

Hy-Ram

**Hydraulic
Impact
Breaker**

**Model
HR710**



ALLIED

Parts Manual - HY-RAM Series

Keep this manual in a convenient location so that it is easily accessible for future reference. Contact your Allied Dealer or the Allied Customer Service Department for replacement manuals. Inquiries regarding the content of this manual must include effective date shown on inside cover.



PM575479

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Revision History of Document 575479

Allied Construction Products, LLC reserves the right to change, edit, delete or modify the content of this document, including descriptions, illustrations and specifications without prior notification. Specifications are based on published information at the time of publication. Go to www.alliedcp.com for product or document updates.

<u>Effective Date</u>	<u>Page</u>	<u>Summary of Change</u>
2013, Nov	8,19	Fig. 5-2 Clarify seal profile to help ensure correct orientation at assembly. Table 4.1 Dimension change to wear plates – Full interchangeability old-to-new is preserved. Part numbers unchanged.
Oct 1, 2012	All	Original issue of 575479

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1.0 Introduction

1.1 Purpose and Scope of This Manual

The material in this manual has been prepared in support of the product named in Table 1.1. It's intended solely for use with the product identified in Table 1.1 and may not be suitable for other models.

Materials presented in this manual, including figures, captions, descriptions and parts tables may show equipment that is optional. Figures depict views that are intended for parts identification and not for purposes of repair or service of the product. Parts Manuals do not include safety precautions or procedures for operation.

How to use this Manual:

- Assembly components are identified with the aid of figures, figure captions, item key, part name and quantity. When necessary, remarks and specifications further enhance part description.
- To assist you, a parts order form is provided at the back of this manual

Prior to ordering parts, confirm that the information recorded on the equipment's identification label corresponds with Table 1.1. For the location of this label, refer to Section 2.0 of this manual.

Table 1.1 About This Manual



Document ID.	PM575479
Type	Spare Parts
Current Status*	See Inside Cover
Product Name:	Mounted Hydraulic Impact Breaker
Series	Hy-Ram
Applicable Model[s]:	HR710
Years of Manufacture:	2011 & above
*Inquiries regarding this manual must include effective date shown on inside cover	

The publication identified in Table 1.1 was created solely for information purposes and should not be considered all-inclusive. If further information is required, contact your local Allied dealer or the Allied Customer Service Department.

The content of this document has been reviewed for accuracy. Allied Construction Products, LLC has endeavored to deliver the highest degree of accuracy and every effort has made to provide information as complete as possible. However, continuous improvement of our products is an Allied policy. The material in this publication, including figures, captions, descriptions, remarks and specifications, describe the product at the time of its release, and may not reflect the product in the future. A record of change for this document is located on the inside cover.

1.2 How To Order Replacement Publications

This manual is an integral part of this product. Keep it in a convenient location so that it is easily accessible for future reference. If replacement manuals are required, they may be ordered by contacting your Allied dealer service center. These manuals may also be viewed and downloaded at: www.alliedcp.com

1.3 Related Publications

Allied Construction Products, LLC offers the following publications for the product identified in Table 1.1.

1.3.1 Safety, Operation & Maintenance Manual SOM575582

Applicable Models: Hy-Ram Series HR470-HR710

The Safety, Operation and Maintenance Manual has been prepared to assist the operator and maintenance personnel with the information necessary for the safe and proper use of the Allied work tool.

Content in the Safety, Operation & Maintenance Manual includes:

Safety Information
 Equipment Serial Number and Model Identification
 Technical Data (Weight & Dimensions)
 Basic Guidelines for Installation and Set-up
 Pre-Operation Inspection
 How to Operate the Allied Work Tool
 Maintenance Schedule
 N2 Gas Charging Instructions
 Tool and Guide Bushing – Lubrication, Inspection, Wear Limits and Replacement
 Troubleshooting
 Removal From Carrier, Transporting, Lifting & Storage

1.0 Introduction and Scope – [cont'd]

1.3.2 AEM Safety Manual for Hydraulic Breakers

AEM Safety Manual for Hydraulic Breakers

The Association of Equipment Manufacturers offers a safety manual designed for operators and maintenance personnel of hydraulic mounted breakers. The manual is available in Spanish, French and English. It is published in an illustrated format of sensible do's and don'ts, featuring typical daily situations on the job site. Content includes safety tips concerning the workplace and equipment, start up and shut down guidelines and special operating and maintenance precautions.

This publication is available by contacting:
Association of Equipment Manufacturers
Toll free 1-866-AEM-0442
E-mail: aem@aem.org
Website: www.aem.org

Ask for FORM CMHB-1004, Hydraulic Mounted Breakers.

This publication is also available through Allied under part number 953076 (English). To order a copy, contact the Allied Customer Service Department.

2.0 Equipment Identification

2.1 Serial Number Location

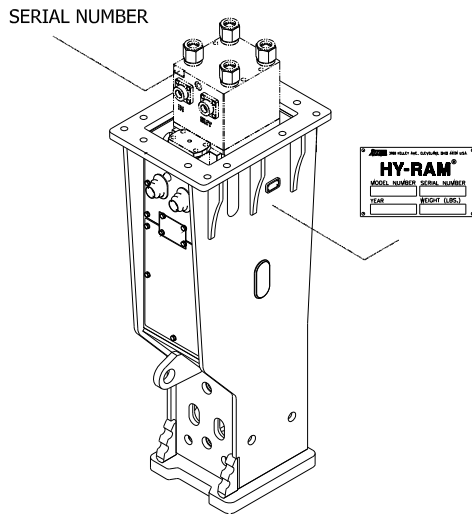


Fig 2-1 Equipment Identification

Refer to Figure 2-1. The Serial Number assigned to this equipment can be found in the following locations:

1. Stamped on the Equipment Identification Tag
2. Stamped on the valve housing.

2.2 Equipment Identification Tag

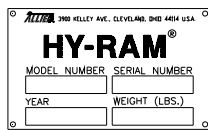


Fig 2-2 Equipment Identification Tag

The Equipment Identification Tag is affixed to the housing. It provides the following information:

- Manufacturer's name
- Address
- Product name
- Model number
- Serial number
- Year of manufacture
- Weight

Confirm that the information contained on the Tag corresponds with the information provided in Section 1, Table 1.1.

2.3 Owner's Record of the Equipment

Your local Allied dealer requires complete information about the equipment to better assist you with questions regarding parts, warranty, operation, maintenance, or repair.

- Record the equipment's serial number to the space provided below. This information may be obtained from the Equipment Identification Tag. Refer to Fig 2-1 for the location of the tag.
- Indicate the date in which the Allied equipment was placed into service.
- Indicate the date in which the Warranty Registration form was completed and returned to Allied.

Product Name: Hydraulic Breaker

Series: Hy-Ram

Model: HR710

Part Number: 575280

Serial Number: _____

In Service Date: _____

Registration Date: _____



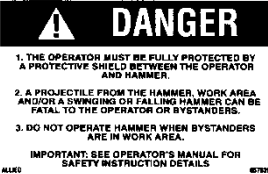
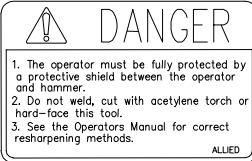

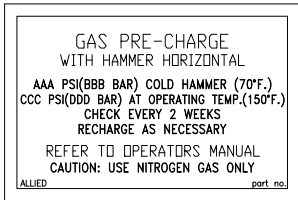
3.0 Safety, Identification & Information Labels

3.1 Label Description and Location On Equipment

Labels affixed to the Allied equipment communicate important information. Safety warnings alert of potential hazards, while other labels provide equipment identification and instructions important to operation and service.

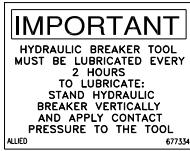




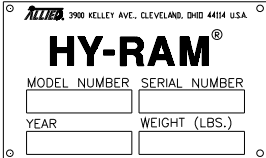
Keep safety labels clean. Words and illustrations must be legible. Replace damaged or missing labels before operating this equipment. Refer to Figure 3-15 for their placement on the equipment. The part numbers for labels are found in Table 3.2.

