



AUTOBRAKE

INSTALLATION CHECKLIST

Models SBS126-14, SBS150-16, SBS159-18

CONGRATULATIONS

We're excited about your Autobrake purchase, the most popular and reliable powered folder on the market today. We are certain it will be an asset to your shop and your sheet metal fabrication processes.

IMPORTANT

We want the installation of your Autobrake to go as smooth as possible. So this document outlines all of the things you need to know, and take care of, before the date of installation.

Please read this pre-installation packet thoroughly and **send back the signed and completed checklist** (page 17) when you're done. We are available to answer any questions. You can reach us at (931) 934-2211 or Fax: (931) 934-2220

CINCINNATI, OH

INSTALLATION INSTRUCTIONS

ELECTRICAL REQUIREMENTS:

It is the responsibility of the customer to insure that the proper electrical power is available for the machine. All incoming power must conform to local electrical codes and should be performed by a licensed electrician only. The Autobrakes have two different electrical options when purchased (230vac 3 phase with ground) or (230vac single phase with ground). If the incoming voltage is dirty (arc welders) install a 5/8 inch copper grounding rod adjacent to the right rear leg. The rod should be 8 feet long and only 8 inches should be extending above the floor level. Run a ground wire from grounding rod to an approved grounding terminal inside the electrical cabinet.

Current requirements:

<u>Unit</u>	<u>Service Required</u>	<u>Minimum Wire Size</u>
SBS 126-14, SBS150-16, SBS159-18	230/3/40	10 Ga.
	460/3/40	
	575/3/40	
	230/1/50	8 Ga

An electrical disconnect needs to be installed within 10 ft of the machine for NEC and OSHA requirements. The electrical power is fed through the main electrical cabinet on the ride side bottom. This connection must be in conduit to meet electrical requirements. See Figure 1.

During installation there are a couple of conditions that can affect the control system. In some parts of the United States the incoming voltage is only 208 VAC. The incoming voltage must be between 220 and 250 VAC, (230 VAC, -5%+10%). If the incoming voltage is below or above these limits then a set of Buck/Boost transformers must be installed. **Note: if these transformers must be installed, they are the responsibility of the customer.** Buck/Boost transformers automatically increase or decrease the voltage potential by 10%. These voltage limitations are critical due to internal step down transformers. Additionally, low incoming voltage can have an adverse effect on the power output of the main motors.

There are several different manufacturers of these transformers and they are readily available across the country.

Acme Electric Corporation Model T-1-81052 .750 KVA	2 required
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Square "D" model 750SV43F .750 KVA	2 required
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Electrical connection goes into the right side bottom of the main electrical cabin.



Figure 1

Note: The electrical power going into the cabinets must be in the appropriate conduit according to NEC (National Electrical Code).

The second condition is single phase incoming power running a three phase machine. In this case an external phase converter must be installed.

A phase converter creates an artificial third leg that is synchronized with the other two incoming phases. **Note: when working with inductive motors, only a rotary inverter should be used.** It is recommended that a voltage stabilizer be installed along with the phase converter.

<u>Unit</u>	<u>Recommended</u>
SBS 126-14 series	R7
SBS 150-16 series	R7
SBS 159-18 series	R7

We recommend:

Phase-A-Matic
39917 18th Street West
Palmdale, CA 93551
(800) 962-6976

When installing a phase converter attention must be paid to wire size and length of cable run. Due to the varying rules and regulation across the country, it is the customers responsibility to insure that all local codes are complied with. We recommend the use of a certified license electrician within your area.

Prior to our service personnel arrival, electrical power must be stubbed into the main control panel with 2 extra feet for routing. A Tennsmith certified technician will do the actual electrical hook up inside the machine.

Surge Suppression

Some customers may desire to install a 3 phase surge suppressor inside their electrical control panel because of problems associated with the local power grid.

We recommend:

Square D SDSA3650
240 VAC
47-63 Hz

Unit meets NEC Article 280.

Upon arrival remove the plastic and inspect the unit for any visible signs of damage. **If any is noted, please contact the trucking company immediately and take pictures of the damage.**

WARNING

IT IS IMPERATIVE THAT THE PREPARATION AND LIFTING OF THE MACHINE BE PERFORMED BY PROFESSIONAL RIGGERS. THESE INSTRUCTIONS ARE TO BE USED AS A REFERENCE GUIDE ONLY.

