



# COLOR DIAGRAMS

## Section 6

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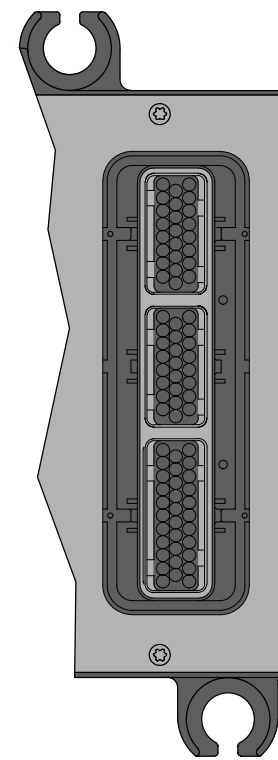


# **240 EFI JET DRIVE MODEL YEAR 2001-1/2 WIRING DIAGRAM**

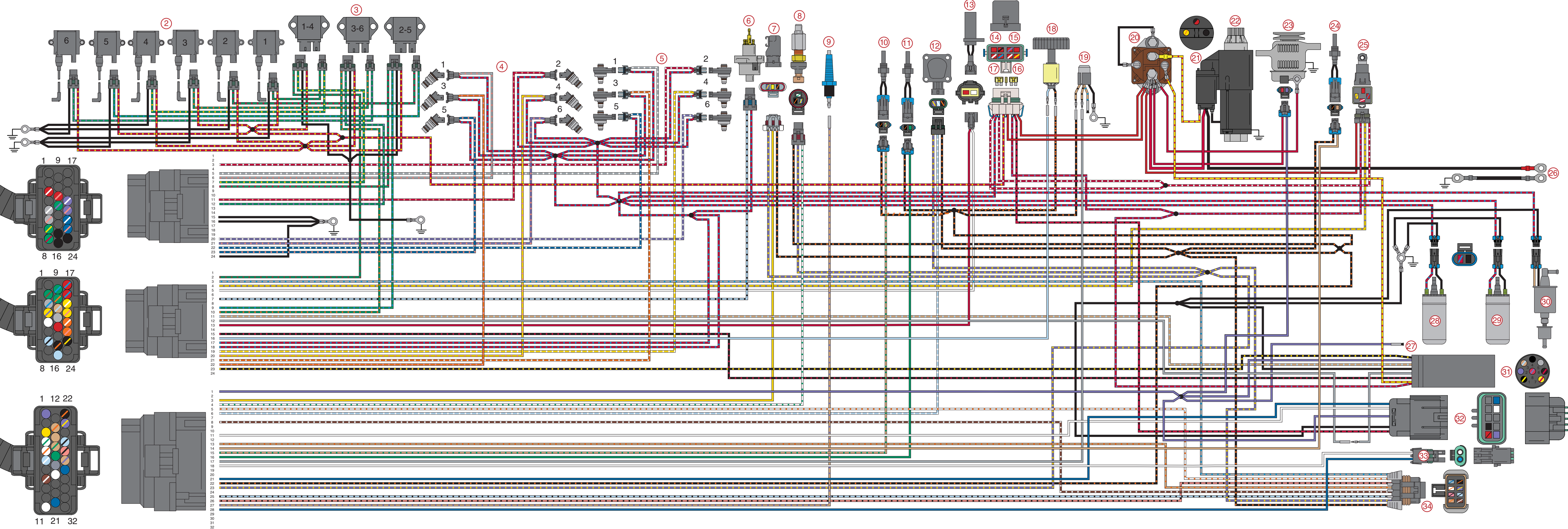
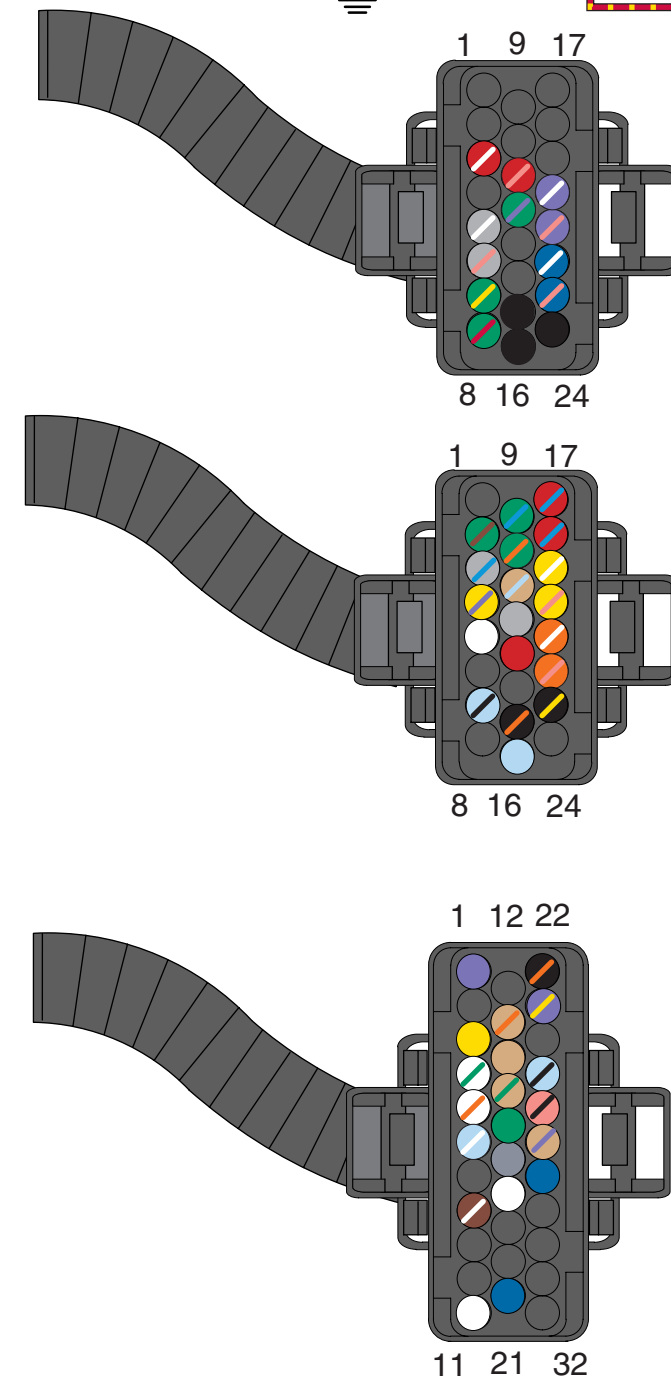


