

# Quick-Start Guide

## Overview

### Introduction

Congratulations on your purchase of a Smithy machine. With proper setup and care, your machine should provide many years of quality work and enjoyment.

This guide covers general instructions for several Smithy metal-working machines. You will receive a detailed operating guide, reference manual, and DVD packed in with your machine. We recommend keeping this quick-start guide with those items when they arrive.

Enjoy your Smithy machine!

### In This Document

This document covers basic information that you will need to prepare for the delivery and to begin setting up your Smithy machine. The topics in this document include:

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Tracking Your Shipment and Preparing for Delivery	2
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### Safety is #1

Smithy machines have been proven to be safe and reliable. However, if abused or operated improperly, any machine can cause injury to you or others. Please read this guide and the operating guide carefully before you start machining. Proper use will create a safe working environment and prolong the life of your machine.

In this manual, the symbols below draw attention to specific operating issues.

**⚠ DANGER** If this action is not avoided, it will cause permanent harm to your health, such as death or serious injury, and it may also cause permanent damage to your machine.

**⚠ WARNING** If this action is not avoided, it can cause potential harm to your health, resulting in death or serious injury, and has potential to cause serious harm to your machine.

**⚠ CAUTION** If this action is not avoided, it may cause potential harm to your health, such as minor to moderate injury, and may also cause moderate harm to your machine.

### Questions?

For pre-delivery questions not covered in the guide, dial **1-800-476-4849**, Monday through Friday, 8:00 a.m. to 5:00 p.m. (Eastern Standard Time).

## Tracking Your Shipment

The best way to be prepared is to know exactly when your machine will arrive. Your “Pro Number” in the cover letter serves as your tracking number for your machine. You have several options available to track your Smithy as it makes its way to you.

### Track by Phone

Estes Express - **1-866-378-3748**- Tell the receptionist that answers the phone that you would like to track your shipment and you will be directed to the next available customer representative.

UPS - **1-800-PICKUPS** - Select #1 and say your tracking number.

U.S. Mail - **1-800-275-8777** - Select desired language and select #5.

### Track Online

Estes- Go to **www.estes-express.com**. Enter your pro number in the “Shipment Tracking Box” and click on submit.

UPS - Go to **www.ups.com**. Select United States from the drop down field. Click on the blue arrow. Click on the “Tracking” tab at the top of the screen.

U.S. Mail - Go to **www.usps.com**. Click on “Track and Confirm”.

### Track by Email

UPS - If we are given your email address at the time of ordering, we will enter it when we fill out your shipping paperwork. UPS will send you automatic updates as your shipment moves.

## Ordering Smithy Accessories

We make every effort to ship your complete order by one method. Big, heavy items, like Smithys, Smithy workstations, and machine stands, are delivered by truck. If your order contains more than one major item, we make every attempt to get both on one truck.

We are often able to pack items under 100 lbs inside a larger item’s box and ship them together. In some cases, orders are too large to be shipped in one box. Items that are not able to be packaged into larger items’ boxes are shipped through UPS Ground, and/or U.S. Mail.

Please note, some items - like Smithy 4-Jaw chucks - are packaged in small wooden crates, which we DO NOT pack inside with your Smithy in order to avoid damage to your machine. Those items will be shipped via UPS or US Mail.

We handle complex Smithy orders every day - orders usually consisting of at least one crate and several boxes of varying sizes and weights. We work closely with Estes and UPS to make sure you’re getting fast, convenient delivery at a reasonable cost.

Your order may arrive in several installments, over a period of 7-10 days after you receive this letter.

### Preparing for Delivery

Here are some things you can do to prepare your shop or work space for your new Smithy machine.

#### Work Bench

You will need a work bench that is capable of supporting the weight of your machine plus up to 300 pounds for the weight of tools, holding devices, work material, etc. If you purchased one of the optional work benches available from Smithy, these benches have been designed to support the weight of the specified machine.

You can also make your own work bench. Just make sure it is sturdy enough to support the machine (plus 300 pounds) and that the bench top is rigid, level, and well-supported. The height should be such that machine controls are at waist level.

