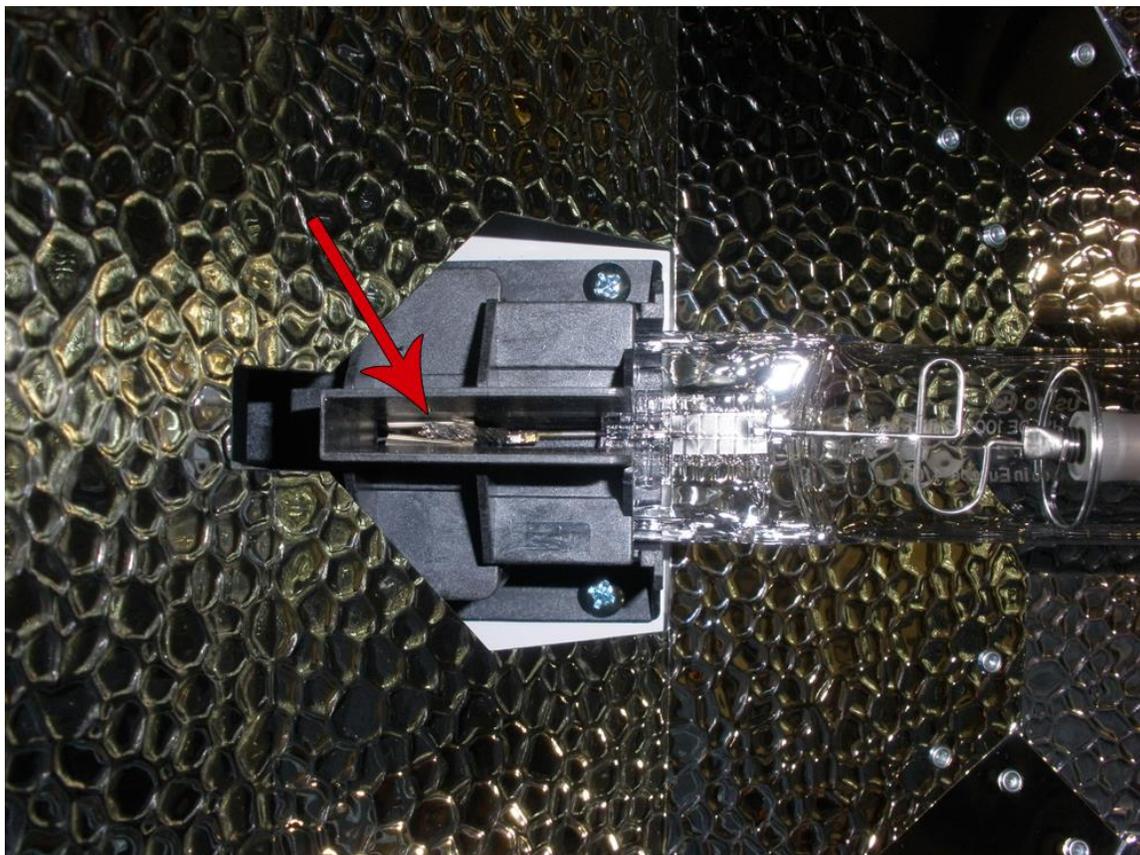


Very Important Tips for Double Ended Lamp Installation

Double ended lights are by far the most productive plant lighting technology on the market right now and people are having great results with them. The double ended lamps are unique, though, and not what we're accustomed to seeing or using. The first time setting up a double ended lighting system can be a bit confusing when you've only used the conventional mogul-base bulbs in the past. Here are a few tips to avoid having a potential problem:



This is a double ended lamp. It doesn't have a threaded base that screws into a normal mogul socket. It has two braided wires coming off either side of it. These lamps are made of quartz so you **NEED TO WEAR GLOVES WHEN HANDLING**. Unlike normal High Pressure Sodium and Metal Halide bulbs, you cannot touch the glass on these bulbs with bare hands. If you get moisture or oil from your fingers on quartz glass, when the bulb heats up it can heat up the oil and cause the bulb to break.

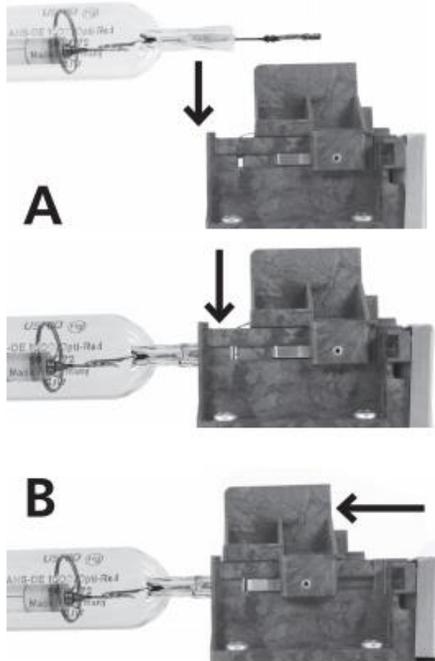


This is how the double ended lamps sit in their sockets. The "flat" ends must sit flat inside of the bracket (**not straight up and down at a 90-degree angle**). The metal wires **NEED TO BE STRAIGHT**. They bend very easily so if you notice they are bent or curved, bend them back into place so they are straight. They must sit inside of the two pieces of metal (see diagram) and make full contact with the two pieces of metal. In this diagram, the wires are bent slightly and VERY CLOSE to NOT making full contact. If full contact is not made, arcing will occur. When an electrical current arcs, heat is built up and you can burn or melt your fixture or, even worse, **START A FIRE**. After making sure that the wires are in place, slide the socket FULLY forward until it can't slide anymore.



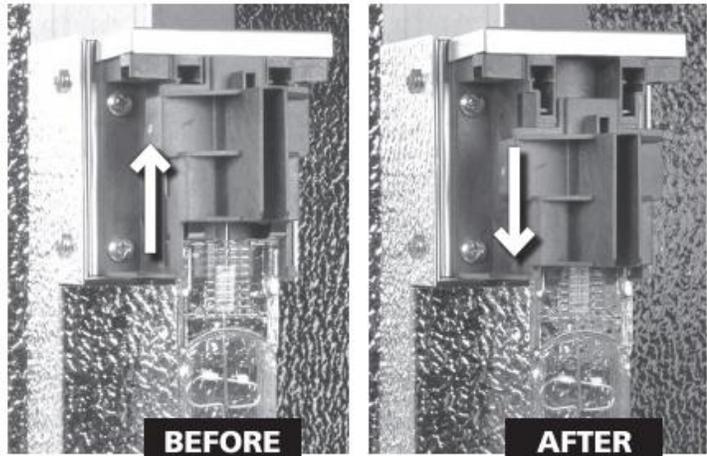
This is what can happen if your lamp is improperly installed. In this case, the wires did not make full contact with the metal and the socket was not slid 100% forward to hold the bulb in place. The electrical current arced, burnt up the lamp and melted the socket. This is the best-case scenario, it could have been much worse.

DOUBLED ENDED LAMP INSTALLATION



Insert lamp ends into sockets (A).

Make sure that it has been properly locked in place by sliding the socket towards the middle of the fixture (B). This prevents the lamp from falling out.



NOTE: These lamps have a quartz jacket. Fingerprints and oils must be wiped off prior to operation.