# **GARDNER DENVER®**

301FWQ997 Rev A SEPTEMBER 2011

# **WELL SERVICING PUMP**

**MODEL** 

**GD-1000Q** 

FLUID END PARTS LIST



# **GD-1000Q WELL SERVICING PUMP** FLUID END PARTS LIST

## MAINTAIN PUMP RELIABILITY AND PERFORMANCE WITH GENUINE GARDNER DENVER PARTS AND SUPPORT SERVICES

Gardner **Denver®** genuine pump parts, manufactured to design tolerances, are developed for optimum dependability. Design and material innovations are the result of years of experience with hundreds of different pump applications. Reliability in materials and quality assurance are incorporated in our genuine replacement parts.

Gardner Denver supports your needs with these services:

- 1. Trained parts specialists to assist you in selecting the correct replacement parts.
- 2. Repair and maintenance kits designed with the necessary parts to simplify servicing your pump.

Authorized service technicians are factory trained and skilled in pump maintenance and repair. They are ready to respond and assist you by providing fast, expert maintenance and repair services.

# For the location of your local authorized Gardner Denver distributor refer to the yellow pages of your directory or contact:

Factory (	Tulsa):	Service (	Center (Odessa):	Service Co	enter (Ft. Worth)
4747 Sou	Denver icing Pumps th 83 <sup>rd</sup> East Avenue lahoma 74145		ıl st 44 <sup>th</sup> Street Texas 79768	Geoquip 7533 Kathy Ft. Worth,	y Lane Texas 76126
Phone:	(918) 664-1151 (800) 637-8099	Phone:	(432) 366-5433 (800) 368-1134	Phone:	(817) 249-6400 (800) 824-0271
Fax:	(918) 664-6225	Fax:	(432) 363-9940	Fax	(817) 249-6401

#### INSTRUCTION FOR ORDERING REPAIR PARTS

When ordering parts, specify Pump MODEL and SERIAL NUMBER (see nameplate on unit). The Serial Number is also stamped on top of the cylinder end of the frame (cradle area).

Where NOT specified, quantity for parts required per pump unit is one (1); where more than one is required per unit, quantity is indicated in parenthesis.

SPECIFY THE NUMBER OF **PARTS** REQUIRED.

#### DO NOT ORDER BY SETS OR GROUPS.

To determine the Right Hand and Left Hand side of a pump, stand at the power end and look toward the fluid end. Right Hand and Left Hand are indicated in parenthesis following the part name, i.e. (RH) & (LH), when appropriate

#### GARDNER DENVER PRODUCT WARRANTY

# GENERAL PROVISIONS AND LIMITATIONS

Gardner Denver (the "Company") warrants to each original retail purchaser ("Purchaser") of its new products, assemblies or parts from the Company or its authorized distributors that such products are, at the time of delivery to the Purchaser, made with good material and workmanship. No warranty is made with respect to:

- 1. Any product which has been repaired or altered in such a way, in the Company's judgment, as to affect the product adversely.
- Any product which has, in the Company's judgment, been subject to negligence, accident, or improper storage, improper installation, operation or application. (Examples: over-pressure, sand-outs, cavitation, corrosion, erosion or degradation).
- 3. Any product which has not been operated or maintained in accordance with the recommendations of the Company.
- 4. Components or accessories manufactured, warranted and serviced by others.

Any reconditioned or prior owned product.

Claims for items described in (4) above should be submitted directly to the manufacturer.

#### **WARRANTY PERIOD**

The Company's obligation under this warranty is limited to repairing or, at its option, replacing, during normal business hours at an authorized service facility of the Company, any part or assembly which in the Company's judgment proved to have unsatisfactory material or workmanship within the applicable Warranty Period as follows.

Except for the products or components listed below, and subject to the limitations and restrictions set forth in the "Disclaimer" section set forth below, the Warranty Period for all products is 1,250 hours of operation or three (3) months after start-up, not to exceed 120 days after delivery to Purchaser, whichever occurs first. The exceptions are as follows:

- Power end is warranted for twelve (12) months from date of start-up or eighteen (18) months from date of delivery to the Purchaser, whichever occurs first.
- Forged steel fluid cylinders are warranted for materials and workmanship for 6 months from the date of installation or 18 months from the date of delivery to the purchaser, which ever occurs first.

- 3. Repairs are warranted for 90 days from the date of delivery, for the workmanship and materials of the new parts installed.
- 4. Weld repaired fluid ends and weld repaired components are not warranted.
- Expendable fluid end parts, including, but not limited to, valves, valve parts, packing, liners and pistons, are not covered by this warranty due to variable abrasive nature of material pumped.

