

# Aqua Marine Supply Wiring Instructions

Installation should be performed by a qualified professional only. Aqua Marine Supply is not responsible for any damage or injury that might occur during installation or wiring. Improper installation that results in damage is NOT cover under warranty. Make sure you have sufficient power and properly sized wires run to ensure no voltage drop. Motors and controls run under low-voltage are NOT covered under warranty. Wire and breaker size should be determined by a licensed electrical contractor only, Aqua Marine Supply cannot help with those calculations.

## Motor Identification



### Wire-to-Wire (Color Coded)

Regal Beloit/Aqua Marine Supply/AO Smith/ Century motors such as C56AD35B17, etc.

This is the current wiring style

**SEE PAGE 2**

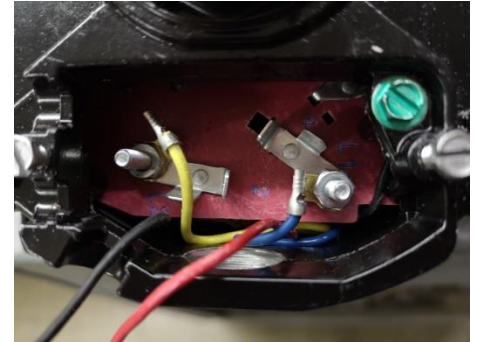


### Wire-to-Wire (T-Wires)

Aqua Marine Supply stainless steel motors #13750, 13980, etc.

This is the current wiring style

**SEE PAGE 3**

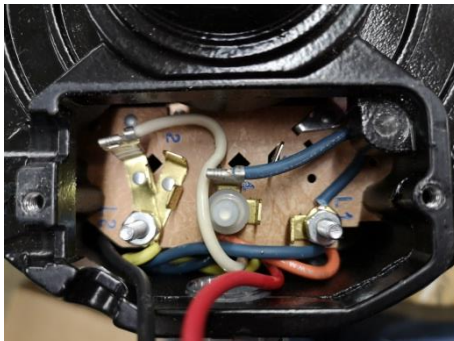


### Terminal Board (48 Frame)

AO Smith/Regal Beloit/Aqua Marine supply motors such as C48D22B17, etc.

This is the current wiring style

**SEE PAGE 4**



### Terminal Board (56 Frame)

Regal Beloit/Aqua Marine Supply/AO Smith/ Century motors such as C56AD35B17, etc.

This style is being phased out as of 2019

**SEE PAGE 5**

## Control Identification



### AMS Reversing Switch

Giovenzana (current)  
Bremas (discontinued)

**SEE PAGE 6**



### GEM Remotes

GEM GR1, etc.

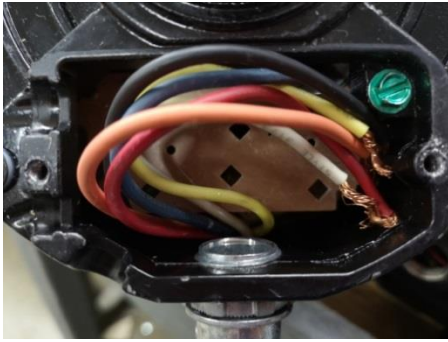
**SEE GEM  
INSTRUCTION SHEET**



### Furnas Switch

Discontinued

**SEE PAGE 7**



## Wire-to-Wire (Color Coded)

To reverse motor direction (switch position up makes lift go down and visa versa), interchange Motor Red and Motor Black wires.

