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INTRODUCTION

Thank you for purchasing Innovatech's Predator 850 'Easy Edge' Grinder. The Predator Easy Edge Grinder has many features for making its use easy and effective. Safety, dependability and performance have been given top priority in the design of this product making it the most versatile edge grinder on the market with ease of maintenance and operation.

NOTE: READ AND UNDERSTAND THIS MANUAL BEFORE YOU OPERATE OR SERVICE THIS MACHINE.

SAFETY SYMBOLS

Some of the following symbols may be used on this tool or throughout this manual. Please study and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

<u>SYMBOL</u>	<u>NAME</u>	<u>DESIGNATION/EXPLANATION</u>
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
n_0	No Load Speed	Rotational speed, at no load
.../rpm	Per Minute	Revolutions, per minute
	Read Operators Manual	To reduce the risk of injury, user must read and understand the operators manual before using this product
	Eye Protection	Always wear safety goggles with side shields, and as necessary, a full face shield when operating this product.
	Safety Alert	Precautions that involve your safety
	No Hands Symbol	Failure to keep your hands away from the moving grinder head will result in serious personal injury.
	Hot Surface	To reduce the risk of injury or damage, avoid contact with hot surface.

DELIVERY

INCLUDED:

Items included with the Predator 850 Easy Edge Grinder

- Predator 850 Easy Edge Grinder
- Dust Guard
- Manual
- Warranty Card



UNPACKING:

- Carefully remove the Predator 850 Easy Edge tool and any accessories from the box. Make sure that all items listed in the packing list are included.
- Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the packing material until you have carefully inspected and satisfactorily operated the tool.
- If any parts are damaged or missing, please call 1.800.267.6682 for assistance.



WARNING: If any parts are damaged or missing do not operate your Predator 850 Easy Edge until the parts are replaced. Failure to heed this warning could result in a serious personal injury.



WARNING: Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious personal injury.

GRINDER SPECIFICATIONS

Dimensions:	Head at 0 degrees	18" Wide
	Head at 45 degrees	19" Wide
	Head at 90 degrees	22" Wide
Height:	43" Tall	
Disc Diameter:	8.5"	
Weight:	136 lbs.	
Down Pressure:	55 lbs.	
Input Power:	120 VAC, 60 HZ	
Motor Power:	1.5 hp	
Max RPM:	1600 rpm	
Amperage:	15 amps	
Grinding Discs:	1 x 8.5"	

SAFETY WARNINGS



- Use personal safety equipment such as steel toe shoes, safety glasses and ear plugs when operating the Predator Easy Edge Grinder.



- Innovatech is not responsible for any hazardous material or condition that is caused or generated by grinding with the Easy Edge Grinder. It is the responsibility of the operator to know the composition of material being removed by grinding and to comply with all necessary safety precautions. The heat caused by grinding may release hazardous gasses from some coatings or paints. Grinding floor coverings containing asbestos is especially dangerous and is prohibited by most health authorities. Contact your state or country department of health or environmental authority for the proper handling procedures.



- Do not leave the machine unattended during operation.



- Do not use grinder in area where there is a risk of explosion or fire.



- Use caution when removing grinding tools after grinding. The tools can become hot. Use gloves to remove the tooling plates.

- Only persons who have received training should operate or repair the Easy Edge Grinder.
- Do not start the machine with grinder head raised off of the floor.
- Make sure the splash guard is properly positioned before starting the machine.
- Before you start grinding or polishing, check the floor area for bolts or other metal objects, large holes or uneven joints. Hitting these obstructions may cause damage to the machine, to the tooling and may cause personal injury.
- Make sure the machine is connected to the correct grounded power supply (up to 120v, 15amp)
- Switch off and disconnect machine power before changing grinding tools.
- Switch off and disconnect machine power supply before working on or repairing machine.
- Be careful when rolling the machine on sloping floors or ramps. The machine can roll very quickly.
- When grinding glues, epoxy paints or coatings, leaving the machine down on the floor surface may cause tooling to melt into the floor. To prevent adhesion tip the machine back as soon as the head comes to a complete stop.
- Always store machine in a dry location.
- Only use Innovatech recommended tooling, accessories that may be suitable for one tool, may become hazardous when used on another tool.
- When grinding dry, use Innovatech's recommended dust collection system to control the dust. Do not operate the Easy Edge Grinder without proper dust collection.
- Keep bystanders, children, and visitors away while operating the Predator Easy Edge.
- Don't expose power tools to rain or wet conditions. Watering entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord to carry the tools or pull the plug from the outlet. Keep cord away from heat, oil, sharp edges, or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
- When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.
- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.

- Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.



Always wear eye protection

WARNING

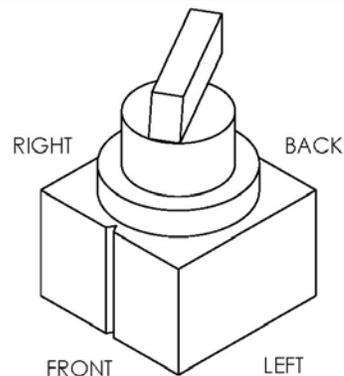
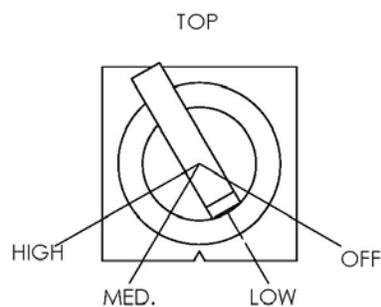


Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specifically designed to filter out microscopic particles.

CONTROLS AND FEATURES



OPERATION



Always wear eye protection when working with or near this product.

Before starting:

1. Check the floor carefully and remove all bolts, nails as well as any loose material that could get caught in the machine.
2. Fit the appropriate tools to the machine.
3. Fit splash guard to the proper height.
4. If you are grinding dry, connect Innovatech's recommended dust collection system and check vacuum before starting the grinder.

