

Hydraulic Impact Breaker

Model AR70 AR70B & AR70C



Parts Manual AR-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 the effective date shown on inside cover.





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Revision History of Document 002062, 103018, 571030

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AR70 Revision History - Summary of Changes For PM002062

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Date	Page	Change Notice
May 03, 1999		1 st Release of Parts Manual 002062
Apr 05, 2000	1,2,3,4,6,7,9,10,11,12,13,18,19,26,27, 28,29	Revisions to Specifications, Parts Lists, Art, Add LTS Configuration, Add SSU2 Skid Steer Configuration
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Jul 25, 2001	22	Revise Tool Illustrations
Jan 20, 2002	Throughout	Revise Nomenclature
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Jun 30, 2005	9	Add part number 571053
AR70B Revisi	on History For PM103018	
Jun 28, 2005		1 st Release of Parts Manual 103018
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Jun 28, 2005		1 st Release of Parts Manual 571030
Jul 01, 2005	18	Add P/N 571053
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Mar 31, 2009	16, 17, 18, 19	Revise Front Head & Tool Retaining Parts (SN-00145 & above)
Oct 19, 2009		Combine Parts Manuals 002062 & 103018 with 571030. Inactivate and discontinue circulation of 002062 & 103018.
Jul 31, 2012	30,33	Revise Seal Kit Table 4.14 & Tool Illustrations & Parts Table 5.1, 5.2.

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1.0 Introduction & Scope

1.1 Purpose of This Manual

The Parts Manual identifies each component of the Allied work tool including safety and information labels. Illustrations shown in the Parts Manual are not intended for use in the repair or service of the breaker.

1.2 About This Manual

This manual is an integral part of this product. Keep it in a convenient location so that it is easily accessible for future reference.

Table 1.1 About This Manual

Document ID.	PM571030			
Category	Spare Parts			
Current Status	See Inside Cover			
Product Name:	Hydraulic Mounted Breaker			
Series	AR			
Applicable Model[s]:	AR70, AR70B, AR70C			
Years of Manufacture:	AR70 1999 - 2003 AR70B 2003 – 2005 AR70C 2005 & above			

Verify that the content in Table 1.1 corresponds with the information located on the Equipment's Identification Tag. Material presented in this Manual, including part name, part number, figures, descriptions and remarks, may not be suitable for models that are not listed in Table 1.1.

The content of this publication has been reviewed for accuracy. Allied Construction Products, LLC has endeavored to deliver the highest degree of accuracy possible. However, continuous improvement of our products is an Allied policy. The material in this publication, including descriptions, illustrations and specifications, describes the product at the time of its publication, and may not reflect the product in the future. Changes made to the content of this publication are recorded on the inside cover.

1.3 How To Order Replacement Publications

Replacement manuals can be ordered by contacting your Allied dealer service center. These manuals may also be viewed and downloaded at: www.alliedcp.com

1.4 Related Publications

This document is published 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.

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

Safety, Operation & Maintenance Manual 002065

Applicable Models: AR70 thru AR95B

The <u>Safety, Operation and Maintenance Manual</u> 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

Repair Manual 101230

The Repair Manual has been prepared to assist the Service Technician with the information necessary for the disassembly & reassembly of the Breaker. Content includes:

Safety Information
Disassembly & Reassembly
Bolt Torque Specifications
Wear Limits of Parts
N2 Gas Charging Instructions
Bushing Replacement

1.0 Introduction and Scope – [cont'd]

1.4 Related Publications - cont'd

AEM Safety Manual

The Association of Equipment Manufacturers publishes a series of safe operation manuals, including <u>Hydraulic Mounted Breakers</u>. These are 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 MB-140. Or, contact Allied Construction Products, LLC for a copy of 953076

2.0 Equipment Identification

2.1 Location of the Serial Number

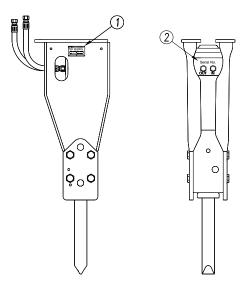


Figure 2-1 Equipment Identification

1) Equipment ID Tag, 2) Secondary location of serial number is

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

Stamped in the Equipment Identification Tag

Scribed In the Valve Housing Above the (IN) and (OUT) Ports.

2.2 Equipment Identification Tag

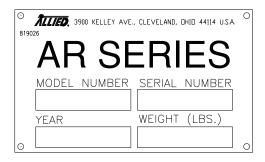


Fig 2-2 Equipment Identification Tag

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

- Allied logo and street 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

Record the Model and Serial Number from the Equipment Identification Tag to the space provided below. Indicate the date in which the Allied equipment was placed into service.

Model / Part Number:	AR70-BSF/ 658668
Model / Part Number:	AR70-XSF/ 658798
Model / Part Number:	AR70-SSU2/ A100300
Model / Part Number:	AR70B-BSF/ A103022
Model / Part Number:	AR70B-XSF/ A103000
Model / Part Number:	AR70B-SSU2/ 103020
Model / Part Number:	AR70C-BSF/ 571010
Model / Part Number:	AR70C-XSF/ 571015
Model / Part Number:	AR70C-SSU2/ 571020
Model / Part Number:	AR70C-BR/ 571035
Serial Number:	
In service date:	

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

Register this equipment by returning the completed warranty registration form to Allied.

Product Registration Date	

3.1 Label Description and Location

Information labels affixed to the Allied equipment include safety warnings, identification and instructions important to operation and service. Table 3.1 identifies and describes each label.

Keep all safety labels clean. Words and illustrations must be readable. Replace damaged or missing labels before operating this equipment. Refer to Table 3.2 for ordering information. Refer to Figure 3-14 for the label's location on the equipment.

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 for personnel to refer to the manual(s) for information and/or instructions.
3-2		Stay Clear - Pictogram of a person and object separated by an arrow alerts personnel and by-standers to maintain a safe distance from the Allied work tool during operation.
3-3	DANGER 1. THE OPERATOR MUST BE FULLLY PROTECTED BY A PROTECTIVE SHIELD BETWEEN THE OPERATOR AND HAMMER. WORK AREA AND HAMMER. WORK AREA AND HAMMER OF THE HAMMER CAN BE FATAL TO THE OPERATOR OR BYSTANDERS. 3. DO NOT OPERATE HAMMER WHEN BYSTANDERS ARE IN WORK AREA. IMPORTANT: SEE OPERATOR'S MANUAL FOR SAFETY INSTRUCTION DETAILS.	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	1. The operator must be fully protected by a protective shield between the operator and hammer. 2. Do not weld, cut with acetylene torch or hard-face this tool. 3. See the Operators Manual for correct resharpening methods.	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 OF PRESSURIZED NITROGEN OF PRACTOR & MANAGEMENT OF STREET O	Pressurized Nitrogen Accumulator – Alerts personnel to the accumulator, warning of nitrogen gas under pressure. Directs personnel to the Operation and Maintenance Manual for service instructions.
3-6	MAXIMUM PRESSURE XXXX YYY BAR	Maximum Pressure – The equipment's maximum operating pressure specification.

