

2016 Corvette: Service Bulletin: Delayed Engagement After Sitting With Engine Off

#16-NA-014: Delayed Engagement After Sitting With Engine Off - (Jan 21, 2016)

Subject: Delayed Engagement After Sitting With Engine Off

Attention: This Bulletin also applies to any of the models that may be

Brand:	Model:	Model Year:	VIN:	Engine:	Transmi
		from to	from to		ssion:
Cadillac	Escalade	2015 to 2016			8L45 or 8L90
Cadillac	Escalade ESV	2015 to 2016			8L45 or 8L90
Cadillac	ATS	2016 to 2016			8L45 or 8L90
Cadillac	CTS	2016 to 2016			8L45 or 8L90
Chevrolet	Corvette	2015 to 2016			8L45 or 8L90
Chevrolet	Silverado	2015 to 2016			8L45 or 8L90
GMC	Sierra	2015 to 2016			8L45 or 8L90
GMC	Yukon	2015 to 2016			8L45 or 8L90
GMC	Yukon XL	2015 to 2016			8L45 or 8L90

Condition

Some customers may comment on a

condition of delayed engagement when the transmission is shifted from Park to Reverse or Park to Drive after the vehicle has been sitting with the engine off. This condition may typically occur after several hours or more commonly overnight.

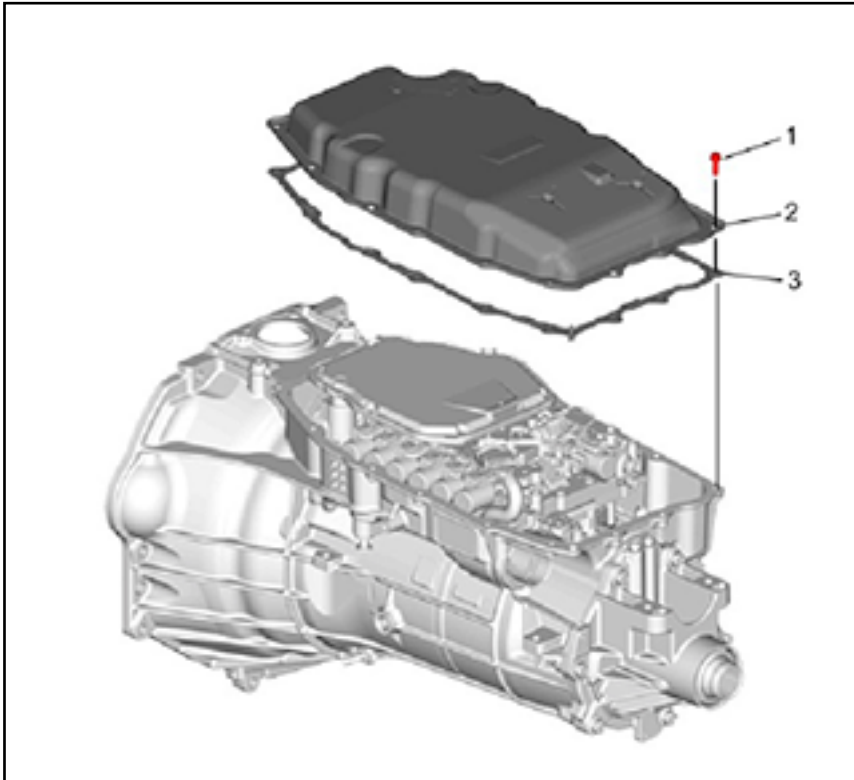
Customers may describe this condition as the vehicle not wanting to move or feeling like the transmission is slipping when first trying to move the vehicle. Operation will be normal and the condition will not occur until the vehicle sits again with the engine off for several hours or overnight.

Correction

Install a new stator shaft support assembly that includes an additional check ball. Follow the instructions below to replace the stator shaft support assembly.

