

Service Bulletin

Bulletin No. 2018-04 OEM No. 2018-03

Circulate to:

Sales Manager

Accounting

Service Manager

Technician

Parts Manager

G3 Reflash Process Change

Models Affected

Models Covered	Serial Number Or Year
Sterndrive JPS Models	2016 to present

Scope

Worldwide

NOTICE

The service technician performing the procedures described in the bulletin must read and understand the entire service bulletin before attempting a reflash procedure. Failure to follow all service bulletin instructions and the instruction shown in CDS G3 during the reflash process may lead to a reflash failure, resulting in an inoperable or disabled vessel.

Situation

ACAUTION

If the boat has Mercury Theft Deterrent System (TDS) installed, then both key fobs need to be present to pair with the TDS module after reflash. Failure to have both fobs will result in the TDS system becoming activated and the boat will be limited to Guardian forced idle.

IMPORTANT: This new process replaces all previous joystick reflash processes outlined in earlier bulletins.

Mercury Outboard Service Bulletins	MerCruiser Service Bulletins
2016-11R4 July 2018	2017-05R1 July 2018
2016-12R4 July 2018	

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The G3 reflash process was refined to make the process easier for the technician. The new process is available in: G3 2018 update 9.



The technician will no longer need to contact Mercury Technical Service to obtain the vessel personality prior to beginning the reflash process. G3 will now record and rewrite the vessel personality during the reflash process.

The following screen shots will show the new process. A video of the reflash process can be found on MercNET or by following this link: <u>https://p.widencdn.net/zpv3s8/New-G3-reflash-6_4_18</u>.

Module Reflash

IMPORTANT: Any power interruption or voltage spike occurring during the reflash process can erase the module and cause the vessel to become nonoperational. Disable the vessel battery charger and all automatic power switching devices while reflashing. Contact Mercury Marine Technical Service if you have a module that has been erased.

- 1. Connect the laptop PC to an AC power source to ensure that the power is not interrupted during the reflash procedure.
- 2. With the key switches on, the engines off, the handles in neutral, and the CDS G3 connected and running, select the **Reflash** tab; then select **Module Reflash** to begin the reflash process. Or from the G3 home screen, select **Update**.

Home			-	_	-	_	_	-	_	_	_	
ORDER	PRIORITY ACTIO	N ITEMS										尊
1	CDS G3 is newer ver	unable to rsion of the	commu softwa	inicate with are.	one or	more modu	les on this	vessel. T	his may be	resolved by u	pdating to a	
2	2 No eBOM is selected							RESOLVE	0			
3	CDS G3 h connecte Please se	as identifie d to. lect the Upe	d that a date bu	an upgrade Itton to per	is availa form the	ble for the o	engine or	vessel sys	stem that yo	ou're		0
ENGINE	INFORMATION	Port	Starl	board								
Engine	Hours		-									
Active F	aults		-									
Mainter	nance Remaining	100%	10	0%								
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3. From the **Reflash Package Browser** screen, select the drop-down arrow and select the appropriate reflash package for your application.

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4. Select **Next** to continue.

🕴 Reflash Package	Browser					Close X	
Group By Category	Search Enter Search Text	Date Range From date	To date	Show All			
Name	- Category D	ate Released Commer	nts Service Bulletin				
JPO with Design 2 Joysticks.	okg Joystick Piloting Outboard	/20/2017	SOB-2016-12R3				
						Next	
Р	A	명 이	6	₩ #	el)		
н	HOME	MODULE DATA EROM	CONFIGURATION D	AGNOSTICS REFLASH	LITERATURE	1118	
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- 5. A **Reflash Prerequisites** screen will show if all prerequisites have been met. Ensure that your system meets the prerequisites. Address any errors that appear.
- 6. Select Next.

