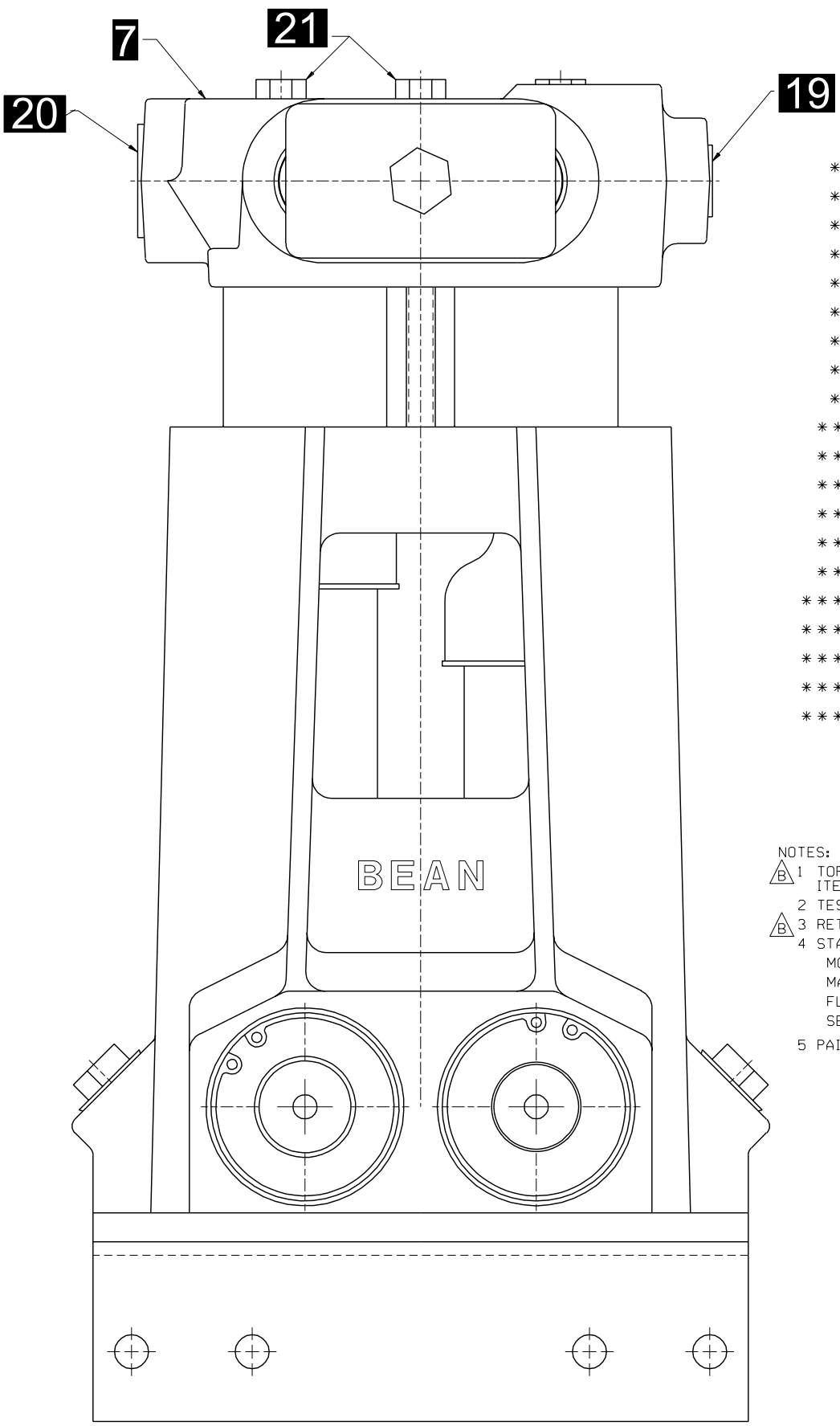
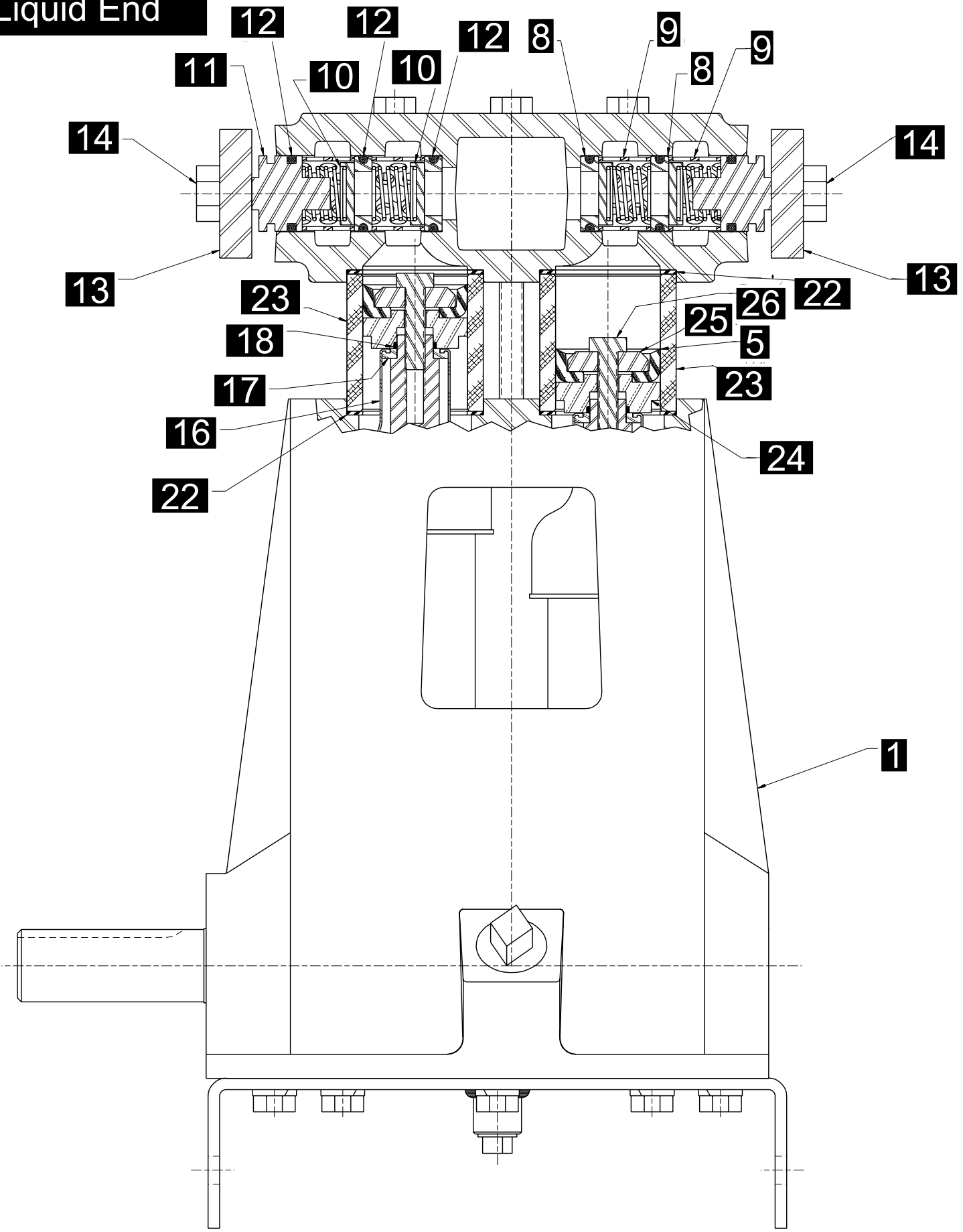


