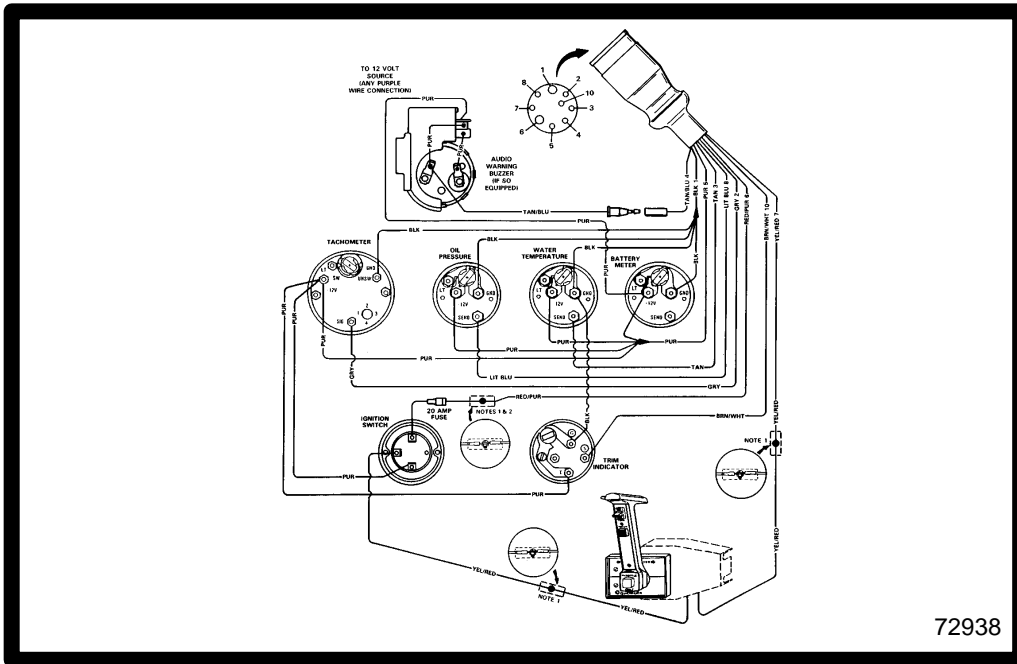


# ELECTRICAL SYSTEMS



4

E

## WIRING DIAGRAMS

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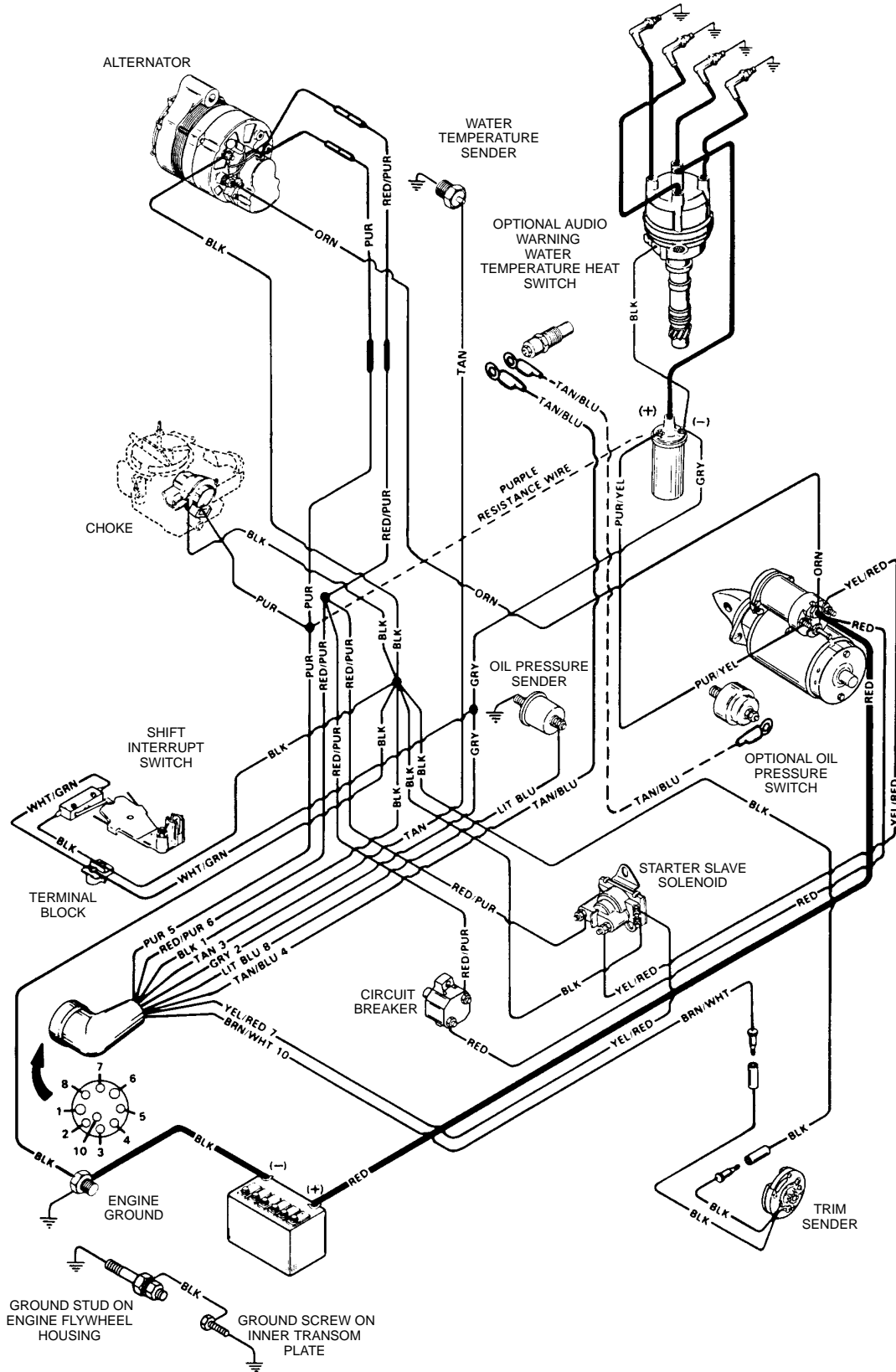
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# Wiring Colors for MerCruiser

