

# **MODEL 6209555 WORKSTATION DOCKING KIT**

## **OWNERS MANUAL**



### **WARNING**

**You must thoroughly read and understand this manual before operating the equipment, paying particular attention to the Warning & Safety instructions.**

# SAFETY INSTRUCTIONS



**Safety Awareness Symbols** are inserted into this manual to alert you to possible **Safety Hazards**. Whenever you see these symbols, follow their instructions.



The **Warning Symbol** identifies special instructions or procedures which, if not correctly followed, could result in personal injury.

The **Caution Symbol** identifies special instructions or procedures which, if not strictly observed, could result in damage to or destruction of equipment.

1. **KEEP GUARDS IN PLACE** and in working order.
2. **REMOVE WRENCHES AND OTHER TOOLS.**
3. **KEEP WORK AREA CLEAN.**
4. **DON'T USE IN DANGEROUS ENVIRONMENT.**  
Don't use Workstation in damp or wet locations. Workstation is for indoor use only. Keep work area well lit.
5. **KEEP ALL VISITORS AWAY.** All visitors should keep a safe distance from work area.
6. **MAKE WORK AREA CHILD-PROOF** with padlocks.
7. **DON'T FORCE THE WORKSTATION.** It will do the job better and safer if used as specified in this manual.
8. **USE THE RIGHT TOOL.** Don't force the Workstation to do a job for which it was not designed.
9. **WEAR PROPER APPAREL.** Wear no loose clothing, gloves, neckties, or jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
10. **ALWAYS USE SAFETY GLASSES.**

11. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
12. **MAINTAIN WORKSTATION WITH CARE.** Follow instructions in this Manual for lubrication and preventive maintenance.
13. **DISCONNECT POWER BEFORE SERVICING.** Because this Workstation operates on 12 volts DC from battery, power must be disconnected before servicing.
14. **CHECK DAMAGED PARTS.** A guard or other part that is damaged or will not perform its intended function, should be properly repaired or replaced.
15. **KNOW YOUR EQUIPMENT.** Read this manual carefully. Learn its application and limitations as well as specified potential hazards.
16. **KEEP ALL SAFETY DECALS CLEAN AND LEGIBLE.** If safety decals become damaged or illegible for any reason, replace immediately. Refer to replacement parts illustrations in this Manual for the proper location and part numbers of safety decals.
17. **DO NOT OPERATE THE WORKSTATION WHEN UNDER THE** influence of drugs, alcohol, or medication.

This kit is intended as a part of a workstation and lift **ONLY**. Any use other than this may cause personal injury and void the warranty.



To assure the quality and safety of your machine and to maintain the warranty, you **MUST** use original equipment manufacturers replacement parts and have any repair work done by a qualified professional.

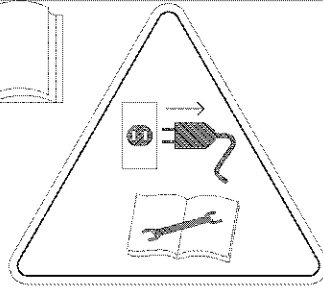
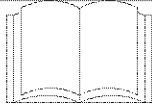
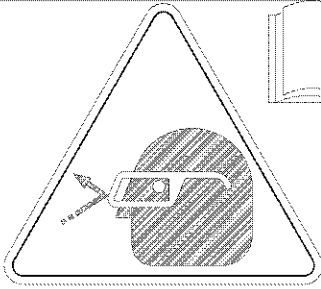
**ALL** operators of this equipment must be thoroughly trained **BEFORE** operating the equipment.

This machine is for indoor use **ONLY**. Do **NOT** power wash machine.

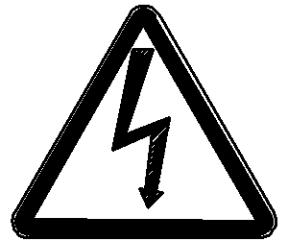


# SAFETY INSTRUCTIONS

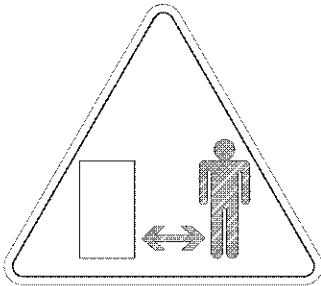
## SAFETY SYMBOL REVIEW



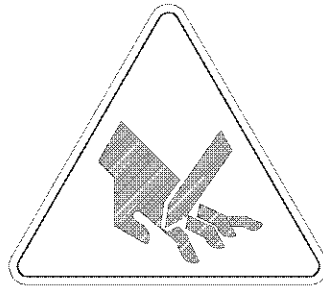
Symbols for Read operators manual, wear safety glasses and disconnect power before servicing.



Symbol identifying a panel, cover, or area as having live electrical components within.



Symbol to keep visitors a safe distance away from the Workstation.



Symbol for sharp object which will cause serious injury.

## WORKSTATION DOCKING KIT

The Docking kit is designed to be used with the 6200980 & 6200985 Workstation. The kit allows the Workstation to be positioned behind the grinder more accurately and safely and has connections to allow the Workstation to be charged from the Grinder and used as a rear safety barrier.

## UNPACK THE CARTON

Inspect all items for shipping damage as they are removed from the shipping containers. If you find any damage, notify the carrier's claims agent and do not proceed further until the damage has been inspected by the agent. Refer also to the "Shipping and Receiving Instructions" packed with the unit.

Use care when unpacking. Miscellaneous parts, are wrapped separately. Verify that they are removed from the shipping carton so that they are not discarded by mistake.

**NOTE:** Before you install the Kit, read the following assembly procedure completely.

## CONTENTS

Safety Instructions/Specifications .....	Page 2 - 3
Service Requirement/ Grounding .....	Page 4 - 5
Assembly .....	Page 6 - 9
Electrical Wiring .....	Page 10 - 15
Operating Instruction .....	Page 16 - 17
Adjustments .....	Page 18
Parts Lists/Exploded Views .....	Page 20 - 21

# TRAINING REQUIRED/TORQUE REQUIREMENTS

## SKILL AND TRAINING REQUIRED FOR SERVICING

This Owners Manual is designed for technicians who have the necessary mechanical and electrical knowledge and skills to reliably test and repair the 620 Workstation. For those without that background, service can be arranged through a local distributor.

This Manual presumes that you are already familiar with the normal operation of the Workstation. If not, you should read the front of the Workstation Owners Manual, or do the servicing in conjunction with someone who is familiar with its operation.



PERSONS WITHOUT THE NECESSARY KNOWLEDGE AND SKILLS SHOULD NOT REMOVE ANY CONTROL OR GUARD PANELS OR ATTEMPT ANY INTERNAL TROUBLESHOOTING, ADJUSTMENTS, OR PARTS REPLACEMENT!

If you have questions not answered in this manual, please call your distributor. They will contact the manufacturer if necessary.

## TORQUE REQUIREMENTS

Throughout this manual we refer to torque requirements as "firmly tighten" or the like. For more specific torque values, refer to the information below.

### Bolts Going into a Nut, or Into a Thread Hole in Steel.

Refer to table at the right.

### Bolts Going into a Thread Hole in Aluminum.

Use the Grade 2 values in the table at the right.

### Socket-Head Screws

Use the Grade 8 values in the table at the right.

