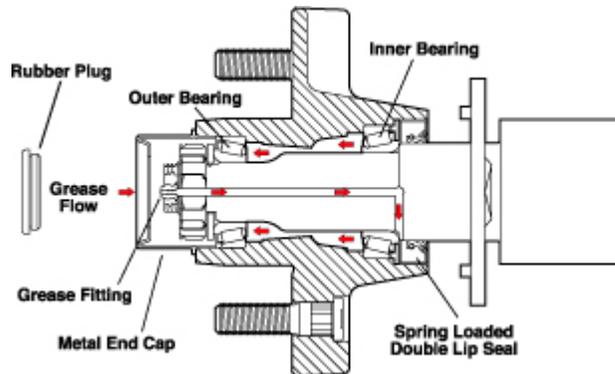


Operations and Maintenance
for the hubs using the Sport Model Bearing Protectors
with the posi-lube spindle
Quick and easy bearing lubrication...



Your maintenance will stay the same as recommended by the trailer manufacturer. The big difference with using the Sport Model Bearing Protectors is that the hub is now pressurized and will not allow a vacuum to occur preventing water entry when the trailer is submerged. The reason now you would do a grease exchange is because of wear and tear over time and not to expel contaminants. The maintenance schedule can be based on a time interval or mileage interval,

When greasing, remove the diaphragm in the end of the metal end cap. Removal can be done by deflating the diaphragm with a sport needle through the valve located in the center or squeeze the diaphragm which will also deflate. Continue squeezing and gently remove from the metal end cap.

Locate the grease fitting in the end of the spindle and start greasing with a hand or pneumatic grease gun. Use the grease recommended by the trailer manufacturer. A conduit passage through the center of the spindle allows the grease to flow into the space between the inner bearing and the seal. (See diagram above) As you add grease, it will flow through the inner bearing toward the front of the hub.

The hub can be greased until the new grease starts coming out of the front of the metal end cap. That will make a complete grease change, similar to an oil change. Wipe off the excess grease so the grease is not past the end of the spindle. Use a flat screw driver when removing the grease due to the metal end cap hole can have sharp edges.

Install the diaphragm into the metal end cap. First, put grease on the edge of the hole on the metal end cap. The grease assures the grommet of the diaphragm seals properly. Squeeze the diaphragm until the grommet in the diaphragm opens up. Slide the open end of the grommet into the hole in the metal end cap. Work the grommet into the hole in a circular pattern until the inner lip of the grommet is seated. Turn slightly to check if it is seated. It should turn easy. Put grease on the needle or in the hole on the diaphragm prior to inflating.

Inflate the diaphragm using a hand pump with a sport needle to where the diaphragm expands outwards past the face of the metal end cap approximately $\frac{3}{4}$ of an inch. (**See decal**). That will pressurize the hub with approximately 5 to 10 p.s.i.

This procedure can be accomplished in a short amount of time and will eliminate the disassembly of the wheel due to water intrusion which can lead to bearing and race contamination and possibly failure. It will also eliminate added labor and vehicle down time.

Check Diaphragms Prior to Submerging the Trailer

Prior to submerging the trailer, glance at the diaphragms to see if the diaphragms are protruding outwards. You can do a visual indication by looking at the diaphragm's location or a physical indication by pressing in on the diaphragm. As long as the diaphragms are pressurized, the hub is protected and nothing else is needed. What should be typically expected with the Sport Model is adding some air to the diaphragms after 6 months to a year. **(See decal below)**

Your Air-Tight bearing protector is designed to last a long time. The wear parts are the seal and eventually the bushing, depending on the severity of the environment and mileage. In the meantime, with proper installation, you should experience tens of thousands of miles out of each seal. When air pressure can no longer be maintained statically, first check the metal cap and diaphragm for obvious damage. Use soap and water in a spray bottle. Inflate the diaphragm and spray the diaphragm to check for leaks. If the diaphragm leaks from where the grommet and cap meet, remove the diaphragm and add grease to the hole on the metal end cap. Replace the diaphragm and air up. That will make sure the diaphragm is beaded. Check for any other obvious damage before replacing a seal and bushing. When at the boat ramp, if for whatever reason one of the diaphragms was flat, air up prior to submerging to assure no contamination can enter the hub. All you need is to hold pressure long enough during trailer submersion. The hub can then be checked at a later time for the problem. With Air-Tight, you will be aware that a hub needs attention and which hub.

With confidence, you will know at all times that the hubs are being protected 24/7. The Air-Tight Bearing Protector will protect the grease and let the grease do its job.

