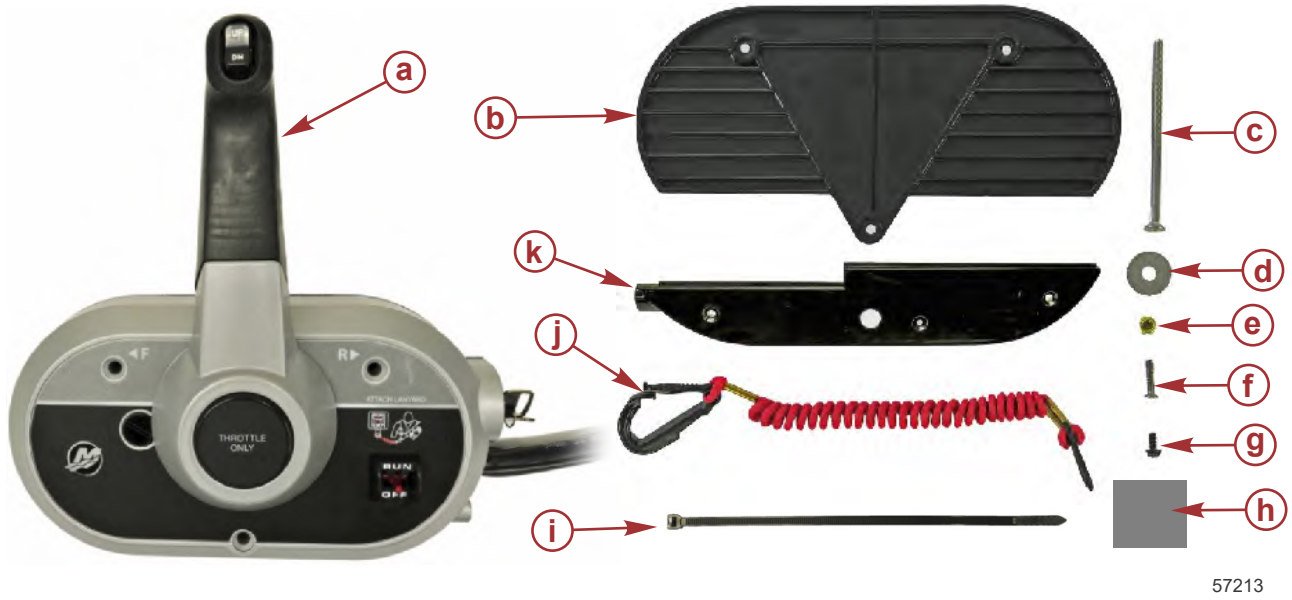
SIDE MOUNT REMOTE CONTROL INSTALLATION INSTRUCTIONS

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.

Components Contained in Kit



Ref.	Qty.	Description	Part Number
a	1	Side mount remote control	NSS
b	1	Remote control spacer	NSS
c	3	Mounting screw, M6 x 120	NSS
d	3	Washer	35280
e	3	Nut	401196
f	3	Screw, M4 x 0.7 x 2	NSS
g	2	Screw, #8-32 x 0.375	859665
h	1	Cable spacer	891907002
i	1	Cable tie	816311T
j	1	Lanyard cord assembly	8M0092849
k	1	Lower back cover	NSS

Remote Control Installation

Notice to Installer

Throughout this publication, Warnings and Cautions (accompanied by the International Hazard Symbol) are used to alert the installer to special instructions concerning a particular service or operation that may be hazardous if performed incorrectly or carelessly. Observe them carefully.

These "Safety Alerts," alone, cannot eliminate the hazards that they signal. Strict compliance to these special instructions when performing the service, plus common sense operation, are major accident prevention measures.

⚠ WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates a situation which, if not avoided, could result in engine or major component failure.

IMPORTANT: Indicates information or instructions that are necessary for a particular step or action.

NOTE: *Indicates information that helps in the understanding of a particular step or action.*

This instruction sheet has been written and published by the service department of Mercury Marine to aid installers when installing the products described herein.

