

## TROUBLESHOOTING OPERATOR & ACCESSORIES

Some troubleshooting will require a hand held multimeter. An inexpensive digital multimeter may be purchased at Radio Shack or a local electric supply company. Refer to the owners manual for instructions.

### **SYMPTOM** *Gate opens OK but after closing, opens back up.*

1. Excessive closing pressure on gate. Re-adjust the close limit switch on the actuator.
2. Automatic reverse sensitivity is set too sensitive. Re-adjust - **CAUTION: Automatic reverse sensitivity should be set sensitive enough to avoid injury.**
3. Gate is mechanically binding. Disconnect actuator from gate and eliminate binding.
4. Battery voltage is too low. Battery voltage should be 12 to 14 volts under load. Check solar panel output or battery charger output or re-evaluate usage.
5. Replace circuit board.

### **SYMPTOM** *Gate moves only a few feet, then stops or reverses.*

1. Battery voltage is too low. Battery voltage should be 12 to 14 volts under load. Check solar panel output or battery charger output or reevaluate usage.
2. Gate is mechanically binding. Disconnect actuator from gate and eliminate binding.
3. Actuator extension tube is bent. Inspect for damage and replace extension tube if required.
4. Current sensitivity is adjusted too sensitive. Re-adjust current sensitivity.
5. Replace circuit board.

### **SYMPTOM** *Gate surges too much. Does not run smooth.*

1. Pivot arm is not ridged. Re-weld and/or brace pivot arm.
2. Bolts are loose. Snug all bolts. Pivot arm bolt should be snug but not tight.
3. Gate is too limber. Reinforce gate.

**SYMPTOM** *Gate will open using push button on side of box, but not with transmitter.*

1. Code switches do not match. Check that the code switches in the transmitter and the receiver match.
2. Low or dead battery in transmitter. Replace battery.
3. Fuse blown on circuit board. Check fuses on gate control board.
4. Low battery in operator. Battery voltage should be 12 to 14 volts under load.
5. Replace receiver.

**SYMPTOM** *Transmitter works, but not very far.*

**Note:** *Transmission distances will vary according to terrain, obstructions, and electrical interference. The normal range from inside a vehicle is 50-100 feet while 100-150 feet may be obtained from outside the vehicle.*

1. Low battery in transmitter. Replace battery.
2. Transmitter malfunctioning. Try a different transmitter.
3. Antenna not making good connection. Be sure center conductor of antenna is penetrating the female connector on the side of the gate box.
4. Reception is being blocked. Raise the height of the antenna using a #244 antenna extension kit.
5. Replace receiver.

**SYMPTOM** *Gate randomly opens, closes, or stops for no reason.*

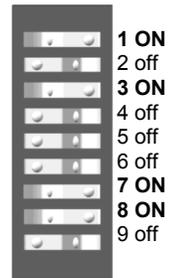
1. Transmitter is stuck on. Check all transmitters, keypads, pushbuttons, etc. for a stuck button.
2. Transmitter and receiver code switches are all down, up, or in the middle. Change at least one switch position in the transmitter and receiver.
3. Push button on side of control box is defective. Disconnect and test.

**SYMPTOM** *Gate will not open or close.*

Disconnect the solar panel or charger and measure the battery voltage. Battery should read 12 or more volts and never drop below 11 volts when gate is operating.

Reset program switches to factory setting. # 1,# 3,# 7,# 8 **ON**, all others **OFF**.

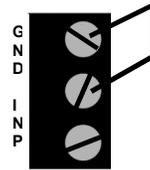
**RED & WHITE PROGRAM SWITCHES**



Disconnect all accessories from the circuit board - receivers, push buttons, keypads, loops, phones, intercoms, etc.

Activate the operator by momentarily shorting **GND** to **INP** on one of the three pin connectors.

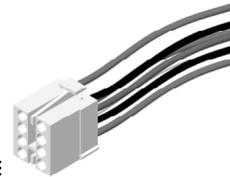
If the operator works, reconnect each accessory individually starting with push button and test operation.



Momentarily short with a piece of wire or needle nose.

Disconnect actuator from circuit board and inspect pins in the connector for damage or poor connections.

Check for proper limit switch configuration (multimeter required) on the connector from the actuator:



- GATE IN OPEN POSITION ..... Orange & Green wires are shorted, White & Green wires are open.
- GATE IN CLOSED POSITION .. White & Green wires are shorted, Orange & Green wires are open.
- GATE IN MID TRAVEL..... White, Green, & Orange wires are open, no shorts.

Replace circuit board