



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

## SOUTHWEST 8431-A FLUID END FOR EWECO EQ-2200

®

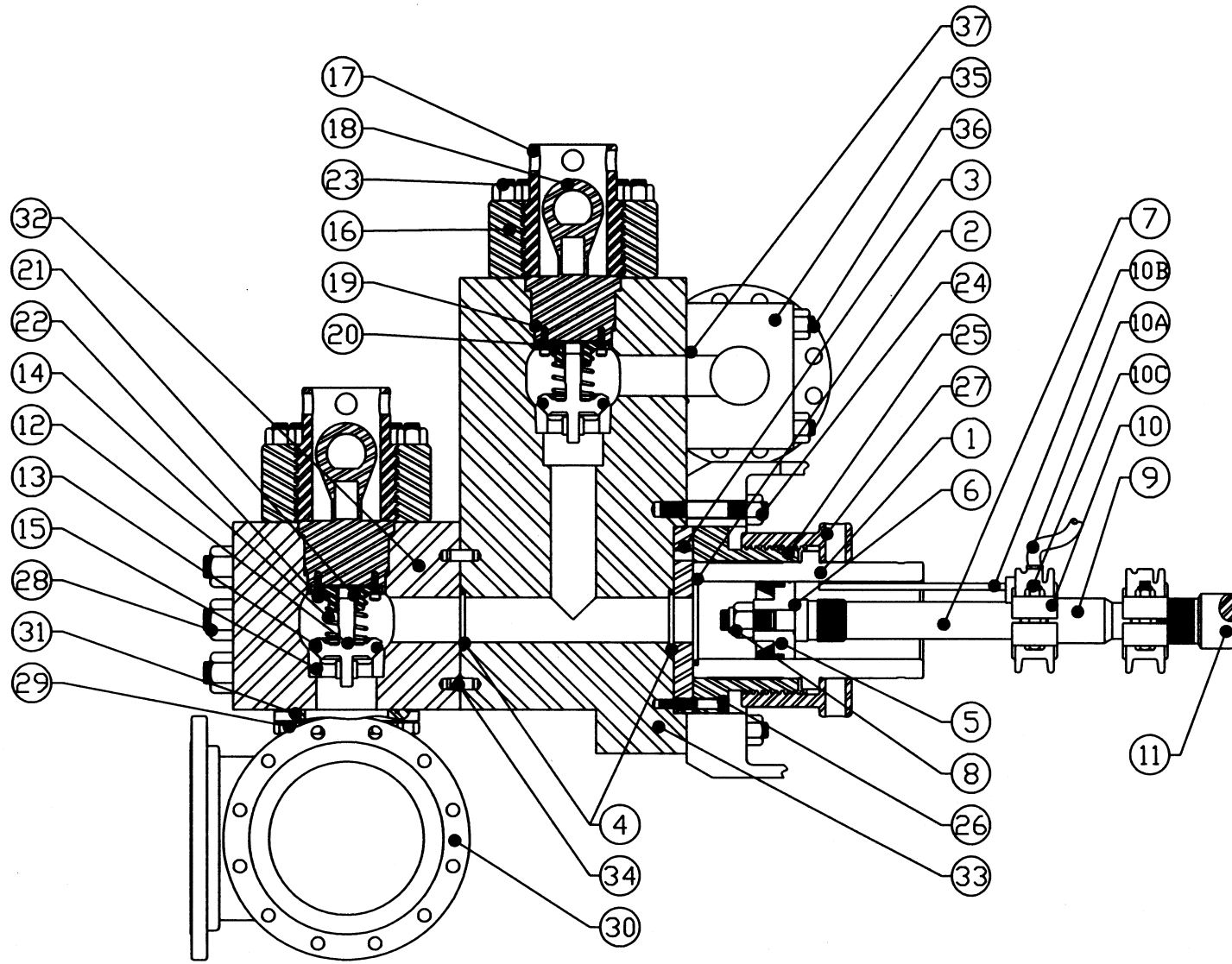
### MUD PUMP PERFORMANCE CHART

PUMP MODEL	MAX I.H.P.	MAX S.P.M.	STROKE LENGTH	LINER SIZE IN INCHES											
				4	4 1/4	4 1/2	4 3/4	5	5 1/4	5 1/2	6	6 1/2	7	7 1/2	
EQ-2200	2200	140	12"	MAX-P.S.I.	7500	6945	6195	5560	5018	4551	4147	3485	2969	2560	2230
				G.P.R.	3.264	3.685	4.131	4.603	5.100	5.623	6.171	7.344	8.619	9.996	11.475
				G.P.M. @ 140 R.P.M.	457.0	515.9	578.3	644.4	714.0	787.2	863.9	1028.2	1206.7	1399.4	1606.5

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



REV.#	DATE	REVISED BY	REVISIONS	UNLESS OTHERWISE NOTED . . .	SOUTHWEST® OILFIELD PRODUCTS, INC. -- HOUSTON, TX.				
				1. ALL DIMENSIONS ARE IN INCHES. 2. ALL FRACTIONAL DIMENSIONS ARE ±1/64. 3. ALL DECIMAL DIMENSIONS ARE ±.005/- .000. 4. ALL ANGLES ARE ±0.5°. 