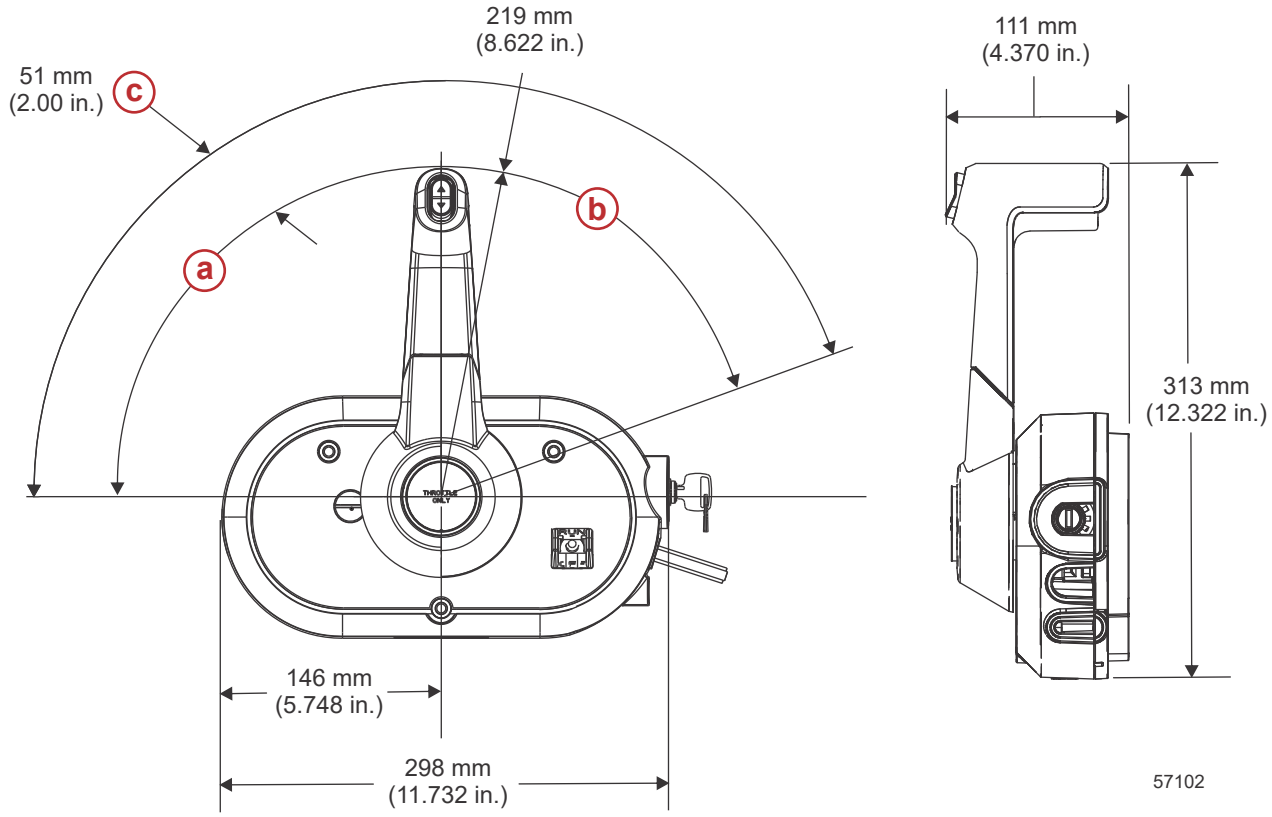
It is assumed that these personnel are familiar with the installation procedures of these products, or like or similar products manufactured and marketed by Mercury Marine. Also, that they have been trained in the recommended installation procedures of these products, which includes the use of mechanics' common hand tools and the special Mercury Marine or recommended tools from other suppliers.

We could not possibly know of and advise the marine trade of all conceivable procedures by which an installation might be performed and of the possible hazards or results of each method. We have not undertaken any such wide evaluation. Therefore, anyone who uses an installation procedure or tool that is not recommended by the manufacturer must first completely satisfy himself that neither his nor the product's safety will be endangered by the installation procedure selected.

All information, illustrations, and specifications contained in this manual are based on the latest product information available at time of publication. As required, revisions to this manual will be sent to all OEM boat companies.

Required Mounting Clearances

The remote control must be mounted on a hard, flat vertical surface no less than 6.3 mm (1/4 in.) thick.



a - 90 degree forward rotation from center of handle
b - 70 degree reverse rotation from center of handle
c - Hand clearance

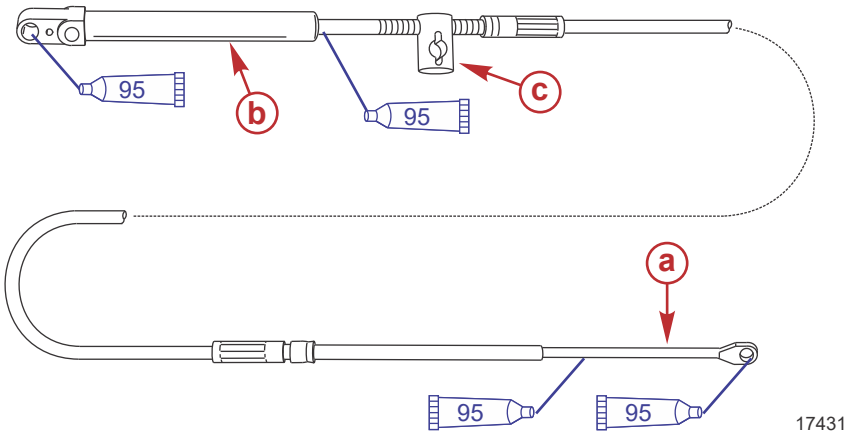
Selecting Remote Control Cables

Refer to the **Mercury Precision Parts Accessories Guide** for the available throttle and shift cables for your application. This control requires the use of Mercury/Quicksilver GEN II throttle and shift cables.

IMPORTANT: Remote control cables must be the correct length. Sharp bends on cables that are too short may result in kinks. Cables that are too long will require unnecessary bends and/or loops. Both conditions place extra stress on the cables.

Throttle and Shift Cable Installation

1. Lubricate the throttle and shift cables with 2-4-C with PTFE.

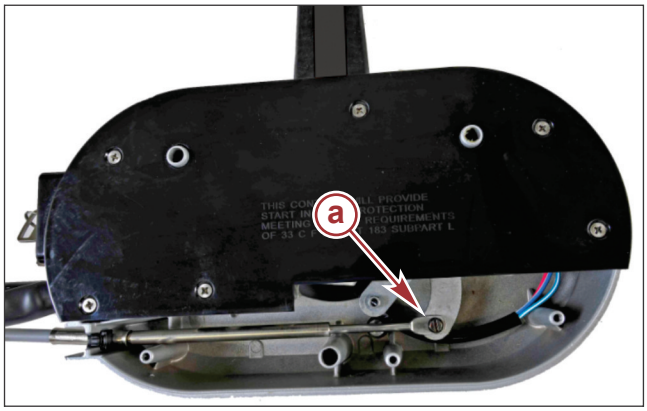


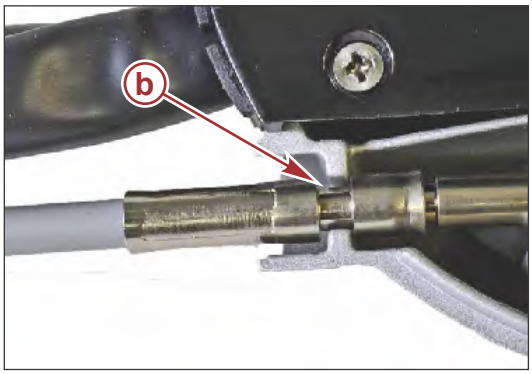
a - Remote control end
b - Engine end
c - Adjusting barrel