# PRESERVATION ASSEMBLIES DESTINED FOR STORAGE

In order for warranty acceptance any pump assembly not immediately installed or destined to be in storage or in transit for extended periods of time must be prepared for storage as defined in the Company's Long Term Storage Procedure. This includes but is not limited to:

- Drain and thoroughly clean inside power end crankcase.
- Spray rust inhibiting oil on all bearing, machined and inside surfaces of the power end
- Induce clean gear oil into any circulating pump, filter, heat exchanger and piping.
- Remove valves, seats and plungers from the fluid end. Thoroughly clean and dry these parts and all internal surfaces. Coat all cylinder bores, valve covers and reusable expendable parts with rust preventative.
- Flush all water, and contaminants from pump, tanks, hoses and spray nozzles. Spray all components with a rust inhibiting oil.
- Rotate pump every 30 days to insure bearings are oiled.
- At the expense of the Purchaser, any product properly preserved must be inspected by an authorized agent of the Company, prior to the Company, granting any extended warranty beyond that stated in this warranty.

# LABOR TRANSPORTATION AND INSPECTION

The Company will provide labor, by Company representative or authorized service personnel, for repair or replacement of any product or part thereof which in the Company's judgment is proved not to be as warranted. Labor shall be limited to the amount

specified in the Company's labor rate schedule. Labor costs in excess of the Company rate schedules caused by, but not limited to, location or inaccessibility of the equipment, or labor provided by unauthorized service personnel is not provided for by this warranty.

All costs of transportation of product or parts claimed not to be as warranted and, of repaired or replacement parts to or from such service facility shall be borne by the Purchaser. The Company may require the return of any part claimed not to be as warranted to one of its facilities as designated by the Company, transportation prepaid by the Purchaser, to establish a claim under this warranty.

Replacement parts provided under the terms of this warranty are warranted for the remainder of the Warranty Period of the product upon which installed to the same extent as if such parts were original components.

The Company may request a root cause analysis be performed in-order to identify if a request for warranty claim meets the requirements of this warranty.

#### **DISCLAIMER**

Except as to title, the foregoing warranty is the sole and exclusive warranty of the Company. Company hereby extends other manufactures' warranty or guaranties, if any given to Company by such manufacturer, but only to the extent the Company is able to enforce such warranty or guaranties. The Company has not authorized any party to make any representation or warranty other than as expressly set forthherein. SELLER HEREBY DISCLAIMS AND EXCLUDES ANY OTHER **IMPLIED** EXPRESS. OR **STATUTORY** WARRANTIES, ARISING BY OPERATION OF LAW OR OTHERWISE. INCLUDING. WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY OR **FITNESS** FOR PARTICULAR PURPOSE. COMPANY MAKES NO WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER (EXPRESS, IMPLIED OR STATUTORY), OF LAW OR OTHERWISE, ON ANY EQUIPMENT. COMPONENT **PARTS** OR ACCESSORIES SOLD HEREUNDER WHICH, ARE NOT MANUFACTURED BY COMPANY.

NOTWITHSTANDING ANYTHING HEREIN TO THE CONTRARY, THE FOREGOING WARRANTY SHALL BE THE SOLE AND EXCLUSIVE REMEDY AVAILABLE TO THE PURCHASER. UNDER NO CIRCUMSTANCES, WHETHER IN CONTRACT, TORT OR OTHERWISE, SHALL THE COMPANY'S TOTAL LIABILITY ARISING IN CONNECTION WITH ANY PURCHASE ORDER EXCEED THE AMOUNT OF ANY SALES OR OTHER PROCEEDS RECEIVED PURSUANT THERETO. IN ADDITION, UNDER NO CIRCUMSTANCES, WHETHER IN CONTRACT, TORT OR OTHERWISE, SHALL THE COMPANY BE LIABLE FOR LIQUIDATED, SPECIAL, INDIRECT, INCIDENTAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES, EXPENSES OR COSTS, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR FACILITY DOWNTIME. HOWEVER CAUSED AND EVEN IF THE POTENTIAL OF SUCH DAMAGES WAS DISCLOSED AND/OR KNOWN.

No statement, representation, agreement, or understanding, oral or written, made by any agent, distributor, representative, or employee of the Company which is not contained in this Warranty will be binding upon the Company unless made in writing and executed by an officer of the Company.

This warranty shall not be effective as to any claim which is not presented within 30 days after the date upon which the product is claimed not to have been as warranted. Any action for breach of this warranty must be commenced within one year after the date upon which the cause of action occurred.

Any adjustment made pursuant to this warranty shall not be construed as an admission by the Company that any product was not as warranted.

