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# ENCLOSED CRANK TRIGGER RCD/SBC GEAR DRIVE INSTALLATION INSTRUCTIONS

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Enclosed Crank Trigger SBC Gear Drive



1. Remove contents from package and check parts against the bill-of-materials to confirm the kit is complete and that you have all of the parts and kits that you ordered. Before starting the installation, read through the instructions and have all of the tools and parts that you will need for installation. If you have any questions please call for clarification.

*NOTE: The enclosed crank trigger base #202103-07 is pre-assembled with the 3/32" roll pin and the crank seal #351505-44*

2. Remove any accessory drives from the end of the crankshaft or KSE water pump adaptor from the gear drive cover. Inspect the crank, key and threads for any damage. The crank should measure 1.2465 +/- 0.0005. Be sure that there are no burrs or sharp edges on the front of the crank. The key should be no wider than 0.188 and the dimension from the top of the key to the opposite side of the crank should be no greater than 1.350. Be sure that you have at least 1.50 depth of good threads in the end of the crank.

3. Install the crank trigger base assembly to the gear drive cover. Use the same "O" ring as the seal housing or KSE water pump adaptor

used or new one in the package. Use (6) 1/4-20 x 0.75 long SHCS #357425-12 to hold the base on. Maximum torque 160 in-lbs (13.5 ft-lbs).

*NOTE: You may want to use blue Loctite on the threads.*

4. Install hub. Lube the crank seal with light oil and the crank with anti-seize. Carefully line up the key and keyway and push the crank hub onto the crank. Use RCD damper puller-installer part #450503-0020.

*NOTE: Since the hub is aluminum you may want to heat the hub to a maximum of 250°F to make the installation easier.*

5. Install RCD water pump drive with Rotex coupler #202107-0005, or RCD std KSE water pump drive #202107-0010 on crank hub using the (3) 3/8-24-0.75 long FHCS #352505-51. Maximum torque is 500 in-lbs (42 ft-lbs). Install the 7/16-20 x 2.0 long hex bolt #\_ and washer #\_ through the drive and into the crank. Apply oil or anti-seize under the head and on the threads. Maximum torque is 1025 in-lbs (85 ft-lbs).

*NOTE: The bolt pattern is the same as a standard SBC damper so any oil pump or other accessory drive that fits a Chevy damper should fit.*

6. Temporarily install cover using the (4) 5/16-18 x 1.125 long SHCS #357431-18 and (4) 1/4 AN washers #352503-05 - just snug the bolts for now. The enclosed crank trigger cover comes pre-assembled with the pointer pin #202109-21, pointer bracket #202109-15 bolted on with (2) 8-32 x 0.375 long SHCS #357308-06 and (2) #8 AN washers #352503-02. Set #1 piston at TDC. Loosen the two 8-32 screws that hold the pointer bracket and looking through the pointer inspection hole set the pointer pin to line up with a full mark 0 on the crank hub and tighten the (2) 8-32 screws.

*NOTE: You may want to use blue Loctite on the threads.*

7. Remove the cover and mark the full line as zero TDC. Counting clockwise around the hub make a notation on the mark where you want the final ignition timing to be set.

*NOTE: Each mark on the hub is one degree of crank rotation.*

8. Bolt the pickup holder #202109-09 on to the base with (2) 1/4-20 x 0.5 long SHCS #357425-08 and (2) 1/4 AN washers #352503-04. The pickup holder will fit on either the right or left side. Slide Leahy electronic pickup into the holder and space it 0.050-0.075 from the circumference

*continued...*

of the hub. Run the leads in the direction that you want and tighten the 8-32 × 0.5 long SHCS #357308-08 to secure the pickup. With the pickup and holder in the center of their travel (at 3:00 or 9:00 o'clock) the ignition timing should be set at about 32 degrees BTDC.

*NOTE: If you would like to run 3 different ignition settings you will need another holder on the other side and a switch to select the timing to be used.*

**9.** Reinstall the cover assembly using the (4) 5/16-18 × 1.125 long SHCS #357431-18 and (4) ¼ AN washers #352503-05. Maximum torque 240 in-lbs (20 ft-lbs).

*NOTE: You may want to use blue Loctite on the cover bolts.*

**10.** Plug the lead from electronic pickup into the connector on the Magneto.

**11.** Bolt the water pump onto the cover with four appropriate length 5/16-18 bolts.

**CAUTION: These bolts are not furnished with the kit and must NOT protrude through the cover and contact the hub!**

**12.** Start the engine and using a timing light through the hole where the pointer plug goes, set the timing by moving the pickup holder

#202109-09 with the electronic pickup. Clockwise will retard the timing and counter clockwise will advance it. If you are using two electronic pickups on your enclosed crank trigger switch to the other and adjust the other pickup holder for the second timing setting.

**13.** With the timing set remove the cover bolt that goes through a portion of the pointer plug hole and install the plug #202109-19. Reinstall the bolt and check all the other fasteners.

*NOTE: Be sure that the leads from the electronic pickup are secured and routed in a safe manor.*