

AMERICAN MOTORS 7⁹/₁₆" TWIN-GRIP DIFFERENTIAL

American Motors

NOTE — For other units used, see American Motors and Spicer Trac-Lock Differential in this section.

DESCRIPTION

Locking (limited slip) type differential which directs major driving force to rear wheel with greater amount of traction. This action is accomplished by two spring-loaded thrust blocks bearing against each side gear, and which are seated in a tapered cone clutch member inside each differential case half. Thrust block spring load is calibrated to permit slippage under variable torque conditions (turning corners or other unbalanced tractive conditions), allowing torque created on one wheel by differential action to overcome thrust block spring load on side gears.

AXLE RATIO & IDENTIFICATION

Axle Ratio Identification

Code	Axle Ratio	Ring Gear Diameter
R	3.58:1 (12/43)	7 ⁹ / ₁₆ "
T	3.08:1 (13/40)	7 ⁹ / ₁₆ "
S	3.31:1 (13/43)	7 ⁹ / ₁₆ "
U	2.73:1 (15/41)	7 ⁹ / ₁₆ "
V	2.53:1 (17/43)	7 ⁹ / ₁₆ "

LUBRICATION

Use AMC Rear Axle Lubricant or equivalent grade limited slip axle lubricant. Do not use axle lubricants containing sulfur at any time.

TESTING ON CAR

With transmission in Neutral and engine off, raise one wheel and install a torque wrench on axle shaft nut. Rotate wheel with torque wrench and note torque at which axle begins to slip. Break-away wrench reading should be 80-120 ft. lbs.

REMOVAL & INSTALLATION

See American Motors Drive Axles in this section.

OVERHAUL

American Motors does not recommend disassembly of this unit. If internal parts are found to be defective, differential assembly must be replaced.

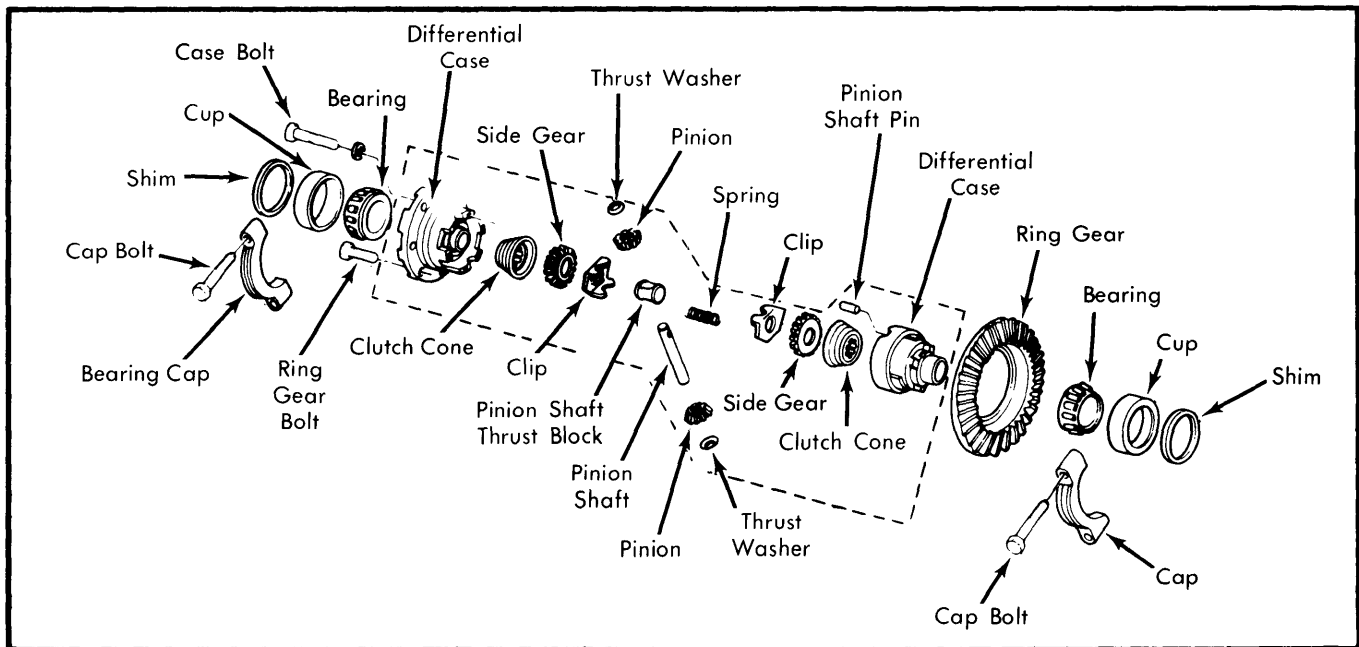


Fig. 1 American Motors 7⁹/₁₆" Twin Grip Differential