

TRAILER BUDDY[®]

STAINLESS STEEL BEARING PROTECTO

INSTALLATION INSTRUCTIONS **Trailer Buddy® Stainless Steel Protector**



How To Remove A Bearing Protector

The bearing protector is pressed into the hub. Remove by impacting on the side with a mallet in several areas. The idea is to walk the protector out of the hub. You do not need to disassemble the bearing protector to remove it.

Bearing and Seal Inspection

Remove bearing protector or dust cap by impacting the side with a mallet in several areas to walk it out of the hub. Remove the cotter pin, castle nut or spindle nut and retainer and washer if equipped. Then slide the hub assembly and outer bearing off the axle spindle. Clean all old and contaminated grease from the hub and spindle. Discard inner seal and carefully inspect bearings for signs of wear, corrosion, and pitting. If these signs exist, use a Dexter bearing replacement kit. Be sure to use a new marine grade, double-lip, spring loaded grease seal. If your hub was not equipped with a marine-grade, double-lip, springloaded grease seal or the axle spindle seal surfaces are worn, rusty or pitted, use a Dexter Spindo-Seal® replacement kit. These kits will offer a long seal life with negligible grease leakage and also keeps grease from leaking and saturating brake linings on trailers equipped with brakes.

Reassemble the components and fill the hubs with high-quality marine bearing grease. Marine grease is specially formulated for water resistance, high temperature, extreme pressure, and decreased maintenance. Wipe a thin coat of grease to pre-lubricate the seal lip, and lightly grease the spindle bearing surfaces before carefully reinstalling the hub: Ensure all the bearing rollers are fully hand-packed with grease. The bearing cups are also greased before hub assembly.

It is critical that the bearing end play is appropriately adjusted and the cotter pin is installed correctly.

1. If new bearings and races/cups were installed in the hub as part of service, first seat the bearings in the races/cups by tightening the spindle nut up to about 20-25 Ft.-lbs. while simultaneously rotating the hub slowly. The bearings should bind up slightly while turning at this point. If the bearings lock up tightly at 20-25 ft.-lbs., disassemble the unit and check the bearings for issues with the rollers, improper part numbers, or improper installation. If the bearings rotate well, loosen the spindle nut until the spindle washer releases its pressure from under the nut and the nut torque goes zero. You may hear or feel a slight click or pop when the washer releases, and the spindle nut will begin to come loose. Then re-tighten the nut to 18-20 in.-lbs. with no apparent end play in the bearings. If unsure, repeat the above tightening/loosening/tightening process to 18-20 in.-lbs. and check again. Then, if so equipped, install the nut retainer (looks like a small cookie-cutter) by lining up the appropriate notch in the nut retainer with the hole at the end of the spindle. Install the cotter pin without disturbing the bearing adjustment or spindle nut. If the pin will not line up, rotate the nut retainer to a new position.

- 2. Install a new cotter pin through the spindle hole and the appropriate notches in the nut or retainer. The cotter pin loop end should be seated in the notch in the nut retainer and against the hole in the spindle. Rotate the cotter pin, so the long leg of the pin is to the outside. Before bending the pin legs, verify that the bearings and hub will rotate smoothly with only a slight amount of drag. If you pull, push-in or out, or try to rock the hub or rotor, you shouldn't feel any obvious play in the bearings.
- 3. Fold the long leg of the cotter pin back over the end of the spindle while keeping the cotter pin loop snug against the spindle end. Once you have folded it back over the end of the spindle, tap it flat against the spindle end.
- Using a flat screwdriver or punch, drive the short end of the cotter 4. pin down and around the nut retainer. The short leg should wrap down to the washer.

Installation

Center the bearing protector over the end of the hub where the bearing/ dust cap would typically go. For standard press-in Trailer Buddies: Use a block of wood against the cap and a hammer, tap the hammer against the wood to drive the protector into place. The standard Trailer Buddy bearing protector is designed to press into the hub securely. Therefore, you should not be able to remove the protector with your own strength. It is essential to confirm the fit of the protector, or it could come off during use.

For the threaded Trailer Buddy (021-120-00), apply Permatex or other grease-proof gasket cement to the bearing protector threads. Screw the bearing protector into the hub, hand tight.

Gasket cement can also be used on the shoulder of a non-threaded bearing protector for additional hold. If the bearing protector cannot be driven into the hub, stop! There are many different sizes of bearing protectors, and you could have the wrong size, or your hubs may be slightly oversized or undersized. If this occurs, see your marine dealer for other available sizes and solutions.

After driving the new protector on, recheck that the bearing end play has not changed by pushing inward and pulling outward on the hub. Rarely, the impact of driving a protector on will shift the bearings or races, and the protector will have to be removed to re-adjust the spindle nut and a new cotter pin installed.

Initial Filling

Using a grease gun, add marine wheel bearing grease through the grease fitting until the piston or blue ring moves out 1/8". Without removing the grease gun, apply pressure against the piston by grasping the grease gun hose or feed tube with your hand and pushing. If the piston moves in, the hub is not full of grease. Repeat this sequence until the piston springs back when pushing force is removed. Do not fill the piston can over-pressurize the system, create a leak, damage the seal, or cause the protector to come loose.

Pressure Relief Feature

During the initial filling, grease may appear around the edge of the piston. This is the result of the automatic pressure relief feature functioning. The piston rides on a rubber O-ring. Once the piston strokes beyond the O-ring, grease will escape, so the hub can't be overfilled or over-pressurized. Wipe off any excess grease.

Lubricant Level Check

Check the hub grease level **before every** launch. Additional grease isn't required if the piston or blue ring can be moved or rocked by pushing on its edge. If the piston doesn't rock or move, add grease until the piston moves outward about 1/8". Do not fill the protector beyond 1/8" piston movement. Always be sure to check before your first trip of each season.

Air Trapped Inside Hubs

A small amount of air is usually trapped inside of the hubs when the bearing protector is first installed. The air will eventually bleed out between the O-ring and piston. A small amount of grease may be pushed out with the air. When all the air has escaped, the grease level will stabilize.