#### WARRANTY REQUESTS

Products to be returned for warranty analysis shall be approved for return in writing by the Company prior to shipment. All requests for product return shall be submitted by email. Facsimile or letter to:

Warranty Department c/o Gardner Denver Petroleum Pumps 4747 South 83<sup>rd</sup> East Avenue Tulsa, Oklahoma 74145

Email: <a href="mailto:ccr.qar@gardnerdenver.com">ccr.qar@gardnerdenver.com</a>

Facsimile:(918)664-

# **TABLE OF CONTENTS**

MAINTAIN PUMP RELIABILITY AND PERFORMANCE	i
GARDNER DENVER PRODUCT WARRANTY	
SPECIAL NOTICE CONCERNING PART COMPATIBILITY	
FLUID END ASSEMBLY 2.75" - 3"	2
FLUID END ASSEMBLY 3.5" - 4.5"	5
HOUSING GROUP	8
NON ADJUSTABLE HNBR CDI PACKING	9
RUBBER SPRING LOADED PACKING	10
NON ADJUSTABLE HNBR CDI PACKING	11
VALVE GROUP	12
PLUNGER GROUP	13
DISCHARGE FLANGE GROUP	14
DISCHARGE FLANGE GROUP (BLIND)	15
SUCTION MANIFOLD GROUP	16
VALVE SEAT PULLER KITS	17

## **TABLE OF FIGURES**

Figure 1: FLUID END ASSEMBLY 2.75" - 3" ISO VIEW	2
Figure 2: FLUID END ASSEMBLY 2.75" - 3" FRONT VIEW	2
Figure 3: FLUID END ASSEMBLY 2.75" - 3" SECTION A-A	3
Figure 4: FLUID END ASSEMBLY ISO VIEW 3.5" - 4.5"	5
Figure 5: FLUID END ASSEMBLY 3.5" - 4.5" FRONT VIEW	5
Figure 6: FLUID END ASSEMBLY 3.5" - 4.5" SECTION A-A	6
Figure 7: HOUSING GROUP 3"	8
Figure 8: HOUSING GROUP 3.5"	8
Figure 9: CDI PACKING 3"	9
Figure 10: RSL PACKING 3.5"	10
Figure 11: CDI PACKING 3.5"	11
Figure 12: VALVE GROUP 2.5" - 3"	12
Figure 13: VALVE GROUP 3.5" - 4.5"	12
Figure 14: PLUNGER GROUP 3"	13
Figure 15: PLUNGER GROUP 3.5"	13
Figure 16: DISCHARGE FLANGE GROUP	14
Figure 17: DISCHARGE FLANGE GROUP (BLIND)	15
Figure 18: SUCTION MANIFOLD GROUP	16

#### SPECIAL NOTICE CONCERNING PART COMPATIBILITY

THIS PARTS LIST CONTAINS PART NUMBERS THAT ARE COMPATIBLE WITH THE GARDNER DENVER GD-1000Q FLUID CYLINDER. THE PART NUMBERS LISTED MAY NOT BE COMPATIBLE WITH OTHER FLUID ENDS AVAILABLE FOR THE GD-1000Q PUMP MODELS. ALL PART NUMBERS IN THIS MANUAL ARE COMPATIBLE WITH THE FOLLOWING BARE FLUID CYLINDER PART NUMBERS:

Part No.	Part Name
PP1073404	CYLINDER-FLUID 2.75" - 3" GD-1000Q
PP1077331	CYLINDER-FLUID 3.5" - 4.5" GD-1000Q

BEFORE ORDERING, VERIFY THAT YOUR BARE FLUID CYLINDER PART NUMBER MATCHES ONE OF THE BARE FLUID CYLINDER PART NUMBERS LISTED ABOVE.

## FLUID END ASSEMBLY 2.75" - 3"

Order by part number and description. Reference numbers are for your convenience only.

