used to determine a breach of warranty by the government. Therefore, it is imperative that the code most applicable to the malfunction be selected from the following groups.

NOTE: MAL codes provided by NALCOMIS may not exactly match definitions from this appendix due to data field limitations.

# Conditional (No Fault) Group

(Use these codes when a nondefective item is removed, or when the defect or malfunction is not the fault of the item in question.)

- 578 ACOUSTICAL COIN TAP TEST
- 000 ADMINISTRATIVE look portion of an inspection; or, work request for manufacture
- 731 BATTLE DAMAGE
- 817 CANNIBALIZATION consumable part not carried or not in stock (NIS)
- CANNIBALIZATION directed by higher authority (above squadron level inter-activity transfer of equipment or item). NOTE: Use MAL Code 801 for mission essential equipment regarding aircraft deconfiguration/reconfiguration only.
- 818 CANNIBALIZATION lack of available deck space/SE/test equipment for troubleshooting (unit left installed in second aircraft)
- 814 CANNIBALIZATION operation launch/turnaround requirements (part not readily available within required time constraints
- 812 CANNIBALIZATION removed for fault isolation/troubleshooting (unit left installed in second aircraft)
- 815 CANNIBALIZATION repairable part carried but not on hand in local supply system
- 816 CANNIBALIZATION repairable part not carried in local supply system
- DAMAGED DUE TO OPERATOR ERROR improper selection, positioning, release, shutdown, activation, or like activities.
- 174 DELIVERED AIRCRAFT QUALITY manufacturing related quality issues
- 572 EDDY CURRENT INSPECTION
- 602 FAILED, DAMAGED OR REPLACED due to malfunction of associated equipment or item
- 574 FIBER-OPTIC BORESCOPE INSPECTION
- 301 FOD use 374 for internal failure
- FOREIGN OBJECT safety wire, fasteners, tools, or other objects discovered in aeronautical equipment which could lead to foreign object damage (FOD) if not removed
- 577 GASEOUS LEAK TEST
- 311 HARD LANDING
- 573 HARMONIC BOND INSPECTION
- 246 IMPROPER /FAULTY MAINTENANCE
- 086 IMPROPER HANDLING
- 087 IMPROPER IDENTIFICATION
- 158 LAUNCH DAMAGE
- 576 LIQUID PENETRANT INSPECTION
- 105 LOOSE, MISSING OR FAULTY bolts, nuts, screws, rivets, safety wire, cotter keys, fasteners, and like items
- 571 MAGNETIC PARTICLE INSPECTION
- 030 MISHAP DAMAGE
- 092 MISMATCHED electronic part
- 093 MISSING PART except code 105 or 110
- 140 MISSING SRC CARD, ASR, MSR, OR AESR
- 800 NO DEFECT component removed/reinstalled to facilitate other maintenance
- 801 NO DEFECT installation or removal of nonexpendable equipment to reconfigure the aircraft or SE to

- perform a specific mission AIRCRAFT MISSION OR SE RECONFIGURATION
- NO DEFECT component removal/reinstallation directed by higher authority
- NO DEFECT removed as part of a matched set NOT FOR USE AT THE O-LEVEL
- NO DEFECT removed for pool stock
- NO DEFECT removed/installed due to scheduled maintenance, modification, or high time
- NO DEFECT removed for troubleshooting and reinstalled on original equipment
- 440 OVERAGE, OBSOLETE OR SURPLUS
- 579 OTHER NDI METHODS
- 570 RADIOGRAPHIC INSPECTION
- 787 TIRE REMOVAL normal wear
- 877 TRANSPORTATION DAMAGE
- 575 ULTRASONIC INSPECTION
- 110 UNINTENTIONAL DEPARTURE OF OBJECTS FROM AIRCRAFT, AIRBORNE, OR ON THE GROUND

#### **Reason for Removal Group**

(This group of codes generally describe trouble symptoms or apparent defects prompting removal of malfunctioning items for repair.)