5. ALL FILLETS AND RADII ARE 1/16 MAX. 6. CHAMFERS ARE 1/16 x 45° MAX. 7. SURFACE FINISH IS 125,7 RMS MAX. 8. CONCENTRICITY NOT TO EXCEED .005 T.I.R. 9. BREAK CORNERS AT 1/32 x 45° MAX.	<small>                         PROPRIETARY INFORMATION--THE INFORMATION CONTAINED HEREON SHALL BE CONSIDERED THE SOLE PROPERTY OF SOUTHWEST OILFIELD PRODUCTS, INC. AND THE RECIPIENT THEREOF AGREES TO MAINTAIN THE INFORMATION CONFIDENTIAL AND AGREES NOT TO COPY, REPRODUCE, DISTRIBUTE TO OTHERS, OR USE IN WHOLE OR IN PART FOR ANY PURPOSE WITHOUT THE EXPRESS WRITTEN PERMISSION OF SOUTHWEST OILFIELD PRODUCTS, INC.                     </small>	DESCRIPTION ASSEMBLY FOR EWECO EQ-2200 QUINTUPLEX SOUTHWEST FLUID END	DRAWN DATE 04-24-08 NAME T. LEMAN HEAT TREATMENT	APPROVED 04-24-08 T. LEMAN DRAWING #	SCALE NONE REVISION #
					FILE # ACAD\ASSEMBLY\8431-A	SHEET OF MATERIAL 1 1	N/A N/A	8431-A	

<b>FLUID END TYPE</b>	<b>MODEL OF PUMP</b>	<b>SIZE OF PUMP</b>
<b>SOUTHWEST 7500PSI</b>	<b>EWECO EQ-2200</b>	<b>7-1/2" X 12"</b>

