**GENERAL**

The 3860 & 3865 McIntire / ADK Maintenance Kits provide all of the parts necessary to perform the recommended yearly maintenance for both cylinders of all McIntire and ADK dual piston compressors.

**CONTENTS - P/N 3860 (Replaces Kit P/N 30-74-4)**

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In addition to the above, the 3865 kit includes two (2) Item "10" - Valve Plates & six (6) additional Filter Felts to be used for quarterly maintenance.
MAINTENANCE INSTRUCTIONS

1. Intake Filters

Replace the intake filter felts every three months as follows: Remove the filter housing by holding the filter base and turning the housing counterclockwise. Slide the felt off the center posts of the base and discard it. Clean the base, housing and air filter disc. Install the new felt (#1) over the center posts and replace the filter housing. **Note: Make sure that the air filter disc is firmly in place inside the housing before reassembling.**

2. Air Compressor Maintenance

_The air compressor is oil-less and requires no lubrication._ It is recommended that the piston rings, piston seals, rider rings, inlet valves, outlet valves, valve plates, cylinder gaskets and head gaskets be replaced at least once a year (or after 4000 hours of operation).

DISASSEMBLY

A. Loosen the four phillips head screws that secure the fan shroud. Pull the shroud forward and remove it.
B. Using a 3/4" open-end wrench, disconnect the manifold tubing at the elbow fittings on both of the heads.
C. Using a 3/16" allen wrench, remove the cylinder heads and valve components from both cylinders. Discard the valve assembly components.
D. Remove the cylinder mounting screws and slide the cylinders off of the pistons. Remove and discard the rider rings, piston rings, and ring seals from both pistons.
E. Clean the pistons, cylinders and heads with a dry cloth. Make sure that all gasket material is removed from the cylinders and heads.
F. Slide the manifold nuts off of the manifold. Remove and discard the manifold sleeves from inside the nuts.

ASSEMBLY

A. Place a piston seal (#2) in the inside ring groove of one of the pistons with the ends of the seal hanging down. Place one end of the piston ring (#3) on top of the seal and carefully work the ring around the piston into the groove. The ends of the piston seal should overlap underneath the ring. Make sure that the ring can be rotated smoothly in the groove and that none of the seal is exposed. Install a piston seal and piston ring in the outside groove in the same manner.
B. Install the rider ring (#4) around the piston. Align the piston rings so that the joints are approximately 180 degrees apart.
C. Slide the cylinder over the piston and secure it to the bracket leaving the screws finger tight. Move the piston outward as far as it will go and adjust the cylinder flush with the top of the piston. Tighten the cylinder bolts (150 to 160 inch pounds).
D. Repeat steps A, B and C for the opposite piston.

E. The valve assemblies furnished with the maintenance kit are tied together with a plastic tie. They are assembled in the proper sequence. Do not cut the tie until the valves are partially installed. There is a 5/32” diameter alignment hole drilled into the gasket surface of the cylinder head. It is located about 1/2 inch away from one of the mounting holes. The cylinder head gasket (#9) and outlet valve (#8) each have one corresponding alignment hole. The valve plate (#10), inlet valve (#7) and cylinder gasket (#6) each have two alignment holes.

1. Insert mounting screws through two of the head mounting holes.

2. Place the valve assembly over the screws, with the alignment hole in the cylinder head gasket lined up with the alignment hole in the head.

3. Place the head and valve assembly on the cylinder and position them with the manifold elbow facing in toward the compressor. Loosely engage the mounting screws. Cut and remove the nylon tie and install the other two mounting screws. Leave all four loose at this time.

4. Install the manifold nuts and seals (#5) on the manifold. Connect one end of the manifold to the head just installed. Leave the nut hand tight at this time.

F. Install the other head and valve assembly by repeating step E.

G. Tighten the head mounting screws (110 to 120 inch pounds). Center the manifold between the cylinder heads and tighten the manifold nuts.

H. Replace the fan shroud.

I. Install the air compressor in the air dryer system. Start the air dryer and check all fittings for leakage.