- 956 ABNORMAL FUNCTION of computer mechanical equipment
- 314 ACCELERATION/DECELERATION IMPROPER
- 693 AUDIO/VIDEO FAULTY
- 652 AUTOMATIC ALIGN TIME EXCESSIVE
- 780 BENT, BUCKLED, DENTED, COLLAPSED, DISTORTED, OR TWISTED
- 135 BINDING, STUCK, JAMMED
- 070 BROKEN, BURST, RUPTURED, PUNCTURED, TORN, CUT (See note.)
- 900 BURNED OR OVERHEATED (See note.)
- 150 CHATTERING
- 185 CONTAMINATION metallic
- 306 CONTAMINATION nonmetallic
- 307 CONTAMINATION Chemical or Biological
- 308 CONTAMINATION Radiological
- 170 CORRODED (See note.)
- 190 CRACKED, CRAZED (See note.)
- 782 DEFECTIVE OR DAMAGED TIRE SIDEWALL, TREAD, BEAD, ETC.
- 846 DELAMINATED
- 117 DETERIORATED/ERODED (See note.)
- DOES NOT ENGAGE, LOCK OR UNLOCK PROPERLY (See note.)
- 320 ENGINE COMPRESSOR STALLS, BUZZ, CHUG, THUMP
- 922 ENGINE MONITORING SYSTEM INDICATES OVERTEMP LIMIT EXCEEDED
- 959 FAILS TO TRANSFER TO REDUNDANT EQUIPMENT
- 051 FAILS TO TUNE/DRIFTS
- 069 FLAME OUT
- 037 FLUCTUATES, OSCILLATES frequency/RPM unstable, intermittent, weak/no stabilization
- 327 FLUCTUATING ENGINE OIL PRESSURE INDICATION
- 696 FLUID LOW
- 188 GLAZED
- 653 GROUND SPEED ERROR EXCESSIVE
- 329 HIGH ENGINE OIL PRESSURE INDICATION
- 281 HIGH OUTPUT
- 916 IMPENDING OR INCIPIENT FAILURE indicated by oil analysis (JOAP)
- 381 LEAKING internal or external
- 383 LOCK ON MALFUNCTION
- 989 LOW COOLANT FLOW

- 328 LOW ENGINE OIL PRESSURE INDICATION
- 282 LOW OUTPUT
- 537 LOW POWER OR THRUST mechanical
- 425 NICKED OR CHIPPED (See note.)
- 682 NO AZIMUTH OR DRIFT
- 326 NO ENGINE OIL PRESSURE INDICATION
- 325 NON-RECOVERABLE IN-FLIGHT SHUTDOWN Engine
- 958 NO OR INCORRECT DISPLAY/SCOPE PRESENTATION
- 255 NO OUTPUT
- 823 NO START, STALLED/HUNG START, HOT START, DETONATION, OR HARD/LATE AFTERBURNER LIGHT
- 257 OFF COLOR
- 398 OIL CONSUMPTION EXCESSIVE
- 464 OVERSPEED/RUNAWAY OPERATION
- 429 PEELED OR BLISTERED (See note.)
- 520 PITTED
- 010 POOR OR NO FOCUS
- 525 PRESSURE/VACUUM/COMPRESSION INCORRECT
- 935 SCORED, SCRATCHED, GOUGED, BURRED (See note.)
- 585 SHEARED
- 681 SHUTTER HUNG/NO TRIP
- 503 SUDDEN STOP
- 649 SWEEP MALFUNCTION
- 334 TEMPERATURE INCORRECT
- 781 TIRE LEAKAGE EXCESSIVE OR BLOWOUT
- 599 TRAVEL OR EXTENSION INCORRECT
- 561 UNABLE TO ADJUST TO LIMITS
- 465 UNDERSPEED
- 690 VIBRATION EXCESSIVE
- 622 WET (See note.)
- 020 WORN, STRIPPED, CHAFED, FRAYED except electrical wiring (See note.)

#### NOTE: Use codes W00 through W62 for wiring and wiring components.

# **Reasons for Failure Group**

(This group of codes generally describe underlying defects or basic failure reasons determined during repair of items exhibiting trouble symptoms.)

