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40/50/60 EFI FourStroke Generation Change – New Diagnostic Requirements

Models Affected

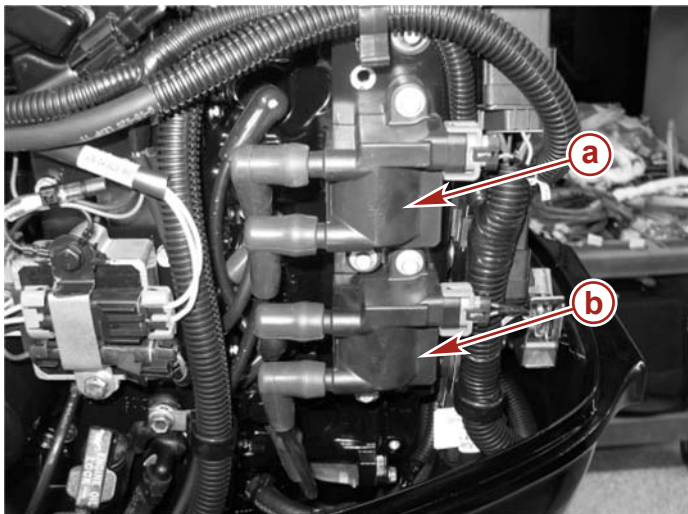
Models Covered	Serial Number
All 40/50/60 EFI FourStroke models	1C104334 and above

Situation

Mercury Marine is pleased to announce that we will be introducing the third generation (GEN III) of the 40/50/60 EFI FourStroke models. These models will include updates to the ignition coils, engine wire harness, ECM, diagnostic systems, and graphics.

Ignition Coil Updates

Changes to the ignition coils on the four cylinder model include changing from a single coil per cylinder to a coil serving two cylinders. This new twin-tower coil has a unique arrangement that has the top coil (#1) sparking the number two and three cylinders, and the bottom coil (#2) sparking cylinders one and four. The three cylinder models will still have a single coil per cylinder, but the design of the ignition coil has changed. The changes to the ignition coils have allowed design changes to the ignition coil mounting plate. These changes to the ignition coil mounting plate will allow for better access to the spark plugs.



43452

Four cylinder ignition coil mounting plate

- a -** Ignition coil for cylinders two and three
- b -** Ignition coil for cylinders one and four

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43453

Three cylinder ignition coil mounting plate

ECM Updates

The ECM on the 40/50/60 EFI models will also be updated. The new ECM will feature a new single plug design. The new plug has a lock bar which assists in installation and removal of the ECM plug.



43454

ECM displayed on a three cylinder model

Computer Diagnostic System (CDS) Updates

Due to the updates to the ECM, the computer diagnostic system will require a software upgrade to provide diagnostic capability. This software upgrade is available to you for a charge. Please see page 4 of this bulletin for ordering instructions. The new program, CDS G3, runs efficiently on any of the CDS computers sold through SPX. CDS G3 and the current version of CDS are compatible with one another and can be installed on the same computer.

CDS G3 will complement the current version of CDS by providing diagnostic support for GEN III 40/50/60 EFI FourStroke, along with select MerCruiser products. In its first release, CDS G3 will provide limited diagnostic coverage. Internet updates are planned to complete the diagnostic functionality for both the GEN III 40/50/60 EFI FourStroke and select MerCruiser products. Future internet updates will also provide support for additional engines and control systems.

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Operating System Requirements

The CDS G3 program will work on all CDS computer systems sold through SPX Corporation. If you purchased a CDS kit with a Dell or Panasonic computer before September 2004, your computer was shipped with the Windows 2000 operating system. Because G3 requires Windows XP, Service Pack 3, it is necessary to update the operating system on these computers. As originally planned, computers purchased with CDS kits from SPX are licensed for Windows 2000 and Windows XP. Through an agreement with Dell, Panasonic, and Microsoft, these computers have a Windows XP certificate of authority and were downgraded from Windows XP to Windows 2000 at SPX. SPX shipped these early Dell and Panasonic computers with special Windows 2000 recovery CDs that would return the computer to its original setup (as it left SPX). SPX also included the Windows XP recovery discs that were supplied by Dell or Panasonic. These discs will return the computer to its original Dell or Panasonic factory setup with Windows XP. These discs will be needed to upgrade the operating system to Windows XP.