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

Figure	Label	Description
3-7	3	Lift Point – Pictogram of hook identifies approved lift points.
3-8	HYDRAULIC BREAKER TOOL MUST BE LUBRICATED EVERY 2 HOURS TO LUBRICATE STAND HYBRULIC BREAKER VERTICALLY AND APPLY CONTACT PRESSURE TO THE TOOL ALLED 677334	Tool Lubrication – Instructions for re-lubrication, including frequency and the required position of the breaker before tool is lubricated.
3-9		ALLIED Logo - Decal is the Allied brand identifier and is a registered trademark of Allied Construction Products, LLC.
3-10	AR70, AR70B, AR70C	Model – Decal identifies the specific model of the Allied equipment.
3-11	PRESSURE LIME 0 IIIII	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	AR SERIES MODEL NUMBER SERIAL NUMBER YEAR WEIGHT (LBS.)	Equipment ID Tag - Contains identifying information about the Allied equipment, including: Manufacturer's name, address, product name, model number, serial number, year of manufacture, and weight.
3-13		2-Postion Bracket – This decal shows the breaker's operating positions horizontal and vertical.

Table 3.2.1 Safety and Identification Labels

Item	Description	Part No.	Qty	Remarks
	AR70 Label Set Complete	981218		
1-11	AR70B Label Set Complete	103017	1-Set	Set Includes 1 thru 11
	AR70C Label Set Complete	571029		
1	Decal – Tool Sharpening	657838	1	
2	Decal – Danger	657839	2	Install in conspicuous location inside cab
3	Decal – Danger Stay Clear	657841	2	
4	Decal – Max Pressure	658540	1	
5	Decal – Allied "A"	676649	2	
6	Decal – Lube w/ Tool In	677334	1	
7	Decal – Lift Point	676982	1	
	Decal – Model AR 70	658572		
8	Decal – Model AR 70B	103023	1	
	Decal – Model AR 70C	571028		
9	Decal – Accumulator Safety Warning	102756	1	
10	Decal – Read Instructions	676984	1	
11	Pressure ID Tag	818676	1	Located on hydraulic supply hose
12	Equipment ID Tag	819026	1	Not part of decal package

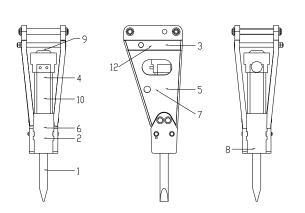


Fig 3-14 BSF Configuration

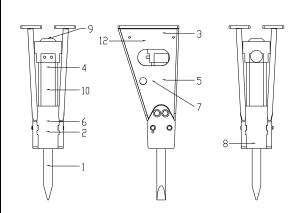


Fig 3-15 BR Configuration

Table 3.2.2 Safety and Identification Labels

Item	Description	Part No.	Qty	Remarks
	AR70 Label Set Complete	981218		
1-11	AR70B Label Set Complete	103017	1-Set	Set Includes 1 thru 11
	AR70C Label Set Complete	571029		
1	Decal – Tool Sharpening	657838	1	
2	Decal – Danger	657839	2	Install in conspicuous location inside cab
3	Decal – Danger Stay Clear	657841	2	
4	Decal – Max Pressure	658540	1	
5	Decal – Allied "A"	676649	2	
6	Decal – Lube w/ Tool In	677334	1	
7	Decal – Lift Point	676982	1	
	Decal – AR70	658572		
8	Decal – AR70B	103023	1	
	Decal – AR70C	571028		
9	Decal – Accumulator Safety Warning	102756	1	
10	Decal – Read Instructions	676984	1	
11	Pressure ID Tag	818676	1	Located on hydraulic supply hose
12	Equipment ID Tag	819026	1	Not part of decal package
13	Decal – 2-Position Bracket Orientation	676941	1	Used only on SSU2 unit. Not part of decal package

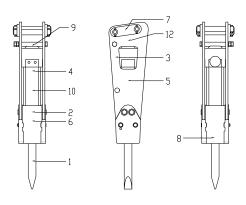


Fig 3-16 XSF Configuration

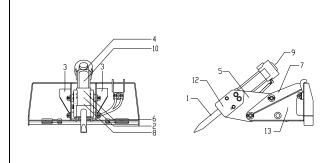


Fig 3-17 SSU2 Configuration

4.0 Parts Information

IMPORTANT PLEASE READ. This Parts Manual covers all configurations of the AR70-Series breaker. Differences with components exist between the AR70, AR70B and AR70C. Prior to ordering parts, it's important to confirm your model and serial number. Carefully read the caption included with each figure and table. The AR70-Series is equipped with Housing Plates available in a variety of mounting options to meet specific carrier requirements. Housing Plate options for the AR70-Series are identified in Figures 4-1 through Figure 4-4.

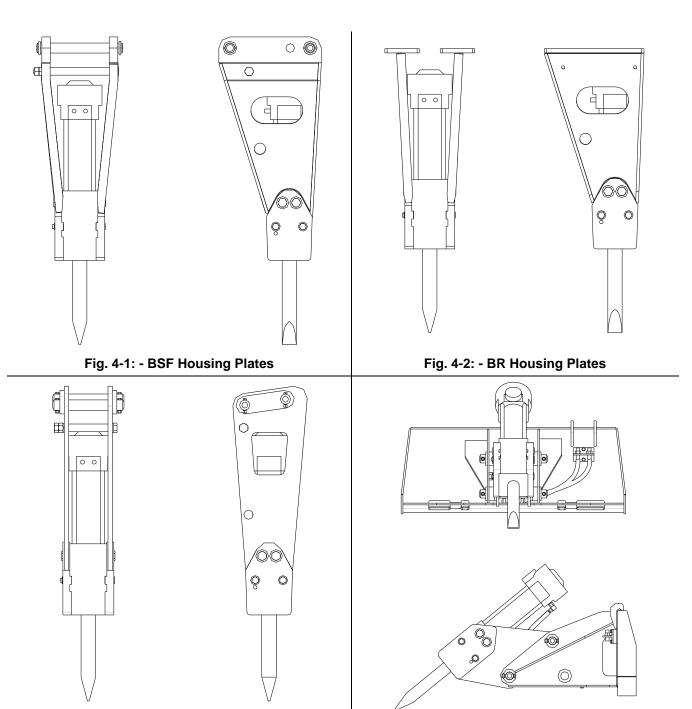


Fig. 4-4: - SSU2 Housing Plates

Fig. 4-3: - XSF Housing Plates

Figure 4-5 shows the AR70 & AR70B equipped with the BSF housing plate option. The BSF housing plate is a pinon type mounting and is intended for backhoe and excavator machines.

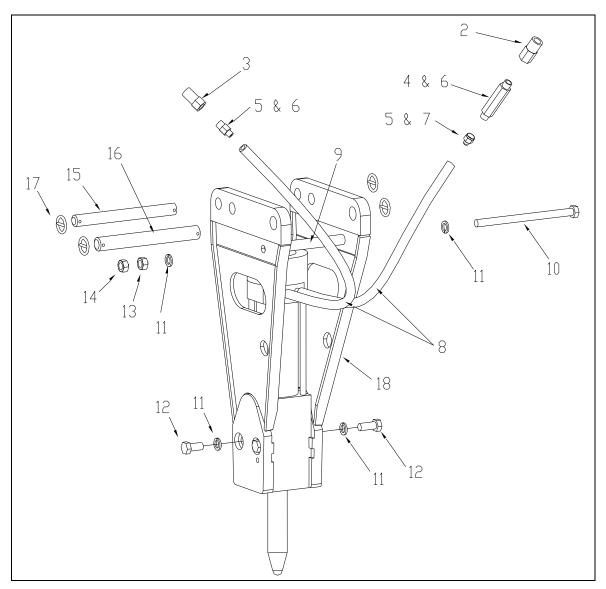


Fig. 4-5 Model AR70 & AR70B Configuration Type BSF

Hydraulic Components & Housing Plates

See separate figure and parts list for Model AR70C

Table 4.1.1 AR70, AR70B Hydraulic Components

See separate Parts List for AR70C

Item	Description	Part No.	Qty	Remarks
	AR70-BSF Configuration	658668		
	AR70B-BSF Configuration	A103022		
1	Quick Disconnect Coupling	670006	1-Set	Set Includes Items 2 & 3
2	Q.D. Socket	670007	1	
3	Q.D. Plug	670008	1	
4	Check Valve	670270	1	Use is discontinued
5.1	Adapter with Measuring Port	667247	1	Use is discontinued
5.2	Adapter	653349	1	
6	Hex Plug	667566	2	Use is discontinued
7.1	Adapter	903725	1	Use is discontinued
7.2	Adapter	653349	1	
8	Hose	815267	2	
	Pressure ID Tag	818676	1	Located on supply hose

