

AUTOMOTIVE WORK STATIONS INSTALLATION INSTRUCTIONS

IMPORTANT: To reduce the risk of serious injury, read and understand this entire guide before beginning any installation.

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BEFORE YOU BEGIN:

1. Check your inventory to be sure you received your entire order. If there are any missing or damaged parts, contact your **Dealer** or **Borroughs Customer Service Manager**.

NOTES: Each cabinet is packaged separately. Each unit features an identification sheet located on the face of the unit. The identification sheet will match the items detailed in contents above.

Lock key-coding is performed after all units are installed. Refer to applicable section of instructions.

2. Read and understand the entire installation instructions prior to beginning the install.

SAFETY WARNINGS:



This symbol is used to address practices not related to personal injury.



A potentially hazardous condition exists that may result in death or serious injury, property damage, or destruction if instructions are not strictly observed.



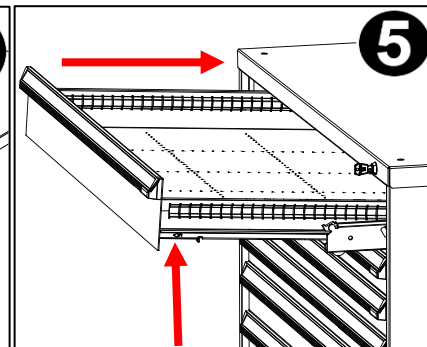
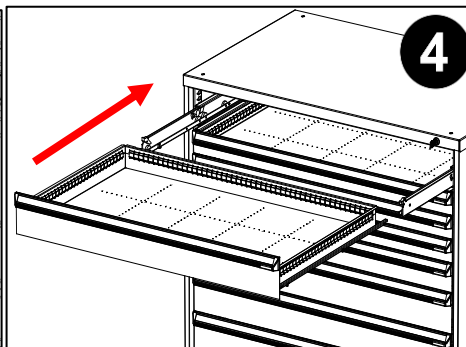
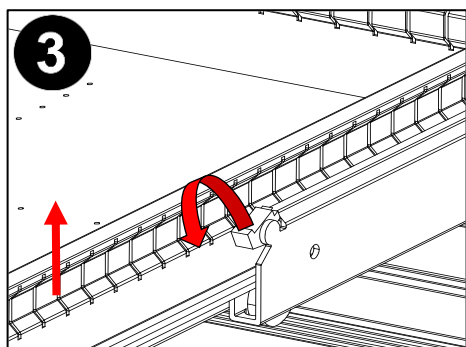
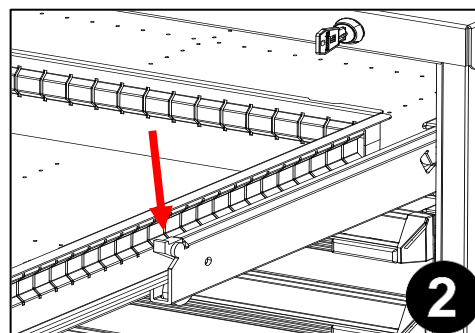
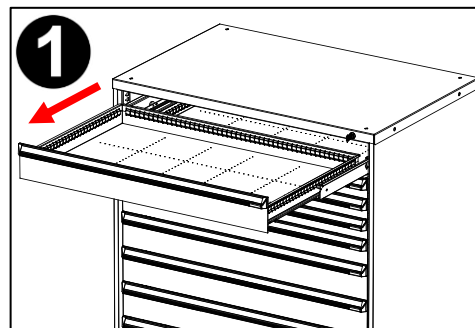
This symbol is used to address practices not related to physical injury.

Once installation is completed, a copy of the installation instruction booklet **MUST** remain with the customer.

DRAWER REMOVAL

STEPS

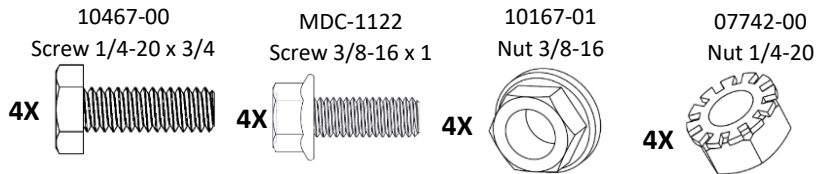
- 1** Open drawer.
- 2** Locate safety clips on both sides of slide profile.
- 3** Release both safety clips by applying down and forward pressure. Drawer may now be removed by lifting while pulling drawer from slides.
- 4** To reinstall drawer, first ensure that both safety clips are in the released state. Align drawer rails with slide rollers.
- 5** Lift the front of drawer while closing. Close drawer fully to automatically lock safety clips.



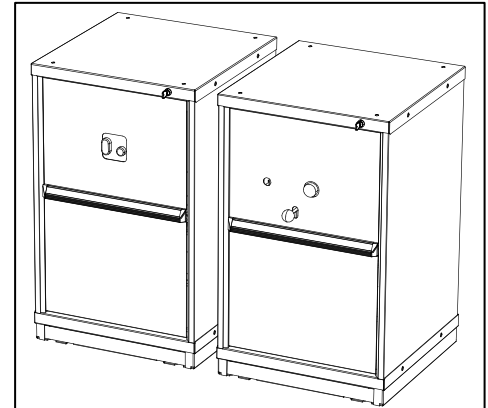
Cabinets MUST be bolted together side to side and anchored to the floor before loading to prevent tipping.

LIFT CONTROL CABINET - ROTARY IN-BAY/CHALLENGER

Hardware:



Tools Required:

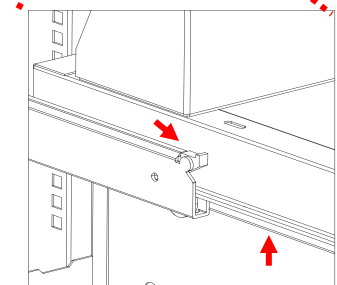
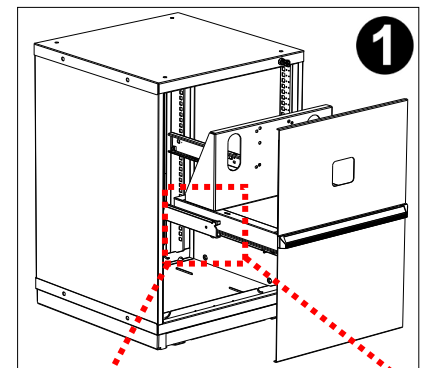


STEPS

NOTE: Please refer to DOC-MDC-0002 for instructions on anchoring and linking cabinets.

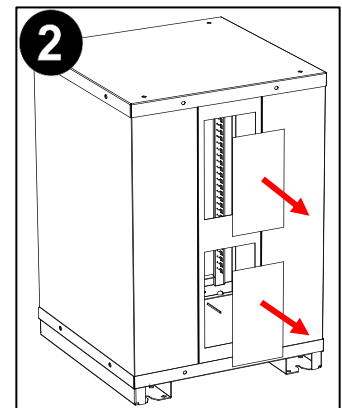
- 1** Remove drawer from housing. Refer to drawer removal section.

NOTE: We recommend placing the drawer face-down on a pair of 2x4s while completing steps 3, 4, and 5.



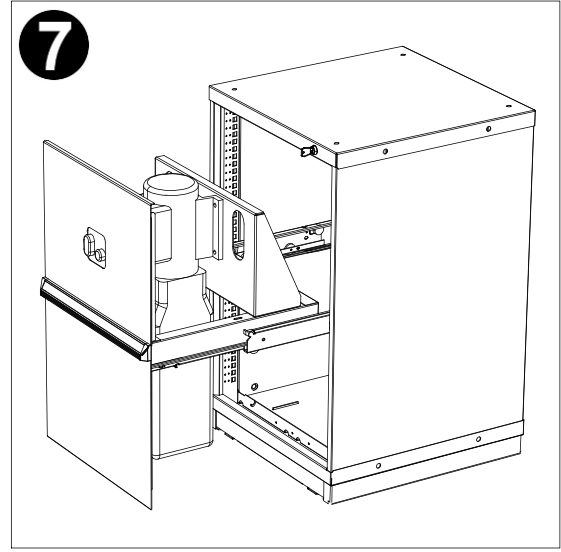
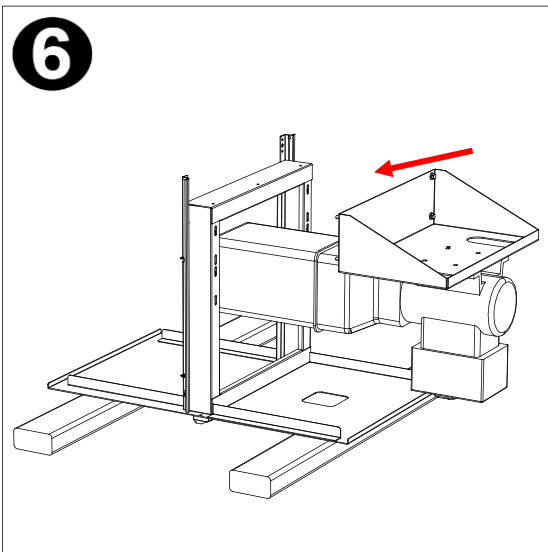
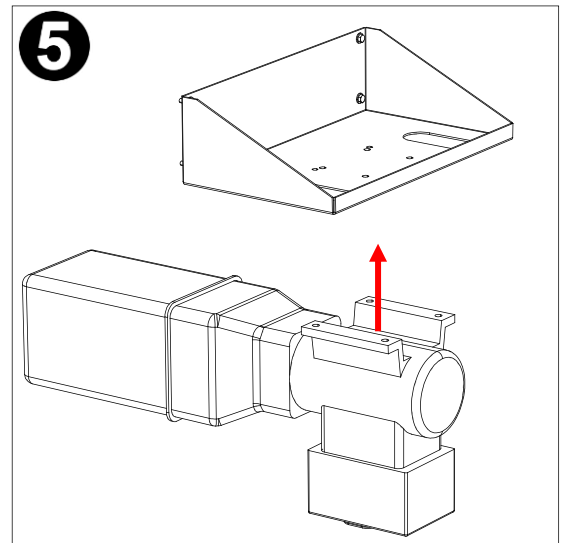
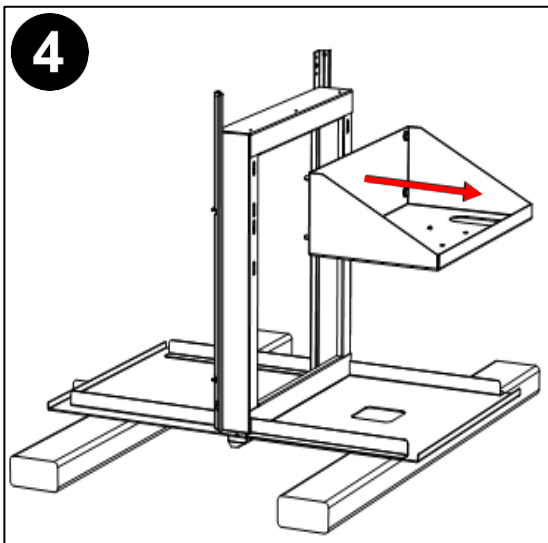
- 2** Using a steel cutting tool, remove 6 x 12 access panel from the bottom or the rear of the housing depending on your installation requirements. Properly dispose of panels.

- 3** Move housing to its permanent location. Route all required utilities through the access hole into the housing.



- 4** Remove mounting plate from drawer assembly by unscrewing 10467-00 screw qty. 4 and 07742-00 nut qty. 4. Retain plate and hardware for reuse.
- 5** Attach mounting plate to pump using appropriate hole pattern and supplied 10167-01 nut qty. 4 and MDC-1122 screw qty. 4.
- 6** Reattach mounting plate to drawer assembly using retained hardware (10467-00 screw qty. 4 and 07742-00 nut qty. 4).
- 7** Reinstall drawer into cabinet housing by inserting drawer slide profile into middle slide profile and lifting the front while closing drawer.

