



Monorail Kit Troubleshooting:

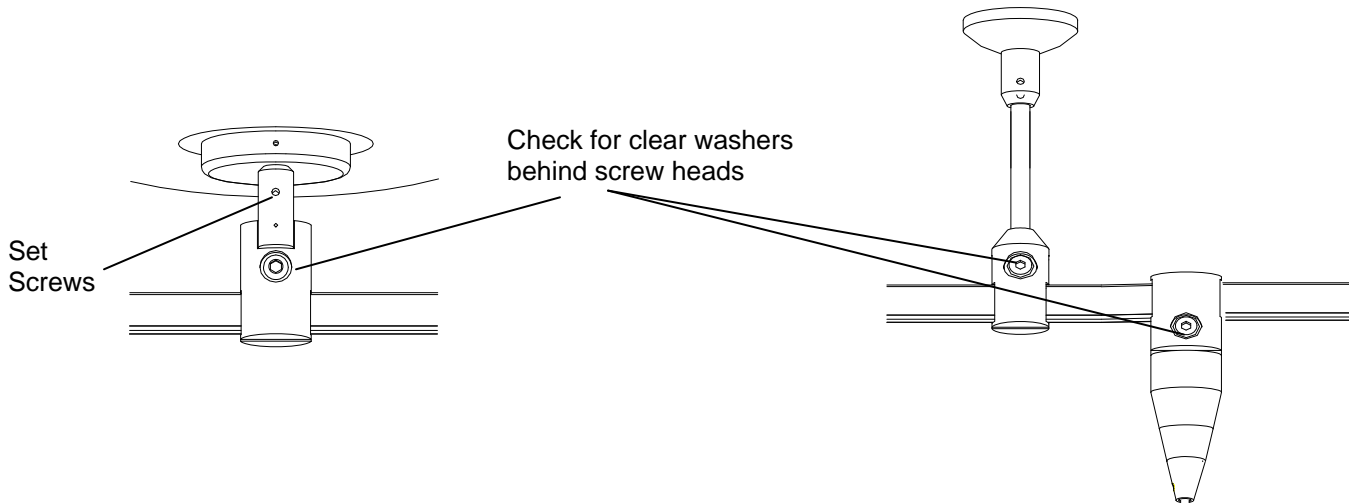
A) Problem: The system does not turn on:

Switch off power immediately and turn off power at main circuit breaker. Leaving power on during a short will harm the transformer.

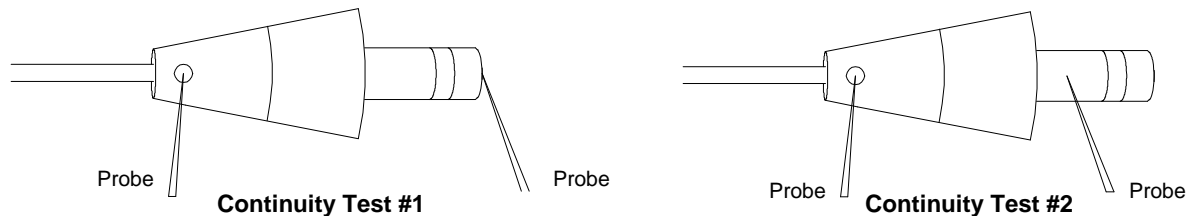
1. Check for short circuit condition at the rail.

You will need a continuity tester or multi-meter to check for shorts.

- i. Loosen the set screws on the power adapter that comes out of the transformer and disconnect the adapter completely from the transformer.
- ii. Remove any quick connect pendants or fixtures by screwing out. The quick connect adapters must remain on the rail.
- iii. Check for continuity by placing a probe on each monorail conductor. The tester should **NOT** light.
- iv. If the tester lights it is indicating a short circuit which is unintended. The most common reason for a rail short is a missing washer behind the screw heads on the standoffs or the quick connect adapters. Contact your local Besa Distributor if any replacement parts are needed.
- v. If the rail checks out OK, proceed to Step 2 below.



