

JESEL

VALVETRAIN INNOVATION

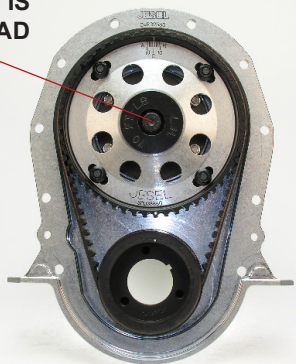
Belt Drive Instruction Sheet

KBD - 35500, Donovan / Brodix
+.400" Raised Cam

INS-35500

Note: BB Chevrolet shown for illustration purposes.

CAM BOLT IS
LH THREAD



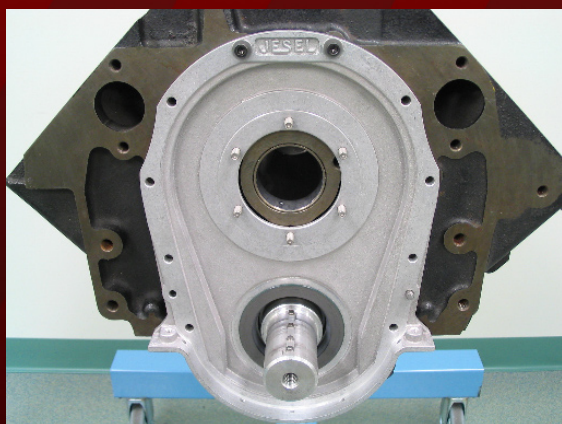
JESEL'S BELT DRIVE SYSTEMS ARE THE MOST ACCURATE AND DURABLE CAMSHAFT DRIVE SYSTEM AVAILABLE. A PATENTED HIGH TORQUE BELT OPERATES WITHOUT LUBRICATION AND SPINS WITH LESS FRICTION THAN CHAINS OR GEAR DRIVE SYSTEMS. THE BELT ALSO REDUCES THE AMOUNT HARMONICS TRANSFERRED FROM THE CRANKSHAFT TO THE CAM RESULTING IN A SMOOTHER RUNNING VALVETRAIN. SOME FEATURES INCLUDE A BILLET ALUMINUM UPPER PULLEY, A HIGH TORQUE DRIVE BELT AND A HEAT TREATED ALLOY STEEL CRANK PULLEY.



STEP 1

CHECK FOR COVER TO BLOCK INTERFERENCE AND CORRECT IF PRESENT BY MODIFYING THE BLOCK. CHECK FOR WATER PUMP AND BALANCER CLEARANCE AS WELL.

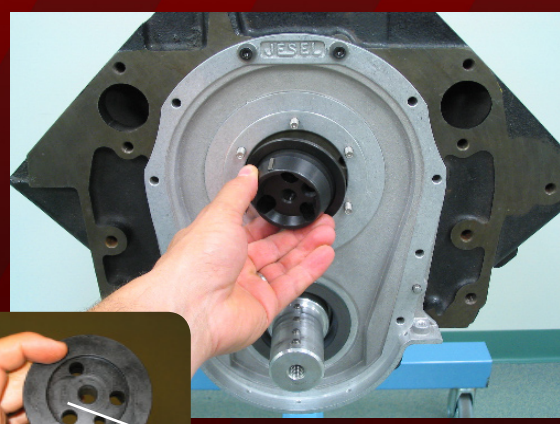
IF YOUR BLOCK HAS BEEN LINE BORED, YOU MAY ENCOUNTER A MISALIGNMENT BETWEEN THE CRANK SEAL AND CRANK SNOOT. WE RECOMMEND ENLARGING THE DOWEL PIN HOLES IN THE COVER AND LOOSELY INSTALLING THE COVER BOLTS BEFORE DRIVING ON THE LOWER PULLEY. THIS PROCEDURE WILL INSURE THAT THE CRANK SEAL IS CENTERED AROUND THE CRANK SNOOT.



STEP 2

SECURE THE BELT DRIVE COVER TO THE BLOCK USING AN OEM TYPE GASKET AND/OR A THIN LAYER OF RTV SEALER. TORQUE THE COVER BOLTS TO **12 FT / LBS.**

LOCATE THE REAR THRUST WASHER (2.950" OD X 1.960" ID X .031"), CAM ADAPTOR (ADP-30080) CAM ADAPTOR BOLTS (5/16-18 X 3/4") AND SPANNER WRENCH.

