



# Service Bulletin

Bulletin No. 2004-63R2  
CMD 2004-03

Circulate to:  Sales Manager  Accounting  Service Manager  Technician  Parts Manager

▲ = Revised April 2005. This bulletin supersedes the previous bulletin 2004-63R1.

## Crankshaft Pulley Slip

### Models Affected

CMD	2.8 ES and EI 200	88010026 to 88010550
CMD	2.8 ES and EI 170	88005200 to 88005238

### Situation

On a specific number of 2.8 ES and EI engines, the pulley nut may not have sufficient torque from the factory, therefore the pulley may slip under normal operation.

### Solution

Complete the appropriate repair process, depending on usage, as follows:

### REPAIR PROCESS TO BE USED WHEN REPAIRING AFFECTED ENGINES ALREADY IN USE:

#### Replacement Parts

Description		Part Numbers
Crankshaft Pulley Kit		895519
Included in kit:	Pulley	850420001
	Nut	811421002

### REMOVAL AND INSTALLATION


1. Remove the starter motor and lock the crankshaft from the flywheel housing using holding tool 91- 895472 or equivalent.
2. Refer to "Figure A." Remove the belt and the four bolts attaching the damper and spacer to the pulley. Remove the spacer.
3. Unscrew the **left handed** thread pulley nut and remove the pulley. Discard the pulley and pulley nut.
4. Clean the crankshaft and the lateral surfaces in contact with pulley.
5. Install the new pulley (850420001).
6. Thoroughly clean the surface where the nut contacts the pulley.

**IMPORTANT: Threads and pulley contact surface of pulley nut must be coated with Loctite Moly Paste (Molybdenum Disulfide Grease).**

7. Install the new pulley nut (811421002) with Loctite Moly Paste (Molybdenum Disulfide Grease) on the threads and pulley contact surface.

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Tube Ref No.	Description	Where Used	Part No.
 113	Loctite Moly Paste (Molybdenum Disulfide Grease)	Pulley nut threads and pulley contact surface	Obtain Locally

8. Torque the pulley nut.

Description	Nm	lb. in.	lb. ft.
Pulley nut	400		295

9. Install the spacer and damper with four bolts. Torque the damper bolts.

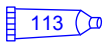
Description	Nm	lb. in.	lb. ft.
Damper bolts	25		18.5

**NOTE:** To install the serpentine belt, use the pulley grooves that are closest to the block.

10. Remove the flywheel holding tool and install the starter.

## REPAIR PROCESS TO BE USED WHEN REPAIRING AFFECTED ENGINES NOT YET IN USE: REMOVAL AND INSTALLATION

1. Remove the starter motor and lock the crankshaft from the flywheel housing using holding tool 91- 895472 or equivalent.
2. Refer to "Figure A." Remove the belt and the four bolts attaching the damper and spacer to pulley. Remove spacer.
3. Remove the **left handed** thread pulley nut.
4. Install the pulley nut with Loctite Moly Paste (Molybdenum Disulfide Grease) on the threads and pulley contact surface.

Tube Ref No.	Description	Where Used	Part No.
 113	Loctite Moly Paste (Molybdenum Disulfide Grease)	Pulley nut threads and pulley contact surface	Obtain Locally

5. Torque the pulley nut.

Description	Nm	lb. in.	lb. ft.
Pulley nut	400		295

6. Install the spacer and damper with four bolts. Torque the damper bolts.

Description	Nm	lb. in.	lb. ft.
Damper bolts	25		18.5

**NOTE:** To install the serpentine belt, use the pulley grooves that are closest to the block.

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7. Remove the holding tool and install the starter.

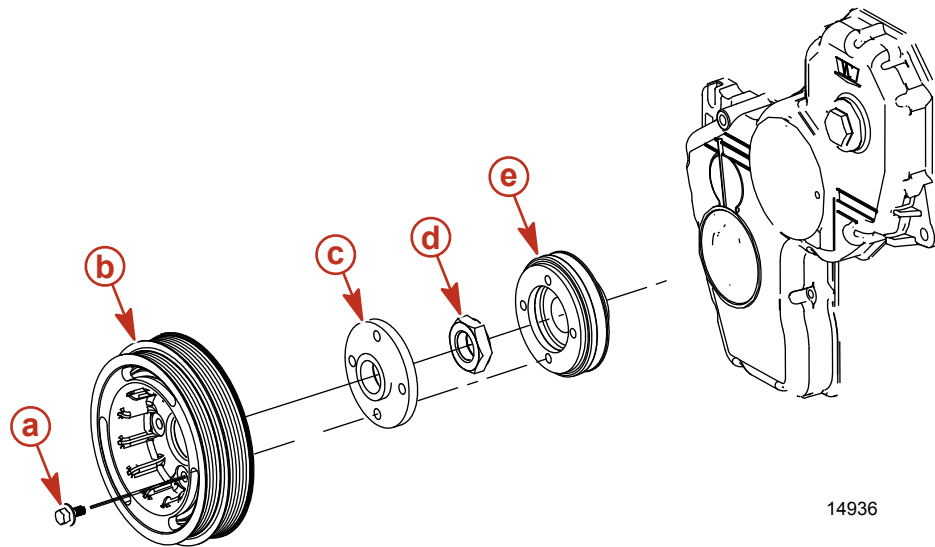


Figure A

- |                   |                       |
|-------------------|-----------------------|
| <b>a</b> - Bolt   | <b>d</b> - Pulley Nut |
| <b>b</b> - Damper | <b>e</b> - Pulley     |
| <b>c</b> - Spacer |                       |

## Warranty

**USA & Canada** – Cummins MerCruiser Diesel authorizes the repair of engine(s) listed in this bulletin and will reimburse the distributor or distributor dealer for the cost of parts and labor until May 31, 2008. Dealers, contact your Cummins MerCruiser Distributor office for instructions. Distributors, submit a warranty claim through your normal warranty processing channel, listing:

- Engine serial number
- Part Code – 429
- Failure Code – 00
- Flat Rate / Labor Codes – ME71, MM58, MM49

Labor Code	Flat Rate
ME71	1.8 Hours
MM58	1.5 Hours
MM49	0.3 Hours

Old parts :

- Discard

**International** – Cummins MerCruiser Diesel authorizes the repair the engine(s) listed in this bulletin and will reimburse the distributor or distributor dealer for the cost of parts and labor until May 31, 2008. Contact your Cummins MerCruiser international office for instructions.

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