

The Vulcan 2900

INSTALLATION PREPARATION GUIDE



LOCKFORMER

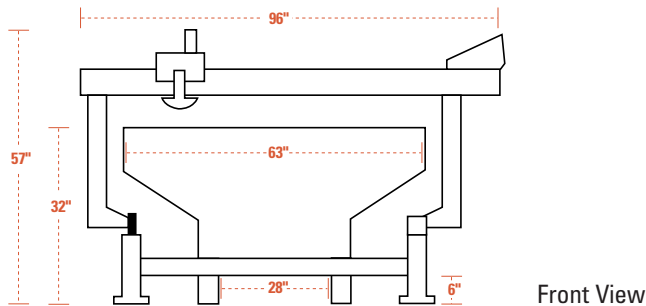
GENERAL INFORMATION

The Vulcan 2900 sets the industry benchmark for quality, reliability, and productivity with its ability to cut sheet metal up to 60" x 120" and 3/8" thick (or even thicker material with optional higher amperage) into component parts for ductwork. Its state-of-the-art power source, precision linear bearings, and dual rack-and-pinion drive, mean you can look forward to years of trouble-free operation.

When your Vulcan 2900 arrives, check the shipping list for all necessary components to verify that they have been received. Note any damage on the bill of lading, have the truck driver sign it, and immediately contact Lockformer's Vulcan Service Hotline at 1-800-441-2840 to ensure that any replacement part(s) are dispatched before the installation technician arrives. The computer will arrive in a separate shipment about a week before the scheduled installation date. Up-to-date shipping information can be obtained from Lockformer's Vulcan Service Hotline.

Position the uncrated and de-skidded cutting table on a square and level concrete floor in the location where it will be used. This will enable the technician to install your machine quickly and properly.

Equipment requirements (coil-line, rack for sheets, etc.) may necessitate rearranging your shop to accommodate the machine and to ensure its operating efficiency. Because all shops are different, our work area diagram should be used only for reference. We suggest that you draw a shop floor-plan layout before installing your Vulcan 2900 to determine how much space is actually needed.

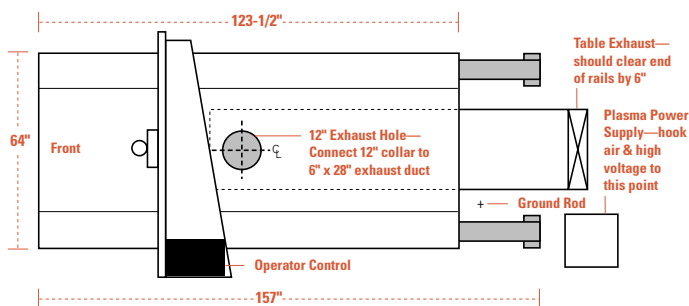


PRE-INSTALLATION CHECKLIST

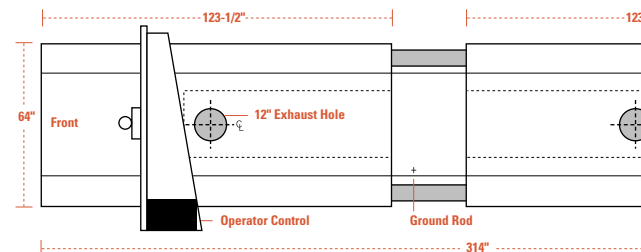
- ▶ Determine a permanent location for the Vulcan 2900 and clear the area **PRIOR** to its arrival. See machine space drawing for the size of space required.
- ▶ The Lockformer technician will check to make sure that the machine is level and square, then make any necessary final adjustments.
- ▶ Provide and set up the appropriate electrical wiring and compressed-air supply prior to the installation date.
- ▶ Install the exhaust system before the Lockformer technician arrives.
- ▶ Final connection should be done during installation.
- ▶ Assign personnel exclusively to the installation and training. This is critical as proper training is vital to the successful operation of the Vulcan 2900.

