

SECTION D

STEERING LINKAGES

ALL SERIES

CONTENTS

Division	Subject	Paragraph
I	SPECIFICATIONS AND ADJUSTMENTS	
II	DESCRIPTION AND OPERATION Description of Steering Linkage.....	90-41
III	SERVICE PROCEDURES Adjustment of Steering Linkage Idler Arm.....	90-42
IV	TROUBLE DIAGNOSIS	

Group 90 Section D Contents

DIVISION II

DESCRIPTION AND OPERATION

90-41 DESCRIPTION OF STEERING LINKAGE

All Buicks use a parallelogram type steering linkage to connect both front wheels to the steering gear pitman arm. The right and left tie rods are attached to steering arms and 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. See Figure 90-161.

DIVISION III

SERVICE PROCEDURES

90-42 ADJUSTMENT OF STEERING LINKAGE IDLER ARM

The Thompson steering linkage idler arm is not adjustable.

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 three plus or minus 1/16" When the idler arm is installed on the support, it must be free to rotate a minimum of 90 degrees in both directions from straight ahead.

IMPORTANT: *If the Saginaw idler arm support is dismantled 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 30 for adjustment of tie rods to obtain proper "toe-in" of front wheels. See Figure 90-160 for correct positioning of tie rod clamps.

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 from which the stud is being removed.



90-223

Figure 90-160 - Tie Rod Clamp Positioning

90-70 STEERING LINKAGES

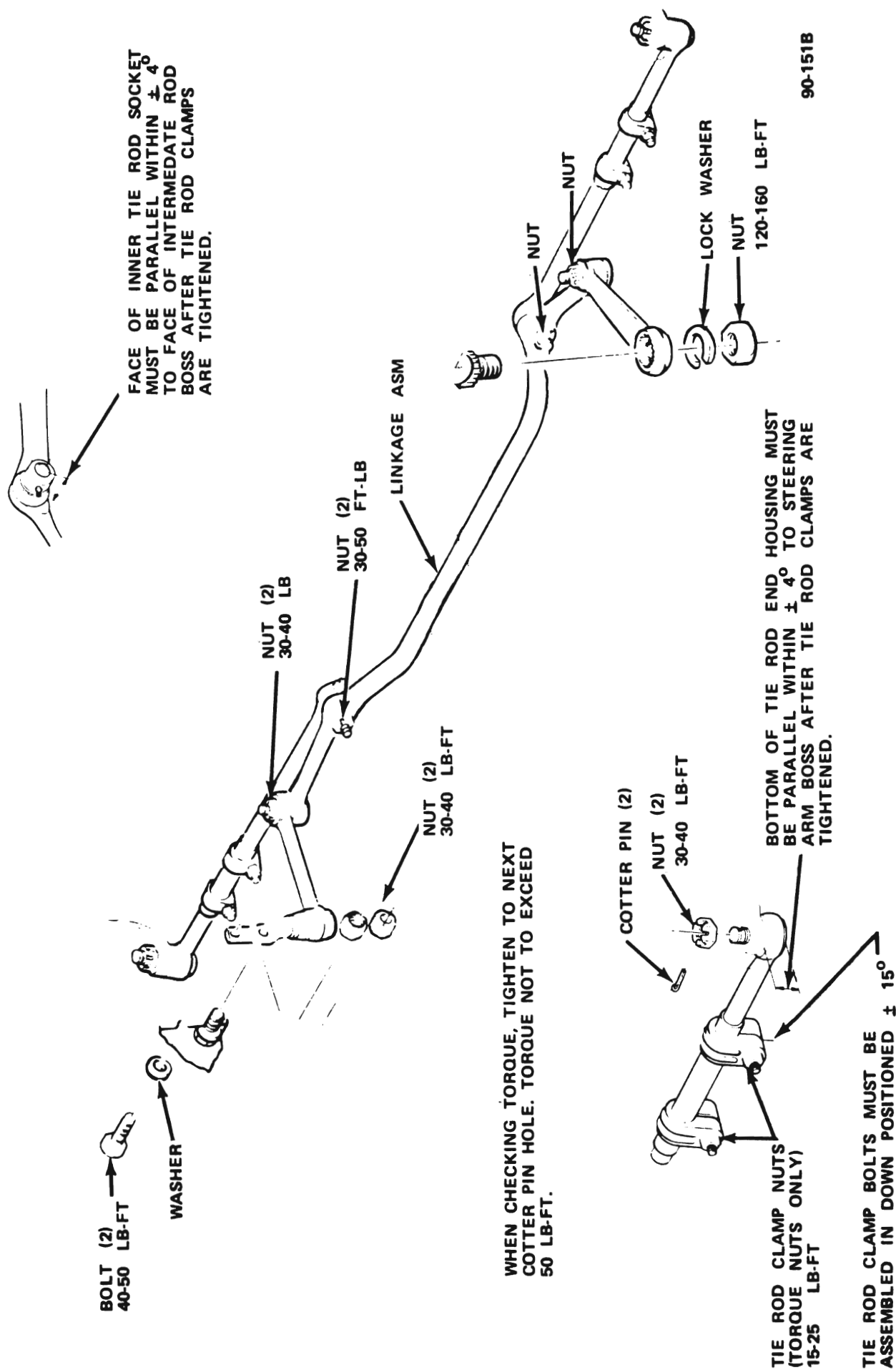
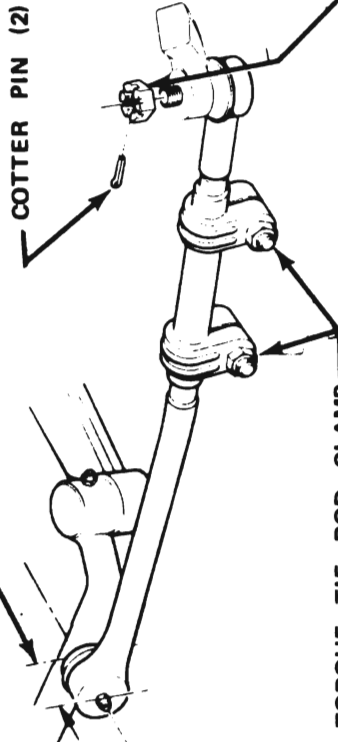


