



Operating Instructions and Parts Manual

Air/Hydraulic Bottle Jack

Models AHJ-12 and AHJ-20



WALTER MEIER (Manufacturing) Inc.

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Warranty and Service

Walter Meier (Manufacturing) Inc., warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Service Centers located throughout the United States can give you quick service. In most cases, any of these Walter Meier Authorized Service Centers can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET® tools. For the name of an Authorized Service Center in your area call 1-800-274-6848.

MORE INFORMATION

Walter Meier is consistently adding new products to the line. For complete, up-to-date product information, check with your local Walter Meier distributor, or visit waltermeier.com.

WARRANTY

JET products carry a limited warranty which varies in duration based upon the product (MW = Metalworking, WW = Woodworking).

90 DAY WARRANTY	1 YEAR WARRANTY	Body Repair Kits Bottle Jacks Cable Pullers Cold Saws Hoists-Air Hoists-Electric Metal forming Mill/Drills Milling Machines MW Bandsaws MW Drill Presses MW Finishing Equipment MW Lathes MW Precision Vises	2 YEAR WARRANTY	Palet Trucks Rigging Equip. Service Jacks Stackers Surface Grinders Tapping Trolleys-Air Trolleys-Electric Web Slings Winches-Electric	3 YEAR WARRANTY	WW Benchtop Tools	5 YEAR WARRANTY	Beam Clamps Chain Hoist- Manual Lever Hoists Pullers-JCH Models Scissor Lift Tables Screw Jacks Trolleys-Gearred Trolleys-Plain Winches-Manual WW Air Filtration WW Bandsaws WW Buffers	WW Drill Presses WW Dust Collectors WW Dust Filters WW Dust Fittings WW Jointers WW Lathes WW Planers WW Sanders WW Shapers WW Tablesaws	LIFE LIFETIME WARRANTY	Fastening Tools Mechanics Hand Tools Striking Tools Vises (no -precision) Clamps
Warranty reverts to 1 Year Warranty if woodworking (WW) products listed above are used for industrial or educational purposes.											

WHAT IS COVERED?

This warranty covers any defects in workmanship or materials subject to the exceptions stated below. Cutting tools, abrasives and other consumables are excluded from warranty coverage.

WHO IS COVERED?

This warranty covers only the initial purchaser of the product.

WHAT IS THE PERIOD OF COVERAGE?

The general JET warranty lasts for the time period specified in the product literature of each product.

WHAT IS NOT COVERED?

Five Year Warranties do not cover woodworking (WW) products used for commercial, industrial or educational purposes. Woodworking products with Five Year Warranties that are used for commercial, industrial or education purposes revert to a One Year Warranty. This warranty does not cover defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair or alterations, or lack of maintenance.

HOW TO GET SERVICE

The product or part must be returned for examination, postage prepaid, to a location designated by us. For the name of the location nearest you, please call 1-800-274-6848.

You must provide proof of initial purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will repair or replace the product, or refund the purchase price, at our option. We will return the repaired product or replacement at our expense unless it is determined by us that there is no defect, or that the defect resulted from causes not within the scope of our warranty in which case we will, at your direction, dispose of or return the product. In the event you choose to have the product returned, you will be responsible for the shipping and handling costs of the return.

HOW STATE LAW APPLIES

This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

LIMITATIONS ON THIS WARRANTY

WALTER MEIER (MANUFACTURING) INC., LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

WALTER MEIER SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Walter Meier sells through distributors only. The specifications in Walter Meier catalogs are given as general information and are not binding. Members of Walter Meier reserve the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever. JET®-branded products are not sold in Canada by Walter Meier.

Warnings

1. Read and understand all warnings and operating instructions before attempting to use this jack.
2. Do not exceed rated capacity. Overloading can cause damage to and/or failure of the jack.
3. If jack is damaged and/or operates abnormally, remove from service until repaired.
4. Support load by appropriate means after lifting.
5. Always center load on the jack.
6. Use this jack as a lifting device only.
7. Use only on a hard, level surface capable of sustaining the load. Using the bottle jack on other than hard, level surfaces can result in jack instability and possible loss of load.
8. Lift only on areas of the vehicle specified by the vehicle manufacturer.
9. Always replace damaged, missing or worn labels and use only genuine factory replacement parts when replacement is necessary.
10. Only use attachments and/or adapters supplied with, or sold specifically for, the jack.
11. No alterations shall be made to this product.
12. Failure to comply with all of these warnings may result in loss of load, damage to jack, and/or personal injury or property damage.