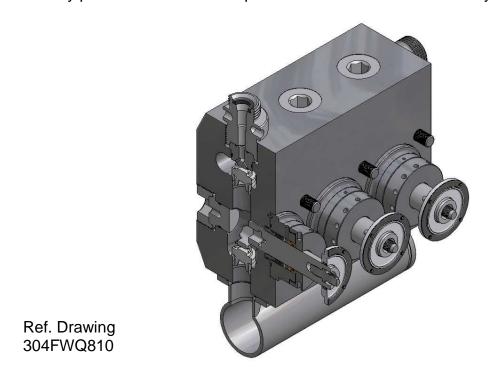


Figure 1: FLUID END ASSEMBLY 2.75" - 3" ISO VIEW

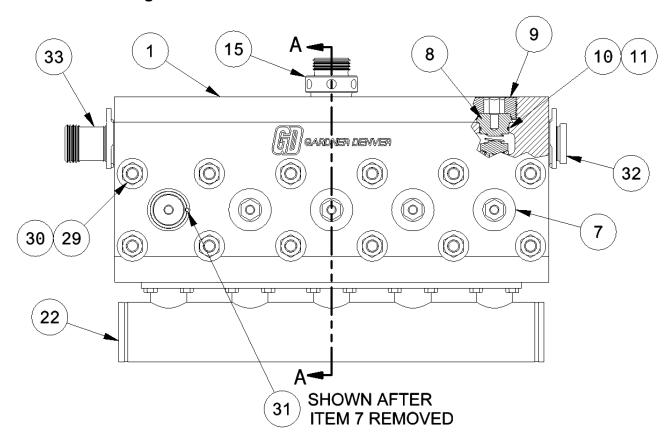


Figure 2: FLUID END ASSEMBLY 2.75" - 3" FRONT VIEW

301FWQ997 Page 2

## FLUID END ASSEMBLY 2.75" - 3"

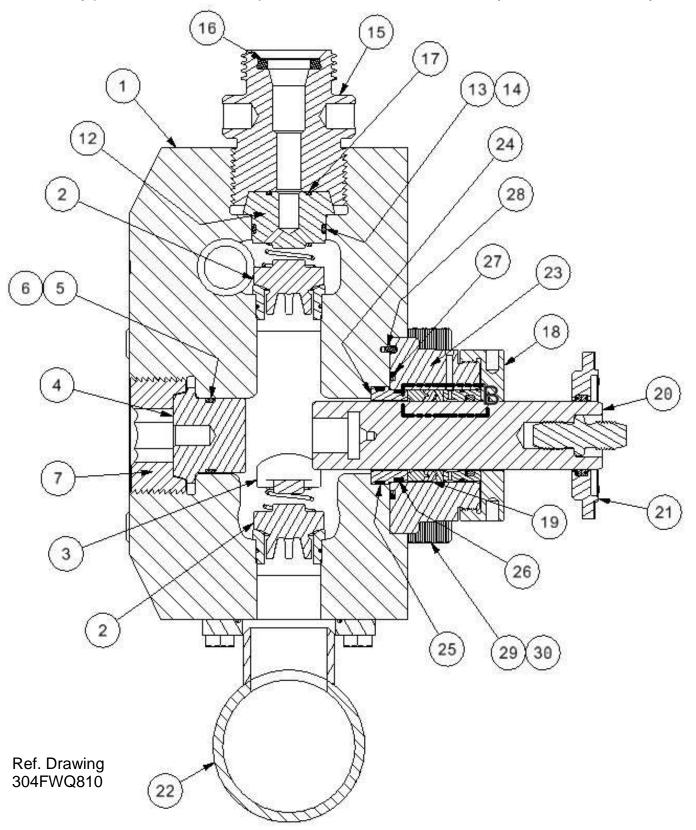


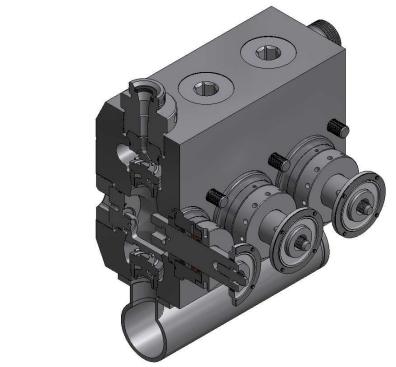
Figure 3: FLUID END ASSEMBLY 2.75" - 3" SECTION A-A

# FLUID END ASSEMBLY 3"

Ref.	Name of Boot	04:-	David No.
No.	Name of Part	<b>Qty.</b> 1	Part No.
1	FLUID CYLINDER 2.75" - 3" (GD-1000Q) VALVE GROUP		PP1073404
2		10	See Page 12
3	SPRING RETAINER	5	PP1045233
4	VALVE COVER	5	PP1080779
5	O-RING	5	107975
6	BACKUP RING	10	25BC651
7	RETAINER	5	303WPD205
8	VALVE COVER (BLIND)	4	314WPD147
9	RETAINER	4	303WPD205
10	O-RING	4	107975
11	BACKUP RING	8	25BC651
12	VALVE COVER (GAGE CONNECTION)	1	315WPD147
13	O-RING	1	107975
14	BACKUP RING	2	25BC651
15	RETAINER	1	304WPD205
16	SEAL	1	901SH06-1
17	O-RING	1	107967
18	GLAND	5	PP1047188
19	PACKING GROUP	5	See Page 9
20	PLUNGER GROUP	5	See Page 13
21	HOUSING GROUP	5	See Page 8
22	SUCTION MANIFOLD	1	See Page 16
23	STUFFING BOX	5	PP1074004
24	STUFFING BOX SLEEVE	5	PP1074010
25	SEAL	5	PP1074915
26	SEAL	5	PP1074011
27	O-RING	5	107986
28	DOWEL PIN	5	62M20
29	STUD	12	PP1036135
30	NUT	12	VP1036194
31	DOWEL PIN	5	62M48
32	DISCHARGE FLANGE GROUP (BLIND)	1	See Page 15
33	DISCHARGE FLANGE GROUP	1	See Page 14

