

SECTION E

STEERING LINKAGES

ALL SERIES

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DIVISION II

DESCRIPTION AND OPERATION

90-26 DESCRIPTION OF STEERING LINKAGE

The parallelogram type steering linkage is used to connect both front wheels to the steering gear pitman arm. The right and left tie rods are attached to a forged intermediate rod by ball studs. The left end of the intermediate rod is supported by the pitman arm and the right end by an idler arm which pivots on a support attached to the frame. The pitman and idler arms are always parallel to each other and move through symmetrical arcs. There are three different linkage setups. Two are manufactured by Saginaw Steering, one for power gears and the other for manual gears. The third is manufactured by Thompson Products and is used only for 45000 Series power

gears. See Figure 90-106.

When assembling the idler arm to support, it must be adjusted as described in Paragraph 90-27. There is no adjustment of the Thompson idler arm and support as these parts are serviced as an assembly.

DIVISION III SERVICE PROCEDURES

90-27 ADJUSTMENT OF STEERING LINKAGE IDLER ARM

The Thompson steering linkage does not require any special adjustment as the idler arm and support assembly is self-adjusting.

The Saginaw linkage requires proper location of the idler arm on its support so that the idler arm ball socket will be level with the pitman arm ball socket. The support must be threaded into the idler arm bushing until the dis-

tance from the center of the support lower bolt hole to the nearest face of the idler arm is 2-15/16" to 3-1/16" as shown in Figures 90-105, 90-107 and 90-108. When the idler arm is installed on support, it must be free to rotate a minimum of 90 degrees in a counterclockwise direction.

IMPORTANT: If the Saginaw idler arm support is dismounted from the frame for other work, wire the support to the idler arm so that it cannot turn from its existing position and possibly change the toe-in of the front wheels.

See Group 100 for adjustment of tie rods to obtain proper toe-in of front wheels.

When disconnecting any of the steering linkage ball studs, use Puller J-5504 where possible. If puller will not work, use Remover J-3295 and firmly support the member that stud is being removed from.