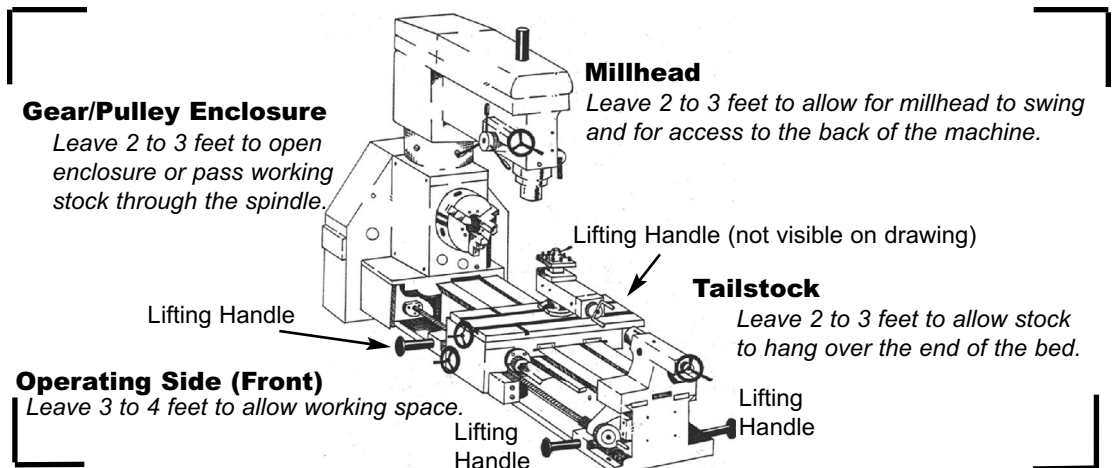
Your work bench should be located in a vibration-free area with a floor that is designed to support the full weight of the bench, machine, accessories, and materials.

#### **! DANGER!**

Smithy strongly discourages the use of casters or wheels on metal-working machine benches. The weight of the machine could result in the bench tipping while being moved. Once the machine is mounted, consider your work bench to be permanent. If you must move the machine, first remove it from the bench.

#### Clearance

Set up the work bench so you have plenty of working space. Leave at least 3 to 4 feet of clearance on the operating side of the machine (at left in the drawing below). Note the suggested clearances for the other sides of the machine. Machines with 110-volt motors require a properly grounded (3-wire), 110-volt AC



#### Power Requirements

electrical circuit protected by a 20-ampere (20 amp) breaker. Machines equipped with 220-volt motors require a 220-volt AC circuit single phase protected by a 15-ampere (15 amp) 220-volt breaker. Preferably, the outlet should be on a separate circuit. Smithy also recommends that you *not* use an extension cord. However, if you do, ensure that the cord is rated for a current of at least 20-amperes. Please check with your local electrical codes when installing a new circuit into your work area.

## Taking Delivery

Here are some recommendations for taking delivery of your Smithy machine.

### Receiving the Machine

In most cases, you will pick up the crated machine at a trucking terminal or depot. Before picking up your machine, contact the delivery terminal, ask about the loading arrangements, and arrange for timely pick-up. You may also be able to arrange to have the machine delivered to your shop location if you have not already done so.

### Weight of the Machine

The table below lists the approximate shipping weight and crate dimensions for Smithy metal-working machine models and optional benches. Use these weights and dimensions in planning to pick up your order.

Model	Shipping Weight (pounds)	Crate Dimensions (inches)
Midas 1220 XL	530	44 x 23 x 38
Midas 1220 LTD	620	44 x 23 x 38
Midas 1231 LTD	670	44-4/3 x 22-3/4 x 38
Granite 1324 Series	775	49-1/2 x 22-3/4 x 43-1/4
Granite 1340 Series	815	65 x 22-3/4 x 43-1/4
CX-329	840	39 x 43 x 45
CX-239	1075	70 x 30 x 30
LX-329	1058	32 x 40 x 54
LX-1340	1500	36-1/2 x 30 x 30
Work Bench (80-000)	1 carton @ 140	60 x 25 x 13-1/4
Work Bench for CZ-239 (80-010)	1 carton @ 48 1 carton @ 68	1 @ 26 x 15 x 11 1 @ 26 x 14 x 18
Work Bench for CX, LX	1 carton @ 76	1 @ 20 x 25 x 17
Work Bench for LZ-1340	1 carton @ 90 1 carton @ 90	1 @ 27 x 17 x 16 1 @ 27 x 16 x 12
Work Bench for GN-1340 Series (80-020)	1 carton @ 66 1 carton @ 49	1 @ 30 x 16 x 18 1 @ 30 x 14 x 18
Work Bench (80-045)	1 carton @ 160	1 @ 59-1/2 x 25 x 13-1/2

