



CLASS I

SERVICE INSTRUCTIONS

24R

No. 0626-032
ATA Code 57-00

SUBJECT: WING - WING ASSEMBLY - PART I, INSPECTION AND REPLACEMENT OF JO-BOLTS ON THE MAIN LANDING GEAR FORWARD SUPPORT CASTINGS; PART II, INSPECTION AND REPLACEMENT OF THE MAIN LANDING GEAR AFT SUPPORT CASTINGS.

EFFECTIVITY: PART I
BEEHCRAFT A24R, serials MC-5 through MC-95;
Sierra A24R and B24R, serials MC-96 through MC-209;
which have the main landing gear forward support casting attached with Jo-Bolts.

PART II
BEEHCRAFT A24R, serials MC-2 through MC-95;
Sierra A24R, serials MC-96 through MC-150.

REASON: PART I
To ensure the security of the main landing gear forward support casting to the aircraft wing structure.

PART II
To determine and ensure the condition and security of the main landing gear aft support casting.

COMPLIANCE: As soon as practical after receipt of these Service Instructions, but within the next 25 service hours.

DESCRIPTION: PART I
The Jo-Bolts which secure the LH and RH landing gear forward support castings are to be inspected to determine if they have become loose. The upper and lower Jo-Bolts are to be replaced with screws on all castings. The remaining Jo-Bolts are to be replaced with screws only if they show signs of being loose.

PART II
Inspect the main landing gear support casting, mounted on the forward face of the main spar, for cracks in the support casting mounting flange and for existing gap between the support casting mounting flange and the upper and lower spar caps.

APPROVAL: FAA Approved - DOA CE-2.

MANPOWER: The following information is for planning purposes only.

No BECP

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- (a) BEEHCRAFT Aero or Aviation Centers and International Distributors and Dealers.
- (b) Owners of record on the FAA Registration list and the

BEEHCRAFT International Owner Notification Service List
(c) Those having a publications subscription.

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CLASS I

98-34239D



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PART I

Estimated man-hours: 5 hours.
Suggested number of men: 1 man.

PART II

Estimated man-hours for inspection: .5 hours.
Suggested number of men for inspection: 1 man.
Estimated man-hours for casting replacement: 16 hours.
Suggested number of men for casting replacement: 2 men.

MATERIAL:

The following parts, if required, are available through your BEECHCRAFT Parts and Service Outlet. Warranty credit will be allowed for parts and for labor not to exceed the man-hours indicated under MANPOWER on claims received prior to August 1, 1974. All orders for parts should be noted that the parts are on warranty request.

Part I

PART NUMBER	DESCRIPTION	QUANTITY
AN525-832R14 or MS27039-1-14	Screw	18 per aircraft
AN525-832R6 or MS27039-1-6	Screw	8 per aircraft
AN960-8 or AN960-10	Washer	26 per aircraft
MS21042L08 or MS21042L3	Nut	26 per aircraft

Part II

169-110021-651	LH Support Casting	1 per aircraft
169-110021-652	RH Support Casting	1 per aircraft
169-110000-297	Shim	4 per aircraft

SPECIAL TOOLS: None.

WEIGHT AND BALANCE: None.

REFERENCES: None.

PUBLICATIONS AFFECTED: It is recommended that a note be made on Figure 32A of all Parts Catalog copies to "See Service Instructions No. 0626-032."

**ACCOMPLISHMENT
INSTRUCTIONS:**

PART I

Inspection and replacement of the Jo-Bolts on the main landing gear forward support castings is accomplished as follows:

NOTE

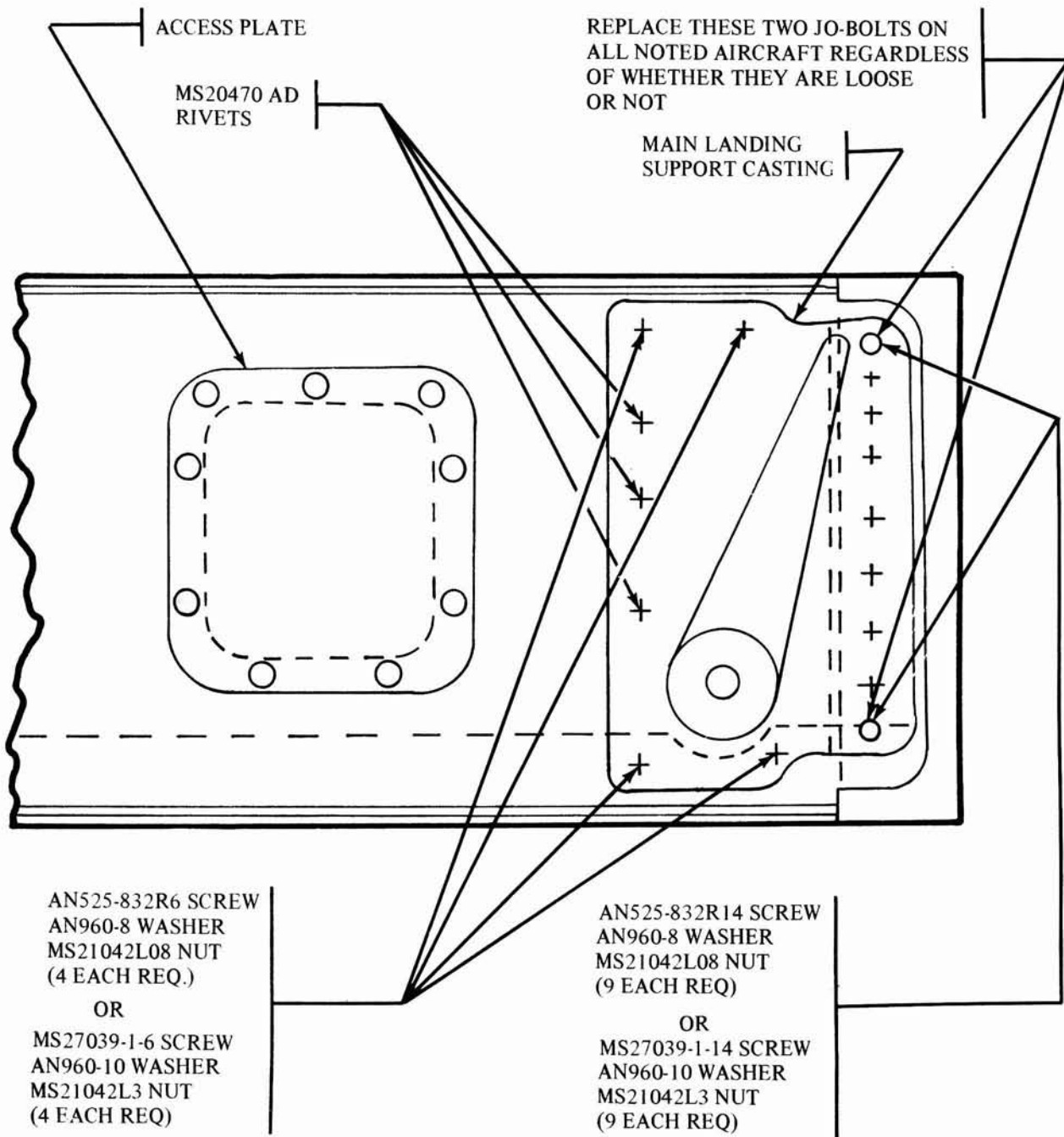
Refer to Figure 1 for Part I accomplishment.

1. Place the aircraft on jacks.
2. Remove the access plate adjacent to the support casting on one wing.
3. Drill out the Jo-Bolts in the upper and lower corners of the casting and inspect the holes for elongation.
4. If the holes are not elongated, install AN525-832R14 screws, AN960-8 washers and MS21042L08 nuts. Torque the nuts to 12 to 15 inch-pounds.

5. If the holes are elongated, ream the holes to .190/.194-inch in diameter and install MS27039-1-14 screws, AN960-10 washers and MS21042L3 nuts. Torque the nuts to 20 to 25 inch-pounds.

NOTE

Use extreme care not to crack or damage the



NOTE: QUANTITIES INDICATED ARE FOR ONE WING ONLY

Figure 1. Main Landing Gear Forward Support Installation

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rib fitting or the support casting.

