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Service Bulletin

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Setup and Reflash of Dual Calibration QC4v Engines

Models Affected

Models Covered	Serial Number Or Year
Mercury Racing 1550 Dual Calibration engine	All

Scope

Worldwide

Situation

There is a new procedure written to pair the key fobs for the 1550 Dual Calibration engine.

Correction

Follow the procedure when the conditions listed below are present.

Updating PCMs or Helm Modules

The following steps must be performed in order every time as listed below when using Racing dual Calibration engines:

- Initially setting up a vessel
- Updating the calibration in the engine PCMs or helm modules with a reflash package
- After an engine or helm module replacement
- Anytime the red locked LED is blinking once per second (this indicates one or more modules in the vessel have not yet paired to the key fobs)

Dual Calibration Key FOB Pairing Procedure

⚠ CAUTION
The dual calibration key fob pairing procedure is not difficult; however, the steps must be performed properly or engine damage will occur!

IMPORTANT: For multiengine vessels, particular care must be taken to follow these instructions to ensure the engines are configured identically.

1. Remove the theft key fob from the theft deterrent system (TDS) docking station.
2. Key down engine or engines.
3. Key on all engines (leaving the fob out of the docking station until directed by G3 to insert them during step 6).
4. Perform the G3 reflash of all PCMs, helm modules, and other modules in the vessel if this is an update of an existing boat; otherwise go to step 5.
5. Perform a G3 helm setup procedure: Assign city ID, followed by the lever adapt process. Perform a complete G3 helm setup if:
   a. This is a new vessel that has not been helm and lever configured yet

    b.   A reflash of any existing vessel or engine module has been performed

    c.   Anytime that a vessel module, engine module, TDS component, or lever set has been replaced

    d.   Whenever an engine is removed or replaced

    e.   If the technician has any question in their mind about the current state of the vessel's configuration

IMPORTANT: The race key fob must be inserted second. Insert it only after G3 directs you to "insert second key."'

6.   With the fob out of the docking station, use G3 to perform the "Pair key fobs to the Merc TDS" procedure. Perform the pairing even if the fobs have been previously paired prior to a reflash or component replacement. The docking station LED will begin glowing red, then blink red rapidly after the base fob is paired, and will finish with a solid green LED after the race fuel key fob is paired.

Final step after completing the G3 pairing: Verify that the fobs have been paired correctly.

Use G3 on the live data screen:

1.   Key down all engines.

2.   Remove fob.

3.   Key up all engines with the key fob out of the docking station.

4.   The "LockedStatus" for every engine should say "Locked" and the docking station LED should be red. Be sure to check each engine's status with the G3 tool.

Insert the race fuel key fob. The next three must all be true. Be sure to verify for every engine.

1.   The "LockedStatus" for every engine should say "Unlocked" and the "HO_CalEnabled" status for every engine should now show "Enabled."

2.   The docking station LED will turn green.

3.   "Performance Key Detected" must be showing on the VesselView display for each engine.

Key up all engines and insert the base key. The next three items must all be true. Be sure to verify for every engine.

1.   The LED should turn green.

2.   The "LockedStatus" for every engine should say "Unlocked" and the "HO_CalEnabled" status for every engine should now show "Disabled."

3.   "Performance Key Detected" must not be showing on the VesselView display for any engine.

IMPORTANT: If either 1, 2, or 3 are not all happening together with the Performance Key as described; or if 1, 2, or 3 are not as described using the Base Key—the setup procedure was not successful. You will need to go to step 6 and run the G3 TDS reset procedure and perform the pairing procedure again.

NOTE: For example, if the VesselView shows "Performance Key Detected," but G3 shows the "HO_CalEnabled" as "Disabled," the procedure was not done correctly and you must perform the TDS pairing procedure again. If 1, 2, or 3 do not function as described with the Performance Key for every engine, that means there is a mismatch of the module configurations. Do not run the engines until the pairing procedure has been completed correctly.

⚠ CAUTION
Reminder—The operator must use the correct fuel for each fob or damage will occur!