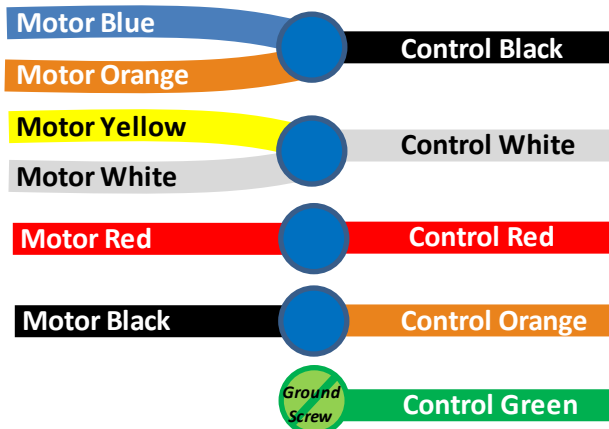
For troubleshooting, refer to page 8



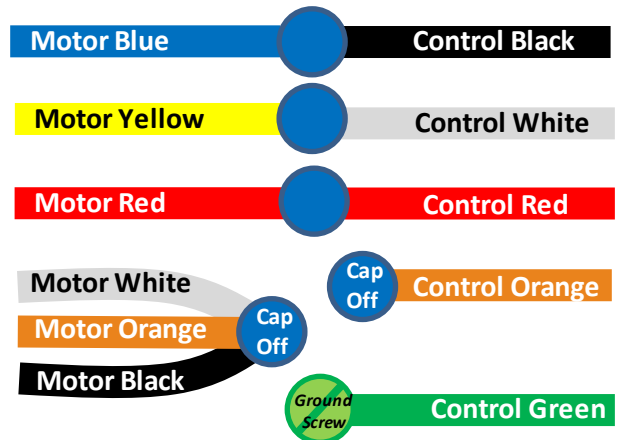
### AMS Reversing Switch

Use the below diagrams if your control is an Aqua Marine Supply reversing switch. Please double check the switch wiring to ensure the wires are connected in the correct place using the switch wiring diagram on page 6. Our diagrams show a 5-wire cable consisting of Black, White, Red, Orange, and Green which is what is used by AMS and is the standard throughout most of the industry.

### 115V Connections



### 230V Connections



### Special Note: GEM Remotes

If you are using a GEM remote control instead of a switch, and have wired the remote according to GEM's instructions, make the following change to the above diagrams:

Interchange the White and Orange control wires. This means for 115V, you will now have Motor Black connected to Control White and Control Orange will be connected to Motor Yellow & Motor White. For 230V, you will now have Control White Capped Off and Control Orange connected to Motor Yellow



## Wire-to-Wire (T-Wires)

To reverse motor direction (switch position up makes lift go down and visa versa), interchange the T5 and T8 wires.

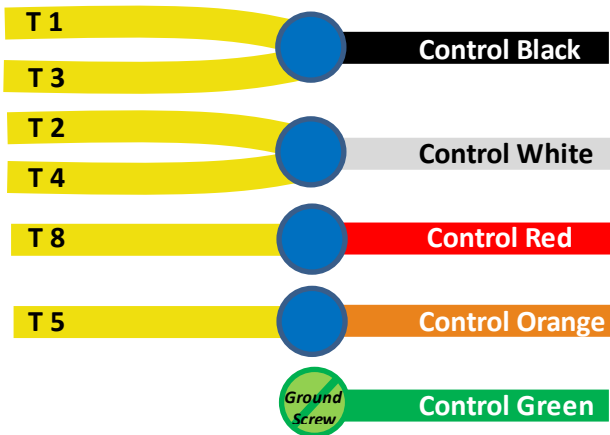
For troubleshooting, refer to page 8



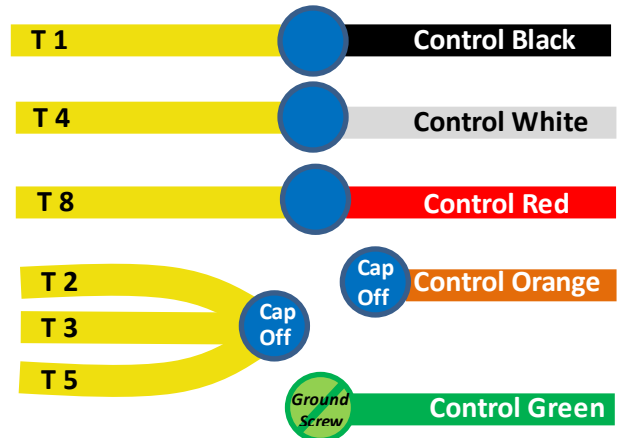
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### 115V Connections



