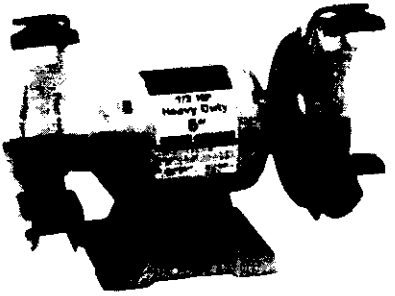
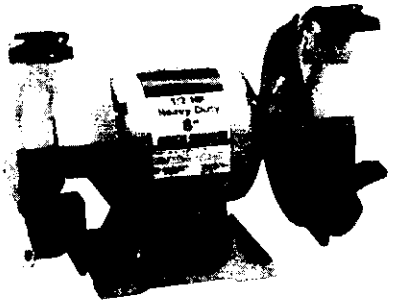
OWNER'S OPERATING MANUAL

BENCH GRINDER / 6 INCH, 8 INCH



6 INCH



8 INCH

SPECIFICATIONS		
Wheels		
Diameter	6"	8"
Thickness	1"	1"
Arbor Hole	1/2"	5/8"
Horsepower	1/2HP	3/4HP
RPM	3600	3600
Arbor Shaft Diameter	1/2"	5/8"

THANK YOU FOR BUYING OUR BENCH GRINDER

Your new bench grinder has been engineered and manufactured to I. T. C. 's high standard for dependability, ease of operation, and operator safety. Properly cared for, it will give you years of rugged, trouble-free performance.

Caution: Carefully read through this entire owner's manual before using your new bench grinder. Pay close attention to the Rules for Safe Operation, Warnings, and Cautions. If you use your grinder properly and only for what it is intended, you will enjoy years of safe, reliable service.

Thank you again for buying our Tools.

Save This Manual For Future Reference

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WARNING:
Failure to obey a safety warning can result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock, and personal injury.

CAUTION:
Failure to obey a safety warning may result in property damage or personal injury. Always follow the safety precautions to reduce the risk of fire, electric shock, and personal injury.

RULES FOR SAFE OPERATION

KNOW YOUR POWER TOOL

Safe operation of this power tool requires that you read and understand this owner's manual and all labels affixed to the tool. Learn its applications and limitations as well as the potential hazards peculiar to a bench grinder. Keep this manual readily available for future reference.

WARNING:
Do not connect your bench grinder to a power source until you have assembled and adjusted the bench grinder as described in this manual and have read and understood all precautions and operating instructions in the manual and printed on the tool.

WARNING:
When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury. Use common sense. Some of these basic safety precautions include the following:

SAFETY PRECAUTIONS

1. **KEEP GUARDS IN PLACE** and in good working order.
2. **REMOVE ADJUSTING KEYS AND WRENCHES.** Get in the habit of checking to see that hex keys and adjusting wrenches are removed from the tool before turning it on.
3. **KEEP THE WORK AREA CLEAN.** Cluttered work areas and work benches invite accidents.
4. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** Do not use power tools near gasoline or other flammable liquids, in damp or wet locations, or expose them to rain. Keep the work area well lighted.

