

WORKMASTER SERIES
Part 2

IAC INDUSTRIES

3831 S BULLARD AVE., GOODYEAR, AZ 85338
Phone (714) 990-8997 Fax (714) 990-0557
www.iacindustries.com

Workmaster Electrical
Assembly Instructions

REV. (100018P65)

Table Of Contents

Page

2	Warnings:
3-5	Workmaster SE1 Electrical Channel Installation
6-9	Workmaster SE2 Electrical in Risers Installation
10-13	Workmaster SE3 Electrical Combination Installation
14-16	Workmaster SE4 Electrical Panel Installation
17	Workmaster J-Box 20 Amp Electrical Installation

Incorrect or faulty installation of IAC supplied electrical systems may cause damage to the products and could cause severe personal injury.

IAC Industries STRONGLY RECOMMENDS that all the electrical systems it supplies must be wired and assembled by qualified professional electricians only. It is the responsibility of the customer to insure that all electrical assembly work and connections to power sources be done by qualified professional electricians. IAC accepts NO responsibility for damage caused by incorrect wiring, assembly, modification or improper use if the electrical systems it provides.



WARNING:

ALL PARTICLE BOARD USED IN IAC INDUSTRIES PRODUCTS ARE SOURCED ONLY FROM VENDORS THAT ARE CARB ATCM PHASE 2 AND TSCA TITLE VI COMPLIANT WITH VALID CERTIFICATES. Drilling, Sawing, Sanding or Machining Wood products can expose you to wood dust, a substance known to the state of California to cause cancer. Avoid inhaling dust generated from wood products or use a dust mask to other safeguards for personal protection. This product can expose you to chemicals, including formaldehyde, which is known to the state of California to cause cancer, and methanol, which is known to the state of California to cause birth defects or other reproductive harm. For more information please visit, www.P65WARNINGS.CA.GOV/WOOD. COPY OF VENDOR CERTIFICATE AVAILABLE UPON REQUEST.

Workmaster SE1 Electrical Channel Installation:
Hardware Kit HWR038

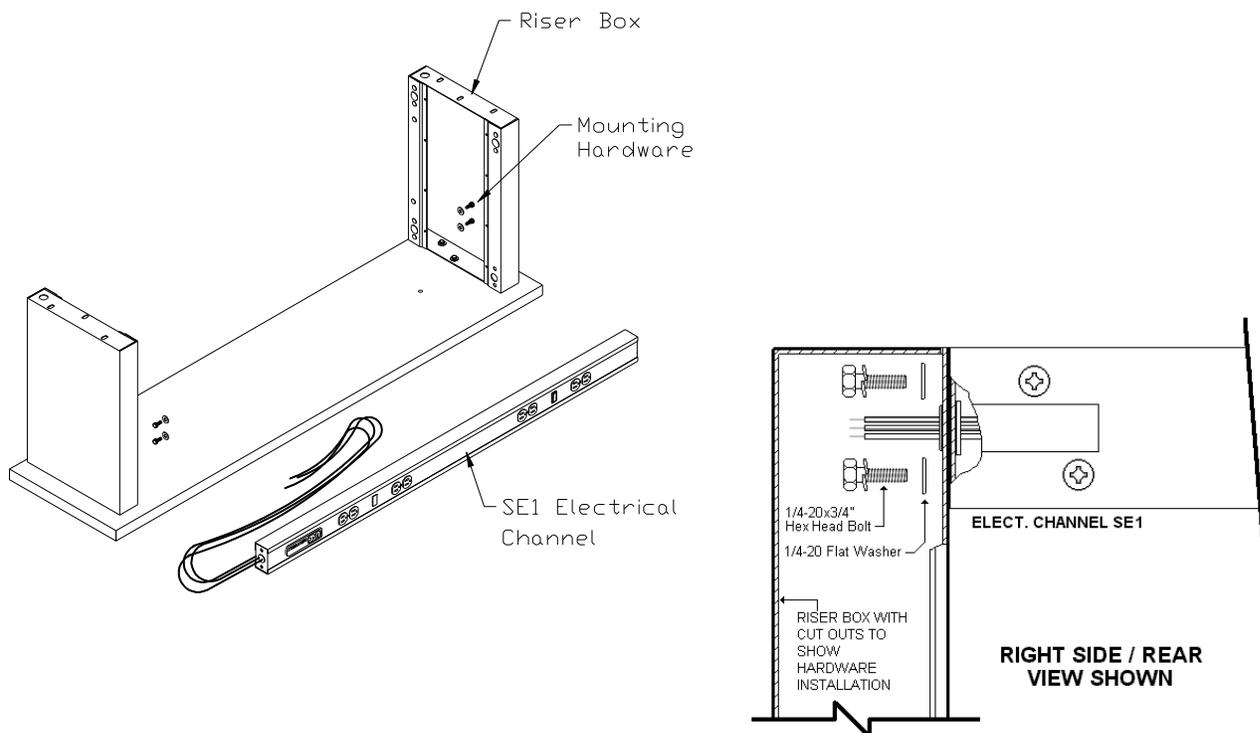
Item	Description	QTY
A	Power Cord Sub-Assy 9' 14/3 SJT	1
B	Bolt #14A X 1.00 Hex Head Washer	2
C	Nipple 1/2" X 3" PVC	1
D	Lock nut 1/2" EMP Connector	2
E	Wire Nut Yellow	3
F	J-Box Cover Blank	1
G	J-Box 2" x 4"	1
H	Strain Relief .875 Black	1

Step 1:

Select desired location of SE1 electrical channel. It can be mounted at the top of the riser boxes either in the front or at the rear, or at the bottom of the rise boxes at the rear. The SE1 electrical channel can also be mounted with the duplexes facing the front or the rear of the bench.

Step 2:

The SE1 Electrical Channel is installed between the riser boxes by feeding the wires through the 7/8 hole in the riser box and aligning the ends of the electrical channel with the mounting holes in the riser boxes. From the inside of the riser boxes attach the electrical channel by threading the 1/4-20 hex head bolts and 1/4" flat washers into the inserts in the ends of the electrical channel. Tighten this hardware. Center the riser boxes on the length of the instrument shelf and tighten the hardware holding the riser boxes to the instrument shelf.



