

KI-151 R44-series Pop-Out Float Cylinder Service Kit Instructions

NOTE

Visit www.robinsonheli.com to verify kit instructions are current revision. Review instructions before installation; contact RHC Technical Support with questions. Verify kit contents match list; contact RHC Customer Service if parts are missing or damaged.

ITEM	PART NUMBER	KIT CONTENTS	QTY
1	KI-151 Instr.	Kit Instructions	1
2	MT545-1	Pin Assembly	1
3	MT546-1	Diffuser	1
4	MT546-2	Adapter Assembly	1
5	MT546-6	Bleed Fitting Assembly	1
6	MS28778-2	Packing	1

Consumables

Refer to R44 Maintenance Manual (MM) § 1.400 for approved materials.

- A257-19 Lubricant

Kit Instructions

WARNING

D679 Cylinder contents are under extreme pressure. Install MT545-1 pin assembly in D757-1 valve assembly during maintenance to prevent cylinder discharge.

A. Cylinder Removal

1. Refer to Figure 1 detail A. Install MT545-1 pin assembly in D757-1 valve assembly.
2. Disconnect D674-1 hose assembly from valve fitting and cap hose to prevent contamination. Install MT546-1 diffuser on valve fitting and special torque diffuser to 120 in.-lb.
3. Refer to R44 Illustrated Parts Catalog (IPC) Figure 32-13. Remove hardware securing D761-2 cover to valve and D761-1 support. Remove cover.
4. Remove hardware securing D761-1 support to valve. Do not kink cable.
5. Refer to Figure 1. Cut and discard MS3367-4-9 ty-rap secured to D760-1 trigger. Disengage D676-1 cable assembly ball from trigger; do not kink cable.
6. Remove screws securing D669-3 strap to D669-1 cradle assembly and remove strap. Carefully remove cylinder.

Kit Instructions (continued)**B. Cylinder Depressurization**

1. Remove cylinder per Part A. Refer to Figure 1. Verify MT545-1 pin assembly and MT546-1 diffuser are properly installed.

CAUTION

Use appropriate eye and hearing protection.

WARNING

Rotation of D760-5 port while removing D760-7 cap may result in sudden cylinder pressure discharge.

2. Using a back-up wrench on D760-5 port, remove D760-7 cap (etched with "FILL PORT") from valve assembly. A loud pop may be heard when cap is unscrewed.
3. Refer to Figure 2. Unscrew MT546-8 bleed adapter from MT546-7 fitting. Install adapter into D760-5 port and special torque to 40 in.-lb. In a well-ventilated area, screw MT546-7 fitting into adapter until the noise of escaping gas is heard. Screw fitting in or out to adjust flow rate. Finish bleeding cylinder with fitting fully in. When noise ceases, verify cylinder pressure gage indicates zero. Remove fitting and adapter.
4. Install D760-7 cap in valve assembly and special torque cap to 40 in.-lb.
5. Review MM § 5.665 and evaluate cylinder life and hydrostatic test status.

C. Filling Cylinder

1. Review MM § 5.665 and evaluate cylinder life and hydrostatic test status.
2. Verify D757-1 valve assembly contains a D758-4 housing assembly (engraved with "D758-4") or D758-2 housing assembly with data plate indicating B900-8 modification (Ref. R44 SB-80).
3. Refer to Figure 1 detail A. Install MT545-1 pin assembly in D757-1 valve assembly. Install MT546-1 diffuser on valve fitting and special torque diffuser to 120 in.-lb.

CAUTION

Use appropriate eye and hearing protection.

4. Remove D760-7 cap (etched with "FILL PORT") from valve assembly. A loud pop may be heard when cap is unscrewed.
5. Fill cylinder per MM § 5.665, thru step 5.
6. Remove fill hose and MT546-2 adapter assembly.
7. Remove & discard old packing from cap. Lightly coat new MS28778-2 packing with A257-19 lubricant and install packing on fill-port cap at base of threads. Install cap in valve assembly and special torque cap to 40 in.-lb.

