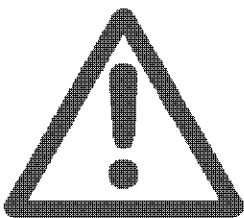


MODEL 377 ROTARY BLADE GRINDER

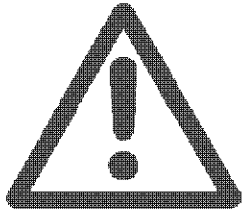
ASSEMBLY & SERVICE MANUAL



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.

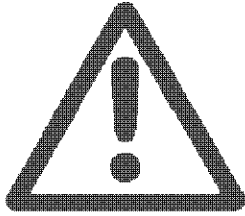
The **Warning Symbol** identifies special instructions or procedures which, if not correctly followed, could result in personal injury.



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 grinder in damp or wet locations. Machine 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 or master switches.
7. **DON'T FORCE THE GRINDER.** It will do the job better and safer if used as specified in this manual.
8. **USE THE RIGHT TOOL.** Don't force the grinder or an attachment 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 GRINDER WITH CARE.** Follow instructions in this manual for lubrication and preventive maintenance.
13. **DISCONNECT POWER BEFORE SERVICING,** or when changing the grinding wheel.
14. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure the switch is OFF before plugging in the grinder.
15. **USE RECOMMENDED ACCESSORIES.** Consult the manual for recommended accessories. Using improper accessories may cause risk of personal injury.
16. **CHECK DAMAGED PARTS.** A guard or other part that is damaged or will not perform its intended function, should be properly repaired or replaced.
17. **NEVER LEAVE GRINDER RUNNING UNATTENDED. TURN POWER OFF.** Do not leave grinder until it comes to a complete stop.
18. **KNOW YOUR EQUIPMENT.** Read this manual carefully. Learn its application and limitations as well as specified potential hazards.
19. **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.
20. **DO NOT OPERATE THE GRINDER WHEN UNDER THE** influence of drugs, alcohol, or

SAFETY INSTRUCTIONS



IMPROPER USE OF GRINDING WHEEL MAY CAUSE BREAKAGE AND SERIOUS INJURY.

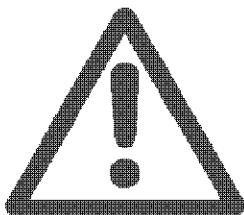
Grinding is a safe operation if the few basic rules listed below are followed. These rules are based on material contained in the ANSI B7.1 Safety Code for "Use, Care and Protection of Abrasive Wheels". For your safety, we suggest you benefit from the experience of others and carefully follow these rules.

DO

1. **DO** always **HANDLE AND STORE** wheels in a **CAREFUL** manner.
2. **DO VISUALLY INSPECT** all wheels before mounting for possible damage.
3. **DO CHECK MACHINE SPEED** against the established maximum safe operating speed marked on wheel.
4. **DO CHECK MOUNTING FLANGES** for equal and correct diameter.
5. **DO USE MOUNTING BLOTTERS** when supplied with wheels.
6. **DO** be sure **WORK REST** is properly adjusted.
7. **DO** always **USE A SAFETY GUARD COVERING** at least one-half of the grinding wheel.
8. **DO** allow **NEWLY MOUNTED WHEELS** to run at operating speed, with guard in place, for at least one minute before grinding.
9. **DO** always **WEAR SAFETY GLASSES** or some type of eye protection when grinding.

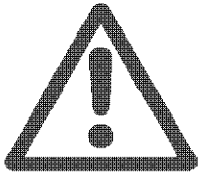
DON'T

1. **DON'T** use a cracked wheel or one that **HAS BEEN DROPPED** or has become damaged.
2. **DON'T FORCE** a wheel onto the machine **OR ALTER** the size of the mounting hole - if wheel won't fit the machine, get one that will.
3. **DON'T** ever **EXCEED MAXIMUM OPERATING SPEED** established for the wheel.
4. **DON'T** use mounting flanges on which the bearing surfaces **ARE NOT CLEAN, FLAT AND FREE OF BURRS**.
5. **DON'T TIGHTEN** the mounting nut excessively.
6. **DON'T** grind on the **SIDE OF THE WHEEL** (see Safety Code B7.2 for exception).
7. **DON'T** start the machine until the **WHEEL GUARD IS IN PLACE**.
8. **DON'T JAM** work into the wheel.
9. **DON'T STAND DIRECTLY IN FRONT** of a grinding wheel whenever a grinder is started.
10. **DON'T FORCE GRINDING** so that motor slows noticeably or work gets hot.



AVOID INHALATION OF DUST generated by grinding and cutting operations. Exposure to dust may cause respiratory ailments. Use approved NIOSH or MSHA respirators, safety glasses or face shields, and protective clothing. Provide adequate ventilation to eliminate dust, or to maintain dust level below the Threshold. Limit Value for nuisance dust as classified by OSHA.

