

INSTALLATION INSTRUCTIONS

Original Issue Date: 1/03

Model: **Automatic Transfer Switches**

Market: **ATS**

Subject: **Chicago Alarm Accessory Kit, GM26313-KP1**

Introduction

The Chicago Alarm Accessory Kit provides an alarm that sounds to indicate that the transfer switch is in the Emergency position. Install this kit to comply with the alarm requirement in the Municipal Code of Chicago, Electrical Section. The kit is designed for indoor installation only.

The kit includes the alarm box shown in Figure 1. The mounting hardware and connecting leads are customer-supplied.

Read the entire installation procedure before beginning installation. Perform the steps in the order shown.

Accessory Operation

The alarm horn sounds and the red ATS in Emergency lamp illuminates whenever the transfer switch is in the Emergency position. Push the Alarm Silence button to stop the alarm horn, if desired. The amber Alarm Silence lamp illuminates when the button is pressed. Both lamps then remain illuminated until the ATS transfers back to the Normal position.

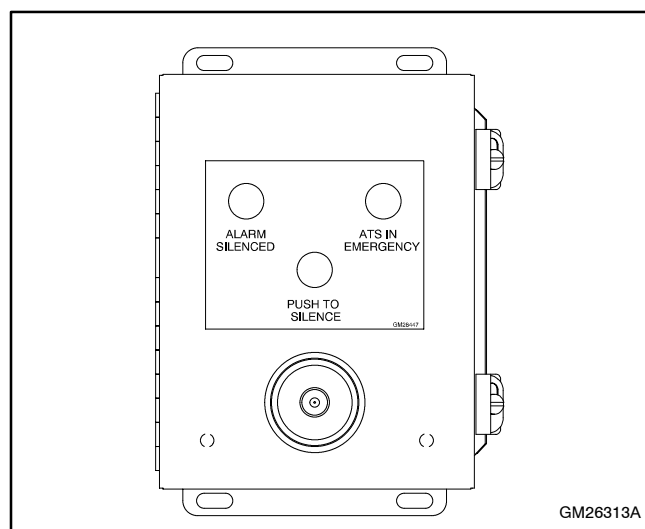


Figure 1 Alarm Box with Mounting Flanges

Safety Precautions

Observe the following safety precautions while installing the kit.

⚠ WARNING



Accidental starting.
Can cause severe injury or death.

Disconnect the battery cables before working on the generator set. Remove the negative (-) lead first when disconnecting the battery. Reconnect the negative (-) lead last when reconnecting the battery.

Disabling the generator set. Accidental starting can cause severe injury or death. Before working on the generator set or connected equipment, disable the generator set as follows: (1) Move the generator set master switch to the OFF position. (2) Disconnect the power to the battery charger. (3) Remove the battery cables, negative (-) lead first. Reconnect the negative (-) lead last when reconnecting the battery. Follow these precautions to prevent starting of the generator set by an automatic transfer switch, remote start/stop switch, or engine start command from a remote computer.

⚠ DANGER



Hazardous voltage.
Will cause severe injury or death.

Disconnect all power sources before opening the enclosure.

Short circuits. Hazardous voltage/current can cause severe injury or death. Short circuits can cause bodily injury and/or equipment damage. Do not contact electrical connections with tools or jewelry while making adjustments or repairs. Remove all jewelry before servicing the equipment.

Installation Procedure

1. Prevent the generator set from starting and disconnect power to the transfer switch.

- 1.1 Remove the generator set from service.
 - 1.1.1 Place the generator set master switch in the OFF position.
 - 1.1.2 Disconnect the power to the battery charger, if equipped.
 - 1.1.3 Disconnect the generator set engine starting battery(ies), negative (-) lead first.
- 1.2 Disconnect power to the transfer switch.
 - 1.2.1 Transfer Switches: Disconnect power to the transfer switch by opening the normal and emergency source circuit breakers or switches.

- 1.2.2 Bypass/Isolation Switches: Follow the instructions in the Bypass/Isolation Switch Operation/Installation Manual to bypass and isolate the transfer switch.

- 1.3 Open the transfer switch enclosure door.