E0413-HD

Liquid End

* 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	5260309	FLUID CYLINDER GROUP:
③	1	5273638	ATTACHING GROUP:
④	2	5273629	CYLINDER GROUP:
⑤	4	5257807	CUP: 1 1/8" DIA, CARBOXILATED NITRILE FABRIC
⑥	1	5266225	LIT KIT:
* ⑦	1	5256139	FLUID CYLINDER: NITRIDED
* ⑧	8	5260142	VALVE SEAT: 450 SST
* ⑨	8	1219610	CAGE: 302 SST
* ⑩	8	5253499	DISC & SPRING ASSEMBLY: 450 SST
* ⑪	4	1219614	VALVE COVER:
* ⑫	12	1177394	O-RING: 1 3/16" OD X 1/8" NOM., BUNA-N
* ⑬	2	1255887	VALVE COVER CLAMP:
* ⑭	2	1100064	HEX HD CAP SCREW: 1/2-13 X 1 1/2" LG.
* ⑮	1	1109987	PLUG: 1/4" PIPE (NOT SHOWN)
** ⑯	4	1279148	UMBRELLA: BLACK
** ⑰	4	1269388	UMBRELLA WASHER:
** ⑱	4	1101339	O-RING: 1 1/16" OD X 1/16" NOM., BUNA-N
** ⑲	1	1177200	CAPLUG: INT. 12
** ⑳	1	1177202	CAPLUG: INT. 17S
** ㉑	4	1101262	HEX HD CAP SCREW: 3/8-16 X 5" LG.
*** ㉒	8	A91684	CYLINDER GASKET:
*** ㉓	4	1241364	CERAMIC CYLINDER:
*** ㉔	4	1282557	PACKING HOLDER:
*** ㉕	4	5257986	PACKING WASHER:
*** ㉖	4	1284516	HEX HD CAP SCREW: 5/16-18 X 1 1/2" LG.