BIA COLOR CODE AND ABBREVIATIONS	WHERE USED
BLACK (BLK)	All Grounds
BROWN (BRN)	Reference Electrode-MerCathode
ORANGE (ORN)	Anode Electrode-MerCathode
LIGHT BLUE/WHITE (LIT BLU / WHT)	Trim- "Up" Switch
GRAY (GRY)	Tachometer Signal
GREEN/WHITE (GRN / WHT)	Trim -"Down" Switch
TAN (TAN)	Water Temperature Sender to Gauge
LIGHT BLUE (LIT BLU)	Oil Pressure Sender to Gauge
PINK (PNK)	Fuel Gauge Sender to Gauge
BROWN/WHITE (BRN / WHT)	Trim Sender to Trim Gauge
PURPLE/WHITE (PUR / WHT)	Trim-"Trailer" Switch
RED (RED)	Unprotected Wires from Battery
RED/PURPLE (RED / PUR)	Protected (Fused) Wires from Battery
RED/PURPLE (RED / PUR)	Protected (+12V) to Trim Panel
ORANGE (ORN)	Alternator Output
PURPLE/YELLOW (PUR / YEL)	Ballast Bypass
PURPLE (PUR)	Ignition Switch (+12 V)
YELLOW/RED (YEL / RED)	Starter Switch to Starter Solenoid to Neutral Start Switch

