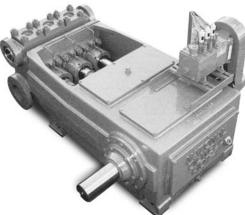


P.O. Box 4638

Houston, Texas 77210-4638

REVISED: AUGUST 21, 2007 REVISED: FEBRUARY 4, 2005 ISSUE: OCTOBER 23, 2003





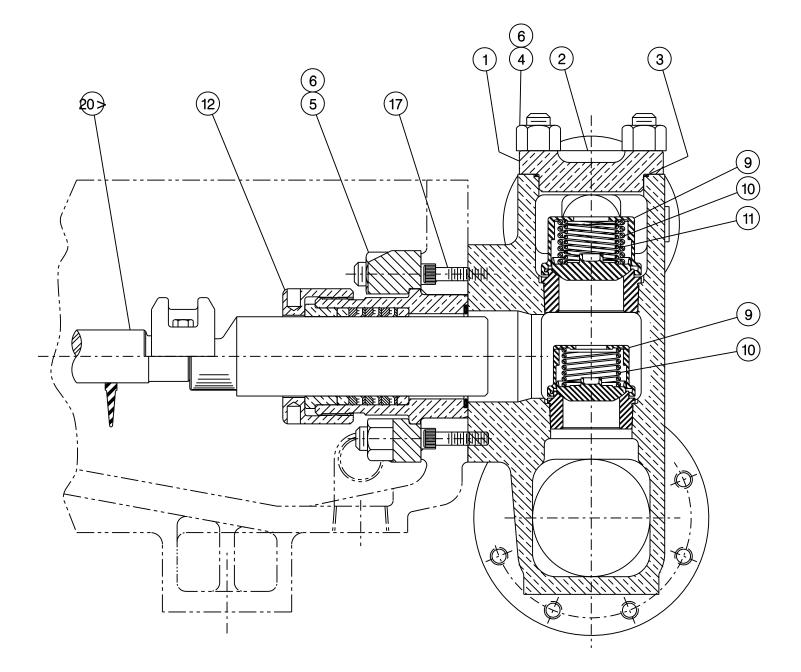
Index and Check List:

PAGE	DWG.	DESCRIPTION	SERIES OF	DATE OF
	NUMBER		ISSUE	ISSUE
1	1711871-13	ASSEMBLY, FLUID END, 130T-4L – ALUM. BRZ.	SECOND	8-21-07
2	1711872-13	ASSEMBLY, FLUID END, 130T-4M – ALUM. BRZ.	SECOND	8-21-07
3	1711873-13	ASSEMBLY, FLUID END, 130T-4M – ALUM. BRZ.	SECOND	8-21-07
4	1711874-13	ASSEMBLY, FLUID END, 130T-4H – ALUM. BRZ.	SECOND	8-21-07
5	1711877-13	ASSEMBLY, POWER END	SECOND	8-21-07
6	1711878-13	ASSEMBLY, CRANKSHAFT	THIRD	3-2-07
7	1711879-13	ASSEMBLY, SEVERE DUTY VALVE	SECOND	8-21-07
8	1711880-13	CAGE VALVE SERVICE – S.S. PLATE, BOTTOM GUIDED AND BALL AND SEAT	FIRST	05-16-00
9	1711881-13	VALVE SERVICE KITS – SPHERICAL SEAT	SECOND	08-21-07
10	1711882-13	VALVE SERVICE KITS – NOV TAPERED SEAT AND CAGE TYPE	FIRST	05-16-00
11	1711883-13	ASSEMBLY, GEAR REDUCER (ALL RATIOS)	SECOND	10-23-03
12	1711884-13	ASSEMBLY, PLUNGER KIT – 130T-4L AND 4M	SECOND	7-19-07
13	1711885-13	ASSEMBLY, PLUNGER KIT – 130T-4M AND 4H (HIGH PRESSURE)	FIRST	05-16-00
14	1711886-13	S.S. PLUNGER KITS W/ KEVLAR PACKING – 130T-4L AND 4M	FIFTH	11-08-07
15	1711887-13	S.S. PLUNGER KITS W/ KEVLAR PACKING – 130T-4H	FIRST	05-16-00
16	1711888-13	PLUNGER W/ INTERM. ROD ASSY. STRAIGHT / TAPERED CLAMP	SECOND	7-19-07
17	1711889-13	PLUNGER W/INTERM. ROD ASSY. – THREADED PLUNGER	THIRD	12-08-08
18	1711890-13	ASSEMBLY, LUBRICATOR PIPING	FIRST	05-16-00
19	1711891-13	OPTIONAL ACCESSORIES	FIRST	05-16-00
20	1711892-13	LOW PRESSURE IN-LINE SUCTION DAMPENER (WELD-ON)	FIRST	05-16-00
21	1711893-13	HIGH PRESSURE IN-LINE SUCTION DAMPENER (WELD-ON)	FIRST	05-16-00
22	1711895-13	LINER AND PISTON ASSEMBLY – 4"	FIRST	05-16-00
23	1711896-13	OUTLINE DRAWING WITHOUT GEAR REDUCER	FIRST	05-16-00
24	1711897-13	OUTLINE DRAWING WITH GEAR REDUCER	FIRST	05-16-00

Revisions effective June 18, 2009 – revised pages 14 and 17.



DESCRIPTION OF CHANGE



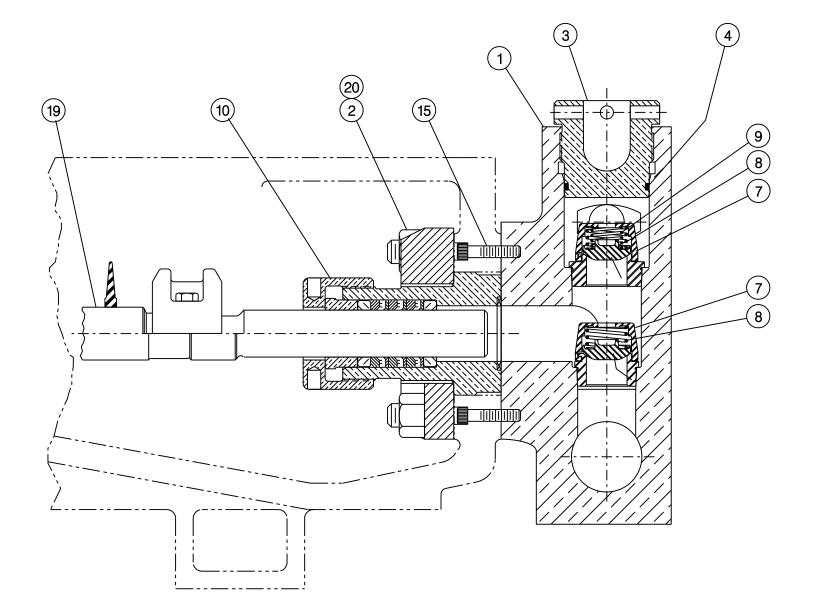
ж	1	1710270	(
	3	SEE PAGES 16 & 17	ſ
8			
A	16 16	7000442-11 7000440-11	\$
	4	7006309	
8	2	6908019	f
8	2	6010021	(
A A A A A 8 8	2	* 1080	(
8	2	*44	(
	3	SEE PAGES 12-15	
	1	1793526	\$
	1	1793525	\$
	1	1793524-6	f
	3	1793522-25	1
	3 3	1793520-25	١
	12	6300160	1
	12	49003081	\$
	12	10000185	0,
	3	2410031-247	
	1	1711073	C
	1	171135714-13	(
	QTY REQ'D	PART NO.	

SEE PAGE 7 FOR SEVERE DUTY VALV

	01	ı	
BAR, STUFFING BOX ADJUSTING NUT	21 20		
ROD, INTMD (CLAMP OR THD TYPE LISTING) SCREW, 2/4"-10 x 21/2" HEX HD CAP (DISCH. CONN.)	19		
SCREW, 1/4" x 2" HEX HD CAP (SUCTION CONN.)	18		>
SCREW, $\frac{1}{2}$ "-13 x 2 $\frac{1}{4}$ " HEX SOC HD CAP	17	(1	
RING, OVAL JOINT R-26	16		Ϊ
GASKET, 5" FLAT RING - 150*	15	L T	-
	14		
CAPLUG STD. PLUNGER KIT LISTING	13 12		
SPRING, INNER	11		
SPRING, OUTER	10		
RETAINER, SPRING	9		
VALVE CPT, SPHERICAL DISCH.	8		
VALVE CPT, SPHERICAL SUCT.	7		
NUT, 1"-8 HVY. HEX STUD, 1"-8 x 6"	6 5		
STUD, 1" × 3 ³ / ₄ "	4		
SEAL, TOP COVER	3		
COVER, CYLINDER TOP	2		
CYLINDER ONLY, FLUID DESCRIPTION	1		
ITEM NOT SHOWN FOR CLARITY	ITEM NO.		
S FOR SHIPPING PURPOSES ONLY			
SHIPPED SEPERATELY			
LIST OF MATERIAL			
LVE ASSEMBLY			
	YELL '	VARCO	
TILE ASSY, FLUI	DF	ND	
130T-4L TRIPLEX PL			
IJUI-4L IRIFLEA FL SIZE REFERENCE NO. DRAWING NO.	UNGE	IREV	
D REFERENCE NO. 17118	71-1	13 ``A	
	SHEET	1 OF 1	
	1		

DATE APPROVED M NO

MADE CHKD



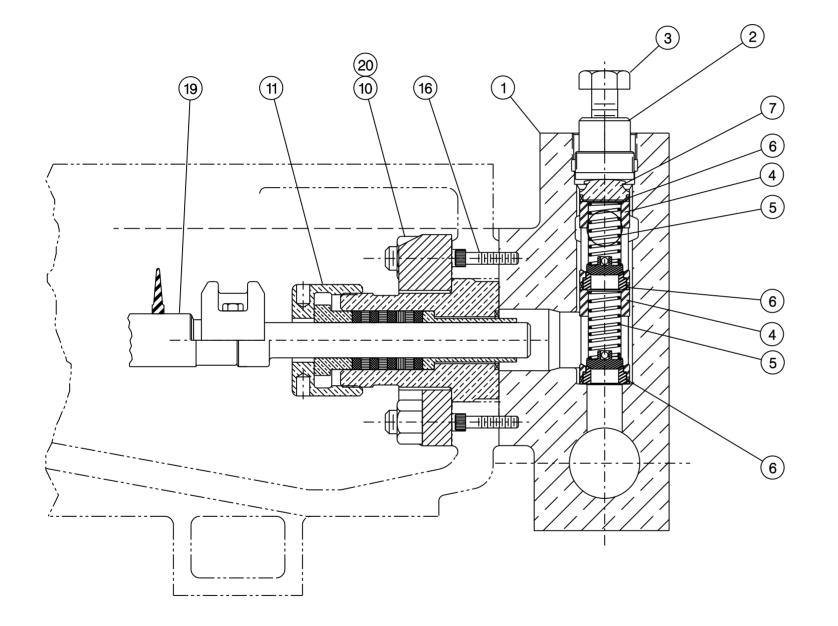
	12	6300160	NUT, 1"-8 HVY. HEX	20		
	3	SEE PAGES 16 & 17	ROD, INTMD (CLAMP OR THD TYPE LISTING)	19		
×	1	1710270	BAR, STUFFING BOX ADJUSTING NUT	18		
8	8	7000397-11	SCREW,5%"x 2" HEX HD CAP (SUCT.CONN.)	17		
8	8	7000525-10	SCREW, 1" x 2¾" HEX HD CAP (DISCH. CONN.)	16		
	4	7006309	SCREW, 1/2"x 21/4" HEX SOC HD CAP	15		
8	2	6908004	RING, OVAL JOINT R-20	14		
8	2	6010019	GASKET, 3" FLAT RING	13		
	2	*55-A	CAPLUG	12		
8	2	* 15	CAPLUG	11		
	3	SEE PAGES 12-15	STD. PLUNGER KIT LISTING	10		
	1	1792526	SPRING, INNER	9		
	1	1792525	SPRING, OUTER	8		
	1	17925246	RETAINER, SPRING	7		
	3	1792522-25	VALVE CPT, SPHERICAL DISCH.	6		
	3	1792520-25	VALVE CPT, SPHERICAL SUCT.	5		
	3	99609339	0-RING 35/8"x 31/4"x3/6"	4		
	3	1711417	COVER, VALVE	3		
	12	49003081	STUD, 1"-8 × 6"	2		
	1	171141214-13		1		
	QTY REQ'D	PART NO.	DESCRIPTION	ITEM NO		
		ж	ITEM NOT SHOWN FOR CLARITY			
	S FOR SHIPPING PURPOSES ONLY					
		E	SHIPPED SEPERATELY			
	LIST OF MATERIAL					

SEE PAGE 7 FOR SEVERE DUTY VALVE ASSEM

M	B	LY	

1	r		
	NOV NATIONAL OILM	VELL VAR	CO
	™ ^{LE} ASSY. FLUI	d end	
	130T-4M TRIPLEX PL	UNGER F	PUMP
	D REFERENCE NO. DRAWING NO.	2-13	A
	SCALE NONE ST WT	SHEET 1 OF	· 1

