



®

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

## OEM STYLE FLUID END FOR EMSCO FC-2200

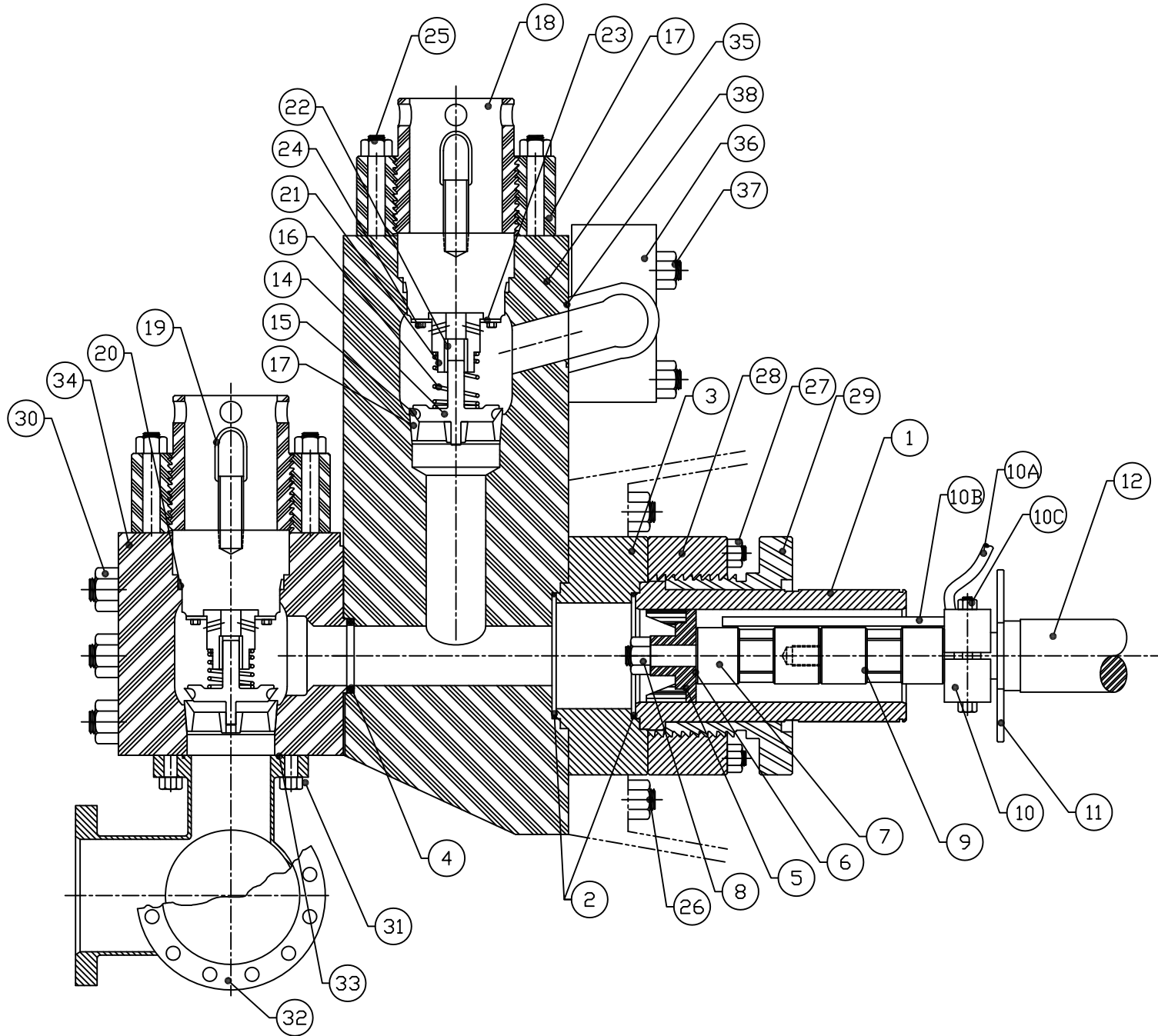
### MUD PUMP PERFORMANCE CHART

PUMP MODEL	MAX I.H.P.	MAX S.P.M.	STROKE LENGTH	LINER SIZE IN INCHES								
				5 ½"	6"	6 ½"	7"	7 ½"	8"			
FC-2200	2200	100	15"	MAX-P.S.I.	7332	6161	5250	4527	3943	3465		
				G.P.R.	4.63	5.51	6.46	7.50	8.61	9.79		
				G.P.M. @ 100 R.P.M.	463	551	646	750	861	979		