Table 4.1.2 AR70, AR70B Housing Plates Type BSF ***See separate Parts List for AR70C***

Item	Description	Part No.	Qty	Remarks
	AR70-BSF Configuration	658668		BSF Configuration
	AR70B-BSF Configuration	A103022		BSF Configuration
9	Spacer	658532	1	
10	Hex Bolt	658527	1	Long
11	Lock Washer	658529	6	
12	Hex Bolt	658525	4	M24
13	Hex Nut	667220	1	
14	Acorn Nut	658530	1	
15	Pin	617080	1	1.50 in Ø
16	Pin	653378	1	1.75 in Ø
17	Klik Pin	617104	4	
18	Housing Plates – Type BSF	658667	1-Set	Set includes LH & RH Plates

Figure 4-6 shows the AR70 & AR70B equipped with the XSF housing plate option. The XSF housing plate, with pin-on type mounting, is intended for mini-excavator machines.

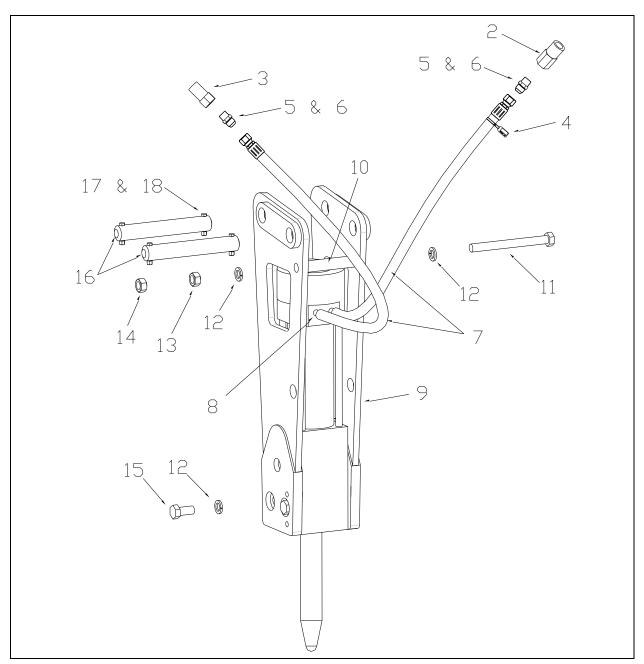


Figure 4-6 Model AR70 & AR70B XSF Configuration

Hydraulic Components & Housing Plates Type XSF

See separate figure and parts list for AR70C

Table 4.2.1 Hydraulic Components

See separate Parts List for AR70C

Item	Description	Part No.	Qty	Remarks
	AR70-XSF Configuration	658798		XSF Configuration
	AR70B-XSF Configuration	A103000		XSF Configuration
1	Quick Disconnect Coupler	670006	1-Set	Set Includes Items 2 & 3
2	Q.D. Socket	670007	1	
3	Q.D. Plug	670008	1	
4	Pressure ID Tag	818676	1	Located on supply hose
5.1	Adapter with Measuring Port	667247	2	Use is discontinued
5.2	Adapter	653349	2	
6	Hex Plug	667566	2	Use is discontinued
7	Hose	902492	2	
8	Adapter	676151	1	

Table 4.2.2 Housing Plates Type XSF ***See separate Parts List for AR70C***

Item	Description	Part No.	Qty	Remarks
	AR70-XSF Configuration	658798		XSF Configuration
	AR70B-XSF Configuration	A103000		XSF Configuration
9	Housing Plates - XSF	658516	1-Set	Set includes LH & RH Plates
10	Spacer	100090	1	
11	Hex Bolt	658526	1	Long
12	Lock Washer	658529	6	
13	Hex Nut	667220	1	
14	Acorn Nut	658530	1	
15	Hex Bolt	658525	4	
16	Mounting Pin	[Varies]	2	Refer to Table 4.15
17	Hex Bolt	653343	4	
18	Hex Nut	759808	4	

Figure 4-7 shows the AR70 & AR70B equipped with the SSU2 housing plate option. The SSU2 housing plate allows tilting of the breaker and is intended for skid-steer type machines.

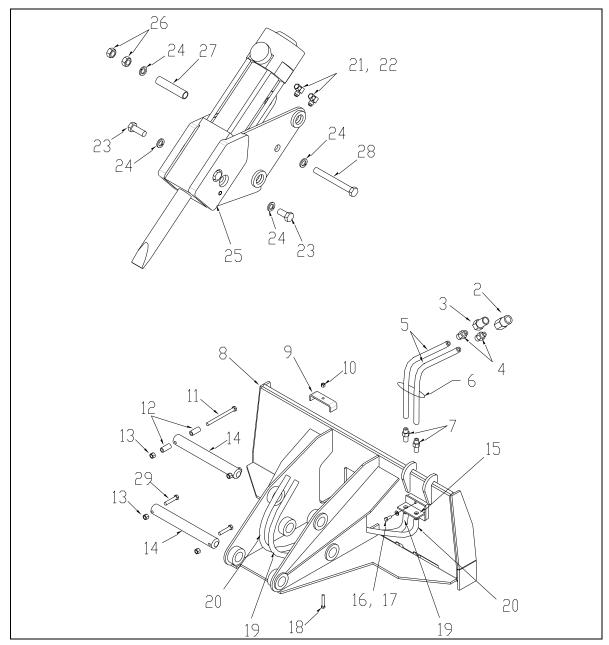


Fig. 4-7 Model AR70 & AR70B

Hydraulic Components & Housing Plates Type - SSU2

See separate figure and parts list for AR70C

Table 4.3 Hydraulic Components & SSU2 Housing Plates

See separate Parts List for AR70C

Item	Description	Part No.	Qty	Remarks
	AR70-SSU2 Configuration	A100300		SSU2 Configuration
	AR70B-SSU2 Configuration	103020		SSU2 Configuration
1	Quick Disconnect Coupler	670006	1-Set	Set Includes Items 2 & 3
2	Q.D. Socket	670007	1	
3	Q.D. Plug	670008	1	
4	Adapter	653349	2	
5	Hose	865308	2	66"
6	Hose Protector	667472	1	66"
7	Adapter - Bulkhead	815046	2	
8	Mounting Bracket 2-Position SSU2	658660	1	
9	Hose Clamp	100439	1	
10	Elastic Nut	759808	1	
11	Hex Head Bolt	563356	1	½" x 6 ¼" Lg.
12	Nylon Sleeve	676939	2	
13	Elastic Nut	813289	4	
14	Pin	100192	2	
15	Bulkhead Bracket	A100318	1	
16	Hex Head Bolt	903703	2	
17	Flat washer	903713	2	
18	Hex Head Bolt	865467	1	3/8"
19	Hose	814177	1	48"
20	Hose	100440	1	52"
21	Adapter	676151	2	
22	90° Swivel Elbow	814146	2	
23	Hex Head Bolt	658525	4	M24
24	Lock washer	658529	6	
25	Adapter Plates	658557	1-Set	Set includes LH & RH Plates
26	Hex Nut	667220	2	
27	Spacer	658531	1	
28	Hex Head Bolt	100600	1	Long M24
29	Hex Head Bolt	708511	3	½" x 2 ½"
	Pressure ID Tag	818676	1	Located on supply hose

Figure 4-8 shows the AR70C equipped with the BSF housing plate option. The BSF housing plate is a pin-on type and is intended for backhoe and excavator machines.

