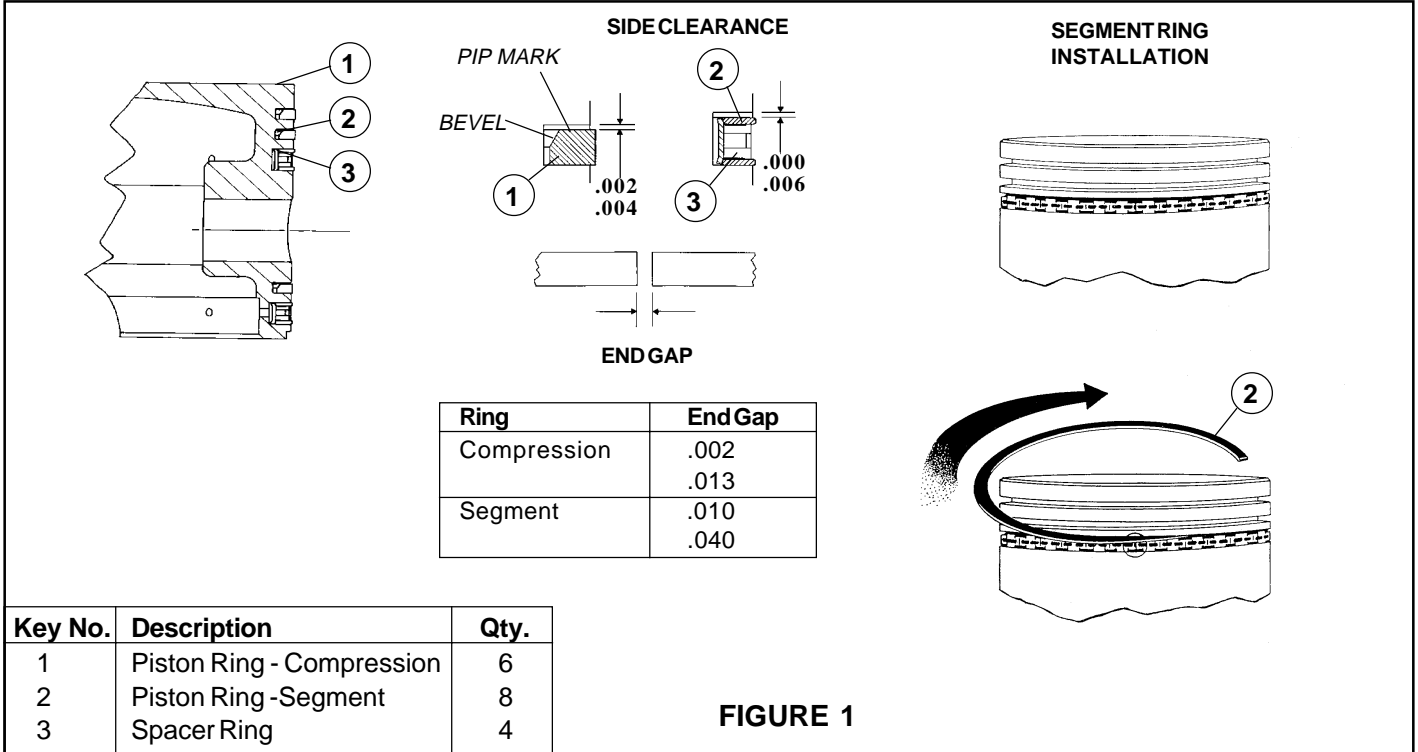




# Installation Instructions

## PISTON RING KIT FOR THE TU-FLO 550 COMPRESSOR



**IMPORTANT! PLEASE READ AND FOLLOW THESE INSTRUCTIONS TO AVOID PERSONAL INJURY OR DEATH:**

When working on or around a vehicle, the following general precautions should be observed at all times.

1. Park the vehicle on a level surface, apply the parking brakes, and always block the wheels.
2. Stop the engine when working around the vehicle.
3. If the vehicle is equipped with air brakes, make certain to drain the air pressure from all reservoirs before beginning ANY work on the vehicle.
4. Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in manner that removes all electrical power from the vehicle.
5. When working in the engine compartment the engine should be shut off. Where circumstances require that the engine be in operation, **EXTREME CAUTION** should be used to prevent personal injury resulting from contact with moving, rotating, leaking, heated, or electrically charged components.

6. Never connect or disconnect a hose or line containing pressure; it may whip. Never remove a component or plug unless you are certain all system pressure has been depleted.
7. Never exceed recommended pressures and always wear safety glasses.
8. Do not attempt to install, remove, disassemble or assemble a component until you have read and thoroughly understand the recommended procedures. Use only the proper tools and observe all precautions pertaining to use of those tools.
9. Use only genuine Bendix replacement parts, components, and kits. Replacement hardware, tubing, hose, fittings, etc. should be of equivalent size, type, and strength as original equipment and be designed specifically for such applications and systems.
10. Components with stripped threads or damaged parts should be replaced rather than repaired. Repairs requiring machining or welding should not be attempted unless specifically approved and stated by the vehicle or component manufacturer.
11. Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.

**NOTE:** These instructions are for the Tu-Flo 550 piston and ring kit only. For more service information refer to the service manual for the compressor being serviced.

## **INSTALLING RINGS**

1. Check each ring end gap in the cylinder bore before installation. Install ring in top of cylinder bore and using the piston, push the ring to midpoint of the cylinder bore and check ring gap. (Refer to figure 1.) If the end gaps are incorrect verify the ring kit is the correct repair size. If the repair size is correct then the cylinder bore is worn beyond specification and the compressor should be replaced.
2. Install the rings on the pistons per the following instructions starting at the center of the piston and moving outward.
  - A. Install the spacer and segment rings as follows.

Place the spacer ring(3) in the piston groove, the ends of the spacer must butt and must not overlap. Install the top segment(2) by inserting one end above the spacer in the ring groove, 120 degrees from the spacer ends and wind the segment into position. Install the bottom segment in the same manner beneath the spacer, making sure the end gap is staggered 120 degrees from the top ring segment and the end gaps. Before using be sure both painted ends of the spacer are visible and butted.
  - B. Install the compression rings(1) in the proper grooves with the bevel or "pip" mark (if any) toward the top of the piston. (Refer to figure 1.)
3. Check the ring side clearance of each ring in the piston ring groove. (Refer to figure 1.) If the side clearance is too large, the piston ring groove is worn beyond specifications and the piston must be replaced.
4. Rotate the piston rings in their respective groove so that each end gap is at least 90 degrees from the previous ring's end gap.