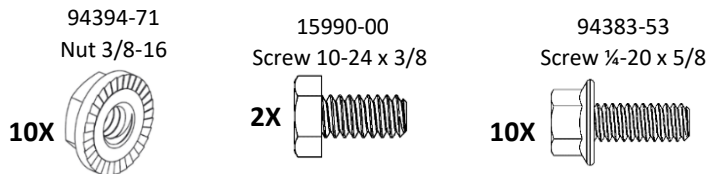
Refer to lift control manual to hook up all utilities.



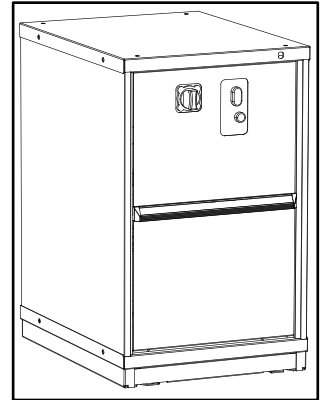
Cabinets MUST be bolted together side to side and anchored to the floor before loading to prevent tipping.

LIFT CONTROL CABINET - SHOCKWAVE

Hardware:



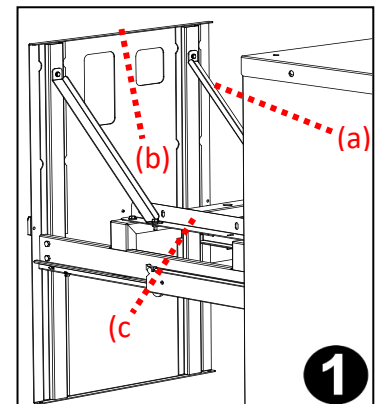
Tools Required:



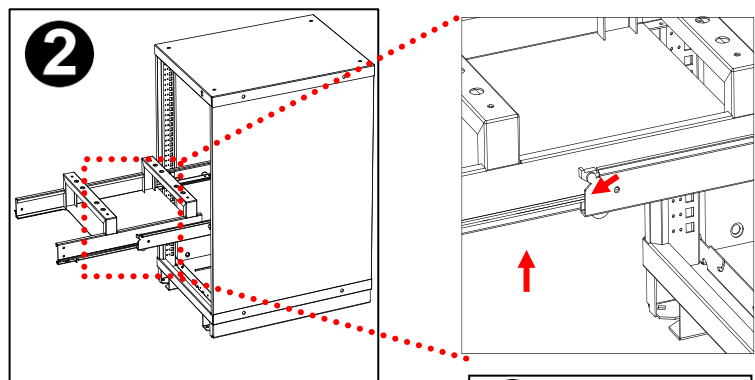
STEPS

NOTE: Please refer to DOC-MDC-0002 for instructions on anchoring and linking cabinets.

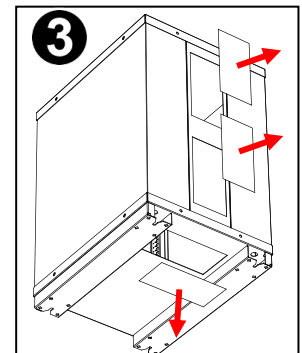
- 1 Disassemble drawer by removing (a) support arms, (b) drawer front, and (c) mounting brackets. Retain arms, front, brackets, and hardware for reuse.



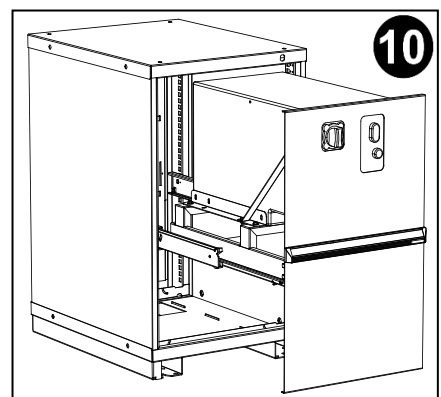
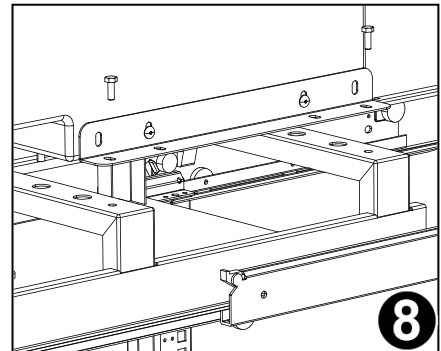
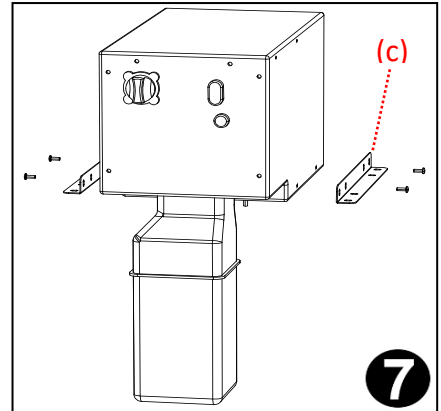
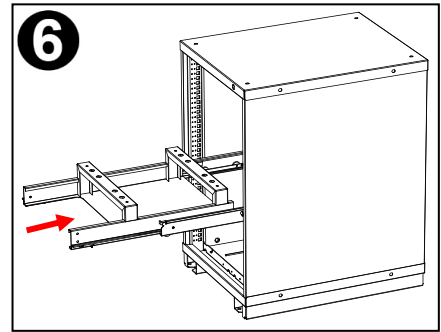
- 2 Remove drawer body from housing by releasing safety clips on slide profile and then lifting drawer while pulling out. Retain for reuse.



- 3 Using a steel cutting tool, remove the 6 x 12-inch access panel from bottom or rear of housing depending on installation requirements. Properly dispose of panels.



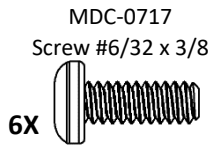
- 4** Move housing to permanent location and install anchors or link to adjacent cabinets.
- 5** Route all required utilities through access hole into housing.
- 6** Reinstall retained drawer body into cabinet housing by inserting drawer slide profile into middle slide profile and lift front while closing drawer.
- 7** Reattach (c) mounting brackets to Shockwave unit, use retained 94383-53 screw qty. 4, and 94394-71 nut qty. 4 hardware.
- 8** Attach assembly from Step 7 to drawer body, use retained 94383-53 screw qty. 4, and 94394-71 nut qty. 4 hardware.
- 9** Make all utility hookups based on lift control manual.
- 10** Reattach (b) drawer front and (a) support arms, use retained 94383-53 screw qty. 2, 94394-71 nut qty. 2, and 15990-00 screw qty. 2 hardware.



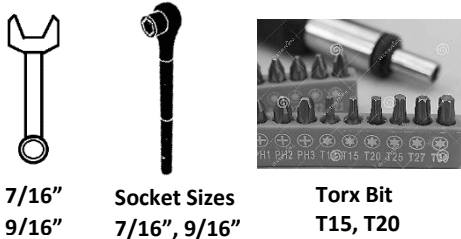
Cabinets MUST be bolted together side to side and anchored to the floor before loading to prevent tipping.

REEL CABINET

Hardware:



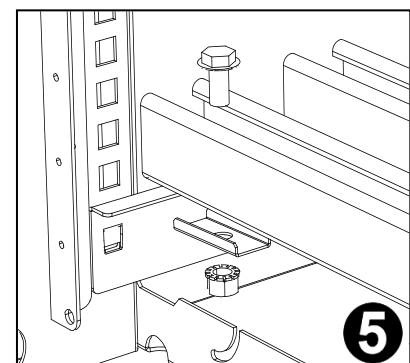
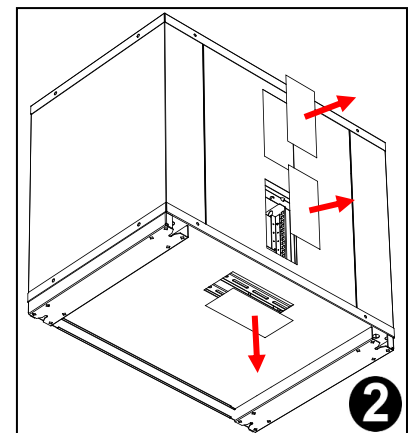
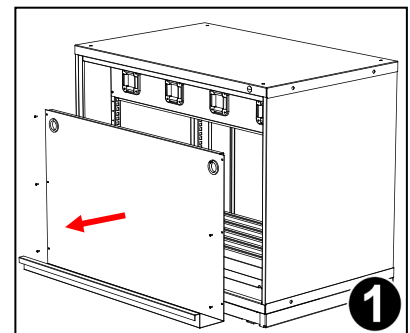
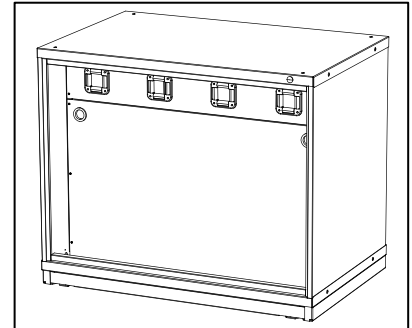
Tools Required:



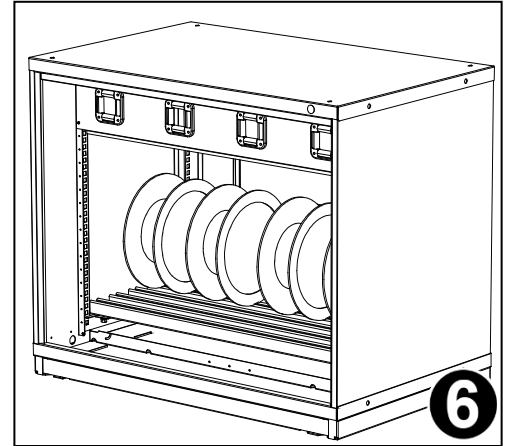
STEPS

NOTE: Please refer to DOC-MDC-0002 for instructions on anchoring and linking cabinets.

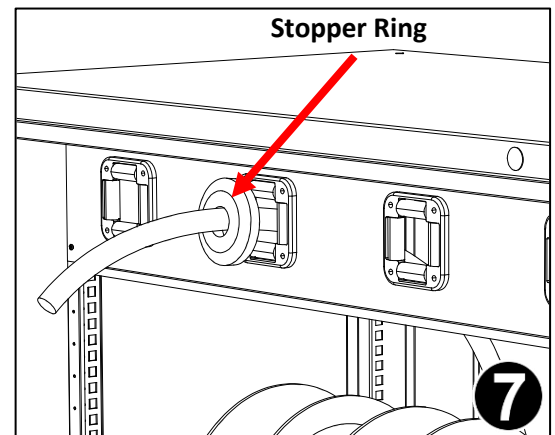
- 1** Remove front enclosure panel by removing MDC-0717 screw qty. 6. Retain panel and hardware for reuse.
- 2** Using a steel cutting tool, remove the 6 x 12-inch access panel from bottom or rear of housing depending on installation requirements. Properly dispose of panels.
- 3** Move housing to permanent location and install anchors or link to adjacent cabinets.
- 4** Route all required utilities through access hole into housing.
- 5** Adjust strut channels as needed by loosening ¼-20 bolts at either end.



