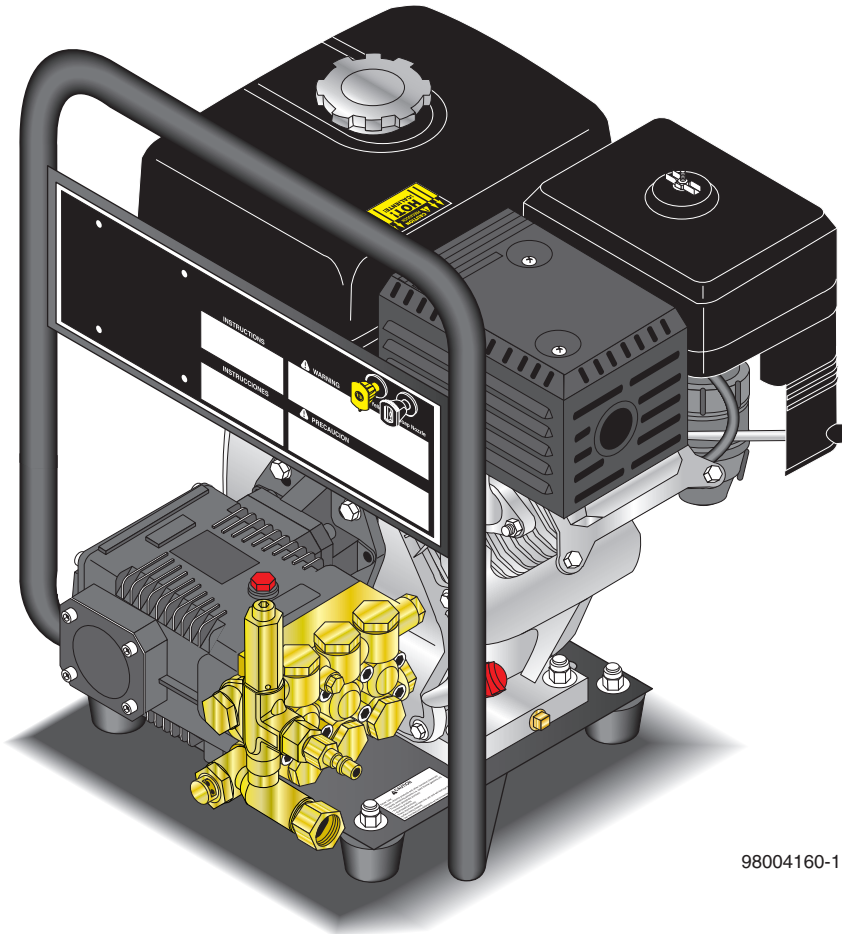


# SERVICE MANUAL



98004160-1

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## MODEL #

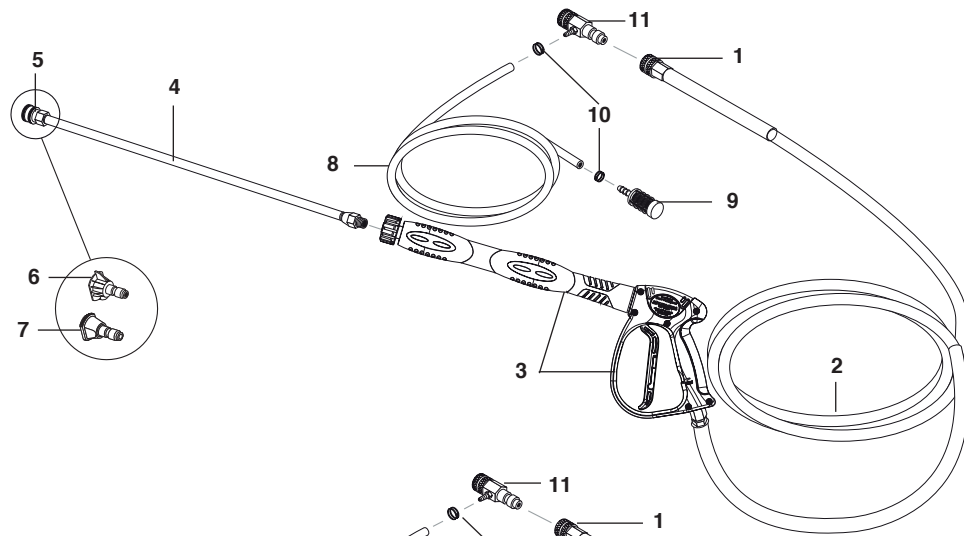
- HC-232439
- HC-232336
- ZG3-24334
- ZG3-23236
- HD 2.3/24 P
- HD 2.3/23 P
- CD-232437
- CD-232336

