

TECHNICAL BULLETIN

TB NO.1016
REV. 1

Subject: Superior Vee Engine - 12 & 16 Cylinders
Main Bearing Cap Fastening Modification

PROBLEM: Loss of torque on main bearing caps attributed to main bearing cap bolt-thread stretch.

The present design of the vee engine bedplate and main bearing cap assembly incorporates the use of (4) threaded bolts to secure the main caps to the bedplate. There have been many problems with this particular design attributed to bolt stretch resulting in the loss of the required torque. When you loose torque you also loose bearing crush and bearing clearance which will ultimately cause the crankshaft to break in most cases at the center main bearing.

To eliminate this chronic problem **EnDyn** recommends a modification to the bedplate and main cap assembly utilizing a through bolt design to more adequately secure the caps to the bedplate and to hold the recommended torque. The recommended modification, material and procedures are contained in **EnDyn** drawing number P-SK-7261 attached.

It is recommended that the bedplate and main cap assembly be transported to **EnDyn** machining facility in Alice, Texas, for the complete modification. Please call our Technical Service Department to set up your **PowerPart**[®] "through bolt" appointment today.

1-14-97

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NOTES:

- 1) DURING HAND TIGHT PRE-ASSEMBLY, ADJUST BOTTOM JAM NUT (ITEM #2) SO TO ALLOW FOR PROPER INSTALLATION OF THE COTTER PIN IN CASTLE NUT.
- 2) APPLY LUBRIPLATE TO THREADS OF ITEMS #2 & #6 BEFORE ASSEMBLY & TORQUE NUTS TO 450 ft. lbs.
- 3) OPTION 1:
AFTER TORQUING NUTS TO 450 ft. lbs. KEEP TIGHTENING UNTIL THE FIRST SLOT IN NUT LINES UP WITH THE HOLES IN THE STUD FOR COTTER PIN INSERTION.
DO NOT LOOSEN.
- 4) OPTION 2:
REPLACE ELASTIC STOP NUTS AFTER RE-TORQUING MORE THAN TWICE.

OPTION "A" - CASTLEATED NUTS

ITEM	V-12 QTY.	V-16 QTY.	PART NUMBER	DESCRIPTION
1	28	36	P-002-723	ROLL PIN
2A	28	36	P-003-809	NUT
3	7	9	P-027-261	BEARING CAP
4	28	36	P-026-414	WASHER
5	28	36	P-032-972	WASHER
6A	28	36	P-032-973	STUD
7	28	36	P-032-977	NUT
8	28	36	P-08CP0800SP	COTTER PIN

P-032-973-X KITT CONSISTS OF:

- {4} P-002-723 (4) P-032-973
- {4} P-003-809 (4) P-032-977
- {4} P-026-414 (4) P-08CP0800SP
- {4} P-032-972

OPTION "B" - ELASTIC STOP

ITEM	V-12 QTY.	V-16 QTY.	PART NUMBER	DESCRIPTION
1	28	36	P-002-723	ROLL PIN
2B	28	36	P-01EN1600PF	NUT
3	7	9	P-027-261	BEARING CAP
4	28	36	P-026-414	WASHER
5	28	36	P-032-972	WASHER
6B	28	36	P-032-973-EN	STUD
7	28	36	P-032-977	NUT

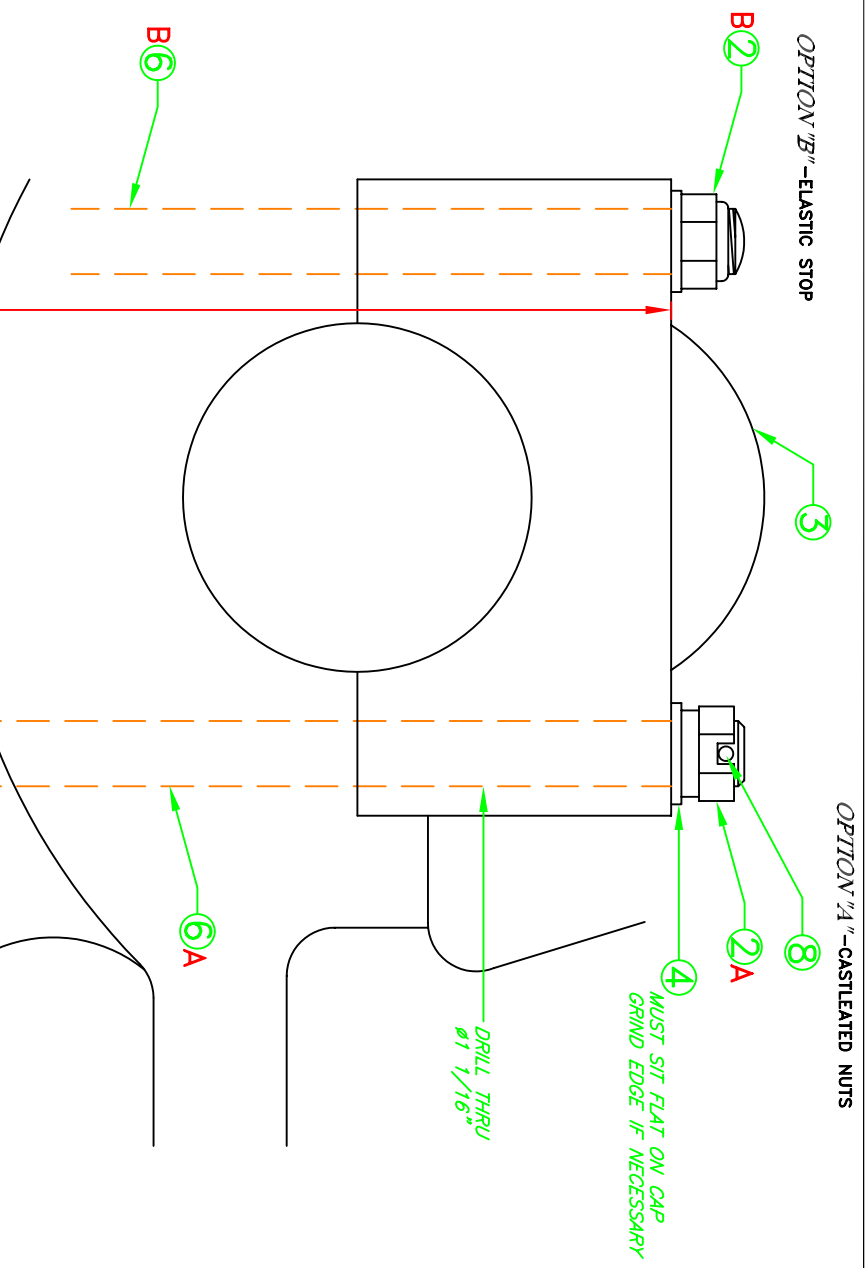
P-032-973-X-1 KITT CONSISTS OF:

- {4} P-002-723 (4) P-032-973-EN
- {4} P-01EN1600PF (4) P-032-977
- {4} P-026-414 (4) P-08CP0800SP
- {4} P-032-972



 TITLE: MAIN BEARINGS FASTENING MODIFICATIONS - VEE

 DRAWING NUMBER: P-SK-7261



REV. 5