

ITEM	PART NO.	DESCRIPTION	QTY.
† 1	7107250	BASE FRAME, SVC ASSY W/ LABELS ALUMINUM	1
† 1.1		SUB-FRAME, ALUMINUM HORIZONTAL 11.75" C-C	1
† 1.2		BRACKET, AXLE HORIZONTAL	2
† 1.3		AXLE, Ø .625 X 20.10 (11.75" C-C FRAME)	1
† 1.4		BOLT, 5/16"-18 x 2 1/4"	4
† 1.5		NUT, 5/16"-18 NYLOCK	4
† 1.6		WASHER, SADDLE 5/16 X 1.0 X 0.060	2
† 1.7		BOLT, 5/16"-18 x 3/4"	1
† 1.8		TUBE, BASE FRAME 11.75 FORMED AL 2.0 WALL	1
† 1.9		PLATE, HORIZONTAL BASE FRAME, AL 11.75" C-C	1
† 1.10		NUT, WHIZ 5/16"-18	1
† 2	7108435	HANDLE, REAR SERVICE ASSEMBLY WITH LABELS	1
† 2.1		HANDLE TUBE, ALUMINUM 11.75" C-C	1
† 2.2		SCREW, TORX PANHEAD 1/4"-20 x 3/4"	4
2.3	7108142	DASHBOARD-NOZZLE HOLDER ASSEMBLY	1
2.4	7107067	HOLDER, NOZZLE 2PC RUBBER STRIP	1
2.5	7107068	HOLDER, NOZZLE 3PC RUBBER STRIP	1
3	100465	ENGINE, HONDA BLACK GX200T2QAPW NH1	1
4	7104174	KEY, SHAFT 3/16" x 3/16" x 1 1/4"	1
5	7107589	CAT PUMP, SVC ASSY	1
† 5.1	7106274	PUMP, CAT 4DNX25GSI	1
† 5.2		VALVE, THERMAL RELIEF 1/4" NPT(M)	1
† 5.3		FITTING, INLET GHT(F) X 3/8" NPT(M)	1
† 5.4		COUPLER, 3/8" QC-F x 3/8" NPTF	1
6	7105013	WHEEL, SERVICE KIT	1
† 6.1		POWER WASHER WHEEL, 4" x 10" BLK W/ 5/8" BRG	2
† 6.2		WASHER, 5/8" FLAT	2
† 6.3		CLIP, E-TYPE 0.625" x 0.042"	2
7	7107262	FOOT KIT, SERVICE KIT	2
† 7.1		FOOT, RECESSED RUBBER INSERT	1
† 7.2		SCREW, PANHEAD M6-1.0 X 25MM PHILLIPS MACHINE	1
8	7103750	MOUNTING KIT, ENGINE	1
† 8.1		BOLT, FLANGE 5/16"-18 x 1 3/4" HHFB	4
† 8.2		NUT, WHIZ 5/16"-18	4
9	7107590	MOUNTING KIT, CAT PUMP	1
† 9.1		PLATE, KING BRUTE PUMP MOUNTING	1
† 9.2		WASHER, SPLIT-LOCK 5/16" RUST RESISTANT	4
† 9.3		BOLT, 5/16"-24 x 3/4"	4
† 9.4		WASHER, 3/8" SPLIT-LOCK	4
† 9.5		BOLT, 3/8"-16 x 1 1/4"	4
† 10	7107941	KNOB-BOLT ASSEMBLY (7103538, 7103563)	2
† 10.1		BOLT, SADDLE 5/16"-18 x 2"	1
† 10.2		KNOB, HANDLE 5/16-18	1
11	7105186	HANDLE GRIP, SIMPSON BLACK W/ WHITE LETTERING	1
12	7103743	NOZZLE SET, 3.0 5PC 1/4" QC-M	1
13	7108125	GUN, 4500PSI 3/8QC(M) INLET X M22(F) OEM	1
14	7103550	LANCE, 16" W/ 1/4" QC-F x M22(M)	2
15	7105645	HOSE, CRIMP MFG 5/16 X 25 X3600 2% PT QC	1
16	7102207	SOAP HOSE AND FILTER KIT	1
* 17	7102045	TOOL, NOZZLE CLEANING, UNIVERSAL	1
* 19	7107725	MANUAL, OPERATORS (ALHC 3228)	1
* 20	7107325	BOX, SHIPPING MULTI UNIT PLAIN KRAFT	1