### FLUID END ASSEMBLY 3.5" - 4.5"

Order by part number and description. Reference numbers are for your convenience only.



Ref. Drawing 310FWQ810

Figure 4: FLUID END ASSEMBLY ISO VIEW 3.5" - 4.5"

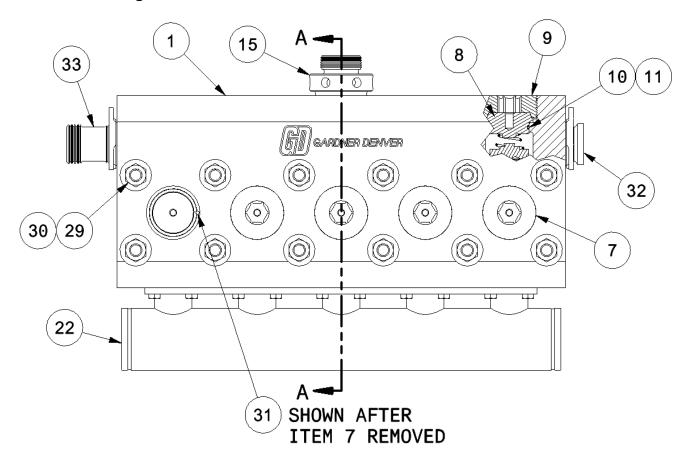


Figure 5: FLUID END ASSEMBLY 3.5" - 4.5" FRONT VIEW 301FWQ997 Page 5

## FLUID END ASSEMBLY 3.5" - 4.5"

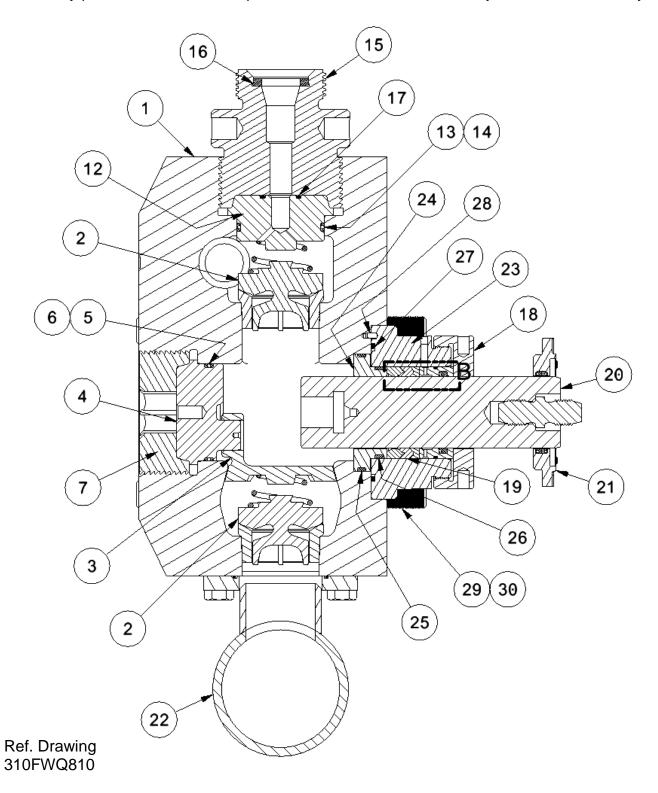


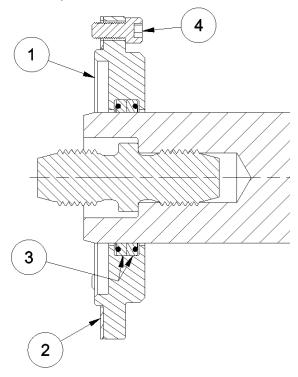
Figure 6: FLUID END ASSEMBLY 3.5" - 4.5" SECTION A-A

