

ROTTLER

F69A CNC

MACHINING CENTER

MACHINE INSTALLATION

MANUAL



PARTS ORDERING

For optional equipment catalogs, please visit <https://www.rottlermfg.com/documentation.php>

For fastest service ordering parts or equipment, contact us via e-mail with the information below. For customers within the U.S., send emails to parts@rottlermfg.com, for customers outside of the U.S., use intlparts@rottlermfg.com

Have the following information on hand to expedite the ordering process:

1. Your name, business name, and contact number
2. Customer number, or your billing address if you do not have a customer number
3. Shipping address if different from the billing address
4. Machine model and serial number
5. Part number and description of the item(s) to order
6. Preferred method of shipment

For customers outside of the U.S. requiring faster service, contact your local distributor.

In some cases, you may be requested to send a photo of the part you are ordering if it is a replacement part or does not appear in our database.

If you are unsure which part you need to order, contact our service department, and ask to speak to one of our service consultants. They will assist you in determining which part(s) you require.

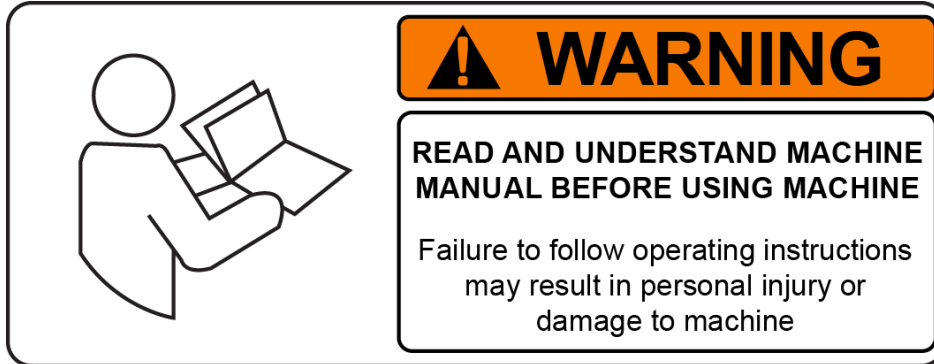
THERE IS A MINIMUM ORDER OF \$25.00

MANUAL SECTIONS

INTRODUCTION

INSTALLATION

INTRODUCTION



READ THE SAFETY CHAPTER BEFORE INSTALLING MACHINE. THOROUGHLY UNDERSTAND ALL SAFETY ISSUES BEFORE OPERATING MACHINE.

ATTENTION OWNER/BUSINESS MANAGER

To validate the warranty on your new Rottler machine, please be sure to sign and complete the “Installation Report” located in the Installation Chapter of this manual.

We suggest that the new user of the F69A read the CONTROL DEFINITIONS to get an idea how the machine operates.

The Operating Instructions chapter should be read in order to familiarize the user with the actual button pushing sequences required to carry out a job. These chapters in the manual should be considered an introduction. As the operators of the F69A series machines gain experience with using the different functions of the machine, complicated setups and programs will make more sense.

The rest of the manual contains information and part number reference on fixtures, cutting tools, and machine maintenance. The operator should read and become familiar with these areas as well.

Description

The model F69A machine is a precision, single point boring, and high-speed surfacing unit. The machine can be equipped with tooling and accessories for surfacing and re-boring most American passenger car and truck engines, In-lines, as well as 90 and 60 degree V-types.

F60 machines can be easily tooled, to machine a wide range of engines, including European and Asian engines, also, the machine can be easily adapted to perform other boring and surfacing operations.

The machine is designed, to maintain alignment of cylinder bores, and cylinder head, deck surfaces to the pan rails and main bearing bore locations, as was done in the original factory machining. This overcomes the many inaccuracies and out-of-alignment problems associated with clamping portable boring bars to the cylinder head surface of blocks.

Convenient controls, fast block clamping, precise 3 axis CNC positioning and clamping, means considerable savings in floor to floor time, and operator involvement.

Change over or resetting time required to set up V-type or in-line engines is a minimum, making this machine highly suited to the jobber shop where engines cannot be run through in model lots.

All feeds and rapid travels are power operated and controlled from the control panel.

Disclaimer

The F69A Manual (henceforth to be referred to as the “Manual”) is proprietary to Rottler Manufacturing LLC. (“Rottler Manufacturing”) and no ownership rights are hereby transferred. No part of the Manual shall be used, reproduced, translated, converted, adapted, stored in a retrieval system, communicated or transmitted by any means, for any commercial purpose, including without limitation, sale, resale, license, rental or lease, without the prior express written consent of Rottler Manufacturing.

Rottler Manufacturing does not make any representations, warranties or guarantees, express or implied, as to the accuracy or completeness of the Manual. Users must be aware that updates and amendments will be made from time to time to the Manual. It is the user’s responsibility to determine whether there have been any such updates or amendments. Neither Rottler Manufacturing nor any of its directors, officers, employees or agents shall not be liable in any manner whatsoever to any person for any loss, damage, injury, liability, cost or expense of any nature, including without limitation incidental, special, direct or consequential damages arising out of or in connection with the use of the Manual.

Rottler Manufacturing and its employees or representatives are not responsible for any information regarding final specifications of any workpiece that is created as a final product when using Rottler equipment. It is the responsibility of the end user of Rottler equipment to determine the final dimensions and finishes of the workpiece that they are working on. Any information regarding final dimensions and finishes that appears in any Rottler literature or that is expressed by anyone representing Rottler is to be regarded as general information to help with the demonstration of or for operator training of Rottler equipment.

Limited Warranty

Rottler Manufacturing Company Model F69A parts and equipment is warranted as to materials and workmanship. This limited warranty remains in effect for one year from the date of installation or two years from the date of the original shipment from Rottler or whichever date occurs first. This only applies if the machine is owned and operated by the original purchaser and is operated and maintained as per the instructions in the manual. A machine is warranted only if the Installation Report has been properly executed by a certified installation person and received by Rottler at the time of actual installation.

The products are warranted upon delivery to conform to their published specifications and to be free from defects in material and workmanship under normal use for a period of one year from shipment. Should a product not be as warranted, Rottler sole obligation shall be, at its option, to repair, correct or replace the product or to refund the amounts paid for the Product upon its return to a location designated by Rottler. No warranty shall extend to rapid wear Products (including tooling) or to Products which have been subject to misuse (including any use contrary to Rottler instructions), neglect, accident (including during shipment), improper handling or installation, or subject to any modification, repair or service not certified

by Rottler. Rottler shall not be liable for any consequential, direct or indirect damages or for any other injury or loss. Buyer waives any right, beyond the foregoing warranty, to make a claim against Rottler. No warranty is provided for any Products not paid in full.

Merchandise cannot be returned to Rottler without prior approval. Customer must contact the Order Department or representative to get approval and to be issued a Return Goods Authorization number (**RGR#**). Merchandise authorized for return must be returned prepaid. If merchandise is returned with shipping charges collect, the actual amount of these charges may be deducted from any credit which may be due the customer. The **RGR #** assigned by the Order Department should be written on the shipping label and must appear on a copy of the invoice(s) covering the original shipment. This invoice copy must be included in the box with the parts. Shipment must contain **ONLY** those items on the **RGR** as approved for return. Merchandise must be received within 10 days of the date of **RGR** or the **RGR** will be canceled. All returned merchandise may be subject to a 20% restocking fee on under \$1,000.00 amount or 10% on any items over \$1,000.00. Parts or tooling over 30 days old are considered as customer property and can only be returned with prior written approval from Rottler Corporation Management and/ or Shipping Department.

