



SOUTHWEST OILFIELD PRODUCTS, INC. MUD PUMP EXPENDABLE PARTS LIST

SOUTHWEST 8495A FLUID END FOR NATIONAL 9-P-100

®

MUD PUMP PERFORMANCE CHART

PUMP MODEL	MAX I.H.P.	MAX S.P.M.	STROKE LENGTH	LINER SIZE IN INCHES													
				4	4 ½	5	5 ¼	5 ½	5 ¾	6	6 ¼	6 ½	6 ¾				
9-P-100	1000	150	9-1/4"	MAX-P.S.I.	5000	5000	4360	3954	3605	3296	3030	2790	2580	2392			
				G.P.R.	1.51	1.91	2.36	2.60	2.85	3.12	3.40	3.69	3.99	4.30			
				G.P.M. @ 120 R.P.M	181	229	283	312	342	374	408	443	479	516			

NOTE: I.H.P.= INPUT HORSE POWER S.P.M.= STROKE PER MINUTE P.S.I.= POUNDS PER SQUARE INCH G.P.R.= GALLONS PER REVOLUTION

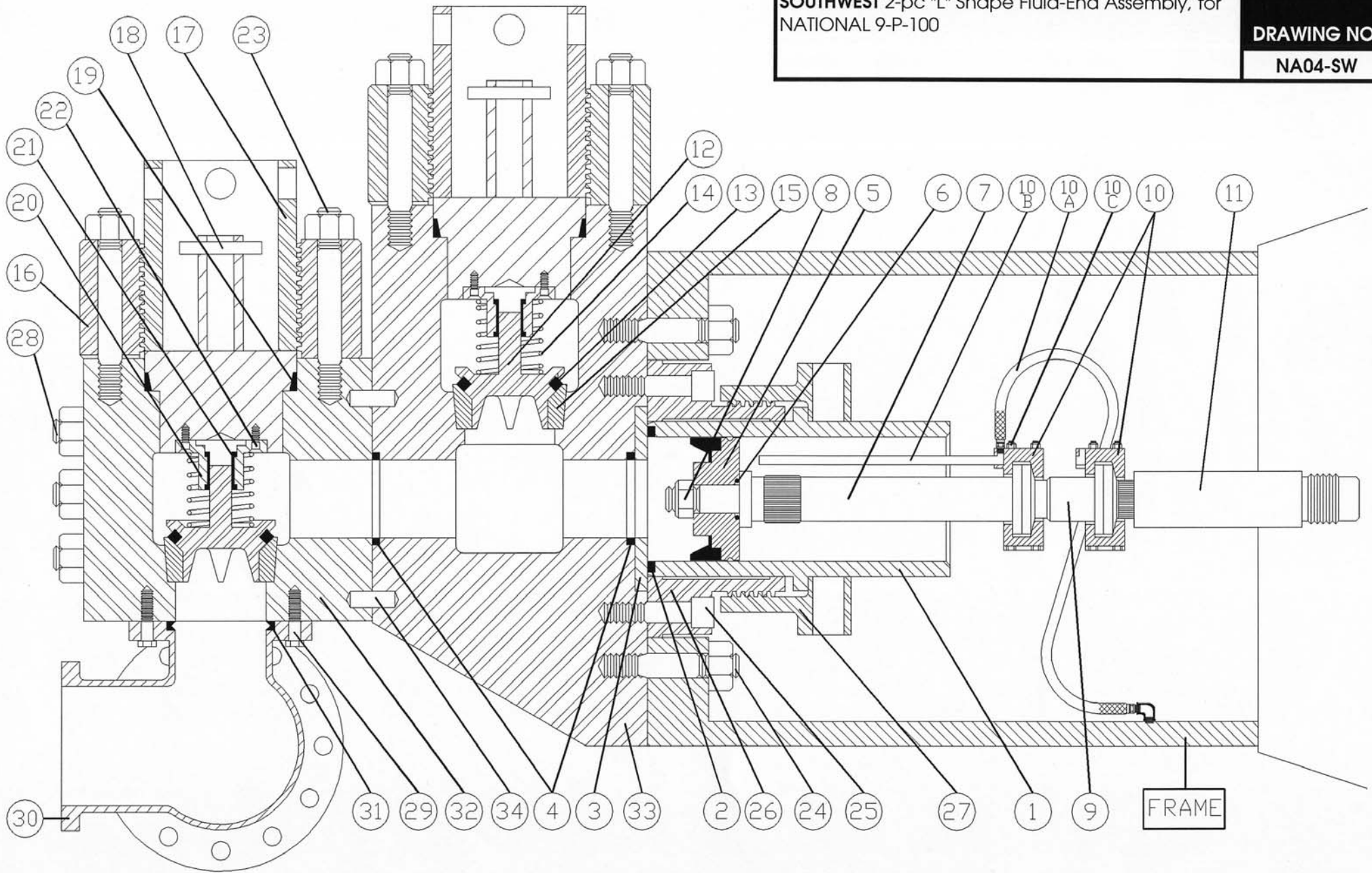
*MAX – P.S.I. CALCULATIONS DO NOT EXCEED MAXIMUM FLUID END PRESSURE RATINGS

BASED ON 100% VOLUMETRIC EFFICIENCY AND 90% MECHANICAL EFFICIENCY

SOUTHWEST 2-pc "L" Shape Fluid-End Assembly, for NATIONAL 9-P-100

DRAWING NO.

NA04-SW



FLUID END TYPE	MODEL OF PUMP	SIZE OF PUMP
SOUTHWEST 5000 P.S.I.	NATIONAL 9-P-100	6-1/4" X 9-1/4"

ITEM NO.	PART NO.	DESCRIPTION	QTY. REQ'D
	8495A	FLUID END ASSEMBLY: (CONSIST OF ITEMS 3, 4, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 32, 33, 34, 47)	3
1	1367YXX	LINER (REFER TO GUIDE TO ORDERING CHART FOR TYPE (Y) AND FOR SIZE (XX))	3
2	2930-XX	LINER SEAL (REFER TO GUIDE TO ORDERING CHART FOR TYPE (Y) AND SIZE (XX))	3
3	8495-3	WEARPLATE	3