5. **KEEP CHILDREN AWAY FROM POWER TOOLS.** All visitors should be kept at a safe distance from the work area.
6. **MAKE THE WORKSHOP CHILD-PROOF** with padlocks and master switches or by removing starter keys.
7. **DO NOT FORCE THE TOOL.** It will do the job better and safer at the rate for which it was designed.
8. **USE THE RIGHT TOOL.** Do not force the tool or attachment to do a job for which it was not designed.
9. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that could get caught in moving parts. Non-slip footwear is recommended. Wear protective covering over long hair.
10. **ALWAYS WEAR SAFETY GLASSES.** Everyday eyeglasses have only impact-resistant lenses; they are NOT safety glasses.
11. **PROTECT YOUR LUNGS.** Wear a face or dust mask if the cutting operation is dusty.
12. **PROTECT YOUR HEARING.** Wear earmuffs or plugs during periods of extended use.
13. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
14. **MAINTAIN THE TOOL WITH CARE.** Keep wheels dressed and clean for the best and safest performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have repaired by an authorized service facility. Inspect extension cords periodically and replace if damaged.
15. **DISCONNECT POWER TOOLS BEFORE SERVICING** or before changing accessories such as grinding wheel.
16. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure the switch is in the OFF position before plugging in the tool.
17. **USE ONLY THE MANUFACTURER'S RECOMMENDED ACCESSORIES.** Consult this owner's manual for recommended accessories. Using improper accessories may increase the risk of injury.
18. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped, or if the cutting tool is unintentionally contacted.
19. **PERIODICALLY CHECK FOR WORN OR DAMAGED PARTS.** Check for alignment of moving parts, binding of moving parts, breakage of parts, loose mounting brackets, and any other conditions that might affect operation. A guard or other part that is damaged should be properly repaired or replaced. Before the tool is used again, make sure that the repaired or replaced part will operate properly and perform its intended function. Have defective switches replaced by an authorized service center. Do not use tool if switch does not turn it on and off.
20. **NEVER LEAVE THE TOOL RUNNING UNATTENDED.** Turn off the power. Do not leave the tool until it comes to a complete stop.
21. **DO NOT ABUSE THE CORD.** Never yank the cord to disconnect from the receptacle. Keep the cord from heat, oil, and sharp edges.
22. **KEEP TOOL DRY, CLEAN, AND FREE FROM OIL AND GREASE.** Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any solvents to clean tools.
23. **STAY ALERT.** Never operate a power tool when tired or while under the influence of drugs, alcohol, or medication.
24. **ALWAYS TURN SWITCH OFF** before disconnecting it to avoid accidental starting.
25. **ALL REPAIRS, WHETHER ELECTRICAL OR MECHANICAL,** should be made at a qualified or Dealer Authorized Service Center. Use only replacement parts from your dealer or his/ her service center.
26. **SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.** Always provide this operating manual if loaning or allowing someone else to use this tool.
27. **BE AWARE OF DIRECTION OF GRINDING WHEEL ROTATION.** Do not feed material into the grinding wheel without the use of the work rest.

BENCH GRINDER SAFETY

1. **BEFORE ATTACHING THE GRINDING WHEEL,** inspect it for visible defects. If cracked, chipped, or warped, do not install it.
2. **MAKE SURE THAT THE GRINDING WHEEL** is properly installed and securely tightened before operating the bench grinder.
3. **DO NOT OVERTIGHTEN THE CLAMP NUT** on the grinding wheel. Excessive tightening can cause the wheel to crack during operation.
4. **MAKE SURE THAT THE WHEEL GUARD** is in good condition and tightly installed before operating the bench grinder.
5. **USE ONLY GRINDING WHEELS** which comply with ANSI B7.1 and rated greater than 3600 r.p.m.
6. **ALWAYS USE THE WHEEL GUARD, SAFETY SHIELD, AND WORK REST** and wear eye protection to reduce the risk of injury.
7. **DO NOT USE THE BENCH GRINDER** if the flange nut or clamp nut is missing or if the spindle shaft is bent.
8. **USE LIGHT PRESSURE WHEN STARTING** to grind; too much pressure on a cold wheel can cause the wheel to crack.
9. **USE ONLY FLANGES FURNISHED** with this bench grinder.
10. **ADJUST DISTANCE BETWEEN WHEEL AND WORK REST** to maintain 1/16" or less separation as the diameter of the wheel decreases with use.

EXTENSION CORDS

When using a power tool at a considerable distance from a power source, use an extension cord heavy enough to carry the current that the tool will draw. An undersized extension cord will cause a drop in line voltage, resulting in a loss of power and overheating. Use the chart provided to determine the minimum wire size required in an extension cord. The smaller the gage, the heavier the cord. Only round jacketed cords listed by Underwriter's Laboratories (UL) should be used.

When working with the tool outdoors, use an extension cord that is designed for outside use. This is indicated by the letters "WA" on the cord's jacket.