Table 3.1 Identification of Safety and Information Labels

Figure	Label	Description
3-1		Read The Manual - Safety Alert Symbol with pictogram of open book. Gives notice of the importance of reading the manual(s) for information and/or instructions.
3-2		Stay Clear - Pictogram displays arrow distancing worker safely from recognized hazard which is represented by the box. Breakers, or any other work tool, pose risk of injury to workers if they are not kept at a safe distance. Never operate the work tool with workers inside the work zone.
3-3		Flying Debris Hazard – Alerts personnel to the hazard of fragments becoming projectiles. A protective guard to shield the operator must be installed before operation of the breaker. Personnel are directed to the Operator’s Manual for safety instructions. NOTE: A smaller sized version of this decal is to be displayed in a conspicuous location inside the operator’s cab.
3-4		Personal Protection Equipment / Tool Re-sharpening – Alerts personnel to provide protective shielding between the operator and breaker. It also warns against welding, cutting, or hard-facing the tool. Personnel are directed to the Operator’s Manual for approved re-sharpening methods.
3-5		Pressurized Nitrogen Accumulator – Alerts personnel to the presence of the accumulator, warning of nitrogen gas under pressure. Directs personnel to the Operation and Maintenance Manual for safe handling service instructions.
3-6		GAS PRE-CHARGE – Decal outlines measuring / charging the back head. Alerts personnel to the following – <ul style="list-style-type: none"> • Maintenance interval – every 2 weeks • Proper position when measured / charged • Charge pressure when COLD vs. HOT • Refers personnel to the Operation and Maintenance Manual • Cautions alerts personnel to use nitrogen gas only
3-7	---	---

3.0 Safety and Information Labels [cont'd]

Table 3.1 Identification of Safety and Information Labels – cont'd

Figure	Label	Description
3-8	 <p>IMPORTANT HYDRAULIC BREAKER TOOL MUST BE LUBRICATED EVERY 2 HOURS TO LUBRICATE: STAND HYDRAULIC BREAKER VERTICALLY AND APPLY CONTACT PRESSURE TO THE TOOL ALLIED 677334</p>	LUBRICATION – Decal identifies the lubrication point, frequency and importance of proper positioning with contact pressure applied to tool before lubricating.
3-9		Lubrication Point – Pictogram of instruction manual and grease gun is used to identify lubrication points. Read the manual(s) for application instructions, grease type and re-lubrication schedule.
3-10		Lift Point – Pictogram of hook identifies approved lift points for safe handling.
3-11		OIL SUPPLY LINE “PRESSURE” I.D. TAG – A red colored cable tie marked “PRESSURE LINE” is attached to the supply hose for ease of identification between hoses.
3-12		ALLIED LOGO – This decal is the Allied brand identifier and is a registered trademark of Allied Construction Products, LLC.
3-13	<p>HR710</p>	MODEL – Decal identifies the series and specific model.
3-14	 <p>ALLIED 3900 KELLEY AVE., CLEVELAND, OHIO 44114 USA HY-RAM® MODEL NUMBER SERIAL NUMBER YEAR WEIGHT (LBS.)</p>	EQUIPMENT ID TAG - Contains identifying information about the equipment, including: Manufacturer’s name, address, product name, model number, serial number, year of manufacture, and weight.

3.0 Safety and Information Labels [cont'd]

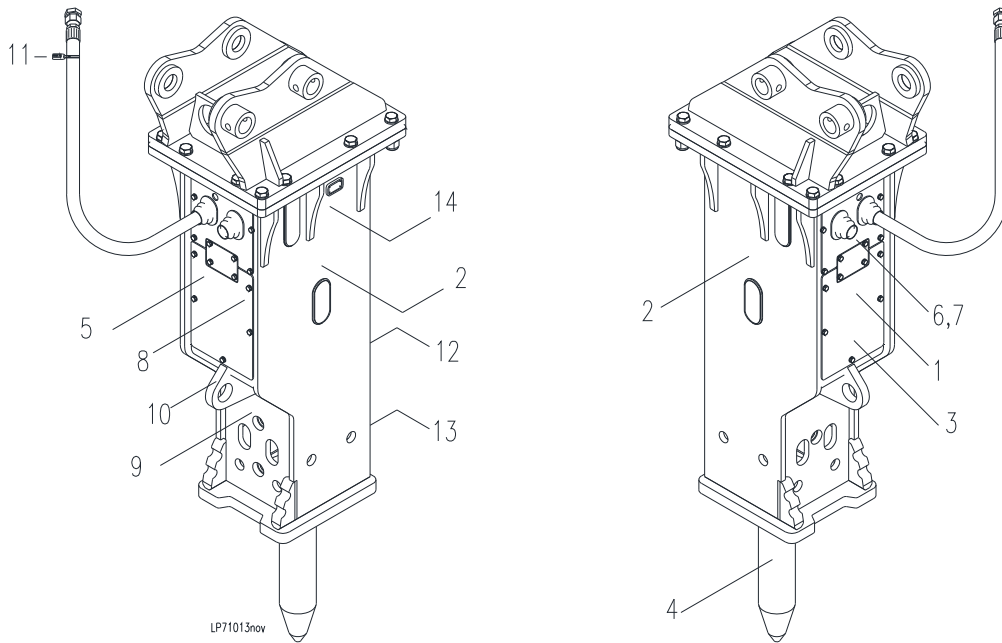


Fig. 3-15 Placement of Labels on Equipment

Table 3.2 Safety, Identification and Information Labels

<u>Item</u>	<u>Description</u>	<u>Part No.</u>	<u>Qty</u>	<u>Remarks / Specifications</u>
---	Label Set	575489	1 Set	Set includes 1-13
1	Read Instructions	676984	1	
2	Stay Clear	657841	2	
3.1	Danger (Large)	657840	1	
3.2	Danger (Small)	657839	1	Display in conspicuous location inside operator's cab
4	Tool Sharpening	657837	1	
5	Accumulator Warning	102756	1	
6	Back Head N2 Pressure	676896	1	
7	---	---	---	
8	Lube w/ Tool In	677334	1	
9	Lubrication Points	A101725	2	
10	Lift Point	676982	1	
11	Pressure ID Tag	818676	1	Identifies the oil supply line "IN"
12	Allied	676656	1	
13	Model HR710	575499	1	
14	Equipment ID Tag	658833	1	Item 13 is not included in Set