The issuance of a **RGR DOES NOT** guarantee credit - it is only authorization for the return of the goods. Credit for return merchandise is at the sole discretion of Rottler. Credit will be issued only after inspection of returned goods.

Tools proven to be defective within the warranty period will be repaired or replaced at the factory's option. We accept no responsibility for defects caused by external damage, wear, abuse, or misuse, nor do we accept any obligation to provide compensation for direct or indirect costs in connection with cases covered by the warranty.

INSTALLATION

Contents

F69A Installation Report	2-2
Machine Dimensions	2-8
Front Dimensions	2-8
Side Dimensions	2-9
Clearance Dimensions	2-10
Installation Procedure	2-11
Location	2-11
Unpacking and Lifting	2-11
Leveling and Alignment	2-13
Leveling Bolt Locations	2-14
Air Supply	2-15
Power Supply	2-16
Grounding	2-16
Getting Started	2-17
Power Up	2-17

ATTENTION OWNER/BUSINESS MANAGER

To validate the warranty on your new Rottler machine, please be sure to sign the installation report after the installation technician has installed the machine and verified the machine is operating correctly and given the operators operation and maintenance training.

Thank you for your cooperation and the opportunity to be of service to you.

ROTTLER MANUFACTURING



INSTALLATION REPORT

F69A
REV 010924

OFFICE USE ONLY
 Route to:
 Orders Notified _____ Eng Mgr _____ Srvc Mgr _____ Assem Mgr _____ Andy _____ Srvc Filing _____
Warranty Exp Date _____

ROTTLER MANUFACTURING MUST HAVE THIS REPORT RETURNED TO PROPERLY QUALIFY WARRANTY ON EQUIPMENT

Customer: _____ Address: _____
 City: _____ State: _____ Zip: _____
 Phone: _____ Country: _____
 Machine Model: _____ Serial Number: _____
 Representative: _____

MACHINE INSTALLATION: Electrical information MUST be complete to validate this report.

_____ Customer has read and fully understands importance of machine location as explained in the installation section of the manual.

Customer responsibility prior to the arrival of Rottler Sales/Service technician. Please Initial each item when it is completed.

- _____ Remove machine from truck.
- _____ Remove fixturing and misc. from machine and clean.
- _____ Install machine with jack pads under jacking bolts. Refer to the Installation section of the F69A manual for proper uncrating and leveling instructions.
- _____ Customer is responsible for providing electricity to machine in a manner that meets the local electrical code requirements.
- _____ Due to strain of USB cables upon the PCIE card during transit, they are removed from the PC for transit. Please refer to the wiring diagram shipped with the machine for reinstalling the USB cables.

CAUTION **VERY IMPORTANT:** Modern design machines contain electronic low voltage circuitry that provides great advantages and a better machine life. BUT, you must have an excellent, stable, isolated power supply along with an isolated ground. If not, electrical noise problems are likely to interfere with machine operation unexpectedly.

- _____ Have Internet connection available for the machine. Either via Ethernet cable or Wireless. The machine comes equipped with a wireless USB adapter.
- _____ Air of the proper pressure and capacity connected to the machine. Air supply must be free from oil and water. Oil or water will damage electrical and air components.
- _____ This machine requires between 208 and 240 Volts AC, Single Phase, 50/60 Hz, isolated power supply. Measure the incoming voltage between L1 and L2. Current requirements for this machine are 30 amps. Measure the incoming AC voltage at least twice during installation.
 L1 to L2 _____

_____ Measure each leg of the incoming supply to ground. Sometimes you may find a “high” leg to ground. When this happens make sure the high leg is running to L3.
 L1 to ground _____ VAC L2 to ground _____ VAC

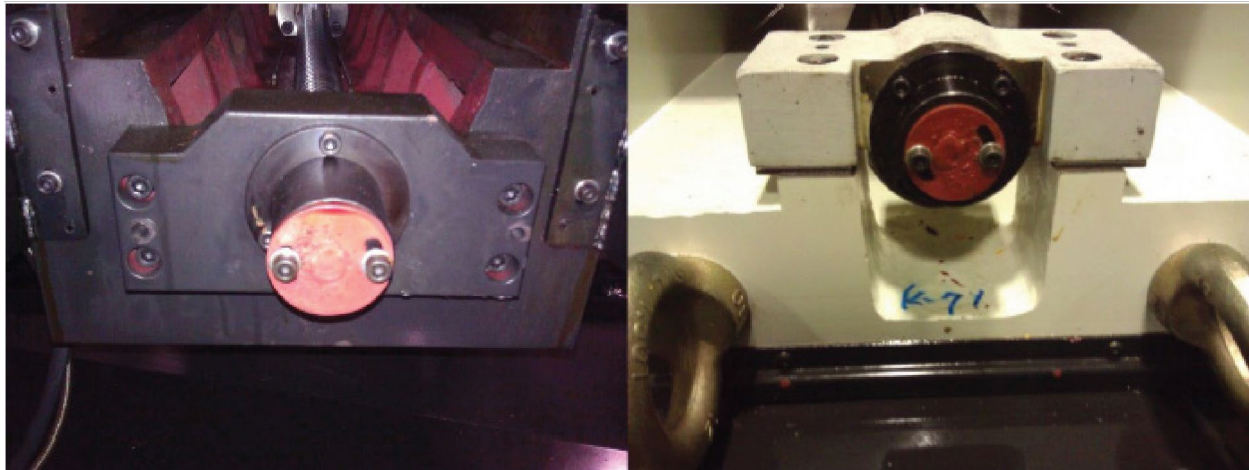
**CAUTION**

Neutral and machine ground are not the same thing. You should measure an open circuit between Neutral and ground.

**CAUTION**

IF VOLTAGE IS OUTSIDE THE CORRECT RANGE AT ANY TIME THE MACHINE WILL NOT OPERATE PROPERLY AND MAY BE DAMAGED.

- _____ Customer should attempt to have junk work piece available.
- _____ Have the operator read through the operation manual before training begins. This will help him be familiar with the button pushing sequences. Have the operator read through the manual again after training and some of the sequences will make more sense.
- _____ Remove the ball screw locks on the left side of the table for the X axis, and the front of the table for the Y axis. The y may be covered up by the way covers.
- _____ Place a thin film of silicone on one side of the ball screw caps and install them in place of both the X and Y axis locks.

**Rottler Technician Installation checklist**

- _____ **BEFORE** turning power on to the machine: Check all wires for security by gently tugging on the wires and then use the correct screw driver, turning CW until movement stops. Stranded wire can “spread” slightly from vibration during transport.
- _____ Install electrical component covers inside the electrical enclosure with fasteners provided.
- _____ Each main system is protected internally by circuit breakers. Green the breaker is “tripped” and red indicates the breaker is “Hot” (conducting electricity).
- _____ Clean any rust inhibitor from the machine surfaces. Remove the way covers from the front and back of the Y (In/Out) Axis. Clean the rust inhibitor from exposed areas of the In/Out and Vertical axis. If the side trays for the Horizontal have been put on the machine, remove them. Use cleaner such as WD40 or Kerosene to clean the ways. Remove way wipers and clean each wiper. _____ Remove all rust inhibitor from the axis way surfaces.

