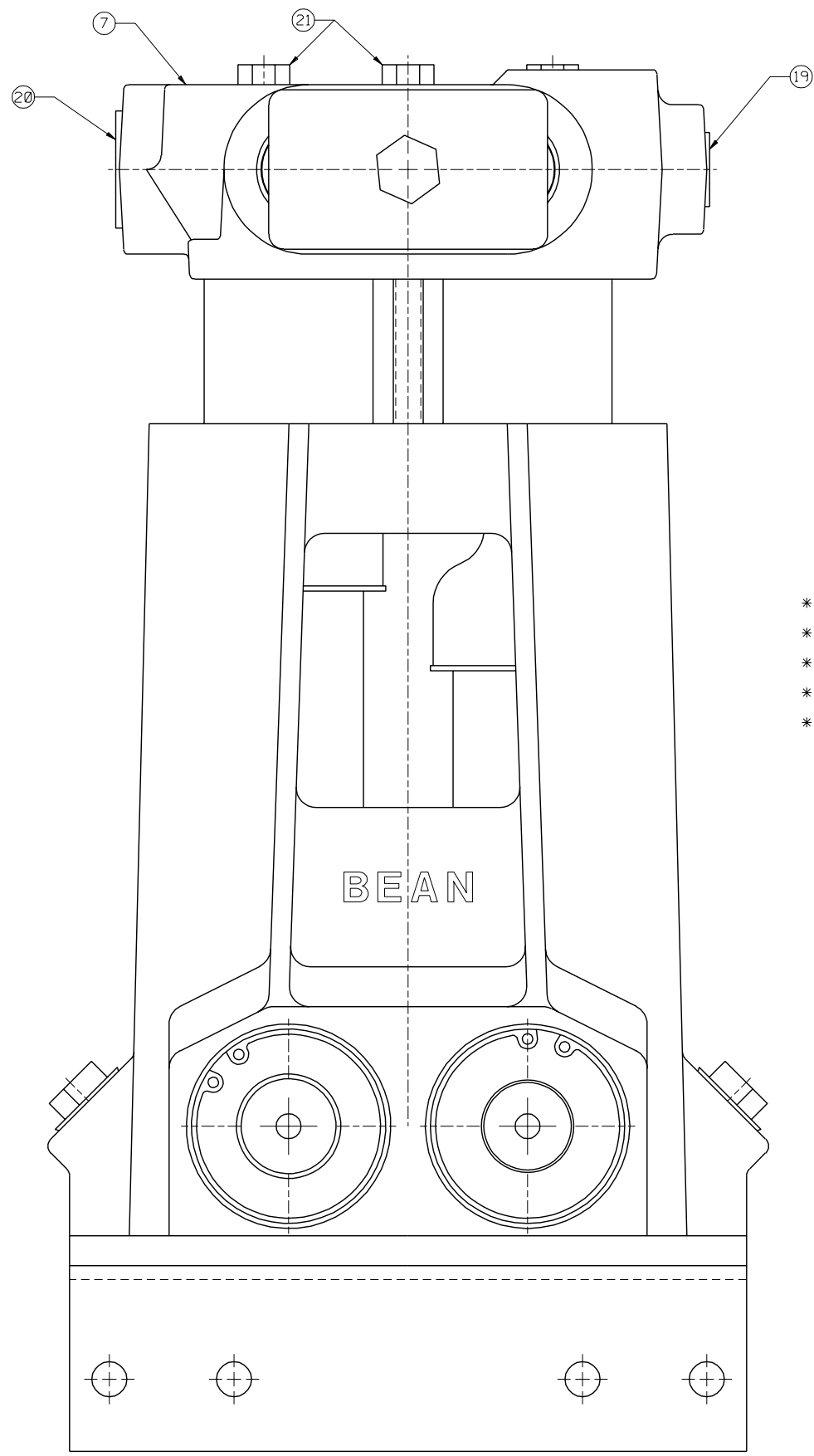