- 127 ADJUSTMENT OR ALIGNMENT IMPROPER
- 651 AIR IN SYSTEM
- 007 ARCING, ARCED (See note.)
- 710 BEARING FAULTY
- 720 BRUSH, SLIP RING/COMMUTATOR WORN EXCESSIVELY/FAILURE
- 969 CANNOT RESONATE input cavity, magnetron
- 180 CLOGGED, OBSTRUCTED, PLUGGED use code 306 for contamination
- 028 CONDUCTANCE INCORRECT
- 029 CURRENT INCORRECT
- 192 ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO CONNECTOR, CONNECTOR CORROSION, BENT PINS
- 194 ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO HIGH INDICATION
- 195 ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO LOW INDICATION
- 193 ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO OIL CONTAMINATION
- 196 ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO TRANSMITTER SHORT
- 191 ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO VIBRATION(S)
- 292 FAILS acceptance check
- 295 FAILS check/test

290 FAILS - diagnostic/automatic tests 698 FAULTY - card/micrologic device 177 FUEL FLOW INCORRECT GAIN OR STANDING WAVE RATIO INCORRECT 088 350 INSULATION BREAKDOWN (See note.) INTERNAL FAILURE - use 301 for FOD 374 KEY WAY OR SPLINE DAMAGED/WORN (See note.) 481 LACK OF/IMPROPER LUBRICATION 410 697 MAGNETIC TAPE BROKEN/FAULTY 064 MODULATION INCORRECT 799 NO DEFECT - malfunction could not be duplicated, item checks good 008 NOISY, MICROPHONIC, GASSY, HIGH ANODE CURRENT, LOW GM/EMISSION, OR OPEN FILAMENT/TUBE CIRCUIT 450 OPEN (See note.) 458 **OUT OF BALANCE** 991 OUT OF FREQUENCY - does not track tuning curve, poor spectrum 416 **OUT OF ROUND** OUT OF SPECIFICATION/CHANGE OF VALUE 766 POWER OUTPUT DIP/LOW - electronic 962 703 PROGRAM FAILURE 567 RESISTANCE/IMPEDANCE HIGH 568 RESISTANCE/IMPEDANCE LOW RIGGING/INDEXING INCORRECT 128 615 SHORTED - including internal (See note.) SIGNAL DISTORTION - input/output pulse, data link errors, etc. 679 420 SPAR SPLINTERING 279 SPRAY PATTERN DEFECTIVE OR FUEL NOZZLE COKED 695 SYNC ABSENT OR FAULTY 167 TORQUE INCORRECT 169 VOLTAGE INCORRECT

NOTE: Use codes W00 through W62 for wiring and wiring components.

WRONG LOGIC - program or computer

447

#### **Numerical List**

The following MAL description codes are prescribed for use in the MDS. The codes are divided into three logical groups to aid in finding the most applicable code. The MAL code takes on added significance when used in conjunction with items under warranty since it may be used to determine a breach of warranty by the government. Therefore, it is imperative that the code most applicable to the malfunction be selected from the following groups.

NOTE: MAL codes provided by NALCOMIS may not exactly match definitions from this appendix due to data field limitations.

#### **Conditional (No Fault) Group**

(Use these codes when a nondefective item is removed, or when the defect/malfunction is not the fault of the item in question.)

- 000 ADMINISTRATIVE look portion of an inspection; or, work request for manufacture
- 030 MISHAP DAMAGE
- 086 IMPROPER HANDLING
- 087 IMPROPER IDENTIFICATION
- 092 MISMATCHED electronic part
- 093 MISSING PART except code 105 or 110
- 105 LOOSE, MISSING, OR FAULTY bolts, nuts, screws, rivets, safety wire, cotter keys, fasteners, and like items. (See note.)
- 110 UNINTENTIONAL DEPARTURE OF OBJECTS FROM AIRCRAFT, AIRBORNE, OR ON THE GROUND
- 140 MISSING SRC CARD, ASR, MSR, OR AESR
- 158 LAUNCH DAMAGE
- 174 DELIVERED AIRCRAFT QUALITY manufacturing related quality issue
- 246 IMPROPER/FAULTY MAINTENANCE (See note.)
- FOD use 374 for internal failure
- FOREIGN OBJECT safety wire, fasteners, tools, or other objects discovered in aeronautical equipment which could lead to FOD if not removed
- 311 HARD LANDING
- DAMAGED DUE TO OPERATOR ERROR improper selection, positioning, release, shutdown, activation, or like activities
- 440 OVERAGE, OBSOLETE OR SURPLUS
- 570 RADIOGRAPHIC INSPECTION
- 571 MAGNETIC PARTICLE INSPECTION
- 572 EDDY CURRENT INSPECTION
- 573 HARMONIC BOND INSPECTION
- 574 FIBER-OPTIC BORESCOPE INSPECTION
- 575 ULTRASONIC INSPECTION
- 576 LIQUID PENETRANT INSPECTION
- 577 GASEOUS LEAK TEST
- 578 ACOUSTICAL COIN-TAP TEST
- 579 OTHER NDI METHODS
- 602 FAILED, DAMAGED OR REPLACED due to malfunction of associated equipment/item
- 731 BATTLE DAMAGE
- 787 TIRE REMOVAL normal wear
- 800 NO DEFECT component removed and reinstalled to facilitate other maintenance
- NO DEFECT installation or removal of nonexpendable equipment to reconfigure the aircraft or SE to perform a specific mission AIRCRAFT MISSION OR SE RECONFIGURATION
- NO DEFECT removed and installed due to scheduled maintenance, modification, or high time
- NO DEFECT removed for pool stock