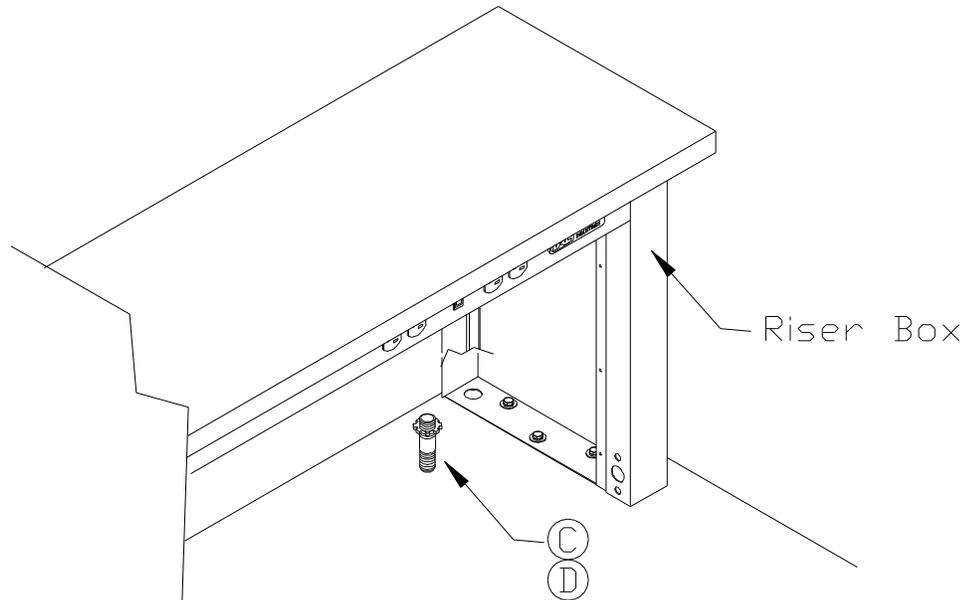
Step 3:

Carefully turn the instrument shelf over and position it on top of the worksurface as shown in the Workmaster Assembly Instructions Part 1. Align the slots in the bottoms of the riser boxes with the inserts in the worksurface and thread the 1/4-20 hex head bolts and 1/4" flat washers into the inserts. Center the instrument shelf in the length of the worksurface and tighten the hardware.

Workmaster SE1 Electrical Channel Installation: (cont)

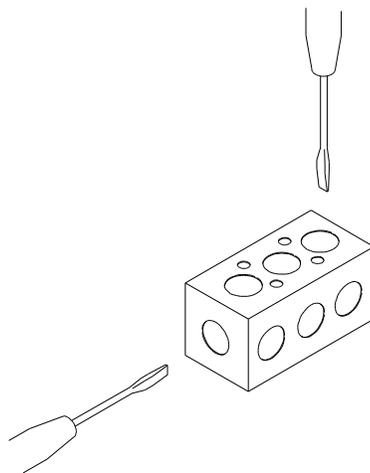
Step 4:

Thread a 1/2" lock nut onto one end of the 1/2" x 3" plastic nipple about 1/2 way down the threads. Install the plastic nipple through the 7/8" hole in the bottom of the riser box as shown. If you have positioned the electrical duplexes facing the front of the bench the nipple will be located on the right side of the bench. If you have positioned the electrical duplexes facing rear the nipple will be on the left side of the bench.



Step 5:

Remove one of the end knock outs in the bottom of the J-Box and one of the knock outs in the end of the J-Box as shown by punching them with the end of a screw driver or similar tool and working it back and forth until the tabs break off.

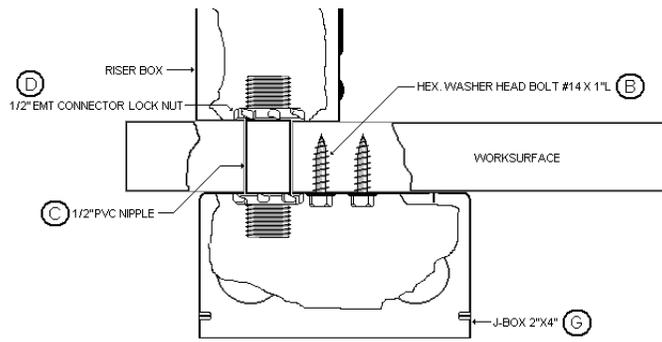


Workmaster SE1 Electrical Channel Installation: (cont)

PLEASE NOTE: The nipple supplied is designed to protect the wires going through the worksurface only and may on some worksurfaces be loose and not tighten down as shown in the drawing below.

Step 6:

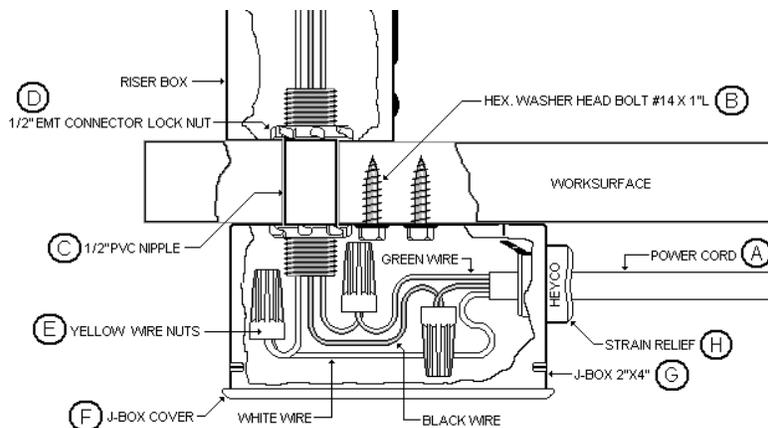
Install the J-Box by fitting the hole in the top of the J-Box over the 1/2" nipple that extends through the bottom of the worksurface. Thread a 1/2" lock nut onto the nipple and tighten as much as possible by hand. Attach the J-Box to the underside of the worksurface using two #14A x 1.00 hex head bolts. To make this easier you can drill two 3/16" pilot holes in the worksurface before installing the bolts.



J-BOX SIDE VIEW SHOWN WITH CUTOUTS

Step 7:

Feed the power cord into the hole in the end of the J-Box pulling it through the J-Box about 12 inches. Feed the wires from the SE1 channel down through the nipple in the riser box into the J-Box. Do not pull them too tight. Attach the like color wires of the SE1 channel to the wires of the power cord using the yellow wire nuts. (If you are wiring a 20 AMP service see page 17.) Tighten the wire nuts so that they cannot be pulled apart using moderate pull pressure. When all three wires are connected carefully pull the excess SE1 wires up into the riser box while at the same time pull the excess power cord out of the J-Box. One to two inches of the power cord will remain in the J-Box for the installation of the strain relief. Install the strain relief onto the power cord by wrapping it around the power cord, compressing it with pliers and inserting it into the end hole in the J-Box. Release the pliers. The strain relief will expand to hold the power cord in place. (If you are wiring a 20 AMP service see page 17) Carefully push the remaining wire connections into the J-Box and attach the J-Box cover using the screws supplied.



Step 8:

The electrical system must be tested for continuity before the assembly process is completed. Testing of the electrical system must be done by a qualified electrician only.

