# **GARDNER DENVER®**

300TWC997 Revision D March 2011

# **WELL SERVICING PUMP**

**MODEL** 

**GD-1250** 

**PARTS LIST** 



# GD- 1250 WELL SERVICING PUMP

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

Gardner **Denver**® genuine pump parts, manufactured to design tolerances, 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 C	Center (Odessa):	Service Center (Ft. Worth):		
Gardner Denver Well Servicing Pumps 4747 South 83 <sup>rd</sup> East Avenue Tulsa, Oklahoma 74145		Chaparral 2121 West 44 <sup>th</sup> Street Odessa, Texas 79768		Geoquip 7533 Kathy Lane Ft. Worth, 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:

- 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
- .2. Forged steel fluid cylinders are warranted for materials and workmanship for 6 months from the date of installation or 18 months from thdate 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 EXPRESS. **IMPLIED STATUTORY** OR WARRANTIES, ARISING BY OPERATION OF LAW OTHERWISE, INCLUDING. WITHOUT OR ANY WARRANTIES LIMITATION. 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: CCR.QAR@gardnerdenver.com

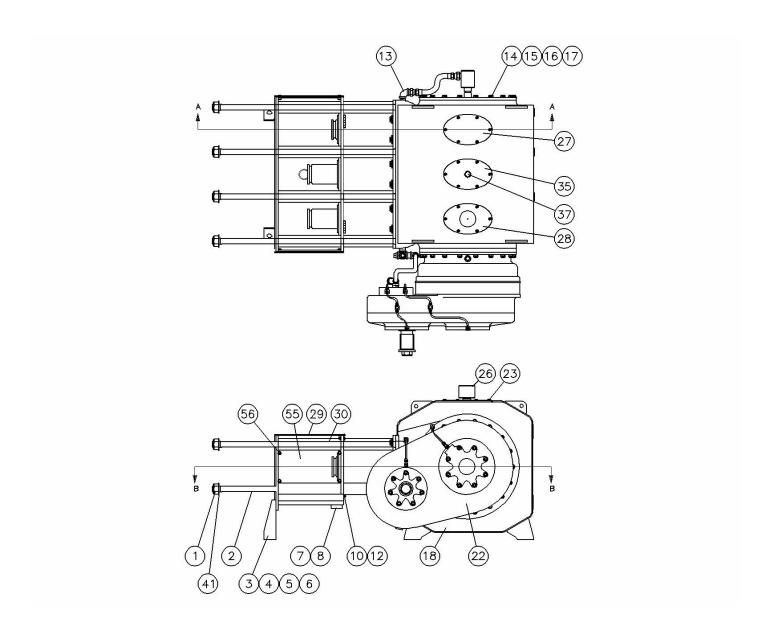
Facsimile: (918) 664-6225

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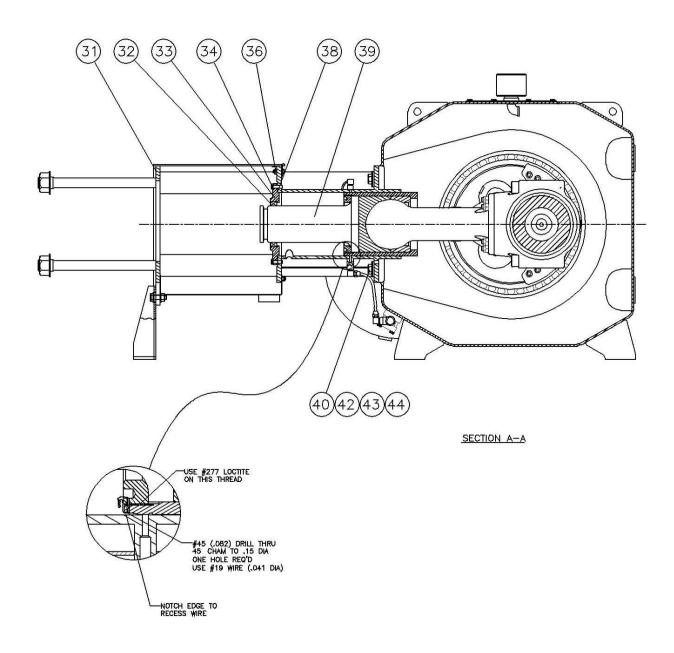
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For Operating and Service Instructions see:

**SERVICE MANUAL 300TWC996** 

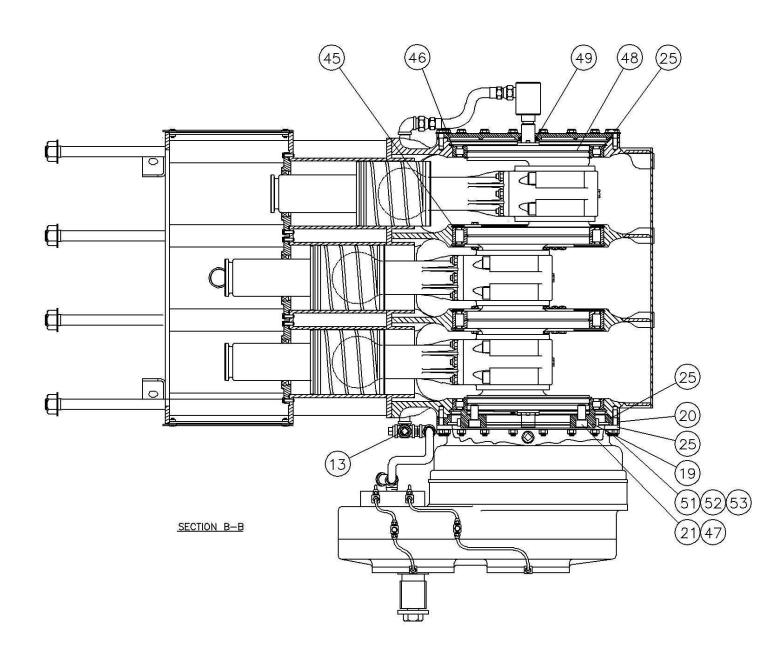


300TWC810 Refer to page 4 for parts numbers



300TWC810 Refer to page 4 for parts numbers

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300TWC800-B3
Refer to page 4 for parts numbers

Ref. No.	Name of Part	Qty.	Part No.
1	NUT	-	50AW54
2	STUD		300TWB110
3	FOOT		202TWB166
4	WASHER		655EF070
5	SCREW	8	95F7
6	NUT		50B31
7	PAN-OIL	1	301TWB545
8	SCREW		75LM51
10	STUD		79A466
12	NUT-FLANGED	10	50AW5
13 *	LUBE PIPING GROUP	1	300TWC4012
14	COVER-FRAME		200TWD368
15	O-RING		25AH53
16	WASHER		95F7
17	SCREW	18	655EF060
18	FRAME	1	203TWB001
19	ADAPTER	1	300TWB170
20	ADAPTER	1	301TWB170
21	SCREW	18	75P152
22	REDUCER-GEAR	1	201TWD449
23	SCREW	18	75LM51
25	O-RING	3	25AH53
26	BREATHER	1	200VQC034
27	PLATE-INSPECTION	1	200TWD052
28	PLATE-INSPECTION	1	201TWD052
29	COVER	1	300TWC225
30	HOUSING	1	200TWB405
31	PIN-DOWEL		62V18
32	SEAL-OIL	3	201OPB199
33	HEAD-OIL STOP	3	200TWD051

