



MODEL T31566 ALL-SWIVEL HD MOBILE BASE INSTRUCTIONS

For questions or help with this product contact Tech Support at (570) 546-9663 or techsupport@grizzly.com

Introduction

Your new Heavy-Duty Mobile Base is designed to give you a stable and mobile platform upon which to mount machinery and equipment.

Inventory

Description	Qty
A. Right Corner Brackets	2
B. Left Corner Brackets	2
C. 21" Side Rails	4
D. 3" Swivel Casters	4
E. Foot Pedals	4
F. Compression Springs	4
G. Foot Pedal Plungers	4
H. Adjustable Rubber Feet	4
I. Shoulder Bolts M8-1.25 x 50	4
J. Hardware (Not Shown)	
—Hex Bolts M8-1.25 x 16	32
—Lock Nuts M8-1.25	20
—Hex Nuts M10-1.5	4

Specifications

- Minimum Inside Dimensions 19" x 21"
- Maximum Inside Dimensions .. 29½" x 29½"
- Maximum Weight Capacity 1200 lbs.

Tools Needed for Assembly

- Open-End Wrench or Socket 13mm
- Open-End Wrench or Socket 14mm
- Open-End Wrench 17mm
- Measuring Tape

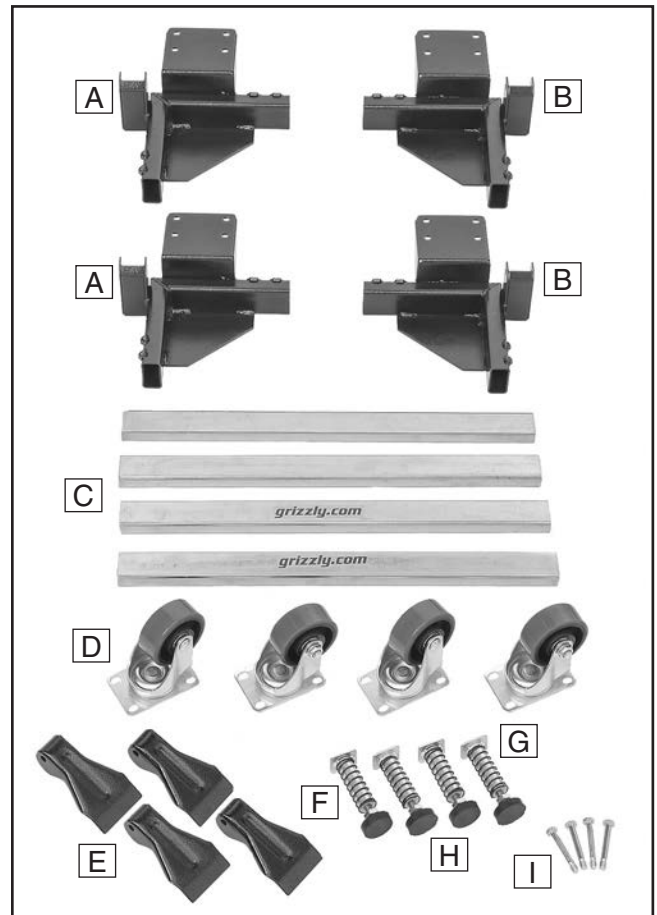


Figure 1. Inventory.

⚠ WARNING

Operating machinery on an unsecured mobile base may allow the machine to shift unexpectedly, which could result in accidental contact with a cutting device or other moving parts.

Preparation for Assembly

There is more than one way to assemble the mobile base. Each method has advantages and disadvantages, depending on the size and weight of the machine that you plan to put on the mobile base. The purpose of this section is to help you decide which method will work best for your situation.

If the machine can be lifted, the easiest method is to assemble the mobile base according to the dimensions of your machine, and then lift and place the machine on the corner bracket plates of the mobile base (see **Figure 2**). Proceed to **Assembling Base & Mounting Machine** on **Page 3** if your machine fits this situation.

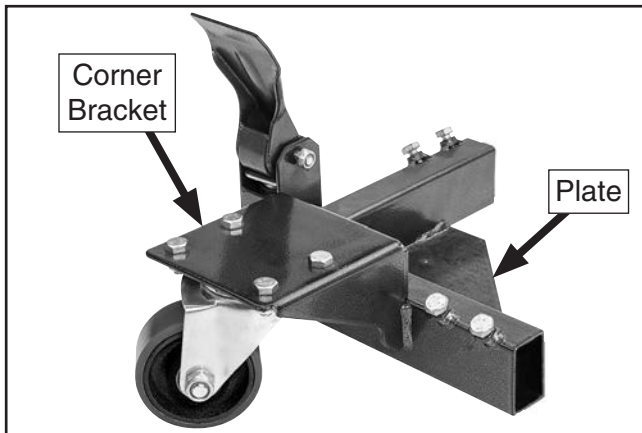


Figure 2. One of four corner brackets.

