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USE of EXTERNAL TIE-BARS on DUAL MERCUISER INSTALLATIONS

(Attach Bulletin Reference Sticker to Section 2D Index Page of Your Service Manual.)

It has been found that, when external tie-bars are used on dual installations (Figure 1), twisting damage to one or both of the upper steering shafts can occur -- if one drive is tilted up ("out") or down ("in") relative to the other. This damage can adversely affect steering. If both upper steering shafts should fail, loss of steering will occur.

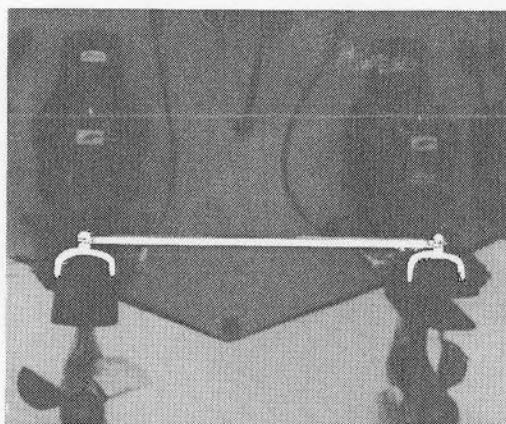


Figure 1. External Tie-Bar Installation

Inspection of the upper steering shafts for damage requires considerable time; however, the existence of any of the following symptoms suggests that damage may have occurred, and inspection is recommended:

SYMPTOMS of POTENTIAL DAMAGE

1. A need for repeated adjustment of the external tie-bar.
2. Excessive steering backlash (sloppiness, looseness) is noticed.
3. A dramatic change of boat steering characteristic, such as an increase of (or excessive) wheel motion to steer the boat, "darting" of the boat, or an increase of force required at the wheel.
4. Observed bending at the ends of the external tie bar (Figures 2 and 3) and/or buckling of steering cable extension at stern drive end and/or Ride-Guide support tube and/or drag link(s).
5. Observed "off-center" angle between either steering arm on inside of the boat and the drive unit outside the boat, when the drive unit is in a straight-ahead position.

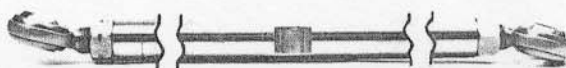
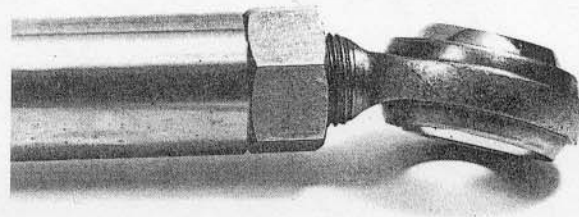


Figure 2. Bent Ends

Figure 3. Closeup of Bent End



(OVER)

Again, if any of the above symptoms of damage occur, one or both of the upper steering shafts could be twisted, and inspection is recommended. To perform an inspection, refer to the MerCruiser Service Manual for repair procedures.

We recommend that you advise your customers (owning dual engine boats equipped with external tie-bars) that, if any of the above symptoms exist now or have ever existed, to have an authorized MerCruiser dealer inspect and replace, if necessary, the upper steering shafts as soon as possible. Your customers also should be advised not to tilt one drive unit independently of the other.