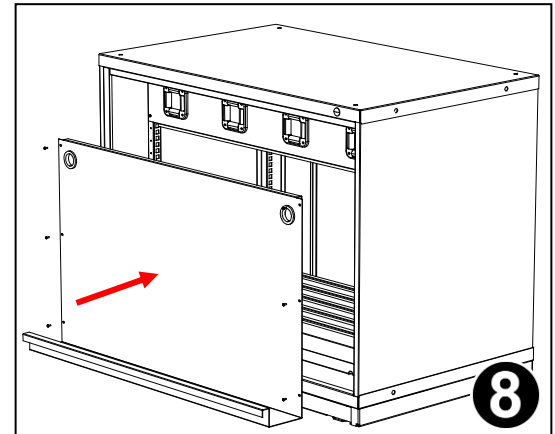
- 6** Install reels according to instructions provided with reel and connect all utilities.



- 7** Route hose/cord from each reel through corresponding roller guides and attach proper stopper ring.



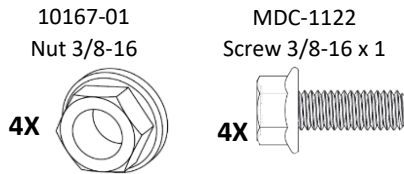
- 8** Reattach retained front enclosure panel using retained MDC-0717 screw qty. 6 from step 1.



Cabinets MUST be bolted together side to side and anchored to the floor before loading to prevent tipping.

SINGLE SIDED GARAGE

Hardware:



Tools Required:

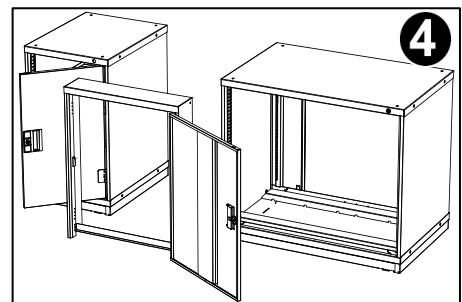
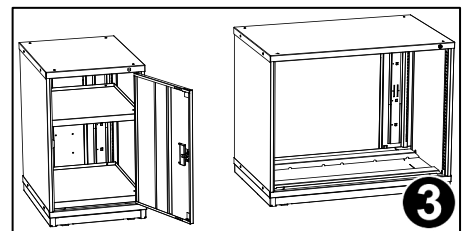
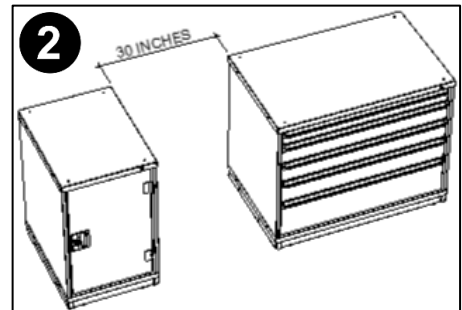
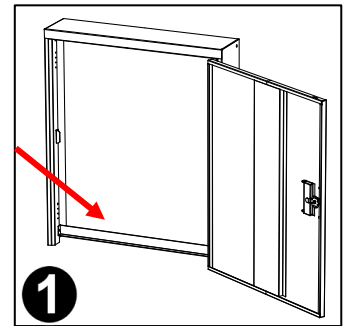


STEPS

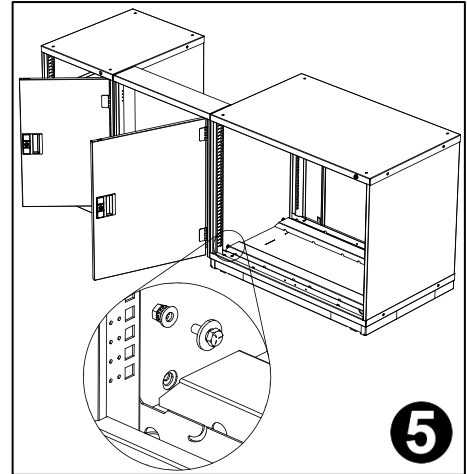
NOTICE

DO NOT remove installation bracket until noted on these instructions. Single sided garages only work in conjunction with adjacent MDC and AWS units.

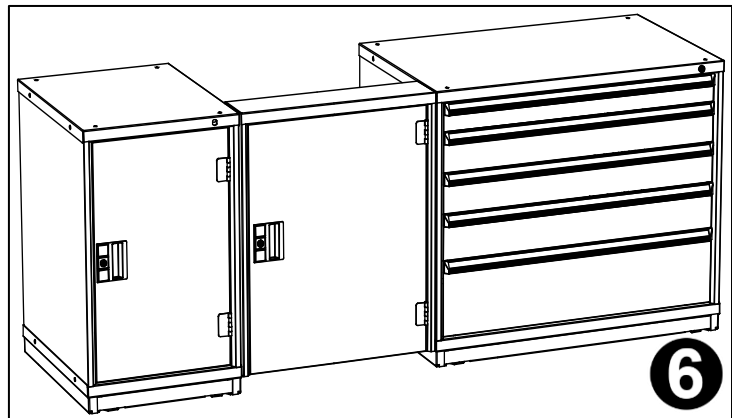
- 1** Unlock and open door to locate hardware pack.
- 2** Place adjacent cabinets to approximate final location, allowing thirty (30) inches between them to place single sided garage.
- 3** Remove drawers, open doors, and remove bottom shelf from adjacent cabinets to gain access to mounting holes (refer to page 4 for drawer removal instructions). Retain all components for reinstall.
- 4** Place single sided garage into position. Ensure top of garage is flush with tops of adjacent cabinets.



- 5** Use supplied 10167-01 nut qty. 4 and MDC-1122 screw qty. 4 to fasten cabinets together (hand tighten only).

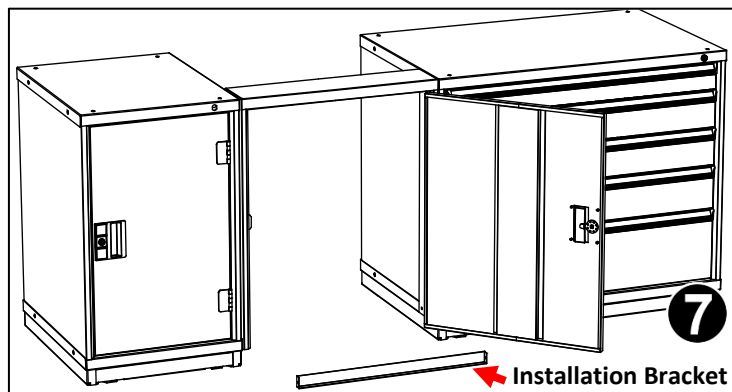


- 6** Close door to ensure proper function and adjust as needed. Finish tightening fasteners with tools.



- 7** Remove installation bracket. Check for free motion of swing door. Shim and/or adjust level as needed. Properly dispose of bracket and hardware.

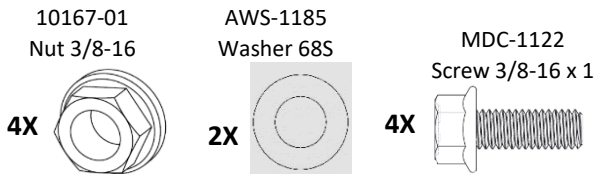
NOTE: Please refer to DOC-MDC-0002 for instructions on anchoring and linking cabinets.



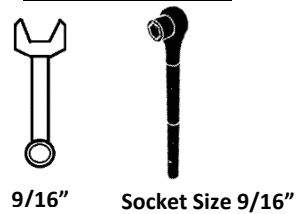
Cabinets MUST be bolted together side to side and anchored to the floor before loading to prevent tipping.

GARAGE CABINET

Hardware List:



Tools Required:



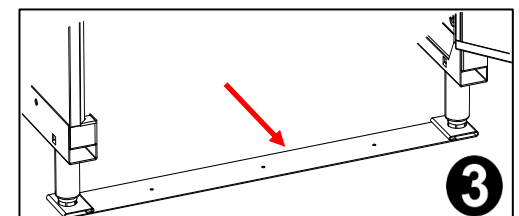
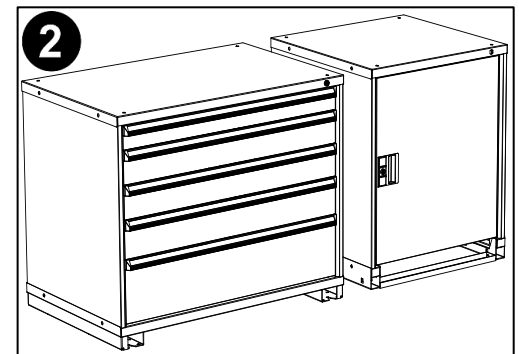
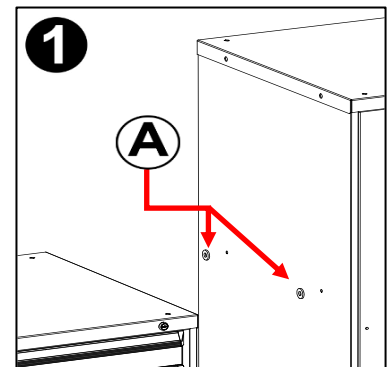
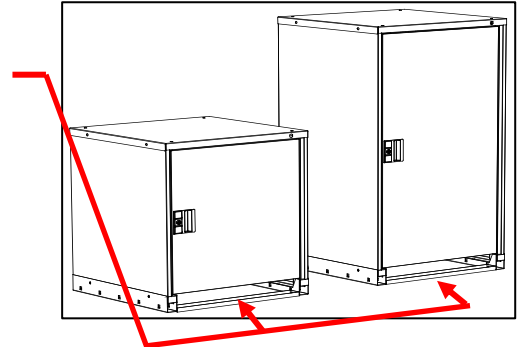
STEPS

NOTICE

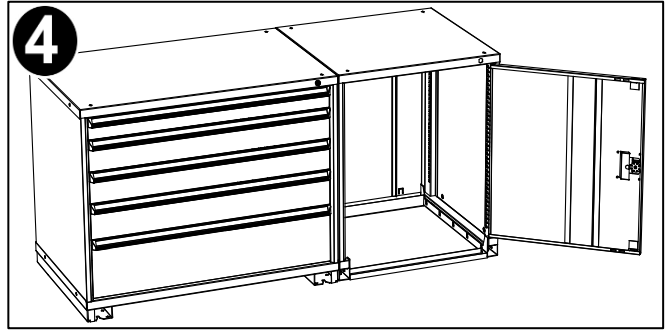
DO NOT remove installation bracket until noted on these instructions.

- 1** For Oil Receiver Garage install supplied AWS-1185 washer qty. 2 adhesive backed washers (A).
- 2** Position garage into place. Ensure garage is level to adjacent units.
- 3** For stainless steel leg option, use supplied AWS-1179 qty. 1 bracket as shown in FIG. 3.

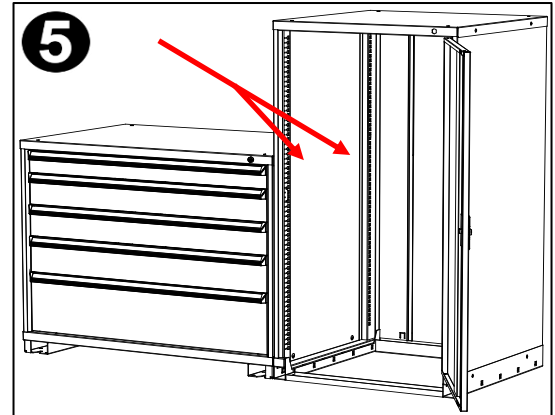
NOTE: Please refer to DOC-MDC-0002 for instructions on anchoring and linking cabinets.



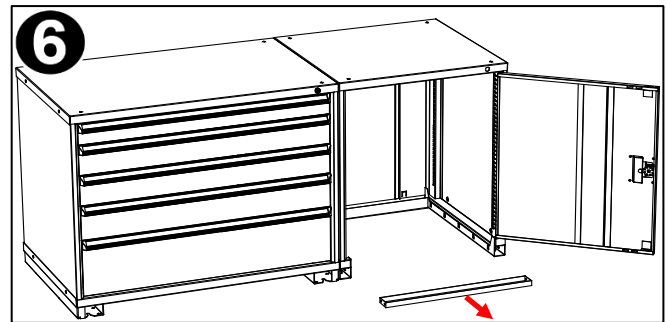
- 4** Use supplied 10167-01 nut qty. 8 and MDC-1122 screw qty. 8 to fasten cabinets together (hand-tighten only).



