



STERN DRIVES/INBOARD ENGINES

NUMBER: 80-9

DATE: 4/14/80

- A. MerCruiser 260 Gear Replacement
- B. MerCruiser 120-thru-260 Lower Drive Shaft Breakage
- C. New Power Steering Test Gauge C-91-38053A3
- D. Universal Joint "Type" Noise

CIRCULATE TO:
 SERVICE MANAGER
 PARTS MANAGER
 MECHANICS

A. MERCUISER 260 GEAR REPLACEMENT

MerCruiser V-8 drive unit (1.5:1 gear ratio) production has changed to a different material in gear housing forward gear starting with drive unit Serial No. 5753521 and above. This gear (B-43-92158A1) also is available as a replacement part and is the same design and completely compatible with conventional pinion gear. Installation specifications are the same as current drive units with reverse gear lash set at .040" to .060" (1.02mm to 1.52mm).

Also, Gear Kit B-43-90571A1 is available for MerCruiser 260 gear housings which have a failed forward/pinion gear. These gears are completely different from past production gears and will not interchange individually. Installation instructions accompany kit which contains the following:

Forward Gear & Needle Bearing Assembly	B-43-90758A1
Pinion Gear	B-43-90571
Reverse Gear	B-43-90572
Shim Assembly - Forward Gear	C-15-57007A1
Shim Assembly - Reverse Gear	C-15-31535A1
Nut - Drive Shaft - Pinion	C-11-69223
Bearing Assembly - Pinion Roller	B-31-92366
Bearing - Ball - Reverse Gear	B-30-88957
Bearing - Tapered Roller - Forward Gear	B-31-35928A1

After gear housing assembly is repaired (using new gears), instruct customer to follow the drive unit 10-hour break-in period that is consistent with new drive unit break-in (following).

Drive Unit 10-Hour Break-In

1. Avoid full throttle starts.
2. DO NOT operate at any one constant speed for extended periods.
3. DO NOT exceed 75% of full throttle during the first 5 hours. During the next 5 hours, operate at intermittent full throttle.
4. Drive unit should be shifted into forward gear a minimum of 10 times during break-in with run-in time at moderate RPM after each shift.

B. MERCUISER 120-thru-260 LOWER DRIVE SHAFT BREAKAGE

Multiple drive shaft (B-45-55757A1) breakage in water pump area of drive shaft may be caused by misalignment between gear housing and drive shaft housing. In most cases, this type of drive shaft failure occurs after drive unit has received a severe impact that has bent the gear housing to drive shaft housing alignment dowel pins (C-17-46912) and/or has elongated the dowel pin installation hole(s) (located in both gear housing and drive shaft housing). If a dowel pin installation hole is elongated, the housing should be replaced.

Drive shaft breakage at pinion gear spline or "O" ring groove area usually is caused by propeller shaft rotation suddenly being stopped. Drive shaft breakage may be a secondary failure after gears had failed or be caused by propeller hitting a submerged underwater object. This would be indicated by twisted drive shaft splines.

C. NEW POWER STEERING TEST GAUGE C-91-38053A3

(Attach Bulletin Reference Sticker on Section 9-B Index Page of Your Service Manual.)

A new Power Steering test gauge is in stock. The assembly includes the gauge, valve, hose and necessary plugs and connectors to test the Power Steering pump, valve and cylinder. Complete test instructions are included. Order your test gauge today.

