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## Diagnostic Tool Update - CDS G3 2018

**NOTICE**

The information released in this service bulletin supersedes any previously released bulletins regarding the CDS G3 diagnostic tool.

### Models Affected

Products	Models Covered	Serial Number Or Year
Outboard	Joystick Piloting for Outboard Systems	All
	Verado Engines	All
	30–40 HP (3 cyl) FourStroke EFI Engines	0T409000 and above
	40–60 HP (4 cyl) FourStroke EFI Engines	All
	75–115 HP FourStroke EFI Engines	1B366823 and above
	150–250 HP Two Stroke EFI Engines	0T409000 and above
	150 HP FourStroke Engines	All
	75–125 OptiMax Engines	All
	V6 OptiMax Engines	0T178500 and above
MerCruiser	MerCruiser Axis and Joystick Piloting Systems	All
	MerCruiser ECT Engines	All
	MerCruiser Non-ECT Engines 4.5L, 6.2L, 8.2L	All
	MerCruiser MPI Engines 4.3L, 5.0L, 5.7L, 6.2L, 8.1L	0M300000 and above
Diesel	Mercury Diesel DTS and Zeus Pod Systems	All
Racing	Mercury Racing DSI OptiMax Engines	All
	Mercury Racing Sterndrive 520, 540, 565, 1100, 1350 and 1650	All

### Scope

Worldwide

### Situation

Mercury Marine is pleased to announce a major update release to the CDS G3 application. CDS G3 2018 is now available as a download from [service.mercurymarine.com/g3/download](http://service.mercurymarine.com/g3/download). A license key is needed prior to performing the download. Please order part number 8M0138391 for each computer that CDS G3 2018 is to be installed on.

### New Features

Mercury Marine is pleased to announce updates to the CDS G3 program.

### Literature Version 1.2

New features in literature version 1.2 have been added, offering numerous benefits like:

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**Document type:**

- Service Manuals
- Service Bulletins

**Products:**

- Mercury Outboard
- MerCruiser
- Mercury Diesel
- Mercury Racing
- Rigging



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*NOTE: Availability is based on literature fee payment and contracted product lines.*

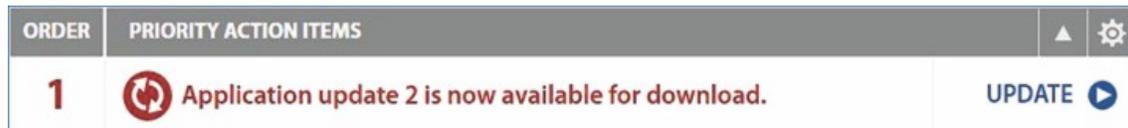
## New Engines Supported

- All Verado
- All OptiMax with 10-pin SmartCraft diagnostic port
- 30–60 HP EFI, 75–115 HP EFI with 10-pin SmartCraft diagnostic port

*NOTE: Refer to the **Models Affected** section for a complete list of supported engines.*

## CDS G3 Updates

Minor releases are provided at no charge during the active subscription terms of a major release. Mercury Marine will make every effort possible to make each of these releases available directly through the CDS G3 application from the **Home** screen. When the computer has internet access and the CDS G3 software is started, it will automatically check for available updates. Notification of updates will appear as a priority action item number 1 on the **Home** screen.



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If updates cannot be provided directly from CDS G3, they will be made available through the [service.mercurymarine.com](http://service.mercurymarine.com) website. When an executable (.exe) is provided as an update, it will contain everything needed to install and run the software. There is no need to have a previous version of the software installed. Also, if a previous version is installed, an executable update can be installed without uninstalling the previous version. CDS G3 no longer includes a hard copy of the media for installation.