### Vehicles

Smithy recommends that you use an open-bed pick-up truck, a cargo van, a cube van, or a sturdy trailer to pick up your machine. Smaller vehicles may not have the load capacity or sufficient clearance for loading at the shipping terminal.

### Inspecting the Crates or Cartons

On arrival, thoroughly check each crate and carton for signs of loss or damage.

While a shipping company employee is present, open any crate or carton that shows signs of loss or damage.

Examine the contents with the shipping company employee.

If any damage is present, record an exact, detailed description of the results of the examination on both the shipper's and your delivery receipt. Be specific.

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## Taking Delivery, continued

### **Important Note**

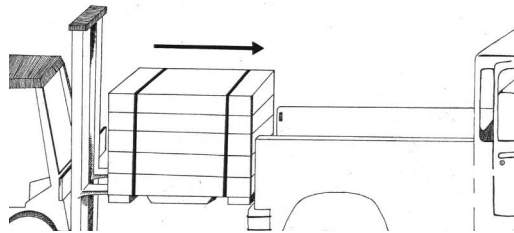
The crate is intended to protect the machine; damage to the crate does not necessarily mean that your Smithy machine has been damaged. However, noting any damage to the crate on the delivery receipt will make it much easier to substantiate a claim if there actually is damage.

### **Loading the Machine**

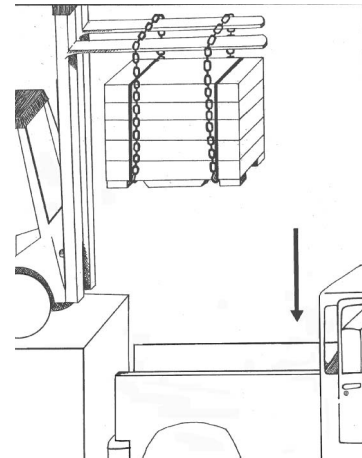
After you have inspected the crate and signed for the machine, a shipping company employee will load your machine into your vehicle. The loading procedure depends upon your vehicle and the facilities at the terminal.

If the shipping company's forklift is not restricted to the loading dock, you can have the crate loaded directly into the truck or trailer bed with the forklift as shown below at left.

If the forklift is restricted to the loading dock, chains or straps can be used to lift the crate and lower it into the truck or trailer bed as shown below at right. Of course, this arrangement will not work well for smaller, closed vehicles.



*Use this procedure if the forklift is not restricted to the loading dock.*



*Use this procedure if the forklift is restricted to the loading dock.*

Regardless of how you load the machine, always be sure to tie the load down securely so that it does not shift during transport.

### Opening the Crate

Follow these steps to open the crate.

**CAUTION!** Wear leather work gloves and safety glasses for this operation, especially when cutting the metal bands, which are under tension.

- Step 1 Remove the packing list from the plastic bag attached to the crate and put the document in a safe place.
- Step 2 Cut the metal bands encircling the crate with tin snips. **Note: If you have ordered a Granite or Granite Industrial machine, the plywood crate cover has been screwed to the pallet. Unscrew the top two screws on the two plates on both sides of the crate and the one plate on the end of the crate.**
- Step 3 Determine the end of the crate at which the tailstock is located. You may need to lift the crate 3 or 4 inches, and run your hand along the base. If you feel 10 to 12 inches of sheet metal, you need to lift the opposite end.
- Step 4 Using the proper lifting techniques, lift the tailstock end of the top of the crate upward. To avoid pinching your fingers while lifting, place your hands toward the corners of the crate and not in the middle. While lifting, pull the crate toward you slightly so that it easily clears the tailstock.

