

ITEM	PART NO.	DESCRIPTION	QTY.
1	7105011	FRAME, 11.75" BASE SVC ASSY F/BLACK	1
2	7105012	HANDLE, REAR DXPW SVC. ASSY F-BLACK W/LABEL	1
2.1	7104806	HANDLE, REAR 11.75" F/BLACK	1
2.2	7103161	HOLDER, NOZZLE 5PC RUBBER	1
2.3	7104813	PLATE, DASHBOARD	1
2.4	7103264	SCREW, 1/4-20 X 0.75 TORX PAN HEAD	4
3	7105010	ENGINE, SVC ASSY HONDA GX160UT2	1
† 4	7105022	PUMP, CAT 3GNX25GSI SERVICE KIT	1
4.1	7102290	PUMP, CAT 3DNX25GSI	1
4.2	7100355	FITTING, INLET GHT(F) X 3/8 NPT(M)	1
4.3	7100821	FITTING, OUTLET M22(M) X 3/8 NPT(F)	1
4.4	7101359	VALVE, THERMAL RELIEF 1/4 NPT(M)	1
4.5	7103746	PLATE, PUMP ADAPTER CAT 3DNX25GSI	1
4.6	7102470	PLUG, 3/8 NPT(M)	1
4.7		WASHER, 3/8" SPLIT-LOCK	4
4.8		BOLT, 3/8-16 X 1.25 HHCS GR5	4
5	7105013	WHEEL, DXPW SERVICE KIT	2
5.1		WHEEL, 10 x 4 (4.10/3.50-4) BLACK HUB	1
5.2		WASHER, 5/8 SAE FLAT	1
5.3		CLIP, E-TYPE 5/8 X 0.042 ZINC/CLEAR	1
6	7103292	FOOT KIT, RUBBER FOOT & SCREW	2
6.1		RUBBER FOOT, 1.50IN X 0.625IN	1
6.2		SCREW, 1/4-20 X 0.75 TORX PAN HEAD	1
7	7103750	HARDWARE KIT, ENGINE MOUNT	1
7.1		NUT, SERRATED FLANGE 5/16-18	4
7.2		BOLT, SERRATED FLANGE 3/8-16 X 1.75	4
8	7103745	HARDWARE KIT, PUMP MOUNTING	1
8.1		WASHER, SPLIT LOCK 5/16 RUST RESISTANT	4
8.2		BOLT, 5/16-24 X 0.75 HHCS GR5	4
9	7104570	HARDWARE KIT, HANDLE MOUNTING	2
9.1		BOLT, SADDLE 5/16-18 x 2.00	1
9.2		NUT, HAND TIGHT 5/16-18	1
10	7104641	HANDLE GRIP, VINYL COVER YELLOW	1
11	7104818	NOZZLE SET, 5 PIECE 2.80 ORIFICE	1
12	7103518	GUN 3800PSI, 8GPM, 3/8" FPT IN X M22 OUT	1
13	7103550	LANCE, 16IN X 1/4 QC(F) X M22(M)	1
14	7104842	HOSE, 5/16 X 25FT X 3200PSI M22(F)	1
15	7102207	SOAP HOSE AND FILTER KIT	1
* 16	7102045	TOOL, NOZZLE CLEANING, UNIVERSAL	1
* 17	7104816	MANUAL, OWNERS DXPW3025	1
* 18	7104815	BOX, SHIPPING DXPW3025 SPECIFIC	1

\*-NOT SHOWN

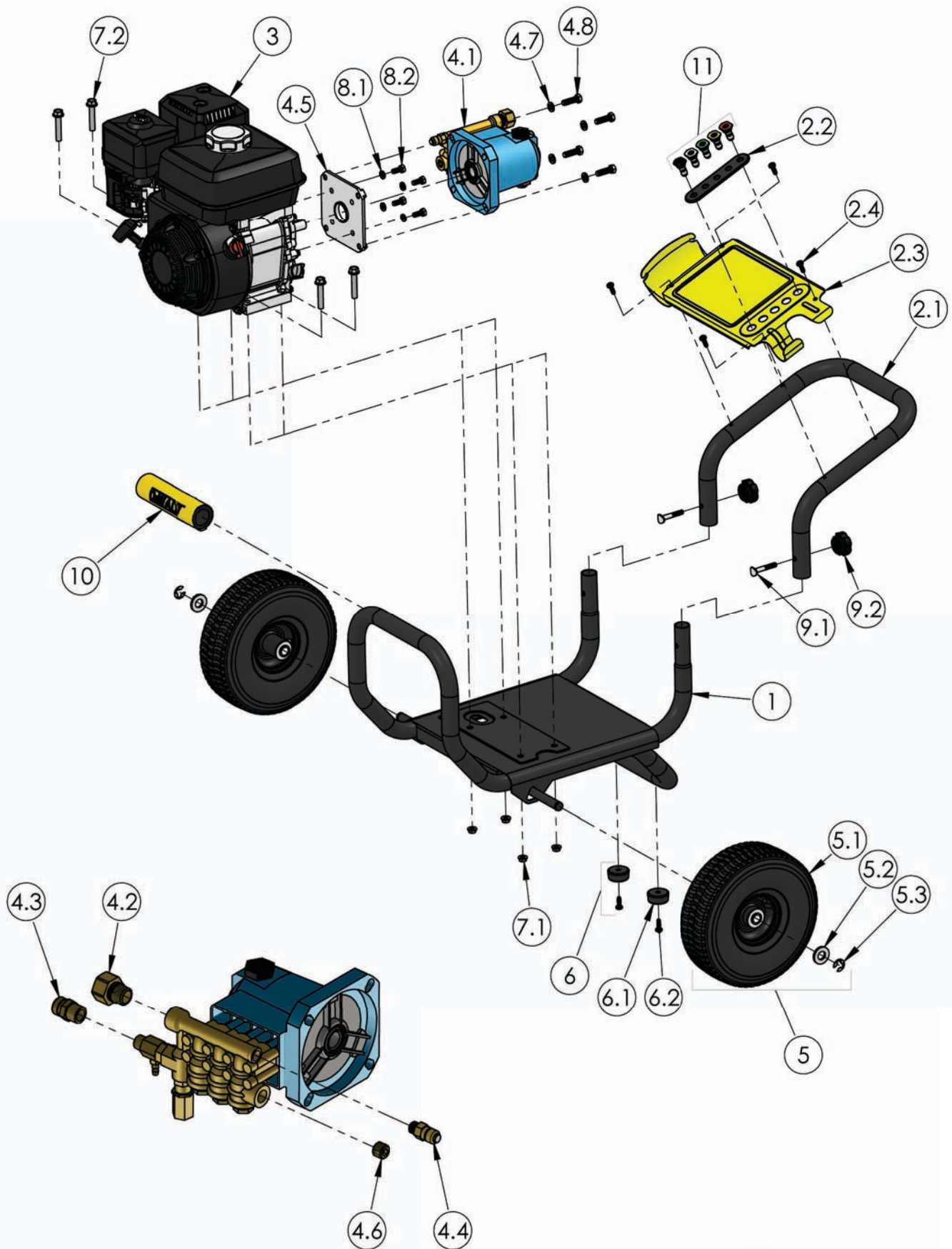


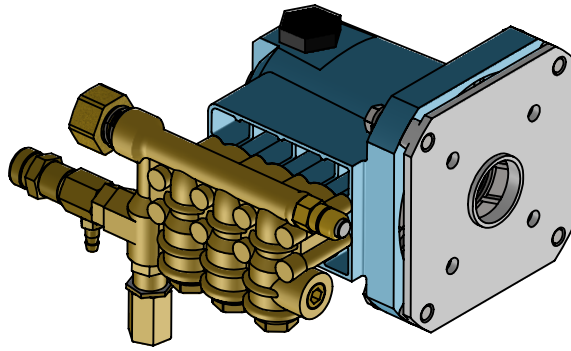
PUMP IDENTIFICATION TABLE			
MACHINE SERIAL #	PUMP TYPE	PUMP PART NO.	PUMP KIT NO.
124117 THROUGH 124877	3DNX25GSI	7102290	7105022
125087 THROUGH 127270	3GXT27	7104859	7105023
127271 THROUGH 134156	BWD-K2329GVRFNA	7104821	7105559
136847 THROUGH PRESENT	8.7GA12	7104811	7105749

	NAME	DATE
DRAWN	LWR	10/25/11
CHECKED	K.B.	10/29/11
ENG APPR.	J.E.W.	1/16/12
MFG APPR.	S.C.	1/16/12
Q.A. APPR.	J.P.	1/16/12
SERVICE APPR.	D.H.	1/16/12

