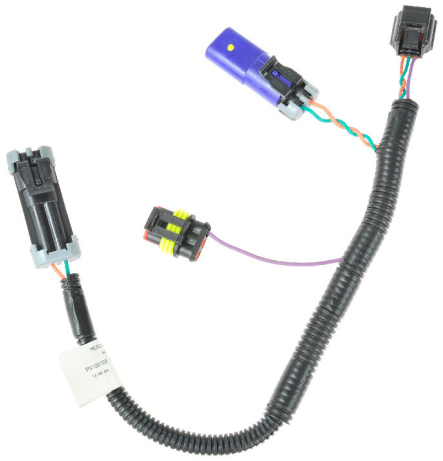
POWER STEERING LSO SIGNAL HARNESS

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

Signal driver harness assembly



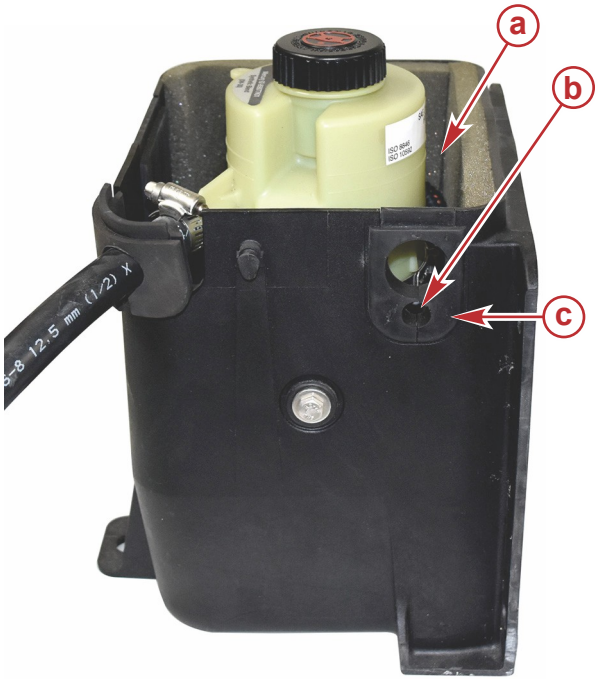
CAN 3 pump harness

Qty.	Description
1	Signal driver harness assembly
1	CAN 3 pump harness

Power Steering Pump Harness Installation

NOTE: *To prevent pump damage, ensure that the pump has been shut down at least two seconds before disconnecting the power or ground from the system.*

1. Remove the pump housing cover and route the harnesses through the opening as shown. Ensure the grommet seals the opening.



a - Harness route
b - Harness opening
c - Grommet

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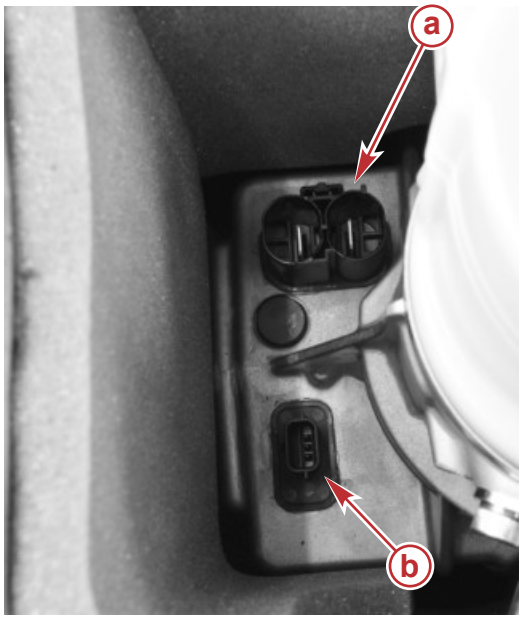
NOTE: *Main power and ground harness comes in 4 ft, 12 ft, and 24 ft lengths.*

