

INTERSTATE-McBEE



NT/N14 LPF Cylinder Liner Installation Instructions

- Proper liner protrusion for this application is .004"- .007" (0.10mm-0.18mm).
 To achieve this protrusion specification the correct thickness liner flange seal ring must be used.
- Make sure the cylinder block deck, counter bore, lower receiving bore, liner seal ring and the cylinder liner are clean and dry.
- Install the counter bore seal ring (shim) into the cylinder block counter bore.Warning: Do not use any type of sealant.
- 4. Install the wide crevice seal in the top liner groove.
- Install the two black O-rings in the center and bottom liner grooves. Verify neither O-ring is twisted.
- Lubricate the crevice seal and the O-rings with vegetable oil. Warning: Do not use engine oil.
- 7. Lubricate the lower packing bore area of the cylinder block with vegetable oil.
- Place the liner into the cylinder bore taking care not to allow any oil to touch the counter bore or seal ring.
- 9. Use hand pressure push the liner into the cylinder block.
- Use a proper liner installation tool to press the liner to its final installed position. Before removing the installation tool check the liner protrusion with a dial indicator at four locations 90° apart. The protrusion must be .004"- .007" (0.10mm-0.18mm) at all four points.
- 11. If the specified protrusion is not attained the liner must be removed and the procedure repeated. If the protrusion is correct remove the installation tool and proceed to step 12.
- 12. Check the liner bore with a dial bore gauge. The bore must not be out of round more than .003" (.08mm) at the top 1 inch of the liner bore and not more than .002" (.05mm) out of round in the balance of the liner bore.



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- Install the counter bore seal ring (shim) into the cylinder block counter bore.Warning: Do not use any type of sealant.
- 4. Install the wide crevice seal in the top liner groove.
- Install the two black 0-rings in the center and bottom liner grooves. Verify neither 0-ring is twisted.
- Lubricate the crevice seal and the O-rings with vegetable oil. Warning: Do not use engine oil.
- 7. Lubricate the lower packing bore area of the cylinder block with vegetable oil.
- Place the liner into the cylinder bore taking care not to allow any oil to touch the counter bore or seal ring.
- 9. Use hand pressure push the liner into the cylinder block.
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