

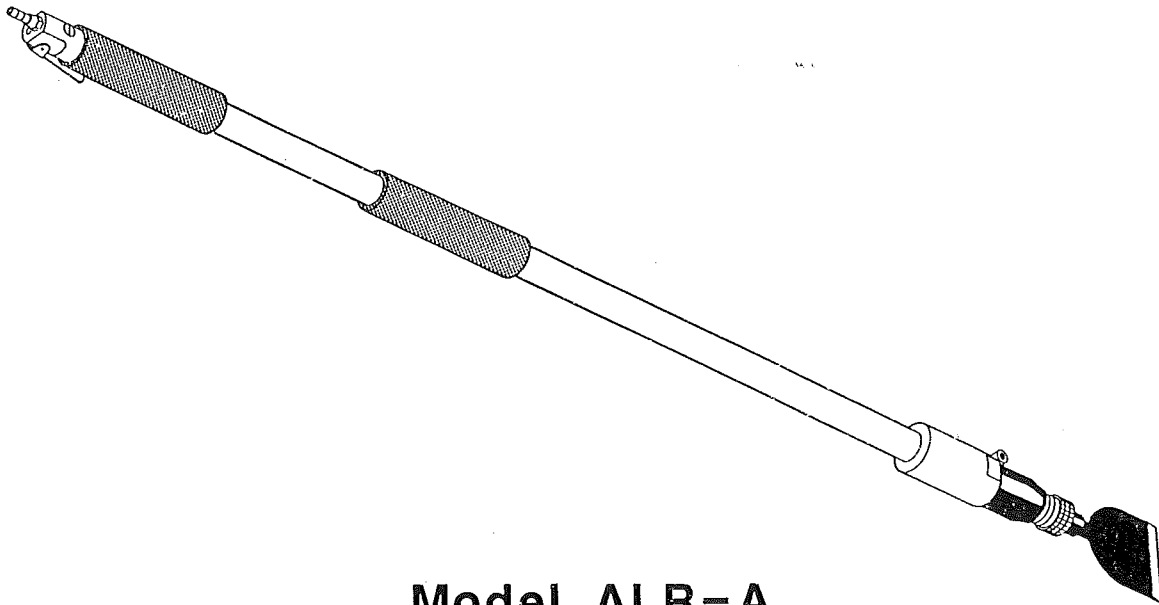
REVISED JUNE, 1994

EDCOR RAM
MADE IN USA™

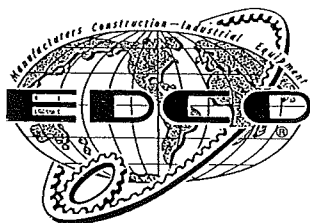
LONG REACH SCALER

LIGHT-WEIGHT

INSTRUCTIONS AND PARTS MANUAL



**Model ALR-A
(ALUMINUM)**



EQUIPMENT DEVELOPMENT COMPANY, INC.