## More Frequent Software and Engine Updates

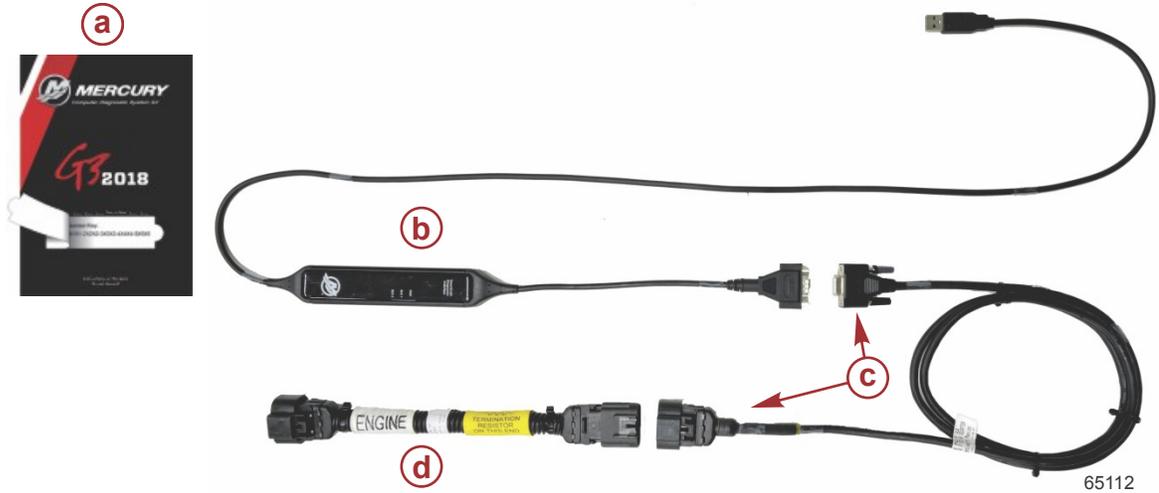
When connected to the internet and first running CDS G3, the following new messages may appear on the Home screen:

- Application update {#} is now available for download.
- As of today, your application is up-to-date.

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## CDS G3 Kit—8M0138392



Ref.	Qty.	Description	Part Number
a	1	Mercury Marine CDS G3 license key	8M0138391
b	1	CDS G3 SmartCraft Diagnostic Interface	898289T81
c	1	CAN P/CAN H adapter harness	898289T83
d	1	G3 engine harness adapter (with resistor)	8M0046081

## CDS G3 Harness Connections

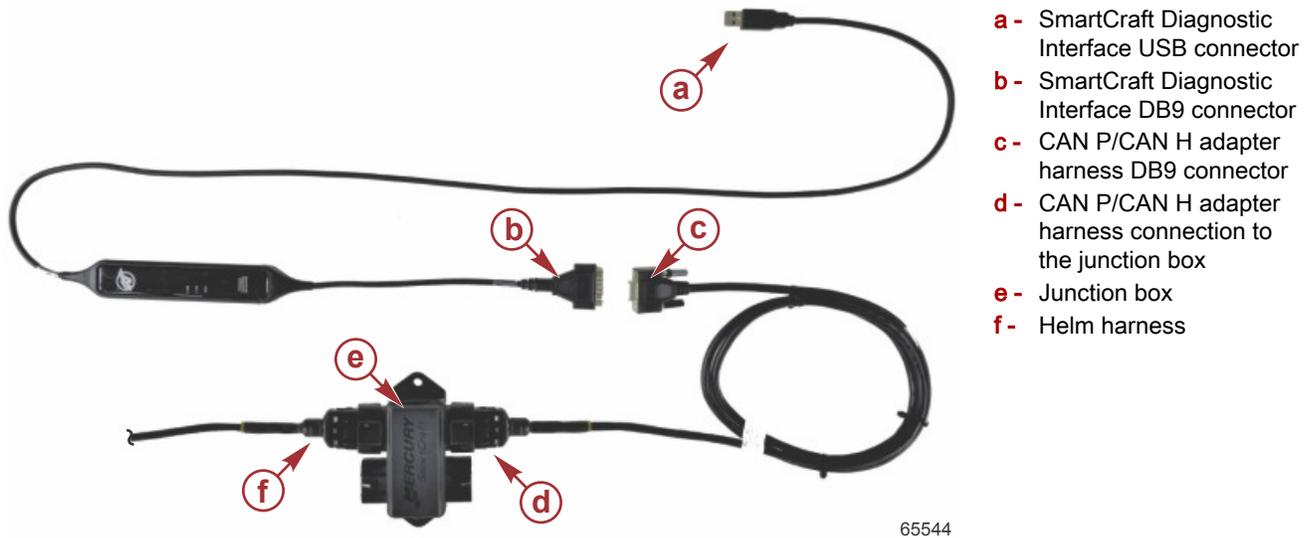
### Vessels with a Junction Box

1. Insert the SmartCraft Diagnostic Interface USB connector into a powered computer USB port.
2. Connect the SmartCraft Diagnostic Interface DB9 connector to the CAN P/CAN H adapter harness DB9 connector.  
**NOTE:** The G3 engine harness adapter is not used when connecting G3 at the helm junction box.
3. Connect the CAN P/CAN H adapter harness to the junction box to communicate with the power package.