2. Mount the alarm box.

- 2.1 Select a wall or other rigid mounting surface for the alarm box. Use the mounting holes on the alarm box as a template or refer to Figure 2 to mark the locations of the mounting holes on the mounting surface.
- 2.2 Use four 6 mm or 1/4 inch screws (not provided) to mount the box. Determine the size of the mounting holes according to the size and type of mounting hardware used. Drill four holes into the mounting surface at the marked locations.
- 2.3 Insert four screws through the mounting flanges on the box (GM26313) to secure the box to the mounting surface.

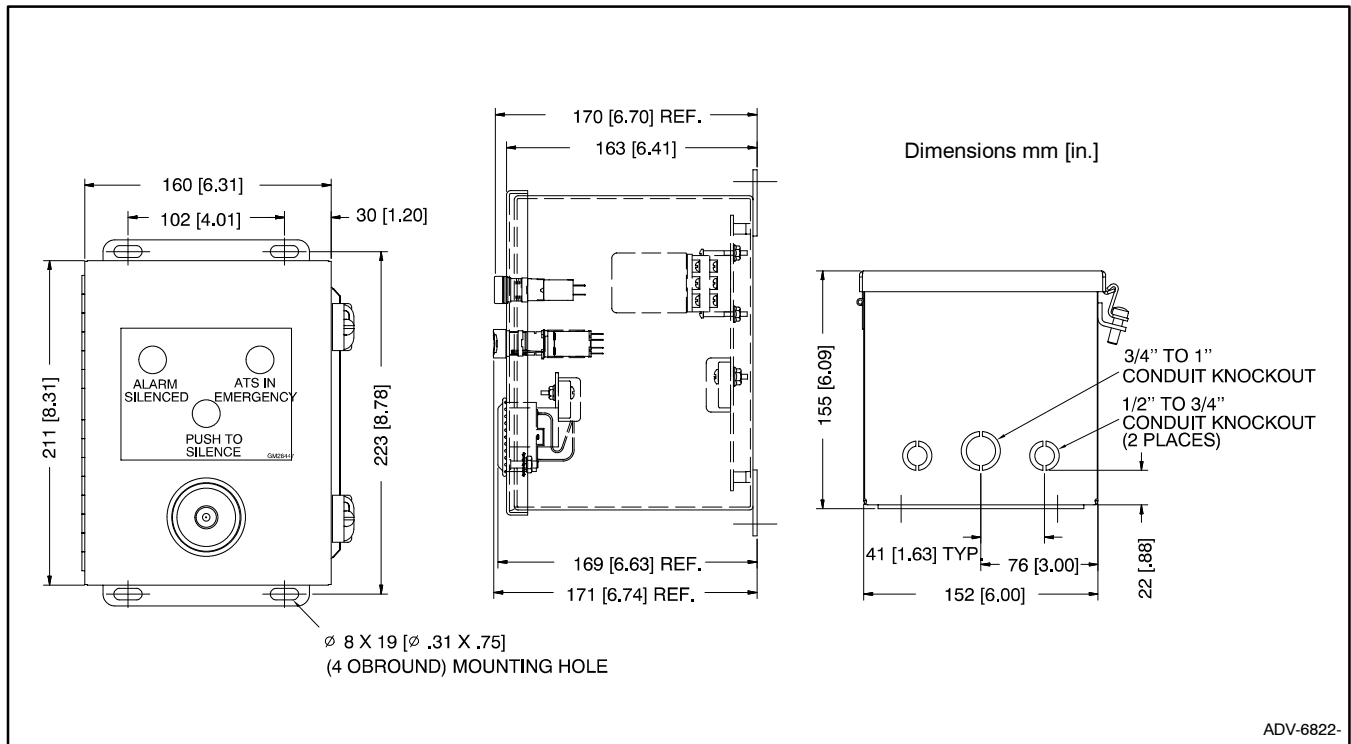


Figure 2 Dimensions

3. Connect the alarm.

- 3.1 Select a 120 VAC circuit on the load side of the transfer switch to provide power to the alarm box.
- 3.2 Disconnect power to the 120 VAC circuit that will provide power to the alarm box.
- 3.3 Open the alarm box and locate the customer connection terminal strip shown in Figure 3. Use #12 AWG to #18 AWG wire (not provided) for the customer connections. Route the 120 VAC power leads and the signal connection leads in separate conduit.
- 3.4 Connect terminal 1 to ground. Connect 120 VAC to terminals 2 and 3, following the polarity indicated on the terminal block label.
- 3.5 Connect terminals 4 and 5 to a transfer switch auxiliary contact that is closed when the ATS is in the emergency position. Refer to the transfer switch Operation and Installation Manual to locate the auxiliary contacts. (Terminal 6 on the alarm box is not used.)
- 3.6 Close the alarm box and secure the door screws.