<sup>\*</sup> See page 23 for details

Ref. <u>No.</u>	Name of Part	Qty.	Part No.
34	SCREW	_18	75LM258
35	PLATE-INSPECTION		300TWC052
36	SCREW		75LM51
37	PLUG	1	64A6
38	O-RING	3	25AH47
39 **	ROD GROUP (STANDARD)	3	200TWB4043
**	ROD GROUP (HEAVY DUTY)	3	300TWC4043
40	SEAL-FASTENER	14	60DD6777
41	WASHER	8	95U14
42	SCREW	14	75P117
43	WASHER	8	95B20
44	PIN-DOWEL	2	62V18
45	SNAP RING	_4	926SH01-7
46	RING-RETAINING	2	74D8545
47	PIN-DOWEL	3	62V71
48 ***	CRANK SHAFT	2	300TWC4040
***	CRANKSHAFT (HEAVY DUTY)	2	301TWC4040
49	OIL SEAL	1	901SH02-13
50 ***	PLUG	1	971VP118-013
51	STUD	18	300TWC110
52	NUT	18	50AQ28
53	LOCKWASHER	18	95H12
55	PLATE-INSPECTION	2	300TWB052
56	SCREW	8	75LM150
57 ***	FITTING-TUBE	1	300TWB533
58 ***	SCREW	9	75G2
59 ***	SCREW	_4	75LM199
60 ***	RETAINER	3	304TWD205
61 ***	NAMEPLATE		PP1001260
62 ***	DATA PLATE		300PA454

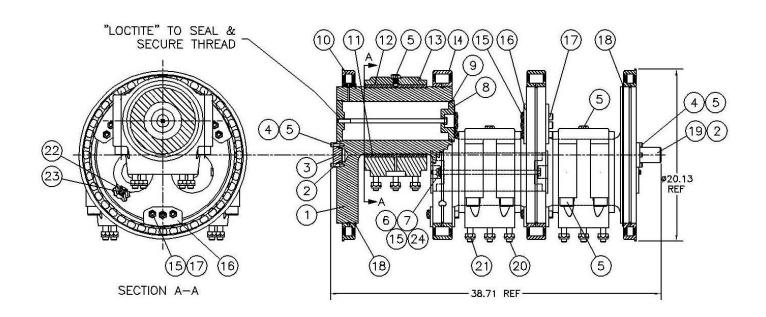
See page 7 for Parts Listing. See page 6 for Parts Listing.

<sup>\*\*\*</sup> Not Shown

# **CRANKSHAFT GROUP**

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

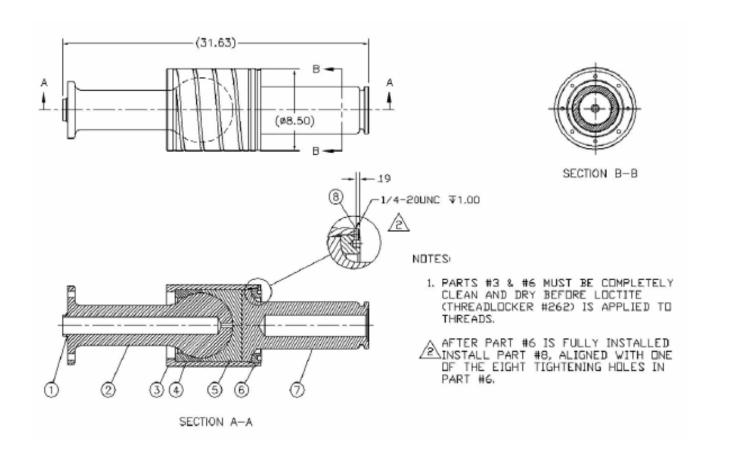
Ref.				Ref.			
No.	Name of Part	Qty.	Part No.	No.	Name of Part	Qty.	Part No.
1	CRANKSHAFT	1	200TWB004	Item	13 includes the following	three un	-numbered items:
2	O-RING	2	25W27		SCREW	12	200TWD655
3	PLUG	1	300TWC191		DOWEL PIN	6	634VP007-006
4	SCREW	8	454VP034-006		LOCK PIN	3	201TWD838
5	WIRE	2	174000018	14	BEARING-ROLLER	2	200TWB1466
6	SCREW	3	655EE508	15	NUT	21	50AW29
7	SEAL	5	60DD35	16	RETAINER	12	200TWB205
8	PLUG	5	200TWB191	17	SCREW	18	75P82
9	O-RING	5	25AH24	18	SNAP RING	2	926SH01-1
10	BEARING-ROLLER	2	201TWB1466	19	ADAPTOR	1	202TWD170
11	BEARING	3	301TWB174	20	STUD	18	202TWD110
12	BEARING	3	300TWB174	21	LOCKNUT	18	50AP10
13	HOUSING-BEARING (S	STD <u>)</u> 3	200TWB006	22	ORIFICE	2	200TWB814
	BEARING HOUSING (F	ID)		23	O-RING	2	25W10
				24	GASKET	5	25F44



301TWC810

#### **ROD GROUP**

Ref. No.	Name of Part	Qty.	Part No.
1	O-RING	1	25AH4
2	CONNECTING ROD	1	PP1012138
3	CROSSHEAD		300TWB005
4	RETRACT BEARING	1	300TWD174
5	THRUST BEARING	1	200TWD088
6	RETAINING RING	1	300TWD706
7	EXTENSION ROD	1	PP1011519
8	SET SCREW	1	76F35N

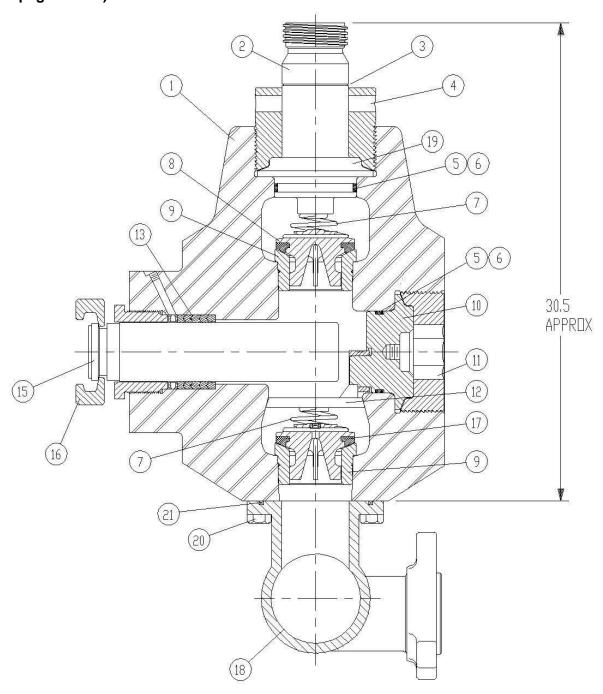


201TWB810

## FLUID CYLINDER ASSEMBLY - HIGH PRESSURE

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

(This list covers assemblies built before November 2008. For assemblies built after October 2008 refer to pages 14-19)