Step 9:

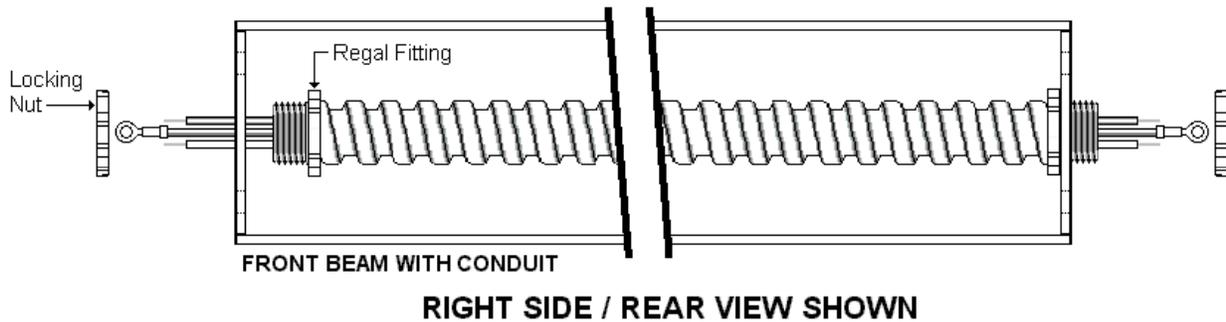
Install the riser box covers referencing page 12 of Part 1 of the Workmaster Assembly Instructions.

Workmaster SE2 Electrical in Risers:

Attach the SE2 Electrical in Risers using the hardware supplied in the instrument shelf hardware kit. The right and left SE2 riser boxes for the instrument shelf are installed as shown in Part 1 of the Workmaster Series Instructions pages 11 & 12.

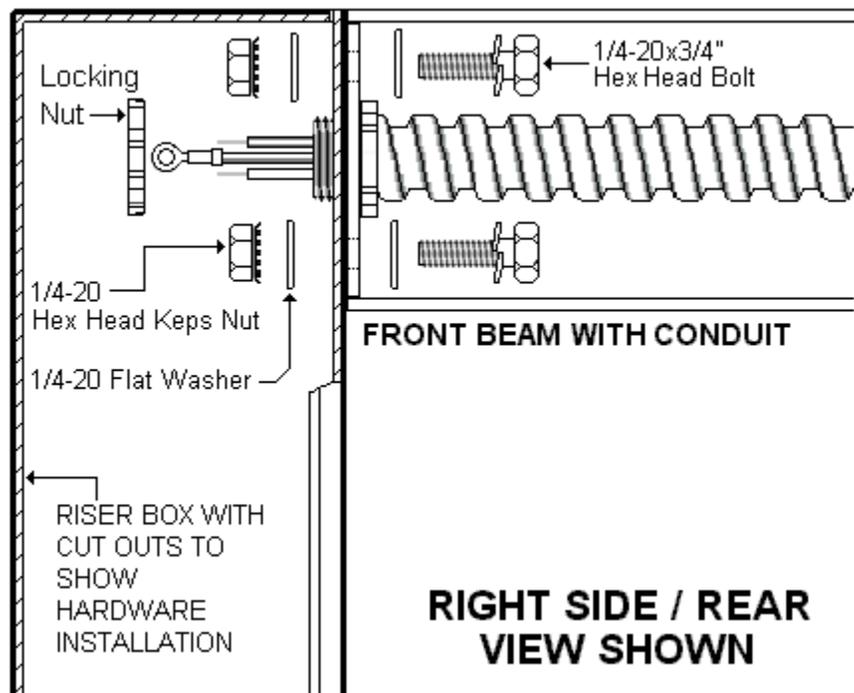
Step 1:

Install SE2 conduit sub-assembly into the instrument shelf support beam as shown below by removing the lock nuts from the conduit fittings at each end of the conduit wire sub-assembly and feeding the ends of the wires through the 7/8" hole at each end of the support beam. Do not install the lock nuts at this time.



Step 2:

The support beam is installed between the riser boxes by feeding the wires through the 7/8" hole in the riser box and aligning the ends of the support beam with the mounting holes in the riser boxes. Attach the support beam to the riser boxes using the 1/4-20 x .75 hex head bolts, 1/4" flat washers and 1/4-20 hex keps nuts positioned on the inside of the riser box. Tighten this hardware. Feed the lock nut over the wires and thread onto the conduit fittings inside each riser box. Tighten these nuts. Center the riser boxes on the length of the instrument shelf and install the riser box mounting hardware as shown in Part 1 of the Workmaster Series Instructions pages 11 & 12 and tighten as instructed.



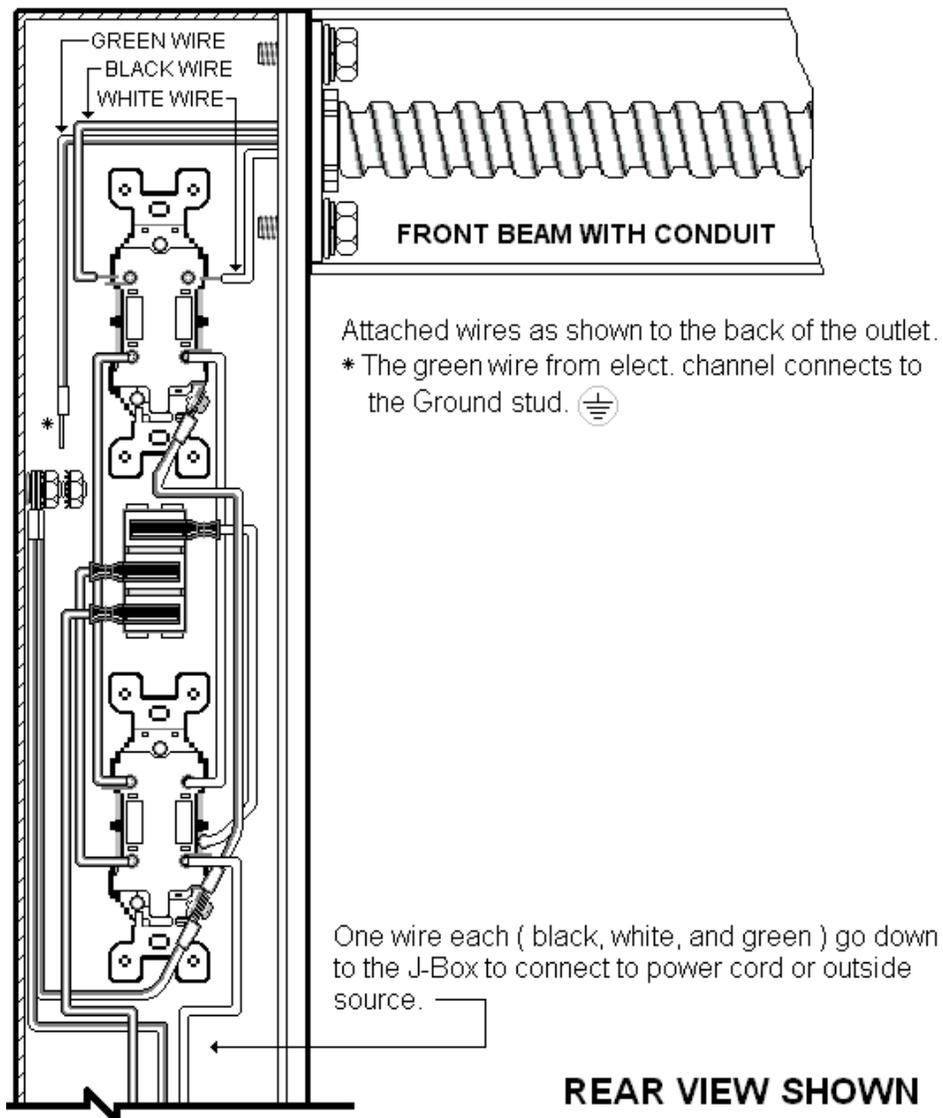
Workmaster SE2 Electrical in Risers: (cont)

Step 3:

Carefully turn the instrument shelf over and position on top of the worksurface as shown in the Workmaster Assembly Instructions Part 1 page 12.