**CAUTION!** Crate covers can weight up to 100 pounds. Ask a friend or family member to help, if necessary.



- Step 5 Set the crate aside, out of the immediate work area. You may want to keep the crate in case you ever need to return the machine for repair.
- Step 6 Check the packing list against the contents of the crate to ensure that everything listed is accounted for in your shipment. Also, check the contents of the crate against the inventory lists in the operating guide to ensure that all machine components are present.
- Step 7 Check the machine carefully for signs of damage, especially if you noted damage to the crate earlier.

### Moving Your Smithy from the Pallet

Before removing your machine from the pallet, review the instructions on page 11 for securing your machine to the work bench. Depending on the model, your fully assembled Smithy machine can weigh 900 pounds or more. Use a mechanical device to lift the entire machine, or disassemble some parts of the machine and reassemble them on the bench, as outlined in this guide.

**Important Note** For your safety, Smithy recommends that at least one additional person be present when moving your machine, even if you are using a mechanical lifting device.

#### Removing with Mechanical Power

Follow these steps to remove the machine from the pallet if you have a hoist or mechanical lift to position the machine on the stand. You can obtain a suitable engine hoist from an equipment rental center.

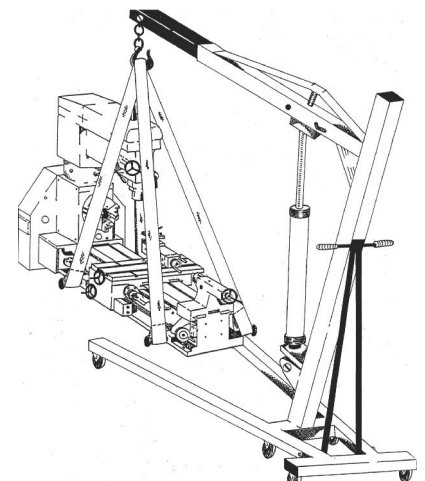
- Step 1 Remove any hold-down straps and the plastic protective covering.
- Step 2 Remove the Smithy boxes that contain your Quick Start Pack.
- Step 3 Use wrenches to remove the nuts and bolts that hold the machine base to the pallet.
- Step 4 Pull out the four lifting handles in the base of the machine. There are two lifting handles on the operator's side of the machine and two on the back side of the machine. On each side, there is a lifting handle near the millhead and one near the tailstock.
- Remove levers or wheels that could be damaged by lifting chains or straps.
- Step 5 Move the table and tailstock as far to the right as possible (toward the end of the machine) to balance the weight of the machine.
- Step 6 Attach chains or lifting straps to the lifting handles. If necessary, you can unscrew the ends of the lifting handles to slide the loop of a lifting strap onto the handle. Be sure all points of attachment are snug and cannot shift.
- Step 7

**If you removed the lifting handle ends, be sure to replace them before lifting to prevent the straps from sliding off the handles.**

**⚠ DANGER!** Ensure that the machine is not plugged into electrical power.

The drawing shows a properly rigged lifting arrangement.

**⚠ CAUTION!** Viewed from the operator's side of the machine, the lifting straps must be attached from the right front to the right back and left front to the left back. Do not cross left and right straps.



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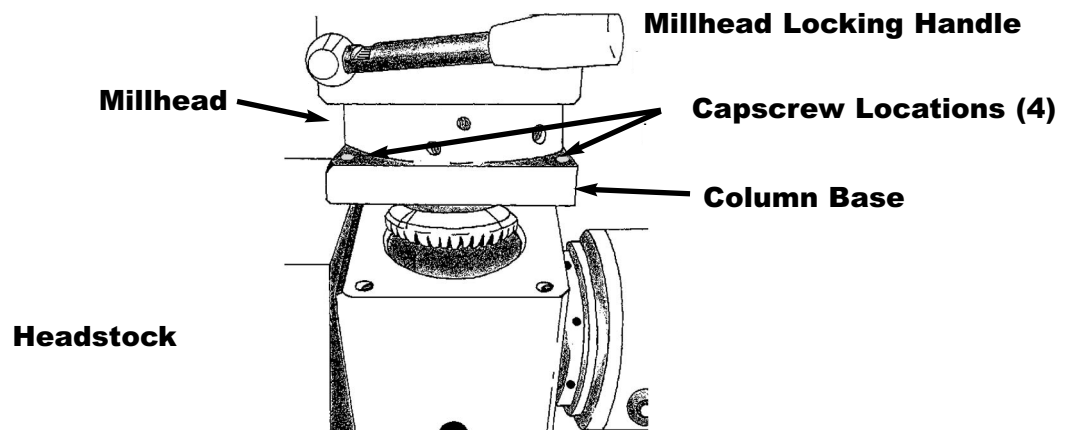
### Moving Your Smithy with Mechanical Power, continued

