Trailer Axle Hub

REPLACEMENT MANUAL

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Safety Information

The "WARNING" symbol above is a sign that a service or maintenance procedure has a safety risk involved and may cause serious injury or death if not performed safely and within the parameters set forth in this manual.

Always wear eye protection when performing service or maintenance to the vehicle. Other safety equipment to consider would be hearing protection, gloves and possibly a full face shield, depending on the nature of the service.

The owner's manual for your unit may have more procedures for service and maintenance.

NOTE: The images shown in this manual are for illustrative purposes only and may not exactly match the components on the axle being serviced.

Hub Removal

1. Lift and support unit per manufacturer's requirements.

⚠WARNING

Lift unit by the frame and never the axle or suspension. Do not go under unit unless it is properly supported by jack stands. Unsupported units can fall causing death or serious injury.

2. Remove the lug nuts from the wheel and set aside (Fig. 1).
3. Remove the wheel from the axle hub and set aside (Fig. 2).

Fig. 1

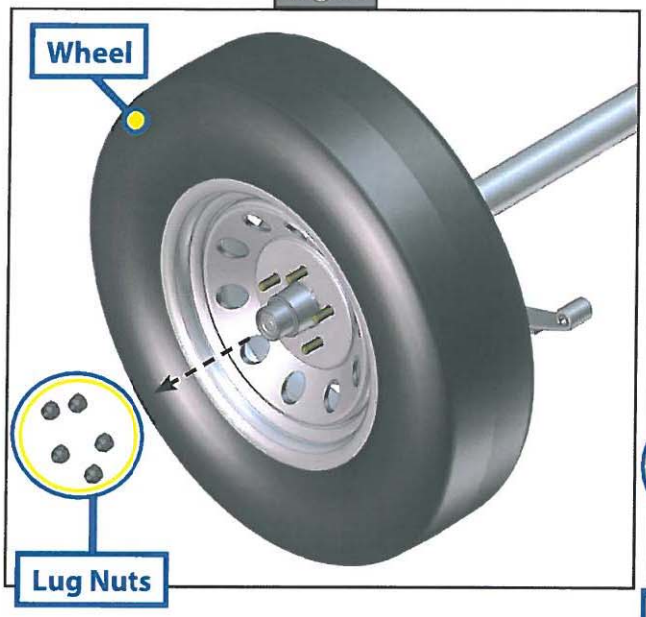
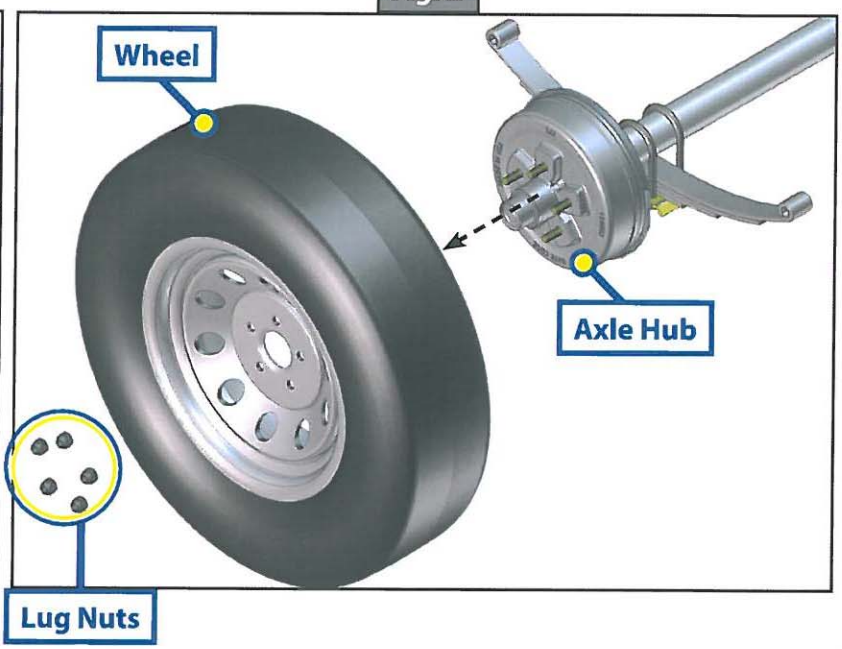


Fig. 2



4. Remove the dust cap by prying the edge out of the hub (Fig. 3). If equipped with oil lubrication, unscrew oil cap using a 2½" socket. Let oil drain into pan.
5. Pull the cotter pin from the castle nut and ***DISCARD THE COTTER PIN*** (Fig. 4).

