STEMCO®

**TECH TIP #125**
NOVEMBER 7, 2022

# Hard Pack Grease Tech Tip for Heavy Duty Wheel Ends

The purpose of this document is to inform fleets about the proper lubrication methods for packing wheel bearings and the proper fill of the hub cavity when using # 2 Hard Pack grease that is common in the chassis trailer market.

## Packing Bearings by Hand

1. Thoroughly clean your hands or wear a new pair of latex gloves.
2. Place a softball sized amount of grease into your palm. (Figure 1)
3. Using your opposite hand, push the large end of the bearing cone assembly into the grease, forcing grease between the rollers, cage, and cone. If all the grease is used up and the bearing is not fully packed, grab more grease and continue the same process (Figure 2)
4. While pushing grease into the large end, rotate the entire cone assembly until the grease is forced out evenly around the entire small end.
5. Smear excess grease on the outside of the bearing cone assembly, between the rollers, and onto the bearing cage. (Figure 3)

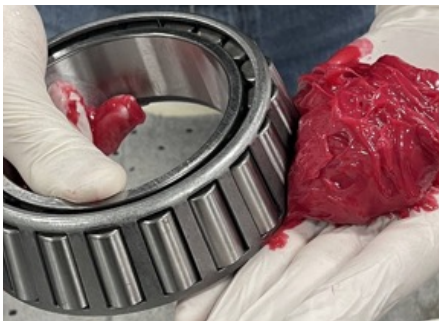


***Figure 1:*** *Packing bearings*

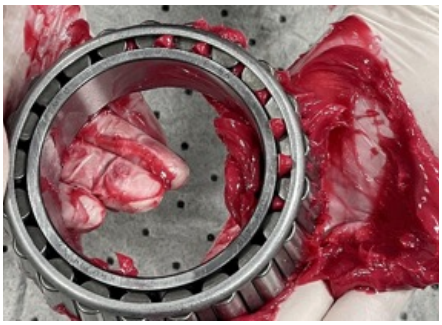


***Figure 2:*** *Force grease between rollers*

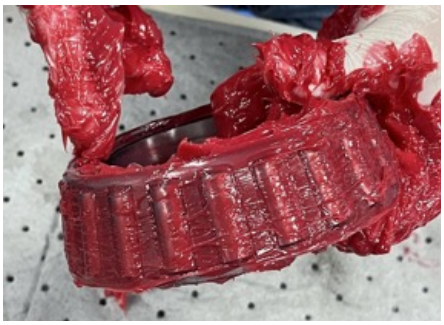


***Figure 3:*** *Coat outside of bearing*

## Packing Bearings with Pressure Packer

1. Thoroughly clean your hands or wear a new pair of latex gloves.
2. Place the bearing cone assembly, small end down, into the grease packer funnel. (Figure 4)
3. Plug the bore of the large end of the bearing cone assembly with the conical retainer.
4. Add grease to the fill port on the packer until grease is forced between the rollers, cage, and cone. (Figure 5)
5. Remove the bearing from the packer
6. Smear excess grease on the outside of the bearing cone assembly between the rollers and onto the bearing cage. (Figure 3)



***Figure 4:*** *Grease packer funnel*



***Figure 5:*** *Pressure packing bearings*

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# Hard Pack Grease Tech Tip for Heavy Duty Wheel Ends (Continued)

## Spindle Lubrication Procedure

1. Thoroughly clean your hands or wear a new pair of latex gloves.
2. Lightly coat the spindle with the same #2 hard pack grease as used on the bearings to prevent fretting corrosion. (Figure 6)



***Figure 6:*** *Spindle lubrication*

## Hub Cavity Fill Procedure

1. Thoroughly clean your hands or wear a new pair of latex gloves.
2. The hub cavity needs to be filled 100% full even with the inner and outer bearing cups. (Figure 7)
3. Fill the cavity 100% full of grease between the cups and then use a straight edge from cup to cup and wipe off the excessive amount of grease in the hub cavity. (Figure 8)

Stemco recommends that all parts inside the hub cavity be coated with a thin film of grease to prevent rust and corrosion. Rust and corrosion can form due to condensation forming inside the hub, due to normal environmental temperature changes.

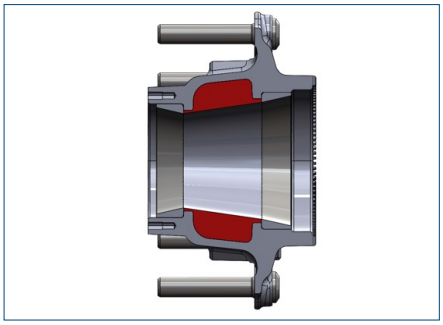


***Figure 7:*** *Hub cavity fill procedure*



***Figure 8:*** *Hub cavity fill procedure*

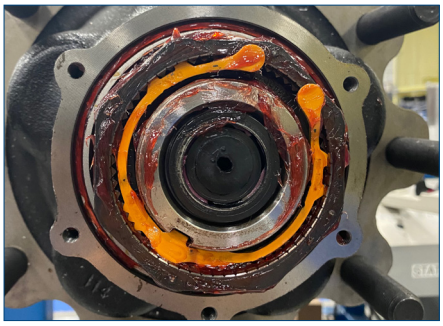


***Figure 9:*** *Grease on spindle nut*

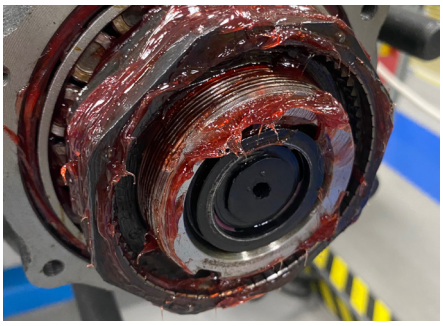


***Figure 10:*** *Grease on spindle nut*

**Please follow all related Technology & Maintenance Council recommended practices for wheel end maintenance such as RP 622, 624, 631, and 644.**



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