6. Inspect all remaining Jo-Bolts and rivets in the support casting to determine if they have become loose.

7. If none of the remaining Jo-Bolts or rivets are loose, no further action is necessary.

8. If any of the remaining Jo-Bolts or rivets are loose, those that are loose are to be drilled out and the holes inspected for elongation.

9. If the holes are not elongated, install AN525-832R6 and AN525-832R14 screws, AN960-8 washers and MS21042L08 nuts as shown in the illustration. Torque the nuts to 12 to 15 inch-pounds.

10. If holes are elongated, ream them to .190/.194-inch in diameter and install MS27039-1-6 and MS27039-1-14 screws, AN960-10 washers and MS21042L3 nuts. Torque the nuts to 20 to 25 inch-pounds.

11. If the three aluminum rivets are loose, they are to be drilled out and replaced with MS20470AD4 rivets of the

appropriate length (obtain locally) if the holes are not elongated. If the holes are elongated, they should be reamed with a No. 21 drill bit and MS20470AD5 rivets of appropriate length (obtain locally) should be installed.

12. Repeat steps 2 through 11 on the opposite wing.

13. Proceed to step 14 or Part II as applicable.

14. Replace the access plates.

15. Remove the aircraft from the jacks and return the aircraft to service.

PART II

Inspection and replacement of the main landing gear aft support castings is accomplished as follows:

1. Inspect the main landing gear aft support fittings for possible cracks or breaks in the area of the flange attach screws to the main upper and lower spar caps, and for gaps between the upper flange of the casting and the upper spar