Step 4:

Install the conduit wiring to the duplexes of the SE2 risers box assemblies by routing the wires as shown below. The black and white wires are inserted into the back of the duplex outlets located at the top of the right and left side SE2 riser box assemblies. Each wire color must be inserted into the like wire color of the duplex, black wires on the black side and white wires on the white side. The the green wires are attached to the ground stud on inside of each riser box.

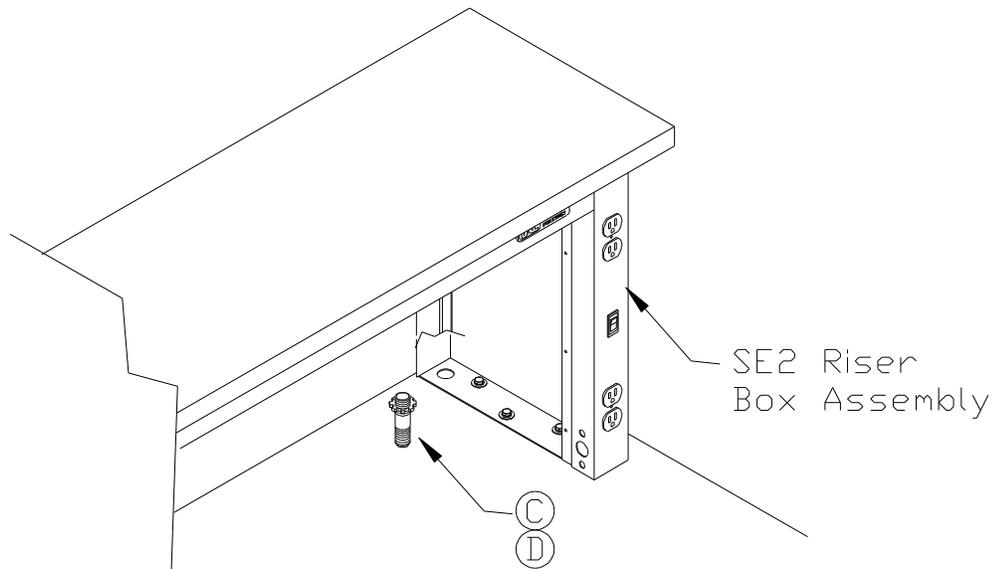


Workmaster SE2 Electrical in Risers: (cont)
Hardware Kit HWR038

Item	Description	QTY
A	Power Cord Sub-Assy 9' 14/3 SJT	1
B	Bolt #14A X 1.00 Hex Head Washer	2
C	Nipple 1/2" X 3" PVC	1
D	Lock nut 1/2" EMP Connector	2
E	Wire Nut Yellow	3
F	J-Box Cover Blank	1
G	J-Box 2" x 4"	1
H	Strain Relief .875 Black	1

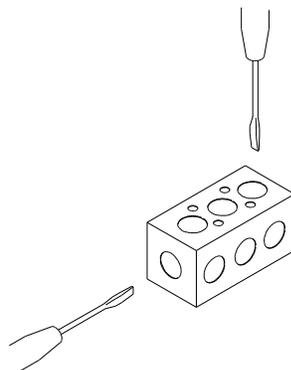
Step 5:

Thread a 1/2" lock nut onto one end of the 1/2" x 3" plastic nipple about 1/2 way down the thread. Install the plastic nipple through the 7/8" hole in the bottom of the riser box as shown. The nipple will be located on the right side of the bench.



Step 6:

Remove one of the end knock outs in the bottom of the J-Box and one of the knock outs in the end of the J-Box as shown by punching them with the end of a screw driver or similar tool and working it back and forth until the tabs break off.

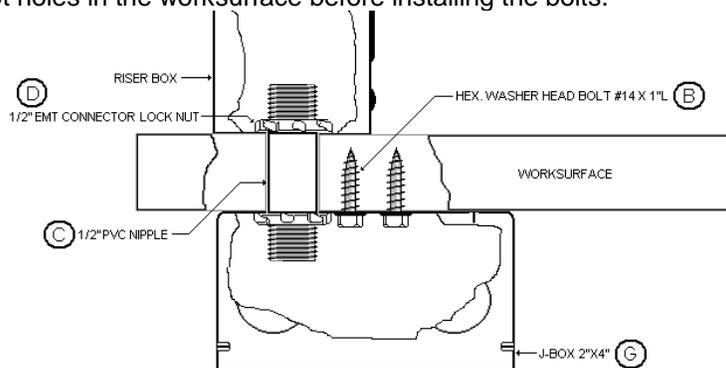


Workmaster SE2 Electrical in Risers: (cont)

PLEASE NOTE: The nipple supplied is designed to protect the wires going through the worksurface only and may on some worksurfaces be loose and not tighten down as shown in the drawing below.

Step 7:

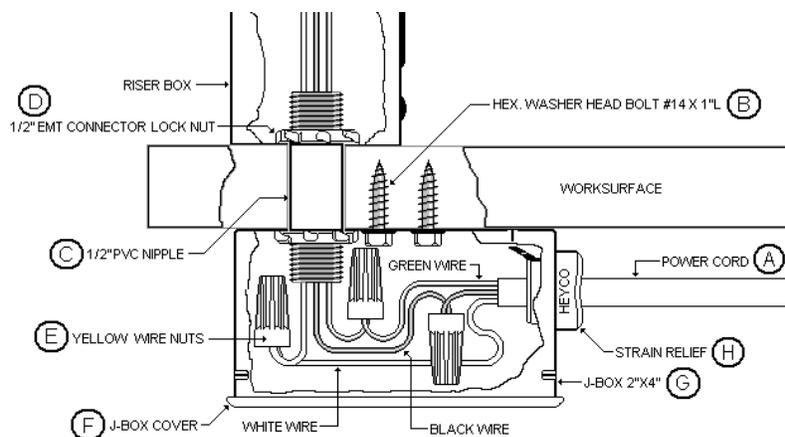
Install the J-Box by fitting the hole in the J-Box over the 1/2" nipple that extends through the bottom of the riser box. Thread a 1/2" lock nut onto the nipple and tighten as tight as possible by hand. Attach the J-Box to the underside of the worksurface using two #14A x 1.00 hex head bolts. To make this easier you can drill two 3/16" pilot holes in the worksurface before installing the bolts.



