



B.M.R. MFG. INC.



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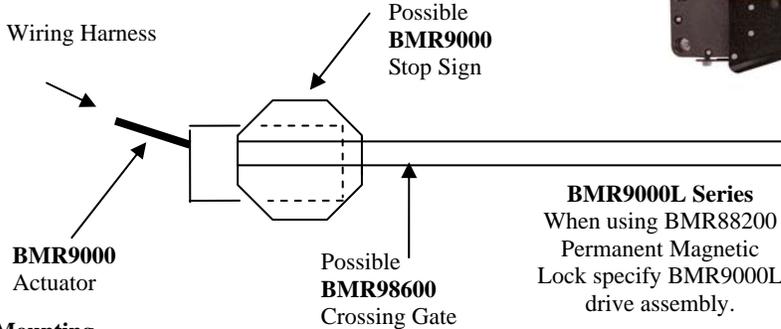
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Installation and Operation of the Series BMR9000 Electric Stop Arm or Crossing Gate Assembly BMR9500.

The **BMR9000** actuator is a solid-state device that drives either a Stop Arm **BMR 9000** or Crossing Gate **BMR98600** to the extended position and to the retracted position without the use of switches or sensor to determine position. No current is flowing in the retracted position. The operation can be inhibited for a door opening cycle if desired.



BMR98600



BMR88200



METAL



BMR88013HT



PLASTIC

Mounting

Mount on the side of the bus or attach to the front bumper. Mounting hardware is included. Mounting brackets are available.

Wiring BMR9012H (4 Wires) Crossing Gate

- There are four wires in the wiring harness.
- Green - Vehicle ground. This should be a good clean grounding point.
- Red - Vehicle +12 volts. Via the master switch if desired.
- Yellow - +12 volts when side door is opened.
- White - To optional momentary grounding switch. (**Inhibit option BMR9800P kit**)
-To optional Permanent Magnetic Gate Lock **BMR88200** only.

Replacement with BMR9000 Series Crossing Gate

The **BMR7000 Series** crossing gate harness is a 3 wire connection. The **BMR9000 series** harness has 4 wires. The adapter (**BMR9712H**) aligns the connection. When the inhibit feature is desired, use the new 4 wire source harness (Included).
To replace an existing SMC crossing gate, disconnect from source the +12 volt (yellow wire). This wire is the SMC feed to the internal heater needed to keep the limit switches from freezing. **B.M.R. MFG. INC. DOES NOT USE LIMIT SWITCHES (No need for a heater).** This wire can now be used for the inhibit feature. The **BMR 9000 4 Wire Harness** will align with existing source harness. With a (**BMR9000P Inhibit Kit Optional**) the operation to open the crossing Gate can be cancelled one time, then the crossing gate will return to normal operation.

Operation

When +12 volts is applied to the yellow wire, the actuator will extend and stay extended as long as the +12 volts is maintained on the yellow wire. When the +12 volts is removed from the yellow wire, the actuator will retract. When the white wire is grounded while the unit is retracted, the next operation will be inhibited. Subsequent operations will not be effected. See kit **BMR9800P**.

BMR 88200 Permanent Magnetic Lock, order **BMR9000L Series** Crossing Gate with **BMR88013HT T Harness**

Operation & Installation of BMR9000 Stop Arm

BMR9000P/Plastic Housing or BMR9000 Metal Housing

- Green - Vehicle ground secure to clean ground.
- Red - Vehicle +12V via the master switch most common.
- Yellow - +12 volts when side door open.

Lamp wires are connected internally to the **BMR9011F** Flasher Control Module. Two flash modes are available pulse or strobe (specify when ordering). The alternating lamp wires can also be removed from the base assembly & connected to the School Bus flasher. (Control Module **BMR9011F** has a 2 pin Jumper On-Is Pulse, Jumper Off-Strobe)

Troubleshooting.

- If the unit does not function correctly:
 - Check that the correct voltages are on the red and yellow wires.
 - Check to ensure that the white wire is not inadvertently grounded.
 - Check the continuity of the ground connection. Do this by taking a separate wire from the green wire to the negative post on the battery.