Fig. 3

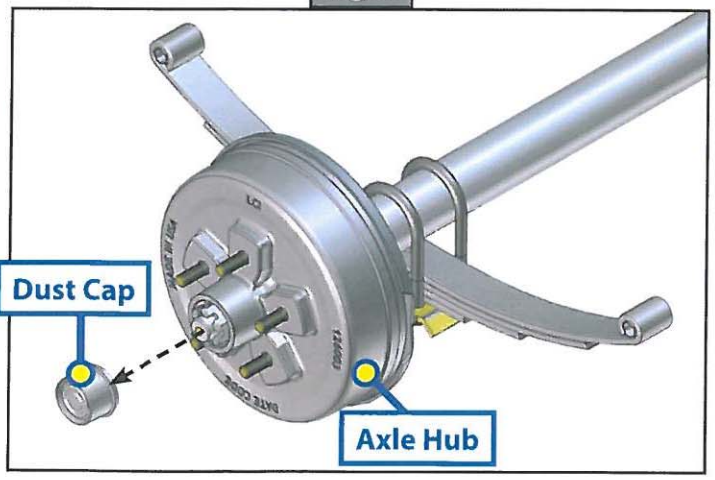
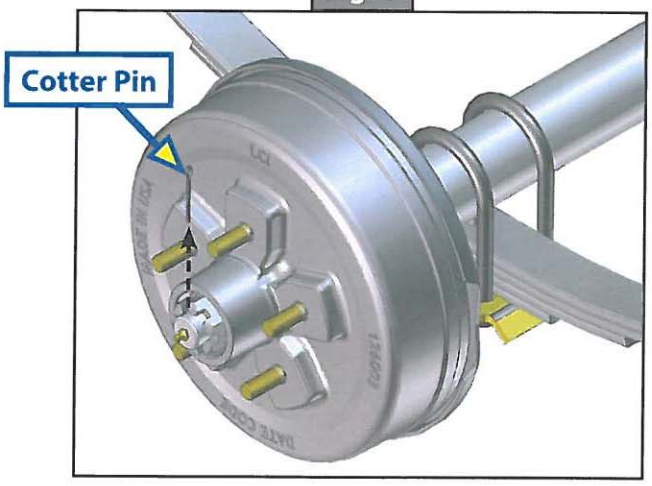


Fig. 4



6. Remove the castle nut from the spindle (Fig. 5).
7. Remove the spindle washer from the spindle (Fig. 6).
8. Place hand over nose of hub during removal to contain outer bearing cone or remove outer bearing cone prior to removal of hub. Remove the hub from the spindle (Fig. 7).

NOTE: Brakes may need to be adjusted or backed off to remove drum from spindle.

NOTE: A gear puller may be necessary to remove hub from spindle.