Before using an extension cord, inspect it for loose or exposed wires and cut or worn insulation.

CAUTION: Keep the cord away from the grinding area and position the cord so that it will not be caught on the work piece, work rest, or any part of the grinder.

Ampere rating (on faceplate)	0 - 2.0	2.1 - 3.4	3.5 - 5.0	5.1 - 7.0	7.1 - 12.0	12.1 - 16.0
CORD LENGTH	Wire Size (A.W.G.)					
25'	16	16	16	16	14	14
50'	16	16	16	14	14	12
100'	16	16	14	12	10	-
150'	16	14	12	12	-	-
200'	14	12	12	10	-	-

ELECTRICAL CONNECTION

Your New Bench Grinder is powered by a precision built electric motor. It should be connected only to a power source that satisfies the power input listed on the tool's nameplates. If the nameplate is marked 120 V, AC, or 60 Hz, the tool must be operated only with alternating current (normal household current). Never operate the tool with a direct current (DC), such as a generator. A voltage drop of more than 10 percent will cause a loss of power and overheating. If the bench grinder does not operate when plugged into an outlet, double check the power supply rating.

GROUNDING INSTRUCTIONS

In the event of an electrical malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances. See Figure A.

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. Check with a qualified electrician or service personnel if the grounding instructions are not completely understood or if in doubt as to whether the tool or outlet is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Have a damaged or worn cord repaired or replaced immediately.

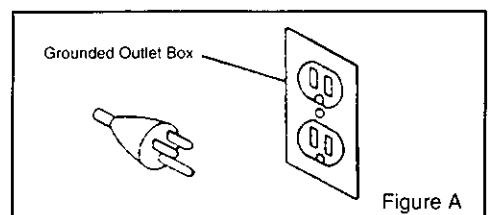


Figure A

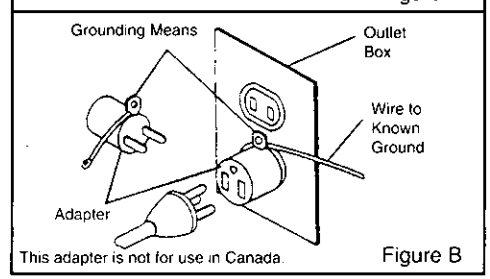


Figure B

This tool is intended for use on a circuit that has an outlet like the one shown in Figure A. A temporary adapter, like the one shown in Figure B, may be used to connect this plug to a 2-pole receptacle as shown in Figure B if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, or wire extending from the adapter must be connected to a known ground such as a properly grounded outlet box. This adapter is for use only in the U.S., not in Canada.

FEATURES

Familiarize yourself with the following features of such bench grinder before connecting it to a power source and using it.

1. **Motor**

Equipped with industrial duty rated motor for long-lasting, smooth performance.

2. **Grinding Wheels**

Equipped with fine and coarse grinding wheels to suit most applications.

3. **Safety Shield and Spark Deflector**

Adjustable safety shields and spark deflectors for operator convenience.

4. **Work rest**

Work rest is independently adjustable to compensate for wheel wear.

UNPACKING

1. Carefully remove all parts from the shipping carton.
2. Do not discard the packing material until you have identified all the parts.
3. If all parts have been included, proceed to assembly.
4. If you are missing a part, contact your dealer to obtain it before attempting to assemble the tool.
5. Examine all the parts to make sure no breakage has occurred during shipping. Any damaged or missing part should be replaced before attempting to use the tool.

LOOSE PARTS LIST

Assemble the following parts according to the instructions on the following pages.