C-91-38053A3 Power Steering Test Gauge

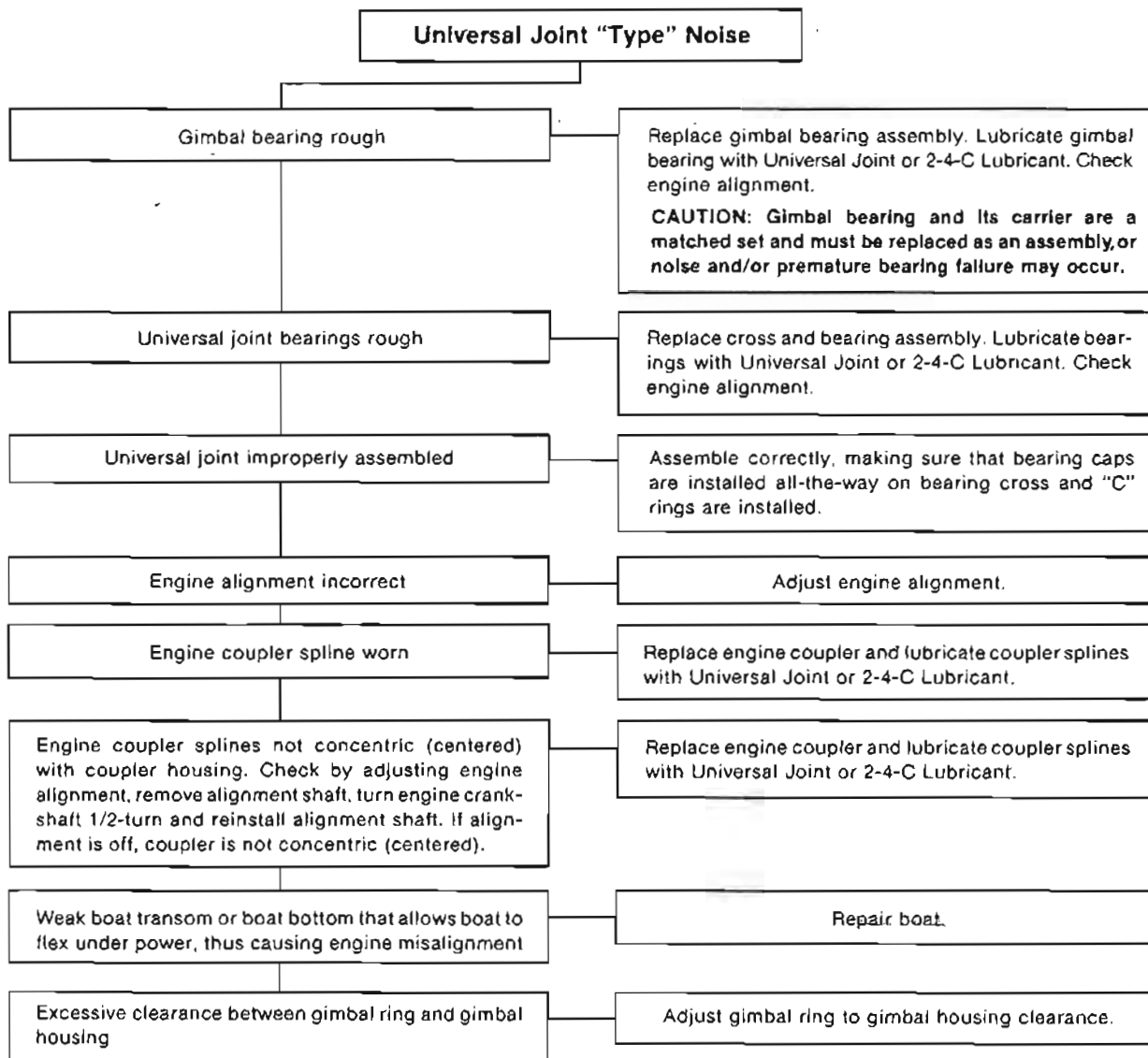
D. UNIVERSAL JOINT "TYPE" NOISE

(Attach Bulletin Reference Sticker on Section 10-D Index Page of Your Service Manual.)

Following is a troubleshooting chart of possible causes of universal joint "type" noise and corrections.

Remember that there are factors which can cause the universal joint to be noisy (engine alignment, etc) which are not corrected by replacing the universal joint or its components. Also remember that there are noises which sound like and/or are in the same area as the universal joint but may be caused by another component.

Many of these problems can be prevented by conforming to the maintenance schedule on lubrication of gimbal bearing, universal joint and engine coupler splines. Use only Universal Joint or 2-4-C Lubricant.



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