NOTES:
 Ⓐ 1 TORQUE ITEM 21 TO 55 FT-LBS; ITEM 14 TO 35 FT-LBS
 ITEM 26 TO 10 FT-LBS
 2 TEST AT 500 RPM, 1500 PSI
 Ⓑ 3 RETORQUE ITEM 21 AFTER TEST
 4 STAMP NAMEPLATE WITH THE FOLLOWING DATA:
 MODEL NO. - E0413 HD PART NO. - P510904
 MAX RPM. - 700 POWER - 14.6 HP / 10.9 KW
 FLOW - 15 GPM/56 LPM MAX PRESSURE - 1500 PSI/10340 KPA
 SERIAL NO. -
 5 PAINT PER ENGR SPEC CP-20

B	REV NOTES	02/18/00	SJK	07-18-00	RELEASED FOR PRODUCTION	SCALE: NONE
A	NEW ISSUE	03-17-00	SJK	03-17-00	ECN	DATE
REV	WAS	ECN	BY	DATE	5004427	03-29-00

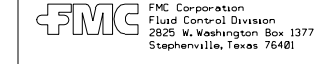
P510904

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FMC 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.
 Angles ±1/2°
 .XX ±.015
 .XXX ±.005
 Finish 125 RMS
 All dimensions are in inches

PUMP ASSEMBLY
 E0413 HD, W/1 1/4" NPT X 3/4" NPT FLUID
 END, CARBOX. NITRILE CUPS, SST
 DISC VALVE ASSEMBLIES



PUMP ASSEMBLY
 E0413 HD, W/1 1/4" NPT X 3/4" NPT FLUID
 END, CARBOX. NITRILE CUPS, SST
 DISC VALVE ASSEMBLIES

DRAWN	SJK	03-17-00	SCALE: NONE
CKD.	BKM	03-20-00	SIZE
APPD.	RMc	03-28-00	D P510904

E0413-HD Liquid End

ITEM	NO. REQD	PART NO.	PART NAME
①	1	P510889	POWER END: HEAVY DUTY
②	1	5260309	FLUID CYLINDER GROUP:
③	1	5273638	ATTACHING GROUP:
④	2	5273629	CYLINDER GROUP:
⑤	4	5257807	CUP: 1 $\frac{5}{8}$ " DIA, CARBOXILATED NITRILE FABRIC
⑥	1	5266225	LIT KIT:
* ⑦	1	5256139	FLUID CYLINDER: NITRIDED
* ⑧	8	5260142	VALVE SEAT: 450 SST
* ⑨	8	1219610	CAGE: 302 SST
* ⑩	8	5253499	DISC & SPRING ASSEMBLY: 450 SST
* ⑪	4	1219614	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	1109987	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	1282557	PACKING HOLDER:
*** ㉕	4	5257986	PACKING WASHER:
*** ㉖	4	1284516	HEX HD CAP SCREW: $\frac{5}{16}$ -18 X 1 $\frac{1}{2}$ " LG.

NOTES:

△ B 1 TORQUE ITEM 21 TO 55 FT-LBS; ITEM 14 TO 35 FT-LBS
ITEM 26 TO 10 FT-LBS

2 TEST AT 500 RPM, 1500 PSI

△ B 3 RETORQUE ITEM 21 AFTER TEST

4 STAMP NAMEPLATE WITH THE FOLLOWING DATA:

MODEL NO. - E0413 HD PART NO. - P510904

MAX RPM. - 700 POWER - 14.6 HP / 10.9 KW

FLOW - 15 GPM/56 LPM MAX PRESSURE - 1500 PSI/10340 KPA

SERIAL NO. -

5 PAINT PER ENGR SPEC CP-20

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