## FLUID CYLINDER ASSEMBLY - HIGH PRESSURE

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

(This list covers assemblies built before November 2008. For assemblies built after October 2008 refer to pages 14-19)

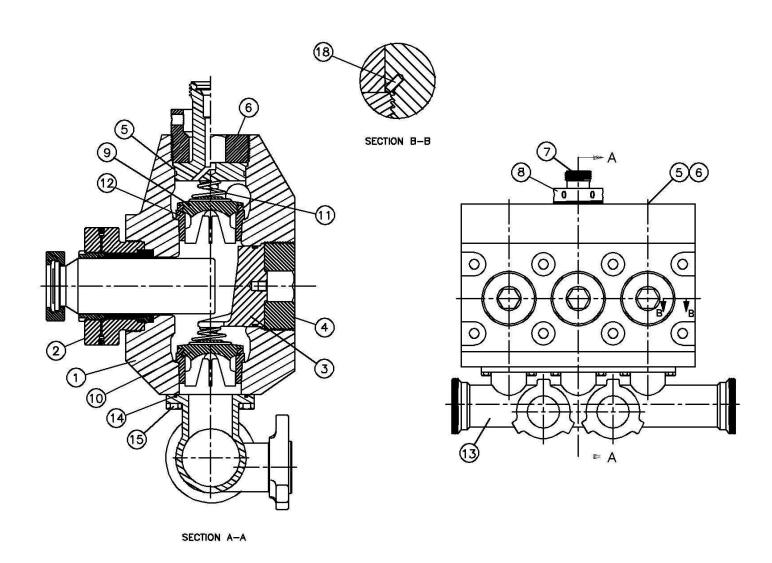
+ Warning: Valves and seats from Mission, Novatech and MacClathie are NOT compatible. In some cases the parts will physically fit, but operation will result in major reductions of valve and seat service life. Personnel in charge of valve and seat replacement must ensure that the parts installed in a fluid end are from the same manufacturer.

Ref. No.	Name of Part	Qty.	Part No.
1	CYLINDER-FLUID		302TWB029
2	DISCHARGE VALVE COVER – GAGE CONNECTOR (2"-1502)		303TWB147
*	DISCHARGE VALVE COVER – GAGE CONNECTOR (2"-2002)		300TWC147
3	RETAINING RING		431640000
4	DISCHARGE VALVE RETAINER		304TWB205
5	O-RING (-427)		107985
6	BACKUP RING (-427)	12	25BC658
7	VALVE SPRING		518532000
<b>+</b> 8	DISCHARGE VALVE – MACCLATHIE +	3	506471000
	DISCHARGE VALVE – MISSION +	3	VP1005729
	DISCHARGE VALVE – NOVATECH +	3	VP1005732
<b>+</b> 9	VALVE SEAT – MACCLATCHIE +	6	511306000
	VALVE SEAT – MISSION +	6	VP1005731
	VALVE SEAT – NOVATECH +	6	VP1005737
10	SUCTION VALVE COVER		PP1039286
11	VALVE RETAINER		500260090
12	SUCTION VALVE SEAT RETAINER		PP1014014
13	PACKING GROUP (See Page 20 and 22)		
15	PLUNGER		508895000
16	PLUNGER COUPLING		302THD092
+ 17	SUCTION VALVE - MACCLATCHIE +		511555000
	SUCTION VALVE - MISSION +		VP1005730
	SUCTION VALVE - NOVATECH +		VP1005733
18	SUCTION MANIFOLD (See page 27 thru 29)		
19	DISCHARGE VALVE COVER – BLIND		304TWB147
20	SCREW		75A237
21	O-RING (-260)		136236
*	DISCHARGE FLANGES (See pages 24 thru 26)		
*	DATA PLATE		300OPA454
*			75LM199
	DRIVE SCREWS* NOT SHOWN	·	

## FLUID CYLINDER ASSEMBLY - MEDIUM PRESSURE

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

(This list covers assemblies built before November 2008. For assemblies built after October 2008 refer to pages 14-19)



315TWB810

#### FLUID CYLINDER ASSEMBLY - MEDIUM PRESSURE

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

(This list covers assemblies built before November 2008. For assemblies built after October 2008 refer to pages 14-19)

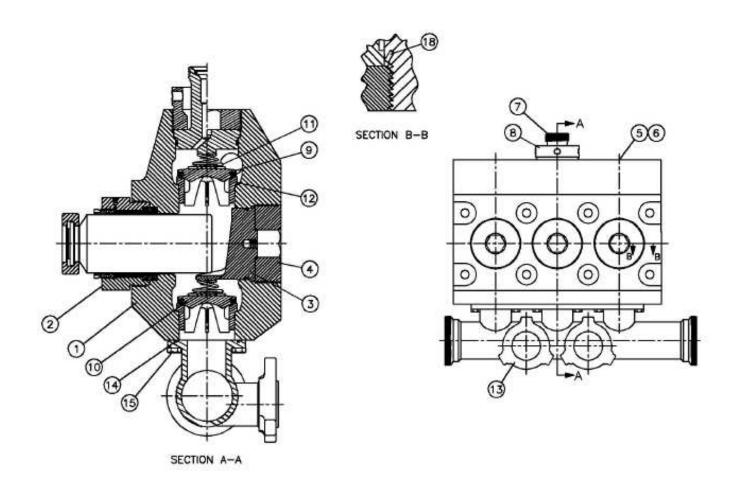
+ Warning: Valves and seats from Mission, Novatech and MacClathie are NOT compatible. In some cases the parts will physically fit, but operation will result in major reductions of valve and seat service life. Personnel in charge of valve and seat replacement must ensure that the parts installed in a fluid end are from the same manufacturer.

Ref No.	Name of Part	Qty.	Part No.
1	FLUID CYLINDER	1	301TWB029
2	STUFFING BOX GROUP – 4.5" (See page 21)	3	306TWC4041
	STUFFING BOX GROUP – 5.0" (See page 21)		307TWC4041
	STUFFING BOX GROUP – 5.5" (See page 21)	3	308TWC4041
3	VALVE COVER ASSEMBLY (Includes the next 3 items)	3	200TWB2016
	VALVE COVER	1	200TWB147
	BACKUP RING (-439)	2	25BC663
	O-RING (-439)	1	107992
4	SUCTION VALVE RETAINER	3	301TWB205
5	DISCHARGE VALVE COVER ASSEMBLY (Includes next 3 items)	2	201TWB2016
	VALVE COVER	1	201TWB147
	BACKUP RING (-431)		25BC659
	O-RING (-431)		162810
6	DISCHARGE VALVE RETAINER	2	201TWB205
7	VALVE COVER ASSEMBLY - GAGE CONN (Includes next 4 items)	1	202TWB2016
	VALVE COVER	1	202TWB147
	BACKUP RING (-431)		25BC659
	O-RING (-431)		162810
	SEAL	1	901SH06-1
8	DISCHARGE VALVE RETAINER	1	203TWB205
<b>+</b> 9	DISCHARGE VALVE – MACCLATCHIE +	3	561829000
	DISCHARGE VALVE - MISSION +	3	VP1035028
<b>+</b> 10	SUCTION VALVE - MACCLATCHIE +	3	561831000
	SUCTION VALVE - MISSION +	3	VP1073690
11	VALVE SPRING	6	518532000
<b>+</b> 12	VALVE SEAT – MACCLATCHIE +	6	200TWB039
	VALVE SEAT – MISSION +	6	VP1073502
13	SUCTION MANIFOLD (See page 27 thru 29)	1	
14	O-RING		25BC333
15	SCREW	12	75A237
18	GUIDE PIN	3	300TWB652
*	DISCHARGE FLANGES (See pages 24 thru 26)	1	
*	DATA PLATE	1	2030PA454
*	DRIVE SCREWS* NOT SHOWN		79LM199
	* NOT SHOWN		