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.	DESCRIPTION	DRAWN	APPROVED	SCALE
				2. ALL FRACTIONAL DIMENSIONS ARE $\pm 1/64$ .	ORIGINAL EQUIPMENT FLUID END	DATE 11-12-98		NONE
				3. ALL DECIMAL DIMENSIONS ARE $+ .005 / - .000$ .	ASSEMBLY FOR FC-2200 EMSCO	NAME BANY G.		
				4. ALL ANGLES ARE $\pm 0.5^\circ$ .	FILE #	SHEET OF	MATERIAL	DRAWING #
				5. ALL FILLETS AND RADII ARE $1/16$ MAX.	HFC-2200/8494-50B			8494-50A
				6. BEVELS ARE $1/16 \times 45^\circ$ MAX.				REVISION #
				7. SURFACE FINISH IS $125 \mu$ RMS MAX.				
				8. CONCENTRICITY NOT TO EXCEED $.005$ T.I.R.				
				9. BREAK CORNERS AT $1/32 \times 45^\circ$ MAX.				

<b>FLUID END TYPE</b>	<b>MODEL OF PUMP</b>	<b>SIZE OF PUMP</b>
<b>OEM 7500 P.S.I.</b>	<b>EMSCO FC-2200</b>	<b>8" X 15"</b>

<b>ITEM NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QTY. REQ'D</b>
	<b>8494-50A</b>	<b>FLUID END ASSEMBLY</b>	
<b>1</b>	<b>6394YXX</b>	<b>LINER (REFER TO GUIDE FOR ORDERING CHART FOR TYPE (G); (Y); AND FOR BORE SIZE (XX))</b>	<b>3</b>
<b>2</b>	<b>AJO524SU</b>	<b>LINER AND WEARPLATE SEAL</b>	<b>6</b>
<b>3</b>	<b>8494-53</b>	<b>LINER WEARPLATE</b>	<b>3</b>
<b>4</b>	<b>AJO526SU</b>	<b>MODULE SEAL</b>	<b>3</b>
<b>5</b>	<b>XX-BYY</b>	<b>PISTON (REFER TO GUIDE FOR ORDERING CHART FOR SIZE (XX) AND FOR TYPE (YY))</b>	<b>3</b>
<b>6</b>	<b>568-225</b>	<b>PISTON SEAL</b>	<b>3</b>
<b>7</b>	<b>6293-32*</b>	<b>PISTON ROD (WITH ELASTIC STOP NUT) *6293-33 AVAILABLE WITH 2" CONNECTION</b>	<b>3</b>
<b>8</b>	<b>ESN1625-8</b>	<b>PISTON ROD NUT</b>	<b>3</b>
<b>9</b>	<b>6293-1*</b>	<b>SUB ROD *6293-3 AVAILABLE WITH 2" CONNECTION</b>	<b>3</b>
<b>10</b>	<b>6293CW</b>	<b>ROD CLAMP (WITH WATER JACKET)</b>	<b>3</b>
<b>10A</b>	<b>1200H30</b>	<b>HOSE</b>	<b>3</b>
<b>10B</b>	<b>1200180</b>	<b>PIPE</b>	<b>3</b>
<b>10C</b>	<b>4019-92</b>	<b>BOLT</b>	<b>6</b>
<b>11</b>		<b>ROD BAFFEL</b>	<b>3</b>
<b>12</b>	<b>6200G93</b>	<b>PONY ROD</b>	
<b>13</b>	<b>SEE PAGE</b>	<b>VALVE COMPLETE</b>	<b>3</b>
<b>14</b>	<b>SEE PAGE</b>	<b>VALVE INSERT</b>	<b>6</b>
<b>15</b>	<b>SEE PAGE</b>	<b>VALVE SPRING</b>	<b>6</b>
<b>16</b>	<b>SEE PAGE</b>	<b>VALVE SEAT</b>	<b>6</b>
	<b>SWTM1700</b>	<b>HYDRAULIC SEAT PULLER KIT COMPLETE (REFER TO TOOLS SECTION IN CATALOG)</b>	<b>6</b>
<b>17</b>	<b>4494-50</b>	<b>VALVE COVER FLANGE</b>	<b>1</b>
<b>18</b>	<b>4594-50</b>	<b>SCREW GLAND</b>	<b>6</b>
<b>19</b>	<b>4694-50A</b>	<b>VALVE COVER PLUG</b>	<b>6</b>
<b>20</b>	<b>AJO525U</b>	<b>VALVE COVER PLUG SEAL</b>	<b>6</b>
<b>21</b>	<b>4794-50</b>	<b>VALVE GUIDE</b>	<b>6</b>
<b>22</b>	<b>4794-51</b>	<b>VALVE GUIDE BUSHING</b>	<b>6</b>

