

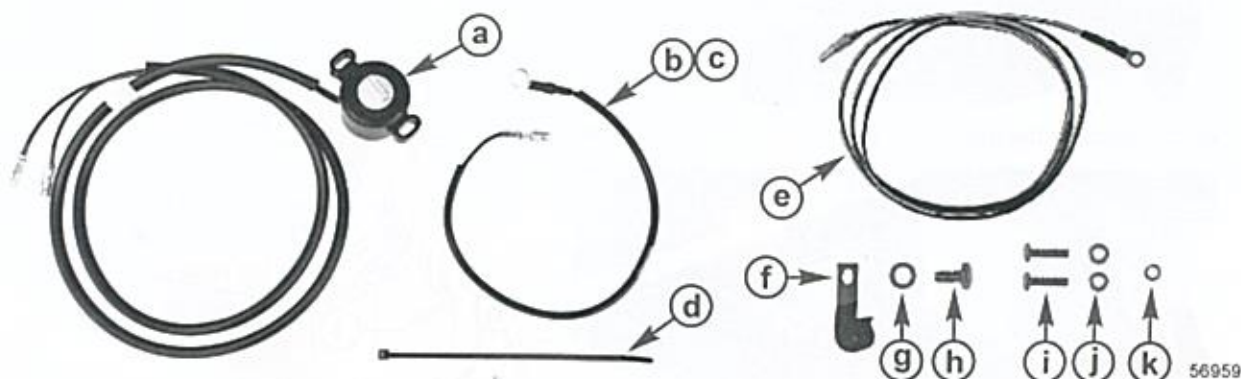
ANALOG TRIM POSITION SENDER KIT

30-60 EFI FAMILY II, 90-115 EFI, OPTIMAX

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.

Components Contained in Kit

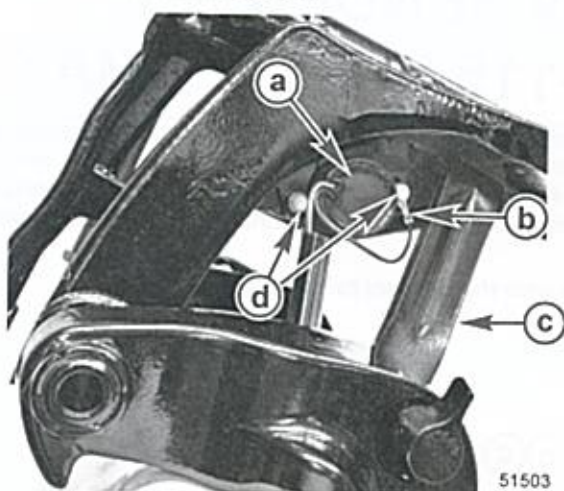


Ref.	Qty.	Description	Part Number
a	1	Analog trim sender - natural color rotor (starboard side mount) (kit 8M0098264)	NSS
		Analog trim sender - black color rotor (port side mount) (kit 8M0098273)	NSS
b	1	Ground cable - 37.5 cm (14.75 in.)	8M0071551
c	1	Ground cable - 55.25 cm (21.75 in.)	8M0071341
d	1	Cable tie	816311T
e	1	Cable (brown/white)	88537A10
f	1	J-clip	54457
g	1	Washer (0.28 x 0.50)	29245
h	1	Screw (0.250-28 x 0.50)	64014
i	2	Screw (10-24 x 0.75)	41069
j	2	Washer (0.203 x 0.406)	89302
k	1	Washer (#10)	26996

