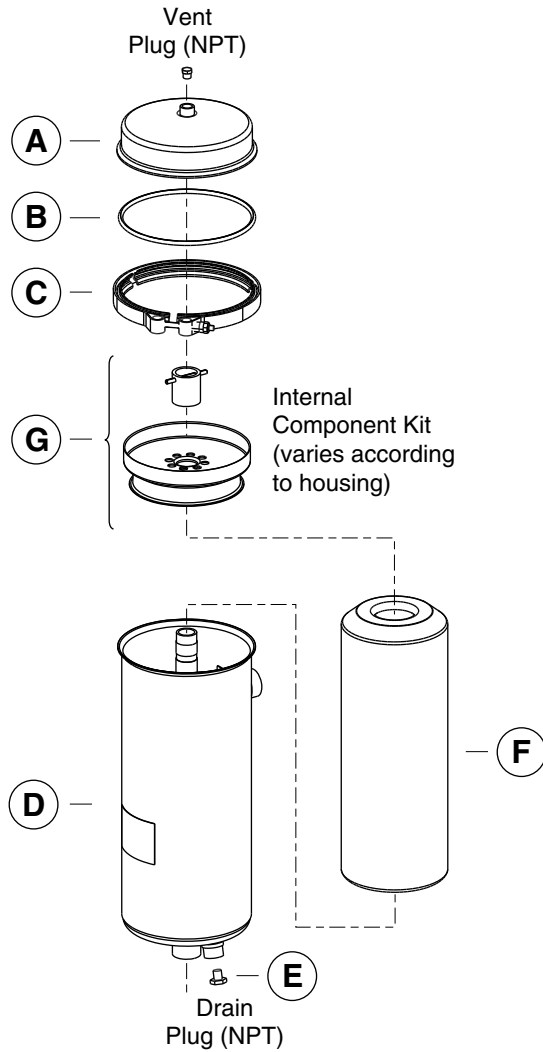




# Winslow® Lube Oil By-Pass – Type 1 Filter Service Instructions



## Parts List

Part	Description	Part Number
A	Cover Assembly	See Ordering Information on Page 5
B	O-Ring	
C	Band Clamp	
D	Housing	
E	Drain Plug	
F	Filter Element	
G	Internal Component Kit	

**⚠ CAUTION:** These instructions are intended for use by professional mechanics who are trained in the proper use of power and hand tools, using appropriate safety precautions (including eye protection).

## Introduction

Winslow® filter elements must be changed periodically to assure the high level of filtration efficiencies required by today's engines. By-pass filter elements should be serviced and changed based on comparative oil analyses. Significant changes in TBN/TAN (Total Base Number/Total Acid Number), oxidation, and nitration should be identified, monitored, and acted upon.

Lube filtration is much more sophisticated than hydraulic fluid filtration. Most engine filters not only combat particulate (wear) matter, but also chemical (corrosion) contamination. The main contributor for the chemical contaminants is combustion cylinder blow-by gas. These contaminants (oxides, nitrates, soot, acids, and water) are by-products of the combustion process and are able to flow past the piston rings and enter the oil sump. Since the Winslow bypass elements absorb these contaminants without a significant increase in restriction, standard methods (a rise in restriction) used to determine an element's life cannot be used on these applications.

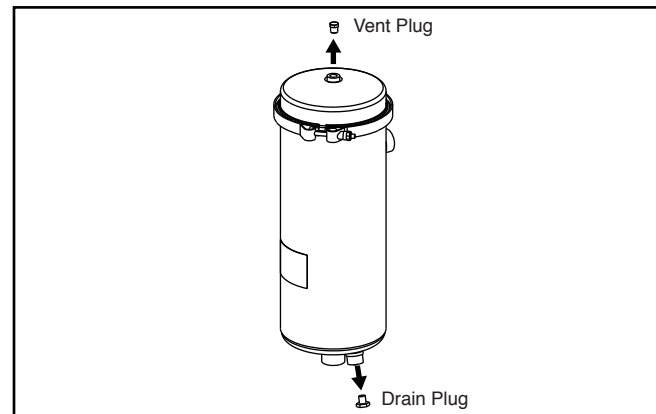
An increase in element restriction can be used as an indicator of a plugged element in applications with an extremely high solid contamination (for example, hydraulic and machine tool fluids). For these applications, the elements should be changed out when the increase in restriction reaches 3 PSID (20.7 kPa) above the clean element restriction, however elements should be changed, at minimum, once a year.

