

service bulletin

A. Steering Cable Guide Tube Adjustment on MerCruiser 120Rthru-260R Models with Power Steering

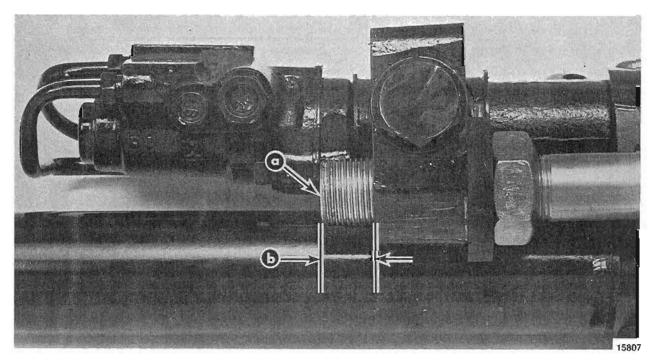
B. Power Steering Pump Lugging in Turns on MerCruiser 120Rthru-260R Models

C. Steering Cable Coupler Nut Locking Plate Installation on MerCruiser 120R-thru-260R Models with Power Steering NUMBER: 84-6

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A. STEERING CABLE GUIDE TUBE ADJUSTMENT ON MERCRUISER 120R-thru-260R MODELS WITH POWER STEERING

It has come to our attention that some mechanics are readjusting the steering cable guide tube (Figure 1) on MerCruiser 120R-thru-260R Models with Power Steering. THIS SHOULD NOT BE DONE.



a - Steering Cable Guide Tube b - 5/8" - 7/8" (16-22mm) [Ideal 27/32" - 7/8" (21-22mm)]

NOTE: Newer production units will be set at 27/32" - 7/8"

11 E. Newer production units will be set at 21/32 - 1/6

Figure 1. Steering Cable Guide Tube

ACAUTION

Only steering cables with end dimensions that comply with the BIA Certification Handbook can be used on models with Power Steering.

The steering cable guide tube is preset at the factory for use with steering cables that have end dimensions that comply with the BIA Certification Handbook. (Figure 2) Loctite is applied to the guide tube threads to prevent the tube from loosening during operation.

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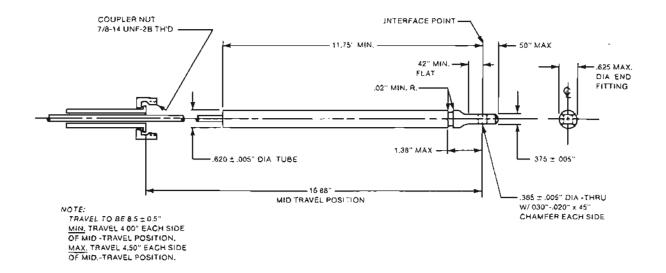


Figure 2. BIA Certification Handbook Steering Cable End Dimensions

Altering the factory guide tube setting or using cables with the improper end dimensions may cause uneven steering travel and/or Power Steering pump lugging in extreme turns. Lugging condition could cause severe damage to steering components. In addition, attempting to adjust guide tube (using a method other than outlined following) could result in damage to tube that could affect steering operation.

If you should find a cable guide tube that has been improperly adjusted, use the following procedure to readjust tube correctly.

ADJUSTING STEERING CABLE GUIDE TUBE

- 1. Remove steering cable.
- 2. Remove cable guide tube and adaptor block assembly by loosening adaptor block attaching nut and tapping nut with a hammer. (Figure 3) After adaptor block is loose, remove nut, lockwasher and cable guide tube and adaptor block assembly.