• Reflash Prerequisites		Close X
Selected Package: JPO with Design 2 Joysticks.pkg		(A)
Laptop		
Battery		
Status:	High	× .
Capacity:	78% (Min. Required 50%)	✓
Performance		
Current CPU Speed:	2601 MHz (Min. Required 750 Mhz)	💙 🔤
CPU Load:	42.45% (Max. Allowed 60%)	✓
Vessel		
System Voltage:	12.84 V (Min. Required 11 Volts)	V
Engine RPM	0 (must be 0 RPM)	× .
CAN Bus		
CAN P Load:	33.97 (Max. Allowed 80%)	✓
CAN H Load:	28.19 (Max. Allowed 80%)	✓
No other tools on Bus?		✓
Icon Key		
W Prerenuisite nassed check 射 Prerenuisite fa	ed check A Prerequisite has caution status	
		Next
P	n - HB 😫 🚭 🕾 🗲	
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7. The **Reflash Module View** will list the module that will be reflashed.

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8. Click Next.

4	Reflash I	Iodule View								Close X
electe	ed Package:	JPO with Design 2 J	oysticks.pkg							
All	Modules	CCM TVM								
	Status	Module	City ID	Quantity I	us Current	: Calibration		Update	Calibration	
4	ON-LINE	Helm 1 STBD (CCM 145(91)	1	CCM162	ZAXXPAAE000	E_JPO_SF1P0	1000 CCM18	ZAXXPAAB000	C_JPO_SF1P04000
4	ON-LINE	Helm 1 PORT (CCM 146(92)	1	CCM162	ZAXXPAAE000	E_JPO_SF1P0	1000 CCM18	ZAXXPAAB000	C_JPO_SF1P04000
4	ON-LINE	STBD TVM	43(2B)	1	TVM13>	XXOPAAG007	JPO_SF1P00	_000 TVM13	XXXOPAAK009	_JPO_SF1P01_000
23	ON-LINE	PORT TVM	44(2C)	1	TVM13>	XXOPAAG007	JPO_SF1P00	_000 TVM13	XXOPAAK009	_JPO_SF1P01_000
1		*ATTENTION: READ SE ailure to follow the bul	ERVICE BULLETIN SC letin may lead to los	B 2016-12R3 BEF s of module calib	ORE PROCEEDING ation and render	III*** the vessel non-oper	ational. Contact Mer	cury Technical Service	e if this occurs.	
lodul	e Icon Key	Conflicted 🛂 Upda	atable ⊘ Not up	dateable by packa	ge					
_										Next
2 1					AEA EEOM		OMGNOSTICS REFL	ASH LITERATORE	-	
										67

9. Select **Next** to begin the reflash process. You will be required to enter the hull I.D. and engine serial numbers before proceeding.

🕴 Reflash - Serial Number/Hull ID				
Selected Package: JPO with Design 2 Joysticks.pkg				
	Please enter the Serial Numbers	Hull Identification Number and the for each engine on the vessel		
	Hull Id:	test		
	Starboard Serial #:	2Bxxxxxx		
	Port Serial #:	2Bxxxxxx		
Back				Next
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10. G3 now displays what step you are in at the top of the screen.

🗲 Reflash I	Progress	
1 Start 2	Read 3 Reflash 4 Config 5 Write 6 Complete	
Selected Package:	JPO with Design 2 Joysticks	
Reflash in p	progress. Do not interrup: battery power.	
Reflashing device	eloutof4	
Module Info:	STBD TVM	
Current Step:	Sending application file to module	
Progress:		
		R
P	↑ ···: 2 Ø ♥ / ···	11 10
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- G3 will read all vessel personality information and store it for later use.
- Once G3 has read all the information it needs, it will proceed to reflash all the modules. It is not necessary to select each module separately.

🖌 Reflash Progress	
1 Start 2 Read 3 Reflash 4 Config 5 Write 6 Complete	
Selected Package: JPO with Design 2 Joysticks, the	
Reflash in progress. Do not interrup: battery power.	
Reflashing device 1 out of 4	
Module Info: STBD TVM	
Current Step: Sending application file to module	
Progress:	
	Þ
	_
H HOME MODILEZARIA GROM COMPAGNATION DURADOSTICS REFLERE LITERATORE	11 12
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11. When all of the modules are reflashed, G3 will prompt you to Launch Helm Setup, this will assign the City ID's to each module. Click Launch Helm Setup.

