TECHNICAL SERVICE BULLETIN No. TSB-ENHCV-1524
30.12.2024

HEAVY COMMERCIAL VEHICLES

Published To :	Service	Warranty	Spare Part	Technician	Service Supervisor	BMIS
	✓	✓	✓	✓	✓	✓

Subject	Inspection of Ecotorq Transmission Output Coupling Cover Bolts
Model	All Ford Trucks Vehicles with Ecotorq Transmission
Sum	Inspection steps to prevent the output coupling cover bolt from shearing

Labor

Labor Code	Labor Name	Duration
F4V51 7A771	Drive Shaft Bolt Replacement	0,75

Parts to be used

Part Number	Part Name	
LC46-7A771-CA	BOLT – Hexagon M12x60	If bolt replacement is deemed necessary; 2 pieces
LC46-7J030-AA	O-RİNG	If O-ring damage occurs; 1 piece

IMPORTANT : For our Ford Trucks vehicles equipped with the domestic Ecotorq transmission**, it is essential to always check the bolts securing the output coupling cover** during each maintenance or when the vehicle enters the service

The inspections to be performed will involve visually checking for bolt loosening and manually checking for torque loosening in the bolts**. No labor should be added to the claim process** for the inspections performed by eye or hand

In case of bolt loosening, missing bolts, or rotation of the bolts during manual inspection, the service procedure outlined below must be fully completed

For vehicles with expired warranties, in cases of bolt loosening, missing bolts, or rotation of bolts during manual inspection, the necessary procedures must be carried out, and the relevant Regional Manager should be contacted. **(No charges should be requested from our customers for this particular case.)**

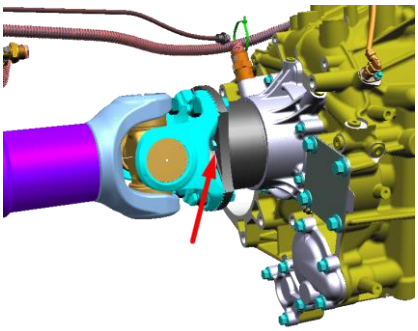

Image 1- Inspection Area

Service Procedure

The following steps should be followed in order

The output coupling window should be illuminated using a flashlight from the opposite direction of your line of sight. Each of the two bolts should be inspected. If one of the bolts is loose or not in the correct mounting position, proceed with the replacement steps as outlined in the document.

Image 2- Visual inspection with the help of a flashlight

1. Using your index finger through the output coupling window, check both the presence of the bolts and their tightness. Inspect the coupling cover piece by moving it forward and backward to check for any gaps. Under normal conditions, the coupling cover should be fixed, and the bolts should be tightly mounted. If any abnormalities are present, proceed with the replacement steps as outlined in the document

Image 3- Manual Inspection

2. Drive Shaft Removal Stage

To gain access to the coupling cover fasteners, four W520014-S type nuts and four W718766-S type bolts should be carefully removed. (They are numbered as 1, 2, 3, and 4 on the image)