- Step 8 Lift the machine off the pallet with a lifting device, such as a hoist, keeping it as low to the ground as possible. Move the machine to the location of the permanent work bench.
- Step 9 Lift the machine just high enough to clear the top of the work bench.
- Step 10 Move the machine over the work bench and gently set it down in position.

### Removing without Mechanical Power

Follow these steps to remove the machine from the pallet if you do not have access to a hoist or mechanical lift. The objective is to remove as much of the weight as possible before lifting. Plan on having four people available to lift the machine onto the bench.

- Step 1 Remove any hold-down straps and the plastic protective covering.
- Step 2 Use wrenches to remove the nuts and bolts that hold the machine base to the pallet.
- Step 3 Remove the Smithy boxes that contain your Quick Start Pak.
- Step 4 **Remove the Millhead** (see diagram below)
- Lock the millhead locking handle. Using a sharp knife or razor blade, score the paint where the millhead attaches to the headstock. Depending on the model, you may need to open the gear enclosure and remove up to two screws.
- To access and remove the four hex-socket capscrews at the base of the millhead support column, raise the millhead and offset at 45°.
- Verify that the millhead is locked to the column. Then lift the millhead and column off the lathe head. You may have to rock it back and forth gently while lifting it.



### CAUTION!

The millhead can weigh up to 100 pounds. Ask a friend to stabilize the millhead to prevent it from tipping while you remove the last capscrew. Tipping could result in injury to you or damage to your machine.

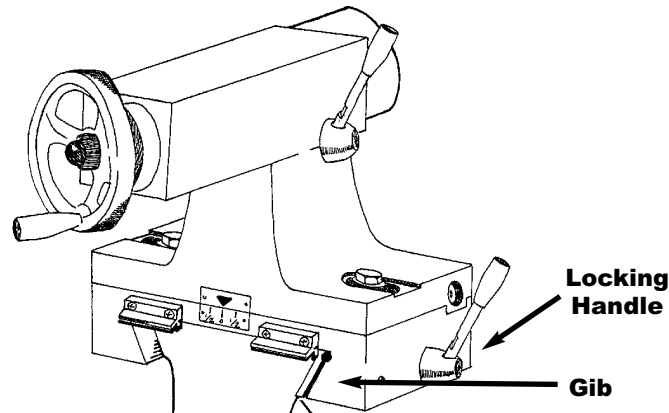
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### Moving Your Smithy without Mechanical Power, continued

Step 5 Remove the Tailstock (see diagram below)

Loosen the locking handle and slide the tailstock off the end of the bed.



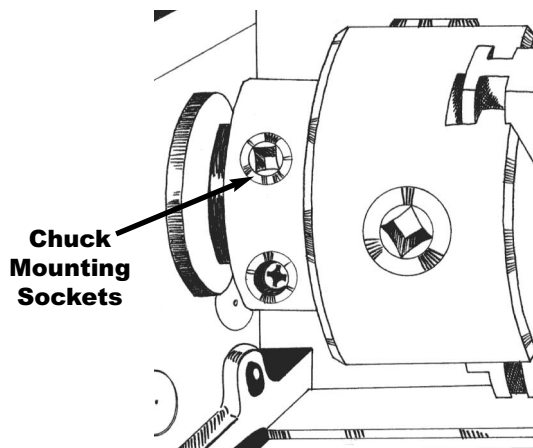
#### **Important Note**

Hold the tailstock gib in place so it does not fall out. There is a locking pin behind the lock handle that can also fall out. Watch carefully as you remove the tailstock.

