



SOUTHWEST OILFIELD PRODUCTS, INC. MUD PUMP EXPENDABLE PARTS LIST

SOUTHWEST 8412A FLUID END FOR IDECO T-1000

®

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"	
T-1000	1000	140	10"	MAX-P.S.I.	5000	5000	4322	3917	3572	3266	3001	2764	2557	2369	2204	2054	1919
				G.P.R.	1.63	2.07	2.55	2.81	3.09	3.37	3.67	3.98	4.31	4.65	5.00	5.36	5.74

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

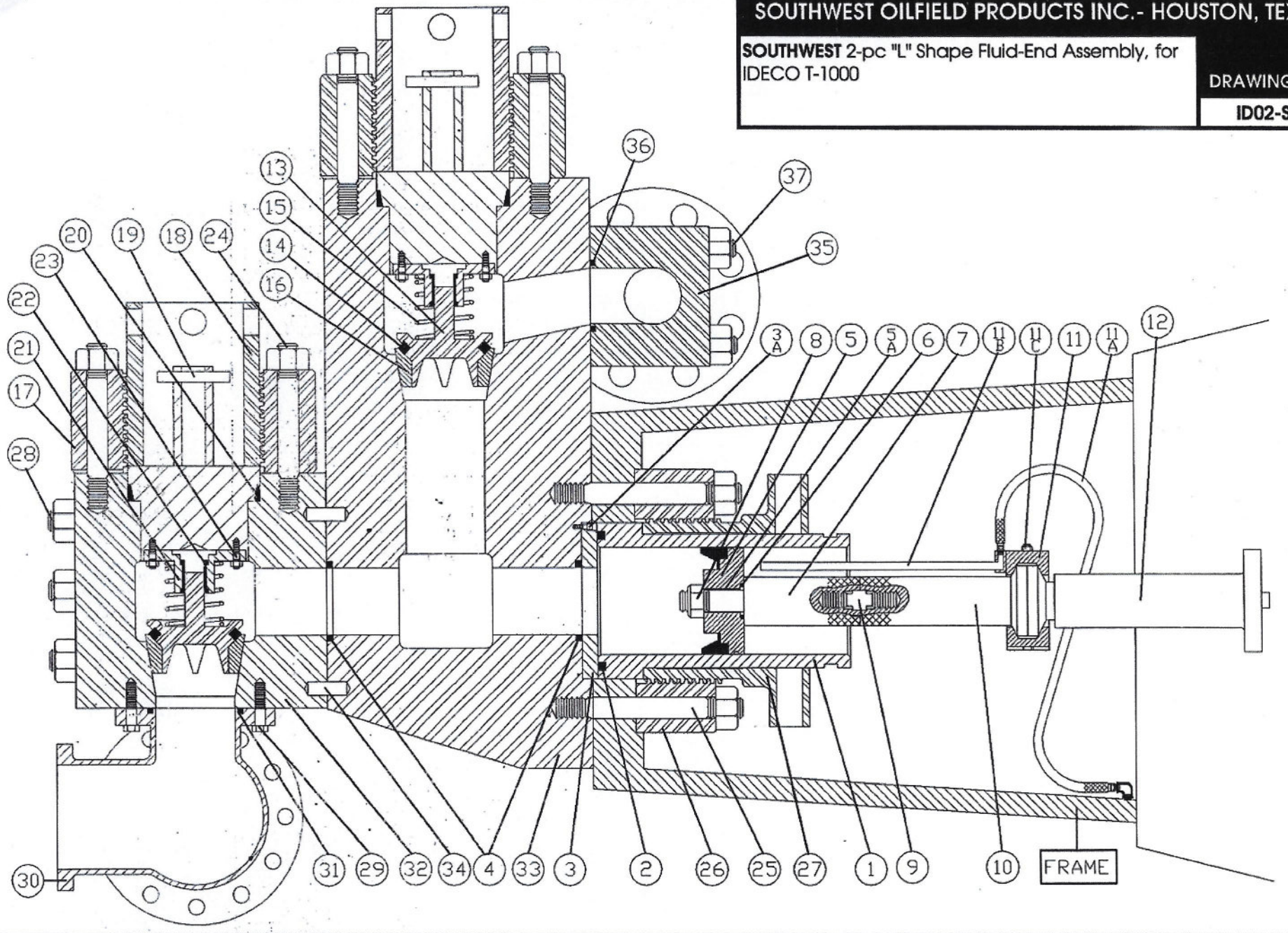
BASED ON 100% VOLUMETRIC EFFICIENCY AND 90% MECHANICAL EFFICIENCY

SOUTHWEST OILFIELD PRODUCTS INC. - HOUSTON, TEXAS

SOUTHWEST 2-pc "L" Shape Fluid-End Assembly, for
IDECO T-1000

DRAWING NO.