All of these requirements must be completed prior to the arrival of the Lockformer technician. If you have any questions regarding pre-installation requirements, please call Lockformer's Vulcan Service Hotline at 1-800-441-2840.

MACHINE SPACE DRAWINGS



Single Table System



Dual Table System with Dual Park

AIR REQUIREMENTS

PowerMAX 1000	
Gas Type	Compressed Air
Gas Quality	Clean, dry, oil-free, 99.995% pure
Gas Inlet Pressure	90 PSI (6.1 bar)
Gas Flow	400 SCFH/6.7 SCFM (at 90 PSIG)

PowerMAX 1250	
Gas Type	Compressed Air
Gas Quality	Clean, dry, oil-free, 99.995% pure
Inlet Pressure	90 PSI (6.1 bar)
Gas Flow	400 SCFH/6.7 SCFM (at 90 PSI)

EXHAUST REQUIREMENTS

Your company is responsible for providing an exhaust system. A round exhaust hole 12" in diameter is located at the bottom of each table. A 3,000 cfm exhausted draw is required (aluminum fan blades are not recommended). There is a 1" to 1-1/2" pressure drop at the 12" opening at the bottom of the table.

Note: Our technicians cannot cut any metal if the exhaust system is not in good working order.

PRINT REQUIREMENTS

- ▶ Avery Laser Labels 5164 (4" x 3-1/3") or equivalent.

These can be purchased locally and should be available when the service technician arrives.

FILTER REQUIREMENTS

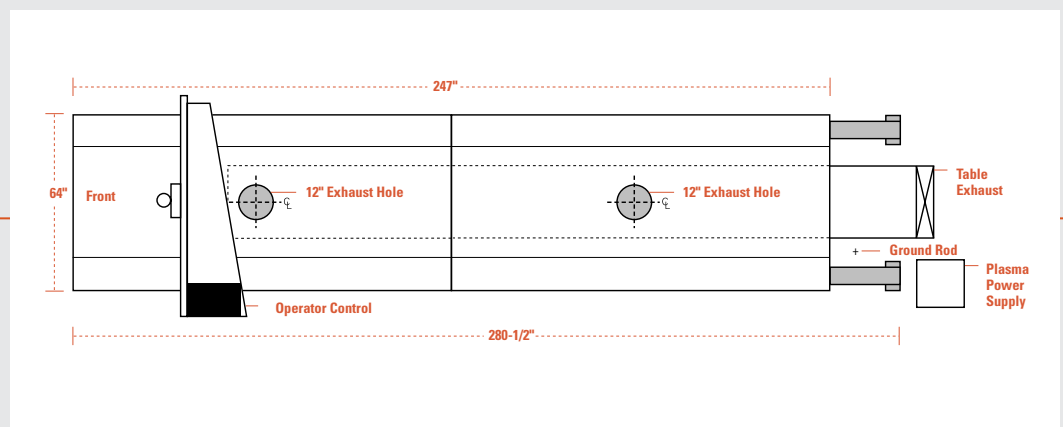
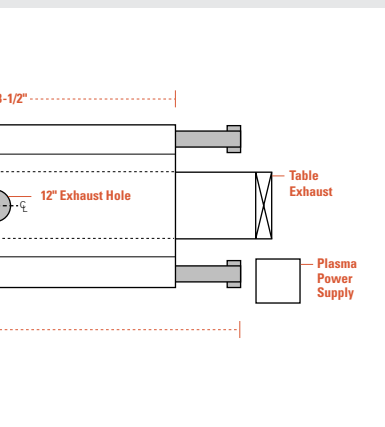
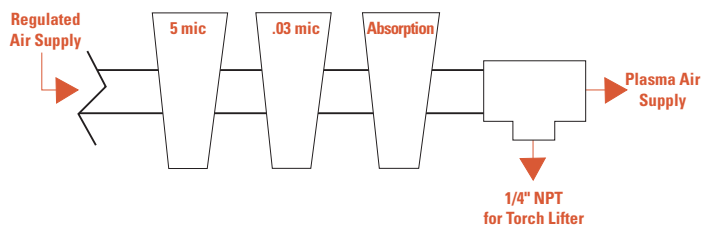
For optimal performance, the air supply should be capable of providing air that is 99.995% clean, dry, and oil-free. If this is not available, a filtering system consisting of three filters is recommended:

- ▶ The first filter should be rated at 5 microns.
- ▶ The second filter should be rated at 0.03 microns.
- ▶ The third filter should be rated for absorption of oil vapors.