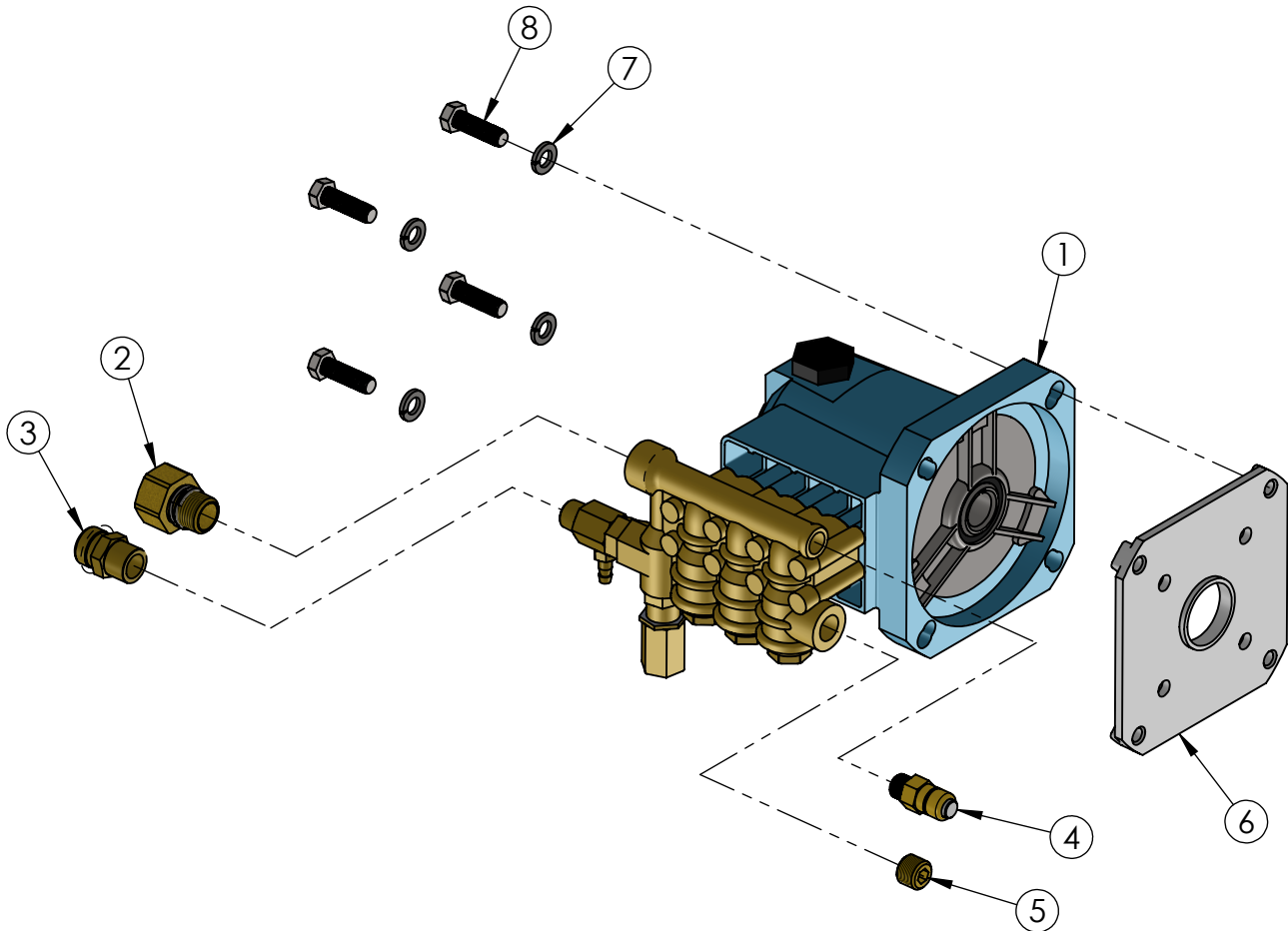
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FNA-GROUP	
1265 INDUSTRIAL STREET, DECATUR, AR 72722	
TITLE:	
<b>DXPW3025</b>	
SIZE	DWG. NO.
<b>A</b>	<b>60574-S</b>
SCALE: N/A	ECN# DC12-0006
REV. <b>C</b>	SHEET 1 OF 14

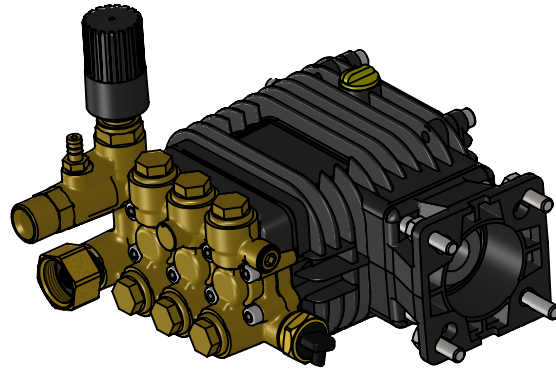




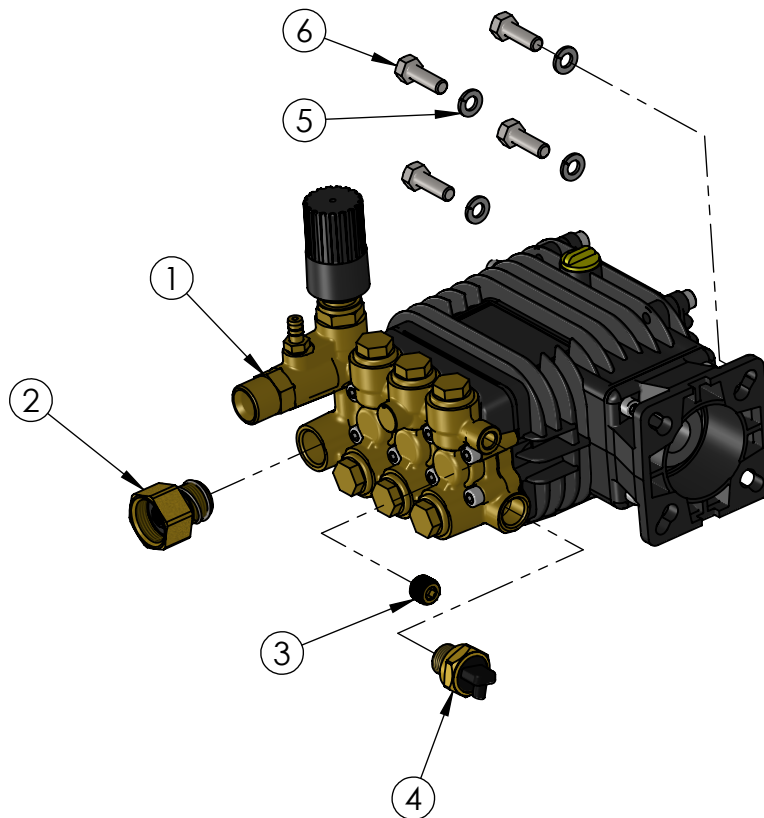
PUMP, HORIZONTAL TRIPLEX SERVICE KIT  
PART NO. 7105023



ITEM	PART NO	DESCRIPTION	QTY
1	7104859	PUMP, CAT 3GXT27	1
2	7100355	FITTING, INLET GHT(F) X 3/8 NPT(M)	1
3	7100821	FITTING, OUTLET M22(M) X 3/8 NPT(F)	1
4	7101359	VALVE, THERMAL RELIEF 1/4 NPT(M)	1
5	7102470	PLUG, 3/8 NPT(M)	1
6	7103746	PLATE, PUMP ADAPTER CAT 3DNX25GSI	1
7		WASHER, 3/8 SPLIT LOCK	4
8		BOLT, 3/8-16 X 1.25 HHCS GR5	4