## Servicing the Filter

### Removing the Filter Element

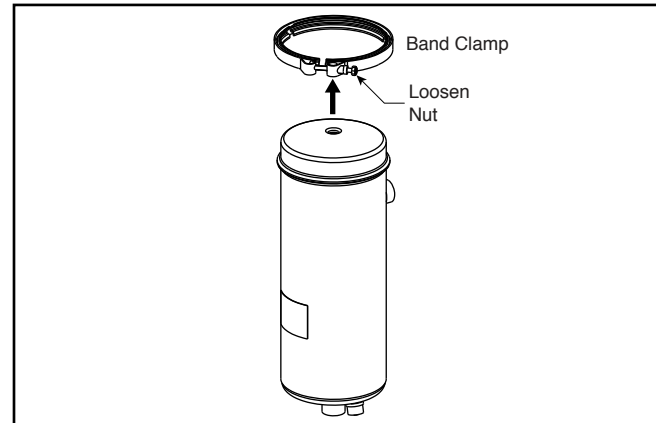
1. Remove the air vent plug and drain plug to drain the filter.

**⚠ CAUTION Fluid may be hot!**



*Figure 1 – Removing the Air Vent and Drain Plugs*

2. Loosen and remove the band clamp.



*Figure 2 – Removing the Band Clamp*

3. Remove the cover assembly.

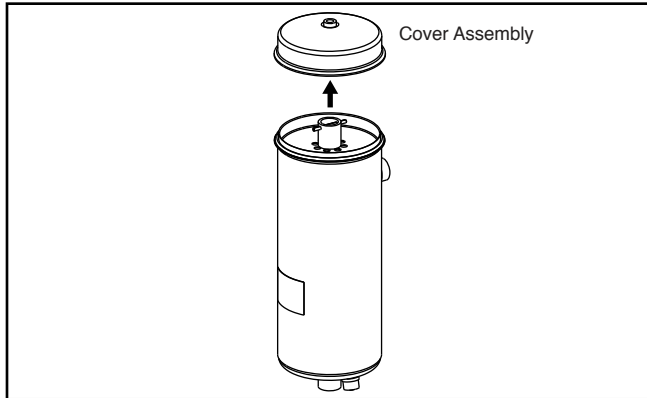


Figure 3 – Removing the Cover Assembly

4. Remove the O-ring cover seal.

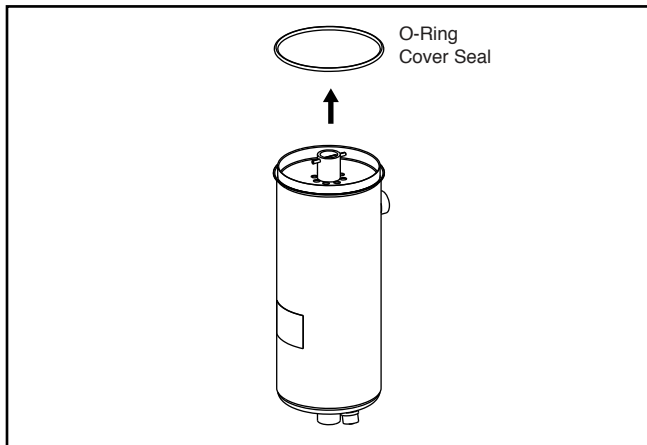


Figure 4 – Removing the O-Ring Cover Seal

5. Loosen and remove the internal component kit (varies according to housing).

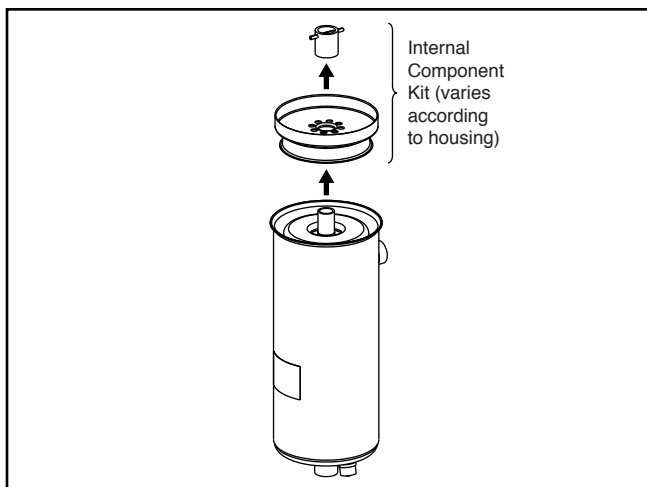


Figure 5 – Removing the Internal Component Kit

6. Pull the element straight up to remove. Dispose of the element in an environmentally responsible manner, according to state and/or federal (EPA) recommendations.

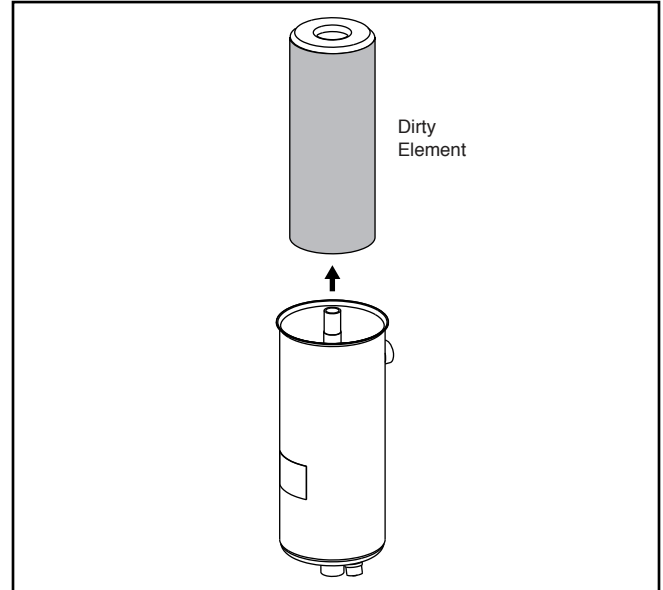


Figure 6 – Removing the Dirty Element

### Cleaning and Inspecting the Filter Parts and Housing

7. Clean all filter parts and the inside of the filter housing, preferably with kerosene.

**⚠ CAUTION** To prevent damage to your engine or equipment, do not allow dirt to fall through the opening of the element support post and into the clean outlet area.

8. Replace the O-ring cover seal. (If necessary, as long as there are no permanent surface deformations, swelling, nicks, and cracks present, the seal can be reused.)
9. Make sure that the bottom seal plate inside the filter is clean.

**Note:** This filter is equipped with a restrictive orifice and a by-pass bleeder hole. The bleeder hole is in the hold-down assembly (internal component kit) and is visible between the coils of the spring. The bleeder hole permits a small amount of oil to by-pass the filter unit when starting cold for quicker warm-up. The bleeder also helps maintain a uniform filtering temperature throughout the unit, especially in cold weather. Both the bleeder hole and the orifice hole should be inspected at each element change to see that they are clear.

### Reassembling the Filter

10. Slide the new element in place over the post.  
Note the direction of the arrow on the element and insert the proper end into the housing first.