If the machine is top heavy or has a narrow base (such as a drill press), there is an increased risk of tipping when moving it around on a mobile base. To reduce the risk, a mounting base plate should be used between the mobile base and machine. Proceed to **Making a Base Plate** on **Page 9** if your machine fits this situation.

If the machine is too heavy to lift into position on the mobile base, then the base can be built around the machine. Proceed to **Assembling Base Around Machine** on **Page 4** for instructions on how to build the base around the machine.

Note: Anything extending or opening outward with a 3" high band around the base of the machine (see **Figure 3**) may interfere with the installation of the machine on the base, so be sure to account for that prior to assembly.



Figure 3. Example of 3" high band around machine base.



Assembling Mobile Base

1. Attach swivel caster to each corner bracket with (4) M8-1.25 x 16 hex bolts and (4) M8-1.25 lock nuts (see **Figure 4**).

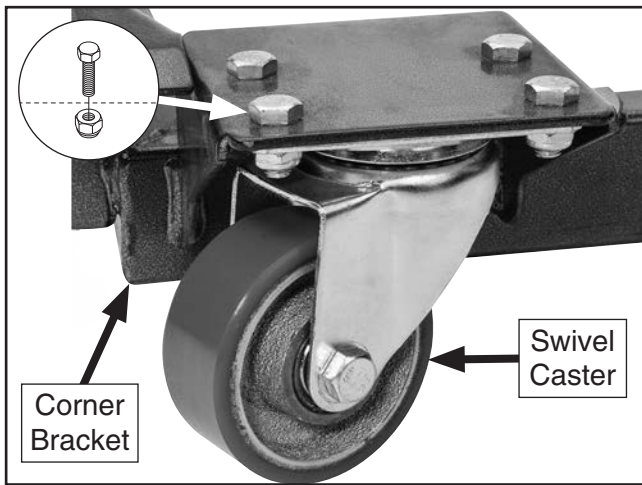


Figure 4. Swivel caster attached to bracket.

2. Install foot pedal plunger and spring into each corner bracket (see **Figure 5**), and attach a rubber foot (with M10-1.5 hex nut) to the bottom of each foot pedal plunger.

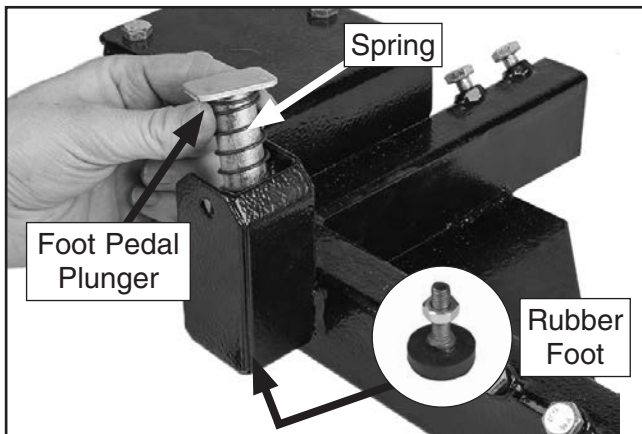


Figure 5. Installing foot pedal plunger and spring.

3. Attach foot pedal to each front corner bracket using (1) M8-1.25 x 50 shoulder bolt and (1) M8-1.25 lock nut (see **Figure 6**).

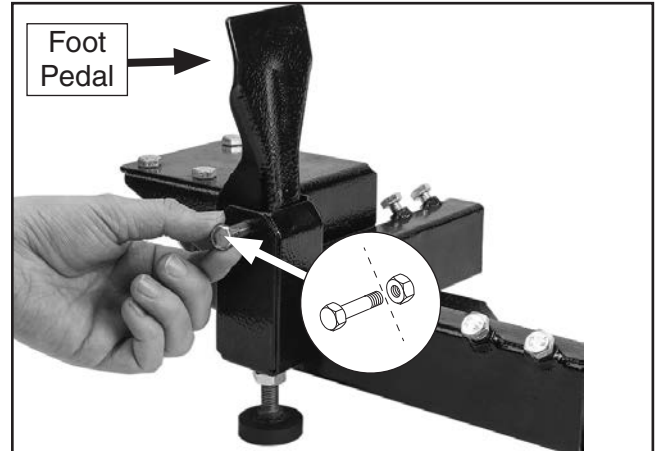


Figure 6. Attaching foot pedals.