DESCRIPTION OF CHANGE	MADE CHKD	DATE	APPROVED	M NO
INDIVIDUAL VALVE AND SEAT PART NUMBERS	MTH RPO	8.21.07		



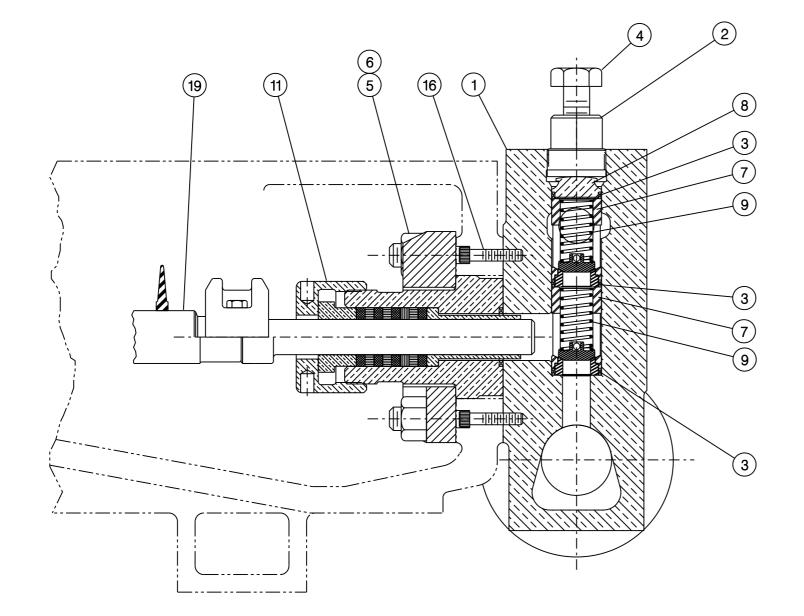
	12	6300160	NUT, 1"-8 HVY. HEX	20	
	3	SEE PAGES 16 & 17	ROD, INT. (CLAMP OR THREADED OPTION)	19	
۵	8	700039711	SCREW,5%" x 2" HEX HD CAP (SUCTION CONN.)	18	
اھ	8	700052510	SCREW, 1 " x 2¾" HEX HD CAP (DISCHARGE CONN.)	17	
	4	7006309	SCREW, $\frac{1}{2}$ "-13 x 2 $\frac{1}{4}$ " HEX SOC HD CAP	16	
اھ	2	6908004	RING, OVAL JOINT R-20	15	
ا	2	6010019	GASKET, 3" FLAT RING	14	
8	2	*55-A	CAPLUG	13	
8	2	* 15	CAPLUG	12	
	3	SEE PAGES 12-15	STD. PLUNGER KIT LISTING	11	
	12	49003081	STUD, 1"-8 × 6"	10	
x	1	1710270	BAR, STUFFING BOX ADJUSTING NUT	9	
	6	1717090-25	VALVE CPT, SPHERICAL	8	
	3	17113872	RETAINER, VALVE CAGE	7	
	9	1712373	SEAL, VALVE CAGE	6	
	6	1712486	SPRING, BALL VALVE	5	
	6	17125854	CAGE, VALVE	4	
	3	1713410	SCREW, CAGE LOADING	3	
	-	17094842	COVER CYLINDER TOP	2	
	1	171138014-13	CYLINDER ONLY, FULID	1	
	QTY REQ'D	PART NO.	DESCRIPTION	ITEM NO	
			* ITEM NOT SHOWN FOR CLARITY		
			S FOR SHIPPING PURPOSES ONLY		
			SHIPPED SEPERATELY		
	LIST OF MATERIAL				

SEE PAGE 7 FOR SEVERE DUTY VALVE ASSEMBLY

NÇ	NATIONAL	OILWELL VARCO
тітье 130T		FLUID END EX PLUNGER PUMP
SIZE RE		11873-13 A
SCALE	DNE ST WT	SHEET 1 OF 1

3)

DESCRIPTION OF CHANGE	MADE CHKD	DATE	APPROVED	M NO
NDIVIDUAL VALVE AND SEAT PART NUMBERS	MTH RPO	8.21.07		



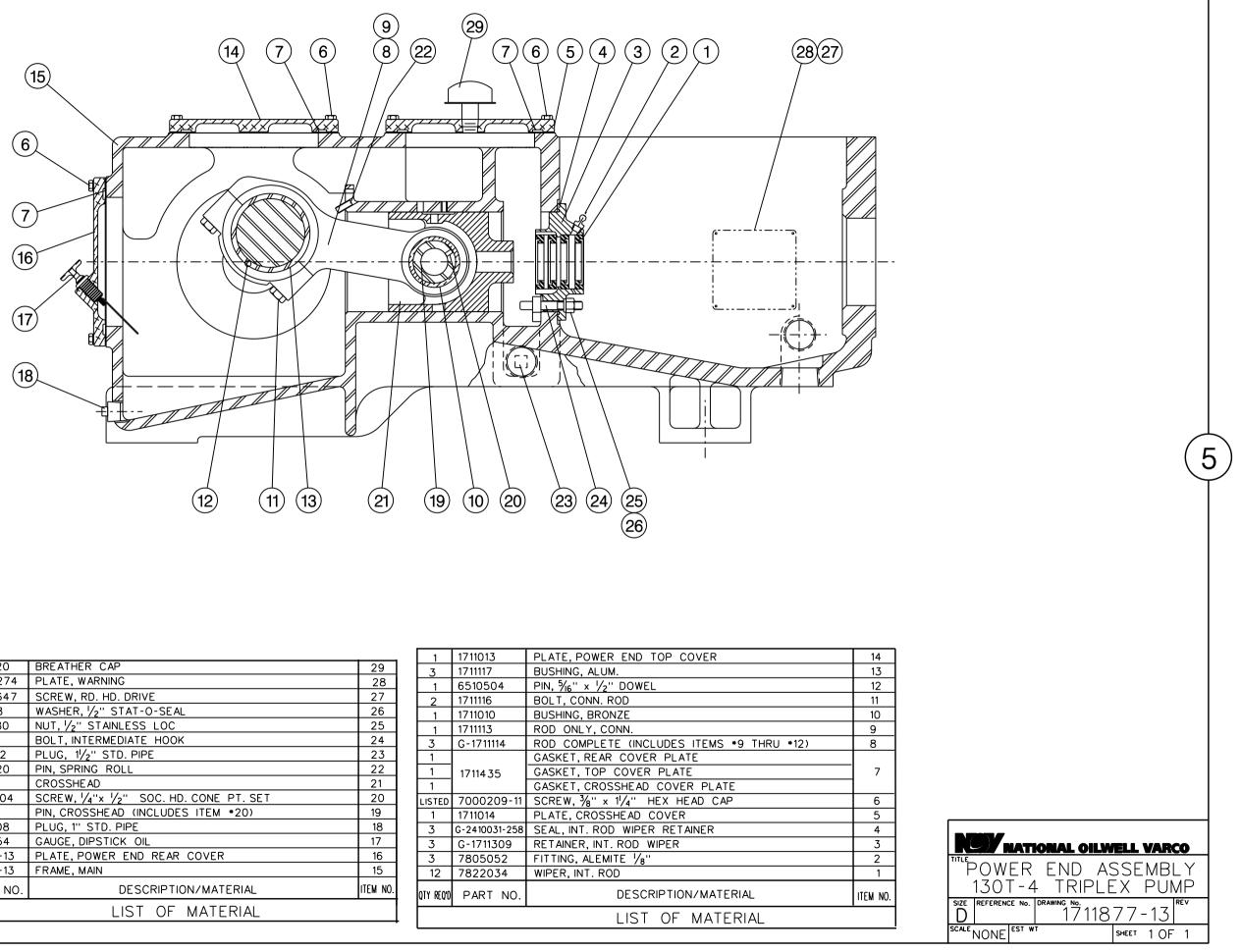
x	1	1710270	BAR, STUFFING BOX ADJUSTING NUT	20			
		SEE PAGES 16-17	ROD, INTMD (CLAMP OR THD TYPE LISTING)	19			
ا	8	700056810	SCREW, 11/8" x 4 " HEX HD CAP (DISCH. CONN.)	18			
ا	16	700044211	SCREW, $\frac{3}{4}$ "-10 x 2 $\frac{1}{2}$ " HEX HD CAP (SUCT. CONN.)	17			
	4	7006309	SCREW, 1/2"-13 x 21/4" HEX SOC HD CAP	16			
٨	2	6908011	RING, OVAL JOINT R-23	15			
8	2	6010022	GASKET, 3" FLAT RING	14			
8	2	*210	CAPLUG	13			
8	2	* 1050	CAPLUG	12			
	3	SEE PAGES 12-15	STD. PLUNGER KIT LISTING	11			
	6	1711450-25	VALVE CPT, SPHERICAL	10			
	6	1711306	SPRING, BALL VALVE	9			
	3	1711387-2	RETAINER, BALL VALVE	8			
	6	1711405-4	CAGE, BALL VALVE	7			
	12	6300160	NUT, 1"-8 HVY. HEX	6			
	12	49003081	STUD, 1"-8 x 6"	5			
	3	1713410	SCREW, CAGE LOADING	4			
	9	1711112	SEAL, VALVE CAGE	3			
	3	1711388-2	COVER, CYLINDER TOP	2			
	1		CYLINDER ONLY, FULID	1			
	QTY REQ'D	PART NO.	DESCRIPTION	ITEM NO.			
	ITEN NOT SHOWN FOR CLARITY						
	S FOR SHIPPING PURPOSES ONLY						
			A SHIPPED SEPERATELY				
			LIST OF MATERIAL				

SEE PAGE 7 FOR SEVERE DUTY VALVE ASSEMBLY

	a PURPOSES ONLY ERATELY
OF	MATERIAL
Y	
_ '	NOY NATIONAL OILWELL VARCO
	TILEASSEMBLY, FLUID END
	130T-4H14SF TRIPLEX PLUNGER PUMP)
	SIZE REFERENCE NO. DRAWING NO. 1711874-13 A
	SCALE NONE EST WT SHEET 1 OF 1

(4)

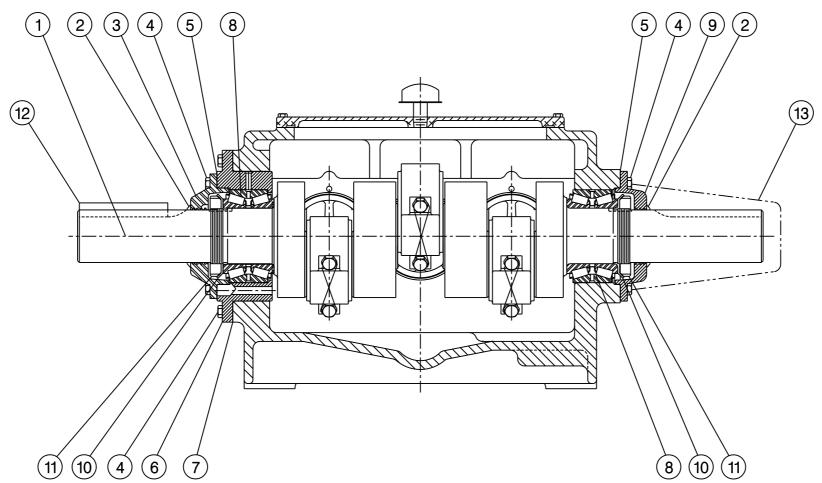
DESCRIPTION OF CHANGE	MADE CHKD	DATE	APPROVED	м	NO
DIVIDUAL VALVE AND SEAT PART NUMBERS	MTH RPO	8.21.07			



QTY REQ'D	PART NO.	DESCRIPTION/MATERIAL	ITEM NO
1	1711001-13	FRAME, MAIN	15
1	1711015-13	PLATE, POWER END REAR COVER	16
1	2400054	GAUGE, DIPSTICK OIL	17
2	6874008	PLUG, 1'' STD. PIPE	18
3	1711008	PIN, CROSSHEAD (INCLUDES ITEM *20)	19
1	H7028104	SCREW, 1/4"x 1/2" SOC. HD. CONE PT. SET	20
3	1711005	CROSSHEAD	21
3	6572420	PIN, SPRING ROLL	22
1	6874012	PLUG, 11/2" STD. PIPE	23
6	1716031	BOLT, INTERMEDIATE HOOK	24
6	6308080	NUT, 1/2" STAINLESS LOC	25
6	7618018	WASHER, 1/2" STAT-O-SEAL	26
8	25854647	SCREW, RD. HD. DRIVE	27
1	G2407274	PLATE, WARNING	28
1	7802020	BREATHER CAP	29

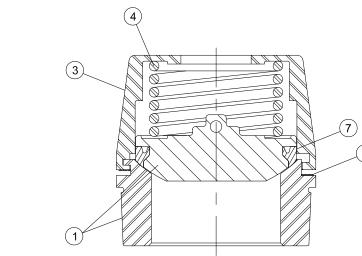
1	1711013	PLATE, POWER END TOP COVER	Τ	
3	1711117	BUSHING, ALUM.		
1	6510504	PIN, 5/16'' × 1/2'' DOWEL		
2	1711116	BOLT, CONN. ROD		
1	1711010	BUSHING, BRONZE		
1	1711113	ROD ONLY, CONN.		
3	G-1711114	ROD COMPLETE (INCLUDES ITEMS *9 THRU *12)		
1		GASKET, REAR COVER PLATE		
1	1711435	GASKET, TOP COVER PLATE		
1		GASKET, CROSSHEAD COVER PLATE	٦.	
LISTED	7000209-11	SCREW, 3/8'' × 11/4'' HEX HEAD CAP	Т	
1	1711014	PLATE, CROSSHEAD COVER	Т	
3	G-2410031-258	SEAL, INT. ROD WIPER RETAINER	Т	
3	G-1711309	RETAINER, INT. ROD WIPER	Т	
3	7805052	FITTING, ALEMITE 1/8"	Т	
12	7822034	WIPER, INT. ROD	Τ	
QTY REQ'D	PART NO.	DESCRIPTION/MATERIAL	П	
	LIST OF MATERIAL			

			MADE	DATE	LADDDOV/CD	
LTR	DESCRIPTION O			DATE	APPROVED	M NO
A B	QTY. REQ'D. WAS 'LIS WAS PART No. G-17		DCP RPO	10-27-00		
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	10		CESSORY DRIV		UIRED	
	9	** OP1	TIONAL EQUIPM	ENT		
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	+					
	4		ATIONAL	OILWE	L L VA R	ICO
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		1 170	NKSHAF1 T-4 TRI	DIEV F		
		I I.J.()	· + IIVI			
	ITEM No.	SIZE REFERENCE	No. DRAWING No			REV
	ITEM No.	SIZE REFERENCE	No. DRAWING No 1	1878	-13	rev B