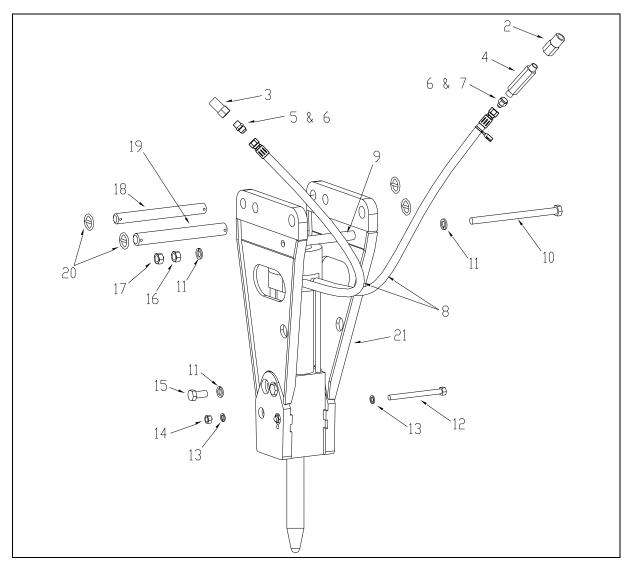


Fig 4-8 Hydraulic Components & BSF Housing Plates - Model AR70C

See separate figure and parts list for AR70 & AR70B

Table 4.4.1 Hydraulic Components

See separate Parts List for AR70 & AR70B

Item	Description	Part No.	Qty	Remarks
	AR70C-BSF Configuration	571010		BSF Configuration
1	Quick Disconnect Coupler	670006	1-Set	Set Includes Items 2 & 3
2	Q.D. Socket	670007	1	
3	Q.D. Plug	670008	1	
4	Check Valve	670270	1	Use is discontinued
5.1	Adapter w/ port	667247	1	Use is discontinued
5.2	Adapter	653349	1	
6	Hex Plug	667566		Use is discontinued
7.1	Adaptor	903725	1	Use is discontinued
7.2	Adapter	653349	1	
8	Hose Assembly	815267	2	

Table 4.4.2 Hydraulic Components & BSF Housing Plates ***See separate Parts List for AR70 & AR70B***

Item	Description	Part No.	Qty	Remarks
	AR70C-BSF Configuration	571010		BSF Configuration
9	Spacer	658532	1	
10	Hex Head Bolt	658527	1	Long
11	Lock washer	658529	6	
12	Hex Head Bolt	571026	2	
13	Lock washer	571027	4	
14	Hex Nut	679423	2	
15	Hex Head Bolt	658525	4	M24
16	Hex Nut	667220	1	
17	Acorn Nut	658530	1	
18	Pin	617080	1	1 ½" Ø
19	Pin	653378	1	1 ¾" Ø
20	Klik Pin	617104	4	
21	Housing Plates - BSF	571375	1-Set	Set includes LH & RH Plates
	Pressure ID Tag	818676	1	Located on supply hose

Figure 4-9 shows the AR70C equipped with the BR housing plate option. An upper mounting bracket (sold separately) is bolted to the top of the housing plates. The BR housing plate is intended for backhoe and excavator machines.

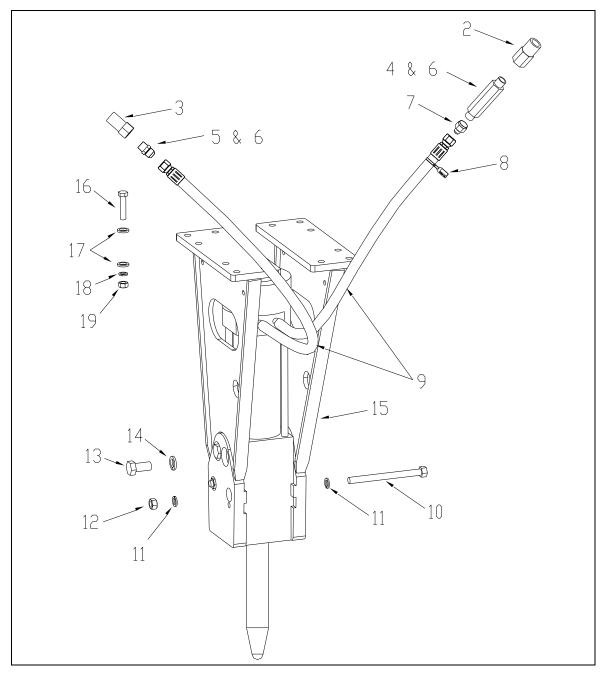


Fig. 4-9 Model AR70C

Hydraulic Components & Housing Plates Type - BR

See separate diagram and parts list for Model AR70 & AR70B

Table 4.5.1 Hydraulic Components & Housing Plates Type - BR

See separate Parts List for AR70 & AR70B

Item	Description	Part No.	Qty	Remarks
	AR70C-BR Configuration	571035		BR Configuration
1	Quick Disconnect Coupler	670006	1-Set	Set Includes Items 2 & 3
2	Q.D. Socket	670007	1	
3	Q.D. Plug	670008	1	
4	Check Valve	670270	1	Use is discontinued
5.1	Adapter w/ measuring port	667247	1	Use is discontinued
5.2	Adapter	653349	1	
6	Hex Plug	667566	2	Use is discontinued
7.1	Adaptor	903725	1	Use is discontinued
7.2	Adapter	653349	1	
8	Pressure ID Tag	818676	1	Located on supply hose
9	Hose Assembly	815267	2	

Table 4.5.2 Housing Plates Type – BR

See separate Parts List for AR70 & AR70B

ltem	Description	Part No.	Qty	Remarks
	AR70C-BR Configuration	571035		BR Configuration
10	Hex Head Bolt	571026	2	
11	Lock washer	571027	4	
12	Hex Nut	679423	2	
13	Hex Head Bolt	658525	4	M24
14	Lock washer	658529	4	
15	Housing Plates - BR	571039	1-Set	Set includes LH & RH Plates
16	Bolt Set	658527	1-Set	Set includes 17,18,19
17	Hex Head Bolt	90566	12	
18	Washer	90597	24	
19	Nut	91000	12	

Figure 4-6 shows the AR70C equipped with XSF housing plates. The XSF housing plates, with pin-on type mounting, is intended for mini-excavator machines.