## **240 EFI JET DRIVE MODEL YEAR 2001-1/2**

1. Electronic Control Module
2. Ignition Coil
3. Fuel Injector
4. Oil Pump
5. MAP Sensor
6. Block Water Pressure
7. Water in Fuel Sensor
8. Air Temperature Sensor
9. Starboard Temperature Sensor
10. Port Head Temperature Sensor
11. Throttle Position Sensor
12. Crank Position Sensor
13. 15 Amp Fuse – Smart Craft Data Bus Circuit
14. 20 Amp Fuse – Main Power Relay, Remote Control Harness
15. 20 Amp Fuse – Ignition Coils
16. 20 Amp Fuse – Fuel Injector Harness, Electric Fuel Pump and Oil Pump
17. Low Oil Switch
18. Slave Solenoid
19. Starter Solenoid
20. Solenoid Driven Bendix Starter
21. Fuel Filter
22. Fuel Lift Pump
23. 3 Amp Fuse
24. 60 Amp Alternator
25. 100 Amp Fuseable Link
26. Main Power Relay
27. VST Electric Fuel Pump
28. To 12 Volt Battery
29. Accessory Power
30. Starboard Knock Sensor
31. Port Knock Sensor
32. Remote Control
33. SmartCraft Data Bus
34. DDT Terminal
35. Boat Harness