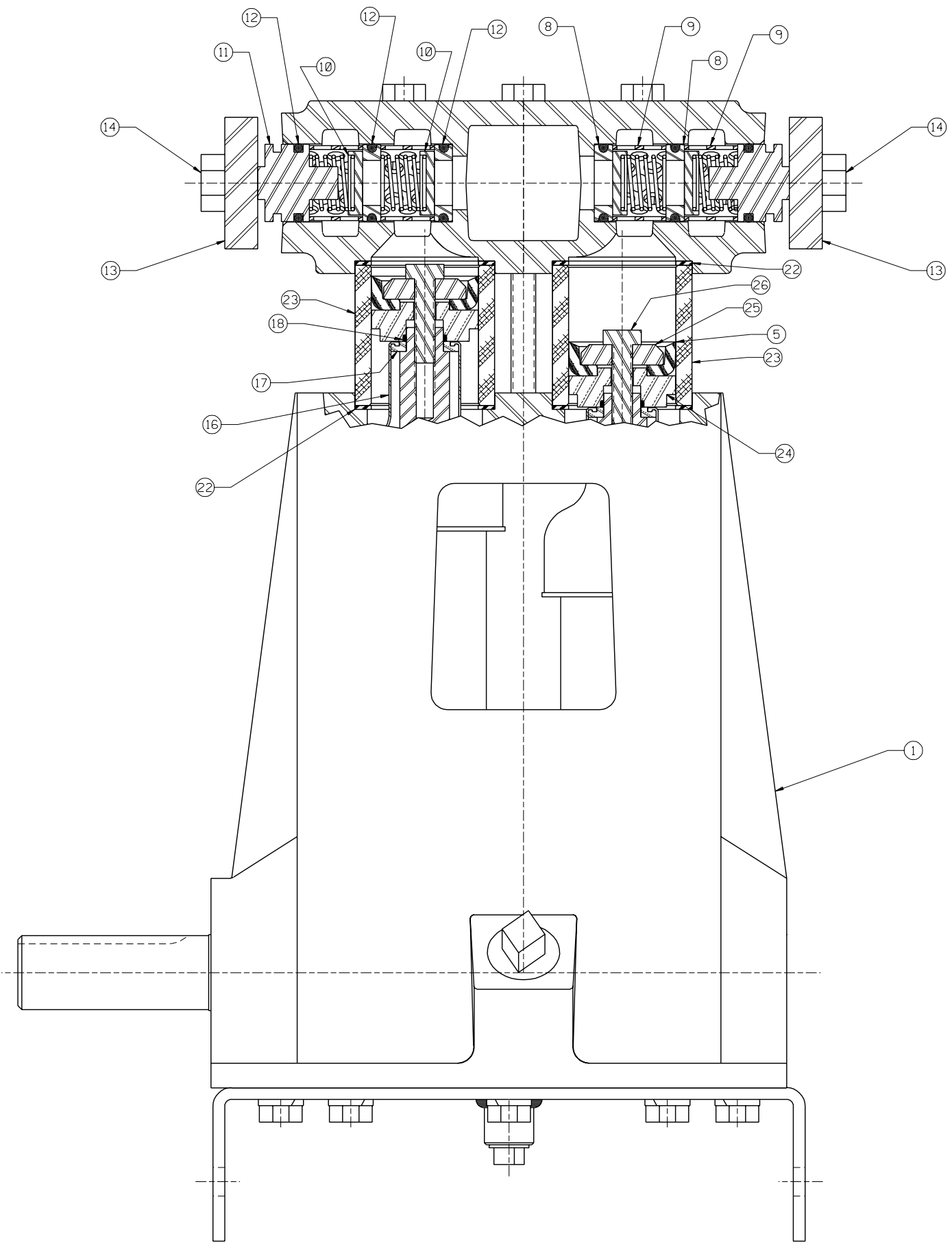


