

**BEECHCRAFT
DUKE 60 SERIES
MAINTENANCE MANUAL**

PASSENGER/CREW - MAINTENANCE PRACTICES

CABIN DOOR REMOVAL

- a. Remove the upholstery panels adjacent to the hinges at the forward side of the door frame to gain access to the hinge attaching points.
- b. Disconnect the electrical leads for the cigarette lighter and door locked indicator light at the forward side of the door frame.
- c. Remove the nut securing the shaft of each hinge assembly to the door frame.
- d. Remove the door by pulling the hinge shafts out of the mounting holes in the door frame.

CABIN DOOR INSTALLATION

- a. Align the door with the door frame and insert the upper and lower hinge shafts into the mounting holes in the door frame.
- b. Reinstall the washers that go between the hinge bearing mount and the shoulder of each hinge shaft.
- c. Secure the hinges to the door frame structure with the attaching washer and nut. Check for a clearance of .03 to .05 inch between the hinge half and the door frame throughout the arc of the hinge rotation as the door is latched and locked. Add AN960-616 or AN960-616L washers as necessary between the hinge bearing mount and the shoulder of each hinge shaft to obtain this clearance.
- d. Make any adjustments necessary for proper operation of the latch mechanism.

DOOR LATCH ADJUSTMENT
(Figures 201 and 202)

The following adjustments are possible only if the latch mechanism is properly rigged:

- a. Unsafety and adjust the length of the upper and lower latch pins until they extend one inch beyond the door frame with the hinges in the closed position.
- b. Adjust the stop bolt (see Detail A) until the complete travel of the center latch bolt from the locked position is 1-1/4 inches.

CAUTION

To prevent damage to the ears of the spring in the exterior handle (P-4 thru P-126, except P-123) the stop bolt must be adjusted to provide .010 to .030 inch clearance (see Detail F, Figure 201) between the ears of the spring and the lug

in the casting of the handle when the handle reaches the limit of its travel.

Check that the center latch pin extends 1-1/4 inches beyond the door frame when the hinges are in the closed position and 1/4 inch when in the open position. If necessary, adjust the length of the latch pin push rod to obtain the foregoing settings.

- c. If the proper settings cannot be obtained by the preceding adjustments, the latching mechanism must be rerigged.

LATCH MECHANISM RIGGING
(Figures 201 and 202)