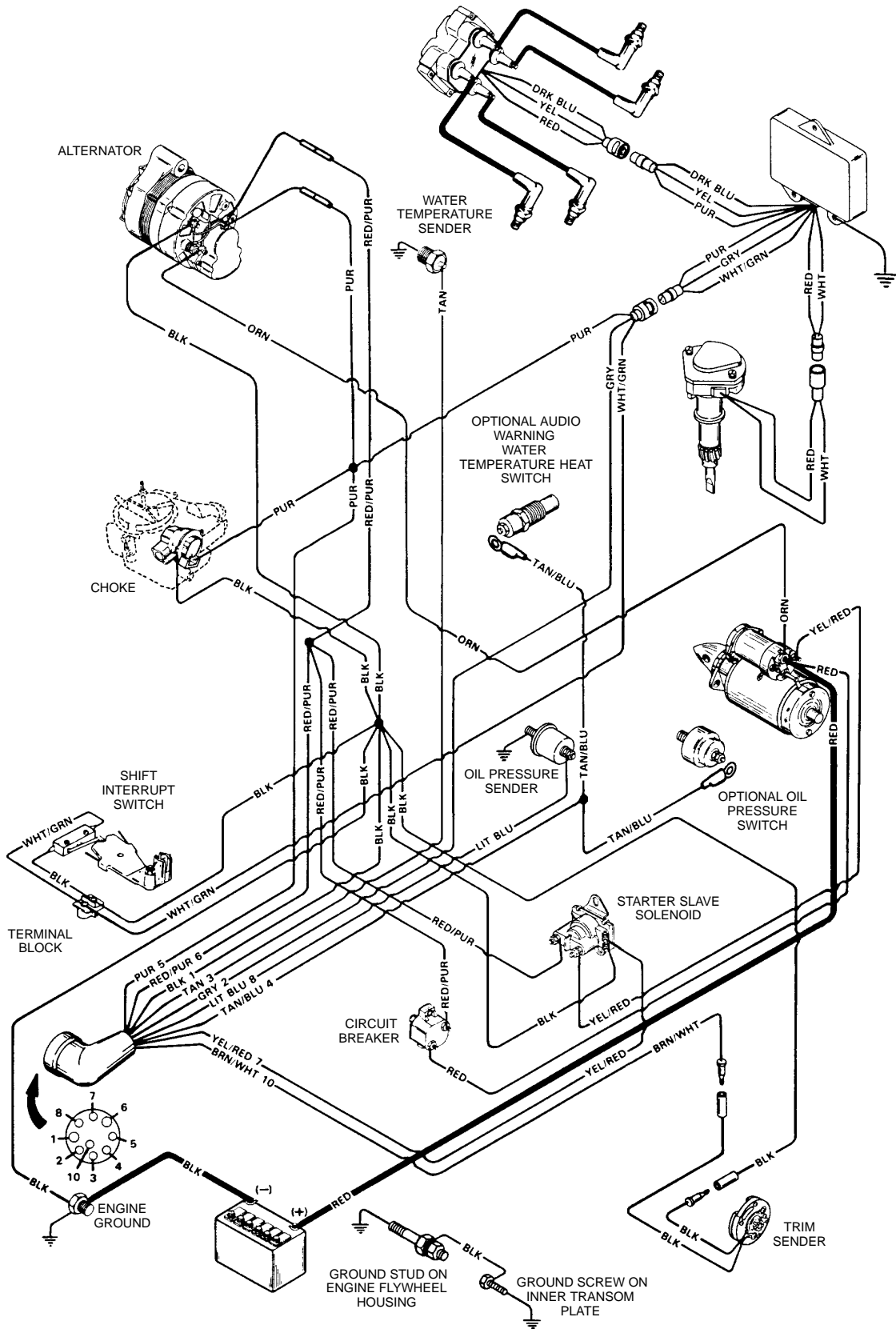
# Wiring Diagrams

## 3.0L Engine Wiring Diagram (Breaker Points Ignition)



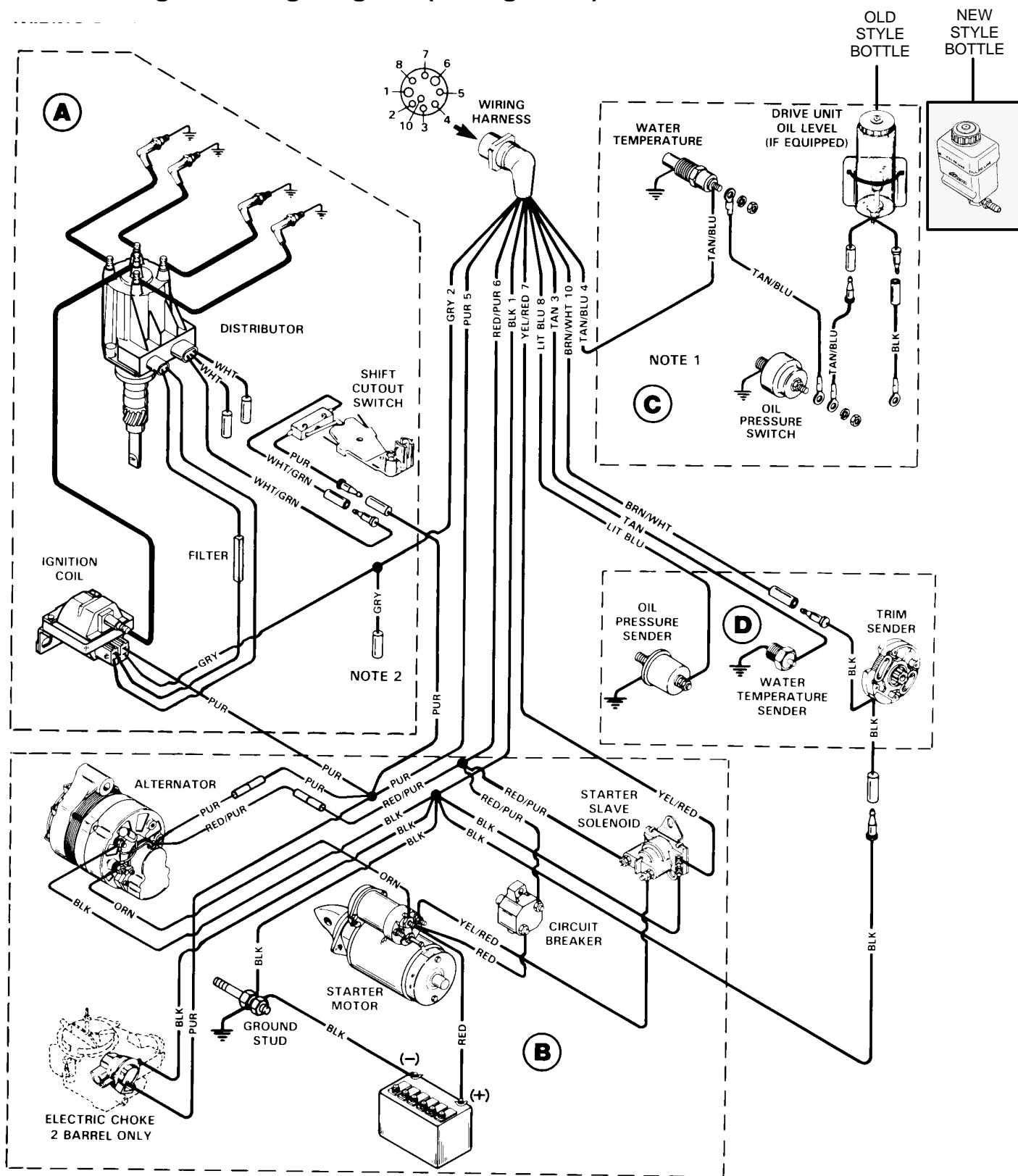
50726

# 3.0L/3.0LX Engine Wiring Diagram (DDIS Ignition)



50727

# 3.0L/3.0LX Engine Wiring Diagram (EST Ignition)



NOTE 1: Audio Warning System Standard On 3.0LX Models

NOTE 2: Gray lead for use with service tachometer.

**A - Ignition Components**

**B - Starting, Charging and Choke Components**

**C - Audio Warning System Components**

**D - Instrumentation Components**

# Instrumentation Wiring Diagram (Battery Meter Circuit)

NOTE 1: Connect wires together with screw and hex nut. Tighten securely and coat with Liquid Neoprene to help control corrosion: when dry, slide neoprene sleeve over connection.

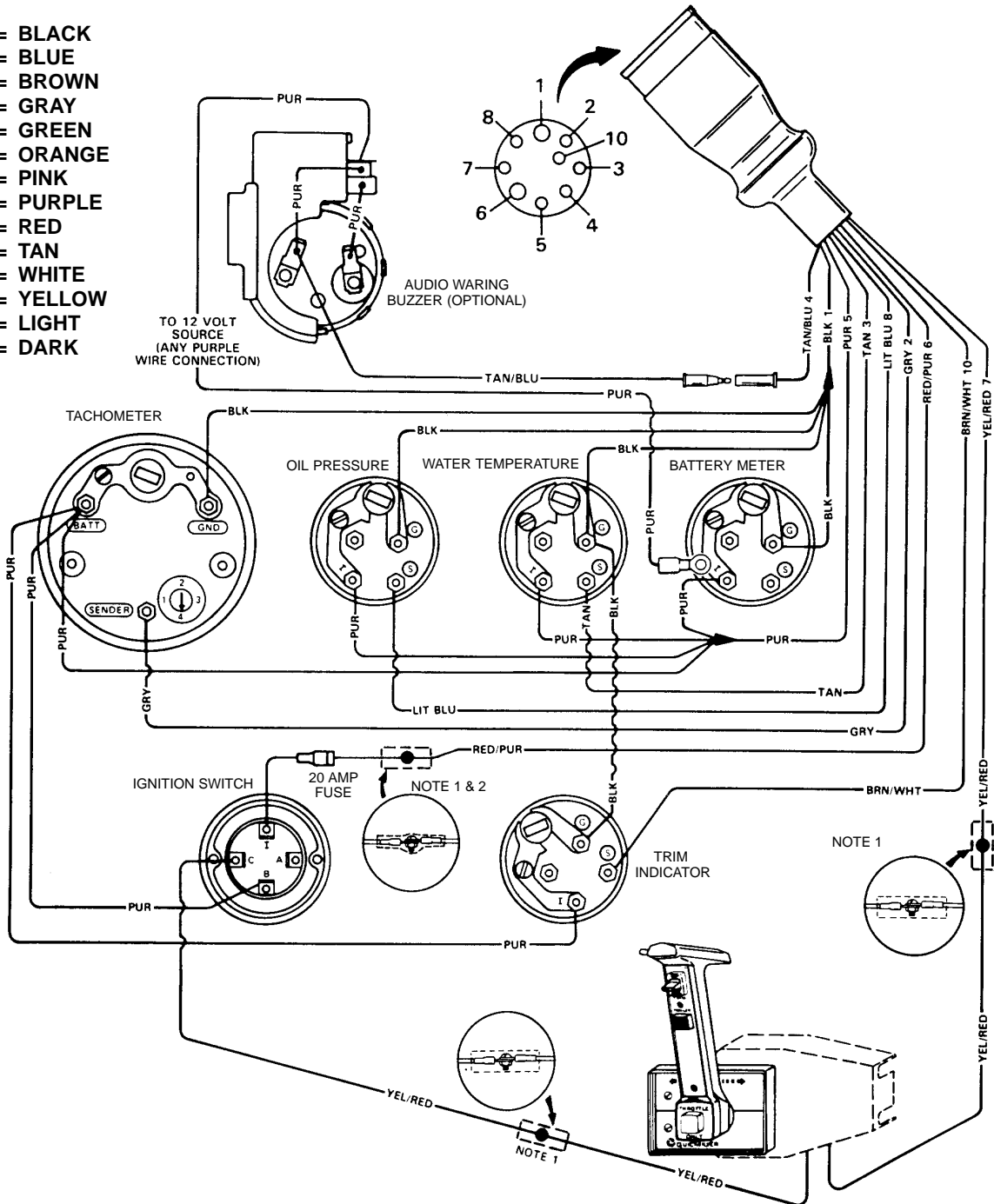
NOTE 2: Power for a fused accessory panel may be taken from this connection. Load must not exceed 40 amps. Panel ground wire must be connected to instrument terminal that has an 8-gauge BLACK (ground) harness wire connected to it.

NOTE 3: Audio warning is standard 3.0LX models and optional on 3.0L.