Trim Sender Installation

1. Tilt the outboard to the full up position. Engage the tilt lock lever.

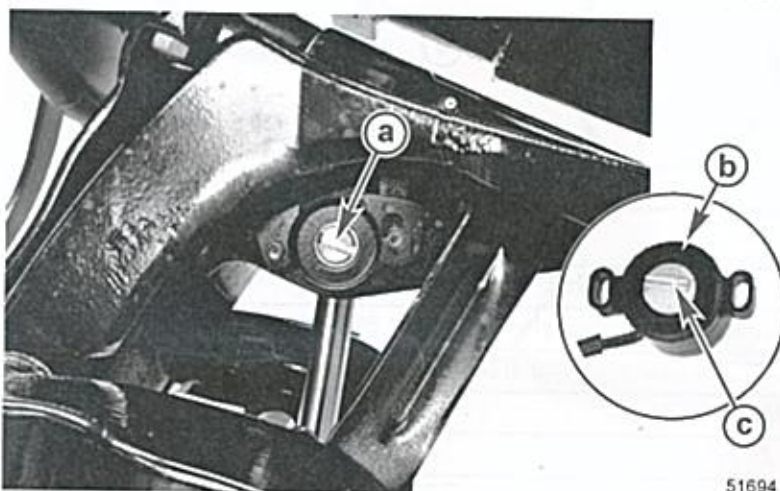
2. Remove the old trim sender.



- a - Trim sender
- b - Ground wire
- c - Tilt lock lever
- d - Mounting screws

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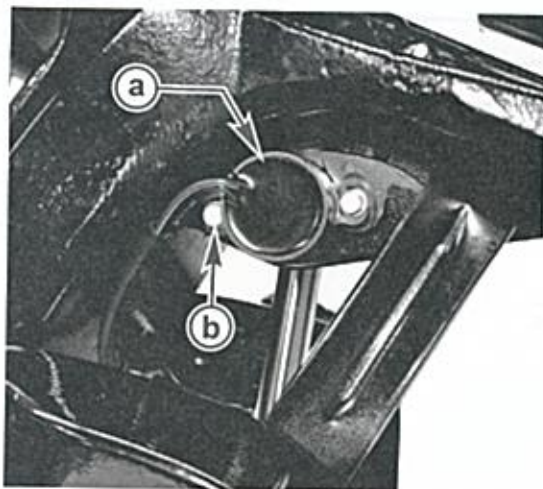
3. Align the tab on the rotor of the trim position sensor with the slot in the cross pin,



- a - Slot in cross pin
- b - Trim position sensor
- c - Tab on the rotor

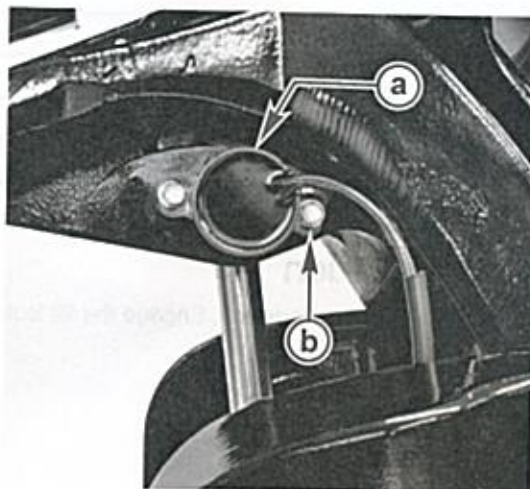
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4. Place the lockwashers and washers onto the screws.
5. Secure the trim position sensor with two screws, washers, and lockwashers.



Port side installation

- a - Trim position sensor
- b - Screw, washer, and lockwasher (2 each)



Starboard side installation

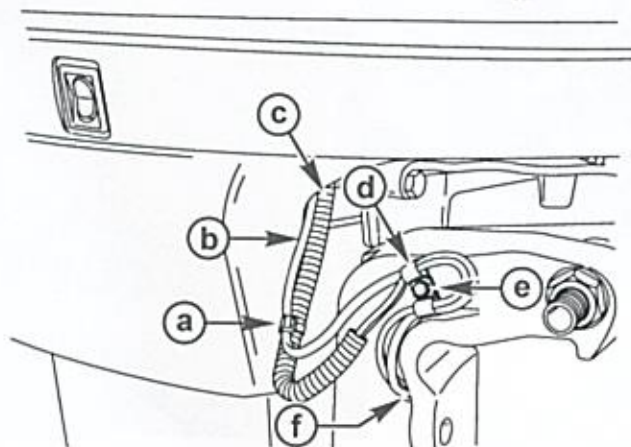
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Trim Position Sensor Wire Routing

NOTE: The trim position sensor on your outboard may have the sensor wire routed in front of the tilt tube or on the side of the power trim motor harness, routed through the bottom cowl.

