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KI-193-1 R44 Gascolator Assembly Upgrade Field Installation Kit Instructions
(for compliance with R44 Service Bulletin SB-69)

KIT CONTENTS:

- 1 ea KI-193-1 INSTR Kit Instructions
- 1 ea KI-193-3 top assembly, includes:
 - 1 ea B402-3 top
 - 1 ea B416-1 collar
 - 1 ea B416-2 ring
 - 1 ea MS27769D2 plug
 - 1 ea 10536-1 gasket
 - 1 ea 10543-2 screen

CONSUMABLES REQUIRED:

B270-6 sealant & lubricant, thread (Tite seal 55, ref R44 Maintenance Manual Section 1.480)

INSTRUCTIONS:

1. Verify kit contents match above list. Contact RHC Customer Service (customerservice@robinsonheli.com) if parts are missing or damaged.
2. Review instructions before installation. Contact RHC Technical Support if you have any questions.
3. Turn master switch and fuel shut-off valve OFF, remove engine right cowling, and drain gascolator.
4. Clean exterior of A666-1 gascolator assembly, attached fittings, C741-1 line assembly, and B283-3 hose assembly.
5. Refer to R44 Illustrated Parts Catalog Figures 8-1, 8-3, and 9-11 (primer-equipped R44s only) dated JUL 2008 (or subsequent). Disconnect C741-1 line assembly from gascolator inlet nipple.
6. Disconnect B283-3 hose assembly from gascolator outlet fitting and protect hose inlet. If installed, disconnect primer line from AN894D4-2 bushing on gascolator outlet tee and protect line inlet.
7. Remove and retain nut & washer from A455-1 plug and remove gascolator. Protect outlet of C741-1 line assembly.
8. Remove sediment bowl, AN816-6D nipple(s), A455-1 plug, and tee fitting with attached bushings (primer-equipped R44s only) from gascolator assembly and clean. Discard gascolator top, gasket, and screen.

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9. Apply B270-6 sealant sparingly to tapered pipe threads of A455-1 plug, nipple(s), and tee (do not apply sealant to first thread of fittings). Install a nipple in port marked "IN" on new B402-3 top and torque to 170 in.-lb. Install A455-1 plug in center hole of B402-3 top and special torque to 120 in.-lb. Install remaining nipple or tee (primer-equipped R44s only) in outlet port of B402-3 top; torque nipple to 170 in.-lb, or torque tee to 85 in.-lb then tighten tee as required until attached bushings point up. Wipe off excess sealant.
10. Place B402-3 top in A454-1 support and finger-tighten C741-1 line assembly to inlet nipple (marked "IN"). Install washer & nut on A455-1 plug, special torque nut to 70 in.-lb, and torque stripe per R44 Maintenance Manual (MM) Figure 2-1. Special torque nut on C741-1 line assembly to 285 in.-lb and torque stripe per MM Figure 2-1.
11. Connect primer line, if installed, to bushing on gascolator outlet tee, special torque nut to 25 in.-lb, and torque stripe per MM Figure 2-1. Connect B283-3 hose assy to gascolator outlet fitting, special torque nut to 120 in.-lb, & torque stripe per MM Figure 2-1.
12. Remove B416-1 collar and B416-2 ring from B402-3 top (ring is pre-lubricated with A257-6 grease and may stick to collar inner flange). Verify large diameter of ring is contacting inner flange of collar. Slide combined ring and collar over bottom of sediment bowl so small diameter of ring engages groove in underside of bowl flange. Verify new screen and gasket installed in B402-3 top. With sediment bowl drain positioned thru hole in belly, hand-tighten collar, ring, and bowl onto B402-3 top until snug. Safety collar to outlet fitting using 0.032-inch diameter lockwire.

NOTE

As required, lightly lubricate collar threads and surface contacting ring with A257-6 grease during subsequent screen and sediment bowl inspections.

13. Verify drain valve on sediment bowl is torque striped per MM Figure 2-1. As required, special torque drain valve to 60 in.-lb wet with B270-6 sealant and torque stripe per MM Figure 2-1.
14. Defuel helicopter per MM Section 1.150 until LOW FUEL light illuminates.
15. Perform fuel flow check per MM Section 12.260.
16. Connect fuel hose to carburetor inlet, special torque to 120 in.-lb, and torque stripe per MM Figure 2-1.
17. Turn fuel shut-off valve ON. Verify no fuel leaks.
18. Run-up helicopter per Pilot's Operating Handbook.
19. Verify no fuel leaks. Install engine right cowling assembly.
20. Make appropriate maintenance record entries (no change in weight and balance).