Kit Instructions (continued)

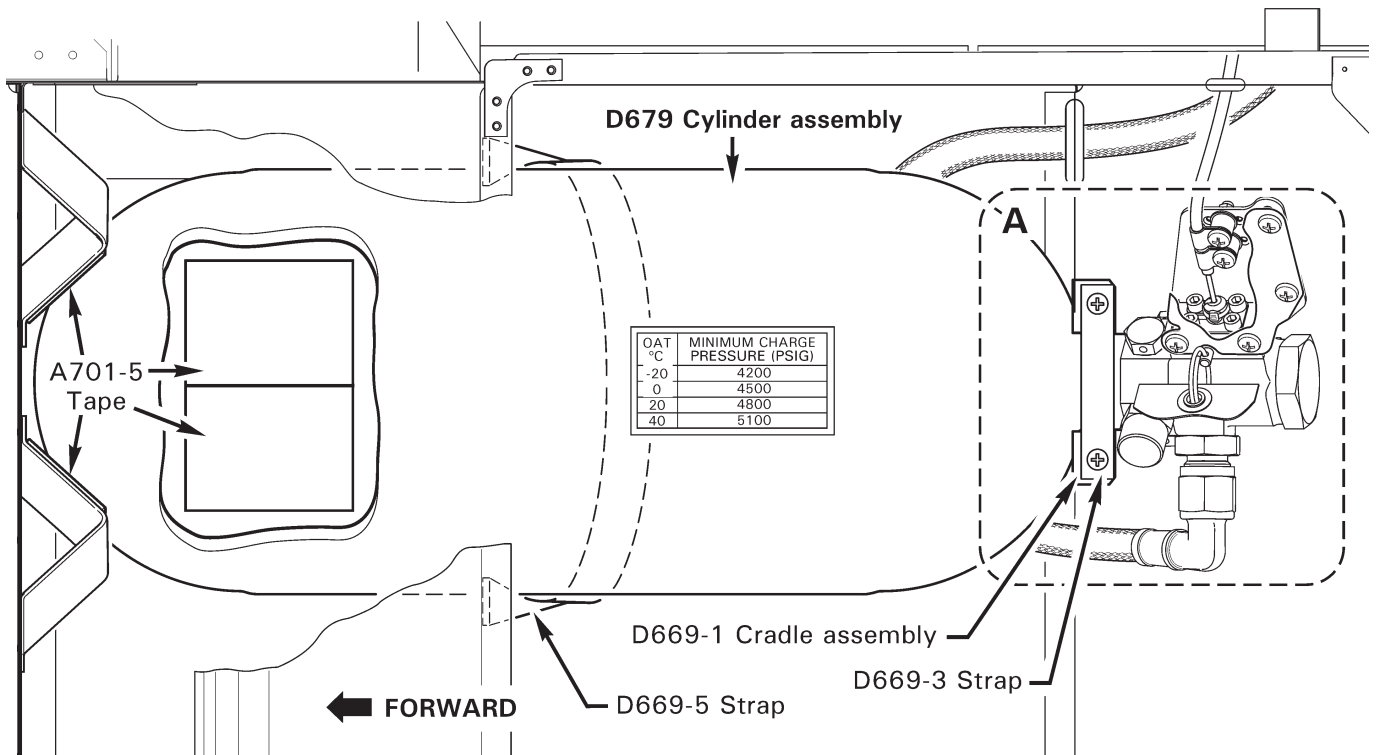
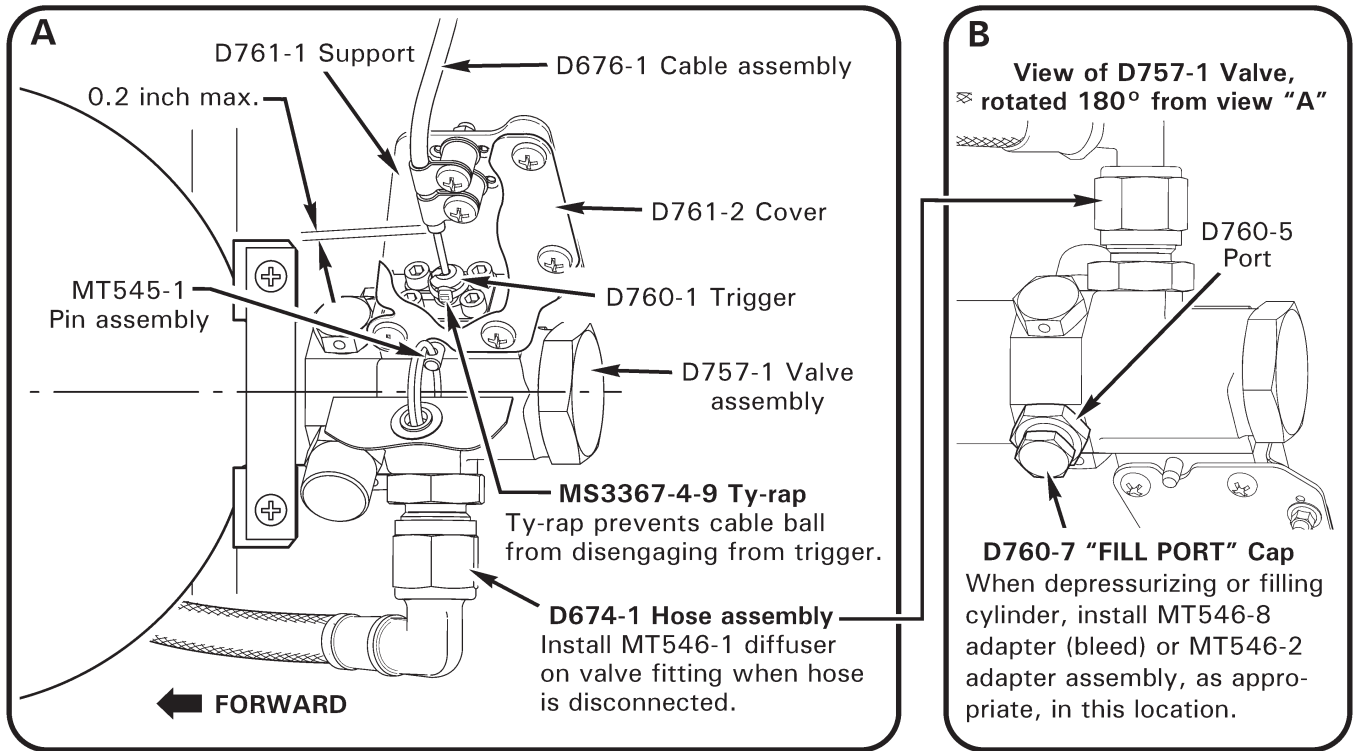


