# 892984A01, 892984A02
# INSTALLATION INSTRUCTIONS
# DTS PANEL MOUNT REMOTE 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.**

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

| Notice |
|---|
| **This Product Requires Electronic Calibration Before Use.**<br>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. |

## Components Contained in Kit

| Qty. | Description | Part Number |
|---|---|---|
| 1 | Panel mount remote control | NSS |
| 1 | Back bezel cover | 858682 |
| 1 | Front bezel cover | 858681 |
| 1 | Lanyard switch decal with instruction sheet | 8M0087765 |
| 1 | Cable tie | 8M0029338 |
| 1 | DTS quick reference guide | 899664 |
| 1 | DTS system calibration instruction sheet | NSS |
| 1 | Parts bag assembly | NSS |

## Parts Bag Assembly

| Qty. | Description | Part Number |
|---|---|---|
| 3 | Wood screw - #12 x 1.25 | 884543 |
| 2 | Screw - M4 x 12 mm | 858660 |
| 1 | Allen wrench - 2.5 mm | 888490 25 |
| 1 | Allen wrench - 5.0 mm | 888490 50 |
| 3 | Screw - 0.250-20 x 1.50 | 859031 |
| 3 | Nut - 0.250-20 | 814101 |
| 3 | Washer | 69057 |

***NOTE:*** *Install the lanyard switch decal near the lanyard switch as described in the instruction sheet in the kit.*


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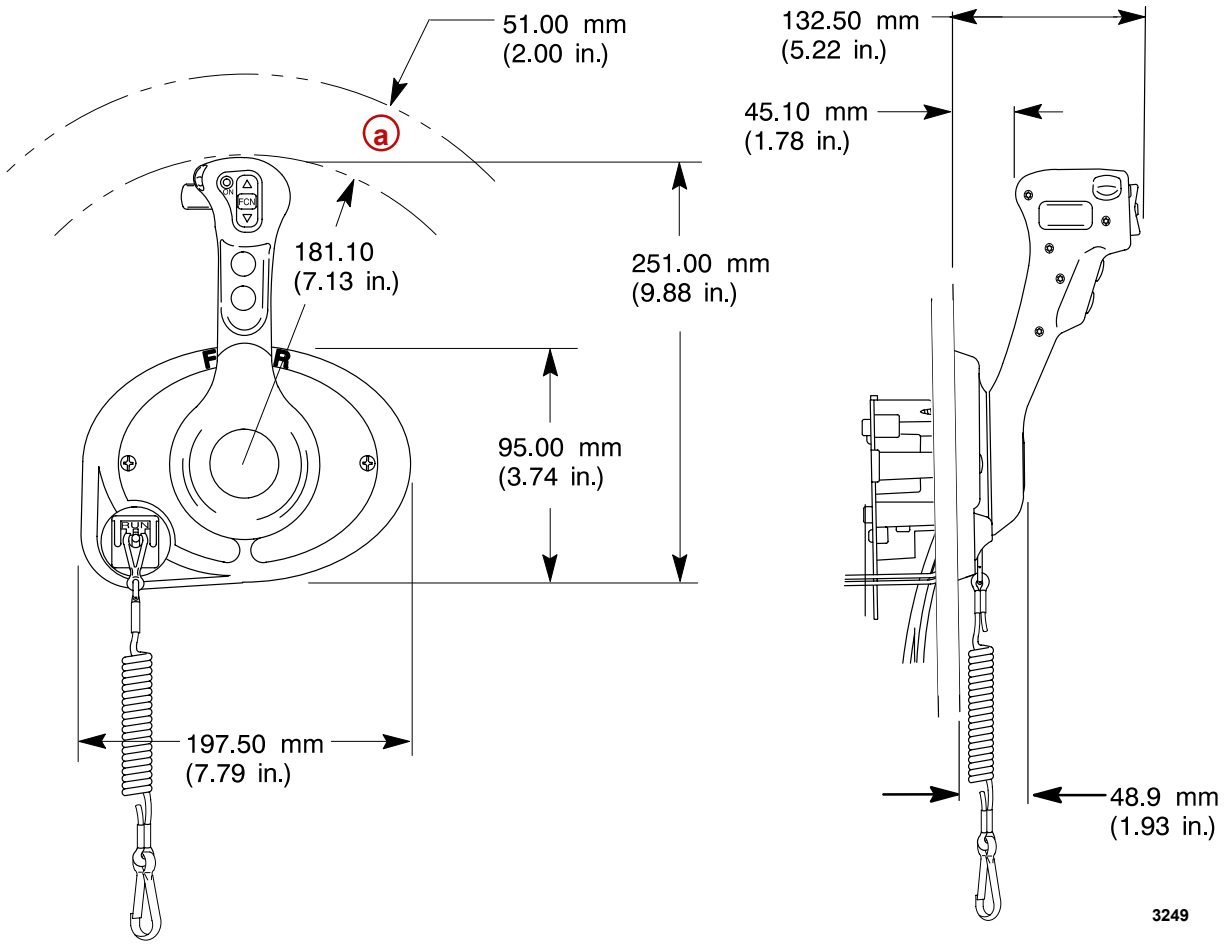
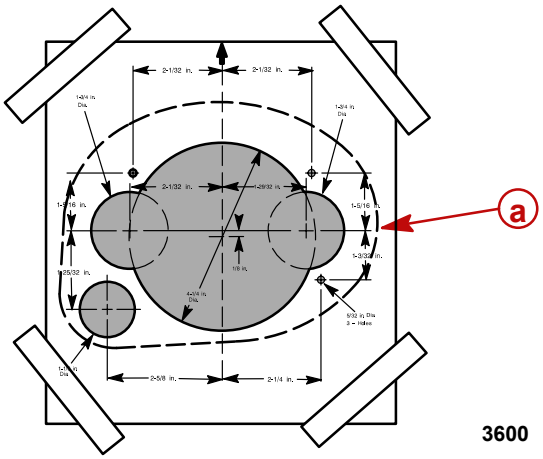
# Required Mounting Clearances for DTS Panel Mount Control