Specifications

Model Number.....	AHJ-12.....	AHJ-20
Stock Number.....	456612.....	456620
Rated Capacity (ton).....	12.....	20
Minimum Height (in.).....	9.65.....	9.65
Maximum Height (in.).....	18.70.....	18.70
Air Pressure Required (psi).....	90 to 145.....	90 to 145
Base Size (L x W)(in.)	8.27 x 6.30.....	8.66 x 6.89
Net Weight (lbs).....	26.46.....	30.86
Shipping Weight (lbs).....	30.86.....	39.68

The above specifications were current at the time this manual was published, but because of our policy of continuous improvement, Walter Meier (Manufacturing) Inc., reserves the right to change specifications at any time and without prior notice, without incurring obligations.

(NOTE: Numbers in parentheses refer to item numbers on the breakdown, page 5.)

Inspection Before Use

Prior to each use, visually inspect for leaking hydraulic oil, damaged, loose or missing parts. If jack becomes worn or damaged in any way, or operates abnormally, remove it from service and contact your nearest service center for repair.

Purging the Hydraulic System

During transit, the jack's hydraulic system may become filled with air, causing a spongy ram action. The air should be purged from the system before operating.

1. To purge air from the hydraulic system, open the release valve (49) by turning it counterclockwise for 2 to 3 turns.

2. Turn the jack 90° to its horizontal position. Be sure that the air motor is underneath the ram assembly (37).
3. Connect the air valve (29) to an air supply, and press the lever on the air valve (29) for 20 seconds to operate the jack.
4. Close the release valve (49) by turning it clockwise while the jack remains at its horizontal position. If the ram assembly (37) doesn't extend, repeat steps 1 through 4.

Operation

Jack operation is controlled either manually or by external air pressure. To operate manually, insert the handle (61) into the handle socket (60). To operate by air pressure, connect the air valve (29) to an external air pressure source. Clean the air connections and lubricate air motor prior to assembly.

To raise the jack, turn the release valve (49) clockwise until it is tight, and either manually pump with the handle, or press the lever on the air valve (29) if connected to an air supply.

To lower the jack, turn the release valve (49) counterclockwise slightly and very slowly. Do not turn valve too quickly or more than twice.

⚠WARNING When lowering the jack, do not turn release valve too quickly or turn the valve more than twice. This can cause the load to descend too rapidly creating a dangerous situation.

Maintenance

Maintain oil at full level. To check the oil, proceed as follows:

1. With the jack in an upright position and the ram completely retracted, open the release valve (49) by turning it counterclockwise.
2. Unscrew and remove the filler plug (31). The oil level should be just up to the hole.
3. If necessary, fill with clean hydraulic jack oil.
4. Re-install the filler plug (31).