* THESE COMPONENTS ARE LOCATED IN THE FLUID CYLINDER GROUP, ITEM ②
 ** THESE COMPONENTS ARE LOCATED IN THE ATTACHING GROUP, ITEM ③
 *** THESE COMPONENTS ARE LOCATED IN THE CYLINDER GROUP, ITEM ④



ITEM	NO. RECD	PART NO.	PART NAME
①	1	P510889	POWER END: HEAVY DUTY
②	1	5273600	FLUID CYLINDER GROUP:
③	1	5273638	ATTACHING GROUP:
④	2	5273631	CYLINDER GROUP:
⑤	4	5257807	CUP: 1 $\frac{1}{8}$ " DIA, CARBOXILATED NITRILE FABRIC
⑥	1	5266225	LIT KIT:
* ⑦	1	5273559	FLUID CYLINDER: NITRIDED
* ⑧	8	5260142	VALVE SEAT: 450 SST
* ⑨	8	1219610	CAGE: 302 SST
* ⑩	8	5273613	DISC & SPRING ASSEMBLY:
* ⑪	4	5273555	VALVE COVER:
* ⑫	12	1177394	O-RING: 1 $\frac{3}{16}$ " OD X $\frac{1}{16}$ " NOM., BUNA-N
* ⑬	2	1255887	VALVE COVER CLAMP:
* ⑭	2	1100064	HEX HD CAP SCREW: $\frac{1}{2}$ -13 X 1 $\frac{1}{2}$ " LG.
* ⑮	1	320510	PLUG: $\frac{1}{4}$ " PIPE (NOT SHOWN)
** ⑯	4	1279148	UMBRELLA: BLACK
** ⑰	4	1269388	UMBRELLA WASHER:
** ⑱	4	1101339	O-RING: 1 $\frac{1}{16}$ " OD X $\frac{1}{16}$ " NOM., BUNA-N
** ⑲	1	1177200	CAPLUG: INT. 12
** ⑳	1	1177202	CAPLUG: INT. 17S
** ㉑	4	1101262	HEX HD CAP SCREW: $\frac{3}{8}$ -16 X 5" LG.
*** ㉒	8	A91684	CYLINDER GASKET:
*** ㉓	4	1241364	CERAMIC CYLINDER:
*** ㉔	4	5273556	PACKING HOLDER:
*** ㉕	4	5273551	PACKING WASHER:
*** ㉖	4	1284516	HEX HD CAP SCREW: $\frac{5}{16}$ -18 X 1 $\frac{1}{2}$ " LG.

NOTES:
 1 TORQUE PER AS-22
 2 TEST PER AS-15
 3 STAMP NAME PLATE PER AS-21
 4 PAINT PER ENGR SPEC CP-20

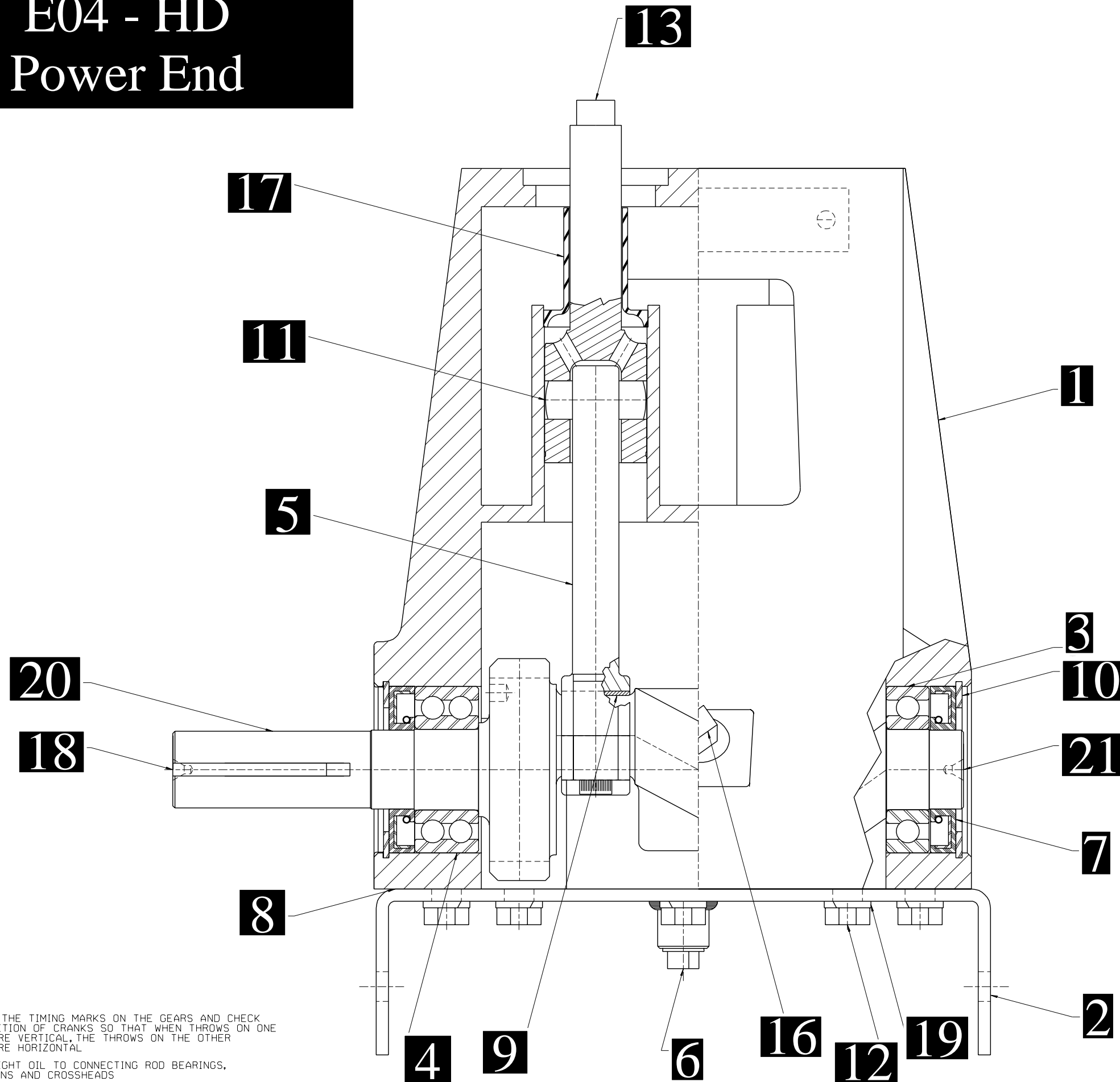
This drawing is the property of FMC Corporation and may not be used, reproduced, published, or disclosed to others without express authorization FMC Corp.		FMC Corporation Fluid Control Division 2825 W. Washington Box 1377 Stephenville, Texas 76481	
Unless Otherwise Specified: Remove all burrs & sharp corners .005 R. All diameters concentric unless .001 I.D.C.		PUMP ASSEMBLY E0413 AB, W/1 $\frac{1}{4}$ " NPT X $\frac{3}{4}$ " NPT FLUID END, CARBOX. NITRILE CUPS, DISC VALVE ASSEMBLIES	
Angles $\pm 1/2^\circ$.X $\pm .01$.XX $\pm .015$.XXX $\pm .025$ Finish 125 RMS All dimensions are in inches	RELEASED FOR PRODUCTION ECN DATE	DRAWN BKM 07-19-01 CKD. JMW 07-23-01 APPD. RMC 07-27-01	SCALE: NONE SIZE: DRAWING NO. D 5273625