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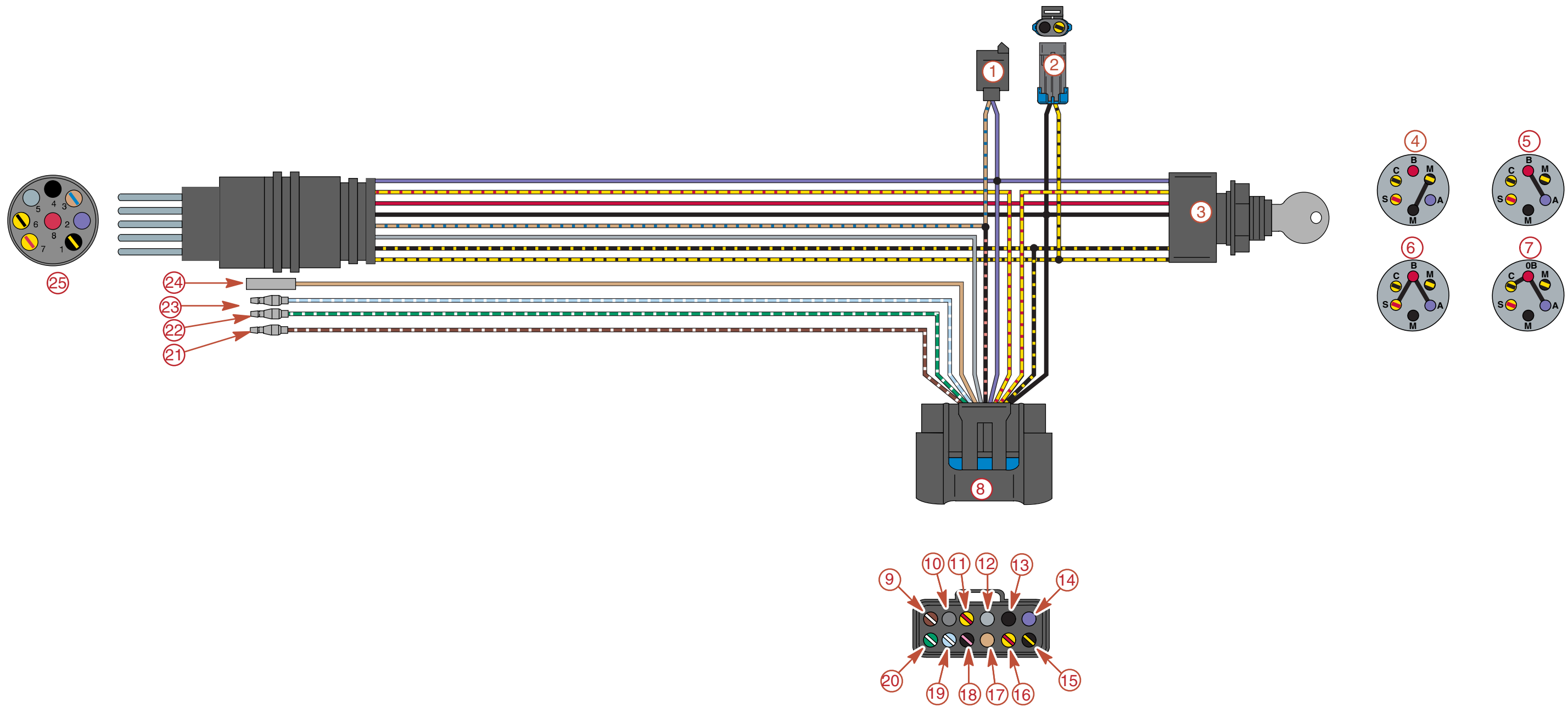
## **240 EFI JET DRIVE TYPICAL KEY SWITCH WIRING**



