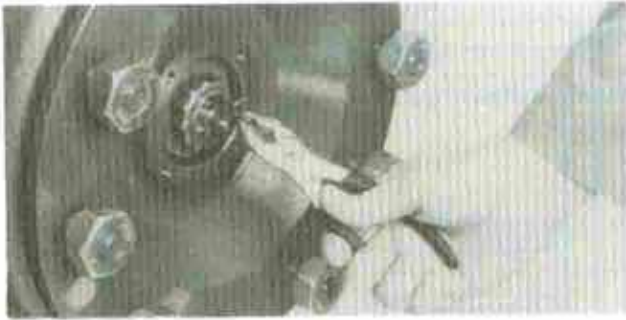


# Wheel Bearing Repacking

## WHEEL BEARING REPACKING (GREASE)

### Disassembly

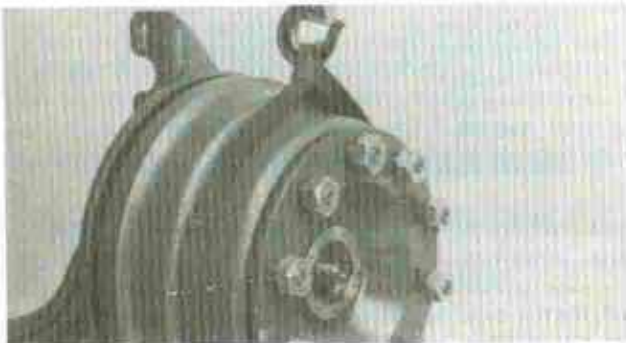
1. Lock parking brake to insure vehicle will not roll.
2. Raise front of vehicle off the ground. Place jack stands or suitable blocks under axle. Make certain wheels rotate freely. Position tire carriage or dolly under tire to be removed.
3. Remove hub cap.



4. Remove outer nut and lock (I-90 thru I-132) or cotter pin and lock (I-50 thru I-80). Replace lock if tabs are broken or cracked.
5. Remove adjusting nut and thrust washer.
6. Move hub out far enough to free outer wheel bearing, then push hub back onto spindle.



7. Remove outer wheel bearing.



8. Remove hub assembly.

**NOTE:** Use of a lifting device is recommended, if tires and wheels have been removed.

9. Remove wheel seal and inner wheel bearing.

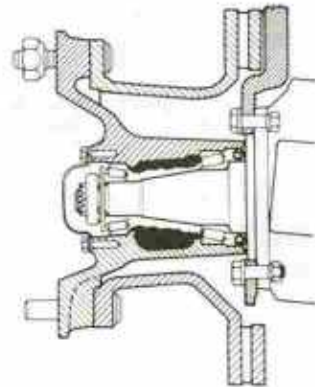
**CAUTION:** Do not tap on inner wheel bearing to remove seal or bearing may be destroyed.

Clean and inspect all components thoroughly as shown on page 3. Remove all grease from hub cavity.

## WHEEL BEARING REPACKING (GREASE)

### Reassembly

1. Pressure lubricate inner and outer bearing assemblies, so that grease is forced between cone and cage. Grease must meet NLGI-1 or 2(EP-1 or EP-2) specifications.



2. Apply grease to wheel or hub cavity so that it is even with inside diameter of bearing cups.
3. Replace inner wheel bearing into hub.



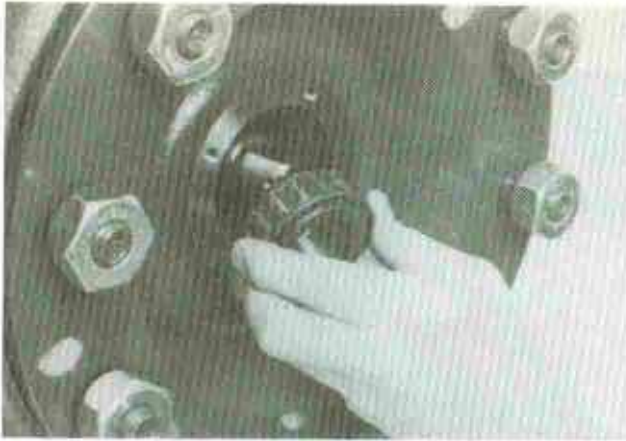
4. Install new inner wheel seal using proper adapters, so damage to seal does not occur.