# FLUID END ASSEMBLY 3.5"

Ref No.	Name of Part	Qty.	Part No.
1	FLUID CYLINDER 3.5" - 4.5" (GD-1000Q)	1	PP1077331
2	VALVE GROUP	10	See Page 12
3	SPRING RETAINER	5	PP1030738
4	VALVE COVER	5	PP1047183
5	O-RING	5	185351
6	BACKUP RING	10	25BC653
7	RETAINER	5	305WPD205
8	VALVE COVER (BLIND)	4	PP1047179
9	RETAINER	4	305WPD205
10	O-RING	4	107981
11	BACKUP RING	8	25BC652
12	VALVE COVER (GAGE CONNECTION)	1	PP1047180
13	O-RING	1	107981
14	BACKUP RING	2	25BC652
15	RETAINER	1	PP1047182
16	SEAL	1	901SH06-1
17	O-RING	1	107967
18	GLAND	5	PP1077340
19	PACKING GROUP	5	See Page 10,11
20	PLUNGER GROUP	5	See Page 13
21	HOUSING GROUP	5	See Page 8
22	SUCTION MANIFOLD	1	See Page 16
23	STUFFING BOX	5	PP1077332
24	STUFFING BOX SLEEVE	5	PP1077333
25	SEAL	5	PP1077337
26	SEAL	5	PP1077338
27	O-RING	5	107991
28	DOWEL PIN	5	62M20
29	STUD	12	PP1036135
30	NUT	12	VP1036194
31	DOWEL PIN	5	62M48
32	DISCHARGE FLANGE GROUP (BLIND)	1	See Page 15
33	DISCHARGE FLANGE GROUP	1	See Page 14

### **HOUSING GROUP**

Order by part number and description. Reference numbers are for your convenience only.



Ref. Drawing 305FWQ810

Figure 7: HOUSING GROUP 3"

## HOUSING GROUP 3": 406FWB4044

Ref.			
No.	Name of Part	Qty.	Part No.
1	OIL STOP HEAD	1	PP1003833
2	GASKET	1	PP1028171
3	SEAL	2	60AM52
4	SCREW	4	75P6

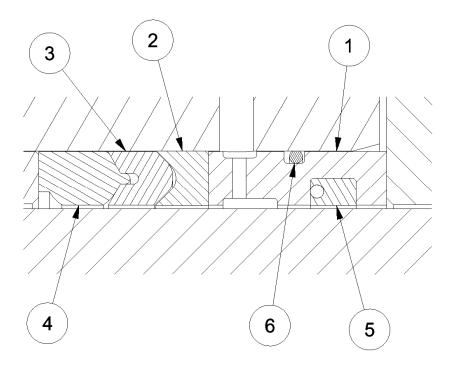
Figure 8: HOUSING GROUP 3.5"

# HOUSING GROUP (NEW STYLE) 3.5": 407FWB4044

Ref.			
No.	Name of Part	Qty.	Part No.
1	OIL STOP HEAD	1	PP1003834
2	GASKET	1	PP1028171
3	SEAL	2	60AM54
4	SCREW	4	75P6

## NON ADJUSTABLE HNBR CDI PACKING

Order by part number and description. Reference numbers are for your convenience only.



Ref. Drawing 304FWQ810

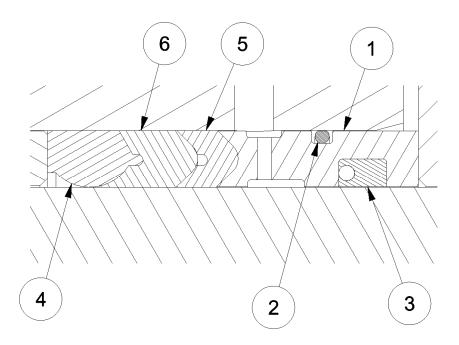
Figure 9: CDI PACKING 3"

PACKING GROUP 3": 301FWQ4060

Ref.			
No.	Name of Part	Qty.	Part No.
1	LANTERN SPACER	1	PP1035978
2	ADAPTER	1	595686000
3	PACKING RING	1	595694000
4	HEADER RING	1	595702000
5	SEAL	1	595710000
6	O-RING	1	901SH05-240

## **RUBBER SPRING LOADED PACKING**

Order by part number and description. Reference numbers are for your convenience only.