J-BOX SIDE VIEW SHOWN WITH CUTOUTS

Step 8:

Feed the power cord into the hole in the end of the J-Box pulling it through the J-Box about 12 inches. Feed the wires from the SE2 risers down through the nipple in the riser box into the J-Box. Do not pull them too tight. Attach the like color wires of the SE2 risers to the wires of the power cord using the yellow wire nuts. (If you are wiring a 20 AMP service see page 17) Tighten the wire nuts so that they cannot be pulled apart using moderate pull pressure. When all three wires are connected carefully pull the excess SE2 wires up into the riser box while at the same time pull the excess power cord out of the J-Box. One to two inches of the power cord will remain in the J-Box for the installation of the strain relief. Install the strain relief onto the power cord by wrapping it around the power cord, compressing it with pliers and inserting it into the end hole in the J-Box. Release the pliers. The strain relief will expand to hold the power cord in place. (If you are wiring a 20 AMP service see page 17) Carefully push the remaining wire connections into the J-Box and attach the J-Box cover using the screws supplied.



Step 9:

The electrical system must now be tested for continuity before the assembly process is completed. Testing of the electrical system must be done by a qualified electrician only.

Step 10:

Install the riser box covers referencing the Workmaster Assembly Instructions Part 1 page 12.

Workmaster SE3 Electrical Combination Installation:

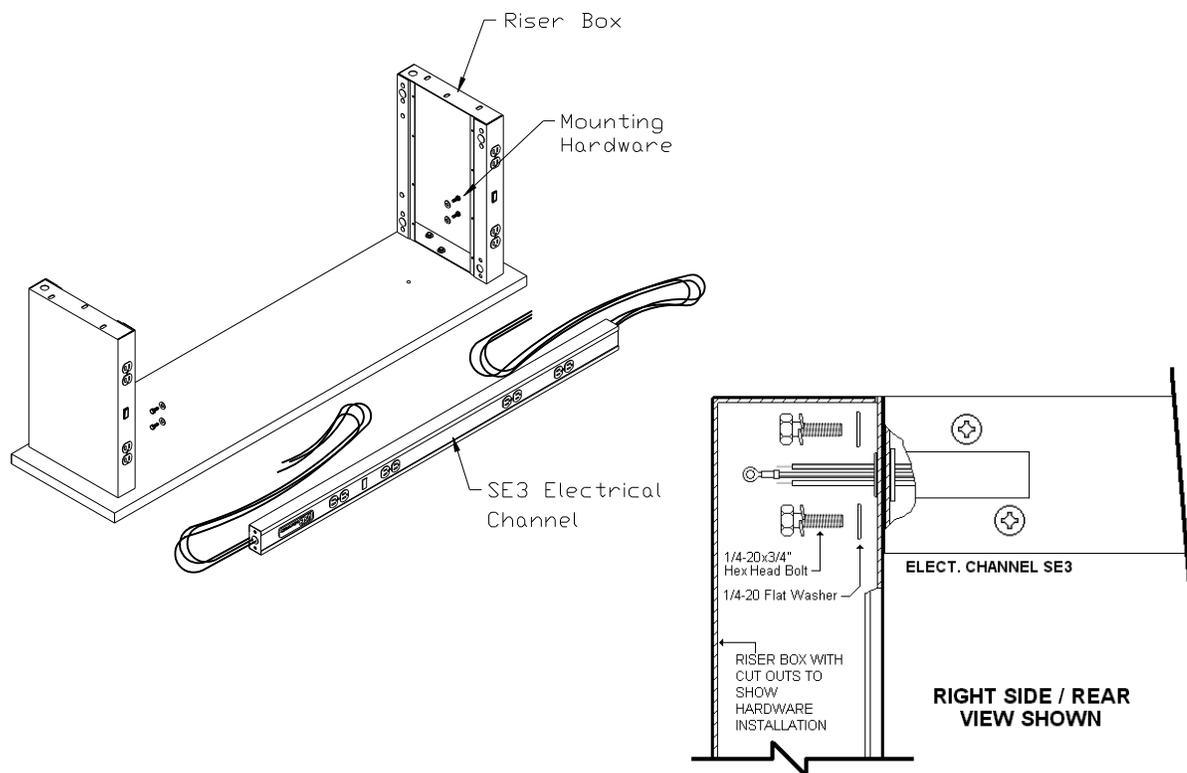
The right and left riser boxes with Electrical in them used for the instrument shelf are installed as shown in Part 1 of the Workmaster Series Instructions pages 11 & 12. Attachment of SE3 Electrical Channel is done using the hardware supplied in the instrument shelf hardware kit.

Step 1:

Select desired location of SE3 electrical channel. It can be mounted at the top of the riser boxes either in the front or rear of the riser boxes, or at the bottom of the riser boxes at the rear. The SE3 electrical channel can also be mounting with the duplexes facing the front or the rear of the bench.

Step 2:

The SE3 Electrical Channel is installed between the riser boxes by feeding the wires through the 7/8 hole in the riser box and aligning the ends of the electrical channel with the mounting holes in the riser boxes. From the inside of the riser boxes attach the electrical channel by threading the 1/4-20 hex head bolts and 1/4" flat washers into the inserts in the ends of the electrical channel. Tighten this hardware. Center the riser boxes on the length of the instrument shelf and tighten the hardware holding the riser boxes to the instrument shelf.



Step 3:

Carefully turn the instrument shelf over and position on top of the worksurface as shown in the Workmaster Assembly Instructions Part 1. Align the slots in the bottoms of the riser boxes with the inserts in the worksurface and thread the 1/4-20 hex head bolts and 1/4 flat washers into the inserts. Center the instrument shelf in the length of the worksurface and tighten this hardware.