**CAUTION**

Do not attempt to move any axis until all rust inhibitor has been removed.

- _____ Reinstall way wipers. Confirm that all wipers make full contact with way surfaces.

_____ Check the exterior of the limit switch for any shipping preservative and wipe clean if required.

Note: The positioning of the machine in small increments will be detrimentally affected if all rust inhibitor is not removed from the ways.

_____ Remind customer of the proper air pressure and capacity connected to the machine. Air supply must be free from oil and water. Oil or water will damage electrical and air components.

_____ Connect electrical wires in main rear enclosure if required using machine wiring diagram.

_____ When installing the way covers on the ends of the table. If there is not weather stripping on the mating surfaces. Put a bead of silicone on one of the mating surfaces before installing the covers. This will keep chips from getting between the two and dropping onto the horizontal turcote.

_____ Install and test the Internet connection to the machine. DO NOT download any updates unless instructed to do so by Rottler.

WARNING

_____ Explain to the customer and operator that at NO time is there to be any software or hardware other than Windows Auto Update and Rottler installed on this machine. This includes screen savers, anti-virus software, and any hardware device that installs software on the machine. Installation of screen savers and anti-virus software can cause dangerous control problems. Any installation of software or hardware will void the warranty on the machine.

_____ Explain to the customer the proper way for turn the machine off when it is not in use. Do not leave the machine on overnight. It is important to close all programs followed by shutting down Windows before turning the main power switch off. Do not turn the main power switch off before shutting down Windows.

_____ Explain to the customer and operator that the machine should be hooked up to the Internet anytime it is on. The software on the machine will automatically connect to our server to send back useful information on machine status.

_____ Explain to the customer and the operator how the to log onto Skype and communicate with Rottler when needed.

WARNING

_____ Computer Viruses will cause the machine control system to become unstable. This may cause the machine to make uncontrolled moves which could create a dangerous environment for the machine operator.

_____ Connect customer supplied Internet to the machine. Verify that the Internet is accessible from the machine.

IMPORTANT

_____ Refer to Chapter 4, Control Definitions of the Machine Manual, Section: Computer and Controller System Safety. Explain and discuss this section carefully with Owner/Manager/Operator and have them sign off. Failure to do so will result in the machine warranty being Null and Void.

Signature / Title

_____ Explain to the customer the importance of backing up the block profiles to a separate device. Any computer failure or possible operator input error can result in the loss of all block profiles that were created for the machine. Refer to Chapter 5 of the machine manual for detailed instructions on backing up and restoring block profiles.

MACHINE START-UP

**CAUTION**

When starting the machine for the first time, it may move out of control. Make sure all hands are clear of machine parts. Be ready to press the Emergency Stop button if needed.

_____ Turn main power on at the main disconnect switch located on the rear enclosure.

If machine moves out of control, turn power off and contact factory for help in trouble shooting.

If any of the circuit breakers “trip”, reset and call factory for possible trouble shooting.

MACHINE MOVEMENTS

Note: Rottler employees and representatives per company policy are not permitted to provide end user of Rottler equipment with any OEM specifications for the workpiece that is created by end user using Rottler equipment.

_____ Make sure there is nothing obstructing the full vertical or horizontal travel of the machine taking special notice of the rear enclosure, way travel and top of the spindle unit.

_____ Put the machine in hand wheel mode and verify Vertical operation. Put an indicator on the cutter head and verify .001” movement per detent in course mode and .0001” in fine mode. If the indicator is jumpy the outer spindle adjustment may be too tight. Refer to manual and re-adjust.

_____ Put the machine in hand wheel mode and verify Horizontal operation. Put an indicator on the cutter head and verify .001” movement per detent in course mode and .0001” in fine mode _____ Use the rapid buttons and verify proper vertical and horizontal travel.

_____ Move the machine to its vertical limits and verify Home and down limit operation.

_____ Move the machine to its horizontal limits and verify operation of the left and right limit switches.

_____ Start the spindle and verify operation at all speeds.

_____ Use the spindle creep buttons and verify proper operation.

_____ E-mail the file to the Lead of the department for the machine being installed.

_____ Level the machine:

INSTRUCTING THE OPERATOR

_____ Using the operating manual as a guide explain the function of all buttons.

_____ Cycle all machine movements and supervise the handling of same by operator.

_____ Demonstrate the differences of Manual and Auto operation.

_____ Fully explain the entire Auto Cycle from Centering to Auto Retract.

_____ Explain machine parameters and error messages. It is very important that the customer does not change parameter settings without first checking with Rottler Manufacturing. If certain parameters are changed the machine may make uncontrolled moves or not operate at all.

_____ Point out safety features to customer and operator. ***Do not push any buttons without thinking of safety first.***

**CAUTION**

Do not assume the cutterhead micrometer has been calibrated.

_____ Install a work piece in the machine and perform an undersize test bore to qualify the micrometer setting to the customers measuring tools.

Note adjustments: + _____ , - _____.

_____ Explain precision reset of tool in cutterhead.

_____ The following is a checklist to go through every time the machine is started to begin a cut or automatic cycle. • Work piece secure

- RPM set
- Feed Rate set
- Correct program in use
- Program oriented correctly (vertical zero at correct place) Guards in place
- Cutterhead secure
- Tool holder adjusted to the correct size
- Tool holder locked in place

_____ Proceed to have operator bore block to size.

_____ (V6/8 Fixture) Demonstrate V fixture use on 60 and 90 degree blocks. Explain the necessity of carefully checking that no bearing cap or extensions interfere with the accurate seating of pan rails and main bearing bar. Work out the best block handling system with the operator. Fully explain main bearing index method from figures in the manual and the locator bar twist during bank switch required on all new 502-1-72F fixtures. The **UP** mark must always be visible. **Stress caution and personal safety.**

_____ Thoroughly explain V6/8 fixture safety requirements of main bearing caps or dummy caps on V blocks.

_____ Demonstrate and explain boring with the electronic hand wheel.

_____ Fully demonstrate full and partial clamp force use.

_____ Explain the correct Feed rates and speeds for carbide, R4, R2 coated tools and sleeve cuts.

_____ Cutter head change and expected stub bar performance.

_____ Parts ordering, refer the to the operating manual for part numbers and description.

_____ Offset tool bits, calibration of micrometer and anvil setting.

_____ Review Emergency stop procedure with operator per operating manual.

MAINTENANCE SECTION

_____ Use the manual as a reference when explaining routine maintenance and lubrication.

_____ Overload devices, There are no mechanical overload devices on this machine. The machine is protected from overload by the motor controllers. If the system is overloaded the controllers shut the motors off. The controllers can be reset by turning the main power off for at least 1 minute, then turning it back on.

_____ Micrometer and anvil thread adjustment.

_____ Inspection of tool bit hole in tool holders (deformation due to accidental impact).

Rottler Manufacturing and its employees or representatives are not responsible for any information regarding final specifications of any workpiece that is created as a final product when using Rottler equipment. It is the responsibility of the end user of Rottler equipment to determine the final dimensions and finishes of the workpiece that they are working on. Any information regarding final dimensions and finishes that appears in any Rottler literature or that is expressed by anyone representing Rottler is to be regarded as general information to help with the demonstration of or for operator training of Rottler equipment.

Note: Rotter employees and representatives per company policy are not permitted to provide end user of Rottler equipment with any OEM specifications for the workpiece that is created by end user using Rottler equipment.