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**IMPORTANT:** Ensure that the correct terminator resistors are installed on both ends of the CAN P bus. The CAN P bus must be properly terminated for the tool to communicate reliably. Improper termination will result in communication errors or complete loss of communication.



- a - SmartCraft Diagnostic Interface USB connector
- b - SmartCraft Diagnostic Interface DB9 connector
- c - CAN P/CAN H adapter harness DB9 connector
- d - CAN P/CAN H adapter harness connection to the junction box
- e - Junction box
- f - Helm harness

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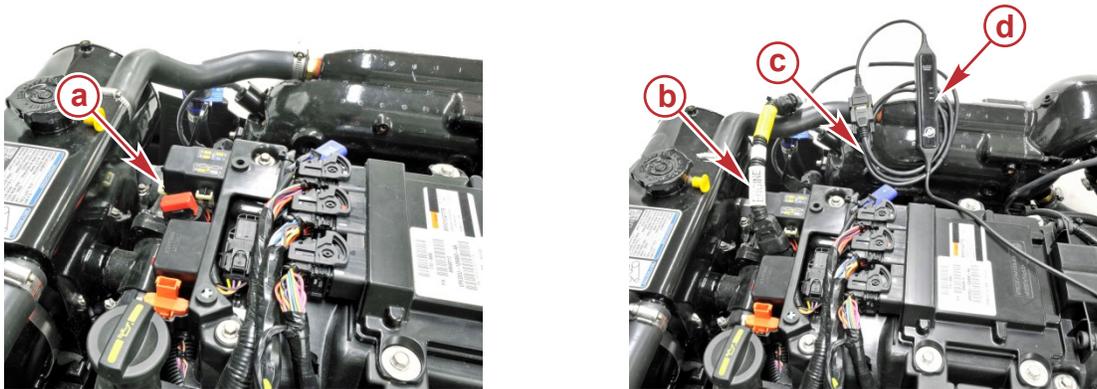
### Vessels without a Junction Box

**IMPORTANT:** The CDS G3 harness adapter (84-8M0046081) contains the correct terminator resistor for the SmartCraft Diagnostic Interface to communicate with the control module.

1. Remove the CAN P/CAN H terminator resistor from the engine harness.

**IMPORTANT:** Ensure that a terminator resistor is installed on the other end of the CAN P bus, typically at the helm harness, or on the other engine in twin engine applications. The CAN P bus must be properly terminated for the tool to communicate reliably. Improper termination will result in communication errors or complete loss of communication.

2. Connect the G3 engine harness adapter to the engine harness.



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- a - CAN P/CAN H terminator resistor
- b - G3 engine harness adapter (engine end)
- c - CAN P/CAN H adapter harness
- d - SmartCraft Diagnostic Interface

3. Connect the CAN P/CAN H adapter harness to the G3 engine harness adapter.
4. Connect the CDS G3 SmartCraft Diagnostic Interface DB9 connector to the CAN P/CAN H adapter harness DB9 connector.

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5. Insert the CDS G3 SmartCraft Diagnostic Interface USB connector into a powered computer USB port.

## Administrative Access

The user performing the CDS G3 program installation must have administrative rights.

**NOTE:** Some information technology (IT) departments may restrict user rights for these accounts. If this has occurred, either the IT department must perform the installation, or must grant administrative rights to the user accounts performing the installation.

## Antivirus/Internet Security Products

Antivirus and internet security products are recommended for use on computers running the CDS G3 programs. Some of these products may display security warnings during the CDS G3 installation. If this occurs, the user must determine whether the warning is caused by the CDS G3 installation program, or if there is some other cause, such as a computer virus. If it can be determined that the CDS G3 installation program caused the warning, the user should allow the installation program to proceed.

## Computer Requirements for CDS G3

Mercury Marine does not recommend specific hardware providers. Mercury Marine recommends that you acquire at least the minimum computer specifications below.