4. Measure machine base footprint size.
5. Arrange corner brackets in desired orientation. Choose orientation to ensure safe clearance around base of machine, as well as desired placement within shop.
6. Slide corner brackets over ends of side rails (see **Figure 7**). Position corner brackets so inside opening is $\frac{1}{4}$ "– $\frac{1}{2}$ " larger than both width and length of machine base footprint.

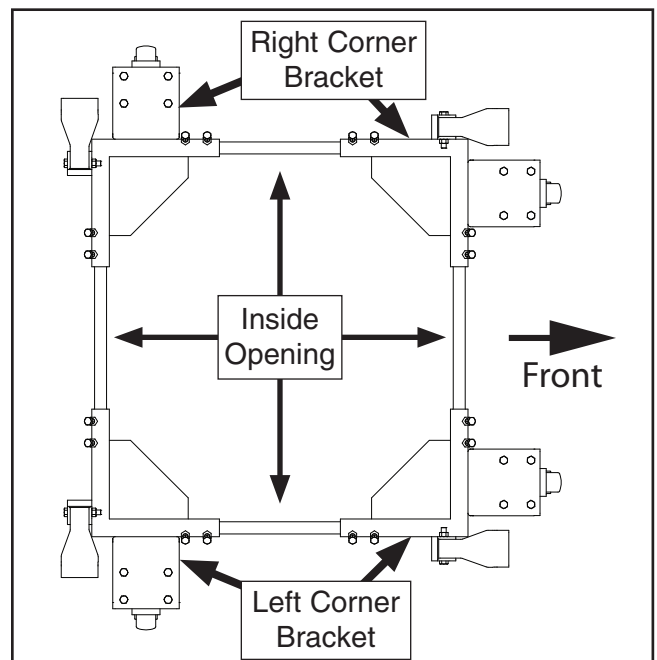


Figure 7. Example of assembled mobile base with inside opening slightly larger than machine base to ensure easy fit.



- Secure each end of corner brackets with (2) M8-1.25 x 16 hex bolts (see **Figure 8**).

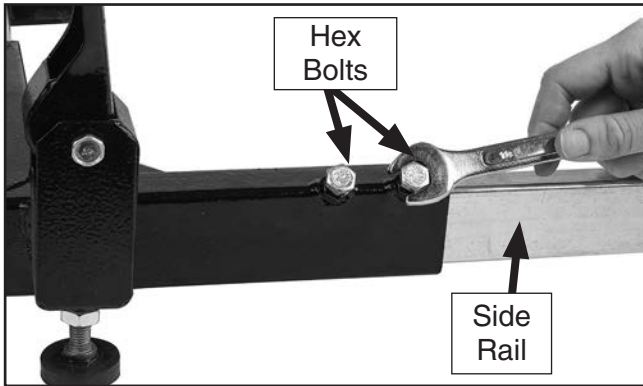


Figure 8. Securing corner bracket with both hex bolts.

CAUTION

BOTH hex bolts must be secured against side rail in each end of corner brackets. DO NOT load machine onto mobile base until all bolts have been firmly tightened. Improper tightening or only using one bolt can result in collapse or tipping when moving machine around later, which could result in crushing injury or property damage.

- With the help of an assistant, or proper lifting equipment, lift and position machine inside mobile base (see **Figure 9**).



Figure 9. Example of machine properly placed inside mobile base.

- Verify machine is properly seated on mobile-base corner pads, it is free of wobbles, and there is no deflection in mobile base.

- **Deflection:** If any deflection exists, verify all fasteners are securely tightened and mobile base is properly assembled. If this does not solve the problem, verify machine does not exceed the rated weight limit listed in **Specifications** on **Page 1**.
- **Wobbles:** Wobbles can easily be eliminated by placing an appropriately sized shim between machine and mobile base where needed.

Assembling Base Around Machine

If your machine is oddly shaped or too heavy to lift into the mobile base, you can assemble the mobile base around your machine as an alternate option for assembly. Always have an assistant stabilize the machine during assembly.

Items Needed	Qty
Additional Person	1
Open-End Wrench 13mm.....	1
Socket Wrench 13mm	1
12" 4x4 Block.....	1
12" 2x4 Block.....	1

To assemble mobile base around machine:

- Install foot pedal plunger and spring into each corner bracket (see **Figure 10**), and attach a rubber foot (with M10-1.5 hex nut) to the bottom of each foot pedal plunger.