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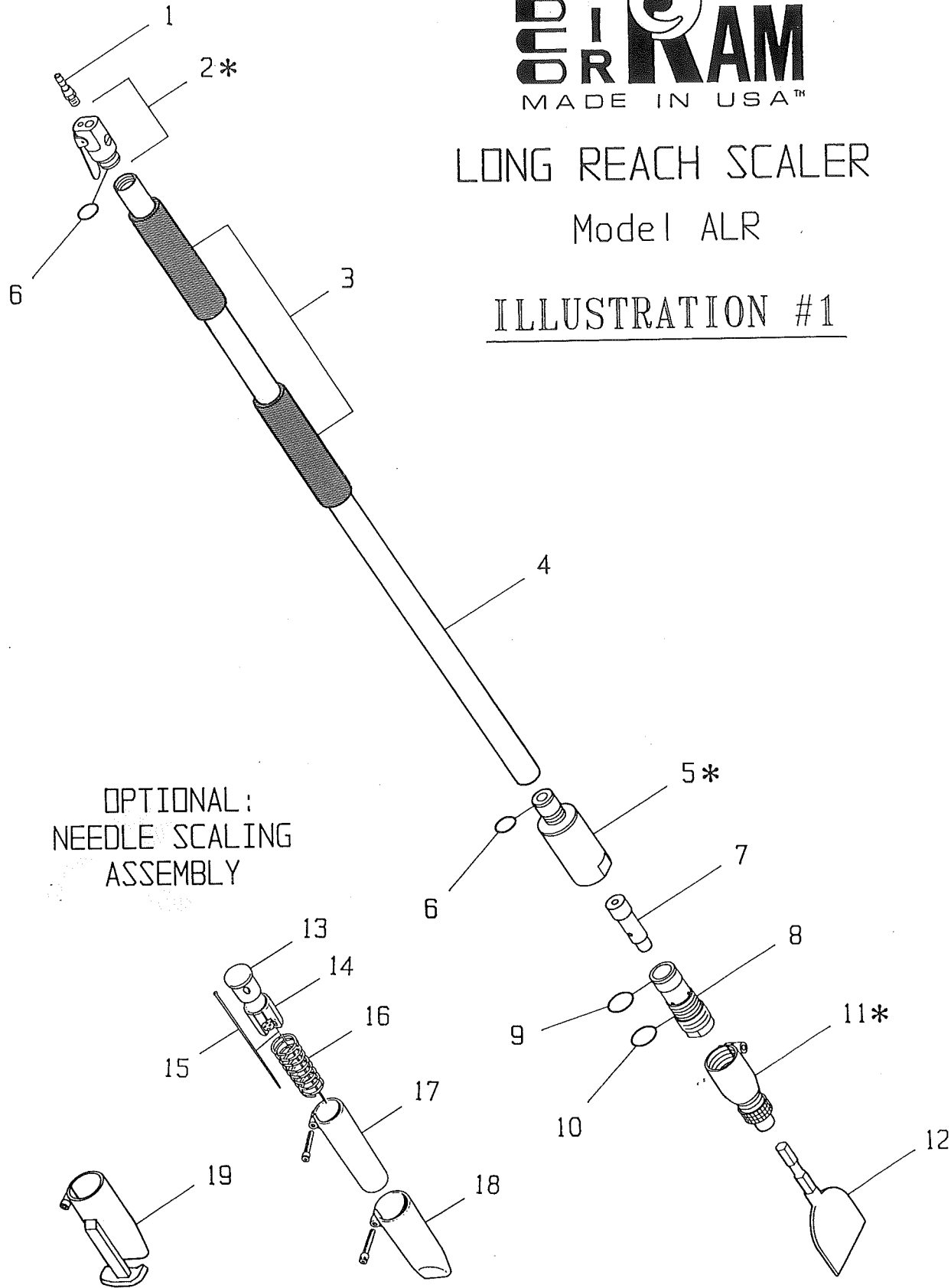
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LONG REACH SCALER

Model ALR

ILLUSTRATION #1



OPTIONAL:
NEEDLE SCALING
ASSEMBLY

* NOTE:
These items are assemblies. Refer to
Illustration #2, page 3, for breakdown.

PARTS LISTING - ILLUSTRATION #1

Item #	Part #	Description	Qty.
1.	C10523	Barb, Swivel 3/8Hose x 1/4MPT	1
2.	C10570A	Valve Body Assembly, Aluminum (See Illus. #2 for Breakdown)	1
3.	C10531	Grip, Foam 8"	2
4.		Casing, Alum. (Specify Size)	1
	C10532A	5 foot Model	
	C10533A	4 foot Model	
	C10534A	2 foot Model	
5.	C10535A	Cylinder Housing Assy., Alum. (See Illus. #2 for Breakdown)	1
6.	C10536	O-Ring 26mm x 2mm (See Illus. #2, Items "G" & "N")	2
7.	C10583	Piston } Should be replaced	1
8.	C10584	Cylinder } together as a set.	1
9.	C10511	O-Ring 34mm x 2mm	1
10.	C10512	O-Ring 37mm x 2mm	1
11.	C10514	Chisel Holder, 5/8" Hex Shank (See Illus. #2 for Breakdown)	1
12.	C10302	LR-4 Chisel, 4" Steel (Other Accessories Available)	1
	C10537	Allen Key 1/4 in. (Not Shown)	1