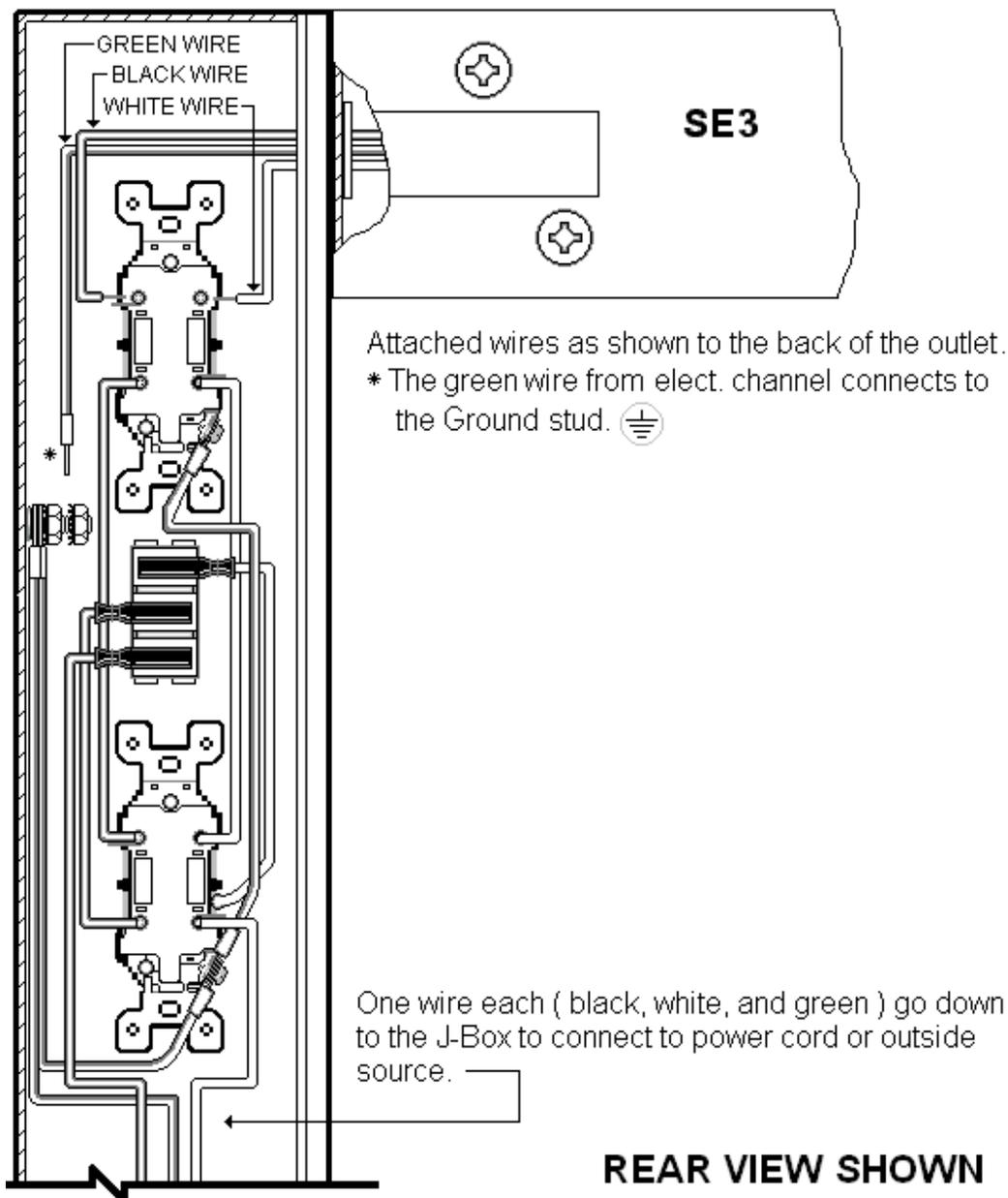
Workmaster SE3 Electrical Combination Installation: (cont)

Step 3:

Carefully turn the instrument shelf over and position on top of the worksurface as shown in the Workmaster Assembly Instructions Part 1 page 12.

Step 4:

Install the SE3 electrical channel wiring to the duplexes of the SE3 riser box assemblies by routing the wires as shown below. The black and white wires are inserted into the back of the duplex outlets located at the top of the right and left side SE3 riser box assemblies. Each wire color must be inserted into the like wire color of the duplex, black wires on the black side and white wires on the white side. The the green wires are attached to the ground stud on inside of each riser box.

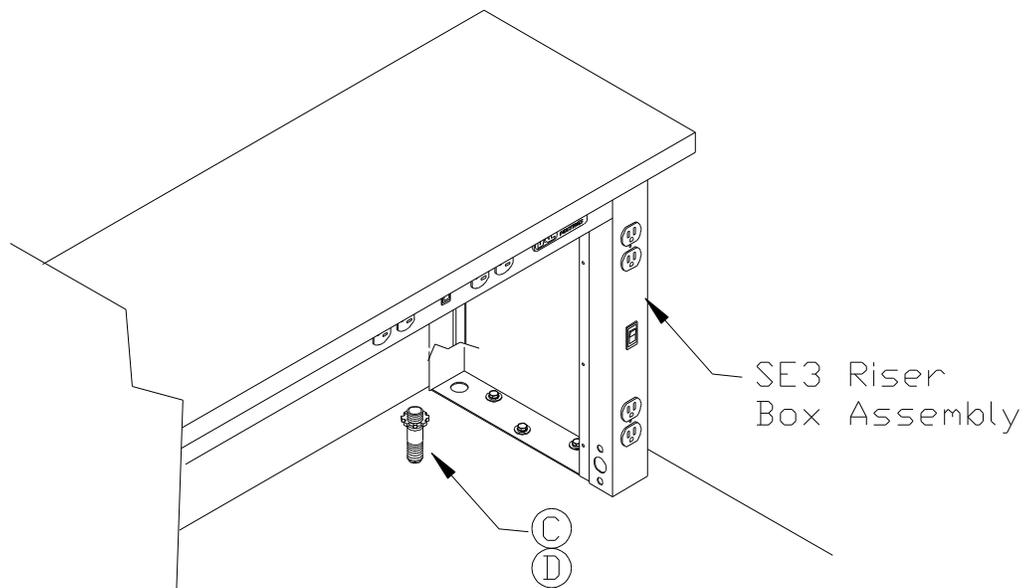


Workmaster SE3 Electrical Combination Installation: (cont)
Hardware Kit HWR038

Item	Description	QTY
A	Power Cord Sub-Assy 9' 14/3 SJT	1
B	Bolt #14A X 1.00 Hex Head Washer	2
C	Nipple 1/2" X 3" PVC	1
D	Lock nut 1/2" EMP Connector	2
E	Wire Nut Yellow	3
F	J-Box Cover Blank	1
G	J-Box 2" x 4"	1
H	Strain Relief .875 Black	1

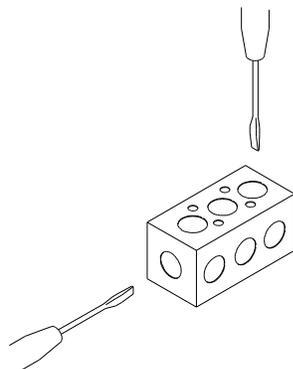
Step 5:

Thread a 1/2" lock nut onto one end of the 1/2" x 3" plastic nipple about 1/2 way down the thread. Install the plastic nipple through the 7/8" hole in the bottom of the riser box as shown. The nipple will be located on the right side of the bench.



Step 6:

Remove one of the end knock outs in the bottom of the J-Box and one of the knock outs in the end of the J-Box as shown by punching them with the end of a screw driver or similar tool and working it back and forth until the tabs break off.

