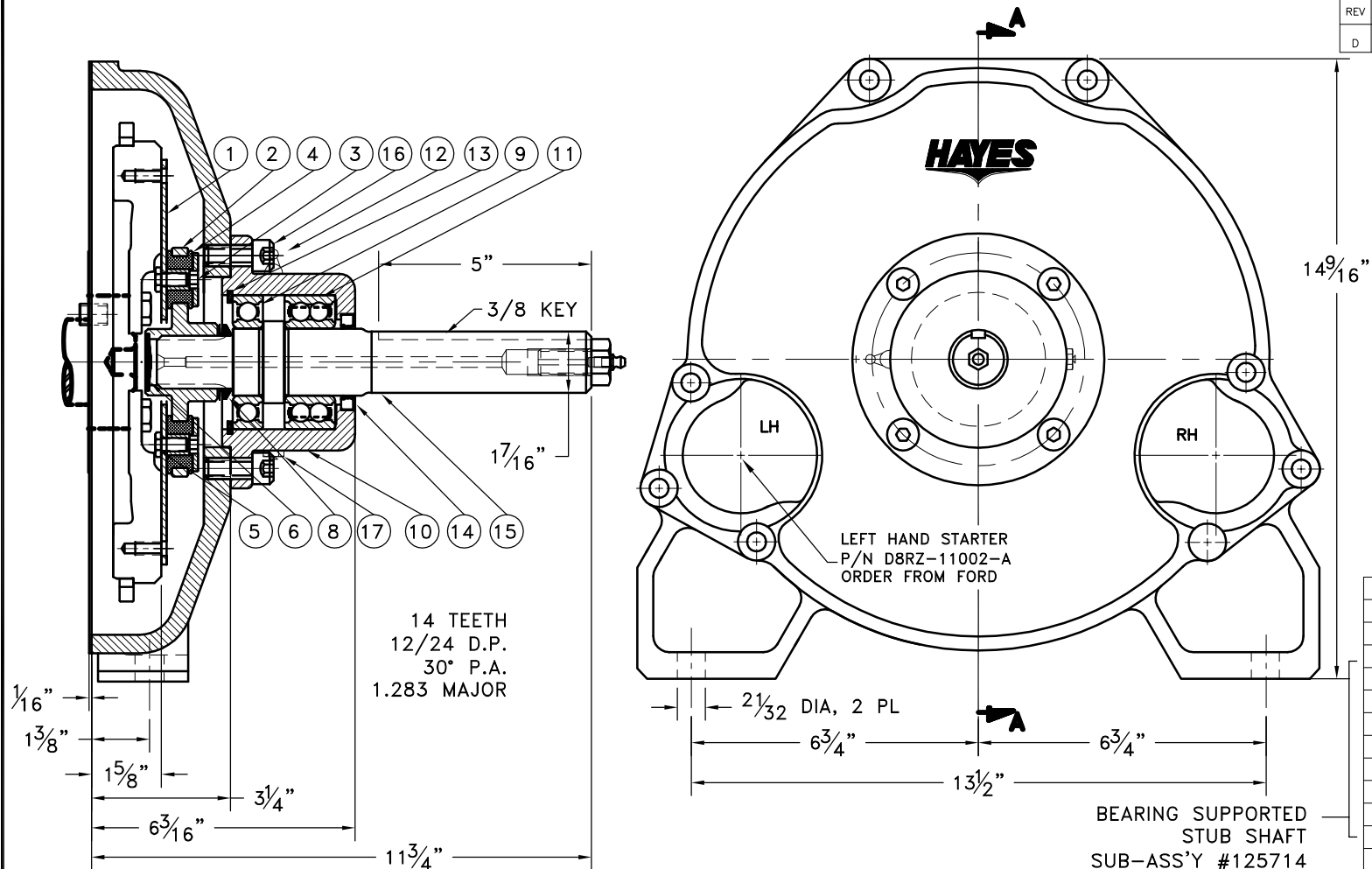


REV	DATE	CHANGE DESCRIPTION	MOD. BY	CK1	CK2
D	06/03/2010	CHANGED BEARING TO 208P	ZS	RJH	HM



**ASSEMBLY NOTE:**

ENSURE THAT THE GREASE ZERK AND RELIEF VALVE ARE LOCATED HORIZONTAL WHEN MOUNTING ON TO PUMP MOUNT PLATE.

