



®

# SOUTHWEST OILFIELD PRODUCTS, INC. MUD PUMP EXPENDABLE PARTS LIST

## SOUTHWEST 8407-7A FLUID END FOR IDECO T-1600 / T-1300

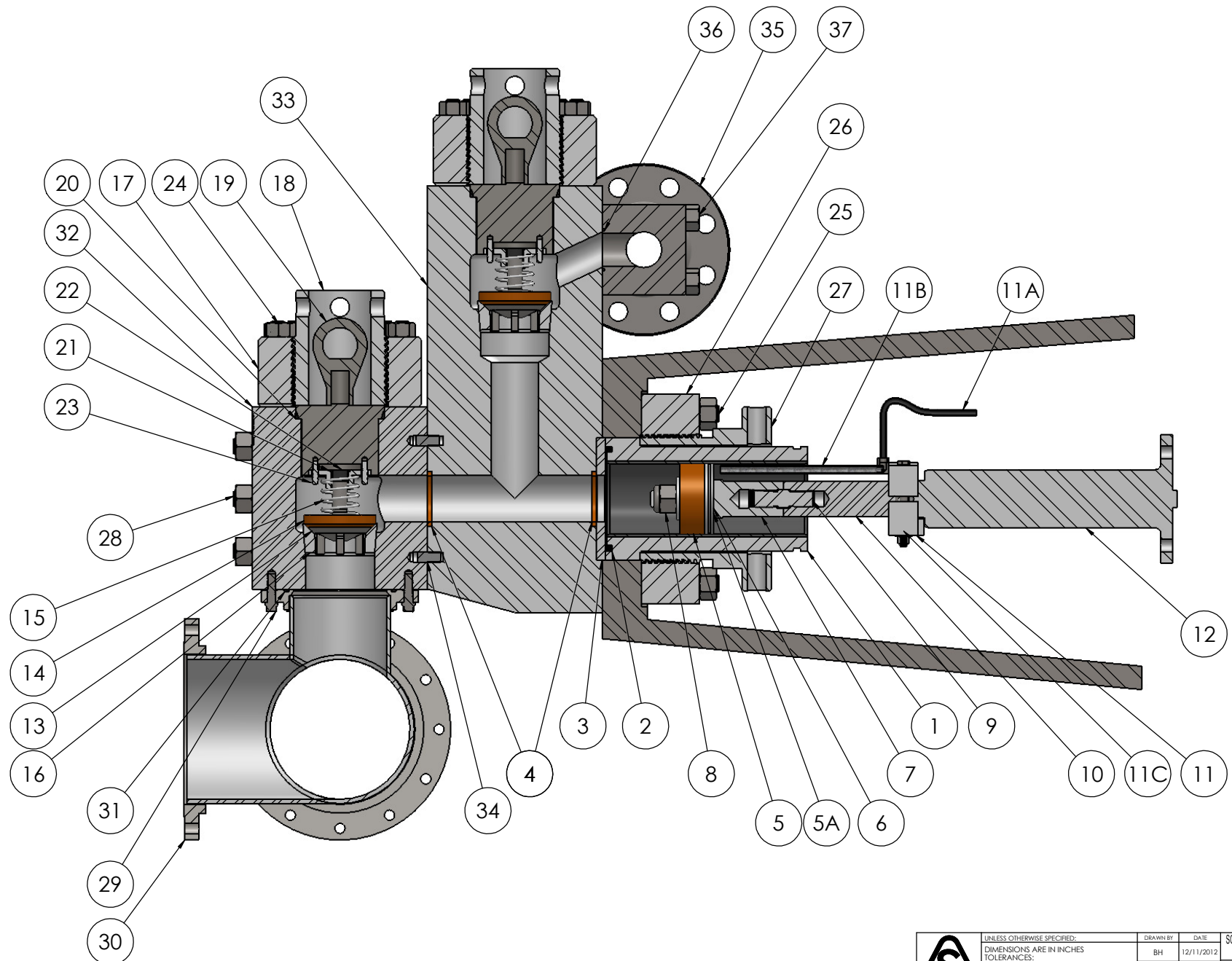
### MUD PUMP PERFORMANCE CHART


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	7	7 ¼	7 ½	
T-1600	1600	130	12"	MAX-P.S.I.	5000	5000	5000	5000	5000	5000	4665	4299	3981	3688	3423	3197	2988
				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	6.88
T-1300	1300	130	12"	MAX-P.S.I.	5000	5000	5000	4952	4516	4126	3791	3494	3234	2997	2789	2598	2428
				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	6.88