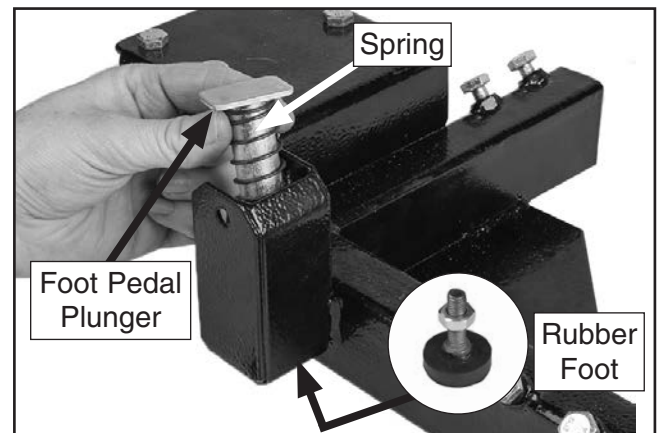


Figure 10. Installing foot pedal plunger and spring.



- Attach each foot pedal to corner bracket with (1) M8-1.25 x 50 shoulder bolt and (1) M8-1.25 lock nut (see **Figure 11**).

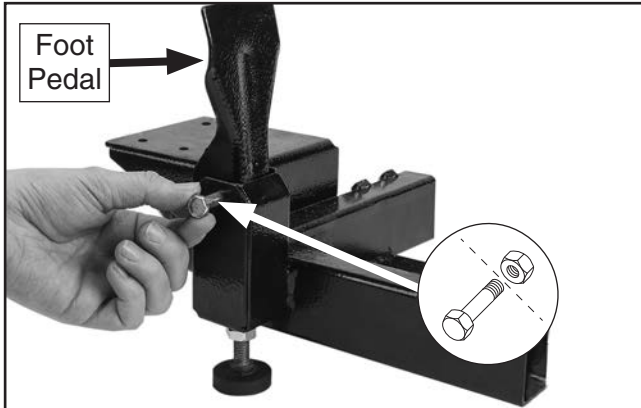


Figure 11. Attaching foot pedals.

- Insert one side rail into the two front brackets, as shown in **Figure 12**, then slide the bracket assembly against the side of machine that will typically be pushed against when moving the machine.

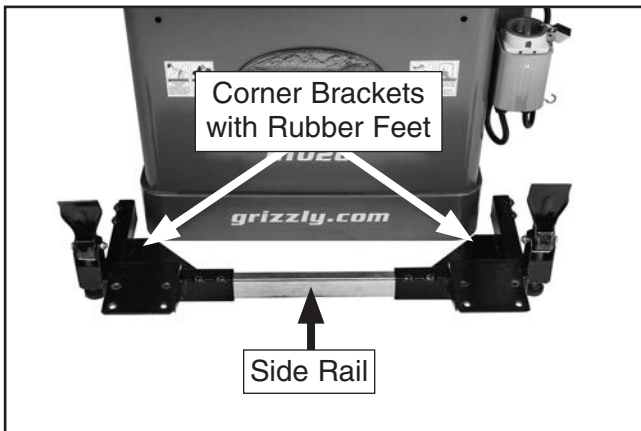


Figure 12. Rail inserted between corner brackets.

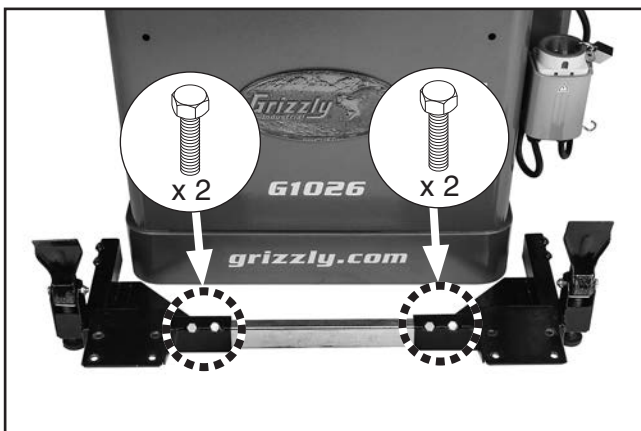


Figure 13. Rail secured to corner brackets.

- Secure each end of rail to front brackets with (2) M8-1.25 x 16 hex bolts, as shown in **Figure 13**.
- Slide other side rails into front brackets from **Step 4**. Secure rails to front brackets with (4) M8-1.25 x 16 hex bolts, as shown in **Figure 14**.

