# Indmar Products

## 6.2L Ford Specifications and Maintenance Requirements

# Engine Specifications

| | |
|---|---|
| Number of Cylinders | 8 |
| Displacement | 376 cid (6.2 L) |
| Bore | 4.015" (102 mm) |
| Stroke | 3.74" (95 mm) |
| Compression Ratio | 9.8:1 |
| Compression Pressure | Minimum 100 psi (690 kPa) |
| Idle RPM in Neutral | 650 RPM |
| Operating Range at WOT | 5000-5400 RPM |
| Minimum Oil Pressure at Idle | 8 psi (55 kPa) |
| Oil Filter | Indmar P/N 501021 |
| Fuel Pump Pressure | 60 psi (414 kPa) |
| Electrical System | 12V DC Negative (-) Ground |
| Minimum Battery Requirements | 650 CCA/700 MCA/120 AH |
| Firing Order | 1-5-4-8-6-3-7-2 |
| Spark Plug Type (16 Plugs Required) | 597037 |
| Spark Plug Gap | 0.044" (1.12 mm) |
| Thermostat | 160°F (71°C) |

| **Fluid Capacities** | |
|---|---|
| Engine Oil | 8 qt (Approx)* |
| Closed Cooling System | 12-14 qt (11.4-13.3 L) |
| In-Line 1:1 Transmission | 1.7 qt (1.6 L) Dexron |
| In-Line Reduction Gear | 2.12 qt (2 L) 15W-40 |
| ZF Ski Vee Transmission | 2.12 qt (2 L) Main Gearbox,<br>1.0 qt (1.06 L) V-Drive - Dexron |
| Walter V-Drive | 0.5 qt (0.5 L) SAE 30 Motor Oil |
| Indmar V-Drive | 2.3 qt (2.18 L) Main Gearbox, Dexron<br>1.25 qt (1.18 L) V-Drive unit, Mobil Delvac Synthetic Transmission Fluid 50 |

* Always fill to full mark on dipstick.

# Maintenance Components and Fluids

| | |
|---|---|
| Engine Oil | 400 and 440 Models 5W-30, API Service SN, P/N 871003<br>575 Supercharged Models 15W50 Fully Synthetic, API Service SN |
| Engine Oil Filter | P/N 501021 |
| Engine Coolant (for fresh water cooled systems) | 50/50 mix propylene glycol and distilled water |
| Flame Arrestor | P/N 525900 |
| Indmar V-Drive | Main Gearbox - Dexron/Mercon<br>V-drive - Mobil Delvac Synthetic Transmission Fluid 50 |
| ZF Hurth Transmission (1:1 Transmission) (Ski-Vee Transmission) | Dexron/Mercon |
| ZF V-Drive and Reduction Gears | 15W-40 |
| Walters V-Drive | 15W-40, API Service SL/SJ/CI-4, CH-4, CG-4 |
| Engine Fuel (for storage) | Marine formula fuel stabilizer |
| Engine Cables (for corrosion protection) | Corrosion protectant and lubricant |
| Starter Bendix Lubricant | Multipurpose grease |
| Alternator Belt | 400 and 440 Models P/N 725901<br>575 Supercharged Models P/N 725902 |
| Thermostat | P/N 985901 |
| Spark Plugs | P/N 597037 |
| Surface Corrosion Protection | Corrosion protectant and lubricant |
| Engine Fogging Oil | Fogging oil |