## ORDER #

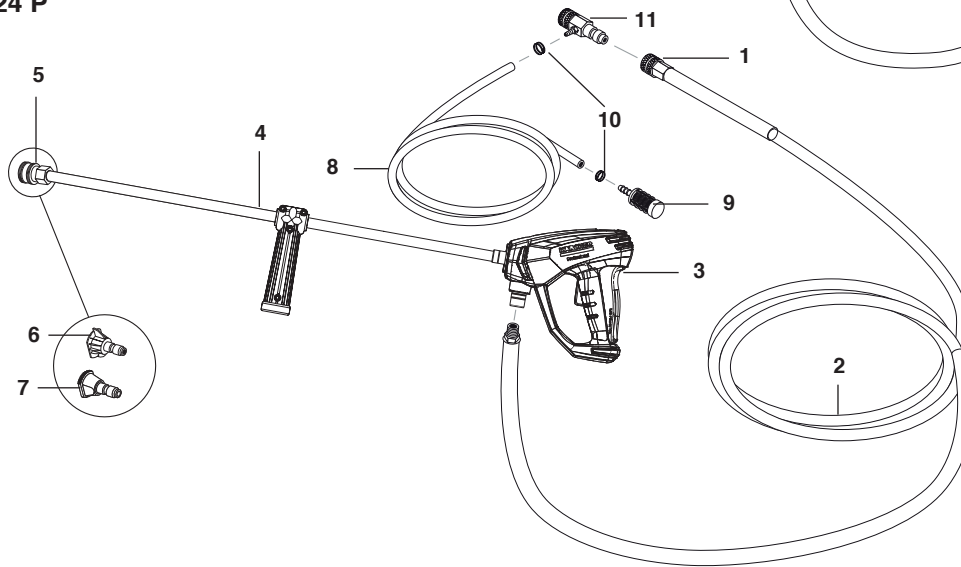
- 1.107-036.0
- 1.107-035.0
- 1.107-081.0
- 1.107-018.0
- 1.575-350.0
- 1.575-351.0
- 1.107-152.0
- 1.107-153.0