Fig. 5

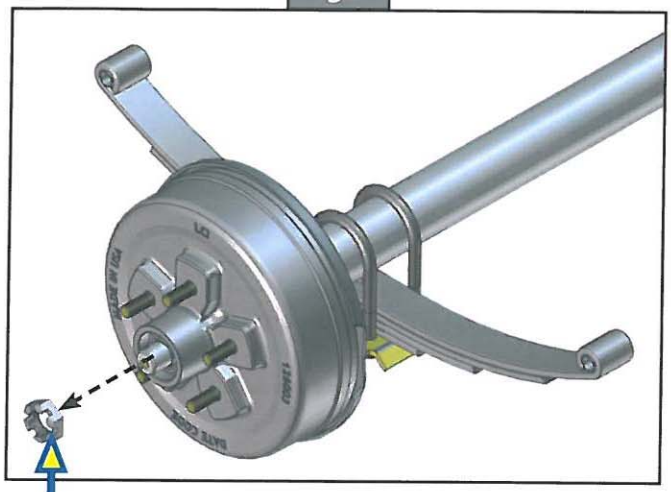


Fig. 6

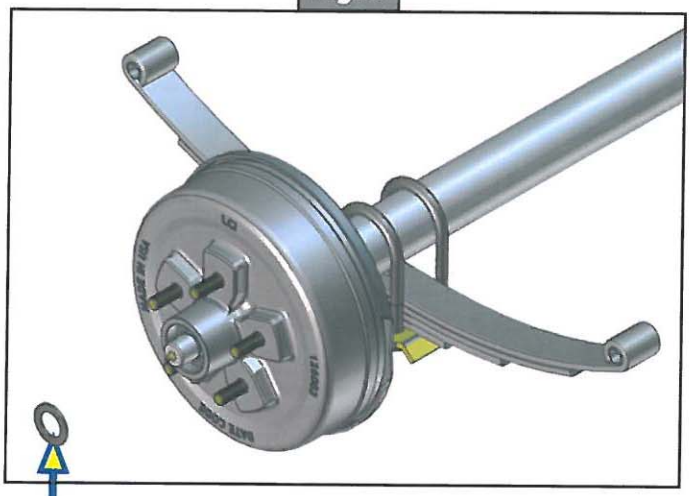
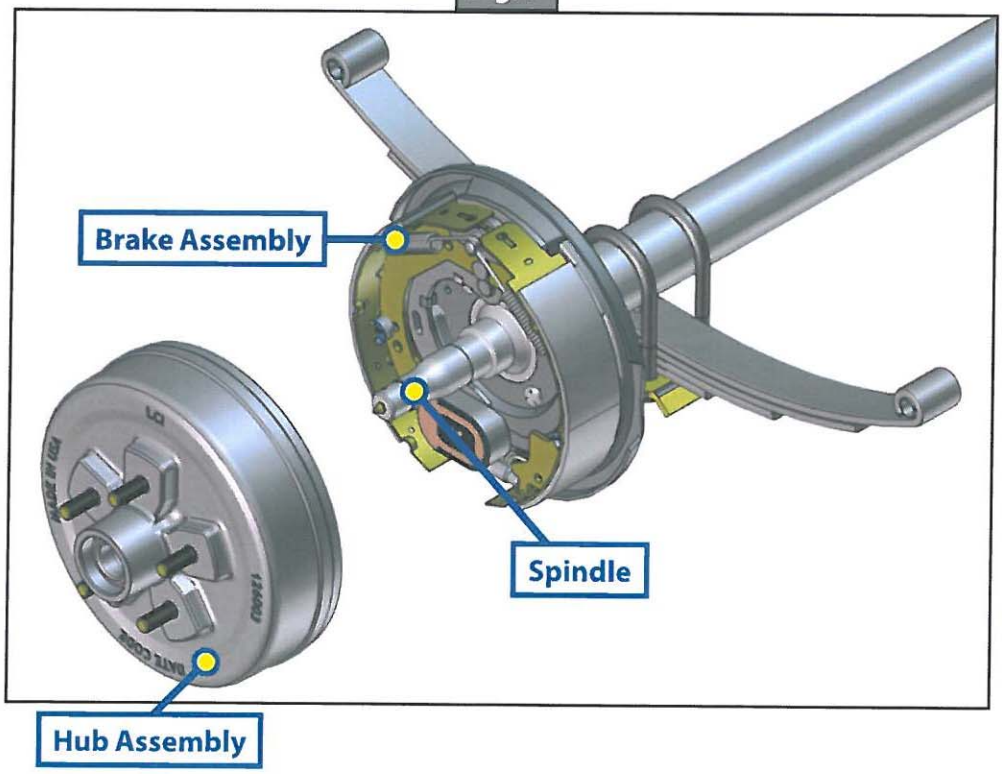