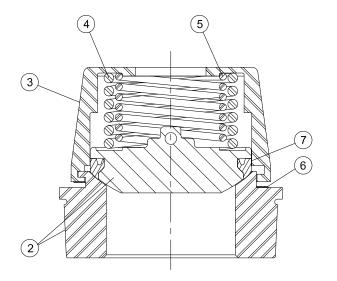


**	1	1711129	COVER, CRANKSHAFT EXT. (SLOTTED LUBRICATOR)			
*	1	1711128	COVER, CRANKSHAFT EXT. (SOLID)	13		
	1	2404027	KEY, CRANKSHAFT ½x½x 6 SQ.	12		
	2	6304040	NUT, TIMKEN TAN-20 LOCK	11		
	2	7610042	ASHER, TIMKEN NO. TW-120 LOCK			
	1	1711022	RETAINER, CRANKSHFT BEARING			
	2	ZT-4006	BEARING, CRANKSHAFT ROLLER	8		
	1	1711614	GASKET, MAIN BEARING CAGE	7		
	1	1711617	CAGE, MAIN BEARING			
	2	1703960	GASKET, CRANKSHAFT BEARING RETAINERS			
	2		FOR CRANKSHAFT BEARING RETAINERS			
	12		FOR MAIN BEARING CAGE			
A	20	2401510	SCREW, $\frac{1}{2}$ " x $\frac{1}{2}$ " DRILLED HD.	4		
	1	1711618	RETAINER, CRANKSHAFT BRG.	3		
_	2	1704800	EXCLUDER, DIRT (1-ONLY W/G. REDUCER)	2		
В	1	171100213	CRANKSHAFT	1		
	QTY REQ'D	PART No.	DESCRIPTION/MATERIAL	ITEM No.		
			LIST OF MATERIAL			





171187	7913	SHT 1						
	LTR	DESCRIPTION	OF CHANGE		MADE CHKD	DATE	APPROVED	M NO
	А	WAS DURABLA TAPEREI	d seat val	.VE ASSY	WFL RPQ	8.21.07		
4			3	4			7	
s					DISCHARGE			
<u> </u>	<u></u>				DISCHARGE			
1 17925 1 17925)83 526	SEAL / INSERT WAVE RING SPRING, INNER SPRING, OUTER RETAINER, SPRING VALVE CPT., DISCHARGE - SEV VALVE CPT., SUCTION - SEVER DESCRIPTION <u>130T-4M</u> <u>TAPERED SEAT</u> <u>SPHERICAL SD TY</u>	<u>= DUTY</u>	77 66 44 33 22 11 ITEN	5 5 			7
1) 2 E DUTY 1	-							
ITEM No.					TIONAL			
			HOUSTON, T	SEVE		VALVE		KLAHOMA
				1301-4	TRIPLEX I			REV
			B SCALE	EST			87913	
				251		SHE	ET 1 0	F 1



DISCHARGE

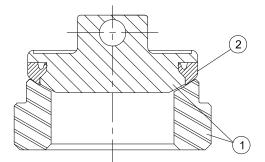
1	9707075	SEAL / INSERT	7
1	9707081	WAVE RING	6
1	1793526	SPRING, INNER	5
1	1793525	SPRING, OUTER	4
1	1793524-6W	RETAINER, SPRING	3
1	1793522-25SD	VALVE CPT., DISCHARGE - SEVERE DUTY	2
1	1793520-25SD	VALVE CPT., SUCTION - SEVERE DUTY	1
QTY REQ'D	PART No.	DESCRIPTION	ITEM No.

(4)

SUCTION

3

<u>130T-4L</u> <u>TAPERED SEAT</u> <u>SPHERICAL SD TYPE</u>



SUCTION & DISCHARGE

1	9707090	SEAL / INSERT	2
1	1711450-25SD	VALVE CPT., SUCTION & DISCHARGE - SEVERE DUTY	1
QTY REQ'D	PART No.	DESCRIPTION	ITEM No.

<u>130T-4H</u> CAGE TYPE SPHERICAL SD TYPE

1	1712373	1711112	SEAL	6		
1	1712372	1711105	RETAINER, SPRING	5		
1	1712371	1711103	SPRING	4		
1	1712370-4	1711101-6	CAGE	3		
1	1712367	1711106	VALVE & SEAT (DISCHARGE)	2		
1	1712367	1711106	VALVE & SEAT (SUCTION)	1		
QTY REQ'D	PART No. 130T-4M	PART No. 130T-4H	DESCRIPTION ITEM NO			
	LIST OF MATERIAL					

|--|

30T –	4M	&
<u>130T –</u>	· 4H	_
CAGE	TYP	Е
BALL \	VALV	Е

-

	LIST	OF	MATERIA
3		-(4)) <u>1301</u> B CA

1711112

1711306

17114054

1711500-25

1711500-25

PART No.

130T-4H

1712373

1712486

17125854

1717080-25

1717080-25

PART No.

130T-4M

1

1

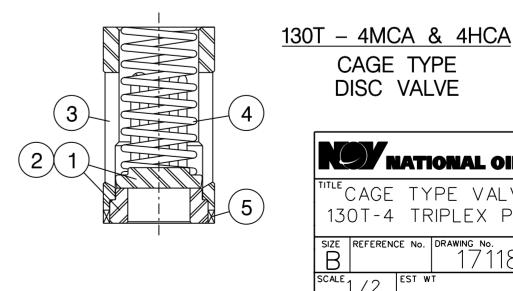
1

1

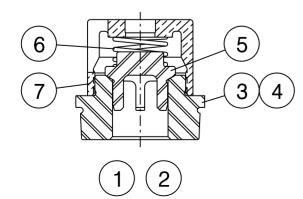
1

QTY REQ'D

1	1712373	1711112	SEAL	5			
1	1712486	1711306	SPRING	4			
1	17125854	17113054	CAGE	3			
1	1712582	1711332	VALVE & SEAT (DISCHARGE)	2			
1	1712580	1711330	VALVE & SEAT (SUCTION)	1			
QTY REQ'D	PART No. 130T-4M	PART No. 130T-4H	DESCRIPTION	ITEM NO.			
	LIST OF MATERIAL						



1	17930426	179250426					
1	1793505P	1792505P	1792505P SPRING				
1	1790067	1790066	VALVE	5			
1		17925034	SEAT, VALVE - DISCHARGE	4			
1		17925014	SEAT, VALVE - SUCTION	4			
1	17935034		SEAT, VALVE - DISCHARGE	3			
1	17935014		SEAT, VALVE - SUCTION				
1	1793502-4	1792502-4	VALVE CPT DISCHARGE	2			
1	1793500-4	1792500-4	VALVE CPT SUCTION	1			
QTY REQ'D	PART No. 130T-4L	PART No. 130T-4M	DESCRIPTION	ITEM NO.			
	LIST OF MATERIAL						



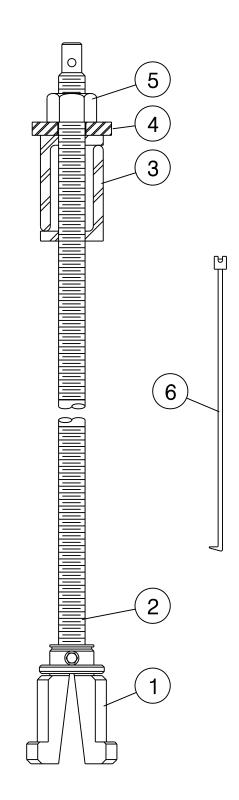
<u>130T – 4L & 4M</u> BOTTOM GUIDED TAPERED SEAT VALVE

SEAL	5
SPRING	4
CAGE	3
VALVE & SEAT (DISCHARGE)	2
VALVE & SEAT (SUCTION)	1
DESCRIPTION	ITEM NO.
MATERIAL	

<u>130T – 4MCA & 4HCA</u> BOTTOM GUIDED CAGE TYPE VALVE

CAGE TYPE

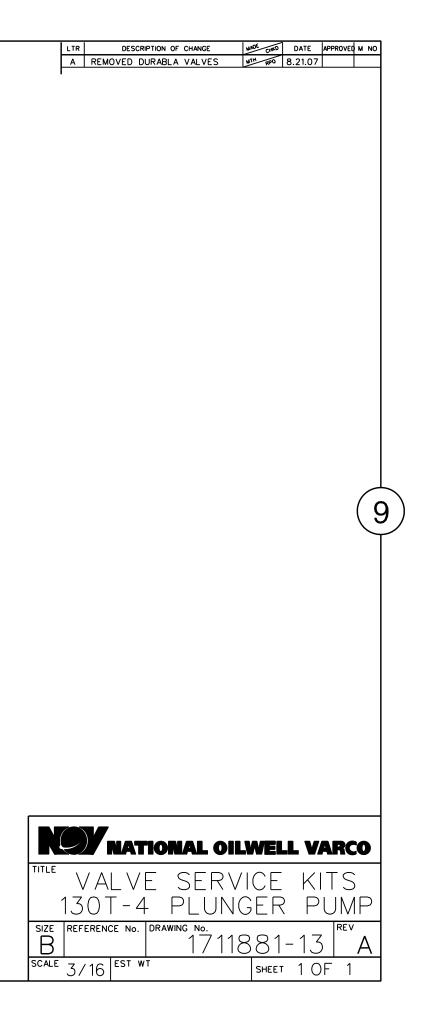
D	ISC	VAL	VE				
ļ				. OILW			-
				ALVE K PLU			
BIZE	REFEREN	CE No.	drawing n 17	•. 1188	30-1	3	REV
CALE,	1/2	EST W	Т		SHEET	10	F 1



SPHERICAL TAPERED SEAT VALVE KIT

	130T–4L						
ITEM NO.	PART No.	DESCRIPTION	QTY. REQD.				
	180104135	VALVE KIT COMPLETE	1				
1	181259359	HEAD	1				
2	20220159	STEM	1				
3	181205709	SPACER	1				
4	75518308	NUT, 1''-8	1				
5	20220194	WASHER	1				
6	1790034	RETRIEVER	1				

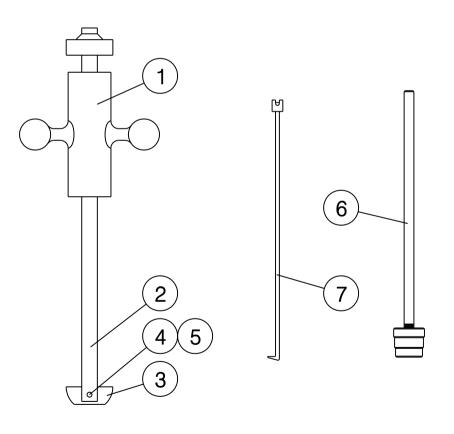
	130T–4M						
ITEM NO.	PART No.	DESCRIPTION	QTY. REQD.				
	180104119	VALVE KIT COMPLETE	1				
1	18259250	HEAD	1				
2	20220159	STEM	1				
3	181205709	SPACER	1				
4	75518308	NUT, 1''-8	1				
5	20220194	WASHER	1				
6	1790034	RETRIEVER	1				



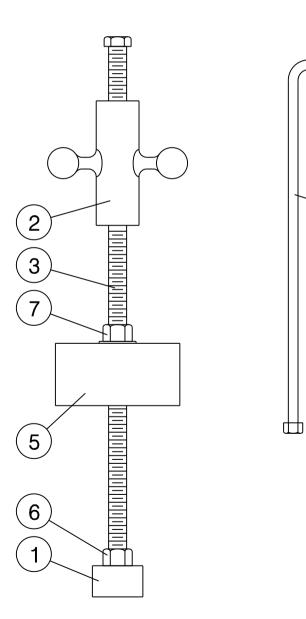
130T – 4HCA /4 PO							
ITEM NO.	PART No.	DESCRIPTION	QTY. REQD.				
	1711251	VALVE KIT COMPLETE	1				
	1711249	BAR CPT. (INCL. 2-5)	1				
1	1790080	BUMPER	1				
2	1710250	BAR	1				
3	1711252	PLATE	1				
4	6572016	PIN	1				
5	6571216	PIN	1				
6	1790041	DRIVER	1				
7	1790034	RETRIEVER	1				

130T – 4MCA							
ITEM NO.	PART No.	PART No. DESCRIPTION					
	1712342	VALVE KIT COMPLETE	1				
	1712242	BAR CPT. (INCL. 2-5)	1				
1	1790080	BUMPER	1				
2	1710250	BAR	1				
3	1712263	PLATE	1				
4	6572016	PIN	1				
5	6571216	PIN	1				
6	1790042	DRIVER	1				
7	1790034	RETRIEVER	1				

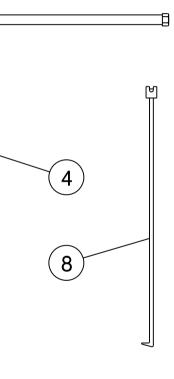
	130T – 4MC						
ITEM NO.	PART No.	DESCRIPTION	QTY. REQD.				
	1792507	VALVE KIT COMPLETE	1				
1	1792506	HEAD	1				
2	1790080	BUMPER	1				
3	1790081	BAR	1				
4	1790082	WRENCH	1				
5	1713109	SUPPORT	1				
6	6300160	NUT	1				
7	6314002	NUT	1				
8	1790034	RETRIEVER	1				



CAGE TYPE VALVE KIT (SPHERICAL, BOTTOM GUIDED, DISC, OR BALL)

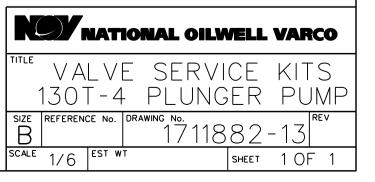


	130T–4LC							
ITEM NO.	PART No.	DESCRIPTION	QTY. REQD.					
	1793507	VALVE KIT COMPLETE	1					
1	1793507	HEAD	1					
2	1790080	BUMPER	1					
3	1790081	BAR	1					
4	1790082	WRENCH	1					
5	1713109	SUPPORT	1					
6	6300160	NUT	1					
7	6314002	NUT	1					
8	1790034	RETRIEVER	1					