When unloading the unit it can be picked up by the upper clamping jaw with slings or through the locations made for fork insert (Figure 2). Make sure to have the proper lift capacity when using crane or forklift. Please refer to figures 3 and 4 for lifting placement and capacities. Contact the factory with any questions prior to removing the machine from the truck. Use a licensed rigger when off-loading the equipment.

After the machine is removed from the truck and set down, the machine should be prepared for placement. Start by removing the 4x6 shipping runners. There should also be two other crates that come with this machine.
(1) Touchscreen Monitor (2) 1 Inch Bending Bar

Once removed, set them aside. They will be installed later by the service person.

WARNING - Potential for Injury or Death

Use proper handling equipment and tools when moving this machine and its components. Do not exceed the rated capacities of fork trucks or cranes. Be aware of all potential hazards, and make certain that the machine, crating, skidding, and separate machine elements are properly braced and supported before attempting to move them.

See page 7 for minimum forklift capacities. Position the forks in the locations made for forks insert between the jaws (Figure 2). Adjust the tilt as required to pick the machine straight up and off of the lag bolts holding it to the runners. Position the machine as required. Note: insert the forks as far as possible for better control when lifting.

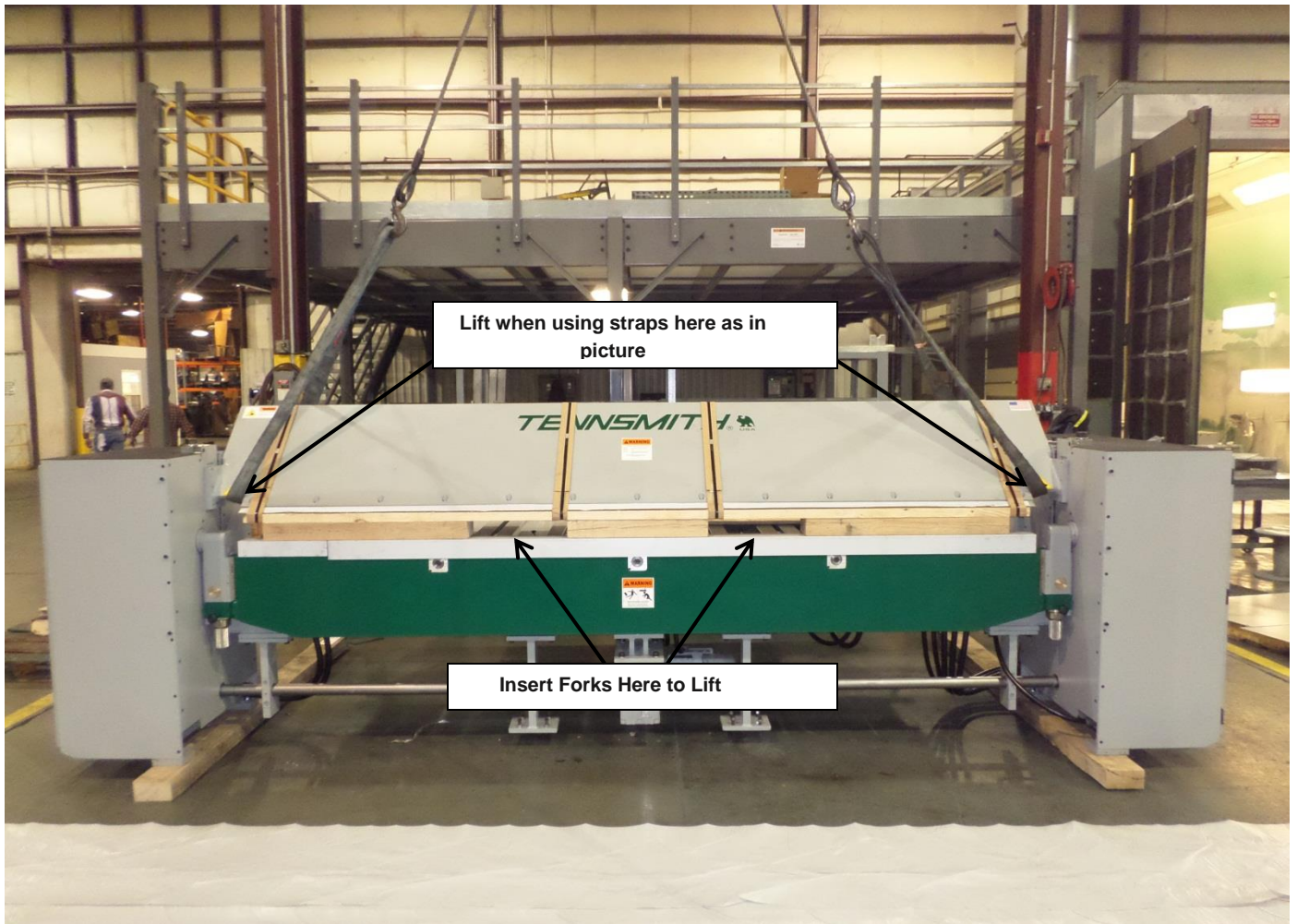
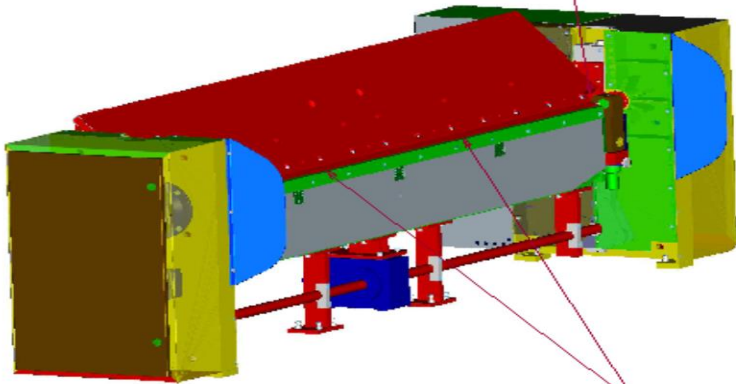