Fig. 7

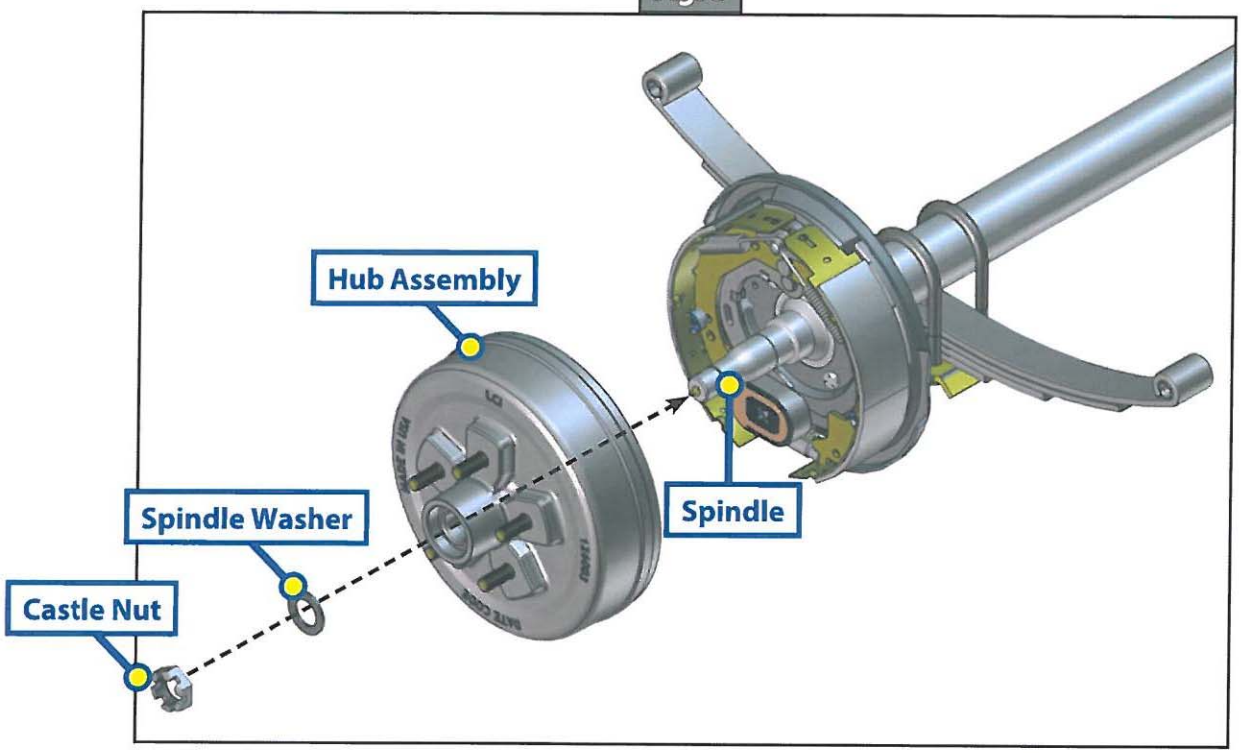


Hub Replacement

NOTE: Wipe all grease from spindle prior to hub install to prevent brake contamination after hub install.

1. Place new hub assembly onto the axle spindle followed by the spindle washer and castle nut (Fig. 8). Castle nut should be torqued to 50 ft.-lb. Rotate the hub during the tightening process.

Fig. 8



2. Loosen castle nut to back off the torque.
3. Tighten castle nut finger tight until snug.
4. Insert ***NEW*** cotter pin (Fig. 9). If cotter pin does not line up with hole, back castle nut up slightly until pin can be inserted.
5. Bend cotter pin over to lock nut in place (Fig. 10). Nut should be free to move with only the cotter pin keeping it in place.

Fig. 9

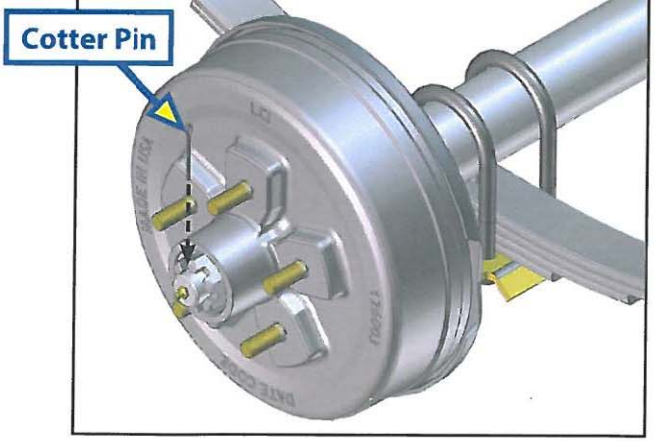
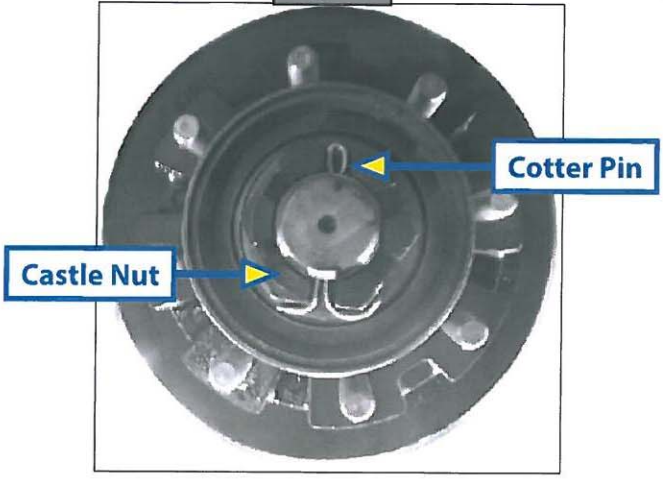