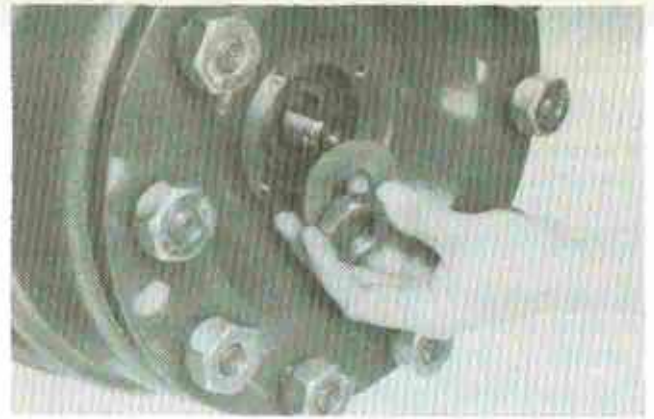
5. Replace hub and brake assembly onto spindle.

**NOTE:** Lifting device or tire carriage should be used to align hub with spindle, so seal is not damaged during installation.

*(continued on next page)*



6. Install outer wheel bearing.



7. Install thrust washer and adjusting nut. Follow steps 6 thru 8 in wheel bearing adjustment section, to complete bearing repacking procedure.

**Wheel bearing repacking complete.**

## Lube Change and Lubricant Recommendations

### WHEEL BEARING LUBRICANT CHANGE (OIL)

Follow procedures outlined in wheel bearing repacking (grease) to change the lubricant in oil lubricated wheel bearings. The few exceptions to these procedures are:

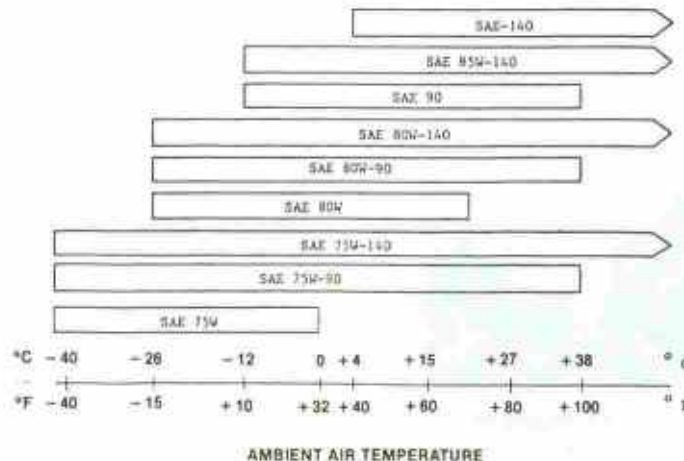
1. Drain oil before removing hub cap.
2. Pre-lube bearing cones with GL-5 gear lubricant.
3. Fill to oil level line on the hub cap, with same lubricant, allow oil to penetrate bearings, and refill.

### RECOMMENDED LUBRICANTS

To insure proper lubrication and operation of Spicer non-drive-steering axles, it is important that proper lubricants be used and regular lubrication intervals be maintained.

Multi-purpose lithium grease meeting NLGI-1 or 2 specifications is the minimum requirement for king pins and tie rod ends (if equipped with lube fittings). This same multi-purpose lithium grease is to be used for wheel bearing lubrication on models so specified.

The heavy duty axles (I-90 thru I-132) may be specified with oil lubricated wheel bearings. These Spicer models use lubricants compatible with API Service Classification GL-5 quality, meeting MIL-L-2105B or C, or better, specifications. This includes synthetic lubricants. The table below should be used to determine which SAE viscosity grades are recommended for ambient temperature ranges the vehicle may encounter.





# Knuckle and King Pin Disassembly

**NOTE:** Removal of the Spicer non-drive steering axle is not necessary to rebuild or service the unit, unless center I-beam section is damaged. If axle must be removed from the vehicle, follow vehicle manufacturer's recommended procedure for this operation.

1. If axle assembly is not to be removed from vehicle, lock parking brake, raise and support front of vehicle on stands.
2. Remove wheels and tires.



3. Remove hub and drum.



4. On models equipped with hydraulic disc brakes, calipers must be removed before hub. Support calipers so weight of caliper does not hang from hydraulic hose.



5. Remove brake backing plate or caliper mounting bracket from the knuckle. It will be necessary to support drum brake backing plate so weight of backing is not on air hose.



6. Remove tie rod assembly using suitable tool (pickle fork).



7. Remove draw keys holding king pins in I-beam.

**NOTE:** Medium duty axles use both single and dual draw keys, and heavy duty axles use only dual draw keys. Dual draw keys are staked in place at assembly. Drive draw keys out from opposite end of staking. Use a drift and brass hammer.



8. Remove king pin end caps and O ring seals from top and bottom of knuckles.

*(continued on next page)*