Without this filter system, the life of your torch's consumable parts may be greatly reduced. Prior to the filters, a shut-off valve and regulator are required. Following the filters, a 1/4" NPT Tee is required to feed both the plasma supply and the pneumatic torch lifter.

We also require that the filtering system be followed by an 8' Neoprene (1/4" diameter) hose with 1/4" NPT male end for plasma inlet (see illustration below).

To Be Mounted within 8' of Plasma Unit



Dual Table System Continuous Cut

ELECTRICAL REQUIREMENTS

Drive System and Controller

115 volts AC single phase, 60 Hz, 15 Amps (dedicated line) to be terminated within 5' of back of machine.

Line Voltage Disconnect Box

A line disconnect box for each power supply should be used to enable the operator to turn the power supply off quickly in an emergency. The switch should be located on a wall near the power supply and should be easily accessible. The interrupt level of the switch must be equal to or exceed the continuous rating of the fuses. Use slow-blow fuses according to the power requirements listed on the charts below for your plasma unit.

PowerMAX 1000

Input Voltage	Phase	Input Current (Amps) at 8.4 KW Output
200–208	1	50
230–240	1	44
480	1	22
200–208	3	30
230–240	3	26
400	3	15
480	3	12
600	3	11

For PowerMAX 1000 Users

Fuse in accordance to local and national electrical codes. (Use slow-blow fuses.)

PowerMAX 1250

Input Voltage	Phase	Input Current (Amps) at 8.4 KW Output
200–208	1	70
230–240	1	60
480	1	30
200–208	3	40
230–240	3	36
400	3	21
480	3	17
600	3	16.5

For PowerMAX 1250 Users

Fuse in accordance to local and national electrical codes. (Use slow-blow fuses.)

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GROUNDING REQUIREMENTS

The power supply must be properly grounded through the power cord according to local code electrical power requirements. The power supply cabinet is electrically conductive and can present a shock hazard if it is not properly grounded through the line voltage disconnect box. A 3-wire service (4-wire for 3-phase) must be used with a green/yellow wire for protective earth ground, in compliance with local electrical requirements.

Your company must also provide an earth ground rod. The ground rod should be made of 1/2" to 3/4" copper, 8' length with no more than 1' exposed. The ground rod should be near the ground lug connection on the table and connected with #2 gauge wire within 4' from the grounding lug. Do not use a water pipe or any ground other than a ground rod.

Note: See machine space drawing for ground rod location.

Your company must run fiber-optic cable enclosed in 1" conduit. **Warning:** Fiber-optic cable is made of glass and can be broken easily. Do not pull on the cable ends or bend cable in less than a 6" radius. Cable ends are not covered under warranty, if broken during installation. The conduit should be run into the flexible cable track at the back of the machine.

VULCAN TECHNICAL SUPPORT

To provide the best service possible under warranty or on a service plan, Lockformer provides Remote Customer Service Assistance (RCSA) and a bulletin board service (BBS).

Through RCSA, Lockformer representatives can connect to your computer via modem and obtain a view into your system or update software for you. Because a representative can watch your actions, make suggestions, or even operate your computer as you observe, problems are always resolved quickly. Additional support is available through our BBS, which enables you to download patches or software enhancements and upload files required by customer service representatives. Both support options help ensure that your Vulcan system will achieve the highest possible uptime.

In order to take full advantage of Lockformer's Vulcan technical support, we suggest installing a dedicated phone line connected to your office computer's internal modem. This will enable you to use our on-line support. If a dedicated phone line is not available, the use of a fax line or another outside line may be used. The computer is provided with a standard RJ-11 jack.