### Machine Screw

No. 6 Screws: 11 in.-lbs [0.125 kg-m]

No. 8 Screws: 20 in.-lbs [0.23 kg-m]

No. 10 Screws: 32 in.-lbs [0.37 kg-m]




	GRADE 2  SMOOTH HEAD	GRADE 5  3 MARKS on HEAD	GRADE 8  6 MARKS on HEAD
1/4 In. thread	6 ft-lbs (0.8 kg-m)	9 ft-lbs (1.25 kg-m)	13 ft-lbs (1.8 kg-m)
5/16 In. thread	11 ft-lbs (1.5 kg-m)	18 ft-lbs (2.5 kg-m)	28 ft-lbs (3.9 kg-m)
3/8 In. thread	19 ft-lbs (2.6 kg-m)	31 ft-lbs (4.3 kg-m)	46 ft-lbs (6.4 kg-m)
7/16 In. thread	30 ft-lbs (4.1 kg-m)	50 ft-lbs (6.9 kg-m)	75 ft-lbs (10.4 kg-m)
1/2 In. thread	45 ft-lbs (6.2 kg-m)	75 ft-lbs (10.4 kg-m)	115 ft-lbs (15.9 kg-m)

FIG. 1

# GROUNDING INSTRUCTIONS

## IMPORTANT GROUNDING INSTRUCTIONS

In case of a malfunction or breakdown, grounding reduces the risk of electrical shock by providing a path of least resistance for electrical current.

This Workstation has an electrical receptacle with an equipment grounding conductor. The receptacle must have a matching plug that is properly installed and grounded according to all local or other appropriate electrical codes and ordinances installed for charging.

Before plugging in the Workstation, make sure it will be connected to a supply circuit protected by a properly-sized circuit breaker or fuse. 15 amp minimum for 115V applications.



**DO NOT MODIFY THE RECEPTACLE PROVIDED; IF IT WILL NOT FIT THE PLUG, GET A CORD WITH THE PROPER PLUG.**

Always provide a proper electrical ground for your machine. An improper connection can cause a dangerous electrical shock. If you are unsure of the proper electrical grounding procedure, contact a qualified electrician.

### **115 VOLT MODEL ONLY.**

Plug the power cord into standard grounded receptacle as shown:



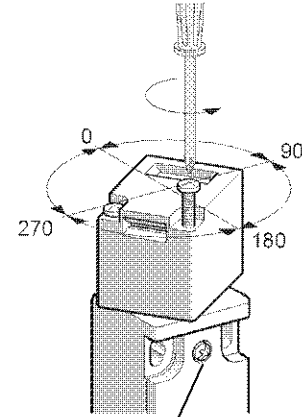
**FIG. 2**

# ASSEMBLE COMPONENTS TO WORKSTATION

## WIRING IN WORKSTATION

Raise the platform to the top, the platform should be level with the frame of the Workstation. Remove rear panel on the Workstation. Install the strain relief into the Safety Switch (refer to page 20 & 21). Then install the safety switch, key, relay and strain reliefs to Workstation as shown on page 20 & 21. Use Safety Screw Tool 3706040 to tighten Safety Screws. Align the Key to engage in the Safety Switch when the platform is fully raised and rotated to the up position. This may require you to remove two screws on the end of the door switch and rotate head so that the key may engage in the safety switch SEE FIG 3. Reinstall the screws after making this adjustment.

Next install Workstation Cord. Insert cord through large hole in top of frame and fix to frame with screws. Use strain relief and route cord through hole in reinforce panel inside of frame.



SCREW TO OPEN CONNECTION BOX ON SAFETY SWITCH

FIG 3



**IF IT BECOMES NECESSARY TO MOVE THE WORKSTATION PLATFORM, REINSTALL THE REAR PANEL TO PREVENT PERSONAL INJURY.**

To insert the strain relief place it on the cord and use pliers to compress strain relief and push into hole in frame. Run platform to top position to verify clearance for cord, make any necessary adjustments. Push female terminals from Blue wire onto spade terminals 2 and 0 on relay (refer to wiring diagram). Push female terminals from Orange and Brown wire onto spade terminal 6 & 1 on relay. The other 3 wires will be connected later.

Now open the connection box on the Safety Switch and insert 5 wire safety switch cord into connection box through the strain relief. Connect blue wire with label "144SS14" to screw terminal 14. Connect red wire with label "144SS13" to screw terminal 13. Connect black wire with label "144SS22" to screw terminal 22. Connect white wire with label "144SS32" to screw terminal 32. Connect brown wire with jumper to screw terminals 31 & 21. Tighten strain relief on Safety Switch to cord (rotate outer cap clockwise).

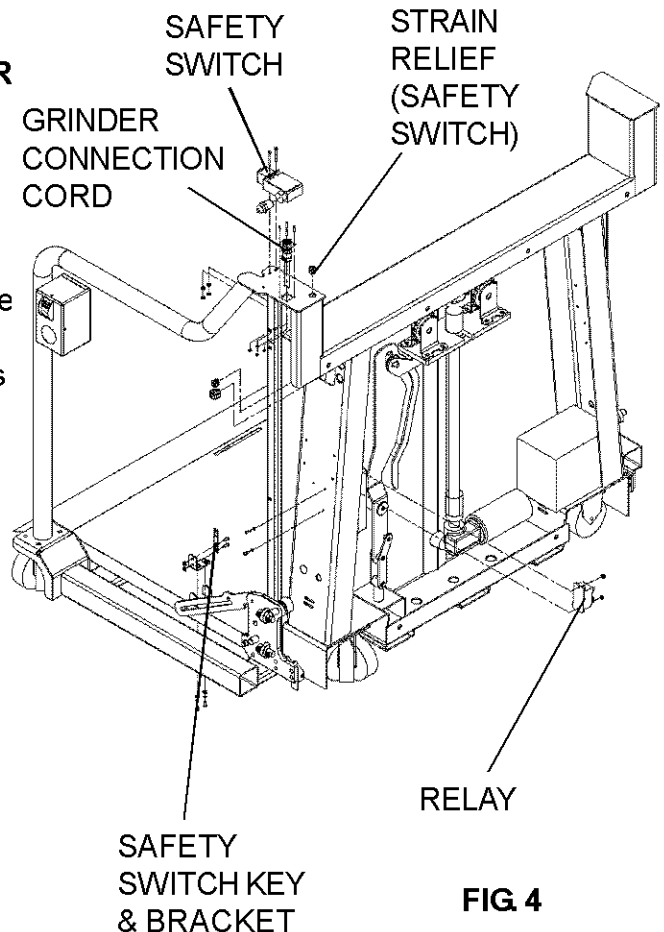


FIG 4

## ASSEMBLE COMPONENTS TO WORKSTATION - CONTINUED

Route the safety switch cord around Grinder Connection cord and install the two strain reliefs (one on the top next to the safety switch and one in the top of the reinforce panel inside workstation frame). Connect white wire from safety switch cord to white wire from Workstation cord (refer to wiring diagram). Connect black wire from safety switch cord to black wire from Workstation cord. Connect brown wire from safety switch cord to red wire from Workstation cord.



**REMOVE 40 AMP FUSE FROM FUSE HOLDER! FAILURE TO DO SO COULD RESULT IN SHOCK AND PERSONAL INJURY.**

After removing the fuse, disconnect the charger cord from the Switch & Charge cord (or transformer jumper wires - 220V model). Connect the brown wire from Switch cord (or transformer) to terminal 7 on relay. Connect the blue wire from the Switch cord (or transformer) to terminal 3 on the relay. Cut off the two male terminals from from charger cord and replace with two female terminals. Connect the brown wire from the charger cord (with new female terminal) to terminal 8 on the relay. Connect the blue wire from the charger cord (with new female terminal) to terminal 8 on the relay.