4.1 Housing and Components

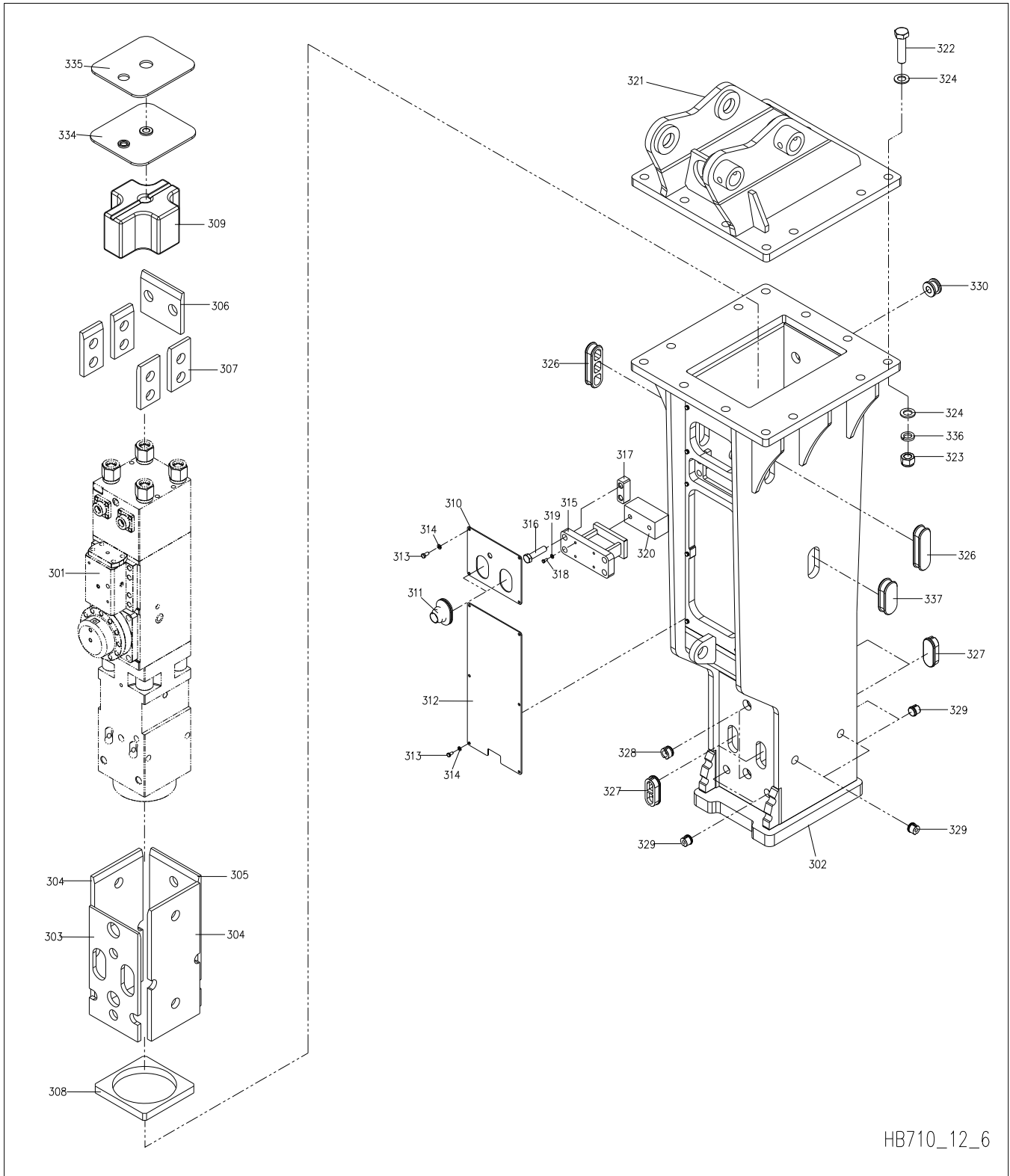


Fig. 4-1 Housing Box and Components

4.1 Housing and Components

Table 4.1 Housing Box & Components

Item	Description	Part No.	Qty	Remarks / Specifications
---	Hy-Ram Model HR710	575280	1	Standard LR10 Configuration. 321 not included.
301	Breaker Assembly	---	1	Refer to Table 4.2
302	Housing Box W.A	575554	1	Standard LR10 Configuration
303	Wear Plate	A5002280	1	¹⁾ Dimension change – interchangeable old-to-new
304	Wear Plate	A5002290	2	¹⁾ Dimension change – interchangeable old-to-new
305	Wear Plate	A5002270	1	¹⁾ Dimension change – interchangeable old-to-new
306	Wear Plate	A2002020	1	¹⁾ Dimension change – interchangeable old-to-new
307	Wear Plate	A5002330	4	
308	Base Buffer	A5002300	1	
309	Top Buffer	A5002320	1	
310	Upper Cover Plate	A5002340	1	
311	Port Cover (In, Out)	A5002360	2	
312	Lower Cover Plate	A5002350	1	
313	Hex. Bolt	056158	10	
314	Spring Washer	SW100000	10	
315	Push Block W.A	A5003200	1	
316	Hex. Bolt	90589	4	
317	Tap Block	A5002690	2	
318	Hex. Bolt	056242	4	
319	Spring Washer	SW120000	4	
320	Side Buffer	A5002310	1	
321	Mounting Bracket – LR10	Varies	1	Not included. Order separately. Section 6
322	Mounting Bolt Set	---	---	Items 322,323,324,336 Refer to Section 6
326	Rubber Plug	A2202550	2	
327	Rubber Plug	570996	4	
328	Rubber Plug	575360	2	
329	Rubber Plug	570997	8	
330	Rubber Plug	B400W270	2	
334	Top Plate Ass'y	A5004740	1	
335	Top Wearing Plate	A5004760	1	
337	Rubber Plug	A2000270	1	

¹⁾ Dimension change to wear plates – Full interchangeability old-to-new is preserved. Part numbers unchanged.

