

- SUBJECT:** LANDING GEAR (MAIN GEAR ASSEMBLY) – MODIFICATION AND ADJUSTMENT OF MAIN LANDING GEAR ACTUATOR
- EFFECTIVITY:** BEEHCRAFT Sierra A24R, serials MC-2 through MC-76, MC-81 through MC-106, MC-110 through MC-112, MC-116 through MC-119 and MC-122.
- REASON:** To ensure security and proper adjustment of the main gear actuator.
- COMPLIANCE:** As soon as practical but no later than the next scheduled inspection.
- DESCRIPTION:** The main gear actuator is removed from the gear assembly. A hole is drilled in the actuator rod adapter assembly and the assembly is safetied with a steel pin. The actuator is adjusted upon reinstallation.
- APPROVAL:** FAA Approved - DOA CE-2.
- MANPOWER:** The following information is for planning purposes only:
Estimated man-hours: 8 hours.
Suggested number of men: 2 men.
- MATERIAL:** The materials required for completion of these Service Instructions may be obtained locally.
- SPECIAL TOOLS:** None.
- WEIGHT AND BALANCE:** None.
- REFERENCES:** None.
- PUBLICATIONS AFFECTED:** It is recommended that a note be made in all Parts Catalogs on Figure 202 and in all Shop Manuals on Figure 3-26 to "See Service Instructions No. 0564-202".
- ACCOMPLISHMENT INSTRUCTIONS:** This modification and adjustment may be accomplished in the following manner.
1. Assure that the MASTER Switch is in the OFF position and the LANDING GEAR circuit breaker is pulled.
 2. Place the aircraft on jacks.

CAUTION

All three wheels must be clear of the ground during this modification.

3. Remove the two main gear actuator access panels located just aft of the gearwell.

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4. Manually break the main gear over center and push it into the retracted position. Place a support under the gear to hold it in the retracted position.
5. Remove the two bolts which secure the actuating cylinder to the gear assembly.
6. Release the lock nut, and screw the adapter assembly off of the actuator rod.
7. Screw the rod end out of the adapter until the threaded end is just visible at the inspection hole in the adapter.
8. Screw the rod end into the adapter three complete turns. While holding the rod end and the adapter securely in this position, drill a .125/.128 inch diameter hole through the adapter and rod end at a location which is 90° to the inspection hole and .19 inches forward (toward the rod end).
9. Install an MS20392-1C17 Pin, AN960-4 Washer and MS24665-132 Cotter Pin in this hole.
10. Screw the adapter assembly onto the actuator rod to approximately the same depth as it was prior to removal.
11. Reattach the rod end to the torque shaft arm and safety with a new MS24665-285 Cotter Pin. Leave the cylinder end unattached and place the gear in the full down position.
12. Extend the cylinder until the piston bottoms out and screw the hydraulic cylinder actuator rod into or out of the adapter as required so that, with the piston bottomed out, the outboard cylinder attach bolt can be freely inserted into position. Install the bolt and nut and safety with a new MS24665-285 Cotter Pin.
13. Turn the actuating rod counter clockwise (outward) in the rod end adapter TWO COMPLETE TURNS and secure the locknut into position.

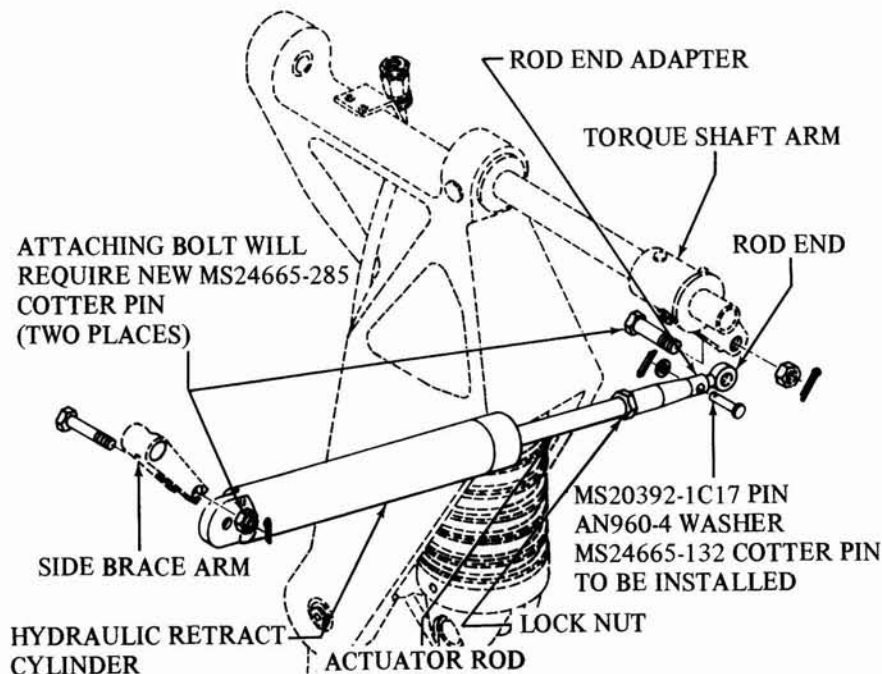
NOTE

Flats on the actuator rod will accommodate a wrench to perform the adjustment.

14. Perform steps 3 through 13 on the opposite landing gear.
15. Cycle the landing gear and assure that the main gear retract mechanisms are properly adjusted.
16. Replace all main gear actuator access panels.
17. Remove the aircraft from the jacks.

RECORD COMPLIANCE:

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



LANDING GEAR ACTUATOR MODIFICATION