## FLUID CYLINDER ASSEMBLY - LOW PRESSURE

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

(This list covers assemblies built before November 2008. For assemblies built after October 2008 refer to pages 14-19)



305TWB810-C (Ref. Drawing)

#### FLUID CYLINDER ASSEMBLY - LOW PRESSURE

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

(This list covers assemblies built before November 2008. For assemblies built after October 2008 refer to pages 14-19)

+ Warning: Valves and seats from Mission, Novatech and MacClathie are NOT compatible. In some cases the parts will physically fit, but operation will result in major reductions of valve and seat service life. Personnel in charge of valve and seat replacement must ensure that the parts installed in a fluid end are from the same manufacturer.

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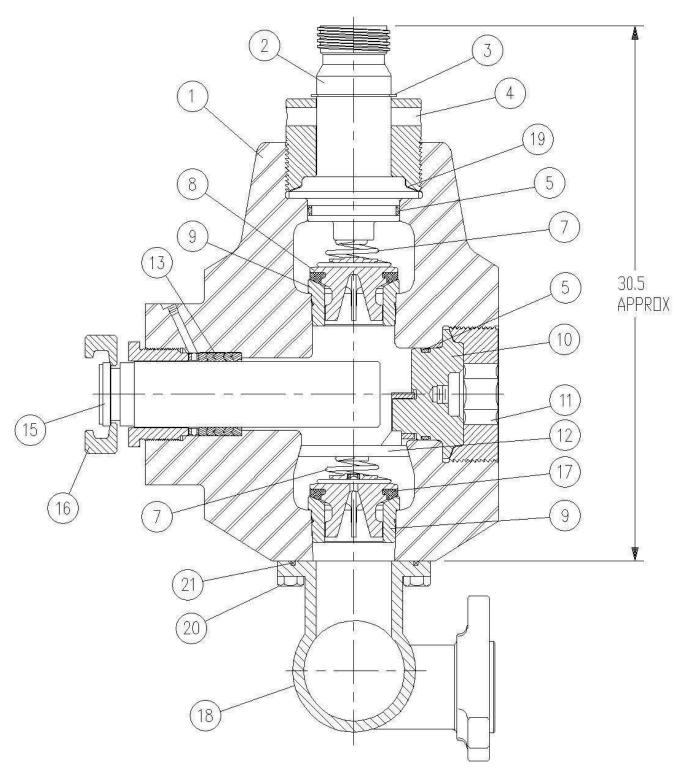
Ret. No.	Name of Part	Qty.	Part No.
1	FLUID CYLINDER_		300TWB029
2	STUFFING BOX GROUP – 5.5" (See Page 21)		
	STUFFING BOX GROUP – 6.0" (See Page 21)		
	STUFFING BOX GROUP – 6.5" (See Page 21)		
3	SUCTION VALVE COVER ASSEMBLY (Includes the next 3 items)		300TWB2016
	VALVE COVER	1	300TWB147
	BACKUP RING (-443)		25BC666
	O-RING (-443)		901SH05-443
4	RETAINER		302TWCB205
5	VALVE COVER ASSEMBLY (Includes the next three items)		301TWB2016
	VALVE COVER	1	301TWB147
	RING (-439)		25BC663
	O-RING (-439)		107992
6	RETAINER		301TWB205
7	VALVE COVER ASSEMBLY (Includes next four items)	1	302TWB2016
	VALVE COVER	1	302TWB147
	RING (-439)	2	25BC663
	O-RING (-439)		107992
	SEAL	1	901SH06-1
8	DISCHARGE VALVE RETAINER	1	303TWB205
<b>+</b> 9	DISCHARGE VALVE – MACCLATCHIE +	3	512058000
	DISCHARGE VALVE – MISSION +	3	VP1028824
<b>+</b> 10	SUCTION VALVE - MACCLATCHIE (15K PSI) +	3	556228000
	SUCTION VALVE - MISSION (15K PSI) +	3	VP1028823
	SUCTION VALVE, 6 1/2" PLUNGER ONLY - MACCLATCHIE (10K PSI)	<b>+</b> 3	512057000
	SUCTION VALVE, 6 1/2" PLUNGER ONLY - MISSION (10K PSI) +	3	VP1028822
11	VALVE SPRING	6	439334000
<b>+</b> 12	VALVE SEAT – MACCLATCHIE +	6	300TWB039
	VALVE SEAT - MISSION +	6	VP1028825
13	SUCTIION MANIFOLD (See page 27 thru 29)	1	
14	O-RING (-260)	3	136236
15	SCREW		75A237
18	GUIDE PIN	3	300TWB652
*	DISCHARGE FLANGES (See pages 24 thru 26)	1	
*	DRIVE PLATE	1	203OPA454
*	DRIVE SCREWS* NOT SHOWN		79LM199

\* NOT SHOWN 300TWC997 Page 13

## FLUID CYLINDER ASSEMBLY - HIGH PRESSURE WITH D-RING

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

(This list covers assemblies built after October 2008. For assemblies built before November 2008 refer to pages 8-13)



Drawing Ref.: 317TWB810

#### FLUID CYLINDER ASSEMBLY - HIGH PRESSURE WITH D-RING

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

(This list covers assemblies built after October 2008. For assemblies built before November 2008 refer to pages 8-13)

