TEXTRON Lycoming

Williamsport Plant

SSP-885-1
ENGINE MOUNTED OIL FILTER KITS AND REPLACEMENT FILTERS

NOTE

This Special Service Publication (SSP) supersedes SSP-885 dated April, 1986.

INTRODUCTION

Clean engine oil is essential to long engine life. Full-flow filter elements and full-flow spin-on assemblies are an added improvement over older methods of filtration and can be installed on any applicable engine not equipped with a filter.

Installing an oil filter on an engine not equipped with a filter can increase the oil change interval from 25 to 50 hours.

MODELS AFFECTED:	All Textron Lycoming Direct Drive and TIGO-541 reciprocating engines.
TIME OF COMPLIANCE:	As required.

PART I - Preparations for Installing an Oil Filter

PART II - Installation of the Full-Flow Oil Filter Assembly Kit P/N LW-14089

PART III - Installation of the Spin-On Oil Filter Assembly

PART IV - Approved Replacement Oil Filters and Element Kits

PART III - INSTALLATION OF TEXTRON LYCOMING APPROVED SPIN-ON FULL-FLOW OIL FILTER ASSEMBLY

For the initial installation of a spin-on oil filter on engines with no previous oil filter, proceed with steps 1 thru 12 of Part I.

1. Install the spin-on oil filter. Lubricate the oil filter base gasket with Dow Corning - 4 Compound. Follow the filter manufacturers recommended torque specification.

CAUTION

DO NOT TIGHTEN THE SPIN-ON FILTER BEYOND THE SPECIFIED MAXIMUM TORQUE. OVERTIGHTENING WILL MAKE THE FILTER EXTREMELY DIFFICULT TO REMOVE. ALWAYS USE A 6 POINT SOCKET WHEN TIGHTENING A FILTER INCORPORATING A HEX NUT.

2. Install the temperature bulb at the location on top of the adapter using a P/N 5578426 gasket. Note that the hole provided for the oil temperature bulb is tapped 5/8-18 NF-3 to accommodate a P/N MS28034-1 temperature bulb. If a different type bulb is used, an adapter may be required.

3. A P/N 53E19600 temperature control oil cooler bypass valve assy., must be assembled at the location provided in the adapter. Use the P/N 76510 gasket that accompanies the valve. See Figures 2, 3 and 4. Lockwire the valve and filter as shown in Figure 1.

NOTE

The oil cooler bypass valve mentioned in Part II and III is not used on some of the O-235 series engines. On these models use a P/N STD-111 annular gasket and P/N STD-1350 square head plug. Lockwire the plug in the same manner as shown for the thermostatic oil cooler bypass valve in Figure 1.

4. Start the engine and check for oil leaks. Also check the engine oil; the addition of an oil filter assembly will require adding approximately one quart of oil.

The longer length, extra capacity spin-on oil filter has been approved for use on TIO-541 and TIGO-541 series engines. See Part IV of this instruction for additional information. The installation of a Textron Lycoming approved spin-on full-flow oil filter on the TIO-541, TIGO-541, 76 Series and all engines equipped with a Bendix dual magneto requires the addition of the P/N LW-13904 converter plate kit.

The installation of the P/N LW-13904 converter kit is as follows: See Figures 4 and 5.

1. Make sure that the filter mounting base on the engine is clean, smooth and undamaged.

2. Lubricate the gasket of the converter plate with clean engine oil and install it in the filter mounting base.

3. Install the converter stud to hold the plate to the engine. Tighten the stud to 50 - 60 foot pounds torque.

4. Install the spin-on oil filter. Lubricate the oil filter base gasket with Dow Corning - 4 Compound. Follow the filter manufacturers recommended torque specification.

NOTE

It is recommended that the P/N LW-13904 converter plate kit be replaced at engine overhaul.

CAUTION

DO NOT TIGHTEN THE SPIN-ON FILTER BEYOND THE SPECIFIED MAXIMUM TORQUE. OVERTIGHTENING WILL MAKE THE FILTER EXTREMELY DIFFICULT TO REMOVE. ALWAYS USE A 6 POINT SOCKET WHEN TIGHTENING A FILTER INCORPORATING A HEX NUT.

5. Start the engine and check for oil leaks. If leakage occurs, check the filter and retorque if necessary. Check the converter plate gasket and sealing surface of the engine for damage (cuts, an imperfect gasket, nicks or scratches on the sealing surface).