**a -** 53 mm (2.00 in.)

# Locating and Drilling Mounting Area

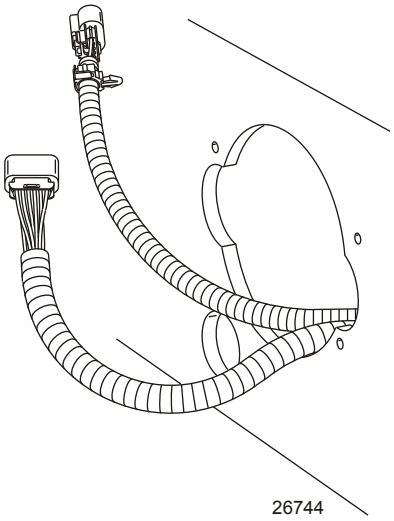
1. Locate the area of boat where the remote control is to be mounted. Allow sufficient clearance for handle movement and clearance for the wiring.
2. Place the template over the mounting area; cut and drill as instructed on the template located on the last page of this instruction sheet.
   **IMPORTANT: After cutting the mounting area, ensure the opening is free of sharp edges.**



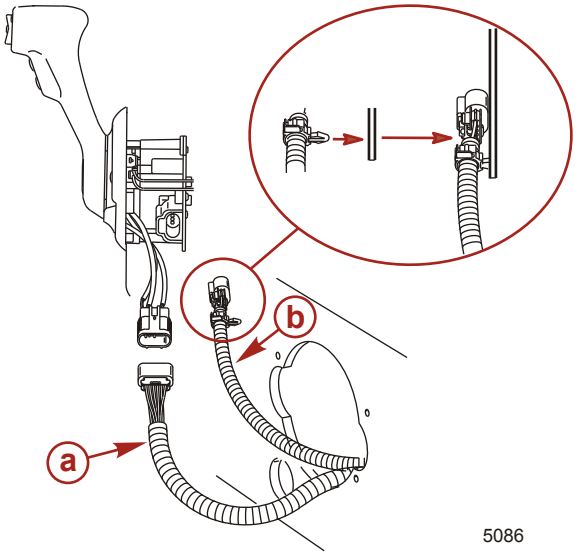

**a -** Template

# Installing DTS Panel Mount Control

1. Ensure the opening is free of sharp edges.
2. Route the wiring for the remote control into the opening.

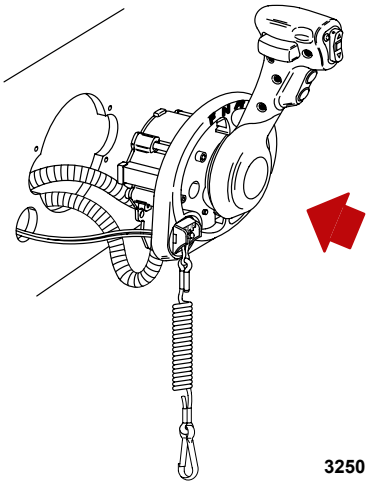



3. Connect the remote control handle and lever 1 harnesses.
4. Insert the bayonet end into the bracket hole. This will prevent the connector from pulling out.
   **IMPORTANT: Be sure to leave slack in the remote control harness to avoid binding during control handle movement.**

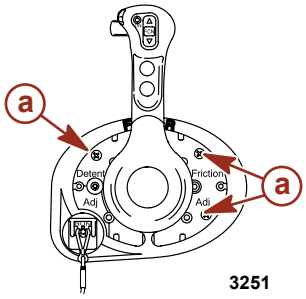



**a -** Remote control handle harness
**b -** Lever 1 harness

5. Place the remote control into the opening.

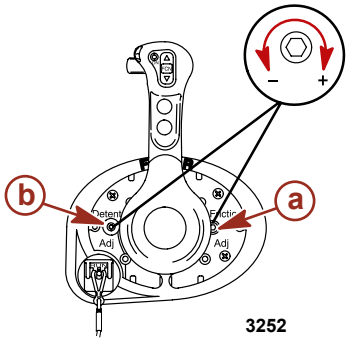



6. Fasten the remote control with three #12 x 1.25 in. screws.



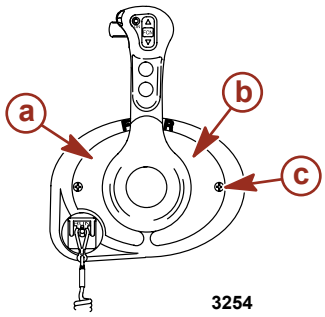

**a -** Mounting screw

7. Adjust the control handle tension as needed. Turn the control handle tension adjustment screw to increase or decrease the overall effort needed to move the control handle. This will help prevent unwanted motion of the handle.
   - Turn the screw towards "+" to increase tension.
   - Turn the screw towards "–" to decrease tension.
8. Adjust the detent tension as needed. Turn the detent tension adjustment screw to increase or decrease the effort to move the control handle into or out of the detent position.
   - Turn the screw towards "+" to increase tension.
   - Turn the screw towards "–" to decrease tension.



