



Operator's Instruction Manual Models ALR, ALR-E, ALR-BS



CHISEL SCALERS



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READ AND UNDERSTAND THE OPERATOR'S INSTRUCTION MANUAL *THOROUGHLY*
BEFORE ATTEMPTING TO OPERATE THIS EQUIPMENT.

Death or serious injury could occur if this equipment is used improperly.



SAFETY MESSAGES

- Safety Instructions are preceded by a graphic alert symbol of DANGER, WARNING, or CAUTION.



Indicates an imminent hazard which, if not avoided, will result in death or serious injury.



Indicates an imminent hazard which, if not avoided, can result in death or serious injury.



Indicates hazards which, if not avoided, could result in serious injury and or damage to the equipment.

AIR POWERED EQUIPMENT



- When operating this equipment, the operator must wear approved job related safety attire. Eye and hearing protection must be worn at all times while equipment is in use as sound levels exceed 85 dBA. Steel toe safety shoes should be worn. Head protection is required if work is performed overhead. Wear proper dust mask based on material being removed.

- Use the correct size air hose for the tool, 1/2" diameter (minimum). Hose and fittings must be rated for safe handling in excess of 100 PSI pressure. The working pressure of this tool is 80-90 PSI and should never be allowed to exceed 100 PSI.

- ALR-E Limit the hose length to 30 feet (10 meters) maximum. Note: The pressure drop of 1/2" diameter hose is approximately 1 PSI per 90 linear feet.

- ALR-BS Limit the hose length to 30 feet (10 meters) maximum. Note: The pressure drop of 3/8" diameter hose is approximately 3 PSI per 90 linear feet.

- A filter/water separator must be provided on the air source to afford an adequate supply of clean, dry air to this tool. A lubricator should also be used. If a lubricator is unavailable, lubricate the tool daily by putting 4 to 5 drops of lightweight machine oil in the hose connector opening prior to connecting the air supply. In cold weather, use graphite oil for lubrication.



- Disconnect the air supply before removing or installing a chisel or accessory. Squeeze the hand lever to release all compressed air from the tool. Use only genuine EDCO chisels and accessories with this equipment. Failure to do so may result in serious bodily injury or death.

- Replace any damaged parts immediately. Use only genuine EDCO parts.

AIR POWERED EQUIPMENT CONTINUED

- To install or remove chisel: Disconnect the air supply. Squeeze the hand lever to release all compressed air. Pull back in the spring loaded locking collar and hold while removing the chisel. Hold back on the spring loaded locking collar while firmly seating the new chisel in the holder. Release collar to retain the chisel.

- The appropriate accessory must be used for the job at hand. Do **NOT** force the tool into the work. The hammering action of the tool will perform the work for you. **NEVER USE THE TOOL AS A PRY BAR.** Damage to the equipment will result. If the tool does not seem to perform the work to your specifications, try another accessory or call our customer service department at 1-800-638-3326.

- To activate tool, attach the air source, firmly grip the tool and then squeeze the hand lever on the air valve.



- After releasing the air valve hand lever, the tool will continue to operate for up to 15 seconds. This is a normal result of stored up pressure in the tool casing being released gradually. **Be sure to firmly grip the tool until ALL air leaves the chamber.**

- Remove the air source from the tool when not in use.



- This equipment will create dust from the material being removed. That dust may contain a chemical known to the state of California to cause cancer and/or birth defects or other reproductive harm. Check the chemical properties of the materials to be removed.



- It is the operator's responsibility to keep other people (workers, pedestrians, bystanders, etc.) away during operation. Block off the work area in all directions with roping, safety netting, etc. for a safe distance. Failure to do so may result in others being injured by flying debris or exposing them to harmful dust and noise.

DUST 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, and
- Crystalline silica from bricks, concrete and other masonry products.

Your risk of exposure to these chemicals varies depending on how often you do this type of work. To reduce your risk: work in a well ventilated area, use a dust control system, such as an industrial-style vacuum, and wear approved personal safety equipment, such as a dust/particle respirator designed to filter out microscopic particles.



Equipment Instruction Manual EDCO Model ALR, ALR-E, ALR-BS

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ALR-E Shown

Figure 1

HOW TO ORDER REPLACEMENT PARTS

To insure product safety and reliability, always use genuine EDCO replacement parts when making repairs to the equipment.