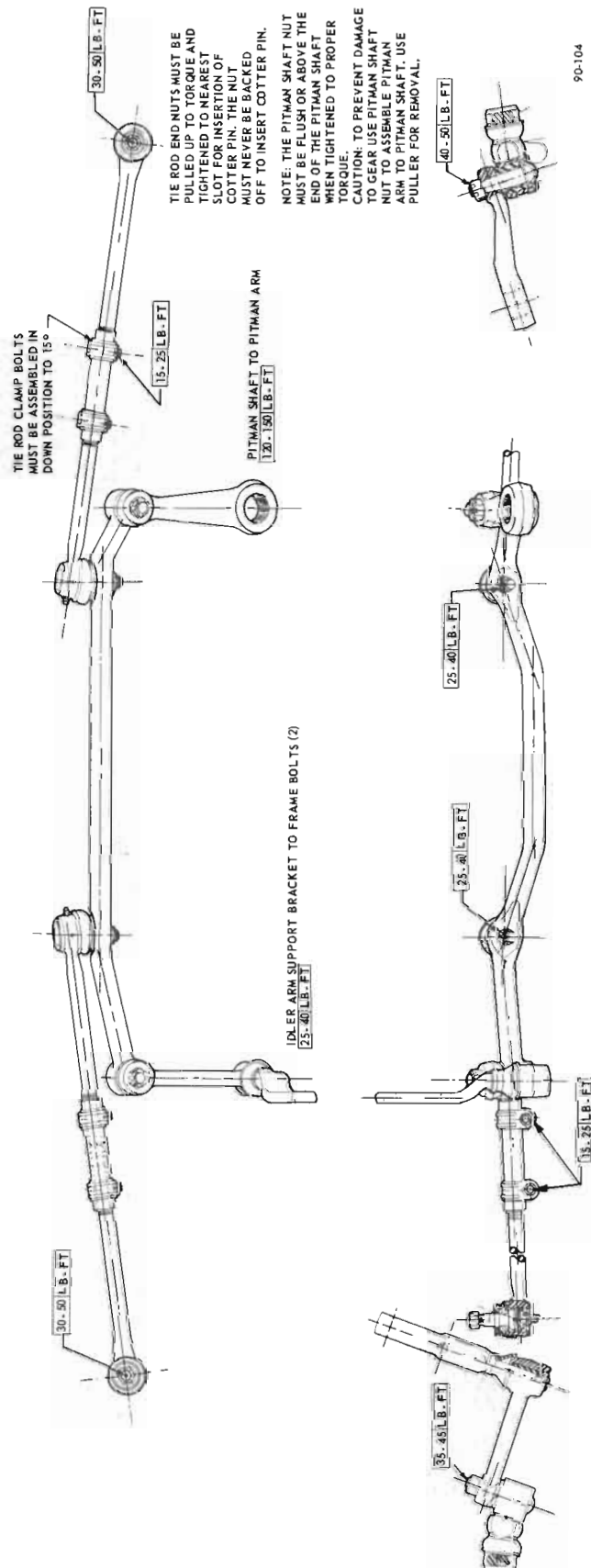


Figure 90-104—Manual and Power Steering Linkage - 43-44000 Series

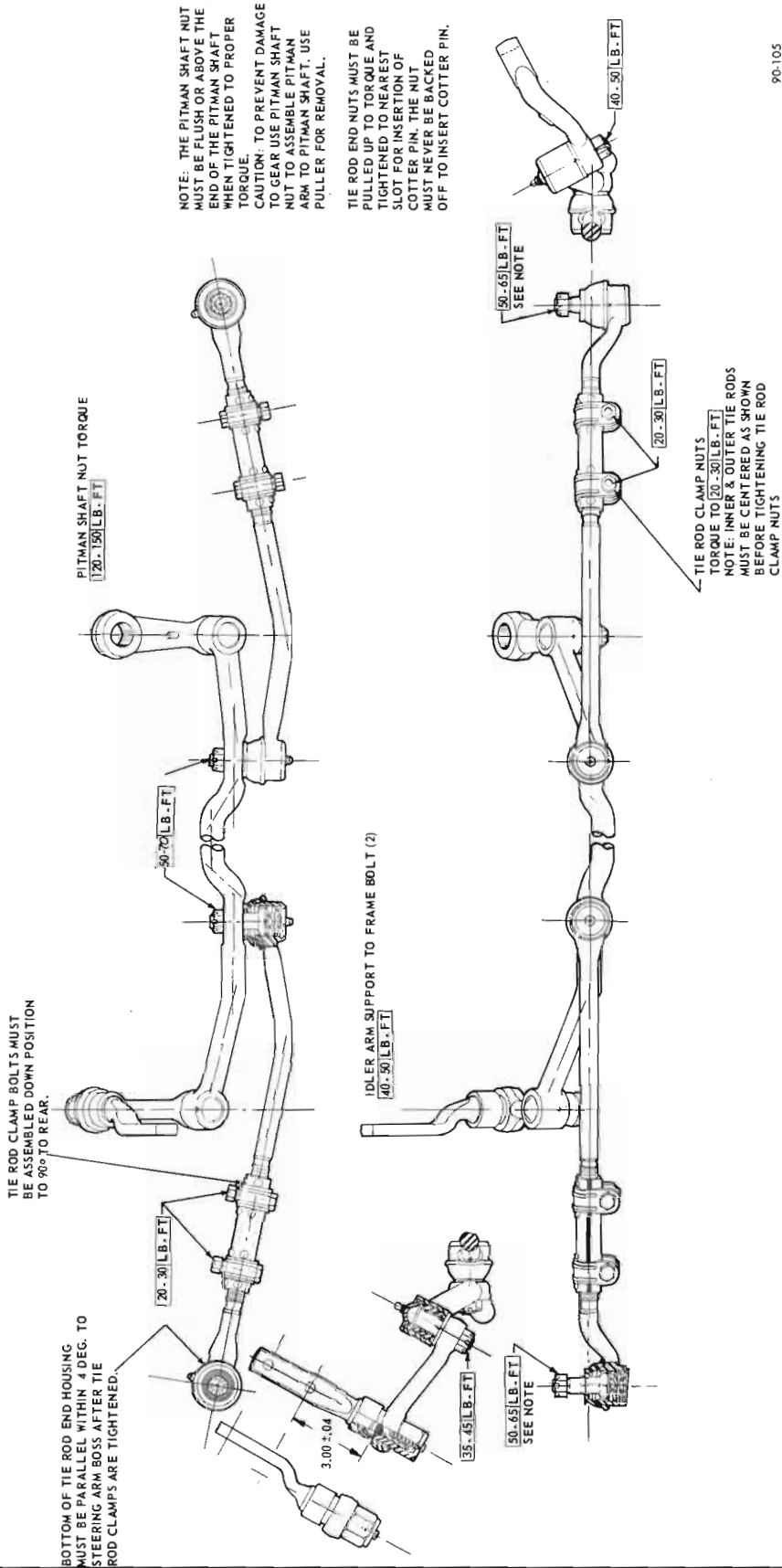


Figure 90-105—Manual Steering Linkage - 45000 Series

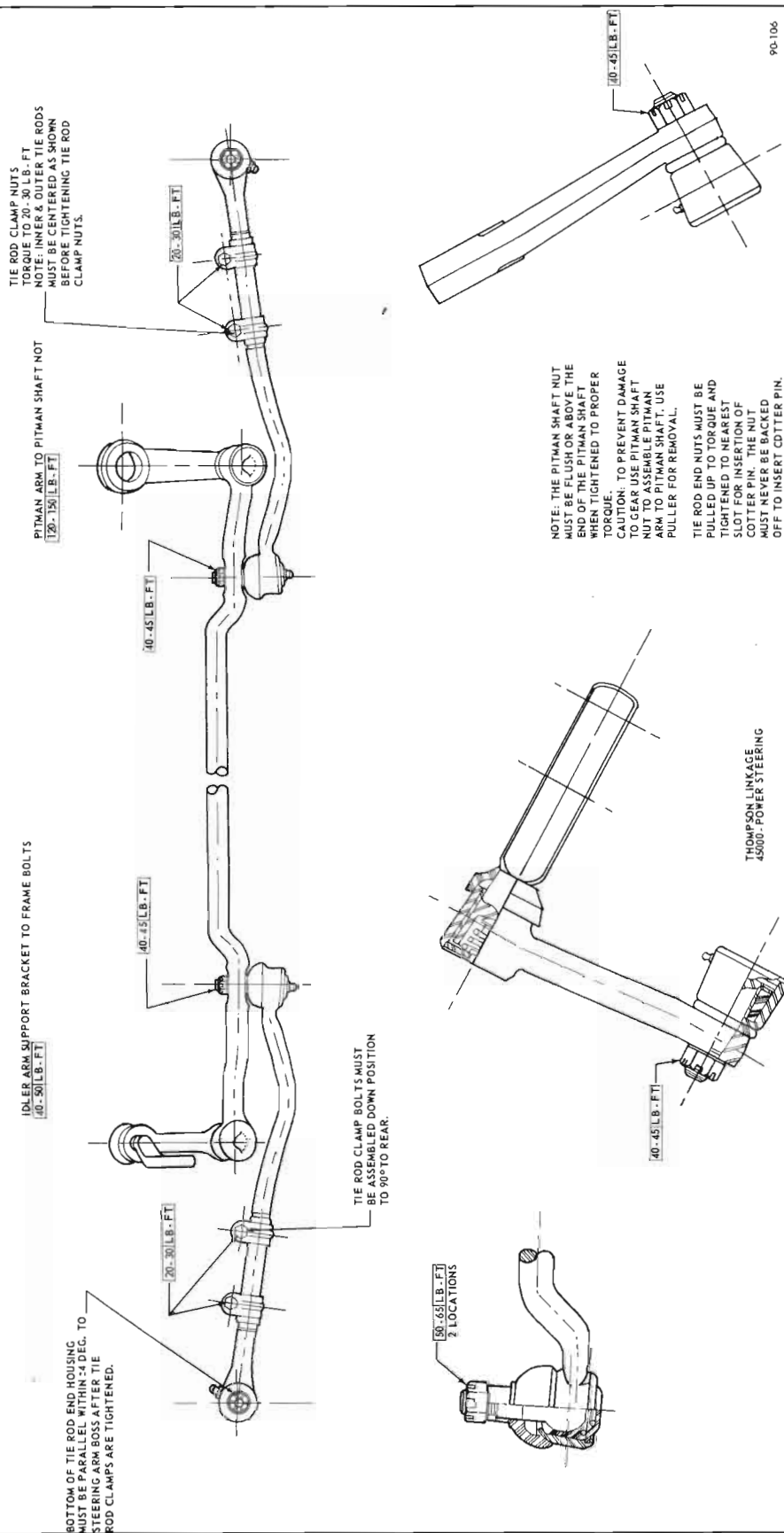


Figure 90-106—Power Steering Linkage - 45000 Series

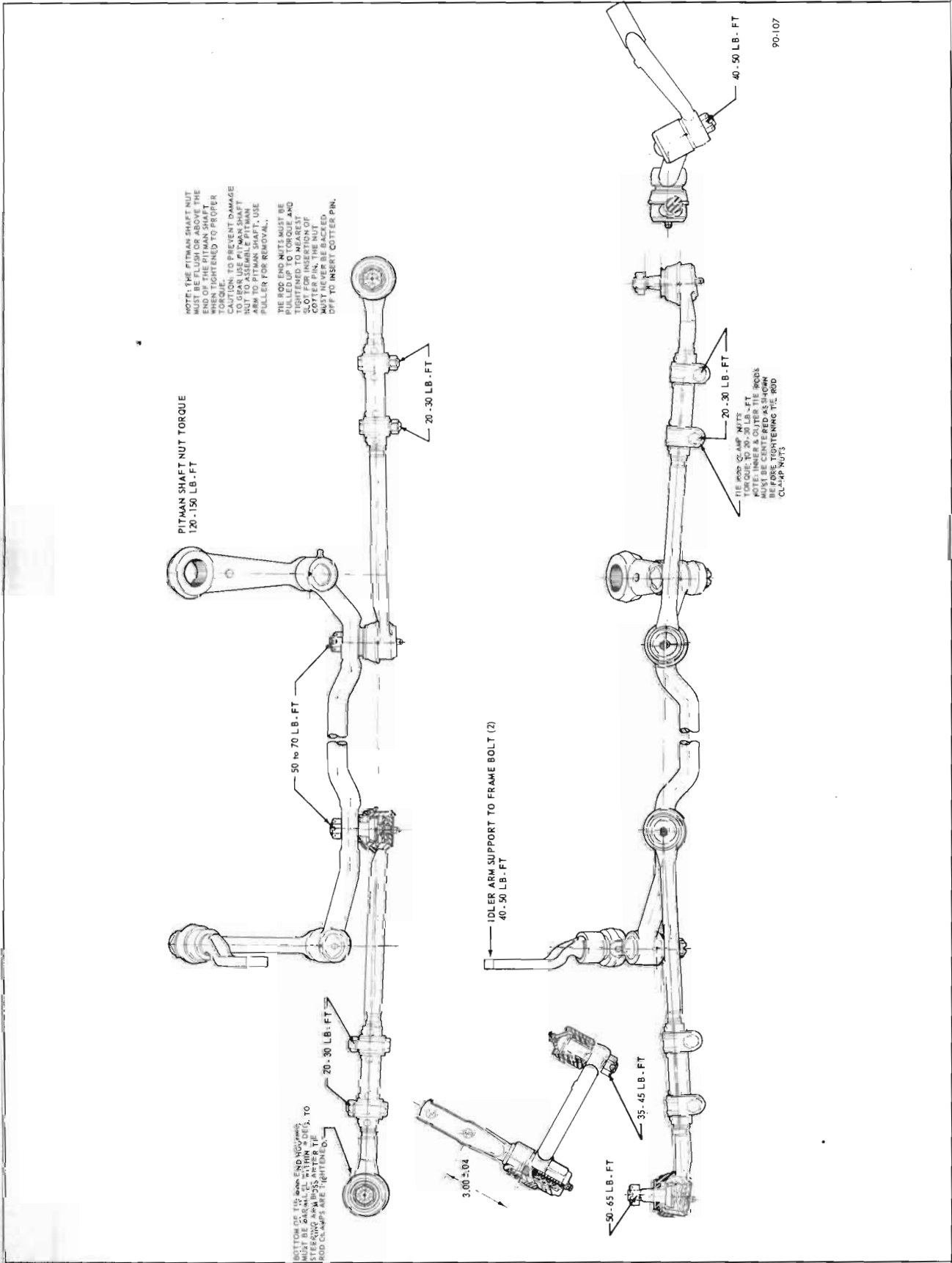


