



Performance Diesel Installation

Step 1 – Tools & Procedures

- Proper key if required
- Anti-seize compound
- Removal & installation tool if required (Damage from improper installation will void your warranty)
- Do not use hammers or pry bars to install or remove Fluidampr, this will void your warranty.
- Sufficient torque wrench (see torque specs on page 2), fan removal tools.

Step 2 – Balancing

Internally and Externally balanced Engines

Part Numbers

720211	External Balanced	Ford Powerstroke 7.3 Liter	1999 to 2003
720221	External Balanced	Ford Powerstroke 7.3 Liter	1994 to 1997
(See #4NFJ01 for Fan Spacer installation instructions)			
870201	External Balanced	Ford Powerstroke 6.0 Liter	2003 to 2007
870211	External Balanced	Ford Powerstroke 6.0 Liter	2003 to 2007
800211	External Balanced	Ford Powerstroke 6.4 Liter	2008 to 2010
800221	External Balanced	Ford Powerstroke 6.7 Liter	2011 to Present
800141	External Balanced	GM / Hummer 6.2 Liter / 6.5 Liter	1994 to 2000
800191	External Balanced	GM / Hummer 6.2 Liter / 6.5 Liter	1982 to 1993
830111	External Balanced	Chevy Duramax 6.6 Liter	2006 to 2010
830121	External Balanced	Chevy Duramax 6.6 Liter	2010.5 to Present
890101	External Balanced	Chevy Duramax 6.6 Liter	2001 to 2005
920301	Internal Balanced	Dodge Cummins 5.9 Liter	2003 to 2009
920321	Internal Balanced	Dodge Cummins 6.7 Liter	2007.5 to Present
960301	Internal Balanced	Dodge Cummins 5.9 Liter	1998.5 to 2002
960311	Internal Balanced	Dodge Cummins 5.9 Liter	1992 to 1998
(See #4NFH02 for Sensor Relocation Bracket installation instructions)			
960341	Internal Balanced	Dodge Cummins 5.9 Liter	Comp Series

REPLACING THE DAMPER

Fluidampr counterweights for external balanced engines have been designed to OEM specifications. If the damper being replaced has never been altered, Fluidampr can be installed with no additional balancing.

BALANCING OR MATCH BALANCING

- Each Fluidampr component is precision balanced during manufacturing, so NO additional balancing is required.
- DO NOT ATTEMPT TO BALANCE THE CRANKSHAFT WITH FLUIDAMPR INSTALLED The inertia ring inside Fluidampr is balanced to a close tolerance at the factory and it rotates inside Fluidampr.
- DO NOT DRILL FLUIDAMPR – The inertia ring and silicone fluid are in a hermetically sealed housing. Drilling may cause the damper to leak and lead to damper failure, voiding the warranty.
- If balancing the crankshaft is required, install the stock damper while balancing.

Step 3 – Removal

- Remove fan and shroud as per manufacturer's instructions, draw sketch of belt routing if required and remove the accessory drive belt.
- **Dodge Cummins 5.9L (1992 to 1998). BEFORE REMOVING THE STOCK DAMPER**, rotate the engine so that the magnetic pick up is not on one of the notches in the outside diameter of the stock damper. If you do not have access to the gap spec, use a feeler gage to measure and record the gap between the magnetic pick up and the stock damper. (See attached sheet).
- Remove the stock damper per factory/service manual instructions.



CAUTION - It is recommended that the Fluidampr be pinned onto the crank shaft when using the Fluidampr on high horsepower Dodge Cummins 5.9L and 6.7L competition drag or pulling engines that exceed 3500 RPM.

Fluidampr recommends using **Drill Pin Kit p/n 300002** and drill the recommended hole(s) in the crank shaft for the spring pin(s) which are also included in this kit.