General remarks on machine performance, adjustments as received and any further organization or parts required to complete the installation.

Instructions given to: _____

Sales/Service Technician: _____ Date _____

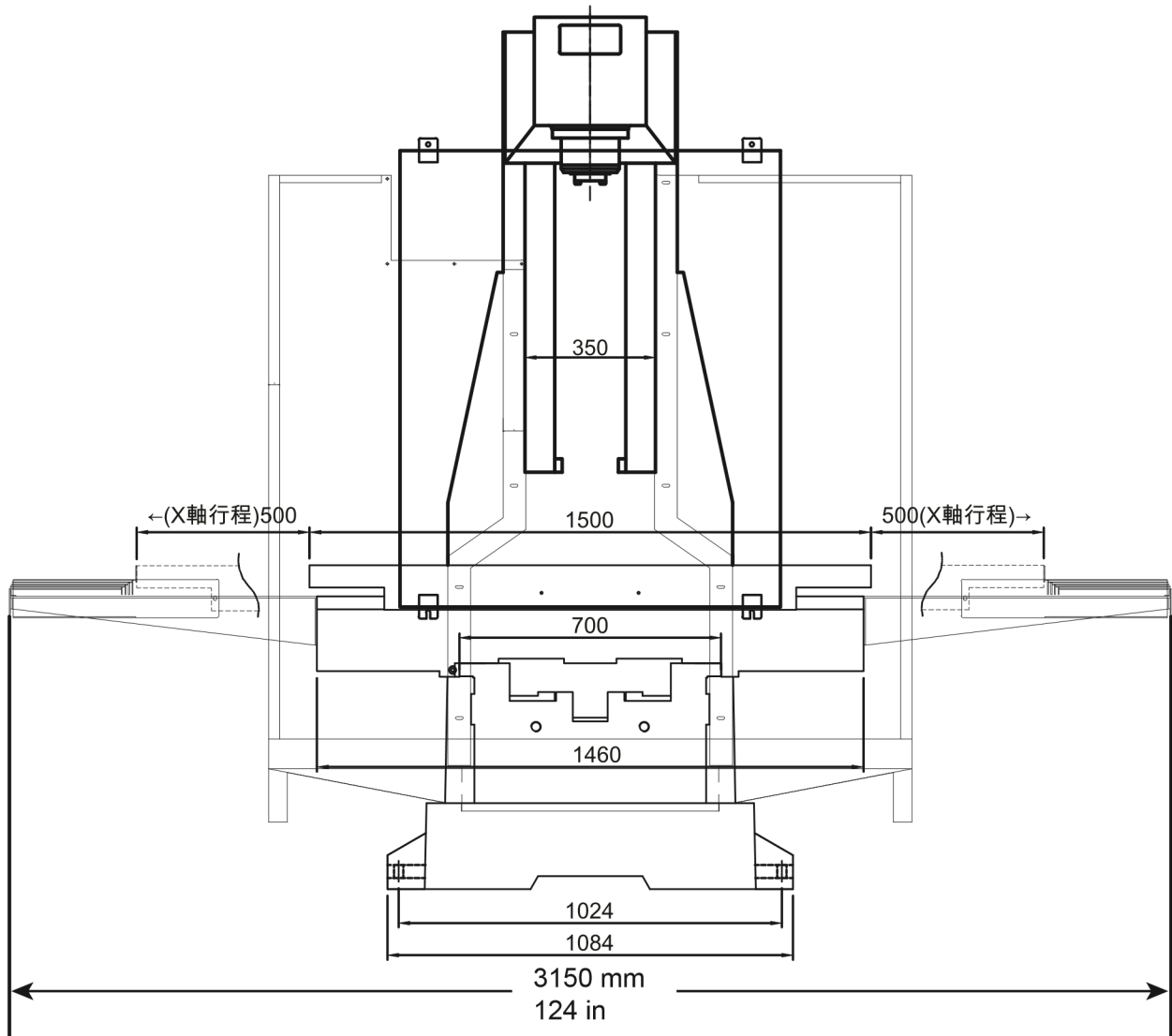
Shop Foreman/Superintendent or Owner: _____ Date _____