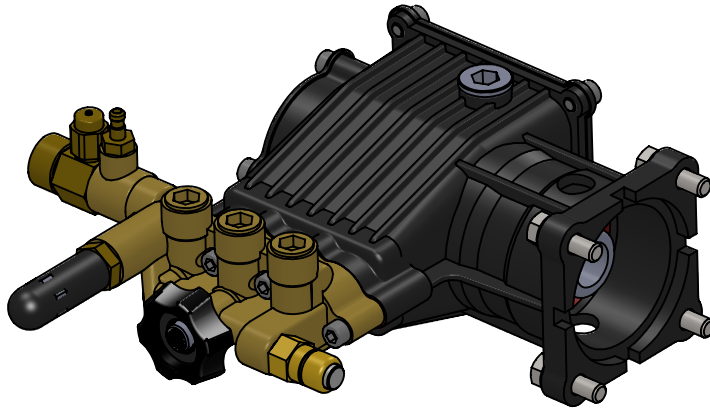


## PUMP, BWD-K2329GVRFNA SERVICE KIT (PART NO. 7105559)

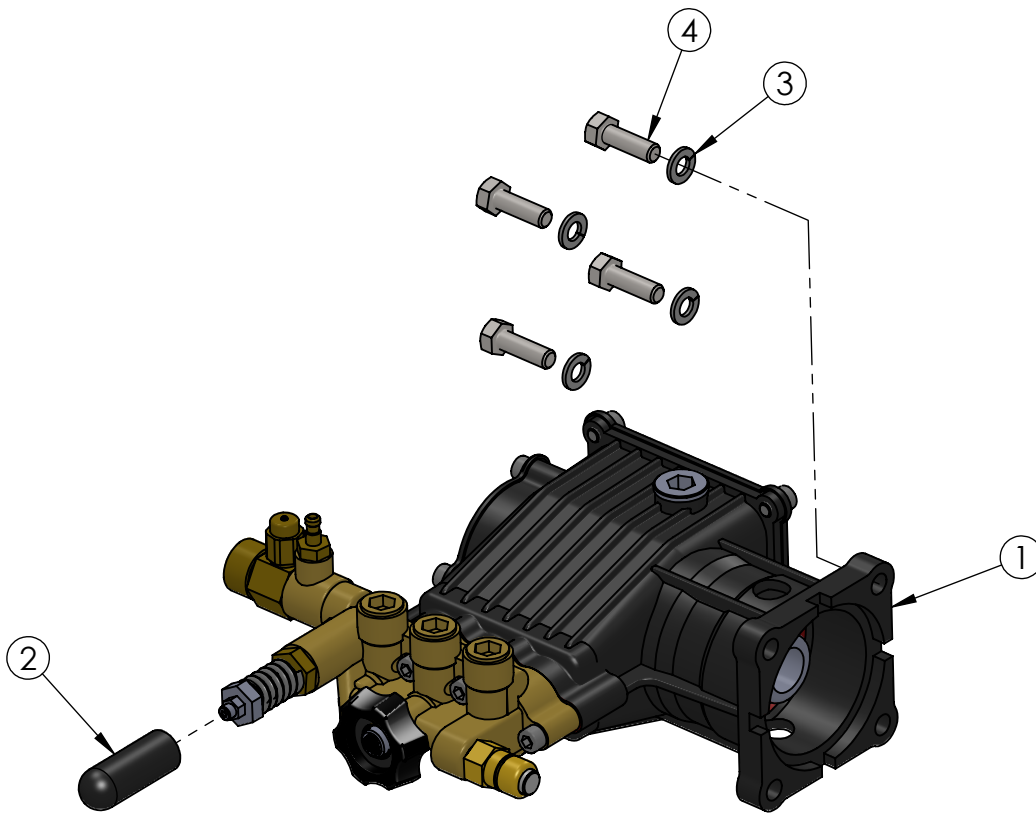


ITEM	PART NO.	DESCRIPTION	QTY.
1	7104821	PUMP, HORIZONTAL 3000PSI @ 2.5GPM BWD-K2329GVRFNA	1
2	7100051	INLET ADAPTER, GARDEN-F TO .500 NPT-M	1
3	7105260	PLUG, 1/4 NPT(M) RECESSED HEX SOCKET BRASS	1
4	7101356	THERMAL RELIEF VALVE .38 NPT-M	1
5	7101377	WASHER, SPLIT LOCK 5/16 RUST RESISTANT	4
6	7100118	BOLT 5/16-24 x 1.0 HHCS GR5	4





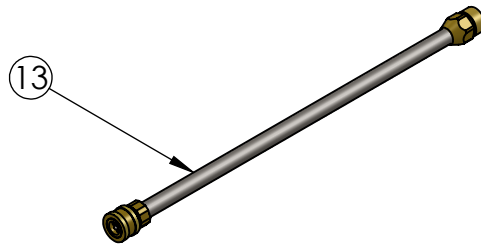
PUMP, 8.7GA12 SERVICE KIT  
(PART NO. 7105749)



ITEM	PART NO.	DESCRIPTION	QTY.
1	7104811	PUMP. HORIZONTAL 3000PSI @ 2.5GPM TRIPLEX	1
2	7104122	CAP, BLACK VINYL 0.625 ID X 1.50	1
3	7101377	WASHER, SPLIT LOCK 5/16 RUST RESISTANT	4
4	7100118	BOLT 5/16-24 x 1.0 HHCS GR5	4



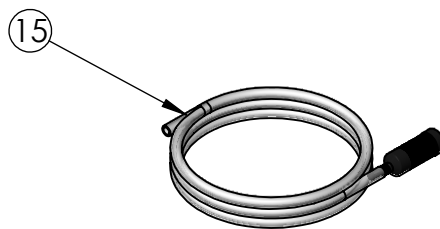
GUN 3800PSI, 8GPM, 3/8" FPT IN X M22 OUT  
(PART NO. 7103518)



LANCE, 16" W/1/4 QC AND M22-M  
(PART NO. 7103550)



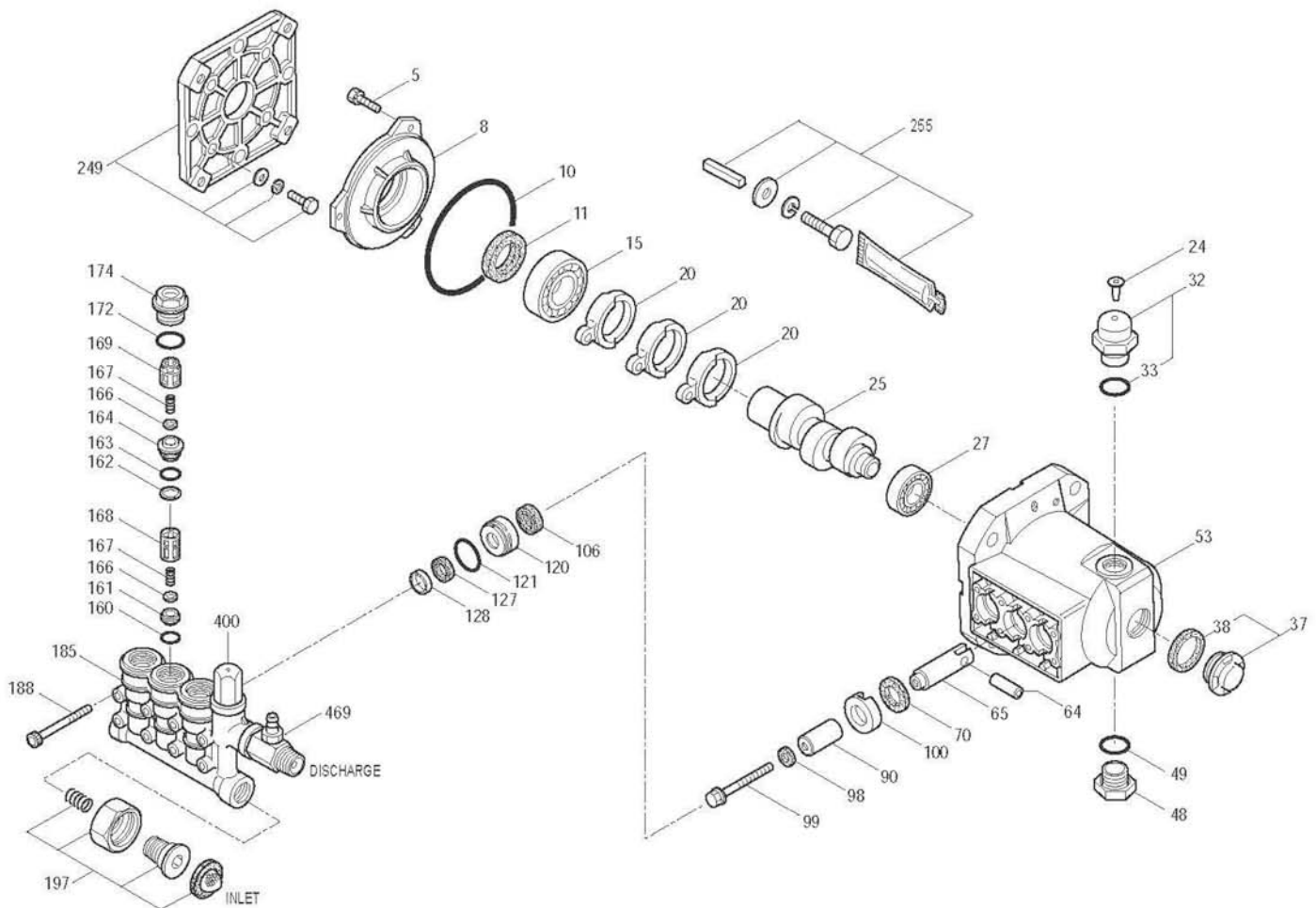
HOSE, 5/16 X 25 X 3200 M22-F X M22-F  
(PART NO. 7104842)



SOAP HOSE KIT  
(PART NO. 7102037)