**⚠ CAUTION**

Audio warning buzzer is not external ignition proof, therefore, **DO NOT** mount buzzer in engine or fuel tank compartments.

- BLK = BLACK
- BLU = BLUE
- BRN = BROWN
- GRY = GRAY
- GRN = GREEN
- ORN = ORANGE
- PNK = PINK
- PUR = PURPLE
- RED = RED
- TAN = TAN
- WHT = WHITE
- YEL = YELLOW
- LIT = LIGHT
- DRK = DARK



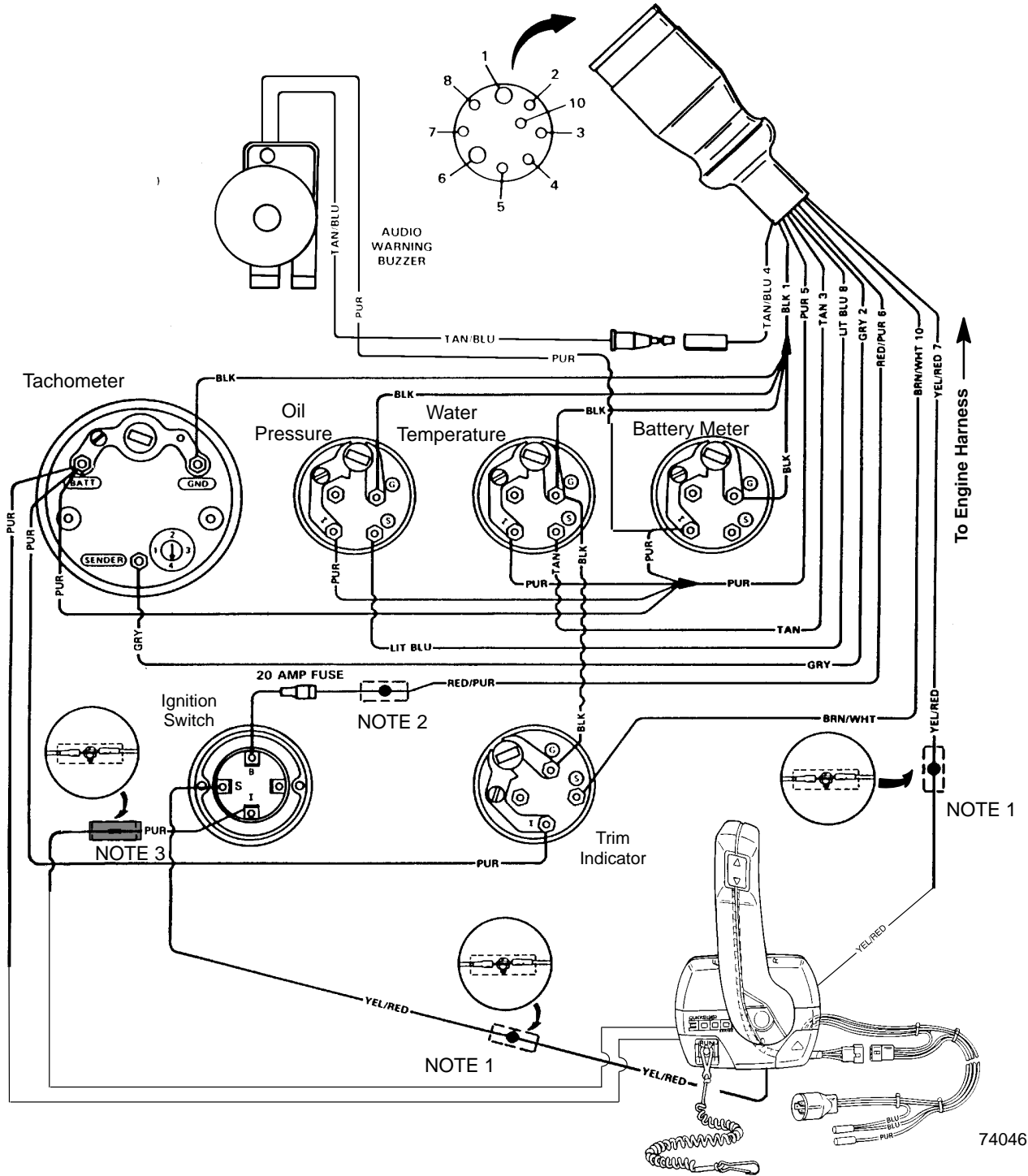
50585

## Earlier Style Audio Warning Buzzer

NOTE 1: Connect wires together with screw and hex nut. Tighten securely and coat with Liquid Neoprene to help control corrosion: when dry, slide neoprene sleeve over connection.

NOTE 2: Power for a fused accessory panel may be taken from this connection. Load must not exceed 40 amps. Panel ground wire must be connected to instrument terminal that has an 8-gauge BLACK (ground) harness wire connected to it.

NOTE 3: Audio warning is standard 3.0LX models and optional on 3.0L.



