Quicksilver Digital Diagnostic Terminal (DDT)

NOTICE

This bulletin replaces Mariner/Mercury Service Bulletin 95-11.

Models Affected

MERCURY/MARINER
2-Stroke
175/200/220 2.4L EFI, 150/175/200 2.5L EFI, 225/250 3.0L EFI, 200/225 3.0L
Carb, 135/150 Optimax, 200/225 Optimax, 200 DFI

4-Stroke
25, 30/40

MERCURY HI-PERFORMANCE
150/200/225/300 ProMax/Super Mag, 2.0/2.4/2.5/3.4 L EFI

MERCRUISER
EFI and MPI Models

Digital Diagnostic Terminal (DDT) and Cartridges

This hand held, menu driven tool is easy to use. The liquid crystal display has 4 lines with 80 characters available for data. A flexible sealed keypad, rubber boot and rugged design will provide years of service. The DDT comes with a 10 foot (3m) extension cable. Adapter cables are used to connect the DDT to Data Link Connector (DLC) on the engine. There are currently two cartridges available, one for Mercury/Mariner Outboards and one for MerCruiser products. Instructions that come with the cartridges and Service Manuals will tell how to connect the DDT to the engine.

The DDT, when used with the correct cartridge and the product's Service Manual, will allow the technicians to properly diagnose and repair engine systems. Engine functions can be monitored while the engine is running to aid in diagnosis, and can also display any trouble codes stored in the Electronic Control Module.

Electronic Control Module (ECM) Capabilities

The DDT will provide and display some or all the following capabilities on an 80-character LCD screen depending on the ECM. The Technician's Reference Manual supplied with the cartridge will give detailed capabilities.

- Actual minimum and maximum sensor values

- Monitor condition of sensors and switches

- Monitor/Clear engines Run and Fault histories

- Special fueling and load test functions

- Monitor fuel delivery by performing a stand alone injector tests

- Perform an *engine -off/key -on* engine diagnostic self test

- ECM identification

- Display, record, and clear trouble codes

Following is a list of equipment, part numbers and usage.

DIGITAL DIAGNOSTIC TERMINAL (DDT) 91-823686A2 is hand held, easy to use, and menu driven. The liquid crystal display has 4 lines with 80 characters available for data. A flexible sealed keypad, rubber boot, and rugged design will provide many years of service. The DDT comes with a 10 foot (3m) extension cable 84-825003A1.

Software Cartridge 1.2C, Part number NA, "Outboard Only"

- 1997 3.0 litre DFI outboard.

Software Cartridge 2.0, 91-822608 1 "Outboard Only"

- 1994 thru 1994-1/2 225 3 litre carburetor outboard

Software Cartridge 3.0 91-822608 2 "Outboard and MerCruiser"

- 1982 and newer 2, 2.4, 2.5, and 3.4 litre Hi-Performance fuel injector test.

- 1994 thru 1997 2, 2.4, 2.5, litre EFI standard and Hi-Performance outboards. *

- 1994 thru 1997 3 litre outboards.

- MerCruiser EFI (TBI) and MPI products with MEFI-1 ECM.

Software Cartridge 4.0, 91-822608 4 "Outboard Only"

- 1982 and newer 2, 2.4, 2.5, and 3.4 litre Hi-Performance fuel injector test.

- 1994 thru 1997 2, 2.4, 2.5, litre EFI standard and Hi-Performance outboards. *

- 1994 thru 1997 3 litre outboards.

- 1997 and newer DFI/Optimax outboards. **

Software Cartridge 4.1, 91-822608 5 "Outboard Only"

- 1982 and newer 2, 2.4, 2.5, and 3.4 litre Hi-Performance fuel injector test.

- 1994 and newer 2, 2.4, 2.5, litre EFI standard and Hi-Performance outboards. *

- 1994 and newer 3 litre outboards.

- 1997 3 litre DFI outboard.

- 1998 and newer 2.5 and 3 litre Optimax.

- 1998 and newer 25-40 hp 4-cycle outboards.

Software Cartridge 1.0, 91-861538 "MerCruiser Only"

- MerCruiser EFI (TBI) and MPI products with MEFI-1 or -2 ECMs.

Software Cartridge 2.0, 91-803999 "MerCruiser Only"

- MerCruiser EFI (TBI) and MPI products with MEFI-1, -2 or -3 ECMs. Can also read RPM history on 1997 and later Thunderbolt V.

Adapter Cables: Part number and usage, see Digital Diagnostic Terminal Order Form.

DDT Accessories Not Sold By Quicksilver:

- Heavy Duty Carrying Case . . . . OTC #3305-07

- Hard Copy Printer (12 Volt, use with OTC #212536 cable) . . . . . . OTC #3285

- Personal Computer Adapter Cable (9-pin) . . . . OTC #212535

- Personal Computer Adapter Cable (25-pin) . . . . OTC #212536

For more information on these accessories or to order, call Owatonna Tool Company toll-free, **Phone: 1-800-328-6657, Fax: 1-800-578-7375.**
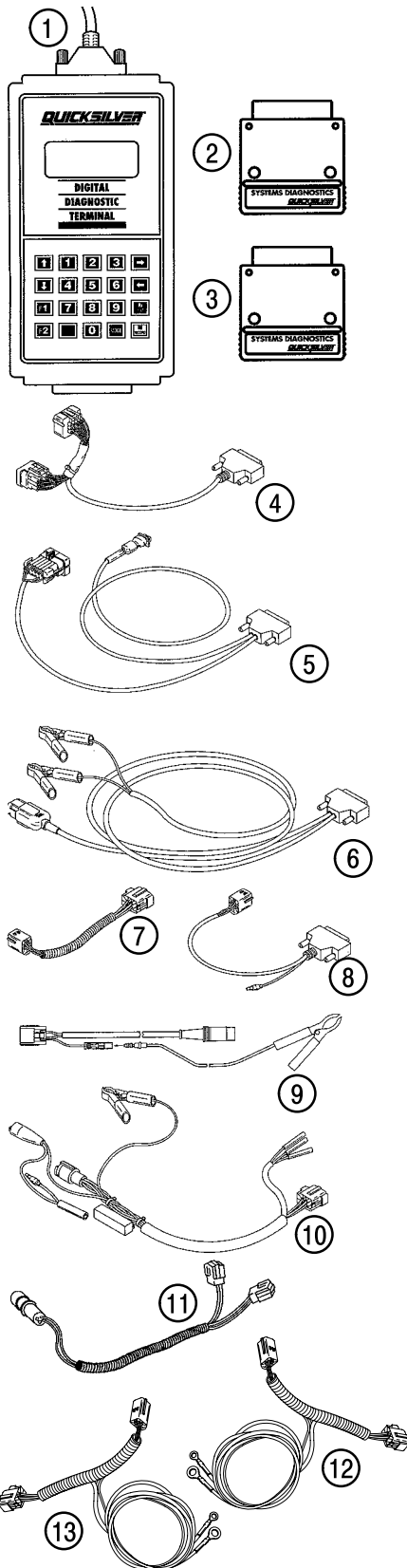
*NOTE: *Also includes previous models that had the original ECM replaced with a newer digital ECM incorporating a diagnostic connector.*

*NOTE: **The 4.0 cartridge is not capable of monitoring block water pressure sensor readings on 3.0L Optimax outboards.*

STICKERS:

Cut and apply the enclosed sticker to Service Bulletin 95-11 to avoid confusion.

QUICKSILVER®
MARINE PARTS AND ACCESSORIES

Digital Diagnostic Terminal Order Form

ITEM	PART NUMBER	DEALER NET	QUANTITY
1. Digital Diagnostic Terminal (DDT)	91-823686A 2	$681.79	_____
• Requires #2 or #3 software cartridge for specific applications plus appropriate harness. (NOTE: Includes 10′ extension harness P/N 84-825003A1)			
2. Outboard DDT Software Cartridge	91-822608 5	$88.98	_____
• 1986 and up EFI Outboards with Electronic Control Modules (ECM) for 2.4/2.5/3.0 Litre. Includes Hi-Performance 2.0/2.4/2.5 Litre.			
• 1994 & up 3.0 Litre Carbureted Outboards.			
• 1997 and up DFI/OptiMax Outboards			
• 1998 and up Mercury/Mariner 25-40 hp 4-Stroke			
(NOTE: Includes Technical Reference Manual 90-825159--3.)			
3. MerCruiser DDT Software Cartridge	91-803999	$117.51	_____
• 1993 and up EFI MerCruiser Engines.			
• 1997 and up Thunderbolt V (RPM History)			
(NOTE: Includes Technical Reference Manual 90-806932--3.)			
4. Adapter Harness	84-822560A 1	$51.81	_____
• 1994 3.0 Litre Carbureted Outboards			
5. Adapter/Injector Harness - MerCruiser Only	84-822560A 2	$40.17	_____
• 1993 and up Gasoline Stern Drive and Inboard EFI engines. (Includes Throttle Body and Port Fuel Injection Systems.)			
6. Adapter Harness	84-822560A 5	$73.48	_____
• 1994-1/2 and up 2.5 Litre EFI Outboards (with 824003 ECM only)			
• 1994-1/2 Pro Max/Super Magnum 150/200/225 hp			
• 1997 and up DFI/OptiMax Outboards			
7. Adapter Harness (Signal Conditioner)	84-822560A 6	$9.19	_____
• 1995 and up 3.0 Litre EFI and Carbureted Outboards (NOTE: Use with #8 adapter harness.)			
8. Adapter Harness	84-822560A 7	$45.15	_____
• 1995 and up 3.0 Litre EFI and Carbureted Outboards (NOTE: Use with #7 adapter harness.)			
9. Adapter Harness	84-822560A 8	$51.27	_____
• All Hi-Performance 2.0/2.5 Litre EFI Outboards (with 11350A Digital ECM only). (NOTE: Use with #8 adapter harness.)			
10. Injector Test Harness	84-830043A 1	$17.04	_____
• 1986 and up 2.4/2.5/3.0 Litre EFI Outboards. (NOTE: Use with #8 adapter harness.)			
• 1982 and up Hi-Performance 2.0/2.4/2.5/3.4 Litre Outboards. (NOTE: Use with #11 adapter/injector harness.)			
11. Adapter/Injector Harness	84-830043A 2	$8.19	_____
• 1982 and up Hi-Performance 2.0/2.4/2.5/3.4 Litre EFI Outboards (Including Offshore Models). (NOTE: Use with #10 injector test harness.)			
12. Adapter Harness	84-822560A10	$11.26	_____
• 1998 and up Mercury/Mariner 25-40 hp 4-Stroke (NOTE: Use with #8 adapter harness.)			
13. Adapter Harness - MerCruiser Only	84-861540A 1	$27.69	_____
• 1997 and up Thunderbolt V (NOTE: Use with #8 adapter harness.)			

Dealer Name_____

Address_____

City/State/Zip_____

Person Ordering_____

Dealer Number_____

Dealer Fax Number_____

Date_____

FAX NUMBER (800) 457-8736

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