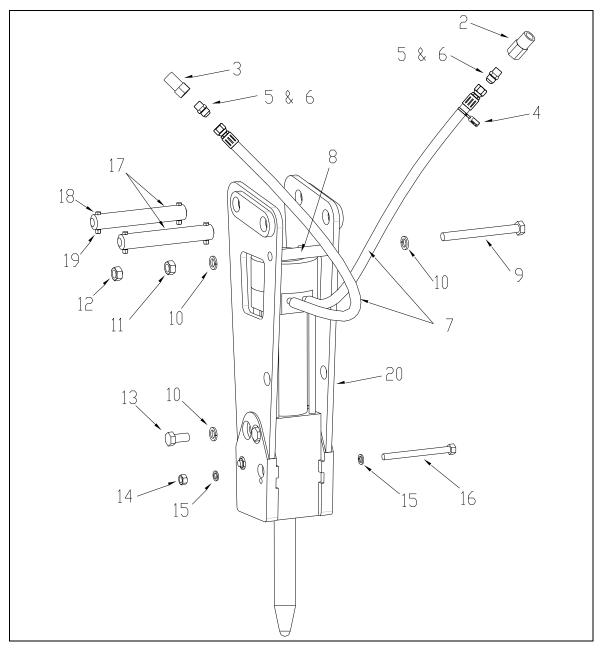


Figure 4-10 Model AR70C

Hydraulic Components & Housing Plates Type XSF

See separate figure and parts list for Model AR70 & AR70B

Table 4.6 Hydraulic Components

See separate Parts List for AR70 & AR70B

Item	Description	Part No.	Qty	Remarks
	AR70-XSF Configuration	571015		XSF Configuration
1	Quick Disconnect Coupler	670006	1-Set	Set Includes Items 2 & 3
2	Q.D. Socket	670007	1	
3	Q.D. Plug	670008	1	
4	Pressure ID Tag	818676	1	Located on supply hose
5.1	Adapter with Measuring Port	667247	2	Use is discontinued
5.2	Adapter	653349	2	
6	Hex Plug	667566	2	Use is discontinued
7	Hose	902492	2	

Housing Plates Type - XSF & Hardware

See separate Parts List for AR70 & AR70B

Item	Description	Part No.	Qty	Remarks
	AR70-XSF Configuration	571015		XSF Configuration
8	Spacer	100090	1	
9	Hex Head Cap Screw	658526	1	
10	Lock washer	658529	6	
11	Hex Nut	667220	1	
12	Acorn Nut	658530	1	
13	Hex Head Bolt	658525	4	M24
14	Hex Nut	679423	2	
15	Lock washer	571027	4	
16	Hex Head Bolt	571026	2	M18 Long
17	Mounting Kit	[Varies]	1	Refer to Table 4.15 for list
18	Hex Bolt – 3/8"	653343	4	
19	Hex Nut	759808	4	
20	Housing Plates Type - XSF	571022	1-Set	Set includes LH & RH Plates

Figure 4-11 shows the AR70C equipped with the SSU2 housing plate option. The SSU2 housing plate allows tilting of the breaker and is intended for skid-steer machines.

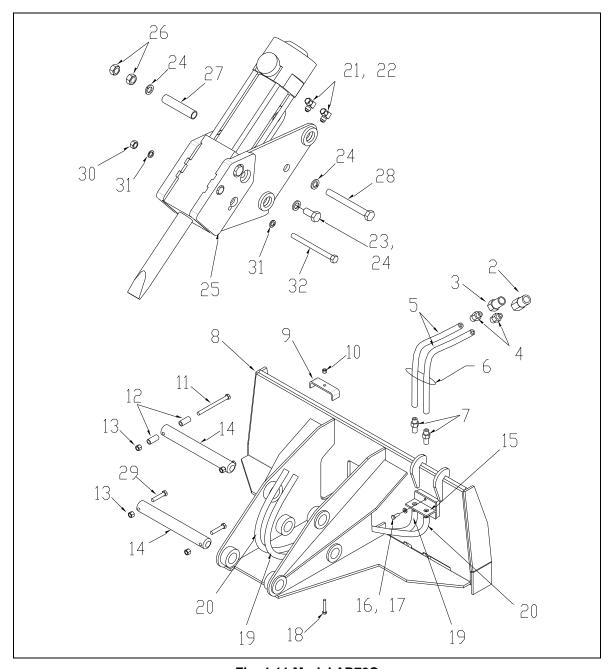


Fig. 4-11 Model AR70C

Hydraulic Components & Housing Plates Type - SSU2

See separate figure and parts list for Model AR70 & AR70B

Table 4.7 Hydraulic Components & SSU2 Housing Plates

See separate Parts List for AR70 & AR70B

Item	Description	Part No.	Qty	Remarks
	AR70C-SSU2 Configuration	571020		
1	Quick Disconnect Coupler	670006	1-Set	Set Includes Items 2 & 3
2	Q.D. Socket	670007	1	
3	Q.D. Plug	670008	1	
4	Adapter	653349	2	
5	Hose	865308	2	66"
6	Hose Protector	667472	1	66"
7	Adapter - Bulkhead	815046	2	
8	Mounting Bracket 2-Position SSU2	658660	1	
9	Hose Clamp	100439	1	
10	Elastic Nut	759808	1	
11	Hex Head Bolt	563356	1	½" x 6 ¼" Lg.
12	Nylon Sleeve	676939	2	
13	Elastic Nut	813289	4	
14	Pin	100192	2	
15	Bulkhead Bracket	A100318	1	
16	Hex Head Bolt	903703	2	
17	Flat washer	903713	2	
18	Hex Head Bolt	865467	1	3/8"
19	Hose	814177	1	48"
20	Hose	100440	1	52"
21	Adapter	676151	2	
22	90° Swivel Elbow	814146	2	
23	Hex Head Bolt	657433	4	M24
24	Lock washer	658529	6	
25	Adapter Plates	571025	1-Set	1-Set includes LH & RH Plates
26	Hex Nut	667220	2	
27	Spacer	658531	1	
28	Hex Head Bolt	100600	1	
29	Hex Head Bolt	708511	3	½" x 2 ½"
30	Hex Nut	679423	2	
31	Lock washer	571027	4	
32	Hex Head Bolt	571026	2	M18

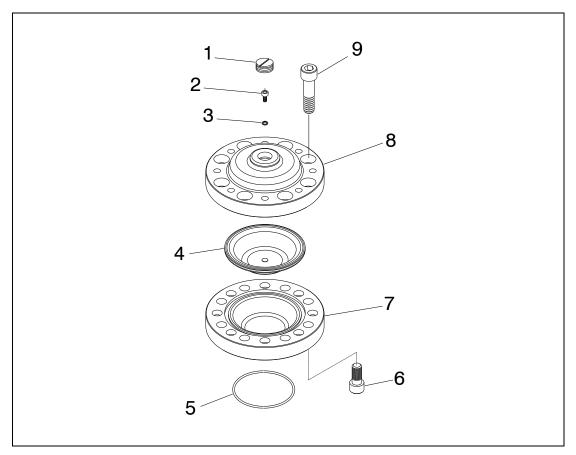


Fig 4-12 Accumulator AR70-Series

Table 4.8 Accumulator 1)

Item	Description	Part No.	Qty	Remarks
1	Protective Cap	676157	1	
2	Threaded Plug	676161	1	
3	Seal	676201	1	
4	Membrane	676162	1	
5	O-Ring	676202	1	
6	Socket Head Bolt	676164	8	
7	Accumulator Shell, Lower	676156	1	
8	Accumulator Shell, Upper	676155	1	
9	Socket Head Bolt	676163	8	