9.800-416.0

## HOSE & SPRAY GUN ASSEMBLY



### HD 2.3/24 P

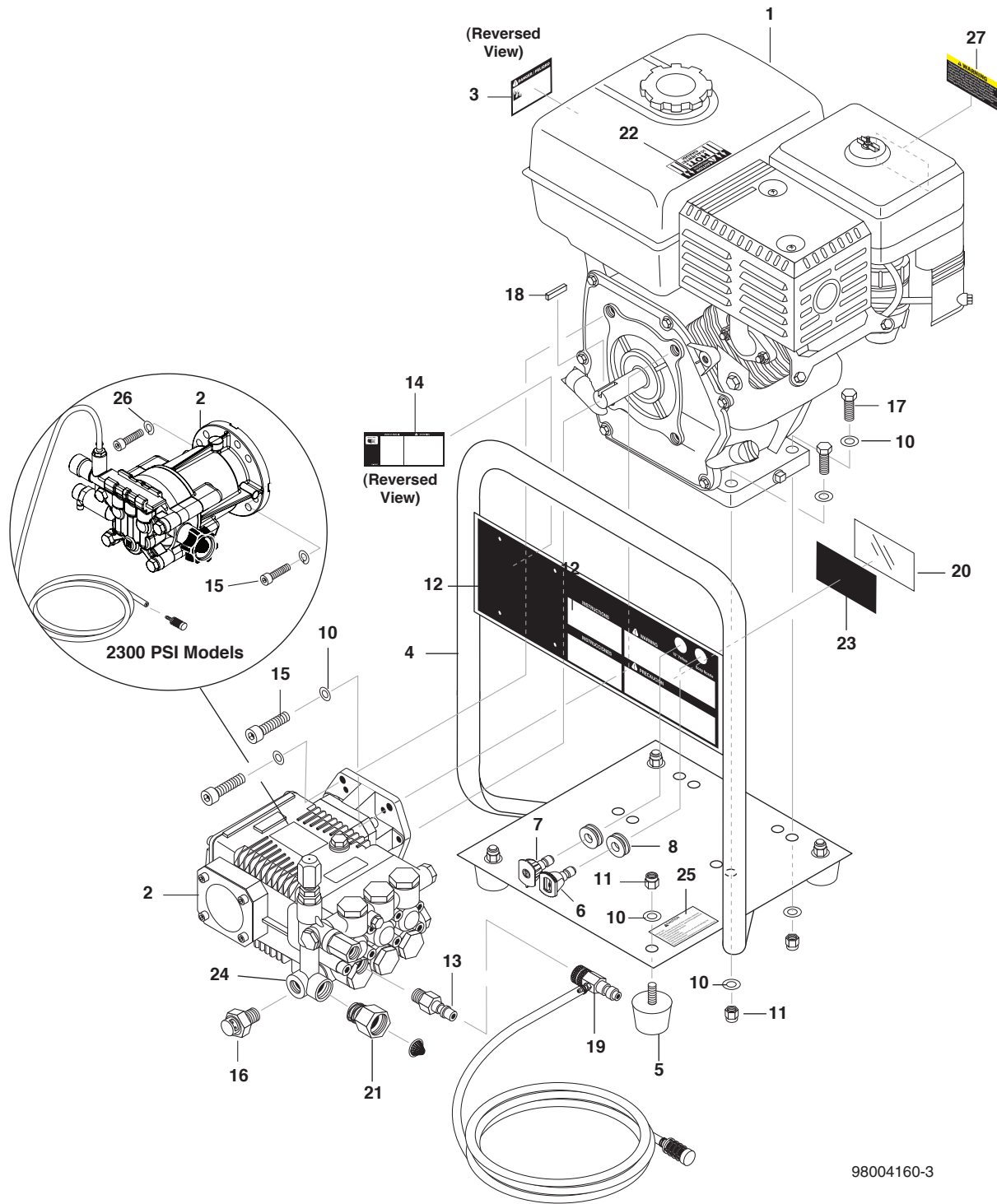


## HOSE & SPRAY GUN ASSEMBLY PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	9.802-166.0	Coupler, 3/8" Female (2400 PSI)	1	6	8.712-333.0	Nozzle, 3.0 15° Yellow (2400 PSI)	1
	9.802-100.0	▲ Quick Coupler O-Ring (2400 PSI)	1		8.753-991.0	Nozzle, 3.25 15° Yellow (2300 PSI)	1
	8.707-182.0	▲ Coupler, Twist Connect, M22-F x 3/8" FNPT (2300 PSI)	1	7	8.712-398.0	Nozzle, Brass Soap	1
2	8.925-137.0	Hose, 3/8" X 25' 1W 4000PSI SW/SO/CPL	1	8	9.802-251.0	Hose, 1/4" x 1/2" Clear Vinyl (2400 PSI) 6 ft.	6 ft.
	8.925-136.0	Hose, 3/8" X 25' 1W 4000PSI SW/SO/M22 (-018.0)	1		6.388-216.0	Hose, DN5 (2300 PSI)	6 ft.
3	8.754-769.0	MV925 Gun 4500 PSI, 3/8" NPT INLET (Only 050.0)	1	9	8.707-057.0	Strainer, 1/4" Plastic (2400 PSI)	1
	4.775-054.0	EASY!Force Advanced KNA (Only 050.0)	1		5.731-652.0	Strainer, Plastic (2300 PSI)	1
4	9.112-533.0	Lance-AL Quick Connect-Male 3000 psi	1	4	9.112-533.0	Lance-AL Quick Connect-Male 3000 psi	1
	8.783-039.0	Wand 30" Zinc Plated, Handle & Coupler	1		8.783-039.0	Wand 30" Zinc Plated, Handle & Coupler	1
5	9.802-164.0	Coupler, 1/4" Female	1	10	6.390-126.0	Clamp, Hose (2400 PSI)	2
	9.802-096.0	Quick Coupler O-Ring	1	11	9.802-216.0	Injector, Chem., Non-Adj, 3-5 GPM, .083 (2400 PSI)	1