NOTE: *The Windows 2000 downgrade process remained in effect from the original release of CDS through CDS Version 3.23. Starting with CDS Version 4.18, CDS became compatible with Windows XP. At that time (September of 2004), SPX stopped the downgrade process and began shipping computers (Dell, HP, or Panasonic) with their original Windows XP operating system intact. If you are currently using an SPX computer with the Windows 2000 operating system, watch for future communications detailing the Windows XP upgrade process. Now is a good time to locate the Windows XP recovery CDs that were shipped with your CDS kit. If the recovery disk has been misplaced, a replacement can be obtained from the manufacturer of the computer (Dell, HP, or Panasonic).*

IMPORTANT: Restoring the computer to the original factory setup will result in the loss of all data and programs stored on the hard drive. Before restoring the computer to its original factory setup, follow the kit instructions concerning backup of all data and having program discs available.

Installation Precautions

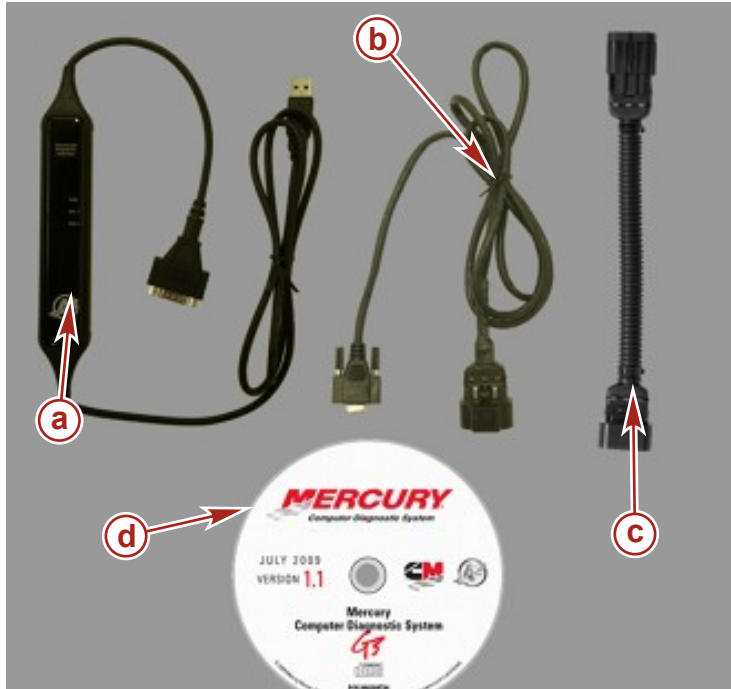
Administrative rights: To install the G3 software, the user performing the installation must have administrative rights. All CDS kits that have the MCDS user originally had administrative rights. Some large dealer chains with IT (information technology) departments restricted these rights to administrators. In those cases, the IT department will have to perform the software installation or they will need to return administrative rights to the user. Dealers that purchased software-only kits will be responsible for determining whether their computers' users have administrative rights.

Antivirus and internet security products: Antivirus and internet security products are recommended for use on computers running CDS or CDS G3 programs. These products will help protect the computer from threats during internet sessions. Due to the sensitivity of some of these products, they may display false security warnings to the user during installation of the software. The user will be required to verify that the CDS or CDS G3 installation program is the cause of such warnings and respond in a way that will allow the software to proceed and complete the installation.

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Ordering Information



43455

Ref.	Description	Part Number
	CDS G3 kit (all pieces pictured above)	8M0046124
a	SmartCraft interface cable	879365022
b	Can P and H adapter	8M0044023
c	Harness adapter (with resistor)	8M0045065
d	Programming CD	898289T87

Order the parts through your normal parts distribution network. For additional information, pricing, or help with ordering a kit, contact Mercury Marine Parts and Accessories.

First time SmartCraft interface cable hook up: The first time that the SmartCraft interface cable is hooked up to the computer's USB port, there will be an installation wizard box that appears asking to install the cable drivers. Select whatever choice is necessary to install the cable drivers automatically.

Hooking up to the engine: The traditional CDS 4 pin connector will no longer be used for diagnostics on the 40/50/60 EFI FourStroke models serial number 1C104334 and above. The 10 pin SmartCraft connector located on the engine above the ECM will now be used for diagnostics. When hooking up to a 40/50/60 EFI FourStroke, it will be necessary to unplug the 10 pin yellow terminator resistor dust cap. Then plug in harness adapter (Ref c, P/N 8M0045065) to the 10 pin SmartCraft connector. This cable has a built-in terminator resistor and will interface between the engine and the CAN P and H adapter cable (Ref b, P/N 8M0044023). The SmartCraft interface cable (Ref a, P/N 879365002) will then plug in between the computer's USB port and the CAN P and H adapter.

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