# 240 EFI JET DRIVE

## TYPICAL KEY SWITCH WIRING

1. Warning Horn
2. Connector for Low-Speed Control.
3. Key Switch
4. Key Switch Connections for OFF Position
5. Key Switch Connections for ON Position
6. Key Switch Connections for START Position
7. Key Switch Connections for CHOKE or PRIME Position
8. Harness Connection to Boat Dash
9. Not Used
10. Blank
11. To Neutral-Only Start Switch.
12. Provides Tachometer Signal to Tachometer.
13. Provides Ground for Dash Gauges and Lanyard Stop Switch.
14. Supplies Switched 12 Volt + to Dash Gauges.
15. Connects to Lanyard Stop Switch.
16. To Neutral-Only Start switch.
17. Not used.
18. Not used.
19. Connects to Oil Level Gauge
20. Not used
21. Not Used
22. Not used
23. Connects to Oil Level Sender in Tank
24. Not Used
25. Key Switch Harness Connection to Engine Harness





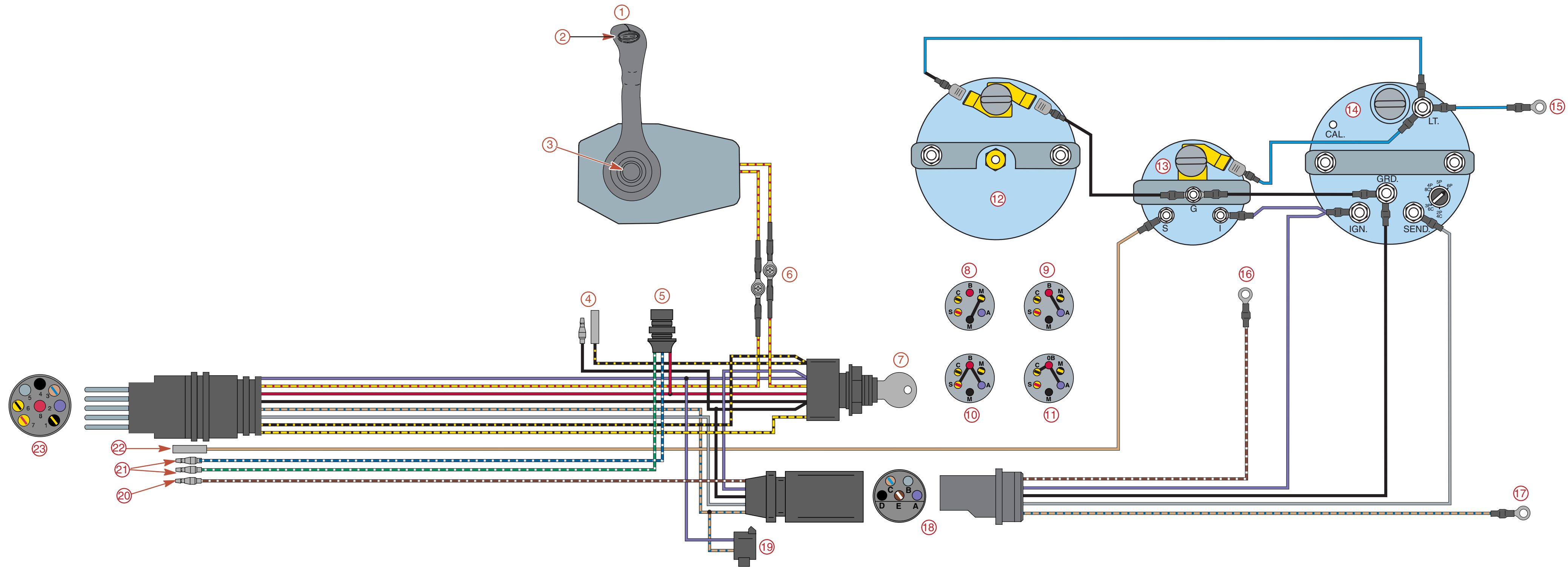


# **240 EFI JET DRIVE TYPICAL REMOTE CONTROL AND DASH WIRING NON-SMARTCRAFT**



# **240 EFI JET DRIVE TYPICAL REMOTE CONTROL AND DASH WIRING NON-SMARTCRAFT**

1. Remote Control meeting ABYC Mini Jet Boat Standard P23
2. Neutral Lock Button
3. Throttle Only Button
4. To Lanyard Stop Switch. Lanyard stop switch leads must be soldered and covered with shrink tube for a water proof connection.  
If alternate method of connection is made (use of electrical butt connector) verify connection is secure and seal for moisture proof connection.
5. Not Used
6. To Neutral Start Switch. Connect wires together with screw and hex nut (2 places); apply Quicksilver Liquid Neoprene to connections and slide heat shrink tubing over each connection.
7. Key Switch
8. Key Switch Connections for OFF Position
9. Key Switch Connections for ON Position
10. Key Switch Connections for START Position
11. Key Switch Connections for CHOKE or PRIME Position
12. Speedometer
13. Temperature Gauge
14. Tachometer
15. Light Switch Connection
16. Not Used
17. To Warning Light (if equipped)
18. Tachometer Harness Connection
19. Warning Horn
20. Not Used
21. Not Used
22. To Temperature Sensor (if equipped)
23. Remote Control Harness Connection



