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DTS HELM PANEL KIT: DUAL ENGINE WITH ZERO EFFORT CONTROL

IMPORTANT: This document guides our dealers, boatbuilders, and company service personnel in the proper installation or service of our products. If you have not been trained in the recommended servicing or installation procedures for these or similar Mercury Marine products, have the work performed by an authorized Mercury Marine dealer technician. Improper installation or servicing of the Mercury product could result in damage to the product or personal injury to those installing or operating the product. Always refer to the appropriate Mercury Marine service manual for component removal and installation instructions.

NOTE: After completing installation, place these instructions with the product for the owner's future use.

NOTICE
This Product Requires Electronic Calibration Before Use.
Installation of this product will require electronic calibration. This calibration must not be attempted by anyone other than the Original Equipment Manufacturer (OEM) or a Mercury technician trained in Digital Throttle and Shift systems (DTS) at an authorized Mercury dealership. Improper installation and calibration of the DTS product will result in a system which is inoperable or unsafe for use.

DTS Wiring Guidelines

⚠ WARNING
Splicing or probing will damage the wire insulation allowing water to enter the wiring. Water intrusion may lead to wiring failure and loss of throttle and shift control. To avoid the possibility of serious injury or death from loss of boat control, do not splice or probe into any wire insulation of the DTS system.

- Never attempt to connect, network, tie into, switch, or sink source voltage or current from the DTS wiring harnesses.
- Never attempt to connect any type of communication or navigation equipment into the DTS wiring harnessing other than at the designated connection point.
- Always install boat accessory equipment using an appropriate power source connection, such as a fuse panel or junction box.
- Never attempt to tap directly into any of the DTS electrical wiring harnesses for a source of power.

Wiring Guidelines for Electrical Boat Accessories

⚠ WARNING
Excessive voltage drop may compromise the DTS system, leading to serious injury or death from loss of throttle and shift control. Do not wire any electrical accessory into the 12-volt ignition key switch circuits of the DTS system.

IMPORTANT: Do not connect boat accessories to 12-volt or ignition key switch DTS circuits. Use a separate, switched 12-volt source for wiring boat accessories.

The DTS system requires a consistent 12-volt power source. Splicing or connecting accessories to the 12-volt or ignition key switch DTS circuits (purple, purple/white, or red wires) could blow a fuse or overload circuits, causing intermittent or complete loss of operation.

Harness Installation Guidelines

- Locate an appropriate path for routing harness connections to their installation points.
- Inspect the routing path to ensure that surfaces are free of any sharp edges or burrs that could cut the harness.
- Fasten and support the harness with clamps or cable ties along the routing path. A clamp or cable tie must be used within 25.4 cm (10 in.) of any connection in a DTS system.
- Ensure that all connections are tight and seal all unused connectors with weather caps.

DTS Helm Panel Installation

1. Determine where to mount the DTS Helm Panel. Follow these guidelines:
   - Mount the panel in an accessible area.

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- Mount the panel on a flat surface.
- Mount the panel in an area where the wiring connections will not be stepped on or disturbed.
- Mount the panel in an area that stays relatively dry.
- Mount the panel with the harness at the bottom of the panel to keep moisture out of the harness connectors.
- Mount the panel to avoid sharp bends in any accessory cables that will be routed to the junction box.
- Mount the panel so that the 14-pin connector on the panel and the 14-pin connector on the data harness will connect easily without sharp bends in the cables.

2. Mount the DTS helm panel securely using the supplied washers and screws.

Key Switch Wiring Connections

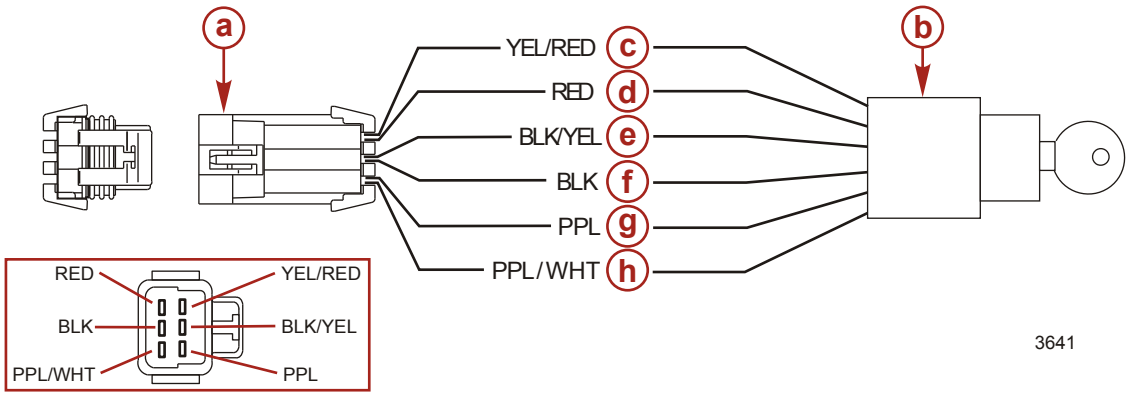
Wiring Instructions for Non-Mercury Marine Ignition Key Switch

⚠ CAUTION

Ignition switches not sold by Mercury Marine can exceed acceptable current flow and voltage drop specifications, causing the engine to start unexpectedly. Only install switches sold through Mercury Marine.

IMPORTANT: We recommend only the use of Mercury Marine brand SmartCraft and DTS accessories. Mercury Marine designs and manufactures these accessories specifically for use on our SmartCraft or DTS systems, with each of these accessories passing through an extensive product qualification process. It is impossible to test our systems with all accessories manufactured and sold by other entities. If a boatbuilder or dealer chooses to disregard this recommendation, any non-Mercury Marine components connected to a SmartCraft or DTS system must adhere to all specifications provided. Documentation exhibiting compliance with these specifications must be submitted and approved by Mercury Marine before releasing the finished product for sale. Damage caused by the use of accessories or parts not manufactured or sold by Mercury Marine is not covered under warranty.