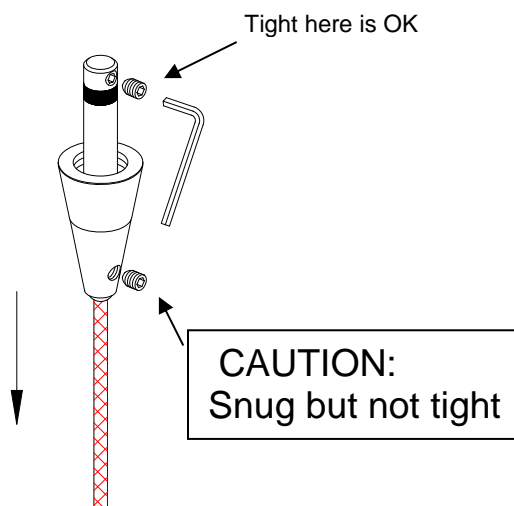
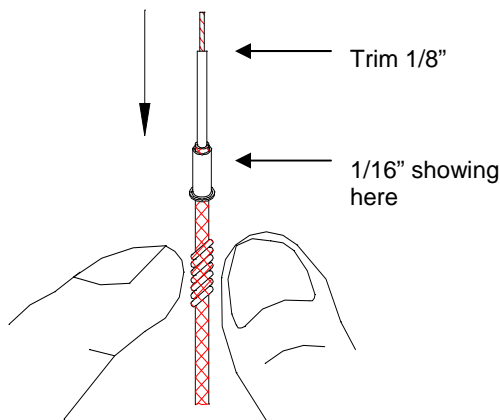
2. It is possible that a short or open circuit exists at the Quick Connect. You will need a continuity tester or multi-meter to help check the Quick Connect.



- i. Remove the lamp. Place a probe on the base of the collar and the other on the end of the Quick Connect, per Continuity Test #1. The tester should not light. If the tester lights, it is indicating a short circuit, refer to the **Quick Connect Repair and Troubleshooting** section on next page. Otherwise, move to the next step to check for an open circuit.
- ii. Reinstall lamp and perform the same continuity test as above. If the tester lights, then the Quick Connect has been installed properly and you can proceed to Step 3 on next page. If the tester does not light, you either have an open circuit or a defective Quick Connect.
- iii. Test the Quick Connect by performing an additional continuity test with the probes shown in Continuity Test #2. If the tester does not light, the Quick Connect part is defective and needs to be replaced (Contact your local Besa Distributor). If the tester does light, refer to the **Quick Connect Repair and Troubleshooting** section on next page.

Quick Connect Repair and Cable Troubleshooting

Remove the Quick Connect from the cord and follow the troubleshooting directions below:



1. Verify that 1/8" of insulation has been trimmed from the inner wire.
2. Verify that approx. 1/16" of braided wire protrudes from the top of the collar.
3. The distance from the bottom of the collar to the top of the inner wire should be 1 3/4".

4. Reinstall the Quick Connect part, verifying that the 1/8" of bare conductor has been extended into the top part. The top set screw must make contact with the bare conductor.
5. Perform continuity check before mounting. If an open or short still exists, then a complete Quick Connect reinstall is recommended. Cut the cord below the collar and follow the instructions provided with the pendant.