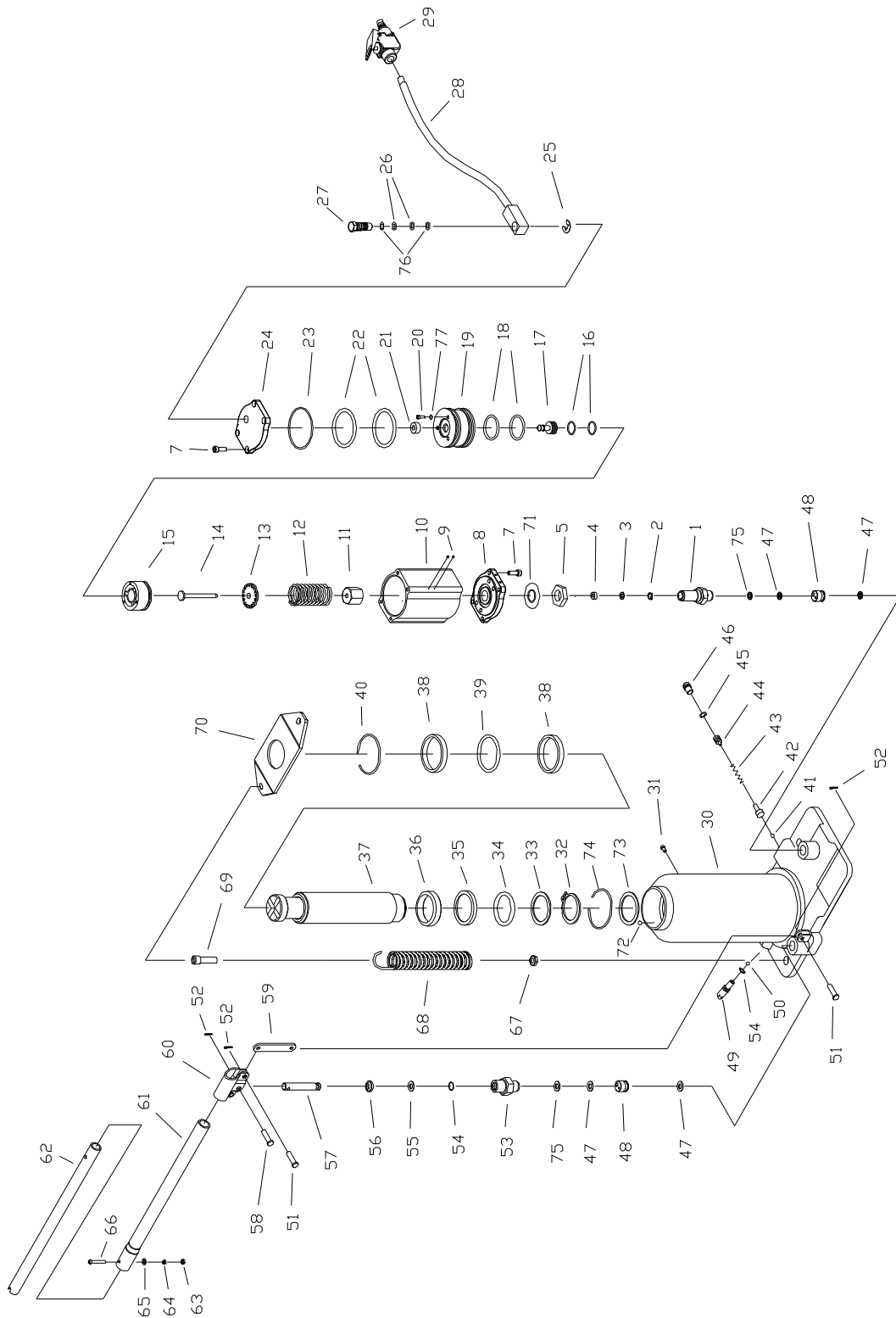
With the release valve (49) open, manually pump the handle six times. This will keep internal components lubricated.

To prevent corrosion, occasionally lubricate the handle socket pivot point (60), release valve screw thread (49), and air valve (29), with a light coat of oil.

Troubleshooting the AHJ Bottle Jack

Trouble	Probable Cause	Remedy
Erratic Action.	Air in hydraulic system.	Bleed air by opening release valve (49). Pump for 20 seconds.
	Viscosity of oil is too high.	Change to a lower viscosity oil.
	Internal leakage in ram (37).	Replace worn packing. Look for excessive contamination or wear.
Ram does not advance.	Release valve (49) is open.	Close release valve (49).
	Low or no oil in reservoir.	Fill reservoir with oil and bleed air from system.
	Air locked in system.	Bleed air by opening release valve (49). Pump for 20 seconds.
	Load is above capacity.	Use correct equipment rated for that load.
Ram does not extend or only partially.	Low oil level in reservoir.	Fill reservoir with oil and bleed air from system.
	Pump plunger (57) is binding.	Look for dirt, gummy deposits, leaks, misalignment, worn parts, or defective packing.
Ram advances slowly.	Low air pressure.	Adjust air pressure to 90 to 145 psi.
	Leaking seals.	Replace seals.
Ram advances but does not hold load.	Release valve (49) is open.	Close release valve (49).
	Ram seals are leaking.	Replace seals.
Ram will not retract, or retracts slowly.	Release valve (49) is closed.	Open release valve (49).
	Reservoir is too full.	Drain oil to correct level.
	Ram damaged internally.	Take jack to authorized service center for repair.

AHJ-12 and AHJ-20 Bottle Jacks



Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday (see our website for business hours, www.waltermeier.com). Having the Model Number and Serial Number of your product available when you call will allow us to serve you quickly and accurately.