2. Connect the main power and ground connection to the power steering pump harness connector.



a - Main power and ground connection
b - Signal connection

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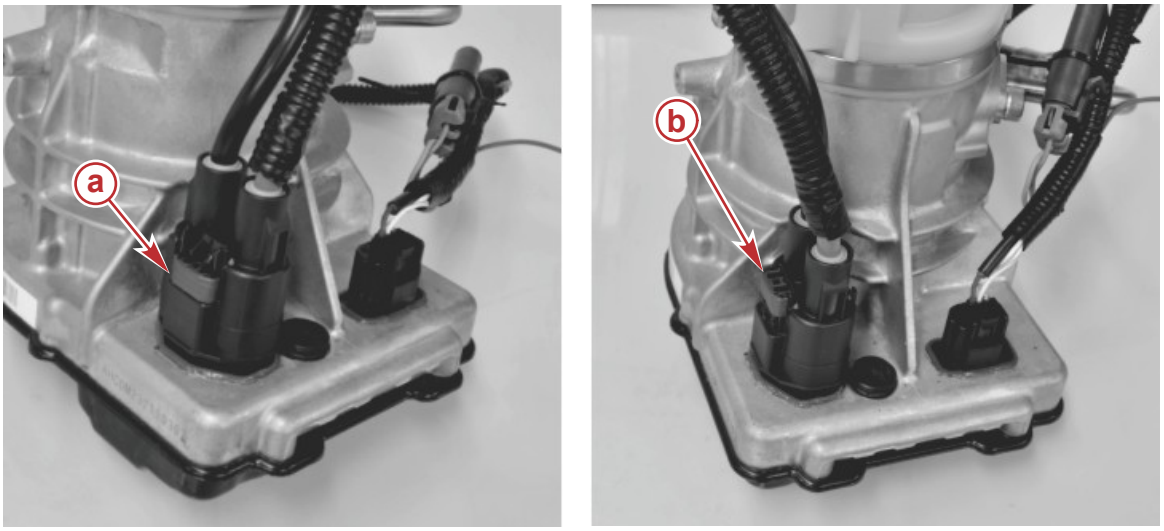

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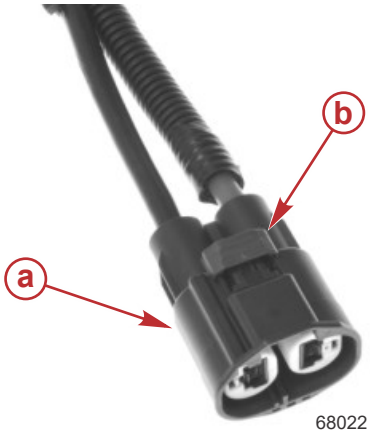
Removed from housing for connection clarity

a - Locked position clip pushed down

b - Unlocked position clip pulled up

NOTE: *Push main power and ground connector onto the power steering pump until a click is heard. Then push the clip down into the locked position. To remove connection, pull the lock clip upward. Then remove the connector.*



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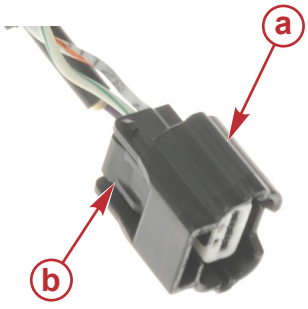
a - Main power and ground connector

b - Release button or lock

3. Connect the power steering signal harness to the driver module harness connector.



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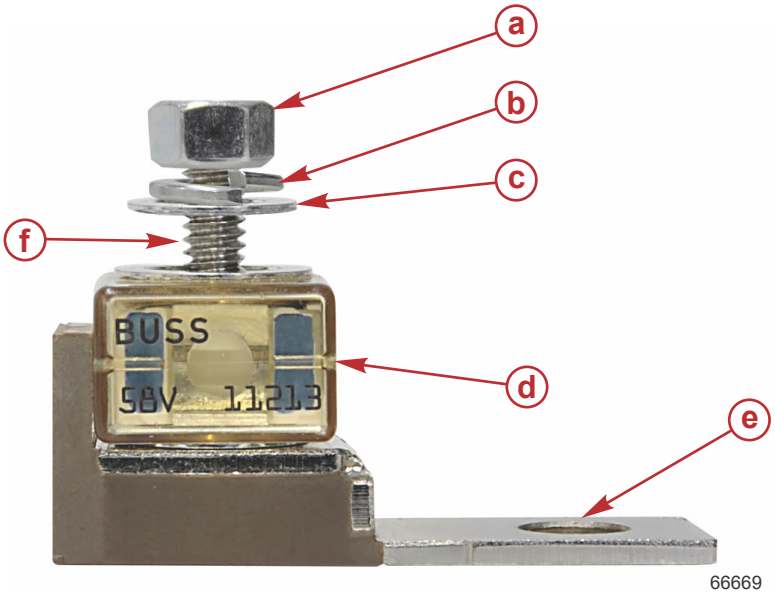
a - Signal connector

b - Release button or lock

NOTE: *On multiple engine applications, connect the driver module harness to the dual-, triple-, or quad-engine power steering signal harness adapter.*