🖌 Reflash Progress	
1 Start 2 Read 3 Reflash 4 Cooper 5 Write 6 Complete	
Selected Package: JPO with Design 2 Joysticks.pkg Reflash is almost complete. Perform the following Helm Setup tasks to finalize. 1. Select number of Helms and Engines.	
2. Assign City Id 3. Lever Adapt	
	Launch Helm Setup 🕞
P H	田田
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12. When the assign City ID and Lever Adapt have been completed, click Close on the Helm Setup screen.

🙆 Lever Adapt		ose X
1 Start 2 Read 3 Refl	sh 4 Config 5 Write 6 Complete	
Configuration Assign City ID	Lever Adapt	Helm
	Select Lever Configuration	
	Choose Lever Type Port Starboard Normal Adapt Adapt Adapt	
	Sta	rt 📢
P H		11 12
		67490

13. G3 will now restore the information that was read before it began the reflash.

🗲 Reflash Progress	
1 Start 2 Read 3 Reflash 4 Config 5 Write 6 Complete	
Selected Package: JPO with Design 2 Joysticks.pkg	
Reflash in progress. Do not interrupt battery power.	
Working	
Module Info: Helm 1 STBD CCM	
Current Step: Restoring Vessel Personality Items	
Progress:	
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- When the Write process is complete, G3 will take you to a new Reflash Summary page.
- A successful reflash and rewrite will have all green check marks.

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• If an error occurred during any of the processes, a red X will appear in place of the green check mark. The drop-down arrows on the right will provide information on how to correct the issue. Select **Next**.

🖌 Reflash Progress	
1 Start 2 Read 3 Reflash 4 Config 5 Write 6 Complete	
Selected Package: JPO with Design 2 Joysticks.pkg	
Reflash Summary	
Vessel Personality data transferred. No further action required.	
V STBD TVN	~~
✓ Helm 1 STBD CCM	~
V PORT TVM	~
V Helm 1 PORT CCM	~
li de la companya de	
View Report	
	Next
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14. The Reflash Module View will list the modules that have been reflashed.

						Close
lecte	ed Package:	JPO with Design 2 Joystic	ks.pkg			
AILI	Modules	CCM TVM				
	Status	Module	City ID	Quantity Bus	Current Calibration Update Cali	ibration
1	ON-LINE	Helm 1 STBD CCM	145(91)	1	CCM18ZAXXPAAB000C_JPO_SF1P04000 CCM18ZAXX	KPAAB000C_JPO_SF1P04000
1	ON-LINE	Helm 1 PORT CCM	146(92)	1	CCM18ZAXXPAAB000C_JPO_SF1P04000 CCM18ZAXX	KPAAB000C_JPO_SF1P04000
1	ON-LINE	STBD TVM	43(2B)	1	TVM13XXXOPAAK009_JPO_SF1P01_000 TVM13XXXC	DPAAK009_JPO_SF1P01_000
1	ON-LINE	PORT TVM	44(2C)	1	TVM13XXXOPAAK009 JPO SF1P01 000 TVM13XXXO	PAAK009 JPO SF1P01 000
		WATTENTION DEAD CENIGE		D 2016 1202 DEFORE 1		
1	F	***ATTENTION: READ SERVICE Failure to follow the bulletin m	BULLETIN SC hay lead to los	B 2016-12R3 BEFORE F s of module calibration	ROCEEDINGIII*** and render the vessel non-operational. Contact Mercury Technical Service if this	s occurs.
odul	e Icon Key Ip to Date	***ATTENTION: READ SERVICE aniure to follow the builtetin m	BULLETIN SC hay lead to los	B 2016-12R3 BEFORE F s of module calibration	ROCEEDINGIII*** and render the vessel non-operational. Contact Mercury Technical Service if this	s occurs.
odul V	e Icon Key Ip to Date	***ATTENTION: READ SERVICE ailure to follow the builtein m	BULLETIN SC hay lead to los	IB 2016-12R3 BEFORE f s of module calibration odateable by package	ROCEEDINGIII*** and render the vessel non-operational. Contact Mercury Technical Service if this	s occurs. Finish
odul	e Icon Key Ip to Date	***ATTENTION- READ SERVICE ailure to follow the builtetin m	BULLETIN SC hay lead to los	B 2016-12R3 BEFORE E s of module calibration addateable by package	ROCEEDINGIII*** and render the vessel non-operational. Contact Mercury Technical Service if this	s occurs. Finish

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- 15. Click Finish to exit the process.
- 16. Return to the **Module Data** screen.