4.2 Breaker Assembly

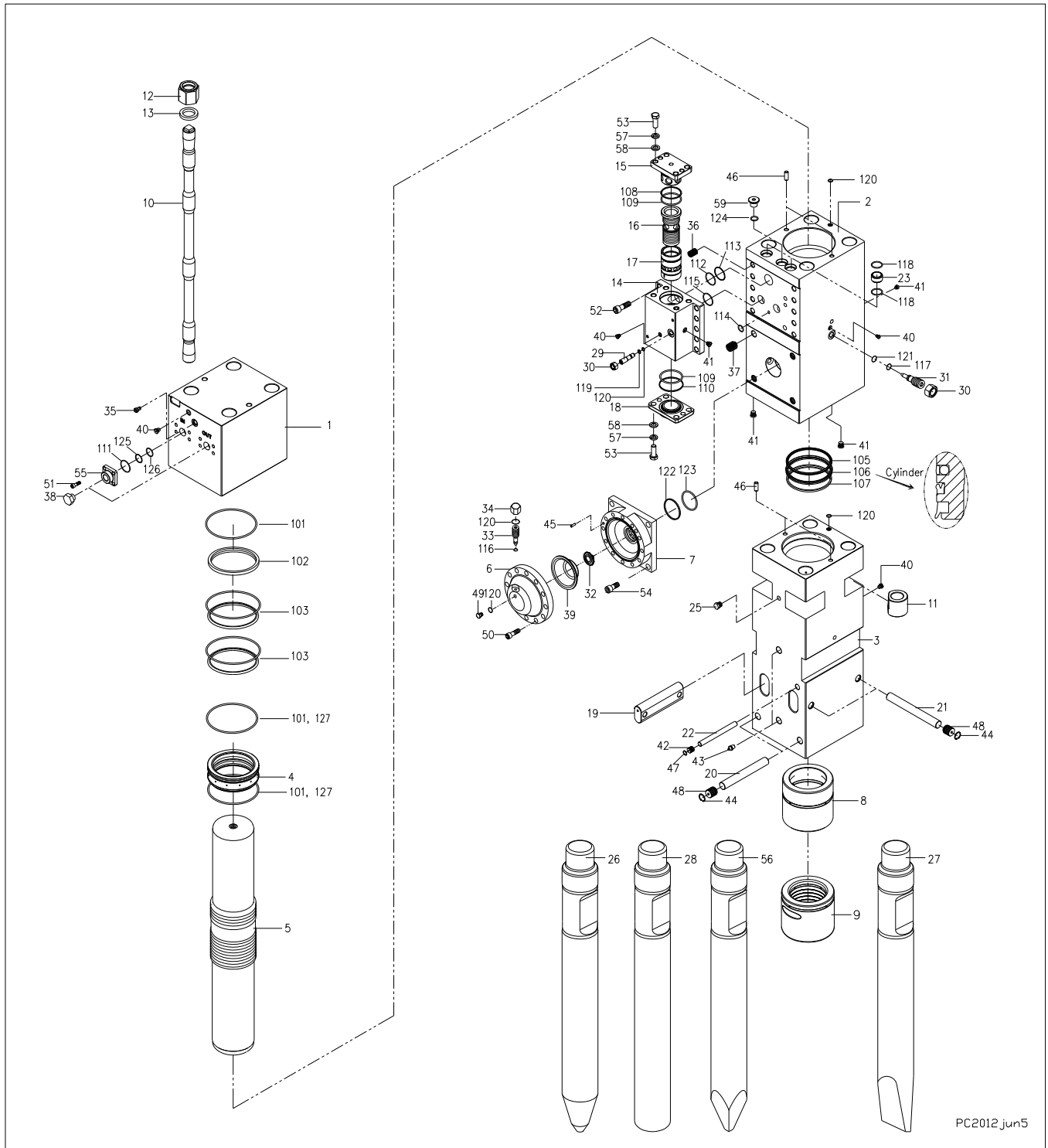


Fig. 4-2 Breaker Assembly

4.2 Breaker Assembly [cont'd]**Table 4.2 Breaker Assembly**

<u>Item</u>	<u>Description</u>	<u>Part No.</u>	<u>Qty</u>	<u>Remarks / Specifications</u>
1	Back Head	A5006580	1	
2	Cylinder	A5006350-06	1	
3	Front Head	A5006340-02	1	
4	Seal Housing	A5106250	1	
5	Piston	A5006100-04	1	
6	Accumulator Cover	A5006180	1	
7	Accumulator Bottom	A5006570	1	
8	Upper Bushing	A5006030	1	
9	Tool Bushing	A5006390	1	
10	Side Rod	A5006110	4	
11	Side Rod Lower Nut	A5006120	4	
12	Side Rod Upper Nut	A5006130	4	
13	Side Rod Nut	A5006140	4	
14	Valve Block	A5006220-04	1	
15	V/V Block Upper Cover	A5006230-03	1	
16	Oper. Valve Spool Guide	A5006240-04	1	
17	Oper. Valve Spool	A5006250-03	1	
18	V/V Block Lower Cover	A5006260-03	1	
19	Tool Pin	A5006040	2	
20	Bushing Pin	A5006050	2	
21	Stop Pin	A5006060	2	
22	Upper Bushing Pin	A5006400	1	
23	Connection Bush	A5006320	2	
25	Socket Plug (Ed-Or)	B4006530	1	
26	Tool Selection	Varies	1	Items 26,27,28,56 Refer to Section 4.4
29	Adjust Bolt 1	A3006311	1	
30	Adjust Nut	A3006320	2	
31	Adjust Bolt 2	A3006330	1	
32	Inner V/V Ass'y	A5106190	1	
33	Gas Charging Bolt	A3006350	1	
34	Gas Charging Cap	A3006360	1	
35	Gas Charging Valve Ass'y	A3006590	1	

4.2 Breaker Assembly [cont'd]

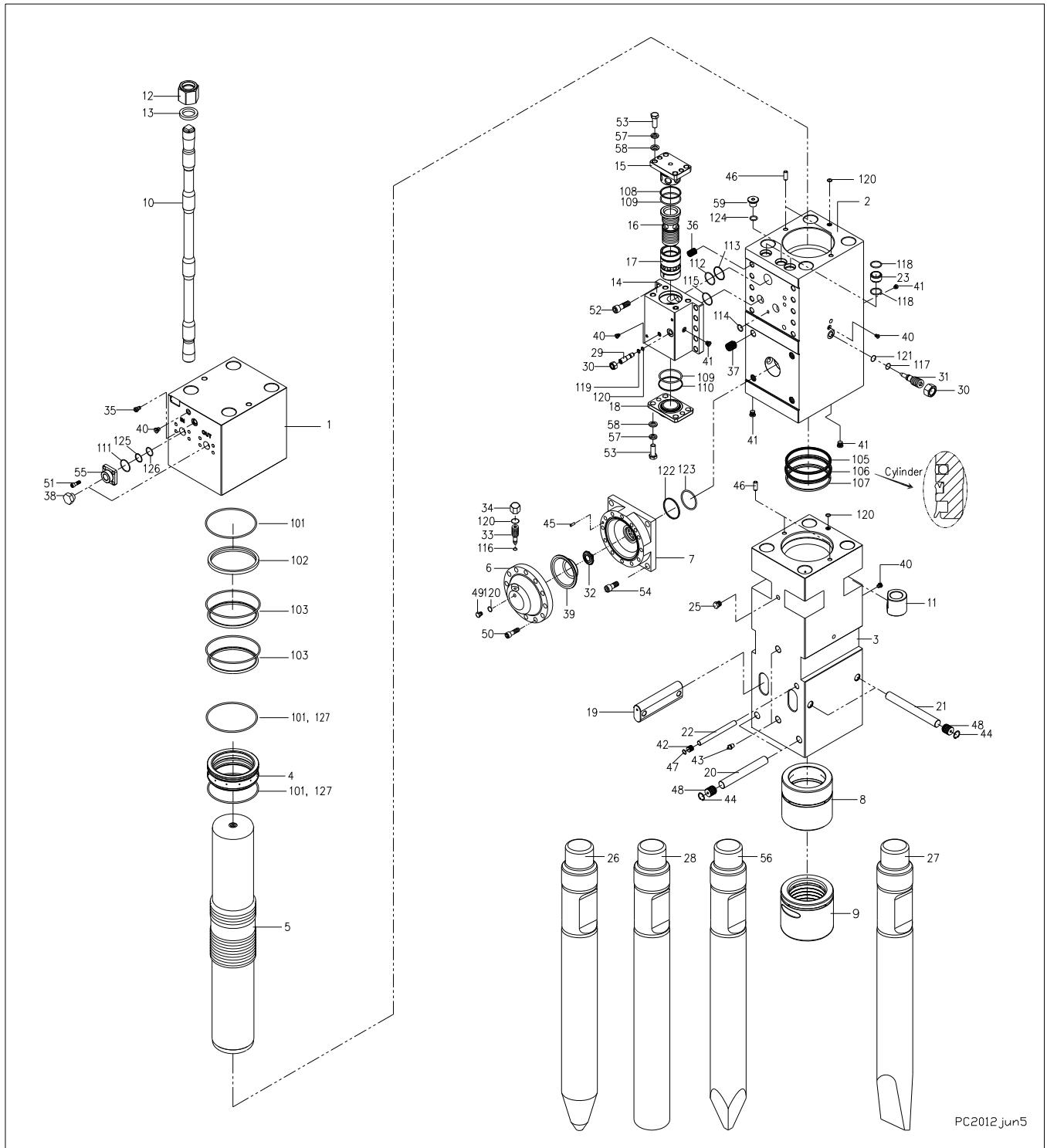


Fig. 4-2 Breaker Assembly

4.2 Breaker Assembly [cont'd]

Table 4.2 Breaker Assembly

<u>Item</u>	<u>Description</u>	<u>Part No.</u>	<u>Qty</u>	<u>Remarks / Specifications</u>
36	Thread Insert	A5006370	10	
37	Thread Insert	A5006380	4	
38	Hex Plug	A3006400	2	
39	Membrane	A5006200	1	
40	Socket Plug	B4006450	4	
41	Socket Plug	B2506530	4	
42	Rubber Plug	571800	1	
43	Grease Nipple	816675	2	
44	Snap Ring	B3006570	4	
45	Guide Pin	B4006370	1	
46	Guide Pin	B4006310	4	
47	Snap Ring	B1806570	1	
48	Rubber Plug	102412	4	
49	Plug	A2006510	1	
50	Socket Head Bolt	571796	12	
51	Socket Head Bolt	659707	8	
52	Socket Head Bolt	SB243080	10	
53	Hex Head Bolt	902263	8	
54	Socket Head Bolt	SB303580	4	
55	Flange Adapter	A5106160	2	
56	Tool Selection	Varies	1	Items 26,27,28,56 Refer to Section 4.4
57	Plain Washer	90511	8	
58	Spring Washer	658529	8	
59	Socket Head Plug	A5006460	1	
101	O-Ring	A5007090	3	
102	Gas Seal	A5007160	1	
103	Seal	A5007150	2	Packaged set includes Step seal & O-ring
105	Seal	A5007170	1	Packaged set includes Step seal & O-ring
106	Seal	A5007060	1	
107	Seal	A5007050	1	
108	Backup Ring	A5007140	1	
109	O-Ring	B7507220	2	
110	Backup Ring	A5007130	1	