4. Route the power steering signal harness to the engines.

5. Mount the power steering pump harness fuse so that it is accessible. Ensure that the power steering pump harness battery ring terminals can reach the battery. Using the mounting hole, secure the fuse housing with the appropriate hardware.



a - Nut
b - Lockwasher
c - Small flat washer
d - Fuse—80-amp
e - Battery post connection plate
f - Cable terminal location

6. Connect the red cable from the power steering pump harness to the positive post on the battery. Secure it with a nut. Tighten the nut to the specified torque.
7. Connect the black cable from the power steering pump harness to the negative post on the battery. Secure it with a nut. Tighten the nut to the specified torque.

Description	Nm	lb-in.	lb-ft
Battery nuts	13.5	119.5	–

8. Secure the power steering signal harness with cable ties to prevent damage.
9. Install the pump housing cover on the pump housing.

IMPORTANT: On multiple engine installations, an automatic power switch (APS) must be used to connect all starting batteries to the power steering pump. The APS directs the voltage from the battery with the highest capacity charge to the output terminal of the APS.

Wire Color Code Abbreviations

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

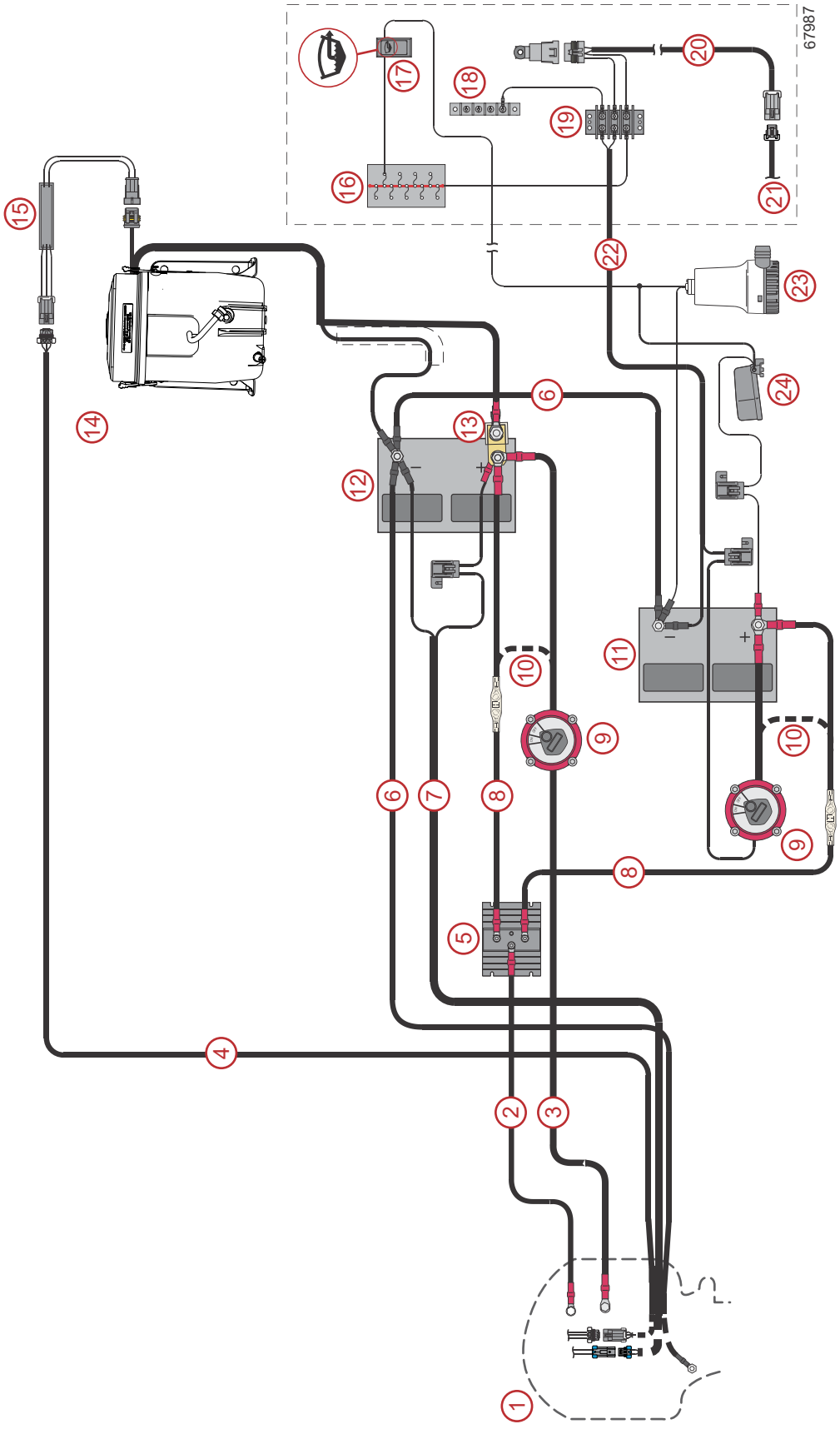
Wire Harness Diagrams

Wiring Diagrams

Wiring diagrams are an example of a Verado DTS installation. For JPO application, refer to the appropriate installation manual.

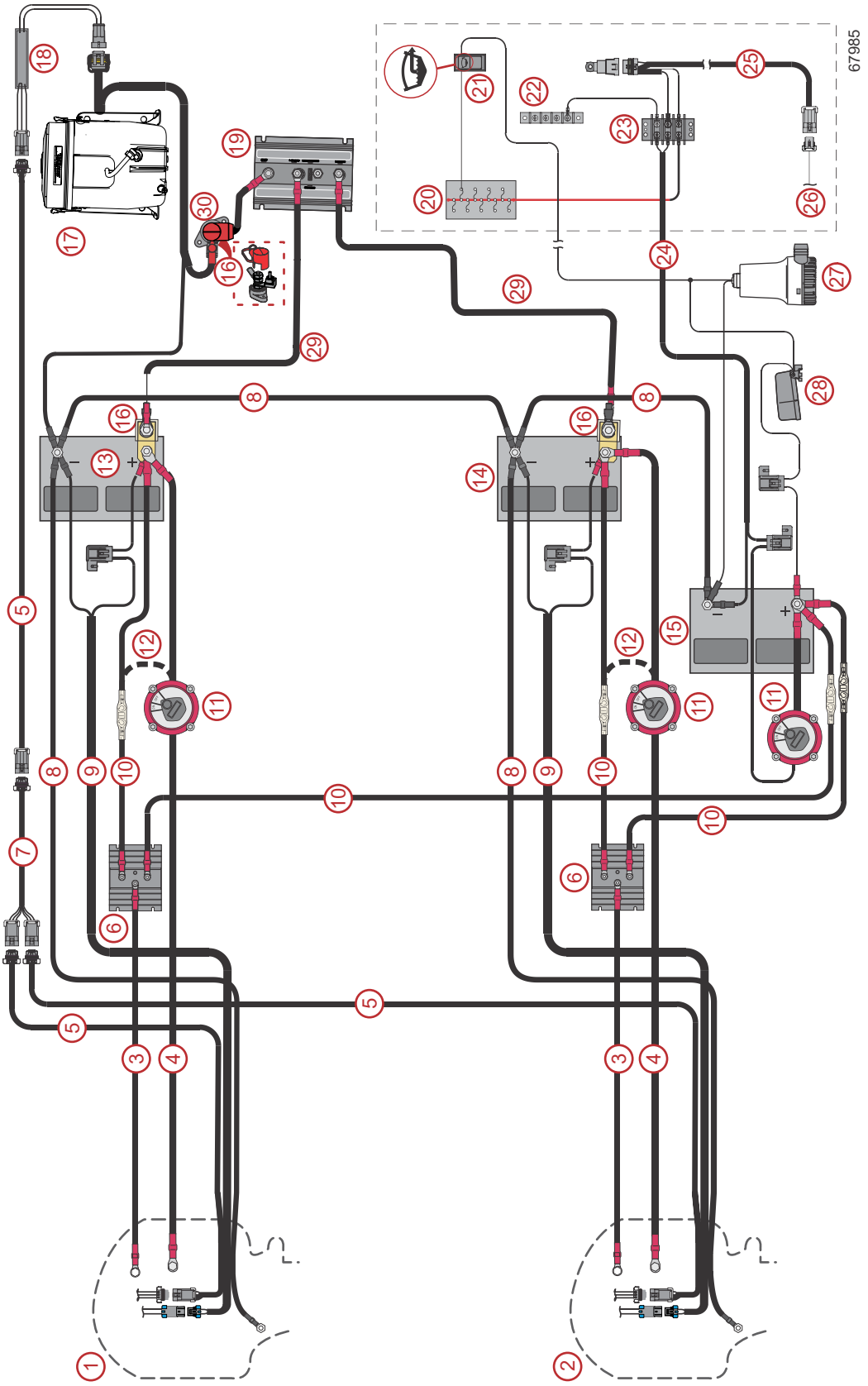
Notes:

Single-Engine Electrical Connections



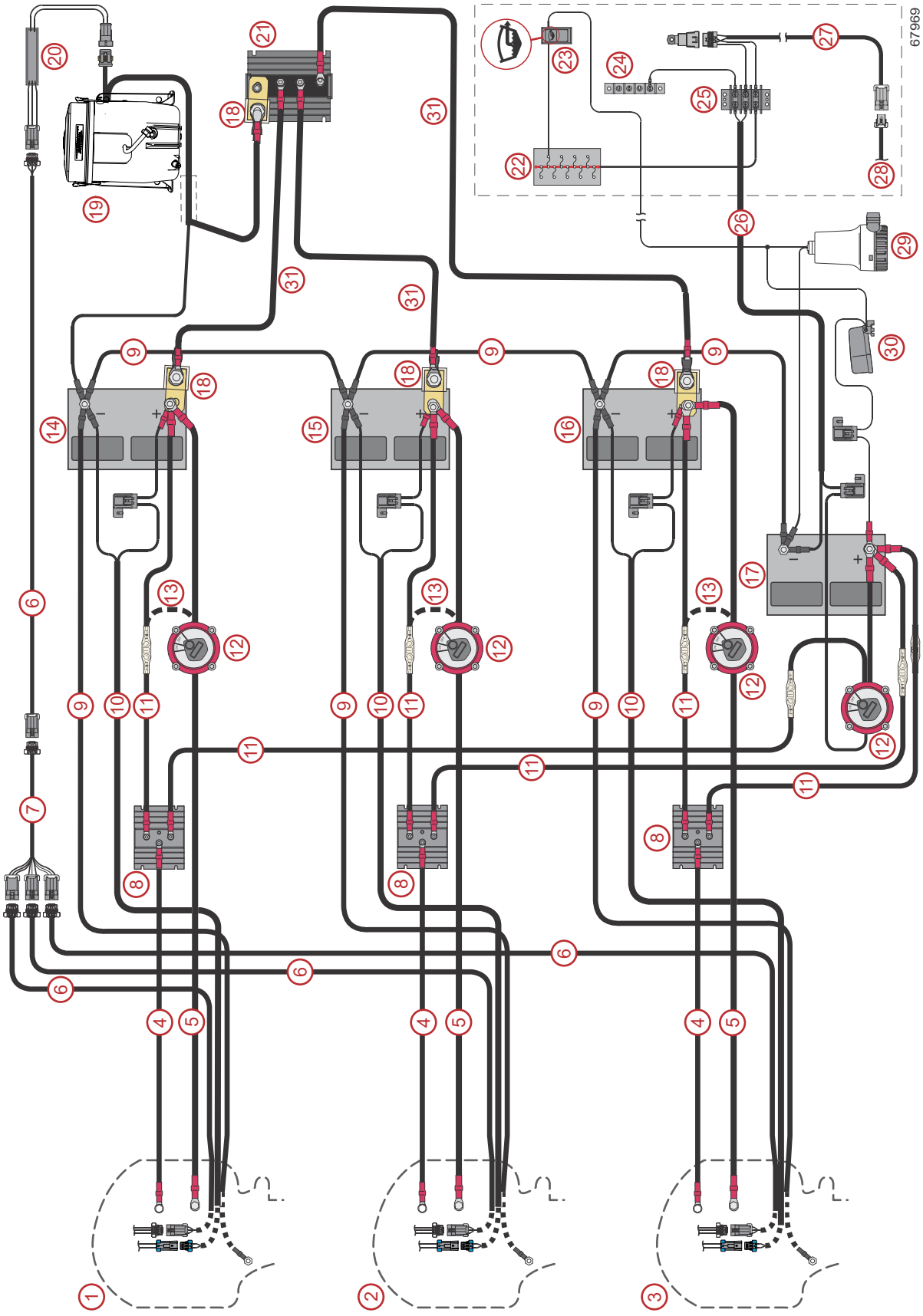
1 - Engine
2 - Alternator wire
3 - Positive battery cable
4 - Power steering signal harness
5 - Battery isolator
6 - Negative battery cable
7 - DTS power harness
8 - Fused harness
9 - Battery switch
10 - Alternate connection option
11 - Auxiliary battery
12 - Starting battery
13 - 80-amp cube fuse
14 - Power steering pump
15 - Power steering driver module harness
16 - Fuse panel
17 - Bilge pump switch
18 - Ground terminal block
19 - Terminal block
20 - Relay harness
21 - DTS command module harness
22 - Accessory power harness
23 - Bilge pump
24 - Bilge pump float switch