- 5** For the full height garages use holes as shown in FIG. 5.
NOTE: Adhesive backed washers ensure square installation.



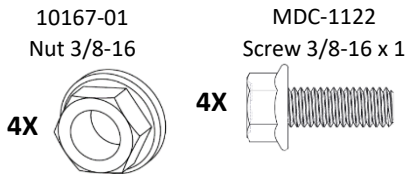
- 6** Close door to ensure proper function and adjust as needed. Finish tightening fasteners with tools. Remove installation bracket and dispose of properly. Ensure swing door has free motion. Shim and/or adjust level as needed.



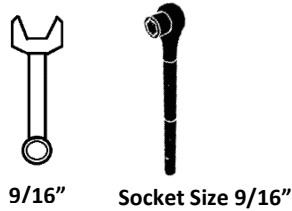
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LOWER CABINET ATTACHMENT

Hardware List:

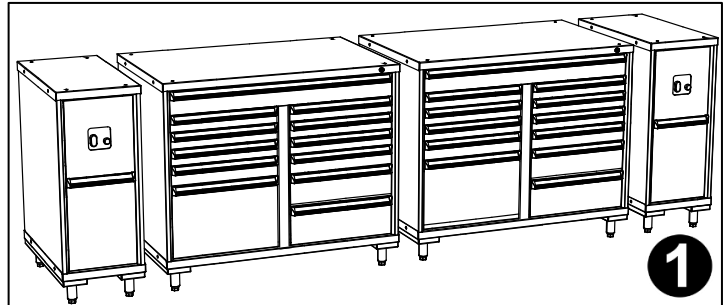


Tools Required:

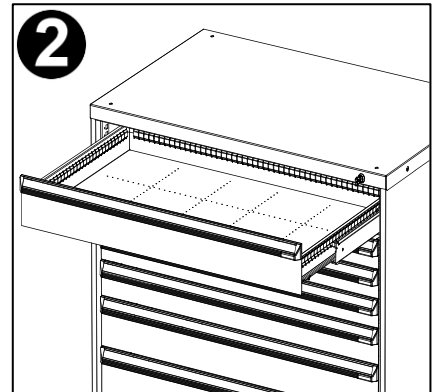


STEPS

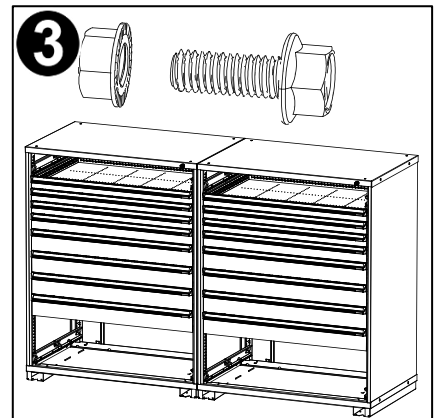
- 1 Place lower cabinets next to one another in desired layout.



- 2 Remove top and bottom drawers and open doors to access cabinet ganging (refer to "drawer removal" pg. 4).



- 3 Use supplied MDC-1122 screw qty. 8 and 10167-01 nut qty. 8 to fasten cabinets together. Ensure screw and nut are tightened.
- 4 Replace drawer and close doors.
- 5 Level system; forklift base = shims (not supplied) or stainless leg = adjust leg with wrench.



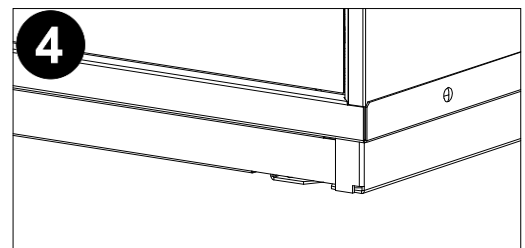
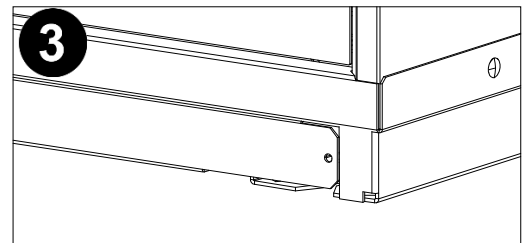
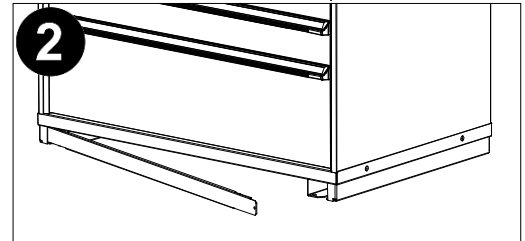
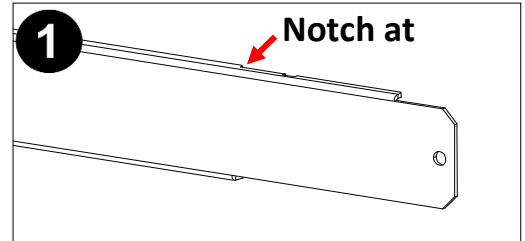
Cabinets must be bolted together side to side & anchored to floor before loading to prevent tipping.

BASE CAPS - FORKLIFT BASE

STEPS

- 1** Locate base cap and place in front of cabinet, ensure base cap notch is at top.
- 2** Insert one end of base cap completely into forklift channel.
- 3** Push base cap closed and slide into the other forklift channel.
- 4** Kick plate notches should integrate with forklift channels and snap into place.

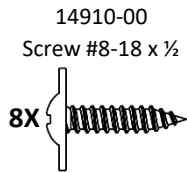
NOTE: to remove, reverse process (a flat screw driver may be required to disengage).



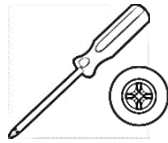
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STAINLESS KICK PLATES - LEG BASE

Hardware:

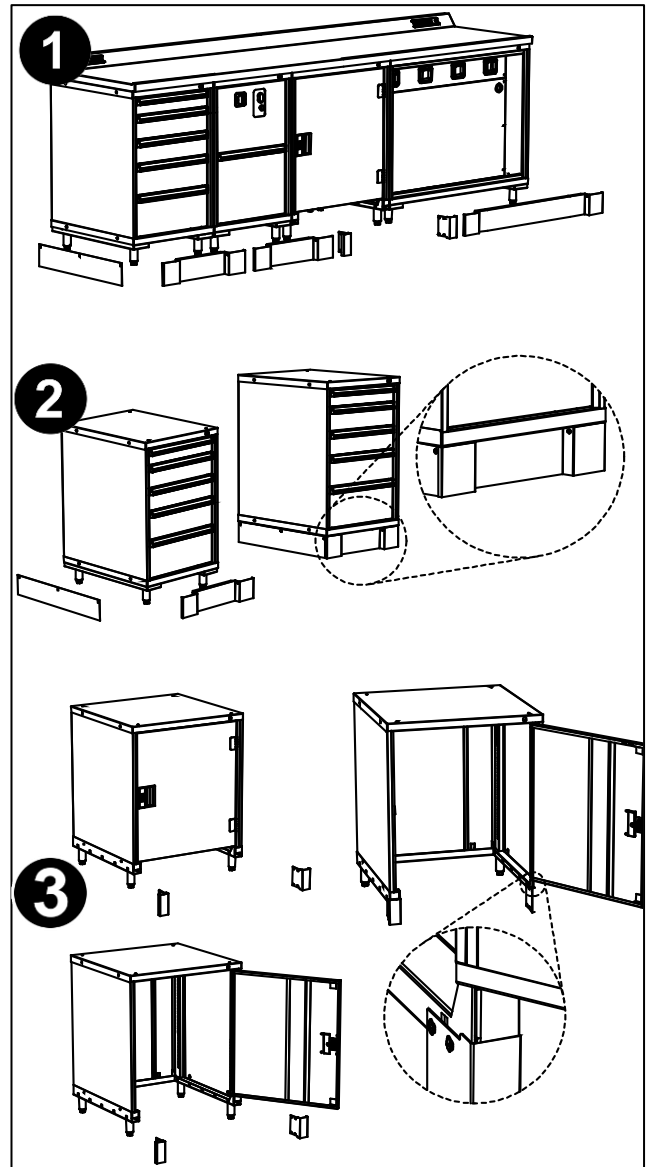


Tools Required:

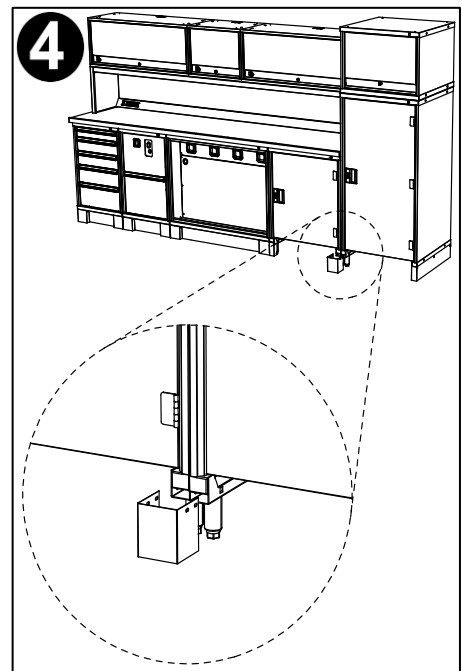


STEPS

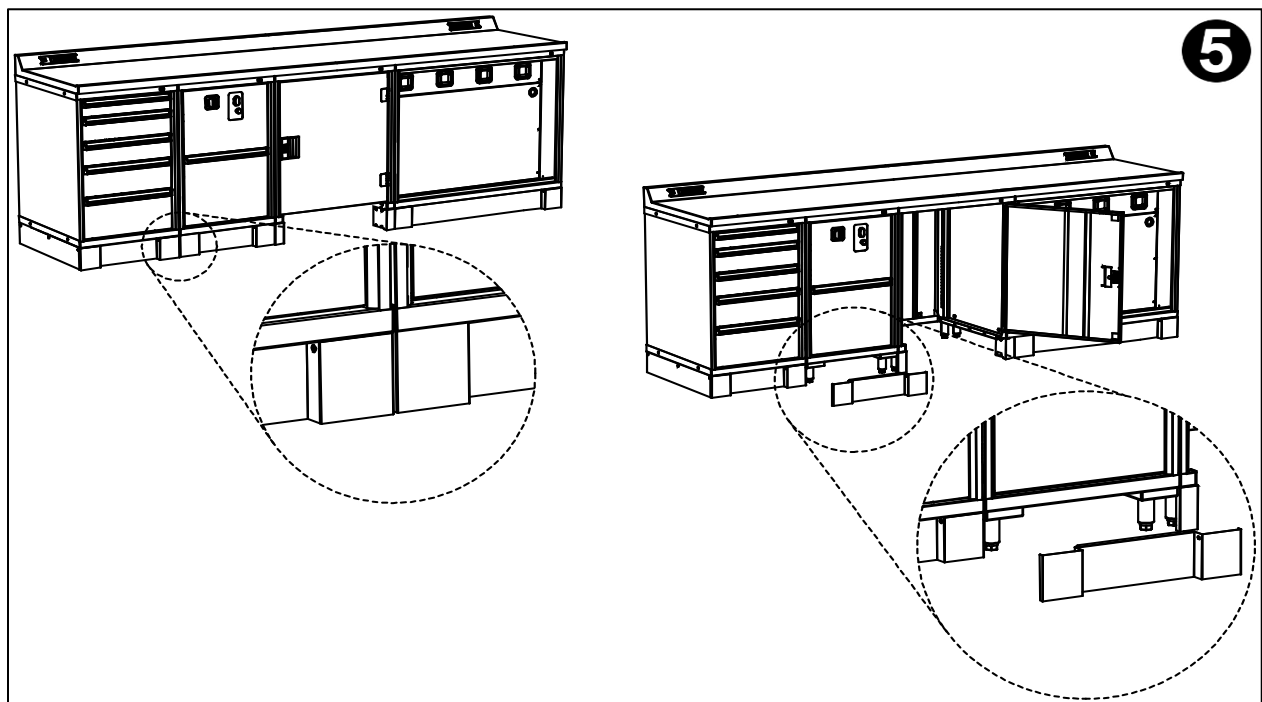
- 1** Ensure all MDC and AWS units are linked together properly, and entire unit is level and placed at final location. Stainless steel kick plates should be the last components installed. Lay out all kick plates, match with appropriate cabinet.
- 2** Start from one side, installing sides first, as front kick plates overlap sides using supplied 14910-00 screw qty. 4 (qty. is dependent on size). Obrounds in stainless kick plates allow for adjustment up and down to level kick plate with ground. Front kick plates can now be mounted as shown.
- 3** For garages, open door and use supplied #8 thread forming screws to attach end caps to bottom channel.



