FORCE Outboards

service bulletin

No. 93-3

High Elevation Gear Ratio/Gear Housing Exchange Program - Force 90 and 120 h.p. 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, modified for high elevation, 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:

90 and 120 h.p. use 2.2:1 ratio gears

NOTE: The 2.2:1 gear sets cannot be used with the Force 150 h.p. outboard engine. Premature gear failure may occur if used with the 150 h.p.

Order

1	FK1229	Gear Set
1	37-815820	Decal

GEAR RATIO EXCHANGE PROGRAM

1. Order parts.
2. Install gear set in outboard per the Service Manual.
3. 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 NJC for 2 hours of labor credit
   - Enter return shipping charges
4. 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”

International Areas: Follow instructions issued by your Marine Power International Office or by your Distributor.

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 operation 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:

90 and 120 h.p. use 2.2:1 ratio gears

NOTE: The 2.2:1 gear sets cannot be used with the Force 150 h.p. outboard engine. Premature failure may occur if used with the 150 h.p.

Order

1	1600-820588A7	Gear Housing
1	37-815820	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. Sign Pre-Authorized Warranty Claim.
4. 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”

International Areas: Follow instructions issued by your Marine Power International Office or by your Distributor.

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 cost. Return freight is free to the dealer.
- Dealer labor is credited at dealer warranty labor rate per Flat Rate Code NJC, 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 operation 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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