Option 1 - Through the Bottom Cowl

1. Route the trim position sensor wire alongside of the power trim motor harness.
2. Secure the sensor wire adjacent to the power trim motor J-clip, using one cable tie.
3. Secure the trim position sensor wire through the two J-clips on the starboard side of the clamp bracket.
4. Route the wire through the grommet in the bottom cowl.



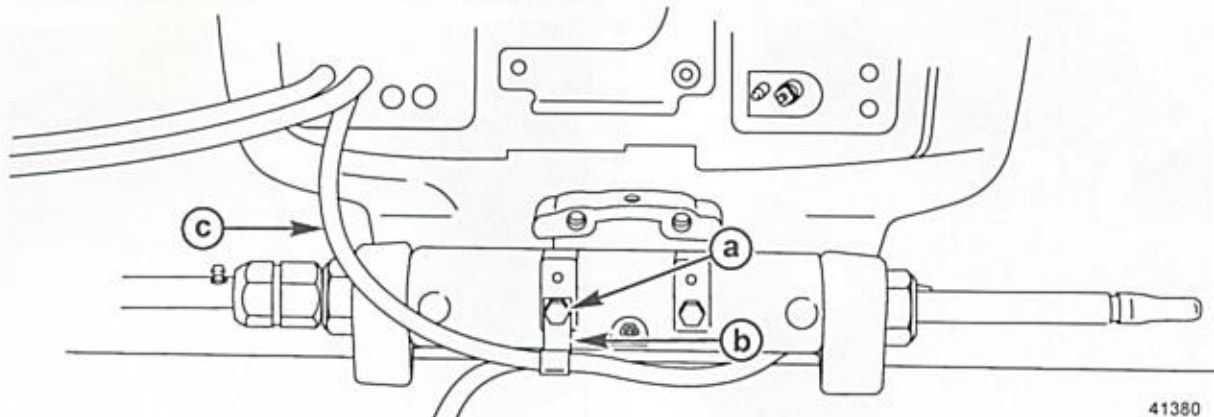
- a - Cable tie
- b - Trim position sensor wire (inside protective sleeve)
- c - Power trim motor harness
- d - J-clip
- e - Screw
- f - Hole in starboard transom bracket

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5. Connect the trim position sensor brown/white bullet connector. Refer to **Trim Position Sensor Wire Connections**.
NOTE: On models with 14-pin connectors, connect the brown/white wire to the engine harness.
6. Any excess wire should be coiled and secured inside the cowl with a cable tie.

Option 2 - Front of the Tilt Tube

1. Route the trim position sensor brown/white wire and black wire in its protective sleeve between the top of the boat transom and the engine swivel bracket.
2. Connect the wire. Refer to **Trim Position Sensor Wire Connections**.
3. Clamp the wire with the protective sleeve into the J-clip as shown.

