TROUBLESHOOTING

The purchase of your MOBI-ARC Control Unit includes one 15 minute phone call. You must have a serial number to access the service department. Subsequent calls will be billed at $1.00/minute with a $15.00 minimum. Please have your Mastercard or Visa ready.

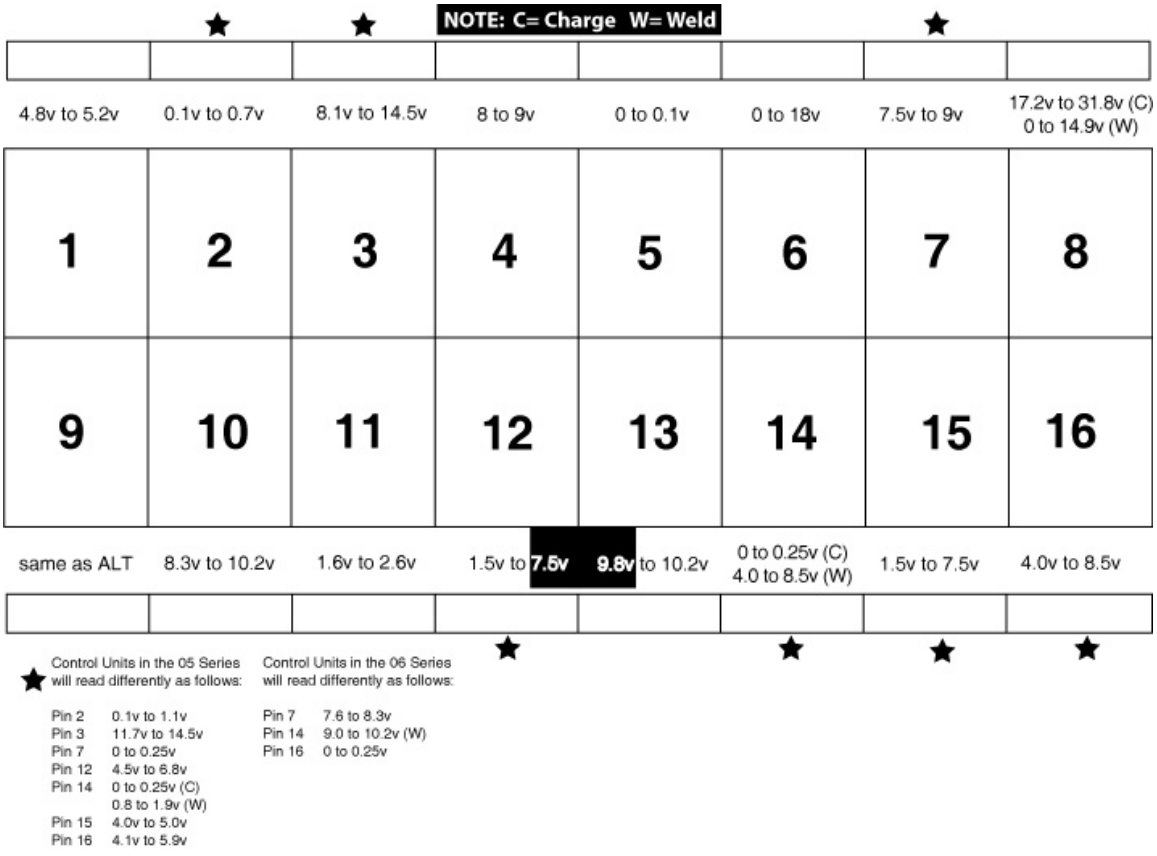
Before you call for technical support, please be sure installation instructions have been executed as stipulated in the installation diagram pertaining to your vehicle. Most complications are due to poor crimps, bad connections, or simply not following the directions.

To verify the MOBI-ARC Control Unit is working correctly, the 16-PIN "MODE SELECT" receptacle also serves as a diagnostic output. Utilizing a digital multi-meter (not a test light), set the DC reading to four places (ex. 12.52).

Switch vehicle ignition to the "ON" position. With the negative meter probe connected to Ground, insert the positive probe into each of the sixteen points as viewed in the diagram below. The sixteen holes are insulated from each other so don't worry about shorting anything out. As you probe each hole, write down the voltage reading in the empty box provided in the diagram.