Computer Hardware	Minimum
CPU:	Intel i5 processor 2.4 GHz or higher
Screen resolution:	1024 x 768
Screen size:	10.1 inch
Memory:	8 GB RAM
Hard drive:	128 GB solid state or better
Internet access:	Wireless
USB:	Three USB 2.0 or 3.0 ports
Optional accessories:	Mouse

## Operating System Requirements

Mercury Marine will provide technical support for CDS G3 2018 when installed with the following operating systems:

- Windows 7 SP1 Professional
- Windows 7 SP1 Enterprise
- Windows 7 SP1 Ultimate
- Windows 8.1 Professional
- Windows 8.1 Enterprise
- Windows 10 Pro
- Windows 10 Enterprise

**Mercury Marine recommends Windows 10 Pro for best performance.**

**NOTE:** CDS G3 will not operate on Windows XP, Windows Vista, or Windows 8.0.

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## Software Download

Ensure the computer you wish to install CDS G3 2018 has internet access on a high-speed connection. Navigate with the web browser to [service.mercurymarine.com/g3/download](http://service.mercurymarine.com/g3/download) and enter the 25-digit license key from the card you received, and click the **DOWNLOAD** button. After it completes the download, run the install program.

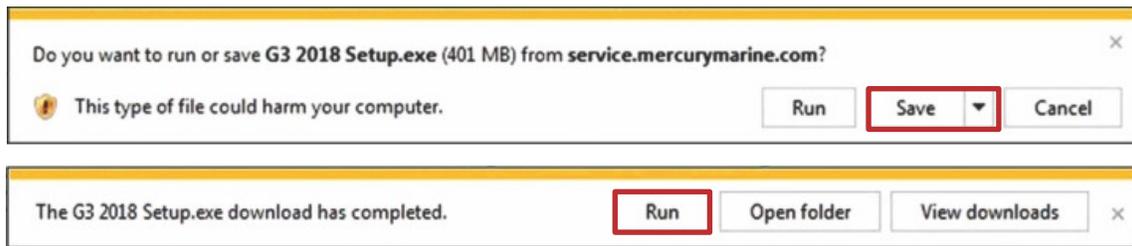


- a - Enter dealer number
- b - Enter 25-digit license key from tear-out section of license card
- c - Click **DOWNLOAD** to start downloading software to computer

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The Microsoft IE web browser will give a message to save, run, or cancel. Click **Save** to save the file to the download folder on the PC, then select the **Run** button to install the program after it downloads.

**NOTE:** Different internet browsers have other iterations to save or run files; consult your internet browser's guide for more information.

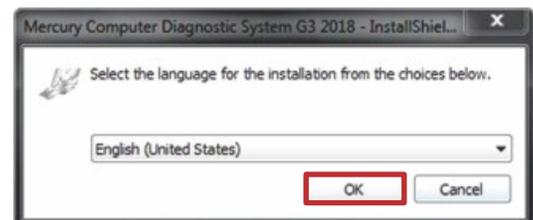


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## Software Installation Steps

Any new installation of CDS G3 may be installed without a previous version of the software installed. Before proceeding with installation, complete all High Priority Updates as provided by Microsoft Windows. To install CDS G3, double-click the executable **g3\_2018\_setup.exe** (name may vary) that you downloaded from the [service.mercurymarine.com/g3/downloads](http://service.mercurymarine.com/g3/downloads). Some screens may vary slightly depending on whether you are updating or performing a new install. Previously installed CDS G3 can be updated without uninstalling.

Select the language for the installation.  
Click **OK** when ready to install.



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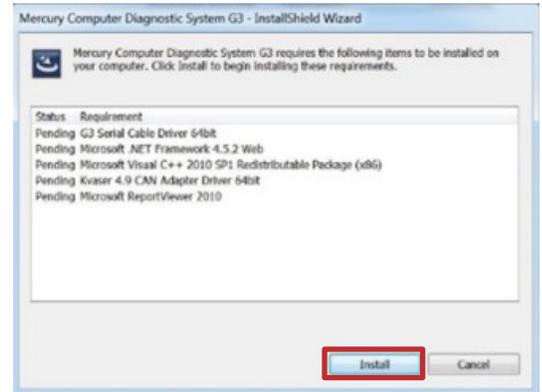
Checking for prerequisites

These programs need to be installed:

- G3 Serial Cable Driver
- Microsoft .NET Framework 4.5.2 or above
- Microsoft Visual C++ 2010 SP1 Redistributable Package
- Kvaser CAN Drivers
- Microsoft Report Viewer 2010

**NOTE:** This list will vary depending on what's already installed.

Click **Install** to continue.