Starting the machine:

1. Attach appropriate grinding plate.
2. Adjust the head angle to the proper position. The head of the Innovatech Easy Edge Grinder may be adjusted right or left of the machine axis to either 45 degrees or 90 degrees.
3. Check that the grinding head is level to the floor and adjust $\frac{3}{4}$ " bolts as necessary.
4. Ensure knob/dial is in the off position before plugging into power source.
5. Connect power to the machine. Up to 120 volt, 15 amp power is required. NOTE: IF THE WRONG POWER IS SUPPLIED TO THE GRINDER, IT MAY DAMAGE THE ELECTRICAL COMPONENTS.
6. Turn knob/dial to desired speed.
Always grip handle firmly when starting machine. The machine will tend to move from side to side when starting.
7. When finished with grinding, turn off machine and let the head come to a complete stop before tilting back the machine.



CAUTION: Tools can be very hot.

Changing of tools:

1. Before working on the grinder, bring the motor to a total stop and **disconnect power**.
2. Tilt machine back on floor – if machine head is adjusted to 45 degrees machine will tip to the side when tilting back.
3. USE CAUTION! Tools can be very hot from the friction of grinding. Use gloves for protection.
4. Use tools to turn center of tool holder to remove tool plate.
5. Replace with new tool plate and turn lock into place.
6. Lower machine back down to re-adjust splash guard if necessary. Working height of different tools varies depending on tools and wear.

Applications:

-You may use this tool for the purposes listed below:

- Surface Preparation
- Concrete Polishing
- Concrete Grinding



WARNING: To prevent loss of control and possible serious personal injury, always operate the grinder with both hands.

CAUTION: If the grinder is held in one spot too long, it will gouge and/or cut grooves in the floor.

ADJUSTING GRINDER HEAD

1. Remove front alignment pin.
2. Align holes to desired position (Right or Left, to 45 degrees or 90 degrees)
3. Replace alignment pin.
4. Check that the head is level with the floor and adjust leveling bolt as required

The Predator Easy Edge grinder head can be adjusted to grind up to 90 degrees from the machine axis, enabling the machine to grind right against the wall.



ELECTRICAL

This tool has a precision-built electric motor. It should be connected to a power supply that is 120 volts, 60 Hz, AC only (normal household current). Do not operate this tool on direct current (DC). A substantial voltage drop will cause a loss of power and the motor will overheat. If the tool does not operate when plugged into an outlet, double-check the power supply.

SERVICE

A warranty claim is not valid unless a return authorization has been issued by Innovatech. To obtain warranty service, buyer must contact Innovatech and receive a return authorization number and return instructions. Buyer then returns the damaged item or part to Innovatech. Customer is responsible for costs of shipment.

It is the customer's responsibility to pay for all non-warranty replacement parts. Non-Warranty labor, service and adjustments are available and will be charged at Innovatech's current hourly labor rates. Non-Warranty service will be billed at Innovatech's current hourly rates. Call Innovatech for current labor rates or to speak with a Customer Service Technician. Call 1.800.267.6682 and ask for Customer Technical Support.

TROUBLESHOOTING

1. Check to be sure Easy Edge Grinder is plugged into appropriate, grounded power outlet (120 volt 60 hz, 15 amp)
2. Check all cord ends for loose connection
3. Check fuse in distribution box or panel – test with meter
4. Check the inverter connector cable to motor.
5. Do not use tool if switch does not turn it on or off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.
6. Call Innovatech at 1.800.267.6682 and ask to speak with a Customer Technical Support Technician. There are no customer-serviceable parts in the electronics of the Predator Easy Edge Grinder.

MAINTENANCE

Clean machine after every use. To clean machine, use compressed air. Low pressure water may be used to clean the grinding head, but avoid getting water on the motor or electrical components. Do not use a high pressure washer. A complete inspection of the machine for wear and any damage should be done after each use. If any parts have been damaged or show excessive wear, they should be replaced. When servicing your Predator 850, use only identical replacement parts. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of shock or injury.