**\*6293-4 CONNECTION STUD REQUIRED FOR 2" CONNECTION**



## EMSCO FC-2200 GUIDE TO ORDERING

PISTONS		LINERS			LINER SEALS	
SIZE	FAIL-SAFE	DUAL-DURO®	BLACK CAT	GRAYLOY®	ZIRCONIA	URETHANE
5 1/2"	83BFS	83BDD	83BBC	6394G3	6394ZIR3	AJO524SU
6"	85BFS	85BDD	85BBC	6394G5	6394ZIR5	AJO524SU
6 1/2"	87BFS	87BDD	87BBC	6394G7	6394ZIR7	AJO524SU
7"	89BFS	89BDD	89BBC	6394G9	6394ZIR9	AJO524SU
7 1/2"	92BFS	92BDD	92BBC	6394G11	NA	AJO524SU
8"	94BFS	94BDD	94BBC	NA	NA	NA

## VALVES & SEATS

TYPE	VALVE	INSERT	SPRING	SEAT	PULLER HEAD
FULL OPENING	781-8	981	952	881-8	SWTM4750
*DBL-ANGLE O-RING	SWR0500120	SWR0515831	SWR0520504 (SS)	SWR0504844	SWTM-3-8

\* CENTER GUIDED VALVES AND SEATS

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

## VALVES & SEATS (OEM EMSCO FC-2200)

TYPE	VALVE	INSERT	SPRING	STAINLESS SPRING	SEAT	PULLER HEAD	PULLER HEAD STYLE
SOUTHWEST (Full Open)	N/A	N/A	N/A	N/A	N/A	N/A	SPLIT JAW
FULL OPEN-ROUGHNECK	SWND-8V2	N/A	SW5710-115L	N/A	SWND-8S2	SWND-8PH SWTM48-SN	PANCAKE SPLIT JAW
FULL OPEN-ROUGHNECK (High Temp)	SWND-8V2HC	N/A	SW5710-115L	N/A	SWND-8S2	SWND-8PH SWTM48-SN	PANCAKE SPLIT JAW
FULL OPEN-ROUGHNECK (w/Replaceable Urethane Insert)	N/A	N/A	N/A	N/A	N/A	N/A	
3 WEB DOUBLE ANGLE O-RING	SWR0500120	SWR0515831		SWR0520504	SWR0504844	SWTM3-8	3 J HOOK
3 WEB (High Temp)	SWR050012022	SWR051583101	N/A	SWR0520504	SWR0504844	SWTM3-8	
3 WEB STANDARD PLATE	SWR0505109	SWR0504897		SWR0514423	SWR0504844	SWTM4-8	
4 WEB	N/A	N/A	N/A	N/A	N/A	N/A	4 J HOOK
4 WEB (High Temp)	N/A	N/A	N/A	N/A	N/A	N/A	