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Preparing to Install

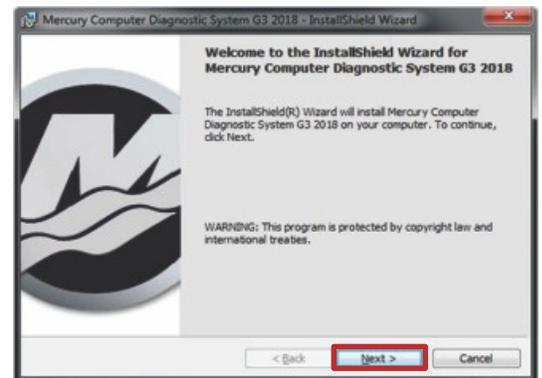
Extracts the file needed to install.



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Welcome screen

Click **Next** to continue.

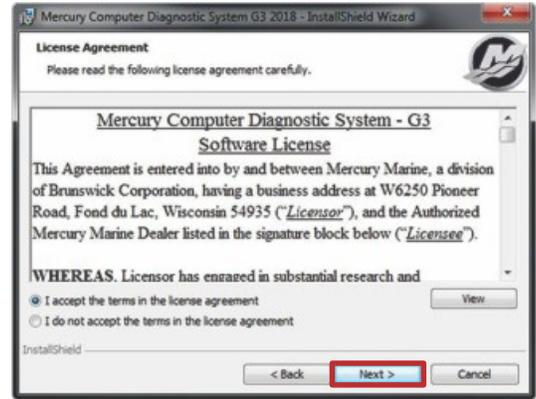


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Accept the terms of the Mercury Computer Diagnostic System - G3 Software License after reading and approving them.  
Click **Next** to continue.



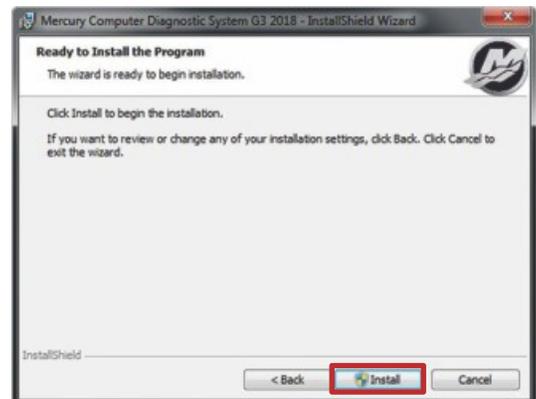
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Accept the terms of the Microsoft Reciprocal License (Ms-RL) agreement after reading and approving them.  
Click **Next** to continue.



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Ready to Install the Program  
Click **Install** to begin the installation.



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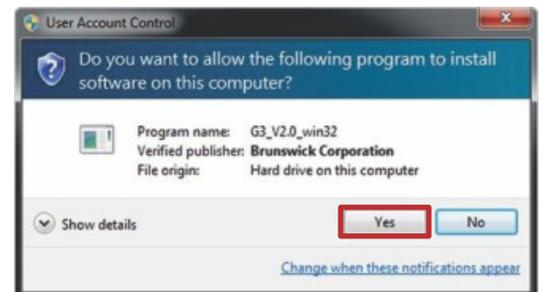
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Installing Mercury Computer Diagnostic System G3 2018 status indicator  
Click **Next** when the button illuminates.



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User Account Control  
Click **Yes** to allow the software on this computer.



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Install is complete, click **Finish**.



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## License Activation

When a CDS G3 license has been activated, account revalidation is still required every 45 days. CDS G3 may only be used by contracted Mercury Marine accounts. If the PC is connected to the internet when CDS G3 is started, revalidation will automatically occur.

## License Key

The CDS G3 license key must be purchased prior to downloading software. A license key is a 25-digit alphanumeric key (for example X1X1X X2X2X X3X3X X4X4X X5X5X) that is used to unlock the CDS G3 application and that ties a PC to a license. Mercury Marine is the provider of the CDS G3 license key, which permits the purchaser to access diagnostic content, configuration tools, and features via the CDS G3 product for business use only. License keys are NOT transferable. Hardware is not provided with the purchase of a license key and must be purchased separately. The CDS G3 licensing agreement is presented for review and acceptance during installation. This document can also be accessed after installation in the start menu. The location is: **Start > Mercury Marine > End User License Agreement**. Review this document for further details.

