

# **Belt Drive Instruction Sheet**

KBD - 36000, GM DRCE2, Brodix +.600" Raised Cam

Note: BB Chevrolet shown for illustration purposes.



JESEL'S BELT DRIVE SYSTEMS ARE THE MOST ACCURATE AND DURABLE CAMSHAFT DRIVE SYSTEM AVAILABLE AND ARE USED BY THE COUNTRY'S TOP RACE TEAMS. A PATENTED HIGH TORQUE BELT OPERATES WITHOUT LUBRICATION AND SPINS WITH LESS FRICTION THAN CHAINS OR GEAR DRIVE SYSTEMS. THE RUBBER BELT ABSORBS DESTRUCTIVE HARMONICS, WHICH CAN CAUSE SERIOUS PROBLEMS ON RACING ENGINES. SOME FEATURES INCLUDE A BILLET ALUMINUM UPPER PULLEY WITH A HIGH TORQUE DRIVE TOOTH CONFIGURATION AND AN ALLOY STEEL CRANK PULLEY WITH GRADE 8 HARDWARE.



STED 2

SECURE THE BELT DRIVE COVER TO THE BLOCK . 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 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 SNOUT. 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 SNOUT.



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 SNOUT. APPLY SEALANT TO THE THREADS OF THE CAM ADAPTOR BOLTS AND BOLT THE ADAPTOR TO THE CAMSHAFT.

TORQUE CAM ADAPTOR BOLTS TO 28-30 FT/LBS.



STEP 4

LUBRICATE AND CAREFULLY INSTALL CAMSHAFT.

APPLY ATHIN 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 ENDPLAY 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 SEALAREA. BE CAREFUL NOT TO DAMAGE SEAL ON ADAPTOR KEYWAY.



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

1000 Panel

STEP 9

ROTATE CRANKSHAFT SO THAT #1 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.

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 OPERAT-ED IN AN ABRASIVE ENVIRONMENT, WE RECOM-MEND COVERING THE UNIT TO PREVENT EXCES-SIVE WEAR TO THE PULLEYS.



### KIT CONTENTS:

A) CVR-32570, BELT DRIVE COVER
B) SPD-38660 SPIDER GEAR
C) PLY-35560 UPPER PULLEY WITH STUDS
D) PLY-35585 LOWER PULLEY
E) BEL-31070 TIMING BELT
F) PLT-35260 THRUST PLATE WITH SEAL
G) ADP-30080 BIG-BLOCK CAM ADAPTER
H) WSH-39750 CAM ADAPTOR WASHER
L) DCL-12830 JESEL BELT DRIVE DECALS
M) KTB-38010, THRUST PLATE SHIMS

#### **AVAILABLE TOOLS:**

I) TOL-39310 LOWER PULLEY DRIVER

J) TOL-39260 CAMSHAFT 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.

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JESEL ALSO OFFERS A DISTRIBUTOR DRIVE KIT FOR THE BIG-BLOCK CHEVY. 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-42560, GM DRCE2, +.600 CAM DISTRIBUTOR DRIVE KIT

# RECOMMENDED JESEL BELT DRIVE MAINTENANCE:

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

BEL-31072, TIMING BELT, BB CHEVROLET

2) REPLACE BOTH SEALS AND THRUST WASHERS ANNUALLY.

SEL-38000, CAMSHAFT SEAL SEL-37300, CRANKSHAFT SEAL WSH-39660, BRONZE THRUST WASHER, FRONT WSH-39610, 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 AF-TER TIMING BELT REPLACEMENT OR REMOVAL.
- 6) DO NOT CLEAN TIMING BELT WITH PARTS CLEAN-ERS OR ENGINE DEGREASERS.
- 7) IF TIMING BELT BECOMES CONTAMINATED WITH ENGINE OIL REPLACE IMMEDIATELY.

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