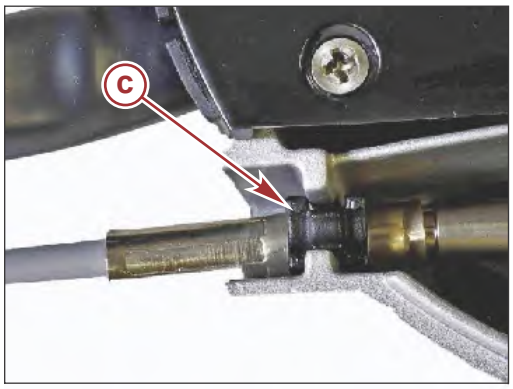
Tube Ref No.	Description	Where Used	Part No.
95	2-4-C with PTFE	Throttle cable and shift cable lubrication points	92-802859A 1

2. Attach the shift cable to the lower mounting boss and align the slot in the cable with the remote control housing.

3. Place the cable spacer on the top side of the shift cable.







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a - Shift cable connection
b - Shift cable aligned in slot
c - Cable spacer installed

4. Attach the throttle cable to the upper mounting boss and align the slot in the cable with the remote control housing.

⚠ WARNING

Improper installation can result in sudden, unexpected loss of throttle and shift control, resulting in serious injury or death. Install all control components properly.

IMPORTANT: Threads of the control cable fastener screws contain a threadlocker. Additional threadlocker should not be applied during the original installation. If the screws are installed and then removed for any reason, apply an appropriate amount of Loctite 271 Threadlocker on the screw threads and tighten to the specified torque. Failure to apply Loctite 271 Threadlocker on the cable fastener screw threads, or to tighten screws to the specified torque, can lead to the screws loosening, which could result in loss of throttle or shift control.

IMPORTANT: Applying too much Loctite can result in the locking agent contacting other moving parts of the control, preventing or limiting proper operation.

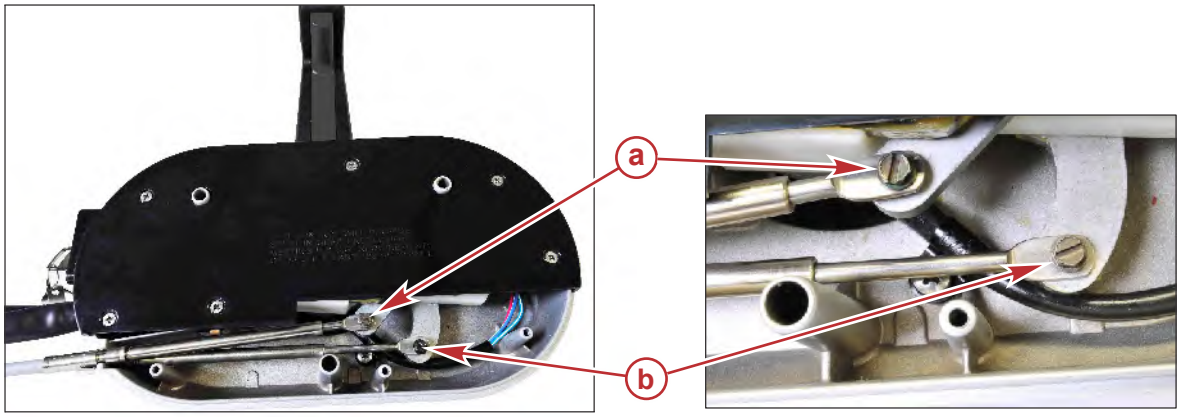
Description	Nm	lb-in.	lb-ft
Control throttle and shift cable screws	2.8	25	–

5. Apply a small amount of Loctite 271 Threadlocker to the threads of the control cable screws.

Tube Ref No.	Description	Where Used	Part No.
7	Loctite 271 Threadlocker	Control cable screw threads	92-809819

6. Install the control cable screws into the threaded hole. Tighten the screws to the specified torque.

Description	Nm	lb-in.	lb-ft
Control cable screws	2.8	25	–



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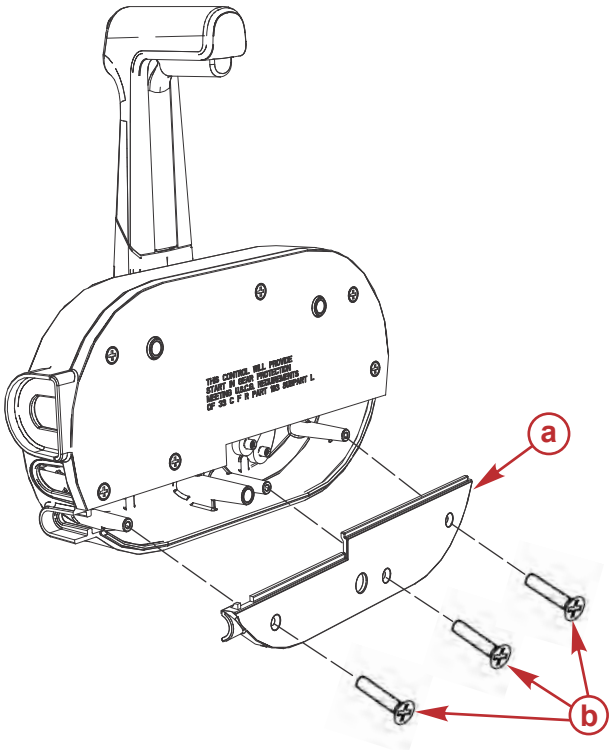
a - Throttle cable connection
b - Shift cable connection

7. After installing the control cables, secure the lower back cover with the three screws that are provided in the kit. Tighten the screws to the specified torque.