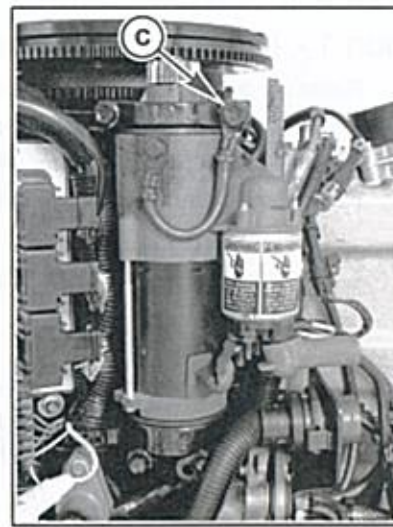
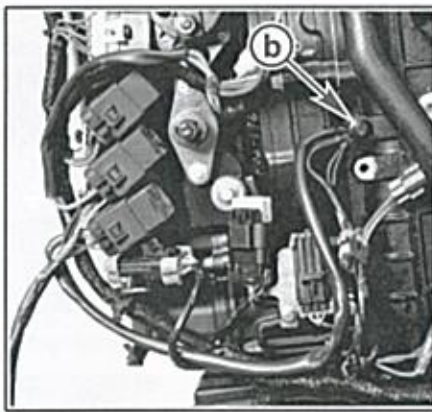
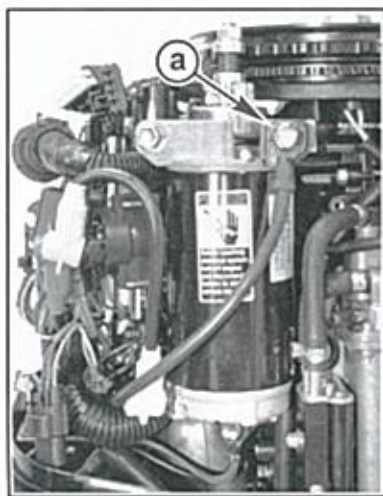


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- a - Bolt and washer
- b - J-clip
- c - Trim position sensor wire (inside protective sleeve)

Ground Wire Connection Points

Shown below are the trim position sender ground wire connection locations for the various outboard models.

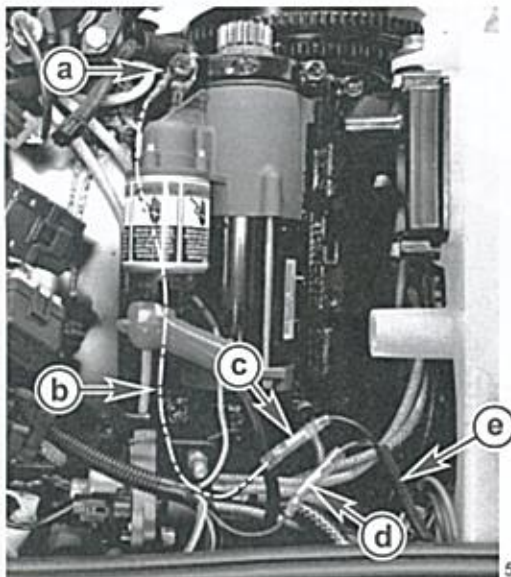


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- a - 30-60 EFI FourStroke
- b - 90-115 EFI FourStroke
- c - OptiMax (2.5L model shown)

Trim Position Sensor Wire Connections

1. Connect the trim position sensor brown/white wire bullet connector to the engine harness brown/white wire bullet connector.
2. Select the correct length ground wire from the kit to connect from the sensor wire to the engine ground point.
3. Connect the trim position sensor black wire bullet connector to the ground wire bullet connector.
4. Connect the ground wire ring terminal to the engine ground point. Refer to **Ground Wire Connection Points**.



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3.0L OptiMax installation example

- a - Ring terminal attached to engine ground
- b - Trim position sender ground wire
- c - Black wire bullet connectors
- d - Brown/white bullet connectors
- e - Trim position sender wires

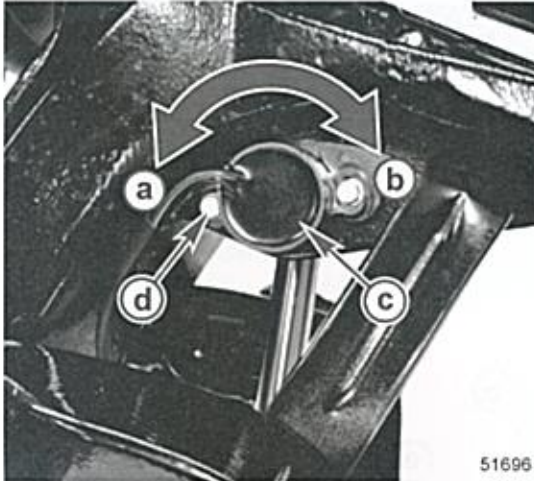
Trim Indicator Gauge Needle Adjustment

1. Turn the ignition key to the "RUN" position.
2. Tilt the outboard to the full in (down) position. The needle of the trim indicator gauge should be in the full in position.
NOTE: If the trim indicator gauge indicates full in position no adjustment is required.
3. If adjustment is required, tilt the outboard to the full out position to gain access to the trim position sensor.