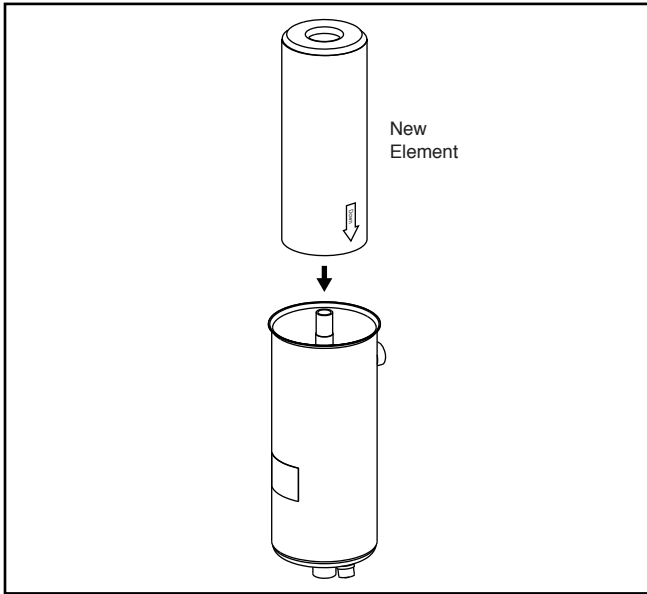


Figure 7 – Installing the New Element

11. Reinstall the internal component kit.

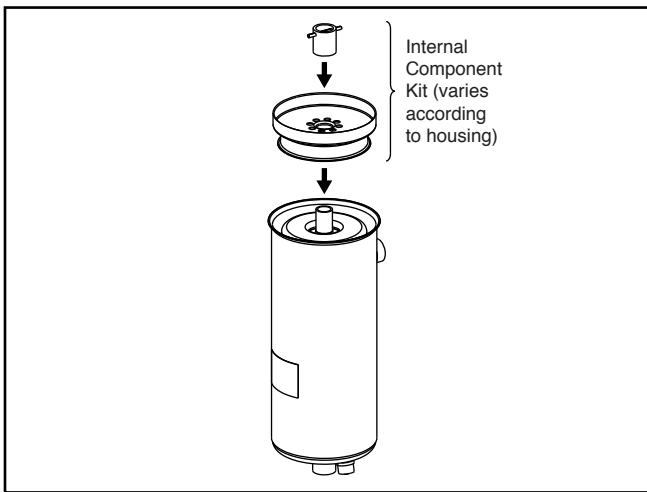


Figure 8 – Reinstalling the Internal Component Kit

12. Reinstall the drain plug.

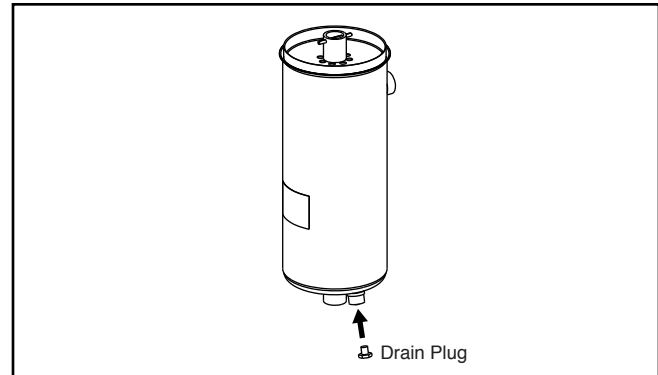


Figure 9 – Reinstall the Drain Plug

13. Fill the filter to within .75" (19 mm) from the top of the filter housing with fresh lube oil.

14. Install a new O-ring cover seal.

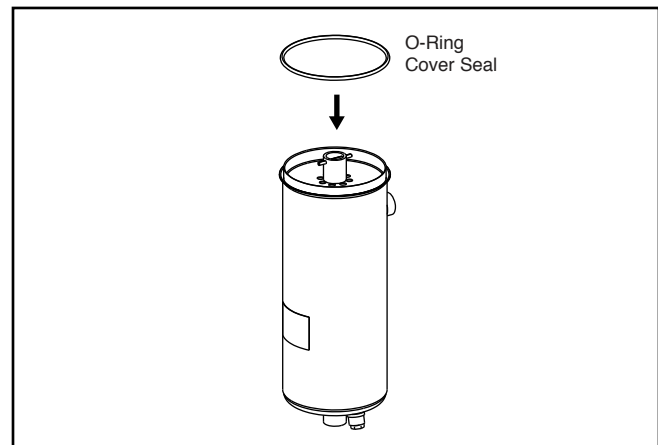


Figure 10 – Installing the O-Ring Cover Seal

15. Reinstall the cover assembly.

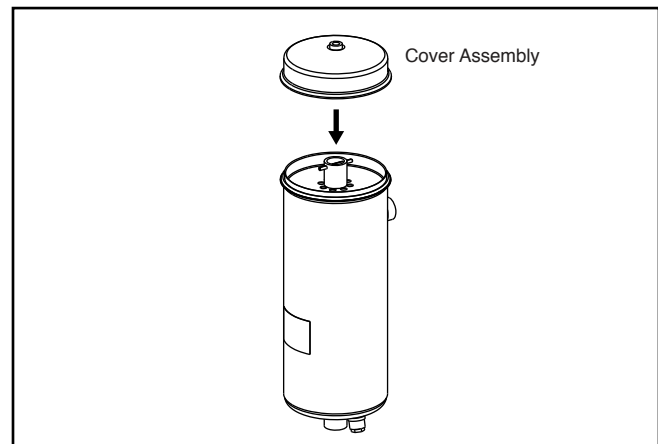