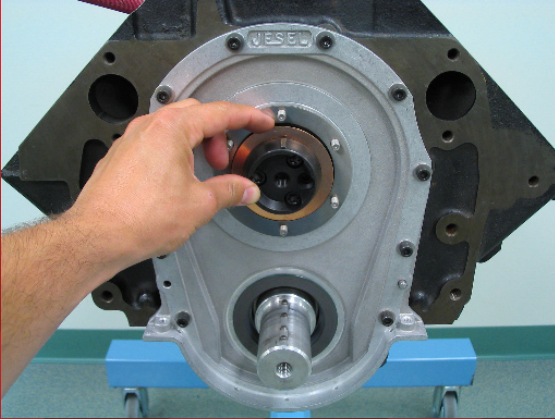


STEP 3

APPLY A THIN LAYER OF RTV SEALER TO THE RECESSED AREA ON THE CAM ADAPTOR.

WITH YOUR CAMSHAFT ON A WORKBENCH, LUBRICATE AND INSTALL THE REAR THRUST WASHER ON THE CAM SNOOT. APPLY SEALANT TO THE THREADS OF THE CAM ADAPTOR BOLTS AND BOLT THE ADAPTOR TO THE CAMSHAFT.

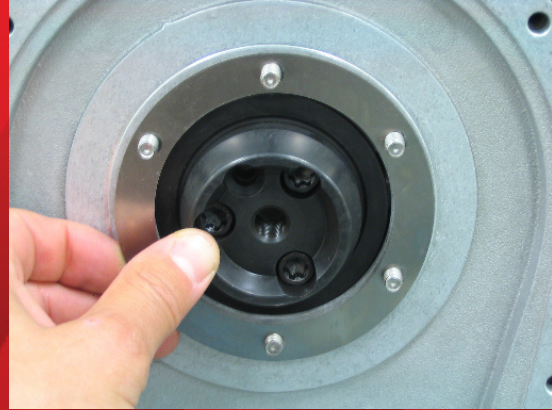
USING SPANNER WRENCH SUPPLIED, TORQUE CAM ADAPTOR BOLTS TO **28-30 FT/LBS.**



STEP 4

LUBRICATE AND CAREFULLY INSTALL CAM-SHAFT.

APPLY A THIN FILM OF OIL TO THE OUTER BRONZE THRUST WASHER (2.950" OD X 2.260" ID X .031") AND INSTALL OVER THE NOSE OF THE CAM ADAPTOR.

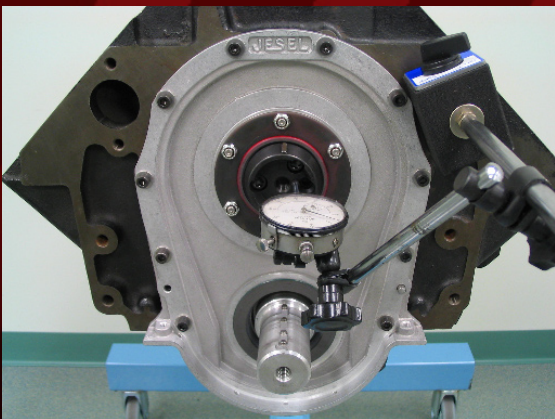


STEP 5

CHECK FOR CAMSHAFT END PLAY BY INSTALLING ALL 3 THRUST SHIMS. JESEL INCLUDES (1) .010", (1) .015" AND (1) .020" THICK THRUST SHIM WITH THIS KIT.

KEEP SHIMS DRY. DO NOT OIL OR USE ANY TYPE OF SEALANT ON SHIMS

CAREFULLY INSTALL THRUST PLATE MAKING SURE NOT TO DAMAGE CAMSHAFT SEAL ON ADAPTOR KEYWAY. **KEEP ALL SEAL AREAS DRY.**

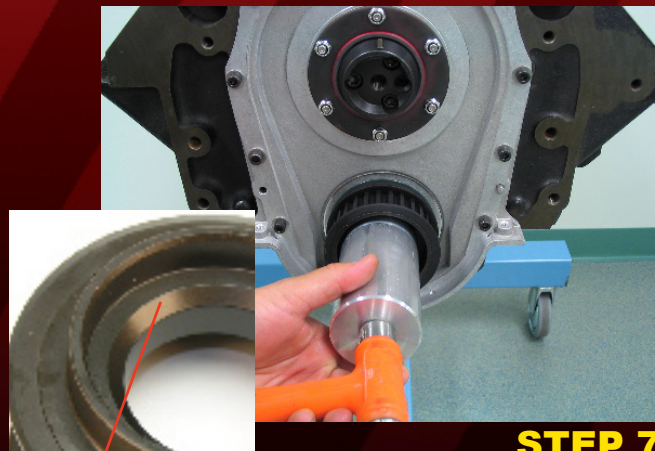


STEP 6

ADJUST CAMSHAFT ENDPLAY BY SETTING A DIAL INDICATOR ON THE FACE OF THE CAM ADAPTOR. ADJUST THE SHIMS UNTIL THE CAMSHAFT END-PLAY IS BETWEEN **.005" AND .010"**.