**Equivalent Oil Filters for 6.2L Ford**

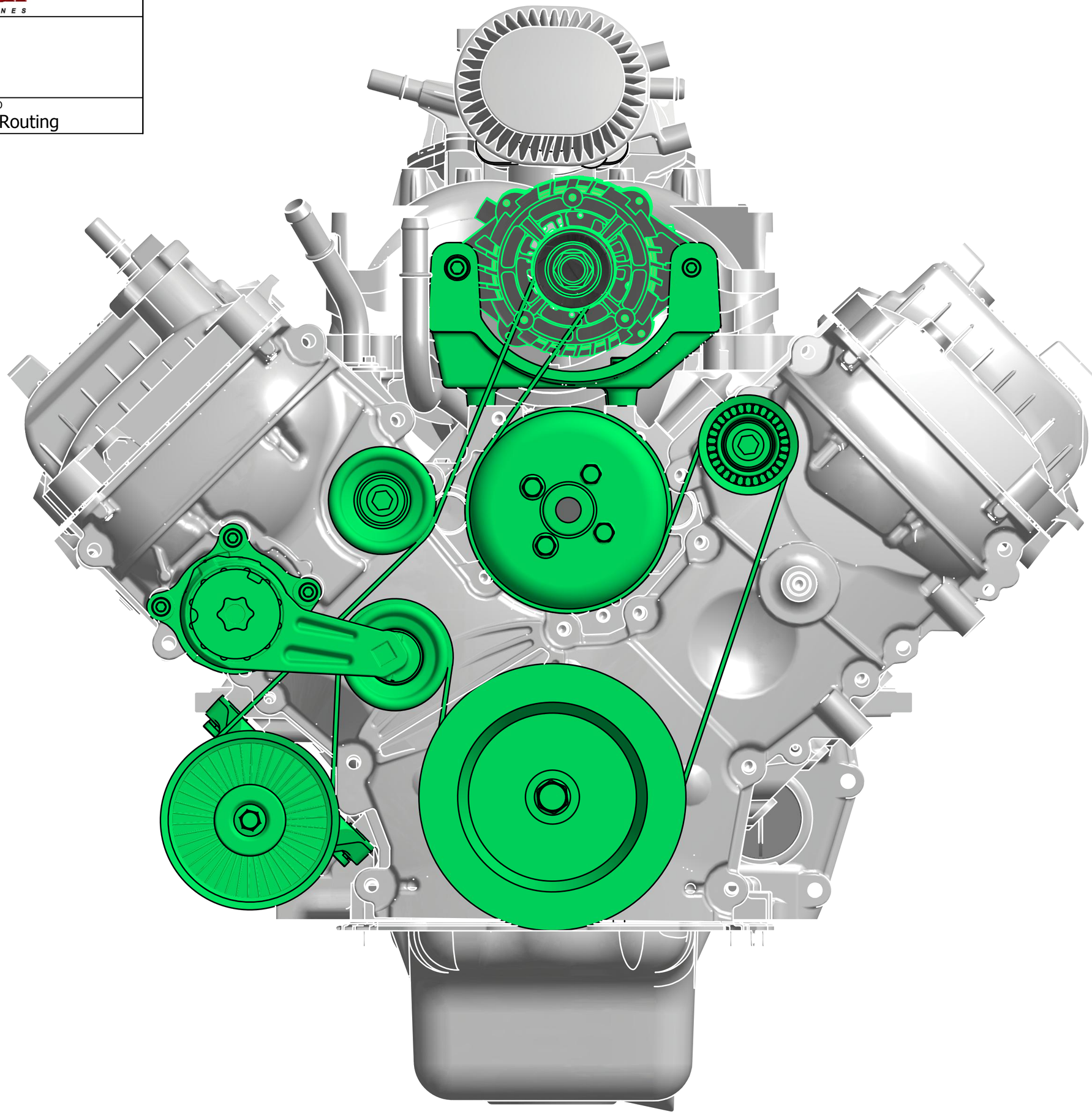
Indmar 501021/872012
Ford/Motorcraft FL820
Pennzoil PZ-42
Mobil 1 M1210
Napa 21372
WIX 51372
Fram PH2

## Scheduled Maintenance Chart

| ITEM | SERVICE | FIRST 10-20 HOURS | EVERY 25 HOURS[1] | EVERY 50 HOURS | EVERY 100 HOURS | EVERY 300 HOURS or ANNUALLY | EVERY 2 YEARS |
|---|---|---|---|---|---|---|---|
| Engine Oil & Filter | Change | X (Oil) | X (Oil) | X (Oil) | | X (Filter) | |
| ZF Transmission Fluid | Change | X | | | | X | |
| Walters V-Drive Oil | Change | X | | | | X | |
| Indmar V-Drive Fluid | Change | X | | | | X | |
| Engine Coolant | Check/Change | | | | | Check | Change |
| Spark Plugs* | Inspect/Clean | | | | | X | |
| Fuel Injectors* | Inspect/Clean | | | | | X | |
| Fuel Filter | Replace | | | | | X | |
| Flame Arrestor | Clean/Change | | | | X | | |
| Belts | Inspect | X | | | X | X | |
| Shaft Alignment | Check | X | | | | X | |
| Spark Plug Wires* | Inspect | | | | | X | |
| Raw Water Pump Impeller | Inspect | | | | X | Replace | |
| Breather Hose* | Clean | | | | | X | |
| Starter Bendix* | Grease | | | X | | X | |
| Heat Exchanger | Inspect/Clean | | | | | X | |
| Zinc Anodes | Inspect | | | X | | | |