4. Restore the generator set and transfer switch to service.

- 4.1 Close and secure the transfer switch enclosure door.

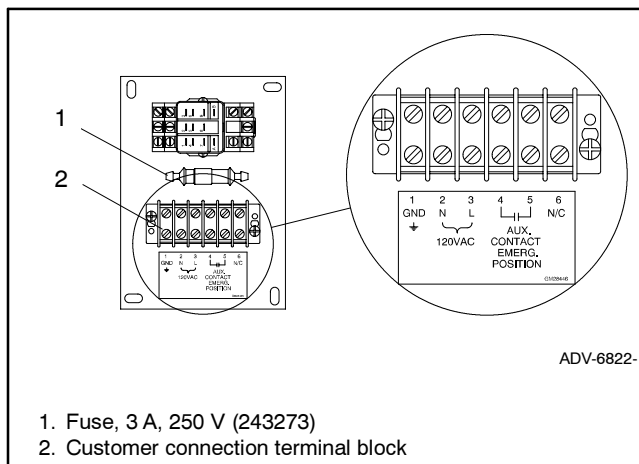


Figure 3 Customer Connections (inside the box)

- 4.2 Reconnect power to the circuit that powers the alarm box.
- 4.3 Reconnect all power sources to the transfer switch.
 - 4.3.1 Transfer Switches: Close the normal and emergency source circuit breakers or switches.
 - 4.3.2 Bypass/Isolation Switches: Follow the instructions in the the Bypass/Isolation Switch Operation/Installation Manual to return the transfer switch to service.
- 4.4 Check that the generator set master switch is in the OFF position.
- 4.5 Reconnect the generator set engine starting battery, negative (-) leads last.
- 4.6 Reconnect power to the battery charger, if equipped.
- 4.7 Move the generator set master switch to the AUTO position.

5. Test the alarm box operation.

- 5.1 Follow the instructions in the transfer switch Operation and Installation Manual to start a loaded test.
- 5.2 Verify that the ATS in Emergency Lamp illuminates and the alarm horn sounds when the transfer switch moves to the Emergency position.
- 5.3 Press the Alarm Silence button. Verify that the alarm horn stops and the Alarm Silenced lamp illuminates when the button is pressed.
- 5.4 When the ATS transfers back to the Normal position, verify that the ATS in Emergency and Alarm Silenced lamps are off and that the alarm horn does not sound.
- 5.5 Follow the instructions in the transfer switch Operation and Installation Manual to end the test.

Schematic and Wiring Diagram

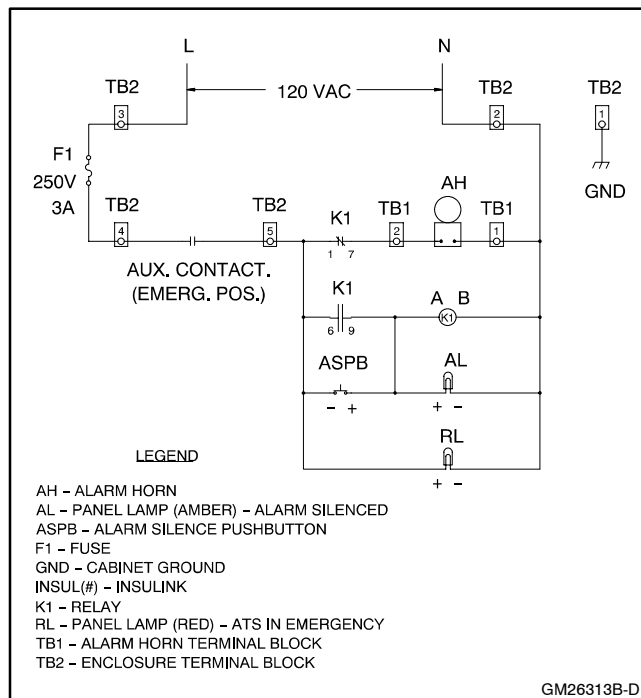


Figure 4 Schematic

Parts List

Chicago Alarm Accessory Kit

Kit: GM26313-KP1		
Qty.	Description	Part Number
1	Fuse, 3 A, 250 V	243273
1	Relay, 120 VAC, 10 A	269958
1	Terminal block, 6 position	295314
1	Fuse holder, inline	322557
1	Block, Contact	GM20928
1	Operator, Red	GM26166
1	Operator, Amber	GM26167
2	Light Module	GM26168
2	Bulb, 120V	GM26169
1	Horn, Alarm A.C. Vibrating	GM26312
1	Switch, Pushbutton	GM28444
1	Decal, Alarm Contacts	GM28446
1	Decal, ATS Alarm	GM28447
1	Enclosure	GM28448
1	Panel, Mounting	GM28449
1	Bracket, Mounting	GM28550
1	Terminal block	X-405-2