**Once completed e-mail this
form to:**

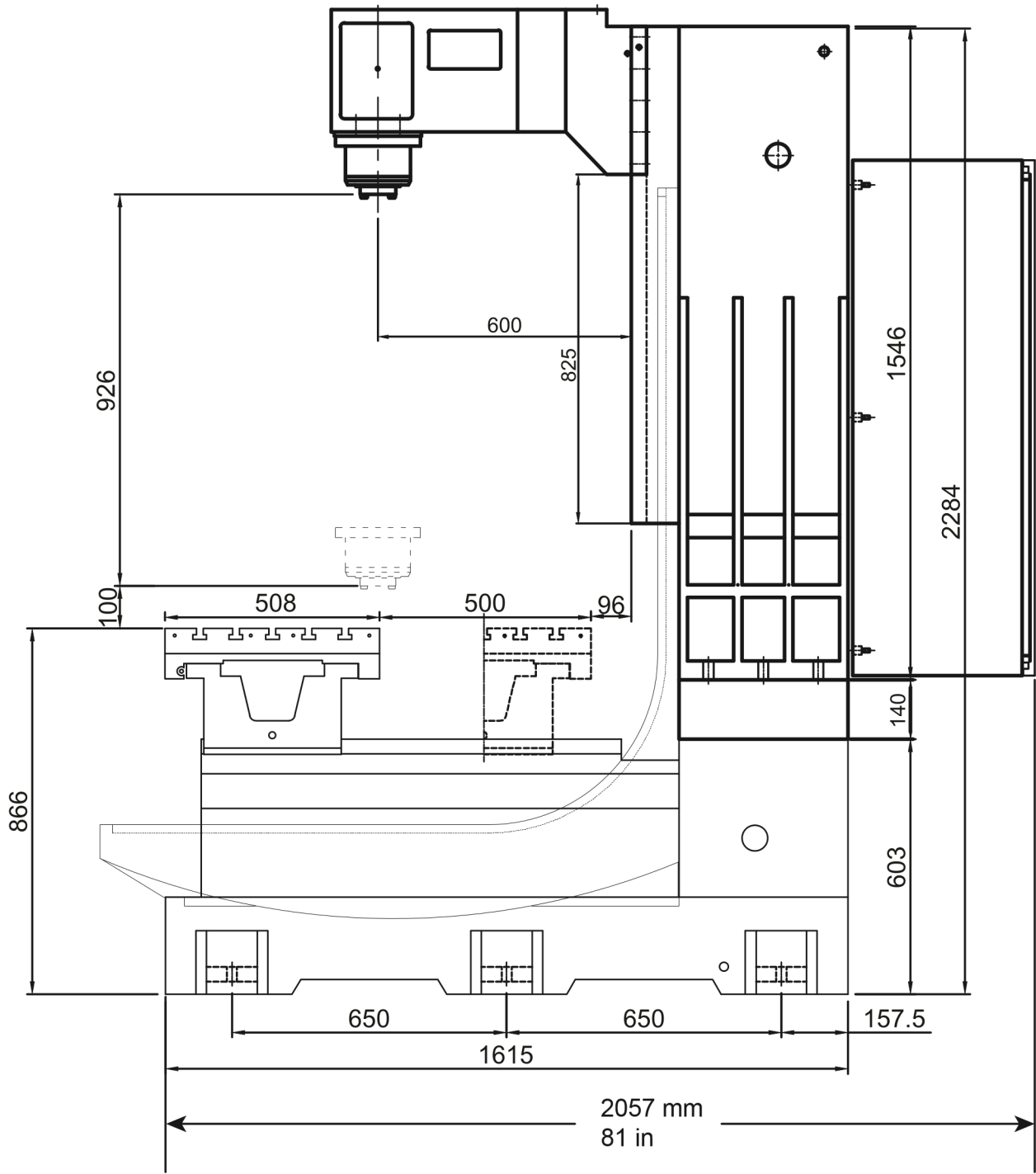
service@rottermfg.com

Machine Dimensions

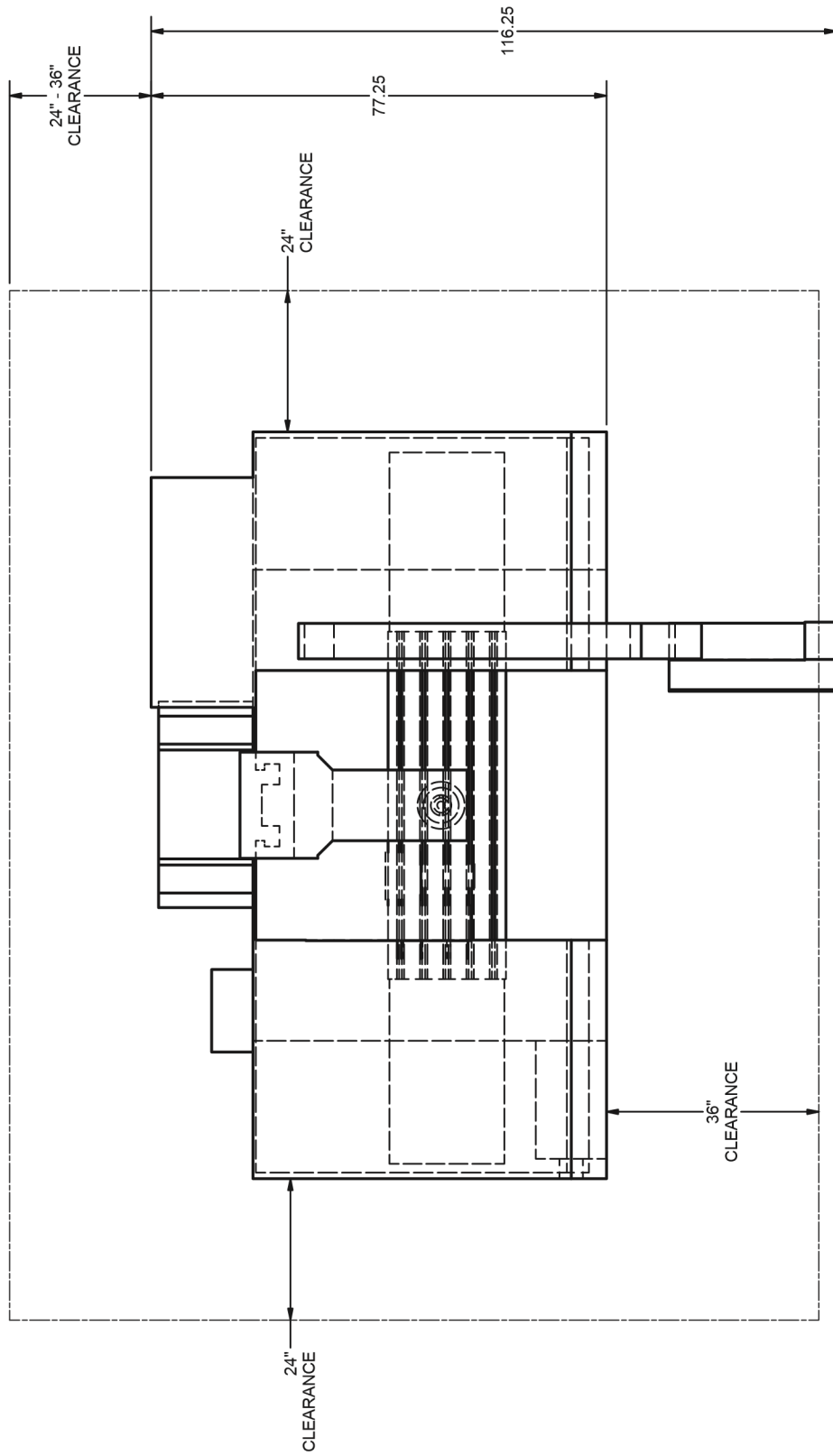
Front Dimensions



Side Dimensions



Clearance Dimensions





Installation Procedure **IMPORTANT!** Placement of Machine

It is critical that the machine be placed in an area of the facility that has a stable thermal environment. The machine should be kept away from direct sunlight, large heating units, and doorways that would allow outside air direct contact on the machine.

Exposure to the above and other extremes in temperature will cause thermal drift to occur in the machines which could have a detrimental effect on machining accuracy. A number of unrepeatability errors in machine performance have been linked to this condition.

Location

The productivity of the F69A will depend a great deal on the proper initial installation. Pay particular attention to the means by which work pieces are lifted into and out of the machine as well as the material handling to and from other operations in your shop. The proper loading arrangements and work location for your F69A is extremely important.

A slow travel (6' to 10' per minute) power hoist, operated from either a bridge or jib crane arrangement works very well. A 1000 lb. is generally adequate for lifting most engine blocks. An air hoist with speed control makes an ideal method for fast, efficient loading and unloading.

For shops where large production runs are anticipated, the work pieces should be loaded and unloaded directly from a conveyor. If this is not the case, we suggest you pay considerable attention to the crane so that it covers an adequate area to allow the operator to back up and remove work pieces without creating a cluttered, dangerous work area.

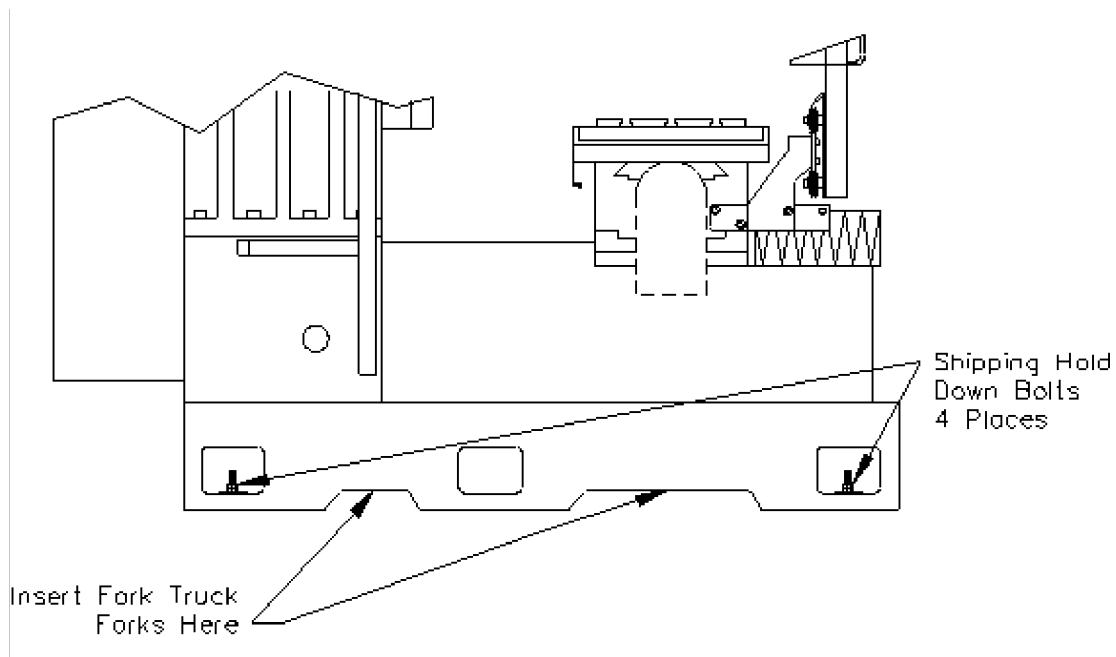
Unpacking and Lifting

Use care when removing the crate materials from the machine. Be careful not to use force on any part of the machine.