B	REVISED & REDRAWN	DATE	BKM 07-19-01
REV	WAS	ECN BY	DATE

5273625

	ITEM	NO. REQD	PART NO.	PART NAME
M (2)				
	(1)	1	P510889	POWER END: HEAVY DUTY
	(2)	1	5273600	FLUID CYLINDER GROUP:
	(3)	1	5273638	ATTACHING GROUP:
	(4)	2	5273631	CYLINDER GROUP:
	(5)	4	5257807	CUP: 1 $\frac{5}{8}$ " DIA. CARBOXILATED NITRILE FABRIC
	(6)	1	5266225	LIT KIT:
*	(7)	1	5273559	FLUID CYLINDER: NITRIDED
*	(8)	8	5260142	VALVE SEAT: 450 SST
*	(9)	8	1219610	CAGE: 302 SST
*	(10)	8	5273613	DISC & SPRING ASSEMBLY:
*	(11)	4	5273555	VALVE COVER:
*	(12)	12	1177394	O-RING: 1 $\frac{3}{16}$ " OD X $\frac{1}{8}$ " NOM., BUNA-N
*	(13)	2	1255887	VALVE COVER CLAMP:
*	(14)	2	1100064	HEX HD CAP SCREW: $\frac{1}{2}$ -13 X 1 $\frac{1}{2}$ " LG.
*	(15)	1	320510	PLUG: $\frac{1}{4}$ " PIPE (NOT SHOWN)
**	(16)	4	1279148	UMBRELLA: BLACK
**	(17)	4	1269388	UMBRELLA WASHER:
**	(18)	4	1101339	O-RING: 1 $\frac{1}{16}$ " OD X $\frac{1}{16}$ " NOM., BUNA-N
**	(19)	1	1177200	CAPLUG: INT. 12
**	(20)	1	1177202	CAPLUG: INT. 17S
**	(21)	4	1101262	HEX HD CAP SCREW: $\frac{3}{8}$ -16 X 5" LG.
***	(22)	8	A91684	CYLINDER GASKET:
***	(23)	4	1241364	CERAMIC CYLINDER:
***	(24)	4	5273556	PACKING HOLDER:
***	(25)	4	5273551	PACKING WASHER:
***	(26)	4	1284516	HEX HD CAP SCREW: $\frac{5}{16}$ -18 X 1 $\frac{1}{2}$ " LG.