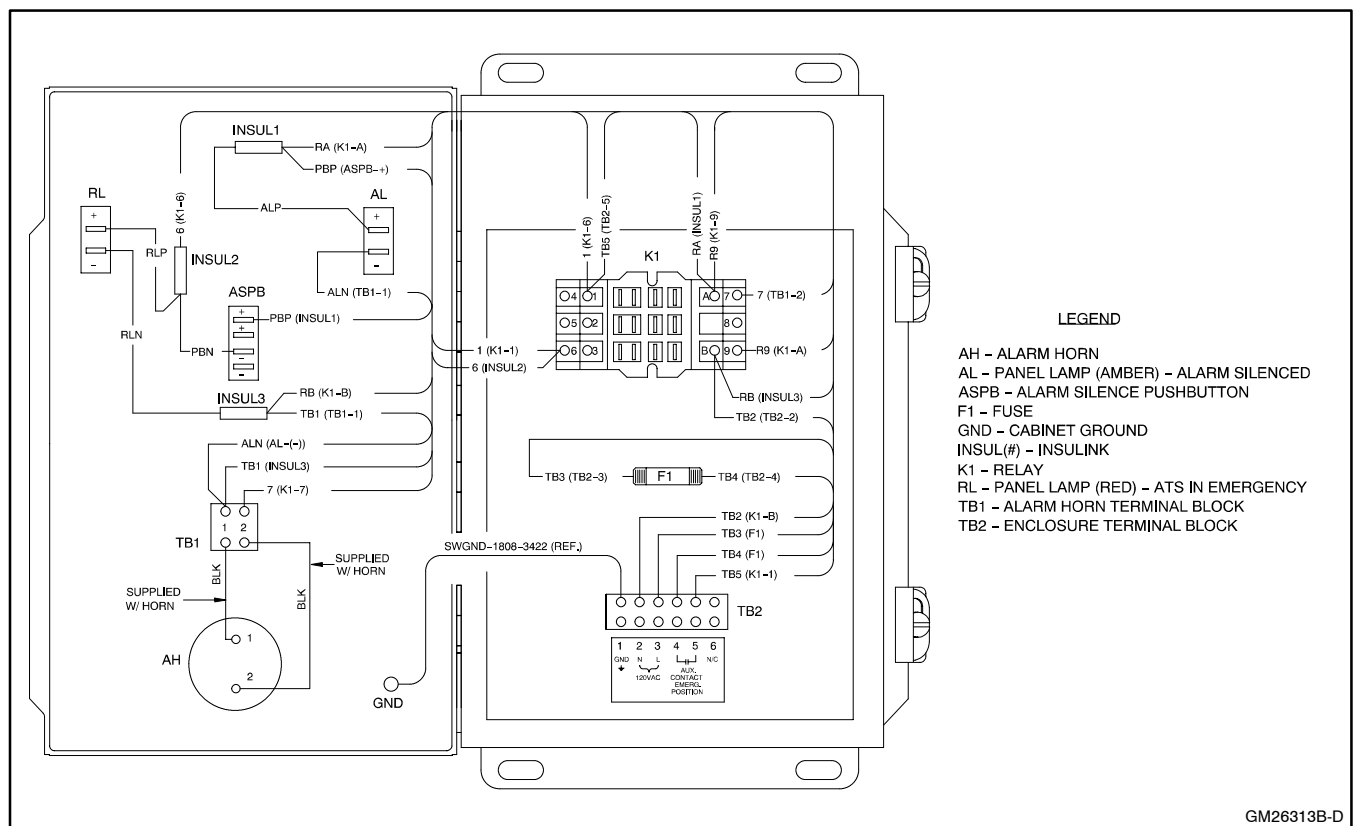


Figure 5 Wiring Diagram