WARRANTY

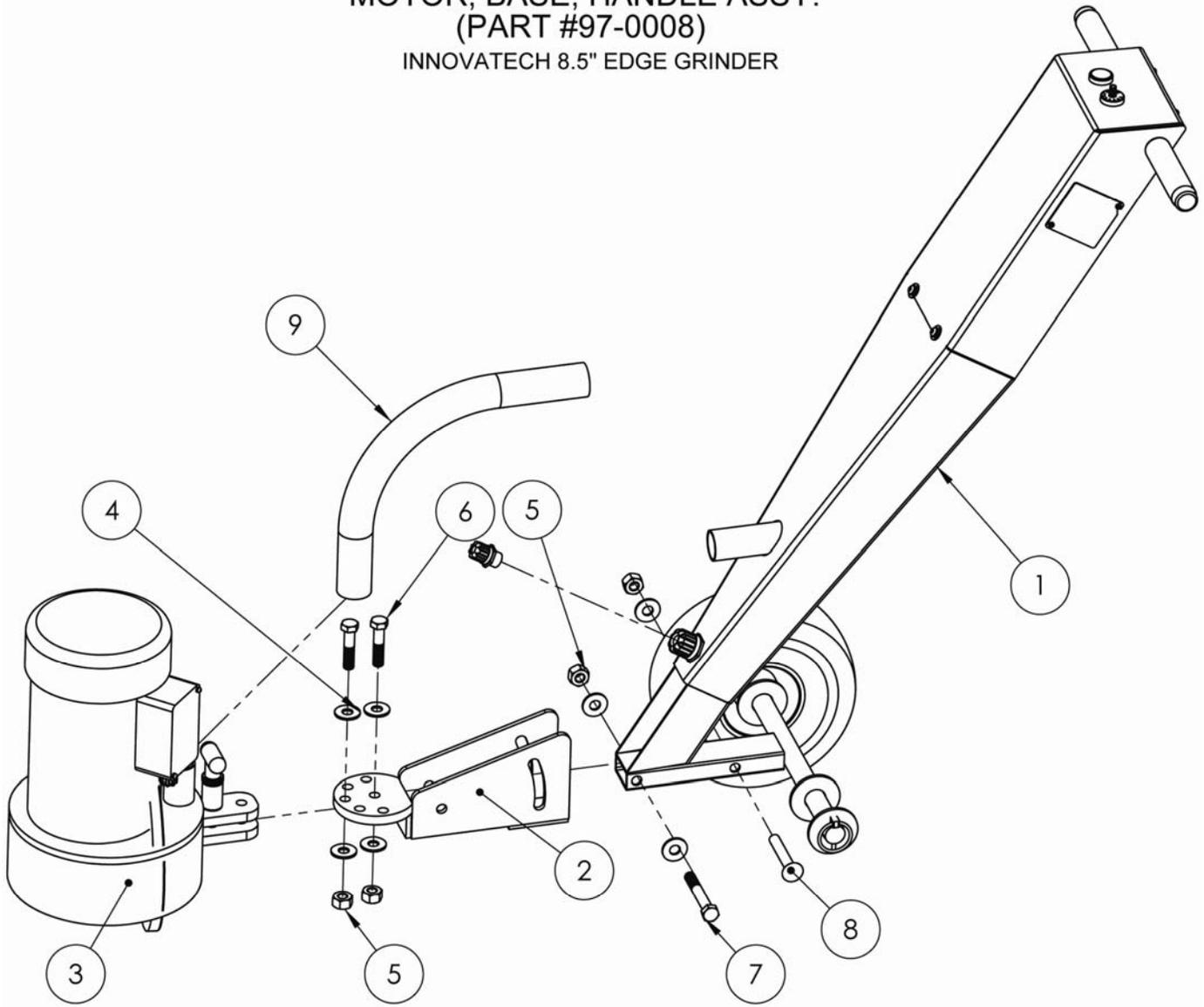
INNOVATECH warrants to the original retail purchaser of the equipment and may not be transferred: Proof of purchase must be presented when requesting warranty service.

Limited Warranty. The equipment, when first delivered, will conform to the specifications set forth in the Owner's Manual and will be without defect in material or workmanship for a period of ninety (90) calendar days after delivery to the original retail purchaser; or in the case of replacement parts other than belts, for a period of ninety (90) days after the part is installed or within the warranty period described above, whichever is later, if the original retail purchaser notifies INNOVATECH (either directly or through one of INNOVATECH'S authorized dealers) of a defect in material or workmanship or of a non-conformity to the specifications, then, upon confirmation of the defect of non-conformity and confirmation that the defect or nonconformity is covered within these Limited Warranty conditions, INNOVATECH will, at it's election and at it's expense, either (i) repair or correct the defect and/or non-conformity, or (ii) replace the part.

- A. Limitations. This Limited Warranty does not apply to damage caused by (i) misuse of the equipment including, without limitation, use of the wrong power source, striking an embedded object such as a bolt, electrical outlet box, expansion joint or steel reinforcing rod; or (ii) unauthorized alteration, modification, repair or tampering; or (iii) use of replacement parts not supplied by INNOVATECH; or (iv) normal wear, discoloration, surface corrosion, deterioration of finishes or paint surfaces, or (v) other appearance deterioration caused primarily by use. INNOVATECH shall not be responsible and this Limited Warranty shall not apply to damage caused by improper maintenance or failure to inspect and maintain the equipment as recommended in the Owner's Manual.
- B. Transportation. Purchaser will pay the cost of transporting defective or non-conforming parts to INNOVATECH and the cost of returning repaired or replacement parts to the purchaser. Each party will safely package the parts it sends to the other in accordance with good commercial practice. If purchaser requests and INNOVATECH agrees, INNOVATECH may perform covered warranty work where the equipment is located. If INNOVATECH performs the work at the locations, purchaser will pay the cost of business class transportation and good quality meals and lodging for INNOVATECH's technicians.
- C. Abuse. INNOVATECH IS NOT RESPONSIBLE FOR DAMAGE, DEFECT, BREAKAGE OR MALFUCTION OF THE EQUIPMENT THAT IS CUASUED BY ABUSE OR BY OPERATION OF THE EQUIPMENT IN A MANNER WHICH IS NOT RECOMMEDED OR APPROVED BY INNOVATECH.
- D. Exclusive Warranty. EXCEPT AS IS EXPRESSLY SET OUT IN THE THIS LIMITED WARRANTY: (i) INNOVATECH MAKES NO PROMISE OR WARRANTY, EXPRESSED OR IMPLIED, WITH RESPECT TO THE EQUIPMENT; (ii) INNOVATECH MAKES NO PROMISE OR WARRANTY THAT THE EQUIPMENT IS FIT FOR ANY PARTICULAR PURPOSE; (iii) INNOVATECH WILL HAVE NO OBLIGATION OR LIABILATIY TO THE PURCHASER OR TO ANY THIRD PARTY FOR ANY DAMAGE CASUED BY THE EQUIPMENT OR AS A RESULT OR CONSEQUENCE OF ANY CLAIMED DEFECT IN THE EQUIPMENT, ANY FAILURE TO WARN OR NOTIFY, OR ANY CLAIMED NON-CONFORMITY TO THE SPECIFICATIONS; AND (iv) PURCHASER WILL HAVE NO OTHER REMEDIES IN RESPECT OF SUCH DEFECT, NON-CONFORMITY, DAMAGE OR CONDITION EXCEPT THOSE SET OUT IN THIS LIMITED WARRANTY.