4	2988	WEARPLATE AND MODULE SEAL (2988U URETHANE AVAILABLE)	6
5	XX-BYY	PISTON (REFER TO GUIDE TO ORDERING CHART FOR TYPE (Y) AND SIZE (XX))	3
6	568-225	PISTON O-RING	3
7	1291-32	PISTON ROD (WITH ELASTIC STOP NUT)	3
8	API-4ESN	PISTON ROD ELASTIC STOP NUT	3
9	1291-1	SUB ROD	3
10	1291CWY	ROD CLAMP (CONSIST OF 10A, 10B, 10C) (FOR CLAMP ONLY, USE 1291C)	3
10A	1200H30	HOSE (1/2" X 30" WITH 1/2" MALE X 3/8" MALE CONNECTIONS)	3
10B	1286CWYFP13	DUAL SPRAY PIPE	3
10C	4020-29	ROD CLAMP BOLT (5/8-6" GRADE 8 BOLT WITH LOCK NUT AND WASHER)	12
11	1200G91	PONY ROD	3
12	SEE PAGE	VALVE	6
13	SEE PAGE	VALVE INSERT (IF REQUIRED)	6
14	SEE PAGE	VALVE SPRING	6
15	SEE PAGE	VALVE SEAT	6
	SWTM1700	HYDRAULIC SEAT PULLER KIT COMPLETE (REFER TO TOOLS PAGE OF CATALOG FOR DETAILS)	
	4467A	SOUTHWEST HP QUICK-CHANGE VALVE COVER ASSEMBLY (CONSIST OF ITEMS 16-23)	6
16	4467	THREADED FLANGE	6
17	4567	SCREW GLAND	6
18	4667A	PLUG (COMPLETE WITH VALVE GUIDE, SCREWS, AND BUSHING)	6
19	P128	HP VALVE COVER PLUG SEAL	6
20	4760-3R	VALVE GUIDE (COMPLETE WITH BUSHING #4700I)	6
21	4700I	VALVE GUIDE BUSHING (4700IU URETHANE AVAILABLE)	6
22	4016-98	VALVE GUIDE SCREW	12
23	4015-5	VALVE COVER STUD (WITH SW PART# HHN1375-6 1-3/8"-6" HEAVY HEX NUT)	72
24	4015-51	POWER END STUD (WITH SW PART# HHN1250-7 1-1/4"-7" HEAVY HEX NUT)	24
25	4017-8	LINER RETAINER FERRY HEAD CAP SCREW	18
26	6495	LINER RETAINER FLANGE	3