74046

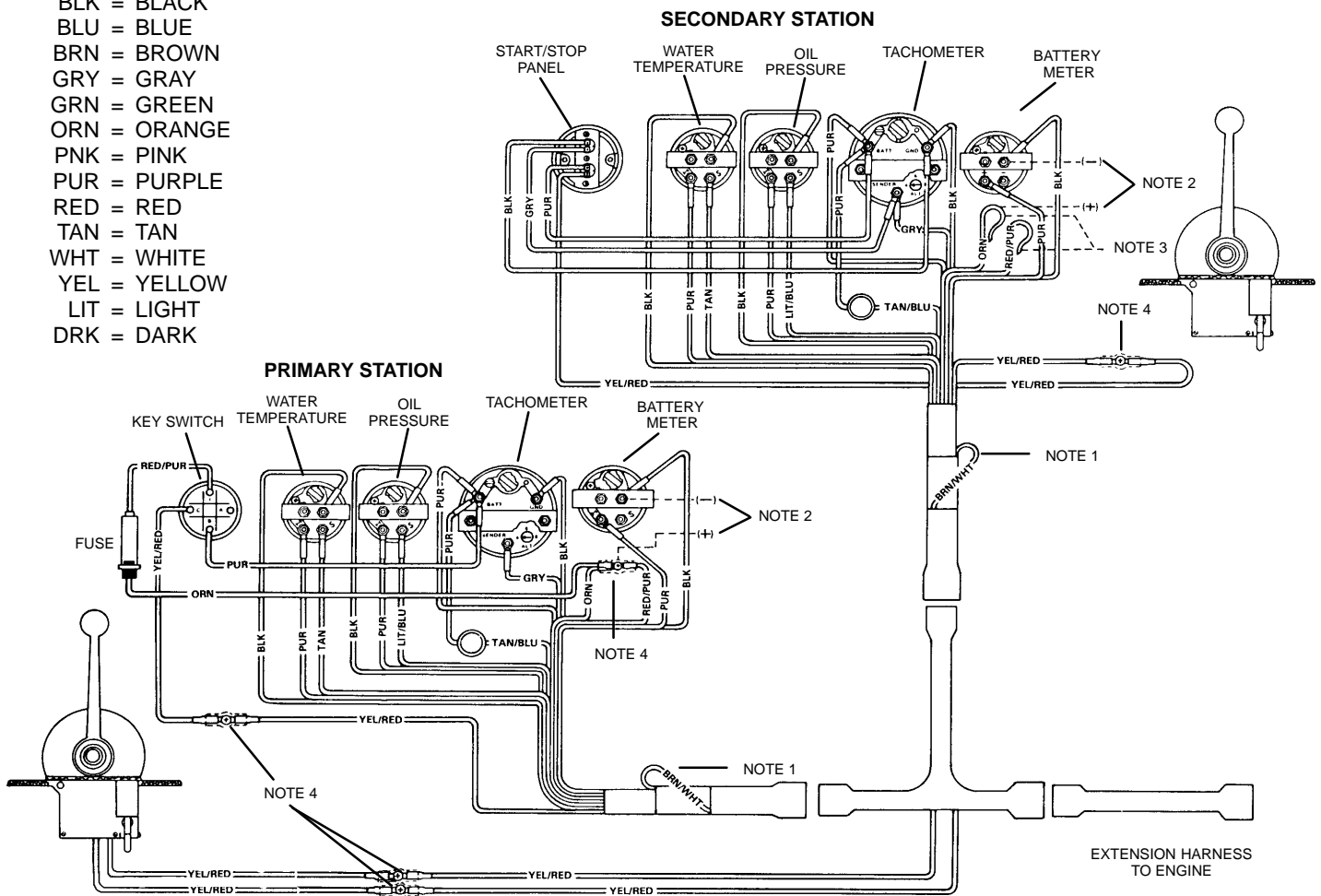
Later Style Audio Warning Buzzer



# Instrument Wiring Harness (Dual Station)

## BREAKER POINT IGNITION - DUAL STATION USING A NEUTRAL SAFETY SWITCH IN ONLY ONE REMOTE CONTROL

- BLK = BLACK
- BLU = BLUE
- BRN = BROWN
- GRY = GRAY
- GRN = GREEN
- ORN = ORANGE
- PNK = PINK
- PUR = PURPLE
- RED = RED
- TAN = TAN
- WHT = WHITE
- YEL = YELLOW
- LIT = LIGHT
- DRK = DARK



50731

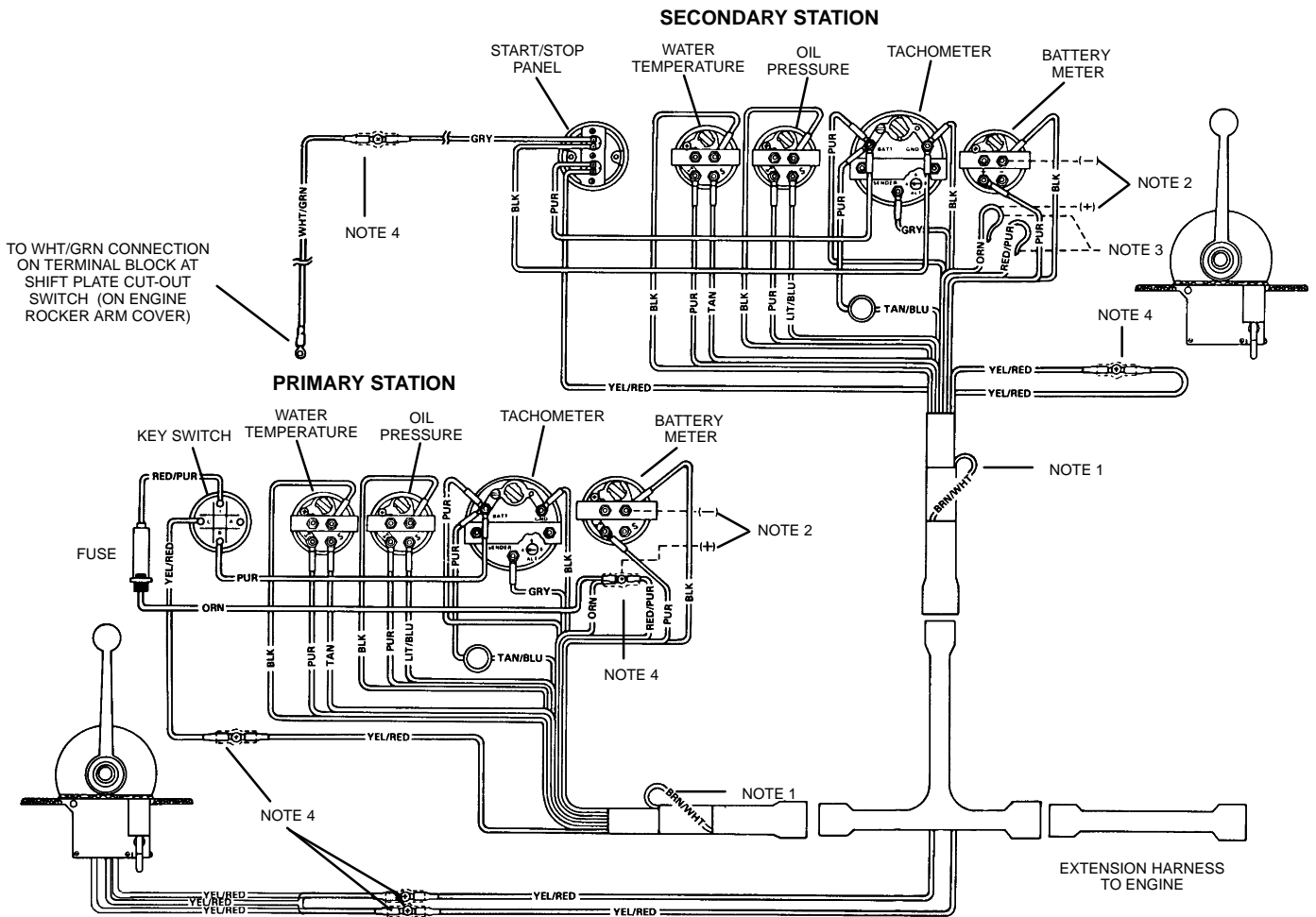
**NOTE 1:** BROWN/WHITE wire is taped back at instrument end. If installing on boat that is equipped with MerCruiser Stern Drive, BROWN/WHITE wire is connected to the trim sender terminal block. Also can be used for an accessory (limit 5 amps).

