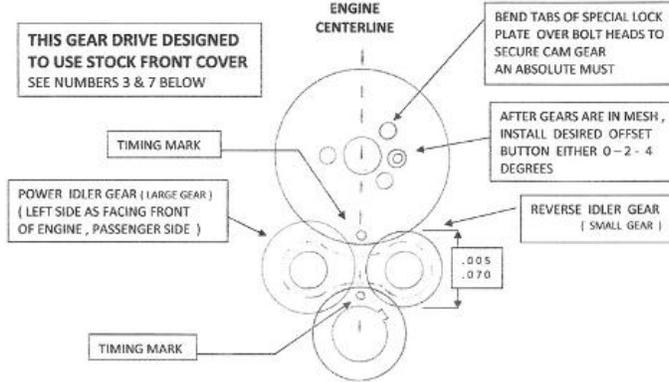


327-1C / 327-1CN / 427-5C / 427-5CN - NON FACTORY ROLLER CAM ENGINES

**Pete Jackson DUAL IDLER
INSTALLATION**



SPECIAL NOTE !
 THE "DUAL IDLER" GEAR DRIVE IS INTENDED TO OPERATE WITH A WEIGHTED HARMONIC BALANCER, EITHER STOCK OR AFTERMARKET - NOT A LIGHTWEIGHT ALUMINUM HUB -

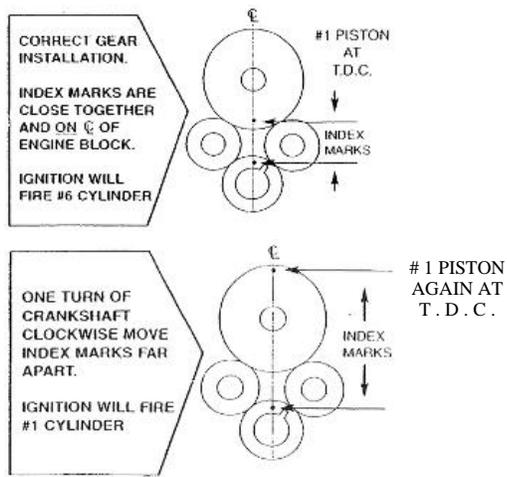
In normal operation power is transmitted thru the Power Idler gear to the camshaft gear . The Reverse Idler is rotating under no-load and must have sufficient clearance

The sole purpose of the Reverse Idler gear is to prevent the Power Idler gear from being disengaged whenever the crankshaft rotates backwards . As occurs each time the engine is switched off .

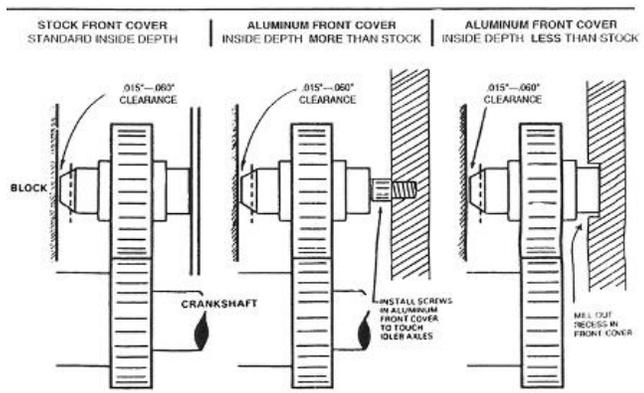
- 1.- With a dab of grease install the back thrust ring on the back of the cam gear . Install cam gear & crank gear first . Put # 1 piston at top dead center and line up the timing marks on **centerline** of engine .
- 2.- Slide the Idler gear assembly with the large gear on the left as you are facing the engine (passenger side) , and the long part of the idler axle towards the engine block .
- 3.- With the idler gears halfway in , push timing cover with the gasket onto the face of the block . Pull cover off . The Idler gears should be at least 90% lined up with the cam & crank gear . With a feeler gauge, check the clearance between the block and the back of the idler axles. You need .015" to .100" clearance . Grind the axle (**not the engine block**) with a bench grinder if necessary . The idler axles will ride against the cover the entire time the engine is running , that's why the clearance is to the block .
- 4.- Install the desired offset bushing on the cam dowel pin . If you are not degreasing the cam in we recommend the "O" bushing (the one with the hole in the middle) . When degreasing the cam always turn the engine in normal rotation (clockwise) .
- 5.- Install the lockplate with washers and bolts . Torque to factory specs . **A MUST - BEND TABS OF LOCKPLATE OVER HEADS OF BOLTS .**
- 6.- Turn crank clockwise so power idler (larger) gear is in full contact with cam & crank gears . Reverse idler (small gear) should have between .005" and .070" vertical movement (clearance) . Check this for (2) full revolutions of the crank . If you do not have enough clearance call Pete Jackson Gear Drives at (323) 849-2622 about an undersize reverse idler gear . Gears will turn blue if not enough clearance . and any warranty will be void .
- 7.- Install cam thrust button assembly in cam gear . Put clay on end and push cover with gasket into place . pull cover off . You should have between .005" and .010" clearance . If there is too much clearance put a shim (washer or shim stock) in cam before the thrust button assembly to obtain the proper clearance . If not enough clearance , grind or machine (solid face) front face of thrust button assembly .
- 8.- Some steel covers flex . To stop this you can install a wedge between the cover and the water pump .

-BIG BLOCK CHEVY'S - Some dampers are straight cut on the gear mating surface , you need a 45° chamfer so it does not interfere with the idler gears .

Web based Instruction sheet - Not from original purchase - © Pete Jackson Gear Drives



If you need help installing your original purchase gear drive or have a problem , please call Pete Jackson Gear Drives at : (323) 849-2622 , NOT the dealer you purchased it from



GAURANTEE
 Pete Jackson Gear Drives fully guarantees " Dual Idler " gear drive kits to be free from defects in materials and workmanship . Should any defect be found in either materials or workmanship upon receiving shipment , return complete " Dual Idler " gear drive kit at once to Pete Jackson Gear Drives—1207 South Flower Street , Burbank, CA 91502 for replacement . Damage caused thru improper use or improper installation will cause guarantee to be null and void .