Indmar
MARINE ENGINES

| APPROVAL DATE | DWG NO |
| --- | --- |
| | Belt Routing |



| Applicable Models |
| --- |
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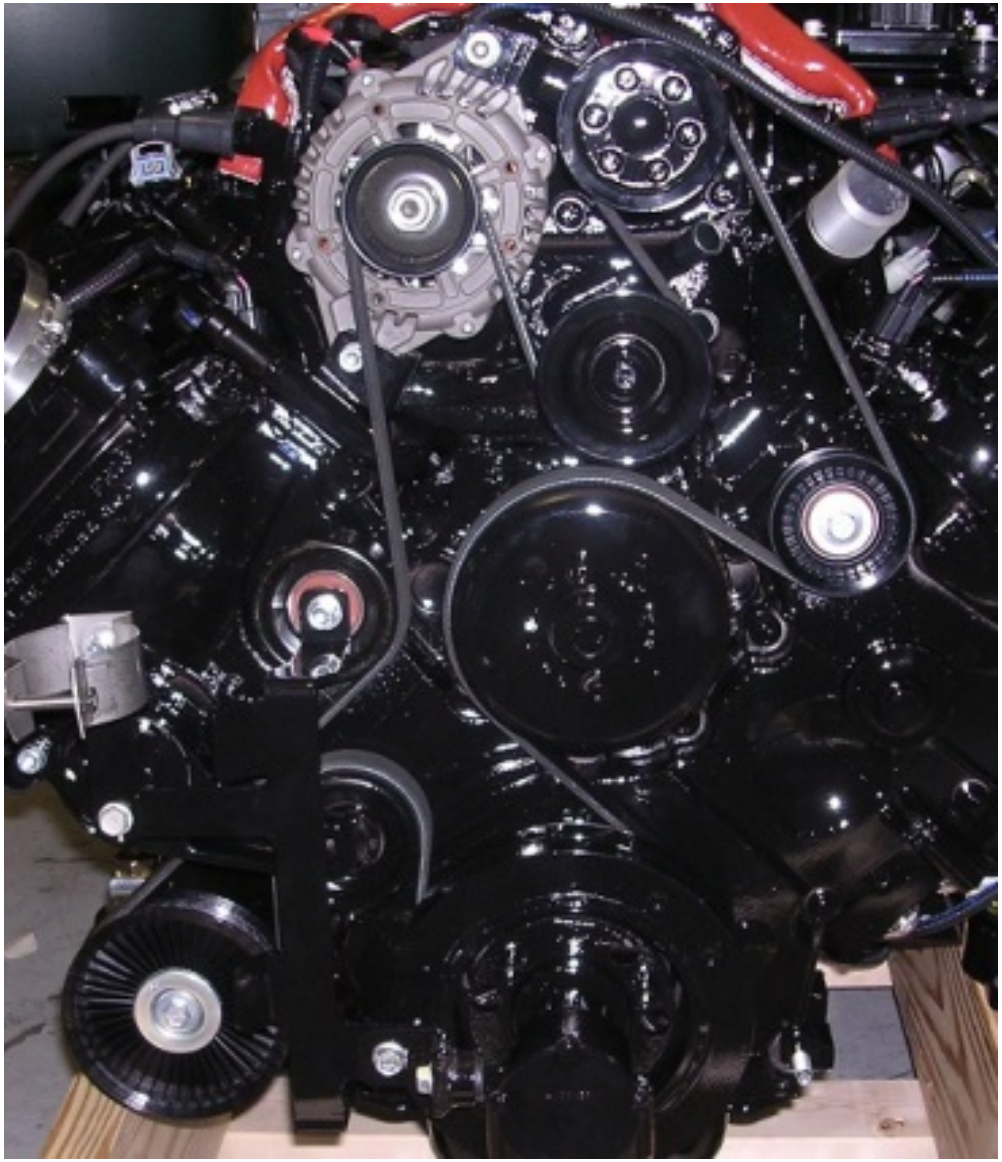