¹⁾ Parts shown in Table 4.8 are for use in AR70, AR70B & AR70C

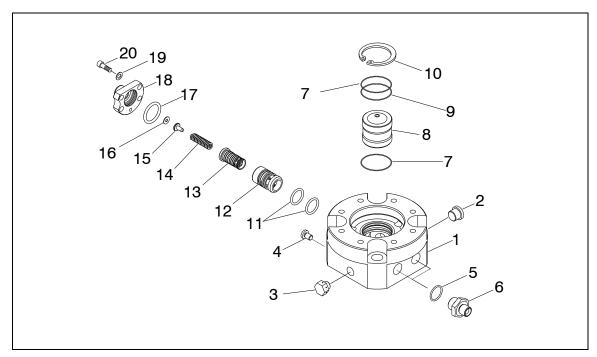


Fig 4-13 Valve Housing AR70-Series

Table 4.9 Valve Housing¹⁾

Item	Description	Part No.	Qty	Remarks
1	Valve Housing	676154	1	
2	Threaded Plug	676158	1	
3	Vent Plug	676215	1	
4	Threaded Plug	676159	1	
5	O-Ring	676204	2	
6	Adapter	676151	2	
7	O-Ring	676203	2	
8	Bushing	676166	1	
9	Back-Up Ring	676205	1	
10	Snap Ring	676165	1	
11	O-Ring	676204	2	
12	Regulator Guide	676199	1	
13	Regulator Spool	676172	1	
14	Regulator Spring	676171	1	
15	Regulator Spring Guide	676173	1	
16	Regulator Shim Plate	676174	1	
17	O-Ring	676206	1	
18	Regulator Cover	676175	1	
19	Disc Lock Washer	571053	4	
20	Socket Head Bolt	940587	4	

¹⁾ Parts shown in Table 4.9 are for use in AR70, AR70B & AR70C

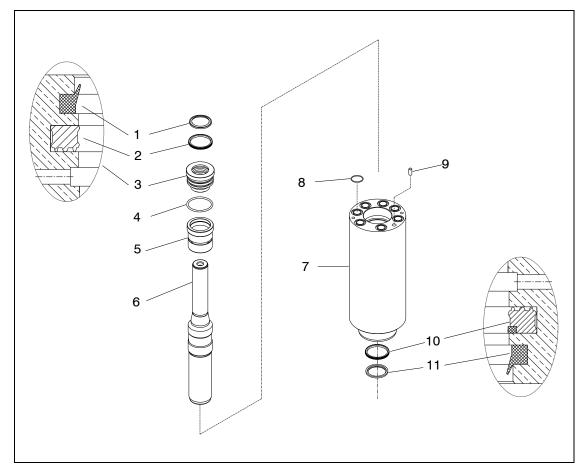


Figure 4-14 Piston and Cylinder AR70-Series

Table 4.10 Piston & Cylinder¹⁾

Item	Description	Part No.	Qty	Remarks
1	Upper Wiper, Piston	676208	1	
2	Piston Seal, Upper	676207	1	
3	Seal Housing	676179	1	
4	O-Ring	676203	1	
5	Control Valve	676181	1	
6	Piston	676178	1	
7	Cylinder Body	676182	1	
8	O-Ring	676209	7	
9	Alignment Pin	676183	1	
10	Piston Seal, Lower	676210	1	
11	Lower Wiper, Piston	676211	1	

 $^{^{1)}}$ Parts shown in Table 4.10 are for use in AR70, AR70B & AR70C

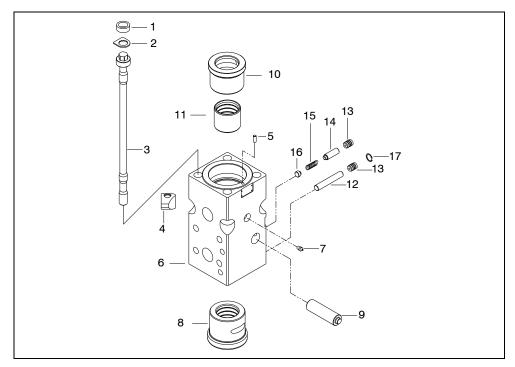


Fig 4-15 Front Head Components - Model AR70

See separate figure & parts list for AR70B & AR70C

Table 4.11 Front Head & Side Rod AR70
See separate figure & parts list for AR70B & AR70C

Item	Description	Part No.	Qty	Remarks
1	Rubber Ring	676169	4	
2	Lock plate	676168	4	
3	Side Rod	676167	4	
4	Nut	676187	4	
5	Alignment Pin	676183	1	
6	Front Head	676186	1	
7	Lubrication Fitting	816675	1	
8	Tool Bushing	676191	1	
9	Tool Retainer Pin	676188	1	
10	Impact Ring	676184	1	
11	Upper Bushing	676185	1	
12	Bushing Retainer Pin	676194	1	
13	Plug	676197	2	
14	Plunger Pin	676193	1	
15	Plunger Spring	676196	1	
16	Plunger Pin Spring Guide	676195	1	
17	Snap Ring		1	

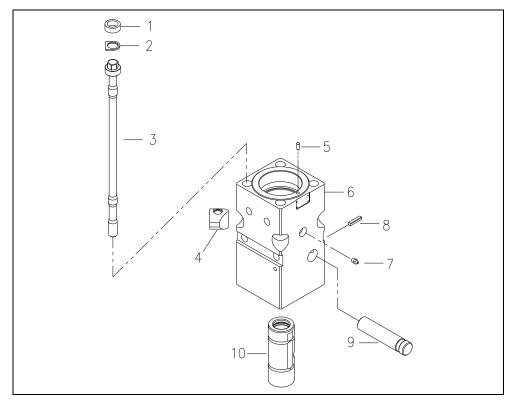


Fig 4-16 Front Head Components - Models AR70B & AR70C

See separate figure and parts list for AR70

Table 4.12 Front Head & Side Rod AR70B, AR70C ***See separate figure and parts list for AR70***

& below
е
& below
е
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е
4

Restore the performance and maintain the reliability of the breaker by replacing common wear items. Tune-up kits include a full set of seals, accumulator membrane, tool bushing and retainer pin.

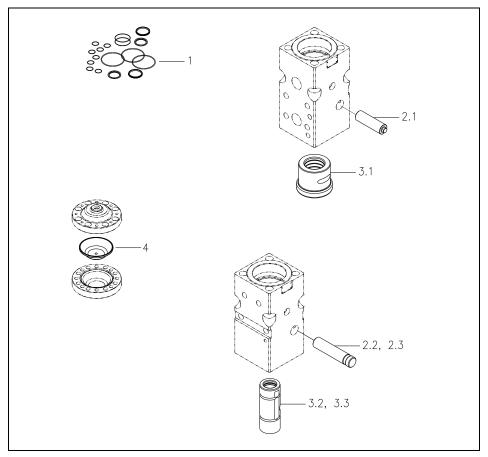


Fig 4-17 Tune-Up Kit

Table 4.13 Tune-Up Kit

abic 1	. 13 Tulle-op Kit			
Item	Description	Part No.	Qty	Remarks
		101352		AR70
4.4	Tuna un Vit	574434	1	AR70B
1-4	Tune-up Kit	571052	1	AR70C SN-00144 & below
		574113		AR70C SN-00145 & above
1	Seal Set	676152	1	AR70-Series
2.1		676188		AR70
2.2	Tool Retainer Pin	102877	1	AR70B, AR70C SN-00144 & below
2.3		573854		AR70C SN-00145 & above
3.1		676191		AR70
3.2	Tool Bushing	102876	1	AR70B
3.3		571033		AR70C SN-AII
4	Membrane	676162	1	AR70-Series