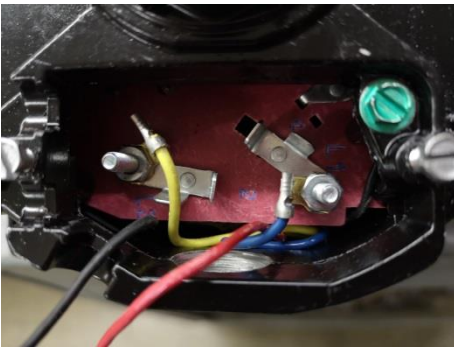
### 230V Connections



### Special Note: GEM Remotes

If you are using a GEM remote control instead of a switch, and have wired the remote according to GEM's instructions, make the following change to the above diagrams:

Interchange the White and Orange control wires. So for 115V, you will now have T5 connected to Control White and Control Orange will be connected to T2 & T4. For 230V, you will now have Control White Capped Off and Control Orange connected to T4.



## Terminal Board (48 Frame)

This motor is strictly 115V and cannot be connected at 230V. To reverse motor direction (switch position up makes lift go down and visa versa), interchange the Red and Black motor wires.

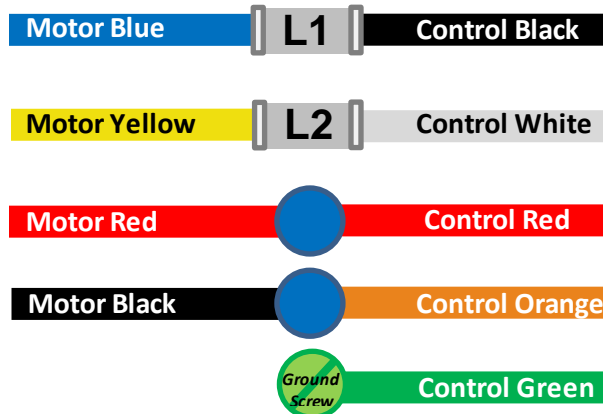
For troubleshooting, refer to page 8



### AMS Reversing Switch

Use the below diagrams if your control is an Aqua Marine Supply reversing switch. Please double check the switch wiring to ensure the wires are connected in the correct place using the switch wiring diagram on page 6. Our diagrams show a 5-wire cable consisting of Black, White, Red, Orange, and Green which is what is used by AMS and is the standard throughout most of the industry.

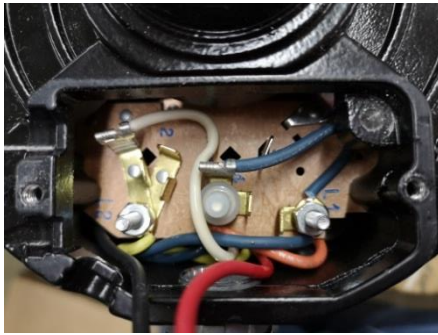
## 115V Connections



### Special Note: GEM Remotes

If you are using a GEM remote control instead of a switch, and have wired the remote according to GEM's instructions, make the following change to the above diagrams:

Interchange the White and Orange control wires. This will now make Control Orange connected to L2 and Control White will be connected to Motor Black.



## Terminal Board (56 Frame)

To reverse motor direction (switch position up makes lift go down and visa versa), interchange the Red and Black motor wires.