**NOTE 2:** An accessory fuse panel may be connected at this location. The combined current draw of the primary station and secondary station MUST NOT exceed 5 amps.

**NOTE 3:** Tape back and insulate with at least four layers of electrical tape.

**NOTE 4:** Connect wires together with screw and hex nut. Tighten securely and coat with Liquid Neoprene to help control corrosion; when dry, slide neoprene sleeve over connection.

# EST AND DDIS IGNITION - DUAL STATION USING A NEUTRAL SAFETY SWITCH IN ONLY ONE REMOTE CONTROL



50730

NOTE 1: BROWN/WHITE wire is taped back at instrument end. If installing on boat that is equipped with MerCruiser Stern Drive, BROWN/WHITE wire is connected to the trim sender terminal block. Also can be used for an accessory (limit 5 amps).

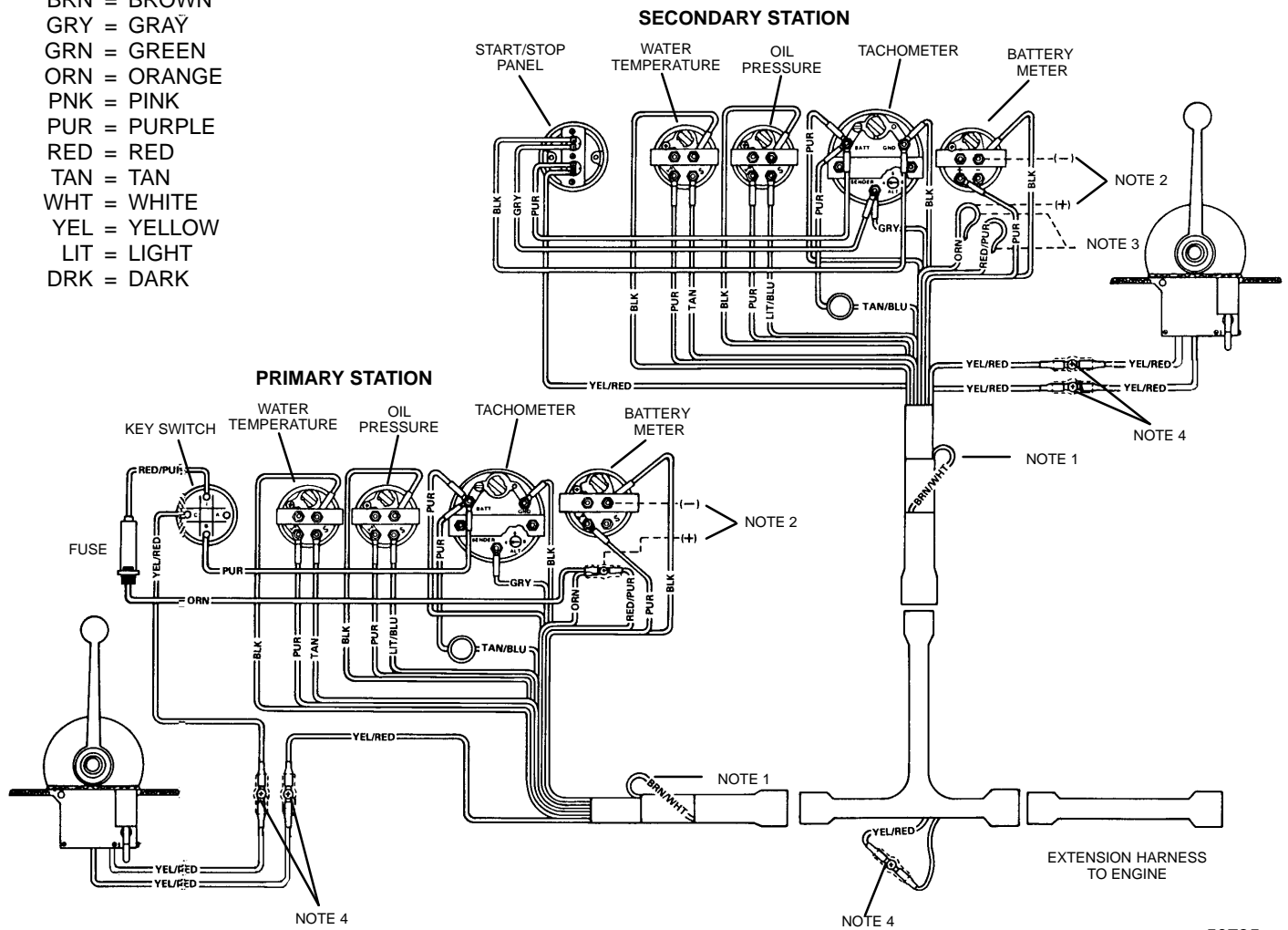
NOTE 2: An accessory fuse panel may be connected at this location. The combined current draw of the primary station and secondary station MUST NOT exceed 5 amps.

NOTE 3: Tape back and insulate with at least four layers of electrical tape.

NOTE 4: Connect wires together with screw and hex nut. Tighten securely and coat with Liquid Neoprene to help control corrosion; when dry, slide neoprene sleeve over connection.

# BREAKER POINT IGNITION - DUAL STATION USING A NEUTRAL SAFETY SWITCH IN BOTH REMOTE CONTROLS

- BLK = BLACK
- BLU = BLUE
- BRN = BROWN
- GRY = GRAY
- GRN = GREEN
- ORN = ORANGE
- PNK = PINK
- PUR = PURPLE
- RED = RED
- TAN = TAN
- WHT = WHITE
- YEL = YELLOW
- LIT = LIGHT
- DRK = DARK