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



 <small>THIRD ANGLE PROJECTION</small>	UNLESS OTHERWISE SPECIFIED:		DRAWN BY	DATE	SOUTHWEST OILFIELD PRODUCTS	
	DIMENSIONS ARE IN INCHES		BH	12/11/2012	10340 WALLISVILLE ROAD, HOUSTON, TX 77013	
	TOLERANCES:		CHECKED BY	DATE	TITLE:	
	FRACTIONAL: 1/64		EF	04/10/2015	SOUTHWEST FLUID END ASSEMBLY FOR IDECO T-1600 & T-1300	
DECIMAL: +.005 / -.000		MATERIAL	N/A			SIZE
ALL FILLETS & RADII - 1/16 MAX		HEAT TREAT	N/A			DWG. NO.
CHAMFERS 1/16 X 45° MAX					REV.	
SURFACE FINISH 125 RMS MAX					A	
CONCENTRICITY NOT TO EXCEED .005 T.I.R.					C	
BREAK SHARP CORNERS 1/32 X 45° MAX					8407-7A	
					SHEET 1 OF 1	

FLUID END TYPE	MODEL OF PUMP	SIZE OF PUMP
<b>SOUTHWEST 5000 PSI</b>	<b>IDECO T-1600 / T-1300</b>	<b>7 ½" X 12"</b>

ITEM NO.	PART NO.	DESCRIPTION	QTY. REQ'D
	8407-7A	<b>FLUID END ASSEMBLY: (CONSIST OF ITEMS: 3,4,17,18,19,20,21, 22,23,24,25,26,27,28,29,31,32,33,34,36,37)</b>	
1	6307YXX	<b>LINER (REFER TO GUIDE TO ORDERING CHART FOR TYPE (Y) AND FOR SIZE (XX))</b>	3
2	AJO507U	<b>LINER CYLINDER HEAD AND VALVE COVER SEAL (URETHANE)</b>	3
3	8407-10	<b>WEARPLATE</b>	3
3A	4018-98	<b>WEARPLATE SOCKET HEAD CAP SCREW</b>	9
4	2988	<b>WEARPLATE AND MODULE SEAL</b>	6
5	XX-BYY	<b>PISTON (REFER TO GUIDE TO ORDERING CHART FOR TYPE (Y) AND SIZE (XX))</b>	3
5A	2932	<b>PISTON BUSHING (FROM 1-5/8" TO 1-1/2" STRAIGHT BORE)</b>	3
6	568-225	<b>PISTON O-RING</b>	3
7	6278-25	<b>PISTON ROD (WITH ELASTIC STOP NUT)</b>	3
8	API-4ESN	<b>PISTON ROD ELASTIC STOP NUT</b>	3
9	1290-2	<b>PISTON ROD CONNECTING STUD</b>	3
10	6207-1	<b>SUB ROD</b>	3
11	6207CW	<b>ROD CLAMP (CONSIST OF 11A, 11B, 11C)</b>	3
11A	1200H30	<b>HOSE (1/2" X 30" WITH 1/2" MALE X 3/8" MALE CONNECTIONS)</b>	3
11B	1200140	<b>PIPE (3/8" X 14" GALVANIZED, AND THREADED ON ONE END)</b>	3
11C	4018-92	<b>ROD CLAMP BOLT (5/8"-8" GRADE 8 BOLT WITH LOCK NUT AND WASHER)</b>	6
12	6200G07	<b>PONY ROD</b>	3
13	SEE PAGE	<b>VALVE</b>	6
14	SEE PAGE	<b>VALVE INSERT (IF REQUIRED)</b>	6
15	SEE PAGE	<b>VALVE SPRING</b>	6
16	SEE PAGE	<b>VALVE SEAT</b>	6
	SWTM1700	<b>HYDRAULIC SEAT PULLER KIT COMPLETE (REFER TO TOOLS PAGE OF CATALOG FOR DETAILS)</b>	
	4475-2A	<b>SOUTHWEST HP QUICK-CHANGE VALVE COVER ASSEMBLY: (CONSIST OF ITEM NO. 17-24)</b>	6
17	4475	<b>THREADED FLANGE</b>	6
18	4575	<b>SCREW GLAND</b>	6
19	4675-2A	<b>PLUG (COMPLETE WITH VALVE GUIDE; SCREWS; AND BUSHING)</b>	6
20	P129	<b>HP VALVE COVER PLUG SEAL</b>	6
21	4775-2R	<b>VALVE GUIDE (COMPLETE WITH BUSHING PART# 4700I)</b>	6
22	4700I	<b>VALVE GUIDE BUSHING (ALSO AVAILABLE IN URETHANE PART# 4700IU)</b>	6
23	4016-99	<b>VALVE GUIDE SCREW</b>	12
24	4015-2	<b>VALVE COVER STUD (WITH SW PART# HHN1250-7 1-1/4"-7" HEAVY HEX NUT)</b>	72
25	4018-68	<b>POWER END AND LINER RETAINER STUD (WITH SW PART# HHN1500-8 1-1/2" -8" HEAVY HEX NUT)</b>	24