▲ Not Shown

# EXPLODED VIEW



98004160-3

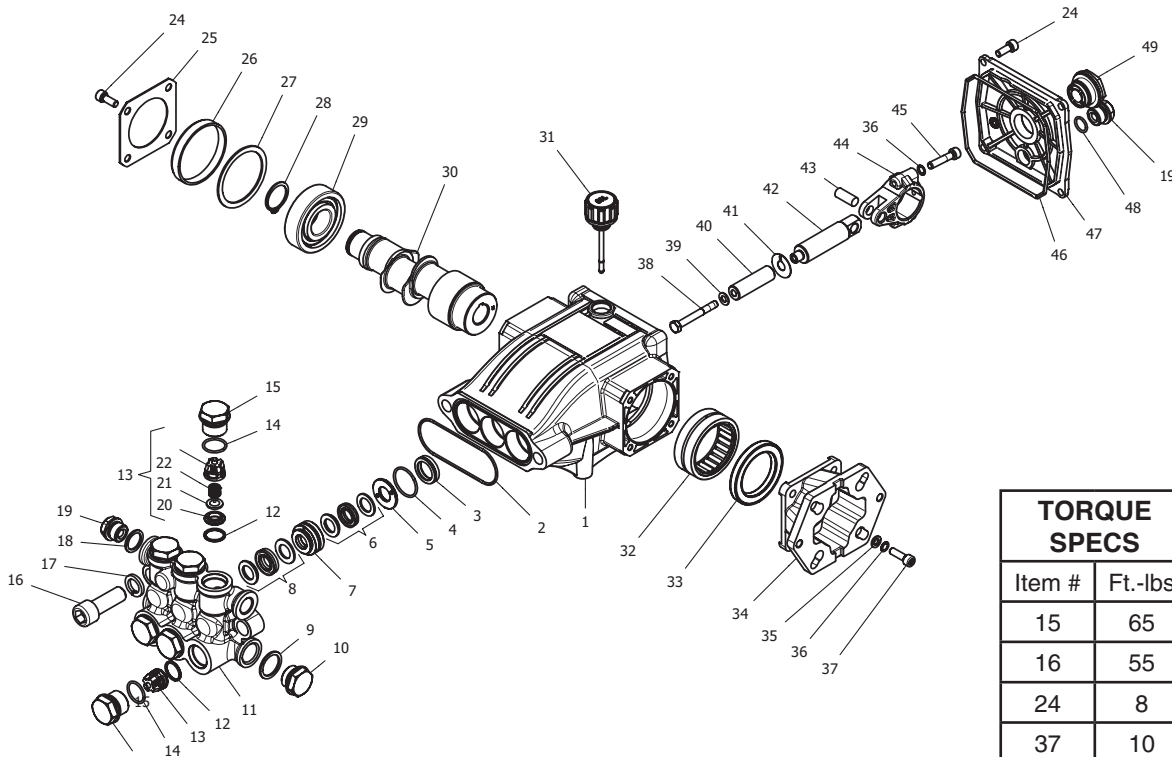
## EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
1	9.802-316.0	Engine, Honda, GX160K1QX2, 163cc (2400 PSI)	1
	9.194-015.0	Engine, Honda, GC1601QHA, 160cc (2300 PSI)	1
2	8.923-785.0	Pump, Kärcher KP2535G, (3400 RPM)	1
	9.120-021.0	Pump, Kärcher Axial (2600 PSI)	1
	8.923-771.0	Pump, Hotsy HP 2535G, (3400 RPM)	1
	8.923-757.0	Pump, Landa LP 2535G, (3400 RPM)	1
	8.920-004.0	Pump, Legacy 2.6 GPM (2600 PSI)	1
3	9.800-008.0	Label, Danger Cool Engine	1
4	9.802-873.0	Handle Assembly	1
5	9.802-063.0	Mount, Vibration, 5/16"-18 x 9/16" Stud, 30 Duro	4
6	See Page 3 For Nozzle Information		
7	See Page 3 For Nozzle Information		
8	9.802-064.0	Grommet, Rubber, Nozzle Holder	2
9	9.800-095.0	▲ Tag, Pump Plug/Vented Cap (2300 PSI)	1
10	8.718-980.0	Washer, 5/16" Flat, SAE	16
11	9.802-776.0	Nut, 5/16", ESNA, NC	8
12	9.800-059.0	Label, Warning/Instructions (HD Models)	1
	8.750-883.0	Label, Warning/Instructions (CB Models)	1
	8.900-893.0	Label, Warning/Instructions (HC Models)	1
	8.900-827.0	Label, Warning/Instructions (ZG Models)	1
13	9.802-170.0	Coupler, 3/8" Plug" Female Steel/Zinc	1
14	9.800-037.0	Label, French Warning	1
15	8.733-007.0	Socket head 5/16"-24 X 3/4" Zinc Plated	4
16	9.804-025.0	Pump Protector, 1/4" 145°(2400 PSI)	1
17	9.802-713.0	Bolt, 5/16" x 1-1/4", 145°	4
18	9.802-958.0	Key, Motor Shaft	1
19	9.802-225.0	Detergent Injector Assy 3-5 GPM 0.83 (2400 PSI)	1
20	9.800-034.0	Label, Clear Lexan, 2-1/4" x 4"	1
21	9.802-146.0	Swivel, 1/2" MP x 3/4" GHF w/Strainer (2400 PSI)	1
22	9.800-006.0	Label, "Hot/Caliente", w/Arrows	1
23	8.932-968.0	Label, Intended For Outdoor Use	1
24	9.803-899.0	Unloader, VBA35 6.6 @ 3500 PSI (HC & ZG3 Models)	1
	8.754-696.0	Unloader, VBT Banjo 1/2M 3/8M, 3000PSI	1
25	9.800-049.0	Label, Manufacturers Cleaning Solution	6 ft.
26	9.802-813.0	Lock Washer (2300 PSI)	4
27	8.751-096.0	Label, Regulation 4442.6	1