Figure 2

CINCINNATI Prec

PICK UP MACHINE WITH FORKLIFT HERE

ALTERNATIVELY, YOU CAN LIFT WITH STRAPS HERE

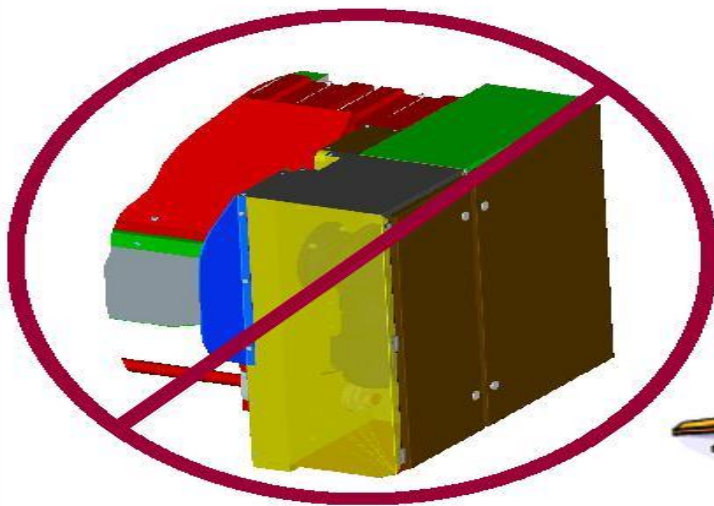


LIFT HERE



TOTAL WEIGHT:
SBS12614 - 9,020 LBS
SBS15016 - 10,180 LBS
SBS15014 - 10,600 LBS
MTS12214 - 10,500 LBS
MTS14614 - 10,900 LBS

DO NOT LIFT BY ENDS



The Autobrake must be in place and bolted to the floor prior to the arrival of service personnel. The Autobrakes are very heavy and difficult to move. For example, when fully skidded the SBS 126-14, with a 41 inch backgauge, weighs 9,600 lbs. Therefore, we recommend that a qualified rigging crew position the base machine where its wanted and set on the leveling pads. The machine should be bolted to the floor using 5/8-7 inch expanding anchor bolts. The minimum floor thickness is 4 inches. Studs should be at least 7 inches long with 3 inches extended above the floor. If you refer to page 10 there is a foot print on laying out you holes to drill before placing the machine. The easiest way to the drill and lag the machine is to remove the covers in **(Figure 4)** on both sides front and back. Once removed drill the holes with the machine already on the leveling pads and in place. The lag bolts can be placed in the hole. Just do not tighten them completely down because the service technician will level machine during installation. The machine must be located such that there are 18 inches of clearance on the left side, 18 inches of clearance for the backgauge, when installed, and 18 inches of clearance on the right side with the electrical control panel fully open.