Remove the Nuts and Jam Nuts from the Four (4) bolts holding the F69A to the crate. These bolts are located at the four bottom corners of the Main Base.

You will need a Fork Truck with a minimum of 8,000 lb. Capacity. The F69A can be picked up from the pallet in two (2) different ways. See the following page for illustration of these procedures.

Type One

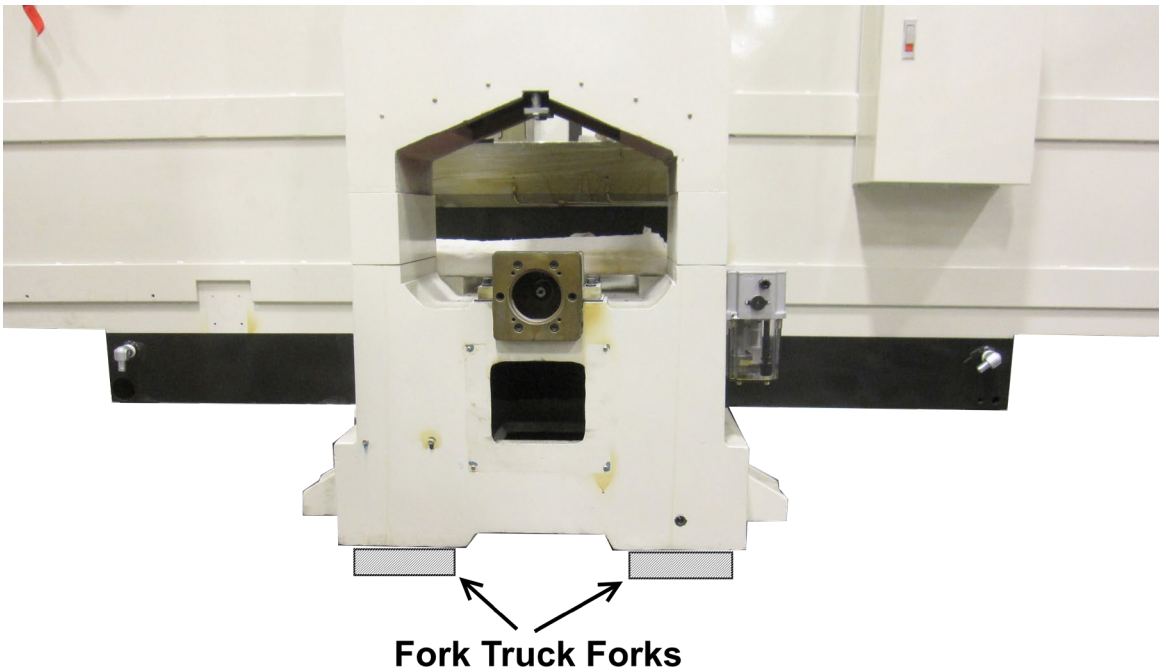


Be sure that the forks are at least Four inches through the opposite side of the casting.



This machine is extremely top heavy. Use extreme care whenever this machine is being used. Do not use quick or sharp movement.

Type Two



Remove the Toolbox, Parallels and optional equipment form the machine. Completely clean these articles along with the rest of the machine with solvent, rust inhibitor was applied at the time of shipment. Any of the rust inhibitor left on the machine will allow Cast Iron dust to build up and cause premature wear to the machine.

IMPORTANT

The ways under the table as well as the ways behind the Vertical gibs were sprayed with rust inhibitor as well. It is extremely important that these surfaces be cleaned thoroughly. Use a cleaner, such as WD-40 to clean the ways where the table and the spindle unit are not sitting. Move the table and spindle unit onto the area that has been cleaned and clean where they were sitting. Spray the ways with WD-40 and move the table and spindle unit over the sprayed area. You must do this several time to get all of the rust inhibitor off of the gib surfaces. If you do not the rust inhibitor will plug up the oiler holes and also cause shudder when moving in small increments, such as handwheel.

Leveling and Alignment

Leveling the F69A properly is very important if you are to use the F69A to its full blue printing capabilities as well as maximizing the use of Rottler fixturing.

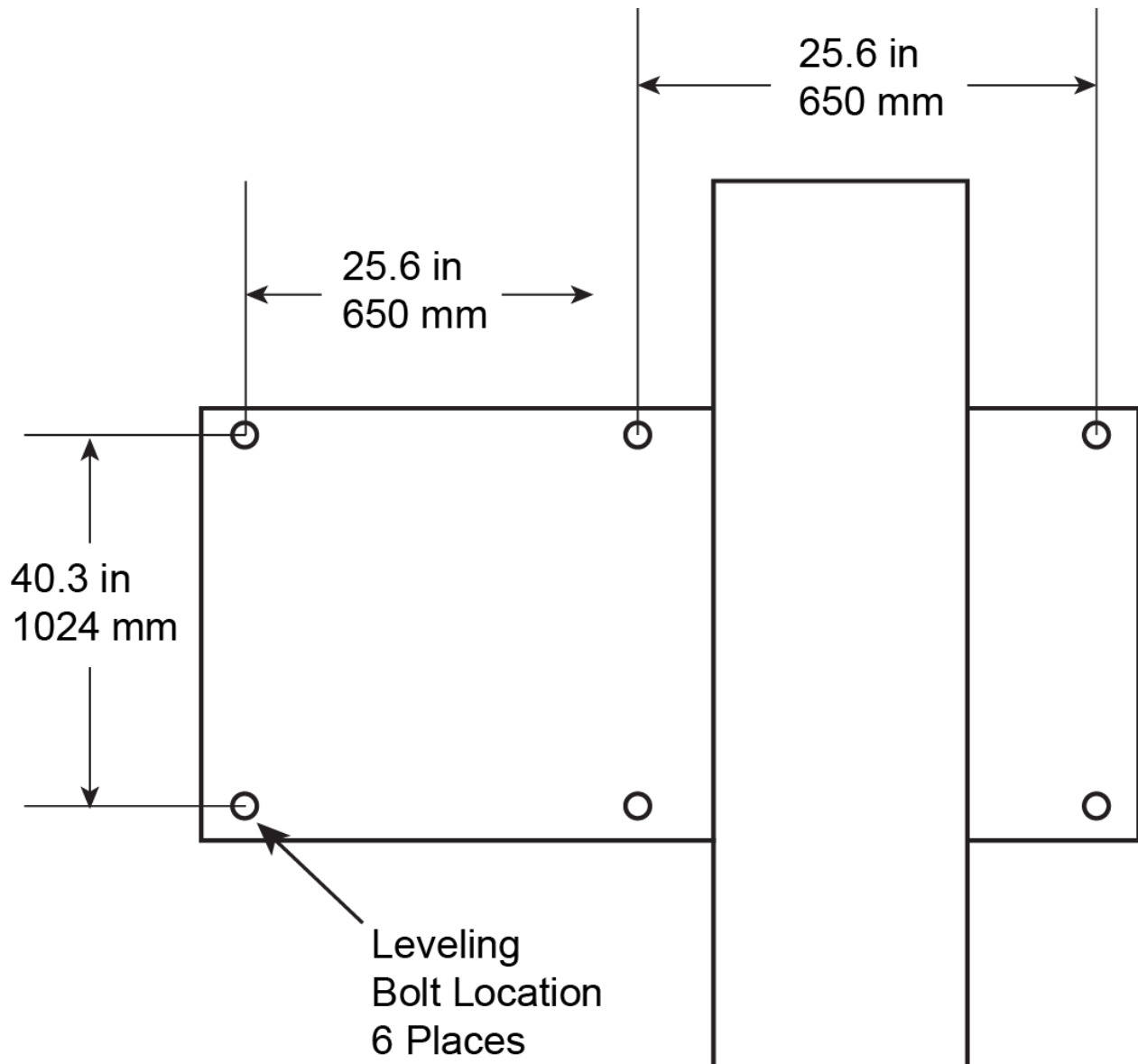
Use the following instructions to properly level the F69A.