Figure 11 – Reinstalling the Cover Assembly

16. Replace and tighten the band clamp to approximately 50-60 in-lbs (5.7-6.8 N·m). **Do not over-tighten.**

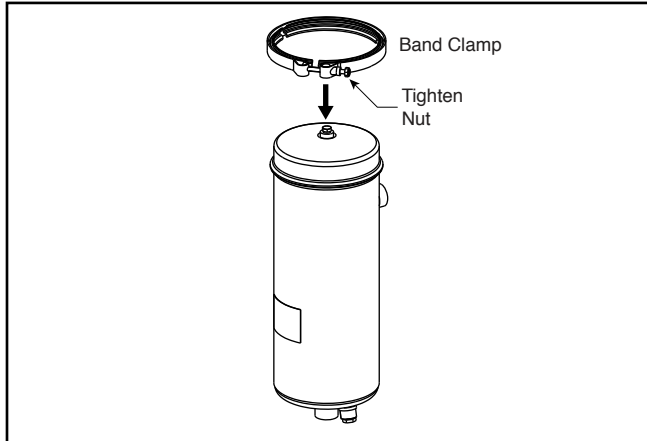


Figure 12 – Reinstalling the Band Clamp

17. Replace and tighten the vent plug.

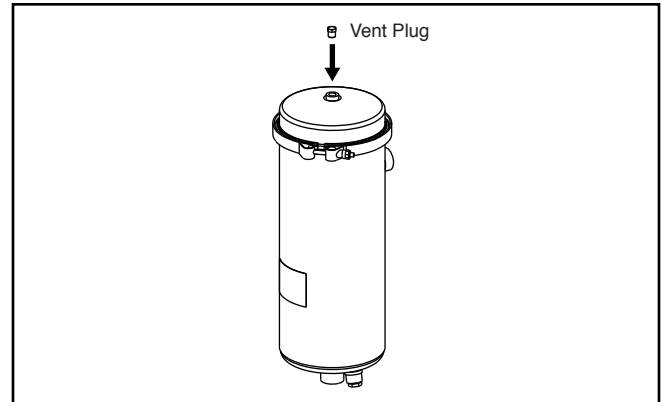


Figure 13 – Replacing the Vent Plug

18. Start the engine.  
 19. Loosen the vent plug. When oil appears from the around the plug, tighten using a wrench.  
 20. Run the system until warm and check for leaks. If no leaks are detected, the filter is properly serviced and the system can be put into operation.