When ordering parts, please specify the MODEL and SERIAL NUMBER of the machine as given on the NAME-PLATE. In addition, give part number, description and quantity as listed on the parts list.

Please note: Due to improvements and changes in the equipment the illustrations shown may be different from the actual machine.

Toll Free: Voice 1-800-638-3326 • Fax 1-800-447-3326

	ALR-E	ALR-BS
Length (L)	66.0" 167.7 cm	57.0" 144.8 cm
Weight Aluminum	12.3 lbs. 5.6 kg	n/a
Weight Steel	18.5 lbs. 8.4 kg	24.5 lbs. 11.1 kg

Note: Specifications for other models on page 4.
Note: Instructions in this manual are the same for all models.



Dust and Silica Warning

WARNING

Grinding/cutting/drilling of masonry, concrete, metal and other materials can generate dust, mists and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproductive harm. If you are unfamiliar with the risks associated with the particular process and/or material being cut or the composition of the tool being used, review the material safety data sheets and/or consult your employer, the manufacturers/suppliers, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials. California and some other authorities, for instance, have published lists of substances known to cause cancer, reproductive toxicity, or other harmful effects.

Control dust, mist and fumes at the source where possible. In this regard use good work practices and follow the recommendations of the manufacturers/suppliers, OSHA/NIOSH, and occupational and trade associations. Water should be used for dust suppression when wet grinding/cutting/drilling is feasible. When the hazards from inhalation of dust, mists and fumes cannot be eliminated, the operator and any bystanders should always wear a respirator approved by NIOSH/MSHA for the material being used.

WARNING

Grinding/cutting/drilling of masonry, concrete and other materials with silica in their composition may give off dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer. When grinding/cutting/drilling such materials, always follow the respiratory precautions mentioned above.



EDCO Model ALR, ALR-E, ALR-BS SPECIFICATIONS SPECIFICATIONS FOR - MODEL ALR

	<u>LENGTH*</u>	<u>WEIGHT*</u>	
		Steel	Aluminum
ALR-2	24.0 in (61 cm)	8.6 lb (3.9 kg)	7.6 lb (3.4 kg)
ALR-4	45.0 in (114.3 cm)	12.5 lb (5.6 kg)	8.5 lb (3.9 kg)
ALR-5	57.0 in (144.8 cm)	16 lb (7.3 kg)	9.0 lb (4.1 kg)
ALR-E	66.0 in (167.6 cm)	18.5 lb (8.4 kg)	12.3 lb (5.6 kg)

* All weight include the standard 4" (10.2 cm) chisel.

Blows per minute..... 2100-3000
Stroke..... 1.535 inches (38.99 mm)
Bore..... 1.188 inches (30.18 mm)
Air Flow Rate..... 6-8 CFM @ 90 PSI
Working Pressure..... 80-90 PSI (5.5-6.2 Bar), 100 PSI max
Noise Level During Operation..... Exceeds 85 dB(A)
Hearing protection must be worn

Caution..... Approximately 15 seconds of pressure is stored in case after air valve is released

Note..... Specifications are subject to change at any time.

SPECIFICATIONS FOR - MODEL ALR-BS

	<u>LENGTH</u>	<u>WEIGHT</u>
ALR-BS-STRAIGHT	57 in (144.8 cm)	23.0 lb (10.4 kg)
ALR-BS-ERGO	57 in (144.8 cm)	24.5 lb (11.1 kg)

Blows per minute..... 3500
Stroke..... 1.595 inches (40.5 mm)
Bore..... 1.902 inches (48.3 mm)
Air Flow Rate..... 12-15 CFM @ 90 PSI
Working Pressure..... 80-90 PSI (5.5-6.2 Bar), 100 PSI max
Noise Level During Operation..... Exceeds 85 dB(A)
Hearing protection must be worn

Caution..... Approximately 15 seconds of pressure is stored in case after air valve is released

Note..... Specifications are subject to change at any time.



EXAMPLE OF WORN AND DAMAGED CHISEL



This is an example of a chisel that has been abused, probably hitting inserts, studs or other objects embedded in the working surface. To get maximum life out of a chisel be careful when working around objects protruding out of the work surface.

EXAMPLE OF AN EVENLY WORN CHISEL



This is an example of a chisel that has not been abused, as you can see the wear is *even* across the width of the chisel. Chisel edge may be renewed by grinding.