The gib for the 1200 series is on the operator's side of the machine.

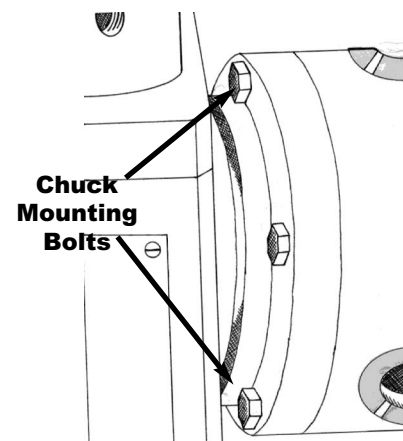
Step 6 Remove the Lathe Chuck (see diagram below)

Removal of the lathe chuck depends on which Smithy machine you have.



#### **GN-1300 Series**

Using the chuck key supplied with the machine, turn the square sockets in the spindle flange counterclockwise until the hashmarks are aligned. Remove the chuck without letting it fall onto the machined ways.



#### **All Other Machines**

Using a wrench, loosen the bolts on the back side of the lathe spindle flange. After all the bolts have been removed, use a rubber mallet or the palm of your hand to loosen the chuck from the spindle flange.

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### Moving Your Smithy without Mechanical Power, continued

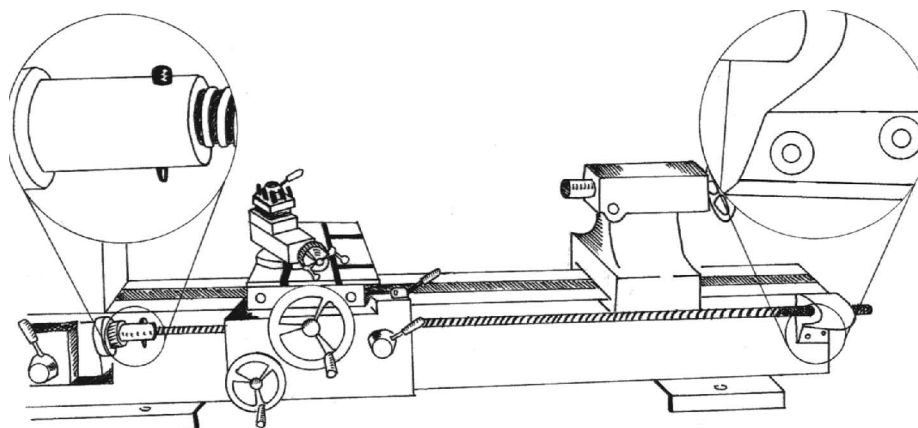
#### Step 7 Remove the Carriage Assembly

**Important Note** Smithy does not recommend that you remove the carriage assembly unless it is absolutely necessary. It is very easy for several small parts to fall into the apron assembly and cause problems later.

If the carriage assembly must be removed, start with the coupler sleeve that connects the leadscrew to the driveshaft on the left-hand side of the leadscrew (see blow-up at left in drawing below). It is pinned to the leadscrew by a tapered pin. Locate the smaller end of the pin and drive the pin out.

On the right trestle, remove the hex-socket capscrews (see blow-up at right in drawing below). **Note:** Depending on the model, the cap screw for removing the trestle could be located on either the operator's side (as shown below) or at the end of the bed. Tap lightly on the right trestle to loosen it from the lathe bed. Do not remove the locating pins. You will need them in place to realign the carriage. Engage the half-nut, run the carriage to the right and off the rack, and slide the carriage off the bed. \*\*

As you are removing the carriage, the gib and locking pin could fall out. Be careful not to lose them.



\*\* On models: GN-1324, GN-1340, GN-1324-I, GN-1340-I, MI-1220 LTD & MI-1231 LTD

**Important Note** The drawing above is shown with the tailstock in place. However, the tailstock will need to be removed before the carriage can be removed. See Step 6 above.