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<b>SOUTHWEST 5000 PSI</b>	<b>IDECO T-1600 / T-1300</b>	<b>7 ½" X 12"</b>

ITEM NO.	PART NO.	DESCRIPTION	QTY. REQ'D
26	6407	LINER RETAINER FLANGE	3
27	6507	LINER RETAINER NUT	3
28	4016-97	SUCTION MODULE STUD (WITH SW PART# HHN1500-8 1-1/2" -8" HEAVY HEX NUT)	18
29	4021-48	SUCTION MANIFOLD CAP SCREW	24
30	8407-8	SUCTION MANIFOLD	1
31	568-447	SUCTION MANIFOLD GASKET	3
32	8407-11S	SUCTION MODULE	3
33	8407-7D	DISCHARGE MODULE	3
34	8488-5	DOWEL PIN	6
35	8407-9	DISCHARGE MANIFOLD	1
36	568-339	DISCHARGE MANIFOLD SEAL	3
37	4017-50	DISCHARGE MANIFOLD STUD (WITH SW PART# HHN11250-8 1-1/4"-8" HEAVY HEX NUT)	12
38	9070019	PONY ROD SEAL	3
39	9060012	BAFFLE	3
	6507-20A	HYDRAULIC LINER RETAINER	
		** POLYURETHANE SEALS AVAILABLE**	

## VALVES & SEATS SOUTHWEST 8407-7A IDECO T-1600 / T-1300

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	SW5710-115	N/A	SW7DD-B1	SWTM4-7	4 J HOOK
4 WEB (High Temp)	SWU5C-EEFHT	SWUDD-7BHT	SW5710-115	N/A	SW7DD-B1	SWTM4-7	

PANCAKE



SPLIT JAW



3 J HOOK



4 J HOOK



**SOUTHWEST 5000 PSI****IDECO T-1600/T-1300****GUIDE TO ORDERING**

PISTONS				LINERS		LINER GASKETS	
SIZE	FAIL-SAFE	DUAL-DURO®	GRAYLOY®	ZIRCONIA		RUBBER	URETHANE
4"	76BFS	76BDD	6307G06			AJO507	AJO507U
4 1/4"	77BFS	77BDD	6307G07			AJO507	AJO507U
4 1/2"	78BFS	78BDD	6307G08			AJO507	AJO507U
4 3/4"	79BFS	79BDD	6307G09			AJO507	AJO507U
5"	81BFS	81BDD	6307G1			AJO507	AJO507U
5 1/4"	82BFS	82BDD	6307G2			AJO507	AJO507U
5 1/2"	83BFS	83BDD	6307G3	6307ZIR3		AJO507	AJO507U
5 3/4"	84BFS	84BDD	6307G4			AJO507	AJO507U
6"	85BFS	85BDD	6307G5	6307ZIR5		AJO507	AJO507U
6 1/4"	86BFS	86BDD	6307G6			AJO507	AJO507U
6 1/2"	87BFS	87BDD	6307G7	6307ZIR7		AJO507	AJO507U
6 3/4"	88BFS	88BDD	6307G8			AJO507	AJO507U
7"	89BFS	89BDD	6307GS9	6307ZIR9		AJO507	AJO507U
7 1/4"	91BFS	91BDD				AJO507	AJO507U
7 1/2"	92BFS	92BDD				AJO507	AJO507U

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

**TORQUE SPECIFICATIONS FOR SOUTHWEST 8407-7A FLUID END ASSEMBLY  
IDECO T-1600 / T-1300 5000 P.S.I.**

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<b>TORQUE TYPE (EXPRESSED IN FOOT-POUNDS)</b>	
		<u>COPPERCOTE</u>	<u>MOLY GREASE</u>
API-4 ESN	PISTON NUT	<i>NO MORE FORCE THAN ONE MAN ON A 3' WRENCH/CHEATER COMBINATION</i>	
4018-91	BOLT	<i>150 MAXIMUM</i>	<i>150 MAXIMUM</i>
4015-2	VALVE COVER STUD	669	970
4018-68	POWER END & LINER RETAINER STUD	1397	2025
4016-97	SUCTION MODULE STUD	1397	2025
4021-48	SUCTION MANIFOLD CAP SCREW	157	200
4017-50	DISCHARGE MANIFOLD STUD	781	1133



**SOUTHWEST**  
OILFIELD PRODUCTS, INC.

**8407-7A FLUID END FOR IDECO T-1600 / T-1300  
REVISION SUMMARY**

<b>REVISION</b>	<b>DATE</b>	<b>REASON OF CHANGE</b>
REV A	05/02/2014	Changed Item No. 11C to 4018-92 (was Part No. 4018-91)
REV B	04/10/2015	UPDATED FLUID END ASSEMBLY DRAWING
REV C	08/10/2020	4017-59 REPLACED BY 4021-48 (BOM ITEM # 29)