# EXPLODED VIEW

# 3DNX PLUNGER PUMP MODEL 3DNX25GSI, 3GXT27



## PARTS LIST

ITEM	PN	MATL	DESCRIPTION	QTY	ITEM	PN	MATL	DESCRIPTION	QTY
5	NA	STCP	Screw, HHC Sems (M6x14)	3	128	NA	PVDF	Adapter, Male	3
	7103819	<i>STCP R</i>	<i>Screw, HHC Sems (M6x14)</i>	3	160	NA	NBR	O-Ring, Inlet Seat - 80D	3
8	7103820	AL	Cover, Bearing	1	161	NA	S	Seat, Inlet	3
10	7102614	NBR	O-Ring, Bearing Cover - 70D	1	162	NA	D	Back-up-Ring, Discharge Seat	3
11	7102813	NBR	Seal, Oil - 70D	1	163	NA	NBR	O-Ring, Discharge Seat - 70D	3
15	7102624	STL	Bearing, Ball	1	164	NA	S	Seat, Discharge	3
20	7103824	TNM	Rod, Connecting	3	166	NA	S	Valve	6
24	7103825	LDPE	Plug, Oil Cap	1	167	NA	S	Spring	6
25	7103826	CM	Crankshaft, 3DNX25GSI 6.8mm Stroke	1	168	NA	PVDF	Retainer, Spring, Inlet	3
	710354	CM	Crankshaft, 3GXT27 6.3mm Stroke	1	169	NA	PVDF	Retainer, Spring, Discharge	3
27	7103828	STL	Bearing, Ball	1	172	NA	NBR	O-Ring, Plug - 90D	3
32	7102604	RTP	Cap, Oil Filler w/O-Ring	1	174	7103836	BB	Plug, Valve (M22x1.5)	3
33	7102617	NBR	O-Ring, Oil Filler Cap - 70D	1	185	7103837	BB	Head, Manifold w/Integral Unloader Body	1
37	7103056	—	Gauge, Bubble Oil w/Gasket	1	188	7103838	STZP	Screw, HSH (M6x60)	8
38	7102970	NBR	Gasket, Flat Flex, Oil Gauge - 80D	1	197	7103839	BB	Assy, GH, 3/8" NPTM	1
48	7101762	NY	Plug, Drain	1		—	—	Nut, Swivel (3/4" FGH)	1
49	7102617	NBR	O-Ring, Drain Plug - 70D	1		—	—	Fitting, (3/8" NPTM)	1
53	7103829	AL	Crankcase	1		—	—	Screen, Inlet	1
64	7103830	CM	Pin, Crosshead	3		—	—	Spring	1
65	7103831	BB	Rod, Plunger	3	249	7103840	—	Assy, Adapter Mount	1
70	7102804	NBR	Seal, Oil - 70D	3	255	7103841	STZP R	Assy, Bolt Mount	1
90	7103542	CC	Plunger (M14x25.5)	3	283	NA	—	Kit, Oil Drain (Not Shown)	1
98	NA	NBR	Washer, Seal - 90D	3	300	7103546	NBR	Kit, Seal (Incls: 98, 106, 121, 127, 128)	1
99	7103833	S	Retainer, Plunger (M6x35)	3	310	7103540	NBR	Kit, Valve (Incls: 160, 161, 162, 163, 164, 166, 167, 168, 169, 172)	1
100	7102925	NY	Retainer, Seal	3	400	NA	—	Unloader, Integral (See Individual Parts)	1
106	NA	NBR	Seal, LPS w/S-Spg	3	469	7101616	BB	Injector, Chemical Fixed	1
120	7103835	BB	Case, Seal	3					
121	NA	NBR	O-Ring, Seal Case - 70D	3					
127	NA	SNG	V-Packing	3					

*Italics are optional items. [ ] Date of latest production change. R Components comply with RoHS Directive.*

See Tech Bulletins 002, 024, 036, 043, 055, 074 and 083 for additional information.

MATERIAL CODES (Not Part of Part Number): AL=Aluminum BB=Brass CC=Ceramic CM=Chrome-moly D=Acetal  
LDPE=Low Density Polyethylene NBR=Medium Nitrile (Buna-N) NY=Nylon PVDF=Polyvinylidene Fluoride RTP=Reinforced Composite

S=304SS SNG=Special Blend (Buna) STL=Steel STCP=Steel/Chrome Plated STZP=Steel/Zinc Plated TNM=Special High Strength

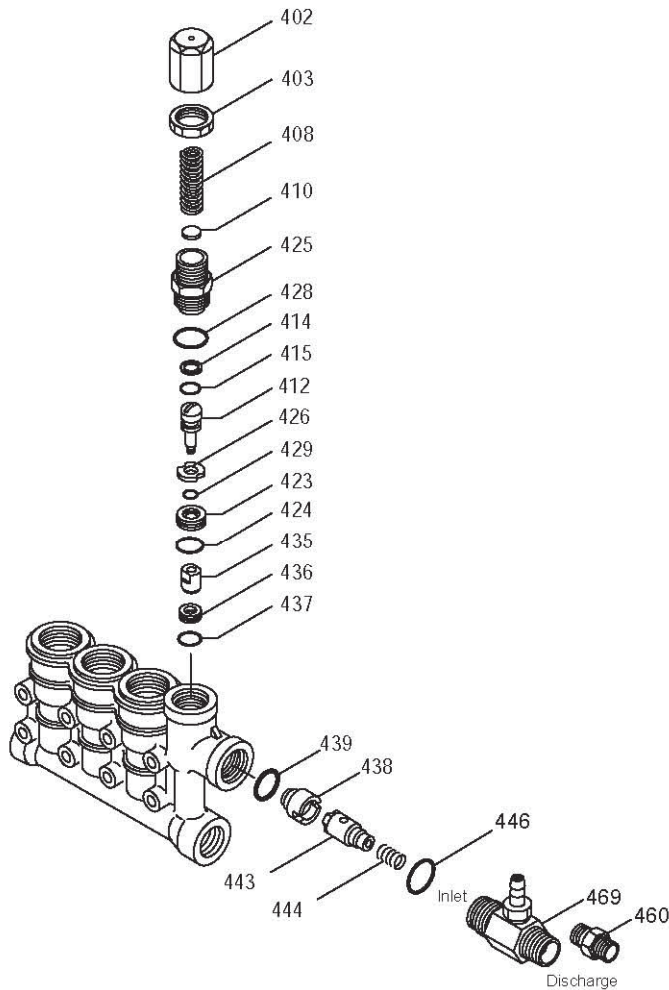
NOTE: Discard Key which may come standard with most engines and use only the key included in this kit.

Center raised pilot guide on the **Adapter Plate** assures proper alignment of pump and engine. Before mounting pump onto engine inspect engine for **recessed seal and bearing guide** to permit adapter to completely seat into recess and four bosses to be flush with engine face.

# INTEGRAL UNLOADER

## SPECIFICATIONS

	U.S. Measure	Metric Measure
Flow .....	3.0 GPM	(11.4 L/M)
PSI Range .....	100-2850 PSI	(7-196 BAR)
Inlet Port .....	3/4" GHF	(3/4" GHF)
Discharge Port .....	M18x1.0	(M18x1.0)



## PARTS LIST

ITEM	PN	MATL	DESCRIPTION	QTY.
402	7103842	BB	Cap, Adjusting	1
403	7103843	BB	Nut, Lock (M18x1)	1
408	7103544	STZP R	Spring, Pressure	1
410	7103845	STCP R	Retainer, Spring	1
412	NA	S	Stem, Piston	1
414	NA	PTFE	Back-up-Ring, Piston Stem	1
415	NA	NBR	O-Ring, Piston Stem - 70D	1
423	NA	BB	Retainer, Valve	1
424	NA	NBR	O-Ring, Valve Retainer (Outer) - 70D	1
425	NA	BB	Retainer, Piston	1
426	NA	S	Washer	1
428	NA	NBR	O-Ring, Piston Retainer - 80D	1
429	NA	NBR	O-Ring, Valve Retainer (Inner) - 80D	1
435	NA	S	Valve	1
436	7103846	S	Seat	1
437	NA	NBR	O-Ring, Seat - 70D	1
438	7101617	NY	Seat, Check Valve	1
439	7102598	NBR	O-Ring, Check Valve Seat - 70D	1
443	7102811	BB	Valve, Check w/O-Ring	1
444	7103048	S	Spring	1
446	7103851	NBR	O-Ring, Body - 80D	1
460	7102590	BB	Fitting, Discharge (3/8" NPTM)	1
468	7103541	NBR	Kit, O-Ring (Incls: 414,415,424,428,429,437)	1
	7103543	NBR	Kit, Repair (Incls: 412,414,415,423,424,425,426,428,429,435)	1
469	7101616	BB	Injector, Chemical Fixed	1

*Italics are optional items. R Components comply with RoHS Directive.*

MATERIAL CODES (Not Part of Part Number): BB=Brass

NBR=Medium Nitrile (Buna-N) NY=Nylon PTFE=Pure Polytetrafluoroethylene

S=304SS STCP=Steel/Chrome Plated STZP=Steel/Zinc Plated

# UNLOADER TYPE

An integral unloader with built-in by-pass is part of the discharge manifold to provide system pressure regulation and pump protection. This pump also includes a fixed chemical injector for chemical application.

## OPERATION:

Pump should be purged of air before commencing with operation. Liquid must flow through the pump without discharge restriction to assure full system pressure is reached.

Install a pressure gauge close to the manifold head of the pump to assist in setting system pressure and to periodically monitor system pressure.