PROCEDURE FOR INSTALLING AND REMOVING A CHISEL



Remove the air supply before performing the following steps. To install a chisel, there are several different types but all install in the same manner. Slide the collar back towards the chisel holder and slide the chisel hex end into the chisel holder and release the collar to lock the chisel in place. Be sure the chisel is seated all the way into the chisel holder.



Pictured above shows the chisel installed. To remove a chisel reverse the above procedure and pull the chisel out of the chisel holder.



PROCEDURE FOR LUBRICATING THE ALR



To lubricate the ALR put four (4) to five (5) drops of light weight machine oil in the hose connector circled above before connecting the air supply, graphite oil in extremely cold weather.

CORRECT POSITIONING OF THE CHISEL



Be sure the chisel is oriented correctly. When in the operating position the straight flat edge should be closest to the work surface and the beveled edge should be facing up as shown in the photo above.



Straight & Ergonomic Models



Chisels 1", 2" or 4" widths
 General purpose demolition or clean up. Chip away accumulation of hardened debris or industrial deposits, oil & grease absorbances, ceramic & quarry tile, epoxy mortars, grouts, refractory cuttings, furnace slag, etc.



Scrapers 2", 4", 8" or 12" widths
 Scraper Blades are made from extra hard spring steel which fasten to a milled shank. Easily removed and replaced, they may be sharpened to almost knife-like edges. Use to strip and clean rubber, glue, mastic, vinyls, floor coverings, ceramics, insulation and fireproofing, paint booth buildup, elastic grouts, waterproofing membranes, tank linings, rust accumulations, corrosion and encrusted deposits around water intakes, roofing materials, etc.



Chipping Points
 Use for demolition; breaking up concrete, ceramics or any hard material; break sharp edge of sidewalk to eliminate trip hazards.



Joint Cleaner
 Remove deteriorated joint compound and sealers from factory floors or highways.



Shingle Removal Tool
 Serrated scraper blades are made from extra hard spring steel and are equipped to easily lift shingles. Fastens to special milled chisel.



Pictured from left to right: ALR-2A, ALR-4A, ALR-5, ALR-E, ALR-BS-ERGO, ALR-BS-STRAIGHT

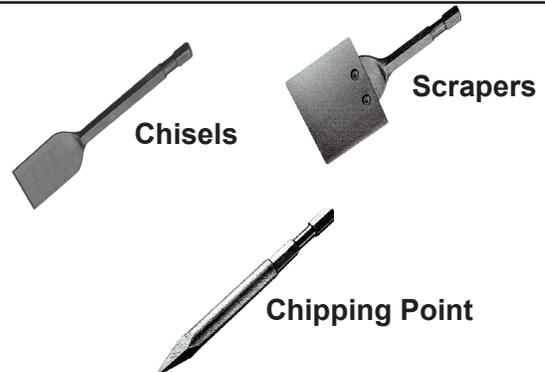


Tampers
 For posts, tamp grout material in confined areas, set packing materials around pipe or flatten asphalt edges.



Bushing Tool
 Forged and tempered, hardened steel bushing hammer tool. Use to create a roughened surface for an architectural finish or better adhesion of coatings and overlayments.