REMOVE THRUST PLATE AND SHIMS. APPLY A LIGHT FILM OF RTV SEALANT BETWEEN SHIMS TO PREVENT POSSIBLE OIL LEAKAGE. REINSTALL SHIMS.

INSTALL THRUST PLATE AND TORQUE NUTS TO **12 FT / LBS**. KEEP **OIL** OFF SEAL AREA. BE CAREFUL NOT TO DAMAGE SEAL ON ADAPTOR KEYWAY.



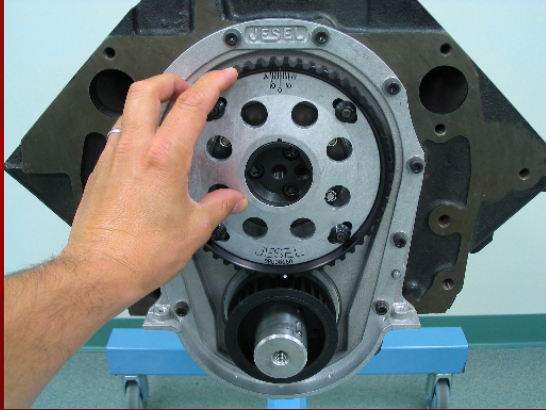
STEP 7

LUBRICATE THE CRANK SNOUT WITH A HIGH QUALITY ANTI-SEIZE COMPOUND.

A THIN LAYER OF RTV SEALANT MAY BE APPLIED TO THE INNER CHAMFER OF THE LOWER PULLEY TO PREVENT OIL SEEPAGE.

INSTALL THE PULLEY ONTO THE CRANK SNOUT UNTIL THE PULLEY STOPS AGAINST THE CRANK-SHAFT.

TO REMOVE LOWER PULLEY: ATTACH A PULLER TO THE (3) THREADED HOLES. DO NOT PULL ON THE RINGS OF THE PULLEY

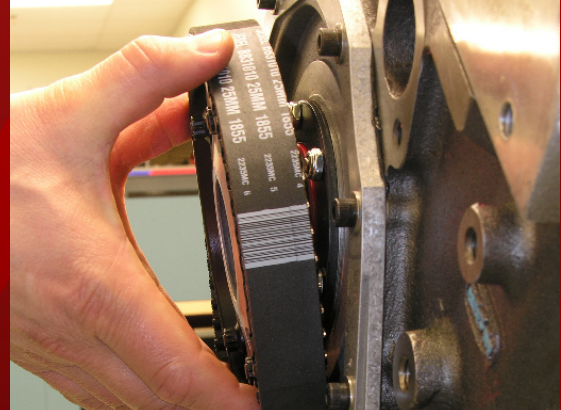


STEP 8

ROTATE CRANKSHAFT SO THAT **#6 CYLINDER** IS AT T.D.C.

ROTATE THE CAMSHAFT SO THAT THE KEYWAY IS AT THE 12 O'CLOCK POSITION.

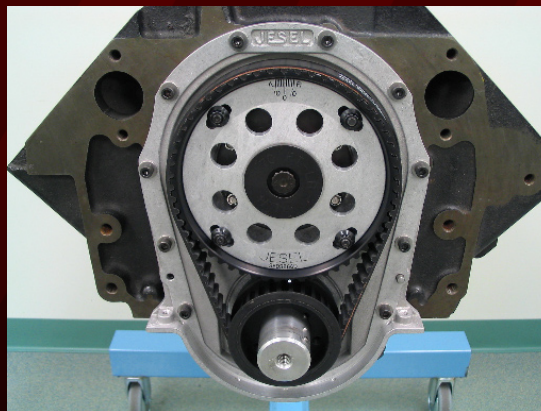
PLACE THE UPPER PULLEY ASSEMBLY ONTO THE CAM ADAPTOR. LOCATE THE CAM ADAPTOR WASHER AND LEFT HAND THREADED CAM ADAPTOR BOLT. START THREADING THE CAM ADAPTOR BOLT INTO THE ADAPTOR. LEAVE BOLT LOOSE.



STEP 9

TILT THE TOP OF THE UPPER PULLEY DOWN TOWARDS THE CRANKSHAFT AND SLIDE THE BELT OVER THE TWO PULLEYS. WITH THE UPPER PULLEY ENGAGED FIRMLY INTO THE CAMSHAFT ADAPTER KEY, TORQUE THE LH BOLT TO **70 LBS-FT.**

SET CAM TIMING TO DESIRED SPECS AND TORQUE UPPER PULLEY NUTS TO **20-25 FT / LBS.** INSTRUCTIONS FOR ADJUSTING THE CAMSHAFT TIMING ARE ON THE BACK PAGE OF THIS INSTRUCTION SHEET.