Play	Data Live Data System D	ata		View Fault	Freeze Frame Run History Ma	aintenanc
tatus	Module	City ID	Bus	Cal ID	Info	
ON	STBD Engine	ANALES .	P	LEG14p0AAAD05_3S300L6G5_P11_000		
ON	Helm 1 STBD CCM	riteit	P	CCM16ZAXXPAAE000F_JPO_SF1P02000	Faults - please click the View Faults button for details.	
ON	STBD TVM	なななか	Ρ	TVM13XXXOPAAK009_JPO_SF1P01_000		
DN	PORT Engine	the store	P	LEG14p0AAAD05_3S300L6G5_P11_000		
ON	Heim 1 PORT CCM	1018105	Ρ	CCM16ZAXXPAAE000F_JPO_SF1P02000	Faults - please click the View Faults button for details.	
ON	PORT TVM	ACRES	P	TVM13XXXOPAAK009_JPO_SF1P01_000		
ON	Helm 1 Device 1 Display Gauge	and and	P	VV13CKAAA		
ON	VesselLink	12021	P	VV13CKAAA		
ON	Vessel Control Module	11.8074	P	AT15_prod_083_ActTrim_G1_P02_000		
ON	Helm 1 Steering Wheel	18953	P	00.06.0602		
ON	Trackpad 1	20,0000	Ρ.	TPD12DAXXTAAFr1000		
ON	Trackpad 2	272032	P	TP15GPSTABLIk002		
Resca	in This Boat			Modules 16 Online 16	Clear All No.	Jules Faul
		*	러명	9 6 9 4	(d)	_

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- 17. Clear individual module Freeze Frame data by highlighting the individual module, and then selecting the **Freeze Frame** button on the top of the screen.
 - All PCMs
 - All CCMs
 - All TVMs
 - Vessel control module

old M	Iodule Data					1014/2005/0010	Contraction of the		
- 10 -									
Pla	y Data Live Data System D	ata					iew Fault	s Freeze-Frame R	un History
Statu	s Module	City ID	Bus	Cal ID		Contraction of the local division of the loc		Info	
ON	STBD Engine	-		LEG14p0AA	AD05_353	IOOL6G5_P	11_000		
ON	Helm 1 STBD CCM		P	CCM16ZAX	XPAAE000	F_JPO_SF1	P02000	Faults - please click the View Faults button for details.	
ON	STBD TVM	1 million	P	TVM13XXXX	DPAAK009	JPO_SF1P	01_000		
ON	PORT Engine	1.1	P	LEG14p0AA	AD05_353	00L6G5_P	11_000		
ON	Helm 1 PORT CCM	0.00	P	CCM16ZAX	XPAAE000	F_JPO_SF1	P02000	Faults - please click the View Faults button for details.	
ON	PORT TVM	11.1	р	TVM13XXX0	PAAK009	JPO_SF1P	01_000		
ON	Helm 1 Device 1 Display Gauge		P	VV13CKAA/	1				
ON	VesselLink		р	VV13CKAA/	1				
ON	Vessel Control Module		P	AT15_prod	083_ActT	rim_G1_P0	2_000		
ON	Helm 1 Steering Wheel	1 Q.	P	00,06.0602					
ON	Trackpad 1	1.511	P	TPD12DAX)	TAAFr100	0			
ON	Trackpad 2	26.04	Ρ	TP15GPSTA	BLIk002				
Resc	an This Boat			Modules 16	online	16			Clear All M
						_	_	-	

- a Freeze Frame
- **b** Highlighted module
- c- TVM
- d CCM
- e Vessel control module
- 18. When the freeze frame data is displayed, select **Options**—the gear icon in the upper right corner. Then select **Clear History**.