4. Engage the tilt lock lever.
5. Refer to **Port Side Installation Adjustment** or **Starboard Side Installation Adjustment** for the adjustment procedure.

Port Side Installation Adjustment

1. Loosen the trim position sensor screws and reposition the trim position sensor.
 - Rotate the trim position sensor counterclockwise to raise the needle reading
 - Rotate the trim position sensor clockwise to lower the needle reading
2. Tighten the trim position sensor screws.

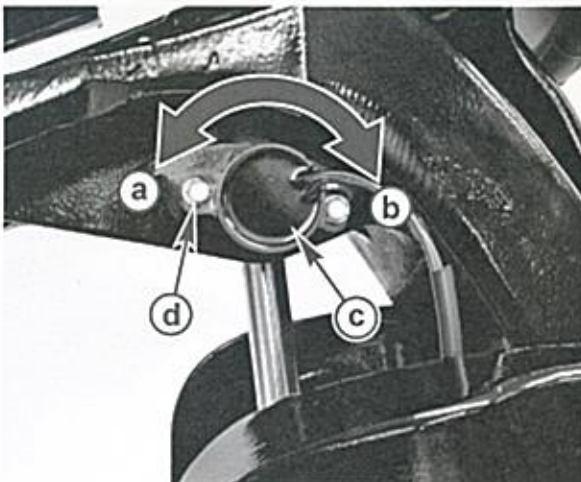


- a - Rotate the trim position sensor counterclockwise to raise the needle reading
- b - Rotate the trim position sensor clockwise to lower the needle reading
- c - Trim position sensor
- d - Screw (2)

3. Disengage the tilt lock lever.
4. Tilt the outboard to the full in position.
5. Check the needle position of the trim position indicator gauge.
6. Repeat the steps as necessary.

Starboard Side Installation Adjustment

1. Loosen the trim position sensor screws and reposition the trim position sensor.
 - Rotate the trim position sensor counterclockwise to lower the needle reading
 - Rotate the trim position sensor clockwise to raise the needle reading
2. Tighten the trim position sensor screws.



- a - Rotate the trim position sensor counterclockwise to lower the needle reading
- b - Rotate the trim position sensor clockwise to raise the needle reading
- c - Trim position sensor
- d - Screw (2)

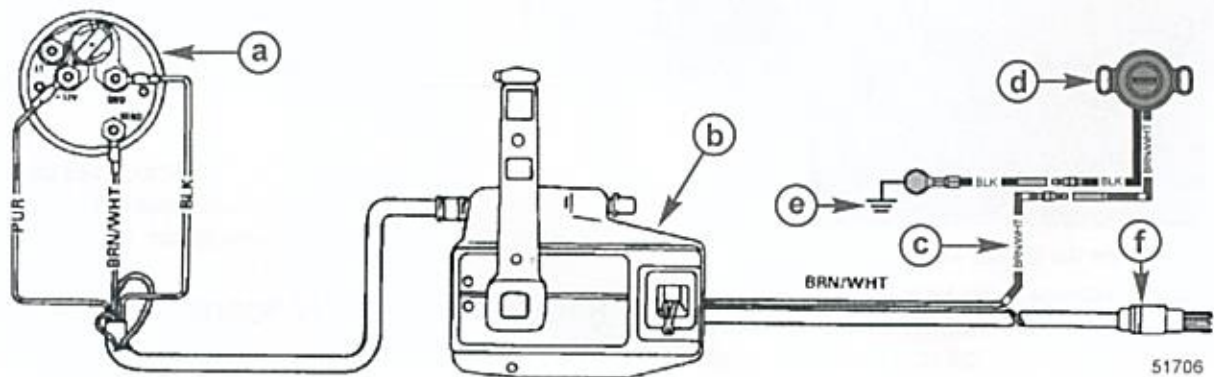
3. Disengage the tilt lock lever.
4. Tilt the outboard to the full in position.
5. Check the needle position of the trim position indicator gauge.
6. Repeat the steps as necessary.