FLUID END TYPE	MODEL OF PUMP	SIZE OF PUMP
SOUTHWEST 5000 P.S.I.	NATIONAL 9-P-100	6-1/4" X 9-1/4"

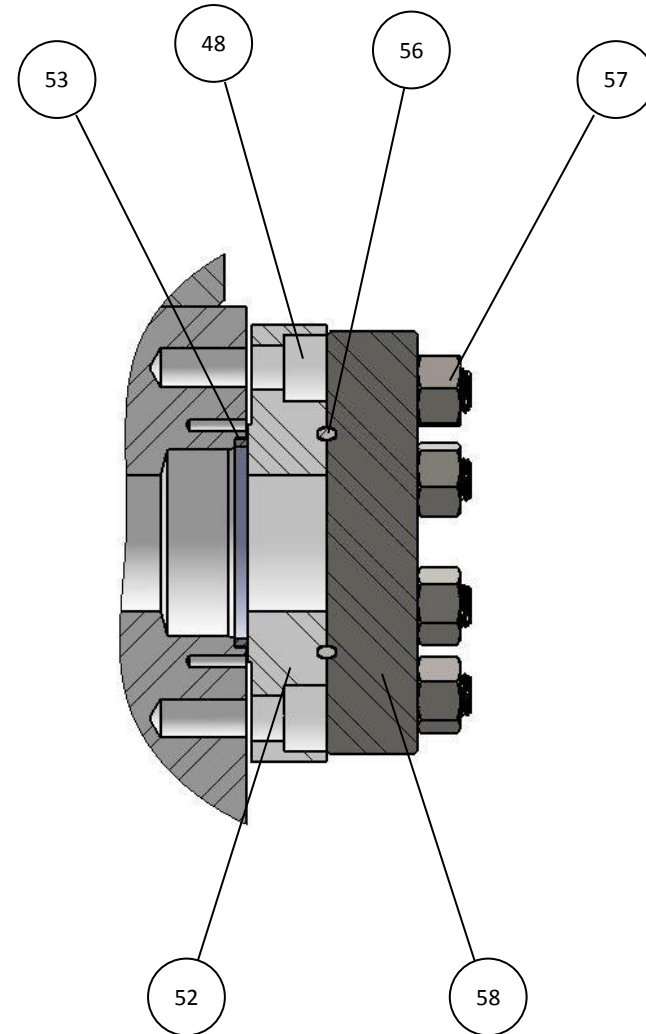
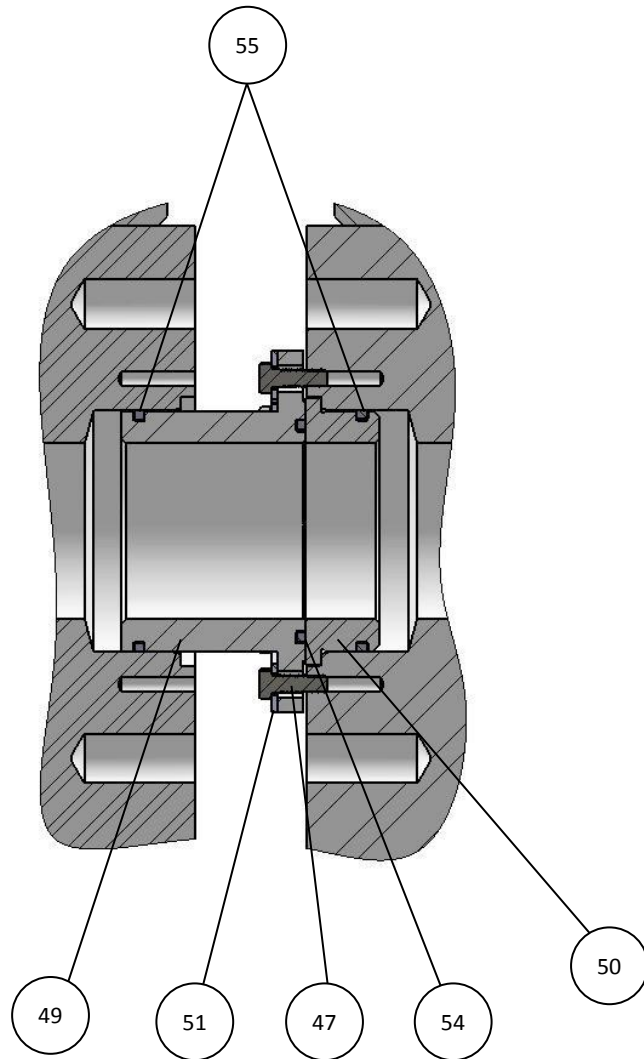
ITEM NO.	PART NO.	DESCRIPTION	QTY. REQ'D
27	6595	LINER RETAINER NUT	3
28	4017-1	SUCTION MODULE STUD (WITH SW PART# HHN1500-8 1-1/2"-8 HEAVY HEX NUT)	18
29	4018-19	SUCTION MANIFOLD CAP SCREW	24
30	8595	SUCTION MANIFOLD	1
31	AJO235	SUCTION MANIFOLD GASKET	3
32	8467-2S	SUCTION MODULE	3
33	8495-1D	DISCHARGE MODULE	3
34	8488-5	DOWEL PIN	6
		<i>ITEMS NUMBER 35 THRU 46 ARE NOT SHOWN INTENTIONALLY.</i>	
47	4018-18	DISCHARGE CONNECTOR CAP SCREW	16
48	4018-27	DISCHARGE SPACER FLANGE SOCKET HEAD CAP SCREW	16
49	8367-1	DISCHARGE CONNECTOR	2
50	8367-2	DISCHARGE ADAPTER	2
51	8367-3	BACK-UP RING	4
52	8367-4	DISCHARGE SPACER FLANGE	2
53	2967-3	DISCHARGE SPACER FLANGE SEAL	2
54	2967-1	DISCHARGE CONNECTOR / ADAPTER PACKING	2
55	2967-2	DISCHARGE CONNECTOR / ADAPTER PACKING	4
56	R39	RING JOINT GASKET	2
57	4017-45	DISCHARGE SPACER FLANGE STUD (WITH SW PART# HHN1250-7 1-1/4"-7 HEAVY HEX NUT)	16
58	5000-4B FLANGE	4" 5000 BLIND FLANGE	1
59	9070014	PONY ROD SEAL	12
60	80491392	SPLASH GUARD	3
		** POLYURETHANE SEALS AVAILABLE **	



