



SOUTHWEST OILFIELD PRODUCTS, INC. MUD PUMP EXPENDABLE PARTS LIST

SOUTHWEST 8488-14A FLUID END FOR OILWELL HD-1700-PT/HD-1400-PT

®

MUD PUMP PERFORMANCE CHART

PUMP MODEL	MAX I.H.P.	MAX S.P.M.	STROKE LENGTH	LINER SIZE IN INCHES													
				4	4 1/2	5	5 1/4	5 1/2	5 3/4	6	6 1/4	6 1/2	6 3/4	7	7 1/4	7 1/2	
HD-1700-PT	1700	120	12"	MAX-P.S.I.	5000	5000	5000	5000	5000	5000	4960	4572	4227	3919	3644	3397	3175
				G.P.R.	1.96	2.48	3.06	3.37	3.70	4.05	4.41	4.78	5.17	5.58	6.00	6.43	6.89
				G.P.M. @ 120 S.P.M.	235	298	367	404	444	486	529	574	620	670	720	772	827
HD-1400-PT	1400	120	12"	MAX-P.S.I.	5000	5000	5000	5000	4714	4313	3960	3650	3380	3130	2910	2713	2535
				G.P.R.	1.96	2.48	3.06	3.37	3.70	4.05	4.41	4.78	5.17	5.58	6.00	6.43	6.89
				G.P.M. @ 120 S.P.M.	235	298	367	404	444	486	529	574	620	670	720	772	827

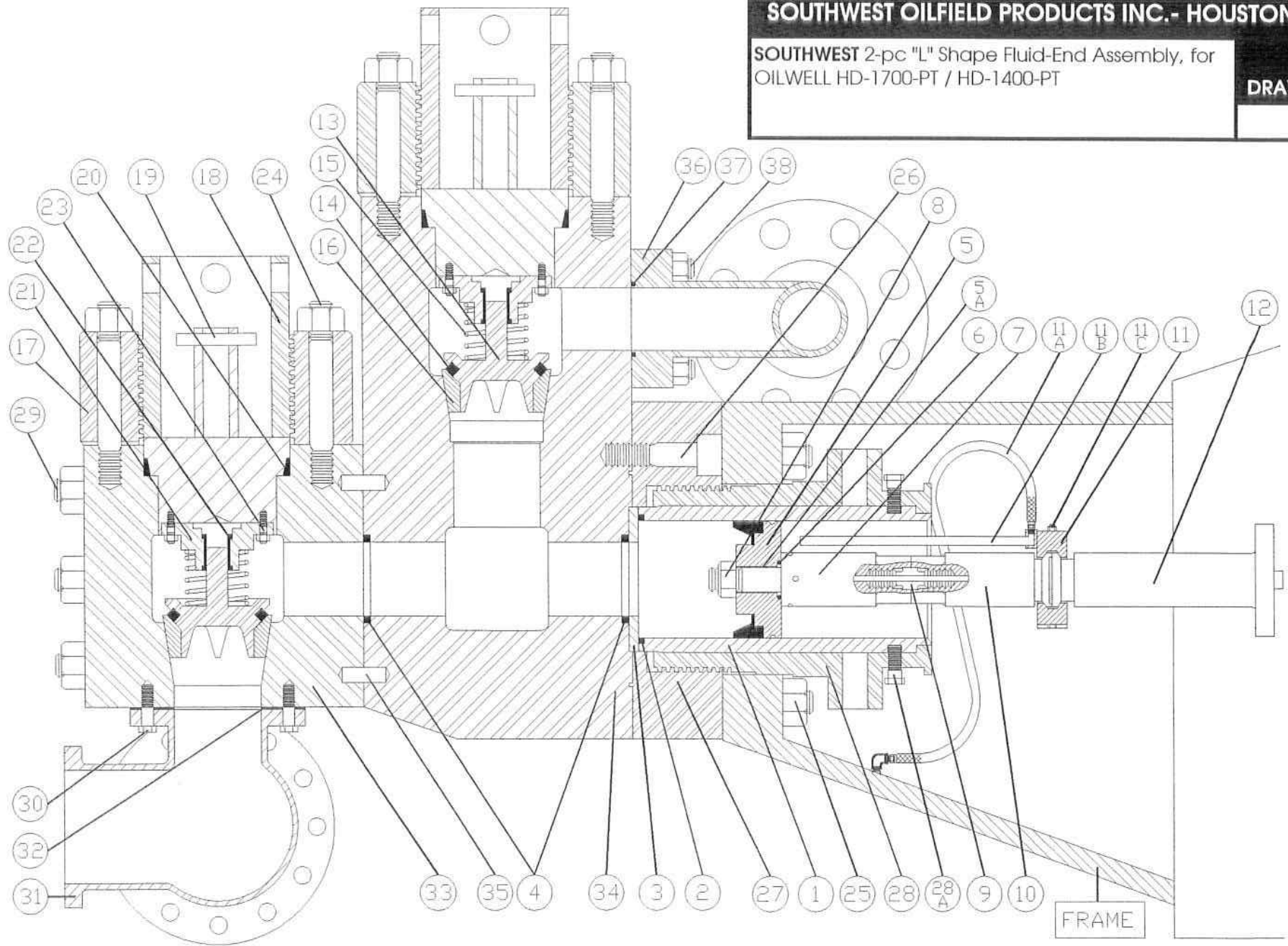
NOTE: I.H.P.= INPUT HORSE POWER S.P.M.= STROKE PER MINUTE P.S.I.= POUNDS PER SQUARE INCH G.P.R.= GALLONS PER REVOLUTION