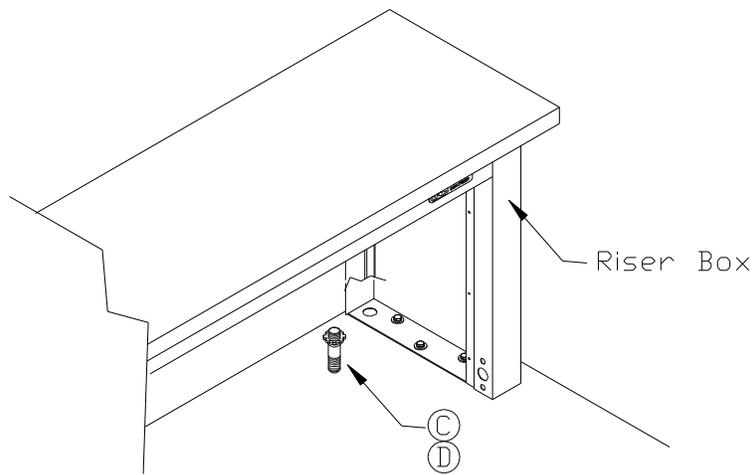


Workmaster SE4 Electrical Panel Installation:
Hardware Kit HWR038

Item	Description	QTY
A	Power Cord Sub-Assy 9' 14/3 SJT	1
B	Bolt #14A X 1.00 Hex Head Washer	2
C	Nipple 1/2" X 3" PVC	1
D	Lock nut 1/2" EMP Connector	2
E	Wire Nut Yellow	3
F	J-Box Cover Blank	1
G	J-Box 2" x 4"	1
H	Strain Relief .875 Black	1

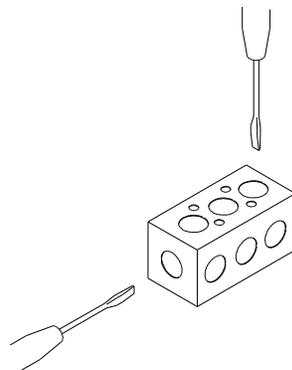
Step 1:

Thread a 1/2" lock nut onto one end of the 1/2" x 3" plastic nipple about 1/2 way down the thread. Install the plastic nipple through the 7/8" hole in the bottom of the riser box as shown. The nipple will be located on the right side of the bench.



Step 2:

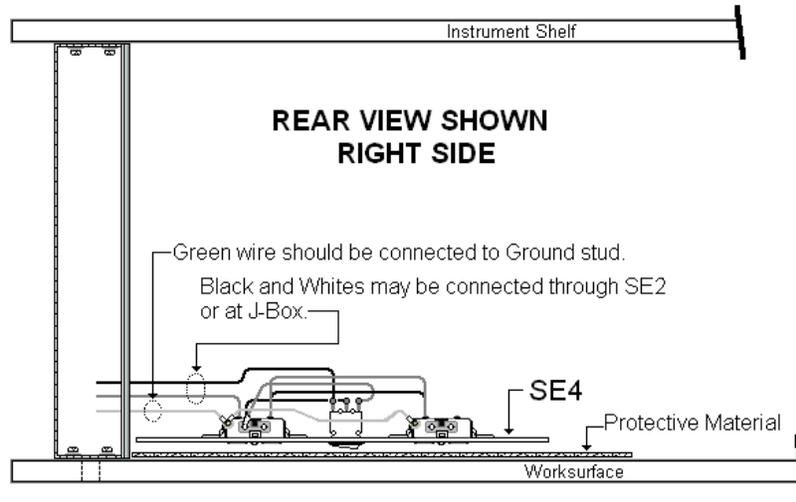
Remove one of the end knock outs in the bottom of the J-Box and one of the knock outs in the end of the J-Box as shown by punching them with the end of a screw driver or similar tool and working it back and forth until the tabs break off.



Workmaster SE4 Electrical Panel Installation: (cont)

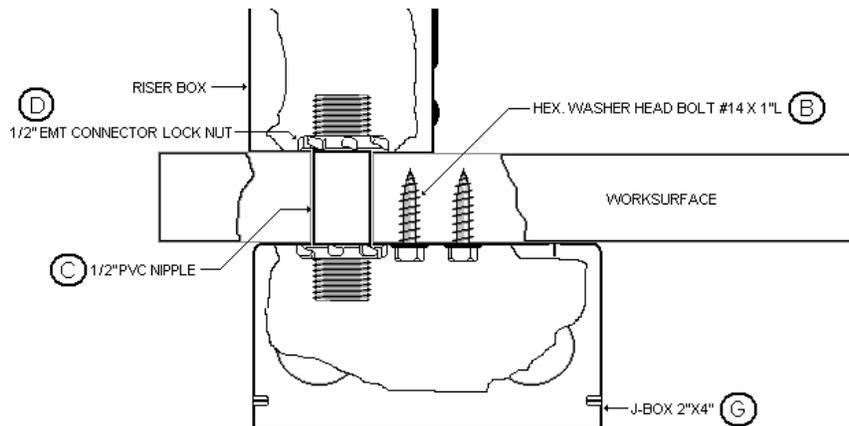
Step 3:

Place the SE4 sub-assembly face down on a protective material so that the open wires are facing the riser box as shown below.



Step 4:

Install the J-Box by fitting the hole in the J-Box over the 1/2" nipple that extends through the bottom of the worksurface. Thread a 1/2" lock nut onto the nipple and tighten as tight as possible by hand. Attach the J-Box to the underside of the worksurface using two #14A x 1.00 hex head bolts. To make this easier you can drill two 3/16" pilot holes in the worksurface before installing the bolts.

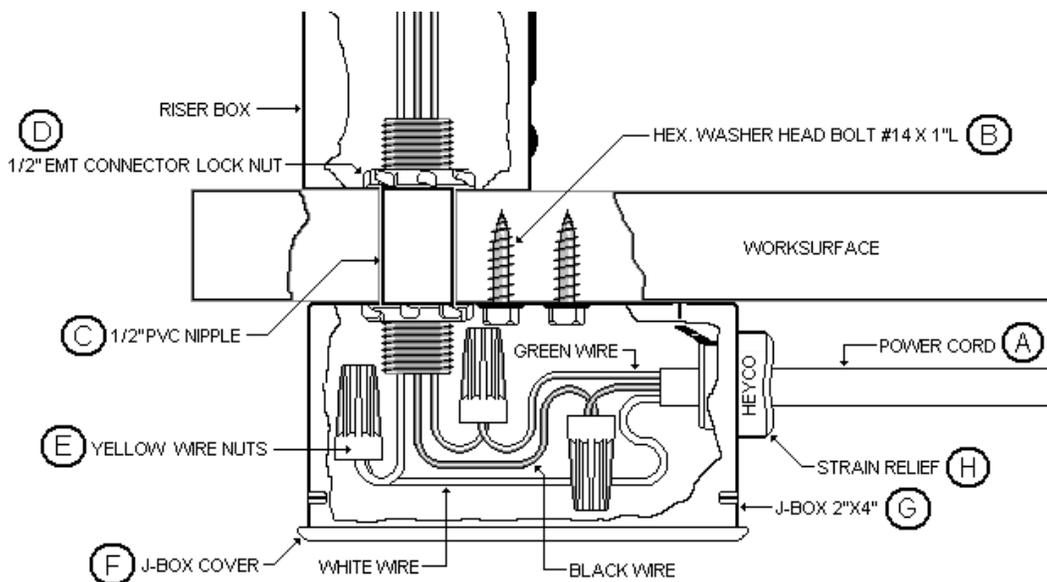


J-BOX SIDE VIEW SHOWN WITH CUTOUTS

PLEASE NOTE: The nipple supplied is designed to protect the wires going through the worksurface only and may on some worksurfaces be loose and not tighten down as shown in the drawing above.