- 4** If two (2) garage bays are placed next to each other, a double base cap is used as shown.



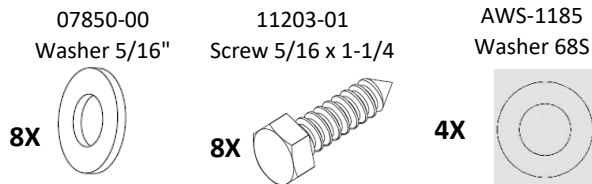
- 5** Once all kick plates are in place, adjustments may now be made. Obrounds allow kick plates to move forward and back ensuring a flush appearance at front of unit. Obrounds on swing doors allow for vertical adjustments. After desired look is achieved, check all screws to ensure all kick plates are securely fastened. To access stainless steel leveling feet, remove screws from kick plate.



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WORK SURFACE

Hardware:

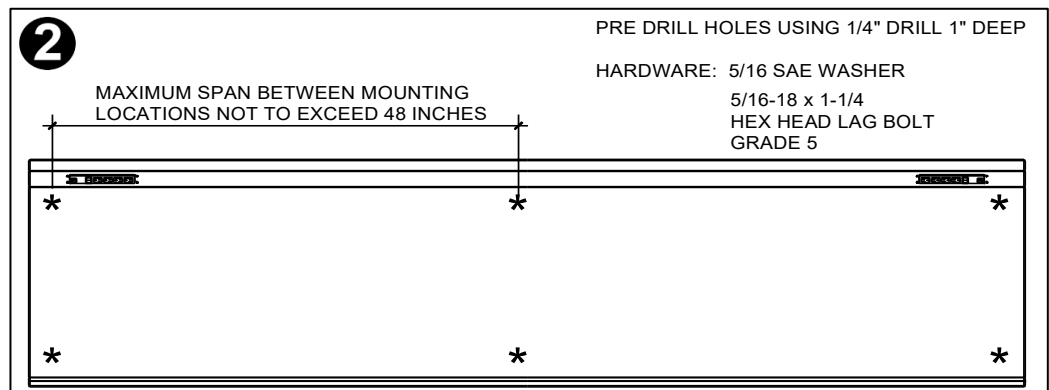
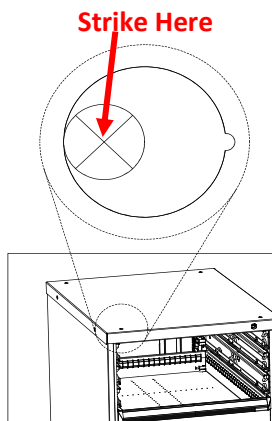
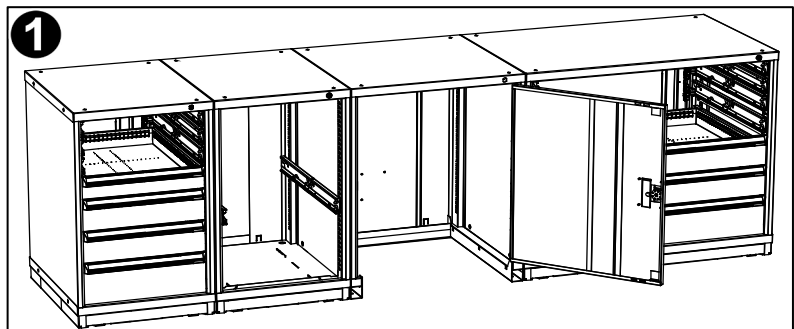


Tools Required:

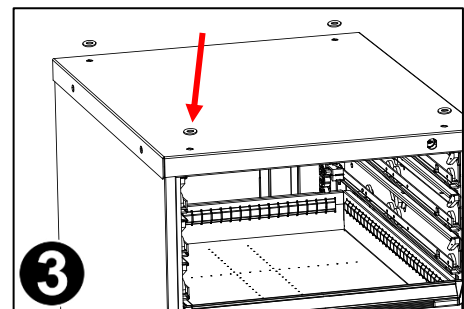


STEPS

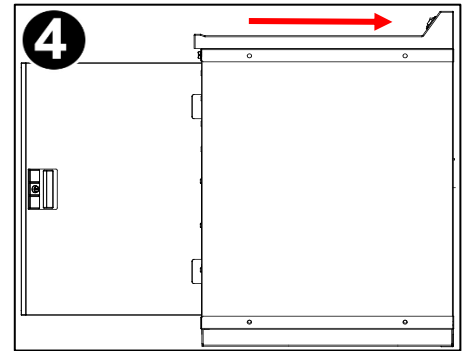
- 1 Remove top drawers to gain access to cabinets underside.
- 2 Use a punch to remove knockouts at indicated locations.



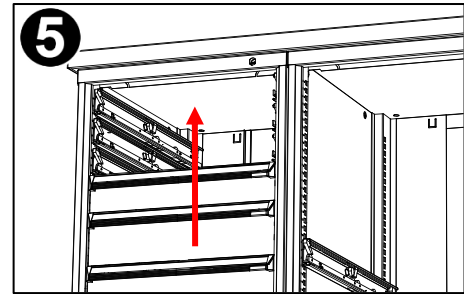
- 3 Place supplied AWS-1185 washer qty. 4 over all hole locations for each cabinet.
- NOTE:** If further assembly involves a riser, stop here and go to riser section first.



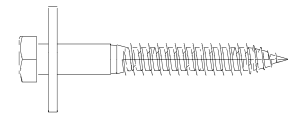
- 4** Position work surface flush to back of unit. If this is a standalone unit, center work surface. If used in conjunction with other work stations, offset top accordingly.



- 5** Pre-drill (1/4-inch drill bit) top from underneath cabinets at pre-determined locations and clean wood chips.

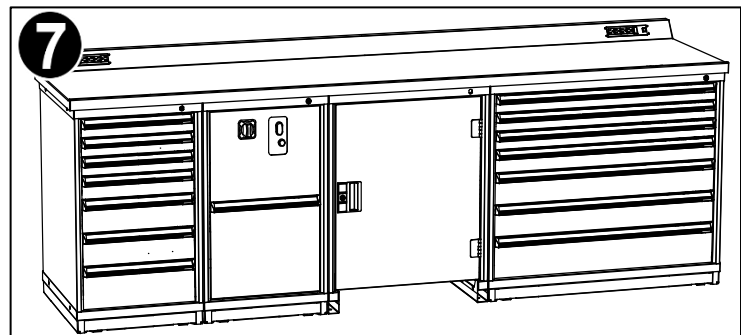


- 6** Using supplied hardware, fasten top to cabinets.



- 6** 5/16 SAE WASHER
5/16 X 1-1/4 lag grade
5 zinc plated

- 7** Replace drawers.

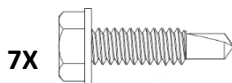


Cabinets MUST be bolted together side to side and anchored to the floor before loading to prevent tipping.

RISER - FLAT WORK SURFACE

Hardware:

MDC-0723
Screw #10-24 x 3/4



Tools Required:



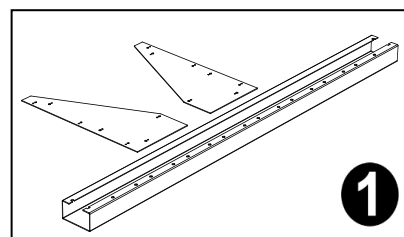
Socket Size
5/16"

Drilling Template Assembly

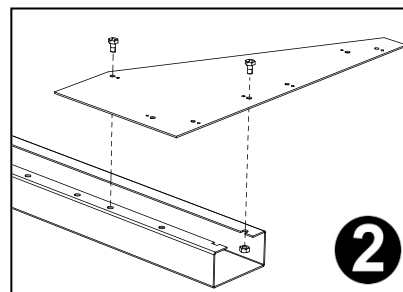
The template assembly will be used to layout the location of the riser on the bench top. The edges of the template assembly align with the edges of the riser.

STEPS

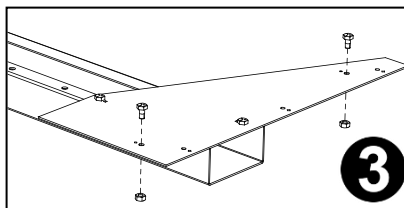
- 1 Locate two (2) template panels, the template hardware pack, and one (1) riser beam.



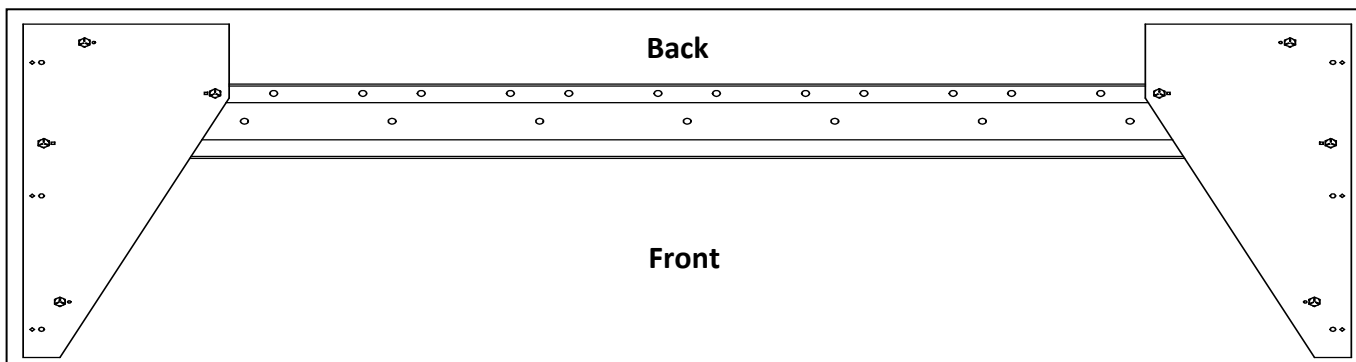
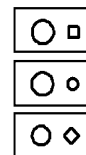
- 2 Connect template panels to each end of the riser beam using holes with square indicators and 1/4-20 hardware.



- 3 (Optional) Connect additional hardware through holes with circle indicators to help stabilize template assembly.