*

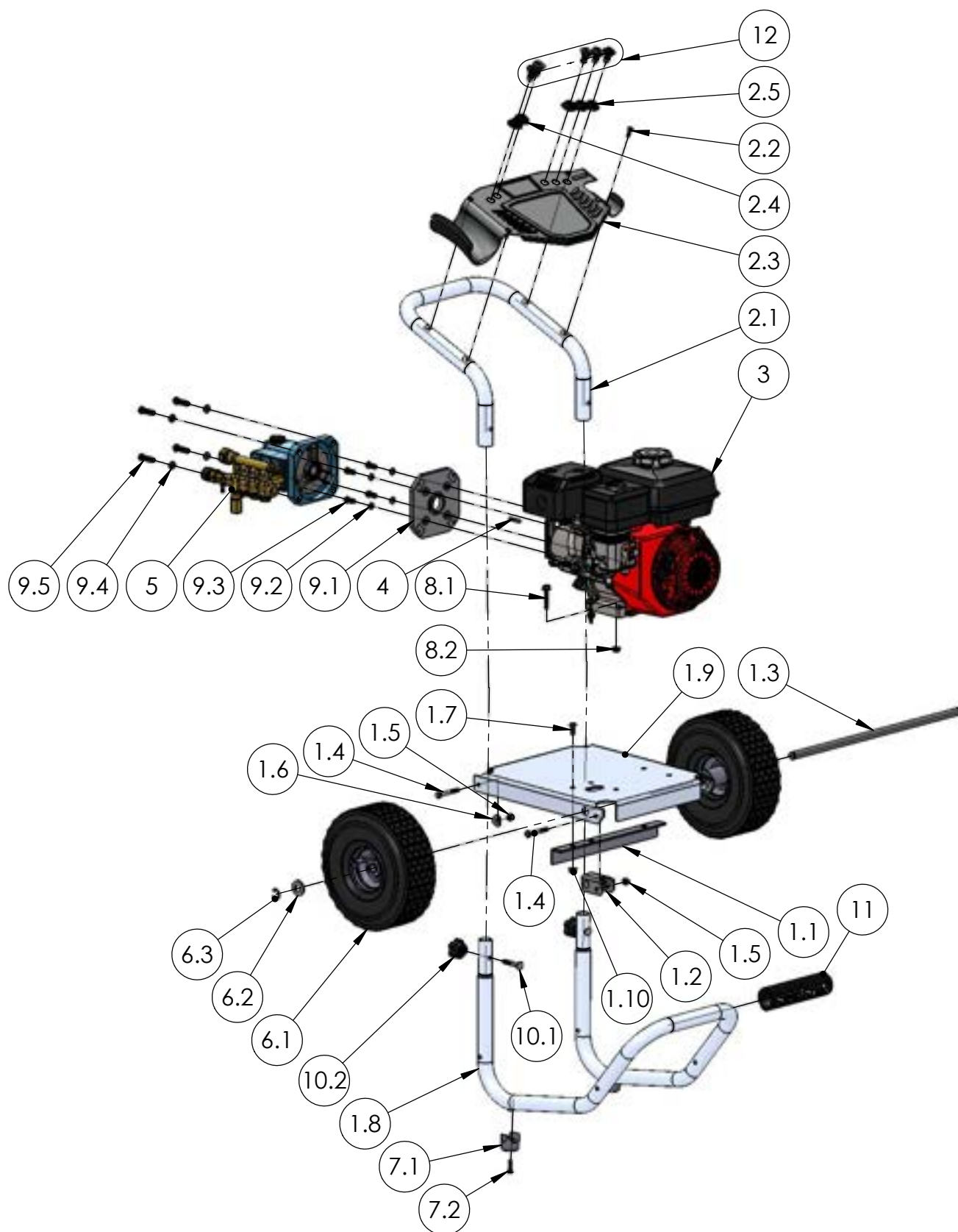