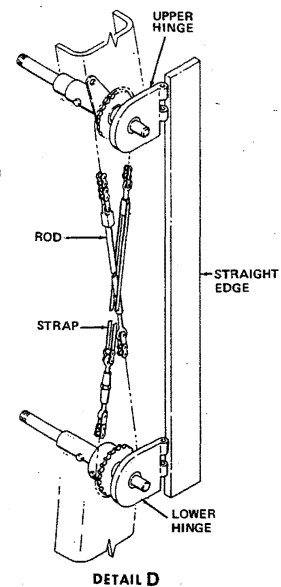
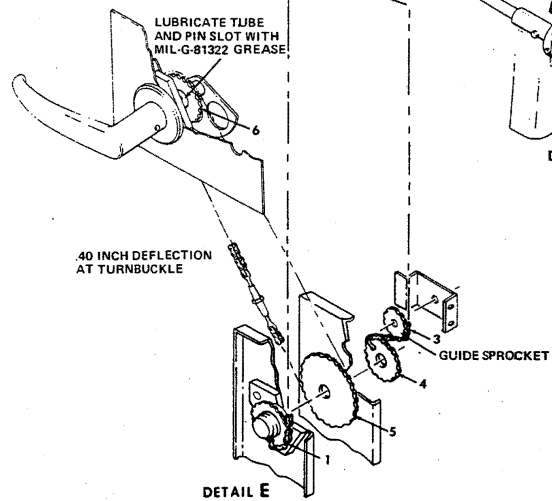
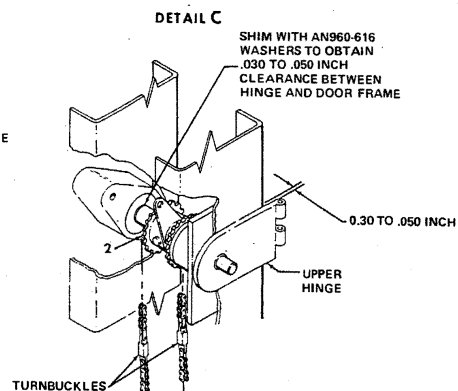
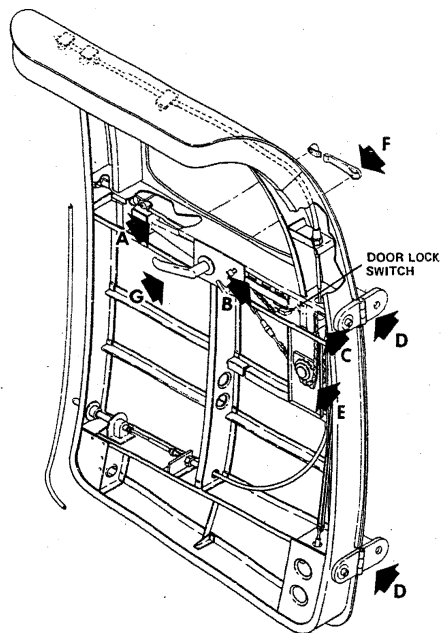
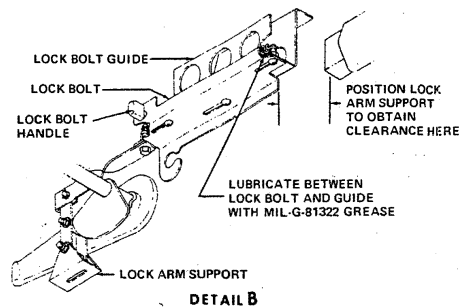
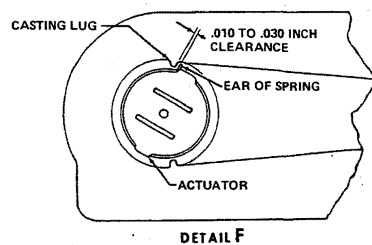
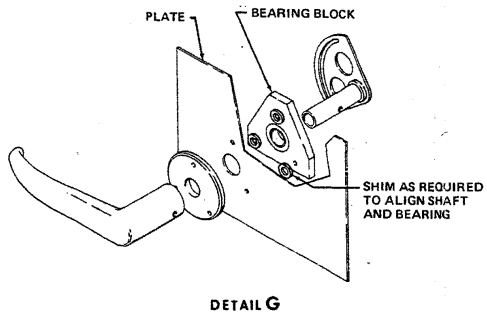
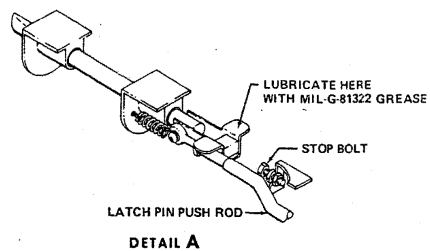
The door latch mechanism is prerigged at the factory and should not normally require further adjustment except when damaged parts, such as chains and sprockets, require replacement. After removing all upholstery panels from the door to gain access to the latching mechanism, rig the door as follows:

- a. Check for a clearance of .030 to .050 inch between each hinge half and the door frame throughout the arc of hinge rotation as the door is latched and locked. If necessary, add AN960-616 or AN960-616L washers between the shoulder of the hinge shaft and the hinge bearing (see Detail C) until the proper clearance is obtained.
- b. Use a straight edge to ascertain that the upper and lower hinge pins (see Detail D) are aligned with one another when the hinges are in the fully open position. Adjust the position of the chains on the upper and lower sprockets until the hinges can be rotated to the fully closed position without interference between the strap or rod terminals and the chain sprockets.
- c. Check that the chains are positioned on sprockets (1, 2, 3, and 4, Details C and E) so that the hinges can be rotated to the fully open position without interference between the turnbuckle terminals and sprockets.
- d. Align the hinges with the straightedge and place the interior handle in the fully open position.

NOTE

If the chain between sprockets (5 and 6, Detail E) has been removed, it must be reinstalled at this point. The chain must be installed with the exterior handle in the neutral position and the interior handle in the fully open position to avoid overloading the latching mechanism requiring excessive force to turn the door handles.

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Cabin Door Mechanism (P-4 thru P-126, except P-123)
Figure 201