- The ignition key switch must comply with Mercury specifications for key switches and controller input switches (897741-S or 897791-S). Switches that do not meet these specifications could leak current.
- Switches must contain an emergency stop circuit.



a - Connector - Packard Metripack 150 Series sealed (6 pin)
b - Ignition key switch
c - Crank
d - +12 volts
e - Lanyard stop
f - Ground
g - Run
h - Accessory

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Wire Color Code Abbreviations

Wire Color Abbreviations				
BLK	Black		BLU	Blue
BRN	Brown		GRY	Gray
GRN	Green		ORN or ORG	Orange
PNK	Pink		PPL or PUR	Purple
RED	Red		TAN	Tan
WHT	White		YEL	Yellow
LT or LIT	Light		DK or DRK	Dark

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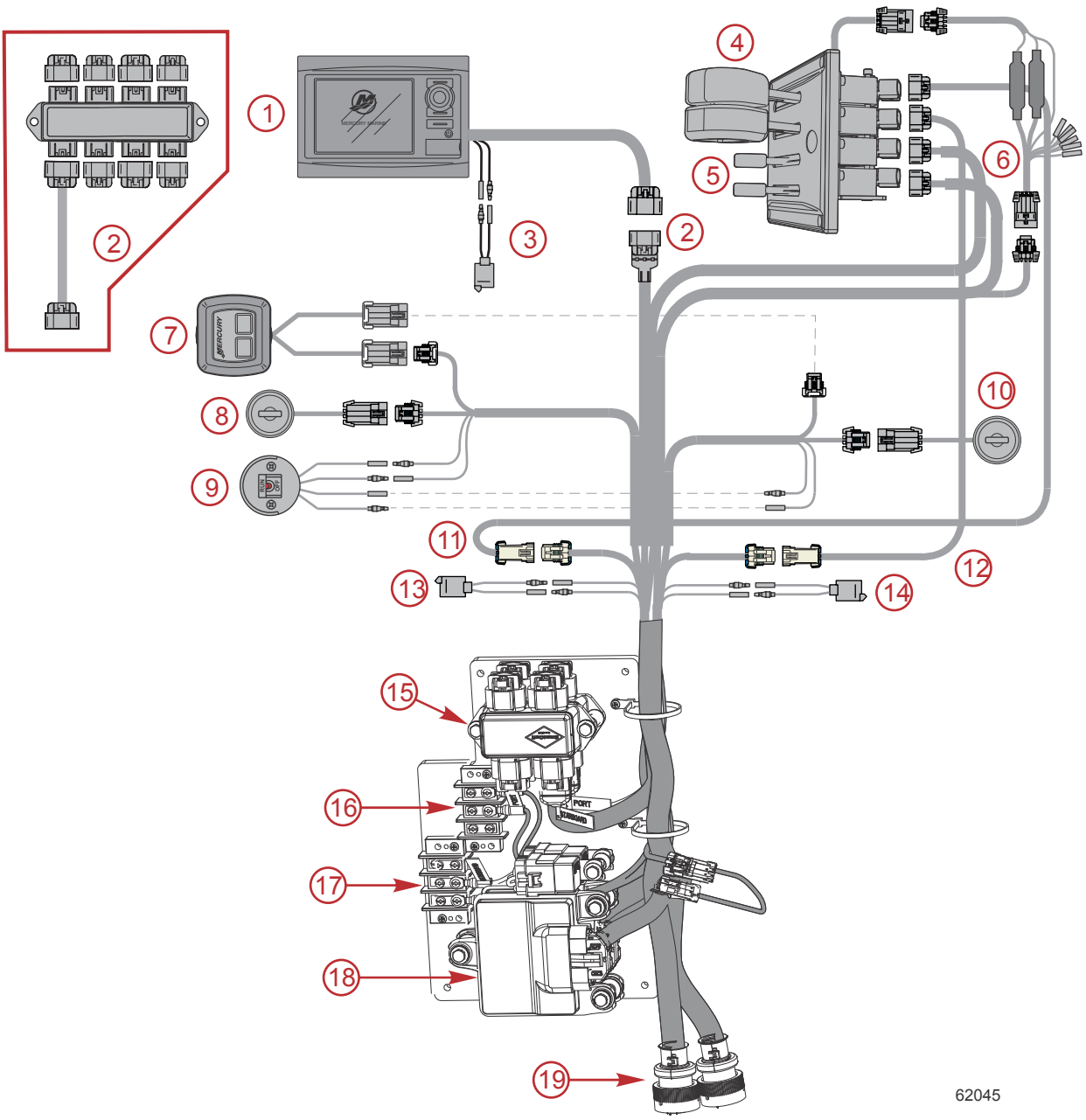
DTS Dual Engine Single Helm with Zero Effort Control



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1 - VesselView
2 - VesselView harness[1.]
3 - Warning horn
4 - Throttle levers
5 - Shift levers
6 - Trim adapter harness
7 - Start/stop switch (optional)
8 - Ignition key switch
9 - Lanyard stop switch
10 - Ignition key switch
11 - Lever three adapter harness
12 - Lever four adapter harness
13 - Warning horn
14 - Warning horn
15 - Junction boxes
16 - Switched power
17 - Switched power
18 - Command modules
19 - Command module harnesses

1. When more than one VesselView is used, a female to female adapter harness and an extra J-Box is required to connect the VesselViews to.

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