HOUSING WILL FIT FORD ENGINE  
VSG-413, 4 CYLINDER, 1.3  
LITRE (79 CID)

**NOTES:**

1. LIGHTLY GREASE INTERNAL AND EXTERNAL AREA OF SPLINE AT ASSEMBLY USING SUPPLIED COUPLING GREASE (OVER GREASING COULD CAUSE A HYDRAULIC TYPE LIFT ON SEALS).
2. **AT ASSEMBLY GREASE BEARING HOUSING UNTIL PIN EXTENDS FROM PRESSURE RELIEF VALVE (LOCATED 180° FROM GREASE ZERK).** USE OF AN UNLEADED EXTREME PRESSURE LITHIUM GREASE, WITH NLGI NO.2 GRADE IS RECOMMENDED. RUN TIME BETWEEN GREASINGS NOT TO EXCEED 2,000 HOURS.
3. **WARNING!!!** INJURY OR DEATH FROM A ROTATING STUB SHAFT CAN OCCUR IF A CONDITION EXISTS WHICH WOULD CAUSE THE SHAFT TO BREAK OR COME APART FROM ANY PART OF THE ASSEMBLY. DEPENDING UPON THE APPLICATION (FOR EXAMPLE, FAN, PULLEY, SHEAVE, ETC.), THE AREA AROUND THE STUB SHAFT MUST BE SUFFICIENTLY GUARDED SO THAT IN THE EVENT OF FAILURE, THE GUARD WILL CONTAIN ANY AIRBORNE PARTS.

20	70HM-6397-AA	DOWEL (ORDER FROM FORD)	2
19	855265-LH	STARTER PLATE	1
18	881444-01	HOUSING	1
17	1093K11	RELIEF VALVE	1
16	740000	1/2-13-1-1/8 SHCS	4
15	125713	SPLINED SHAFT	1
14	CRW1-R-15830	SEAL	1
13	RR-314	SPIROLOX SNAP RING	1
12	600000	GREASE ZERK	1
11	5208WD	DOUBLE BEARING	1
10	125007	BEARING HOUSING	1
9	208P	BEARING	1
8	VS-032	V-RING	1
7	801912	GREASE	1
6	R-0017-01	GREASE PLUG	1
5	HX300	SPECIAL 5/16-24 x 5/8" HHB	8
4	H52500	NEOPRENE INSERT	8
3	123729-01	THREADED BUSHING	8
2	125008	COUPLING HUB	1
1	124319	FLYWHEEL PLATE	1

SYMBOLS	DET.	PART NUMBER	DESCRIPTION	QTY.
FLATNESS STRAIGHTNESS ANGULARITY SQUARENESS PARALLELISM CONCENTRICITY TRUE POSITION ROUNDNESS CIRCULAR RUN OUT TOTAL RUN OUT CYLINDRICITY FINISH	DO NOT SCALE DRAWING TOLERANCES UNLESS OTHERWISE SPECIFIED ANGLE ±1/2° FRACTION ±1/32 DECIMAL .00 ±.01 .000 ±.005 .0000 ±.0005	TITLE <b>FORD VSG 413 BEARING STUB SHAFT ASS'Y</b> MATERIAL	<b>HAYES</b> TM MANUFACTURING INC.	
- UNLESS OTHERWISE SPECIFIED - REMOVE FIRST THREAD ON ALL TAPPED HOLES BREAK ALL SHARP CORNERS .010 TO .020 STAMP OR MARK DRAWING NO.	DRAWN BY <b>LAWSON</b> CHECKED BY	DATE <b>11-26-00</b> SCALE	DRAWING NO. <b>877010</b> SHEET OF REV.	

THIS DRAWING IS THE PROPERTY OF HAYES MFG. INC. AND IS LOANED SUBJECT TO THE CONDITION THAT IT SHALL NOT BE REPRODUCED, COPIED, LOANED OR OTHERWISE DISPOSED OF, DIRECTLY OR INDIRECTLY. IT SHALL BE USED AS A MEANS OF REFERENCE TO WORK FURNISHED BY THIS COMPANY ONLY AND IS NOT TO BE SUBMITTED TO OUTSIDE PARTIES FOR EXAMINATION WITHOUT OUR CONSENT.