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

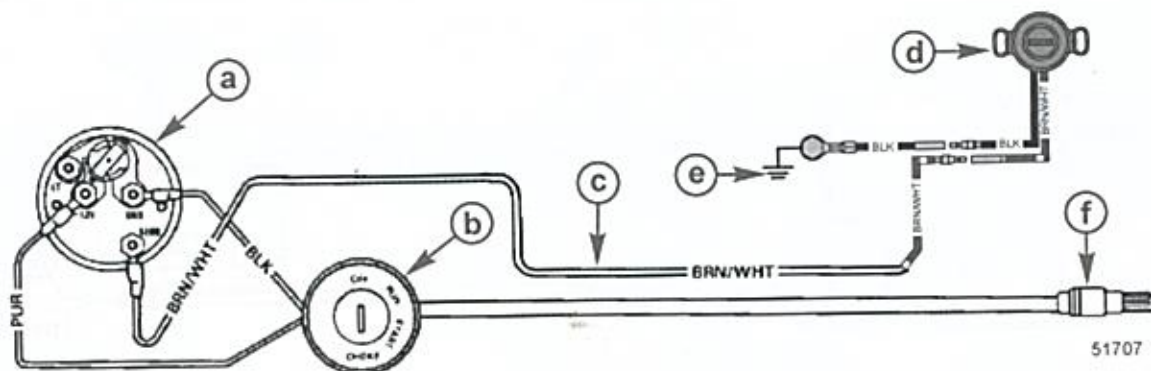
Analog Trim Position Sensor/Gauge Wiring

8-Pin Harness



8-pin connector Quicksilver Commander series side mount control

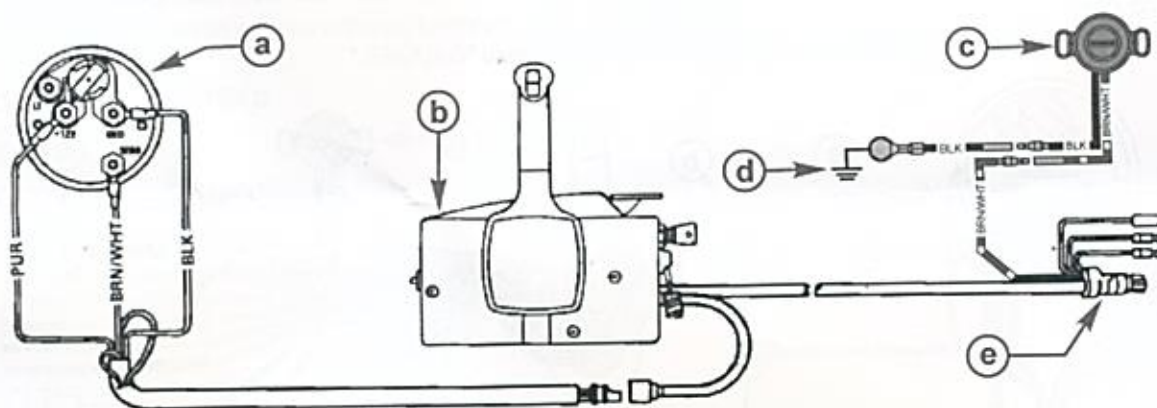
- a - Trim position gauge
- b - Remote control
- c - Brown/white cable assembly
- d - Trim position sensor
- e - Engine ground
- f - To engine wiring harness



