# REPAIR AND OVERHAUL INSTRUCTIONS

# WING JACKING PAD REPAIR SCHEMES

(This EO replaces EO 05-45B-3F dated 13 Jun 62)

#### INFORMATION

- 1 This EO details instructions for a minor and major repair of the jacking point lugs. The minor repair as shown on RCAF Drawing 44133 shall be used when the existing lugs can be reworked to the limits detailed on RCAF Drawing 24478 thereby removing stripped threads and all cracks and damage to the jacking point lugs.
- If all the damage to the lugs cannot be removed by the minor repair scheme, it is mandatory that the major repair scheme shown on RCAF Drawing 5395 be carried out.
- Both minor and major repair schemes detailed in this EO are considered beyond the capability of first or second line maintenance organizations.

#### INSTRUCTIONS

#### MINOR REPAIR SCHEME

- 4 Carry out the repair to the port and/or starboard jacking point lugs in accordance with the following information and RCAF Drawing 44133 and Check List 44133.
- (a) Fabricate doublers and covers in accordance with RCAF Drawing 33769 and 24481 as necessary and install the doubler as shown on RCAF Drawing 33770.
- (b) Rework the jacking point lugs in accordance with RCAF Drawing 24478.
- (c) Fabricate flat or contoured spreader plate in accordance with RCAF Drawings 24480 or 24479 respectively (for requirement, refer to RCAF Drawing 44133).
- (d) Fabricate new jacking point lugs as detailed on RCAF Drawing 15968.
- (e) Assemble the new lugs and spreader plate in accordance with RCAF Drawing 44133.
- (f) After assembly and finishing the lugs and spreader plate, the assembly shall be installed on the aircraft.
- (g) The access cover shall be installed after drilling lug clearance holes as detailed on RCAF Drawing 44133.

#### MAJOR REPAIR SCHEME

- 5 Carry out the repair to the port and/or starboard jacking pad attachments in accordance with the following information and RCAF Drawing 5395 with its respective check list.
- (a) Remove the fuel cell from port and/or starboard side as applicable.

- (b) Remove bulkhead from front main spar fuel cell area if required.
- (c) Cut away lower center section skin as indicated on Drawings 5395 and 33770.
- (d) Remove paint and zinc chromate primer from spar in the area that the jacking pad is to be applied. Ensure a clean smooth surface is obtained.
- (e) Rework existing jacking point lugs as per RCAF Drawing 24478.
- (f) Fabricate coupling lugs as per RCAF Drawing 15968.
- (g) Manufacture mounting pad and clamp brackets as indicated by RCAF Drawings 33771 and 24482.
- (h) Fit the mounting pad and clamp brackets to the aircraft structure, ensuring the steel contour plates of each item clear the spar surface by a minimum of 1/32".
- (j) Back drill mounting pad from reworked sleeves.
- (k) Open holes to 3/8" diameter to take coupling lugs.
- (m) Assemble lugs, mounting pad and clamp bracket and bolt in place using a standard jack adapter. Part 84-180930. Do not tighten nuts until assured all mating surfaces are parallel and bolts are in alignment.

### NOTE

Local modifications to some adapters make this fit impossible. Do not use modified adapters for this operation.

- (n) Mate lugs to reworked sleeves and tighten standard jack adapter to lug.
- (p) Remove from aircraft and tack weld lugs to mounting pad.
- (q) Remove standard jack adapter.
- (r) Finish welding as per Drawing 5395.
- (s) Coat the spar area with a release agent to ensure the pad and clamp brackets may be removed after hardening of the "Devcon A".
- (t) Mix 33C/NIC "Devcon A" plastic steel, to suitable consistency and fill the pad and clamp brackets. Apply the fittings to the aircraft ensuring that the 1/32" clearance is maintained as noted in step (h).
- (u) Allow a minimum of 4 hours hardening time for the "Devcon A".
- (v) Remove the jacking pad and saddles.
- (w) Thoroughly clean aircraft structure in the area of the adapter to remove "Devcon" parting agent.
- (x) Refinish the aircraft structure to the original specification. (One coat zinc chromate primer, two coats bituminous paint to Spec. 1-GP-80).
- (y) Manufacture and install cover plate and doubler as per RCAF Drawings 24481, 33769, and 33770.

### NOTE

Instances have occurred where the cover plate cannot be fitted flush with the skin. Sketch 6RD 1347D is submitted as an alternate cover installation if this condition exists.

- (z) Install the jacking pad and clamp brackets on the aircraft structure noting that only sufficient torque is used to prevent damage to these members.
- (aa) Replace bulkhead assembly.
- (ab) Replace fuel cell.

# ADDITIONAL INFORMATION

- The minor and major repair schemes originated from CPA(R) Drawing 4CP1807D and CPA(R) Engineering Order #865, dated 25 Apr 57 respectively.
- 7 Source of supply of "Devcon A".

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