If the voltage readings fall within the specified parameters, the control unit is working correctly. Any problem will be external to the control unit (alternator, wiring/cabling, connections, or battery). If the voltage readings fall outside the specified parameters, this may indicate a problem with the control unit; please contact the manufacturer or your MOBI-ARC reseller.

(BELOW---16-PIN RECEPTACLE AS VIEWED FROM REAR OF CONTROL UNIT)



BATTERY _____volts BATTERY POST _____volts ALTERNATOR POST _____volts

TYPE OF PROBLEM	PROBABLE CAUSE	RECOMMENDED FIX
NO LIGHTS ON CONTROL UNIT.	Bad connection or wired incorrectly	Make sure 10-pin harness is inserted in HARNESS receptacle. Battery connection has been restored. Violet wire is connected to keyed-on 12 volts and should be no less than 1/10th of a volt below the battery post (tested w/ digital multi-meter, not a test light)
ALL LIGHTS ON (except CHARGE), BUT NO CHARGING CURRENT GETTING TO THE BATTERY	Electrical configuration of Blue and/or Green wires are incorrect in relation to the alternator's electrical configuration	Double-check wiring schematic specific to your vehicle. Make sure in-line fuse(s) have not been blown. If blown. Check for short and contact manufacturer.
	Battery level is too low for the control unit to function correctly	Place battery on shop charger and bring charge level up to 12.5 v +/-
	Gray wire is not connected to battery or is on the wrong side of a dual-battery isolation device.	Connect Gray wire to Battery.
	Red and Yellow #4 AWG cables are not installed between the control unit, alternator, and battery	Be sure Yellow cable is installed between alternator and control unit. Be sure Red cable is installed between the battery and the control unit.
	Poor ground on alternator	Double check ground connection.
	Bad alternator	Install BYPASS Configuration to make sure alternator functions normally. If no charge output, contact manufacturer and/or have alternator serviced or replaced.
	Mode Select Module left in 16-pin receptacle	Remove Mode Select Module and allow timer to reset.
STRIKE AN ARC TO WELD, BUT ONLY LIGHT SPARKING TAKES PLACE AT THE WORK-PIECE.	Control unit isn't switching into "weld" mode.	If an arc is struck, and the CHARGE LED does not go out, do the following: ✓ Yellow #4AWG cable is the <u>only</u> connection on the main post on the bck of the alternator. The original alternator output cable is <u>not used</u> and only the Yellow cable should be present. ✓ Make sure the blue and/or green wires for conductivity though the in-line fuse(s). Be sure the blue/green wire(s) are making the connection(s) on the alternator based upon the correct wiring diagram.
		An arc is struck, CHARGE LED extinguishes, but WELD LED does not go on: ✓ Make sure the blue and/or green wires for conductivity though the in-line fuse(s). Be sure the blue/green wire(s) are making the connection(s) on the alternator based upon the correct wiring diagram. ✓ Make sure Gray wire is connected to keyed-on 12 volts. ✓ Be sure the alternator does not use avalanche diodes in the rectifier. If not sure, contact manufacturer.
STRIKE AN ARC TO WELD, WELDING BEGINS BUT THEN FADES AWAY.	Drive belt is not tight enough and slipping as alternator loads.	Tighten belt.
DIFFICULT TO STRIKE AN ARC AND WELD.	Old or wet electrodes (welding rod).	Purchase fresh electrodes
	42 volts open-circuit not being generated by the alternator after initial strike.	Make sure the blue and/or green wires for conductivity though the in-line fuse(s). Be sure the blue/green wire(s) are making the connection(s) on the alternator based upon the correct wiring diagram. Make sure Gray wire is connected to keyed-on 12 volts
	Avalanche diodes are present in the rectifier plate not allowing the voltage to increase to 42 volts	Be sure the alternator does not use avalanche diodes in the rectifier. If not sure, contact manufacturer.
WELDING ARC LOST AFTER 7-10 SECONDS OF CONTINUOS WELDING	End of electrode is not close enough to puddle in order to maintain arc.	Tighten gapping by keeping end of electrode closer to puddle.
	Timer is not resetting and extending as welding is taking place. Unit is timing out and briefly switching into "Charge" mode, then back to "Weld" mode.	Call for support and return unit for service. Component on PCB must be replaced.