Disconnect the red wire from the Switch & Charge cord that is connected to the red wire that is part of the 4 relay harness. Connect the red wire with the female terminal to the blue wire from the Workstation Cord. Connect the red wire with the male terminal to the red wire on the Workstation cord. Connect the Ground wires to the Primary Ground stud, use the nuts on the stud. Use the Cable ties and cable tie mounts to secure the loose wires. Reinstall the 40 Amp fuse and rear panel. Test the function of the workstation to make sure everything is working correctly.

# ASSEMBLE COMPONENTS TO GRINDER

There are two Rear Grinder Add On Panels shipped with your Docking Kit. These panels must be attached to the rear of the grinder for proper Workstation match up to the grinder. See items on page 20 and 21 to understand these parts and their fasteners. FIG. 5 and 6 shows the Add On Panels in place on two grinders.

There is a cord with an AMP connector attached to the right rear Add On Panel when looking at the back of the grinder. This cord connects the battery charger power and the Workstation safety switch into the grinder Control Panel. This cord must be routed from the Add On Panel to the Control Panel.

Route this cord through the grinder in FIG. 5 by running the cord through the hole in the frame as indicated in FIG. 5 using one of the strain reliefs supplied. Then the cord will lay on the floor of the grinder and enter the Control Panel through the hole indicated in FIG. 7. To run the cord through this hole, remove the hole plug and install the cord with the second strain relief supplied.

Route this cord through the grinder in FIG. 6 by running the cord through the hole in the frame as indicated in FIG. 6 using one of the strain reliefs supplied. Then the cord will be routed across the top inside of the grinder using cable tie mounts and cable ties and enter the Control Panel through the hole indicated in FIG. 8 on page 10. To run the cord through this hole, remove the hole plug and install the cord with the second strain relief supplied.

The wiring connections within the Control Panel on the MANUAL control grinders are the three power wires for charging the battery attach as follows:

- Wire 143DOOR1 to terminal TB1-14
- Wire 143DOOR2 to terminal TB1-15
- Wire 143DOOR4 to terminal TB1-17

The three safety switch wire connections attach as follows:

- Wire 143PWR1 to terminal TBG-2
  - Wire 143PWR2 to terminal TBW-6
  - Wire 143GRND to terminal TBW-14
- See FIG. 9 on page 11.

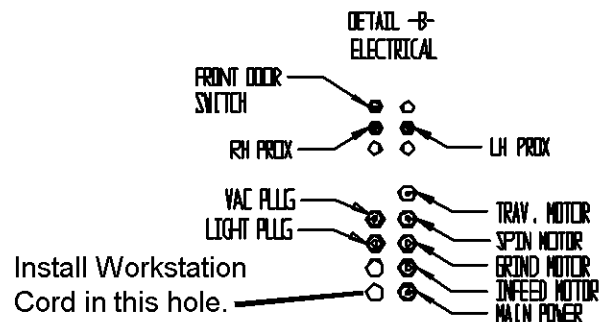
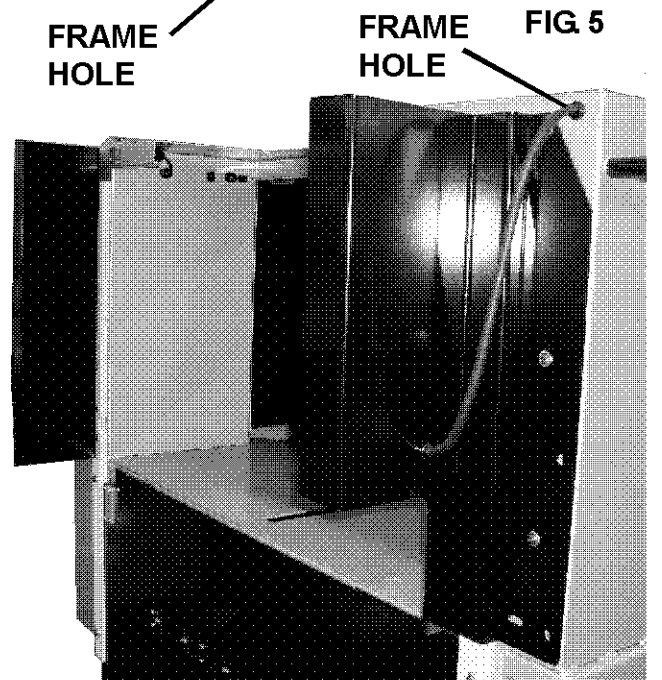
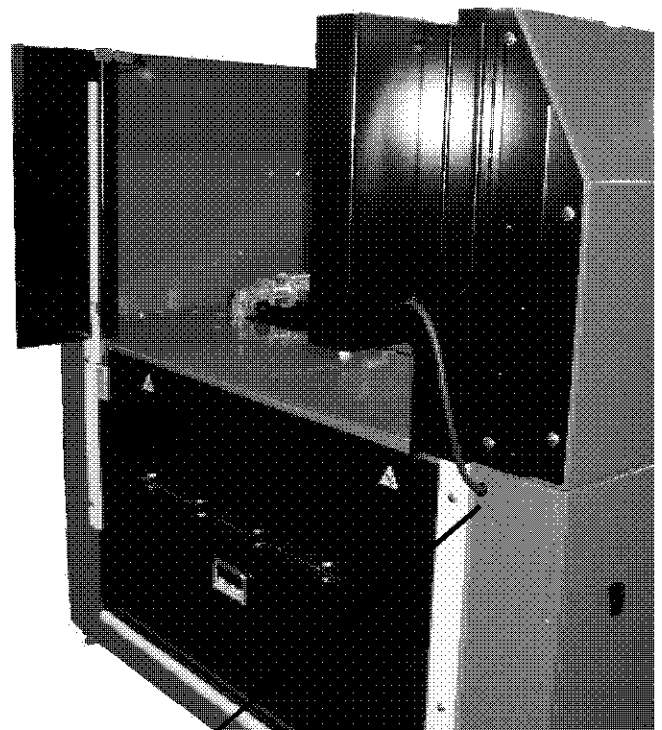


FIG. 7



## ASSEMBLE COMPONENTS TO GRINDER - CONTINUED

The wiring connections within the Control Panel on the TOUCH control grinder are the three power wires for charging the battery attach as follows:

Wire 143DOOR1 to terminal SSM-S32

Wire 143DOOR2 to terminal SSM-S22

Wire 143DOOR4 to terminal SSM-C

The three safety switch wire connections attach as follows:

wire 143PWR1 to terminal TBB-12

Wire 143PWR2 to terminal TBB-17

Wire 143GRND to terminal TBB-16

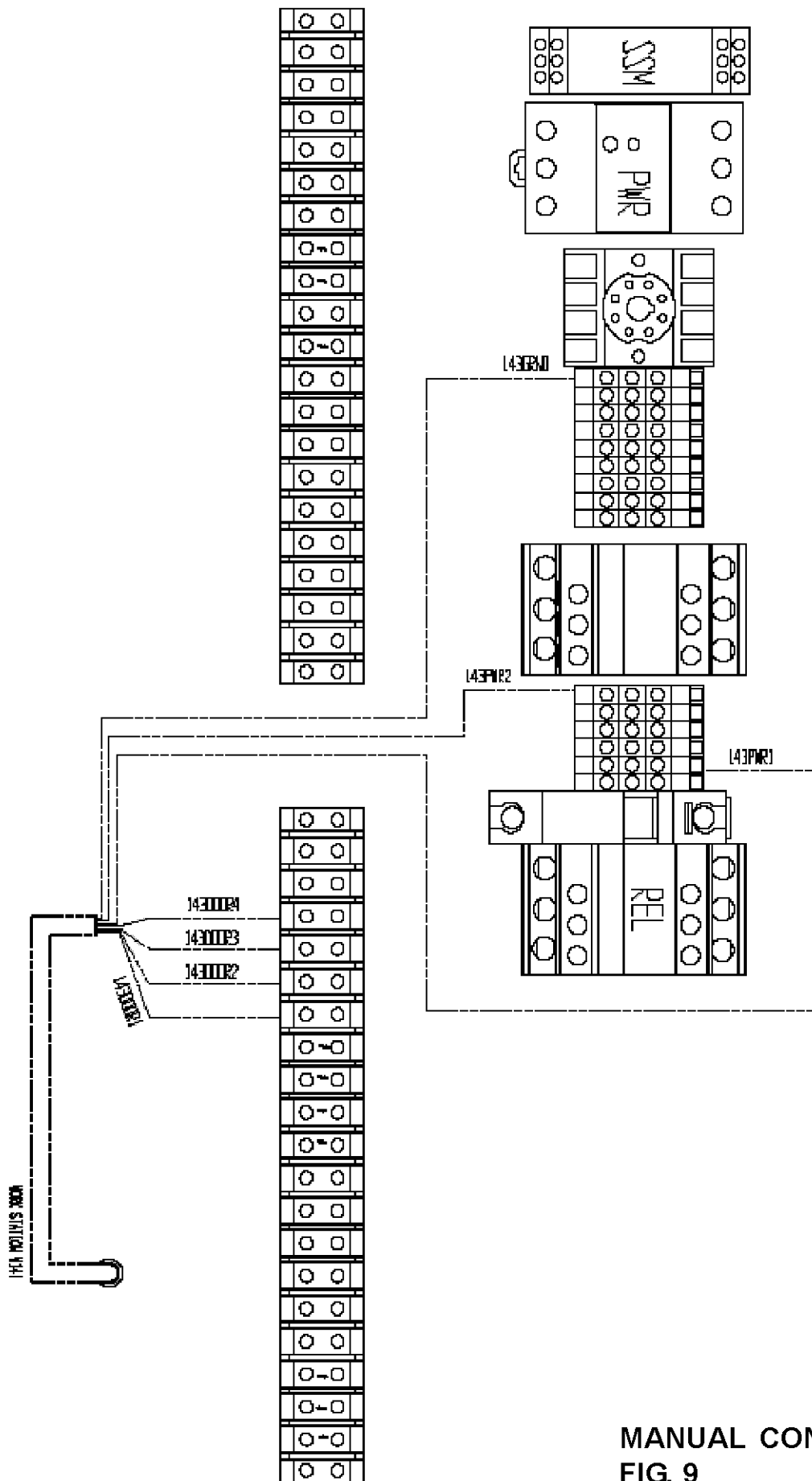
See FIG. 10 on page 12.



Install Workstation  
Cord in this hole

**FIG. 8**

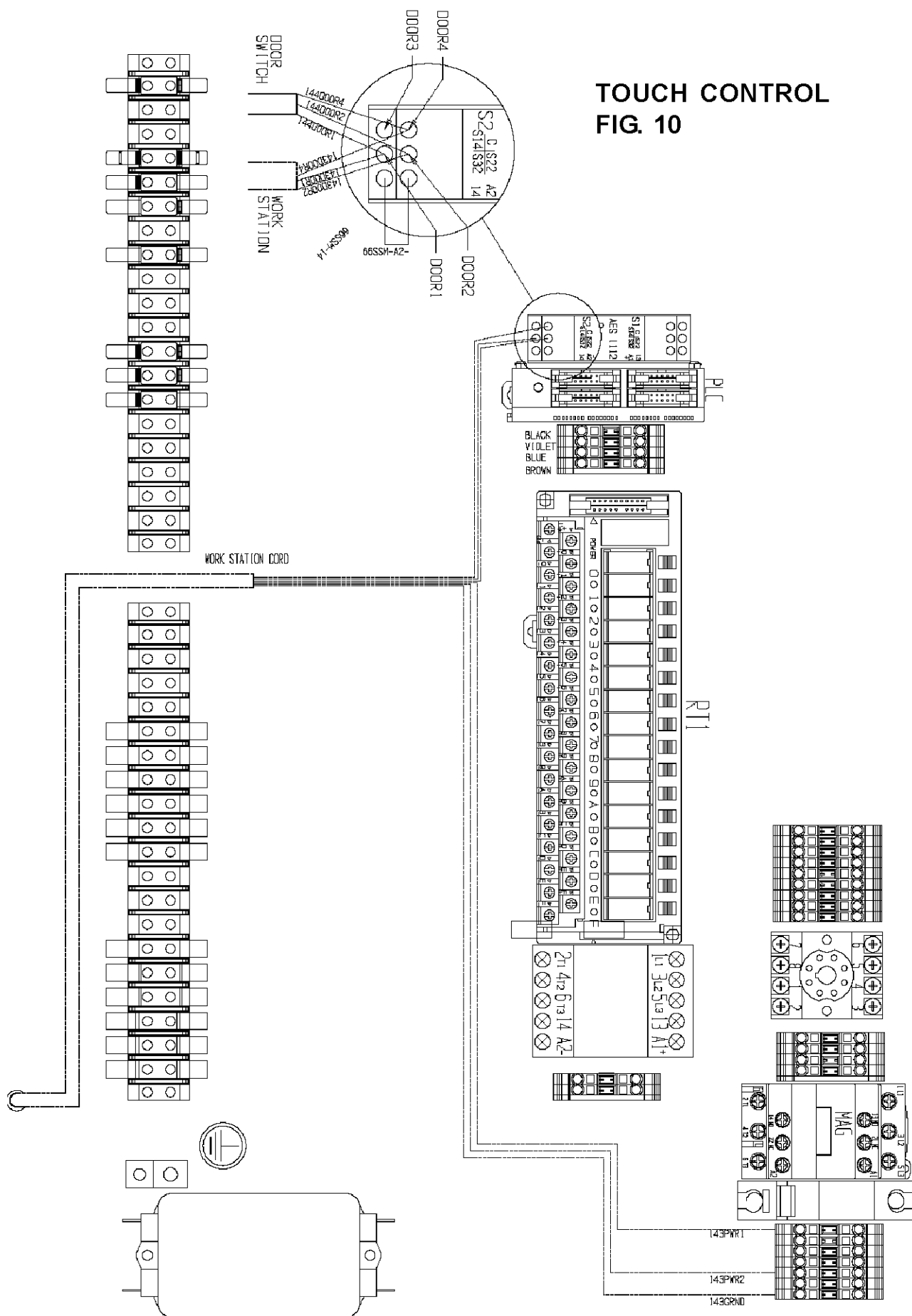
# ASSEMBLE COMPONENTS TO GRINDER - CONTINUED