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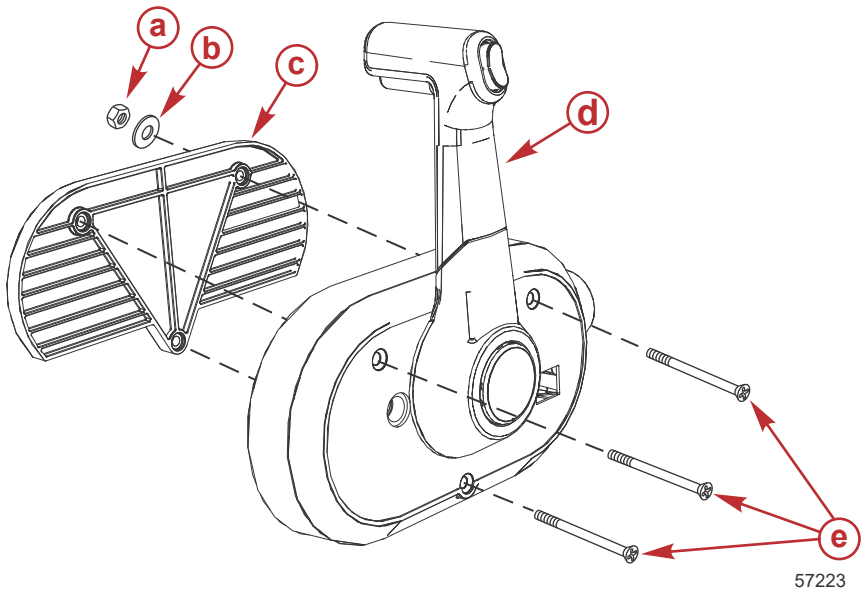
a - Lower back cover
b - Screw (3)

Description	Nm	lb-in.	lb-ft
Lower back cover screws	2–4	18–35	–

Installing the Remote Control

1. The remote control must be mounted on a hard, flat vertical surface no less than 6.3 mm (1/4 in.) thick.
2. Use the remote control spacer as a template to mark and drill three 6.3 mm (1/4 in.) diameter holes through the mounting surface.
3. Install the screws through the remote control, spacer, and mounting location.

4. Attach the washers and nuts, and tighten securely.



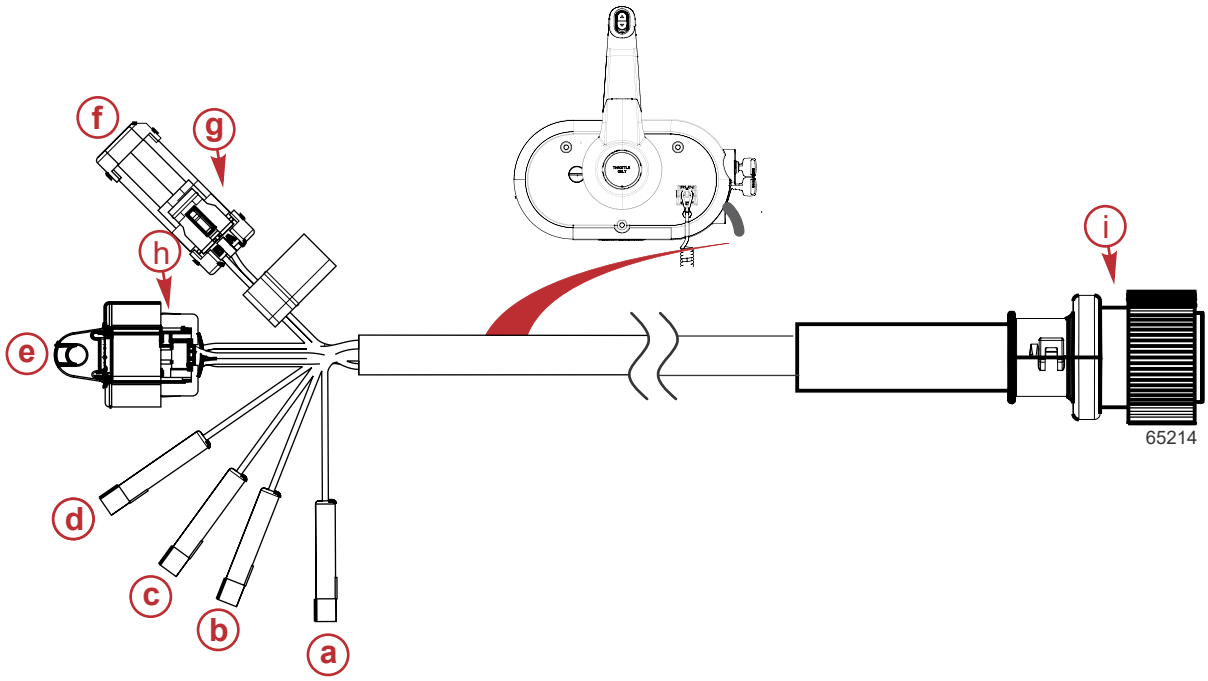
a - Nut (3)
b - Washer (3)
c - Remote control spacer
d - Remote control
e - Screw (3)

Harness Connections

NOTE: *Use connector plug part number 13541 if power trim connectors are not used.*