WITHOUT LIMITING THE FOREGOING, AND REGARDLESS OF THE CIRCUMSTANCES AND EVEN IF A REMEDY FAILS, INNOVATECH WILL HAVE NO LIABILITY TO THE PURCHASER OR TO ANY THIRD PARTY FOR (i) LOSS OF REVENUE OR PROFITS, OR (ii) FOR INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES.

MOTOR, BASE, HANDLE ASSY.
(PART #97-0008)
INNOVATECH 8.5" EDGE GRINDER

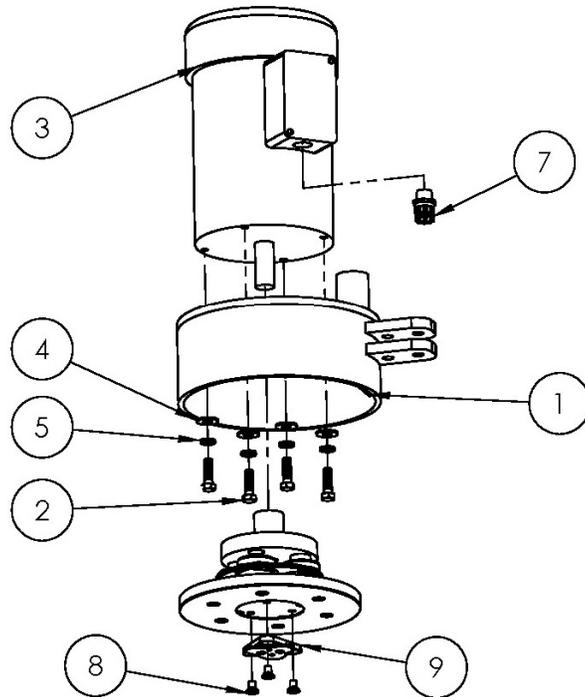


NOTE: FOR ILLUSTRATION SIMPLICITY, NOT ALL PARTS ARE SHOWN OR LABELED.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	96-0099	HANDLE ASSY	1
2	53-0070	FRAME, BASE ASSY	1
3	96-0100	CUTTER HEAD ASSY	1
4	11-0230	1/2" USS FLAT WASHER	7
5	11-0028	1/2-13 NYLOCK NUT	4
6	11-0241	STEEL HEX HEAD CAP SCREW, GR5: 1/2"-13x2.25 ZP	2
7	11-0240	STEEL HEX HEAD CAP SCREW, GR5: 1/2"-13x3.5 ZP	1
8	11-0242	ROUND HEAD, SQUARE NECK, BOLT 1/2"-13x3.25	1
9	825-0023	SUCTION HOSE 1.5"X 22"L	1
10	24-0045	110V POWER CORD, W/MALE CORD END (NOT SHOWN)	1
11	820-0038	12/4 SO CORD 3'	1

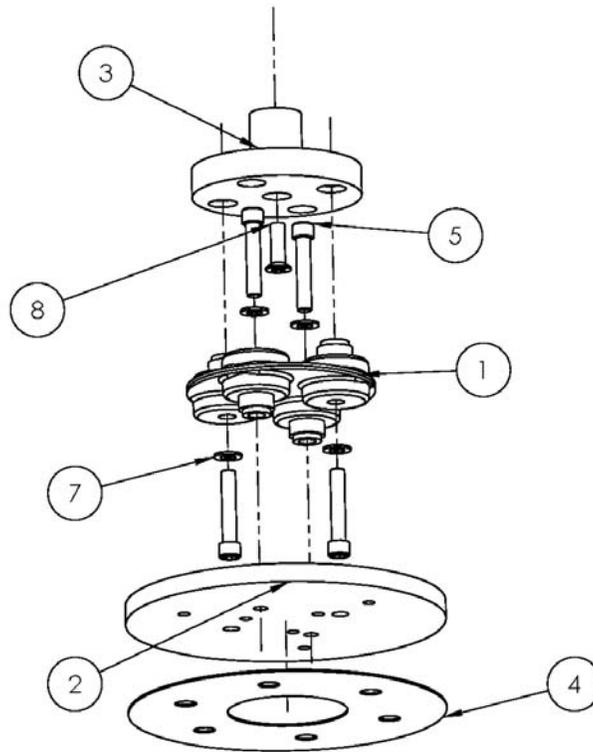
REV-1

8.5" MOTOR, CUTTER HEAD ASSY
(PART # 96-0100)
INNOVATECH 8.5" GRINDER



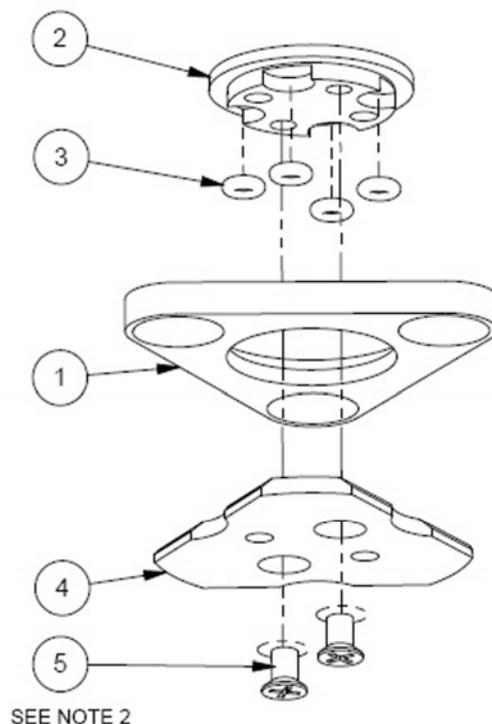
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	53-0072	MOTOR, BASE ASSY	1
2	11-0194	HEX CAP SCREW, 3/8-16 X 1 1/2 GR5 ZP	4
3	23-0084	220 3PH 1.5HP MOTOR	1
4	11-0035	STEEL USS FLAT WASHER, GR2: 3/8" SCREW ZP	4
5	11-0129	STEEL SPLIT LOCK WASHER: 3/8" SCREW ZP	4
6	96-0101	CUTTER HEAD, FLEX HEAD, ASSY	1
7	25-0090	3/4" NPT BLACK PLASTIC CGB	1
8	11-0206	FLAT HEAD UNDER CUT PHILLIPS, 5/16-18 X 1/2	3
9	96-0063	CUTTER HEAD, TRIANGLE HOLDER ASSY.	1