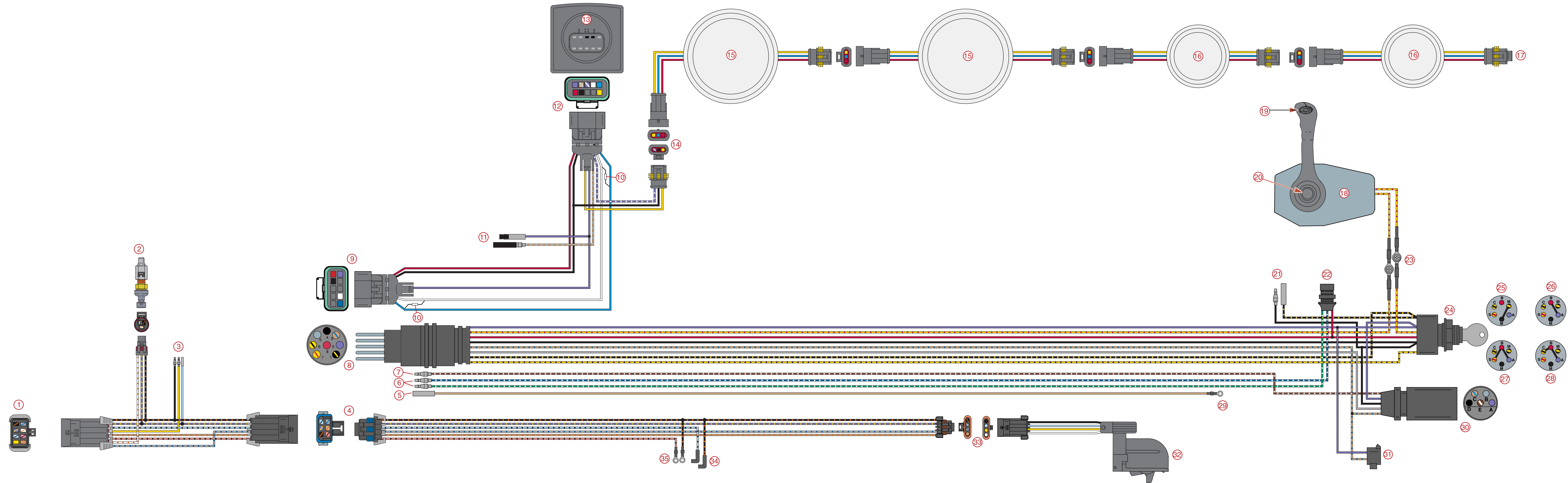


# **240 EFI JET DRIVE TYPICAL REMOTE CONTROL AND DASH WIRING WITH SMARTCRAFT**



# **240 EFI JET DRIVE TYPICAL REMOTE CONTROL AND DASH WIRING WITH SMARTCRAFT**

1. 8-Pin Digital Sensor Harness Extension, Connect to 8-Pin SmartCraft Harness on Engine
2. Digital Speedometer Sensor
3. Not used
4. 6-Pin Digital Sensor Harness
5. Not Used
6. Not Used
7. Not Used
8. Remote Control Harness Connects to Engine Harness
9. 10-Pin Control Area Network (CAN) Harness, Connect to Data Buss 10-Pin CAN Harness on Engine
10. Resistors within CAN Harness ( $120\Omega$  1/4W 5%)
11. Connections for Auxiliary Warning Horn for Depth Sensor
12. 10-Pin Control Area Network (CAN) Connection to System Monitor
13. System Monitor
14. System Link Series Connections
15. 3-1/4 in. System Link Gauges (Tachometer and Speedometer)
16. 2-1/4 in. Dia. System Link Gauges (Fuel, Temperature, Trim, etc.)