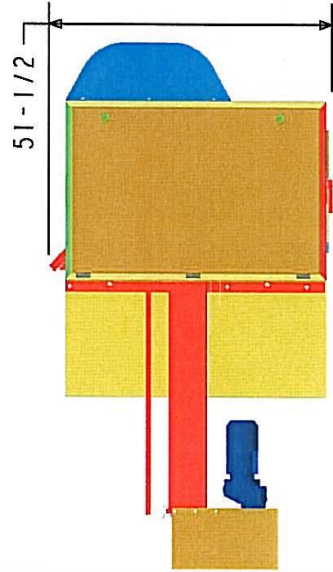


Figure 4

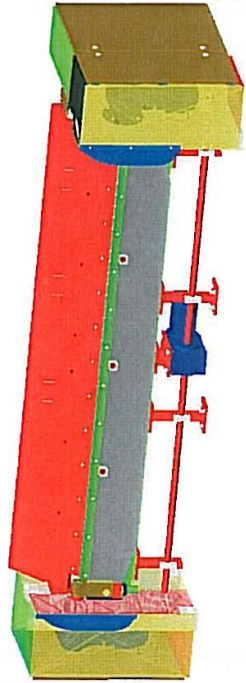
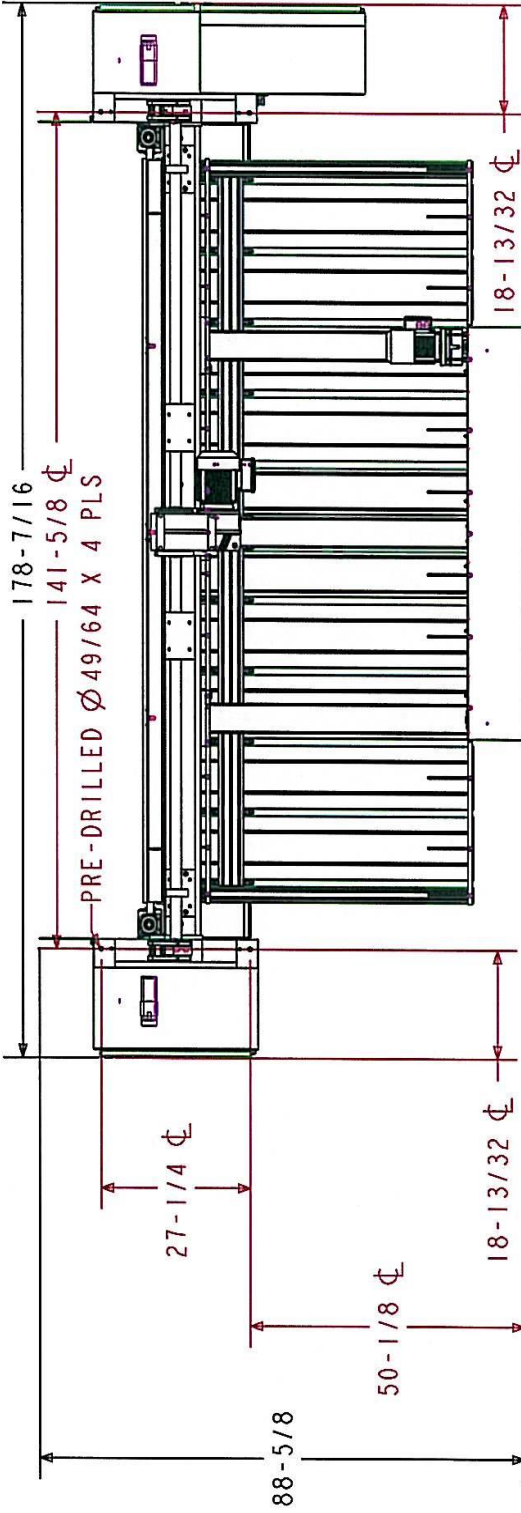
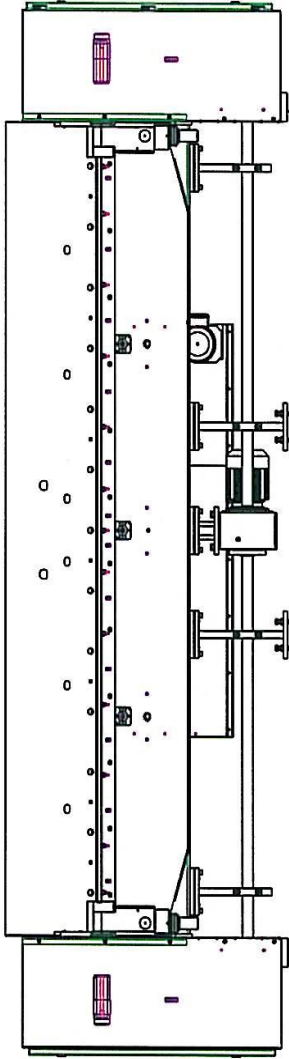
Remove these (4) covers for drilling the holes to lag machine to floor