Ref. Drawing 310FWQ810

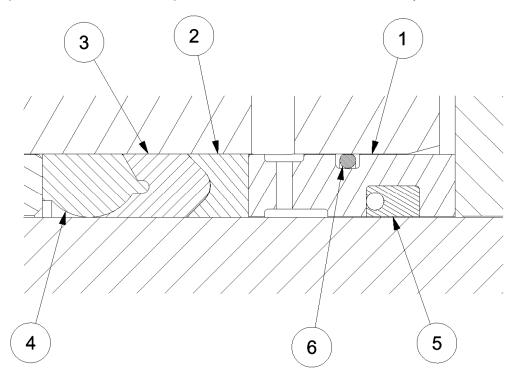
Figure 10: RSL PACKING 3.5"

**PACKING GROUP 3.5": 303FWQ4060** 

Ref.			
No.	Name of Part	Qty.	Part No.
1	LANTERN SPACER	1	PP1084164
2	O-RING	1	161125
3	SEAL	1	60AM83
4	HEADER RING	1	901VP014-012
5	PRESSURE RING	1	100972
6	PACKING RING	1	100297

## NON ADJUSTABLE HNBR CDI PACKING

Order by part number and description. Reference numbers are for your convenience only.



Ref. Drawing 310FWQ810

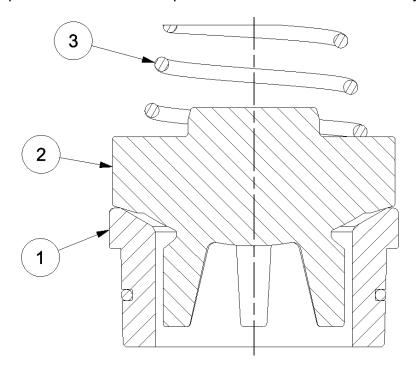
Figure 11: CDI PACKING 3.5"

**PACKING GROUP 3.5": 302FWQ4060** 

Ref.			
No.	Name of Part	Qty.	Part No.
1	LANTERN SPACER	1	PP1077750
2	ADAPTER	1	308OPE170
3	PACKING RING	1	309OPE222
4	HEADER RING	1	302OPE222
5	SEAL	1	60AM83
6	O-RING	1	161125

### **VALVE GROUP**

Order by part number and description. Reference numbers are for your convenience only.



Ref. Drawing 306FWQ810

Figure 12: VALVE GROUP 2.5" - 3"

VALVE GROUP 2.5" - 3": 403WPD4030

Ref.			
No.	Name of Part	Qty.	Part No.
1	VALVE SEAT	1	928SH01-8
2	VALVE	1	927SH01-7
3	SPRING	1	918VP024

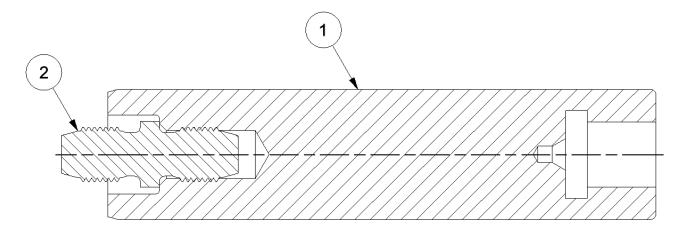
Figure 13: VALVE GROUP 3.5" - 4.5"

VALVE GROUP 3.5" - 4.5": 406WPD4030

Ref.			
No.	Name of Part	Qty.	Part No.
1	VALVE SEAT	1	928SH01-4
2	VALVE	1	927VP010-003
3	SPRING	1	918VP023

### **PLUNGER GROUP**

Order by part number and description. Reference numbers are for your convenience only.



Ref. Drawing 309FWQ810

Figure 14: PLUNGER GROUP 3"

PLUNGER GROUP 3": 401FWB4066

Ref.			
No.	Name of Part	Qty.	Part No.
1	PLUNGER	1	102414
2	STUD	1	PP1006122

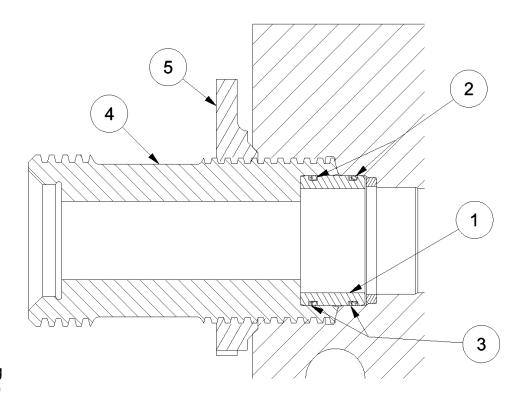
Figure 15: PLUNGER GROUP 3.5"

PLUNGER GROUP 3.5": 402FWB4066

Ref.			
No.	Name of Part	Qty.	Part No.
1	PLUNGER	1	102413
2	STUD	1	PP1006122

### **DISCHARGE FLANGE GROUP**

Order by part number and description. Reference numbers are for your convenience only.