OPTIONAL - NEEDLE SCALING ASSEMBLY (Part #C10307)

13.	C10516	Anvil	1
14.	C10517	Needle Holder for 3mm Needle	1
15.		Needle 3mm x 7" (28 per set)	28
	C10595	AN-FL Flat Tip (Standard)	
	C10596	AN-PT Pointed Tip (Optional)	
	C10597	AN-CP Chisel Tip (Optional)	
16.	C10518	Spring, Compression	1
17.	C10519	Intermediate Tube, Round Front W/ Socket Head Screw	1
18.	C10520	Front Tube, Straight W/ Socket Head Screw	1
19.	C10537	Allen Key 1/4 in. (Not Shown)	1

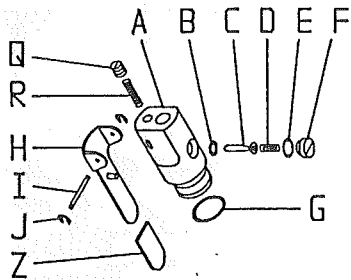
OPTIONAL - FRONT TUBE WITH FOOT FOR CRACK CHASING

19.	C10538	Front Tube, Crack Chaser W/ Socket Head Screw	1
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ILLUSTRATION #2

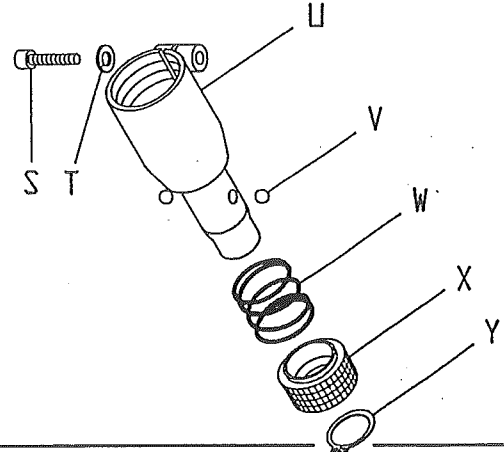
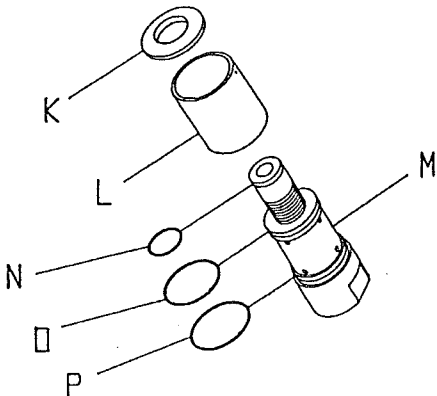
2 C10570A Valve Body Assembly

ITEM	PART #	DESCRIPTION	QTY
A	C10571A	Valve Body, Aluminum	1
B	C10540	O-Ring, Valve Stem #109	1
C	C10572	Valve Stem	1
D	C10542	Spring, Valve Stem	1
E	C10543	O-Ring, Stem Retainer #013	1
F	C10544	Valve Stem Retainer	1
G	C10536	O-Ring, Valve Body 26mm x 2mm	1
H	C10573	Valve Lever	1
I	C10574	Pin, Valve Lever 1/8 x 1 3/8	1
J	C10622	Retaining Ring, E-Clip 1/8"	2
Q	C10575	Retaining Cap, 3/8 - 24 x 3/8	1
R	C10576	Spring, Valve Lever	1
Z	C10569	Grip, Flat Red .75 x 1.5"L	1



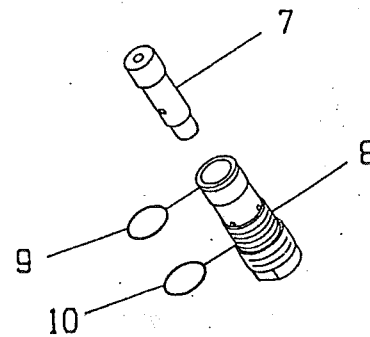
5 C10535A Cylinder Housing Assembly

ITEM	PART #	DESCRIPTION	QTY
K	C10545	Cylinder Housing Cap	1
L	C10546	Cylinder Housing Sleeve	1
M	C10547A	Cylinder Housing Main Body, Alum.	1
N	C10536	O-Ring 26mm x 2mm	1
O	C10548	O-Ring 46mm x 2mm	1
P	C10549	O-Ring 48mm x 2mm	1