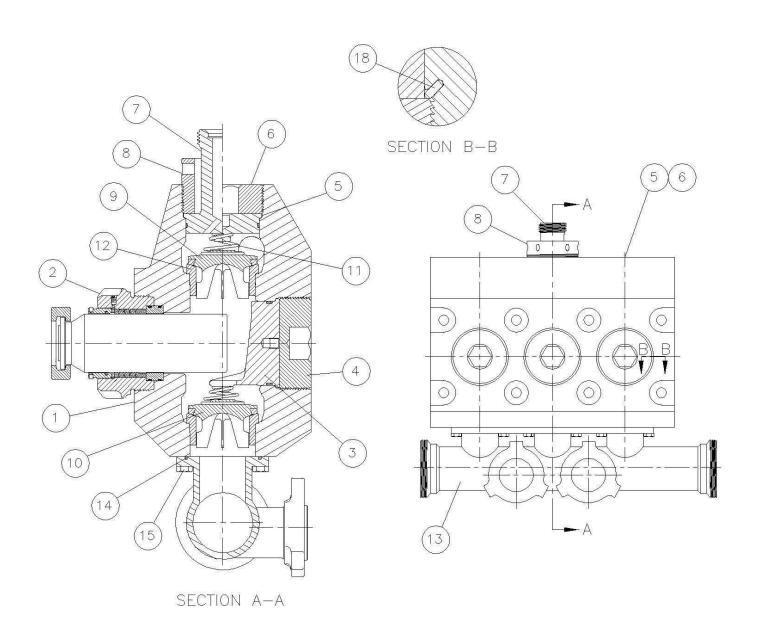
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Ref. No.	Name of Part	Qty.	Part No.
1	CYLINDER-FLUID	1	302TWB029
2	DISCHARGE VALVE COVER – GAGE CONNECTOR (2"-1502)		PP1039282
*	DISCHARGE VALVE COVER – GAGE CONNECTOR (2"-2002)	1	300TWC147
3	RETAINING RING	1	431640000
4	DISCHARGE VALVE RETAINER		304TWB205
5	D-RING		VP1041781
7	VALVE SPRING		518532000
+ 8	DISCHARGE VALVE – MACCLATHIE +	3	506471000
	DISCHARGE VALVE – MISSION +		VP1005729
	DISCHARGE VALVE – NOVATECH +		VP1005732
<b>+</b> 9	VALVE SEAT – MACCLATCHIE +		511306000
	VALVE SEAT – MISSION +		VP1005731
	VALVE SEAT – NOVATECH +	6	VP1005737
10	SUCTION VALVE COVER		PP1039286
11	VALVE RETAINER		500260090
12	SUCTION VALVE SEAT RETAINER		PP1014014
13	PACKING GROUP (See Page 20 and 22)		
15	PLUNGER		508895000
16	PLUNGER COUPLING		302THD092
+ 17	SUCTION VALVE - MACCLATCHIE +	3	511555000
	SUCTION VALVE - MISSION +	3	VP1005730
	SUCTION VALVE - NOVATECH +		VP1005733
18	SUCTION MANIFOLD (See page 27 thru 29)		
19	DISCHARGE VALVE COVER – BLIND	3	304TWB147
20	SCREW		75A237
21	O-RING (-260)	3	136236
*	DISCHARGE FLANGES (See pages 24 thru 26)		
*	DATA PLATE		300OPA454
*	DRIVE SCREWS* NOT SHOWN		75LM199
	* NOT SHOWN		

## FLUID CYLINDER ASSEMBLY - MEDIUM PRESSURE WITH D-RING

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

(This list covers assemblies built after October 2008. For assemblies built before November 2008 refer to pages 8-13)



Drawing Ref.: 315TWB810

#### FLUID CYLINDER ASSEMBLY - MEDIUM PRESSURE WITH D-RING

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

(This list covers assemblies built after October 2008. For assemblies built before November 2008 refer to pages 8-13)

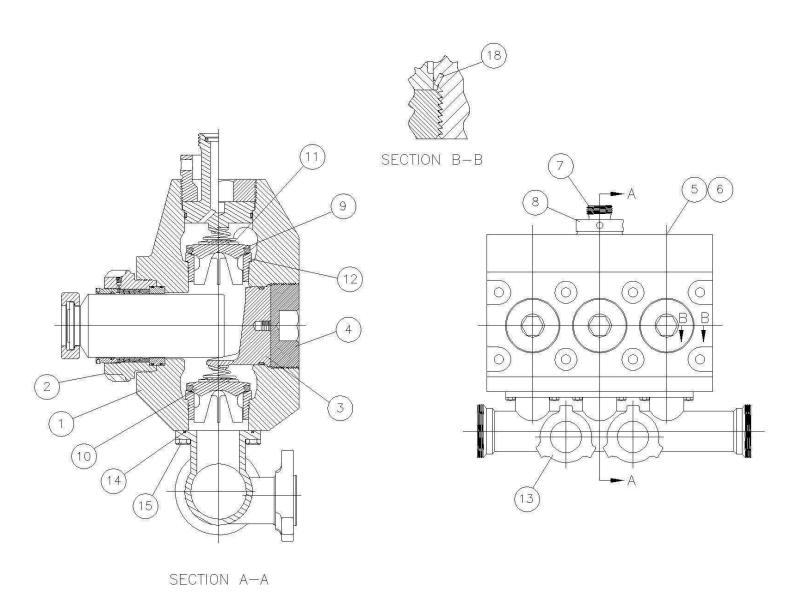
+ Warning: Valves and seats from Mission, Novatech and MacClathie are NOT compatible. In some cases the parts will physically fit, but operation will result in major reductions of valve and seat service life. Personnel in charge of valve and seat replacement must ensure that the parts installed in a fluid end are from the same manufacturer.

Ref No.	Name of Part	Qty.	Part No.
1	FLUID CYLINDER	1	301TWB029
2	STUFFING BOX GROUP – 4.5" (See page 21)		306TWC4041
	STUFFING BOX GROUP - 5.0" (See page 21)		307TWC4041
	STUFFING BOX GROUP - 5.5" (See page 21)		308TWC4041
3	SUCTION VALVE COVER ASSEMBLY (Includes the next 3 items)	3	200TWB2016
	VALVE COVER	1	PP1039668
	D-RING	2	VP1028133
4	SUCTION VALVE RETAINER	3	PP1014012
5	DISCHARGE VALVE COVER ASSEMBLY (Includes next 3 items)	2	201TWB2016
	VALVE COVER	1	PP1039671
	D- RING	2	VP1028127
6	DISCHARGE VALVE RETAINER	2	201TWB205
7	VALVE COVER ASSEMBLY - GAGE CONN (Includes next 4 items)		202TWB2016
	VALVE COVER	1	PP1039672
	D-RING	2	VP1028127
	SEAL	1	901SH06-1
8	DISCHARGE VALVE RETAINER	1	203TWB205
<b>+</b> 9	DISCHARGE VALVE – MACCLATCHIE +	3	561829000
	DISCHARGE VALVE – MISSION +	3	VP1035028
<b>+</b> 10	SUCTION VALVE - MACCLATCHIE +	3	561831000
	SUCTION VALVE - MISSION +	3	VP1073690
11	VALVE SPRING	6	518532000
<b>+</b> 12	VALVE SEAT – MACCLATCHIE +	6	200TWB039
	VALVE SEAT – MISSION +	6	VP1073502
13	SUCTION MANIFOLD (See page 27 thru 29)	1	
14	O-RING	3	25BC333
15	SCREW	12	75A237
18	GUIDE PIN	3	300TWB652
*	DISCHARGE FLANGES (See pages 24 thru 26)		
*	DATA PLATE	1	3000PA454
*	DRIVE SCREWS* NOT SHOWN		79LM199
	* NOT SHOWN		

## FLUID CYLINDER ASSEMBLY - LOW PRESSURE WITH D-RING

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

(This list covers assemblies built after October 2008. For assemblies built before November 2008 refer to pages 8-13)



Drawing Ref.: 305TWB810

#### FLUID CYLINDER ASSEMBLY - LOW PRESSURE WITH D-RING

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

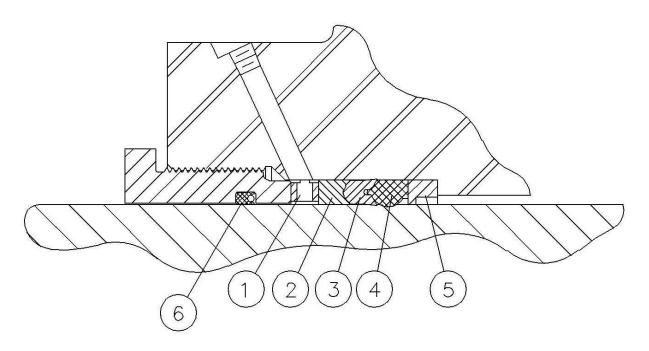
(This list covers assemblies built after October 2008. For assemblies built before November 2008 refer to pages 8-13)

+ Warning: Valves and seats from Mission, Novatech and MacClathie are NOT compatible. In some cases the parts will physically fit, but operation will result in major reductions of valve and seat service life. Personnel in charge of valve and seat replacement must ensure that the parts installed in a fluid end are from the same manufacturer.