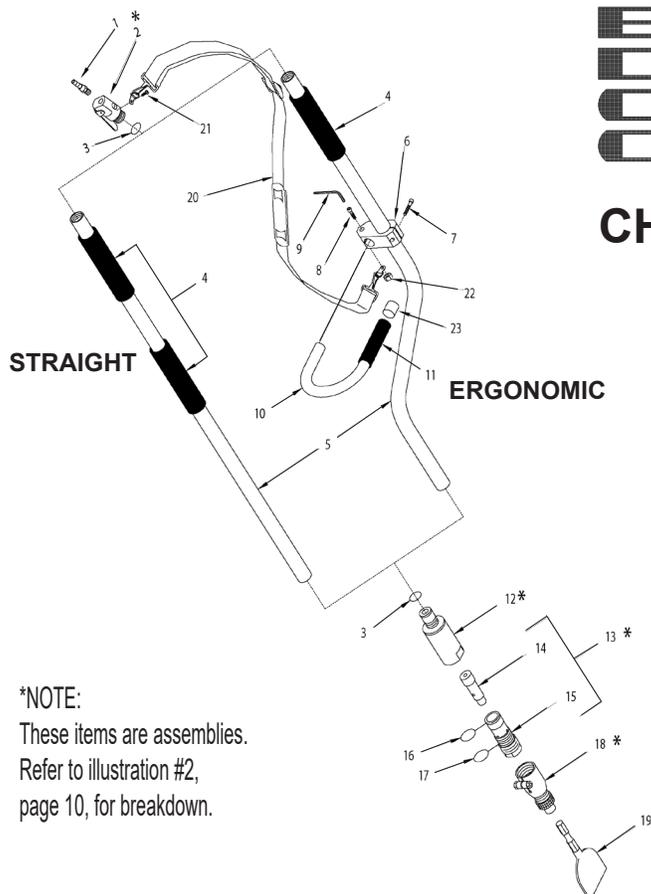
Big Stick Model



Questions? Call EDCO
1-800-638-3326



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TO DISASSEMBLE THE ALR SERIES AND BIG STICK

NOTE: Items (#2), (#12), (#13) and (#18) can be replaced as assemblies.

NOTE: All threaded parts are standard right-hand threads.

1. Place Cylinder Housing (#12) in a vice and clamp on the flat ends.
2. To remove Chisel Holder Chuck (#18), loosen Lock Nut and Capscrew, then unscrew the Chisel Holder from the Cylinder (#15).
3. Unscrew Cylinder (#15) from Cylinder Housing (#12). Cylinder (#15) contains the Piston (#14). Piston is removed by gently tapping on the small end and lifting Piston (#14) up and out of Cylinder (#15).
4. Cylinder Housing (#12) is not an operating part and rarely needs to be removed. If an air leak is detected, the "O" rings (#3) should be replaced.
5. Casing (#5) if damaged, may be unscrewed from the Cylinder Housing (#12) and Valve Assembly (#2). There are no moving parts in the Casing (#5).
6. To remove the Valve Assembly (#2) simply unthread from the upper end of the Casing (#5).
7. To replace Rubber Hand Grips (#4), remove Air Valve Assembly (#2), moisten grips with water and slide grips to a comfortable position on Casing (#5).



MAINTENANCE INSTRUCTIONS

WARNING

Disconnect air source and chisel accessory before performing any maintenance on this machine.

WARNING

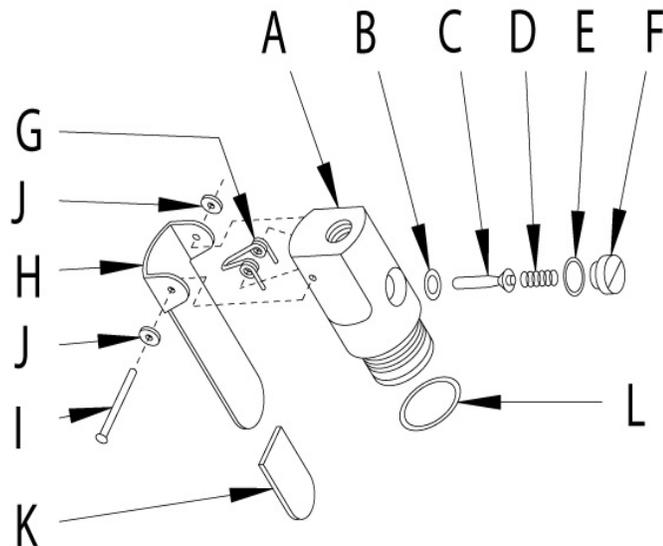
1. Clean tool daily and keep it clean and lubricated. If a lubricator is provided with the air source, it should be adequate. If you are unsure or no lubricator is provided, lubricate the tool daily before use by putting 4 to 5 drops of lightweight machine oil in the hose connector opening. If tool is operated in cold weather (near or below freezing), use a graphite oil instead of the lightweight machine oil as described above.
2. After every 100 hours of use, flush the tool thoroughly with an environmentally safe, nonflammable and non-caustic solvent to clean out any oil/dirt buildup in the tool. Oil tool immediately after flushing to prevent corrosion.
3. Replace any damaged parts immediately. Use only genuine EDCO parts.

ILLUSTRATION #2

STEPS TO DISASSEMBLE THE AIR VALVE BODY ASSEMBLY ILLUSTRATION (#2):

1. To remove Internal Valve Parts:

E - "O" Ring
D - Compression Spring
C - Valve Stem
B - "O" Ring



First remove the Capping screw (F). Note that the Valve Stem (C) should be replaced if it is worn and loose in Valve Body (A).