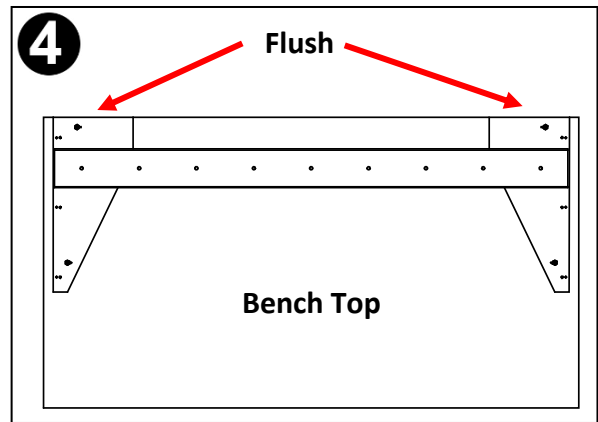


Indicators for the holes on the template panel:

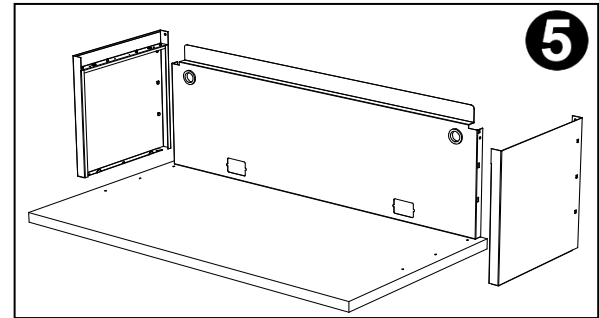


- 4** Place template assembly onto bench top with panels face down and back of template flush to back of bench top.

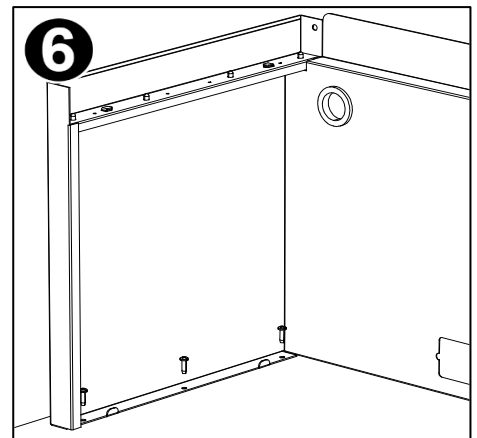
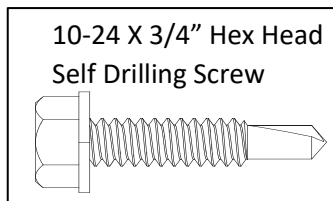
Move template assembly along bench top until desired riser location is set and mark location of holes with diamond indicators on bench top.



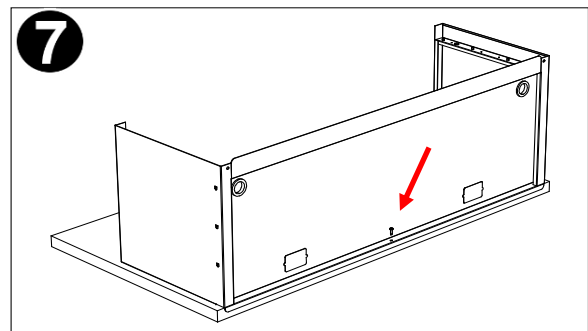
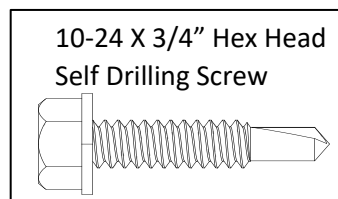
- 5** Set riser back panel on back edge of bench top and attach side panels by engaging three (3) lances in the sides with three (3) slots on back panel.



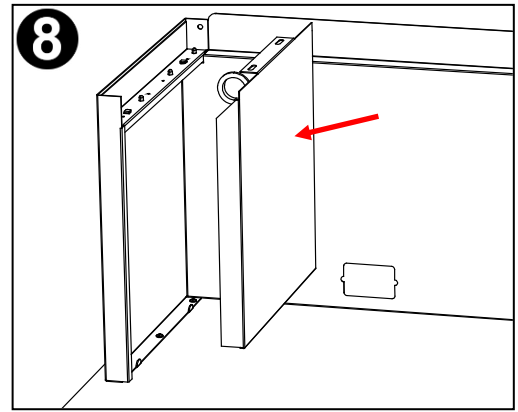
- 6** Align sides over marked hole locations and attach with supplied MDC-0723 screw qty. 6. Refer to photo below.



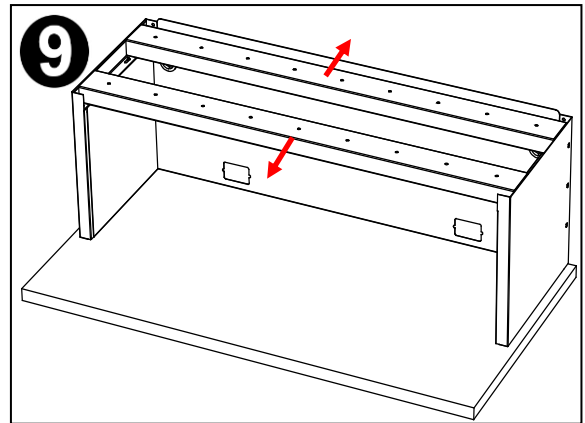
- 7** Use supplied MDC-0723 screw qty. 1, drill into bench top through hole on back side of back panel. Refer to photo.



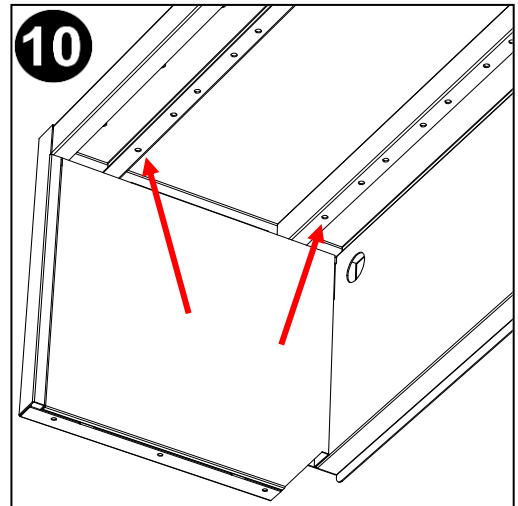
- 8** Install inner cover panels by inserting tabs from side panel into slots on inner cover panel and tilting forward until spring pins lock it in place.



- 9** Install beams by engaging the lance in beam support with notch in beam. Slide beam until spring pin locks in place.



- 10** Verify holes on underside of riser beams are facing toward inside.

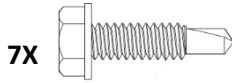


Cabinets MUST be bolted together side to side and anchored to the floor before loading to prevent tipping.

RISER - TAPERED WORK SURFACE

Hardware:

MDC-0723
Screw #10-24 x 3/4



Tools Required:



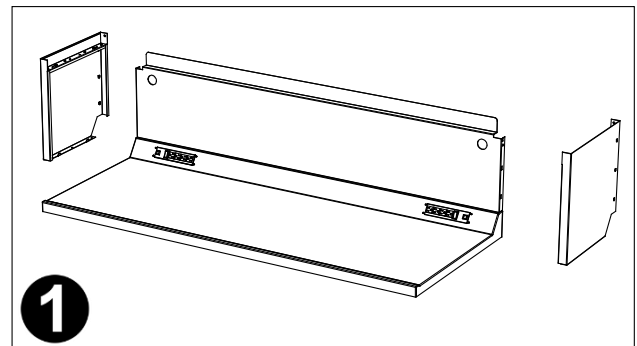
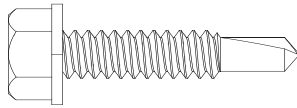
Socket Size
5/16"

STEPS

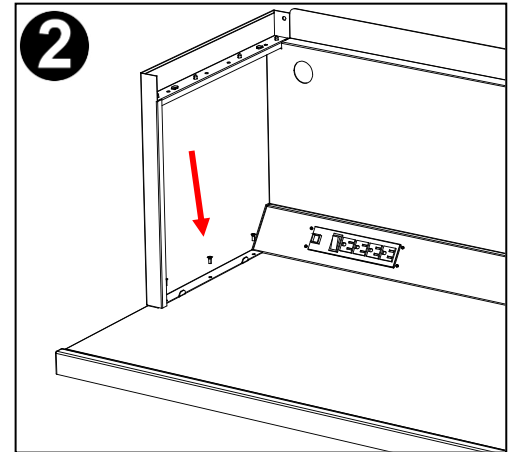
When installing a taper bench top riser, a template is not needed.

- 1 Set riser back panel on back edge of bench top and attach side panels by engaging three (3) lances in sides with three (3) slots on back panel.

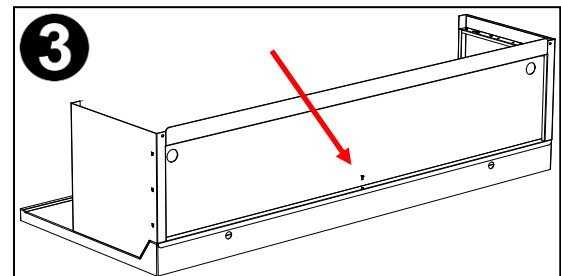
10-24 X 3/4" Hex Head
Self Drilling Screw



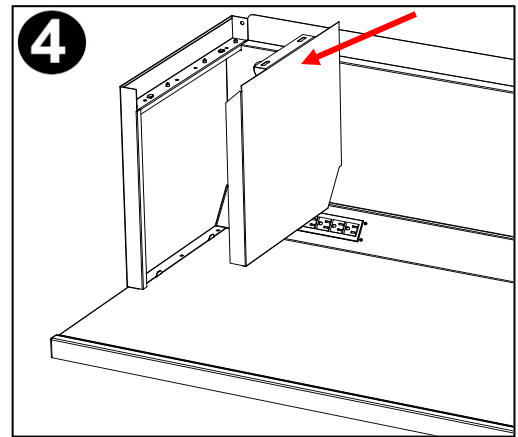
- 2 Move assembly side to side on bench top to desired location and mark hole locations. Align sides over marks and attach with supplied MDC-0723 screw qty. 6. Refer to photo.



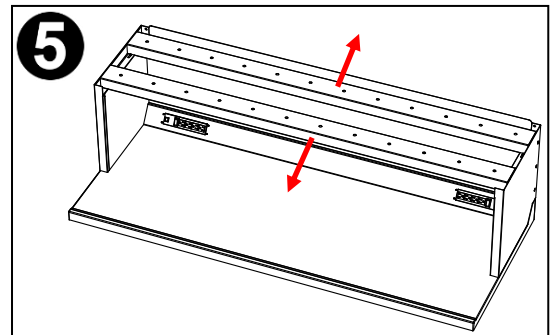
- 3 Using supplied MDC-0723 screw qty. 1 refer to photo above, drill into bench top through hole on back side of back panel.



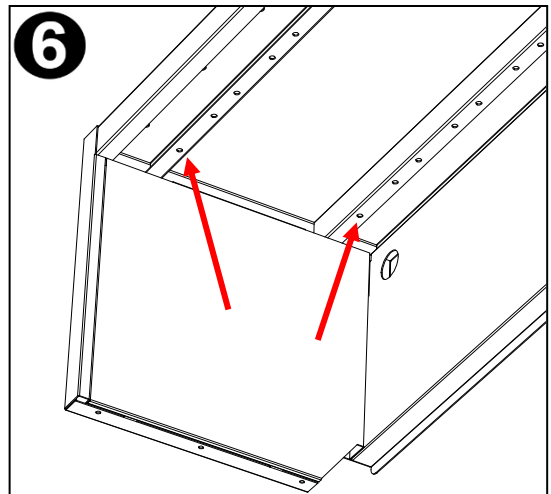
- 4** Install inner cover panels by inserting tabs from side panel into slots on inner cover panel and tilting forward until spring pins lock it in place.



- 5** Install beams by engaging lance in beam support with notch in beam. Slide beam until spring pin locks in place.