SAFETY INSTRUCTIONS



This machine is intended for rotary blade grinding 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.

Do not use compressed air to clean grinding dust from the machine. This dust can cause personal injury as well as damage to the grinder.

MACHINE SPECIFICATIONS

Motor	1.00 HP 115/220 Volt 60/50 Cycle, 1 Phase
Grinding Wheel	8" Diameter x 1.00" Wide - 24 Grit
Maximum Blade Length	Any Length
Sound Level	Greater than 85 Dba when operating.

UNPACK THE CARTON

Use care when unpacking. Open box, remove the contents and lay parts out on a table.

Check components against the Parts List on Page 6 & 7 to insure all parts were shipped and are in working order.

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 with unpacking until the damage has been inspected by the agent. Refer also to the "Shipping Recieving Instructions" packed with this unit.

ASSEMBLY INSTRUCTIONS

1. Remove the blade support base from its stored position and set aside.
2. Install the strain relief bushing on the power cord in the slot in the rear wall of the grinder with a plier. The small section of the strain relief must go toward the top.
3. Install the grinder to the bench per FIG. 1. If mounting to a wooden bench, use the two lag bolts provided. If installing to a steel bench, drill 11/32 holes and install 5/16 bolts, lockwashers and nuts which you must provide.
4. Reinstall the blade support base with the correct side up in the forward set of slots.
5. Remove front panel plastic shield, remove protective paper and reinstall.
6. Plug in the power cord. Follow operating instructions, your grinder is now ready to grind.

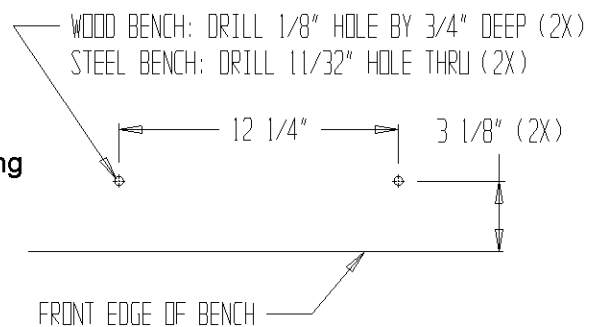


FIG. 1

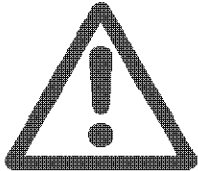
WIRING INSTRUCTIONS

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 shock.

This Grinder has an electrical cord with an equipment grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded according to all local or other appropriate electrical codes and ordinances.

Before plugging in the Grinder, make sure it will be connected to a supply circuit protected by a properly-sized circuit breaker or fuse. 10 amp minimum for 115V application.



DO NOT MODIFY THE PLUG PROVIDED WITH THE MACHINE; IF IT WILL NOT FIT THE OUTLET, HAVE A PROPER OUTLET AND CIRCUIT INSTALLED BY A QUALIFIED ELECTRICIAN.

115 Volt Model Only.
Plug the power cord into standard grounded receptacle as shown:



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.

FIG. 2

115V AC (AS BUILT)

See wiring diagram on Page 6 of this manual.

CONVERSION TO 230V AC

TO CONVERT YOUR BLADE GRINDER FROM 115V AC TO 230V AC:

1. Remove the cord assy 3779066 from the motor to the switch.
2. Remove the shrink sleeves on each end of the cord jacket.
3. Install the yellow wire from the bag assy into the cord jacket.
4. Cut the .25 female terminal of the white wire of the 3707034 power cord and strip back .62 inches [13 mm].
5. Reinstall the motor to switch cord per FIG. 3. NOTE: Use blue wire nut when connecting 2 wires and orange wire nut when connecting 3 wires.
6. Cut the wall plug off the power cord and install the appropriate plug for your locality. For plug and circuit breaker sizing, this motor uses 230V, 1 phase power with a maximum AMP draw of 6.1 AMPS. Use only a qualified electrician. NOTE: This motor will correctly operate on 60Hz or 50Hz.