<b>ITEM NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY. REQ'D</b>
	8431-A	<b>FLUID END ASSEMBLY: (CONSISTS OF ITEMS: 3,4,16,17,18,19,20,21,22,23,24,25,26,27,28,29,32,33,34,36)</b>	
1	1376YXX	<b>LINER REFER TO GUIDE FOR ORDERING CHART 6 FOR TYPE (G); (Y); AND FOR BORE SIZE (XX)</b>	5
2	2930-XX	<b>LINER SEAL</b>	5
3	8490-28	<b>WEARPLATE (WITH 568-447 O-RING)</b>	5
4	2988	<b>WEARPLATE &amp; MODULE SEAL</b>	10
5	XX-BYY	<b>PISTON REFER TO GUIDE FOR ORDERING CHART ON PG. 6 FOR SIZE (XX) AND FOR TYPE (YY)</b>	5
6	568-225	<b>PISTON SEAL</b>	5
7		<b>PISTON ROD (WITH ELASTIC STOP NUT)</b>	5
8	API-4ESN	<b>PISTON ROD NUT</b>	5
9		<b>SUB ROD</b>	5
10		<b>ROD CLAMP (WITH WATER JACKET)</b>	10
10A		<b>HOSE (1/2" X 30" WITH 1/2" MALE X 3/8" MALE CONNECTIONS)</b>	5
10B		<b>PIPE (3/8" X 14" GALVANIZED AND THREADED ON ONE END)</b>	5
10C		<b>BOLT (7/8-9 GRADE 8 BOLT WITH LOCK NUT AND WASHER)</b>	20
11		<b>PONY ROD (CLAMP TYPE)</b>	5
12	SEE PAGE	<b>VALVE</b>	10
13	SEE PAGE	<b>VALVE INSERT</b>	10
14	SEE PAGE	<b>VALVE SPRING</b>	10
15	SEE PAGE	<b>VALVE SEAT</b>	10
	SWTM1700	<b>HYDRAULIC SEAT PULLER KIT COMPLETE (REFER TO TOOLS SECTION)</b>	1
16	4488-25	<b>VALVE COVER FLANGE</b>	10
17	4588-25	<b>SCREW GLAND</b>	10
18	4690-25A	<b>PLUG (COMPLETE WITH VALVE GUIDE; BUSHING; AND SCREWS) INCLUDES ITEMS 19, 20, 21, &amp; 22</b>	10
19	P115	<b>HP VALVE COVER PLUG NITRILE SEAL</b>	10
20	4788-25R	<b>VALVE GUIDE (COMPLETE WITH BUSHING #4700I)</b>	10
21	4700I	<b>VALVE GUIDE BUSHING</b>	10
22	4018-18	<b>VALVE GUIDE SCREW</b>	20

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<b>ITEM NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY. REQ'D</b>
23	4015-2	VALVE COVER STUD (WITH SW PART# HHN1250-7 1 1/4-7 HEAVY HEX NUT)	120
24	4018-58S	POWER END STUD (WITH SW PART# HHN1250-8 1 1/4-8 HEAVY HEX NUT)	50
25	6490-25	LINER RETAINER FLANGE	5
26	4019-51	LINER RETAINER CAPSCREW	60
27	6590-25	LINER RETAINER NUT	5
28	4019-61	SUCTION MODULE STUD (WITH SW PART# HHN1750-8 1 3/4-8 HEAVY HEX NUT)	30
29	4018-19	SUCTION MANIFOLD CAPSCREW	30
30		SUCTION MANIFOLD	1
31	568-443	SUCTION MANIFOLD SEAL	5
32	8431-2S	SUCTION MODULE	5
33	8431-1D	DISCHARGE MODULE	5
34	8488-5	DOWEL PIN	10
35		DISCHARGE MANIFOLD	1
36	4017-50C	DISCHARGE MANIFOLD STUD (WITH SW PART# HHN1250-8 1 1/4-8 HEAVY HEX NUT)	30
37	568-343	DISCHARGE MANIFOLD SEAL	5