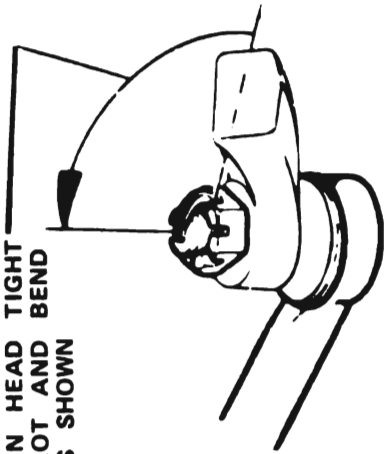
Figure 90-161 · 43-44000 Steering Linkage-Manual or Power

FACE OF INNER TIE ROD SOCKET MUST BE PARALLEL WITHIN $\pm 4^\circ$ TO FACE OF INTERMEDIATE ROD BOSS AFTER TIE ROD CLAMPS ARE TIGHTENED.



TORQUE TIE ROD CLAMP NUTS TO 15-25 LB-FT
 NOTE: INNER & OUTER TIE ROD ENDS MUST BE LOCATED AS SHOWN BEFORE TIGHTENING TIE ROD CLAMP NUTS. THE ROD CLAMP BOLTS MUST BE LOCATED WITH THE BOLT IN THE EXTREME DOWNWARD, HORIZONTAL POSITION. ROTATIONAL TOLERANCES ARE TO BE $\pm 15^\circ$.
 BOTTOM OF TIE ROD END HOUSING MUST BE PARALLEL WITHIN $\pm 4^\circ$ TO STEERING ARM BOSS AFTER TIE ROD CLAMPS ARE TIGHTENED.

INSTALL PIN HEAD TIGHT IN NUT SLOT AND BEND APPROX AS SHOWN



WHEN CHECKING TORQUE, TIGHTEN TO NEXT COTTER PIN HOLE. TORQUE NOT TO EXCEED 75 LB-FT

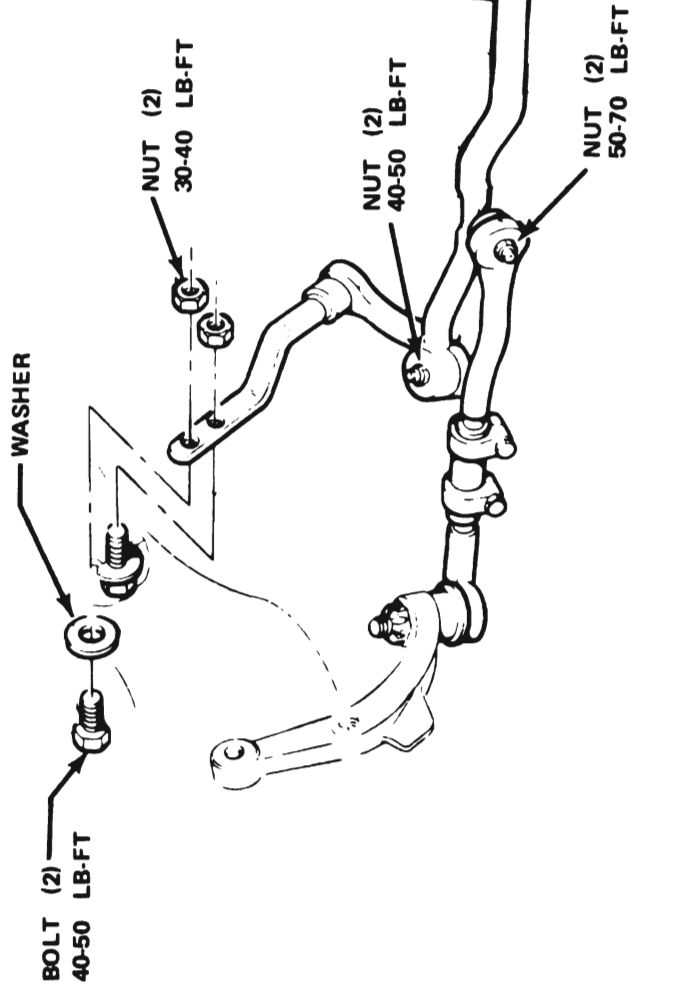


Figure 90-162 - 45-46-48-49000 Steering Linkage-Manual or Power