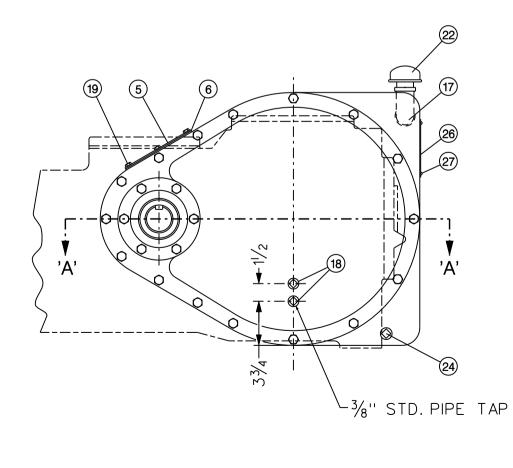


NATIONAL OILWELL VARCO TAPERED SEAT VALVE KIT

(10)



(20) 4 (7` 11109 (26) (25) 67 (12) 21 (21) (18) (15) (23) 2 SECTION 'A-A'



3 FT.				800016				LOCKWIRE, #16 GA. ANNEALED	28
4			71780	25				SCREW, RD HD DRIVE $#2 \times \frac{1}{4}$ "	27
1			171160	1606				PLATE, NAME & INSTRUCTION	26
2			ZT-25	2501				BEARING, PINION SHAFT	25
1			78150	59				PLUG, MAGNETIC DRAIN 11/4"	24
1			1119310)				EXCLUDER, BRG	23
1			78020)20				CAP, BREATHER * S-183	22
16			70003	309-11				SCREW, HEX HD CAP 1/2" x 21/4"	21
12			70003	304-11				SCREW, HEX HD CAP 1/2" x 1/4"	20
4			70002	206-11				SCREW, HEX HD CAP 3/8" x3/4"	19
2			68740)03				PLUG, STD PIPE 3/8"	18
1			68290	800				ELBOW, STD 1" × 90° STREET	17
2			65808	352				PIN, TAPER #8 x 3 ¹ /4''	16
1			24040)45				KEY, GEAR 7/8" x 7/8" x 3"	15
8			2405529					SCREW, HEX HD DRLD $\frac{1}{2}$ " x $\frac{3}{4}$ "	14
1			2402330					KEY, PINION 5/8" x 5/8" x 4"	13
1			171162	2				RETAINER, CRANKSHAFT BRG	12
6			171162	7				SHIM, BEARING RETAINER .007	11
6			171262	25				SHIM, BEARING RETAINER .005	10
2			171162	0				SHIM, BEARING RETAINER .020	9
1			171160	5				CAP, H.S. PINION BRG OPEN	8
1			171160	4				CAP, H.S. PINION BRG BLIND	7
1			1711619	9				GASKET, INSPECTION COVER	6
1			110560)9				COVER, INSPECTION	5
1			78172	00-68				GASKET, LOCTITE PLASTIC	4
1	1711602	1711	602	17116	502	1711602	1711602	HOUSING CPT, GEAR REDUCER	3
1	1711616	1711	1615	17116	21	1711613	1711612	PINION	2
1	1711608		609	17116	-	1711610	1711611	GEAR	1
QTY REQ'D			T NO.	PART		PART NO.	PART NO.	DESCRIPTION	ITEM NO
	1711633 4.269:1 RATIO		11632 1 RATIO		1634 I RATIO	1711631 3.15: RATIO	1711630 2.60:1 RATIO		
	GEAR RED	UCER	ASSY.	COMF	LETE I	3/M No.'s			
	-							-	

 REVISED 10-23-03

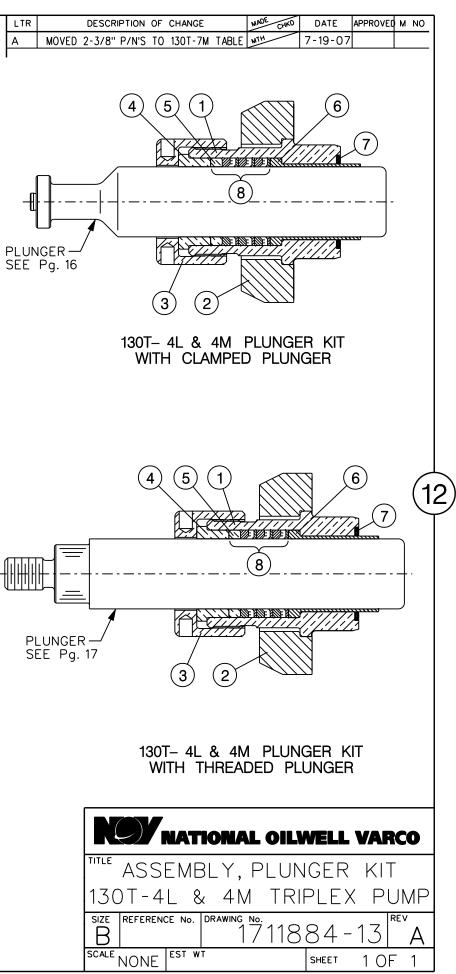
11

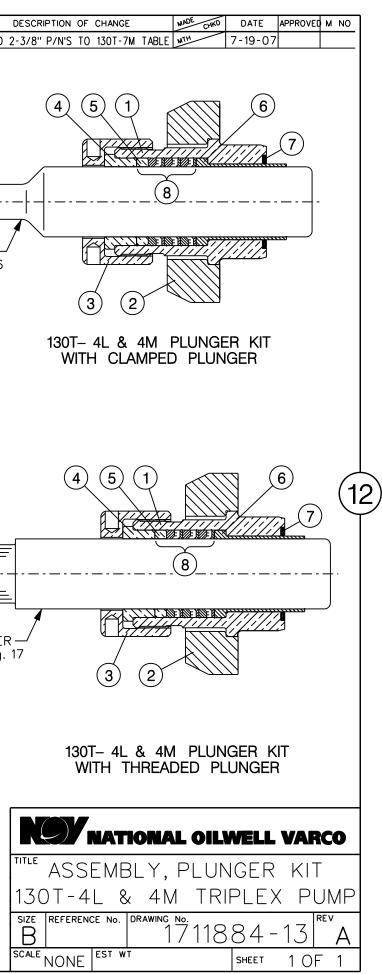
TITLE GEAR REDUCER ASSEMBLY 130T-4 TRIPLEX PLUNGER PUMP SIZE REFERENCE NO. DRAWING NO. B 1711883-13 A SCALE 1 / 8 EST WT SHEET 1 OF 1

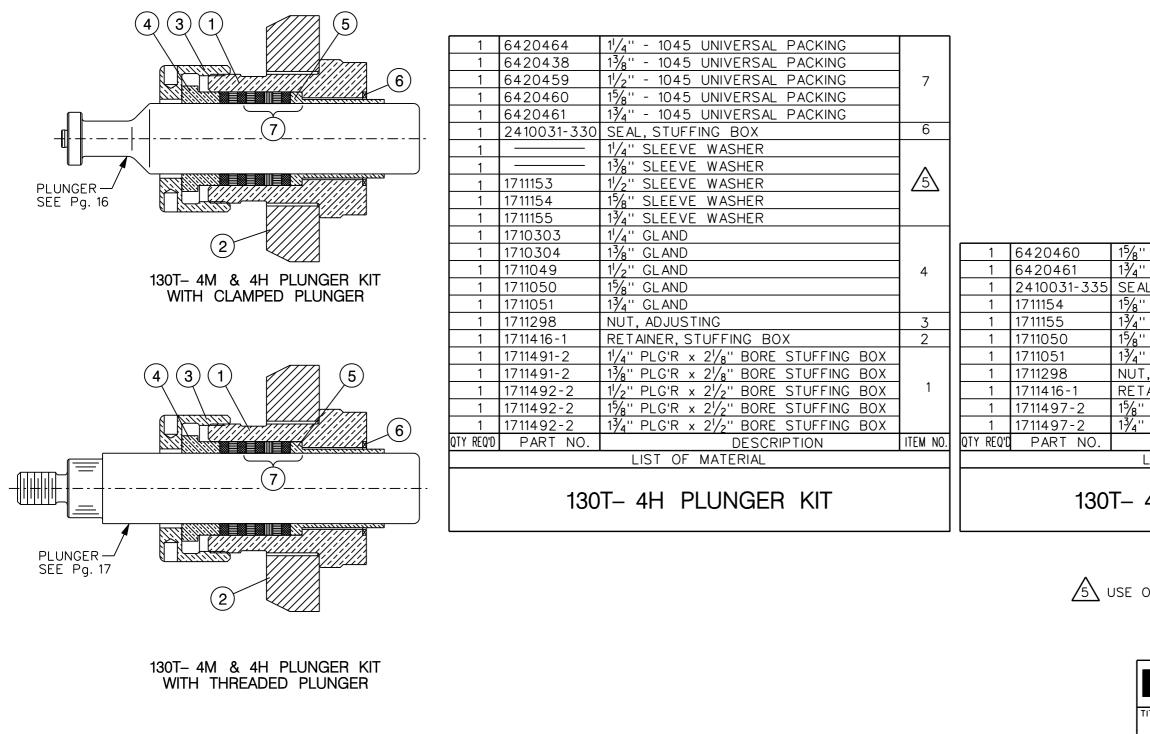
TR		DES
ι	MOVED	2-3/

6 USE ONLY WITH CERAMIC PLUNGER. REPLACE ONE OF ITEM *5 WITH ITEM *6.

					6400717		1
					6422317	15/8" 850-N UNIVERSAL PACKING	4
	<u>-</u>				6422318	13/4" 850-N UNIVERSAL PACKING	+
1 64	-22336	$2\frac{5}{8}$ " - 850-N UNIVERSAL PACKING			6422321	17/8" 850-N UNIVERSAL PACKING	8
1 64	-22339	$2\frac{7}{8}$ " - 850-n universal packing		1	6422323	2" 850-N UNIVERSAL PACKING	4
1 64	-22341	3 ¹ /8'' - 850-N UNIVERSAL PACKING		1	6422325	21/8" 850-N UNIVERSAL PACKING	-
1 49	010923	3 ¹ /4'' - 850-N UNIVERSAL PACKING	8	1	49012041	2 ¹ /4" - 850-N UNIVERSAL PACKING	4
1 64	-22344	3¾" - 850-N UNIVERSAL PACKING		1	6422331	2 ³ / ₈ " - 850-N UNIVERSAL PACKING	
1 64	22343-13	3 ¹ /2" - 850-N UNIVERSAL PACKING		1	2410031-335	SEAL, STUFFING BOX	7
1 64	-2244-13	3 ⁵ / ₈ " - 850-N UNIVERSAL PACKING		1	1711154	15%'' SLEEVE WASHER	
		3 ³ / ₈ "- 2 ³ / ₈ " SEAL, STUFFING BOX	7	1	1711155	1 ³ / ₄ " SLEEVE WASHER	1
		$2\frac{1}{8}$ " SLEEVE WASHER		1	1711156	17/8" SLEEVE WASHER	
		2 ⁷ / ₈ " SLEEVE WASHER		1	1711157	2" SLEEVE WASHER	
		3 ¹ / ₈ ^{''} SLEEVE WASHER		1	1711158	21/8" SLEEVE WASHER	
		3 ¹ / ₄ " SLEEVE WASHER	/6\	1	1711858	21/4" SLEEVE WASHER	1
		3 [%] / ₈ " SLEEVE WASHER		1	1711161	2 ³ / ₈ " SLEEVE WASHER	1
		$3^{1}/2^{11}$ SLEEVE WASHER		2	1712163	15/8'' WASHER	
		35/2 SLEEVE WASHER		2	1712056	1 ³ ∕₄'' WASHER	1
		2%'' WASHER		2	1711058	1 ⁷ / ₈ " WASHER	1
		2%" WASHER		2	1711059	2" WASHER	5
		3 ¹ / ₈ " WASHER		2	1711060	2 ¹ / ₈ ^{''} WASHER	-
		$3^{1}/4^{11}$ WASHER	5	2	1711856	2 ¹ / ₄ " WASHER	1
		3%'' WASHER			1711096	2 ³ / ₈ " WASHER	1
		$3^{1}/_{2}^{\prime\prime}$ WASHER		1	1711050	15%'' GLAND	
		3%" WASHER			1711051	1 ³ / ₄ '' GLAND	1
		2% GLAND			1711052	1 ⁷ / ₈ " GLAND	1
		2%" GLAND		1	1711053	2" GLAND	4
		3 ¹ / ₈ ¹¹ GLAND		1	1711054	2 ¹ / ₈ ^{''} GLAND	1
		3 ¹ / ₄ '' GLAND	4	1	1711857	2 ¹ / ₄ " GLAND	1
		3 ³ / ₈ " GLAND	4	1	1711093	2 ³ / ₈ " GLAND	1
		3 ¹ / ₂ ^{''} GLAND		1	1711298	$1\frac{3}{4}$ ''- $1\frac{5}{8}$ '' NUT, ADJUSTING	
		3%'' GLAND		1	1711025	$2^{1}/8^{1}-1^{5}/8^{11}$ NUT, ADJUSTING	1_
		$3\frac{1}{2}$ "-3 $\frac{5}{8}$ " NUT, ADJUSTING	3	1	1711025	$2^{1}/4^{11}$ NUT, ADJUSTING	- 3
		RETAINER, STUFFING BOX $2\frac{3}{8}$ "- $3\frac{3}{8}$ "		1	1711065	$2\frac{3}{8}$ "- $3\frac{3}{8}$ " NUT, ADJUSTING	1
		RETAINER, STUFFING BOX $3^{1}/2^{11}-3^{5}/8^{11}$	2	-	1711416-1	RETAINER, STUFFING BOX	2
	11495-2	$2\frac{1}{2}$ " PLG'R x $3\frac{1}{3}$ " BORE STUFFING BOX		1	1711497-2	$1\frac{1}{8}$ " PLG'R x $2\frac{1}{2}$ " BORE STUFFING BOX	<u> </u> _
	11495-2	$2\frac{7}{8}$ " PLG'R x $3\frac{5}{8}$ " BORE STUFFING BOX	1	1	1711497-2	$1\frac{3}{4}$ " PLG'R x $2\frac{1}{2}$ " BORE STUFFING BOX	1
	11495-2	$3^{1}/_{8}$ " PLG'R x $4^{1}/_{8}$ " BORE STUFFING BOX		1	1711493-2	$1\frac{7}{8}$ " PLG'R x $2\frac{7}{8}$ " BORE STUFFING BOX	-
	11496-2	3^{\prime}_{4} " PLG'R x 4^{\prime}_{8} " BORE STUFFING BOX	1 1	1	1711493-2	2" PLG'R $\times 2\frac{7}{8}$ " BORE STUFFING BOX	1
	11496-2	$3\frac{3}{8}$ " PLG'R x $4\frac{1}{8}$ " BORE STUFFING BOX	· '	1	1711493-2	$2^{1}/8^{11}$ PLG'R × $2^{7}/8^{11}$ BORE STUFFING BOX	1
	11490-2	$3^{1}/_{2}$ " PLG'R x $4^{3}/_{8}$ " BORE STUFFING BOX	1	1	1711493-2	$2\frac{1}{4}$ " PLG'R x $2\frac{7}{8}$ " BORE STUFFING BOX	1
	11687-13	$3\frac{5}{2}$ PLG'R x $4\frac{3}{8}$ " BORE STUFFING BOX	1	1	1711494-2	$2\frac{3}{8}$ " PLG'R × $3\frac{1}{8}$ " BORE STUFFING BOX	1
	PART NO.		ITEM NO.	QTY REQ'D		DESCRIPTION	ITEM NO.
	1 / 1 I I I I I I I I I I I I I I I I I	LIST OF MATERIAL			TANT NU.	LIST OF MATERIAL	
							1
	130	T– 4L PLUNGER KIT			130	T– 4M PLUNGER KIT	







su su

		iati	ona	L OILW	ÆLL	VAR	CO
πιε 13			•	PLUN TRIPI			
BIZE	REFERENC	CE No.	drawing	^{№.} 11885	5-13	,)	REV
CALE	1/4	EST W	Т		SHEET	10	F 1