Bench Grinder unit
Work rests (left and right)
Safety shields (2)
Shield rods (left and right)
Spark deflectors (left and right)
Owner's Operating Manual

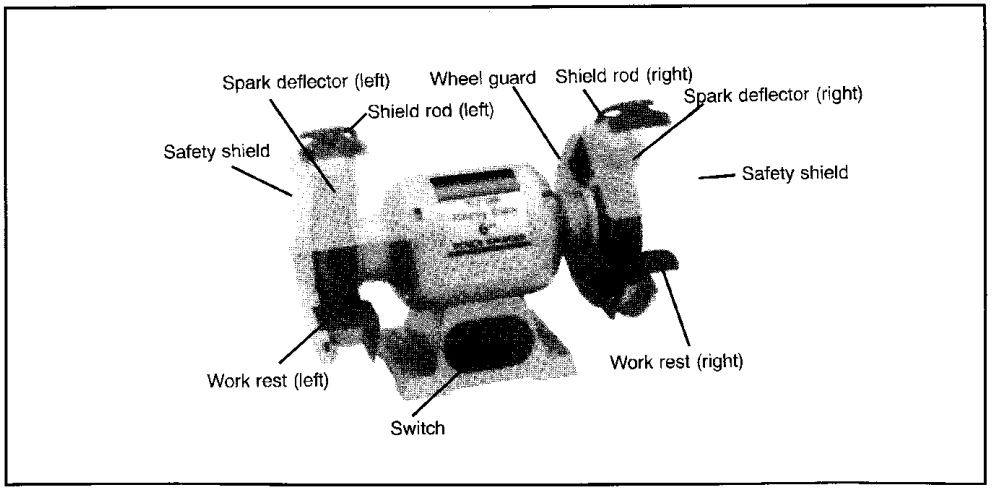


Figure 1

ASSEMBLY

WARNING:
Always disconnect the bench grinder from the power source before performing any assembly or adjustment.

WARNING:
Prior to use, secure the grinder to its supporting surface with bolts and nuts, using the holes in the base of the grinder.

CARE OF GRINDING WHEELS

WARNING:
Check carefully whether there are cracks in the grinding wheel. Replace a cracked wheel immediately.

In normal use, the grinding wheels may become cracked, grooved, rounded at the edges with foreign material. Cracked wheels must be replaced immediately. New wheels sometimes require dressing to make them round.

WHEEL REPLACEMENT

If you must replace a grinding wheel, be sure to obtain one with a safe rated speed at least as high as the "no load speed" r.p.m. marked on the name plate of the grinder and which is marked to comply with ANSI B7.1.

To replace the grinding wheel, remove the wheel cover by loosening the screws. Use a spanner wrench to loosen the hex nut in a clockwise direction for the left side and counterclockwise direction for the right side. Remove the outside flange and grinding wheel. To install a new grinding wheel, reverse the above procedure. Be sure the grinding wheel and outside flange are properly seated on the spindle shaft (Figure 2).

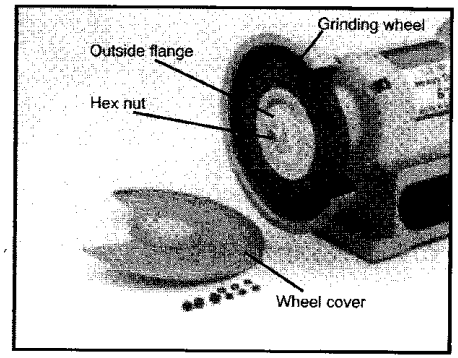


Figure 2

SPARK DEFLECTOR

Using one of the smaller hex head bolts, mount the spark deflector to the inside of both wheel guards. Adjust the spark deflector within 1/16" to the grinding wheel and tighten the bolts securely (Figure 3).

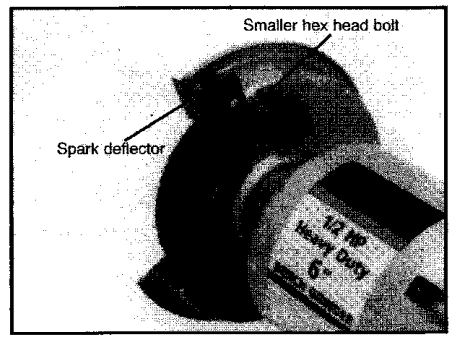


Figure 3

SAFETY SHIELD

Mount the shield rods by using the clamp brackets and the largest hex head bolts on the inside of both wheel guards. Mount and adjust safety shields to desired position and tighten the hex head bolt securely (Figure 4).