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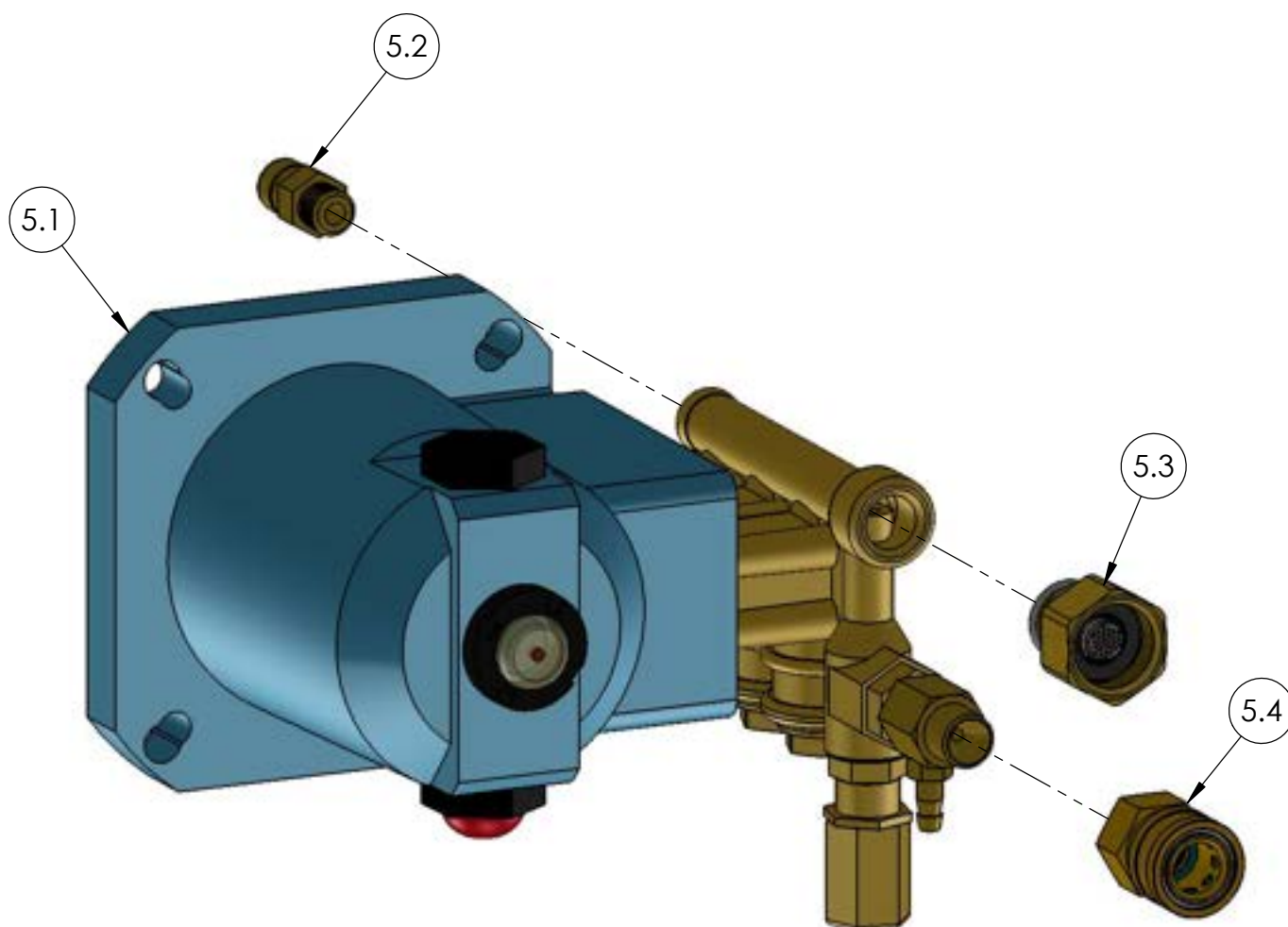
†