Ref. No.	Name of Part	Qty.	Part No.
1	FLUID CYLINDER	1	300TWB029
2	STUFFING BOX GROUP - 5.5" (See Page 21)		
	STUFFING BOX GROUP – 6.0" (See Page 21)		
	STUFFING BOX GROUP - 6.5" (See Page 21)		
3	SUCTION VALVE COVER ASSEMBLY (Includes the next 3 items)		300TWB2016
	VALVE COVER	1	PP1039480
	D-RING		PP1004443
4	RETAINER		PP1014013
5	VALVE COVER ASSEMBLY (Includes the next three items)	2	301TWB2016
	VALVE COVER	1	PP1039674
	D-RING		VP1028133
6	RETAINER		301TWB205
7	VALVE COVER ASSEMBLY (Includes next four items)	1	302TWB2016
	VALVE COVER	1	PP1039675
	D-RING		VP1028133
	SEAL		901SH06-1
8	DISCHARGE VALVE RETAINER	1	303TWB205
<b>+</b> 9	DISCHARGE VALVE – MACCLATCHIE +	3	512058000
	DISCHARGE VALVE – MISSION +	3	VP1028824
<b>+</b> 10	SUCTION VALVE - MACCLATCHIE (15K PSI) +	3	556228000
	SUCTION VALVE - MISSION (15K PSI) +	3	VP1028823
	SUCTION VALVE, 6 1/2" PLUNGER ONLY - MACCLATCHIE (10K PS	SI)+ <u>.</u> 3	512057000
	SUCTION VALVE, 6 1/2" PLUNGER ONLY - MISSION (10K PSI) +	3	VP1028822
11	VALVE SPRING	6	439334000
<b>-</b> 12	VALVE SEAT – MACCLATCHIE +		300TWB039
	VALVE SEAT – MISSION +	6	VP1028825
13	SUCTIION MANIFOLD (See page 27 thru 29)	1	
14	O-RING (-260)	3	136236
15	SCREW		75A237
18	GUIDE PIN		300TWB652
*	DISCHARGE FLANGES (See pages 24 thru 26)		
*	DRIVE PLATE		300OPA454
*			79LM199
	DRIVE SCREWS* NOT SHOWN		

## 3¾" HIGH PRESSURE PACKING GROUP

Order by Part Number and Description. Reference Numbers are shown for your convenience only.



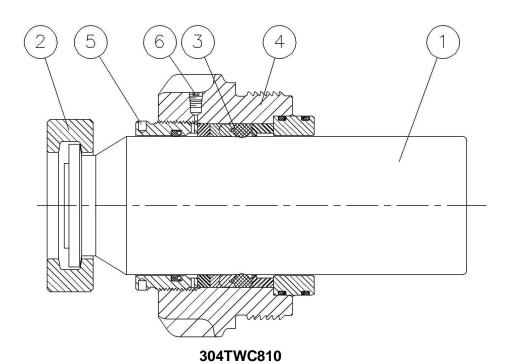
306TWC810

## 3¾" HIGH PRESSURE HEADER RING TYPE PACKING GROUP

Ref. No.	GRP-PACKING Description	Qty.	Part No.
_	OLAND.		540004000
1	GLAND	1	512061000
2	ADAPTOR, FEMALE - PEEK	1	595687000
3	PACKING-RING PTFE	1	595695000
4	HEADER RING	1	595703000
5	JUNK RING	_1	300TWC317
6	POLY-PAK SEAL	1	60AM71
7	GLAND	_1	457434000
*	WARNING LABEL	1	596791000
*	NOT SHOWN		

## **STUFFING BOX**

Order by Part Number and Description. Reference Numbers are shown for your convenience only.



STUFFING BOX GROUPS - MEDIUM PRESSURE

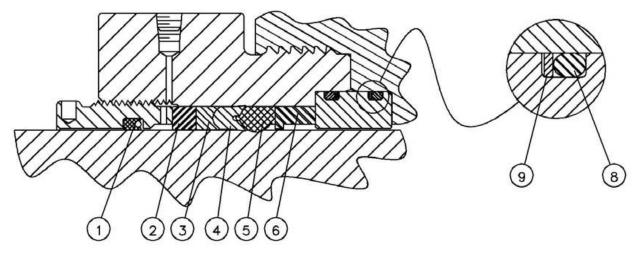
Gro	up Part	Size	4-1/2" 306TWC4041	5" 307TWC4041	5-1/2" 308TWC4041
No.	Description	Qty.	Part No.	Part No.	Part No.
1	PLUNGER	1	207OPB038	208OPB038	209OPB038
2	PLUNGER COUPLING, Includes	1	342-C-76	342-C77	342-C77
	SCREW	2	2009617	2009617	75P79
3	PACKING GROUP (See Page 18)	1	300TWC4060	301TWC4060	302TWC4060
4	STUFFING BOX		301TWB014	302TWB014	303TWB014
5	GLAND		310TWB008	311TWB008	312TWB008
6	PLUG		64AC2	64AC2	64AC2
7	SLEEVE	4	300TWB571	301TWB517	302TWB571

## **NEW STYLE STUFFING BOX GROUPS – LOW PRESSURE**

		Size	5-1/2"	6"	6-1/2"
Gro	up Part		309TWC4041	310TWC4041	311TWC4041
Ref.					
No.	Description	Qty.	Part No.	Part No.	Part No.
1	PLUNGER (PUMP)	1	209OPB038	211OPB038	157PN001
2	COUPLING-PLGR	1	342-C-77	342-C-77	342-C-77
	INCLUDES SCREWS	2	2009617	2009617	2009617
3	GRP-PACKING (See page 16)	1	303TWC4060	304TWC4060	305TWC4060
4	BOX STUFFING	1	304TWB014	305TWB014	300TWB014
5	GLAND	1	312TWB008	313TWB008	314TWB008
6	PLUG	5	64AC2	64AC2	64AC2
7	SLEEVE	1	303TWB517	304TWB517	305TWB571

## **PACKING GROUPS**

Order by Part Number and Description. Reference Numbers are shown for your convenience only.