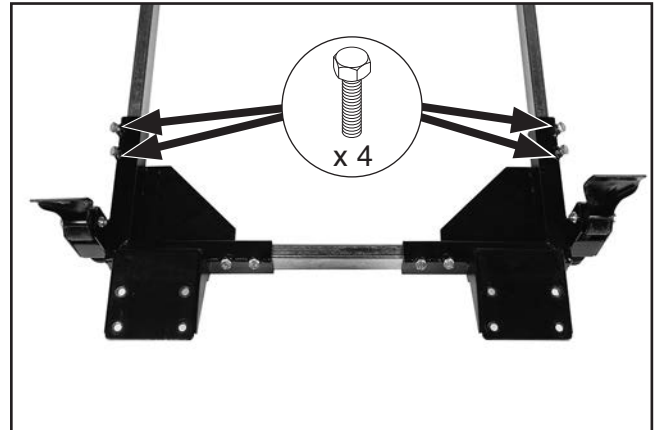


Figure 14. Rails fastened to brackets (machine removed for clarity).

- While an assistant lifts one side of the machine, slide rail-bracket assembly from **Step 5** under machine, as shown in **Figure 15**.

Note: It may be necessary to adjust position of rails once machine is on base assembly.

Side rails may be cut down to accommodate machines with smaller footprints. However, reducing length of mobile base decreases stability and increases likelihood of tipping. Base plates should be constructed for tall or top-heavy machines (see **Page 9**).



Figure 15. Rail-bracket assembly placed under front of machine.



- Attach swivel casters to each rear bracket with (4) M8-1.25 x 16 hex bolts and (4) M8-1.25 lock nuts (see **Figure 16**).

Note: There is limited space when installing fasteners inside the bottom of the caster wheels.

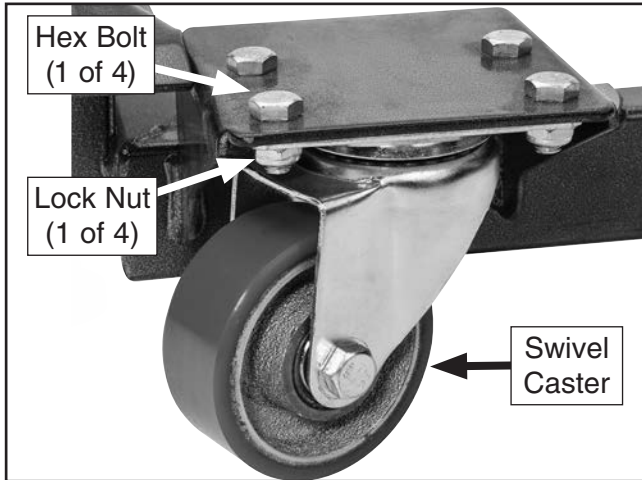


Figure 16. Swivel caster attached to corner bracket.

- With the help of an assistant, lift rear side of machine, then place a 2x4 block under machine (see **Figure 17**).
- Slide each of the rear brackets onto remaining side rail, and slide assembly into rail-bracket assembly from **Step 6**. Adjust fit until rail-bracket assembly rests against machine body (see **Figure 17**).

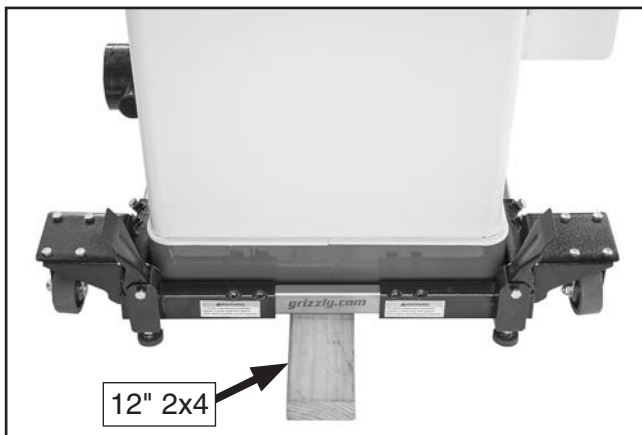


Figure 17. Rear brackets and rail placed around back of machine, which is raised up with a wood block.

- Secure rail to rear brackets with (4) M8-1.25 x 16 hex bolts, as shown in **Figure 18**.