Parts List: AHJ-12 Bottle Jack

Index No.	Part No.	Description	Size	Qty
1	AHJ12-1	Pump Cylinder		1
2	AHJ12-2	Y-Seal*	5.8x12x5.2mm	1
3	AHJ12-3	Nylon Gasket*	5.8x12x1.25mm	1
4	AHJ12-4	Copper Washer		1
5	AHJ12-5	Nut		1
7	TS-1503051	Socket Head Cap Screw	M6x20	8
8	AHJ12-8	Base Cover		1
9	SB-3MM	Steel Ball	Ø 3mm	4
10	AHJ12-10	Air Motor Housing		1
11	AHJ12-11	Nut		1
12	AHJ12-12	Spring		1
13	AHJ12-13	Washer		1
14	AHJ12-14	Air Pump Plunger		1
15	AHJ12-15	Air Piston Base		1
16	AHJ12-16	O-Ring	20.3x2.65mm	2
17	AHJ12-17	Air Shuttle Valve		1
18	AHJ12-18A	O-Ring	42.7x3.7mm	2
19	AHJ12-19	Air Piston		1
20	TS-1502021	Socket Head Cap Screw	M5x10	3
21	AHJ12-21	Shuttle Valve Seal		1
22	AHJ12-22	O-Ring	57x5.3mm	2
23	AHJ12-23	O-Ring	67x2.4mm	1
24	AHJ12-24	Top Cover		1
25	AHJ12-25	Snap Ring	Ø 14mm	1
26	AHJ12-26	O-Ring	11.5x1.5mm	2
27	AHJ12-27	Coupler		1
28	AHJ12-28	Air Hose Assembly		1
29	AHJ12-29	Air Valve Assembly		1
30	AHJ12-30	Oil Tank Assembly		1
31	AHJ12-31	Oil Filler Plug		1
32	AHJ12-32	Snap Ring	Ø 36mm	1
33	AHJ12-33	O-Ring Retainer		1
34	AHJ12-34	O-Ring*	36x4.6mm	1
35	AHJ12-35	Seal Washer*		1
36	AHJ12-36	Piston Ring		1
37	AHJ12-37	Ram Assembly		1
38	AHJ12-38	Bushing		2
39	AHJ12-39	O-Ring*	43x3.55mm	1
40	AHJ12-40	Snap Ring		1
41	SB-4MM	Steel Ball	Ø 4mm	1
42	AHJ12-42	Safety Valve Ball Seat		1
43	AHJ12-43	Safety Valve Spring		1
44	AHJ12-44	Safety Valve Adjusting Screw		1
45	AHJ12-45	O-Ring*	7.5x2.65mm	2
46	AHJ12-46	Screw		1
47	AHJ12-47	Copper Washer		4
48	AHJ12-48	Valve Block Assembly		2
49	AHJ12-49	Release Valve Assembly		1
50	SB-6MM	Steel Ball	Ø 6mm	1
51	AHJ12-51	Link Pin		2
52	AHJ12-52	Pin		3
53	AHJ12-53	Pump Cylinder		1
54	AHJ12-54	O-Ring*	7x3mm	2
55	AHJ12-55	Nylon Gasket*	7x12x1.5mm	1
56	AHJ12-56	Dustproof Ring	12.5x18.5x6mm	1
57	AHJ12-57	Pump Plunger		1

58	AHJ12-58	Pump Plunger Pin		1
59	AHJ12-59	Link		1
60	AHJ12-60	Handle Socket		1
61	AHJ12-61	Front Handle		1
62	AHJ12-62	Rear Handle		1
63	TS-1540031	Hex Nut	M5	1
64	TS-2361051	Lock Washer	M5	1
65	TS-1550031	Flat Washer	M5	1
66	TS-2285302	Phillips Pan Head Machine Screw	M5x30	1
67	AHJ12-67	Hex Nut (Thin)	M10	2
68	AHJ12-68	Return Spring		2
69	AHJ12-69	Screw		2
70	AHJ12-70	Spring Lid		1
71	AHJ12-71	Spring Washer		1
72	SB-4MM	Steel Ball	ø4mm	1
73	AHJ12-73	Retainer		1
74	AHJ12-74	Snap Ring		1
75	AHJ12-75	Nylon Gasket	14x18x1.25mm	2
76	AHJ12-76	Nylon Gasket	10x14x1.25mm	2
77	AHJ12-77	O-Ring	5x1.8mm	3
	AHJ12-RP	Repair Kit for AHJ-12 *		

Items marked with an asterisk (*) are included in the Repair Kit.