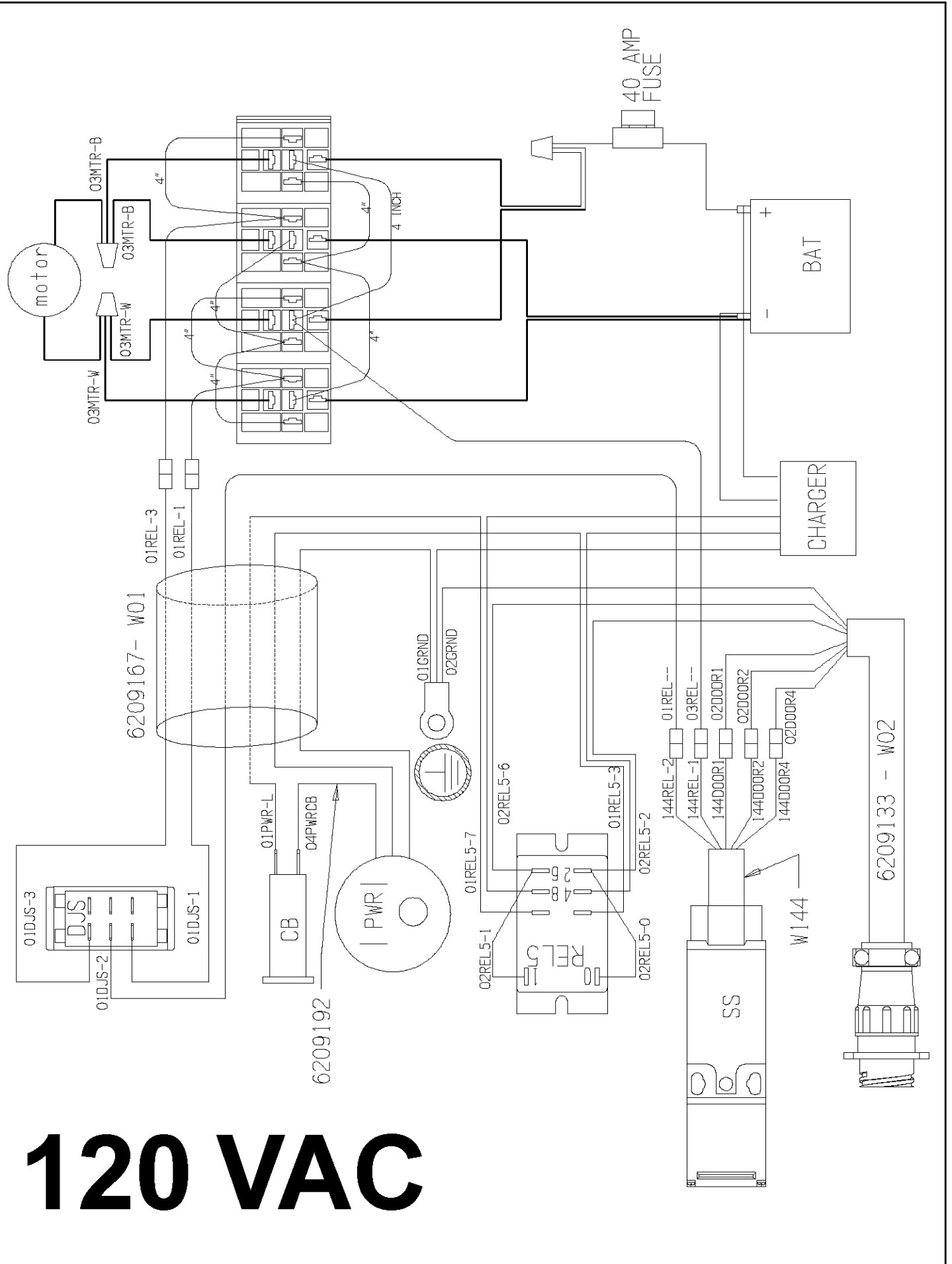
MANUAL CONTROL  
FIG. 9

# ASSEMBLE COMPONENTS TO GRINDER - CONTINUED

**TOUCH CONTROL  
FIG. 10**

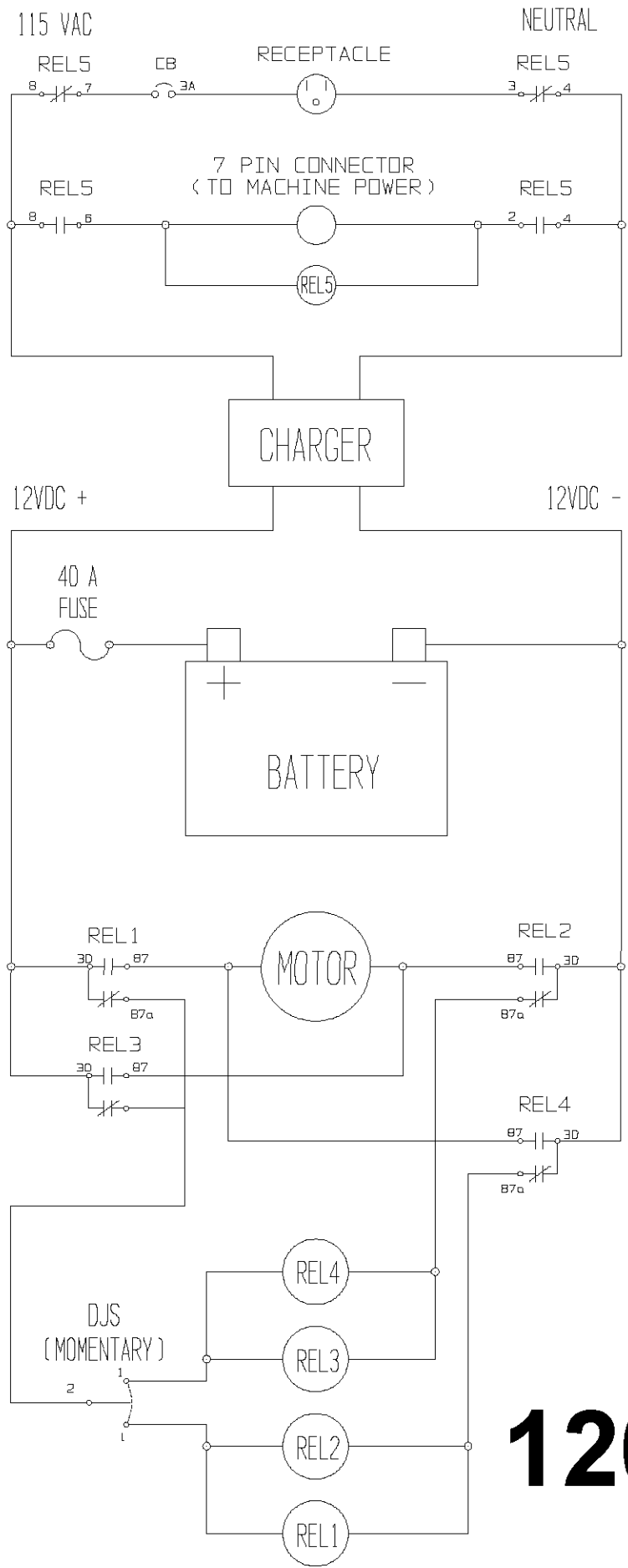


# ELECTRICAL INFORMATION



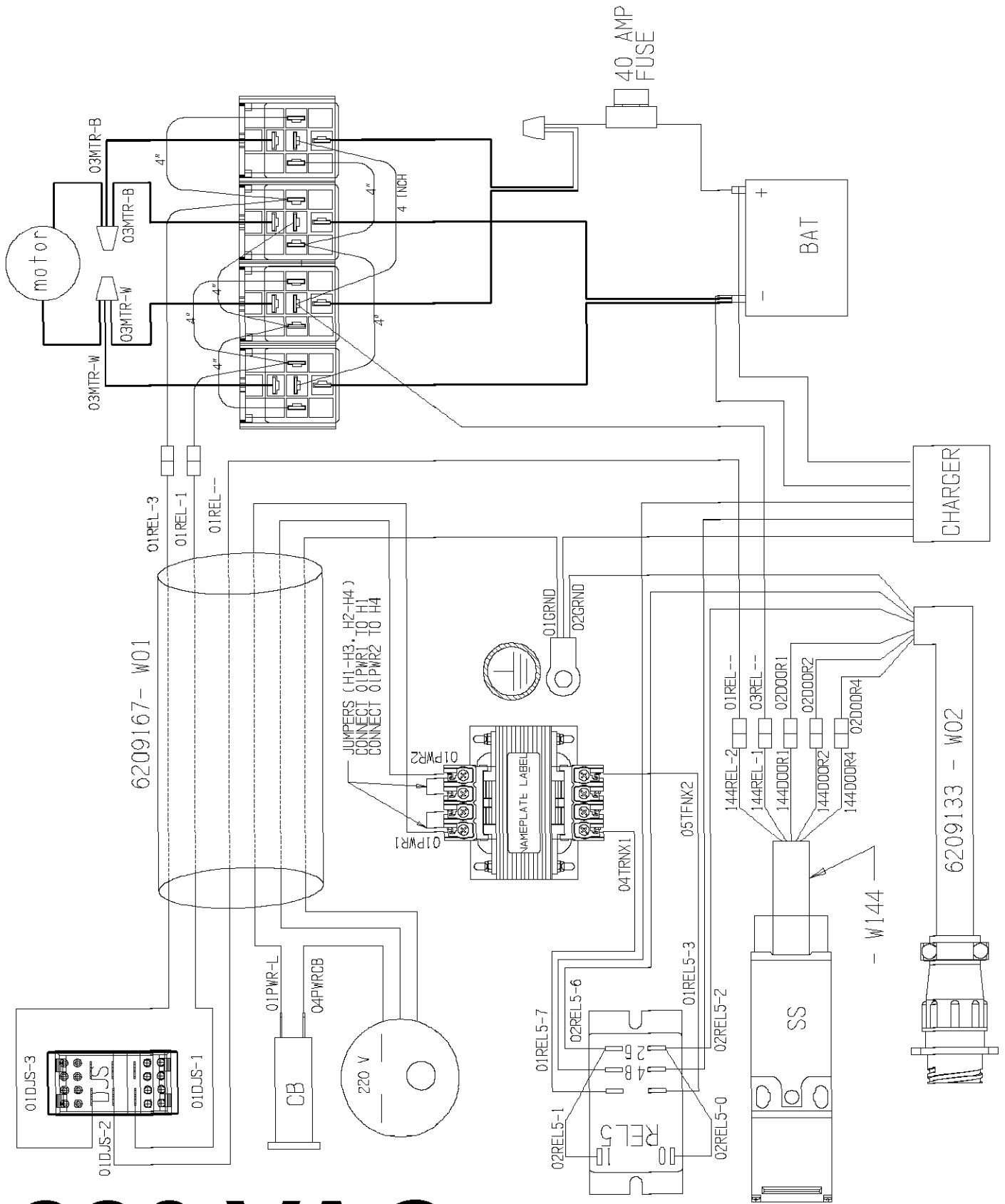
# 120 VAC

# ELECTRICAL INFORMATION



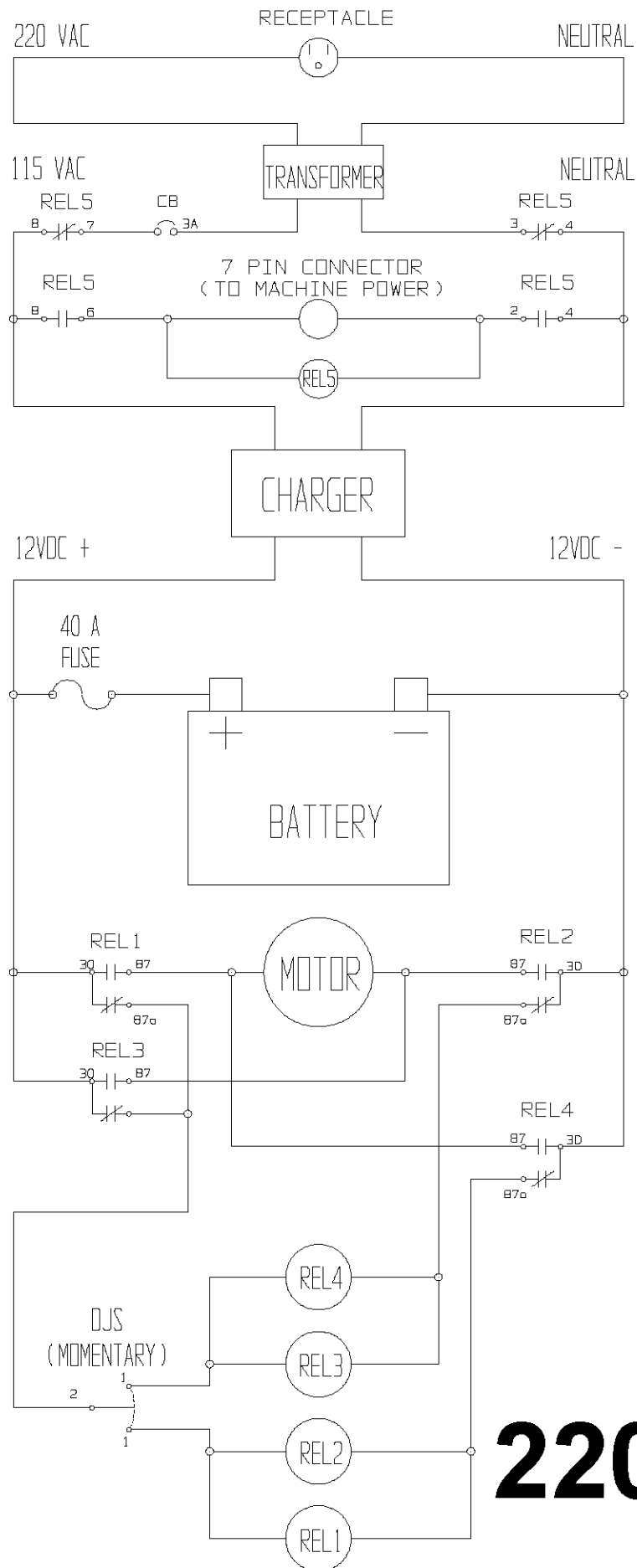
# 120 VAC

# ELECTRICAL INFORMATION



# 220 VAC

# ELECTRICAL INFORMATION



# 220 VAC

# OPERATING INSTRUCTIONS

## WORKSTATION MOBILITY

The Workstation is a portable unit, moving around the shop on 4" [102 mm] casters. The casters on the end without the handle are rigid and the casters on the handle end are swivel allowing the Workstation to be moved through the shop with operator control.

## PLATFORM MOVEMENT

The Workstation has an up/down momentary switch located on the handle. Pushing the top side of the switch will raise the platform and pushing the bottom side of the switch will lower the platform.



