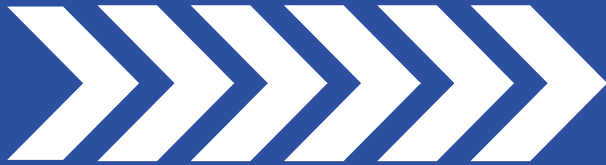


E-Z RIDER®

Heavy Duty Clutches
Made in the U.S.A.



Technical Hot Sheet

FLYWHEEL 101



- Basics •*
- Verifying Good Condition •*
- Checking Runout •*

For Immediate Assistance

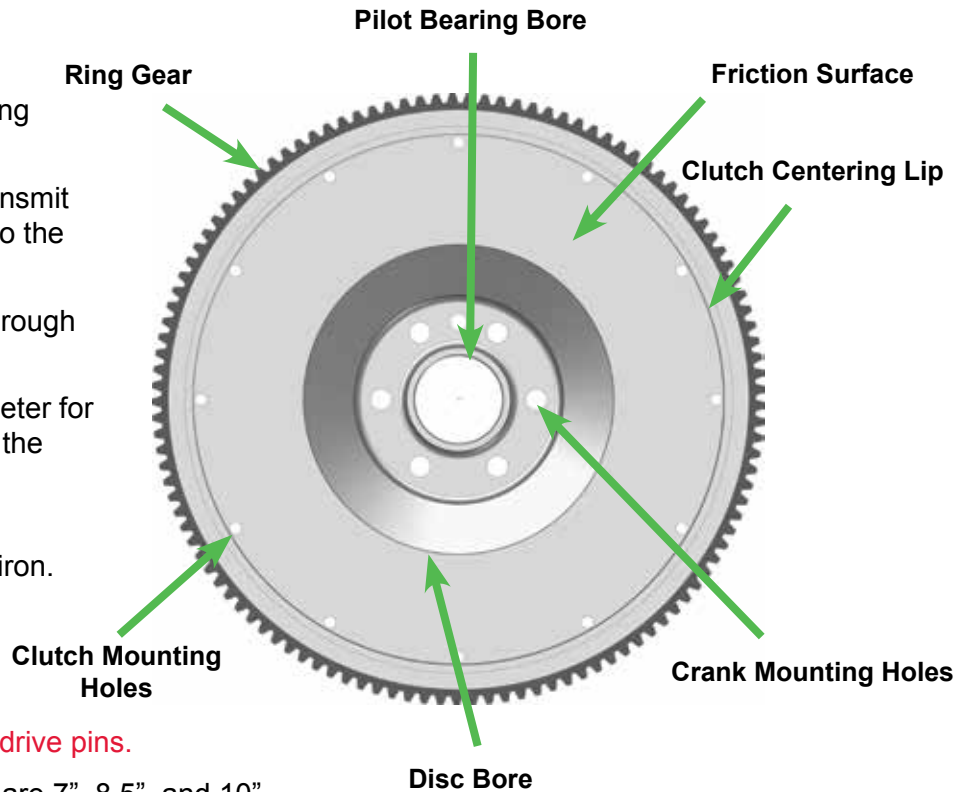
1-800-325-6138

24/7 TECHNICAL SUPPORT

FLYWHEEL 101

Flywheel Basics

- Bolts to the crankshaft.
- Reduces vibration from the firing cylinders through its inertia.
- Clutch mounting surface to transmit torque from the engine and into the transmission.
- Heat sink for heat produced through friction in clutch.
- Has a geared ring on its perimeter for the starter to engage and turn the engine.
- Most heavy duty diesel truck flywheels are made from cast iron.
- Flat or Pot style accommodate different types of clutches.
- Most common disc bore sizes are 7", 8.5", and 10".



Note: Pot style flywheels use drive pins.

Verifying Good Flywheel

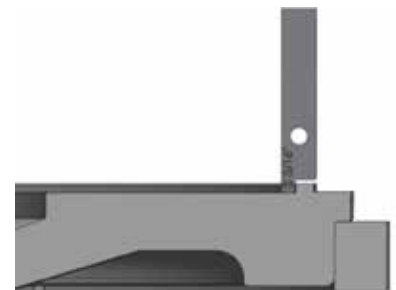


You must have a minimum of 5/16" distance from the friction surface of flywheel to top of the bolt head that holds the flywheel to the crankshaft. If it is less than 5/16", you need a NEW flywheel.

If this dimension is less than the 5/16" the dampener of the clutch disc will hit the crank bolts and cause failure.

Clutch centering lip cannot be greater than 3/16" deep. This dimension increases as the flywheel wears or is ground for resurfacing.

If it is greater than 3/16" the clutch will not bolt tight to flywheel.



For correct clutch operation on a 14" pot style flywheel this dimension must be 2.937". When resurfacing these flywheels you must take the same amount from the clutch mounting surface as you do the friction surface to maintain 2.937".

Drive pins must be replaced with every clutch. If they are not replaced and made square, the center plate can bind.

Note: All measurements can be checked and verified by using a flywheel gauge tool (Part #IG100).



FLYWHEEL 101

Checking Runout - Measuring Engine Flywheel Housing and Flywheel

CHECK THE FOLLOWING USING A DIAL INDICATOR:



Flywheel Face Runout

Secure dial indicator base to flywheel housing face. Put gauge finger in contact with flywheel face near the outer edge. Rotate flywheel one revolution. Maximum acceptable runout is .008 (.20mm).



Flywheel Housing I.D. Runout

Secure dial indicator base to crankshaft. Put gauge finger against flywheel housing pilot I.D. Rotate flywheel one revolution. Maximum acceptable runout is .008 (.20mm).



Pilot Bearing Bore Runout

Secure dial indicator base to flywheel housing face. Position gauge finger so that it contacts pilot bearing bore. Rotate flywheel one revolution. Maximum acceptable runout is .005 (.13 mm).



Flywheel Housing Face Runout

Secure dial indicator base to flywheel near the outer edge. Put gauge finger in contact with face of flywheel housing. Rotate flywheel one revolution. Maximum acceptable runout is .008 (.20 mm).

PROBLEMS CAUSED BY EXCESSIVE RUNOUT:

- Clutch will not release properly
- Uneven pull, causing bushing to come out
- Increased vibrations
- Uneven wear
- Accelerated disc hub wear
- Premature disc breakage
- Premature failure

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