▲ Not Shown

## LP SERIES PUMP EXPLODED VIEW

8.754-755.0 LP2535G



TORQUE SPECS	
Item #	Ft.-lbs
15	65
16	55
24	8
37	10
38	10
45	10

### LP SERIES PUMP EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	8.754-841.0	Crankcase	1	19	8.707-262.0	Plug, Brass G3/8	1
2	8.754-846.0	O-ring Ø1.78 X 72.75	1	20*	See Kits Below	Valve Seat	6
3*	See Kits Below	Plunger Oil Seal	3	21*	See Kits Below	Valve Plate	6
4*	See Kits Below	O-ring Ø1.78 X 26.7	3	22*	See Kits Below	Valve Spring	6
5*	See Kits Below	Washer, Pressure Ring 14 mm	3	23*	See Kits Below	Valve Cage	6
6*	See Kits Below	U-Seal, 14 mm	3	24	9.802-939.0	Screw, M6 X 16	12
7*	See Kits Below	Pressure Ring, 14 mm	3	25	8.717-137.0	Bearing Cover	2
8*	See Kits Below	U-Seal, 14 mm	3	26	9.803-954.0	Bearing Seal	1
9	9.803-199.0	Washer, Copper G1/2	1	27	8.754-843.0	Seal Spacer, Crankshaft	1
10	9.802-926.0	Plug, Brass G1/2	1	28	9.802-914.0	Snap Ring, 25 mm	1
11	8.754-853.0	Manifold	1	29	9.803-955.0	Bearing, Ball	1
12*	8.717-233.0	O-ring Ø1.78 X 15.6	6	30	8.754-831.0	Shaft, 3/4" Hollow 2535G	1
13*	See Kits Below	Valve Assembly	6		8.754-834.0	Shaft, 3/4" Hollow 3035G	1
14*	9.803-948.0	O-ring Ø1.78 X 18.77	6	31	8.754-219.0	Oil Dipstick	1
15	9.803-949.0	Valve Plug	6	32	8.754-840.0	Bearing Needle	1
16	8.754-854.0	Bolt, Manifold M14 x 40	2	33	8.754-826.0	Seal, Crankshaft	1
17	8.754-850.0	Washer, Lock	2	34	8.754-863.0	Flange, Engine	1
18	9.803-198.0	Washer, Cooper G3/8	1	35	9.803-210.0	Washer	4
				36	9.803-218.0	Washer 6mm	10

## LP SERIES PUMP EXPLODED VIEW PARTS LIST (CONT)

ITEM	PART NO.	DESCRIPTION	QTY
37	8.752-824.0	Screw, M6 x 20	4
38*	8.754-855.0	Bolt, Plunger	3
39*	8.754-092.0	Spacer, Copper	3
40*	8.754-849.0	Plunger, 14 mm	3
41*	9.803-962.0	Spacer, Copper	3
42	8.754-827.0	Plunger Rod	3
43	9.803-965.0	Connecting Rod Pin	3
44	9.803-966.0	Connecting Rod	3
45	8.933-020.0	Screw, Connecting Rod	6
46	8.754-847.0	O-ring Ø2.62 X 111.62	1
47	8.754-842.0	Cover, Crankcase	1
48	9.803-906.0	O-ring Ø1.78 X 14	1
49	9.803-202.0	Sight Glass, G3/4	1

\* Available in kit (See below)