Step 4 – Fluidampr Installation

- On engines that the damper **slides or presses** onto the crankshaft, carefully remove burrs, scratches, or nicks on the crank snout by filing or polishing the snout so that it is smooth and free of surface irregularities. Remove any sharp keyway corners. The key should fit snugly in the keyway on the crank. A heavy press fit creates high stress on the slot and should be avoided. If you use a hammer for anything other than a light tap, the key is too wide. Replace or modify the key if it is too tight or too loose.
- Coat the crankshaft snout and damper inside diameter with anti-seize compound or moly grease to prevent galling during installation.
- **Dodge Cummins 5.9L (2003 – 2009), 6.7L (2007.5 to 2011), and Ford Powerstroke 6.0L: The belt must be routed between the Fluidampr and the water pump pulley before the Fluidampr is installed.**
- Install the Fluidampr and torque the bolt or bolts properly as per the original manufacturers' torque or torque to yield requirements. Consult a dealer to determine if your application is torque to yield.
- Fluidampr recommends that crank bolt(s) always be replaced when installing the damper.
- Install the accessory drive belt, fan and shroud as per manufacturer's instructions.

Part No.	Engine	Bolt Torque
720211	Ford Powerstroke 7.3L 1999 to 2003	212 ft-lbs
720221	Ford Powerstroke 7.3L 1994 to 1997	212 ft-lbs
870201	Ford Power Stroke 6.0L 2003 to 2007	50 ft-lbs plus an additional 90 degrees*
870211	Ford Power Stroke 6.0L 2003 to 2007	50 ft-lbs plus an additional 90 degrees*
800211	Ford Power Stroke 6.4L 2008 to 2010	50 ft-lbs plus an additional 90 degrees*
800221	Ford Power Stroke 6.7L 2011 to Present	22 ft-lbs plus an additional 90 degrees*
800141	GM / Hummer 6.2L / 6.5L 1994 to 2000	See Owners Manual*
800191	GM / Hummer 6.2L / 6.5L 1982 to 1993	See Owners Manual*
830111	Chevy Duramax 6.6L 2006 to 2010	74 ft-lbs plus an additional 90 degrees*
830121	Chevy Duramax 6.6L 2010.5 to Present	74 ft-lbs plus an additional 90 degrees*
890101	Chevy Duramax 6.6L 2001 to 2005	74 ft-lbs plus an additional 90 degrees*
920301	Dodge Cummins 5.9L 2003 to 2009	92 ft-lbs
920321	Dodge Cummins 6.7L 2007.5 to Present	92 ft-lbs
960301	Dodge Cummins 5.9L 1998.5 to 2002	92 ft-lbs
960311	Dodge Cummins 5.9L 1992 to 1998	92 ft-lbs
960341	Dodge Cummins 5.9L Comp Series	92 ft-lbs

WARNING: FAILURE TO USE PROPERLY TORQUED BOLTS WILL VOID WARRANTY AND COULD RESULT IN DAMPER, KEY, OR CRANK DAMAGE.

***BOLTS ARE TORQUE TO YIELD, NEW BOLTS MUST BE USED EVERYTIME.**

LIMITED WARRANTY

LIMITED WARRANTY: All Fluidamprs are warranted to be free from defects in workmanship and materials for a period of one (1) year from the DATE OF PURCHASE. A copy of the sale receipt showing DATE OF PURCHASE must be presented at the time of warranty claim. In the unlikely event you need to make a claim for warranty consideration, you must contact Horschel Motorsports for a returned goods authorization number. During the warranty period, Horschel Motorsports will repair or replace, at our discretion, any part or parts that are determined by Horschel Motorsports to be defective due to workmanship or materials. Transportation charges for return of defective parts must be prepaid by the purchaser. THIS WARRANTY DOES NOT INCLUDE AND IS NOT LIMITED TO THE FOLLOWING: Failure due to improper installation or maintenance. Loss or injury incurred from use or operation of Horschel Motorsports products. Misuse, abuse, or unauthorized repairs. Removal or replacement cost. Cost incurred due to downtime of vehicle. Damage to other engine or vehicle components. Normal wear and tear.

Horschel Motorsports
180 Zoar Valley Road
Springville, NY 14141

Phone 716-592-1000
Fax 716-592-1001
Web www.fluidampr.com
E-mail support@fluidampr.com

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