Ref. Drawing 310FWQ810

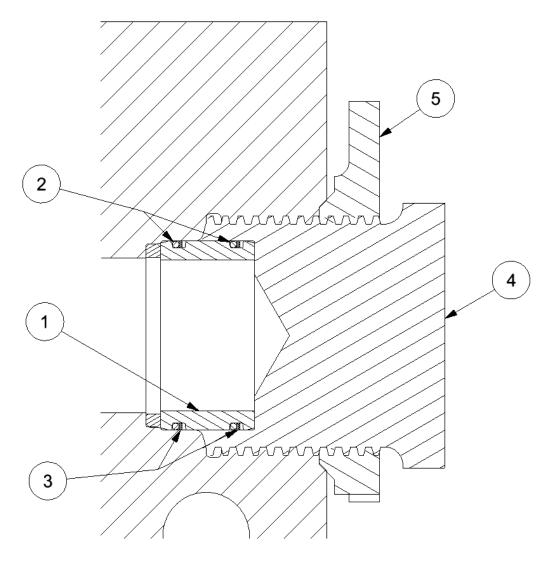
Figure 16: DISCHARGE FLANGE GROUP

## 2" 1502 15,000 PSI TREATING (STANDARD): 402TWC4038

Name of Part	Qty.	Part No.
BUSHING	1	403400090
O-RING	2	169828
BACK-UP RING	2	429003000
ADAPTER	1	479197090
WING NUT	1	403403000
	BUSHING O-RING BACK-UP RING ADAPTER	BUSHING 1 O-RING 2 BACK-UP RING 2 ADAPTER 1

# **DISCHARGE FLANGE GROUP (BLIND)**

Order by part number and description. Reference numbers are for your convenience only.



Ref. Drawing 310FWQ810

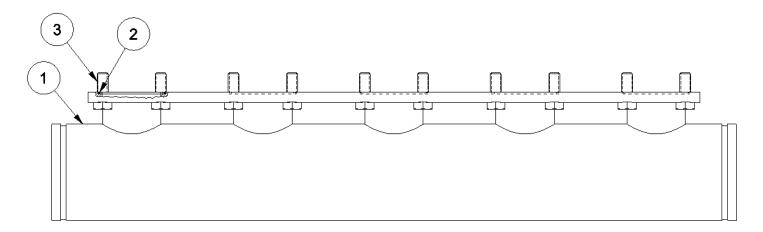
Figure 17: DISCHARGE FLANGE GROUP (BLIND)

# **DISCHARGE FLANGE GROUP (BLIND): 400TWC4038**

Ref.			
No.	Name of Part	Qty.	Part No.
1	BUSHING	1	403400090
2	O-RING	2	169828
3	BACK-UP RING	2	429003000
4	ADAPTER	1	403404090
5	WING NUT	1	403403000

## **SUCTION MANIFOLD GROUP**

Order by part number and description. Reference numbers are for your convenience only.



Ref. Drawing 311FWQ810

Figure 18: SUCTION MANIFOLD GROUP

6" WITH VICTAULIC ENDS: 400FWQ4053

Ref	•		
No.	Name of Part	Qty.	Part No.
1	SUCTION MANIFOLD	1	PP1037619
2	O-RING	5	161125
3	SCREW	20	103296

## **VALVE SEAT PULLER KITS**

Name of Part	Qty.	Part No.
2.75 – 3" Valve Seat Puller Kit*	1	406THD6031
(*Includes the following 3 items)		
* Seat Puller Jack Assembly	1	PP1013245
* Puller Head Assembly	1	PP1049186
* Tool Box	1	H-400
3.5 – 4.5" Valve Seat Puller Kit*	1	402THD6031
(*Includes the following 3 items)		
* Seat Puller Jack Assembly	1	102014
* Puller Head Assembly	1	PP1049188
* Tool Box	1	H-400

#### 北京

信德迈科技(北京)有限公司CNMEC Technology 北京朝阳区胜古中路2号金基业大厦201室

邮编:100029

电话: 010-8428 2935 13910962635

传真:010-8428 8762 主页://www.cnmec.biz 电子邮件:sales@cnmec.biz

#### 西安

西安嘉岳自动化技术有限公司Garye Automation

地址:西安经开区凤城二路天地时代广场B座23层22312室

邮编:710016

电话: 029 - 8610 8648 15319759129

传真:029 - 8610 6806 主页:http://www.garye.cn 电子邮件: sales@garye.cn

For additional information contact your local representative or

Gardner Denver Inc. 4747 South 83<sup>rd</sup> East Avenue, Tulsa, OK 74145 PH: (918) 664-1151, (800) 637-8099

FAX: (918) 664-6225

www.gardnerdenver.com

Gardner Denver

Specifications subject to change without notice. Copyright © 2005 Gardner Denver, Inc. Litho in U.S.A2