

(9) Inspect companion flange for cracks, worn splines, pitted, rough or corroded oil seal contacting surface. Repair or replace companion flange as necessary.

(10) The outside diameter of the seal assembly is precoated with a special sealer so no sealing compound is required for installing. Install new drive pinion oil seal.

On 7-1/4 inch axles use Tool C-4002 or C-3719.

On 8-1/4 inch axles use Tool C-4076.

Seal is properly installed when seal flange contacts housing flange face.

(11) Position companion flange on pinion stem being careful to match scribe marks made previously before removal.

(12) Install companion flange using Tool C-3718 and holding Tool C-3281.

(13) Remove tool and install Belleville washer (convex side of washer out) and pinion nut.

(14) Hold universal joint flange with holding Tool C-3281 and tighten pinion nut to 210 ft. lbs. (285 N·m). Rotate pinion several complete revolutions to assure that bearing rollers are properly seated. Using an inch-pound torque wrench C-685-A measure pinion bearing preload. Continue tightening pinion nut and checking preload until preload is at the original established setting you found in Step 4. Under no circumstances should

the preload be more than 10 in. lbs. (1 N·m) over the established setting found at time of checking in Step 4 of procedure.

Bearing preload should be uniform during a complete revolution. A preload reading that varies during rotation indicates a binding condition which has to be corrected. The assembly is unacceptable if final pinion nut torque is below 210 ft. lbs. (285 N·m) or pinion bearing preload is not within the correct specifications.

**Caution:** Under no circumstances should the pinion nut be backed off to lessen pinion bearing preload. If the desired preload is exceeded a new collapsible spacer must be installed and nut retightened until proper preload is obtained. In addition, the universal joint flange must never be hammered on or power tools used.

(15) Install propeller shaft (match scribe marks on propeller shaft universal joint and pinion flange). Tighten clamp screws to 170 in. lbs. (19 N·m).

(16) Install the rear brake drums and wheels and tighten nuts to 85 ft. lbs. (115 N·m).

(17) Raise the vehicle to a level position so axle assembly is at correct running position and check lubricant level. Add the correct type of lubricant required to bring the lubricant to proper level.

## SURE-GRIP DIFFERENTIAL

### INDEX

	Page		Page
General Information .....	22	Cleaning and Inspection .....	24
Lubrication .....	25	Identification .....	23
Service Diagnosis .....	4	Installation .....	25
Service Procedures .....	24	Noise .....	24
Sure-Grip Differential .....	24	Removal .....	24
Assembly .....	25	Testing .....	24

### GENERAL INFORMATION

**CAUTION:** Anytime rear axle servicing is necessary, or axle is being rotated through use of the engine or other means, **ELEVATE BOTH REAR WHEELS.**

The Sure-Grip differential is being offered as a special equipment option in 8-1/4 in. rear axles (Figs. 1 and 2).

The Sure-Grip differential design is basic and simple and consists of a two piece case construction and is completely interchangeable with the conventional differential and also the previous

type.

A conventional differential allows the driving wheels to rotate at different speeds while dividing the driving torque equally between them. This function is ordinarily desirable and satisfactory. However, the total driving torque can be no more than double the torque at the lower-traction wheel. When traction conditions are not the same for both driving wheels, a portion of the available traction cannot be used.