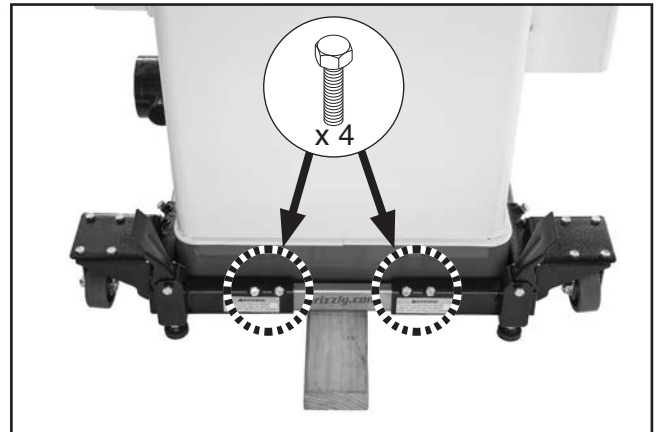


Figure 18. Remaining rail-bracket assembly secured.

- With the help of an assistant, shift machine to remove 2x4 block.
- With the help of an assistant, tilt machine, and insert a 2x4 block beneath machine and mobile base frame (see **Figure 19**).

Note: Use caution when tilting machine supported on casters.



Figure 19. 2x4 Placed beneath machine and mobile base frame.

- Attach swivel casters to each front bracket with (4) M8-1.25 x 16 hex bolts and (4) M8-1.25 lock nuts (see **Figure 16**).

Note: There is limited space when installing fasteners inside the bottom of the caster wheels.



14. With the help of an assistant, tilt machine and remove 2x4 block from beneath machine and mobile base frame, and set machine on the floor.

Note: When moving the mobile base, the rubber feet should not touch the floor. Likewise, when operating the machine, ensure that the rubber feet are fixed firmly against the floor to provide stability.

Adjusting Rubber Feet

The height of the rubber feet can be adjusted to stabilize the machine. To ensure the machine does not move during operations, always make sure the adjustable rubber feet (see **Figure 20**) are firmly touching the ground before operating the machine.

Tool Needed	Qty
Open-End Wrench 17mm.....	1

To adjust rubber foot height:

1. Loosen hex nut on each foot to allow foot (see **Figure 20**) to move up or down as needed.

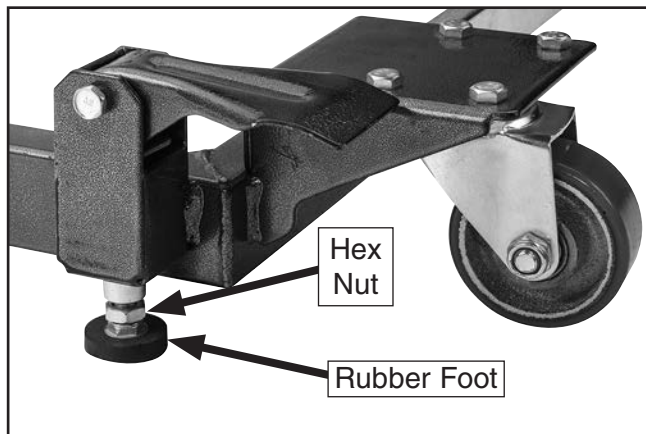


Figure 20. Rubber foot and hex nut adjustment.

2. With all casters on the ground, lower each foot to firmly touch the ground without lifting caster.
3. Tighten hex nut on each foot.

4. Raise foot pedals up to lift rubber feet and move machine (see **Figure 21**).

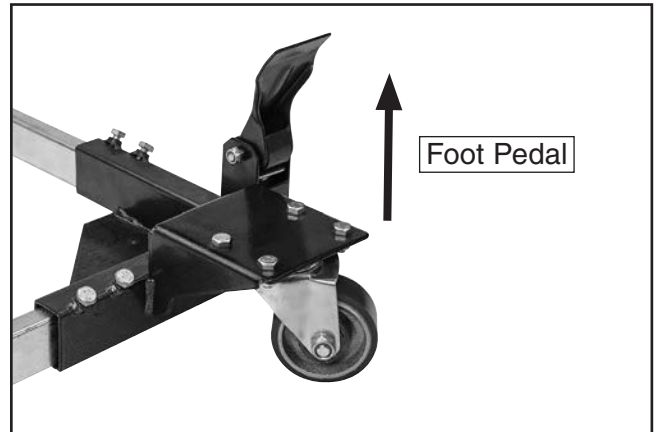


Figure 21. Foot pedal raised.

IMPORTANT: When moving the mobile base, the rubber feet should not touch the floor. Likewise, when operating the machine, ensure that the rubber feet are fixed firmly against the floor to provide stability, without lifting casters.