2. The "O" Ring (B) for the VALVE Stem (C) may become unseated due to excess air pressure. Check this item if tool fails to stop running when valve handle is released.
3. The Valve Lever (H) is held in place by the Rivet (I) and two Washers (J).

The "O" Ring (L) must be in place on Valve Assembly (A) to prevent air leaks when assembly is threaded into Casing (#5) page 9.

NOTE: All "O" Rings should be inspected and replaced if air leakage or damage is detected.

NOTE: Be sure to lubricate all parts with a lightweight machine oil when reassembling the tool.



Maintenance Schedule



Repairs are to be done by authorized EDCO Dealers only.



Read and follow instructions in the motor owner's manual.

All maintenance to be performed by qualified personnel.	Before Operation	Daily	Every 100 Hours of Operation	As Required	Every Tool Flush
Visual Inspection of Entire Tool	X				
Check chisel for damage/uneven wear	X				
Lubricate		X			
Clean Dust & Dirt Off of Tool		X			
Flush Tool			X		
Check "O" Rings					X
Replace "O" Rings				X	

Operational Keys to good equipment care and long life...

1. Before each use, check and insure all hardware, nuts, bolts and fittings are tight and not worn or damaged. If damaged or missing hardware is noted, it should be replaced before the tool is put back into service.
2. Check the maintenance instructions for important information about lubrication intervals. Remember, equipment used in a dusty environment has more frequent lubrication requirements than equipment that is not used in a dusty environment.
3. After each days use, the chisel scaler should be cleaned. When cleaning, cover any openings to prevent contaminants from entering the equipment.



LIMITED EQUIPMENT WARRANTY OF SALE – TERMS & CONDITIONS

Equipment Development Company, Inc. herein referred to as EDCO (Seller) warrants that each new unit manufactured by EDCO to be free from defects in material and workmanship in normal use and service for a period of (1) one year (**except for the chisel head assembly on all model ALR's & ALR-BS**, in which case the warranty period shall be 90 days) from date of shipment to the original retail or equipment rental center owner.

Accessories or equipment furnished and installed on the product by EDCO but manufactured by others, including, but not limited to engines, motors, electrical components, transmissions etc., shall carry the accessory manufacturers own warranty.

EDCO will, at its option, repair or replace, at the EDCO factory or at a point designated by EDCO, any part which shall appear to the satisfaction of EDCO inspection to have been defective in material or workmanship.

EDCO reserves the right to modify, alter and improve any part or parts without incurring any obligation to replace any part or parts previously sold without such modified, altered or improved part or parts.

This warranty is in lieu of and excludes all other warranties, expressed, implied, statutory, or otherwise created under applicable law including, but not limited to the warranty of merchantability and the warranty of fitness for a particular purpose in no event shall seller or the manufacturer of the product be liable for special, incidental, or consequential damages, including loss of profits, whether or not caused by or resulting from the negligence of seller and/or the manufacturer of the product unless specifically provided herein. In addition, this warranty shall not apply to any products or portions thereof which have been subjected to abuse, misuse, improper installation, maintenance, or operation, electrical failure or abnormal conditions and to products which have been tampered with, altered, modified, repaired, reworked by anyone not approved by seller or used in any manner inconsistent with the provisions of the above or any instructions or specifications provided with or for the product

FORCE MAJEURE

Seller's obligation hereunder are subject to, and Seller shall not be held responsible for, any delay or failure to make delivery of all or any part of the Product due to labor difficulties, fires, casualties, accidents, acts of the elements, acts of God, transportation difficulties, delays by a common carrier, inability to obtain Product, materials or components or qualified labor sufficient to timely perform part of or all of the obligations contained in these terms and conditions, governmental regulations or actions, strikes, damage to or destruction in whole or part of manufacturing plant, riots, terrorist attacks or incidents, civil commotions, warlike conditions, flood, tidal waves, typhoon, hurricane, earthquake, lightning, explosion or any other causes, contingencies or circumstances within or without the United States not subject to the Seller's control which prevent or hinder the manufacture or delivery of the Products or make the fulfillment of these terms and conditions impracticable. In the event of the occurrence of any of the foregoing, at the option of Seller, Seller shall be excused from the performance under these Terms and Conditions, or the performance of the Seller shall be correspondingly extended.