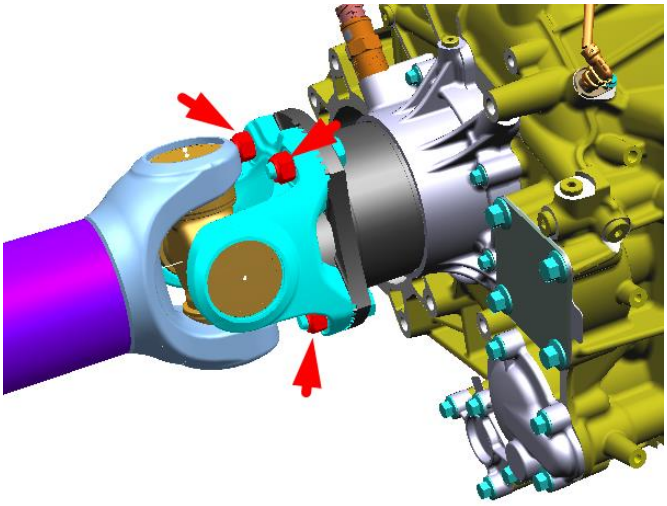

Image 4- Removal of Nuts

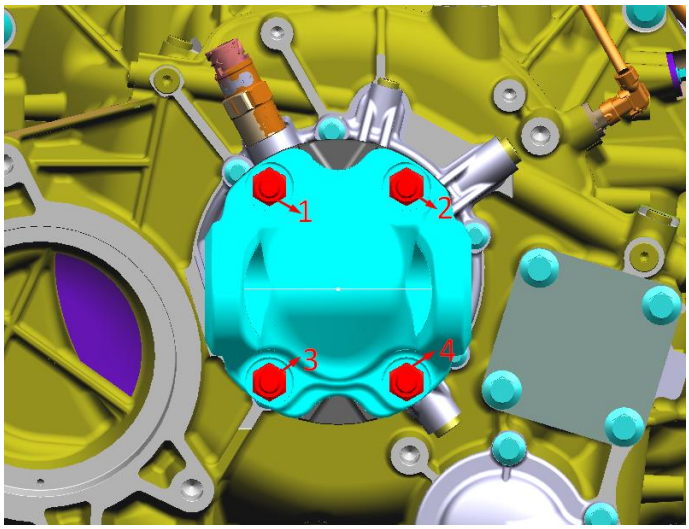

Image 5- Removal of Bolts

3. Coupling Cover Bolt Removal Stage

Both bolts are removed. (They are numbered as 1 and 2 on the image.)