NOT SOLD SEPERATELY



TITLE:		
ALH3228-S SIMPSON		
SIZE A	DWG. NO. 60735	REV. B
SCALE: N/A	SHEET 1 OF 6	





CAT PUMP, SVC ASSY PART NO. 7107589

ITEM NO.	PART NO.	DESCRIPTION	QTY.
5.1	7106274	PUMP, CAT 4DNX25GSI	1
5.2	7101359	VALVE, THERMAL RELIEF 1/4" NPT(M)	1
5.3	7100355	FITTING, INLET GHT(F) X 3/8" NPT(M)	1
5.4	7100019	COUPLER, 3/8" QC-F x 3/8" NPTF	1



GUN, 4500PSI 3/8QC(M) INLET X M22(F) OEM
PART NO. 7108125



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



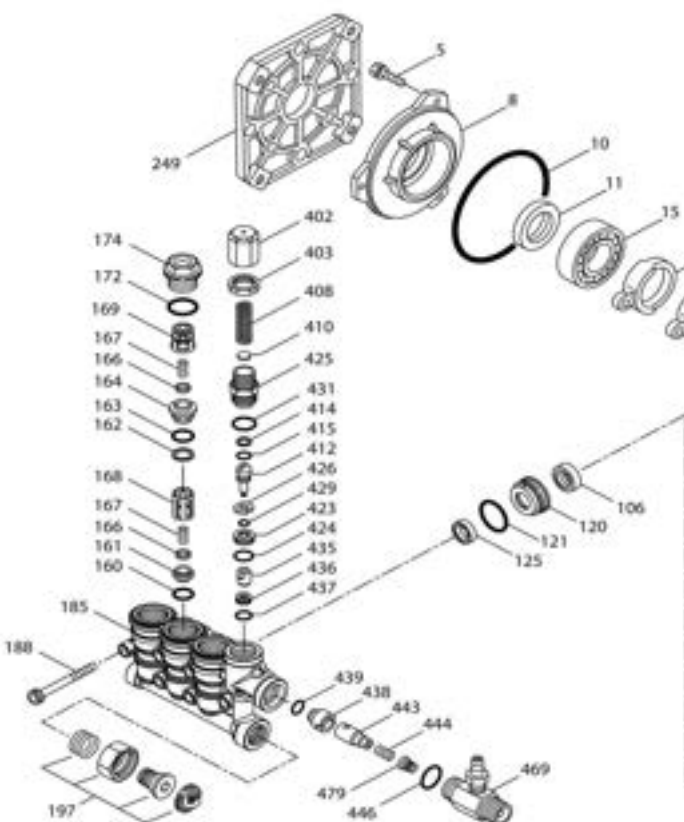
HOSE, CRIMP MFG 5/16 X 25 X3600 2% PT QC
PART NO. 7105645