11 C10514 Chisel Holder Assembly

ITEM	PART #	DESCRIPTION	QTY
S	C10577	Screw, Skt. Hd. 5/16 - 18 x 1 1/4	1
T	10801	Washer, Lock 5/16	1
U	C10578	Chuck Body	1
V	C10579	Ball, 5/16" Chrome	2
W	C10580	Spring, Comp. 1 1/2" OD x 1 1/4"L	1
X	C10581	Collar, Knurled Ball Locking	1
Y	C10582	Retaining Ring, Ext. 1 1/8"	1
	C10537	Allen Key 1/4 in. (Not Shown)	1



7, 8, 9 & 10 Piston and Cylinder Assembly

ITEM	PART #	DESCRIPTION	QTY	
7	C10583	Piston	} Should be replaced together as a set.	1
8	C10584	Cylinder		1
9	C10511	O-Ring 34mm x 2mm		1
10	C10512	O-Ring 37mm x 2mm		1

OPERATION AND MAINTENANCE INSTRUCTIONS

EDCO AIR-RAM LONG REACH SCALER

1. Be certain airhose is correct size for the tool - 90 p.s.i. (6.3 bar). Working pressure should always be kept at 80 psi and never above 100 psi. Check hose fittings.
2. Keep hose length limited to 30 feet (10 meters). Pressure drop is approximately 3 psi per 90 feet of 3/8" hose.
3. The use of a filter/lubricator is recommended. Otherwise lubricate the tool daily through the hose connector with four or five drops of light machine oil. After 100 hours of use, flush the tool thoroughly with kerosene. Oil tool immediately after flushing. When operating the tool in refrigerated rooms or during freezing weather, the use of a graphite/oil mixture for lubrication is recommended.
4. To install tools into chisel holder:
 - Pull back on the spring-loaded locking collar - hold until tool is firmly seated in the holder
 - Release collar to retain tool

To remove tool:

 - Pull back on locking collar and remove tool
5. Do not apply excessive pressure when operating the tool - let the scaler do the work. DO NOT use the tool as a pry bar.
6. The AIR-RAM Scaler is equipped with a safety release air valve to prevent accidental activation. To operate the valve, push the lever "H" back toward air inlet and depress. Releasing the lever will stop the air flow.
7. After releasing the air valve lever, the tool will continue to operate for up to 12 seconds. This is a normal result of stored pressure in the tool casing being released gradually.
8. Follow disassembly instructions in case of problems. The AIR-RAM is virtually maintenance free and if used properly, will provide long, trouble free service. Parts are available from your dealer or the EDCO factory.

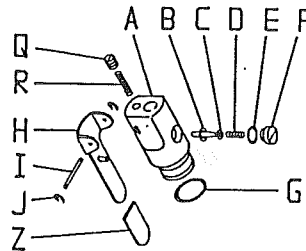
TO DISASSEMBLE EDCO AIR-RAM SCALER MODEL

ALR

NOTE: Items #2, #5, and #11 can be replaced as assemblies. All threaded parts are standard right-hand styles.

1. To disassemble tool: place Cylinder Housing (#5) in vice and clamp on flat ends.
2. To remove Chisel Holder Chuck (#11) - loosen hex screw and unscrew Chisel Holder from Cylinder (#8).
3. Cylinder (#8) may be unscrewed from Cylinder Housing (#5). Cylinder (#8) contains the Piston (#7). Piston is removed by gently tapping on the small end and lifting Piston up and out of Cylinder Housing.
4. Cylinder Housing (#5) is not an operating part and rarely needs to be removed. If an air leak is detected, the "O" rings (#6 and "N") should be replaced.
5. Casing (#4) if damaged, may be unscrewed from Cylinder Housing (#5) and Valve Assembly (#2). There are no moving parts in the Casing.
6. Valve Assembly (#2) is screwed into upper end of Casing (#4).