14-Pin—Handle Mounted Power Trim

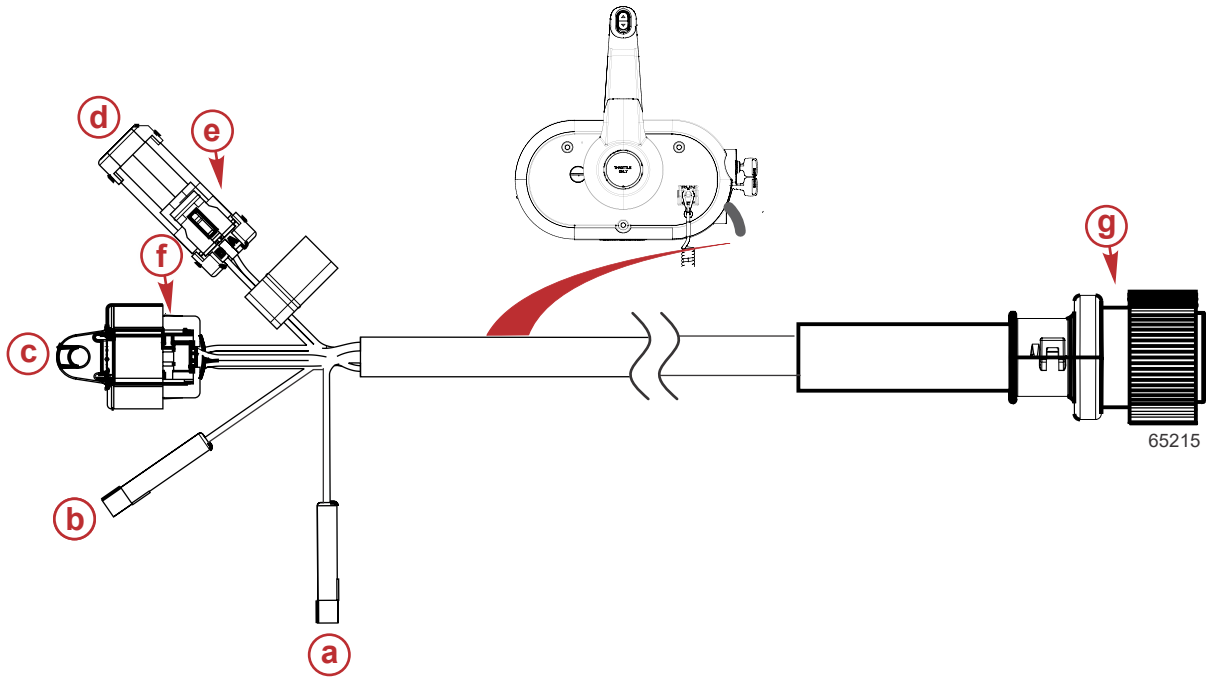
NOTE: *Remove the 2-pin weather cap and install a 2-pin termination resistor part number 893388A01, if SmartCraft instruments are installed.*



- **a -** 12-volt (red)
- **b -** Trim down (green/white)
- **c -** Trim up (blue/white)
- **d -** Horn (tan/light blue)
- **e -** 10-pin weather cap
- **f -** 2-pin weather cap
- **g -** 2-pin CAN P data link
- **h -** 10-pin gauge harness
- **i -** 14-pin data harness

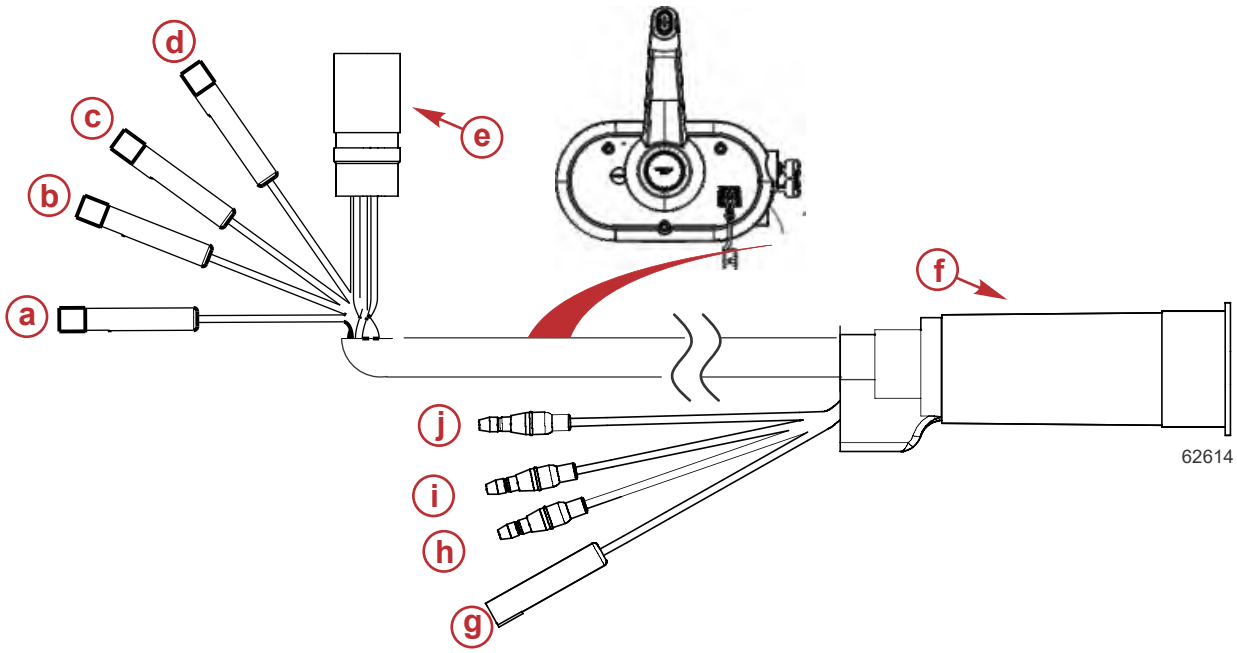
14-Pin—Non-Power Trim

NOTE: *Remove the 2-pin weather cap and install a 2-pin termination resistor part number 893388A01, if SmartCraft instruments are installed.*



