SIEMENS

S-60 CROSSING
AUXILIARY OVERLOAD DEVICE
## QUICK START GUIDE
Document No. SIG-QG-09-01A.1

The Auxiliary Overload Device (AOD) is an add-on device for the S-60 Crossing Gate, with a **Rev C or Older Main Board** installed. The AOD is designed to detect an entrance gate motor stall based on the supply voltage and amount of time the S-60 actively drives the gate motor. The AOD, upon detection of a stall condition, will engage a relay, interrupting the supply of power to the motor and have the gate arm descend in a controlled manner. The AOD is powered by the S-60 drive mechanisms and is not capable of introducing foreign energy or otherwise interfering with the S-60 safety related motor drive in a manner that would cause an unsafe condition. Refer to the S-60 Crossing Manual for further information. **(Siemens Doc. No.: 074050).**

WARNING

THIS PROCEDURE WILL REQUIRE TEMPORARY OPENING AND CLOSING OF HIGHWAY CROSSING WARNING DEVICE CIRCUITS. PRIOR TO PERFORMING, TAKE THE NECESSARY PRECAUTIONS TO WARN PEDESTRIANS, PERSONNEL, TRAINS, AND VEHICLES IN THE AREA UNTIL PROPER OPERATION IS RESTORED AND VERIFIED.
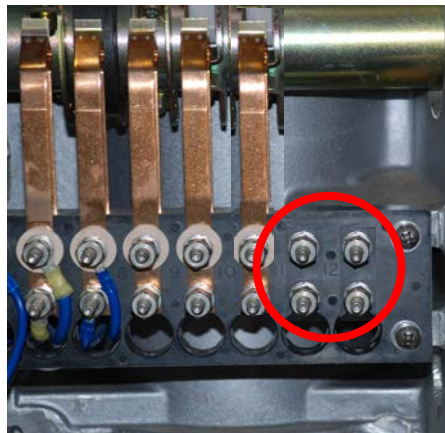
Prepare Crossing

Prepare the crossing for installation. Open the Gold-Nut, which will lower the Gate Arm. See S-60 Crossing Gate Manual **(Siemens Document Number 074050)** for further information.
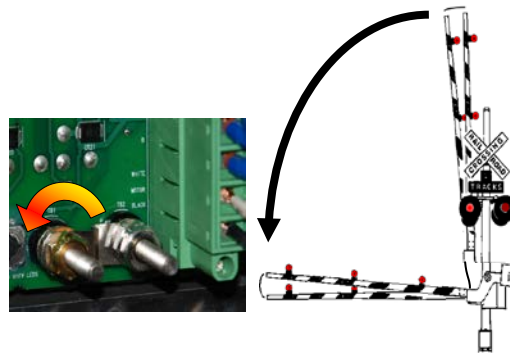
NOTE

Visually inspect the gate mechanism to ensure there are no cams and/or wires attached to terminals T11 top and bottom and T12 top and bottom.
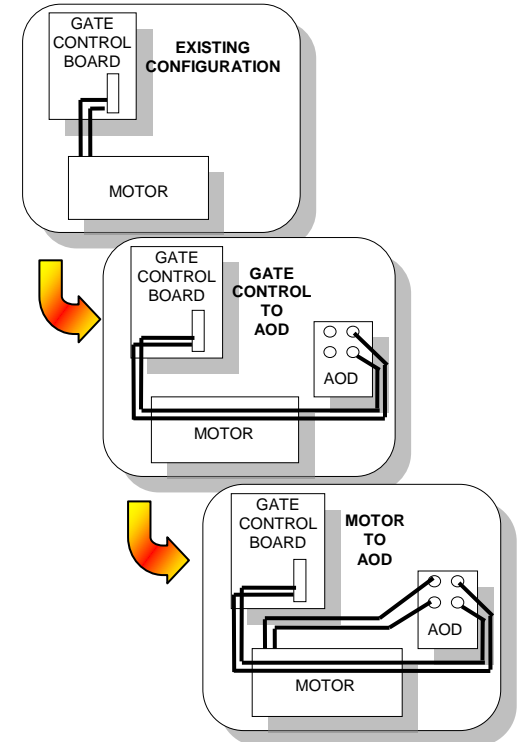

Gate Mechanism Visual Inspection

WARNING

IT IS NECESSARY TO FOLLOW THIS PROCEDURE AND ENSURE WIRES ARE INSTALLED IN THE PROPER LOCATIONS FOR THE GATE MECHANISM TO OPERATE PROPERLY.