SOUTHWEST
OILFIELD PRODUCTS, INC.

DRAWING NO. 8367-A

SOUTHWEST DISCHARGE MANIFOLD
ASSEMBLY, FOR NATIONAL 9-P-100



SOUTHWEST 5000 PSI NATIONAL 9-P-100 GUIDE TO ORDERING

PISTONS		LINERS			LINER GASKETS		
SIZE	FAIL-SAFE	DUAL-DURO®	BLACK CAT	GRAYLOY®	ZIRCONIA	RUBBER	URETHANE
4"	76BFS	76BDD	76BBC	1367G06	1367ZIR06	2930-06	2930-06U
4 1/4"	77BFS	77BDD	77BBC	1367G07		2930-07	2930-07U
4 1/2"	78BFS	78BDD	78BBC	1367G08	1367ZIR08	2930-08	2930-08U
4 3/4"	79BFS	79BDD	79BBC	1367G09		2930-09	2930-09U
5"	81BFS	81BDD	81BBC	1367G1	1367ZIR1	2930-1	2930-1U
5 1/4"	82BFS	82BDD	82BBC	1367G2		2930-2	2930-2U
5 1/2"	83BFS	83BDD	83BBC	1367G3	1367ZIR3	2930-3	2930-3U
5 3/4"	84BFS	84BDD	84BBC	1367G4		2930-4	2930-4U
6"	85BFS	85BDD	85BBC	1367G5	1367ZIR5	2930-5	2930-5U
6 1/4"	86BFS	86BDD	86BBC	1367AG6			
6 1/2"	87BFS	87BDD	87BBC	1367AG7	1367ZIR7		
6 3/4"	88BFS	88BDD	88BBC				
NOTE: DUAL-DURO® AND GRAYLOY® ARE REGISTERED TRADEMARKS OF SOUTHWEST® OILFIELD PRODUCTS.							