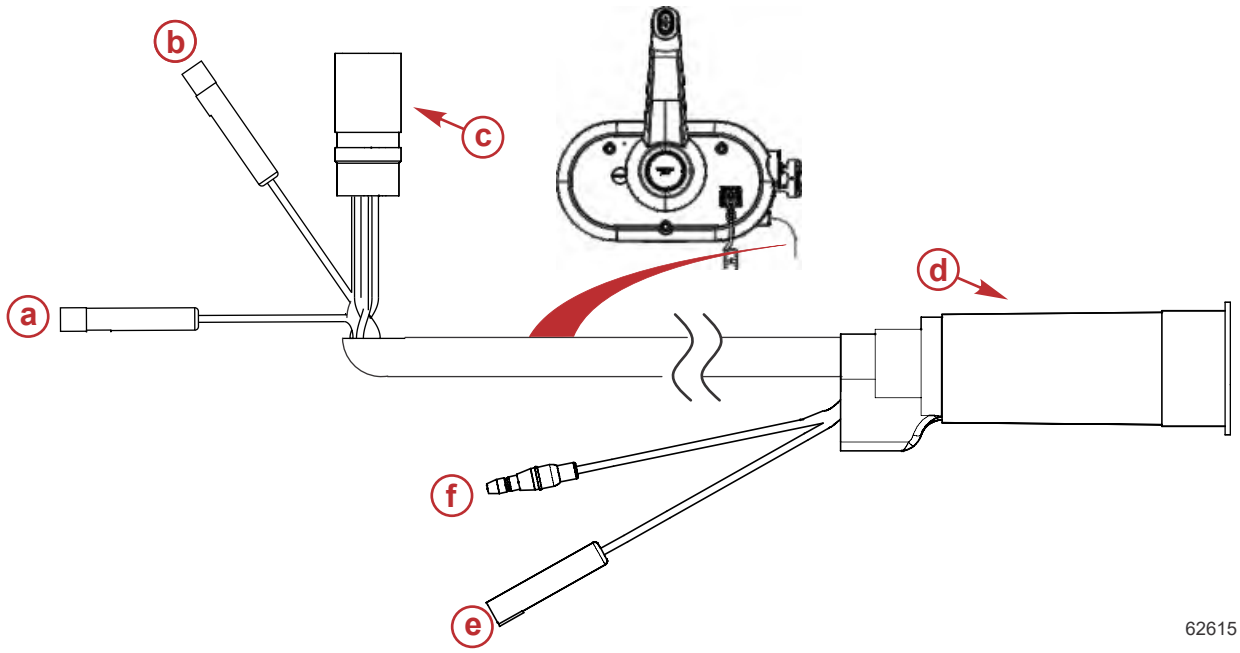
a - 12-volt (red)
b - Horn (tan/light blue)
c - 10-pin weather cap
d - 2-pin weather cap
e - 2-pin CAN P data link
f - 10-pin gauge harness
g - 14-pin data harness

8-Pin—Traditional Handle Mounted Power Trim



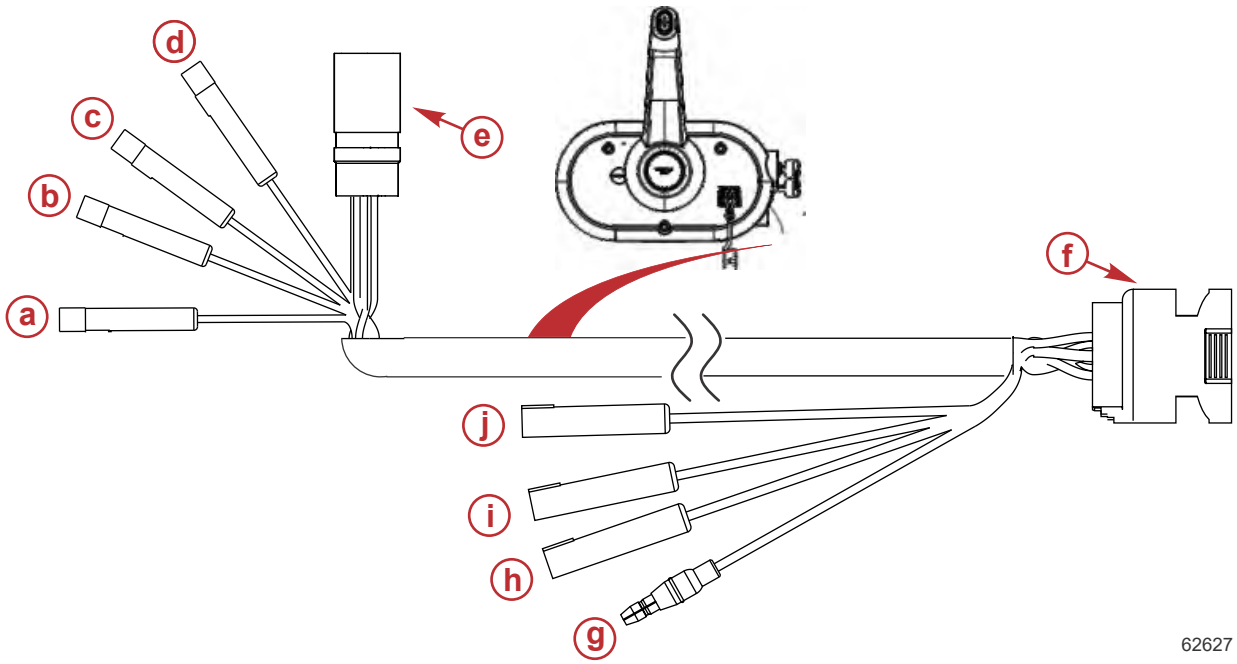
- **a -** 12-volt (red)
- **b -** Trim down (green/white)
- **c -** Trim up (blue/white)
- **d -** Horn (tan/light blue)
- **e -** 5-pin gauge harness
- **f -** 8-pin engine harness
- **g -** Temperature
- **h -** Trim up (blue/white)
- **i -** Trim position (brown/white)
- **j -** Trim down (green/white)