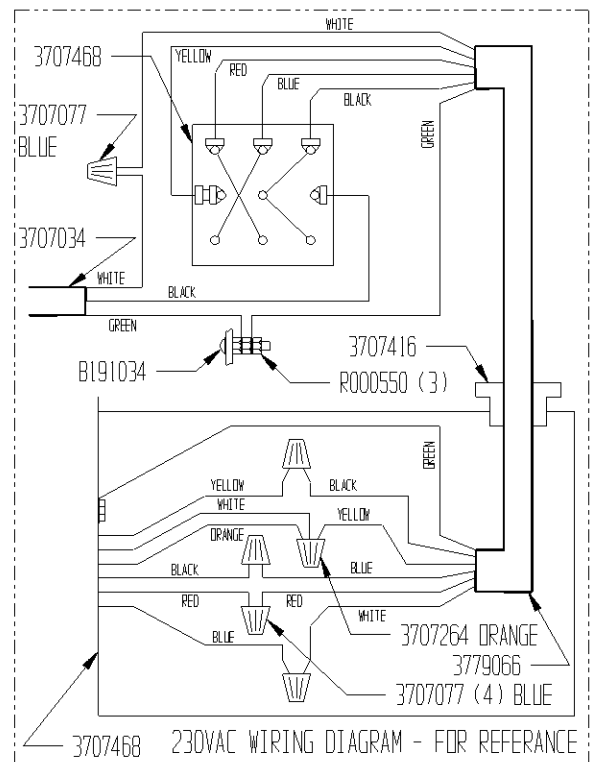
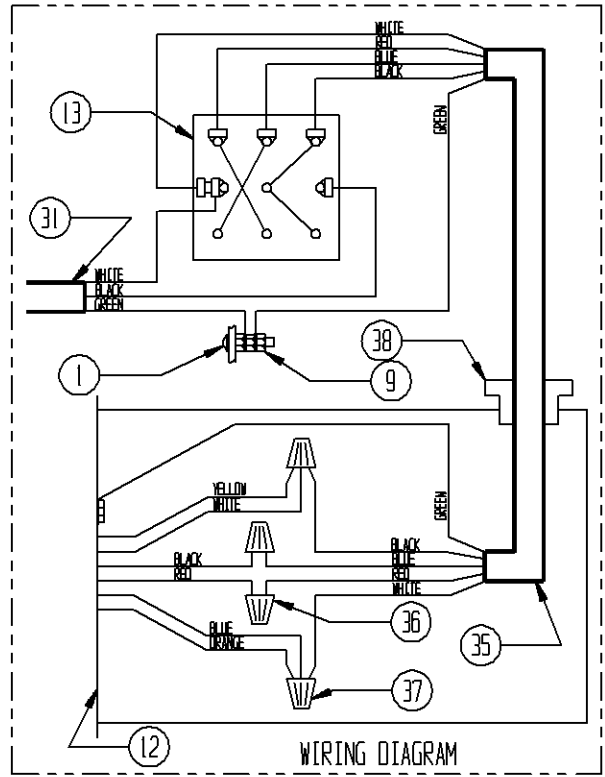
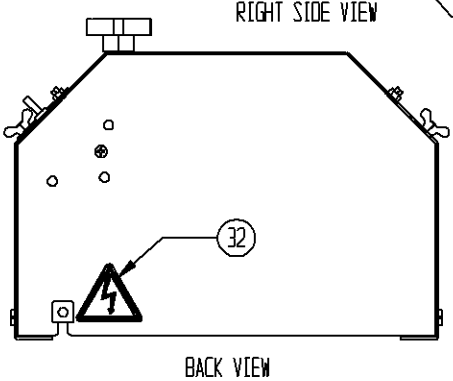
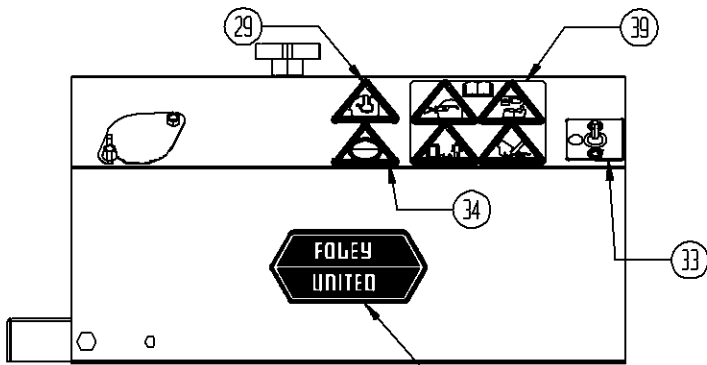
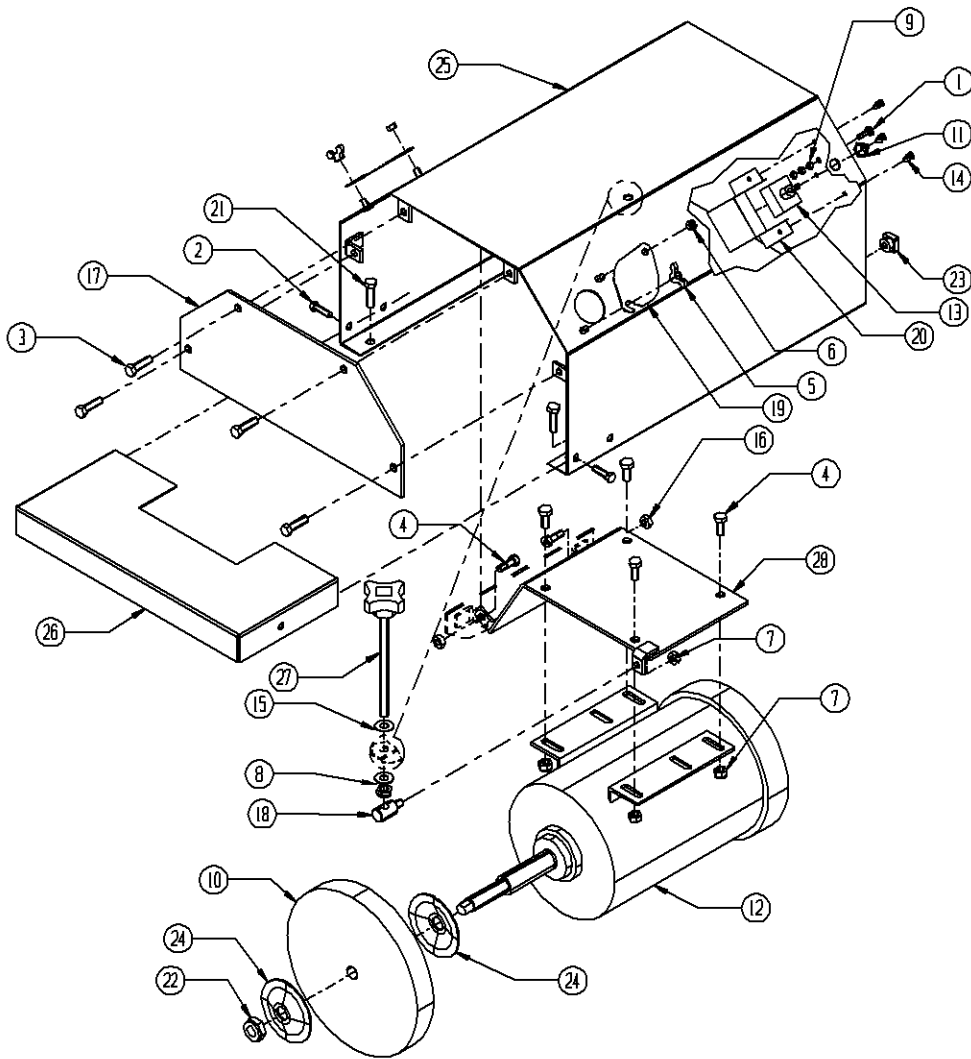