5 USE ONLY WITH CERAMIC PLUNGER.

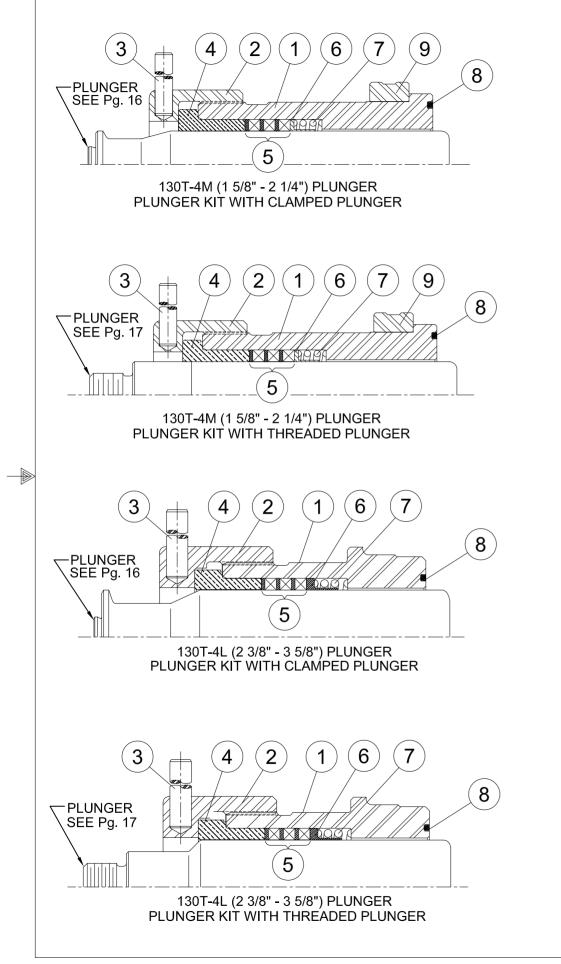
130T- 4M PLUNGER KIT

1045 UNIVERSAL PACKING	7		
1045 UNIVERSAL PACKING	/		
L STUFFING BOX	6		
SLEEVE WASHER			
SLEEVE WASHER	25		
GLAND	4	1	3)
GLAND	-	$ \setminus $	5
, ADJUSTING	3		
AINER, STUFFING BOX	2		
PLG'R x $2\frac{1}{2}$ " BORE STUFFING BOX	1		
PLG'R x $2\frac{1}{2}$ " BORE STUFFING BOX			
DESCRIPTION	ITEM NO.		
IST OF MATERIAL			

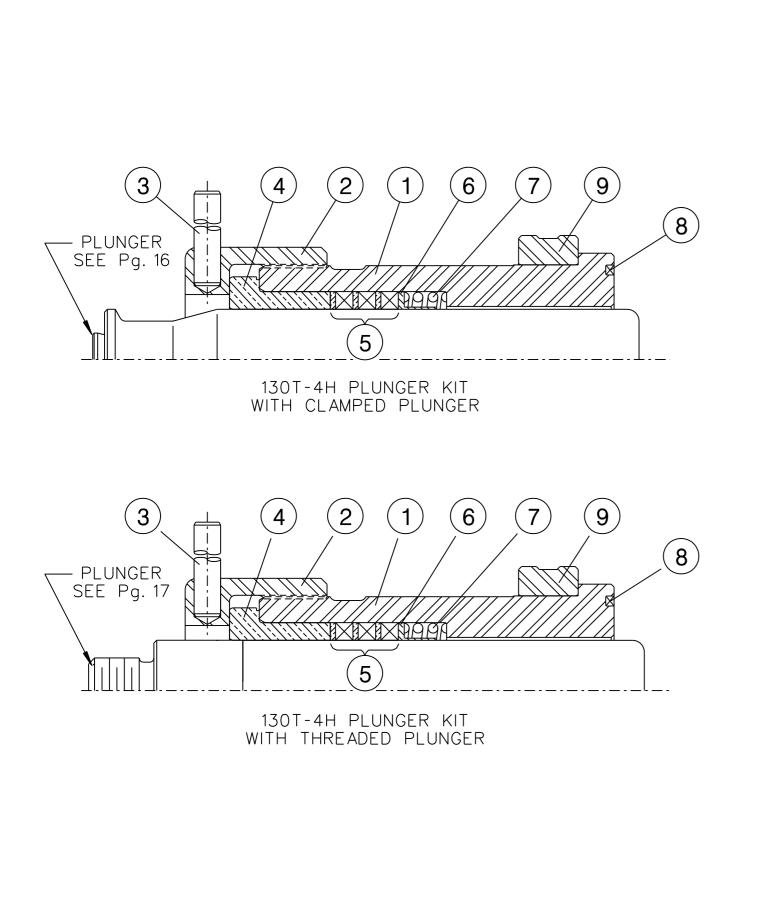
DWG NO 1711886

 \blacksquare

-13							
LTR		DESCRIPTION (OF CHANGE	MADECHKD	DATE	APPROVED	MN
A	ADDE	D P/N 342-916		RPQ	6/9/04		
В	DELE	TED SEAL 2410	031-342	RPQ	6/18/07		
С	MOVED	2-3/8" P/N's TC	130T-4M TABLE	MTH	7/19/07		-
D	-	D 3 1/4" PLKT		DCP RPQ	11.08.07	RPQ	
	8	1 L342-910 1 2410031-3	34 2" - 15/8" SEAL	, STUFFING BO)X	9	
	6	1 2410031-3- 1 L342-240 1 L342-260 1 342-000 1 L342-345 1 L342-346	42 2 ¹ / ₄ " - 2 ¹ / ₈ " SE 1 ³ / ₄ " - 1 ⁵ / ₈ " SPR 2 ¹ / ₈ " - 1 ⁷ / ₈ " SPF 2 ¹ / ₄ " SPRING 1 ⁵ / ₈ " FOLLOWER 1 ³ / ₄ " FOLLOWER	AL, STUFFING	BOX	7	
		1 L342-367 1 L342-368 1 342-353 1 342-354 1 342-001 1 L342-745	1 ⁷ / ₈ " FOLLOWER 2" FOLLOWER 2 ¹ / ₈ " FOLLOWER 2 ³ / ₈ " FOLLOWER 2 ¹ / ₄ " FOLLOWER 1 ⁵ / ₈ " KEVLAR PA			6	
	5	1 L342-746 1 L342-767 1 342-768 1 342-751 1 342-752 1 342-003 1 L342-545	1 ³ / ₄ '' KEVLAR PA 1 ³ / ₄ '' KEVLAR PA 2'' KEVLAR PAC 2 ¹ / ₈ '' KEVLAR PA 2 ³ / ₈ '' KEVLAR P 2 ¹ / ₄ '' KEVLAR P 1 ⁵ / ₈ '' GLAND	ACKING ACKING KING ACKING ACKING		- - - - - - - -	(
	4	1 L342-546 1 L342-167 1 L342-168 1 342-121 1 342-122 1 342-005 1 342-914	$1\frac{3}{4}'' GLAND$ $1\frac{7}{8}'' GLAND$ $2'' GLAND$ $2\frac{1}{8}'' GLAND$ $2\frac{3}{8}'' GLAND$ $2\frac{1}{4}'' GLAND$ PIN, LOCKING			- 4	
	7	1 L342-913 1 342-916 1 342-919 1 342-919 1 342-919 1 L342-908	NUT, ADJUSTING NUT, ADJUSTING	2 ¹ /4'' 2'' BORE STUI 2'' BORE STUI	FING BOX	- 2	A
ING	2	1 L342-908 1 342-948 1 342-925 1 342-925 2 QTY PART No	2'' PLG'R x 2 ³ / ₄ 2 ¹ / ₈ '' PLG'R x 2 2 ³ / ₈ '' PLG'R x 3 ¹ 2 ¹ / ₄ '' PLG'R x 3 ¹	' BORE STUFF 1/8" BORE STU 1/4" BORE STU	ING BOX FFING BOX FFING BOX FFING BOX	ITEM No.	
X X X X X X X	4	REQ'D	LIST OF MA 130T - 4M P	TERIAL			
X X X X X X X X X	1 ITEM No.		HOUSTON, TEXAS U.S.A. TITLE S.S. PLUNG	ATIONAL ER KIT ASSEMI 130T-4L & 4M T	ENGINEERIN BLY, W/ KEVL	IG, MCALESTER,	OKLAHOMA
			SIZE REFERENCE	No. DRAWING No			REV D

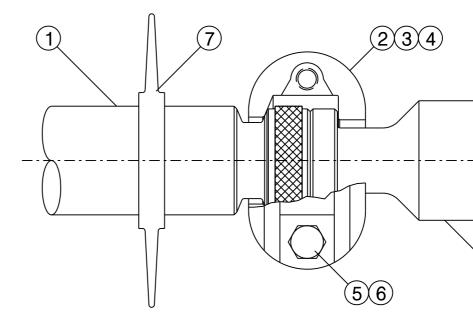


F	QTY	PART No.	DESCRIPTION	ITEM No
ſ	1	342-992	35%" PLG'R x 45%" BORE STUFFING BOX	
	1	342-992	31/2" PLG'R x 43/8" BORE STUFFING BOX	
	1	342-950	3% "PLG'R x 4/8" BORE STUFFING BOX	
	1	342-950	31/4" PLG'R x 41/8" BORE STUFFING BOX	
٦L	1	342-950	3 ¹ / ₈ " PLG'R x 4 ¹ / ₈ " BORE STUFFING BOX	1
Ļ	1	342-926	3" PLG'R x 3 ³ / ₄ " BORE STUFFING BOX	1
Ļ	1	342-926	27/8" PLG'R x 37/4" BORE STUFFING BOX	-
ļ	1	342-926	2 ³ / ₄ " PLG'R × 3 ³ / ₄ " BORE STUFFING BOX	-
╞	1	342-949	25%" PLG'R × 35%" BORE STUFFING BOX	-
ŀ	1	342-925	$2^{1}/_{2^{''}}$ PLG'R x $3^{1}/_{4^{''}}$ BORE STUFFING BOX	-
┝		342-993	J78 & J72 NUT, ADJUSTING	
┢	1		3 ³ / ₈ " - 3 ¹ / ₈ " NUT, ADJUSTING 3 ⁵ / ₈ " & 3 ¹ / ₂ " NUT, ADJUSTING	-
ŀ		342-920	3/4 = $3/4$ NUT ADJUSTING	2
ŀ	1	342-928	$3'', 2\frac{7}{8}'', & 2\frac{3}{4}''$ NUT, ADJUSTING	1
ŀ	1	342-916	$2\frac{5}{8}$ ", $2\frac{1}{2}$ ", $2\frac{3}{8}$ " & $2\frac{1}{4}$ " NUT, ADJUSTING	L
F	1	342-930	3 ³ / ₈ " - 2 ¹ / ₄ " PIN LOCKING	3
ſ	1	L342-161	35/8" GLAND	1
Γ	1	L342-160	3 ¹ / ₂ " GLAND]
٦ ٦	1	342-126	3%" GLAND	
][1	343-044	3 ¹ / ₄ " GLAND	
	1	342-125	3 ¹ / ₈ " GLAND	
Ļ	1	342-023	3" GLAND	4
Ļ	1	342-124	27/8" GLAND	
┝	1	342-022	2 ³ / ₄ " GLAND	-
┝	1			-
┢		342-123	25%" GLAND	1
┢	1	342-006	$2^{1}/2^{11}$ GLAND	
F	1	342-847	3 ⁵ / ₈ " KEVLAR PACKING	1
ſ	1	342-846	3 ¹ /2" KEVLAR PACKING	1
- [1	342-756	3¾" KEVLAR PACKING	
	1	342-843	3 ¹ /4" KEVLAR PACKING	
╗┟	1	342-755	3 ¹ /8" KEVLAR PACKING	
╞	1	342-019	3" KEVLAR PACKING	
┝	1	342-754	27/8" KEVLAR PACKING	5
┢				-
ŀ	1	342-018	$2\frac{3}{4}$ " KEVLAR PACKING	1
ŀ	1	342-753	25/8" KEVLAR PACKING	1
F	1	342-004	2 ¹ /2" KEVLAR PACKING	
	1	L342-403	35/8" FOLLOWER	
Ļ	1	L342-402	3 ¹ / ₂ " FOLLOWER	-
╞	1	342-358		{
┛┝	1		3%" FOLLOWER	{
٦ŀ		343-045	3 ¹ / ₈ " FOLLOWER 3 ¹ / ₄ " FOLLOWER	-
┢	1	342-357		-
ŀ	1	342-015	3" FOLLOWER	6
ŀ	1	342-356	2 ⁷ / ₈ " FOLLOWER	1
F	1	342-014	2¾" FOLLOWER	1
f	1	342-355	25/8" FOLLOWER	1
ľ	1	342-002	2 ¹ /2" FOLLOWER	
	1	L342-279	35/8" - 31/2" SPRING	
┝	1	342-268	3 ³ / ₈ " - 3 ¹ / ₈ " SPRING	-
┢			3/11 3/11 SDDINC	7
ŀ	1	342-008	2%" SPRING 3" - 2¾" SPRING	
	1	342-270	25/ SPRING	1
┢	1	342-000	2 ¹ /2" - 2 ³ / ₈ " SPRING	1