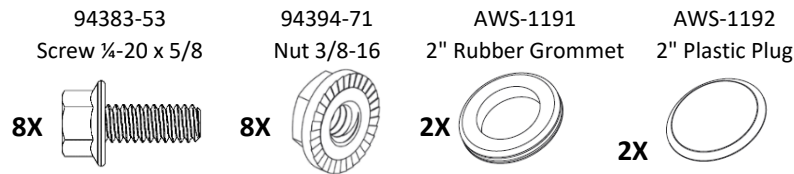
- 6** Verify that holes on underside of riser beams are facing toward inside.



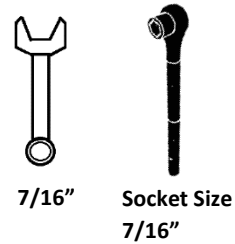
Cabinets MUST be bolted together side to side and anchored to the floor before loading to prevent tipping.

UPPER CABINET

Hardware:



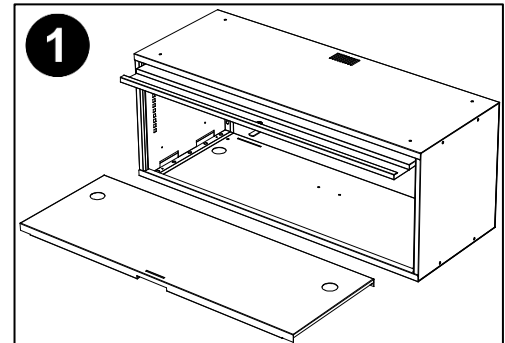
Tools Required:



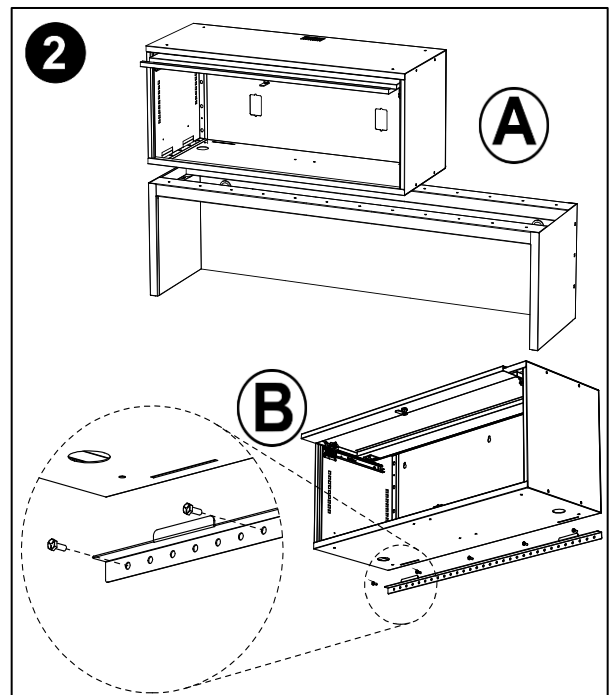
STEPS

- 1 Open upper cabinet door and remove bottom pan and supplied hardware. Retain pan for reuse.

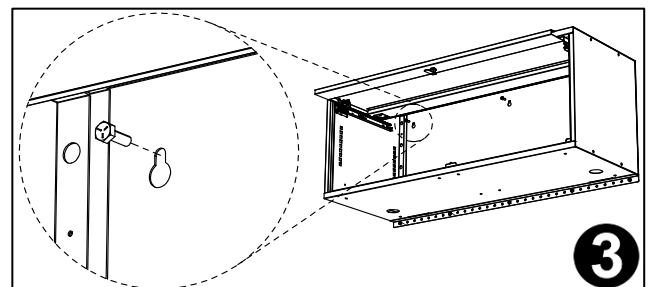
NOTE: remove all necessary knockouts.



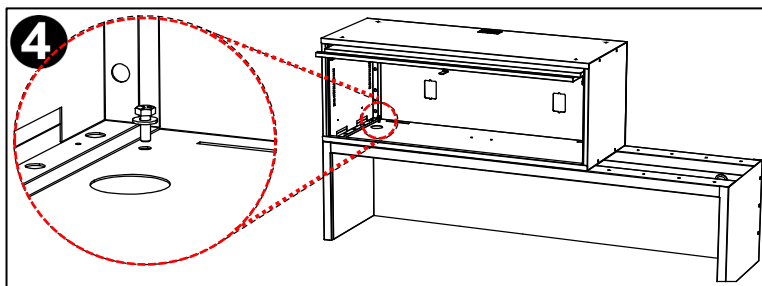
- 2 If mounting to riser kit (A), proceed to step (4). If wall mounting, anchor wall cleat in desired location (B).
NOTE: hardware not supplied for mounting cleat.



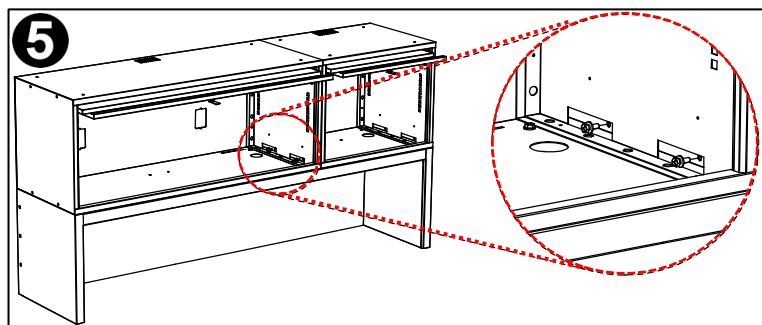
- 3 To finish installation of wall mounted upper cabinet, integrate cabinet with wall cleat and anchor cabinet back to wall. Proceed to step (5) for information regarding mounting adjacent cabinets and finishing installation.



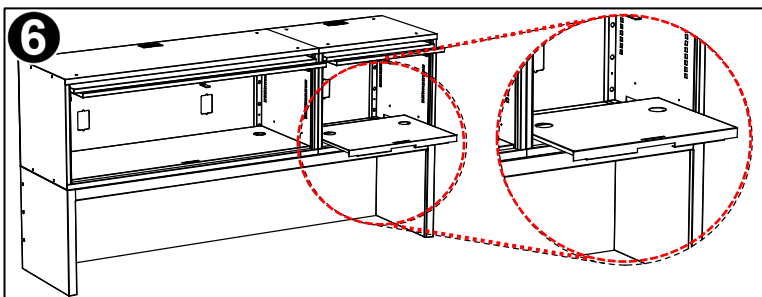
- 4** To finish mounting upper cabinets to a riser kit, use supplied 94383-53 screw qty. 4 and 94394-71 nut qty. 4 to mount cabinet bottom with riser cross beam.



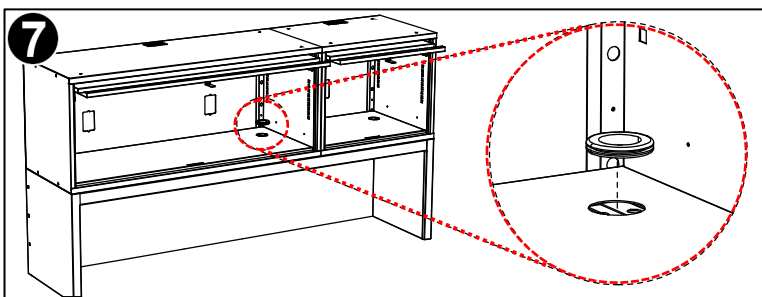
- 5** If mounting adjacent cabinets, work from one side mounting cabinets to either wall cleat or riser kit, linking cabinets with supplied 94383-53 screw qty. 4 and 94394-71 nut qty. 4 at all four (4) locations on side of cabinet.



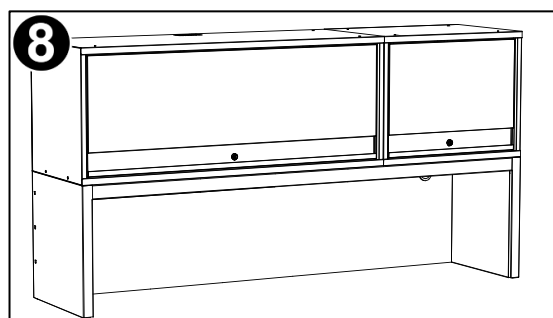
- 6** Replace retained bottom pans.



- 7** Add either supplied AWS-1191 grommet qty. 2 or AWS-1192 plastic plug qty. 2 to location shown.



- 8** Close doors ensure proper function of lock.



Cabinets MUST be bolted together side to side and anchored to the floor before loading to prevent tipping.

KEYBOARD MOUNT

Hardware:

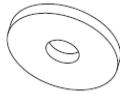
10167-01
Nut 3/8-16

4X



MDC-0006
Washer 3/8 x 1-1/4

4X



Tools Required:



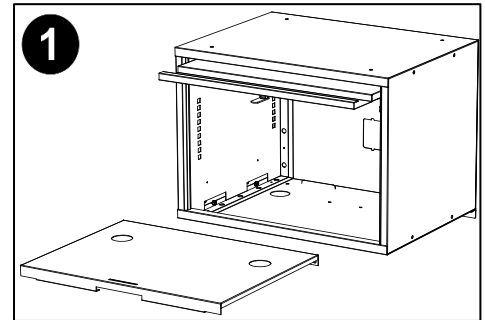
9/16"



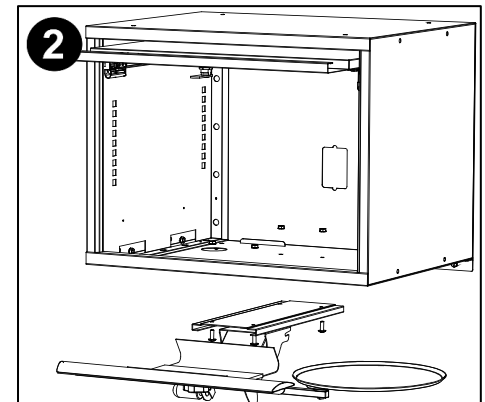
Socket Size
9/16"

STEPS

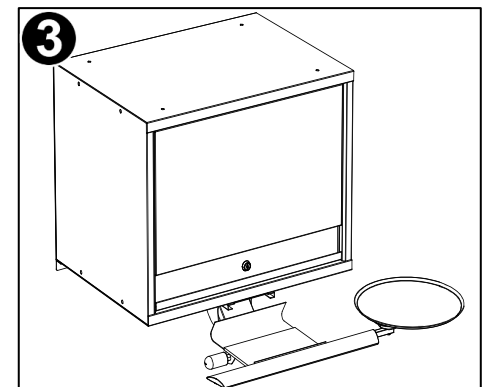
- 1 When installing keyboard mount to a wall mounted upper, begin by opening flip door and removing bottom pan. Retain pan for reuse. When installing keyboard mount to a riser kit skip to step four (4).



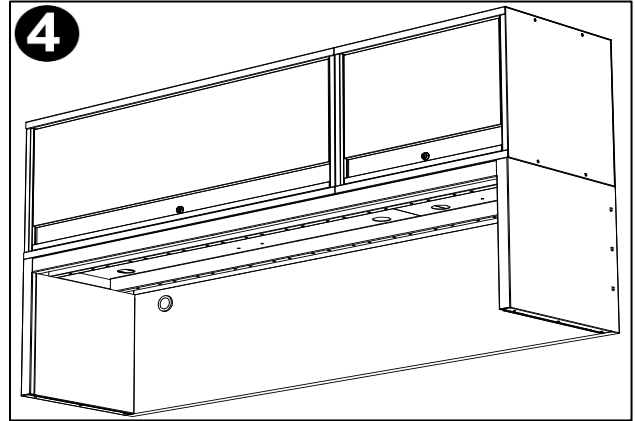
- 2 Use supplied MDC-0006 washer qty. 4 and 10167-01 nut qty. 4 to attach keyboard mount. Insert bolts through keyboard mounting plate and tighten Keps nuts from inside cabinet (4 places).



