MARINER OUTBOARDS

MERCURY OUTBOARDS

service bulletin

No. 93-6

High Elevation Gear Ratio/Gear Housing Exchange Program - Mariner/Mercury 100-200 Models

Outboards operated above 2500 feet may experience a decrease in performance due to less oxygen in the air at higher elevations. Propeller changes, carburetor jet changes and gear ratio/gear housing changes or a combination of these changes may be necessary to restore satisfactory performance.

A High Elevation Gear Ratio/Gear Housing Exchange Program is in effect to help offset some of the costs incurred to set up engines for operation at higher elevations. This program applies to new, unused outboards and should be considered only for outboards used primarily at higher elevations. Use of outboards, with gears changed to a lower ratio, at elevations below 2500 feet could result in powerhead damage or gear damage from overspeed rpm.

Order the following parts and make the exchange per these instructions.

Gear Ratio Exchange

MODELS:

100/115 (4 cyl) use 75/90 (3 cyl) 2.3:1 ratio gears

Order

1	43-44484	Pinion Gear
1	43-12634A-2	Forward Gear
1	43-12635	Reverse Gear
1	26-43035A-3	Seal Kit
2	37-815820	Caution Decal

175/200 with 1.87:1 ratio - use 135/150 2:1 ratio gears

Order

1	43-44102A-2	Gear Set
1	26-89238A-2	Seal Kit
2	37-815820	Caution Decal

135/150/175 SKI with 2:1 ratio - use 2.3:1 ratio gears

Order

1	43-16294A-2	Gear Set
1	45-16292	Drive Shaft (Long)
1	45-815237	Drive Shaft (X-Long)
2	37-815820	Caution Decal

GEAR RATIO EXCHANGE PROGRAM

1. Order parts.
2. Install gear set in outboard per the Service Manual.
3. Apply Caution Decal on boat dashboard and on outboard driveshaft housing.
4. Complete warranty claim:
   - Enter outboard serial number
   - List part numbers of unused gears (and driveshaft) returned for credit
   - Note “High Elevation Gear Ratio Exchange Program” on the form
   - Enter Flat Rate Code OG-19 for 2 hours of labor credit
   - Enter return shipping charges
5. Carefully pack and return the unused gears (and driveshaft) with the warranty claim enclosed to:

   MERCURY MARINE
   WARRANTY RECEIVING
   W6250 W. PIONEER ROAD
   FOND DU LAC, WI 54936-1939

Mark box “GEAR RATIO EXCHANGE PROGRAM”

provided by http://www.crowleymarine.com

COSTS AND CREDITS:

- Dealer orders and pays for new parts and incoming freight
- Dealer is credited for unused, undamaged gears (and driveshaft) returned, at Dealer Price, and is credited for return freight
- Dealer receives 15 % handling allowance for gears (and driveshafts) taken from dealer stock
- Dealer labor is credited at dealer warranty labor rate

RETURN TO LOWER ELEVATION

The dealer is responsible for advising the customer of the potential for powerhead or gear damage if an outboard modified for high elevation operations is used at low elevation.

Gear ratio and propeller changes must be reversed to avoid overspeed rpm. Carburetor jet changes must be reversed to avoid a lean fuel condition.

Gear Housing Exchange

MODELS: (20 INCH LENGTH ONLY)

100/115 (4 cyl) 2.07:1 ratio use 75/90 (3 cyl) 2.3:1 ratio Gear Housing Assembly

Mercury 1667-9011A7
or
Mariner 1667-9011A9
and
2 37-815820 Caution Decal

175/200 with 1.87:1 ratio use 135/150 2:1 ratio Gear Housing Assembly

Mercury 1647-9148A18
or
Mariner 1647-9148A20
and
2 37-815820 Caution Decal

135/150/175 SKI with 2:1 ratio use 2.3:1 ratio Gear Housing Assembly

Mercury 1667-9148A40
or
Mariner 1667-9148A41
and
2 37-815820 Caution Decal

GEAR HOUSING ASSEMBLY EXCHANGE PROGRAM

1. Order gear housing assembly thru Technical Service Pre-Authorized Warranty.
2. Install gear housing assembly per the Service Manual.
3. Apply Caution Decal on boat dashboard and on outboard driveshaft housing.
4. Sign Pre-Authorized Warranty Claim.
5. Carefully pack and return the unused gear housing assembly with the warranty claim enclosed to:

   MERCURY MARINE
   WARRANTY RECEIVING
   W6250 W. PIONEER ROAD
   FOND DU LAC, WI 54936-1939

Mark box “GEAR HOUSING ASSEMBLY EXCHANGE PROGRAM”

COSTS AND CREDITS:

- Dealer orders and has 90 days to pay for new gear housing assembly
- Dealer is credited for unused, undamaged gear housing assembly returned, at Dealer Price. Return freight is free to the dealer.
- Dealer labor is credited at dealer warranty labor rate per Flat Rate Code OG12, 0.7 hours.

RETURN TO LOWER ELEVATION

The dealer is responsible for advising the customer of the potential for powerhead or gear damage if an outboard modified for high elevation operations is used at low elevation.

Gear ratio/gear housing assembly and propeller changes must be reversed to avoid overspeed rpm. Carburetor jet changes must be reversed to avoid a lean fuel condition.

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