305TWC810

#### MEDIUM PRESSURE HEADER RING TYPE PACKING GROUPS

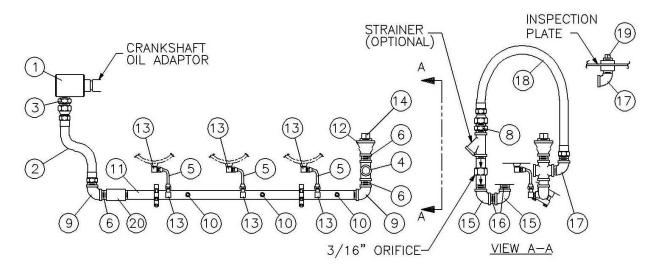
		Size	41/2"	5"	5½"
Re	ef.				
No	o. Description	Qty.	Part No.	Part No.	Part. No.
4	CEAL	4	0041470	COANAZA	COANTE
1	SEAL	1	60AM73	60AM74	60AM75
2	BRONZE SPACER	1	301TWC144	302TWC144	303TWC144
3	PEEK FEMALE ADAPTER	1	595688000	595689000	595690000
4	TEFLON PRESSURE RING	1	595696000	595697000	595698000
5	HNBR HEADER RING	1	595704000	595705000	595706000
6	JUNK RING	1	302TWC317	303TWC317	304TWC317
7	SLEEVE	1	300TWB571	301TWB571	302TWB571
8	RING (O-RING)	2	901SH05-364	901SH05-364	901SH05-364
9	RING-BACK UP	2	25BC667	25BC667	25BC667

## LOW PRESSURE HEADER RING TYPE PACKING GROUPS

		Size	5½"	6"	61/2"
Re	ef.				
No	o. Description	Qty.	Part No.	Part No.	Part No.
	0541		0048475	0044470	0041477
1	SEAL	1	60AM75	60AM76	60AM77
2	BRONZE SPACER	1	303TWC144	304TWC144	305TWC144
3	PEEK FEMALE ADAPTER	1	595690000	595691000	595692000
4	TEFLON PRESSURE RING	1	595698000	595699000	595700000
5	HNBR HEADER RING		595706000	595707000	595708000
6	JUNK RING	1	304TWC317	305TWC317	306TWC317
7	SLEEVE	1	303TWB571	304TWB571	305TWB571
8	RING (O-RING)	2	901SH05-368	901SH05-368	901SH05-368
9	RING-BACK UP	2	25BC668	25BC668	25BC668

## **LUBE PIPING GROUP**

Order by Part Number and Description. Reference Numbers are shown for your convenience only.



## 302TWC810

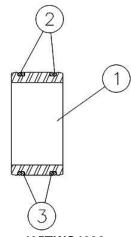
Ref.				
No.	Name of Part	Qty.	Part No.	
1	UNION-ROTARY	1	200TWD586	
2	HOSE ASSEMBLY	1	1025T09	
3	ADAPTOR	2	29Z214	
4	CROSS	1	64R18	
5	HOSE ASSEMBLY	3	30031008	
6	NIPPLE	3	63H2G	
8	ADAPTOR	1	119333	
9	ELBOW	2	64C6	
10	PLUG	3	64AA5	
11	MANIFOLD-OIL	1	201TWD116	
12	REDUCER PIPE	1	64N7	
13	ADAPTOR	6	29Z242	
14	PLUG	1	64A8	
15	ELBOW PIPE	2	64C5	
16	NIPPLE-PIPE	2	63G2	
17	ELBOW	2	64D10	
18	HOSE ASSEMBLY, Includes next three items	1	1025T10	
	HOSE	1	122406	
	ADAPTOR-SWIVEL	1	119782	
	COUPLING	1	119795	
19	PLUG	1	64A6	
20	COUPLING-PIPE	1	64BK6	

## **DISCHARGE FLANGE ASSEMBLY**

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

# **DISCHARGE PORT BUSHINGS & O-RINGS ASSEMBLY**

(Used on all fluid ends)

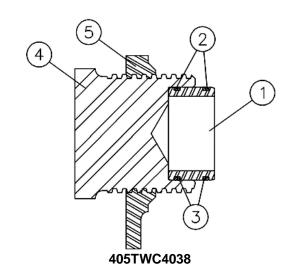


405TWC4038

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No.	Name of Part	Qty	Part No .
1	Port Bushing	1	403400090
2	O-Ring	2	169828
3	Backup Ring (For item 2)	2	429003000

## **BLIND DISCHARGE FLANGE ASSEMBLY**



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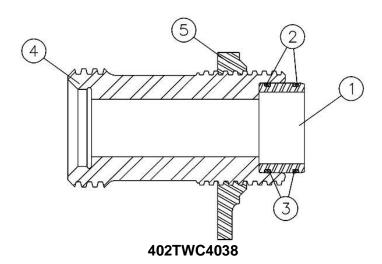
No.	Name of Part	Qty	Part No .
1	Port Bushing	1	403400090
2	O-Ring	2	169828
3	Backup Ring (For item 2)	2	429003000
4	Plug	1	403404090
5	Wing Nut	1	403403000

300TWC997 Page 24

## **DISCHARGE FLANGE ASSEMBLY**

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

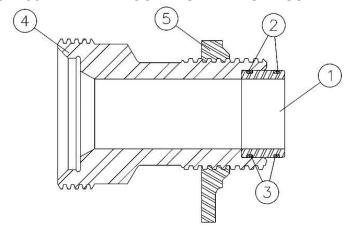
## 2" 1502 FEMALE DISCHARGE FLANGE ASSEMBLY



Ref.
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No.	Name of Part	Qty	Part No .
1	Port Bushing	1	403400090
2	O-Ring	2	169828
3	Backup Ring (For item 2)	2	429003000
4	2" 1502 Female Treating Adapter	1	479197090
5	Wing Nut	1	403403000

## 3" 1502 FEMALE DISCHARGE FLANGE ASSEMBLY



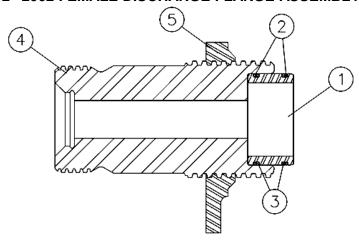
403TWC4038

Ref. <u>No.</u>	Name of Part	Qty	Part No .
1	Port Bushing	1	403400090
2	O-Ring	2	169828
3	Backup Ring (For item 2)	2	429003000
4	Plug	1	520915090
5	Wing Nut	1	4034030

## **DISCHARGE FLANGE ASSEMBLY**

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

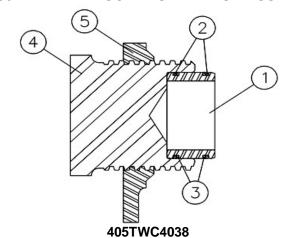
## 2" 2002 FEMALE DISCHARGE FLANGE ASSEMBLY



404TWC4038

Ref. No.	Name of Part	Qty	Part No .
1	Port Bushing	1	403400090
2	O-Ring	2	169828
3	Backup Ring (For item 2)	2	429003000
4	2" 1502 Female Treating Adapter	1	PP1001852
5	Wing Nut	1	403403000

