MERCURY

MARINER

MERCURY
Sport Jet

FORCE
Outboards

service information

✔ADVISORY

☐ BULLETIN

No. 2000-12

Circulate to: ☐ Sales Manager ☐ Accounting ✔ Service Manager ✔ Technician ✔ Parts Manager

DDT Cartridge and Worksheet

NOTICE

This is a revision of Outboard Advisory 2000-12. Destroy original Advisory 2000-12 July 2000 and insert the revised Advisory 2000-12 June 2001.

Models Affected

MERCURY/MARINER

135 THRU 225 HP, OPTIMAX S/N 0T178500 and Above
150 THRU 250 HP, EFI, 3/040/50/60 HP, 4 stroke EFI, S/N 0T409000 and Above

The following series of (DDT) cartridges are used on the more advanced Electronic Control Modules (ECMs). There have been two revisions to the cartridge that have added improvements and enhancements.

IMPORTANT: The following cartridge versions are not meant to replace the older outboard or M/C cartridge. You MUST retain Outboard Cartridge, P/N 822608 – 6, version 5.0, and M/C cartridge P/N 91-803999 version 2.0 to work with 2000 and prior, and select 2001 models.

CARTRIDGE

P/N 880118 Software version 1.0 was the first cartridge developed primarily for the 2001 Optimax engines equipped with advanced ECM. The 1.0 version superseded to the 1.1 version.

P/N 880118 1 Software version 1.1 has improvements that allow you to see engine timing on 2002 model V-6 EFI outboards, and diagnostics for M/C models that use the Optimax outboard style advanced ECM. The 1.1 version supersedes to 1.2 version.

P/N 880118A2 Software version 1.2 has improvements for EFI 4 stroke outboard ignition coil diagnostics.

WORKSHEET

Attached is the latest version of the DDT worksheet. Worksheet is helpful when diagnosing running problems, and is required to be returned/attached to the warranty claims, on returned power heads, for engines that use the above series DDT cartridge. The data sheet will be available in pad form of 50 sheets **P/N 90-881929-1.**

SmartCraft Data Worksheet

Dealer Name:	Engine S/N:
Dealer Number:	Engine Type:
Technician Name:	ECM Part Number:
Date:	DDT Software Version:

FAULT SECONDS	Engine #1	Engine #2	RUN HISTORY	Engine #1	Engine #2
BATT VOLT HIGH			RUN TIME HR		
BAT VOLT LOW			RPM 0–749		
BLOCK PRESS LOW			RPM 750–1499		
COMP OVERHEAT			RPM 1500–2999		
ETC MOTOR OPEN			RPM 3000–3999		
ETC MOTOR SHORT			RPM 4000–4499		
FUEL P INPUT HI			RPM 4500–5000		
FUEL P INPUT LO			RPM 5000–5499		
GUARDIAN			RPM 5500–6249		
KNOCK SENS1			RPM 6250+		
KNOCK SENS2			BREAK–IN LEFT		
OIL PSI STR			RPM LIMIT Sec		
OIL REMOTE SRT			GRD LIMIT Sec		
OIL RESERVE STR			ACT TEMP Sec		
MAP INPUT HI			BLOCK PSI Sec		
MAP INPUT LO			CTS TMP Sec		
MAP IDLE CHECK			CTP TEMP Sec		
OIL PUMP			LOW OIL Sec		
OVERSPEED			OIL PMP Sec		
PORT OVERHEAT			**BOAT INFORMATION**		
STAR OVERHEAT					
WARNING HORN			WOT RPM		
H$_2$O IN FUEL			Propeller Type		
LED INDICATORS **ILLUMINATED**	#1 ☐ #2 ☐ #3 ☐ #4 ☐	#5 ☐ #6 ☐ #7 ☐ #8 ☐	Propeller Size		
			Boat Type		
			Boat Length		
			Weather Condition		

Description of Problem: _____

_____

_____

SmartCraft Data Worksheet

Dealer Name:	Engine S/N:

FREEZE FRAME FAULT BUFFER DATA

FAULT I.D.	Fault Buffer 0	Fault Buffer 1	Fault Buffer 2	Fault Buffer 3	Fault Buffer 4	Fault Buffer 5	Fault Buffer 6	Fault Buffer 7	Fault Buffer 8	Fault Buffer 9
BREAK–IN										
BARO PSI										
BATT VOLTS										
BLOCK PSI										
BOAT SPEED										
AIR TEMP F										
COOL TMP F										
DEMAND %										
ENGINE RPM										
ENGINE STATE										
FPC TOTAL										
FREQ COUNTER										
FUEL LEVEL %										
SHIFT										
LAKE/SEA TMP F										
LOAD %										
MPRLY										
MAP PSI										
OIL LEVEL %										
PORT TAB POS										
AVAILABLE PWR%										
RUN TIME										
STAR TAB POS										
TPS %										
TRIM POS										
COOL TMP STB ^{0}F										
COOL TMP PRT ^{0}F										

What was the engine speed when the failure occurred? _____

How was the engine being operated before the failure?

Steady RPM ☐   Accelerating ☐

Decelerating ☐   Extended Idle ☐