



MERCUISER SERVICE BULLETIN

Section: XII (Bulletins)

Number: 68-11-06

Date : 3/28/68

Power Tilt Not Holding in Reverse

POWER TILT NOT HOLDING IN REVERSE

If a MerCruiser 120 or 160 stern drive unit, equipped with POWER TILT, does not hold down when placed in reverse, check the following six (6) reasons and correct accordingly:

1. Check tilt pin for straightness. A bent tilt pin can keep the reverse hooks from locking on to tilt pin. Remedy: Replace tilt pin and reverse hook and stop assemblies, if they are worn or do not move freely.
2. Check for control cables which may require readjustment. Remedy: If reverse hooks are engaged but do not hold in reverse, the control cables may need readjustment. If readjustment does not correct the problem, replace the reverse hook arms and reverse stop assembly, then readjust shift cables.
3. Check gimbal rings on MerCruiser 120 and 160 stern drive units; some had a misalignment at the hinge pin hole. This could cause drive shaft housing to contact gimbal ring flange (Figure 1) and prevent it from returning to "down" position and locking on tilt adjustment pin. Remedy: It may be necessary to remove slight amounts of metal from both gimbal ring flange and drive shaft housing until it returns freely to tilt adjustment pin. (Figure 1)
4. Check the tilt pin recesses on MerCruiser 120 and 160 drive shaft housings. They may not align with tilt pin and, thus, will not allow drive unit to travel down far enough on tilt pin. Remedy: File a slight amount of metal from top end of tilt pin stop area. (Figure 2) It may be necessary to file from either one or both sides. Remove only enough metal to allow reverse hooks to engage tilt pin freely.
5. Check that the drive unit is not held from returning to "Down" position by a defective tilt cylinder. Remedy: Replace defective cylinder.
6. Check for contaminated oil which causes valve in pump to malfunction, if unit fails to return to "Down" position after a normal running over sand bar or obstruction. Remedy: Operate pump "Up" and "Down" a number of times to clear valve. If this will not correct problem, then clean and flush pump and fill with clean oil. If unit still fails to return, replace the pump valve body and gear assembly (B-392-3360).

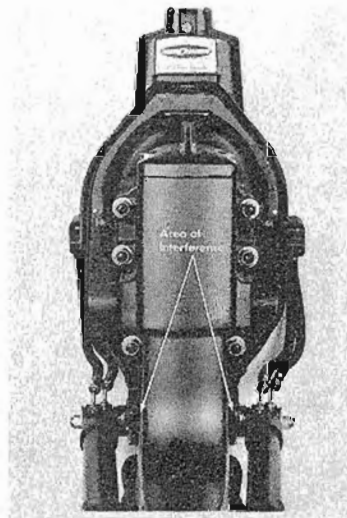


Figure 1. Gimbal Ring Flange

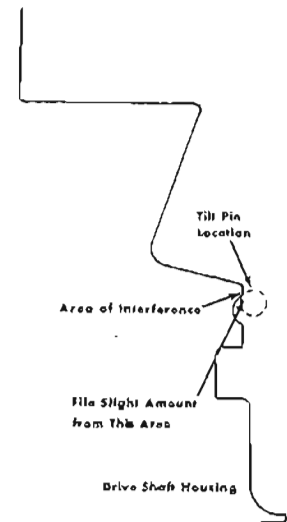


Figure 2. Tilt Pin Stop Area

NOTE: Trouble-shooting charts for MerCruiser Power Tilt and Power Trim have been added to Miscellaneous Section X of your MerCruiser Service Manual, Pages 87-88.