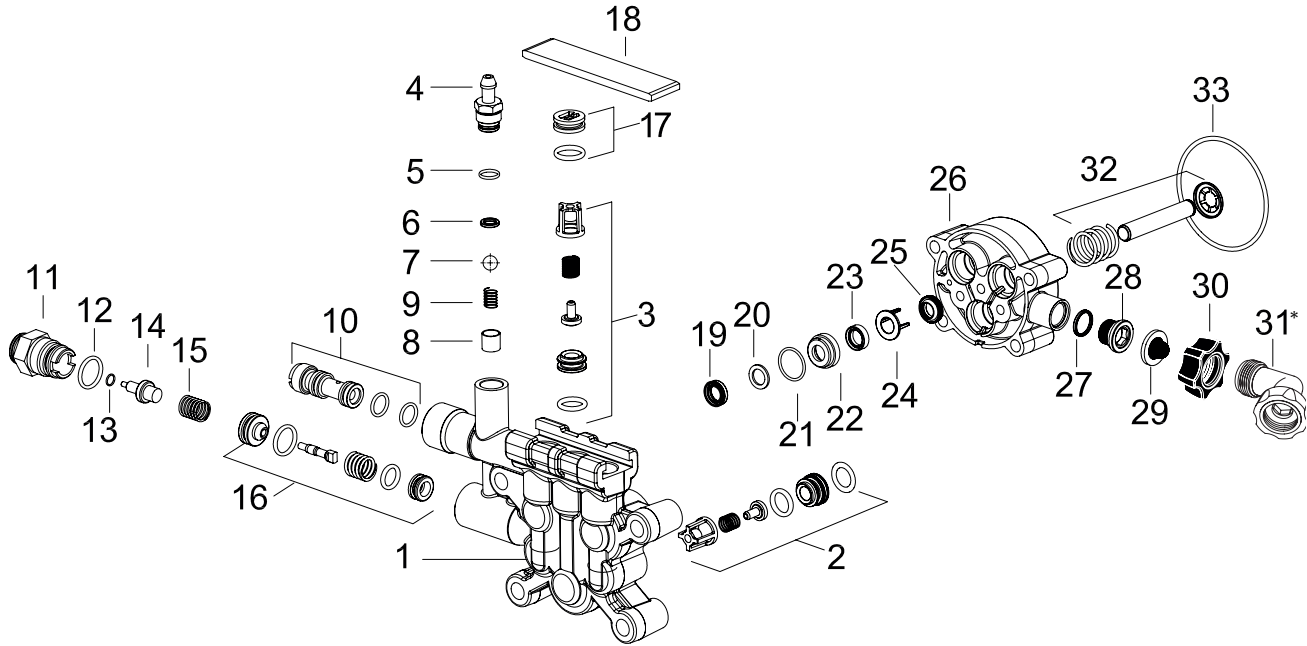
## LP SERIES PUMP REPAIR KITS

REPAIR KIT NUMBER	8.754-860.0	8.754-861.0	8.754-862.0	8.754-859.0	9.803-937.0
KIT DESCRIPTION	Plunger Seals 14mm	Seal Packing 14mm	Plunger 14mm	Complete Valve	Plunger Oil Seals
ITEM NUMBERS INCLUDED	4, 6, 8	4, 5, 6, 7, 8	38, 39, 40, 41	12, 13, 14	3

## AXIAL PUMP EXPLODED VIEW AND PARTS LIST

9.120-021.0

8.920-004.0

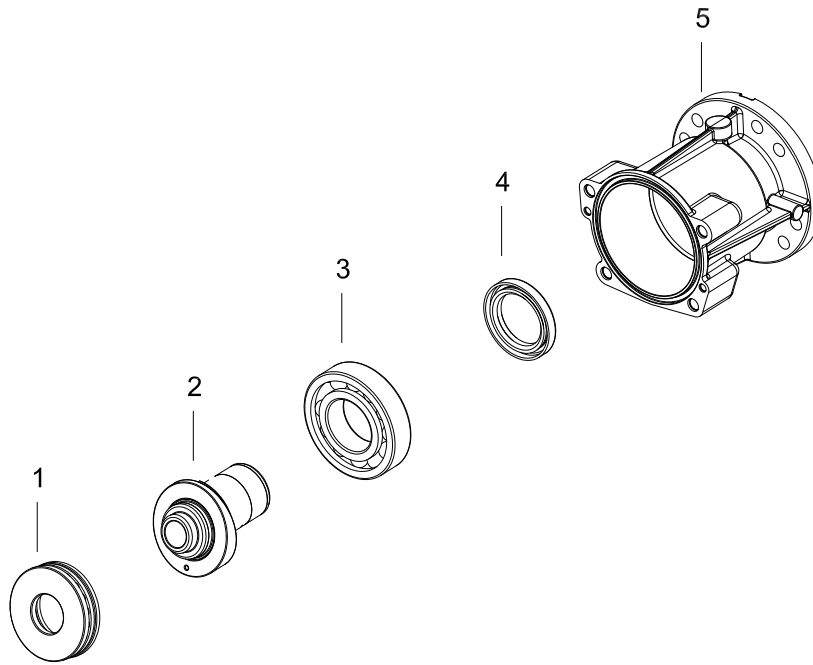


ITEM	PART NO.	DESCRIPTION	QTY
1	9.135-015.0	Cylinder Head	1
	8.762-010.0	Cylinder Head, Legacy	1
2	9.175-004.0	Valve Assy Horizontal	3
3	2.884-916.0	Spare Part List, Set 3	1
4	5.443-448.0	Nipple Chemistry	1
5	6.362-451.0	O-Ring Seal 8.0 x 1.0	1
6	6-362-634.0	O-Ring Seal, 5.28 x 1.78	1
7	7.401-908.0	Sphere 7 G300 - 1.4301 DIN 5401 PC	1
8	5.110-714.0	Sleeve	1
9	5.332-258.0	Helical Spring	1
10	9.139-372.0	Spare Part List Nozzle INS 020/021 Pump	1
11	9.184-018.0	Outlet-Thermal Valve	1
12	6.362-480.0	O-Ring Seal, 12.42 x 1.78	1
13	7.362-507.0	O-Ring Seal 8 x 2 NBR 90	1
14	6.413-403.0	Thermo Valve Tin Coated	1
15	5.332-290.0	Helical Spring	1
16	9.175-005.0	Unloader Assembly	1

ITEM	PART NO.	DESCRIPTION	QTY
17	4.132-007.0	Drain Plug Replacement	1
18	5.003-062.0	Plate	1
19	9.177-301.0	High Pressure Seal	3
20	9.177-310.0	Back Ring	3
21	6.362-833.0	O-Ring Seal 12.5 x 1.73	3
22	9.155-011.0	Housing Low Pressure Seal	3
23	6.363-058.0	Grooved Ring	3
24	9.134-016.0	Spacer	3
25	6.365-393.0	Oil Sealing 12.20x4/6	3
26	9.133-007.0	Piston Guide	1
27	6.362-390.0	O-Ring Seal 15.6 x 1.8	1
28	9.134-019.0	Male Adapter	1
29	9.181-005.0	Filter Seal	1
30	9.154-044.0	Nut, Garden hose connector	1
31	9.178-005.0	Adapter Garden	1
32	9.139-370.0	Spare Part List, Piston	1
33	6.362-471.0	O-Ring Seal 80.0x3.0 NBR70	1
34	8.752-032.0	Clamp, Tension Spring OD 11/16"	1
35	8.752-076.0	Valve, Thermal Cover Long	1