- Step 8 With a person at each lifting handle, use proper lifting techniques to move the machine to the location of the permanent work bench. Proper lifting technique includes squatting down so that you use your leg muscles to lift rather than bending over at the waist and risking a back injury.
- Step 9 Lift the machine high enough to clear the top of the work bench.
- Step 10 Move the machine over the work bench and gently set it down in position.
- Step 11 After following the instructions on page 11 to secure the machine to the bench, reassemble any parts that were removed.

## Securing the Machine to the Work Bench

If you have not already done so, you will need to assemble or build the work bench you intend to use. Once the machine is resting on the permanent work bench, you will need to secure it to the bench top with bolts.

### Mounting Hardware

There are four mounting-bolt holes on the machine base. Follow the mounting hardware recommendations shown for the benches available for purchase from Smithy. Use equivalent hardware if you have built your own work bench, adjusting the length of the bolts for the thickness of your bench top.

#### MI-1220XI &, MI-1220 LTD

Metal Chip Tray Bench (80-030 or 80-045)  
3/8" x 3-1/4" bolts, 3/8" washers, and 3/8" nuts

Maple Top Bench (80-000)  
3/8" x 3-1/4" lag bolts

#### GN-1324/GN-1324 MX and GN-1324 IMX

Metal Chip Tray (80-030 or 80-045)  
3/8" x 2" bolts, 3/8" washers, and 3/8" nuts

Maple Top Bench (80-000)  
3/8" x 2" lag bolts

<b>Important Note</b>	<b>The bench for the Granite 1340, 1340 MX, 1340 IMX and for all Dedicated Lathes and Mills include all necessary mounting hardware.</b>
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### Aligning the Machine

The chip tray of the 80-045 bench comes with three mounting pads for the machine, two mounting pads are pre-drilled. The two pads that are closest together support the headstock end of the machine and should be on the left side when facing your work bench from the operating side.

The easiest way to align the machine base to the bolt holes is to suspend the machine just above the bench top with a hoist. Put mounting bolts in opposite corners of the machine base to use as guides as you gently lower the machine onto the bench top. You can then add bolts to the remaining mounting holes and tighten all mounting hardware. If you are using a bench with a chip tray, be sure to align the mounting holes on the base to the holes in the chip tray.

If you are using the maple top (80-000) or a top for which holes must be drilled, gently lower the machine onto the bench top, mark the location of the mounting holes, lift and move the machine, drill pilot holes for the lag bolts, move the machine back into place, and then fit and tighten the bolts. You can also lay out the bolt pattern as shown in the diagrams on the pages that follow.

<b>Important Note:</b>	<b>All four holes are not accessible on all machines.</b>
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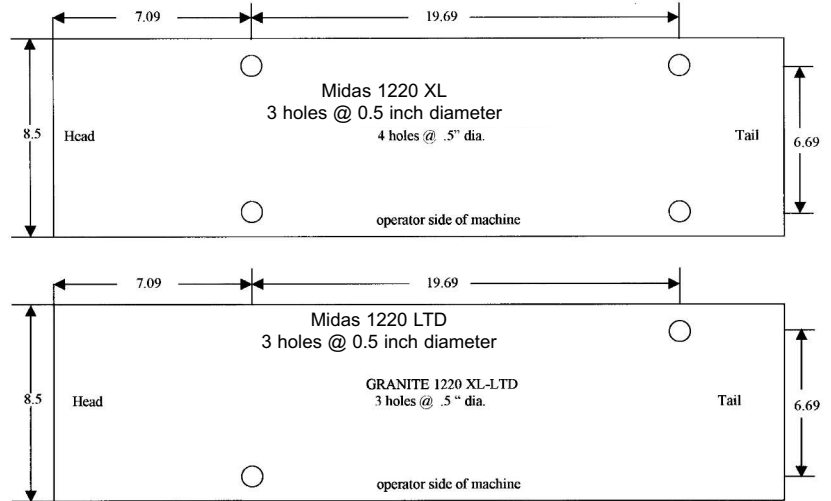
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**Securing the Machine to the Work Bench, continued**

