SECTION D

STEERING LINKAGES
ALL SERIES

CONTENTS

DIVISION II

DESCRIPTION AND OPERATION

90-32 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 set-ups. Two are manufactured by Saginaw Steering, one for power gears and the other for

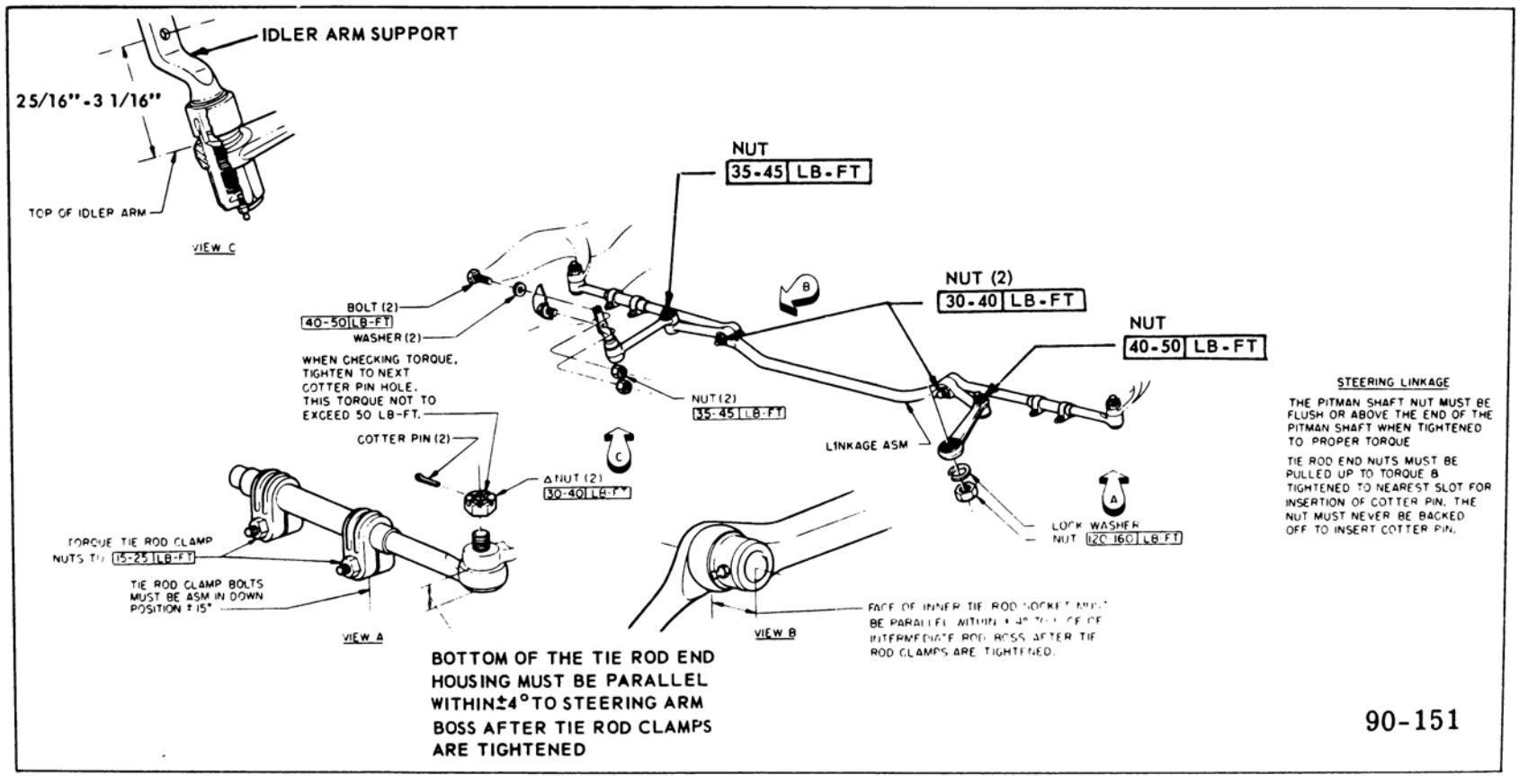


Figure 90-110 Steering Linkage (Manual or Power) 43-44000 Series

manual gears. The third is manufactured by Thompson Products and is used only for 45000 Series power gears. See Figure 90-111.