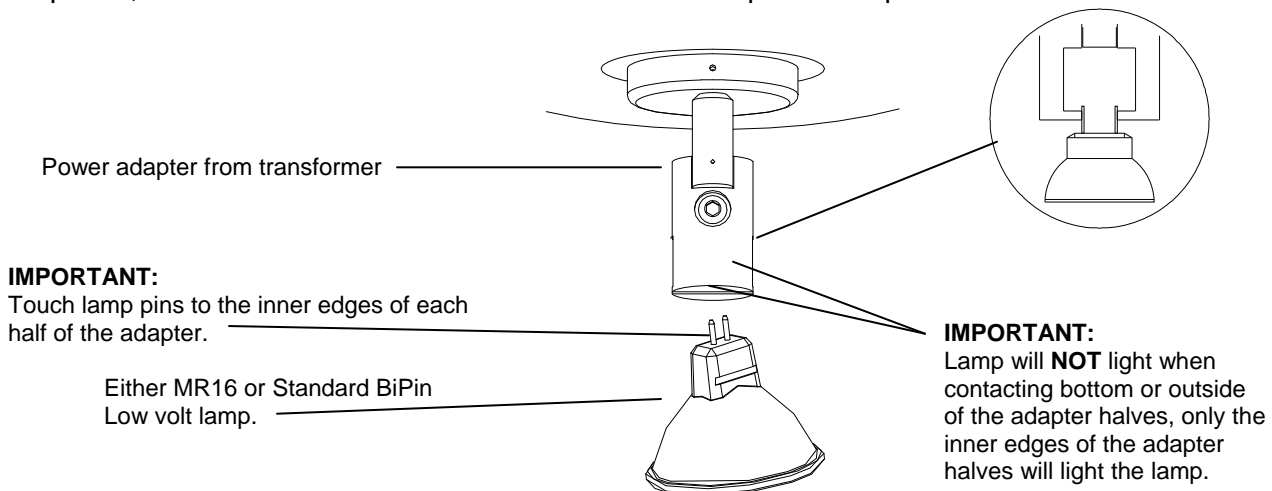
3. You've checked and corrected all shorts and/or open conditions, but still the system does not turn on:

Check the transformer. Shorts can damage the transformer if not immediately removed. The transformer output is high frequency and cannot be seen by most multi-meters. A simple lamp test can verify the status of the transformer: **Caution: Have a qualified person perform this operation.**

Remove rail from power adapter halves coming from the transformer, then restore power to the transformer.

Hold a 12volt lamp with a clean cloth rag or glove and raise it to the transformer. Touch the pins of the lamp to the inner edges of each half of the adapter. **Do this only for 1 to 2 seconds!** **A lit lamp indicates a good transformer.** Contact your local Besa Distributor if a replacement transformer is needed.

Turn off power; remove insulator and re install monorail to the power adapter.



B) Problem: Sections of the system (not the fixtures) feel hot to the touch.

1. Heat is an indication of a poor electrical connection. The high current in low voltage systems requires intimate contact between conducting parts. If only a partial connection is present the system may still operate but the current flow through the small contact area will heat up.

Corrective Action: Make sure connections involve firm metal to metal contact, firmly tighten the screws on rail adapters, quick connects and fixture adapters. Operate system for 20 to 30 minutes and re-check the hot spot. If not corrected replacement of the part is warranted.

C) Problem: Lights burn out quickly, or burn very brightly:

1. Bad socket connection. *Corrective action: Inspect lamp pins for evidence of discoloration.*
2. Finger oils on quartz lamps. *Corrective action: Wipe the glass with a clean soft cloth on all lamps after installation.*

D) Problem: System comes on but lights flicker or, are dim:

1. Insufficient minimum load.....(Electronic transformers only) *Corrective action: Increase lamp load to above the minimum (see transformer instruction sheet).*
2. Wrong lamps installed; 24 volt lamps operating from a 12 volt power supply. *Corrective action: Re-lamp with 12 volt lamps.*
3. If lamps become dim or flicker after operating normally over for a period of time. This is a sign of deteriorating 12volt connections due to the high current. *Corrective action: Re check all secondary connections paying close attention to any discoloration, oxidation or hot spots.*

E) Problem: The circuit breaker on the main panel trips on initial power up:

1. There may be a short on the 120-volt side of the transformer. *Corrective action: Re check connections and perform a continuity test.*
2. Frequent tripping of circuit breaker upon system start up may be nuisance tripping. This caused by high inrush current needed to start up cold lamps. *Corrective action: The use of a dimmer switch helps to buffer the load to the transformer. You may also need to use an inductive load circuit breaker, which is less apt to nuisance tripping.*