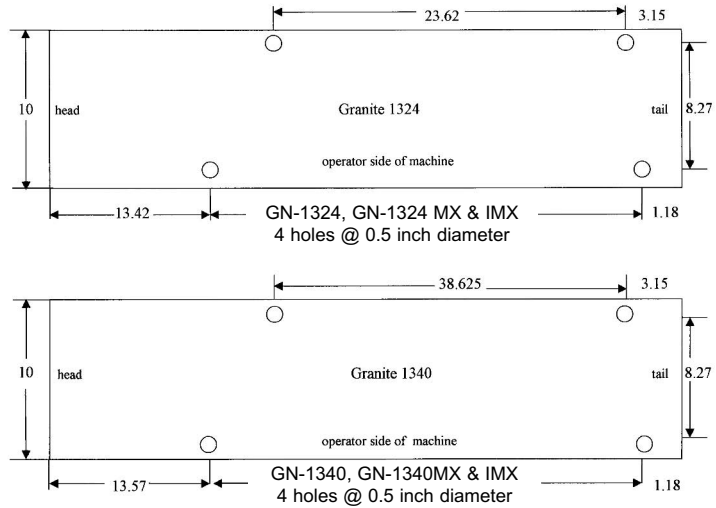
**Bolt Patterns**

If you have made your own work bench, use the lay-out diagrams below to pre-drill holes for the mounting hardware.

**1200 Series  
Mounting Bolt  
Layout**



**1300 Series  
Mounting Bolt  
Layout**

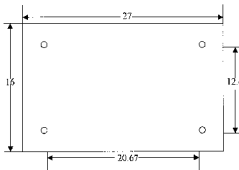


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Securing the Machine to the Work Bench, continued

**CX-329 & LX-329  
Mounting Bolt  
Layout**

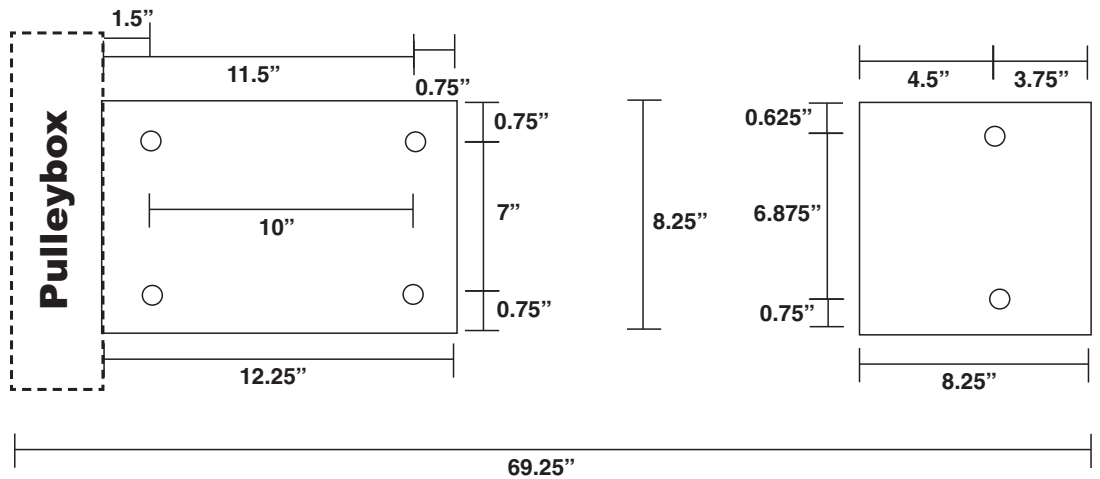
MOUNTING HOLE FOOTPRINT FOR BX-288



Note: Hole size is 1/2". Use 3/8" to mount to your stand.

**CZ-239 Mounting  
Bolt Layout**

**LZ-1340  
Mounting Bolt  
Layout**



- All holes are measured to center
- Hole diameter is 1/2"
- Use 7/16" bolts
- Drawing is not drawn to scale

**Ready for  
Cleaning and  
Setup!**

When you have completed securing the machine to the bench top, you are ready to begin cleaning and setting up the machine. Watch the DVD and read your operation guide thoroughly to familiarize yourself with your machine and the operations of your machine.