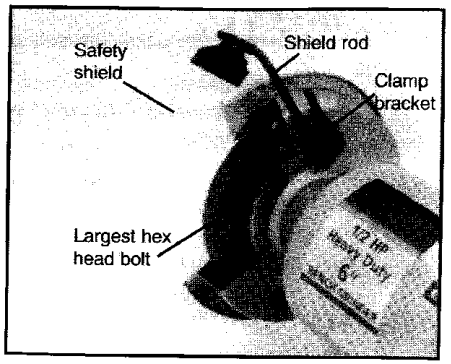


Figure 4

WORK REST

Using the larger hex head bolts, mount the work rests on both sides and adjust so the gap between the work rest and the grinding wheel is a maximum of 1/16". Tighten the hex head bolts securely (Figure 5).

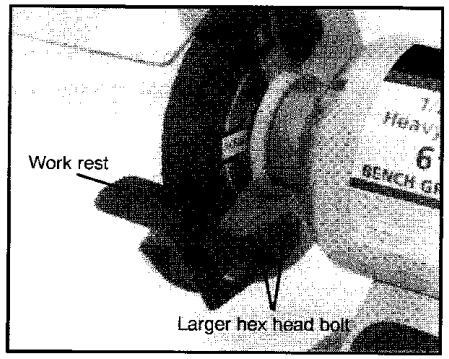


Figure 5

BASIC BENCH GRINDER OPERATION

WARNING:
Always wear eye protection when using the bench grinder.

WARNING:
Excessive pressure on a cold wheel may cause the wheel to crack.

CAUTION:
Pressing too hard overheats the motor and prematurely wears down the grinding wheel.

The key to efficient bench grinder performance is controlling the pressure. Keep the item to be sharpened moving at an even pace for smooth grinding. Note the original bevel angle on the item to be sharpened and try to maintain this angle. The grinding wheel should rotate "into" the object being sharpened. Keep a tray filled with water and dip your work in it regularly to prevent overheating. Overheating may weaken the metal by removing the temper.

The following recommendations will aid you in sharpening specific tools:

KNIVES

Remove metal from both faces of most knives working from the heavy end of the blade toward the tip (Figure 6).

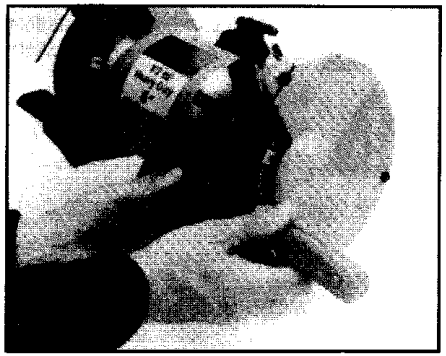


Figure 6

TWIST DRILL BITS

Drill bits are best sharpened on a sharpening jig available at most hardware stores, but can be "dressed up" on your bench grinder. Begin on one side of the point at the existing angle, then twist the bit while maintaining contact with the grinding surface. Sharpen only the tip. This technique requires considerable practice, so take your time and make a few "dry runs" first with the grinder off. Be sure to maintain the original cutting edge angle as this is important to the efficiency of your bits. One work rest has a V-groove angled to fit most drill bits (Figure 7).

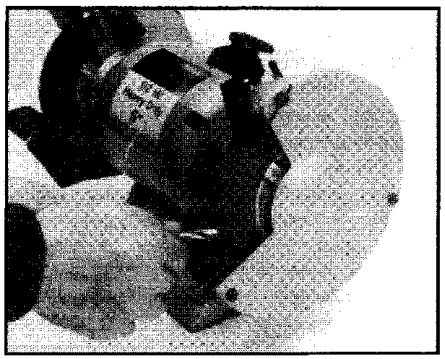


Figure 7

LAWN MOWER BLADES

Lawn mower blades are usually sharpened on only one edge and dressed up slightly on the other. Perform this sharpening process on both cutting ends of the blade. After sharpening, be sure to balance the blade by removing additional material from the heavy end. To balance, clamp a screwdriver horizontally in a vise. If a vise is not available, a straight nail can also be used. Place the center hole in blade on screwdriver shank. If blade is balanced it will remain in a horizontal position. If either end of the blade drops downward, sharpen the heavy end until the blade is balanced (Figure 8).