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**NOTE:** A CDS G3 license can be removed from a machine by pressing the **Deactivate Machine** button from the **Help > About** menu. This will free up a license and allow the license key to be reused on a new or different PC. This option is only available when the licenses are operated under an active subscription.

The following instructions can be found on the back of the license key card:

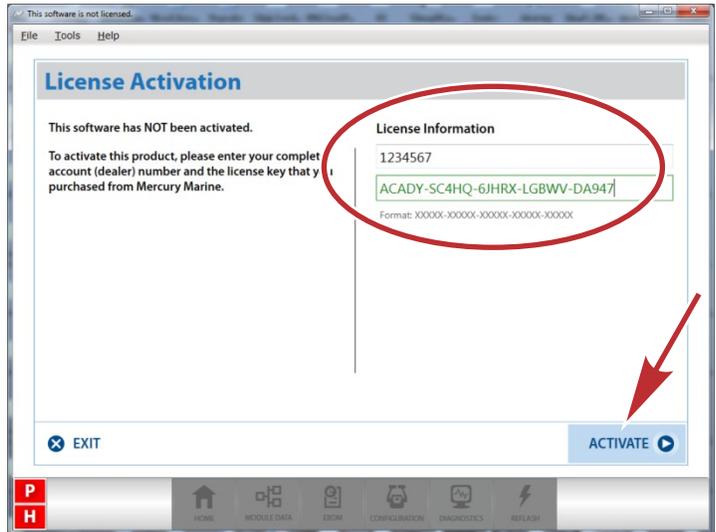
1. Open your internet browser and navigate to the website: **service.mercurymarine.com/g3/download**
2. After the latest version of the software has been downloaded, install and run the software.
3. Use the license key on the front of this card along with your Mercury dealer number to activate the software.

**IMPORTANT:** Only one license key may be used on each computer running CDS G3 2018.

When the CDS G3 software is started for the first time, the license activation screen will launch and will prompt the user for a dealer number and the 25-digit license key that was purchased from Mercury Marine.

Enter the dealer number and license key.

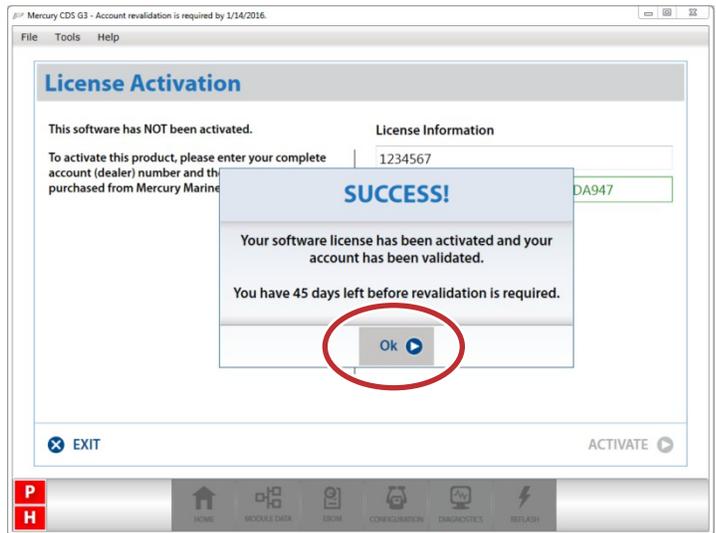
Click **ACTIVATE**.



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When you click **ACTIVATE** the following screens will appear:

Click **Ok** to finish.



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## FAQ's

**License exceeded:** CDS G3 is installed on another computer with the same license key.

**FIX:** Go to Menu select **Help > About** and deactivate from the computer you don't want G3 on. Or, if installing on a new computer and have old computer that you can no longer access, call Mercury Marine Technical Support to have key released.

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**Error Code 101:** The application has encountered a system clock validation error and must close.

**FIX:** Adjust your time/date on computer. Right click on the lower right and choose **adjust date/time**.

**Full report was unable to be generated:**

**FIX:** Set a printer as the default printer. In Windows 10 (go to **setting > printers & scanners**) a checkbox may be checked next to **Let Windows manage my default printer**, uncheck and manually assign a default printer.

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