*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
OILWELL HD-1700-PT / HD-1400-PT

DRAWING NO.



FLUID END TYPE	MODEL OF PUMP	SIZE OF PUMP
SOUTHWEST 5000 PSI	OILWELL HD-1700-PT / HD-1400-PT	7-1/2" X 12"

ITEM NO.	PART NO.	DESCRIPTION	QTY. REQ'D
	8488-14A	FLUID END ASSEMBLY: (CONSISTS OF ITEMS: 3, 4, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 28A, 29, 30, 33, 34, 35, & 38)	
1	1388-XX	LINER (LARGE BODY) (REFER TO GUIDE FOR ORDERING CHART FOR TYPE (G); (Y); AND FOR BORE SIZE (XX))	3
2	2974-XX	LINER GASKET (REFER TO GUIDE TO ORDERING CHART FOR TYPE AND SIZE (XX))(ALSO AVAILABLE IN URETHANE)	3
3	8488-12	WEARPLATE	3
4	2988	MODULE AND WEARPLATE GASKET (ALSO AVAILABLE IN URETHANE PART# 2988U)	6
5	XX-BYY	PISTON REFER TO GUIDE FOR ORDERING CHART ON PG. 6 FOR SIZE (XX) AND FOR TYPE (YY)	3
5A	2932	PISTON BUSHING (FROM 1 5/8" TO 1 1/2" STRAIGHT BORE)	3
6	568-225	PISTON SEAL	3
7	1290HW25	PISTON ROD (WITH 1 1/2-8 ELASTIC STOP NUT)	3
8	API-4ESN	PISTON ROD NUT	3
9	1290W2	PISTON ROD CONNECTING STUD	3
10	1290HW1	SUB ROD	3
11	1290CW	ROD CLAMP (WITH WATER JACKET)	3
11A	1200H30	HOSE (1/2" X 30" WITH 1/2" MALE X 3/8" MALE CONNECTIONS)	3
11B	1200120	PIPE (3/8" X 12" GALVANIZED AND THREADED ON ONE END)	3
11C	4018-94	BOLT (5/8-11 GRADE 8 BOLT WITH LOCK NUT AND WASHER)	6
12	1200G90	PONY ROD	3
13	SEE PAGE	VALVE COMPLETE	6
14	SEE PAGE	VALVE INSERT	6
15	SEE PAGE	VALVE SPRING	6
16	SEE PAGE	VALVE SEAT	6
	SWTM1700	HYDRAULIC SEAT PULLER KIT COMPLETE (REFER TO TOOLS SECTION IN CATALOG)	1
	4475-1A	SOUTHWEST HP QUICK-CHANGE VALVE COVER ASSEMBLY: (CONSISTS OF ITEM NOs 17-24)	
17	4475	VALVE COVER FLANGE	6
18	4575	SCREW GLAND	6
19	4675-1A	PLUG (COMPLETE WITH VALVE GUIDE; BUSHING; AND SCREWS) INCLUDES ITEMS 21, 22, & 23	6
20	P129	HP VALVE COVER PLUG SEAL (ALSO AVAILABLE IN URETHANE PART# P129U)	6
21	4775R	VALVE GUIDE (COMPLETE WITH BUSHING #4700-I)	6
22	4700I	VALVE GUIDE BUSHING (ALSO AVAILABLE IN URETHANE PART# 4700IU)	6
23	4018-88	VALVE GUIDE SCREW	12
24	4015-2	VALVE COVER STUD (WITH SW PART# HHN1250-7 1 1/4-7 HEAVY HEX NUT)	72

