

Customer Requirements			
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Division #:	1 & 11	Customer #:	10023, 13423, 13601 13604, 14103
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MTU			

MTU Double Check (ORDERS) must be performed on all MTU orders shipping to Hannover, Germany (#13601), all other MTU sites do not require a double check.

Germany (HAJ) Inspection will complete attached checklist as part of the double check process.

MTU Double Check (TRANSFERS) must be performed for material going to MT2 Warehouse which requires an AAR material cert with MTU PO number referenced on the cert. Material going to the HAJ Warehouse does not require a cert or a double check.

## **MTU Customer Approvals for Orders & Transfers:**

Customer approvals via EDI PO narratives will NOT be accepted.

CUSTOMS PPWK ENVELOPE: Attach an extra copy of AAR's ATA106 and any ARC's (8130-3, EASA Form 1, etc.) in a Customs Envelope to your pick document for shipping and for inspector performing the double check. All originals shall be enclosed in the box.

#### **New Material:**

- MTU requires that all new material be traceable to the OEM either by providing the OEM paperwork or through a statement from the last regulated source stating that the material was obtained from the OEM.
- Factory new parts must be in OEM packaging.
- MTU requires an original or a true certified copy of the original 8130-3/EASA
  Form 1. If not available, an Export 8130 must be issued in lieu of an 8130
  airworthiness certificate.
- For material being provided from an ARC with more than one line item on it, a CTC/Split Stamped ARC copy must be provided indicating the quantity being shipped, even if that is the full quantity of the Line Item in question.

#### **Traceability Requirements:**

- The Distributor shall ensure that no parts are supplied from a source included on MTU's <u>Do Not Use List</u>, unless falling into one of the three exception categories indicated on the list.
- MTU does not accept **Cabo Verde** trace on **LLP's**, non-LLP's can be traced to Cabo Verde.
- MTU does not require a removal tag or teardown report.
- MTU requires trace to ESN and Last Operator. (PL to issue a pick narrative if PO states that operator trace is not required and "Traceable to the stock of ... "is acceptable)

- Trace exceptions can be made for Pratt and GE, detailed in 1 & 2 below, these two exceptions do not require written approval or order narratives:
  - 1) MTU accepts material traceable to Pratt SMMO/CSA on Pratt & Whitney manufactured material provided that the Pratt material cert states the last ESN.
  - 2) MTU accepts material traceable to GE Aviation Material (GEAM) on GE manufactured material provided that the GE material cert states the last ESN.

## **PMA Parts (Parts Manufacturer Approval):**

 Only PMA design approvals for non-critical components have direct acceptance by EASA. In order to determine that a given part is defined as non-critical, the following statement must be entered into the remarks block of the Authorized Release Certificate completed by the Distributors supplier:

"This PMA part is not a critical component"

## **Airworthiness Directives:**

- AD's (Airworthiness Directives) on LLP's require shop router or equivalent in addition to 8130-3.
- MTU Requires the detailed method of compliance for all performed AD's (Airworthiness Directives) as accurately described in the AD itself.
- If an Alternative Method of Compliance (AMOC) is issued for an AD and the AMOC is used instead of the original issue AD, the alternative method of compliance must also be provided as accurately described in the AMOC.
- SPOP's (Service Process Operation Procedure) will not be accepted, DFP's (Dirty Finger Prints / Inspection Sheets / Shop Router / Shop Traveler) must have the detailed requirements as shown on the AD's detailed on the forms, see attached letter for examples: Cover Letter for Dirty Finger Prints
- If no shop documentation (DFP's) is provided, a completed Data Sheet for detailed AD task with date, signature and inspectors stamp would also fulfill the AD requirement.

#### **Certification Requirements:**

- MTU will not accept any EASA forms with batch or lot numbers referenced in the Block 10 Serial Number field.
- MTU requires an original or true certified copy dual release for all "S" & "O" material. Copies shall only be provided if MTU provides written acceptance.
- For parts being shipped from an ARC with multiple L/I's on it, or when shipping the last quantity of parts from an ARC which is less than the number in the Qty block, a CTC/Split Stamped ARC copy must be provided for the qty being sent.
- An ATA-106 is required for all material supplied to MTU.
- The following information must be entered in Block 13A of the ATA-106:
  - System reference tracking # of the authorized release certificate.
  - o When available, reference ex ESN ... "
  - o Last operator was ... "
  - o For trace exceptions, other than 1 & 2 above, reference: Stock of......
- Any Non-OEM Inspection / Repair (i.e. DER/IEN/Airline Specific) must be approved by MTU in writing. This includes **PDER markings** but excludes PW2000 list of approved DER's below.

• AAR personnel cannot concess any material not conforming to FAA orders (i.e. FAA 8130.21).

## **Certified True Copies:**

• MTU requires a certified true copy stamp (reflecting the quantity being supplied) if the Authorized Release Certificate (ARC) quantity is split. This applies even if they are purchasing the remaining quantity and it applies to all ARC's.

## **Record Of Measurement (R.O.M.) Sheets:**

• R.O.M. Sheets are a standard requirement for all bearings.

## F.O.D. Prevention:

• Parts shipping to MTU must be protected from Foreign Object Damage (FOD). All closures must be of such design that the opening that they protect cannot be assembled to its mating opening without removal of the closure. This requirement prevents the mating of parts with a closure still in place. Please see your Lead/Supervisor if you have any questions

## **Previous DER (PDER) Markings:**

If your parts or paperwork have any of the following markings:

- DER
- EA
- MTO-220-S
- ER
- **RW-1** (Part Marking on Bearings)
- **RW-2** (Part Marking on Bearings)
- C-747 (ARC Paperwork for Bearings)
- **CGT-DER** (Chromalloy DER marking)
- U1 P/N Suffix (UAL part marking that may not be a DER but requires approval)

These DER's/PDER's will require customer approval, if we don't have approval, please issue an NCR.