8.5" GRINDER, CUTTER HEAD COUPLER ASSY.
(PART # 96-0101)
INNOVATECH 8.5" EDGE GRINDER



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	13-0056	Morflex502	1
2	51-0240	CUTTER HEAD FLOATING HEAD BOTTOM PLATE	1
3	53-0073	MOTOR, COUPLER	1
4	13-0168	Cutter head velcro mat	1
5	11-0147	SOCKET HEAD CAP, 3/8- 24 X 2	2
7	11-0162	WASHER (B.S.) 3/8	4
8	11-0243	FLAT HEAD SOCKET CAP MACHINE SCREW, 3/8-16 X 1 1/4	1

CUTTER HEAD TRIANGLE HOLDER ASSEMBLY (PART # 96-0063)



NOTES:

1. FOR ILLUSTRATION SIMPLICITY, NOT ALL PARTS ARE SHOWN OR LABELED.
2. ATTACH INDICATED SCREWS TO CENTER ROTATOR USING A HIGH STRENGTH THREAD LOCKING COMPOUND (IE. LOCTITE 271). SCREW HEADS HAVE AN "UNDERCUT" FEATURE TO AVOID POSSIBLE PARTS FITTING INTERFERENCE PROBLEMS.

ITEM	DESCRIPTION	PART #	QTY
1	TRIANGLE HOLDER BASE	51-0244	1
2	TRIANGLE HOLDER CENTER ROTATOR	51-0110	1
3	O-RING, 1/8 ID x 5/16 OD x 3/32 WIDTH	13-0142	4
4	TRIANGLE HOLDER HOLD-DOWN	51-0246	1
5	SCREW (FLAT-HEAD (UNDER-CUT), PHILLIPS) #10-24x5/16	11-0142	2

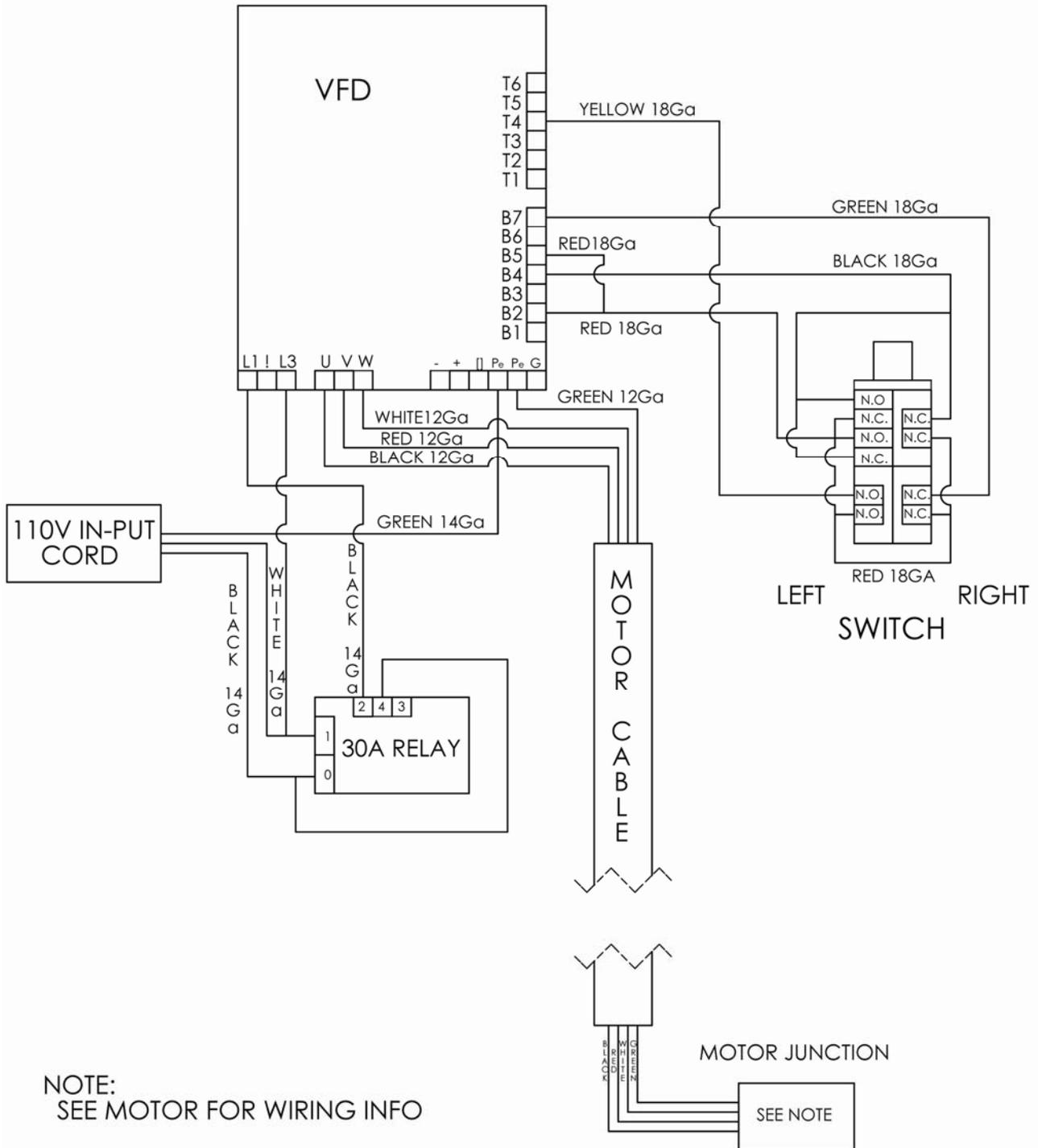
REV --

8.5" EDGE GRINDER WIRING

(PART #96-0102)