SOUTHWEST 5000 PSI HD-1700-PT/HD-1400-PT GUIDE TO ORDERING

PISTONS								LINERS		LINER GASKET	
SIZE	FAIL-SAFE	DUAL-DURO®	BLACK CAT	GRAYLOY	ZIRCONIA	RUBBER	URETHANE				
4"	76BFS	76BDD	76BBC	1388G06	1388ZIR06	2974-06	2974-06U				
4 1/4"	77BFS	77BDD	77BBC	1388G07		2974-07	2974-07U				
4 1/2"	78BFS	78BDD	78BBC	1388G08	1388ZIR08	2974-08	2974-08U				
4 3/4"	79BFS	79BDD	79BBC	1388G09		2974-09	2974-09U				
5"	81BFS	81BDD	81BBC	1388G1	1388ZIR1	2974-1	2974-1U				
5 1/4"	82BFS	82BDD	82BBC	1388G2		2974-2	2974-2U				
5 1/2"	83BFS	83BDD	83BBC	1388G3	1388ZIR3	2974-3	2974-3U				
5 3/4"	84BFS	84BDD	84BBC	1388G4		2974-4	2974-4U				
6"	85BFS	85BDD	85BBC	1388G5	1388ZIR5	2974-5	2974-5U				
6 1/4"	86BFS	86BDD	86BBC	1388G6		2974-6	2974-6U				
6 1/2"	87BFS	87BDD	87BBC	1388G7	1388ZIR7	2974-7	2974-7U				
6 3/4"	88BFS	88BDD	88BBC	1388G8		2974-8	2974-8U				
7"	89BFS	89BDD	89BBC	1388G9	1388ZIR9	2974-9	2974-9U				
7 1/4"	110BFS	110BDD	110BBC	N/A		2974-10	2974-10U				
7 1/2"	111BFS	111BDD	111BBC	N/A		2974-11	2974-11U				

NOTE: DUAL-DURO® AND GRAYLOY® ARE REGISTERED TRADEMARKS OF SOUTHWEST® OILFIELD PRODUCTS.

VALVES & SEATS HD-1700-PT/HD-1400-PT

TYPE	VALVE	INSERT	SPRING	STAINLESS SPRING	SEAT	PULLER HEAD	PULLER HEAD STYLE
SOUTHWEST (Full Open)	777-8B	N/A	941	N/A	877-7	SWTM4250	SPLIT JAW
FULL OPEN-ROUGHNECK	SWND-7V2	N/A	SW5710-115L	N/A	SWND-7S1	SWTM40-SN SWND-7PH	SPLIT JAW PANCAKE
FULL OPEN-ROUGHNECK (High Temp)	SWND-7V2HC	N/A	SW5710-115L	N/A	SWND-7S1	SWTM40-SN SWND-7PH	SPLIT JAW PANCAKE
FULL OPEN-ROUGHNECK (w/Replaceable Urethane Insert)	SWND-7V1	SWND-7I	SW5710-115L	N/A	SWND-7S1	SWTM40-SN SWND-7PH	SPLIT JAW PANCAKE
3 WEB DOUBLE ANGLE O-RING	SWR0500110	SWR0514275	SWR0513744	SWR0514790	SWR0509309	SWTM3-7T	3 J HOOK
3 WEB (High Temp)	SWR0520502	SWR0520501	SWR0513744	SWR0514790	SWR0509309	SWTM3-7T	
3 WEB STANDARD PLATE	SWR0505062	SWR0504893	SWR0513937	SWR0514423	SWR0509309	SWTM3-7T	
4 WEB	SWU5C-EEF	SWUDD-7B	SW5710-110	N/A	SW7DD-B1	SWTM4-7	4 J HOOK
4 WEB (High Temp)	SWU5C-EEFHT	SWUDD-7BHT	SW5710-110	N/A	SW7DD-B1	SWTM4-7	

PANCAKE



SPLIT JAW



3 J HOOK



4 J HOOK



**TORQUE SPECIFICATIONS FOR 8488-14A SOUTHWEST FLUID END ASSEMBLY
OILWELL HD-1700-PT / HD-1400-PT 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	NO MORE THAN ONE MAN ON A 3' WRENCH/CHEATER COMBINATION	
4018-94	BOLT	<i>150 MAXIMUM</i>	<i>150 MAXIMUM</i>
4016-99	VALVE GUIDE SCREW	44	64
4015-2	VALVE COVER STUD	669	970
4019-18	POWER END STUD	2275	3299
4018-81	LINER RETAINER FLANGE	908	1363
4018-80	SUCTION MODULE STUD	1397	2025
4018-70	SUCTION MANIFOLD CAP SCREW	188	282
4016-3	DISCHARGE MANIFOLD STUD	957	1388



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**SOUTHWEST 8488-14A FLUID END FOR OILWELL HD-1700-PT/HD-1400-PT
REVISION SUMMARY**

<u>REVISION</u>	<u>DATE</u>	<u>REASON OF CHANGE</u>
REV. A	6/01/15	UPDATED TORQUE SPECIFICATION PAGE