SOAP HOSE AND FILTER KIT
PART NO. 7102207

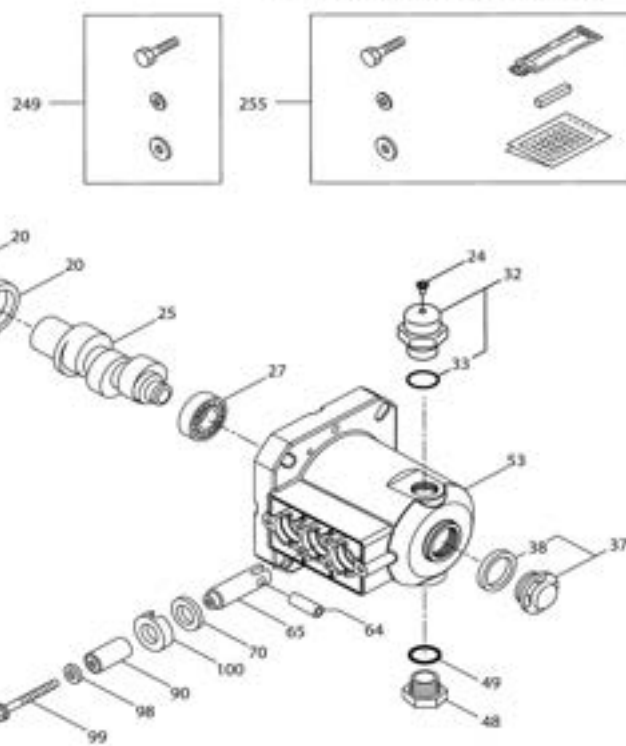
EXPLODED VIEW

July 2012

**PLUNGER PUMP MODELS**

4DNX25GSI, 4DNX27GSI

FNA PART NO. 7106274

**PARTS LIST**

ITEM	PART NO.	DESCRIPTION	QTY
5	7103829	SCREW HH SEMS (M6 X 14)	3
8	7103820	COVER, BEARING	1
10	7102604	O-RING, BEARING COVER 700	1
11	7102613	SEAL, OIL 700	1
15	7102624	BEARING, BALL INNER	1
20	7103824	ROD, CONNECTING	3
24	7106430	PLUG, OIL CAP	1
25	7103826	CRANKSHAFT, 3450 RPM, 3/4" 6.8MM STROKE	1
25	7103354	CRANKSHAFT, 3450 RPM, 3/4" 6.3MM STROKE	1
27	7103828	BEARING, BALL INNER	1
32	7102604	CAP, OIL FILLER WITH O-RING	1
33	7102617	O-RING, OIL FILL CAP	1
37	7103056	GAUGE, OIL BUBBLE WITH GASKET	1
38	7102970	GASKET, FLAT OIL GAUGE	1
48	7102787	PLUG, DRAIN	1
49	7102617	O-RING, DRAIN PLUG	1
53	7106425	CRANKCASE	1
64	7103830	PIN, CROSSHEAD	3
65	7103831	ROD, PLUNGER	3
70	7102804	SEAL, OIL CRANKCASE, 700	3
90	7103542	PLUNGER CERAMIC	3
98	7101709	WASHER, SEAL	3
99	7103833	RETAINER, PLUNGER (M6 X 35)	3

ITEM	PART NO.	DESCRIPTION	QTY
100	7102925	RETAINER SEAL	3
106	N/A	SEAL, LPS WITH S-Spg	3
120	7106427	CASE, SEAL	3
121	7102610	O-RING, SEAL CASE	3
125	7106428	SEAL, HPS	3
160	N/A	O-RING, INLET SEAT	3
161	N/A	SEAT, INLET	3
162	7102945	BACK-UP-RING, DISCHARGE SEAT	3
163	7102946	O-RING, DISCHARGE SEAT, 700	3
164	N/A	SEAT, DISCHARGE	3
166	N/A	VALVE	6
167	7102923	SPRING	6
168	7102812	RETAINER, SPRING, INLET	3
169	N/A	RETAINER, SPRING, DISCHARGE	3
172	N/A	O-RING, VALVE PLUG - 900	3
174	7106429	PLUG, VALVE WITH O-RING	3
185	7106430	HEAD, MANIFOLD WITH INTEGRAL REGULATORY BODY	1
188	7106431	SCREW, (M6 X 60)	6
197	7103839	ASSY, GH, 3/8"	1
249	7103840	ASSY, ADAPTOR MOUNT	1
255	7103841	ASSY, BOLT MOUNT	1
283	7106432	KIT, OIL DRAIN	1
300	7106433	KIT, SEAL (98, 106, 121, 125)	1
320	7106434	KIT, VALVE (160-164, 166-169, 172)	1