Using Mobile Base

1. DISCONNECT MACHINE FROM POWER!
2. With machine mounted on mobile base, lift foot pedals to raise rubber feet. If needed, adjust feet further to ensure feet do not drag during move. Refer to **Adjusting Rubber Feet** on **Page 7** for details.
 - If floor is uneven, retract feet completely to eliminate the chance of the pads dragging.
3. Check to make sure machine pathway is clear of all obstructions.
4. Push machine from lowest possible point to avoid tipping it over, and move it to its new location. The best control is usually achieved by pushing from swivel caster side of base.
 - If the machine is large, get an assistant to help stabilize the machine while it is being moved.
5. Adjust each foot until it touches floor, then rotate each foot so it firmly presses against ground without raising casters.
6. Check machine to make sure it is stable in its new location, and make sure machine is clear of any obstructions before reconnecting power and turning machine **ON**.

CAUTION

Before moving machine and mobile base, check to make sure pathway is clear of any hoses, wires, tools or shop debris. An abrupt impact with an object along path of travel can lock a wheel and cause machine to fall over, resulting in serious personal injury. Disconnect machine from power supply or dust collection before moving.

WARNING

To reduce risk of serious injury when using this mobile base:

1. **LOCKING FEET.** Do not operate machine on mobile base unless all mobile base feet firmly contact floor. Using the machine on base when it is not secured could result in a loss of workpiece control.
2. **MACHINE STABILITY.** Test for stability after placing the machine in its new location. Adjust feet so they all touch the ground, then push on machine at several locations, making sure it is not off balance. The hex nuts can be adjusted up to top of foot assembly to lock foot height setting.



Making a Base Plate

If the footprint of the machine is too small for the mobile base or the machine doors or fixtures do not clear the side rails, you can mount it to a base plate, as shown in **Figure 22**.

A good quality base plate can increase the standard footprint of machines, such as drill presses, to make them more stable. The base plate should be approximately $\frac{3}{4}$ " thick and made of plywood (do not use OSB, MDF, or particle board) to hold the weight of the machine.

Needed Materials for Base Plate Qty

- Plywood $\frac{3}{4}$ " x Base Width x Base Length.. 1
- Hex Bolts $\frac{5}{16}$ " x $1\text{-}\frac{1}{4}$ " 4
- $\frac{5}{16}$ " Hex Nuts 4
- $\frac{5}{16}$ " Lock Washers 4
- $\frac{5}{16}$ " Flat Washers 8

To make and use base plate:

1. Place plywood base plate on assembled mobile base (see **Page 3** for assembly instructions).
2. Drill $\frac{3}{8}$ " holes through base plate and bracket plates at each corner of mobile base.
3. Secure base plate to mobile base with $\frac{5}{16}$ " hex bolts, hex nuts, flat washers, and lock washers, as shown in **Figure 22**.

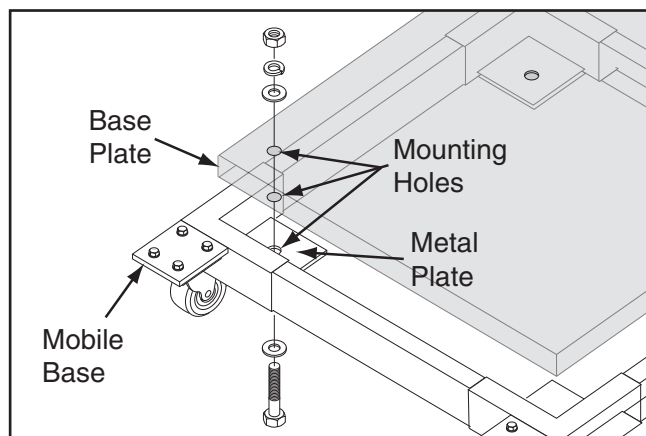


Figure 22. Example of mounting plywood base plate to mobile base.

4. Lower rubber feet to keep mobile base from moving (see **Page 7**).
5. With help from an assistant, place machine on base plate.
6. Position machine stand close to front or center of mobile base, so mobile base will not be a tripping hazard.
7. Drill holes through base plate and secure machine with through bolts, flat washers, lock washers, and hex nuts (see **Figure 23**).