8-pin connector Quicksilver ignition/choke and main harness assembly

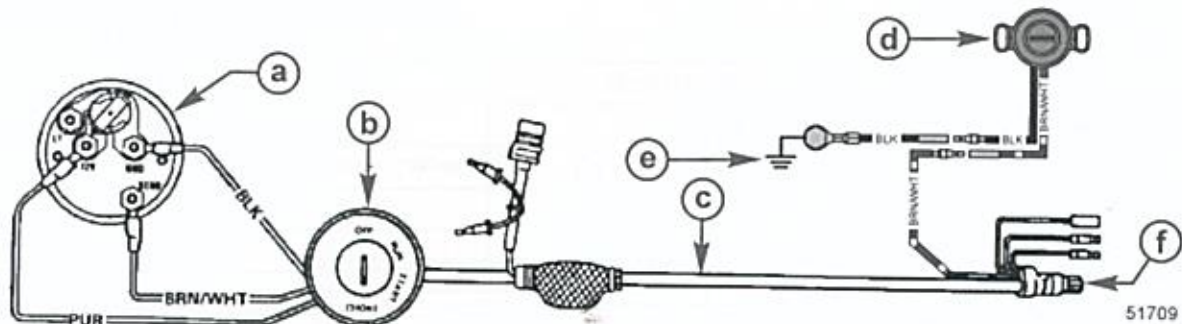
- a - Trim position gauge
- b - Ignition/choke switch
- c - Brown/white cable assembly
- d - Trim position sensor
- e - Engine ground
- f - To engine wiring harness

12-Pin Harness



12-pin connector Quicksilver Commander series side mount control

- a - Trim position gauge
- b - Remote control
- c - Trim position sensor
- d - Engine ground
- e - To engine wiring harness



12-pin connector Quicksilver ignition/choke and main harness assembly

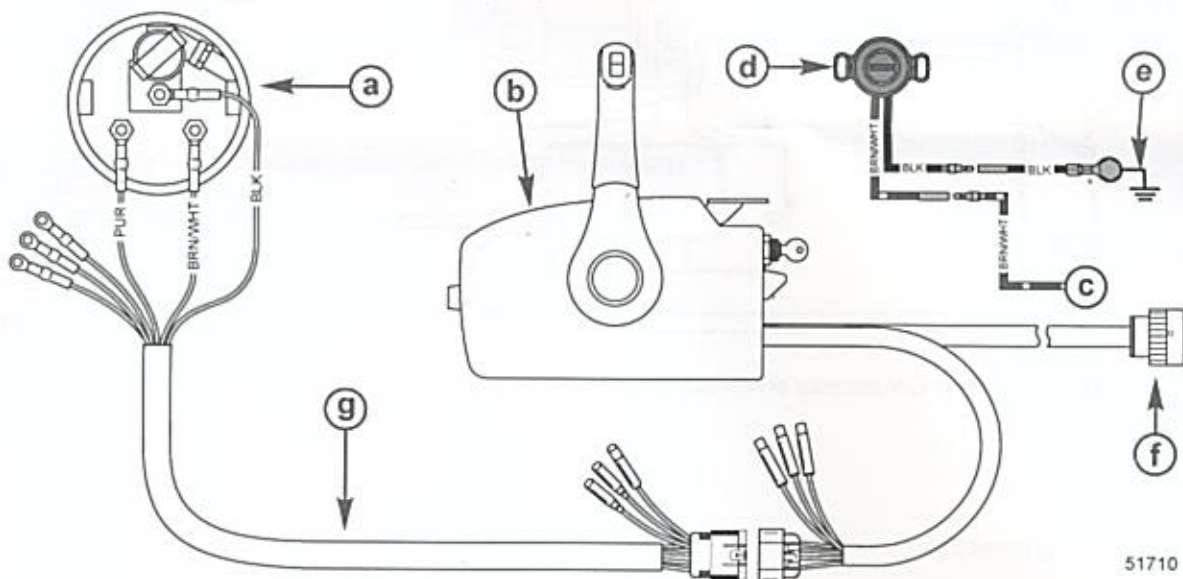
- a - Trim position gauge
- b - Ignition/choke switch
- c - Power trim harness
- d - Trim position sensor
- e - Engine ground
- f - To engine wiring harness

14-Pin Non-DTS Harness

IMPORTANT: Refer to Outboard Service Bulletin 2005-16 for additional information.