E04 - HD Power End



ITEM	NO. RECD	PART NO.	PART NAME
①	1	1273545	POWER FRAME:
②	1	1280633	MOUNTING BASE:
③	3	1104444	BALL BEARING: SINGLE
④	1	1104508	BALL BEARING: DOUBLE
⑤	4	P509546	CONNECTING ROD:
⑥	1	1101305	PLUG: 1/4" PIPE
⑦	4	1101095	OIL SEAL:
⑧	1	1273559	GASKET:
⑨	8	P510431	ROD BEARING:
⑩	4	1118553	RETAINER RING:
⑪	4	1219650	WRIST PIN:
⑫	12	1100068	HEX HD CAP SCREW: 3/8-16 x 3/4" LG
⑬	4	1216823	CROSSHEAD:
⑭	1	5277981	NAMEPLATE: (NS)
⑮	2	1187413	SELF-TAPPING SCREW: #4 x 3/8" LG (NS)
⑯	2	1105060	PLUG: 3/4" PIPE
⑰	4	1218743	SLEEVE:
⑱	1	1187577	KEY: 1/4" SQUARE, 1 3/4" LG
⑲	12	1177455	SPRING WASHER: 3/8"
⑳	1	P510882	CRANKSHAFT: HD, DRIVE
㉑	1	P509560	CRANKSHAFT: HD, DRIVEN

NOTES:

- 1 LINE UP THE TIMING MARKS ON THE GEARS AND CHECK THE POSITION OF CRANKS SO THAT WHEN THROWS ON ONE CRANK ARE VERTICAL, THE THROWS ON THE OTHER CRANK ARE HORIZONTAL
- 2 APPLY LIGHT OIL TO CONNECTING ROD BEARINGS, WRIST PINS AND CROSSHEADS

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Unless Otherwise Specified: Remove all burrs & sharp corners .005 R. All diameters concentric unless .001 I.D. Angles ±1/2° .X ±.1 .XX ±.015 .XXX ±.005 Finish 125 RMS All dimensions are in inches		POWER END ASSEMBLY F/E04 HD	
B	REV BOM	5004427	DRG 11-27-00
A	NEW ISSUE	1	SJK 03-15-00
REV	WAS	ECN	BY DATE
RELEASED FOR PRODUCTION		DATE	SCALE: NONE
ECN	5004427	03-29-00	DRAWN SJK 03-14-00
APPD.	RMc	03-28-00	CDK. BKM 03-28-00
SIZE		DRAWING NO.	
D		P510889	

P510889

E04 - HD Power End

ITEM	NO. REQD	PART NO.	PART NAME
	4	126098	CONN ROD BUSHING <i>(Must be Reamed)</i>
①	1	1273545	POWER FRAME:
②	1	1280633	MOUNTING BASE:
③	3	1104444	BALL BEARING: SINGLE
④	1	1104508	BALL BEARING: DOUBLE
⑤	4	P509546	CONNECTING ROD:
⑥	1	1101305	PLUG: 1/4" PIPE
⑦	4	1101095	OIL SEAL:
⑧	1	1273559	GASKET:
⑨	8	P510431	ROD BEARING:
⑩	4	1118553	RETAINER RING:
⑪	4	1219650	WRIST PIN:
⑫	12	1100068	HEX HD CAP SCREW: 3/8-16 x 3/4" LG
⑬	4	1216823	CROSSHEAD:
⑭	1	5277981	NAMEPLATE: (NS)
⑮	2	1187413	SELF-TAPPING SCREW: #4 x 3/16" LG (NS)
⑯	2	1105060	PLUG: 3/4" PIPE
⑰	4	1218743	SLEEVE:
⑱	1	1187577	KEY: 1/4" SQUARE, 1 3/4" LG
⑲	12	1177455	SPRING WASHER: 3/8
⑳	1	P510882	CRANKSHAFT: HD, DRIVE
㉑	1	P509560	CRANKSHAFT: HD, DRIVEN

B