1	L342-903	1 ³ / ₈ '' - 1 ¹ / ₄ '' RETAII
1	L342-910	1¾'' - 1½'' RETAI
1	2410031-334	SEAL, STUFFING E
1	L342-210	1 ³ / ₈ '' - 1 ¹ / ₄ '' SPRIN
1	L342-240	1¾'' - 1½'' SPRIN
1	L342-312	1 /4" FOLLOWER
1	L342-313	1 ³ / ₈ " FOLLOWER
1	L342-344	1 / ₂ " Follower
1	L342-345	15/8" FOLLOWER
1	L342-346	1¾" FOLLOWER
1	L342-712	1 /4'' kevlar pac
	L342-713	1¾'' KEVLAR PAC
1	L342-744	11/2" KEVLAR PAC
1	L342-745	15%'' KEVLAR PAC
1	L342-746	1¾'' KEVLAR PAC
1	L342-112	1 /4'' GLAND
1	L342-113	1 ³ / ₈ " GLAND
1	L342-544	1 /2'' GLAND
1	L342-545	15/8'' GLAND
1	L342-546	1¾'' GLAND
1	342-914	PIN, LOCKING
1	L342-912	1 ³ / ₈ '' - 1 ¹ / ₄ '' NUT, /
1	L342-913	1¾" - 11/2" NUT, /
1	L342-904	1 / ₄ " PLG'R x 2 / ₈
1	L342-904	13/8" PLG'R x 21/8
1	342-919	$1^{1}/_{2}^{\prime\prime}$ PLG'R x $2^{1}/_{2}$
1	342-919	15/8" PLG'R x 21/2
1	342-919	1¾'' PLG'R x 2½
QTY REQ'D	PART NO.	DE
		LIST OF MATE
	1	00T – 4H PLI
	•	

INER, STUFFING BOX	0		
INER, STUFFING BOX	9		
BOX	8		
IG	7		
IG	/		
	6		
CKING			
CKING			
CKING	5		
CKING			
	4		
		(1!	5)
	3		
ADJUSTING			
ADJUSTING	2		
" BORE STUFFING BOX			
"BORE STUFFING BOX			
" BORE STUFFING BOX	1		
BORE STUFFING BOX			
BORE STUFFING BOX			
ESCRIPTION	ITEM NO.		
ERIAL			
UNGER KIT			
		,	
NOY NATIONAL OIL	VELL V	ARCO	
ASSEMBLY, SS PLUN	iger ki		
WITH KEVLAR PA 130T-4H TRIPLEX			
SIZE REFERENCE No. DRAWING No. 1/118		ZREV	
SCALE NONE EST WT	SHEET 1	OF 1	



STRAIGHT / TAPER CLAMP

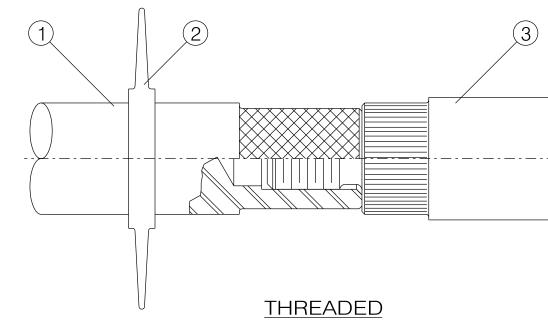
PLUN	PLUNGERS FOR STRAIGHT / TAPER CLAMPS						
		130T–4L					
ITEM	PART No.	DESCRIPTION					
	1711702-13	3 ⁵ / ₈ " CERAMIC PLUNGER					
	1711703-13	3 ¹ /2" CERAMIC PLUNGER					
8	1711490	3 ³ / ₈ " CERAMIC PLUNGER					
	1711462	3 ¹ /4" CERAMIC PLUNGER					
	1711489	3 ¹ /8" CERAMIC PLUNGER					
	1711466	3" CERAMIC PLUNGER					
	1711488	2 ⁷ 8" CERAMIC PLUNGER					
	1711465	2¾" CERAMIC PLUNGER					
	1711487	25/8" CERAMIC PLUNGER					
	1711464	2 ¹ / ₂ " CERAMIC PLUNGER					
		130T–4M					
	1711486	2 ³ / ₈ " CERAMIC PLUNGER					
	1711463	21/4" CERAMIC PLUNGER					
	1711485	2 ¹ / ₈ " CERAMIC PLUNGER					
	1711484	2" CERAMIC PLUNGER					
	1711483	1 ⁷ / ₈ " CERAMIC PLUNGER					
	1711482	1¾'' CERAMIC PLUNGER					
	1711481	15/8" CERAMIC PLUNGER					
		130T–4H					
	1711482	1 ³ / ₄ " CERAMIC PLUNGER					
	1711481	15/8" CERAMIC PLUNGER					
	1711480	11/2" CERAMIC PLUNGER					
		1 ³ / ₈ " CERAMIC PLUNGER					
		11/4" CERAMIC PLUNGER					

	BILL OF MATERIAL				
ITEM	PART No.	DESCRIPTION			
1	340-018	INTERMEDIATED ROD STAINLESS			
2	1716037	CLAMP, COMPLETE			
3 1716035		BOLT HALF			
4	1716036	THREAD HALF			
5	700031211	SCREW, H.H. CAP			
6	7616050	WASHER, SPRING LOCK			
7	1711018	BAFFLE, INTERMEDIATE			

Р	PLUNGERS FOR STRAIGHT / TAPER CLAMPS					
		130T	-4L			
ITEM	*PART No.*	PART No.	DESCRIPTION			
		340-277	3% "CARBIDE PLUNGER			
		340-278	3 ¹ / ₂ " CARBIDE PLUNGER			
8	1711520	340-131	3%" CARBIDE PLUNGER			
		340-274	3 ¹ /4" CARBIDE PLUNGER			
	1711519	340-143	3 ¹ /8" CARBIDE PLUNGER			
		340-017	3" CARBIDE PLUNGER			
	1711518	340-142	2 ⁷ / ₈ " CARBIDE PLUNGER			
		340-016	2¾" CARBIDE PLUNGER			
	1711517	340-141	25/8" CARBIDE PLUNGER			
		340-015	2 ¹ / ₂ " CARBIDE PLUNGER			
		130T	–4M			
	1711516	340-140	2 ³ / ₈ " CARBIDE PLUNGER			
		340-014	2 ¹ /4" CARBIDE PLUNGER			
	1711515	340-139	2 ¹ /8" CARBIDE PLUNGER			
	1711514	340-138	2" CARBIDE PLUNGER			
	1711513	340-137	1 ⁷ 8" CARBIDE PLUNGER			
	1711512	340-136	1¾" CARBIDE PLUNGER			
	1711511	L340-135	15/8" CARBIDE PLUNGER			
		130T-	–4H			
	1711512	340-136	1 ³ / ₄ " CARBIDE PLUNGER			
	1711511	L340-135	15%'' CARBIDE PLUNGER			
	1711510	340-134	1/2" CARBIDE PLUNGER			
	1711509	340-133	1% '' CARBIDE PLUNGER			
	1711508	340-132	1 ¹ /4" CARBIDE PLUNGER			

		0.175			1
CRIPTION OF CHANGE 2-1/4" PLUNGER P/N'S TO 130T-4M TABLES	MADE CHKD	DATE 7.19.07	APPROVED	MNO	
2 WE LONGEN FUILS IN DUITHM HOLES		1.19.07			
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\backslash					
(8)					
				4	\sim
					6)
*LISTED PART N	NUMBER	RS WEF	RE		
PREVIOUSLY H	ARD C	DAT PL	UNGE	RS.	
	IONAL (DILWEL	l var		
	/INTERM	EDIATE	ROD A		
I STRAI	GHT / T-4 PLI	TAPER	CLAMP		
SIZE REFERENCE No.	DRAWING No.			REV	
SCALE NONE EST W		<u>11888</u>		<u>A</u>	
SCALE NONE		SHEE	т 1 OF	1	

LTR	DESCRIPTION OF CHANGE	MADE CHKD	DATE	APPROVED	M NO
А	MOVED 2-3/8" & 2-1/4" PLUNGER P/N'S TO 130T-4M TABLES	MTH	7.19.07		
В	CORRECTED P/N'S	RPO RPO	12.8.08	GRL	



	BILL OF MATERIAL					
	ITEM PART No. DESCRIPTION					
	1 340-022 INTERMEDIATED ROD STAINLESS					
В	2	1711018	BAFFLE, INTERMEDIATE ROD			

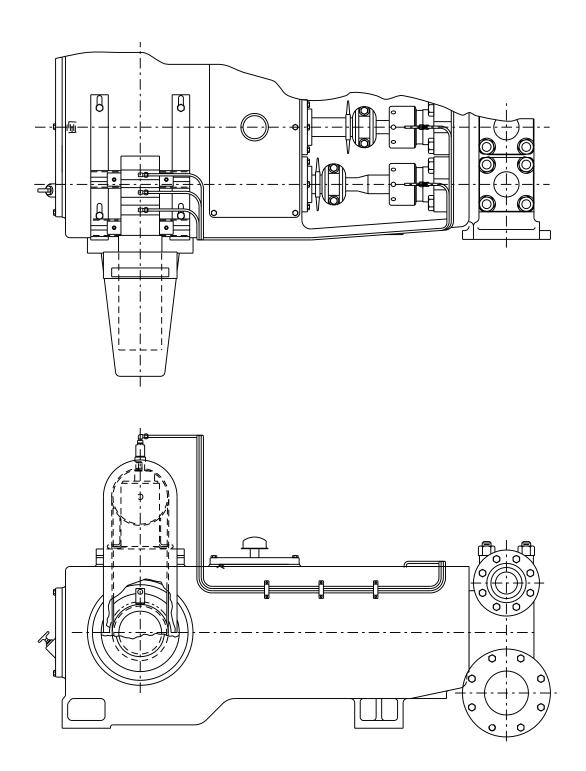
	THREADED PLUNGERS							
		130T-4L						
ITEM	* PART No. *	PART No.	DESCRIPTION					
	1711686-13		35%" CARBIDE PLUNGER					
	1711685-13		3 ¹ /2" CARBIDE PLUNGER					
3	1711088	340-311	3 ³ / ₈ " CARBIDE PLUNGER					
	1711462		3 ¹ /4" CARBIDE PLUNGER					
	1711087	340-310	3 ¹ /8" CARBIDE PLUNGER					
	1711466	340-309	3'' CARBIDE PLUNGER					
	1711086	340-308	2 ⁷ / ₈ " CARBIDE PLUNGER					
	1711465	340-307	2¾'' CARBIDE PLUNGER					
	1711085	340-306	25/8" CARBIDE PLUNGER					
	1711464	340-182	$2\frac{1}{2}$ " Carbide plunger					
		130T-	–4M					
	1711084	340-181	2 ³ / ₈ " CARBIDE PLUNGER					
	1711463	340-180	2 ¹ /4" CARBIDE PLUNGER					
	1711048	340-179	2 ¹ /8" CARBIDE PLUNGER					
	1711047	340-178	2" CARBIDE PLUNGER					
	1711046	L340-177	17/8" CARBIDE PLUNGER					
	1711045	L340-176						
	1711044	340-175	15/8" CARBIDE PLUNGER					
		130T–4H						
	1711045	L340-176	1¾'' CARBIDE PLUNGER					
	1711044	340-175	15/8" CARBIDE PLUNGER					
	1711043	340-174	11/2" CARBIDE PLUNGER					
	1711342	340-173	1 ³ / ₈ " CARBIDE PLUNGER					
B	1711341	L340-172	11/4" CARBIDE PLUNGER					

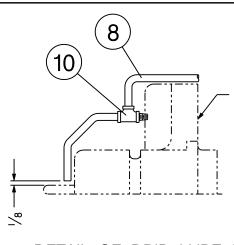
	THREADED PLUNGERS				
		130T–4L			
ITEM	PART No.	DESCRIPTION			
	1711691-13	3 ⁵ /8'' CERAMIC PLUNGER			
3	1711692-13	3 ¹ /2" CERAMIC PLUNGER			
С	1711082	3 ³ / ₈ " CERAMIC PLUNGER			
	1711148	3 ¹ /4" CERAMIC PLUNGER			
	1711081	3 ¹ /8" CERAMIC PLUNGER			
	1711147	3'' CERAMIC PLUNGER			
	1711080	2 ⁷ / ₈ " CERAMIC PLUNGER			
	1711146	2¾'' CERAMIC PLUNGER			
	1711079	25/8" CERAMIC PLUNGER			
	1711145 2 ¹ /2" CERAMIC PLUNGER				
	130T–4M				
	1711078	2 ³ / ₈ " CERAMIC PLUNGER			
	1711144	2 ¹ /4'' CERAMIC PLUNGER			
	1711042	2 ¹ /8" CERAMIC PLUNGER			
	1711041	2'' CERAMIC PLUNGER			
	1711040	1 ⁷ / ₈ " CERAMIC PLUNGER			
	1711039	1¾" CERAMIC PLUNGER			
	1711038	15/8" CERAMIC PLUNGER			
	130T–4H				
	1711039	1¾'' CERAMIC PLUNGER			
	1711038	15/8" CERAMIC PLUNGER			
	1711037	11/2" CERAMIC PLUNGER			
		1 ³ / ₈ " CERAMIC PLUNGER			
		11/4" CERAMIC PLUNGER			

*LISTED PART NUMBERS WERE PREVIOUSLY HARD COAT PLUNGERS.