- NO DEFECT removed as part of a matched set NOT FOR USE AT THE O-LEVEL
- 807 NO DEFECT component removal and reinstallation directed by higher authority
- NO DEFECT removed for troubleshooting and reinstalled on original equipment
- 812 CANNIBALIZATION removed for fault isolation or troubleshooting (unit left installed in second aircraft)
- CANNIBALIZATION directed by higher authority (above squadron level inter-activity transfer of equipment or item). NOTE: Use MAL Code 801 for mission essential equipment regarding aircraft deconfiguration/reconfiguration only.
- 814 CANNIBALIZATION Operation launch/turnaround requirements (part not readily available within required time constraints)
- 815 CANNIBALIZATION repairable part carried but not on hand in local supply system
- 816 CANNIBALIZATION repairable part not carried in local supply system
- 817 CANNIBALIZATION consumable part not carried or NIS
- 818 CANNIBALIZATION lack of available deck space/SE/test equipment for troubleshooting (unit left installed in second aircraft.)
- 877 TRANSPORTATION DAMAGE

NOTE: Use codes W00 through W62 for wiring and wiring components.

# **Reason for Removal Group**

(This group of codes generally describes trouble symptoms or apparent defects prompting removal of malfunctioning items for repair.)

- 010 POOR OR NO FOCUS
- 020 WORN, STRIPPED, CHAFED, FRAYED except electrical wiring
- 037 FLUCTUATES, OSCILLATES frequency or RPM unstable, intermittent, weak, or no stabilization
- 051 FAILS TO TUNE/DRIFTS
- 069 FLAME OUT
- 070 BROKEN, BURST, RUPTURED, PUNCTURED, TORN, CUT (See note.)
- 117 DETERIORATED/ERODED (See note.)
- 135 BINDING, STUCK, JAMMED
- 150 CHATTERING
- 170 CORRODED (See note.)
- 185 CONTAMINATION metallic
- 188 GLAZED
- 190 CRACKED, CRAZED (See note.)
- 255 NO OUTPUT
- 257 OFF COLOR
- 281 HIGH OUTPUT
- 282 LOW OUTPUT
- 306 CONTAMINATION nonmetallic
- 307 CONTAMINATION Chemical or Biological
- 308 CONTAMINATION Radiological
- 314 ACCELERATION/DECELERATION IMPROPER
- 320 ENGINE COMPRESSOR STALLS, BUZZ, CHUG, THUMP
- 325 NON-RECOVERABLE IN-FLIGHT SHUTDOWN Engine
- 326 NO ENGINE OIL PRESSURE INDICATION
- 327 FLUCTUATING ENGINE OIL PRESSURE INDICATION
- 328 LOW ENGINE OIL PRESSURE INDICATION
- 329 HIGH ENGINE OIL PRESSURE INDICATION
- 334 TEMPERATURE INCORRECT
- 381 LEAKING internal or external
- 383 LOCK-ON MALFUNCTION
- 398 OIL CONSUMPTION EXCESSIVE
- 425 NICKED OR CHIPPED (See note.)
- 429 PEELED OR BLISTERED (See note.)