Setting and adjusting the unloader pressure must be done with the system turned on. Start the system with the unloader backed off to the lowest pressure setting (counterclockwise direction). Squeeze the trigger and read the pressure on the gauge at the pump. Do not read pressure at the gun or nozzle. If more pressure is desired, release the trigger, turn adjusting cap one quarter turn in a clockwise direction. Squeeze the trigger and read the pressure. Repeat this process until the desired system pressure is reached. Thread locking nut up to adjusting cap.

**NOTE:** Pressure is not set at the factory.

## SERVICE:

The unloader should be serviced on the same schedule as the seals in the pump. Refer to 3DNX Service Manual for start-up, servicing of seals and valves, torque requirements and Diagnosis/Maintenance chart.

# 7332 FIXED CHEMICAL INJECTOR

## SPECIFICATIONS

	U.S. Measure	Metric Measure
Flow .....	3.0 GPM	(11.4 L/M)
Nozzle Orifice .....	2.1 mm	(2.1 mm)
Hose Barb .....	1/4"	(1/4")
Inlet Port .....	M18x1.0	(M18x1.0)
Discharge Port .....	3/8" NPTM	(3/8" NPTM)
Weight .....	5.3 oz.	(0.15 kg)
Dimensions .....	2 x 1 x 1.75"	(52 x 25 x 45 mm)

## CHEMICAL INJECTOR PERFORMANCE CHART

Orifice Size	Maximum Injecting Pressure	Maximum Chemical Draw	Pressure Drop Across Injector At System Pressure (2850 PSI)
2.1 mm	250 PSI	37.2 oz/min	141 PSI

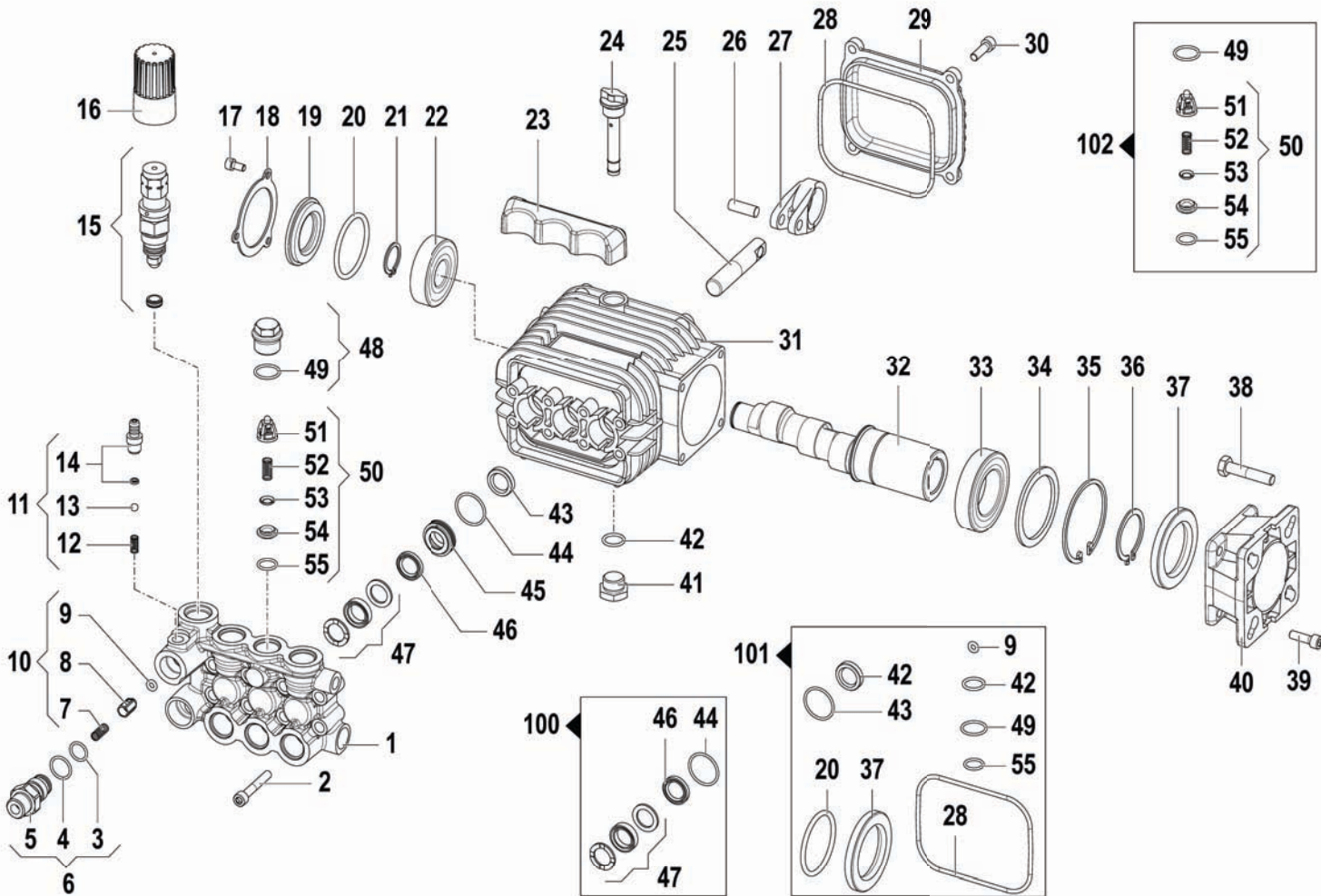
Optimum performance of chemical injector occurs with a 35 ft. high pressure hose and a minimum 3/8" I.D. The type of hose, extended lengths, reduced I.D. and fittings may create back pressures in excess of the low pressure nozzle rating and prevent the injector from drawing chemical. See Hose Friction Loss Chart in Service Manual. **Deduct hose friction loss from above low PSI Nozzle. Contact CAT PUMPS for assistance with other options.**

**CAUTION:** Deduct the pressure drop shown in the performance chart from your desired system pressure to arrive at the maximum high pressure nozzle rating. This is essential to avoid over-pressurizing the pump.



# PUMP DIAGRAM

## BWD-K2329GVRFNA (PART NO. 7104821)



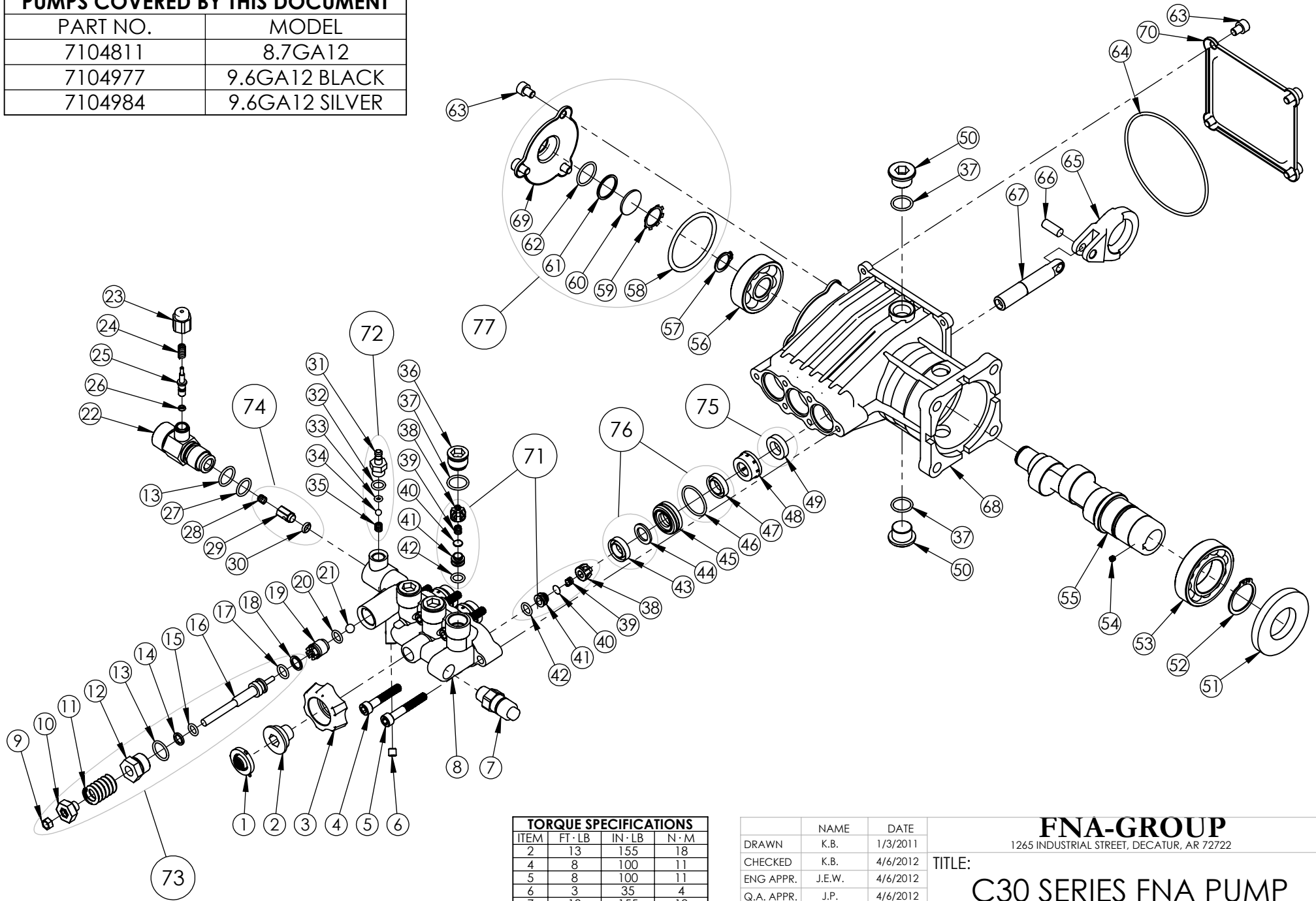
DWG NO.	PART NO.	DESCRIPTION	QTY.
1	7105543	BRASS PUMP MANIFOLD, Ø14mm	1
2	7104957	SCREW, M6 X 40	8
3		O-RING, Ø1.78 X 12.42mm	1
4		O-RING, Ø1.78 X 15.6mm	1
5		INJECTOR BODY, Ø1.8mm - M22-1.5	1
6	7105544	INJECTOR BODY KIT, Ø1.8mm - M22-1.5	1
7		SPRING, CHECK VALVE	1
8		CHECK VALVE	1
9	7105405	O-RING, Ø2.4 X 4.3mm	1
10	7105406	CHECK VALVE KIT	1
11	7104951	DETERGENT COUPLING KIT	1
12	7105407	DETERGENT SPRING	1
13	7105408	DETERGENT BALL	1
14	7105409	DETERGENT COUPLING	1
15	7105410	UNLOADER VALVE KIT, 4000psi[280BAR]	1
16	7104947	UNLOADER ADJUSTMENT KNOB	1
17	7105412	SCREW, M5 X 10	3
18	7105413	RETAINER, CRANKCASE COVER	1
19	7104960	TRANSPARENT COVER	1
20	7105415	O-RING, Ø3.53 X 44.04mm	1
21	7105416	EXTERNAL SNAP RING	1
22	7104962	BALL BEARING, 20 X 52 X 15mm	1
23	7104966	MANIFOLD COVER	1
24	7105420	OIL DIPSTICK	1
25	7104969	CERAMIC PISTON	1
26	7105421	PISTON PIN	1
27	7105545	CONNECTING ROD ASSEMBLY	1
28	7105549	O-RING, Ø3 X 85mm	1
29	7104970	CRANKCASE COVER	1
30	7105436	SCREW, M6 X 20	4
31	7105548	PUMP CRANKCASE	1
32	7105550	CRANKSHAFT, HOLLOW Ø.75"	1
33	7105551	BALL BEARING, 35 X 62 X 14mm	1
34	7105552	SPACER, BEARING	1