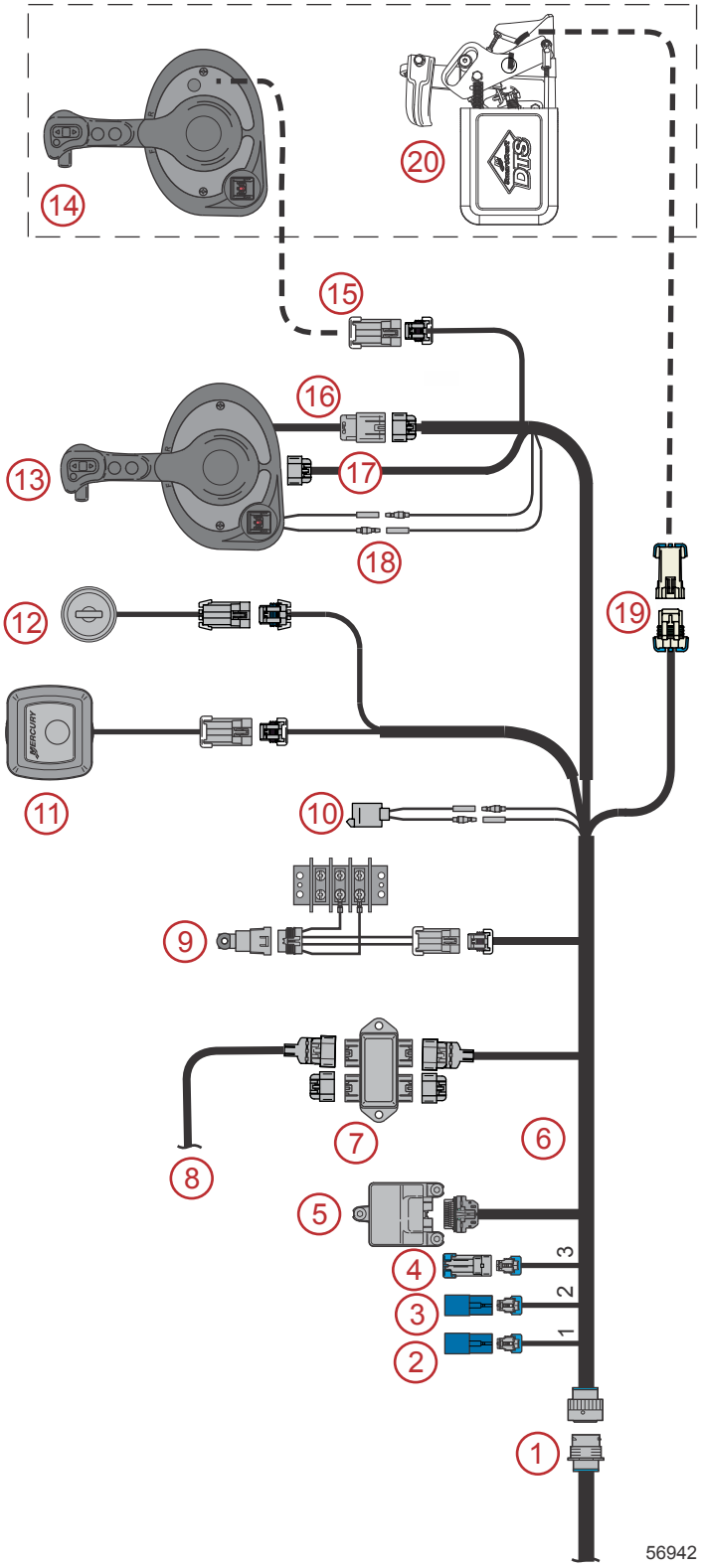

**a -** Control handle tension adjustment screw
**b -** Detent tension adjustment screw

9. Install the front and back bezel covers with attaching screws.




**a -** Front bezel cover
**b -** Back bezel cover
**c -** Screw - M4 x 12 (2)

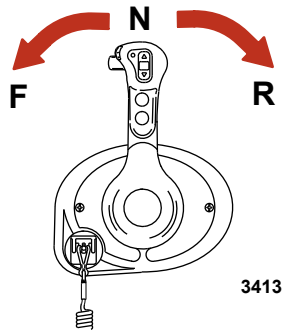
# DTS Panel Control Wiring



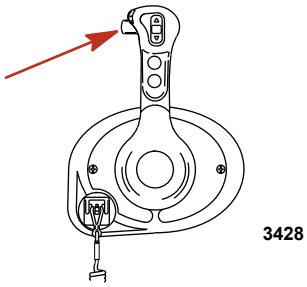

1 - 14-pin data harness
2 - CAN 1 (CAN P) connector (blue and white) – blue terminator resistor
3 - CAN 2 (CAN X) connector (brown and yellow) – blue terminator resistor
4 - CAN 3 (CAN H) connector (orange and green) – weather cap
5 - Command module
6 - Command module harness
7 - Junction box
8 - To instrumentation
9 - Accessory power relay
10 - Warning horn
11 - Start/stop switch (optional)
12 - Key switch
13 - Panel mount control without hand throttle on/off switch
14 - Panel mount control with hand throttle on/off switch (optional)
15 - Hand throttle toggle
16 - Remote control handle
17 - Lever 1
18 - Lanyard
19 - Foot throttle
20 - Hot foot throttle (optional)