Fig. 10



6. Re-install dust cap into the hub assembly (Fig. 11).
7. Re-install the wheel onto the hub assembly (Fig. 12).
8. Re-install the lug nuts onto the hub studs (Fig. 13). See the torque requirements section on the next page.

Fig. 11

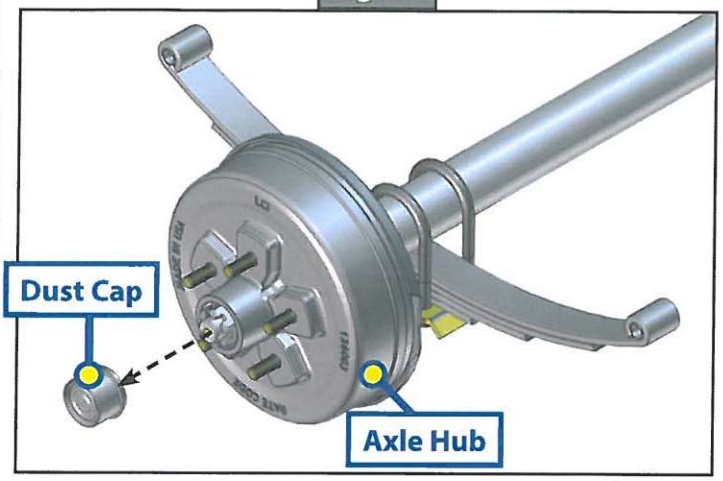
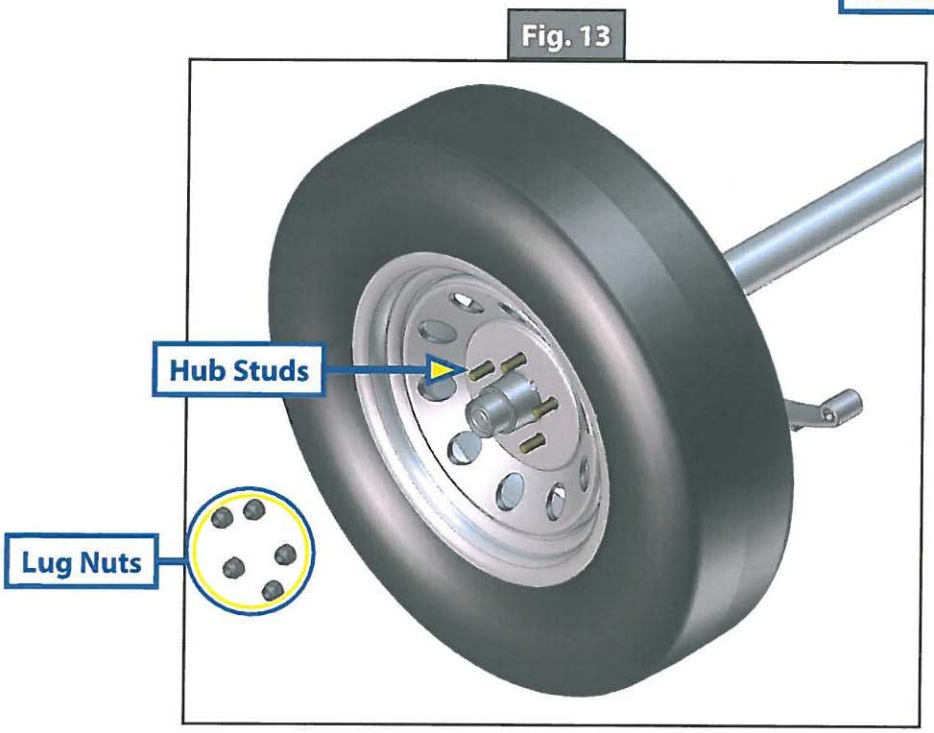


Fig. 12

Fig. 13



Wheel Torque Requirements

It is extremely important to apply and maintain proper wheel mounting torque on your trailer axle. Torque wrenches assure the proper amount of torque is being applied to a fastener. Use no other method to torque fasteners.