**WHEN THE PLATFORM REACHES  
THE TOP END OF TRAVEL OR THE  
BOTTOM END OF TRAVEL THE  
SWITCH MUST BE RELEASED.  
FAILURE TO RELEASE THE SWITCH  
MAY CAUSE DAMAGE TO THE  
ELECTRICAL SYSTEM**

## BATTERY CHARGING

The Workstation can be charged by two alternative methods. If the Workstation is remote from the grinder, for the 115V model 6200980 a standard 115VAC - 15 amp extension cord can be plugged into the receptacle below the platform switch on the control box and to a standard 115 VAC wall receptacle and the battery will be charged. If the Workstation has the Docking Kit 6209555 installed and is docked to the grinder and the electrical cable is connected between the Workstation and the grinder, then the power to charge the battery will be delivered through this cable and the battery will be charged. NOTE: For the 220V model 6200985, a 220 VAC receptacle is built into the workstation below the platform switch and the equivalent connector receptacle is included with the grinder. This loose receptacle should be attached to the appropriate 220 VAC 8 amp extension cord for the location. See FIG. 1.



# OPERATING INSTRUCTIONS

## DOCKING TO REEL GRINDER WITH DOCKING KIT 6209555 INSTALLED.

The Workstation has been designed to dock to specific reel grinders. To dock the Workstation, raise the platform so that the floor brake is disengaged, guide the end of the Workstation without the handle into the bracket on the left rear side of the grinder engaging the top plate of the Workstation. See FIG. 2. Then using the swivel casters on the handle side of the Workstation swing that side into close contact with the right rear side of the grinder frame. See FIG. 3. Now raise or lower the platform to engage the floor brake.

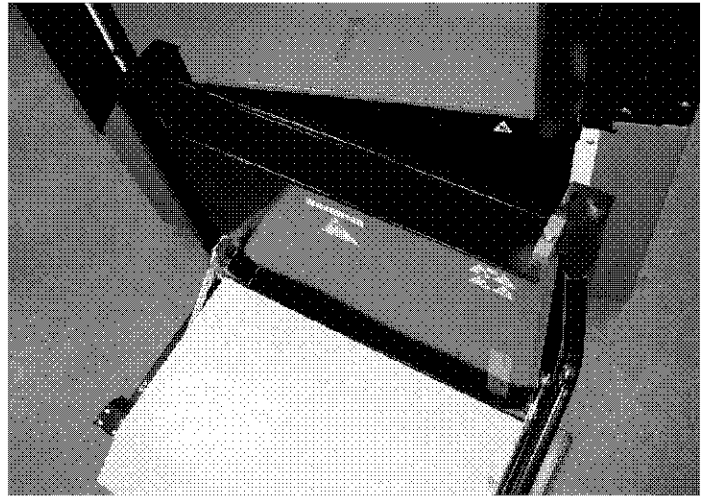


FIG 2

When the Workstation is used to load mowing units into the reel grinder, the Workstation platform functions as the rear guard. The grinder has an electrical cord that connects to the Workstation. This cord carries two functions. First the 115 VAC power to recharge the battery and, second, the electrical functions for the safety switch for the Workstation platform. After the mowing unit has been loaded into the reel grinder, the Workstation platform must be raised and latched. Raising the platform closes the access to the mowing unit during grinding and engages the safety switch key into the safety switch. NOTE: When the safety switch is engaged the platform switch is interlocked out, it will not function.

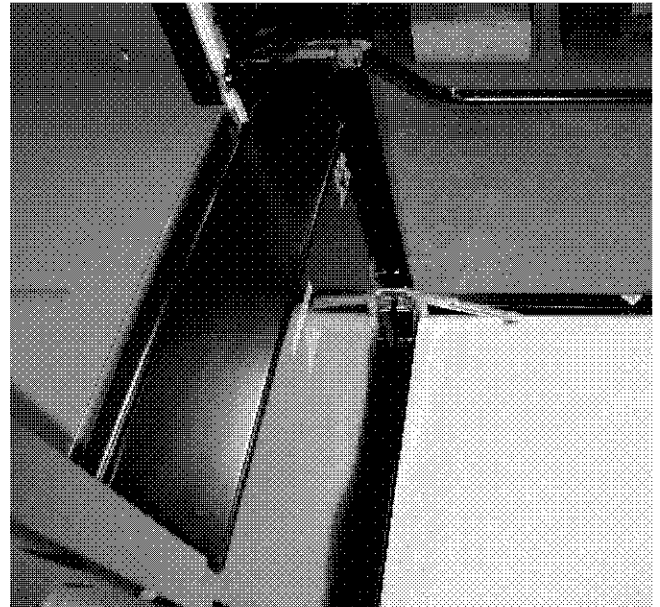


FIG 3



**DO NOT POSITION THE WORKSTATION OUTSIDE THE REAR GUARD ADD PANELS OR AWAY FROM THE GRINDER FRAME. FAILURE TO HAVE THE WORKSTATION TIGHT TO THE GRINDER FRAME WITH THE PLATFORM RAISED AND LATCHED AND THE SAFETY SWITCH ENGAGED COULD CAUSE PERSONAL INJURY.**

# ADJUSTMENTS

## SAFETY SWITCH ADJUSTMENT

The Workstation has an interlock safety switch that functions when the Workstation is docked to a specific reel grinder with the electrical cord connected. This safety switch and key may require adjustment for proper alignment and function.

The safety switch is attached to the Workstation main frame with two special 8-32 safety screws and lock-nuts. To adjust the safety switch, with a special tool (3706040) loosen the fasteners, adjust the switch and retighten the fasteners. See FIG. 17.

The safety switch key is attached to the platform with a bracket and 8-32 safety screws to hold both the bracket to the platform and between the bracket and the key. To adjust the safety switch key, with a special tool (3706040) loosen the appropriate fasteners, adjust either the bracket or the key or both and retighten the fasteners. See FIG. 18.