FIG. 3

EXPLODED VIEW AND PARTS LIST



EXPLODED VIEW AND PARTS LIST

Diagram No.	Part No.	Description
1	B191034	10-32 x 5/8 Button Head Socket Cap Screw
2	D250808	1/4-20 x 1/2 Hex Head Tapping Screw
3	D310800	5/16-18 x 1/2 Hex Head Tapping Screw
4	3708543	Shoulder Bolt .313 D x .313 L
5	J253000	Wing Nut 1/4-20
6	J257000	Locknut Thin 1/4-20
7	J317100	Locknut Nylon Full 5/16-18
8	J377000	Locknut Jam Nylon 3/8-16
9	R000550	Kep Nut 10-32
10	3700077	Grinding Wheel 8 x 1 x .62B 24G
11	3707075	Boot - Toggle Switch
12	3707468	Motor - 1HP Foot MT
13	3707476	Switch - Toggle 4 Pole
14	3708521	Rivet - Plastic .187D Push
15	3709304	Washer - Thrust .375 x .812
16	J257100	Locknut Nylon 1/4-20
17	3779054	Shield - Front Panel
18	3779057	Pivot - Adjuster
19	3779058	Cover - Vac Hole
20	3779060	Shield Switch
21	E311603	Lag Bolt 5/16 x 1 LG
22	J627000	Locknut Thin 5/8-11
23	3707273	Strain Relief
24	3708514	Flange - Grinding Wheel
25	3779550	Frame Weldment 1 HP
26	3779551	Blade Support Base Weldment
27	3779556	Knob Assembly
28	3779552	Motor Bracket Weldment 1 HP
29	3708528	Decal - Hearing Protection
30	3709926	Decal - Foley United
31	3707034	Cord Set
32	3708448	Decal - Warning Electrical
33	3779003	Decal - Switch
34	3708461	Decal - Warning 3600 RPM
35	3779066	Cord - Switch to Motor 1 HP
36	3707077	Wire Nut - Blue
37	3707264	Wire Nut - Orange
38	3707416	Strain Relief
39	3708524	Decal - Warning Safety

