

**Wheel Grease Seal and Bearing, Front****Replacement and Repacking****SPECIAL SERVICE TOOL(S)  
REQUIRED**

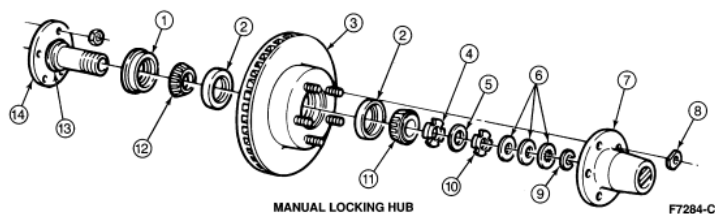
Description	Tool Number
Impact Slide Hammer	T50T-100-A
Bearing Cup Replacer	T80T-4000-P
Driver Handle	T80T-4000-W
Seal Replacer	T80T-4000-T
Spindle Seal Replacer	T95T-3132-D

The recommended wheel bearing lubricant is lithium-base High-Temperature Constant Velocity Joint Grease E43Z-19590-A or equivalent meeting Ford specification ESP-M1C207-A.



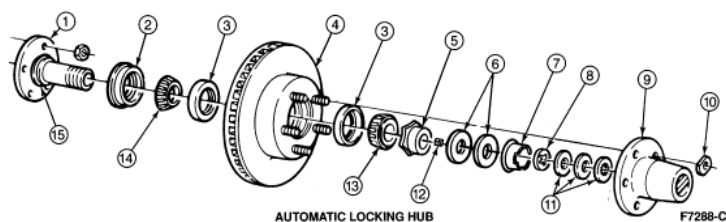
**CAUTION:** Sodium-base grease is not compatible with lithium-base grease. Do not intermix. Clean all old lubricant grease prior to lubricating front/rear wheel bearing. Use of incompatible bearing lubricant could result in premature lubricant breakdown.

**NOTE:** If bearing adjustment does not eliminate looseness or rough and noisy operation, clean, inspect and repack the hub and wheel bearings with specified wheel grease. If wheel bearing cup or the cone and roller assemblies are worn or damaged, they should be replaced.

**Manual Locking Hub, Ranger**

Item	Part Number	Description
1	1175B	Wheel Hub Grease Seal
2	4222	Wheel Bearing Cup
3	1102	Rotor
4	1197	Inner Locknut
5	3B549	Washer
6	3B548	Axle Shaft Spacer
7	3B396	Hub
8	1A107	Retainer Washer
9	3B457	Snap Ring
10	1197	Outer Locknut
11	4221	Wheel Bearing Outer
12	4221	Wheel Bearing Inner
13	1175A	Excluder Seal
14	3105	Front Wheel Spindle

**Automatic Locking Hub, Exploded View, Ranger**



Item	Part Number	Description
1	3105	Front Wheel Spindle
2	1175B	Wheel Hub Grease Seal
3	4222	Wheel Bearing Cup
4	1102	Rotor
5	3N105	Wheel Bearing Adjusting Nut
6	3N105	Thrust Spacers
7	3B477	Front Axle Wheel Hub Retainer
8	3B458	Axle Shaft Spacer
9	3B396	Hub
10	1A107	Retaining Washer
11	3B548	Axle Shaft Spacer
12	3B549	Single Hump Locking Key
13	4221	Wheel Bearing Outer
14	4221	Wheel Bearing Inner
15	1175A	Excluder Seal

#### Disassembly

1. Raise the vehicle and install Rotunda Car/Truck Stands 077-00018 or equivalent.
2. Remove the wheel and tire assembly.
3. Remove the retainer washers and remove the hub assembly. Refer to Manual Locking or Automatic Locking Hubs under [Front Wheel Bearing Adjustment](#) in this section for removal.
4. Remove the disc brake caliper (2B120) as described in [Section 06-03](#).
5. Remove the hub and rotor. Remove the outer wheel bearing cone.
6. Remove the wheel hub grease seal (1190) from the rotor with Seal Remover TOOL-1175-AC or equivalent and Impact Slide Hammer T50T-100-A. Discard wheel hub grease seal and replace upon assembly.
7. Remove excluder seal.
8. Remove the inner wheel bearing.
9. **NOTE: If new wheel bearing cups are installed, install new cone and roller assemblies.**

Inspect the wheel bearing cups for pits or cracks. If necessary, remove them with Internal Puller D80L-943-A or equivalent and Impact Slide Hammer T50T-100-A.

#### Assembly

1. Lubricate the wheel bearings with High Temperature Constant Velocity Grease E43Z-19590-A or equivalent meeting Ford specification ESP-M1C207-A. Clean all grease from the hub. Pack the cones and rollers. If a bearing packer is not available, work as much lubricant as possible between the rollers and the cages.
2. If wheel bearing cups are to be installed, position wheel bearing cups in rotor and drive in place with Bearing Cup Replacer T80T-4000-P and Driver Handle T80T-4000-W.
3. Position excluder seal on spindle and drive into position using Spindle Seal Replacer T95T-3132-D.
4. Position the inner wheel bearing in the inner wheel bearing cup in the rotor. Install the wheel hub grease seal by driving in place with Seal Replacer T80T-4000-T and Driver Handle T80T-4000-W.
5. Carefully install the rotor onto the front wheel spindle (3105). Refer to [Section 06-03](#).
6. Install outer wheel bearing into rotor.
7. Refer to Automatic Locking Hubs under [Front Wheel Bearing Adjustment](#) in this section for remainder of installation.

