

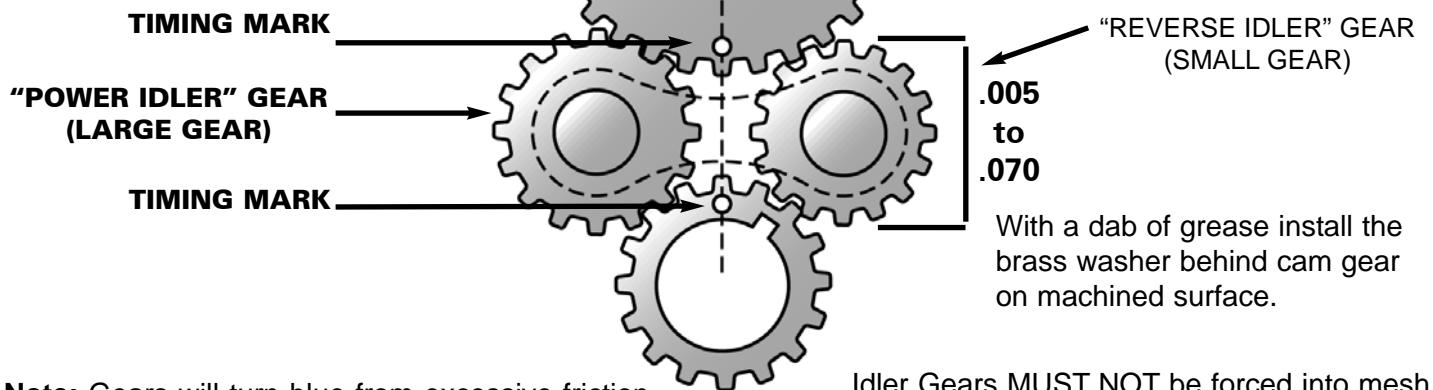
DUAL IDLER GEAR DRIVE INSTALLATION INSTRUCTIONS

Follow Shop manual instructions for replacement of timing chain assembly

Power Idler MUST be installed on LEFT SIDE as shown (when you are facing engine). Crankshaft gear will Force power idler Gear into perfect mesh with camshaft gear as crankshaft rotates clockwise.

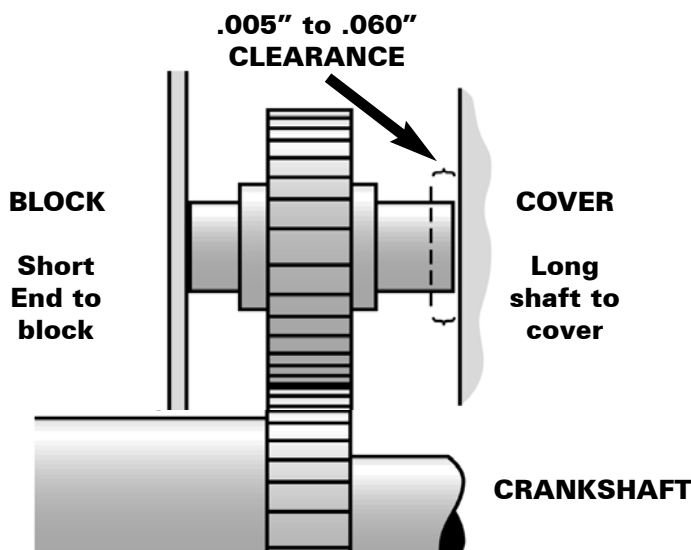
**When decreasing in cam always
turn crank clockwise
Non DS, Mechanical Pump
ALWAYS Turn Crank Clockwise.**

“Reverse Idler Gear should have free vertical movement when Power Idler Gear is in solid mesh with cam and crank gears.



Note: Gears will turn blue from excessive friction if reverse idler gear does not have sufficient running clearance.

Idler Gears MUST NOT be forced into mesh. If they fit tightly due to excessive line bore, Phone (306) 242-7644 for instructions. Special fit gears are available special order.



Note: Idler Axles are ALWAYS in contact with front cover. All end clearance is between engine block and REAR END of axles. Put Idler Gears about half way in, take cover with gasket and push into place. Remove cover and that is where Idlers will run. Rear end of axle MUST NOT touch block. Grind off is necessary for at least .005" end clearance. DO NOT trap axles between block and front cover.

ATTN: Gear Drive Installer !!!

It takes 16 lifters and 16 pushrods and 16 rocker arms and 16 valve springs, all in good working order to allow gear drive to function properly. If any one of these 64 elements is defective, it will cause a clicking/knocking sound from the power idler gear when crankshaft is rotated clockwise.

OPERATIONAL DATA

In normal operation, power is transmitted through “Power Idler” gear to camshaft gear, the “Reverse Idler” gear is rotating under no-load and must have ample clearance.

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

Warranty

All Dual Idler Gear Drives and Phazers are lifetime warranted against defective materials or workmanship. Any product deemed to be defective must be returned at the customers expense, with the proof of purchase. Diesel Services Group will not be responsible for any other expenses incurred by the customer under the terms of this warranty, nor shall it be responsible for any damages either consequential, special, contingent, or otherwise; or expenses or injury arising directly or indirectly from the use of any DSG product. Diesel Services Group reserves the right to determine whether the terms of the warranty, set out above, have been properly complied with. In the event that the terms are not complied with, Diesel Services Group shall be under no obligation to honor this warranty.

**Diesel Services Group
230 - 29th Street East
Saskatoon, Saskatchewan
S7L 6Y6**



Saskatoon Diesel

*230 - 29th Street East
Saskatoon, SK, S7L 6Y6
Tel. 306-242-7644
Fax. 306-242-5457*

Regina Diesel

*646 Henderson Drive
Regina, SK, S4N 5X3
Tel. 306-757-4159
Fax. 306-359-3217*

Swift Current Diesel

*1920 Chaplin Street West
Swift Current, SK, S9H 3V6
Tel. 306-773-4616
Fax. 306-778-3707*

Call Toll Free 1-800-667-6879
E-mail - sales@dieselservices.com
www.dieselservices.com