•	HARD COAT PLUNGERS.
	NOY NATIONAL OILWELL VARCO
	TITLE PLUNGER/INTERMEDIATE ROD ASSY. THREADED PLUNGER 130T-4 PLUNGER PUMP
	SIZE REFERENCE NO. DRAWING NO. REV 1711889-13 B
	SCALE NONE EST WT SHEET 1 OF 1







DETAIL OF DRIP LUBE PIPING SCALE : NONE

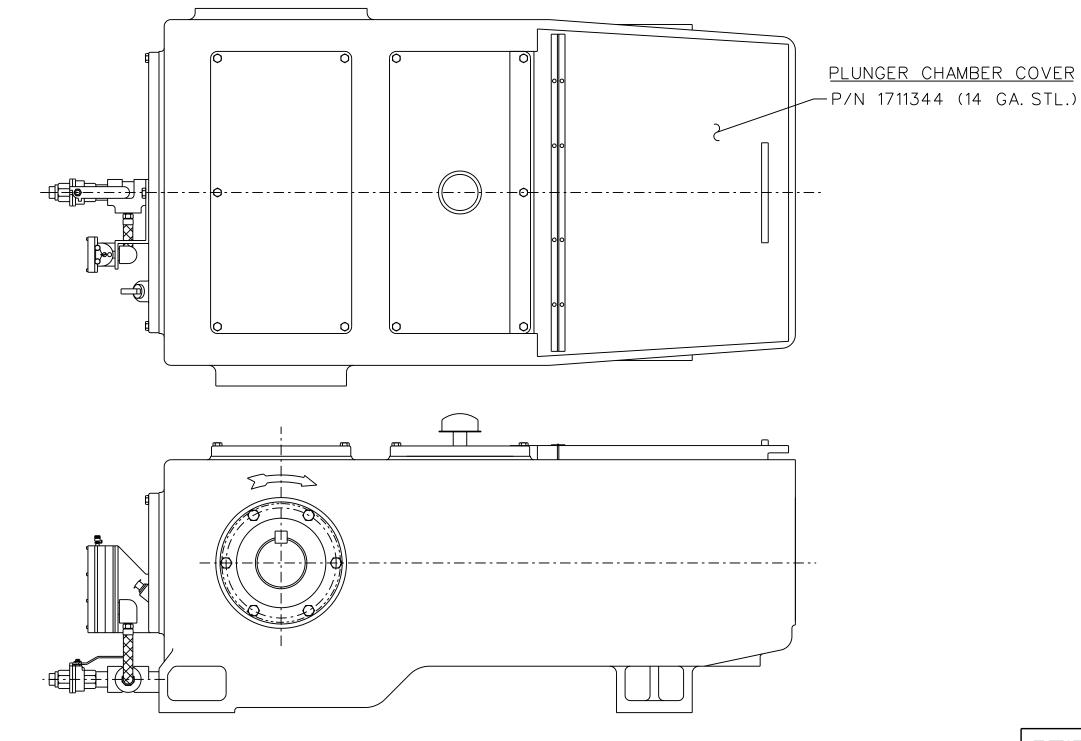
1790074 BRACKET, LUBRICATOR 1 1790074 1790051 1790051 BRACKET, LUBRICATOR 1 4 6300070 NUT, HEX $\frac{7}{16}$ " 6300070 WASHER, 7/16" N TYPE A 20 7600028 7600028 4 7000258-11 SCREW, HEX HEAD CAP 7000258-11 4 7000210-11 7000210-11 SCREW, HEX HEAD CAP 6 7168073 7168073 SCREW, HEX HEAD #8-3 CLIP, MULTI-LINE TUBING 3 7802200 7802200 TEE, 1/4" TUBE x 1/4" TU 25854704 3 TEE, 1/4" TUBE x 1/4" TU G7819165 ELBOW, 90° × 1/4" TUB 64226988 3 ELBOW, 90° × 1/4" TUB 7804080 TUBING, STAINLESS STE 64699402 25 FT 7400420 TUBING, COPPER 1/4" O. LUBRICATOR, 3 FEED 7811072 7811072 1 7811071 7811071 LUBRICATOR, 3 FEED BELT, V - 2480 1 4712480 4712480 1 SHEAVE, DRIVER 5.25" 1711021 1711021 SHEAVE, LUBRICATOR 6. 1 7200020 7200020 1 COVER, CRANKSHAFT EX 1711129 1711129 GUARD, LUBRICATOR BEI 1 1710125 1710125 BRACKET, LUBRICATOR 1 1711315 1711315 PART No. QTY REQ'D DESCRIPTION / LUBRICATOR ASSY. COMPLETE WITH LUBRICATOR ASSY. COMPLETE WITH STAINLESS STEEL LINES COPPER LINES P/N 1711222RS P/N 1711222 LIST OF MATERIAL

> NOTE: R.H. LUBRICATOR SHOWN L.H. OPPOSITE

STUFFING BOX RETAINER

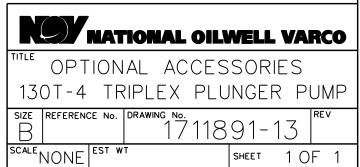
GUARD - BOTTOM	18
GUARD - TOP	17
	16
A .922 O.D.	15
7∕ ₁₆ × 1 ¹ ∕2" LG.	14
3∕8" × 11∕2" LG.	13
32 x ¹ /4'' TYPE F SELF TAPPING G	12
G	11
UBE x 1/4" N.P.T S.S.	10
UBE x 1/4" N.P.T.	
E x 1/8" N.P.T S.S.	0
E x 1/8" N.P.T.	9
EL 1/4" O.D. x .035 WALL	
D. x .032 WALL	8
(LH)	7
(RH)	′
	6
PD	5
.2" PD	4
XTENSION	3
LT (INCL. ITEMS 17 & 18)	2
	1
MATERIAL / SPECIFICATION	ITEM NO.

N	NOV NATIONAL OILWELL VARCO						
TITLE	LUBR	ICAT	OR AS	SSEM	BLY (3
3.	3-FEED LUBRICATOR (R.H. OR L.H.)						
	130T-4 TRIPLEX PLUNGER PUMP						
SIZE	REFERENC	E No.	DRAWING N				REV
D	D 1711890-13						
SCALE NONE EST WT				SHEET	1 OF	- 1	



OIL LEVEL SWITCH ASSY.

(TYPICAL ARRANGEMENT) MURPHY L-129 SHOWN SWITCH MODEL, LOCATION & PIPING ARRANGEMENT WILL VARY DEPENDING ON APPLICATION



57 (FOR 6", 8" &
68 (FOR 4")

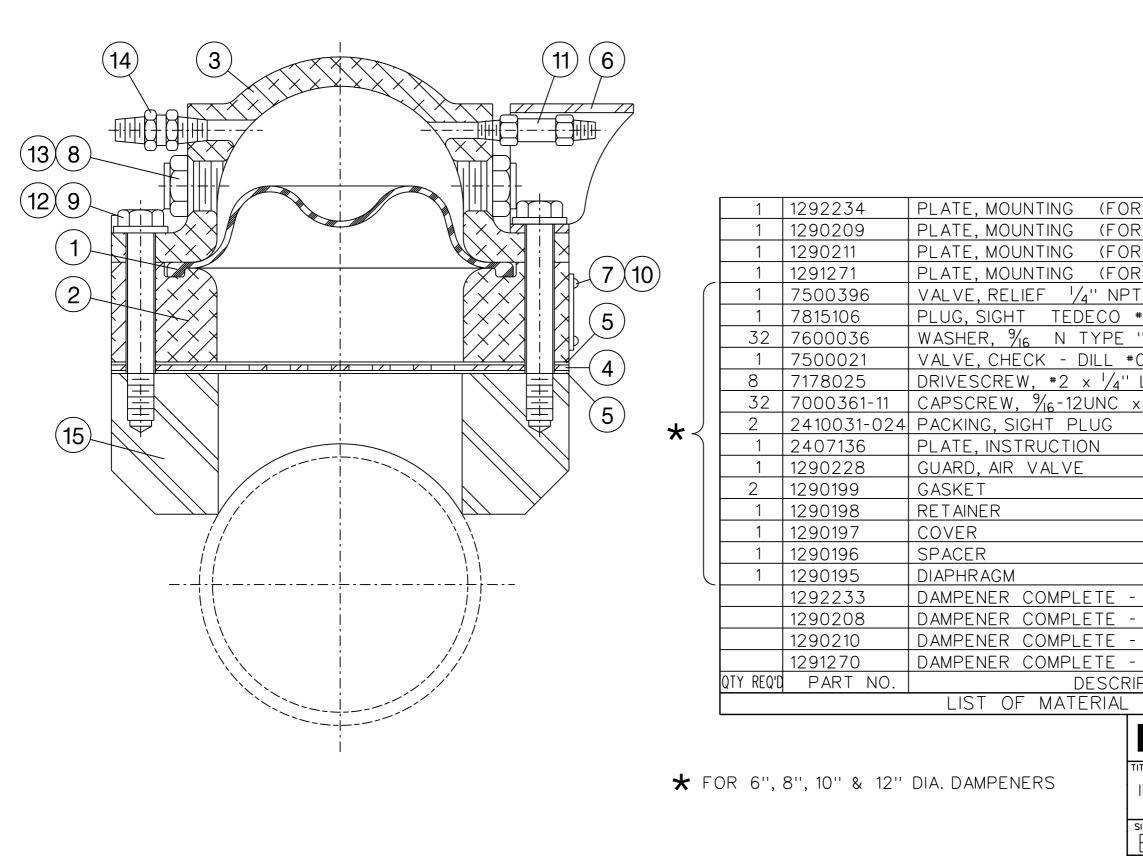
10'')

ſ	14	7600020	WASHER, 5/16" (FOR 4")
	18	7600020	WASHER, 5/16'' (FOR 6'', CAPSCREW, 5/16-18 x 1'' L
	14	7000157-11	CAPSCREW, 5/16-18 x 1'' L
ل حل	18	7000158-11	CAPSCREW, 5/16-18 x 11/4"
*<	1	1712218	GASKET, BLANKING PLATE
	1	6000004	GASKET, BLANKING PLATE
	1	1712217	PLATE, BLANKING (FOR
Ĺ	1	X17-1569	PLATE, BLANKING (FOR
	14	7600020	WASHER, 5/16" (FOR 4")
	18	760020	WASHER, 5/16" (FOR 6",
	14	7000168-11	WASHER, 5/16'' (FOR 6'', CAPSCREW, 5/16-18 x 3 ³ /4
	18	7000169-11	CAPSCREW, 5/16-18 x 4"
	1	7500021	CHECK VALVE, 1/8" (FOI
	1	1713201	10" PIPE BODY
	1	1712501	8" PIPE BODY
	1	1712251	6" PIPE BODY
	1	1712250	4" PIPE BODY
	1	1712327	10'' DIAPHRAGM
	1	1712327	8'' DIAPHRAGM
	1	1712327	6" DIAPHRAGM
	1	1712262	4'' DIAPHRAGM
	1	1712329	10" DAMPENER
	1	1712329	8'' DAMPENER
	1	1712329	6" DAMPENER
	1	1712290	4'' DAMPENER
		1713200	DAMPENER COMPLETE -
		1712502	DAMPENER COMPLETE -
		1712253	DAMPENER COMPLETE -
		1712252	DAMPENER COMPLETE -
	QTY REQ'D	PART NO.	DESCRIP
			LIST OF MATER
	•		

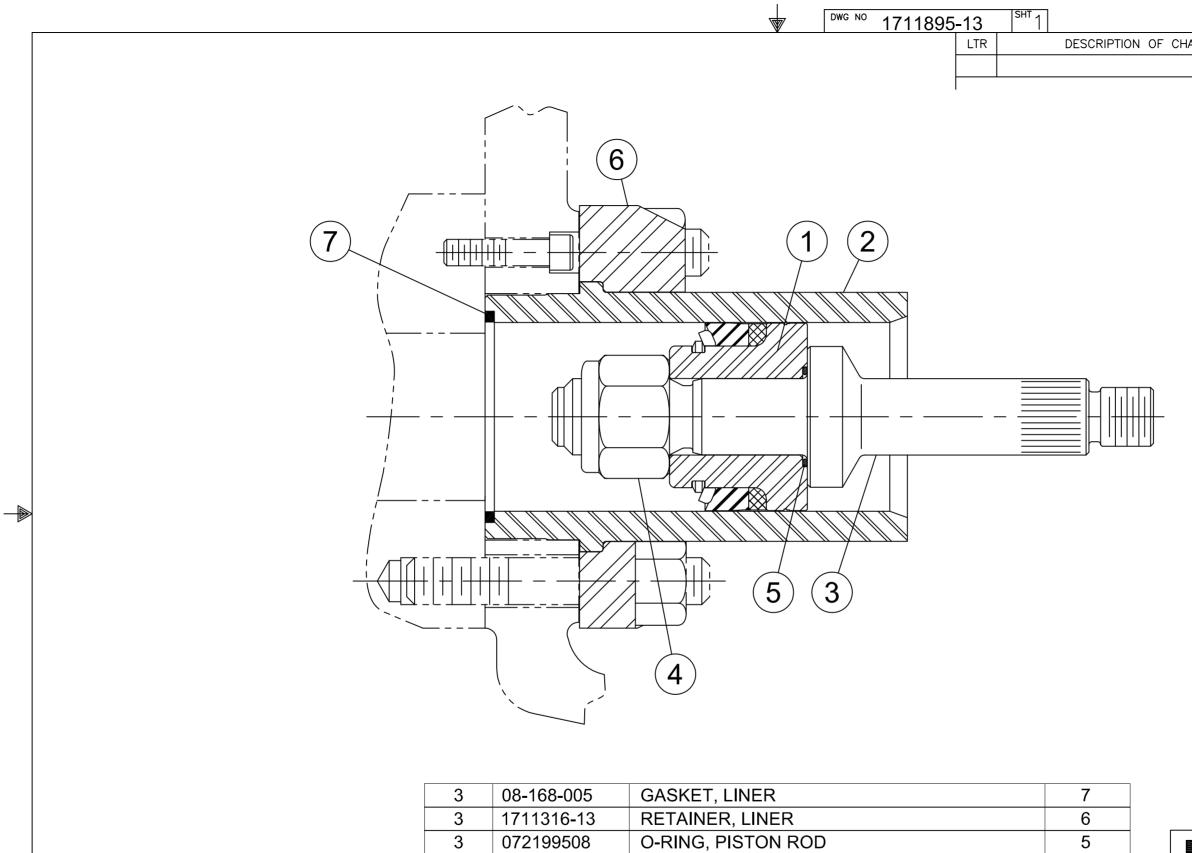
★ L/M FOR BLANKING PLATE ASSEMBLY ITEMS #9 THRU #14 ARE NOT SHOWN

