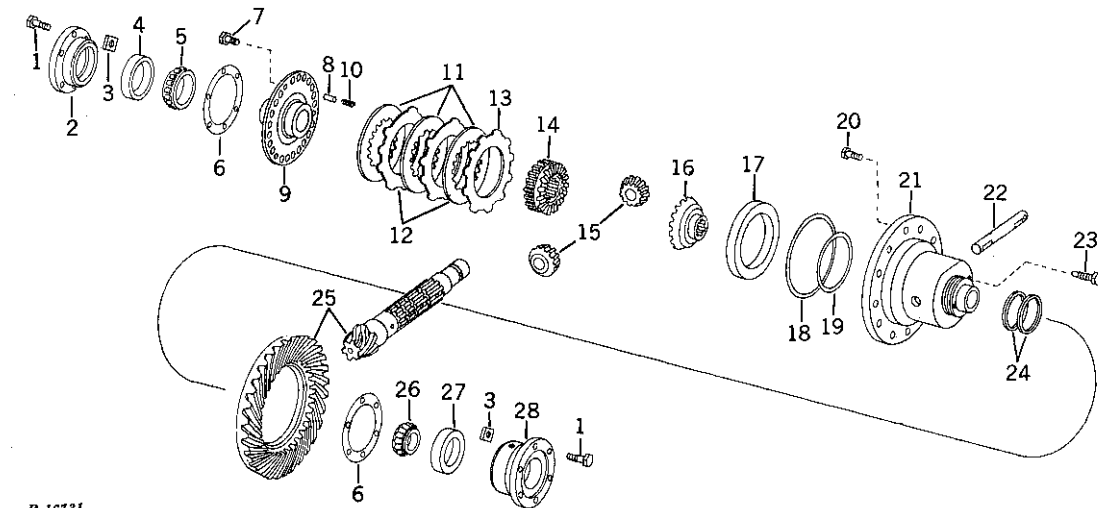


## Group 15 DIFFERENTIAL



R 16731

- 1-Special Cap Screw (12 used)
- 2-Left-Hand Bearing Quill
- 3-Square Nut (2 used)
- 4-Bearing Cup
- 5-Bearing Cone
- 6-Shim (use as required)
- 7-Special Cap Screw (12 used)
- 8-Spring Pin (3 used)
- 9-Differential Housing Cover
- 10-Spring (3 used)

- 11-Drive Disk (3 used)
- 12-Separator Plate (2 used)
- 13-Backing Plate
- 14-Bevel Lock Gear
- 15-Bevel Pinion (2 used)
- 16-Bevel Gear
- 17-Piston
- 18-Packing
- 19-O-ring
- 20-Special Cap Screw (12 used)

- 21-Differential Housing
- 22-Bevel Pinion Shaft
- 23-Special Cap Screw
- 24-Sealing Ring (2 used)
- 25-Ring Gear and Pinion
- 26-Bearing Cone
- 27-Bearing Cup
- 28-Right-Hand Bearing

Fig. 1-Differential Parts

### GENERAL INFORMATION

The tractor may be equipped with a differential lock. If it is not so equipped, follow only the appropriate parts of the instructions given here.



For a complete explanation of the differential and its related components, see FOS Manual 40-POWER TRAINS, Chapter 7.

### REMOVAL

Remove both final drive units. See Section 10, Group 25.

Remove load control arm. See Section 70, Group 30.

Remove transmission oil pump inlet and outlet tubes and blocks. See Group 10 of this Section.

### REPAIR

If necessary, apply compressed air at the oil pressure inlet hole in housing to lift piston.

If the ring gear must be replaced, heat new gear in hot oil not to exceed 300°F. Tighten attaching cap screws to 85 ft-lbs torque. Whenever the ring gear must be replaced, the differential drive shaft should also be replaced. Refer to the transmission Group of this Section for instructions.

When assembling differential with lock, install the clutch backing plate (13, Fig.1) on top of the piston. The clutch backing plate has twelve tangs, while the separator plates have only nine tangs. This allows the piston return springs to contact the backing plate when the differential housing cover is installed.