

24R

No. 0649-200
ATA Code 32-30

SUBJECT: LANDING GEAR - MODIFICATION OF THE HYDRAULIC SHUTTLE VALVE

EFFECTIVITY: BEECHCRAFT A24R serials MC-2 through MC-95;
A24R and B24R Sierra 200, serials MC-96 through MC-219, MC-221 through MC-231,
MC-233, MC-235 and MC-241.

REASON: To assure proper operation of the landing gear.

COMPLIANCE: As soon as practical but no later than the next 25 service hours.

DESCRIPTION: An O-ring is to be removed from the A255-1 shuttle valve and the nose gear limit switches are to be inspected for proper adjustment.

APPROVAL: FAA Approved - DOA CE-2.

MANPOWER: The following information is for planning purposes only:

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

MATERIAL: None.

WARRANTY: Warranty credit will be allowed for labor not to exceed 5 man-hours on warranty claims submitted prior to October 1, 1974. Submit all warranty claims to Parts and Service Operations, Beech Aircraft Corporation, Wichita, Kansas, 67201.

SPECIAL TOOLS: None.

WEIGHT AND BALANCE: None.

REFERENCES: None.

PUBLICATIONS AFFECTED: It is recommended that a note be made on Figures 3-26 and 3-27 of all 19, 23 and 24 series Shop Manual copies to "See Service Instructions No. 0649-200."

**ACCOMPLISHMENT
INSTRUCTIONS:**

This modification is accomplished as follows:

1. Remove the aft bulkhead from the baggage compartment to gain access to the hydraulic system shuttle valve.
2. Disconnect the lower hydraulic line from the bottom of the A255-1 shuttle valve.

Installation, the A255-1 shuttle valve is the inboard valve.

3. Remove the machined hex head fitting from the bottom of the shuttle valve and carefully remove the O-ring from the lower (bottom) end of the shuttle valve and discard the O-ring.

NOTE

On aircraft equipped with the Magic Hand

4. Reinstall the machined hex head fitting into the shuttle

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valve and reconnect the lower hydraulic line to the shuttle valve. Be certain the end of the shuttle valve without the O-ring is down, and the smaller diameter end of the spring is against the upper side of the shoulder of the shuttle.

5. If the aircraft has a magic hand installation:

a. Disconnect the line from the elbow in the center part of the A1250 (outboard) shuttle valve and install a AN929-4 pressure cap on the elbow.

b. Disconnect the same line from the top of the tee fitting in the A255-1 shuttle valve, discard the line and install an AN929-4 pressure cap on the top of the tee fitting.

c. Disconnect the line from the bottom of the A1250 shuttle valve.

d. Remove the bottom end cap from the A1250 shuttle valve, remove the shuttle and discard.

e. Reinstall the bottom end cap in the A1250 shuttle valve and reconnect the line.

6. Remove the lower engine cowl and place the aircraft on jacks.

7. Inspect the nose gear down limit switches for proper adjustment as follows:

a. Place an observer in the aircraft and turn the master switch on. Be certain the landing gear switch is in the down position.

b. Manually rig the nose gear to a position where the center of the lower drag link attach bolt and the center of

the center pivot drag link bolt align with the center of the torque tube at the upper end of the drag link.

c. With the drag link held at this position, adjust the Microswitch so that with a .002-inch shim or feeler gage inserted between the switch cam follower and the striker plate, the switch will barely activate the green nose gear light "on", and the pump and red in-transit light "off".

d. Make certain that both Microswitches are firmly secured in this position.

NOTE

Aircraft serials MC-2 thru MC-95 except MC-81 have only one Microswitch.

8. Cycle the landing gears normally two or three times and also emergency extend the gears two or three times.

NOTE

If a supplemental power supply is available, its use is recommended to prevent excessive drain on the aircraft battery.

9. Inspect for possible hydraulic leaks.

10. Reinstall the aft bulkhead in the baggage compartment.

11. Reinstall the lower engine cowl and remove the aircraft from the jacks.

RECORD COMPLIANCE:

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