DWG NO.	PART NO.	DESCRIPTION	QTY.
35	7105434	INTERNAL SNAP RING, Ø62mm	1
36	7105553	EXTERNAL SNAP RING, Ø35mm	1
37	7105554	OIL SEAL, Ø35 X 62 X 7mm	1
38		BOLT, 5/16-24 X 1.25"	4
39	7105436	SCREW, M6 X 20	4
40	7105555	MOUNTING FLANGE, SAE J 609 A	1
41	7105444	CAP, 3/8" GAS PIPE T-HREAD	1
42	7105443	O-RING, Ø2 X 14mm	1
43	7105556	OIL SEAL, Ø14 X 22 X 5mm	3
44		O-RING, Ø1.78 X 23.52mm	3
45		PACKING RETAINER Ø14mm	3
46		PACKING, Ø14 X 22 X 4mm	3
47		PACKING KIT, Ø14mm	3
48	7105446	CAP & O-RING KIT,	6
49	7105447	O-RING, Ø1.78 X 17.17mm	6
50		SUCTION/PRESSURE VALVE ASSY KIT	6
51		SUCTION/PRESSURE VALVE CAGE	6
52		SUCTION/PRESSURE VALVE SPRING	6
53		SUCTION/PRESSURE VALVE	6
54		SUCTION/PRESSURE VALVE SEAT	6
55		O-RING, Ø1.78 X 12.42mm	6
<b>SPARE PARTS KITS</b>			
100	7104953	WATER SEAL KIT	1
101	7105557	OIL SEAL KIT	1
102	7105558	SUCTION/PRESSURE VALVE KIT	1

Torque Specifications						
No.	Part No.	Description	lb · ft	lb · in	N · m	Apply To Thread
2	7104957	SCREW, M6 X 40	33.2	400	45	Loctite 243
17	7105412	SCREW, M5 X 10	7.4	90	10	-
30	7105436	SCREW, M6 X 20	6.6	80	9	-
39	7105436	SCREW, M6 X 20	6.6	80	9	-
48	7105446	CAP & O-RING KIT	3	40	4	-

**PUMPS COVERED BY THIS DOCUMENT**

PART NO.	MODEL
7104811	8.7GA12
7104977	9.6GA12 BLACK
7104984	9.6GA12 SILVER



TORQUE SPECIFICATIONS			
ITEM	FT·LB	IN·LB	N·M
2	13	155	18
4	8	100	11
5	8	100	11
6	3	35	4
7	13	155	18
12	13	155	18
22	13	155	18
23	13	155	18
31	9	110	13
36	13	155	18
50	13	155	18
63	7	80	9

	NAME	DATE
DRAWN	K.B.	1/3/2011
CHECKED	K.B.	4/6/2012
ENG APPR.	J.E.W.	4/6/2012
Q.A. APPR.	J.P.	4/6/2012
SVC. APPR.	D.H.	4/6/2012

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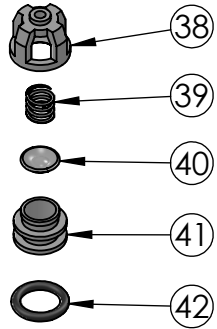
TITLE:  
**C30 SERIES FNA PUMP**

SIZE <b>A</b>	DWG. NO. C30 SERIES PUMP	REV A
ECN # DC12-0037		SHEET 1 OF 5

ITEM	QTY	PART NO.	DESCRIPTION
1	1	7000123	SCREEN, WATER INLET
2	1	7105704	CONNECTOR, WATER INLET
3	1	7105705	NUT, HAND TIGHT
4	3	7000325	SCREW, M6-1.0 X 35 GR 8.8
5	3	7105436	SCREW, M6-1.0 X 40 GR 8.8
6	1	7104692	SCREW, SET M6-1.0 X 8
7	1	7101359	VALVE, THERMAL RELIEF
8	1	7105706	MANIFOLD
9	1	NA	NUT, UNLOADER JAM
10	1	NA	NUT, UNLOADER ADJUSTMENT
11	1	NA	SPRING, UNLOADER
12	1	NA	GUIDE BUSHING, UNLOADER
13	2	7105707	O-RING 13.2 X 1.8
14	1	NA	BACK-UP RING, UNLOADER VALVE
15	1	NA	O-RING, 7.2 X 1.8
16	1	NA	STEM, UNLOADER
17	1	NA	O-RING, 9.0 X 1.8
18	1	NA	BACK-UP RING, SPLIT
19	1	7105708	VALVE SEAT
20	1	7105709	O-RING, 9 X 1.8
21	1	7105710	BALL, UNLOADER VALVE
22	1	7105711	BODY, SOAP INJECTOR
23	1	7105712	CAP, BOOST VALVE
24	1	7105713	SPRING, BOOST VALVE
25	1	7105714	VALVE, PRESSURE BOOST
26	1	7105715	O-RING, 2.5 X 1.8
27	1	7105716	O-RING, 11.8 X 1.8
28	1	NA	SPRING, CHECK VALVE
29	1	NA	CHECK VALVE
30	1	NA	O-RING, 4.5 X 2.65
31	1	NA	FITTING, SOAP INJECTION
32	1	NA	O-RING, 7.5 X 1.8
33	1	NA	O-RING, 3.5 X 1.8
34	1	NA	BALL, 3/16" SOAP VALVE
35	1	NA	SPRING, SOAP VALVE
36	3	7105717	PLUG, MANIFOLD
37	5	7105718	O-RING, 13 X 1.8
38	6	NA	CAGE, VALVE
39	6	NA	SPRING, VALVE
40	6	NA	DISK, VALVE
41	6	NA	SEAT, VALVE
42	6	NA	O-RING, 9 X 1.8
43	3	NA	SEAL, HIGH PRESSURE
44	3	NA	RING, ANTI-EXT
45	3	7105719	RETAINER
46	3	NA	O-RING, 22 X 1.8

