## Indian 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, 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 1.25 qt (1.18 L) V-Drive unit, Mobil Delvac Synthetic Transmission Fluid 50			

<sup>\*</sup> 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		
	575 Supercharged Models 15W50 Fully Synthetic, API Service		
Engine Oil Filter	P/N 50102		
Engine Coolant (for fresh water cooled systems)	50/50 mix propylene glycol and distilled water		
Flame Arrestor	P/N 525900		
Indmar V-Drive			
ZF Hurth Transmission (1:1 Transmission) (Ski-Vee Tr	ransmission) Dexron/Mercor		
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 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

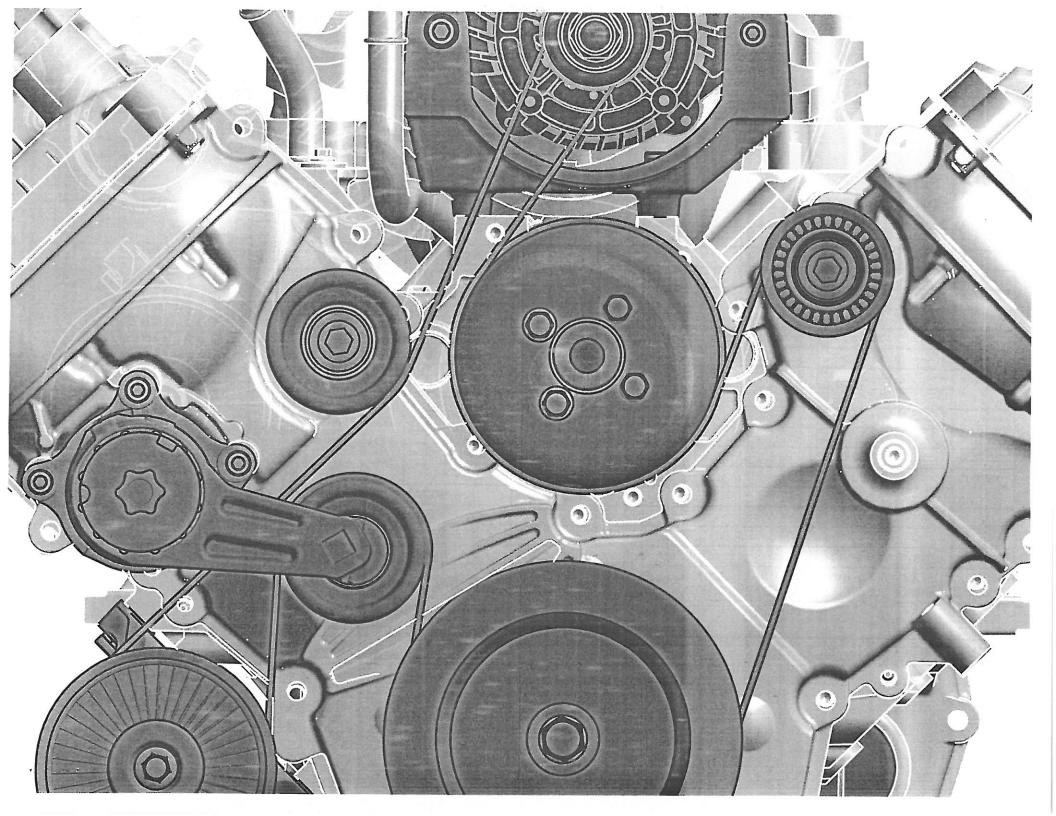
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### **Scheduled Maintenance Chart**

ITEM	SERVICE	FIRST 10-20 HOURS	EVERY 25 HOURS <sup>1</sup>	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	Х			100	X	
Walters V-Drive Oil	Change	Х			4 4 4 4	Х	
Indmar V-Drive Fluid	Change	X				Х	
Engine Coolant	Check/Change		10.5			Check	Change
Spark Plugs*	Inspect/Clean	, and a second			1.7	X	onange
Fuel Injectors*	Inspect/Clean					Х	
Fuel Filter	Replace					X	
Flame Arrestor	Clean/Change				Х		
Belts	Inspect	Х			Х	Х	
Shaft Alignment	Check	Х				X	
Spark Plug Wires*	Inspect					X	
Raw Water Pump Impeller	Inspect				Х	Replace	
Breather Hose*	Clean					X	
Starter Bendix*	Grease			Х		X	
Heat Exchanger	Inspect/Clean					X	
Zinc Anodes	Inspect			Х			



## **Section Seven**



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	



#### **TRANSMISSIONS**

#### NOTICE

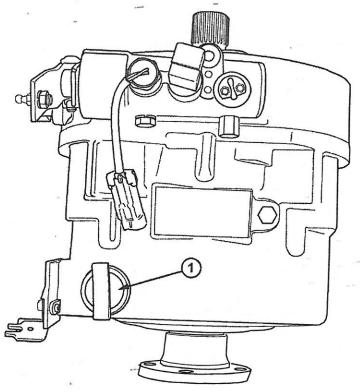
It is important to keep the water level in the bilge below the output shaft of the transmission. If the water level in the bilge is too high, the coupler can splash water inside the engine compartment and cause corrosion problems. High water levels can also allow water intrusion into the transmission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

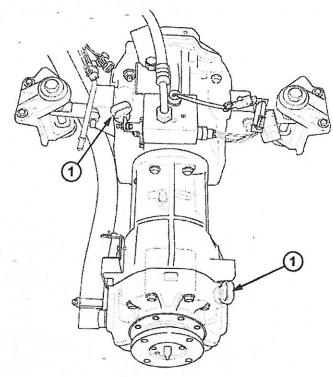
## **Section Seven**





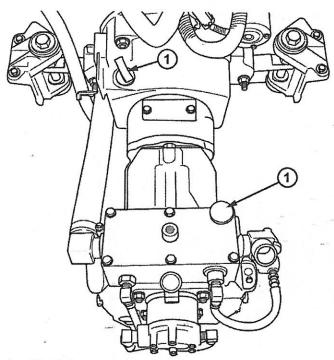
1 - Dipstick

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



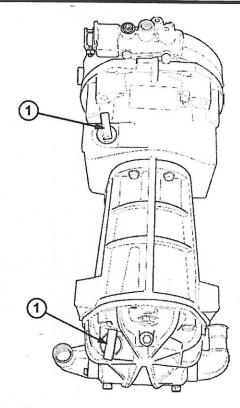
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Figure 7.11 – Stern Mount, ZF Hurth Ski-Vee or Indmar-Vee Throughshaft Models



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).

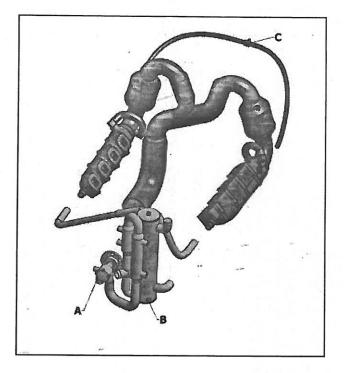
**NOTE:** Indmar recommends draining and replacing the propylene glycol coolant every two years. The system capacity is approximately 4 gallons. See SP2015-4 for instructions on draining and filling the closed cooling system.

#### Water Raw Portion of System

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

- 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.
  - **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.
- 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 3/4" (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.