17. Series Connection for Additional System Link Gauges
18. Remote Control meeting ABYC Mini Jetboat Standard P23
19. Neutral Lock Button
20. Throttle Only Button
21. Connections for Lanyard Stop Switch
22. Connections for Power Trim Switch
23. Connections for Neutral Start Safety Switch
24. Ignition Key Switch
25. Key switch connections for OFF position
26. Key switch connections for ON position
27. Key switch connections for START position
28. Key switch connections for CHOKE or PRIME position
29. Analog Temperature Gauge Connection
30. Analog Tachometer Harness (Not Used on CAN Installation)
31. Warning Horn
32. Paddle Wheel/Lake/Sea Water Temperature Sender
33. 4-Pin Digital Sensor Harness Connection to Paddle Wheel
34. Digital Connections to Oil Sender
35. Digital Connections for Fuel Sender





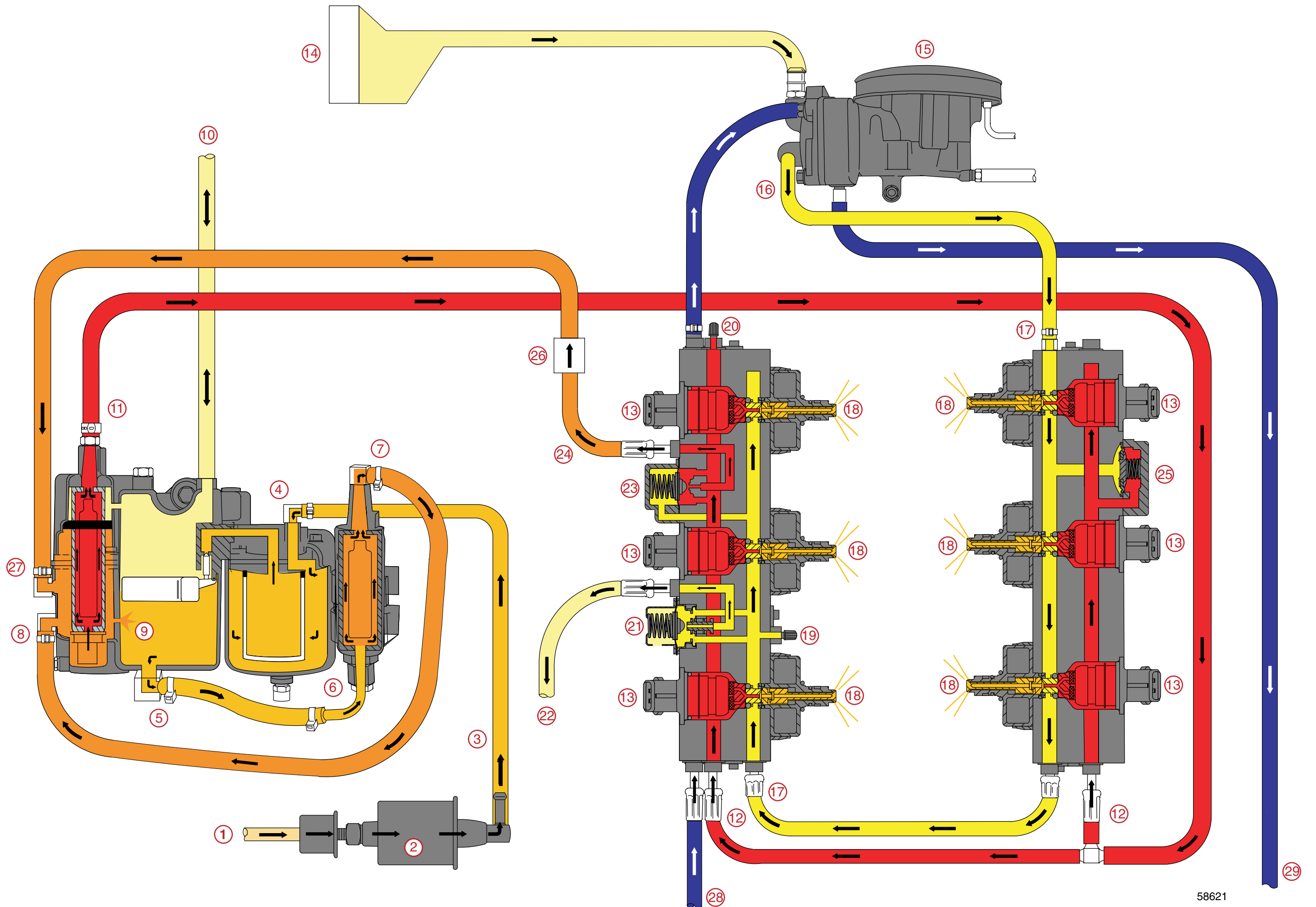
## **240 EFI JET DRIVE FUEL & OIL FLOW DIAGRAM**