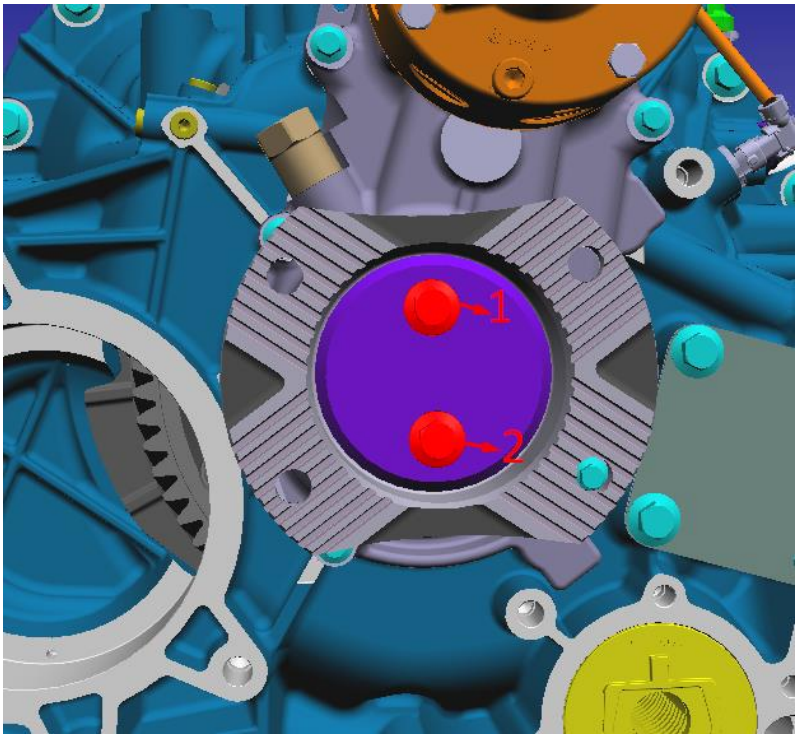

Image 6- Coupling Cover Bolts

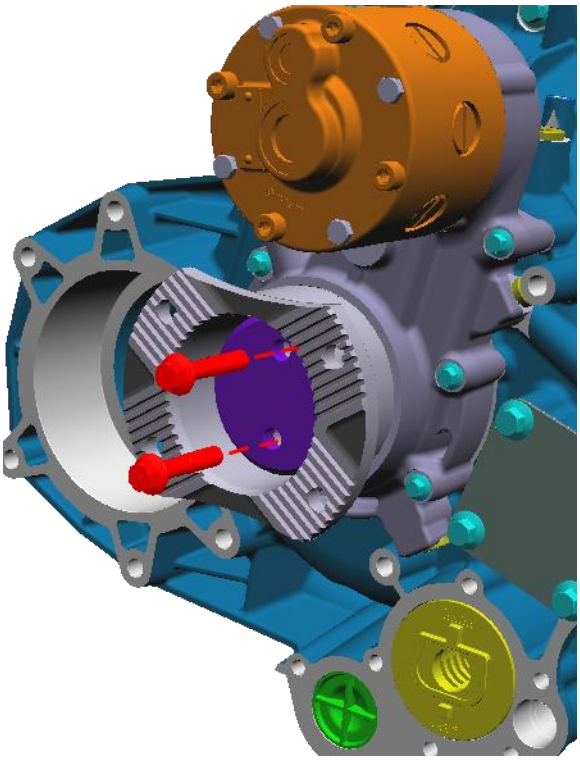

Image 7- Bolts Removal

4. Coupling Cover Bolt Assembly Stage

Ensure that the coupling, coupling cover, and bolts are positioned as shown in the image below. Since perfect alignment as shown in the image may not be achievable, a slight deviation is acceptable

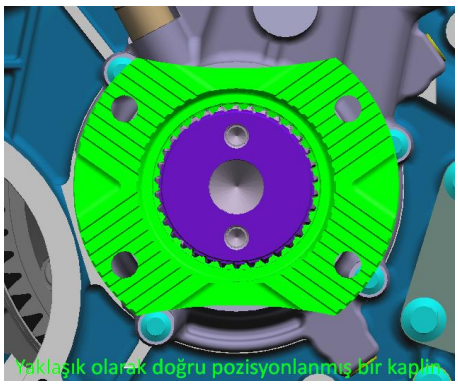

Image 8- Coupling in the Correct Position

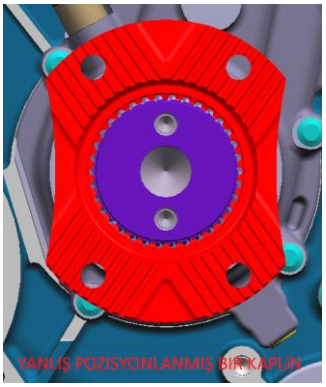

Image 9- Coupling in the Incorrect Position

- Make sure that the O-ring sits properly in its groove. Ensure that there is absolutely no overflow in the coupling assembly pressure area.. (LC46-7J030-AA)

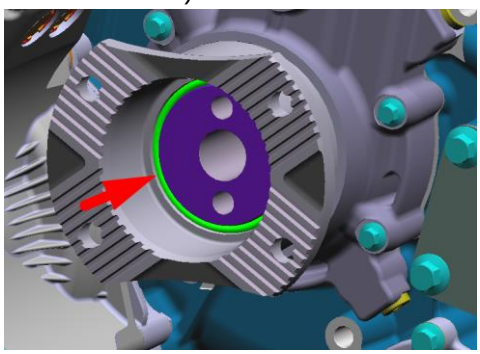

Image 10- O-ring position

The gap must be taken up until both bolts sit flush with the cover surface.

- Ensure that the coupling cover (number 3) is centered in the assembly area.
- The gap-free bolts numbered 1 and 2 are tightened to 45±5 Nm. (W500543)
- Bolts numbered 1 and 2 are then tightened to 80±5 Nm. (LC46-7A771-CA)
- The tightening process for bolts numbered 1 and 2 is repeated at 80±5 Nm. (This step is critical.)