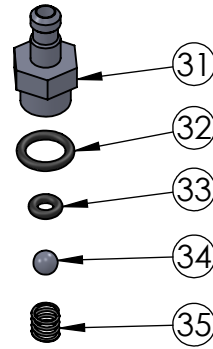
ITEM	QTY	PART NO.	DESCRIPTION
47	3	NA	SEAL, LOW PRESSURE
48	3	7105720	RETAINER, SEAL
49	3	NA	SEAL, OIL
50	2	7105721	PLUG, CRANKCASE
51	1	7105722	SEAL, OIL 29.5 X 58 X 8
52	1	7105723	RING, M30 RETAINING
53	1	7105724	BEARING, CRANKSHAFT 6006
54	1	7103426	SCREW, M4-0.7 X 4 GR 8.8
55	-	-	CRANKSHAFTS
	1	7105725	CRANKSHAFT 8.7GA12
	1	7105726	CRANKSHAFT 9.6GA12
56	1	7105727	BEARING, CRANKSHAFT 6303
57	1	7105729	RING, M17 RETAINING
58	1	NA	O-RING, 47.5 X 2.65
59	1	NA	INTERNAL RETAINING RING, SELF LOCKING
60	1	NA	SIGHT GLASS
61	1	NA	BACK-UP RING
62	1	NA	O-RING, 18 X 1.8
63	7	7103437	SCREW, M6-1.0 X 10 GR 8.8
64	1	7105728	O-RING, 90 X 3.5
65	3	7105730	CONNECTING ROD
66	3	7105731	PIN, CONNECTING ROD
67	3	7105732	PISTON, CERAMIC COATED
68	-	-	CRANKCASES
	1	7105733	CRANKCASE, PUMP BLACK
	1	7105734	CRANKCASE, PUMP SILVER
69	-	-	CRANKCASE SIDE COVER
	1	7105735	CRANKCASE SIDE COVER, BLACK
	1	7105736	CRANKCASE SIDE COVER, SILVER
70	-	-	CRANKCASE END COVER
	1	7105737	CRANKCASE END COVER, BLACK
	1	7105738	CRANKCASE END COVER, SILVER
71	6	7104226	VALVE KIT
72	1	7104228	SOAP INJECTOR KIT
73	1	7105739	UNLOADER KIT
74	1	7105740	UNLOADER CHECK VALVE KIT
75	1	7105741	OIL SEAL KIT
76	1	7105742	HIGH AND LOW PRESSURE SEAL KIT
77	-	-	END COVER KITS
	1	7105743	SIDE COVER KIT, BLACK
	1	7105744	SIDE COVER KIT, SILVER
78	1	7105745	MANIFOLD KIT
79	-	-	CRANKCASE KITS
	1	7105746	CRANKCASE KIT, 8.7GA12
	1	7105747	CRANKCASE KIT, 9.6GA12 BLACK
	1	7105748	CRANKCASE KIT, 9.6GA12 SILVER

NA - NOT AVAILABLE INDIVIDUALLY, ORDER KIT



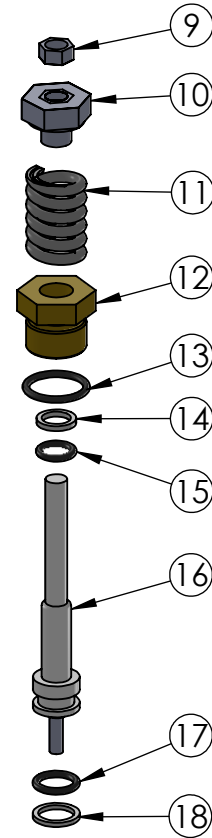
**7104226**  
ITEM 71 VALVE KIT

ITEM	QTY	DESCRIPTION
38	6	CAGE, VALVE
39	6	SPRING, VALVE
40	6	DISK, VALVE
41	6	SEAT, VALVE
42	6	O-RING, 9X1.8



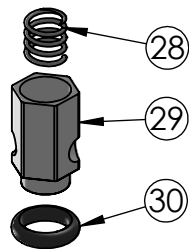
**7104228**  
ITEM 72 SOAP INJECTOR KIT

ITEM	QTY	DESCRIPTION
31	1	FITTING, SOAP INJECTION
32	1	O-RING, 7.68X1.78
33	1	O-RING, 3.68X 1.78
34	1	BALL, 3/16" SOAP VALVE
35	1	SPRING, SOAP VALVE



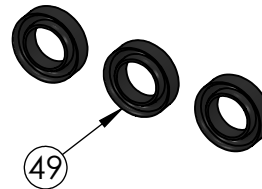
**7105739**  
ITEM 73 UNLOADER KIT

ITEM	QTY	DESCRIPTION
9	1	NUT, UNLOADER JAM
10	1	NUT, UNLOADER ADJUSTMENT
11	1	SPRING, UNLOADER
12	1	GUIDE BUSHING, UNLOADER
13	1	O-RING
14	1	BACK-UP RING, UNLOADER VALVE
15	1	O-RING, 7.2 X 1.8
16	1	STEM, UNLOADER
17	1	O-RING, 9.0 X 1.8
18	1	BACK-UP RING, SPLIT



**7105740**  
ITEM 74 UNLOADER CHECK VALVE KIT

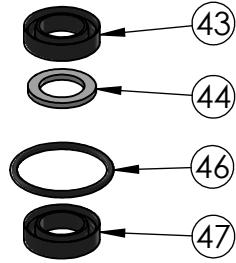
ITEM	QTY	DESCRIPTION
28	1	SPRING, CHECK VALVE
29	1	CHECK VALVE
30	1	O-RING, 4.5X2.65



**7105741**  
ITEM 75 OIL SEAL KIT

ITEM	QTY	DESCRIPTION
49	3	SEAL, OIL

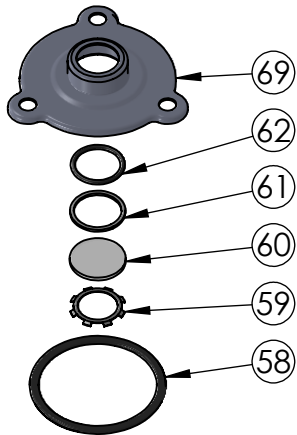




**7105742**

**ITEM 76 HIGH AND LOW PRESSURE SEAL KIT**

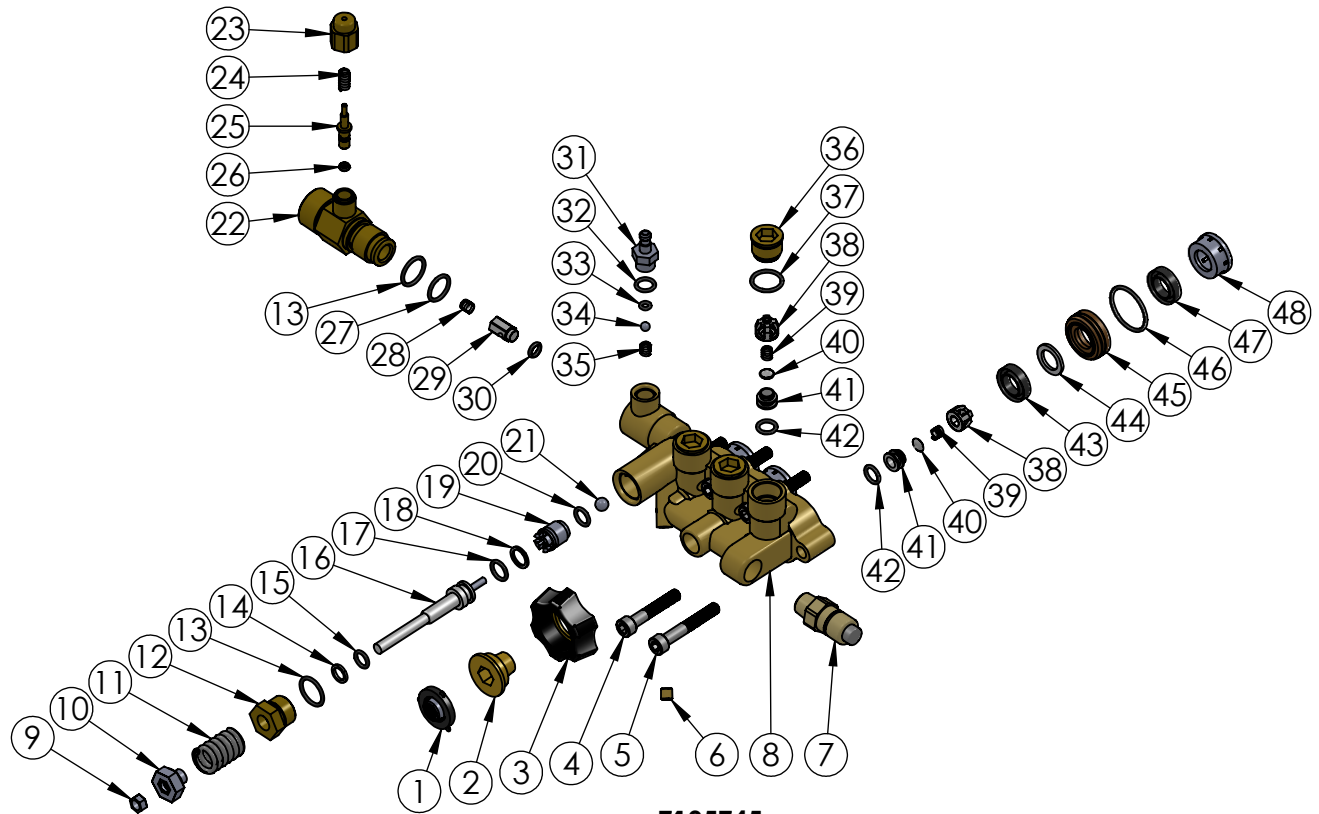
ITEM	QTY	DESCRIPTION
43	3	SEAL, HIGH PRESSURE
44	3	RING, ANTI-EXT
46	3	O-RING, 22X1.8
47	3	SEAL, LOW PRESSURE