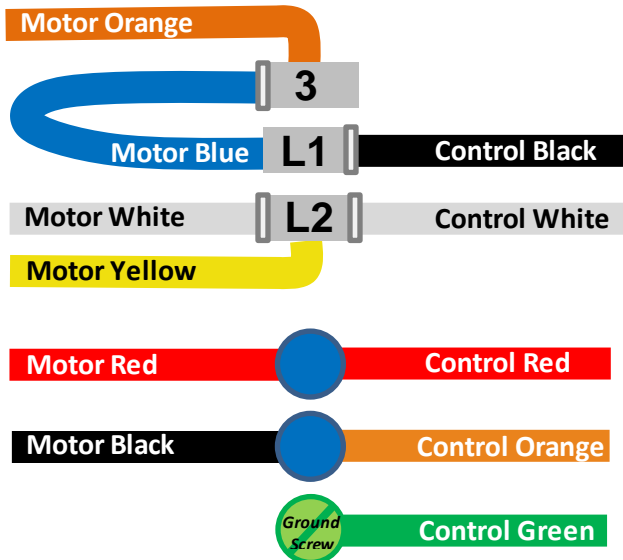
For troubleshooting, refer to page 8



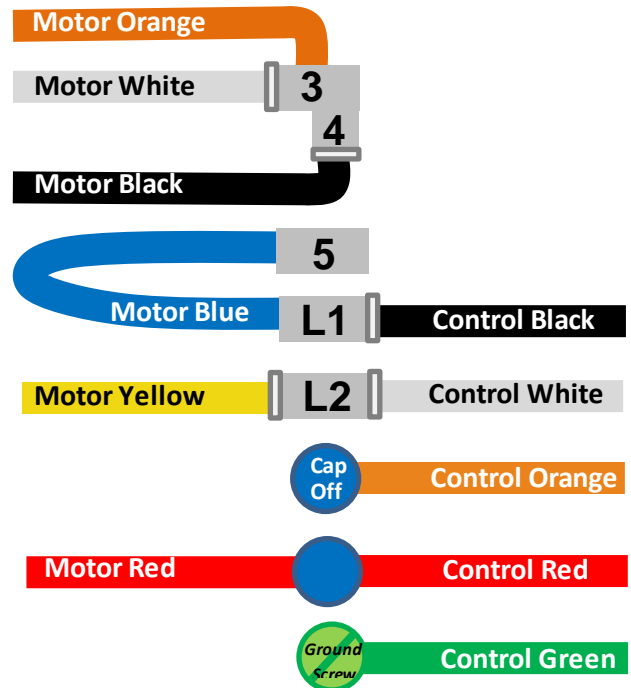
### AMS Reversing Switch

Use the below diagrams if your control is an Aqua Marine Supply reversing switch. Please double check the switch wiring to ensure the wires are connected in the correct place using the switch wiring diagram on page 6. Our diagrams show a 5-wire cable consisting of Black, White, Red, Orange, and Green which is what is used by AMS and is the standard throughout most of the industry.

### 115V Connections



### 230V Connections



### Special Note: GEM Remotes

If you are using a GEM remote control instead of a switch, and have wired the remote according to GEM's instructions, make the following change to the above diagrams:

Interchange the White and Orange control wires. So for 115V, you will now have Control Orange connected to L2 and Control White will be connected to Motor Black. For 230V, you will now have Control White Capped Off and Control Orange connected to L2.