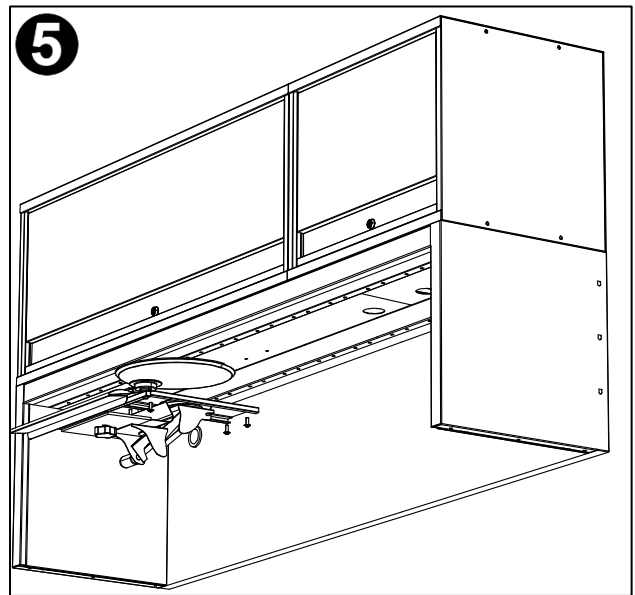
- 3 Replace retained bottom pan and adjust keyboard mount as desired.



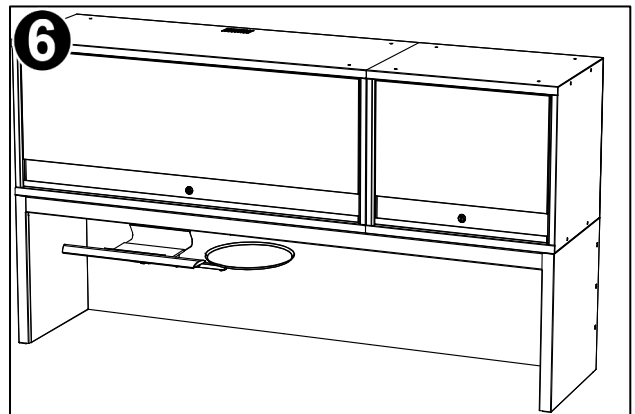
- 4** When mounting keyboard mount to a riser kit, installation is done from the underside of riser. Hole locations are spaced in six (6) inch increments. Select desired location for keyboard mount.



- 5** Use supplied MDC-0006 washer qty. 4 and 10167-01 nut qty. 4 to attach keyboard mount to underside of riser by placing bolt through keyboard mount first and tightening Keps nut in riser cabinet.



- 6** Adjust keyboard mount as desired.

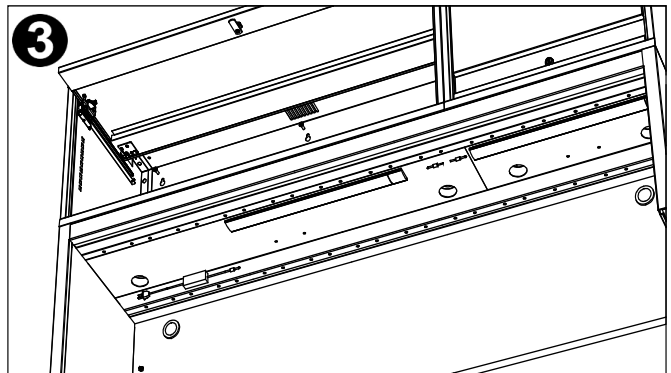
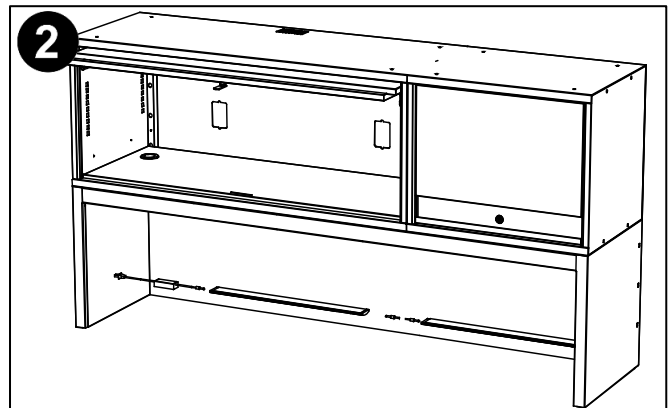
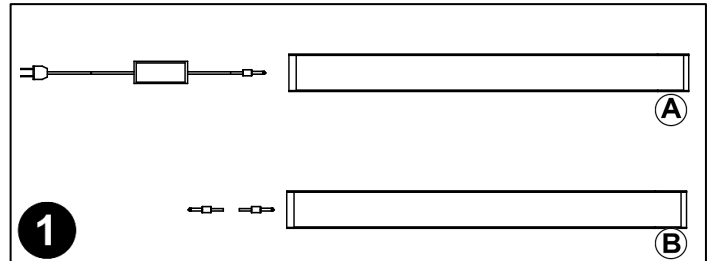


Cabinets MUST be bolted together side to side and anchored to the floor before loading to prevent tipping.

TASK LIGHTS ****Skip until unit is completed****

STEPS

- 1** LED task lights can be added to AWS workstation. Starter units (A) are pre-packaged, and adder units (B). Up to six (6) light strips can be linked together off one (1) power supply.
- 2** Task lights come supplied with a magnetic strip to allow for simple installation. Simply layout starter and adder units in desired location. Ensure power supply is located appropriately.
- 3** Place light, hook-up power supply, and interconnect wires for adder units. Clean up wiring as desired.



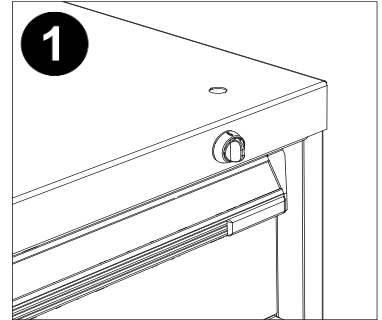
CABINET KEY CODING

Tools Required to Complete Installation:

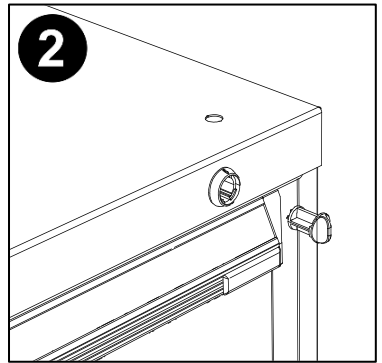
- Core Removal Key
- Lock Core Assembly

STEPS

- 1** All lockable cabinets are shipped with a removable black plastic plug. Rotate plug fully counter-clockwise to unlock.



- 2** Pull plug straight out and properly discard.



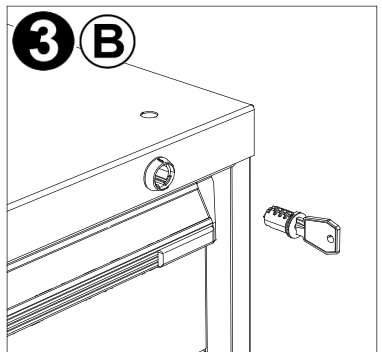
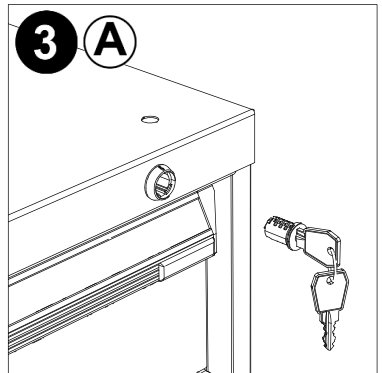
- 3** All Borroughs AWS systems are shipped with an owner's kit. This kit contains the coded lock components to designate key codes to specific cabinets.

- A** Locate a lock core assembly (core with two (2) keys) with desired code.

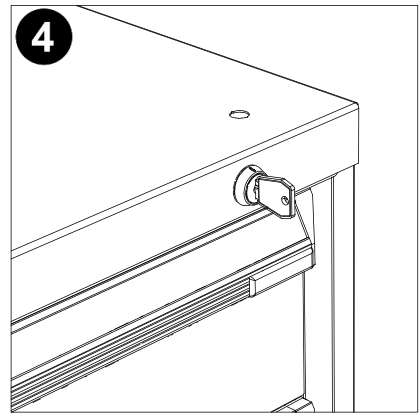
NOTE: Key codes are stamped on face of core and on the keys.

- B** Remove key from lock core and insert core removal key (stamped B8187).

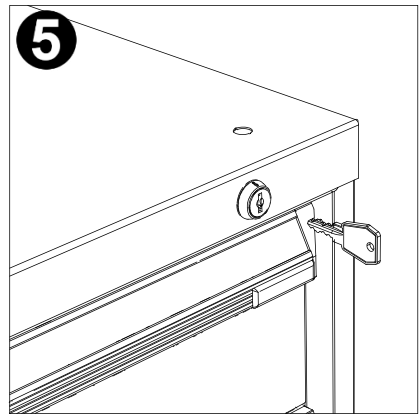
Hold this assembly with key code stamp facing left on core, then insert into lock.



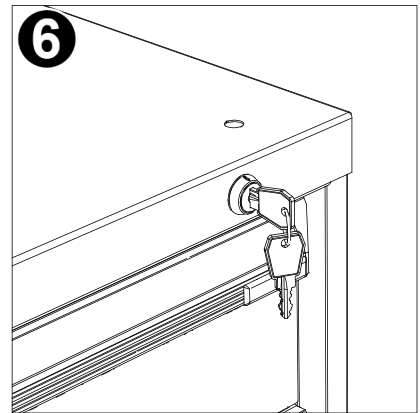
- 4** Holding your thumb and index finger tight on key, pull key out while holding core to lock.



- 5** Store core removal key in safe location.



- 6** Code matched key set can now be inserted and used as normal.



Cabinets MUST be bolted together side to side and anchored to the floor before loading to prevent tipping.

Once installation is completed, a copy of the installation instruction booklet **MUST** remain with the customer.

Regular Cleaning

Use a soft clean cloth and mild detergent to wipe the surfaces. Dry completely with a soft clean cloth using straight line motion.



Do not use abrasives (ex. scratchers, steel wool).

WARRANTY

Borroughs extends to the original purchaser from the date of purchase a limited lifetime warranty for Borroughs' Automotive Workstations and Modular Drawer Cabinets against manufacturing defects in material and workmanship. For all other products Borroughs extends to the original purchaser from the date of purchase a 5-year limited warranty against manufacturing defects in material and workmanship.

If a Borroughs product fails to perform because of a manufacturing defect, Borroughs will examine it. If found defective, it will be repaired or replaced at our option. This warranty applies only to Borroughs products acquired directly from Borroughs or from Authorized Borroughs Dealers.

This warranty does not apply to any product which has been subject to misuse, negligence, or accident; has been damaged in shipment, storage, or installation; has been misapplied or has been modified or repaired by unauthorized persons or been repaired with non-standard Borroughs replacement parts. This warranty specifically excludes claims for indirect, incidental, or consequential damages arising in any way from a product defect. This warranty is exclusive, and exists in lieu of all other warranties, either expressed or implied.

This warranty gives you specific legal rights; you may also have other rights which may vary from state to state.

Contact your Borroughs Selling Dealer, to obtain warranty service. You must make a written claim. Provide a copy of your purchase record and a written description of the warranty problem with your claim.

If you are unable to contact your Dealer, contact:

Borroughs, Customer Service Manager
3002 N. Burdick St., Kalamazoo, MI 49004-3483.
Phone: 1-800-748-0227