8-Pin—Traditional Handle Mounted Non-Power Trim



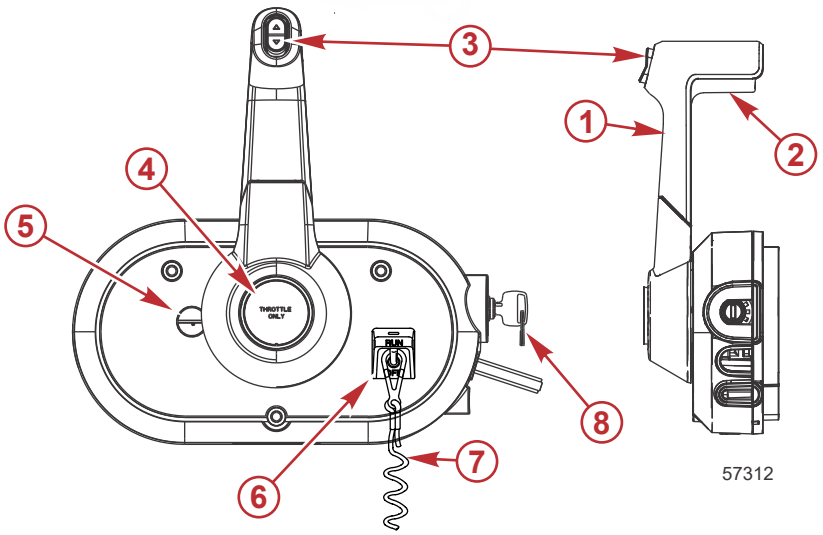
- **a -** 12-volt (red)
- **b -** Temperature
- **c -** 5-pin gauge harness
- **d -** 8-pin engine harness
- **e -** Temperature (engine)
- **f -** Trim position (brown/white)

8-Pin—Round



- **a -** 12-volt (red)
- **b -** Trim down (green/white)
- **c -** Trim up (blue/white)
- **d -** Horn (tan/light blue)
- **e -** 5-pin gauge harness
- **f -** 8-pin engine harness
- **g -** Temperature
- **h -** Trim up (blue/white)
- **i -** Trim position (brown/white)
- **j -** Trim down (green/white)

Remote Control Features



1. **Control handle:** Lift the neutral lock release and shift into gear with a firm, quick motion. Approximately the first 32° of control handle travel (from neutral position) will shift the gears, the remainder of control handle travel advances the throttle.

2. **Neutral lock release:** The neutral lock prevents accidental shifting of the remote control from the neutral position. The neutral lock release must be lifted to shift the remote control.
3. **Power trim switch (if equipped):** Used to raise or lower the engine to a desired height for transporting, launching, or shallow water operation.
4. **Throttle only button:** Allows engine throttle advancement without shifting the engine. This is done by disengaging the shift mechanism from the control handle. The throttle only button can be depressed only when the remote control handle is in the neutral position and should only be used to assist in starting the engine.
5. **Throttle friction adjustment knob:** Adjust throttle friction by turning the knob clockwise to increase friction, or counterclockwise to decrease friction.
6. **Lanyard stop switch:** The purpose of a lanyard stop switch is to turn off the engine when the operator moves far enough away from the operator's position (as in accidental ejection from the operator's position) to activate the switch.
7. **Lanyard cord/clip:** Connect the cord or clip to the lanyard stop switch and attach the other end of the cord to the driver of the boat. Proper length of the cord will allow some freedom of movement, but provides the lanyard stop switch to shut the engine off if the driver of the boat no longer has access to the controls.
8. **Ignition switch:** Start the engine by turning the ignition key clockwise to the **START** position.

   NOTE: *On models that require a choke, pushing the ignition key in will actuate the choke. Release the ignition key and allow the switch to return to the* ***RUN*** *position. Stop the engine by turning the ignition key counterclockwise to the* ***OFF*** *position.*

   IMPORTANT: For manual start engines, the following steps must be adhered to:

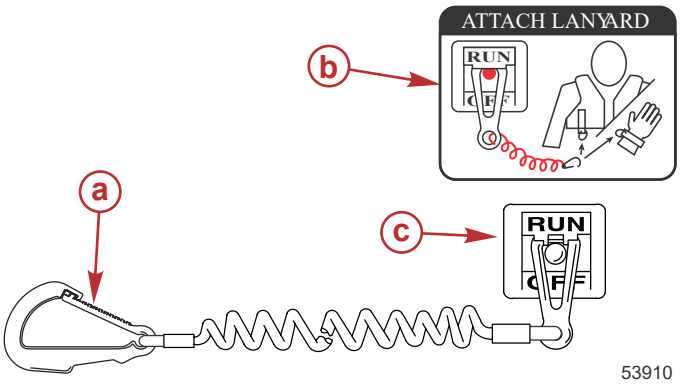
- Make sure the remote control moves smoothly in both directions.
- Make sure the remote control is placed in neutral.
- Attach the lanyard cord clip to the lanyard stop switch and flip the toggle to the **RUN** position.
- Confirm the engine is in neutral.
- Pull the engine over to start the engine.
- Properly attach the lanyard cord clip to the operator.