SC 575 Belt Routing

| TRANSMISSION | MODEL | CAPACITY | FLUID TYPE |
|---|---|---|---|
| ZF Hurth In-Line | ZF 45C | 1.7 qt (1.6 L) | Dexron |
| ZF Hurth In-Line | ZF 45A | 2.12 qt (2 L) | 15W-40 Motor Oil |
| ZF Hurth In-Line | ZF 63A | 4.2 qt (4 L) | 15W-40 Motor Oil |
| ZF Hurth V-Drive | ZF 63IV | 4.2 qt (4 L) | 15W-40 Motor Oil |
| ZF Hurth V-Drive | ZF 45IV | 2.12 qt (2 L) Main Gearbox | Dexron |
| | | 1.0 qt (1.06 L) V-Drive Unit | Dexron |
| Walters V-Drive | RV-26D-71V | 0.5 qt (0.5 L) | 15W-40 Motor Oil |
| Indmar V | – | 2.3 qt (2.18 L) Main Gearbox | Dexron |
| | | 1.25 qt (1.18 L) V-Drive Unit | Mobil Delvac Synthetic 50 |

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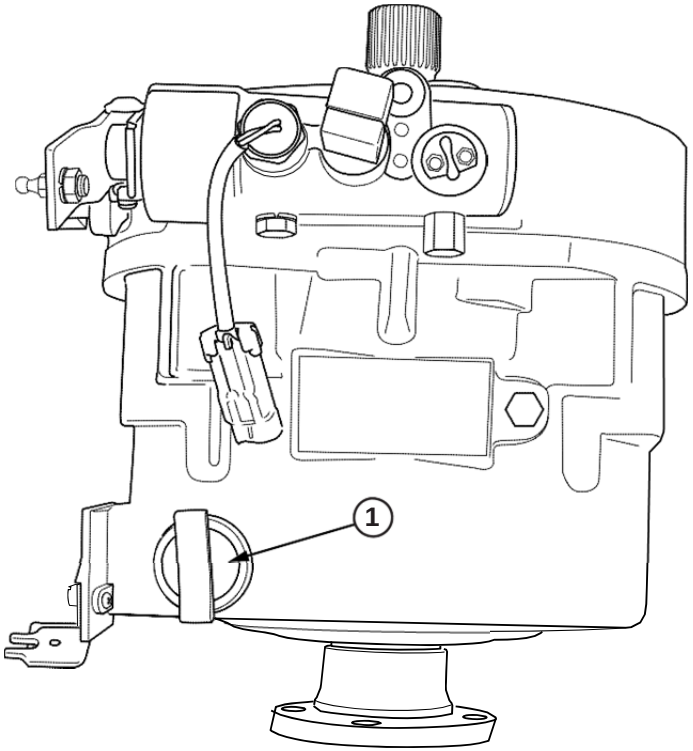
## TRANSMISSIONS

***NOTICE***

*It is important to keep the water level in the bilge below the output shaft of the transmission. If the water level in the bilge is too high, the coupler can splash water inside the engine compartment and cause corrosion problems. High water levels can also allow water intrusion into the transmission causing severe damage.*

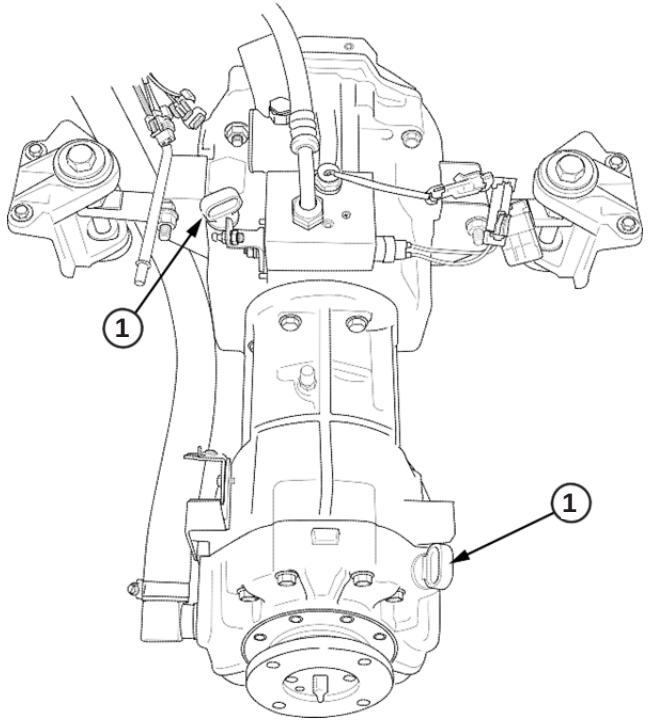
Indmar engines are equipped with one of these marine transmissions:

- ZF Hurth Marine In-Line
- ZF Hurth Marine V-Drive
- Walters V-Drive and ZF Hurth In-Line
- Indmar V-Drive



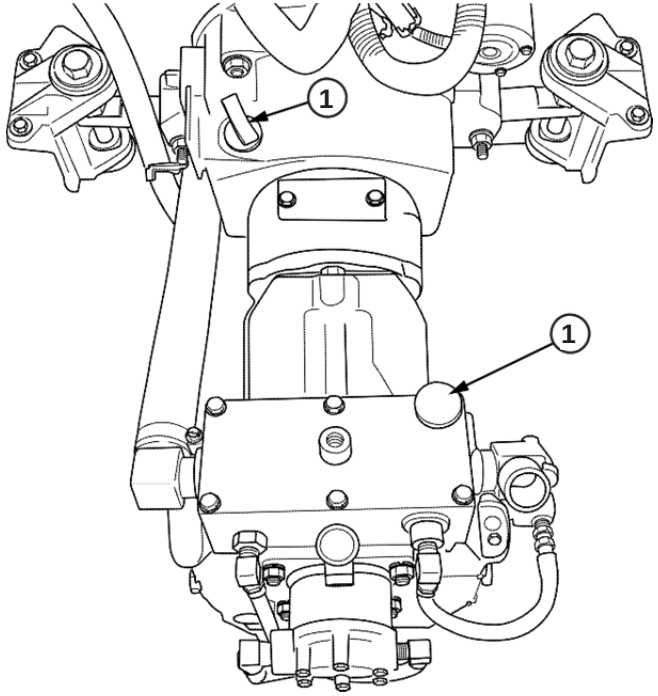

**1 -** Dipstick

***Figure 7.10 – Midships Mount, ZF Hurth Marine In-Line***



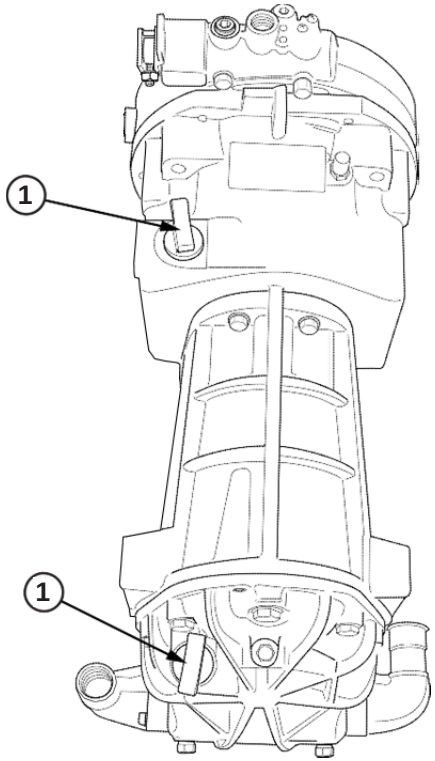

**1 -** Dipstick

***Figure 7.11 – Stern Mount, ZF Hurth Ski-Vee or Indmar-Vee Throughshaft Models***




**1 -** Dipstick

***Figure 7.12 – Stern Drive, Walters V-Drive and ZF Hurth In-Line***




**1 -** Dipstick

***Figure 7.13 – Stern Mount, ZF Hurth Ski-Vee or Indmar-Vee Undershaft Models***

**Cooling System Preparation for Off Season Storage**

The 6.2L Ford Based Engine is equipped with a fresh water cooling system that runs a 50:50 mixture propylene glycol anti-freeze coolant through the engine block as well as through the cabin heater if one is installed in the boat. To prepare the cooling system for off-season storage, the following steps should be followed.

**Closed Cooled Portion of System**

1. Check the protection level of the propylene glycol coolant. The protection level must be to a temperature level below the coldest temperature that is experienced in your area. If the level of protection is inadequate, you will have to drain coolant from the system and add concentrated coolant till the desired protection level is attained.