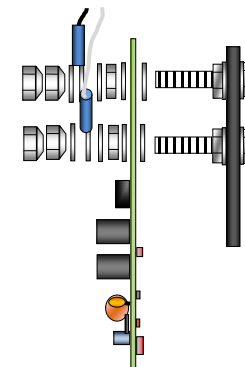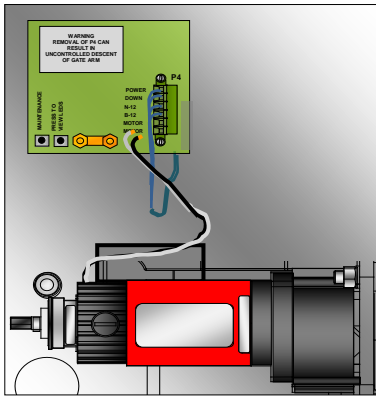## Wiring Overview

The following is an overview of the AOD wiring:

Hardware Installation Overview

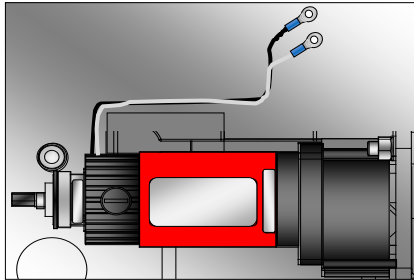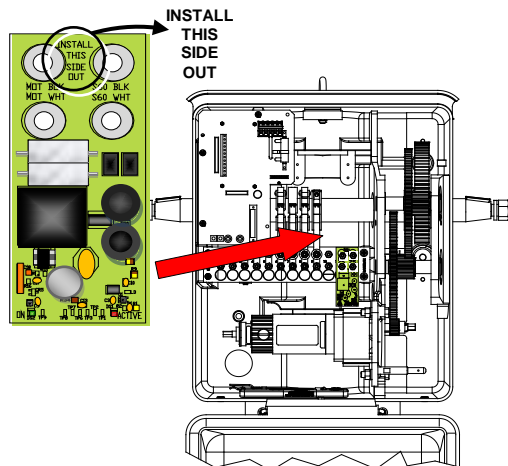The following is the hardware sequence for the AOD installation.

Installation Procedure
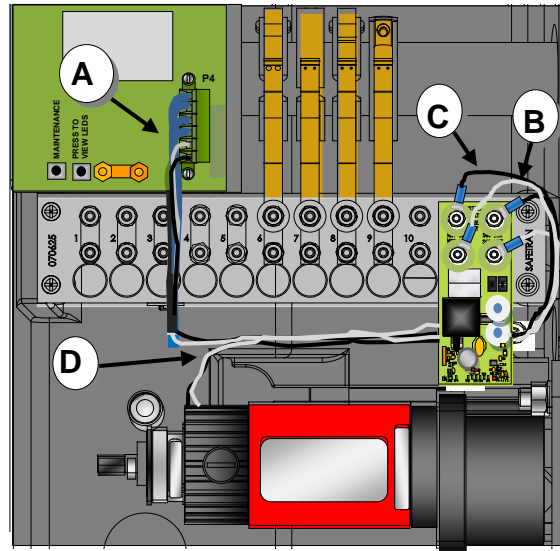
1. Remove motor wires from P4 on Main Board

2. Install Ring Terminals on Motor wires.

3. Install AOD Board on AAR Terminals (#11 and #12). Mount the AOD Board with **"INSTALL THIS SIDE OUT"** facing front as shown below.

4. Install the wiring using the following procedure:

A). Locate prepared wires provided with the AOD Kit and install bare ends into P4 S connector, where the motor wires were removed. Install White wire on top and Black wire on the bottom as shown in diagram above.

B). Connect Ring Terminal ends of the wires to the AAR Terminals (#12), Black on 12T (top), White 12B (bottom).

C.) Connect Motor wire Ring Terminals to AAR Terminals (#11), Black on 11T (top), White on 11B (bottom).

D.) Bundle and tie-wrap wires.

Testing Installation

1.) Close the Gold-Nut. Cycle the Gate a minimum of 2 times to verify gate is operating properly. The AOD Board "ON" LED (Green) will illuminate with each motor operation. Note the Red "ACTIVE" LED will illuminate for 3 minutes in the event of a low supply voltage, causing the motor to be in a stall condition.
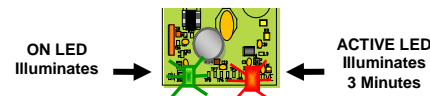
2.) Perform any other tests as prescribed by the railroad and/or authority to ensure proper operation of the warning system and compliance with current rules and regulations.

3.) Restore Crossing to normal operation.

Contact Siemens Customer Service with any questions.

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