# **240 EFI JET DRIVE FUEL & OIL FLOW DIAGRAM**

1. Fuel inlet from boat fuel tank
2. Fuel Filter for Fuel Lift Pump
3. Fuel Lift Pump
4. Pulse Fuel Pump
5. Fuel line to Water Separating Fuel Filter - 2-8 psi (14-55 kPa)
6. Water Separating Fuel Filter in Vapor Separator Tank (VST) Assembly
7. Fuel outlet from Needle and Seat
8. Fuel Level Float in VST
9. Pulse Pressure from Cylinder Block
10. On-Board Oil Tank
11. Check Valve in Outlet Hose from Oil Tank
12. Engine Mounted Oil Reservoir
13. Oil Inlet Hose to Electronic Oil Pump
14. Electronic Oil Pump
15. Oil Outlet Hose from Oil Pump to VST
16. Oil is Mixed with Gas in VST
17. Gas/Oil Mixture is Drawn into High Pressure Fuel Pump
18. Fuel Drain
19. High Pressure Fuel Pump [41 psi – 45 psi (283 kPa – 310 kPa)]
20. Schrader Valve
21. Fuel Passage to Fuel Regulator
22. Fuel Regulator
23. Ambient Air Pressure
24. Fuel Blow-Off from Fuel Regulator to VST
25. In-Line Fuel Filter
26. High Pressure Fuel Line to Reed Valve Plate Assembly
27. Reed Valve Plate Assembly
28. Fuel Inlet to Fuel Rail
29. Fuel Rail Assembly
30. Fuel Injectors







## **240 EFI JET DRIVE WATER FLOW**



# 240 EFI JET DRIVE WATER FLOW

## Powerhead and Exhaust Cooling Circuit

1. Inlet Cooling Water from Jet Pump.
2. Water Inlet from Flushing Connection.
3. Water Flows from Adapter Plate to Powerhead.
4. Water Fills Center of Powerhead, Flows Over Exhaust Runners, then to Cylinder Jackets
5. Water Pressure Sensor
6. Cooling Water Fills Cylinder Jackets, then flows to Cylinder Heads.
7. Majority of water flows down Cylinder Heads. Cylinder Head Cover has been removed from Head for illustration, it is normally part of Head Casting.
8. Small amount of water flows out top of Cylinder Head to Water By-Pass.
9. Water By-pass – Discharged outside of Boat.
10. Water flows from bottom of Cylinder Head through passage in Cylinder Block to Adapter Plate.
11. Water flows from Cylinder Block through Adapter Plate, Cooling Exhaust Passages.
12. Water flows from Adapter Plate to Expansion Chamber Water Jacket.
13. Cooling Water from Expansion Chamber is emptied back into Adaptor Plate.
14. Cooling Water from Adaptor Plate is exhausted through the Jet Tunnel.