# 3" 2002 FEMALE DISCHARGE FLANGE ASSEMBLY

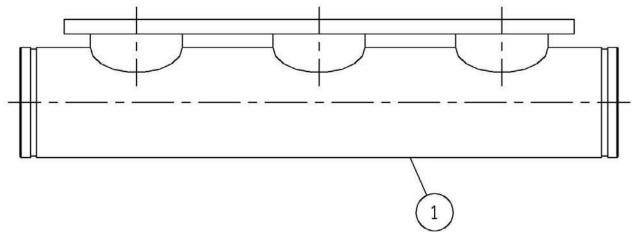


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No.	Name of Part	Qty	Part No .
1	Port Bushing	1	403400090
2	O-Ring	2	169828
3	Backup Ring (For item 2)	2	429003000
4	Plug	1	PP1027503
5	Wing Nut	1	403403000

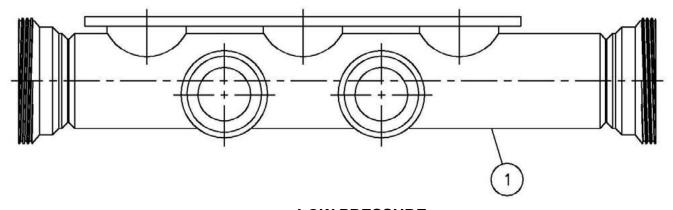
## **SUCTION MANIFOLDS**

Order by Part Number and Description. Reference Numbers are shown for your convenience only.



## **LOW PRESSURE**

Ref. <u>No.</u>	Name of Part	Qty	Part No .
1	Suction Manifold	1	300TWB069

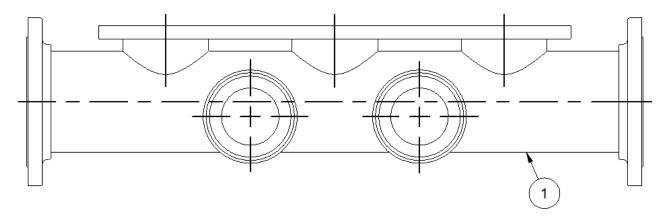


## **LOW PRESSURE**

Ref. No.	Name of Part	Qty	Part No .
1	Suction Manifold	1	301TWB069
*	Wing Nut – Cleanout	2	64EB875
*	Plug – Cleanout	2	64EB876
*	O-Ring – Cleanout	2	124642
* No	ot Shown		

## **SUCTION MANIFOLDS**

Order by Part Number and Description. Reference Numbers are shown for your convenience only.

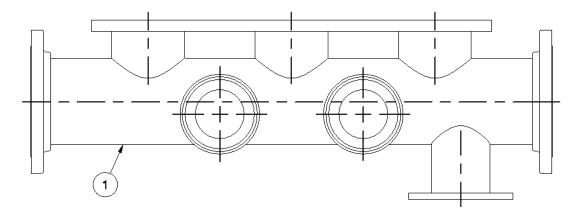


# **LOW PRESSURE**

R	ef	_

No.	Name of Part	Qty	Part No .
1	Suction Manifold	1	PP1007655
*	Wing Nut – Cleanout	2	64EB875
*	Plug – Cleanout	2	64EB876
*	O-Ring – Cleanout	2	124642

<sup>\*</sup> Not Shown



# **HIGH PRESSURE / MEDIUM PRESSURE**

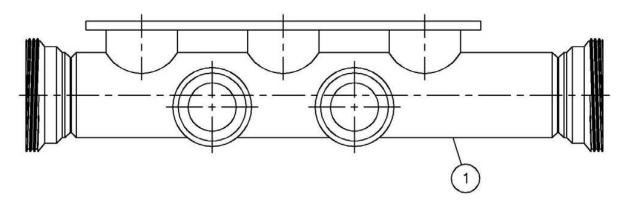
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No.	Name of Part	Qty	Part No .
1	Suction Manifold	1	PP1007656
*	Wing Nut - Cleanout	2	64EB875
*	Plug – Cleanout	2	64EB876
*	O-Ring – Cleanout	2	124642

<sup>\*</sup> Not Shown

## **SUCTION MANIFOLD**

Order by Part Number and Description. Reference Numbers are shown for your convenience only.



# HIGH PRESSURE / MEDIUM PRESSURE

Ref. <u>No.</u>	Name of Part	Qtv	Part No .
140.	Name of Fart	<u> Qty</u>	raitito .
1	Suction Manifold	1	302TWB069
*	Wing Nut – Cleanout	2	64EB875
*	Plug – Cleanout	2	64EB876
*	O-Ring – Cleanout	2	124642

<sup>\*</sup> Not Shown

## **FLUID END SERVICE TOOLS**

Ref. No.	Name of Part	Qty	Part No .					
1	Packing Nut Wrench	1	300TWC933					
2	Spring Depressor	1	300TWC074					
3	3" Hex Wrench	1	342-A-89					
4	Slide Hammer Wrench	1	590PN006					
5	Seat Puller Tool Kit (Select from 3 size options below)	1						
	HP (3 ¾" Plunger with 511306000 Seat) Valve Seat Puller Kit							
	Complete 3 ¾" Valve Seat Puller Kit	1	402THD6031					
	Seat Puller Jack Assembly (Included)	1	102014					
	Puller Head Assembly (Included)	1	PP1062146					
	Tool Box (Included)	1	H-400					
	MP (4 ½", 5", & 5 ½" Plunger with 200TWB039 Seat) Valve Seat Puller Kit							
	Complete 4 ½ - 5 ½" Valve Seat Puller Kit	1	403THD6031					
	Seat Puller Jack Assembly (Included)	1	102014					
	Puller Head Assembly (Included)	1	PP1049189					
	Tool Box (Included)	1	H-400					
	LP (5 ½", 6", & 6 ½" Plunger with 300TWB039 Seat)	Valve Seat Pu	ller Kit					
	Complete 5 ½ - 6 ½" Valve Seat Puller Kit	1	405THD6031					
	Seat Puller Jack Assembly (Included)	1	102014					
	Puller Head Assembly (Included)	1	PP1049190					
	Tool Box (Included)	1	H-400					
	` '							

#### GARDNER DENVER UNIT RECORD

The following unit identification plate is provided as a convenience to you, our valued Gardner Denver customer. Please take the time to copy all the information from the actual nameplate of your unit. The model number, date manufactured and serial number will be required when contacting the company or your distributor for information or replacement parts.

NO.			MAX TEMP	C/ĈA	NO	
SERVICE	RATED MAX RATED INPUT		MAX RATED MAX DISCHARGE		SUCTION MAX PSI W.P. OF FLUID CYL.	MAX INPUT RPN AT MAX
INTERMITTENT					]	PRE SSURE
DISPLACES	MENT & PRESSUR	E AT RATED F	RPM. SEE O-M M	ANUAL FOR ADD	OTTOMAL SPECIE	FICATIONS
GPM						
PSI INTERMI	TIENT DUTY MA	XIMUM PRESSU	IRE, SEE O-M M	ANUAL FOR ADD	TIONAL SPECIF	ICATIONS
PSI	<u> </u>			PURCHASER	L	
	Carcare	river		ID NO.	2 0 N	99055 85

200OPA496 (Ref. Drawing)



北京 西安

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