4.2 Breaker Assembly [cont'd]

Table 4.2 Breaker Assembly

<u>Item</u>	<u>Description</u>	<u>Part No.</u>	<u>Qty</u>	<u>Remarks / Specifications</u>
111	O-Ring	100107	2	
112	O-Ring	676203	3	
113	Backup Ring	A5007100	1	
114	O-Ring	676204	1	
115	O-Ring	676251	2	
116	O-Ring	A3007190	1	
117	Backup Ring	A3007180	1	
118	O-Ring	A0807500	4	
119	Backup Ring	A3007160	1	
120	O-Ring	571820	4	
121	O-Ring	A3007170	1	
122	Backup Ring	A5007110	1	
123	O-Ring	A5007070	1	
124	O-Ring	A3206550	1	
125	Backup Ring	A5107010	2	
126	O-Ring	101781	2	
127	Backup Ring	A5007190	3	

4.5 Hydraulic Connections

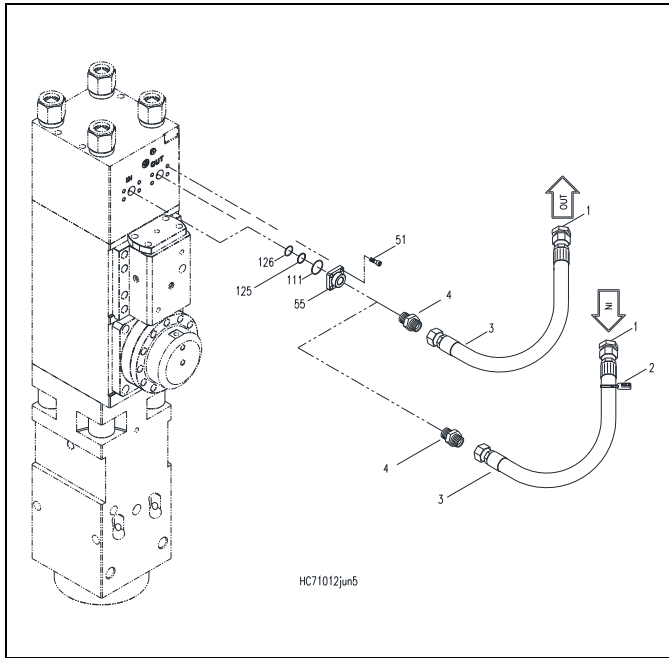


Fig. 4-3 Hydraulic Connections At Breaker

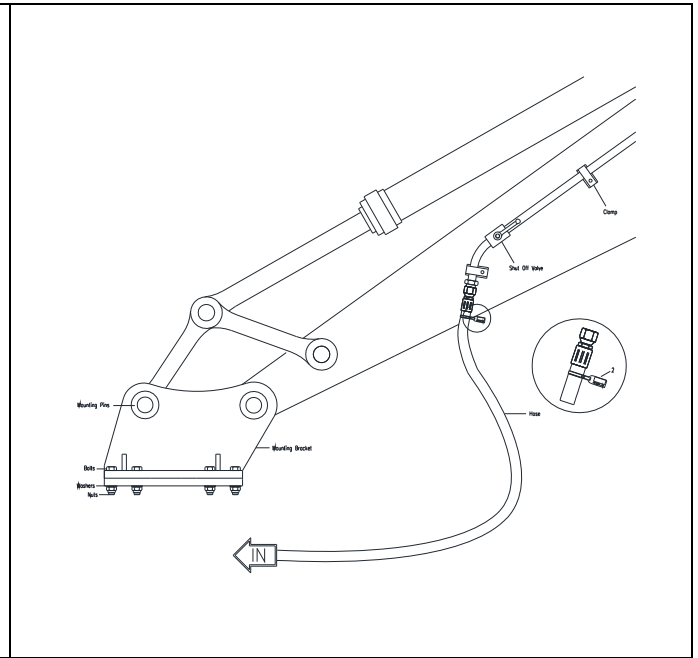


Fig. 4-4 Hydraulic Connections To Excavator - Typical

Table 4.3

<u>Item</u>	<u>Description</u>	<u>Part No.</u>	<u>Qty</u>	<u>Remarks / Specifications</u>
1	Plug	815152	2	
2	“PRESSURE” ID Tag	818676	1	Identifies oil supply line “IN”
3	Hose	678011	2	1 ¼ x 102”
4	Adapter	053755	2	
51	Socket Head Bolt	659707	8	
55	Flange Adapter	A5106160	2	
111	O-Ring	100107	2	
125	Backup Ring	A5107010	2	
126	O-Ring	101781	2	

4.4 Tools – Standard and Specialty

4.4.1 Standard Tools

The three most commonly used tool points for concrete demolition, rock cutting and bolder reduction are the Conical, Chisel and Blunt.

A. Chisel Tool (Wedge) – Suitable applications include soft rock and general demolition of concrete. The tool penetrates into the material, forcing it to separate. Useful when cutting action is required, e.g. benching and trenching.

B. Conical Point - Same applications as the chisel. The conical tool also penetrates, but unlike the chisel, the rounded shape resists twisting that can cause burring in the tool's retainer pin area.

C. Blunt Tool – Designed for impact breaking. The blunt tool is effective in secondary breaking of oversize rock or boulder reduction.

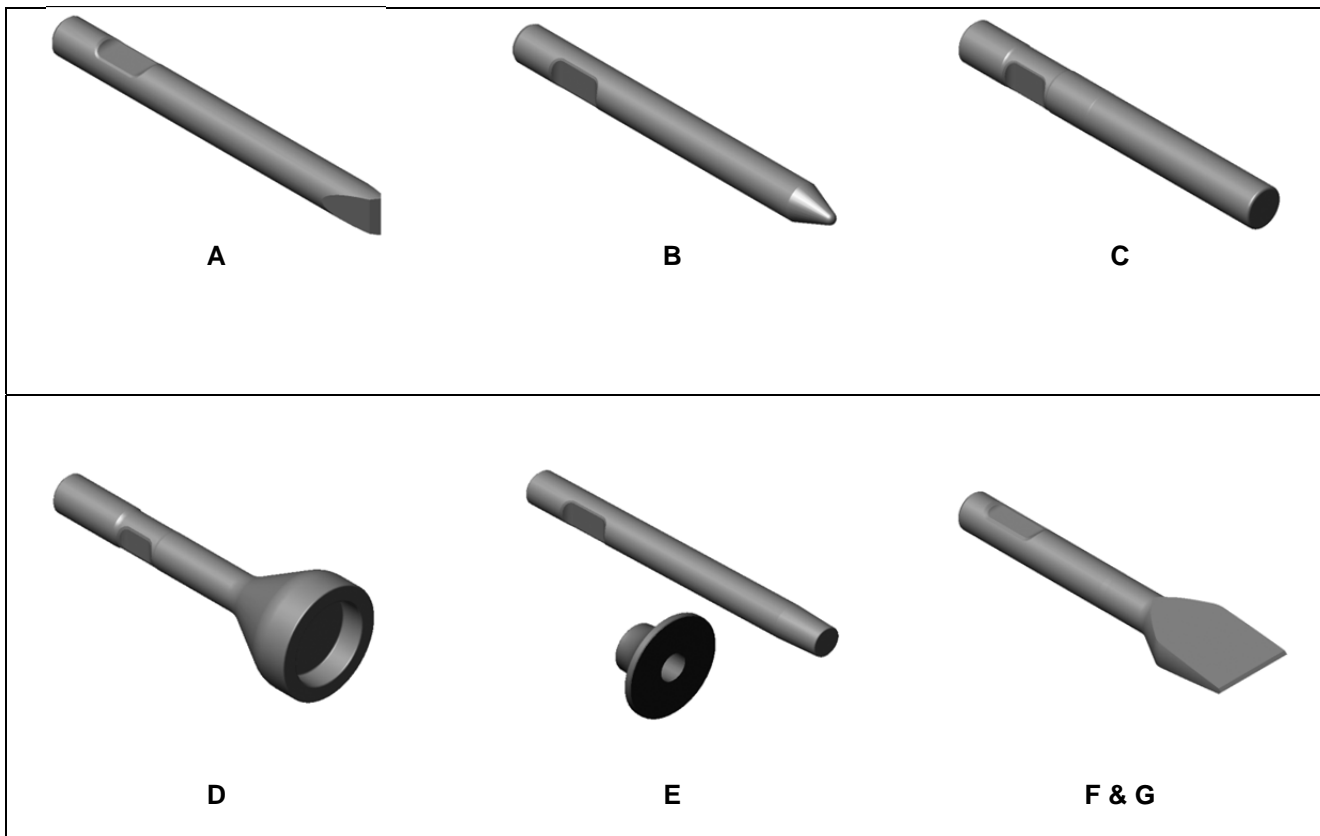


Fig. 4-5* Standard and Specialty Tools
(*Shown are general illustrations. Actual tool design may vary)

4.4.2 Specialty Tools (Not available for all models).

Specialty tools have a specific purpose or function designed into each tool. These tools can extend the versatility of a breaker, thus increasing productivity and eliminating the need for additional equipment.