**\*\* POLYURETHANE SEAL AVAILABLE\*\***

**SOUTHWEST 7500PSI**

**GUIDE TO ORDERING**

**EWECO EQ-2200**

**PISTONS**

**LINERS**

**LINER SEALS**

<b>SIZE</b>	<b>FAIL-SAFE</b>	<b>DUAL-DURO®</b>	<b>BLACK CAT</b>	<b>GRAYLOY®</b>	<b>ZIRCONIA</b>	<b>RUBBER</b>	<b>URETHANE</b>
4 1/2"	78BFS	78BDD	78BBC	1376G08	1376ZIR08	2930-08	2930-08U
4 3/4"	79BFS	79BDD	79BBC	1376G09	1376ZIR09	2930-09	2930-09U
5"	81BFS	81BDD	81BBC	1376G1	1376ZIR1	2930-1	2930-1U
5 1/4"	82BFS	82BDD	82BBC	1376G2		2930-2	2930-2U
5 1/2"	83BFS	83BDD	83BBC	1376G3	1376ZIR3	2930-3	2930-3U
5 3/4"	84BFS	84BDD	84BBC	1376G4	1376ZIR4	2930-4	2930-4U
6"	85BFS	85BDD	85BBC	1376G5	1376ZIR5	2930-5	2930-5U
6 1/4"	86BFS	86BDD	86BBC	1376G6	1376ZIR6	2930-6	2930-6U
6 1/2"	87BFS	87BDD	87BBC	1376G7	1376ZIR7	2930-7	2930-7U
6 3/4"	88BFS	88BDD	88BBC	1376G8		2930-8	2930-8U
7"	89BFS	89BDD	89BBC	1376G9	1376ZIR9	2930-9	2930-9U
7 1/4"	90BFS	90BDD	90BBC	1376G10	1376ZIR10	2974-11	2974-11U
7 1/2"	91BFS	91BDD	91BBC	1376G11		2974-11	2974-11U

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

## VALVES & SEATS (EWECO EQ-2200)

TYPE	VALVE	INSERT	SPRING	STAINLESS SPRING	SEAT	PULLER HEAD	PULLER HEAD STYLE
SOUTHWEST (Full Open)	773-1B	N/A	941	N/A	873-1	SWTM3750	SPLIT JAW
FULL OPEN-ROUGHNECK (Cast in Place Insert)	SWND-6V2	N/A	SW5710-115L	N/A	SWND-6S4	SWND-6PH SWTM27SXN	PANCAKE SPLIT JAW
FULL OPEN-ROUGHNECK (High Temp)	SWND-6V2HC	N/A	SW5710-115L	N/A	SWND-6S4	SWND-6PH SWTM27SXN	PANCAKE SPLIT JAW
FULL OPEN-ROUGHNECK (w/Replaceable Urethane Insert)	SWND-6V1	SWND-6I	SW5710-115	N/A	SWND6-S4	SWND-6PH SWTM27SXN	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	SWR05153744	SWR0514790	SWR0512436	SWTM3-7D	
3 WEB STANDARD PLATE	SWR0505038	SWR0504890	SWR0515575	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-6AB	SW5710-115	N/A	SW6ADD-B4	SWTM4-6	

PANCAKE



SPLIT JAW



3 J HOOK



4 J HOOK



**TORQUE SPECIFICATIONS FOR 8431-A FLUID END ASSEMBLY  
FOR EWECO EQ-2200 7500 P.S.I.**

<b><u>PART NUMBER</u></b>	<b><u>DESCRIPTION</u></b>	<b>TORQUE TYPE (EXPRESSED IN FOOT-POUNDS)</b>
		<b><u>MOLY GREASE</u></b>
API-4 ESN	PISTON ROD NUT	<i>NO MORE FORCE THAN ONE MAN ON A 3' WRENCH/CHEATER COMBINATION</i>
4018-18	VALVE GUIDE SCREW	<i>150 MAXIMUM</i>
4015-2	VALVE COVER STUD	970
4018-58S	POWER END STUD	1133
4019-51	LINER RETAINER CAPSCREW	329
4019-61	SUCTION MODULE STUD	3299
4018-19	SUCTION MANIFOLD CAPSCREW	322
4017-50C	DISCHARGE MANIFOLD STUD	1133

\*LUBRICATE ALL FASTENERS WITH MOLY GREASE BEFORE TIGHTENING\*



**SOUTHWEST**  
OILFIELD PRODUCTS, INC.

**8431A FLUID END FOR EWECO EQ-2200  
REVISION SUMMARY**

<b><u>REVISION</u></b>	<b><u>DATE</u></b>	<b><u>REASON OF CHANGE</u></b>
REV A	08/03/2016	UPDATED TORQUE SPEC. PAGE (SEE CATALOG FOLDER FOR DETAILS).
REV B	08/15/2016	ADDED PART NO. 568-343 TO ITEM NO.37 DISCHARGE MANIFOLD SEAL.
REV C	12/06/2022	REVISED WEAR PLATE O-RING PART NUMBER.