ID02-SW



FLUID END TYPE	MODEL OF PUMP	SIZE OF PUMP
SOUTHWEST 5000 PSI	IDECO T-1000	7" X 10"

ITEM NO.	PART NO.	DESCRIPTION	QTY. REQ'D
	8412A	FLUID END ASSEMBLY: (CONSISTS OF ITEMS: 3,3A,4, 17,18,19,20,21,22,23,24,25,26,27,28,29,32,33,34,37)	
1	6312YXX	LINER (REFER TO- GUIDE TO ORDERING CHART FOR TYPE (Y) AND FOR SIZE (XX))	3
2	AJO512	LINER SEAL	3
3	8412-3	LINER WEARPLATE	3
3A	4018-98	WEARPLATE SOCKET HEAD CAP SCREW	9
4	2988	WEARPLATE AND MODULE SEAL	6
5	XX-BYY	PISTON (REFER TO- GUIDE TO ORDERING CHART 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	6278-25	PISTON ROD (WITH ELASTIC STOP NUT)	3
8	API-4ESN	PISTON ROD NUT	3
9	1290-2	PISTON ROD CONNECTING STUD	3
10	6212-1	SUB ROD (CLAMP TYPE)	3
11	6212CW	ROD CLAMP (WITH WATER JACKET)(CONSIST OF 11A, 11B, 11C)	3
11A	1200H30	HOSE (1/2" X 30" WITH 1/2" MALE X 3/8" MALE CONNECTIONS)	3
11B	1200140	PIPE (3/8" X 14" GALVANIZED AND THREADED ON ONE END)	3
11C	4018-93	BOLT (5/8" X 6-1/2" GRADE 8 BOLT WITH LOCK NUT AND WASHER)	6
12	6200G12	PONY ROD	3
13	SEE PAGE	VALVE COMPLETE	6
14	SEE PAGE	VALVE INSERT	6
15	SEE PAGE	VALVE SPRING	6
16	SEE PAGE	SEAT	6
	SWTM1700	HYDRAULIC SEAT PULLER KIT COMPLETE (REFER TO TOOLS SECTION OF CATALOG FOR DETAILS.)	
	4475-2A	SOUTHWEST HP QUICK-CHANGE VALVE COVER ASSEMBLY: (CONSIST OF ITEMS NO. 17-24)	6
17	4475	THREADED FLANGE	6
18	4575	SCREW GLAND	6
19	4675-2A	PLUG (COMPLETE WITH VALVE GUIDE; SCREWS; AND BUSHING)	6
20	P129	HP VALVE COVER PLUG SEAL	6
21	4775R	VALVE GUIDE (complete with bushing #4700I)	6
22	4700I	VALVE GUIDE BUSHING	6
23	4016-99	VALVE GUIDE SCREW	12
24	4015-2	VALVE COVER STUD (WITH SW PART# HHN1250-7 1-1/4"-7" HEAVY HEX NUT)	72

FLUID END TYPE	MODEL OF PUMP	SIZE OF PUMP
SOUTHWEST 5000 PSI	IDECO T-1000	7" X 10"

ITEM NO.	PART NO.	DESCRIPTION	QTY. REQ'D
25	4017-50	POWER END AND LINER RETAINER STUD (WITH SW PART# HHN1250-8 1-1/4"-8 HEAVY HEX HUT)	24
26	6412	LINER RETAINER FLANGE	3
27	6512	LINER RETAINER NUT	3
28	4016-97	SUCTION MODULE STUD (WITH SW PART# HHN1500-8 1-1/2" - 8 HEAVY HEX NUT)	18
29	4017-59	SUCTION MANIFOLD CAP SCREW (WITH LOCK WASHER)	24
30		SUCTION MANIFOLD (FRONT OR SIDE INLET)	1
31	568-446	SUCTION MANIFOLD SEAL	3
32	8412-2S	SUCTION MODULE (STUDED ONLY)	3
33	8412-1D	DISCHARGE MODULE (STUDED ONLY)	3
34	8488-5	DOWEL PIN	6
35		DISCHARGE MANIFOLD	1
37	568-339	DISCHARGE MANIFOLD SEAL	3
38	4017-50	DISCHARGE MANIFOLD STUD (WITH SW PART# HHN1250-8 1-1/4" - 8 HEAVY HEX NUT)	12
39	9070257	PONY ROD SEAL	
40	9060018	BAFFLE	
		POLYURETHANE SEALS AVAILABLE	