D. Post Driver – For driving posts, pipes, etc.

E. Tamper – Designed to compact loose material.

F. Frost Cutter – For cutting into frozen ground.

G. Asphalt Cutter – Designed to cut seams in asphalt for removal. Useful when removing asphalt to dig a trench. Available in Cross-Cut and In-Line configurations.

4.4 Tools – Standard and Specialty [cont'd]

Table 4.4

Item	Description	Part No.	TD³⁾ in. x WL⁴⁾ in. [mm]	Weight lbs. (kg.)
A¹	Chisel Cross Cut	575270	7.09 (180) x 31 [787]	600 lbs. [273]
B	Conical Point	575390	7.09 (180) x 31 [787]	570 lbs. [258]
---	Chisel In-Line	--- ²	---	---
C	Blunt End	575400	7.09 (180) x 27 [686]	585 lbs. [265]
--- ²	Pyramid (Not Pictured)	--- ²	7.09 (180) x 31 [787]	585 lbs. [265]

1) **Standard tool supplied with breaker in Bold**

2) For availability of tool types not listed, contact Allied

3) TD - Tool Diameter

4) WL - Working Length

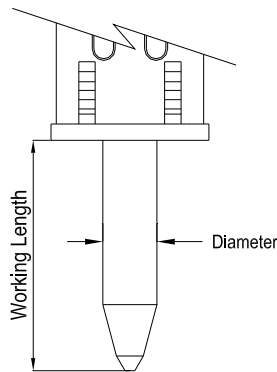


Fig. 4-6 TD & WL

4.5 Lubricant For Bushing and Tool

4.5.1 Allied Chisel Paste

A key element in improving the wear resistance of the bushing and tool is through the regular use of a high-quality lubricant. Allied Chisel Paste performs exceptionally well in this application because it's a "specialty" lubricant, formulated for use in heavy loaded reciprocating motion and high heat applications.

Allied Chisel Paste is a unique blend of liquid and solid lubricants. Solid lubricants, which include particles of molybdenum, copper and graphite, form a highly effective structure that resists being squeezed out during periods of heavy loading.

"General Purpose" grease typically contains little or no solid lubricants. That means once the liquid lubricant is squeezed out, there is a loss of lubrication between the bushing and tool. The result is metal-to-metal contact, which quickly leads to friction related wear and damage.

4.5.2 Chisel Paste Ordering Information

Table 4.5 Packaging

Part No.	Packaging
574430	Case of 10 cartridges*
574431	Case of 30 cartridges*
676698	Bucket, 35# (5 gallon)
679968	Keg, 120# (15 gallon)

* 14 oz. cartridge fits standard grease gun

5.0 Service Kits and Tools

5.1 Tune-up Kit

All breakers require regular maintenance and periodic parts replacement. Follow the recommended service schedule to maintain reliable service.

Tune-up kits can help restore performance by replacing common wear parts. Tune-up kits offer the convenience of combining parts that usually need to be replaced at the same time into a single package.

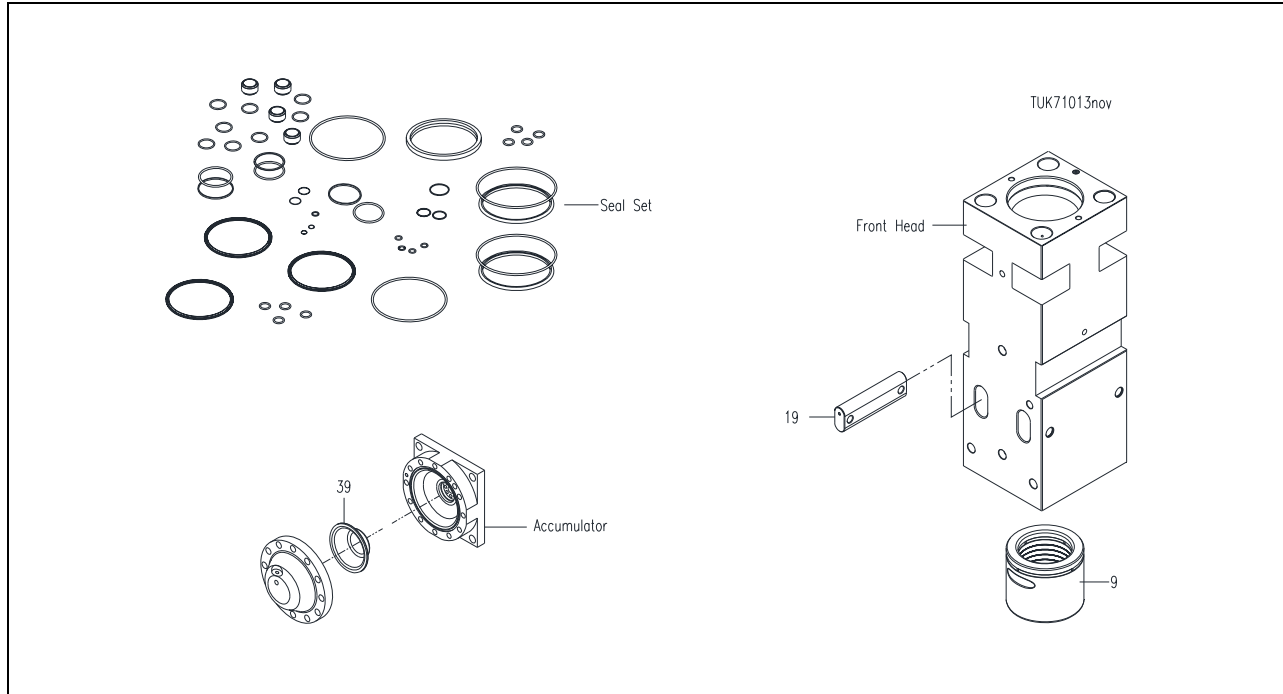


Fig. 5-1 Tune-up Kit

Table 5.1 Tune-up Kit

<u>Item</u>	<u>Description</u>	<u>Part No.</u>	<u>Qty</u>	<u>Remarks / Specifications</u>
---	Tune-up Kit	575410	1-Kit	Kit includes all items in Table 5.1
---	Seal Set	575421	1-Set	Set includes all items in Table 5.2
9	Lower Bushing	A5006390	1	
19	Tool Retainer Pin	A5006040	2	
39	Membrane	A5006200	1	