VALVES & SEATS (NATIONAL 9-P-100)

TYPE	VALVE	INSERT	SPRING	STAINLESS SPRING	SEAT	PULLER HEAD	PULLER HEAD STYLE
SOUTHWEST (Full Open)	773-1B	N/A	SW5710-110L	N/A	873-1	SWTM3750	SPLIT JAW
FULL OPEN-ROUGHNECK (Cast N Place Insert)	SWND-6V2	N/A	SW5710-115	N/A	SWND-6S4	SWND-6PH SWTM27SXXN	PANCAKE SPLIT JAW
FULL OPEN-ROUGHNECK (High Temp)	SWND-6V2HC	NA	SW5710-115	N/A	SWND-6S4	SWND-6PH SWTM27SXXN	PANCAKE SPLIT JAW
FULL OPEN-ROUGHNECK (w/Replaceable Urethane Insert)	SWND-6V1	SWND-6I	SW5710-115	N/A	SWND-6S4	SWND-6PH SWTM27SXXN	PANCAKE SPLIT JAW
3 WEB DOUBLE ANGLE O-RING	SWR0500119	SWR0515845	SWR0513744	SWR0514790	SWR0512436	SWTM3-7D	3 J HOOK
3 WEB (High Temp)	SWR0520586	SWR0520585	SWR0513744	SWR0514790	SWR0512436	SWTM3-7D	
3 WEB STANDARD PLATE	SWR0505038	SWR0504890	SWR0513744	SWR0515576	SWR0512436	SWTM3-7D	
4 WEB	SWU5B-EH	SWUDD-6AB	SW5710-115	N/A	SW6ADD-B4	SWTM4-6	4 J HOOK
4 WEB (High Temp)	SWU5B-EHHT	SWUDD-6ABHT	SW5710-115	N/A	SW6ADD-B4	SWTM4-6	

PANCAKE



SPLIT JAW



3 J HOOK



4 J HOOK



**TORQUE SPECIFICATIONS FOR 8495A SOUTHWEST FLUID END ASSEMBLY
FOR NATIONAL 9-P-100 5000 P.S.I.**

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	TORQUE TYPE (EXPRESSED IN FOOT-POUNDS)	
		<u>COPPERCOTE</u>	<u>MOLY GREASE</u>
API-4 ESN	PISTON ROD NUT	<i>NO MORE FORCE THAN ONE MAN ON A 3' WRENCH/CHEATER COMBINATION</i>	
4018-94	ROD CLAMP BOLT	<i>150 MAXIMUM</i>	<i>150 MAXIMUM</i>
4015-5	VALVE COVER STUD	876	1270
4015-51	POWER END STUD	669	970
4017-8	SOCKET HEAD CAP SCREW	455	682
4017-1	SUCTION MODULE STUD	1397	2025
4018-19	SUCTION MANIFOLD CAPSCREW	215	322
4018-27	DISCHARGE SPACER FLANGE SOCKET HEAD CAP SCREW	908	1363
4017-45	DISCHARGE SPACER FLANGE STUD	757	1098



SOUTHWEST
OILFIELD PRODUCTS, INC.

8495-A SOUTHWEST STYLE FLUID END REVISION SUMMARY

REVISION	DATE	REASON OF CHANGE
REV. A	8/15/16	UPDATED BILL OF MATERIALS PAGE ITEM NO. 52 ADDED PART NO. 8367-4 & ITEM NO. 58 PART NO. WAS INCORRECT UPDATED PART NO. 5000-4B FLANGE
REV. B	02/23/2022	REVISED ITEM 56 PART NUMBER (R39D REPLACED BY R39).