50735

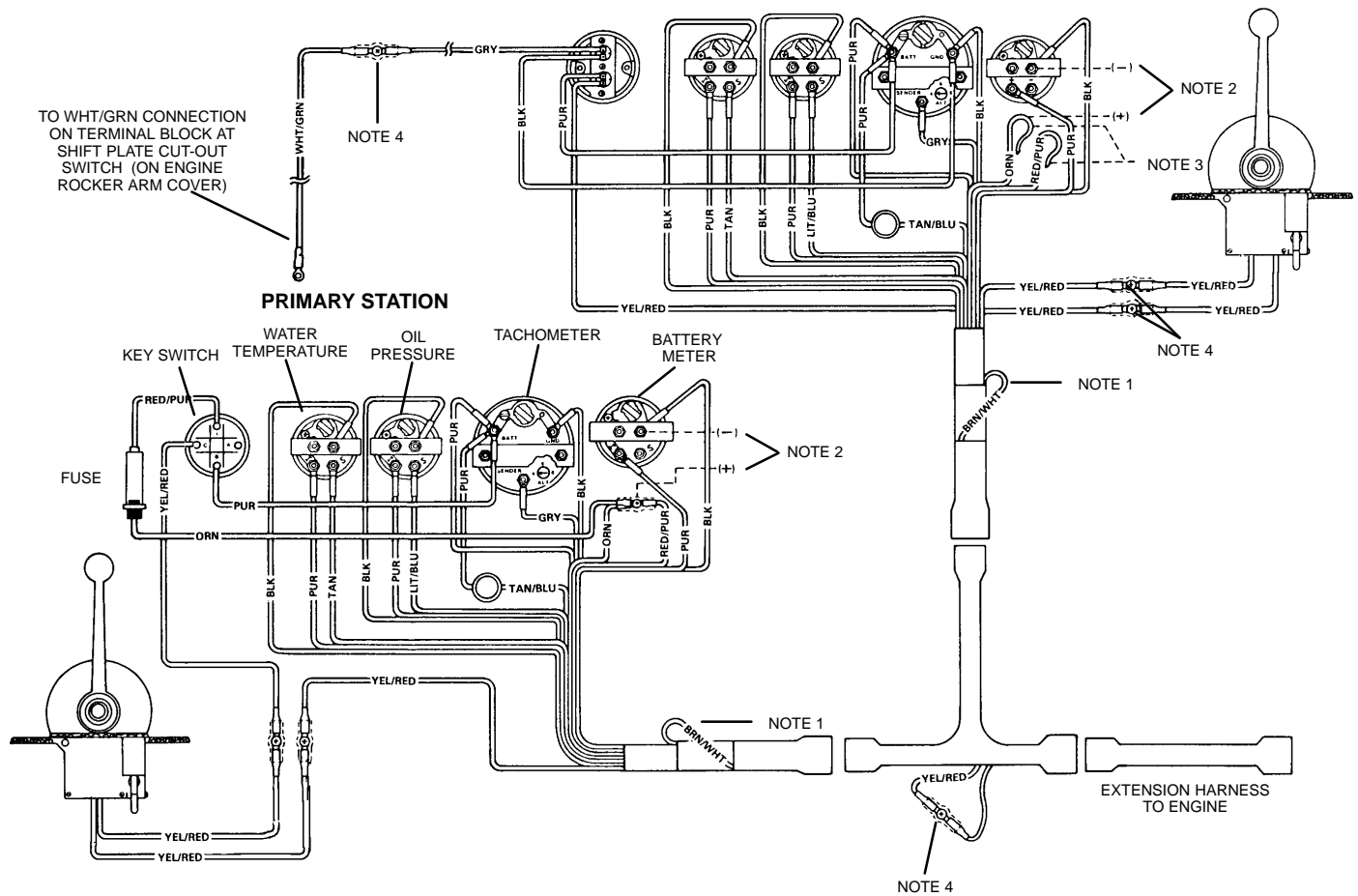
**NOTE 1:** BROWN/WHITE wire is taped back at instrument end. If installing on boat that is equipped with MerCruiser Stern Drive, BROWN/WHITE wire is connected to the trim sender terminal block. Also can be used for an accessory (limit 5 amps).

**NOTE 2:** An accessory fuse panel may be connected at this location. The combined current draw of the primary station and secondary station MUST NOT exceed 5 amps.

**NOTE 3:** Tape back and insulate with at least four layers of electrical tape.

**NOTE 4:** Connect wires together with screw and hex nut. Tighten securely and coat with Liquid Neoprene to help control corrosion; when dry, slide neoprene sleeve over connection.

# EST AND DDIS IGNITION - DUAL STATION USING A NEUTRAL SAFETY SWITCH IN BOTH REMOTE CONTROLS



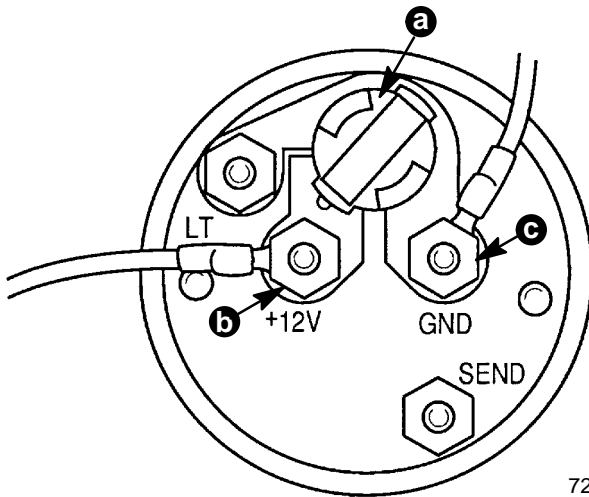
NOTE 1: BROWN/WHITE wire is taped back at instrument end. If installing on boat that is equipped with MerCruiser Stern Drive, BROWN/WHITE wire is connected to the trim sender terminal block. Also can be used for an accessory (limit 5 amps).

NOTE 2: An accessory fuse panel may be connected at this location. The combined current draw of the primary station and secondary station MUST NOT exceed 5 amps.

NOTE 3: Tape back and insulate with at least four layers of electrical tape.

NOTE 4: Connect wires together with screw and hex nut. Tighten securely and coat with Liquid Neoprene to help control corrosion; when dry, slide neoprene sleeve over connection.

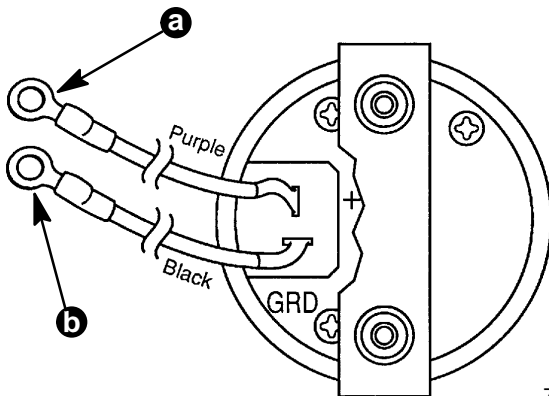
## Battery Meter Gauge



72814

- a - Lamp Mounting Hole
- b - PURPLE (or WHITE) Jumper Wire from This Terminal to "I" (or +) Terminal on Water Temperature or Oil Pressure Gauge
- c - BLACK Jumper Wire from This Terminal to Ground (-) Terminal on Water Temperature or Oil Pressure Gauge