# Panel Mount Features and Operation

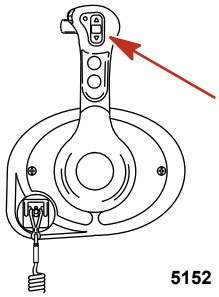
- Operation of shift and throttle is controlled by the movement of the control handle. Push the control handle forward from neutral to the first detent for forward gear. Continue pushing forward to increase speed. Pull the control handle back from neutral to the first detent for reverse gear. Continue pulling back to increase speed.




- Shift lock - Pressing the shift lock allows the engine to shift. The shift lock must always be pressed when moving the control handle out of the neutral position.

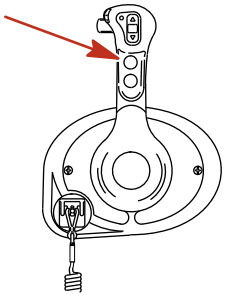



- When the power trim switch is activated on the ERC handle, the DTS command module senses a closed circuit for either up or down trim. The DTS command module formulates a signal and sends it to the PCM. The PCM closes the ground circuit to the up or down trim relay.




- Throttle only button - Allows the boat operator to increase engine RPM for warm-up, without shifting the engine into gear. To engage throttle only, move the control handle into the neutral position. Depress and hold the throttle only button while moving the control handle ahead to the forward detent. Hold the button in until the horn sounds twice. The horn indicates throttle only is engaged. Advance the throttle to increase engine RPM. To disengage, return the control handle to the neutral position. Engine RPM is limited to prevent engine damage.

***NOTE:*** *When using a foot throttle with either a panel mount or single handle console mount control, only the foot throttle controls engine speed. The remote control is used for shifting operations only. When the throttle only button on the shift control is engaged, the shift operation of the control is deactivated. To reactivate the shift function, move the control handle back to the neutral position.*



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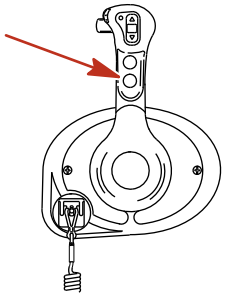
- Stop/start button - Allows the boat operator to start or stop the engine without using the ignition key. The ignition key must be in the "ON" position to start the engine.



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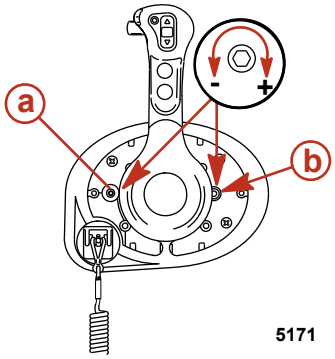
- Control handle tension adjustment screw - This screw can be adjusted to increase or decrease the tension on the control handle (cover must be removed). This will help prevent unwanted motion of the handle in rough water. Turn the screw clockwise to increase tension and counterclockwise to decrease tension. Adjust to the tension desired.
- Detent tension adjustment screw - This screw can be adjusted to increase or decrease the effort to move the control handle out of detent positions (cover must be removed). Turning the screw clockwise will increase tension. Adjust to the tension desired.