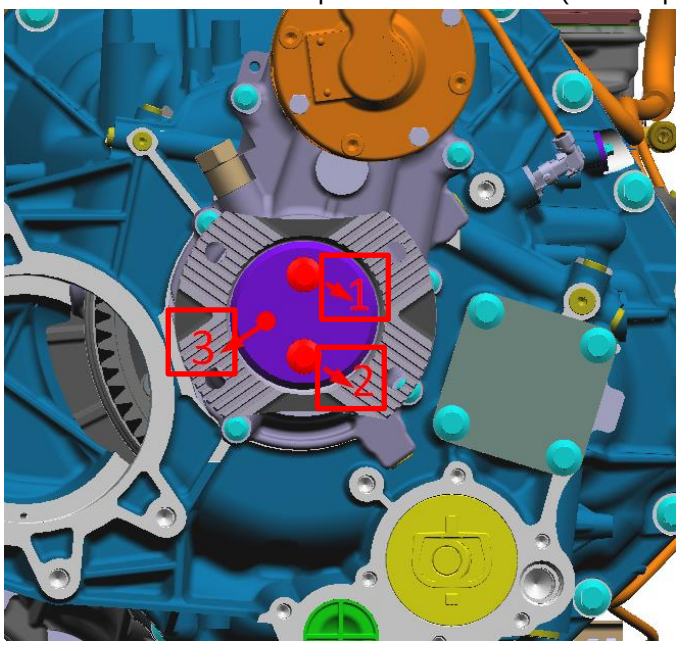

Image 11- Bolt and Cover Position

5. Drive Shaft Assembly Stage

Install the shaft in place. To complete the shaft assembly, tighten 4 pieces of W520014-S (nuts) and 4 pieces of W718766-S to 175±26.3 Nm.

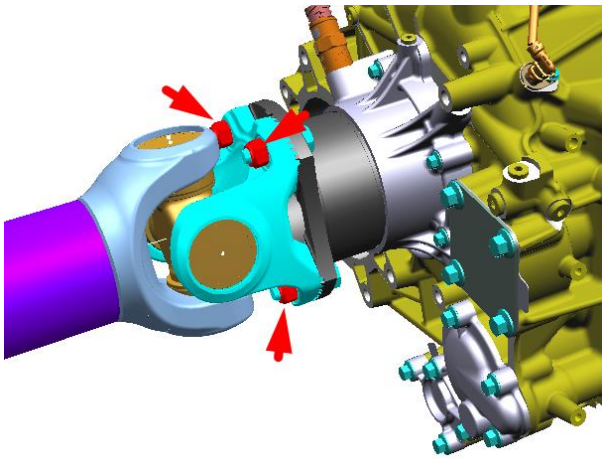

Image 12- Nut Assembly

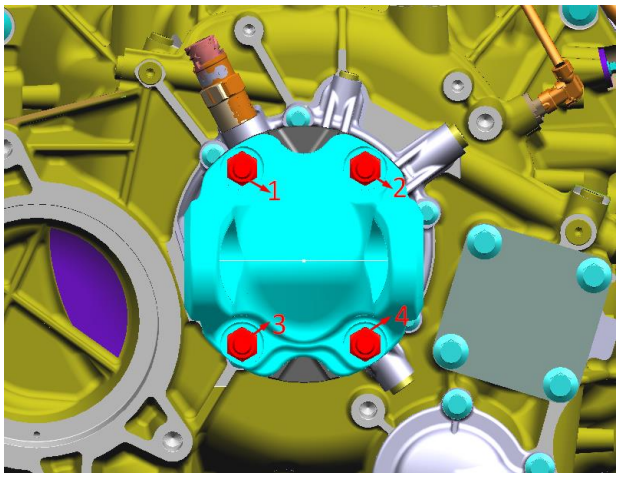

Image 13- Bolt Assembly

Best Regards,
Ford Trucks Service Engineering