Dual-Engine Electrical Connections



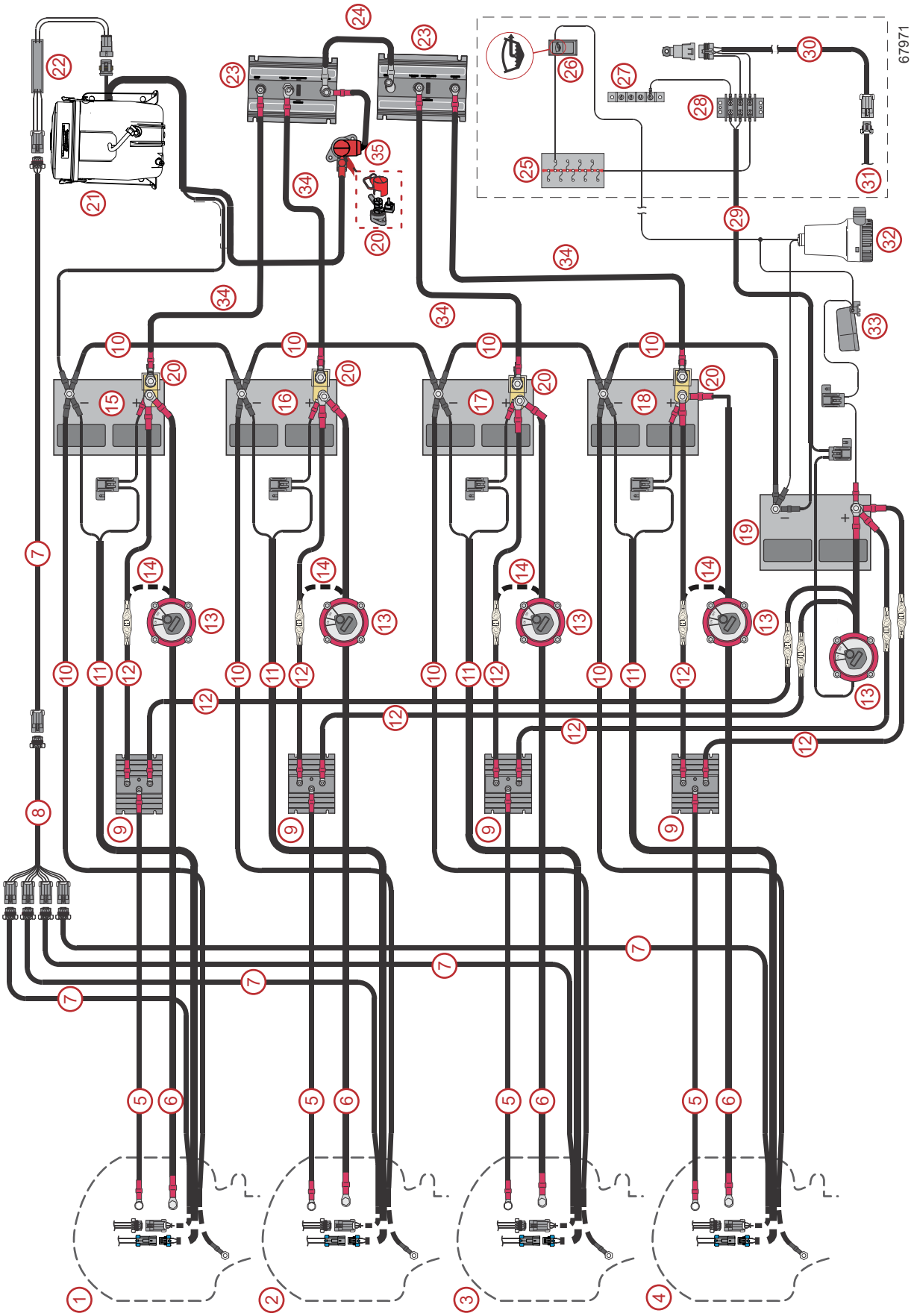
1 - Port engine
2 - Starboard engine
3 - Alternator wire
4 - Positive battery cable
5 - Power steering signal harness
6 - Battery isolator
7 - Dual-engine power steering signal harness adapter
8 - Negative battery cable
9 - DTS power harness
10 - Fused harness
11 - Battery switch
12 - Alternate connection option
13 - Port engine starting battery
14 - Starboard engine starting battery
15 - Auxiliary battery
16 - 80-amp cube fuse
17 - Power steering pump
18 - Power steering driver module harness
19 - Automatic power switch (APS)
20 - Fuse panel
21 - Bilge pump switch
22 - Ground terminal block
23 - Terminal block
24 - Accessory power harness
25 - Relay harness
26 - DTS command module harness
27 - Bilge pump
28 - Bilge pump float switch
29 - Positive battery cable with 80-amp cube fuse
30 - Hot stud

