



Manual

750 ACE PUMP HYDRAULIC SEAL REPLACEMENT KIT JM0061314

ACE PUMPS PART NUMBER: RK-BAC-75-M

Rev. 2.22.2021

J&M Manufacturing Co, Inc

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Ace Pump Breakdown and Hydraulic Seal Replacement

J&M Part Number: JM0061314

Ace Pump Part Number: RK-BAC-75-M

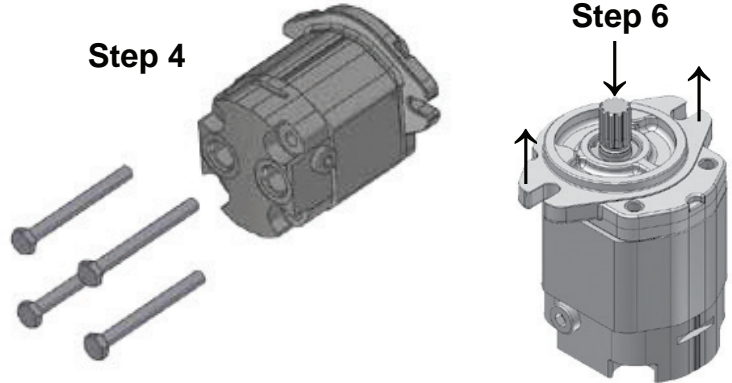
To see a video on how to change this check out this video from Ace Pumps.

<https://www.youtube.com/watch?v=Lxe5vomHmrU>

Caution: Do not remove the protective paper tube from the new flange assembly.

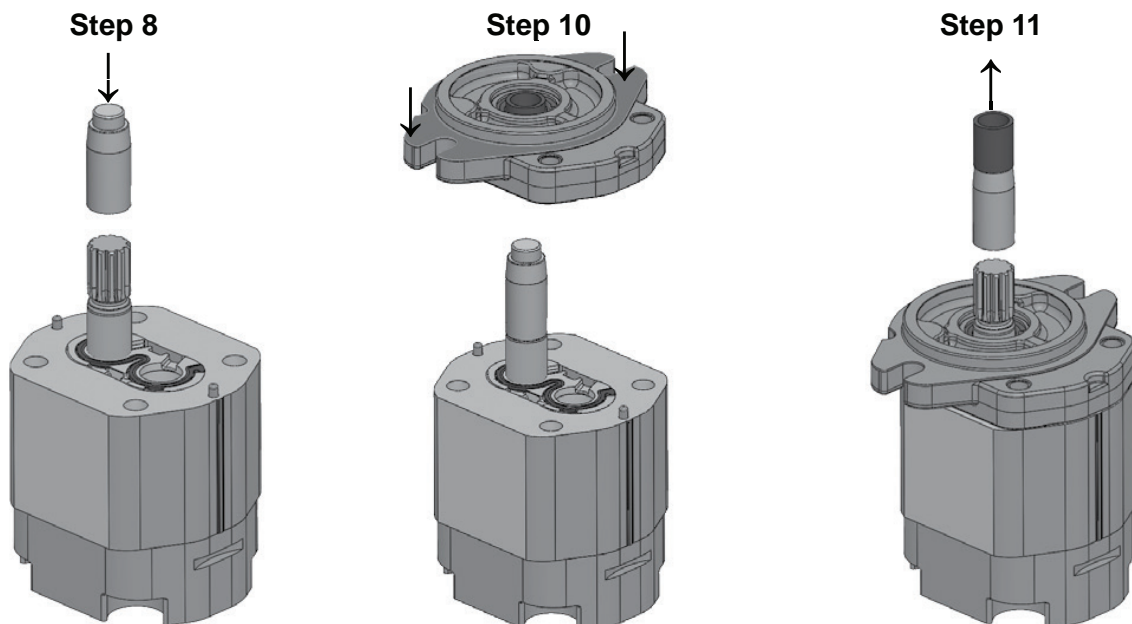
DISASSEMBLY

1. Wipe the motor with a clean cloth to remove dirt which could contaminate the motor.
2. Note port locations then remove hoses and external fittings.
3. Mark the motor section joints to indicate orientation of the motor components.
4. Remove (4) motor assembly cap screws. Motors with hex head cap screws require a 17 mm socket. Motors with socket head cap screws require a 9.5 mm or 3/8" hex key wrench.
5. Set motor on rear cover with shaft pointing up.
6. Remove front motor flange by pressing thumbs against shaft end while pulling up with fingers behind flange ears. Take care to not disturb the other motor components.
7. Remove the housing seal O-ring and discard the old flange assembly. Inspect the motor shaft for grooving or scoring. Moderate to severe damage in the sealing area may prevent proper sealing and require motor replacement.



ASSEMBLY

8. Place seal installation tool over splined shaft end. Lubricate the tool and seal lips with clean oil.
 9. Lightly grease housing seal O-ring and place into groove on rear of new flange.
 10. Carefully place new flange/seal assembly over installation tool and press down slowly to body. The tool will push the paper tube out.
- Note:** Take care to hold the flange level and push evenly on both sides of the flange.
11. Discard seal installation tool and paper tube.
 12. Reinstall motor assembly bolts and tighten to 33 ft-lb (45 N-m) torque. Turn the shaft by hand to ensure the motor turns freely.
 13. Reinstall external motor fittings.



Shaft Seal Leak Causes

HIGH BACK PRESSURE IN THE RETURN LINE:

This is the most common cause of shortened motor seal life. the hydraulic motor seal is rated for 250 pssi of back pressure. However, a continuous return pressure of 100 psi or less is recommended for efficient operation and optimum seal life. The high return pressure is caused by restrictions in hoses, fittings, and tractor plumbing.

LOOK FOR:

Seal lips pressed tight against the outer seal housing and shaft. There may also be grooves in the shaft where the seal lips touch.

PREVENTION:

The best way to minimize return pressure is to return oil directly back to the tractor reservoir. Most tractor manufacturers now offer a Low Pressure RETURN Port option for this purpose. Contact your dealer for the specific options available for your tractor model. Proper hydraulic hose sizing is also important to minimize restriction. An open hose coupling may also be used to reduce restrictions in the return line. Ace recommends 1/2" hose for 200 Series motors and 3/4" hose for 300 series motors. The hoses should be sized larger if individual lengths exceed 15 feet.



PRESSURE SPIKE:

System pressure spikes may also damage the shaft seal and cause leakage. Spikes in the 3000-5000 psi range may result from improperly synchronized hydraulic valves or quick couplers coming unplugged during operation.

LOOK FOR:

The seal lips are pressed tight against the outer seal housing and form a right angle between the seal housing and the shaft. In severe cases, the seal lip material may be extruded between the front seal casing and the shaft.

PREVENTION:

Using a Low Pressure Return Port prevents spikes by keeping the return line open back to the reservoir at all times. If not using a low pressure return, the pump should always be turned off by moving the lever to the Float position. When moved to Float, the oil supply valve is shut but the return valve stays open.