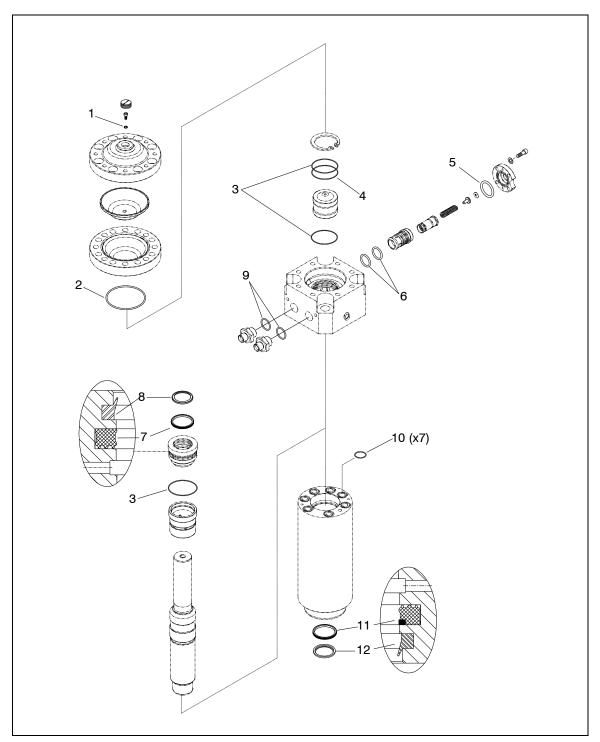


Fig 4-18 Seal Set – AR70 Series



Refer to the instructions given in Repair Manual 101230 for proper assembly of parts.

Table 4.14 Seal Kit – AR70 Series 1)

Item	Description	Part No.	Qty	Remarks
	Seal Set	676152	1-Set	Set includes items 1-13
1	Usit Ring	676201	1	
2	O-Ring	676202	1	
3	O-Ring	676203	3	
4	Back-Up Ring	676205	1	
5	O-Ring	676206	1	
6	O-Ring	676204	2	
7	Piston Seal, Upper	676207	1	
8	Upper Wiper, Piston	676208	1	
9	O-Ring	676204	2	Discard if adapter is equipped with bonded seal
10	O-Ring	676209	7	
11	Piston Seal, Lower	676210	1	
12	Lower Wiper, Piston	676211	1	
13	Thread Lube	676927	1	See application note

¹⁾ Parts shown in Table 4.14 are for use in AR70, AR70B & AR70C

IMPORTANT

Seal set includes packet of thread lubricant for use on side rod threads. DO NOT apply to seals!

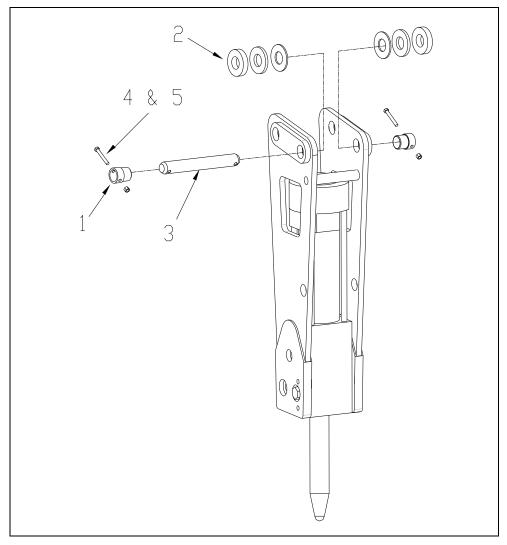


Fig 4-19 AR70 Series Mounting Kit for Housing Plate Type "XSF"

Table 4.15 Mounting Kits for Configuration Type XSF 1, 2)

Item	Description	Part No.	Qty	Remarks
	AR70-XSF Configuration			
	AR70B-XSF Configuration			
	AR70C-XSF Configuration			
1-5	25* mm	A101735	1	
1-5	30* mm	100207	1	
1-5	35* mm	100283	1	
1-5	38* mm	100364	1	
1-5	40* mm	100204	1	
1-5	45* mm	100324	1	No flange bushing. Uses pin collar
1-5	50* mm	101808	1	Includes pin collar and sleeve bushing
1-5	1.00* (in)	100208	1	
1-5	1.25* (in)	100209	1	
1-5	1.50* (in)	A100210	1	

¹⁾ Part numbers shown in Table 4.15 are for use with AR70, AR70B & AR70C equipped with XSF Housing Plates. Each AR70, configured with the mounting type XSF, come standard with one of the mounting kits listed in Table 4.15. Selection of the mounting kit requires the make & model of the machine. For carriers equipped with a quick mounting coupler additional mounting information will be necessary.

Table 4.16 Each "XSF" Mounting Kit Includes the Following

Item	Description	Part No.	Qty	Remarks
1.1	Flange Bushing	Varies 2)	4	
1.2	Pin Collar		4	Replaces Flange Bushing in Kits 100324 & 101808
2	Spacer 3/16", 3/8" & 3/4"	Varies	12 (3)	
3	Pin ∅	Varies 2)	2	
4	Hex Head Bolt	653343	4	
5	Hex Nut	759808	4	

²⁾ Part number of bushings and pins is determined by carrier make and model.

³⁾ Each XSF Kit includes spacers. These spacers come in assorted thicknesses. Combine quantity and thickness as required for proper spacing.

5.0 Tools - Standard & Specialty

5.1 Standard Tools

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

A) Chisel Tool – Suitable applications include soft rock and general demolition of concrete. The tool penetrates the material, wedging it apart. Useful when cutting action is required, e.g. benching and trenching. (Available in Cross-Cut and In-Line wedge.)

- **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.

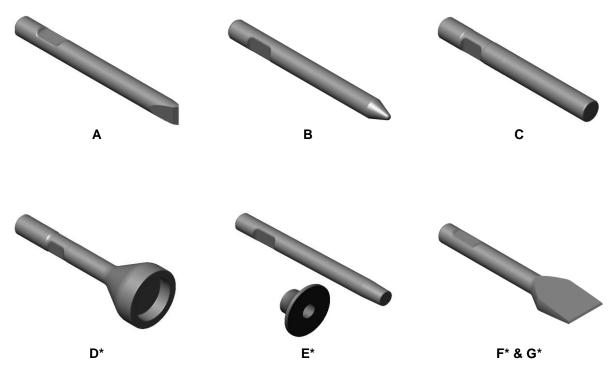


Fig. 5-1 Standard and *Specialty Tools (*General illustrations shown. Actual tool design may vary)

5.2 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. Available in Cross-Cut and In-Line configurations.