STEP 10

THE BELT DRIVE INSTALLATION IS NOW COMPLETE. **PLEASE OBSERVE THE FOLLOWING NOTES:**

- 1) ALWAYS DOUBLE CHECK CAMSHAFT TIMING BY USING A HIGH QUALITY DEGREE WHEEL.
- 2) ALWAYS DOUBLE CHECK YOUR PISTON TO VALVE CLEARANCE. CHANGING CAM TIMING CHANGES PISTON TO VALVE CLEARANCE.
- 3) IF THE BELT DRIVE IS GOING TO BE OPERATED IN AN ABRASIVE ENVIRONMENT, WE RECOMMEND COVERING THE UNIT TO PREVENT EXCESSIVE WEAR TO THE PULLEYS.



KIT CONTENTS:

- A) CVR-32550, BELT DRIVE COVER
- B) SPD-38660, SPIDER
- C) PLY-35520, CAMSHAFT PULLEY
- D) PLY-35530, CRANKSHAFT PULLEY
- E) BEL-31060, TIMING BELT
- F) PLT-35260, THRUST PLATE WITH SEAL
- G) ADP-30080, CAM ADAPTER
- H) WSH-39750, CAM ADAPTER WASHER
- L) DCL-32787, JESEL BELT DRIVE DECALS
- M) KTB-38010, THRUST PLATE SHIMS

AVAILABLE TOOLS

- I) TOL-39310, LOWER PULLEY DRIVER
- J) TOL-39260, SPANNER WRENCH
- K) TOL-19210, T45 TORX SOCKET

TORQUE SPECS:

CAM ADAPTOR BOLTS - **28-30 FT / LBS**
 UPPER PULLEY NUTS - **20-25 FT / LBS**
 CAM SEAL THRUST PLATE NUT - **12 FT / LBS**
 7/16-20 LEFT HAND CAM BOLT - **70 FT / LBS**

CAM TIMING ADJUSTMENTS:

LOOSEN FOUR NUTS ON THE SPIDER. TURN THE CRANKSHAFT CLOCKWISE TO RETARD THE CAMSHAFT TIMING AND COUNTER-CLOCKWISE TO ADVANCE THE CAMSHAFT TIMING. EACH MARK ON THE SPIDER GEAR EQUALS TWO DEGREES AT THE CRANKSHAFT.

1985 CEDAR BRIDGE AVE.
 LAKEWOOD, NJ 08701
 732-901-1800, FAX 732-901-6777

www.jesel.com



JESEL ALSO OFFERS A DISTRIBUTOR DRIVE KIT FOR THIS BELT DRIVE. THE DISTRIBUTOR DRIVE KIT ELIMINATES INACCURATE IGNITION TIMING SETTINGS DUE TO CAMSHAFT TORSIONAL TWISTING ON HIGH RPM ENGINES WITH EXCESSIVE SPRING PRESSURES. IT ALSO PROVIDES A MUCH COOLER LOCATION FOR THE DISTRIBUTOR. INTAKE MANIFOLD CHANGES WILL BE MUCH EASIER AS WELL THANKS TO THE DISTRIBUTOR NOT HAVING TO BE ROUTED THROUGH THE REAR PORTION OF THE INTAKE MANIFOLD. THIS KIT IS A DIRECT BOLT ON.

KDD-42510, +.400 RAISED CAM DISTRIBUTOR DRIVE KIT

RECOMMENDED JESEL BELT DRIVE MAINTENANCE:

- 1) REPLACE BELT ANNUALLY OR AFTER ANY TYPE OF ENGINE DAMAGE.

BEL-31060, TIMING BELT

- 2) REPLACE BOTH SEALS AND THRUST WASHERS ANNUALLY.

SEL-38000, CAMSHAFT SEAL

SEL-37300, CRANKSHAFT SEAL

WSH-39610, BRONZE THRUST WASHER, FRONT

WSH-39660, BRONZE THRUST WASHER, REAR

- 3) COVER BELT DRIVE SYSTEM IF OPERATED ON ABRASIVE TRACK SURFACES SUCH AS DIRT OR SAND.

- 4) KEEP **OIL OFF OF ALL SEALING SURFACES** PRIOR TO INITIAL START UP.

- 5) ALWAYS DEGREE AND RE-DEGREE CAMSHAFT AFTER TIMING BELT REPLACEMENT OR REMOVAL.

- 6) DO NOT CLEAN TIMING BELT WITH PARTS CLEANERS OR ENGINE DEGREASERS.

- 7) IF TIMING BELT BECOMES CONTAMINATED WITH ENGINE OIL REPLACE IMMEDIATELY.