Triple-Engine Electrical Connections



1 - Port engine
2 - Center engine
3 - Starboard engine
4 - Alternator wire
5 - Positive battery cable
6 - Power steering signal harness
7 - Triple-engine power steering signal harness adapter
8 - Battery isolator
9 - Negative battery cable
10 - DTS power harness
11 - Fused harness
12 - Battery switch
13 - Alternate connection option
14 - Port engine starting battery
15 - Center engine starting battery
16 - Starboard engine starting battery
17 - Auxiliary battery
18 - 80-amp cube fuse
19 - Power steering pump
20 - Power steering driver module harness
21 - Automatic power switch (APS)
22 - Fuse panel
23 - Bilge pump switch
24 - Ground terminal block
25 - Terminal block
26 - Accessory power harness
27 - Relay harness
28 - DTS command module harness
29 - Bilge pump
30 - Bilge pump float switch
31 - Positive battery cable with 80-amp cube fuse

Quad-Engine Electrical Connections



1 - Port outside engine
2 - Port inside engine
3 - Starboard inside engine
4 - Starboard outside engine
5 - Alternator wire
6 - Positive battery cable
7 - Power steering signal harness
8 - Quad engine power steering signal harness adapter
9 - Battery isolator
10 - Negative battery cable
11 - DTS power harness
12 - Fused harness
13 - Battery switch
14 - Alternate connection option
15 - Port outside engine starting battery
16 - Port inside engine starting battery
17 - Starboard inside engine starting battery
18 - Starboard outside engine starting battery
19 - Auxiliary battery
20 - 80-amp cube fuse
21 - Power steering pump
22 - Power steering driver module harness
23 - Automatic power switch (APS)
24 - APS jumper cable 15.24 cm (6 in.) or less; 8 gauge PVC at 105 °C (221 °F) (84-88807A33)
25 - Fuse panel
26 - Bilge pump switch
27 - Ground terminal block
28 - Terminal block
29 - Accessory power harness
30 - Relay harness
31 - DTS command module harness
32 - Bilge pump
33 - Bilge pump float switch
34 - Positive battery cable with 80-amp cube fuse
35 - Hot stud

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