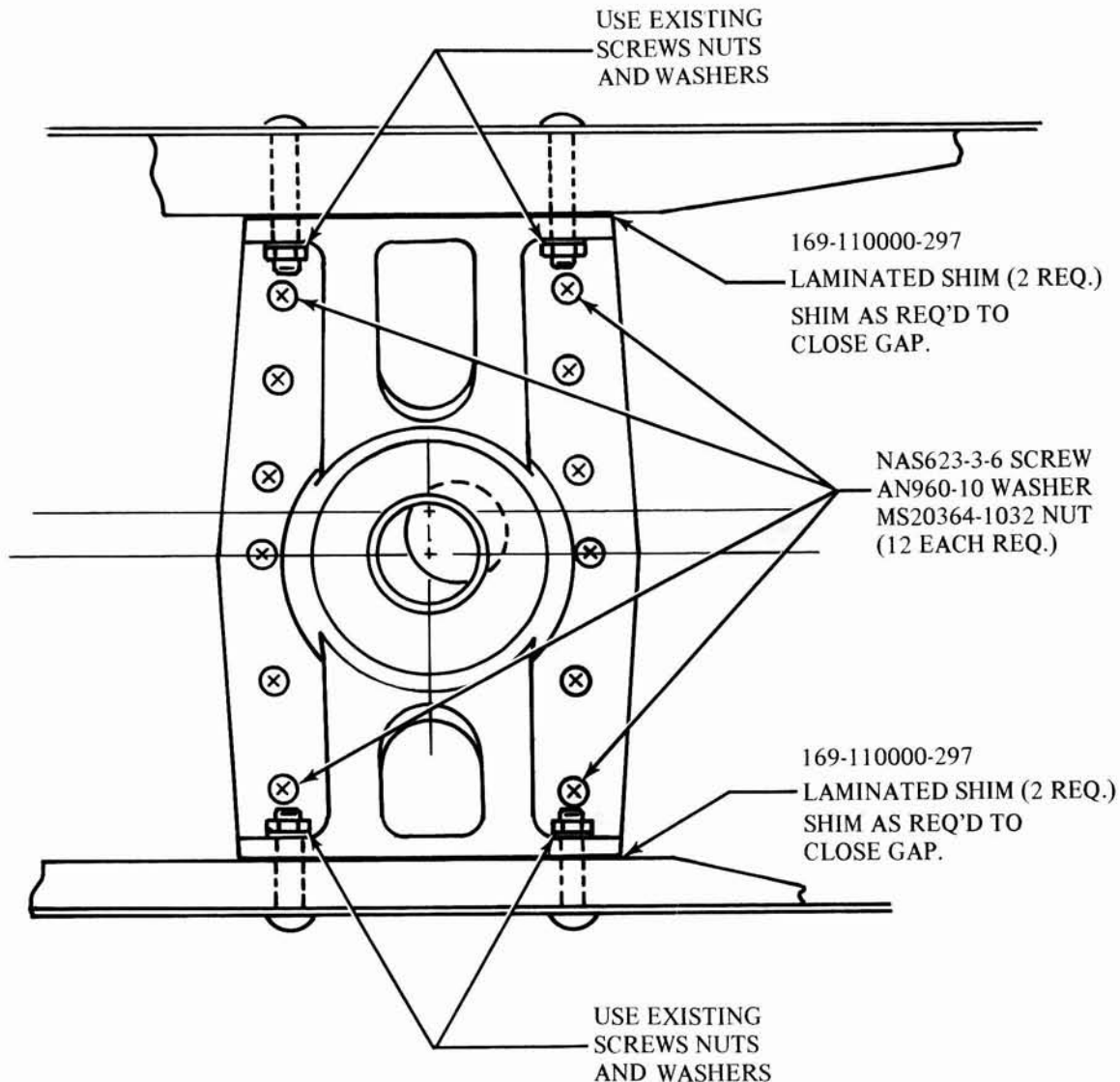


Figure 2. Main Landing Gear Aft Support Installation

cap and between the lower casting flange and the lower spar cap.

2. If no cracks or gaps exist, complete steps 14 and 15 of Part I, if applicable, and return the aircraft to service.

3. If no cracks or breaks are found, but gaps exist, remove the attaching screws and shim as necessary to provide a snug fit and reinstall the attaching screws.

4. If cracks or breaks are found, accomplish the following:

- a. Place the aircraft on jacks (if not already on jacks from Part I) and remove the inspection plate just aft of the spar and outboard of the landing gear.
- b. Open the emergency dump valve and remove the bolt securing the main gear actuator rod end to the torque shaft arm.
- c. Remove the taper pin securing the torque shaft arm to the shaft.
- d. Remove the taper pin securing the torque shaft to the main landing gear housing.
- e. Support the landing gear and slide the torque shaft aft and out of the gear support casting located on the main spar.
- f. Remove the main attaching screws from the lower casting flange and spar cap and from the upper casting flange and spar cap.
- g. Remove the 12 lockbolts from the casting in an outboard direction to clear the main gear housing and remove the support casting.
- h. Secure the new P/N 169-110021-651 LH support casting or P/N 169-110021-652 RH support casting temporarily to the spar with the pilot holes in the casting and the existing holes in the main spar web.
- i. Slide the torque shaft forward through the main spar, the support casting and into the main gear housing.
- j. Reinstall the taper pin through the gear housing and torque shaft.

- k. Reinstall the two taper pins through the torque shaft arm and shaft.
- l. Align the six pilot holes on each side of the casting with the existing holes in the spar web.
- m. Back drill the casting through the existing holes in the spar web, with a No. 20 bit (.1610/.163 dia), using care not to elongate the holes.
- n. Install 12 each NAS623-3-6 screws through the spar web and new casting and secure with AN960-10 washers and MS20364-1032 nuts. (Obtain screws, nuts and washers locally.)
- o. Determine gap between top and bottom flanges of casting and the spar caps and install shims as necessary to provide a snug fit (see Figure 2).
- p. Back drill the upper and lower casting flanges through the existing holes in the upper and lower spar caps. Use extreme care not to elongate the holes.
- q. Reinstall the MS27039-4-25 screws through the upper and lower spar caps and the casting flanges and secure with AN960-416 washers and MS20365-428 nuts.
- r. Reinstall the taper pins through the torque shaft and gear housing and through the main actuator torque shaft arm.
- s. Reattach the main actuator rod end to the torque shaft fitting.

NOTE

If Service Instructions Class II, No. 0564-202 has not been complied with, do so at this time.

5. Repeat steps 1 through 4 on the opposite wing.
6. Close the emergency dump valve and cycle the gear to ensure proper operation and remove the aircraft from the jacks.

RECORD COMPLIANCE:

Upon completion of these Service Instructions, make an appropriate maintenance record entry.