   **NOTE:** The use of a Refractometer is recommended to determine the protection level of propylene glycol anti-freeze coolant.

   **NOTE:** A 50:50 mix of propylene glycol and distilled water provides protection to -34 degrees F (-37 C). The maximum recommended mixture is 60% propylene glycol and 40% distilled water which provides protection to -58 degrees F (-50 C).

   **NOTE:** Indmar recommends draining and replacing the propylene glycol coolant every two years. The system capacity is approximately 4 gallons. See SP2015-4 for instructions on draining and filling the closed cooling system.

**Water Raw Portion of System**

The draining points are marked A, B and C in the diagram on the next page.

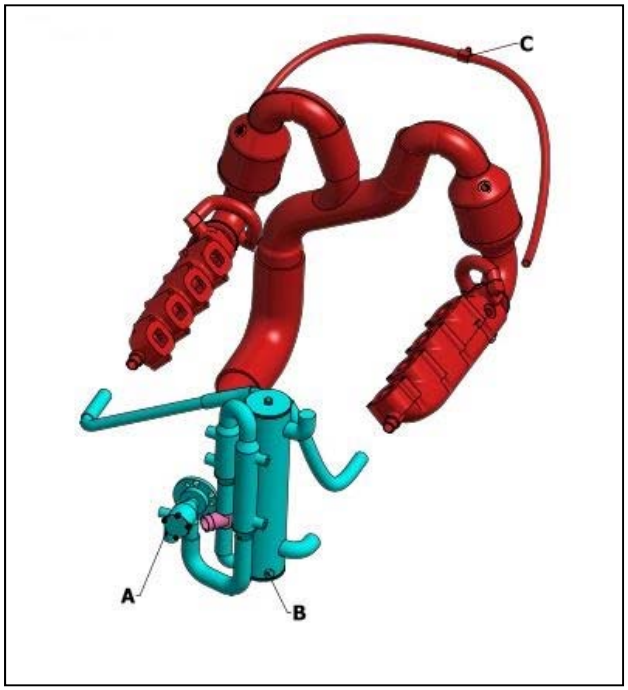
1. Draining Pont A. Remove the 4 screws And cover from the raw water pump. Remove the impeller from the pump. This will drain the transmission cooler and the raw water pump. The small amount of water that may remain in the hose between the raw water pump and transmission cooler is inconsequential. You may also remove this hose to drain the pump and cooler.
2. **NOTE:** Indmar recommends replacing the raw water impeller every year. It is better to leave the new impeller out of the pump during the off-season so it remains uncompressed and does not take a set.

3. Draining Point B. Remove the drain plug/sacrificial anode from the heat exchanger. This will drain the raw water from the oil cooler, the water flow sensor and the heat exchanger.

   **NOTE:** The drain plug also serves as a sacrificial anode to protect the closed cooling system from damage due to electrolysis. If the anode has been consumed to a length of ¾" (19 mm) or less, it must be replaced.

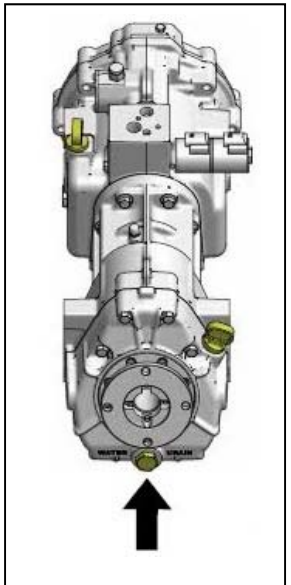
4. Draining Point C. Depending on the installation, draining of the exhaust manifolds can be accomplished in two different ways. You may be able to remove the hose that connects the manifold crossover hose to the dripless packing. If the boat is not equipped with a dripless packing or if the crossover hose cannot be lowered enough to drain the manifolds, the crossover hose may need to be removed from the fittings on the manifolds to ensure they are drained. **NOTE:** Some applications may not use the crossover hose between the manifolds. In

those cases, there will be plugs in the manifolds that must be removed for draining. The small amount of water that may remain in the catalytic converters is inconsequential.




**Transmission Preparation**

1. The Indmar V-drive Transmission is drained by removing the plug as shown here and draining the cooler.



Newer Model 6.2L Ford Drain Points