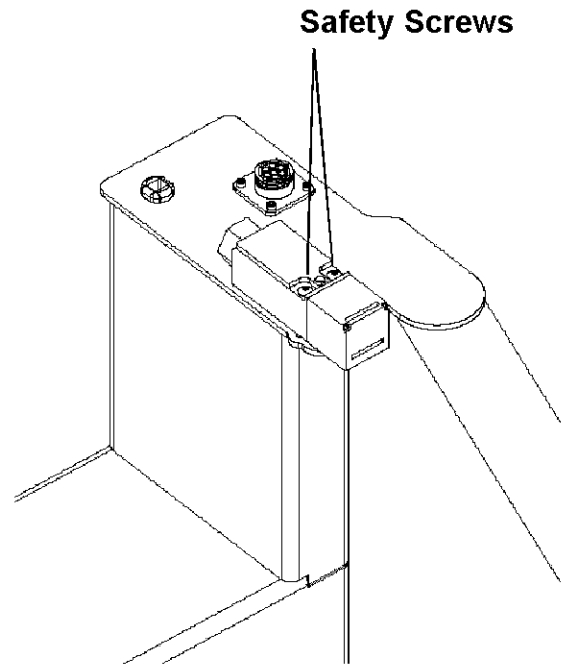


FIG. 17

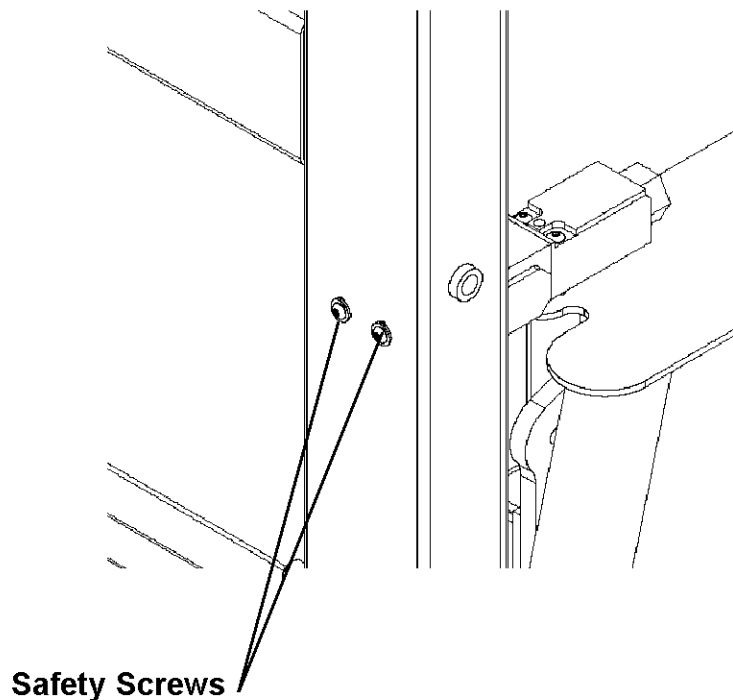
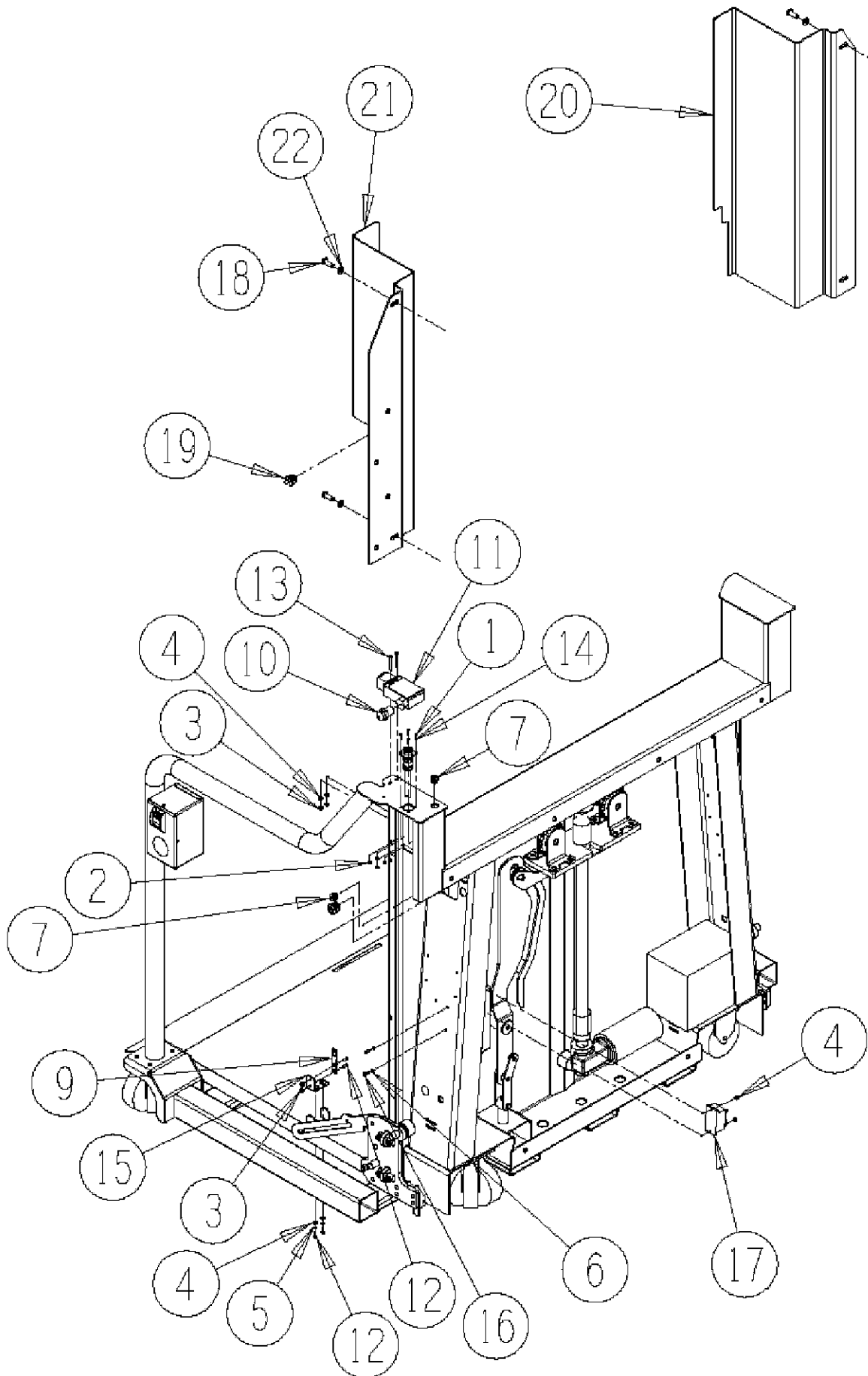


Fig. 18



# EXPLODED VIEW



# PARTS LIST

<u>DIAGRAM NUMBER</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1 .....	B110811 .....	Socket Head Cap Screw 4 - 40 x 1/2" Long
2 .....	J117000 .....	4-40 Nylon Jam Locknut
3 .....	J167000 .....	8-32 Nylon Jam Locknut
4 .....	J161000 .....	8-32 Hex Nut
5 .....	K160001 .....	#8 Flat Washer SAE
6 .....	K161501 .....	#8 Split Lockwasher
7 .....	3707294 .....	Strain Relief, Wire Dia. .33-.36
8 .....	3707059 .....	Strain Relief. Wire Da. .53-.62
9 .....	3707372 .....	Safety Switch Key - Straight
10 .....	3707049 .....	Strain Relief, Wire Dia. .23-.39
11 .....	3707752 .....	Safety Switch
12 .....	3708820 .....	8-32 x 1/2" Long Button Head Safety Screw
13 .....	3708865 .....	8-32 x 1 1/2" Long Button Head Safety Screw
14 .....	6209133 .....	Workstation Cord Assembly
.....	3707748 .....	Connector Sealing Cap
15 .....	6209579 .....	Safety Switch Key Bracket
16 .....	B160807 .....	Button Head Socket Cap Screw 8-32 x 1/2" Long
17 .....	3707751 .....	Relay DPDT 30 Amp 120V
18 .....	B371616 .....	3/8-16 x 1 Long Button Head Socket Cap Screw
19 .....	3707294 .....	Strain Relief, Wire Dia. .43-.47
20 .....	6209163 .....	Rear Grinder Add Panel - LH
21 .....	6209164 .....	Rear Grinder Add Panel - RH
22 .....	K370001 .....	3/8 Flat Washer SAE

Items that are part of the assembly by not shown

.....	3707093 .....	Liquid Tight Strain Relief Wire Dia. .43-.55
.....	3707224 .....	Cable Tie Mount
.....	3707225 .....	Cable Tie
.....	3707233 .....	.25 Female Terminal
.....	3706040 .....	Safety Screw Adjustment Tool
.....	6209133 .....	Workstation Cord with Amp Connector
.....	6209191 .....	Safety Switch Cord
.....	6329117 .....	Grinder Cord with Amp Connector