١N sız R

·'')	14		
", 8" & 10")	13		
'' G_(F()R_4'')	12		
4" LG. (FOR 6", 8" & 10")	11		
ATE (FOR 6", 8" & 10") ATE (FOR 6", 8" & 10") ATE (FOR 4")	10		
R 6", 8" & 10")) R 4")	9		
·'')	8		
". 8" & 10")	7		
5 ³ /.'' G (FOR 4'')	6		
'', 8'' & 10'') 5¾'' LG. (FOR 4'') -'' LG. (FOR 6'', 8'' & 10'') FOR 4'', 6'', 8'' & 10'')	8 7 6 5 4		
OR 4" 6" 8" & 10")	4		
	3	(2	0)
	2		
	1		
- 10" (29" LG.) - 8" (29" LG.) - 6" (28" LG.) - 4" (25 ¹ / ₂ " LG.) RIPTION ERIAL	ITEM NO.		
TITLE LOW PRESSURE PLAST IN-LINE SUCTION DAMPENER PLUNGER PUMPS	FIC BOD (WELD)Y	
B REFERENCE NO. DRAWING NO. 1711892		REV	
SCALE NONE EST WT	εт 10	F 1	

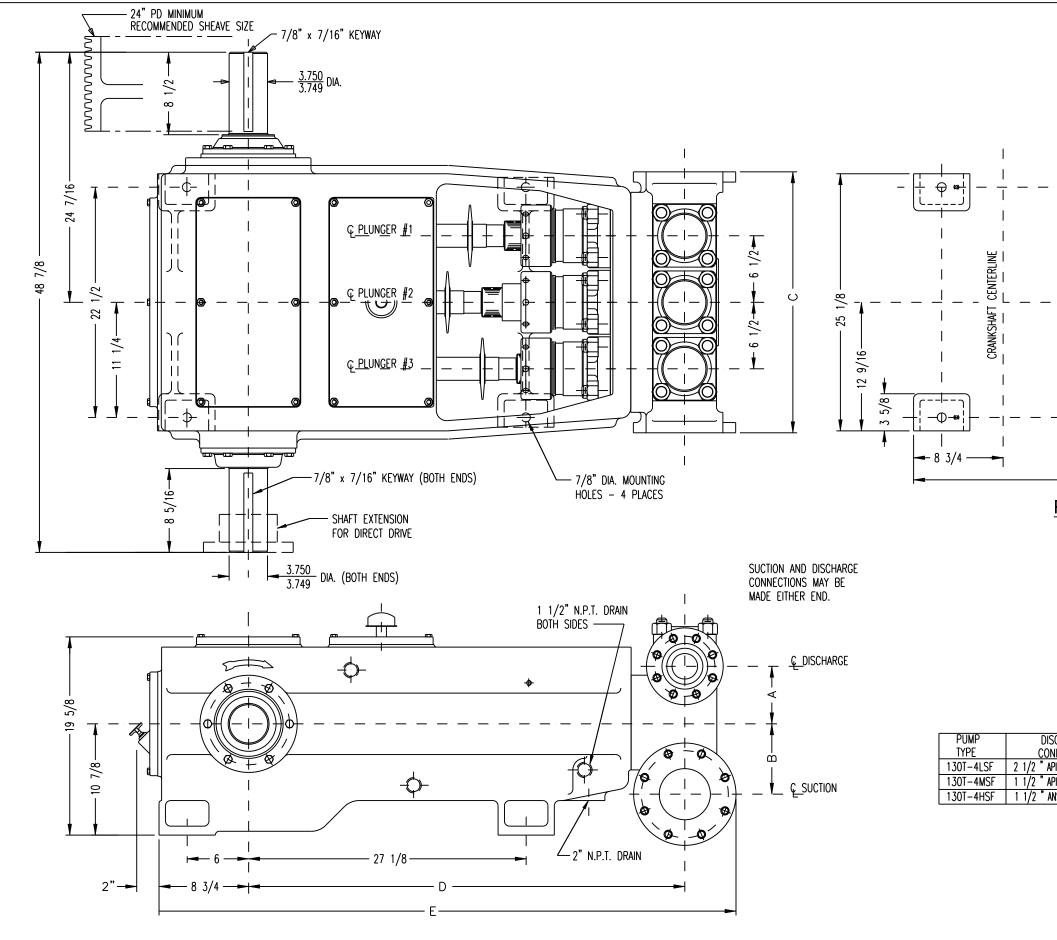


R 12") 15 R 10") 15 R 8") 15 R 6") 14 I *559B-2M-70 14 *W-54 13 "A" 1.159 O.D. 12 02500-100AA-643VC 11 LG. ROUND HD. 10 x 4" LG. HEX HD. 9 8 7 6 5 44 3 22 1 1 1 12" (34 ¹ / ₂ " LG.) 6" (34 ¹ / ₂ " LG.) 6" (34 ¹ / ₂ " LG.) 8" (34 ¹ / ₂ " LG.) 8" (34 ¹ / ₂ " LG.) 8" (34 ¹ / ₂ " LG.) 9" 9" 9" 9" 9" 9" 9" 9" 10" (34 ¹ / ₂ " LG.) 10" 10" 11" 11" 12" 14" 15" 10" 11" 11" 12" 12" <t< th=""><th></th><th></th><th></th><th></th></t<>				
TITLE HIGH PRESSURE ALUMINUM BODY IN-LINE SUCTION DAMPENER (WELD-ON) PLUNGER PUMPS SIZE REFERENCE NO. DRAWING NO. 1711893-13	"A" 1.159 O.D. 02500-100AA-643VC LG. ROUND HD. x 4" LG. HEX HD. - 12" (34 ¹ / ₂ " LG.) - 10" (34 ¹ / ₂ " LG.) - 8" (34 ¹ / ₂ " LG.) - 6" (34 ¹ / ₂ " LG.)	14 13 12 11 10 9 8 7 6 5 4 3 2 1		1
	IITLE HIGH PRESSURE ALUMIN IN-LINE SUCTION DAMPENER	UM BO	DY	

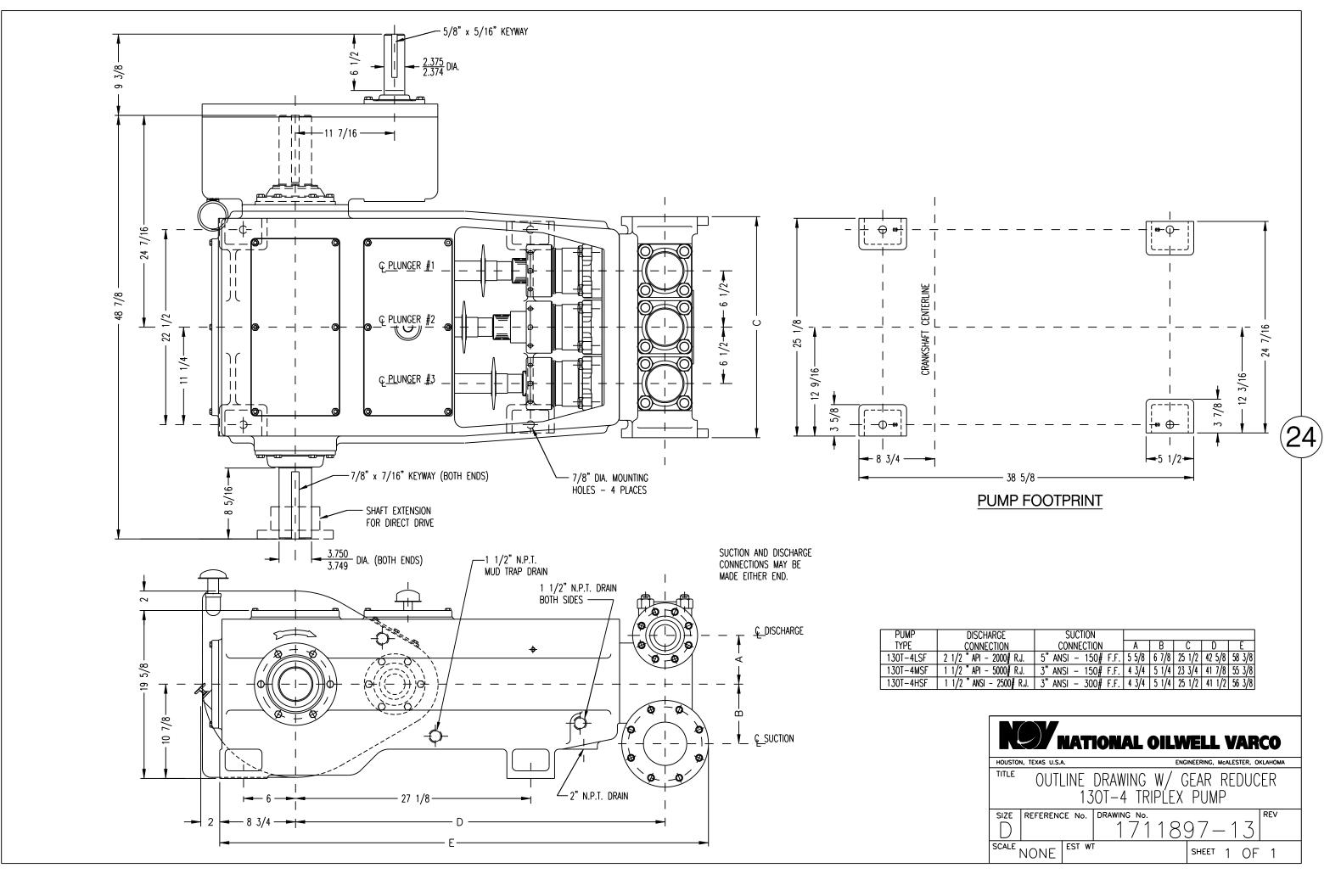


5	00-100-005	GASKET, LINER	
3	1711316-13	RETAINER, LINER	6
3	072199508	O-RING, PISTON ROD	5
REF.	005402052	NUT, PISTON ROD (W/ ELASTIC STOP)	4
3	1711826-13	ROD, PISTON (INCLUDES ITEM #4)	3
3	1711827-13	LINER, PISTON - 4"	2
3	012180170	PISTON ASSEMBLY, CPT 4"	1
QTY.	PART No.	DESCRIPTION	ITEM No.
		LIST OF MATERIAL	

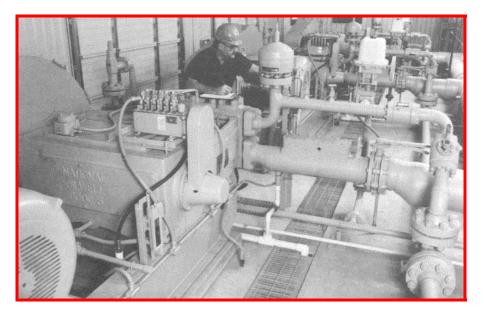
CHANGE WALLER A PPROVED M NO DATE APPROVED M NO ATE APPROVED M NO A						
222	CHANGE	MADE CHKD	DATE	APPROVED	М	NO
Interview Drawing No. No. REFERENCE NO. Drawing No. REV 1711895-13 REV						
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Interview Drawing No. No. REFERENCE NO. Drawing No. REV 1711895-13 REV						(22
INDER & DISTON ASSY 4" INDER & PISTON ASSY 4" 130T- 4L TRIPLEX PUMP SIZE REFERENCE NO. DRAWING NO. REV 1711895-13						\searrow
INDER & DISTON ASSY 4" INDER & PISTON ASSY 4" 130T- 4L TRIPLEX PUMP SIZE REFERENCE NO. DRAWING NO. REV 1711895-13						
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INDER & DISTON ASSY 4" INDER & PISTON ASSY 4" 130T- 4L TRIPLEX PUMP SIZE REFERENCE NO. DRAWING NO. REV 1711895-13		eational	OILWE	l l va r	200	
LINER & PISTON ASSY 4 130T- 4L TRIPLEX PUMP SIZE REFERENCE No. DRAWING No. 1711895-13	HOUSTON, TEXAS U.S.A.		ENGINEERIN	G, McALESTER, OF		
SIZE REFERENCE No. DRAWING No. REV						
B 1711895-13			PLEX P	UMP		
		No. DRAWING No.	474400		REV	
SHEET 1 OF 1					_	
	NONE		SHEE	et 1 OI		1



38 5/8	ION CTION A B 150# F.F. 5 5/8 6 7/8 25 150# F.F. 4 3/4 5 1/4 23	C D E 0.1/2 42 5/8 58 3/8 3/4 41 7/8 55 3/8	2 7/16	3
	TIONAL OIL	VELL VA	RCO	
HOUSTON, TEXAS U.S.A.		GINEERING, McALESTER,	OKLAHOMA	
	DRAWING No.	<u></u> 96—13	REV	
SCALE NONE		SHEET 1 OF	· · · ·	







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Or you can access our website at the URL listed below, where you may search by location or country.

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