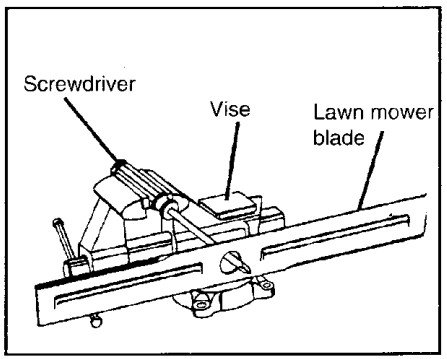


Figure 8

CAUTION:
An unbalanced lawn mower blade will cause excessive vibration which will damage the lawn mower.

MAINTENANCE



WARNING:
When servicing, use only replacement parts provided by your dealer or his/her service center. Use of any other parts may create a hazard or cause product damage.



WARNING:
Always disconnect the bench grinder from the power source before servicing the unit or making any adjustment.

Keep the bench grinder clean. Remove dust frequently from working parts and beneath the grinder.

Make sure that the bench grinder operates properly. Periodically check screws and bolts for tightness.



WARNING:
To ensure safety and reliability, all repairs should be performed at a Service Center authorized by your dealer. Use only replacement parts from your dealer or his service center.

WHEEL DRESSING

"Dressing" a wheel is done to renew sharpness or to true up the face of the wheel. Two types of wheel dressers are available:

1. a mechanical type with star wheels that revolve as the dresser is pressed against the wheel,
2. a hard grinding stone approximately 1" square and usually about six inches long.

Set the work rest of the bench grinder at a slight angle and brace the dressing tool/stone against it. Do not make contact with the grinding wheel until after you have turned on the motor and the wheel is rotating at full speed. Press the dresser slightly against the rotating wheel until you get a bite, then move slowly from side to side across the wheel. A small bite and many passes is better than a big bite and one pass. Work cautiously, hold the dresser with force on the work rest. Do not use excessive pressure against the grinding wheel. Proceed slowly until you master the technique.

• SERVICE

Now that you have purchased your tool, should a need ever exist for repair parts or service, simply contact your nearest Authorized Service Center or Dealer's Factory Service Center. Be sure to provide all pertinent facts when you call or visit.

• MODEL NO.

The model number of your tool will be found on a plate attached to the motor housing.

• HOW TO ORDER REPAIR PARTS

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- **MODEL NUMBER**
- **PART DESCRIPTION**
- **NAME OF ITEM**
  Bench Grinder
- **PART NUMBER**

All parts listed may be ordered from any Service Center authorized by the Dealer or Dealer's Factorv Service Center.

FULL WARRANTY PROGRAM

FOR ELECTRIC, HYDRAULIC OR PNEUMATIC TOOLS

ITC warrants all **ITC** or **ITC Pro Canada** Brand tools as listed above to be free of defects in material or workmanship for a period of **1 YEAR** from the date of purchase by the original purchaser/user. 90 days on electrical parts and motors. ITC shall, at its option, either repair or replace free of charge any product found defective upon Company inspection.

This warranty applies only to products purchased new by the original purchaser and does not apply to products which have been abused, misused, modified, or repaired by someone other than an authorized ITC Service Department or representative.

ITC makes no other warranty, and all implied warrantees including any warranty of mechantability or fitness for a particular purpose are limited to the duration of the expressed warranty period as set forth above. The Company's maximum liability hereunder is limited to the purchase price of the product. In no event shall the company be liable for any consequential, indirect, incidental, or special damages of any nature arising from the sale of the product.

All goods must be returned to the original Point of Purchase or authorized Service Centre and must be accompanied by the original Proof of Purchase. All goods shall be returned FREIGHT PREPAID. We reserve the right as final authority on whether the product should be repaired or replaced.