# AXIAL PUMP EXPLODED VIEW PARTS LIST

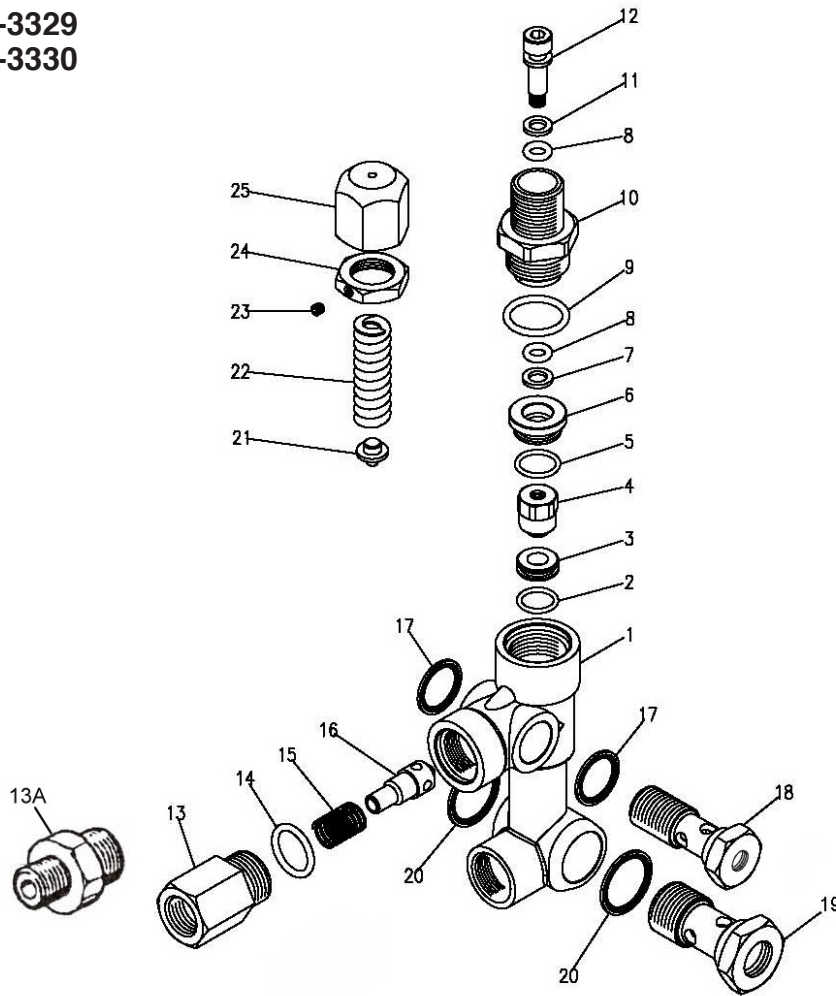
9.120-021.0 Housing View  
8.920-004.0 Housing View



ITEM	PART NO.	DESCRIPTION	QTY
1	9.166-016.0	Grooved Ball Bearing	1
2	9.135-018.0	Swash Plate Hor.	1
3	9.165-356.0	Ball Bearing No 6207	1
4	9.177-314.0	Radial Seal 35 x 52 x 7	1
5	9.135-016.0	Oil Housing	1