This document sets forth the terms and conditions pursuant to which the purchaser ("Purchaser") will purchase and Equipment Development Co.Inc. ("Seller") will sell the products, accessories, attachments (collectively the Products ") ordered by the Purchaser. These terms and conditions shall govern and apply to the sale of Seller's Products to Purchaser, regardless of any terms and conditions appearing on any purchase order or other forms submitted by Purchaser to Seller, or the inconsistency of any terms therein and herein.

1. PRICE

All prices set forth on any purchase order or other document are F.O.B. Sellers facility or distribution point, as may be determined by Seller (F.O.B.Point). All prices are exclusive of any and all taxes, including, but not limited to, excise, sales, use, property or transportation taxes related to the sale or use of the Products, now or hereafter imposed, together with all penalties and expenses. Purchaser shall be responsible for collecting and/or paying any and all such taxes, whether or not they are stated in any invoice for the Products. Unless otherwise specified herein, all prices are exclusive of inland transportation, freight, insurance and other costs and expenses relating to the shipment of the Products from the F.O.B. point to Purchaser's facility. Any prepayment by Seller of freight insurance and other costs shall be for the account of Purchaser and shall be repaid to Seller.

2. PAYMENT TERMS

Payment terms are as follows. 2% 10 days (to approved and qualified accounts). Net 30 days. This is a cash discount for invoices paid within 10 days after the invoice date, regardless of date of receipt of shipment. This is not a trade discount and will not be granted to accounts that do not adhere to stated terms.

*All past due accounts are subject to a late payment fee of 1.5% per month or a maximum allowed by law if different, along with the expenses incidental to collection including reasonable attorney's fees and costs.

*Seller reserves the right to hold shipments against past due accounts.

*Seller reserves the right to alter payment terms.

3. FREIGHT TERMS

All shipments will be made F.O.B. shipping point as designated in these Terms and Conditions, and title shall pass at the F.O.B. point. Delivery to the initial common carrier shall constitute delivery to the Purchaser. Any claims for loss or damage during shipment are to be filed with carrier by the Purchaser. Seller will not assume responsibility for the performance of the carrier.

Back orders will be shipped in the most practical fashion with charges consistent with our freight policy established with the original order. UPS, FED EX, MAIL or shipments by other couriers are subject to the same terms and conditions as outlined in paragraph #3'Freight Terms".

4. DELIVERY, DAMAGES, SHORTAGES

Seller shall use reasonable efforts to attempt to cause the Products to be delivered as provided for in these Terms & Conditions. Delivery to the initial common carrier shall constitute the delivery to the Purchaser. Sellers responsibility, in so far as transportation risks are concerned ceases upon the delivery of the Products in good condition to such carrier at the F.O.B. point and all the Products shall be shipped at the Purchaser's risk. Seller shall not be responsible or liable for any loss of income and/or profits, or incidental, special, consequential damages resulting from Seller's delayed performance in shipment and delivery.

5. RETURN OF DEFECTIVE PRODUCTS

Defective or failed material shall be held at the Purchaser's premises until authorization has been granted by Seller to return or dispose of Products. Products that are to be returned for final inspection must be returned Freight Prepaid in the most economical way. Credit will be issued for material found to be defective upon Seller's inspection based on prices at time of purchase.

6. PRODUCTS ORDERED IN ERROR

Products may be returned, provided that claim is made and Seller is notified within 7 days of receipt of Products, and the Products are in original buyer's possession not more than 30 days prior to return, subject to Seller's approval. If Products are accepted for return, they must be Freight Prepaid and buyer will be charged a minimum of 15% restocking charge, plus a charge back for outbound freight charges if the original order was shipped prepaid. Returns are not accepted for any Products that are specifically manufactured to meet the buyer's requirement of either specifications or quantity.

AGREEMENTS

These Terms and Conditions constitute the entire agreement between Seller and Purchaser as it relates to terms and conditions of sale, and supersedes any and all prior oral or written agreements, correspondence, quotations or understandings heretofore in force between the parties relating to the subject matter hereof. There are no agreements between Seller and Purchaser with respect to the Product herein except those specifically set forth in and made part of these terms and conditions. Any additional terms, conditions and/or prices are rejected by Seller.

These terms and conditions may be modified, cancelled or rescinded only by a written agreement of both parties executed by their duly authorized agents.

USE ONLY GENUINE EDCO PARTS & ACCESSORIES
For your own safety, the safety of others and the life of your machine.