5.0 Tools Standard & Specialty - [cont'd]

Table 5.1 Tools - AR70 & AR70B 1) ***See separate parts list for AR70C***

Item	Description	Part No.	TD ³⁾ in. x WL ⁴⁾ in. (mm)	Weight lbs. (kg.)
A ¹⁾	Chisel Cross Cut	658517	2.77 (70) x 18 (457)	40 (18)
В	Conical Point	658518	2.77 (70) x 18 (457)	40 (18)
	Chisel In-Line (Not Pictured)	100488	2.77 (70) x 18 (457)	40 (18)
С	Blunt End	100585	2.77 (70) x 18 (457)	40 (18)
	Bell End (Not Pictured)	100993	2.77 (70) x 12 (305)	40 (18)
D	Post Driver	101017	2.77 (70) x 16 (406)	73 (33)
Е	Tamper	100970	2.77 (70) x 12 (305)	192 (87)
F	Frost Cutter	100994	2.77 (70) x 12 (305)	37 (17)
G	Asphalt Cutter	100971	2.77 (70) x 21 (533)	93 (42)
	Relieved Moil (Not Pictured)	100489	2.77 (70) x 18 (457)	40 (18)

¹⁾ Part numbers shown in Table 5.1 are for use with AR70, AR70B. Standard tool supplied with breaker shown

Table 5.2 Tools - AR70C 5)

See separate parts list for AR70 & AR70B

Item	Description	Part No.	TD ³⁾ in. x WL ⁴⁾ in. (mm)	Weight lbs. (kg.)
A ⁵⁾	Chisel Cross Cut	571014	2.48 (63) x 15 (380)	25 (11)
В	Conical Point	571042	2.48 (63) x 15 (380)	25 (11)
	Chisel In-Line (Not Pictured)	²⁾	2.48 (63) x 15 (380)	25 (11)
С	Blunt End	571043	2.48 (63) x 15 (380)	25 (11)
D	Post Driver	571044	2.48 (63) x 16 (406)	55 (25)
Е	Tamper	571046	2.48 (63) x 12 (305)	192 (87)
F	Frost Cutter	571045	2.48 (63) x 12 (305)	31 (14)
G	Asphalt Cutter	571047	2.48 (63) x 19 (483)	66 (30)

²⁾ For availability of tool types not listed, contact Allied ³⁾ TD - Tool Diameter ⁴⁾ WL - Working Length

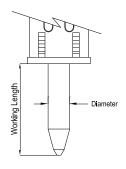


Fig. 5-2 Tool Diameter & Working Length

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

³⁾ TD - Tool Diameter

⁴⁾ WL - Working Length

⁵⁾ Part numbers shown in Table 5.2 are for use with AR70C. Standard tool supplied with breaker shown in Bold.

6.0 Tool & Bushing Lubrication - Chisel Paste

Each time the breaker is put to work, the tool and bushing are subjected to extreme pressure, heat and abrasive debris. These parts are made of high quality, heat-treated alloy steel. Yet, inattention to relubrication schedules or using the wrong grease will cause rapid wear and render parts unusable. Replacing these parts can be costly, both in terms of down time and price.

When choosing a grease to lubricate the bushing and tool, it's important to emphasize that the "right type" is equally important as "how much" and "how often".

There are many types of grease available, both basic and specialized. Basic types are generally suited for use in a variety of applications. Specialized types are highly developed and possess unique properties that are intended for specific tasks. Lubricating the bushing and tool requires the right type of grease. Allied Chisel Paste is specifically formulated to provide the bushing and tool with superior protection against wear and friction related damage.

Allied Chisel Paste contains a high solid content, which is desirable, especially in sliding applications that involve heavy side loading. Solids maintain a high-strength boundary between the bushing and tool that effectively reduce metal-to-metal contact and thereby reduce heat-generated damage from friction.

Basic lubricants, in comparison, are less developed and are usually labeled "General Purpose", or "Multi-Purpose". They are usually less expensive because they possess few additives and are unlikely to contain any solid content. When these types are subjected to heavy side loading, the lubricant it is squeezed out, leaving nothing to protect the bushing and tool against friction related damage.

Additionally, not all are formulated for high temperature applications. The breaker tool gets extremely hot during operation. Higher temperatures can cause grease to loose its ability to cling.

Many factors, including operator technique, determine whether the breaker will remain productive. Everyday wear-and-tear is unavoidable and no other component receives more punishment than the bushing and tool. But with attention to maintenance, including timely lubrication, and through the regular use of Allied Chisel Paste, the wear of these parts and the cost to replace them can be minimized.

Allied Chisel Paste Specifications

NLGI Grade - No. 2
Thickener Type – Calcium sulfonate complex
Solids include graphite and copper
Dropping Point ° F (° C), min. – 500 (260)
Oil Viscosity @ 100° F (40° C) – 200-240
Application methods include brushing, grease gun and all Allied automatic grease dispensers

IMPORTANT

Application Restriction - Chisel Paste is NOT suitable for use with roller type bearings.

Table 6-1 Ordering Information

Packaging	Packaging	Part No.
14.5 oz Tubes*	Qty x 10	574430
14.5 oz Tubes*	Qty x 30	574431
35 lb Bucket	Qty x 1	676698
120 lb Drum	Qty x 1	679968

^{*}Fits standard hand operated grease guns.

IMPORTANT

Contamination interferes with reliable operation and will shorten component life. Prevent dirt and debris from entering the lubrication system. Always clean the area around connections and cartridge prior to opening the system. Keep lubricants properly stored in their original, sealed container until ready for use.

7.0 N2 Gas Charge Kit

7.1 General Description

The accumulator is a self-contained pressure vessel with a flexible membrane dividing the inner chamber. The lower chamber is used to receive, store and discharge pressurized oil. Pressurized gas occupies the upper chamber.

Filling with nitrogen (N2) gas is accomplished with the charging unit (Fig. 7-1) and a commercially available nitrogen bottle. Table 6.1 lists items included in the charge kit.

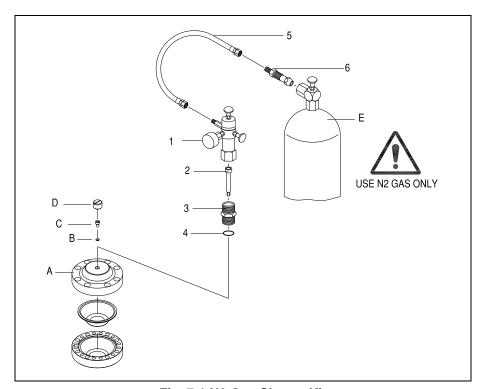


Fig. 7-1 N2 Gas Charge Kit

Table 7.1 N2 Gas Charge Kit

Part No.	Description	Qty	Remarks / Specifications
570071	N2 Gas Charge Kit	1-Kit	Kit includes 1,2,3,4,5,6
100527	Charge Valve with Gauge	1	Includes 2-6 (& storage case - not shown)
40601	Socket Bolt	1	
R101635	Adaptor	1	
901135	O-ring	1	
N/A	Hose	1	8 Ft. [2.5 M] Not Sold Separately
N/A	Gas Bottle Adapter	1	Not Sold Separately
N/A	Nitrogen Gas Bottle		Not Supplied (Source Locally)
	Accumulator, U-sit ring, Bolt, Cap, N2 Gas Bottle		Items A,B,C,D,E not included in charge kit. They are shown for reference only.
	570071 100527 40601 R101635 901135 N/A N/A	570071 N2 Gas Charge Kit 100527 Charge Valve with Gauge 40601 Socket Bolt R101635 Adaptor 901135 O-ring N/A Hose N/A Gas Bottle Adapter N/A Nitrogen Gas Bottle Accumulator, U-sit ring,	570071 N2 Gas Charge Kit 1-Kit 100527 Charge Valve with Gauge 1 40601 Socket Bolt 1 R101635 Adaptor 1 901135 O-ring 1 N/A Hose 1 N/A Gas Bottle Adapter 1 N/A Nitrogen Gas Bottle Accumulator, U-sit ring,



Read, understand and follow all instructions given in Repair Manual 101230 for the safe and proper use of this tool.

8.0 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.

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