Six Hex head bolts, six jam nuts, and six purple leveling pads are provided with the machine for leveling. Refer to the following illustrations for leveling bolt locations. Screw the jam nuts all the way onto the bolts; insert the bolts at the base support points. Screw the bolts in until they are just protruding from the bottom of the base casting. Lower the machine onto the Leveling pads, making sure the bolts seat into the recessed area of the leveling pads.

Make sure there is equal pressure on each of the leveling bolts. Remove the protective rubber cover, located behind the table, from the Y-Axis (In/Out). Place the level on the Y-Axis ways, level the ways in both directions (Horizontal / In-Out) within .0005".

Check the level in both directions on the Table. If it does not match the alignment of the Y-Axis ways refer to the Maintenance Chapter of this manual for full alignment procedures.

Leveling Bolt Locations



Air Supply

It is very important that the air source for the F69A be moisture free. Water and oil in the air lines will result in early cylinder and valve failure as well as introducing moisture into the Inner spindle bearings. ***The factory recommends installing a water trap at the machine.***

Attach a 100 P.S.I. air source to the main air intake located on the left hand side of the main rear enclosure.



Main Incoming Air 100 PSI

Power Supply

This machine has the following power requirements:

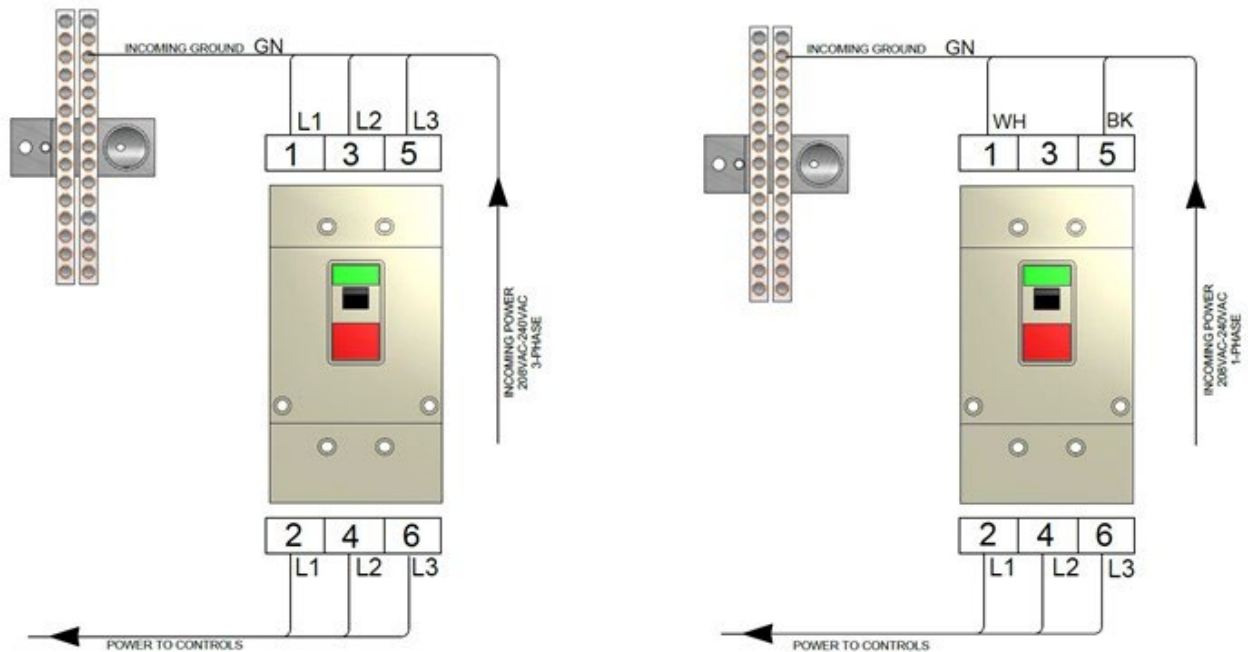
- 208 to 240 VAC
- Single Phase
- 50 or 60 Hertz
- 30 amps

See illustration below for correct connection of incoming power. Measured power at the machine's main breaker must be within the required range listed above. If incoming power is not within range, a transformer must be used. Failure to do so will cause the machine to function abnormally and cause permanent damage to the electronic control system.

Some electrical services contain a "Hot Leg, High Leg, or Wild Leg", where one leg measures 208VAC to Ground instead of 120VAC. Use of the "Hot Leg, High Leg, or Wild Leg" is NOT permitted on this machine. If a "Hot Leg, High Leg, or Wild Leg" is present, connect the machine in the Single Phase configuration shown below.

IMPORTANT Electrically connect in accordance with national and local electrical codes.

CAUTION Do not attempt to connect more 240VAC to this machine.



Grounding

The machine requires a good earth ground. The grounding conductor from the incoming power source must be connected to the grounding block located inside of the electrical cabinet. A ground rod installed in addition to the electrical service grounding conductor is permitted, but must be connected directly to the grounding block inside of the electrical cabinet. Connecting the ground rod to the machine base is not permitted. Consult a Licensed Electrician in your area to assess the installation, and install the appropriate ground rod if necessary. Failure to do so may lead to an installation that is unsafe and does not meet national and local electric codes.