SOUTHWEST 5000 PSI

IDECO T-1000

GUIDE TO ORDERING

PISTONS			LINERS			LINER SEALS	
SIZE	FAIL-SAFE	DUAL-DURO®	BLACK CAT	GRAYLOY®	ZIRCONIA	RUBBER	URETHANE
4"	76BFS	76BDD	76BBC	6312G06	6312ZIR06	AJO512	AJO512U
4 1/4"	77BFS	77BDD	77BBC	6312G07		AJO512	AJO512U
4 1/2"	78BFS	78BDD	78BBC	6312G08	6312ZIR08	AJO512	AJO512U
4 3/4"	79BFS	79BDD	79BBC	6312G09		AJO512	AJO512U
5"	81BFS	81BDD	81BBC	6312G1	6312ZIR1	AJO512	AJO512U
5 1/4"	82BFS	82BDD	82BBC	6312G2		AJO512	AJO512U
5 1/2"	83BFS	83BDD	83BBC	6312G3	6312ZIR3	AJO512	AJO512U
5 3/4"	84BFS	84BDD	84BBC	6312G4		AJO512	AJO512U
6"	85BFS	85BDD	85BBC	6312G5	6312ZIR5	AJO512	AJO512U
6 1/4"	86BFS	86BDD	86BBC	6312G6		AJO512	AJO512U
6 1/2"	87BFS	87BDD	87BBC	6312G7	6312ZIR7	AJO512	AJO512U
6 3/4"	88BFS	88BDD	88BBC	6312G8		AJO512	AJO512U
7"	89BFS	89BDD	89BBC	6312G9	6312ZIR9	AJO512	AJO512U
7 1/4"	91BFS	91BDD	91BBC	N/A		AJO512	AJO512U

* CENTER GUIDED VALVES AND SEATS

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

VALVES & SEATS (IDECO T-1000)

TYPE	VALVE	INSERT	SPRING	STAINLESS SPRING	SEAT	PULLER HEAD	PULLER HEAD STYLE
SOUTHWEST (Full Open)	773-1B	N/A	SW5710-110L	N/A	873-2	SWTM3750	SPLIT JAW
FULL OPEN-ROUGHNECK (W/Bonded Valve Insert)	SWND-6V2	N/A	SW5710-115	N/A	SWND-6S6	SWND-6PH SWTM27SXN	PANCAKE SPLIT JAW
FULL OPEN-ROUGHNECK (High Temp Bonded Insert)	SWND-6V2HC	N/A	SW5710-115	N/A	SWND-6S6	SWND-6PH SWTM27SXN	PANCAKE SPLIT JAW
FULL OPEN-ROUGHNECK (w/Replaceable Urethane Insert)	SWND-6V1	SWND-6I	SW5710-115	N/A	SWND-6S6	SWND-6PH SWTM27SXN	PANCAKE SPLIT JAW
3 WEB DOUBLE ANGLE O-RING	SWR0500118	SWR0515844	SWR0513744	SWR0514790	SWR0504818	SWTM3-6	3 J HOOK
3 WEB (High Temp)	SWR0520586	SWR0520585	SWR0513744	SWR0514790	SWR0504818	SWTM3-6	
3 WEB STANDARD PLATE	SWR0505012	SWR0504888	SWR0513937	SWR0514423	SWR0504818	SWTM3-6	
4 WEB	SWU5B-EH	SWUDD-6AB	SW5710-115	N/A	SW6ADD-B6	SWTM4-6	4 J HOOK
4 WEB (High Temp)	SWU5B-EHHT	SWUDD-6ABHT	SW5710-115	N/A	SW6ADD-B6	SWTM4-6	

PANCAKE



SPLIT JAW



3 J HOOK



4 J HOOK



**TORQUE SPECIFICATIONS FOR SOUTHWEST 8412A FLUID END ASSEMBLY
IDECO T-1000 5000 P.S.I.**

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>TORQUE TYPE (EXPRESSED IN FOOT-POUNDS)</u>		
		<u>COPPERCOTE</u>	<u>MOLY GREASE</u>	<u>DRY (NOT RECOMMENDED)</u>
API-4 ESN	PISTON NUT	NO MORE FORCE THAN ONE MAN ON 3' WRENCH/CHEATER COMBINATION		
4018-93	BOLT	150 MAXIMUM		
4015-2	VALVE COVER STUD	669	970	1338
4017-50	POWER END & LINER RETAINER STUD	781	1133	1563
4016-97	SUCTION MODULE STUD	1397	2025	2794
4017-59	SUCTION MANIFOLD CAP SCREW	188	282	376
4017-50	DISCHARGE MANIFOLD STUD	781	1133	1563