⚠WARNING

Proper and accurate torque must be maintained to prevent wheels from loosening, studs from cracking and/ or breaking or other possible hazardous breakage resulting in death or serious injury.

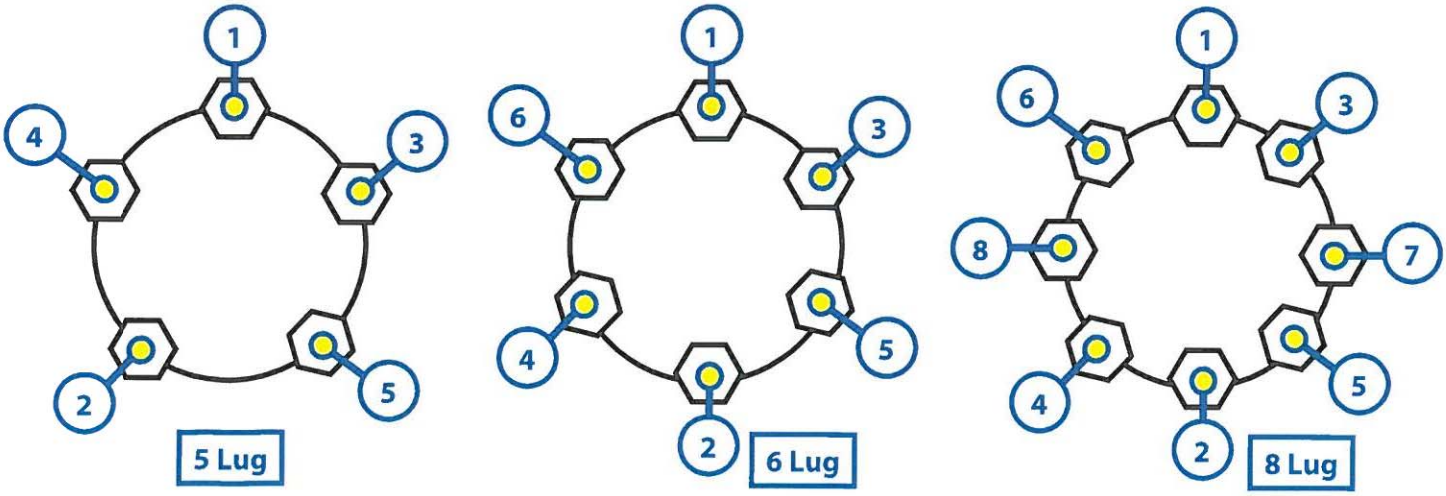
Be sure to use only the fasteners matched to the cone angle of your wheel (usually 60°or 90°). The proper procedure for attaching your wheels is as follows:

1. Start all bolts or nuts by hand to prevent cross threading.
2. Tighten bolts or nuts in the following sequence (see Wheel Torque Requirement Chart below, Fig. 14).
3. Tightening fasteners should be done in stages. Follow the recommended sequence (Fig. 15). Tighten fasteners per wheel torque requirements chart below.
4. Wheel nuts/bolts should be torqued before first road use and after each wheel removal. Check and re-torque after 10 and 25 miles and again at 50 miles. A periodic check during regular service is recommended.

Fig. 14

Wheel Torque Requirement Chart				
Wheel Size	Stud Size	Torque Sequence		
		1st Stage	2nd Stage	3rd Stage
14"	½"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs
15"	½"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs
16"	½"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs
16.5" x 6.75"	½"	20-25 ft-lbs	50-60 ft-lbs	90-120 ft-lbs
16"	9/16"	20-25 ft-lbs	60-70 ft-lbs	120-130 ft-lbs
16.5" x 6.75"	9/16"	20-25 ft-lbs	60-70 ft-lbs	120-130 ft-lbs
16" Dual and 17.5" Cone Nut	⅝"	50-60 ft-lbs	100-120 ft-lbs	190-210 ft-lbs
16" Dual and 17.5" Flange Nut	⅝"	50-60 ft-lbs	150-200 ft-lbs	275-325 ft-lbs
14.5" Demount	⅝"	Tighten sequentially to 85-95 ft-lbs		

Fig. 15



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