R22-series Full-Flow Oil Filter Installation Kit Instructions

For use on helicopters without a previously installed oil filter adapter. Replacement of oil cooler out/return lines may be required. Refer to R22 Illustrated Parts Catalog Chapter 79.

NOTE

Visit <u>www.robinsonheli.com</u> 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-160Instr.	Kit Instructions	1
2	B123-2	Oil Filter	1
3	D723-1	Filter Adapter	1
4	STD-160	Lockwasher	4
5	15-724	Gasket – Oil Temperature Sender	1
6	61173	Gasket – Adapter	1
7	76510	Gasket – Bypass Valve	1

Consumables

Refer to R22 Maintenance Manual (MM) § 23-70 for approved materials.

• A257-19 Valve lubricant & sealant compound or A257-16 Engine oil

Kit Instructions

- 1. Turn battery switch off. Remove left and right A378 skirts.
- Refer to Figure 1. Remove wire terminal from A760-1 oil temperature sender; retain nut. Remove sender and gasket. Cut and discard safety wire securing 53E22144 bypass valve; remove valve and 76510 gasket. Discard gaskets.
- 3. Remove 69510 screen housing, 62817 screen, 61173 gasket, and installation hardware. Discard STD-160 lockwashers and gasket; retain remaining hardware.
- 4. Refer to Figure 2. Install (supplied) D723-1 adapter on engine accessory housing using retained hardware and new STD-160 lockwashers & 61173 gasket. Verify straight side of gasket is oriented toward oil filter flange as shown. Special torque screws to 96 in-Ib and torque stripe per MM Figure 2-1.
- 5. Install bypass valve into adapter with new 76510 gasket. Special torque valve to 300 in-lb and torque stripe per MM Figure 2-1.

Kit Instructions (continued)

- Install temperature sender into adapter with new 15-724 gasket. Special torque sender to 300 in-lb and torque stripe per MM Figure 2-1. Secure temperature sender to bypass valve using 0.032-inch diameter safety wire. Connect wire terminal to temperature sender using retained nut; special torque nut to 20 in-lb. Position nipple over terminal.
- 7. Install filter per instructions on filter housing.
- 8. With an appropriately qualified person at the controls, perform helicopter start, run-up, and shut-down procedures per Pilot's Operating Handbook (POH).
- 9. Inspect engine for oil leaks. Correct any discrepancies noted, then repeat step 8. Verify no oil leaks.
- 10. Check engine oil quantity; adjust as required.
- 11. Install left and right A378 skirts.
- 12. Revise helicopter's Weight & Balance Record in POH Section 6 to reflect this installation by incorporating the following data:

Install:

Item	Weight	Long. Arm	Long. Moment	Lat. Arm	Lat. Moment
Oil Filter Installation	2.27 lb	96.20 in.	218.37 in-lb	-3.0 in.	-6.81 in-lb

13. Make appropriate maintenance record entries.



FIGURE 1 Removal



FIGURE 2 Installation