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R44 SERVICE BULLETIN SB-80

DATE: 07 September 2011

TO: R44 and R44 II owners, operators, and maintenance personnel

SUBJECT: Pop-Out Float Cylinder Valve

ROTORCRAFT AFFECTED: R44 and R44 II helicopters with pop-out floats (Clippers), and spare pop-out float cylinders, equipped with D757-1 (gray) valve assembly containing D758-1 Revision C or prior housing assembly (Revision letter follows stamped part number). Black valves are not affected.

TIME OF COMPLIANCE: Within next 250 flight hours or by 30 June 2012, whichever occurs first.

BACKGROUND: During a factory test of pop-out floats, the floats failed to inflate due to a stuck cylinder valve. This bulletin requires earlier D757-1 valve assemblies be upgraded to ensure proper function.

COMPLIANCE PROCEDURE:

- 1. Refer to Figure 1. If D757-1 (gray) valve assembly is engraved with "D758-4," or if gray valve has a data plate indicating B900-8 modification, the requirements of this bulletin have been complied with and no further action is required.
- 2. If gray valve is not engraved with "D758-4" or does not have a data plate indicating B900-8 modification:
 - a. Verify a local facility (such as a welding gas supplier) is available to fill cylinder with 5000 psi helium and order one KI-211 Valve Replacement Kit, or
 - b. Order one D679-3R (filled, overhauled-exchange) cylinder assembly.

NOTE

D679-3R cylinder assemblies are subject to hazardous materials shipping regulations and fees.

3. Order KI-151 Cylinder Service Kit as required. Kit can service multiple cylinders and includes MT545-1 locking pin, MT546-1 diffuser, MT546-2 adapter, MT546-4 bleed fitting assembly, and instructions. Instructions are available online at www.robinsonheli.com under the Publications tab.

- 4. Remove and depressurize cylinder per KI-151 kit instructions.
- 5. Remove valve from cylinder and return valve, or return empty cylinder assembly, to RHC with completed <u>Component Return Authorization</u> form.

CAUTION

When removing valve from cylinder, do not place cylinder in vise; vise jaws can damage cylinder reinforcing fibers. A strap wrench can be used to immobilize cylinder and react valve torque. Tape cylinder opening to prevent foreign object contamination.

- 6. As required, lightly coat A215-212 o-ring with A257-19 lubricant and install o-ring on valve at base of threads. Install D757-1R valve assembly in cylinder and special torque valve at 1-3/8 inch wrenching flats to 40 ft-lb.
- 7. Follow KI-151 kit instructions when filling and installing cylinder assembly.
- 8. Make appropriate maintenance record entries.

Approximate Cost:

Parts: \$850 for KI-211 Pop-Out Float Cylinder Valve Replacement Kit, refunded upon receipt of affected, serviceable, D757-1 valve assembly. KI-211 includes D757-1R (overhauled-exchange) valve assembly, A215-212 o-ring, A257-19 lubricant, D682-6 decal, MS28778-2 o-ring, and MS3367-4-9 ty-raps.

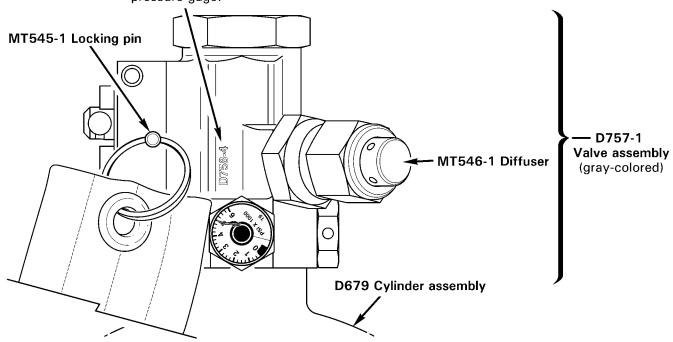
\$2000 for D679-3R cylinder assembly, refunded upon receipt of affected, serviceable, cylinder assembly. Shipping fees are not refunded.

\$105 for KI-151 Pop-Out Float Cylinder Service Kit if ordered by 30 June 2012. KI-151 includes MT545-1 locking pin, MT546-1 diffuser, MT546-2 adapter, MT546-4 bleed fitting assembly, and instructions.

Parts may be obtained from any R44 Dealer or Service Center, or ordered directly from RHC Customer Service via www.robinsonheli.com, fax, or phone.

Labor: 2.5 man-hours to replace cylinder and valve assemblies (filling cylinder not included).

D758-4 Housing part number will be engraved adjacent to pressure gage.



Data plate indicating B900-8 modification will be located adjacent to pressure gage.

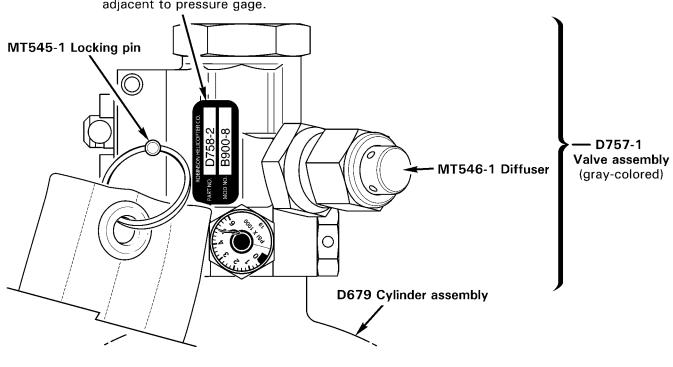


FIGURE 1

THE DESIGN ENGINEERING ASPECTS OF THIS BULLETIN HAVE BEEN SHOWN TO COMPLY WITH APPLICABLE FEDERAL AVIATION REGULATIONS AND ARE FAA APPROVED.