464 OVERSPEED/RUNAWAY OPERATION 465 **UNDERSPEED** SUDDEN STOP 503 520 **PITTED** 525 PRESSURE/VACUUM/COMPRESSION INCORRECT 537 LOW POWER OR THRUST - mechanical 561 UNABLE TO ADJUST TO LIMITS **SHEARED** 585 TRAVEL OR EXTENSION INCORRECT 599 622 WET (See note.) 649 **SWEEP MALFUNCTION** 652 AUTOMATIC ALIGN TIME EXCESSIVE GROUND SPEED ERROR EXCESSIVE 653 681 SHUTTER HUNG/NO TRIP 682 NO AZIMUTH OR DRIFT 690 VIBRATION EXCESSIVE 693 AUDIO/VIDEO FAULTY 696 FLUID LOW BENT, BUCKLED, DENTED, COLLAPSED, DISTORTED, OR TWISTED 780 TIRE LEAKAGE EXCESSIVE OR BLOWOUT 781 782 DEFECTIVE OR DAMAGED TIRE SIDEWALL, TREAD, BEAD, ETC. NO START, STALLED/HUNG START, HOT START, DETONATION, OR HARD/LATE 823 AFTERBURNER LIGHT 846 **DELAMINATED** 900 BURNED OR OVERHEATED (See note.) 916 IMPENDING OR INCIPIENT FAILURE - indicated by oil analysis (JOAP) ENGINE MONITORING SYSTEM INDICATES OVERTEMP LIMIT EXCEEDED 922 DOES NOT ENGAGE, LOCK OR UNLOCK PROPERLY (See note.) 932 SCORED, SCRATCHED, GOUGED, BURRED (See note.) 935 ABNORMAL FUNCTION - of computer mechanical equipment 956 NO OR INCORRECT DISPLAY/SCOPE PRESENTATION 958 FAILS TO TRANSFER TO REDUNDANT EQUIPMENT 959

NOTE: Use codes W00 through W62 for wiring and wiring components.

989

LOW COOLANT FLOW

### **Reasons for Failure Group**

(This group of codes generally describe underlying defects or basic failure reasons determined during repair of items exhibiting trouble symptoms.)

007 ARCING, ARCED (See note.) 008 NOISY, MICROPHONIC, GASSY, HIGH ANODE CURRENT, LOW GM/EMISSION, OR OPEN FILAMENT/TUBE CIRCUIT 028 CONDUCTANCE INCORRECT **CURRENT INCORRECT** 029 064 MODULATION INCORRECT 088 GAIN OR STANDING WAVE RATIO INCORRECT 127 ADJUSTMENT OR ALIGNMENT IMPROPER 128 RIGGING/INDEXING INCORRECT 167 TOROUE INCORRECT **VOLTAGE INCORRECT** 169 177 FUEL FLOW INCORRECT 180 CLOGGED, OBSTRUCTED, PLUGGED - use code 306 for contamination 191 ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO VIBRATION(S) 192 ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO CONNECTOR, CONNECTOR CORROSION, BENT PINS 193 ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO OIL CONTAMINATION 194 ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO HIGH INDICATION 195 ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO LOW INDICATION ENGINE OIL PRESSURE TRANSMITTER FAILS DUE TO TRANSMITTER SHORT 196 279 SPRAY PATTERN DEFECTIVE OR FUEL NOZZLE COKED 290 FAILS – diagnostic/automatic tests 292 FAILS – acceptance check FAILS - check/test 295 350 INSULATION BREAKDOWN 374 INTERNAL FAILURE - use 301 for FOD 410 LACK OF/IMPROPER LUBRICATION 416 **OUT OF ROUND** 420 SPAR SPLINTERING 447 WRONG LOGIC - program or computer 450 OPEN (See note.) 458 OUT OF BALANCE KEY WAY OR SPLINE DAMAGED/WORN (See note.) 481 567 RESISTANCE/IMPEDANCE HIGH 568 RESISTANCE/IMPEDANCE LOW SHORTED - including internal (See note.) 615 651 AIR IN SYSTEM SIGNAL DISTORTION - input/output pulse, data link errors, etc. 679 SYNC ABSENT OR FAULTY 695 697 MAGNETIC TAPE BROKEN/FAULTY 698 FAULTY - card/micrologic device 703 PROGRAM FAILURE 710 BEARING FAULTY BRUSH, SLIP RING/COMMUTATOR WORN EXCESSIVELY/FAILURE 720 OUT OF SPECIFICATION/CHANGE OF VALUE 766 799 NO DEFECT - malfunction could not be duplicated, item checks good

NOTE: Use codes W00 through W62 for wiring and wiring components

OUT OF FREQUENCY - does not track tuning curve, poor spectrum

POWER OUTPUT DIP/LOW - electronic

CANNOT RESONATE - input cavity, magnetron

962

969

991