FIGURE 1
(View looking down, with forward left seat assembly open)

Kit Instructions (continued)**D. Cylinder Installation**

1. Perform Part C step 2. Fill cylinder per Part C if not previously accomplished.
2. Refer to Figure 1 detail A. Install MT545-1 pin assembly in D757-1 valve assembly.
3. Refer to Figure 1. Verify A701-5 (anti-chafe) tape protects cylinder where cylinder base contacts cabin structure in four locations. Carefully position cylinder in D669-5 strap and D669-1 cradle assembly.
4. Refer to Figure 1 detail A and IPC Figure 32-13. Engage D676-1 cable assembly ball in D760-1 trigger; do not kink cable. Install MS3367-4-9 ty-rap as shown. Cinch ty-rap until snug without over-tightening, and trim tip flush with head. Install hardware securing D761-1 support to valve.
5. Verify cable housing protrudes through clamps on support flush-to-0.200 inch maximum. Adjust as necessary.
6. Rotate cylinder as required to minimize cable bending and ensure clearance with cabin structure.
7. Install screws securing D669-3 strap to cradle assembly.
8. Install hardware securing D761-2 cover to valve and D761-1 support.
9. Remove MT546-1 diffuser, if installed. Connect D674-1 hose assembly to valve fitting. Orient hose as required to maintain minimum 0.25 inch clearance to cylinder and adjacent vertical panel. Special torque B-nut per MM § 1.330 and torque stripe per MM Figure 2-1.
10. Rig inflation lever per MM § 5.680.
11. Remove MT545-1 pin assembly from D757-1 valve assembly.
12. Make appropriate maintenance record entries.

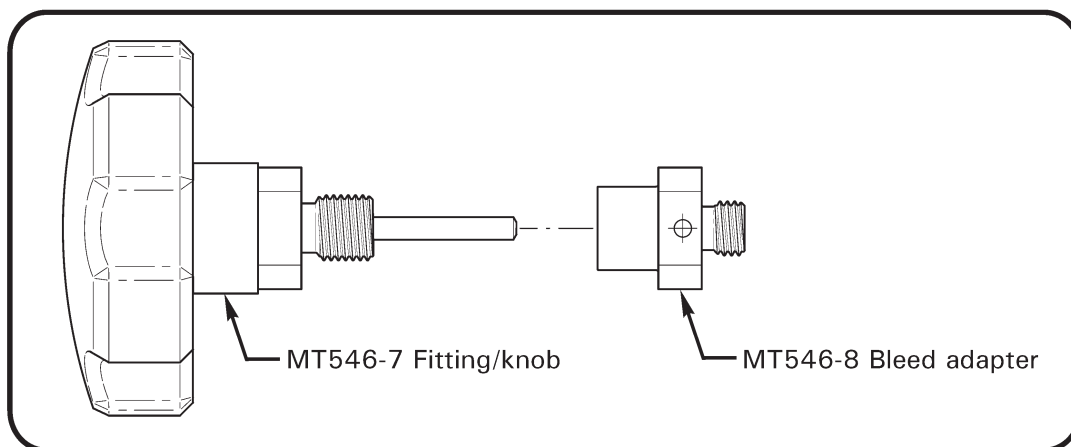


FIGURE 2
MT546-6 Bleed fitting assembly