Step 5:

Feed the power cord into the hole in the end of the J-Box pulling it through the J-Box about 12 inches. Feed the wires from the SE4 cover down through the nipple in the riser box into the J-Box. Do not pull them too tight. Attach the like color wires of the SE4 cover to the wires of the power cord using the yellow wire nuts. (If you are wiring a 20 AMP service see page 17) Tighten the wire nuts so that they cannot be pulled apart using moderate pull pressure. When all three wires are connected carefully pull the excess SE4 wires up into the riser box while at the same time pull the excess power cord out of the J-Box. One to two inches of the power cord will remain in the J-Box for the installation of the strain relief. Install the strain relief onto the power cord by wrapping it around the power cord, compressing it with pliers and inserting it into the end hole in the J-Box. Release the pliers. The strain relief will expand to hold the power cord in place. (If you are wiring a 20 AMP service see page 17) Carefully push the remaining wire connections into the J-Box and attach the J-Box cover using the screws supplied.



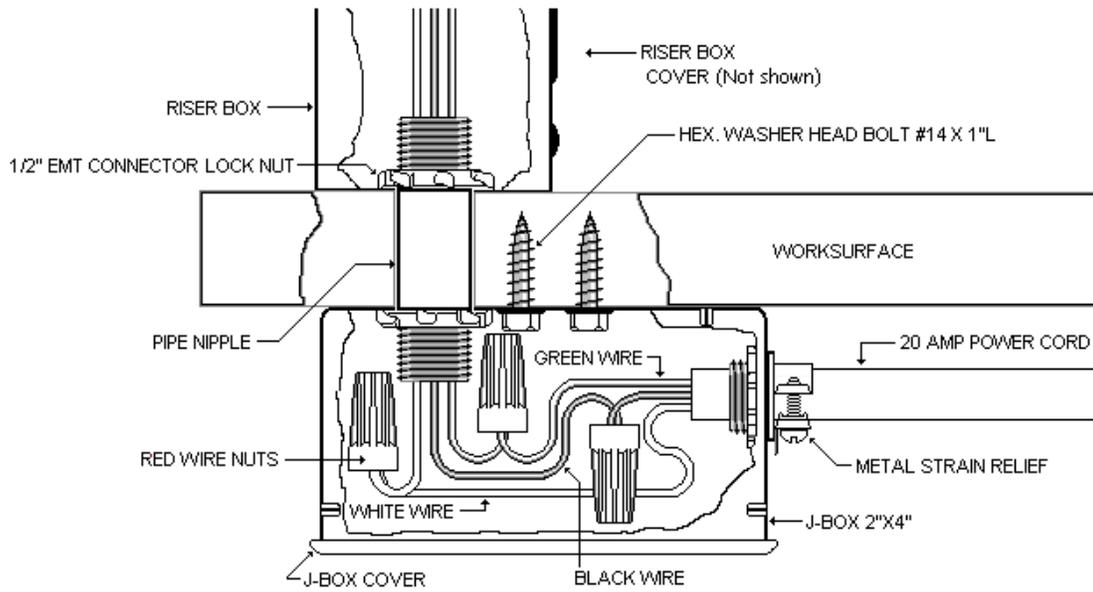
Step 6:

The electrical system must now be tested for continuity before the assembly process is completed. Testing of the electrical system must be done by a qualified electrician only.

Step 7:

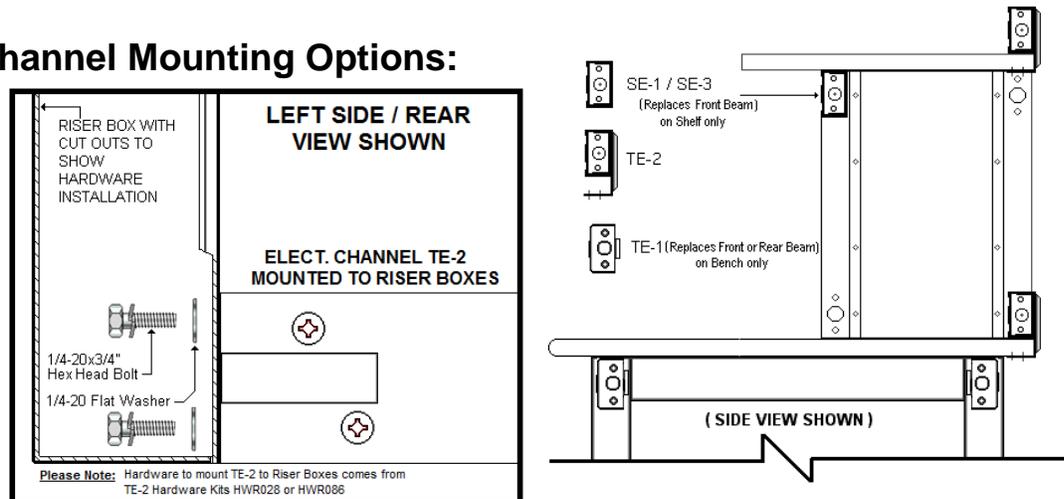
Secure the SE4 Cover sub-assembly by referencing to the Workmaster Assembly Instructions Part 1 page 12.

Workmaster J-Box 20 Amp Electrical Installation:
(Shown for parts reference only)



**J-BOX FOR 20 AMP CONNECTION
WITH PART LISTING**

Electrical Channel Mounting Options:



PLEASE NOTE:

TE-2 can be mounted between riser boxes using hardware kit HWR028 or HWR086 (for Maple worksurfaces). If your order has SE-1, SE-2, SE-3, or SE-4 you have three options in mounting the TE-2 Electrical Channel. **Note: TE-1 or 2 CAUTION: Risk of Electric Shock. Do NOT plug into another Relocatable power tap.**

1. Mount in lower back as shown in the above drawings without Mounting brackets using hardware supplied with Hardware kits to between riser boxes attaching TE-2 from the inside of the riser boxes.
2. Mounting it on the top rear between the two riser boxes (not shown) using the same hardware list above in option 1.
3. Mounting it on the top rear of the riser box as shown above using hardware kit HWR028 or HWR086 (for Maple worksurfaces).