## **For Reference Only:**

MTU's Supplier Quality Policy Issued 24.01.2018

**CONTINUED BELOW:** 



## **Technical:**

#### **GE CF6-50**

#### **Life Limited Parts:**

- All life limited parts must be traceable back to birth and be checked against GE SB 72-949 dealing with 'Accident Involved Hardware'.
- Any LLP that is affected by AD note 2002-05-03 must reference that the AD was complied
  with in the remarks block of the 8130-3/EASA. If the 8130-3 dates prior to the AD note, a
  copy of the shop router can be used instead of the reference in remarks of the 8130.

## **Technical Requirements:**

- The following turbine blade part numbers must be approved in writing by MTU prior to shipment:
  - o 9299M30GXX
  - o 9128M91GXX
  - o 1881M53PXX
  - o 9315M11GXX
  - o 9045M14GXX
- PMA parts must be pre-approved by MTU.
- MTU requires CAT 'A' compressor blades and vanes only.
- All LPT Stage 1 Vanes must have one of the following coatings performed:
  - o CODEP coating (with Spare Parts Release SB 72-1075 applicable).
  - Sermalloy 'J' coating (in accordance with EM 72-55-01 Rep. 007)
  - Chromizing CHR-2 coating (alternate to Sermalloy 'J').
  - Walbar RB-505 (alternate to Sermalloy 'J').
  - CF6-50 Stage 1 LPT Vanes ending in part numbers G18 or G22 require Sermalloy 'J' coating or PTAL coating. This coating is repair number 7 in the maintenance manual.

## PW2000

## **Serialized Parts:**

- Traceability to Ex ESN will be provided in the remarks block of the Airworthiness Approval Certificate, FAA Form 8130-3, FAA Form 337, EASA Form 1, or a part removal tag
- Non Incident Statement requires Letter Head of the Airline and handwritten Signature
- For Assy. Parts (e.g. Drum Rotors) an MRP is required for all piece parts (e.g. Disks)

## **HPT Blades:**

- T1 blades follow the EM for limited PN's.
- T2 blades EM for limited PN's and two 2 strip maximum

## **HPC Blades:**

#### HPC blades Stq.6-9:

- Inspected and repaired per EM 72-35-11 thru 14, latest revision.
- Blades must comply with MTU TO SH 72-35-00 013 Latest Rev and meet Cat A or Cat B.
- Stg.6 Pre SB 72-712 configuration blades are not acceptable, this includes the following PN's: 1B7706, 1A8106-001, 1B0806-001, 1B3406-001, 1B5606-001
- Stg.9 Pre SB72-713 configuration blades are not acceptable, this includes the following PN's: 1A9709, 1B6509, 1B6709

#### HPC blades Stg.10-17:

- Inspected and repaired per EM 72-35-15 thru 22, latest revision.
- Tip-welded per EM repair-05 (fulfills min. Cat "A" Req.) (72-35-XX-300-005-002) by vendor **TOS** only (no DERs allowed)
- "Stub Run" blades are **not** acceptable

# PW2000 (continued)

#### Fan Blades:

- PL will specify via a pick narrative if an MTU order is for the repair of a UPS engine. If
  the fan blades are for a UPS engine, Repair 12 (hot straightening) is required.
  MTU does not track the TSN/CSN of fan blades but instead tracks the quantity of hot
  straightening repairs. Blades with hot straightening repairs performed (current or
  previous repair cycle) will have repair markings to that effect. Repair markings are
  listed in EM section 72–31–12–300–011
- Fan blade PN's 1B6531, 1B6231-001, 1A9031-001 and fan blade pair/set PN's 1B6521, 1B6221-001, 1A9721-001 require the following inspections and repairs to be performed:

EM 72-31-12 Inspections 00, 01, 02, 04, 05.

EM 72-31-12 Repairs 01, 02, 04, 05, 06, 14, 16, 18.

Compliance with SB A72-729 latest revision and AD 2012-02-01 should be indicated on the Authorized Release Certificate

DFP's (shop routers) are required for all blades complying with the above AD & SB. NOTE: MTU may accept blades with different work-scopes than required above. Approval of parts that do not meet the above requirements will be based on MTU's review of the paperwork and acceptance will be provided via e-mail.

#### **Fuel Nozzles:**

Fuel Nozzles PN 1B3122 must include test log sheets.

## **Combustion Chamber:**

• Limited to 22,000 Total Time, or new liner replacement at last overhaul

## LPC Shafts:

Must include new coating in SB 72-494 & SB 72-728 or SB 72-772

#### LPT Cases:

 MTU requires a ROM (Record of Measurement) from the repair vendor to be included with any LPT Case sold, example of the part numbers included are A8A2566 and 8A2987 but no limited to just those two part numbers.

#### DER / IEN:

- List of Pre-Approved DER's, all others need approval.
- See list of UPS <u>Approved DER repairs</u>. In addition to attached list, UPS can accept EA EM16FC153 and EA 15FC310, Product Line will indicate when a shipment is scheduled for UPS via the pick narratives.
- DER's & IEN's must be documented on the ARC.
- For DER's, FAA Form 8110-3 to be provided to MTU.

#### **High Point Requirement:**

 See <u>Attached</u> for PN, Manual Reference and Part Marking Requirements. It is Product Lines responsibility to flow this down when required.

#### Miscellaneous:

- MTU will not accept customized Engine Manual Serviceable Tags (e.g. Delta Manual)
- True Copies require full readability, no covered or cutout areas allowed True Copy Stamp in the remarks area is acceptable as well as a minimized form with the stamp on a side.