



TROUBLESHOOTING CHART

Page 14

Symptoms	Possible Cause(s)	Diagnosis
Mast turns too easily or not at all	1. Incorrect tension adjustment	1. Remove the mast and tighten or loosen the bolt on the top of the outer swivel (see Fig. 2 in the Assembly Procedure).
Mast eventually works loose after adjusting the tension	1. Tension bolt	1. The tension bolt of the mast has a nylon insert to keep the bolt from becoming loose during operation. If the tension needs to be adjusted continually, 1-877-343-7703 .
Floor slope scale will not lock in position	1. Handle loose 2. Shoulder bolt loose	1. Tighten the handle on the floor slope cam to lock the cam. 2. Remove the front wheel on the floor slope adjusting cam. The round cam has a 3/8" shoulder bolt that should be tight without affecting the movement of the cam. Tighten the shoulder bolt and attach the wheel. If problem is not corrected, call 1-877-343-7703 .
V100 aim head wobbles on mast	1. Tension wheel	1. On the side of the aimer is 3 wheels. The front single wheel can be adjusted by tightening the set screw on the front edge of the side extrusion where the front wheel is mounted (see Assembly Fig. 6 in the Assembly Procedure). Note: When tightening set screw, you may experience some resistance, continue to tighten until tension wheel removes excessive rocking or wobbling.
V100 aim head will not fit over mast or has stiff movement	1. Tension wheel	1. To loosen the tension wheel, loosen set screw on the side mount extrusion (see Fig. 6 in the Assembly Instructions). Loosen lock nut on tension bolt and force wheel assembly toward the front of the aimer to allow for play. Tighten tension bolt nut until it's snug (see Fig. 6 in the Assembly Instructions). Place head on mast and tighten set screw until tension wheel is adjusted properly. Note: When tightening set screw, you may experience some resistance, continue to tighten until tension wheel removes excessive rocking or wobbling.

For technical assistance call: 1-877-343-7703



TROUBLESHOOTING CHART

Page 15

Symptoms	Possible Cause(s)	Diagnosis
High Candela Readings	1. Filter glass 2. Lamp	1. With the front cover open, look inside through the top view lens toward the aim screen with cross hairs. A blue filter glass should be attached to the center of the aim screen. If the glass has become dislodged, call 1-877-343-7703. 2. Some lamps can have candela readings as high as 70,000. If the readings only occur on certain lamps, then the unit is set correctly. If the readings are always 100,000 on all lamps, call 1-877-343-7703.
"Lamp Too Dim" signal when Aligning to Lamp. (finding center of lamp)	1. Operating mode 2. Front cover open 3. Dim lamp	1. Verify that the unit is in "Align To Lamp" mode and not "Aim Lamp" mode. 2. The front cover must be closed when aligning the V100 to the lamp. 3. If the headlight is very dim or dirty, it can affect the candela output of the lamp. It may be necessary to start the vehicle on a dimmer lamp, if the lamp does not need to be replaced or cleaned. Call 1-877-343-7703 if the problem is not resolved.
"Lamp Too Dim" signal when Aiming Lamp. (adjusting or auditing a lamp)	1. Front cover closed 2. Operating mode 3. Lamp way out of adjustment 4. Dim lamp	1. The front cover must be open when the unit is in the "Aim Lamp" mode. 2. Verify that the unit is in "Aim Lamp" mode and not "Align To Lamp" mode. 3. With the headlights on and shining into the V100 aimer, look through the top view lens and verify that the headlights hot spot is shining on the blue filter glass. The lamp may need to be adjusted visually until the hot spot appears to be shining in the center of the cross hairs or blue filter glass. 4. If the headlight is very dirty or dim, it can affect the candela output of the lamp. Also, low battery voltage will cause a dim lamp. It may be necessary to start the vehicle to increase lamp brightness.



TROUBLESHOOTING CHART

Page 16

Symptoms

Possible Cause(s)

Diagnosis

Lamp Too Dim (Cont'd.)

5. V100 too far from lights

5. Make sure the unit is within 25 inches of the headlights, if a "Dim Lamp" signal appears. If the problem cannot be resolved, call **1-877-343-7703**.

Unit will not charge (Low battery)

1. Charger defective

1. Plug charger into 120 volt outlet and using a DC voltmeter, check the output voltage of the charger. Voltage readings can range between 12 and 18 DC volts. If the readings are acceptable, proceed to Number 2. If the readings are not in range, call the **1-877-343-7703**.

2. DC jack defective

2. Using the 4 screws on the back of the V100, remove the back cover plate. Disconnect the battery cable connector so the battery is not powering the unit. Now plug the charger into the V100 DC jack and try to turn on the unit. If the V100 will not power up with only the charger, call **1-877-343-7703**. If the unit works with the charger proceed, to Number 3.

3. Cable loose or defective

3. While the unit is still plugged into the charger and with the battery disconnected, take a voltage reading on the battery connector cable coming from the main PCB board. The voltage reading should be within 2 or 3 volts of the charger reading taken in Step 1. If a reading cannot be obtained, call **1-877-343-7703**. If a voltage reading occurs, proceed to Number 4.

4. Battery defective

4. Remove the battery pack from the unit and check for loose wires. Using a voltmeter, check the output voltage of the battery. It may be necessary to move the wires on the battery's connector while reading the voltage to check for shorts.

Note: The unit will not power up on the battery alone, if the voltage drops below five volts. If the battery appears to be defective, call **1-877-343-7703**. If the battery checks OK, let the unit charge overnight. If unit still fails to charge, call **1-877-343-7703**.