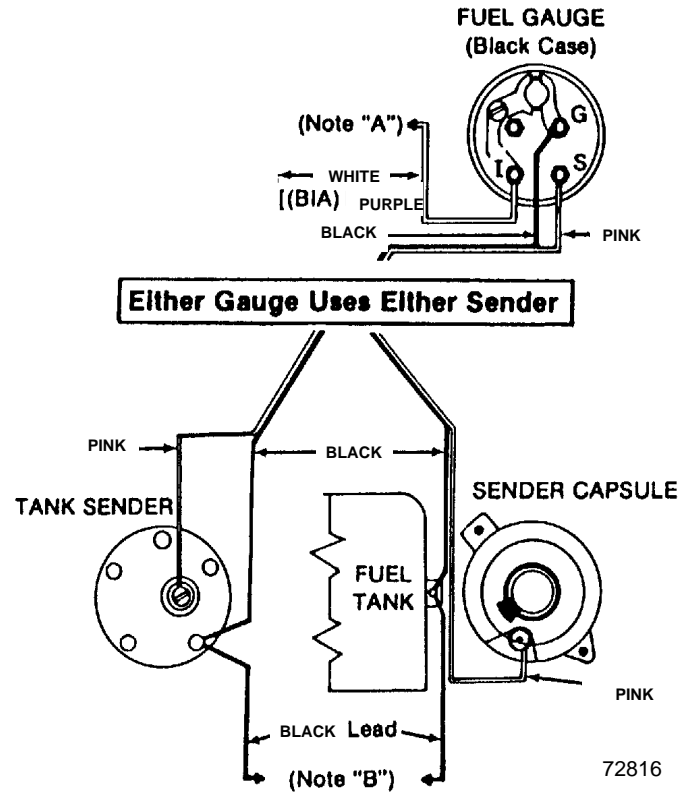
## Cruiselog



72815

- a - Connect to Ignition Switch Activated 12 Volt Positive (+) Source (PURPLE Wire)
- b - Connect to Negative (-) Ground (BLACK Wire)

## Fuel Gauge and Sender



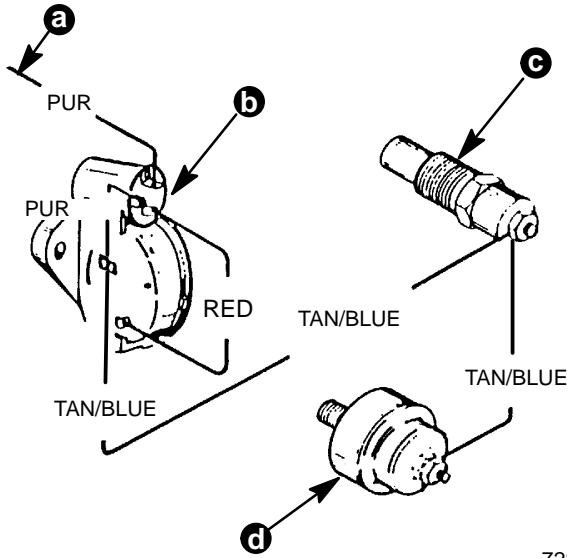
72816

- NOTE "A": Connect to "I" (Ignition) Terminal or Accessory Terminal of ignition switch.  
 NOTE "B": Connect to NEGATIVE (-) Battery Terminal Or Suitable Ground (-).

# Audio Warning System

## ⚠ WARNING

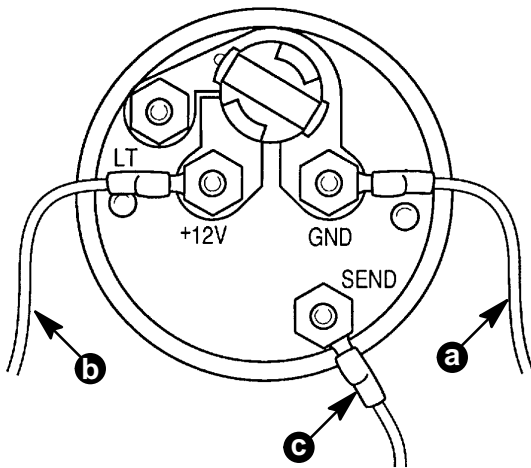
Buzzer is not external ignition-proof; therefore, **DO NOT** mount buzzer in engine or fuel tank compartments.



72817

- a - To 12 Volt (+) Positive Source
- b - Audio Warning Buzzer
- c - Water Temperature Heat Switch
- d - Oil Pressure Switch

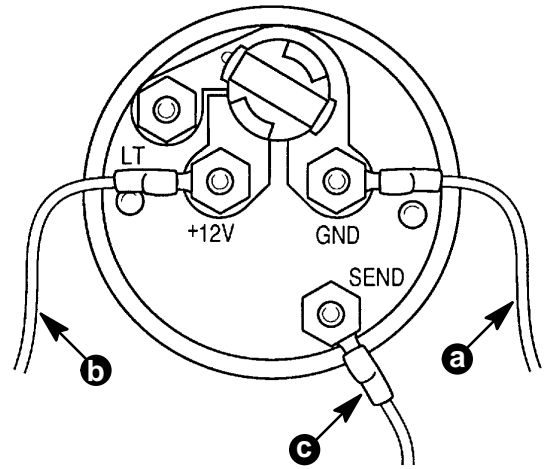
# Water Temperature Gauge



72819

- |                |                                   |
|----------------|-----------------------------------|
| BIA Color Code | Leads to –                        |
| a BLACK        | (a) Ground (-)                    |
| b PURPLE       | (b) Switched 12 (+)_Volt Terminal |
| c TAN          | (c) Sender Lead                   |

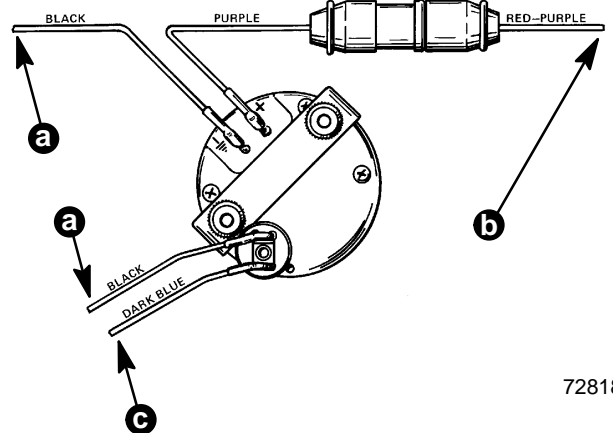
# Oil Pressure Gauge



72819

- |                |                                   |
|----------------|-----------------------------------|
| BIA Color Code | Leads to –                        |
| a BLACK        | (a) Ground (-)                    |
| b PURPLE       | (b) Switched 12 Volt (+) Terminal |
| c LIGHT BLUE   | (c) Sender Lead                   |

# Clock



72818

- a - Connect to a Terminal on an Adjacent Gauge or to Another Suitable Ground (-)
- b - Connect to Instrument Harness RED/PURPLE Lead and Slide a Rubber Sleeve over Connection
- c - Connect to an "I" Terminal of an Adjacent Gauge or to Any Switched 12 (+) Volt Terminal