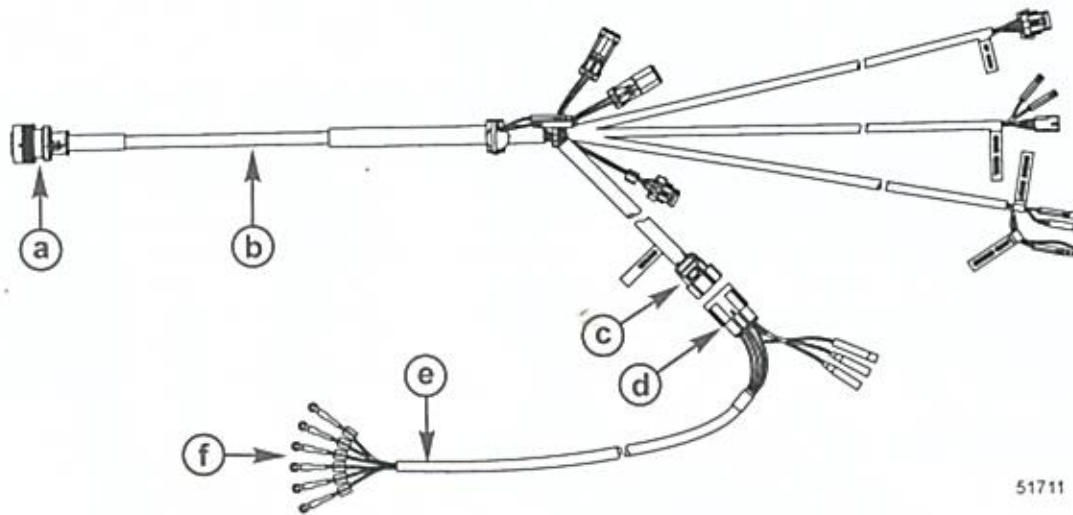
NOTE: An analog instrument harness, P/N 84-892990T01, is required for installation with the 14-pin ignition key switch or remote control.

Connect the analog instrument harness to the 10-pin connector labeled "GAUGES."



14-pin connector Quicksilver Commander series side mount control

- a - Trim position gauge
- b - Remote control
- c - To engine wiring harness
- d - Trim position sensor
- e - Engine ground
- f - 14-pin connector
- g - Analog instrument harness

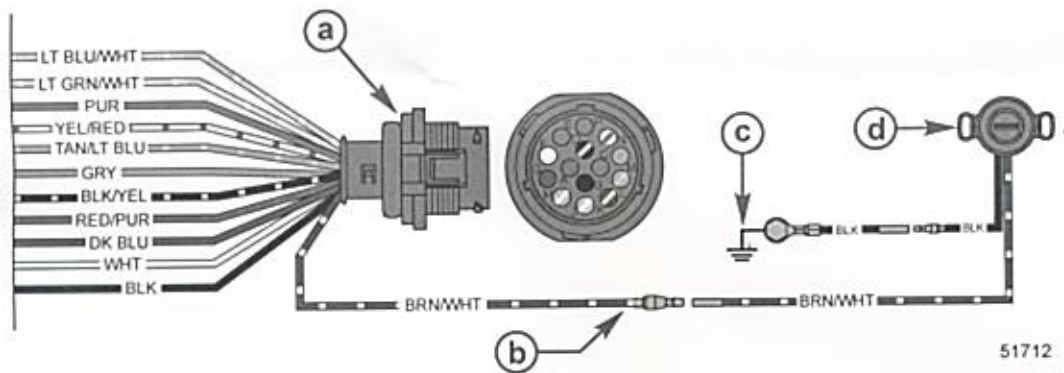


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14-pin connector, ignition/choke and main harness assembly

- a - 14-pin connector
- b - Key/choke and engine harness
- c - Analog gauge connection
- d - Analog adapter harness connection
- e - Analog adapter harness
- f - Connection for analog gauges with ring terminals

14-Pin Engine Harness



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- a - 14-pin engine harness
- b - Analog trim sender connection
- c - Engine ground
- d - Trim position sensor