

TROUBLESHOOTING CHECKLIST FOR Oil Bath Seals

- Most seal failures are caused by damage to the seal element or sealing surface during installation of the seal.
- Unitized oil bath seals eliminate installation damage common to two-piece seals with exposed sealing surfaces.
- Protected internal sealing surface remains effective from one major maintenance job to the next.
- Rubber O.D. surfaces contribute to the improved performance of the unitized oil bath seal over seals which simply have a metal O.D.
- The ribbed rubber I.D. of the unitized oil bath seal creates a larger sealing surface against the spindle, versus point contact seals.
- Never rely on appearance when matching up unitized oil bath seals with original equipment seals – use the catalog.

First check leakage path – O.D., sealing surface or I.D.

Symptom	Probable cause of leakage
Case distorted	<ul style="list-style-type: none"> • Seal O.D. may be too large for wheel bore* • Wheel bore excessively out of round • Careless seal handling or improper installation tools used
Inner parts of seal assemble loose	<ul style="list-style-type: none"> • Use of improper installation tools • Wheel housing out of round • Seal O.D. too large for wheel bore*
Seal cocked in bore	<ul style="list-style-type: none"> • Improper tools or installation procedures used • Seal O.D. too large for wheel bore* • Burr or chips in wheel bore prevent proper seating
Shaft gouges or scratches seal	<ul style="list-style-type: none"> • Lack of inspection or proper surface preparation before installing
Leakage at seal I.D.	<ul style="list-style-type: none"> • Chisel marks on spindle • Wrong seal installed
Leakage around seal O.D.	<ul style="list-style-type: none"> • Wheel bore out of round (if greater than .002", bore sealant may correct problem) • Seal O.D. surface damaged by careless handling or improper installation or burr on edge of seal bore • Seal cocked in wheel housing • Dirt or scratch on wheel bore • Oversize bore*
No definite leakage path	<ul style="list-style-type: none"> • Possible excessive pre-lubrication on assembly, without actual leakage
Excessive difficulty in replacing wheel on spindle	<ul style="list-style-type: none"> • Failure to remove old wear sleeve

* Recommended press fit range is .004" to .015" measured interference fit on a new seal. Minimum should be .006" aluminum hub.