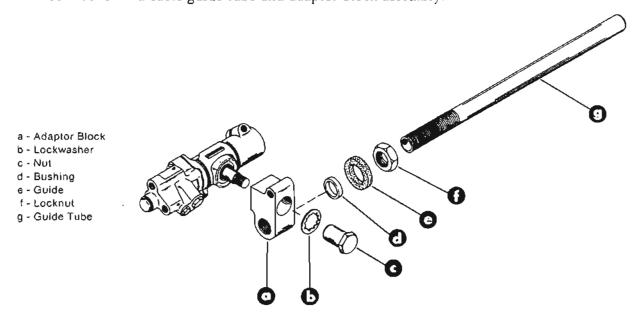


Figure 3. Removing Cable Guide Tube and Adaptor Block Assembly

- 3. Apply heat to cable guide tube and adaptor block to soften Loctite.
- 4. Loosen cable guide tube locknut and remove tube from adaptor block. Remove locknut, bushing and guide from guide tube.

AWARNING

Loctite MUST BE applied to cable guide tube threads to prevent tube from loosening during operation.

- 5. Clean guide tube threads with a wire brush to remove old Loctite. Spray threads with Locquic Primer "T" (92-59327). After primer has dried (approximately 10 minutes) apply a liberal amount of Loctite No. 35 (92-59328) to guide tube threads (in area where adaptor block and locknut will be positioned).
- 6. Reinstall guide tube and related hardware and position so that threaded end of tube protrudes 27/32" 7/8" (21-22mm) thru adaptor block. (Figure 1) TORQUE LOCKNUT TO 15-20 LBS. FT. (20-27 N.m).
- 7. Reinstall cable guide tube and adaptor block assembly, using a new lockwasher (13-76629). TORQUE ADAPTOR BLOCK ATTACHING NUT TO 30-40 LBS. FT. (41-54 N.m).
- 8. Apply Quicksilver Special Lubricant 101 (92-79214) to steering cable end and reinstall cable.
- 9. Check for proper steering travel and to ensure the Power Steering pump does not lug in extreme turns.

B. POWER STEERING PUMP LUGGING IN TURNS ON MERCRUISER 120R-thru-260R MODELS

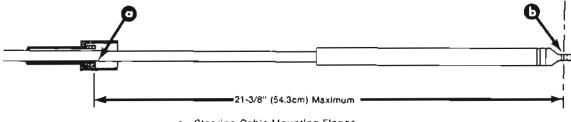
If Power Steering pump lugging occurs in extreme turns with cable guide tube properly adjusted, the following steps should be taken.

Lugging in a Left Turn

- 1. Check for obstruction between gimbal ring and gimbal housing.
- 2. Check if steering lever is contacting transom cutout. If so, modify cutout to obtain required clearance.

Lugging In a Right Turn

- 1. Check for obstruction between gimbal ring and gimbal housing.
- 2. Check if steering lever is contacting transom cutout. If so, modify cutout to obtain required clearance.
- 3. Check steering cable end dimension with cable fully extended. (Figure 4) If excessive, replace cable or steering head as required.



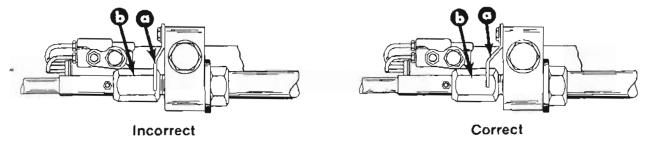
a - Steering Cable Mounting Flangeb - Center of Hole In Steering Cable End

Figure 4. Checking Steering Cable End Dimension (Cable Fully Extended)

C. STEERING CABLE COUPLER NUT LOCKING PLATE INSTALLATION ON MERCRUISER 120R-thru-260R MODELS WITH POWER STEERING

Whenever installing a steering cable on MerCruiser 120R-thru-260R Models with Power Steering, be sure to observe the following:

- Be sure to torque cable coupler nut to 35 lbs. ft. (47 N.m).
- When installing locking plate, make sure that plate engages flats on coupler nut. (Figure 5) If not, bend locking plate to obtain proper engagement.



a - Locking Plate b - Cable Coupler Nut

Figure 5. Locking Plate Installation