5.2 Service Kits and Tools [cont'd]

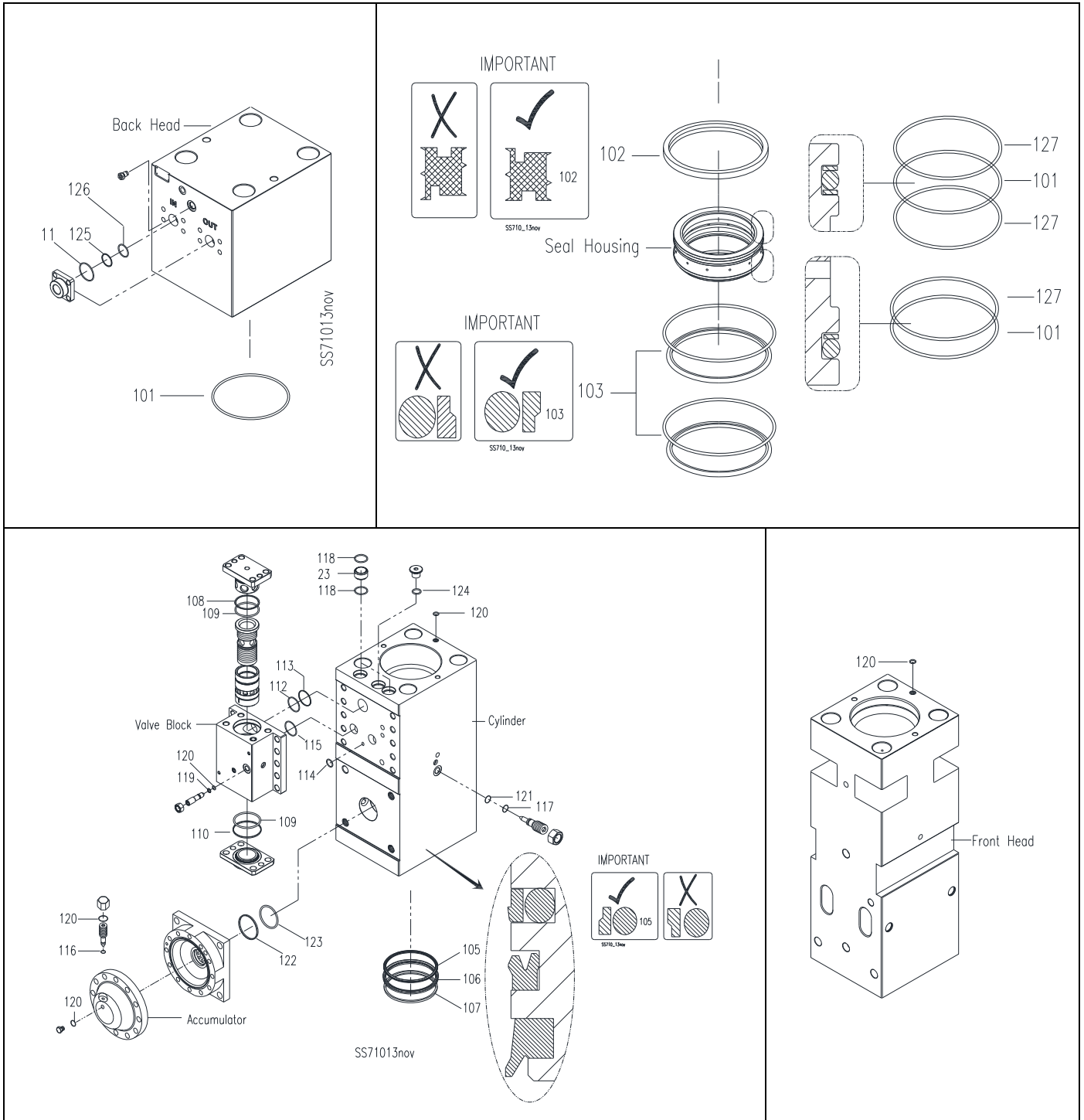


Fig. 5-2 Seal Positions - 575421



Follow Assembly Instructions

5.2 Service Kits [cont'd]

Table 5.2 Seal Set

Item	Description	Part No.	Qty	Remarks / Specifications
---	Seal Set	575421	1	Set includes all items in Table 5.2
23	Connection Bush	A5006320	2	
101	O-Ring	A5007090	3	
102	Gas Seal	A5007160	1	
103	Seal	A5007150	2-Sets	Each set includes Step seal & O-ring
105	Seal	A5007170	1-Set	Set includes Step seal & O-ring
106	Seal	A5007060	1	
107	Seal	A5007050	1	
108	Backup Ring	A5007140	1	
109	O-Ring	B7507220	2	
110	Backup Ring	A5007130	1	
111	O-Ring	100107	2	
112	O-Ring	676203	3	
113	Backup Ring	A5007100	1	
114	O-Ring	676204	1	
115	O-Ring	676251	2	
116	O-Ring	A3007190	1	
117	Backup Ring	A3007180	1	
118	O-Ring	A0807500	4	
119	Backup Ring	A3007160	1	
120	O-Ring	571820	4	
121	O-Ring	A3007170	1	
122	Backup Ring	A5007110	1	
123	O-Ring	A5007070	1	
124	O-Ring	A3206550	1	
125	Backup Ring	A5107010	2	
126	O-Ring	101781	2	
127	Backup-Ring	A5007190	3	
---	Thread Lube	676927	1	Included with set. Follow application instructions

IMPORTANT

Apply thread lube to side rods at assembly.
DO NOT apply Thread Lube to seals!

IMPORTANT

Contamination interferes with reliable operation and will shorten component life. Prevent dirt and debris from entering the hydraulic system. Always work in a clean area. Keep seals properly stored in their original, sealed package until ready for use.

5.3 Service Tools - N2 Gas Charge Kit

5.3 N2 Gas Charge Tool - General Description

The back head is pressurized with nitrogen gas. Proper function of the breaker is accomplished through accurate charging. The same charging tool is used to check and fill the back head and the accumulator¹⁾. NOTE: Source the nitrogen bottle locally.

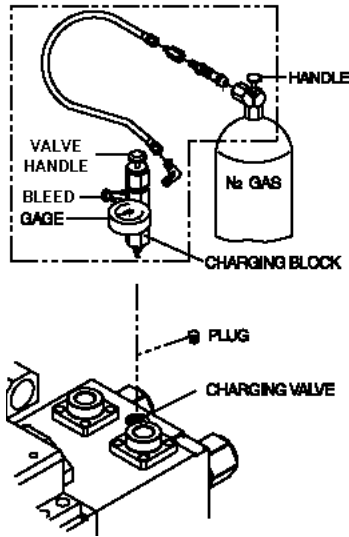


Fig. 5-3 Back Head Charge

The accumulator¹⁾ is a self-contained pressure vessel with an elastic membrane dividing the inner chamber. The lower chamber is used to receive, store and discharge pressurized oil. Pressurized gas occupies the upper chamber. Proper function of the accumulator and optimum membrane life is accomplished through accurate charging of the upper chamber.

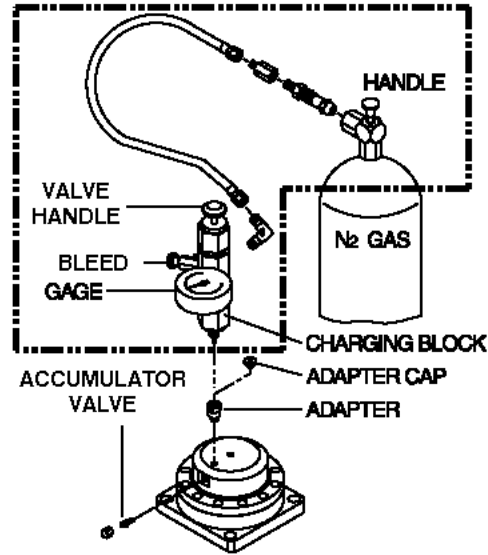


Fig. 5-4 Accumulator Charge ¹⁾

Table 5.3 N2 Gas Charge Tool

Item	Description	Part No.	Qty	Remarks / Specifications
1	N2 Gas Charge Kit	575427	1-Kit	Kit includes items 2,3,4,5
2	Charge Valve with Gauge	---	1	"Charging Block"
3	Extension	---	1	"Adapter"
4	Hose	---	1	
5	Adapter - Gas Bottle	---	1	
6	Gas Bottle - Nitrogen [N2]	Not Available	1	Source Locally



For your safety, read, understand and follow all instructions given in Operation & Maintenance Manual 575582 for the safe and proper use of this tool.

¹⁾ Not all Hy-Ram models are equipped with an accumulator

6.0 Mounting Bracket Information

6.1 Mounting Brackets

A mounting bracket (sold separately) is required to attach the Breaker to a carrier. Allied offers an array of mounting brackets to fit virtually any carrier, including those equipped with pin-grab or hook-type quick mounting couplers.