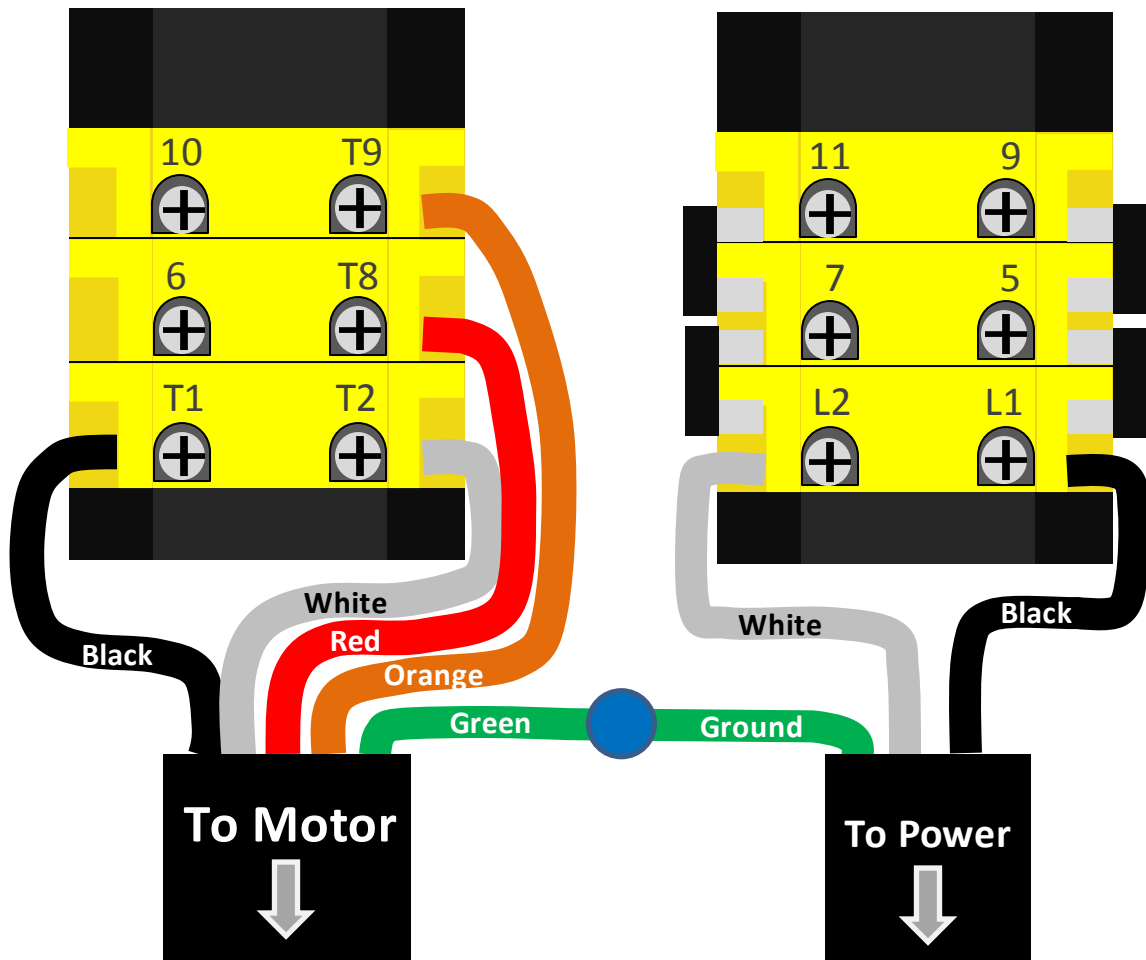




## AMS Reversing Switch

This diagram will work for older Bremas switches as well as current Giovenzana switches. Wiring is the same for 115V or 230V although 230V wiring does not require the connection on T9 as that wire is capped off in the motor. Do not move or remove jumpers from switch.

