WIRING SCHEMATIC

FOR SOFTWARE VERSIONS 320.46 AND HIGHER

FOR CURTIS 1239 CONTROLLER

MARINE CONVERSION

FOR SINGLE MOTOR APPLICATION

REVISION: A
Date 2/2/15
NOTES:

(*1) Tachometers that are designed to work off of an ignition coil may not function in this application. Some Tachometers may need a pull up resistor of 4.7K Ω.

To ignition switch “ON” position

Pull up Resistor (Note *1) TBD

12V

OEM WIRING

GAUGE CONNECTION SCHEMATIC

TACHOMETER DRIVER. ORANGE / BLACK 18 AWG

TEMPERATURE ORANGE/ RED 18 AWG

FUEL GAUGE BROWN 18 AWG

R1-2

R1-3

R1-5

8 TACH

0 12

4

1239 CONTROLLER MARINE GAUGES

Version 320.46

1010-BOAT-PRI
ENGAGE 7 J1 CONNECTION SCHEMATIC

NOTES:

(*1) The LCD Heater will automatically turn on at ambient temperature below 32°F (0°C).
NOTES:

(*1) Recommended Transducer: Honeywell, Part PX2EF1XX030PAAAX. Output: 5V; Voltage Input: 4.75-5.25 V; Operating Pressure: 30 PSI
Possible Supplier: Digi-Key P/N: 480-5806-ND

5V POWER CONTROLLER +5V IN PRESSURE TRANSUCER (NOTE *1) SIGNAL GROUND
R1-26 RED/WHITE 18 AWG
R1-24 PURPLE 18 AWG (OPTIONAL)
R1-7 BLACK 18 AWG

INTEGRATED PITOT TUBE

OR

5V POWER CONTROLLER +5V IN PRESSURE TRANSUCER (NOTE *1) SIGNAL GROUND
R1-26 RED/WHITE 18 AWG
R1-24 PURPLE 18 AWG (OPTIONAL)
R1-7 BLACK 18 AWG

PITOT TUBE

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Diagram of an electrical system, showing connections for a curtais acuity system. The diagram includes connections for battery pack, charger, controller, motor, and various currents and sensors. The diagram indicates connections for positive and negative power, controller output, and a CAN connection.
THROTTLE CONFIGURATION

Depending on the type of throttle used for the application, the different types of throttle configurations are listed within the table below. Electrical schematics are also included within the following pages.

<table>
<thead>
<tr>
<th>THROTTLE CONFIGURATION</th>
<th>TYPE</th>
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<tbody>
<tr>
<td>ELECTRONIC without SWITCH</td>
<td>TYPE 2</td>
</tr>
<tr>
<td>2 WIRE with SWITCH 0-5k Ω</td>
<td>TYPE 3</td>
</tr>
<tr>
<td>3 WIRE with SWITCH 0-5k Ω</td>
<td>TYPE 2</td>
</tr>
<tr>
<td>CURTIS PB8 THROTTLE ASSEMBLY</td>
<td>TYPE 2</td>
</tr>
<tr>
<td>WIG WAG 3 WIRE</td>
<td>TYPE 4</td>
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** When Electronic pedal is used, the GREEN wire from pedal interlock MUST be connected to the RED/BLUE wire.

*Typical connection, verify correct voltage and connection in throttle documents or instructions.

Not all Electronic Throttles supported
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**REV DESCRIPTION APPROVED**

**INITIAL RELEASE 2/3/2015**

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**2 WIRE TYPE 3 THROTTLE**

**MARINE APPLICATION**

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**THROTTLE ASSEMBLY**

- Pin #16: YELLOW / WHITE
- Pin #18: PURPLE / WHITE, POT LOW
- Pin #25: RED / BLUE
- Pin #9: GREEN

**WIPER**

**COM NC**

**NORMALLY CLOSED INTERLOCK SWITCH**

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**NORMAL**

**APPLICATION**

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**WHEN ACCELERATOR PEDAL IS PRESSED** the interlock switch is released to its *NORMAL* position (switch not activated) thus completing the circuit since its green wire is connected to the normally closed (NC) connection.
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**3 WIRE TYPE 2 THROTTLE**

**MARINE APPLICATION**

**When accelerator pedal IS PRESSED** the interlock switch is released to its NORMAL position (switch not activated) thus completing the circuit since its green wire is connected to the normally closed (NC) connection.

**Black/White**
- Pin #15: POT HIGH

**Yellow/White**
- Pin #16: WIPER

**Purple/White**
- Pin #18: POT LOW

**Red/Blue**
- Pin #25

**Green**
- Pin #9

**COM**

**NC**

**NORMALLY CLOSED INTERLOCK SWITCH**

**Throttle Assembly**
** When accelerator pedal IS PRESSED the interlock switch is released to its \textit{NORMAL} position (switch not activated) thus completing the circuit since its green wire is connected to the normally closed (NC) connection.
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** No Forward or Reverse input used. No Interlock Switch used.

3 WIRE WIG WAG TYPE 4 THROTTLE**

MARINE APPLICATION

Pin #15  BLACK / WHITE  POT HIGH

Pin #16  YELLOW / WHITE

Pin #18  PURPLE / WHITE  POT LOW

**  No Forward or Reverse input used. No Interlock Switch used.
THROTTLE INTERLOCK CONNECTION

The throttle interlock connection is required for both 2 and 3 wire throttle pot assemblies. The Green wire is connected to the Normally Closed tab. The red/blue wire is connected to the common tab. See picture below.

NOTE: when the throttle IS ENGAGED the interlock switch is released to its NORMAL position (switch not activated) thus completing the circuit since its green wire is connected to the normally closed (NC) connection.