Data Item	Rx Doc1 State Of Health	Rx Doc 10 Soh	RX Doc7 State Of Health	Rx D PRINT PAGE			
FF_FrequencyCount	er 12	12	12	12			
FF_RunTime	883.6 h	883.6 h	883.6 h	883.6 RELOAD DATA			
FF_EngineState	Stall	Stall	Stall	Stall			
FF_EngSpeed	0 r/min	0 r/min	0 r/min	0 r/m CLEACHISTORY			
F_LoadPercent	0.00 %	0.00 %	0.00 %	0.00 %			
F_BattVolt	11.65 V	12.27 V	12.27 V	12.33 V			
F_BaroPressure	29.19 inHg	29.19 inHg	29.19 InHg	29.19 inHg			
F_MapPressure	29.16 inHg	29.19 inHg	29.16 inHg	29.18 inHg			
F_PowerLimit	5 %	5 %	5 %	5 %			
F_Demand	16.50 %	16.50 %	16.50 %	16.50 %			
F_TPSPercent	9.23 %	9.23 %	9.23 %	9.23 %			
F_BlockPressure	0.02 inHg	0.02 inHg	0.02 inHg	0.02 inHg			
F_CoolantTemp	68.00 °F	68.00 °F	68.00 °F	68.00 °F			
F_StarCintTemp	32 °F	32 °F	32.ºF	32 °F			
F_PortCintTemp	32 °F	32 °F	32 °F	32 °F			
F ChargeTemp	73.40 °F	73.40 °F	73.40 °F	73.40 °F			
F_FPCTotal	0.00 mg	0.00 mg	0.00 mg	0.00 mg			
F_GearPosition	Neutral	Neutral	Neutral	Neutral			
F_TrimPosition	0.00 %	0.00 %	0.00 %	0.00 %			
F_StarTabPosition	0.00 %	0.00 %	0.00 %	0.00 %			
FF PortTabPosition	0.00 %	0.00 %	0.00 %	0.00 %			

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19. Select OK.

						ł
Data Item	Rx Doc1 State Of Health	Rx Doc 10	Soh	RX Doc7 State Of Health	Rx Doc 9 Soh	
F_FrequencyCounte	ar 12	12		12	12	
F_RunTime	883.6 h	883.6 h		883.6 h	883.6 h	- 1
F_EngineState	Stall	Ctall		Ctall	Stall	
F_EngSpeed	0 r/min	UCTODY U	AC DEEN	CLEADED	0 r/min	
F_LoadPercent	0.00 %	ISTORY H	AS BEEN	LLEARED	0.00 %	
F_BattVolt	11.65 V				12.33 V	
F_BaroPressure	29.19 inHg	Histon	whas been clear	he	29.19 inHg	
F_MapPressure	29.16 inHg	Thotor	y nus been crean	eu.	29.18 inHg	
F_PowerLimit	5 %				5 %	-
F Demand	16.50 %				16.50 %	
F_TPSPercent	9.23 %				9.23 %	
F BlockPressure	0.02 inHg				0.02 inHg	
F_CoolantTemp	68.00 °F		01 0		68.00 °F	
F_StarCintTemp	32 °F		UNO		32 °F	
F PortCintTemp	32 °F	2 32 °F		32 °F	32 °F	
F_ChargeTemp	73.40 °F	73.40 °F		73.40 °F	73.40 °F	
F_FPCTotal	0.00 mg	0.00 mg		0.00 mg	0.00 mg	- 1
F GearPosition	Neutral	Neutral		Neutral	Neutral	
F_TrimPosition	0.00 %	0.00 %		0.00 %	0.00 %	
F_StarTabPosition	0.00 %	0.00 %		0.00 %	0.00 %	
F PortTabPosition	0.00 %	0.00 %		0.00 %	0.00 %	1

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20. Select Close to return to the Module Data screen. Continue until all modules have been cleared.

Freeze Frame Data for Module: STBD Engine -	Close X			
	No Freeze Frame buffers	present		
		Þ		
		-		
				63666

Warranty

NOTE: The new flat rate amount replaces the flat rates called out in the previous bulletins, listed in the **Situation** section of this bulletin.

If the engine is within the warranty period, submit a warranty claim through your normal warranty processing channel.

- Starboard engine serial number
- Labor: 0.5 hour per boat
- Part code: 536 (CCM), 566 (TVM)
- Fail code: 79

Outside the United States and Canada: Follow the instructions issued by your local office or distributor.

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