INNOVATECH GRINDER

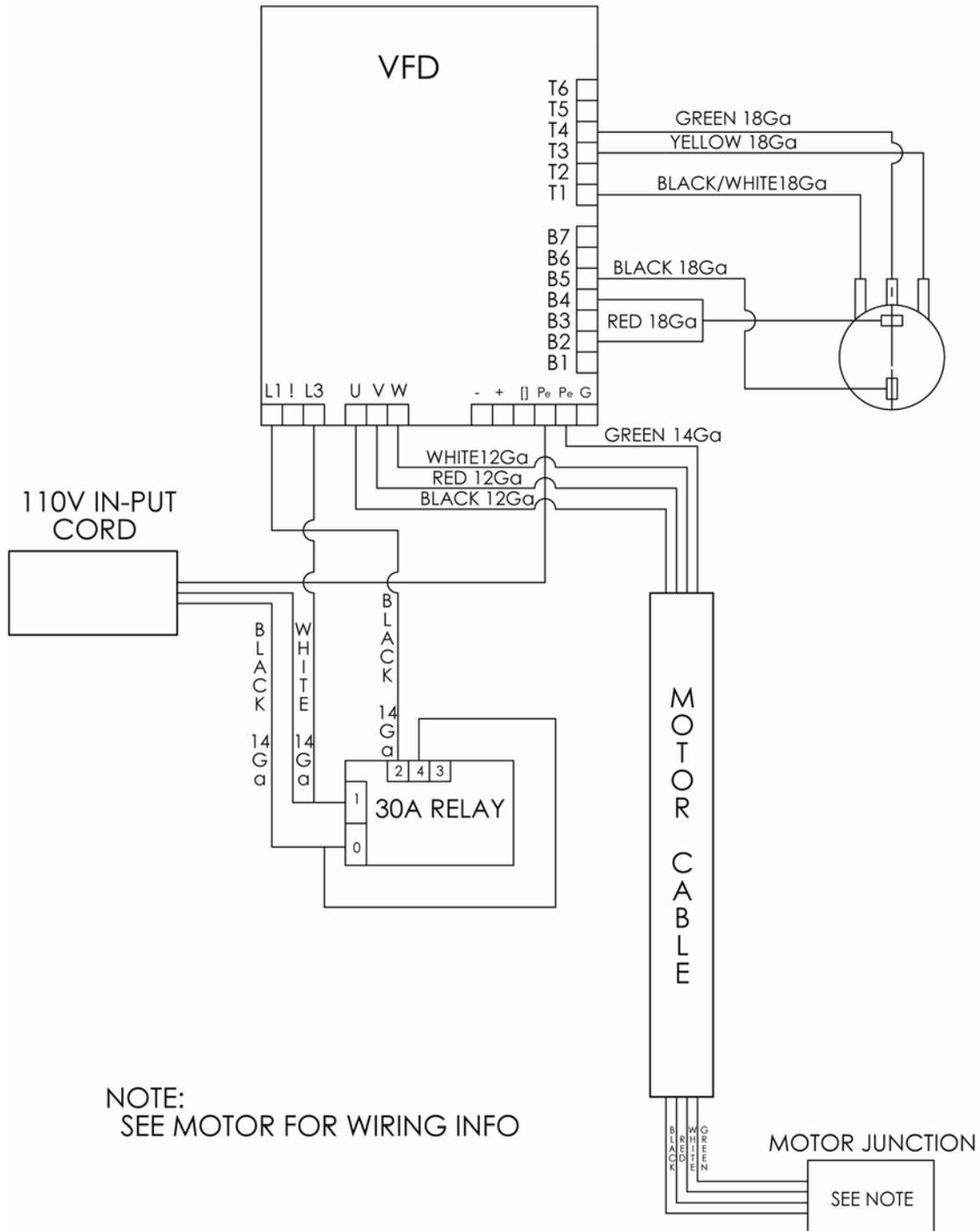
WIRING FOR FIRST EDITION EDGE GRINDERS



NOTE:
SEE MOTOR FOR WIRING INFO

8.5" EDGE GRINDER WIRING

(PART #96-0102)
 INNOVATECH GRINDER



NOTE:
 SEE MOTOR FOR WIRING INFO

MOTOR JUNCTION

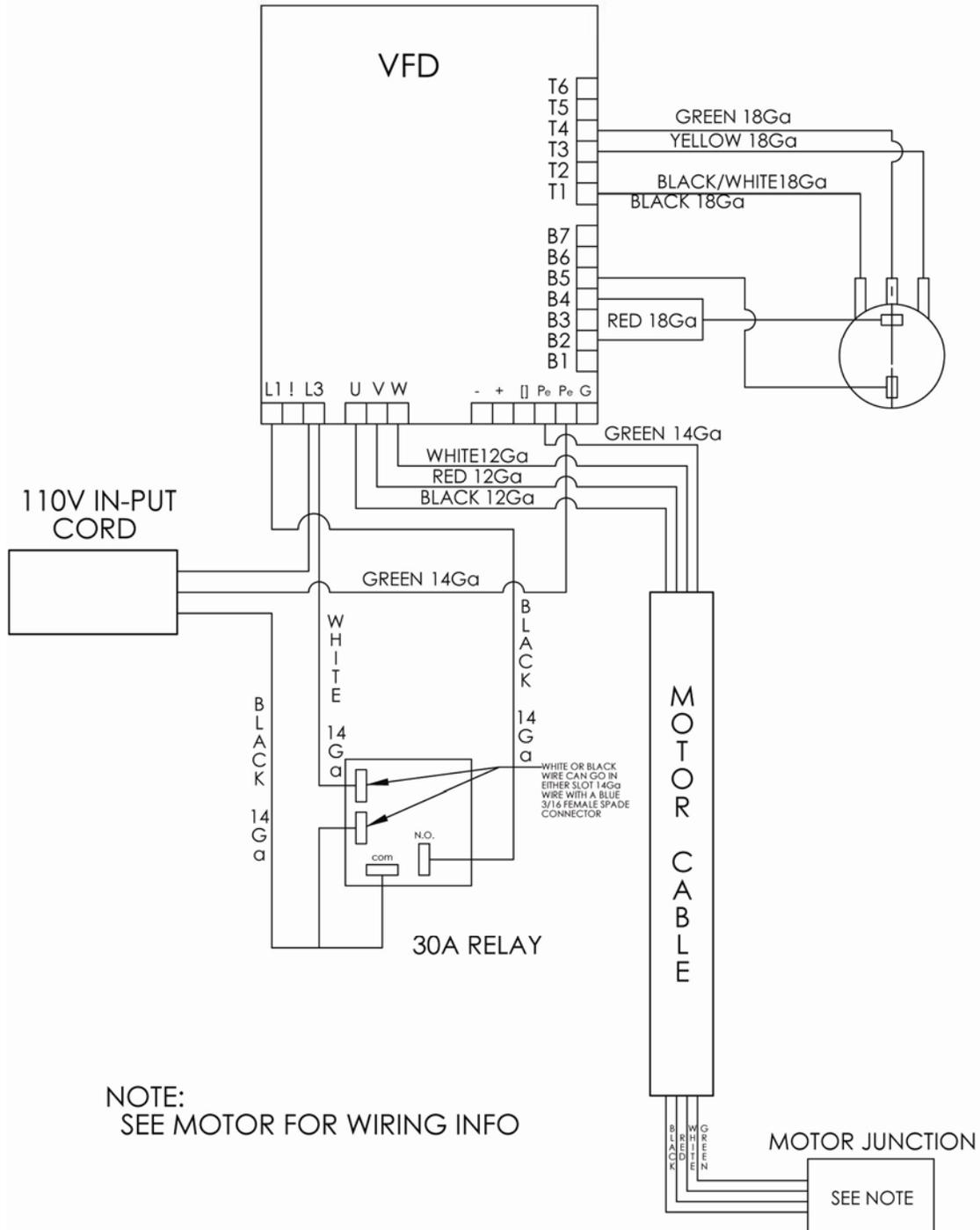
SEE NOTE

8.5" EDGE GRINDER WIRING

(PART #96-0102)