**ITEM 77 CRANKCASE END COVER KIT**

PART NO.	DESCRIPTION
7105743	CRANKCASE SIDE COVER KIT BLACK
7105744	CRANKCASE SIDE COVER KIT SILVER

ITEM	QTY	DESCRIPTION
69	1	COVER, CRANKCASE END
58	1	O-RING, 47.5X2.65
59	1	INTERNAL RETAINING RING, SELF LOCKING
60	1	SIGHT GLASS
61	1	BACK-UP RING
62	1	O-RING, 18 X 1.8



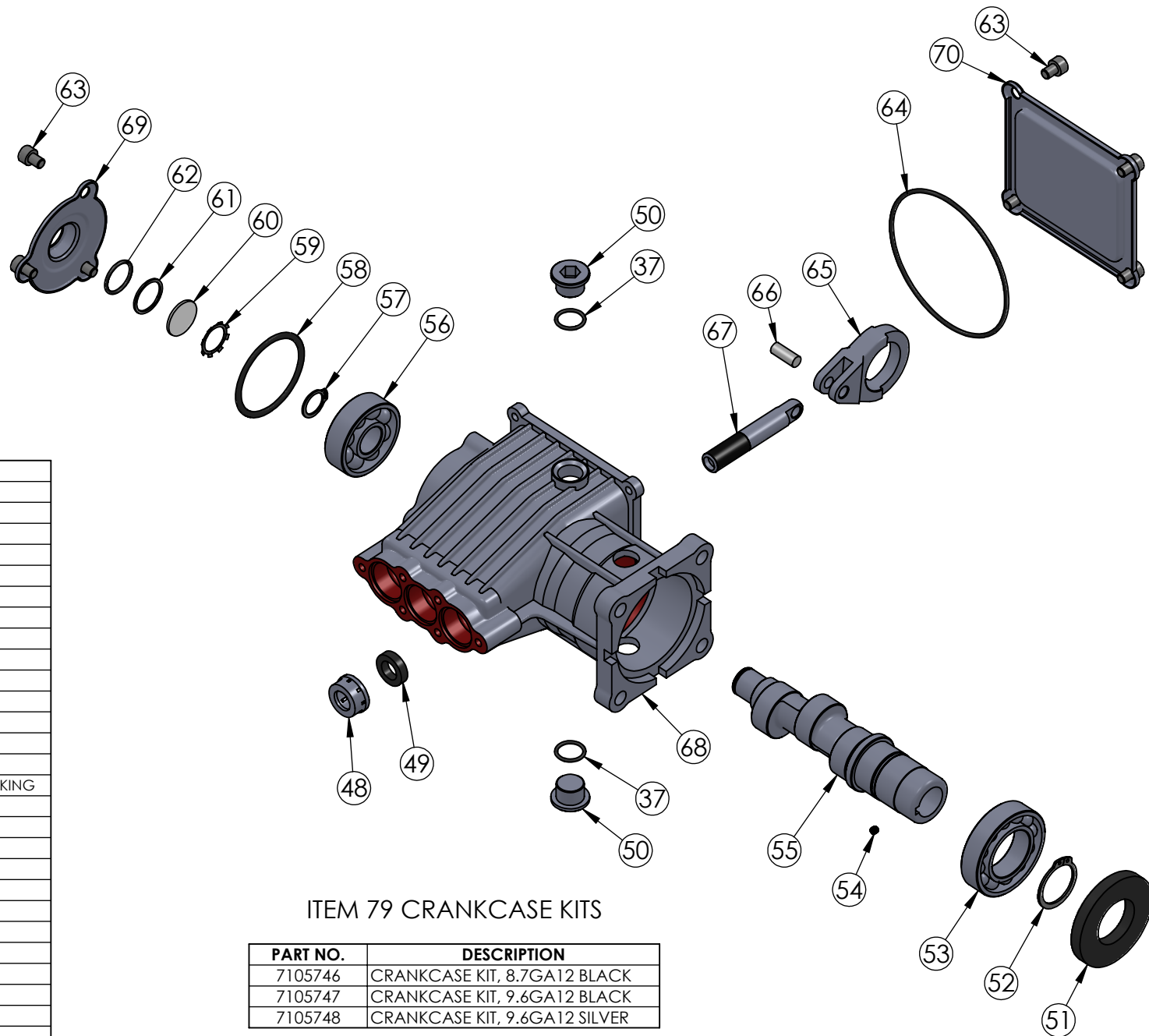
**7105745**

**ITEM 78 MANIFOLD KIT**

ITEM	QTY	DESCRIPTION
1	1	SCREEN, WATER INLET
2	1	CONNECTOR, WATER INLET
3	1	NUT, HAND TIGHT
4	3	SCREW, M6-1.0 X 35 GR 8.8
5	3	SCREW, M6-1.0 X 40 GR 8.8
6	1	SCREW, SET
7	1	VALVE, THERMAL RELIEF
8	1	MANIFOLD
9	1	NUT, UNLOADER JAM
10	1	NUT, UNLOADER ADJUSTMENT
11	1	SPRING, UNLOADER
12	1	GUIDE BUSHING, UNLOADER
13	2	O-RING
14	1	BACK-UP RING, UNLOADER VALVE
15	1	O-RING, 7.2 X 1.8
16	1	STEM, UNLOADER
17	1	O-RING, 9.0 X 1.8
18	1	BACK-UP RING, SPLIT
19	1	VALVE SEAT
20	1	O-RING, 9X1.8
21	1	BALL, UNLOADER VALVE
22	1	BODY, SOAP INJECTOR
23	1	CAP, BOOST VALVE
24	1	SPRING, BOOST VALVE

ITEM	QTY	DESCRIPTION
25	1	VALVE, PRESSURE BOOST
26	1	O-RING, 2.5X1.8
27	1	O-RING
28	1	SPRING, CHECK VALVE
29	1	CHECK VALVE
30	1	O-RING, 4.5X2.65
31	1	FITTING, SOAP INJECTION
32	1	O-RING, 7.68X1.78
33	1	O-RING, 3.68X 1.78
34	1	BALL, 3/16" SOAP VALVE
35	1	SPRING, SOAP VALVE
36	3	PLUG, MANIFOLD
37	3	O-RING, 13X1.8
38	6	CAGE, VALVE
39	6	SPRING, VALVE
40	6	DISK, VALVE
41	6	SEAT, VALVE
42	6	O-RING, 9X1.8
43	3	SEAL, HIGH PRESSURE
44	3	RING, ANTI-EXT
45	3	RETAINER
46	3	O-RING, 22X1.8
47	3	SEAL, LOW PRESSURE
48	3	RETAINER, SEAL

SIZE	DWG. NO.	REV
<b>A</b>	<b>C30 SERIES PUMP</b>	<b>A</b>
ECN# DC12-0037		SHEET 4 OF 5



ITEM	QTY	DESCRIPTION
37	2	O-RING, 13X1.8
48	3	RETAINER, SEAL
49	3	SEAL, OIL
50	2	PLUG, CRANKCASE
51	1	SEAL, OIL 29.5X58X8
52	1	RING, M30 RETAINING
53	1	BEARING, CRANKSHAFT 6006
54	1	SCREW, M4-0.7 X 4
55	-	CRANKSHAFT
	1	CRANKSHAFT 8.7GA12
	1	CRANKSHAFT 9.6GA12
56	1	BEARING, CRANKSHAFT 6303
57	1	RING, M17 RETAINING
58	1	O-RING, 47.5X2.65
59	1	INTERNAL RETAINING RING, SELF LOCKING
60	1	SIGHT GLASS
61	1	BACK-UP RING
62	1	O-RING, 18 X 1.8
63	7	SCREW, M6x10
64	1	O-RING, 90X3.55
65	3	CONNECTING ROD
66	3	PIN, CONNECTING ROD
67	3	PISTON, CERAMIC COATED
68	-	CRANKCASE
	1	CRANKCASE, BLACK
	1	CRANKCASE, SILVER
69	-	CRANKCASE END COVER
	1	CRANKCASE END COVER, BLACK
	1	CRANKCASE END COVER , SILVER
70	-	CRANKCASE SIDE COVER
	1	CRANKCASE SIDE COVER, BLACK
	1	CRANKCASE SIDE COVER, SILVER

ITEM 79 CRANKCASE KITS

PART NO.	DESCRIPTION
7105746	CRANKCASE KIT, 8.7GA12 BLACK
7105747	CRANKCASE KIT, 9.6GA12 BLACK
7105748	CRANKCASE KIT, 9.6GA12 SILVER