Lanyard Stop Switch

The purpose of a lanyard stop switch is to turn off the engine when the operator moves far enough away from the operator's position (as in accidental ejection from the operator's position) to activate the switch. Tiller handle outboards and some remote control units are equipped with a lanyard stop switch. A lanyard stop switch can be installed as an accessory - generally on the dashboard or side adjacent to the operator's position.

A decal near the lanyard stop switch is a visual reminder for the operator to attach the lanyard to their personal flotation device (PFD) or wrist.

The lanyard cord is usually 122–152 cm (4–5 feet) in length when stretched out, with an element on one end made to be inserted into the switch and a clip on the other end for attaching to the operator's PFD or wrist. The lanyard is coiled to make its at-rest condition as short as possible to minimize the likelihood of lanyard entanglement with nearby objects. Its stretched-out length is made to minimize the likelihood of accidental activation should the operator choose to move around in an area close to the normal operator's position. If it is desired to have a shorter lanyard, wrap the lanyard around the operator's wrist or leg, or tie a knot in the lanyard.



a - Lanyard cord clip
b - Lanyard decal
c - Lanyard stop switch

Read the following Safety Information before proceeding.

Important Safety Information: The purpose of a lanyard stop switch is to stop the engine when the operator moves far enough away from the operator's position to activate the switch. This would occur if the operator accidentally falls overboard or moves within the boat a sufficient distance from the operator's position. Falling overboard and accidental ejections are more likely to occur in certain types of boats such as low sided inflatables, bass boats, high performance boats, and light, sensitive handling fishing boats operated by a hand tiller. Falling overboard and accidental ejections are also likely to occur as a result of poor operating practices such as sitting on the back of the seat or gunwale at planing speeds, standing at planing speeds, sitting on elevated fishing boat decks, operating at planing speeds in shallow or obstacle infested waters, releasing your grip on a steering wheel or tiller handle that is pulling in one direction, drinking alcohol or consuming drugs, or daring high speed boat maneuvers.

While activation of the lanyard stop switch will stop the engine immediately, a boat will continue to coast for some distance depending upon the velocity and degree of any turn at shut down. However, the boat will not complete a full circle. While the boat is coasting, it can cause injury to anyone in the boat's path as seriously as the boat would when under power.

We strongly recommend that other occupants be instructed on proper starting and operating procedures should they be required to operate the engine in an emergency (if the operator is accidentally ejected).

⚠ WARNING

If the operator falls out of the boat, stop the engine immediately to reduce the possibility of serious injury or death from being struck by the boat. Always properly connect the operator to the stop switch using a lanyard.

⚠ WARNING

Avoid serious injury or death from deceleration forces resulting from accidental or unintended stop switch activation. The boat operator should never leave the operator's station without first disconnecting the stop switch lanyard from the operator.

Accidental or unintended activation of the switch during normal operation is also a possibility. This could cause any, or all, of the following potentially hazardous situations:

- Occupants could be thrown forward due to unexpected loss of forward motion - a particular concern for passengers in the front of the boat who could be ejected over the bow and possibly struck by the gearcase or propeller.
- Loss of power and directional control in heavy seas, strong current, or high winds.
- Loss of control when docking.

Keep the Lanyard Stop Switch and Lanyard Cord in Good Operating Condition

Before each use, check to ensure the lanyard stop switch works properly. Start the engine and stop it by pulling the lanyard cord. If the engine does not stop, have the switch repaired before operating the boat.

Before each use, visually inspect the lanyard cord to ensure it is in good working condition and that there are no breaks, cuts, or wear to the cord. Check that the clips on the ends of the cord are in good condition. Replace any damaged or worn lanyard cords.

Mechanical Remote Control Maintenance

⚠ WARNING

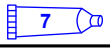
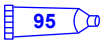
Neglect or improper maintenance, repairs, or inspections of the power package can result in product damage or serious injury or death. Perform all procedures as described in this manual. If you are not familiar with proper maintenance or service procedures, consign the work to an authorized Mercury Marine dealer.

Maintenance and safety instructions are the owner’s responsibility and must be performed at the following specified intervals:

- After the first 25 hours of use, follow the instructions in 1, 2, and 3, below.
- A regular 100-hour or yearly (whichever comes first) maintenance schedule should be followed, involving all of the instructions listed below.

1. Check all fasteners which secure the control housing to the control module, and the control and module to the boat. Tighten any loose fasteners to the specified torque listed in the installation instructions.
2. Check the control handle retaining screw to ensure that it is tightened to the specified torque. If the screw has been removed for any reason, Loctite 271 Threadlocker should be applied to the screw threads before installation.
3. Check electrical connections to be sure that they are tight, free of corrosion, and that all harnesses are properly secured and kept away from water.
4. Inspection and lubrication of the remote control assembly should be performed once each year by your authorized dealer. Lubrication should also be performed if the remote control is disassembled, or if control operating effort has increased. Lubricate with 2-4-C with PTFE or equivalent.

5. Yearly inspection of the cables for free-play should coincide with the dealer inspection and lubrication. Cable ends should be disconnected from both the engine and the control. Cable ends should be manually manipulated to feel for stiffness, binding, or tightness affecting the cable core. Worn, pinched, or corroded cables should be replaced. Mercury/Quicksilver GEN II throttle and shift cables are required for use in this remote control.

Tube Ref No.	Description	Where Used	Part No.
	Loctite 271 Threadlocker	Control handle retaining screw threads	92-809819
	2-4-C with PTFE	Remote control internal moving parts and control cable ends	92-802859A 1

Description	Nm	lb-in.	lb-ft
Control handle retaining screw	17	150	–

Products of Mercury Marine
W6250 Pioneer Road
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