AIR VALVE BODY ASSEMBLY (#2)



To remove Internal Valve Parts, E - "O" Ring,
D - Compression Spring,
C - Valve Stem,
B - "O" Ring
remove Capping Screw (F). The Valve Stem (C) should be replaced if worn or loose in Valve Body (A).

The "O" Ring for the Valve Stem (B) may become unseated due to excess air pressure. Check this item if tool fails to stop running when valve handle is released.

The Valve Lever (H) is held in place by the Pin (I) and E-clips (J).

The "O" ring (G) must be in place on Valve Assembly (A) to prevent air leaks when assembly is screwed into Casing (#4).

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

To replace Rubber Hand Grips (#3) - remove Air Valve Assembly and slide grips to a comfortable position on Casing.

Lubricate all parts with light machine oil when reassembling the tool.

OPTIONAL NEEDLE SCALER OR CRACK CHASER

ASSEMBLY:

This assembly is threaded onto Cylinder (#8) in place of Chisel Holder Chuck (#1).

TO REPLACE WORN NEEDLES:

Loosen hex screw on Tube (#17)

Unscrew entire assembly from Cylinder (#8)

Be careful - needles are under spring pressure and Anvil (#13) may eject from Tube (#17)

Hold anvil in place when unscrewing assembly from tool. When assembly is unscrewed - spring tension will be released. Gently shake out Anvil (#13), Needles Holder (#14) and needles will follow. Spring (#16) should be left inside of Tube (#17).

Remove needles and replace. One needle per location hole in Needle Holder (#14). Insert needles into Tube (#17) as a group - be sure all needles fit inside Spring (#16).

Replace Holder (#14) in Tube, follow with Anvil (#13). Reassemble on tool, tighten hex screw on Tube (#17).

Extension tube adjustment: loosen hex screw on Tube (#18), allow about 1 inch of needle to protrude. Tighten Tube (#18).

NOTE: Needle Scaler Tube (#18) may be replaced with Crack Chaser Tube with foot (#19) for opening random cracks on concrete floor surfaces.

MODEL ALR LIMITED EQUIPMENT WARRANTY

Equipment Development Company, Inc. herein referred to as EDCO 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 (6) six months (except in the case of the chisel head assembly on all model ALRs, in which case the warranty period shall be 90 days) from date of shipment to the original retail or equipment rental center owner.

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.

This warranty, does not apply to failure occurring as a result of abuse, misuse, negligent repairs, corrosion, erosion, normal wear and tear, alterations or modifications made to the product without express written consent of EDCO: or failure to follow the recommended operating practices and maintenance procedures as provided in the products operating and maintenance manuals.

This warranty does not obligate EDCO to bear any transportation charges in connection with the replacement or repair of defective parts. This warranty does not obligate EDCO to bear any expenses for travel time or of personnel in connection with any service calls.

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

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, OR STATUTORY, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

LIABILITY LIMITATIONS

The remedies of the user set forth under provisions of warranty outlined above are exclusive and the total liability of EDCO with respect to their sale or the equipment and service furnished hereunder, in connection with the performance or breach thereof, or from the sale, delivery, installation, repair or technical direction covered by or furnished under the sale, whether based on contract, warranty, negligence, indemnity, strict liability, or otherwise shall not exceed the purchase price of the unit of equipment upon which such liability is based.

EDCO will not in any event be liable to the user, any successors in interest or any beneficiary or assignee relating to this sale for any consequential, incidental, indirect, special or punitive damages arising out of this sale or any breach thereof, or any defects on, or failure of, or malfunction of the equipment under this sale whether based upon loss of use, lost profits or revenue, interest, lost goodwill, work stoppage, impairment of other goods, loss by reason of shutdown or non-operation, increased expenses of operation of the equipment, cost of purchase or replacement power or claims of users or customers of the user for service interruption whether or not such loss or damage is based on contract, warranty, negligence, indemnity, strict liability, or otherwise.

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.

No person is authorized to give any other warranty or to assume any additional obligation on EDCO's behalf unless made in writing and signed by an officer of EDCO.

Equipment Development Company, Inc.

HOW TO ORDER REPAIR 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 parts list.

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