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**a -** Detent tension adjustment screw
**b -** Control handle tension adjustment screw

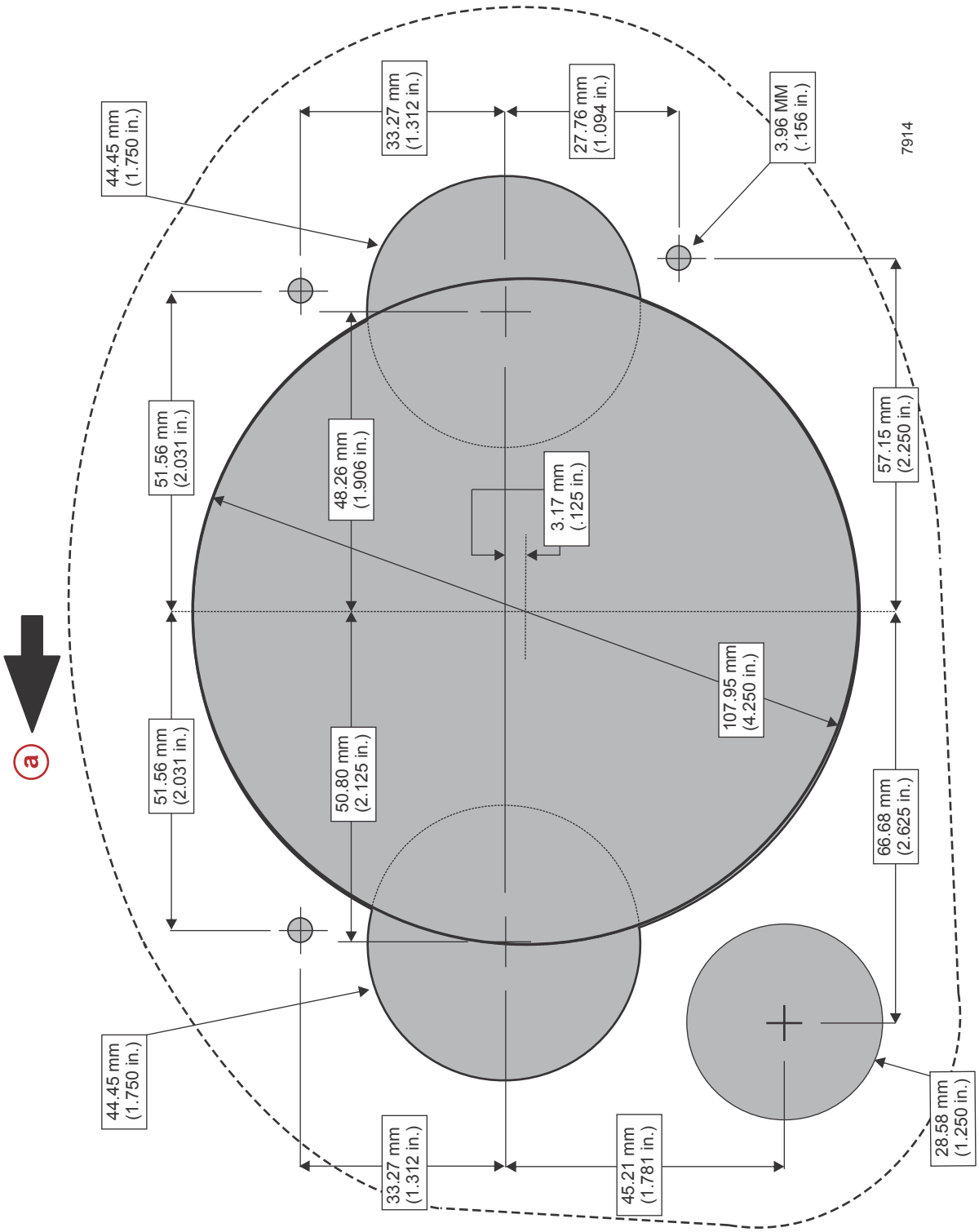
# Calibration Setup Panel Mount Remote Control

## Calibration

**IMPORTANT: After the panel mount remote control has been installed it must be calibrated by only trained or certified personnel by using the Mercury Marine computer diagnostic system (CDS). Follow the on-screen instructions to complete the calibration. Refer to the DTS System Calibration instruction sheet from the kit for further information.**

# Panel Mount Remote Control Template

**IMPORTANT: Due to printing variables, the image size may have changed from the actual size. Check the graphic for accuracy prior to using the template.**




**a -** Front of boat

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