Note: *There is limited space underneath base plate, which can make it difficult to tighten fasteners. If needed, insert bolts from below and fasten washers and nuts from above.*

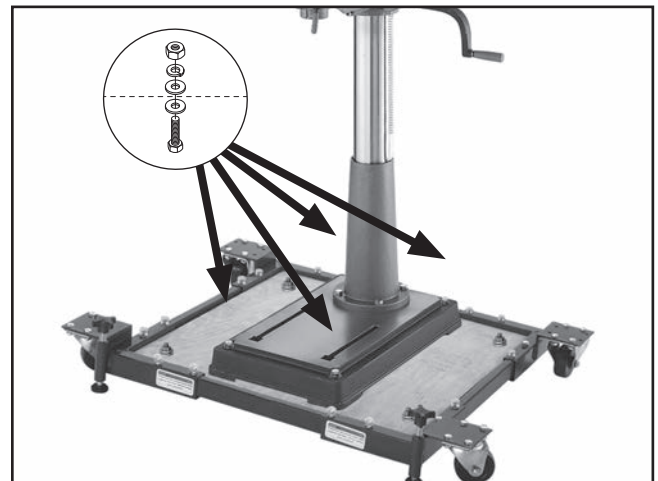
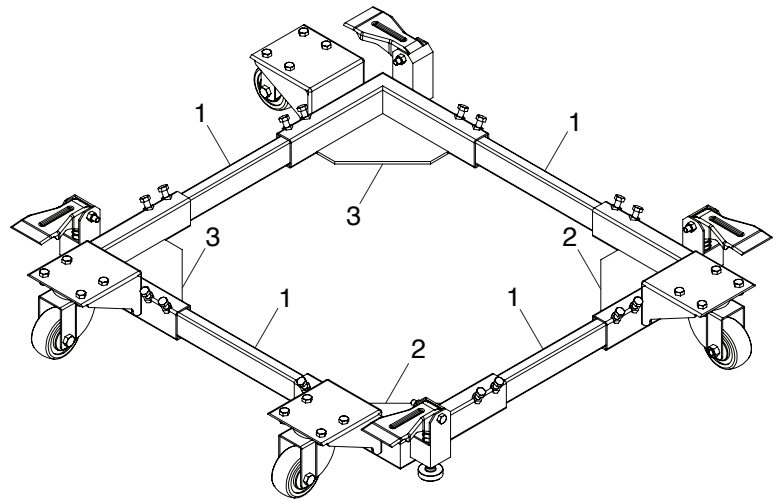
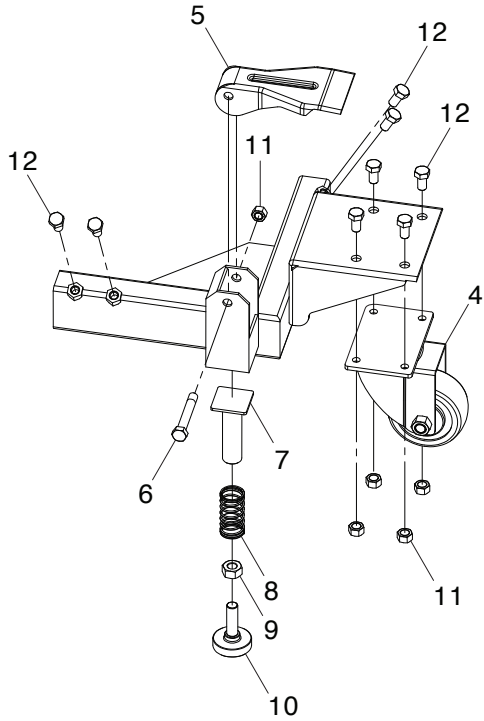


Figure 23. Example of drill press mounted to a base plate.



T31566 Parts Breakdown & List



REF	PART #	DESCRIPTION
1	PT31566001	RAIL 21"
2	PT31566002	RIGHT CORNER BRACKET
3	PT31566003	LEFT CORNER BRACKET
4	PT31566004	CASTER, 3" SWIVEL
5	PT31566005	FOOT PEDAL
6	PT31566006	SHOULDER BOLT M8-1.25 X 8, 8 X 50

REF	PART #	DESCRIPTION
7	PT31566007	FOOT PEDAL PLUNGER 17MM
8	PT31566008	COMPRESSION SPRING 22 X 1.5 X 61
9	PT31566009	HEX NUT M10-1.5
10	PT31566010	ADJUSTABLE FOOT M10-1.5 X 30
11	PT31566011	LOCK NUT M8-1.25
12	PT31566012	HEX BOLT M8-1.25 X 16

Please Note: We do our best to stock replacement parts whenever possible, but we cannot guarantee that all parts shown here are available for purchase. Call (800) 523-4777 or visit our online parts store at www.grizzly.com to check for availability.



WARRANTY & RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

In the event you need to use this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

To take advantage of this warranty, you must register it at <https://www.grizzly.com/forms/warranty>, or you can scan the QR code below to be automatically directed to our warranty registration page. Enter all applicable information for the product.



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