Figure 90-107-46000 Series Manual Power Steering Linkage - 46-48000 Series

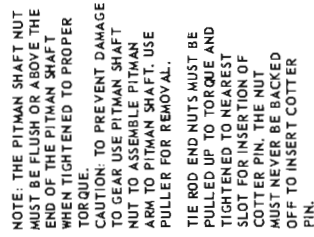


Figure 90-108—Power Steering Linkage - 49000 Series

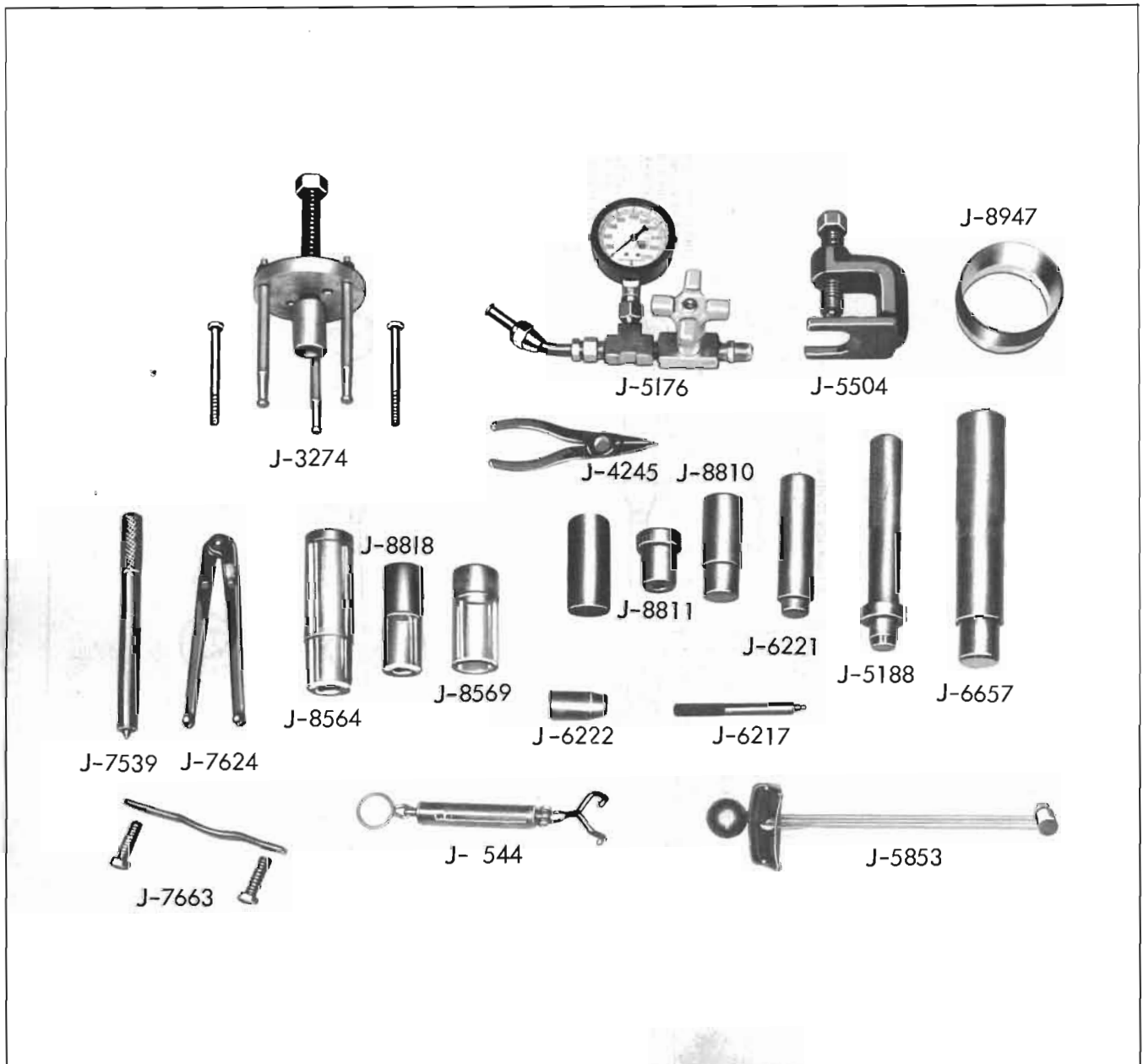


Figure 90-109—Manual and Power Steering Special Tools

J-3274	Steering Wheel Puller	J-7539	Power Steering Gear Ball Retaining Tool
J-4245	True Pliers	J-7624	Power Steering Gear Adjustable Spanner Wrench
J-5176	Testing Gauge	J-7663	Power Steering Pump End Plate Installer
J-5188	Valve Cover Seal Installer	J-8564	Worm Shaft Oil Seal Installer
J-5504	Pitman Arm Puller	J-8569	Pitman Shaft Oil Seal Installer
J-5854	0-100 in. lb. Torque Wrench	J-8810	Pitman Shaft Bushing Remover and Replacer
J-6217	Valve Connector Seal Installer	J-8811	Pitman Shaft Seal and Upper Bearing Cup Installer
J-6219	Steering Gear Pitman Shaft Oil Seal Installer	J-8818	Power Steering Pump Seal Installer
J-6221	End Cover Bearing Remover and Installer (Adjuster Plug Needle Bearing)	J-8947	Teflon Ring Compressor (For 43, 44 & 45000 Series)
J-6222	End Cover Seal Protector (Stub Shaft Protector)		
J-6657	Pitman Shaft Needle Bearing Remover and Installer		