CINCINNATI Precision Machinery 513-860-4133

RED DIMENSIONS: FLOOR BOLT DOWN



REV	DESCRIPTION	ENGR.	DATE



TOL: .000 ± .005
 .00 ± .015
 .0 ± .03
 FRACTION ± 1/32

MATERIAL:	QTY:	DATE:	DWG#
		26-Mar-08	SBS12614-ASSEMBLY
DESCRIPTION: FOOTPRINT - FOLDER			
	DRWN TO SCALE	ENGR.	SHEET: 1 OF 1
		EW	

TENNSMITH, INC., 6826 SMITHVILLE HWY.,
 MCINNISVILLE, TN 37110
 PHONE (931) 934-2211 INFO@TENNSMITH.COM
 FAX (931) 934-2220 WWW.TENNSMITH.COM



Remove, (4) 4x6 metal jack plates from inside left side cabinet door. The metal plates have a hole in them. Line the hole up with the hole in the 4 corners. This so your lag bolts can be place through both of them to bolt machine to the floor.

AUTOBRAKE INSTALLATION CHECK LIST

Prior to delivery and set up of the Autobrake, the customer must insure they have the correct electrical requirements, foundation requirements, and that the unit is set in place.

- | | | | |
|----|-------------------|-----------|---------------------|
| 1. | Electrical Power: | Phase 'a' | Phase 'a' to ground |
| | | Phase 'b' | Phase 'b' to ground |
| | | Phase 'c' | Phase 'c' to ground |

Note: these readings must be taken with an A/C volt meter. Using a voltage checker only indicates power. It does not give you a voltage reading. If you don't have a calibrated volt meter, you will need to have someone, who is capable of doing this, take the voltage readings.

If you have 208 volts A/C then you need to install a set of buck/boost transformers. See Electrical Requirements, page 3. If you have single phase 220 volts A/C operating a three phase machine, then a phase converter must be installed. See Electrical Requirements, page 3.

2. Remove 4x6 runners from machine and set machine on the leveling pads
3. Each leg of the Autobrake has a pair of feet attached with which the Autobrake is secured to the shop floor. After setting the machine in place, use the non-threaded holes in the feet to determine the location of the floor anchors. There is sufficient clearance in these holes to place the floor anchors without moving the machine. Install 5/8-7 inch lag bolts (anchors) in the floor. See page 9, 10 for details.
4. Seat the lag bolts, and install related hardware. Do not level the machine at this time. Service personnel will level the machine during the installation process.

The above readings and activities are required to be completed by the purchaser of the machine. Please sign and return this page as acknowledgment of your acceptance of these conditions.

Additional service charges may be applied if the above items are not completed prior to the start of the installation process.

Tennsmith will only be able to schedule your machine for installation after this form is signed and returned. Send the form by fax to Tennsmith (931)934-2220: attention Service Department or email: info@tennsmith.com .

Please contact us with any questions at (931)934-2211.

Signed _____ Dated: _____