Getting Started

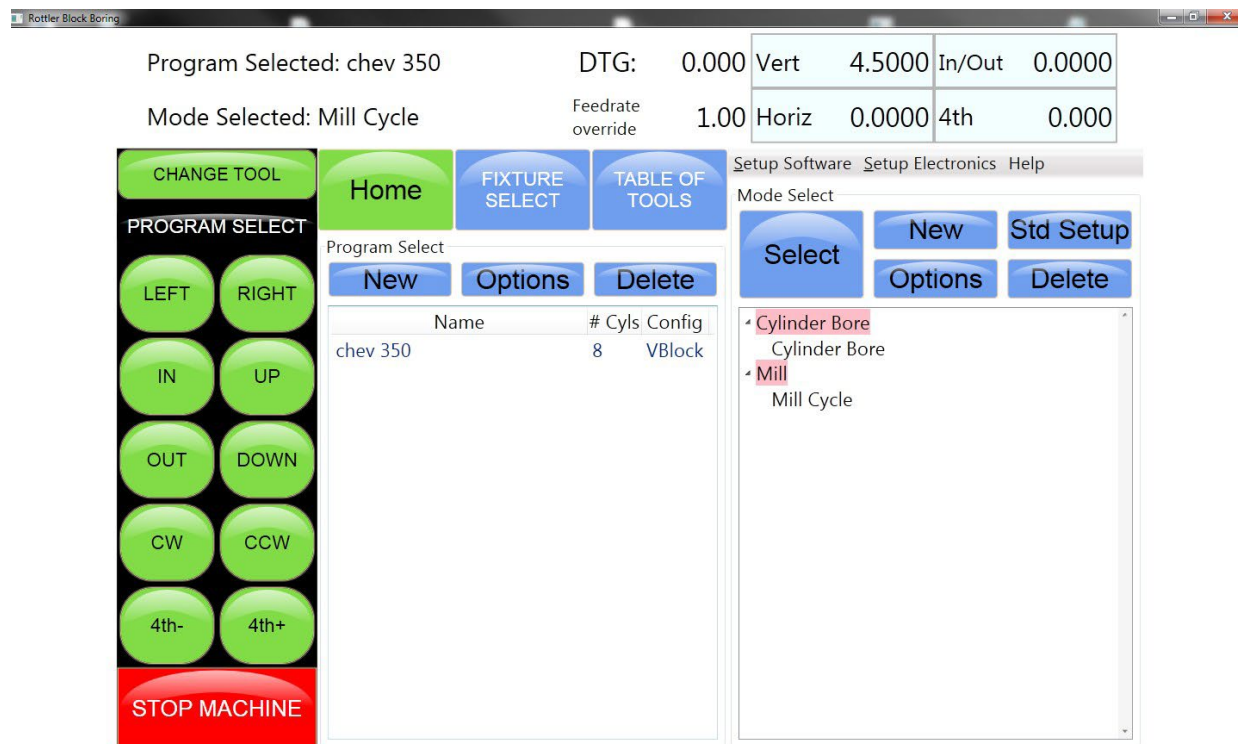
Once power has been supplied to the machine measure the incoming voltage with a meter to verify proper voltages before turning the Main Power switch on. Failure to measure and record proper voltages to the machine could cause damage and will void factory warranty. Measure L1 to L2 and record on the installation report. Record L1 to ground and L2 to ground and record on the installation report.

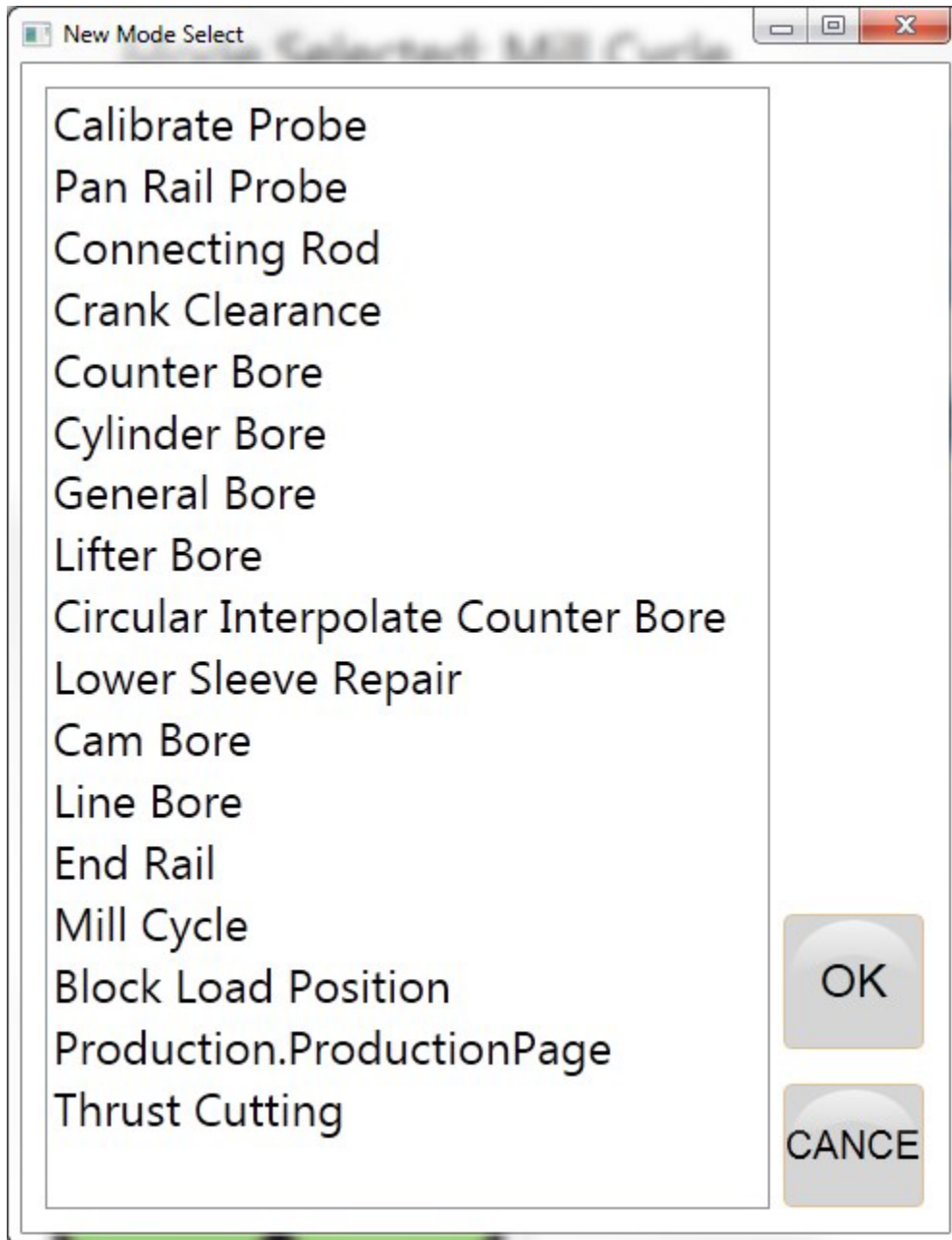
Power Up

Turn the Main Power switch on. Allow a few minutes for the machine to fully boot up.

Note: The Rottler F69A uses a touch screen for control and data transfer to the computer. Be careful not to touch the screen until the machine has fully booted up and a Rottler screen is showing. If the screen is touched prior to full boot –up it may activate a function or interfere with proper boot-up.

To start the Rottler software simply double click on the Rottler icon as located on your desktop labeled Rottler_WPF. The next screen to appear is the Block Select screen. At this point, select any block and press SELECT. This needs to be done to be able to move the machine so the shipping restraints can be removed.





Click on the New button to view all of the available modes. This will take you to the Rottler program where the handwheel can be used. Highlight the Cylinder Bore mode and touch the OK button. This will bring up the Operation screen.