When assembling the idler arm to support, it must be adjusted as described in Paragraph 90-33. There is no adjustment of the Thompson idler arm and support as these parts are serviced as an assembly.

DIVISION III

SERVICE PROCEDURES

90-33 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 distance 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 90-110, 90-111 and 90-112. When the idler arm is installed on the 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.

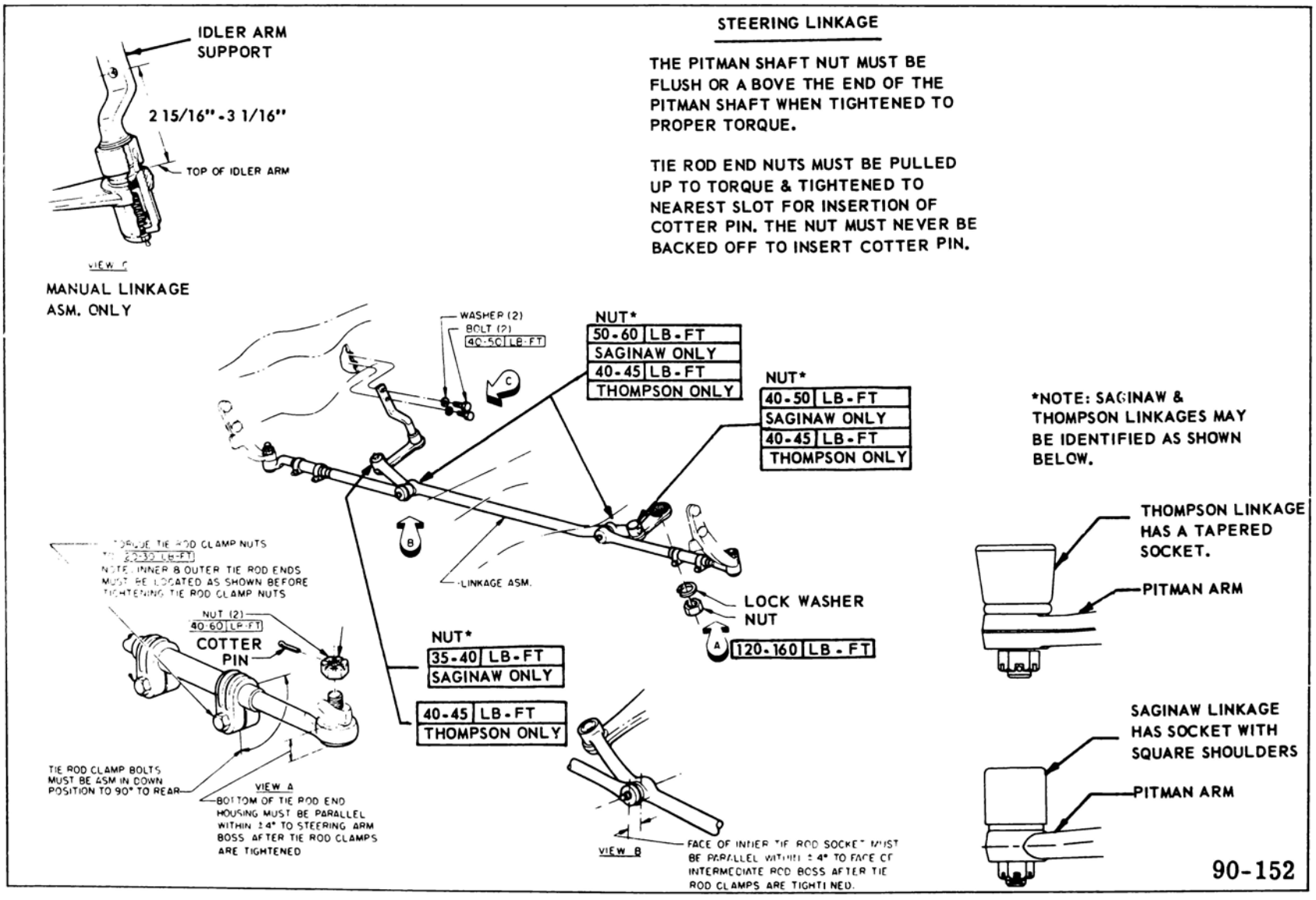
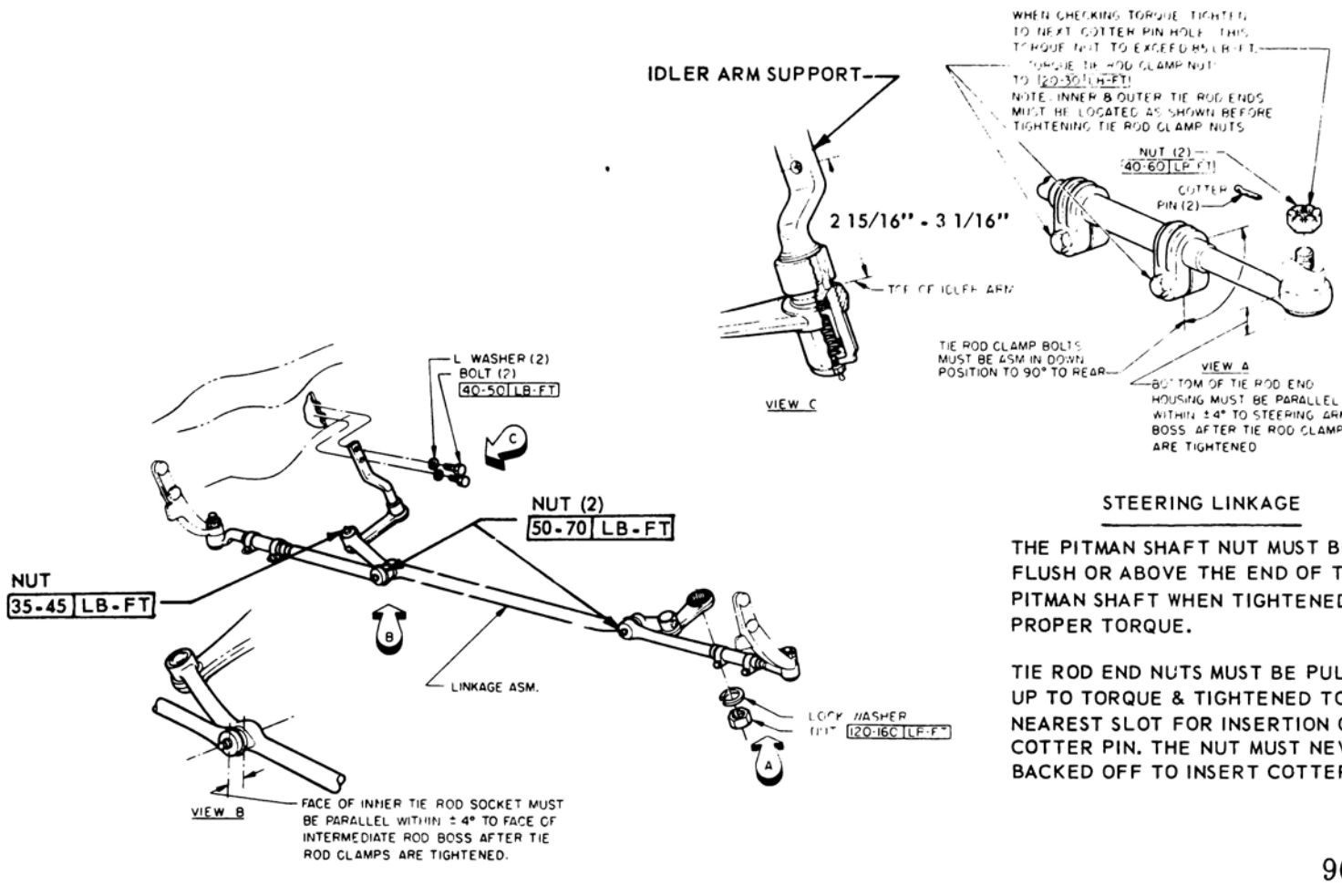


Figure 90-111 Steering linkage (Manual or Power) 45000 Series



STEERING LINKAGE

THE PITMAN SHAFT NUT MUST BE FLUSH OR ABOVE THE END OF THE PITMAN SHAFT WHEN TIGHTENED TO PROPER TORQUE.