For troubleshooting, refer to page 8

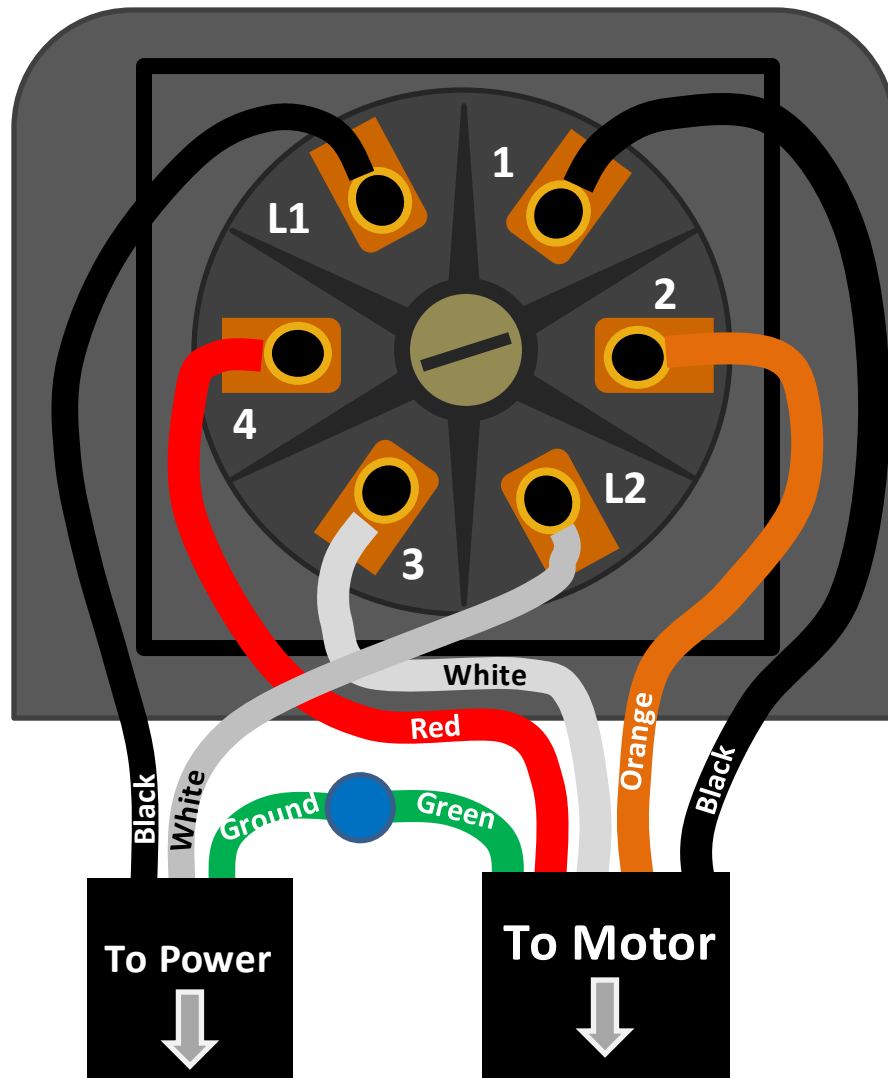




## Furnas Switch (Discontinued)

This diagram will work for older Furnas/Hubbell switches. Wiring is the same for 115V or 230V although 230V wiring does not require the connection on #2 as that wire is capped off in the motor.

For troubleshooting, refer to page 8



## TROUBLESHOOTING

Please follow these troubleshooting guidelines before contacting us for technical support. Do not contact us for diagnosing issues in the electric circuit on existing products.

<p>New motor only runs in one direction</p>	<ul style="list-style-type: none"><li>• Double-check wiring connections and make sure connections are clean and tight. If wired to GEM remote, make sure the White and Orange wires from the remote are connected to the proper places</li><li>• It is possible the switch or GFCI is malfunctioning. It could also be a short in wiring between motor and controls. Try interchanging motor direction to see if the problem follows in the other direction. If it follows, the motor is most likely not the issue.</li></ul>
<p>Motor is getting hot or smoking</p>	<ul style="list-style-type: none"><li>• Make sure your motor connections are correct for the power supply voltage being utilized. Running 230V power into a motor that has been connected for 115V will burn the motor up fast and cause permanent damage to windings</li><li>• Motor is under-voltage. This is a common problem and is caused by long runs of electric with too small of wiring to power motor under load. Consult with electrician to ensure wire size is sufficient. Check voltage at the motor to ensure no voltage drop under load.</li></ul>
<p>Don't see diagram for motor or control I have</p>	<ul style="list-style-type: none"><li>• The diagrams shown prior are the products used by AMS. If you have only either one of AMS' motors or controls but not both, we will not be able to assist you with wiring. We will not be able to tell you if the two items are compatible so please do not contact us on these types of issues.</li></ul>