## VBA 35 UNLOADER EXPLODED VIEW

9.803-899.0 5-3329  
 9.803-900.0 5-3330

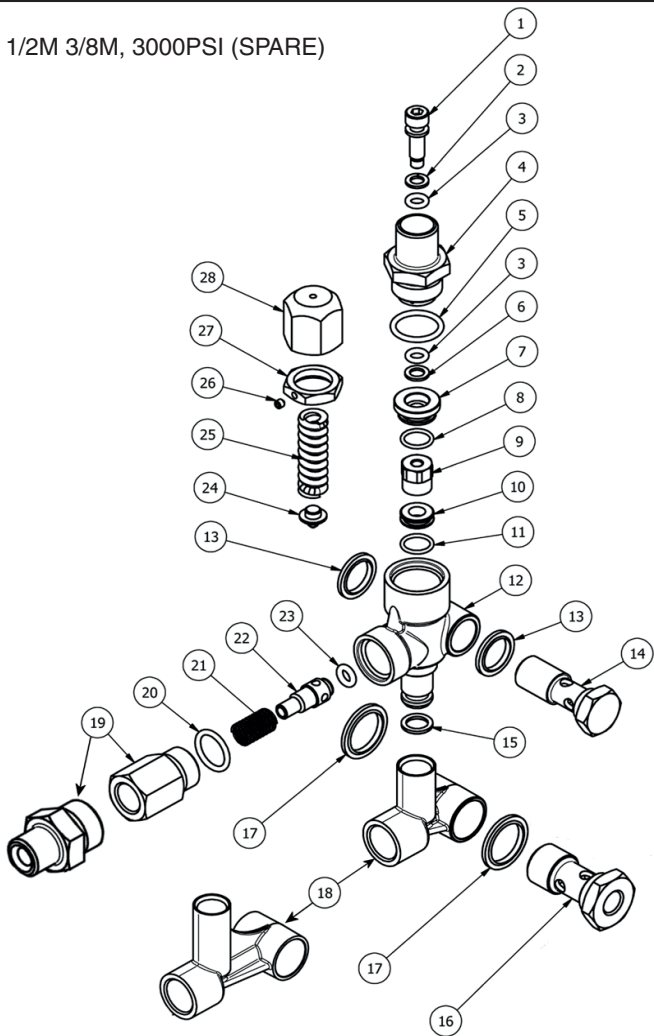


### VBA 35 UNLOADER EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	KIT	QTY	ITEM	PART NO.	DESCRIPTION	KIT	QTY
1		Body Valve (KG)		1	16		Poppet	B	1
		Body Valve (KS)		1	17	9.802-893.0	Seal Washer 3/8		2
2		O-Ring	A,C	1	18	9.803-915.0	Banjo Bolt 3/8" w 1/8" Pilot		1
3		Seat	C	1		9.803-919.0	Banjo Bolt 3/8" Solid Cap		1
4		Ball, Sub-assy	C	1	19	9.803-920.0	Banjo Bolt 1/2" w 1/4" Pilot		1
5		O-Ring	A	1		8.750-105.0	Banjo Bolt 1/2" Solid Cap		
6	9.803-907.0	Guide Bushing		1		9.803-919.0	Banjo Bolt 3/8" Solid Cap		
7		Teflon Ring		1	20	9.803-921.0	Seal Washer 1/2		2
8		O-Ring	A	1	21		Plate	C	1
9		O-Ring	A	2	22		Spring	C	1
10	9.803-911.0	Connector		1	23	8.933-021.0	Set Screw		1
11		Teflon Ring	A	1	24	9.803-925.0	Nut		1
12	70-120207	Stem	C	1	25	9.803-926.0	Brass Handle		1
13	9.803-941.0	Connector Female		1	Kit A	8.717-672.0	O-Ring Repair Kit		
13A	9.702-892.0	Connector Male		1	Kit B	8.717-673.0	Outlet Kit		
14		O-Ring	A,B	1	Kit C	8.717-674.0	Stem Repair Kit		
15		Spring	B	1					

## VBT UNLOADER EXPLODED VIEW

8.754-696.0  
UNLOADER, VBT BANJO 1/2M 3/8M, 3000PSI (SPARE)



### VBT UNLOADER EXPLODED VIEW PARTS LIST

ITEM	PART #	DESCRIPTION	KIT	QTY	ITEM	PART #	DESCRIPTION	KIT	QTY
1*	8.754-929.0	Stem	C	1	17	9.803-914.0	Seal Washer 1/2)		1
2*	9.803-912.0	Backup Ring	A	1	18	8.754-937.0	Bypass Manifold		1
3*	8.754-930.0	O-ring, Ø2.62 x 6.02	A	2	19	9.802-892.0	Outlet Connector 3/8 MPT		1
4	8.730-882.0	Stem Connector		1	20*	9.803-191.0	O-ring, Ø2.62 X 17.13	A,B	1
5*	9.803-193.0	O-ring, Ø2.62 x 20.24	A	1	21*	8.933-017.0	Poppet Spring	B	1
6*	9.803-908.0	Backup Ring	A	1	22*	8.754-939.0	Poppet	B	1
7	9.803-907.0	Guide Bushing		1	23*	8.754-940.0	O-ring, Ø3 x 6	A,B	1
8*	9.803-906.0	O-ring, Ø1.78 x 14	A	1	24*	8.754-961.0	Plate	C	1
9*	8.754-959.0	Ball SubAssembly	C	1	25*	8.933-018.0	Spring 1500-4000 PSI	C	1
10*	8.754-933.0	Seat	C	1	26	8.933-021.0	Set Screw		1
11*	8.754-934.0	O-ring, Ø1.78 x 12.42	A,C	1	27	9.803-925.0	Nut		1
12	8.754-935.0	Valve Body		1	28	9.803-926.0	Knob, Brass, Unloader		1
13	9.802-893.0	Seal Washer 3/8		1					
14	9.803-919.0	Banjo Bolt 3/8		1					
15*	8.754-936.0	O-ring, Ø2.62 x 10.78	A	1					
16	9.803-920.0	Banjo Bolt, 1/2, w/1/4" Port		1					

\* Included in Kit

**Kit A** 8.754-941.0 O-Ring Repair Kit  
**Kit B** 8.754-942.0 Outlet Repair Kit  
**Kit C** 8.754-957.0 Stem Repair Kit