### Suggested Preventive Maintenance

**Every Filter Change** – Replace the O-ring cover seal.

**Every 12 Months** – Check all fittings for leaks.

### Ordering Information

D Housing*	A Cover Assembly	B O-Ring	C Band Clamp	E Drain Plug	E Filter Element	F Internal Component Kit
95240J	Q80384A	99955A	Q52860A	Q69171	82421A	990436K
95252A	Q57511A	Q58500	Q53085A	Q69173	82484A	990437K
95303A	Q57597A	99955A	Q52860A	Q69217	82537A	990438K
95353A	Q57597A	99955A	Q52860A	Q69172	82648A	990435K

\* Designed for 75 lb/in<sup>2</sup> (517.1 kPa) continuous operating conditions.

\*\* Filter does not include an internal by-pass valve. An external by-pass valve can be ordered separately, if required.

Table corresponds to Parts List on cover page.

### Replacement Filter Elements

Part Number	Description
82421A	$\beta_5 = 75$ Full-Flow Lube Depth Element
82484A	$\beta_5 = 75$ Full-Flow Lube Depth Element
82537A	$\beta_5 = 75$ Full-Flow Lube Depth Element
82648A	$\beta_5 = 75$ Full-Flow Lube Depth Element

### Filter Specification

Densely ram-packed cotton provides  $\beta_5 = 75$  solid contamination control.

## Specifications

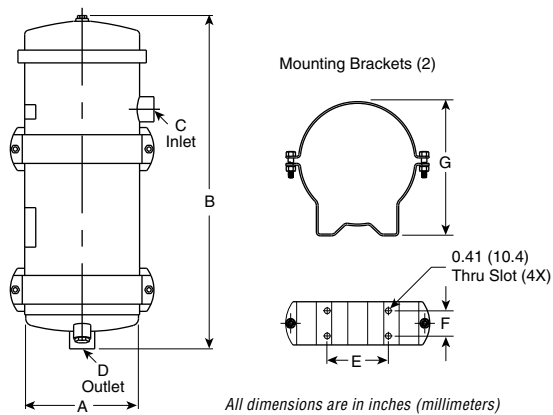
Housing Part Number	Filter Oil Volume qt (L)	Flow Rate* gal/min (L/min)	Element Number	Number of Elements	Efficiency (Particulate Control)	Capacity
95240J	12 (11.4)	0.4 (1.5)	82421A	1	$\beta_5 = 75$	Capacity Exceeds SAE Time Constraints
95252A	15 (14.2)	0.8 (3.0)	82484A	1	$\beta_5 = 75$	
95303A	27 (25.6)	1.2 (4.5)	82537A	1	$\beta_5 = 75$	
95353A	35 (33.1)	1.9 (7.2)	82648A	1	$\beta_5 = 75$	

\* Flow rate based on 30 SAE oil at 180 °F (82.2 °C) at 55 lb/in<sup>2</sup> (379.2 kPa).

**Notes:**

1. Designed for 75 lb/in<sup>2</sup> (517.1 kPa) continuous operating conditions.
  2. By-pass filter elements can be changed each time full-flow elements are changed or with every other full-flow element change.
- Specifications subject to change without notice.

## Mounting/Dimensions



Housing* Part Number	A Diameter in (mm)	B Height in (mm)	C Inlet	D Outlet	E Mounting Bracket Hole Horiz. Spacing in (mm)	F Mounting Bracket Hole Vert. Spacing in (mm)	G Mounting Bracket Max. Width in (mm)
95240J	8.6 (218.4)	18 (457.2)	1/4" NPT	1/4" NPT	4.25 (108.0)	1.75 (44.5)	8.97 (227.8)
95252A	8.0 (203.2)	23.0 (584.2)	1" NPT	1/2" NPT	4.25 (108.0)	1.75 (44.5)	9.41 (239.0)
95303A	8.6 (218.4)	30.9 (784.9)	1" NPT	1/2" NPT	4.25 (108.0)	1.75 (44.5)	10.03 (254.8)
95353A	8.6 (218.4)	40.0 (1016.0)	2" NPT	1-1/2" NPT	4.25 (108.0)	1.75 (44.5)	10.03 (254.8)

\* Designed for 75 lb/in<sup>2</sup> (517.1 kPa) continuous operating conditions.

