## Allied Systems

# **Transmission Filter Service Instructions**

#### A. Mounting

- 1. Install utilizing proper fittings.
- 2. Support filter where appropriate. When using flexible hose or when using piping that cannot support the weight of the filter filled with oil, a mounting bracket is recommended.
- 3. Insure drain plug (refer to Figure 1, item 13), fittings and connectors are secure and tight.
- 4. Fill housing (item 12) with fluid and purge the filter to remove entrapped air.

## B. Start-Up

- 1. Check for and eliminate leaks upon system startup.
- 2. Check differential pressure indicator (if so equipped) to monitor element condition.

## C. Service

1. An element must be serviced when the differential pressure indicator (refer to item 4 in Figure 1 on following page) indicates service is required.

NOTE: IF THE FILTER IS NOT EQUIPPED WITH A DIFFERENTIAL PRESSURE INDICATOR, THE ELEMENT SHOULD BE SERVICED ACCORDING TO THE INSTRUCTIONS FOUND IN THE MA-CHINE MAINTENANCE/LUBRICATION MANUAL.

## **D. Servicing Dirty Elements**

- 1. Shut the system down to assure that there is NO PRESSURE OR FLOW in the filter housing.
- Refer to Figure 1 on following page. Remove the drain plug (item 13) to drain the oil from the housing. Save the drained oil for reuse – drained oil has been filtered.
- 3. Remove the cover (item 1).
- 4. Remove the insert O-ring (item 5) and bypass seal (item 6).
- 5. Remove the bypass spring assembly (item 11).
- 6. Remove the contaminated cartridge (item 7) with a twisting motion.
- 7. Discard disposable element cartridge or clean the mesh element cartridge.

- a. Wash in a non-caustic solvent using care not to damage the element.
- b. Compressed air may be used to facilitate cleaning.
  - NOTE: ELEMENTS FINER THAN 150 MICRONS (100 MESH) MAY REQUIRE SPECIAL ULTRA-SONIC CLEANING. CONSULT FACTORY FOR RECOMMENDATIONS.

## E. Before Installing Cartridges

- 1. Refer to Figure 1 on following page. Clean magnet core with a lint-free cloth.
- 2. Check all seals and O-rings and replace if necessary.

## F. To Install New Or Cleaned Cartridge

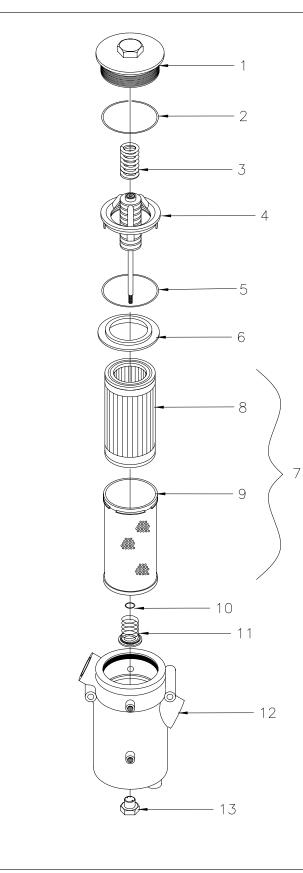
- 1. Refer to Figure 1 on following page. Lubricate all seals.
- 2. Mount new or recleaned filter cartridge (item 8).

NOTE: FOR EASE OF MOUNTING, HOLD THE CARTRIDGE AWAY FROM THE MAGNETIC CORE UNTIL THE STUD IS THROUGH THE HOLE IN THE BOTTOM OF THE ELEMENT. THEN SLIDE IT UP TO SECURELY SEAT IT AGAINST THE TOP OF THE INSERT O-RING.

3. Install bypass spring assembly or blocking plate (tighten until snug).

NOTE: OLDER VERSIONS MAY HAVE A COT-TER PIN/CASTELLATED NUT RETAINED BYPASS SPRING. IN THESES CASES, THE NUT SHOULD BE TURNED DOWN THE SHAFT UNTIL THE CROSS DRILLED HOLE IS VISIBLE IN THE BASE OF THE CASTELLATION. THE COTTER PIN IS THEN INSERTED AND THE ENDS FLARED TO LOCK THE BYPASS ASSEM-BLY IN PLACE.

- 4. Reinstall insert into the filter housing (make sure the top spring is secure).
- 5. Reinstall the cover.
- 6. Follow procedure A.4 and A.5
- 7. Follow procedure B.1 and B.2



- 1. Cover
- 2. Cover O-Ring
- 3. Top Spring
- 4. Indicator (Optional)
- 5. Insert O-Ring
- 6. Bypass Seal
- 7. Element Assembly
- 8. Element
- 9. Outer Sleeve
- 10. Element O-Ring
- 11. Bypass Assembly
- 12. Filter Housing
- 13. Drain Plug

Figure 1-1: Typical Transmission Filter