TIE ROD END NUTS MUST BE PULLED UP TO TORQUE & TIGHTENED TO NEAREST SLOT FOR INSERTION OF COTTER PIN. THE NUT MUST NEVER BE BACKED OFF TO INSERT COTTER PIN.

90-153

Figure 90-112 Steering Linkage (Manual or Power) 46-48-49000 Series

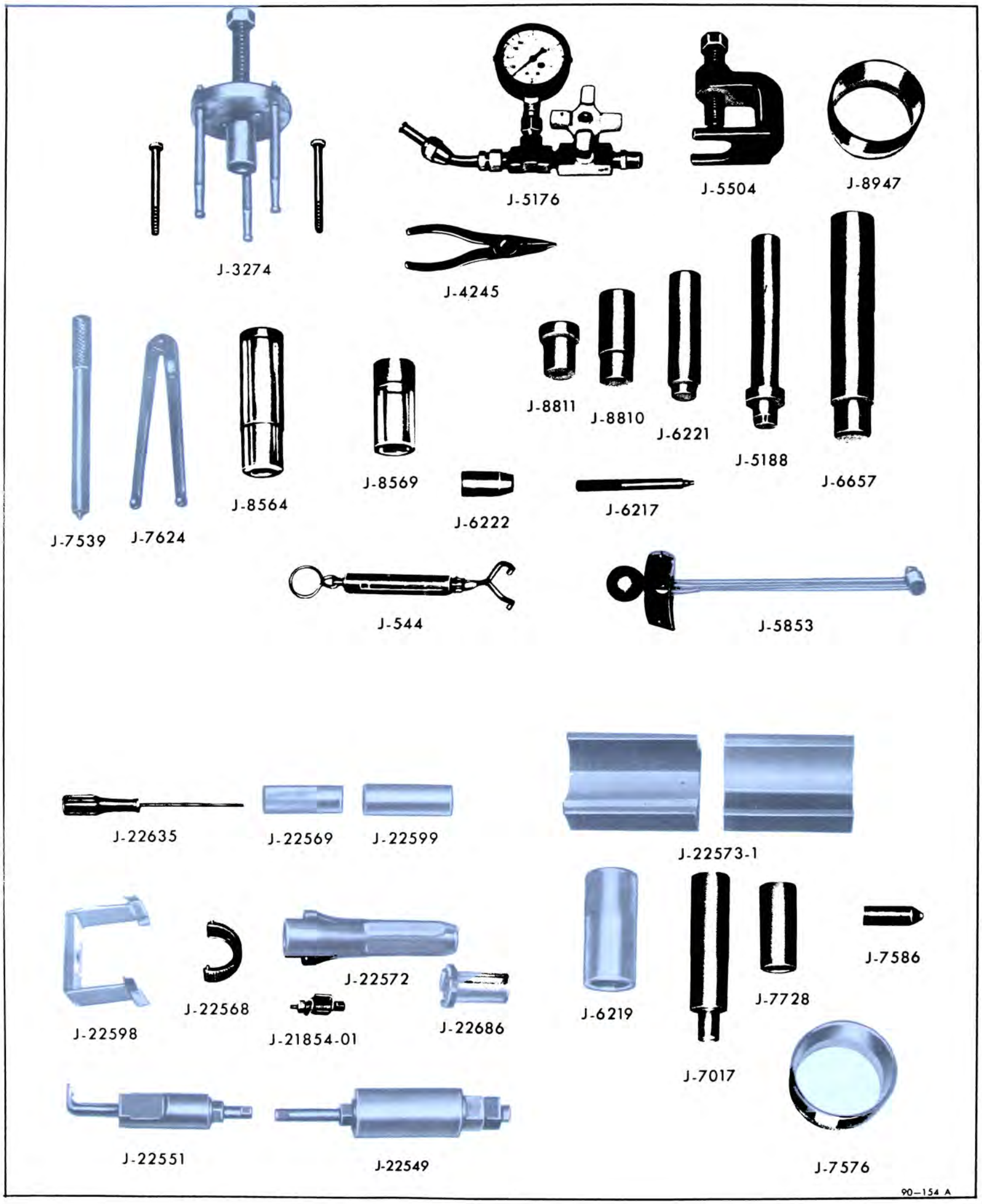


Figure 90-113 Special Tools - Steering System