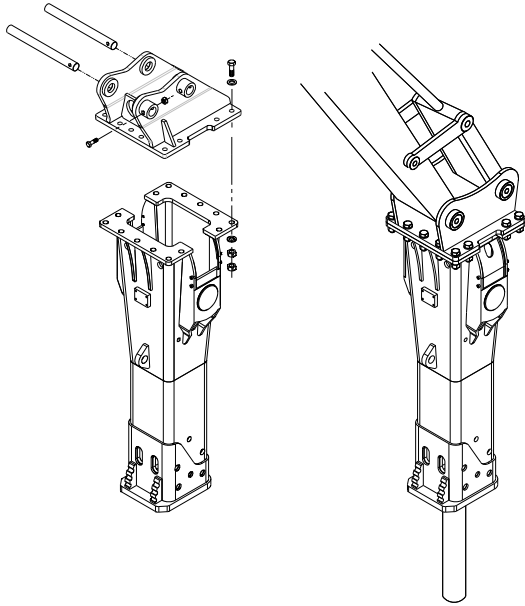


Fig. 6-1 Bolt Mounting Bracket to Housing Box

6.2 Connection Plate

The mounting bracket is bolted to the connection plate located at the upper end of the housing box. Dimensions of the connection plate, including thickness, spacing, quantity and diameter of the bolt holes, will vary between small, medium and large size breakers. Dimensions for the connection plate can be found in Operation & Maintenance Manual.

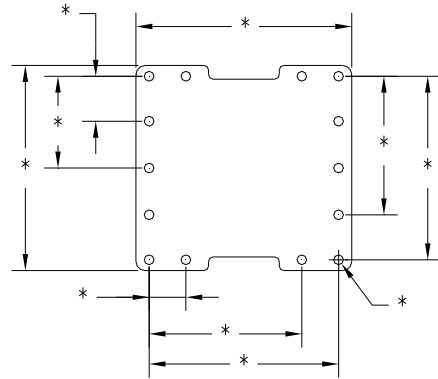


Fig. 6-2 Connection Plate Dimensions

In Table 6.1, Hy-Ram models are grouped by “Family”. The mounting “Family” is a sizing system used to designate a specific connection plate. Other Allied work tools, including the Ho-Pac®, utilize these same mounting Families.

Table 6.1 Mounting Family & Hardware (QTY)

<u>Family</u>	<u>Model</u>	<u>Bolt</u>	<u>FL Washer</u>	<u>LK Washer</u>	<u>Nut</u>
XR	HR175	575555 (7)	798064 (14)	100088 (7)	575652 (7)
XR	HR230	901382 (7)	798064 (14)	100088 (7)	575652 (7)
BR	HR270	90566 (12)	921825 (24)	056245 (12)	90548 (12)
BR	HR290	90566 (12)	921825 (24)	056245 (12)	90548 (12)
SR	HR330	575556 (12)	798064 (24)	100088 (12)	575652 (12)
SR	HR390	951390 (12)	798064 (24)	100088 (12)	575652 (12)
MR	HR470	575557 (12)	901291 (24)	658529 (12)	90507 (12)
MR	HR560	575557 (12)	901291 (24)	658529 (12)	90507 (12)
LR9	HR600	90520 (12)	573029 (24)	573028 (12)	90519 (12)
LR10	HR710	573167 (12)	573029 (24)	573028 (12)	90519 (12)



Always follow the recommended tightening torque of all fasteners. These can be found in the Operation and Maintenance Manual 575582.

7.0 How To Order Spare Parts

Your local Allied dealer requires the Product Name, Model and Serial Number to better assist you with questions regarding parts, warranty, operation, maintenance, or repair. This information should be noted in Section 2.3 of this manual.

Product Hy-Ram Series Breaker
 Model HR710
 Serial No. _____

Please fill out completely

Line	Description	Part Number	Quantity	Price
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Your contact information

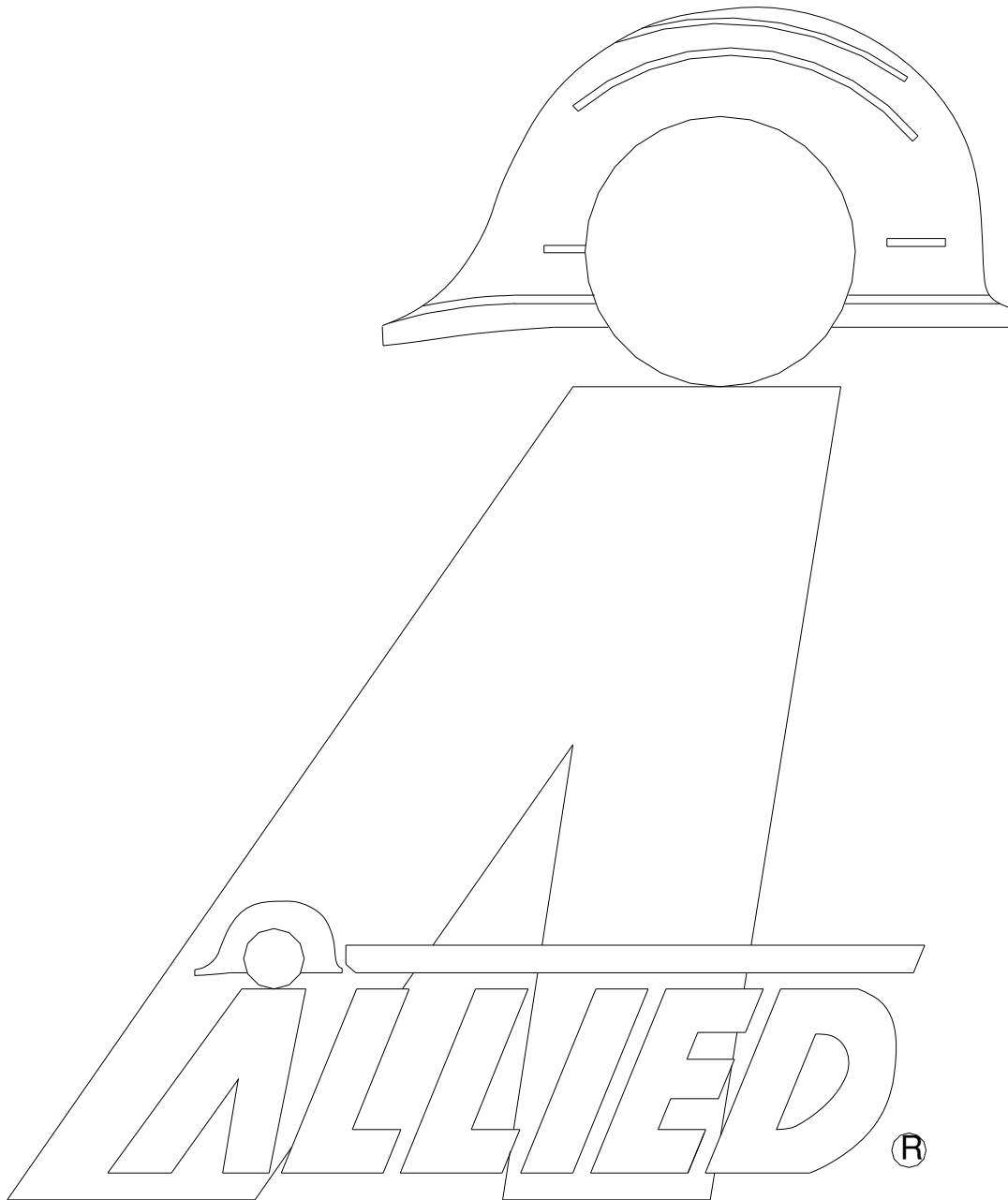
Your Name _____ Company Name _____
 Phone _____ Account Number _____
 Fax _____ Purchase order _____
 Email _____ Shipping carrier _____

*See note below

Billing Address _____ Shipping Address _____

***Note: All backordered parts will be shipped when available via the same method as the original order unless initialed and checked below:**

Initials _____
 Ship complete order only
 Ship available parts and contact customer on disposition of backordered parts
 Other – specify below



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Tel: 216-431-2600 Fax: 216-431-2601
e-mail: Sales@AlliedCP.com
website: <http://www.AlliedCP.com>