6. Lockwire the filter to the temperature bulb fitting of the adapter.

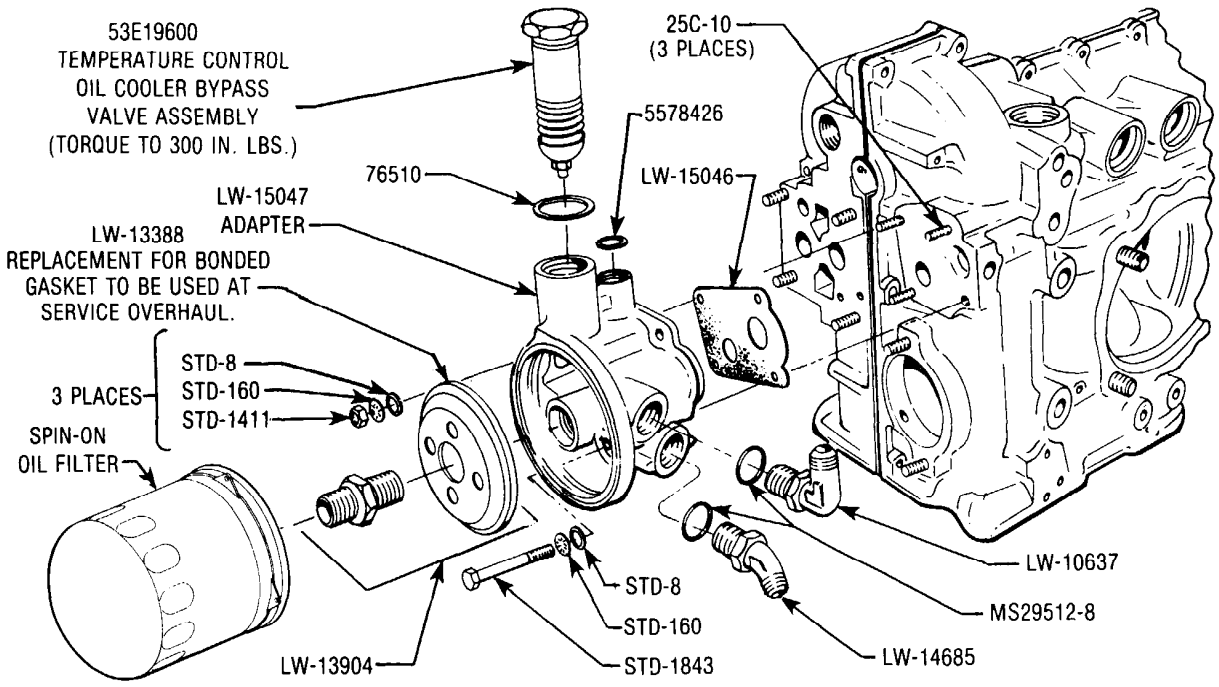

Figure 4. Exploded View of Full-Flow Oil Filter Assembly - 76 Series

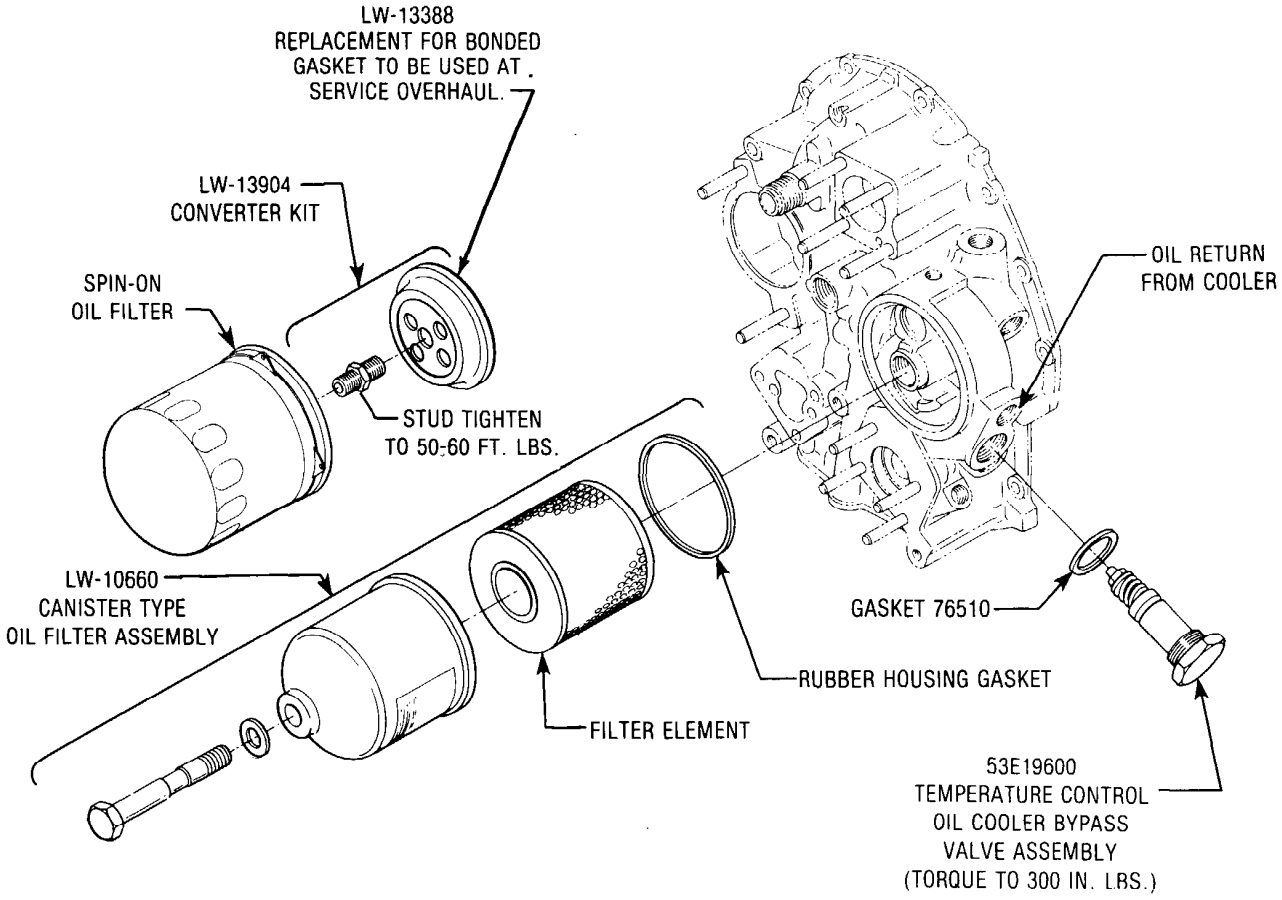

Figure 5. Exploded View of Full-Flow Oil Filter Assembly - Dual Magneto Engines