PANCAKE



SPLIT JAW

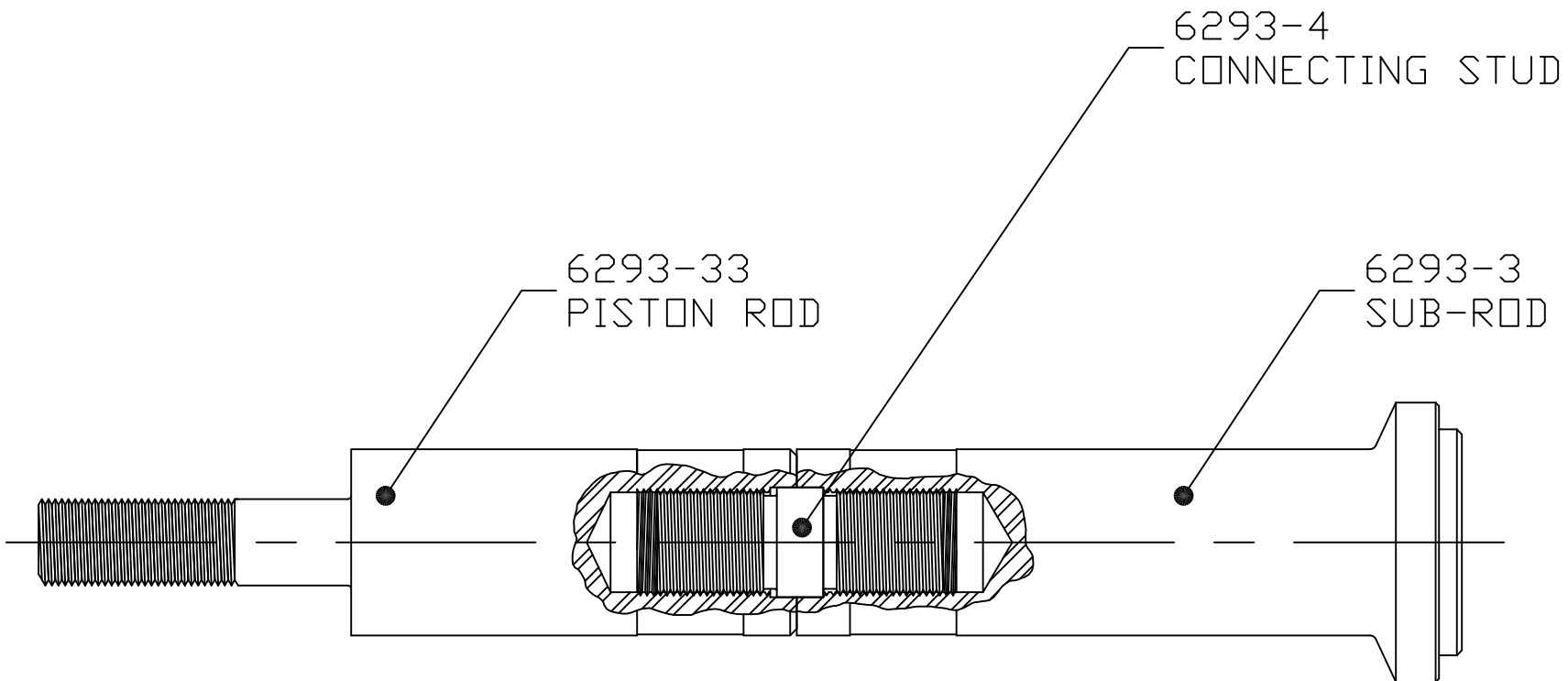


3 J HOOK



4 J HOOK

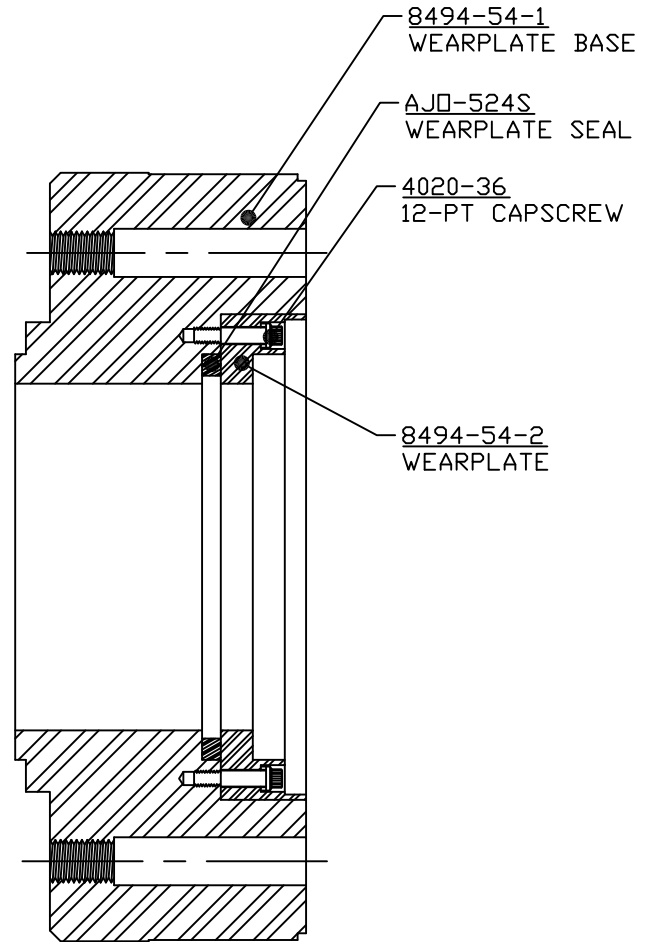
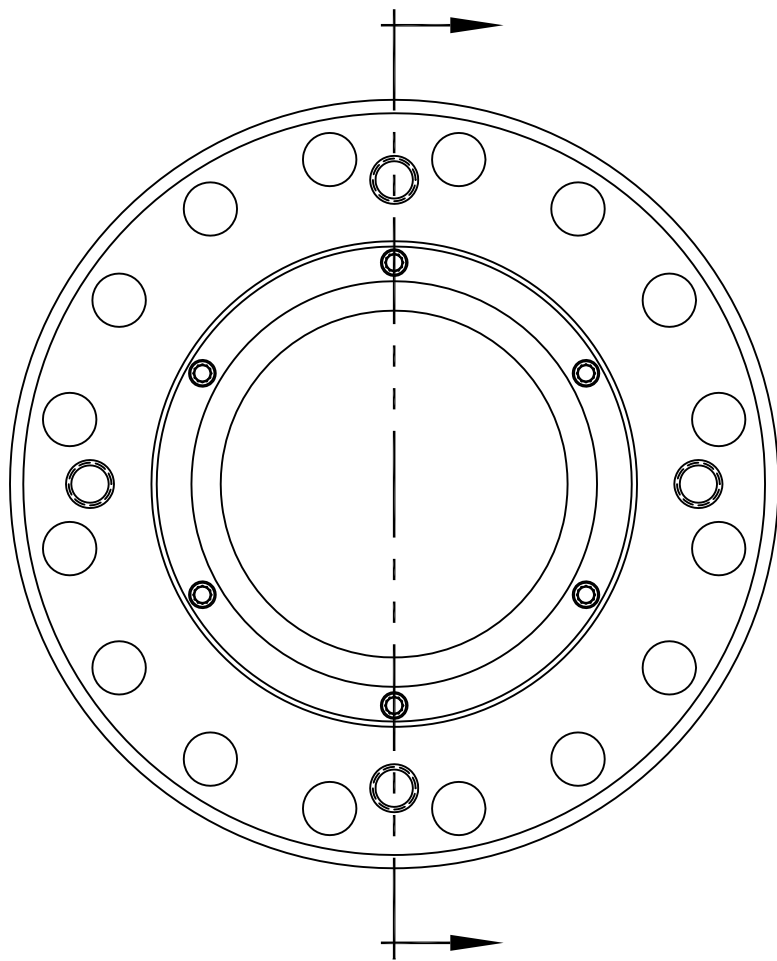




6293-3A

REV#	DATE	REVISED BY	REVISIONS . . .	UNLESS OTHERWISE NOTED . . .
				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 RADI ARE 1/16 MAX.
				6. BEVELS 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.

<b>SOUTHWEST OILFIELD PRODUCTS, INC. -- HOUSTON, TX.</b>			
DESCRIPTION PISTON ROD ASSEMBLY FOR SOUTHWEST 2 PIECE ROD -- FC-2200	DATE	DRAWN	APPROVED
	11-29-99		
FILE # G:\USERS\ACAD\WINGONGS\RODS\6293-3A	MATERIAL XXXXX	HEAT TREATMENT XXXXX	SCALE NONE
DRAWING # 6293-3A		REVISION #	



8494-54A

REV#	DATE	REVISED BY	REVISIONS . . .	UNLESS OTHERWISE NOTED . . .	SOUTHWEST® OILFIELD PRODUCTS, INC. -- HOUSTON, TX.						
				1. ALL DIMENSIONS ARE IN INCHES.	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.	DESCRIPTION		DRAWN	APPROVED	SCALE	
				2. ALL FRACTIONAL DIMENSIONS ARE #1/64.		WEARPLATE CONVERSION FOR FC-2200		DATE 03-09-04		NONE	
				3. ALL DECIMAL DIMENSIONS ARE +.003/- .000.		EMSCO OEM FLUID END		NAME T. LEMAN			
				4. ALL ANGLES ARE ±0.5°.		FILE #	SHEET OF	MATERIAL	HEAT TREATMENT	DRAWING #	REVISION #
				5. ALL FILLETS AND RADI ARE 1/16 MAX.		-. \WORKING\WEARPLATE 8494-54A	1	N/A	N/A	8494-54A	
				6. BEVELS 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.							