DC13-0161 REV B

INTEGRAL UNLOADER

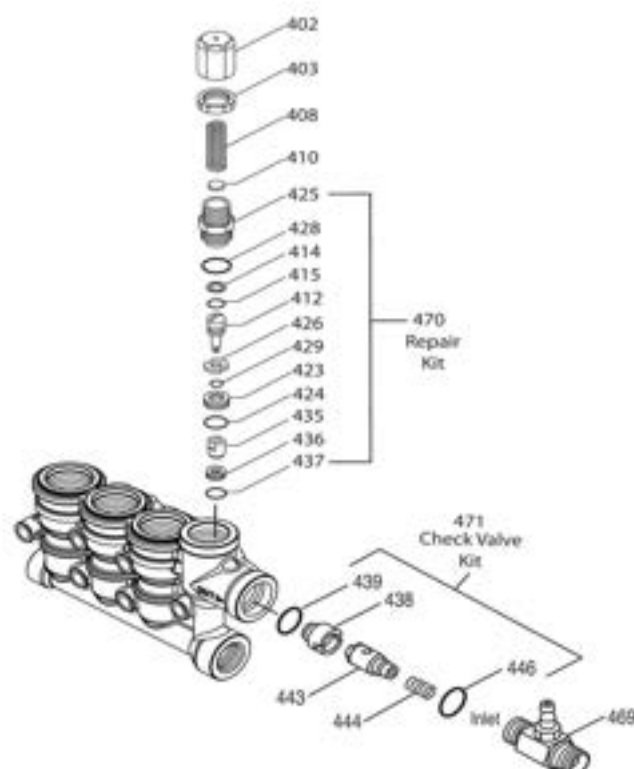
SPECIFICATIONS

Flow.....	3.0 gpm
PSI Range.....	100-2850 psi
Inlet Port	3/4" GHF
Discharge Port	M18 x 1.0

U.S. Measure

Metric Measure

(11.4 lpm)
(7-196 bar)
(3/4" GHF)
(M18 x 1.0)



PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
402	7103842	CAP, ADJUSTING	1
403	7103843	NUT, LOCK (M18 X 1)	1
408	7103544	SPRING, PRESSURE	1
410	7103845	RETAINER, SPRING	1
412	N/A	STEM, PISTON	1
414	N/A	BACK-UP RING, PISTON STEM	1
415	N/A	O-RING, PISTON STEM - 700	1
423	N/A	RETAINER, VALVE	1
424	N/A	O-RING, VALVE RETAINER (OUTER) - 700	1
425	N/A	RETAINER, PISTON	1
426	N/A	WASHER	1
428	N/A	O-RING, PISTON RETAINER - 800	1
429	N/A	O-RING, VALVE RETAINER (INNER) - 800	1
435	N/A	VALVE	1
436	7103846	SEAT	1
437	N/A	O-RING SEAT - 700	1
438	7106837	SEAT	1
439	N/A	O-RING, CHECK VALVE SEAT 700	1
443	N/A	VALVE, CHECK	1
444	7103048	SPRING, CHECK VALVE	1
446	7103851	O-RING, BODY - 800	1
468	7103541	KIT, O-RING	1
469	7106836	INJECTOR, FIXED CHEMICAL	1
470	7106435	KIT, REPAIR (432, 414, 415, 423-426, 428, 429, 435-437)	1
471	7106436	KIT, REPAIR (438, 439, 443, 444, 446)	1

UNLOADER TYPE

FNA PART NO 7106274

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 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 regulator 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, 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.

SERVICE:

The unloader should be serviced on the same schedule as the seals in the pump. Refer to 4DNX Service Manual for start-up, servicing of seals and valves, torque requirements and diagnosis and maintenance chart.

7332 FIXED CHEMICAL INJECTOR

SPECIFICATIONS

U.S. Measure

Metric Measure

Flow.....	3.0 gpm	(11.4 lpm)
Nozzle Orifice.....	2.1 mm	(2.1 mm)
Hose Barb.....	1/4"	(1/4")
Inlet Port	M18 x 1.0	(M18 x 1.0)
Discharge Port	3/8" NPTM	(3/8" NPTM)
Weight	5.3 oz.	(0.15kg)
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 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 pressure 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.