Parts List: AHJ-20 Bottle Jack

Index No.	Part No.	Description	Size	Qty
1	AHJ12-1	Pump Cylinder		1
2	AHJ12-2	Y-Seal*	5.8x12x5.2mm	1
3	AHJ12-3	Nylon Gasket*	5.8x12x1.25mm	1
4	AHJ12-4	Copper Washer		1
5	AHJ12-5	Nut		1
6	AHJ12-6	O-Ring	18x2.65mm	1
7	TS-1503051	Socket Head Cap Screw	M6x20	8
8	AHJ12-8	Base Cover		1
9	SB-3MM	Steel Ball	ø3mm	4
10	AHJ12-10	Air Motor Housing		1
11	AHJ12-11	Nut		1
12	AHJ12-12	Spring		1
13	AHJ12-13	Washer		1
14	AHJ12-14	Air Pump Plunger		1
15	AHJ12-15	Air Piston Base		1
16	AHJ12-16	O-Ring	20.3x2.65mm	2
17	AHJ12-17	Air Shuttle Valve		1
18	AHJ12-18	O-Ring	42.7x3.7mm	2
19	AHJ12-19	Air Piston		1
20	TS-1502021	Socket Head Cap Screw	M5x10	3
21	AHJ12-21	Shuttle Valve Seal		1
22	AHJ12-22	O-Ring	57x5.3mm	2
23	AHJ12-23	O-Ring	67x2.4mm	1
24	AHJ12-24	Top Cover		1
25	AHJ12-25	Snap Ring	ø14mm	1
26	AHJ12-26	O-Ring	11.5x1.5mm	2
27	AHJ12-27	Coupler		1
28	AHJ12-28	Air Hose Assembly		1
29	AHJ12-29	Air Valve Assembly		1
30	AHJ20-30	Oil Tank Assembly		1
31	AHJ20-31	Oil Filler Plug		1

32.....	AHJ20-32.....	Snap Ring.....	ø40mm.....	1
33.....	AHJ20-33.....	O-Ring Retainer.....		1
34.....	AHJ20-34.....	O-Ring*.....	46.8x4.6mm.....	1
35.....	AHJ20-35.....	Seal Washer*.....		1
36.....	AHJ20-36.....	Piston Ring.....		1
37.....	AHJ20-37.....	Ram Assembly.....		1
38.....	AHJ20-38.....	Bushing.....		2
39.....	AHJ20-39.....	O-Ring*.....	53x4.6mm.....	1
40.....	AHJ20-40.....	Snap Ring.....		1
41.....	SB-4MM.....	Steel Ball.....	ø4mm.....	1
42.....	AHJ12-42.....	Safety Valve Ball Seat.....		1
43.....	AHJ12-43.....	Safety Valve Spring.....		1
44.....	AHJ12-44.....	Safety Valve Adjusting Screw.....		1
45.....	AHJ12-45.....	O-Ring*.....	7.5x2.65mm.....	2
46.....	AHJ12-46.....	Screw.....		1
47.....	AHJ12-47.....	Copper Washer.....		4
48.....	AHJ12-48.....	Valve Block Assembly.....		2
49.....	AHJ12-49.....	Release Assembly.....		1
50.....	SB-6MM.....	Steel Ball.....	ø6mm.....	1
51.....	AHJ12-51.....	Link Pin.....		2
52.....	AHJ12-52.....	Pin.....		3
53.....	AHJ12-53.....	Pump Cylinder.....		1
54.....	AHJ12-54.....	O-Ring*.....	7x3mm.....	2
55.....	AHJ12-55.....	Nylon Gasket*.....	7x12x1.5mm.....	1
56.....	AHJ12-56.....	Dustproof Ring.....	12.5x18.5x6mm.....	1
57.....	AHJ12-57.....	Pump Plunger.....		1
58.....	AHJ12-58.....	Pump Plunger Pin.....		1
59.....	AHJ12-59.....	Link.....		1
60.....	AHJ12-60.....	Handle Socket.....		1
61.....	AHJ12-61.....	Front Handle.....		1
62.....	AHJ12-62.....	Rear Handle.....		1
63.....	TS-1540031.....	Hex Nut.....	M5.....	1
64.....	TS-2361051.....	Lock Washer.....	M5.....	1
65.....	TS-1550031.....	Flat Washer.....	M5.....	1
66.....	TS-2285302.....	Phillips Pan Head Machine Screw.....	M5x30.....	1
67.....	AHJ20-67.....	Hex Nut (Thin).....	M10.....	2
68.....	AHJ20-68.....	Return Spring.....		2
69.....	AHJ20-69.....	Screw.....		2
70.....	AHJ20-70.....	Spring Lid.....		1
71.....	AHJ12-71.....	Spring Washer.....		1
72.....	SB-4MM.....	Steel Ball.....	ø4mm.....	1
73.....	AHJ20-73.....	Retainer.....		1
74.....	AHJ20-74.....	Snap Ring.....		1
75.....	AHJ12-75.....	Nylon Gasket.....	14x18x1.25mm.....	2
76.....	AHJ12-76.....	Nylon Gasket.....	10x14x1.25mm.....	2
77.....	AHJ12-77.....	O-Ring.....	5x1.8mm.....	3
.....	AHJ20-RP.....	Repair Kit for AHJ-20 *.....		

Items marked with an asterisk (*) are included in the Repair Kit.



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