INNOVATECH GRINDER

WIRING FOR SPEED POT AND RELAY REVISION

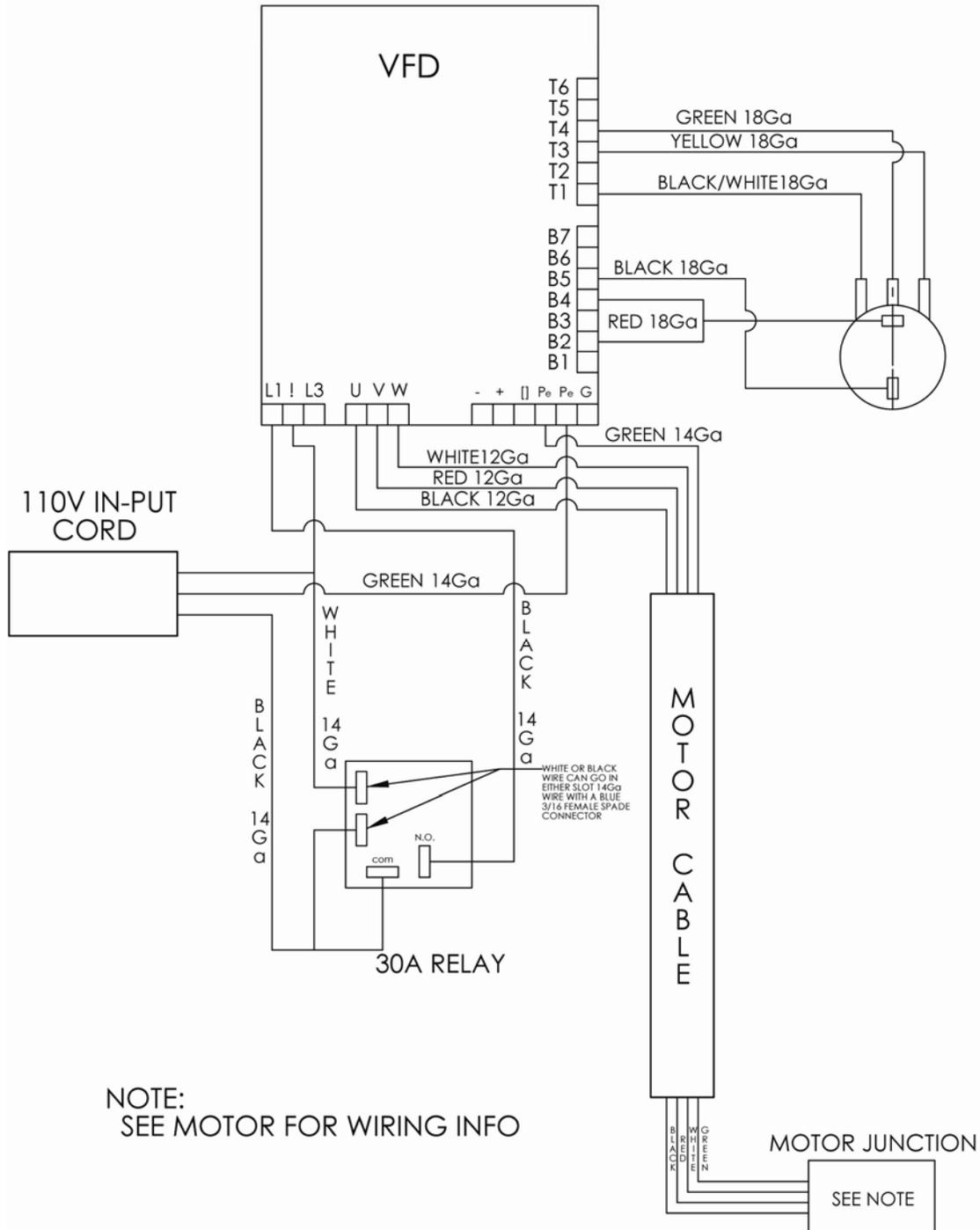


NOTE:
SEE MOTOR FOR WIRING INFO

8.5" EDGE GRINDER WIRING

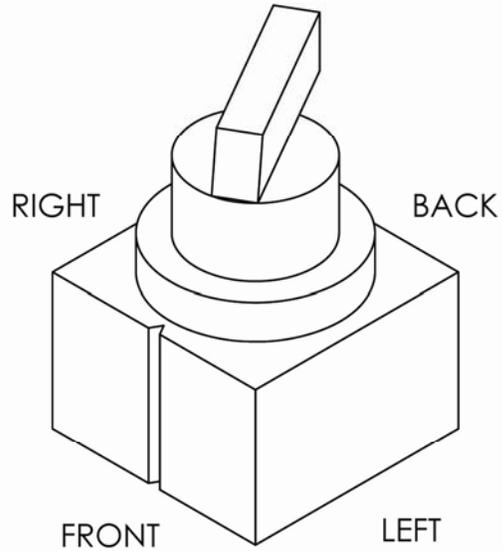
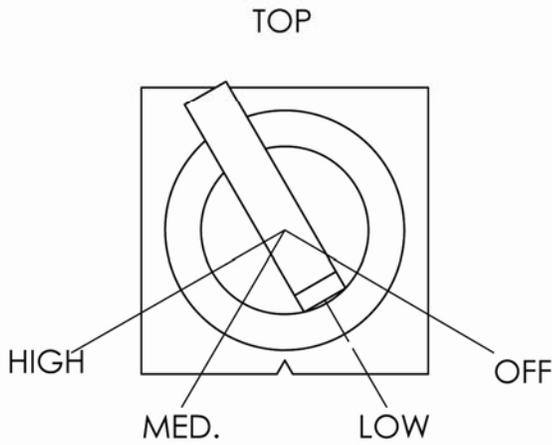
(PART #96-0102)

INNOVATECH GRINDER
RETROFIT WIRING FOR RELAY UPGRADE

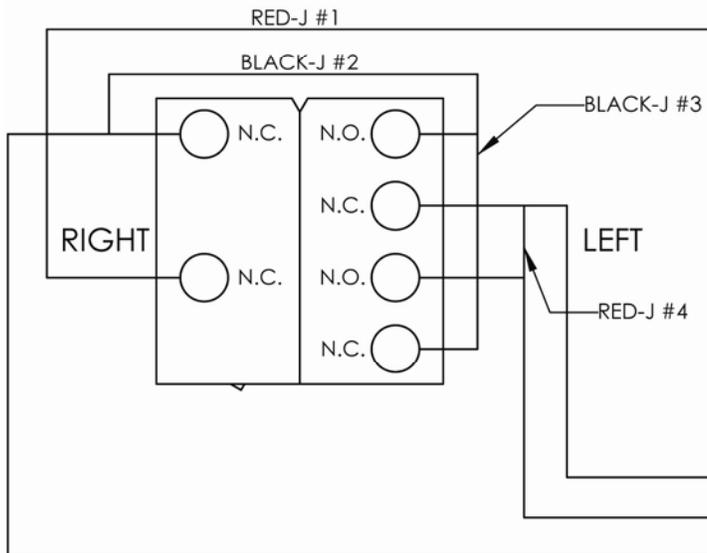


WIRING DIAGRAM FOR SWITCH

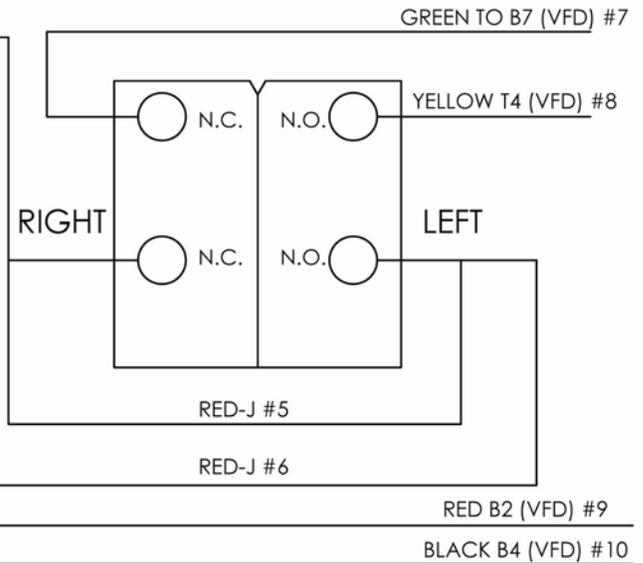
(PART # 22-0022)
 INNOVATECH 8.5" GRINDER



BOTTOM
 FIRST ROW CONTACTORS



BOTTOM
 SECOND ROW CONTACTORS



NOTE: J= JUMPER WIRE

WIRE NUMBER	COLOR	LENGTH	QTY PER PART	PART NUMBER
1	RED	4"	1	25-0049
2	BLACK	5"	1	25-0048
3	BLACK	4"	1	25-0048
4	RED	4"	1	25-0049
5	RED	5"	1	25-0049
6	RED	4"	1	25-0049
7	GREEN	?	1	25-0050
8	YELLOW	?	1	25-0091
9	RED	?	1	25-0049
10	BLACK	?	1	25-0048



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