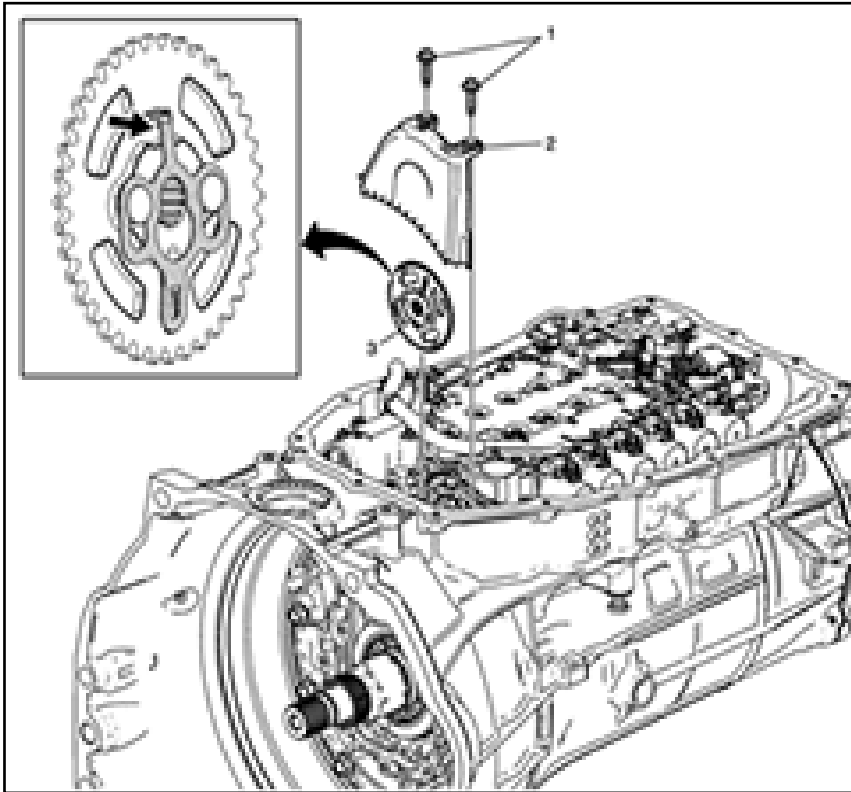
Service Procedure

1. Remove the transmission from the vehicle and mount to the DT-48989 transmission holding fixture. Refer to *Transmission Replacement* in SI.
2. Remove the 15 bolts (1) securing the fluid pan and gasket to the transmission.



Note: The fluid pan gasket is reusable. Inspect the gasket to determine if it may be reused. If the gasket is stuck to the case or pan, it should be replaced.

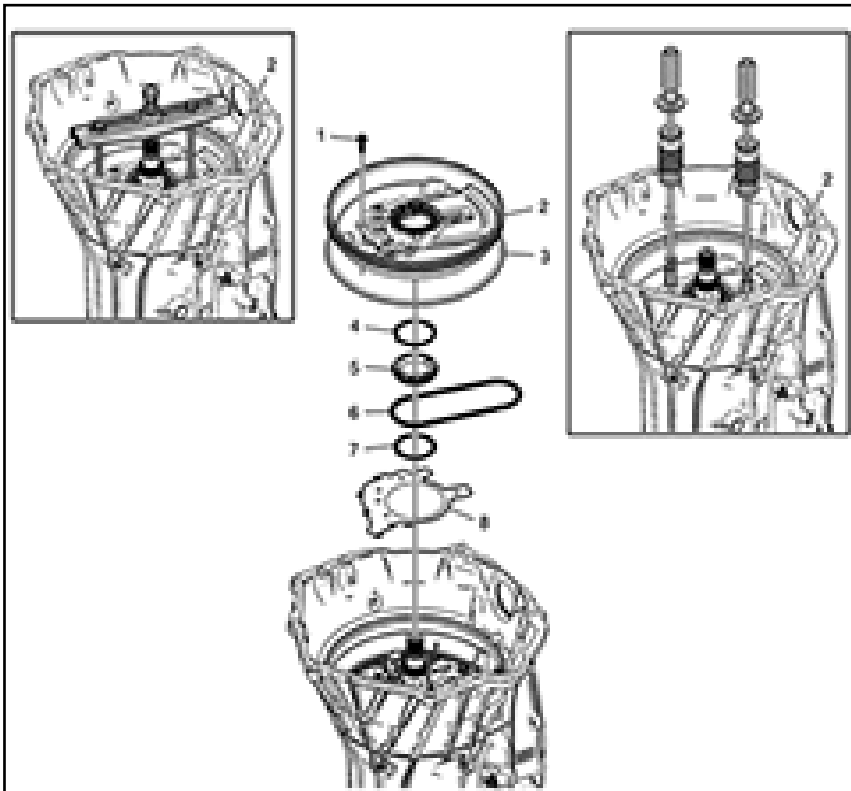
1. Remove the fluid pan (2) and gasket (3). The fluid filter does not need to be removed.



1. Using the DT-48285 Torx Plus socket, remove the two fluid baffle bolts (1) and fluid baffle (2). Discard the bolts.

Note: The driven sprocket locking tab is located on the back of the sprocket. Rotate the sprocket as shown and simultaneously pull back and up on the tab to release the retainer.

1. Remove the driven sprocket (3) from the oil pump shaft leaving the drive link (chain) loose in the case.



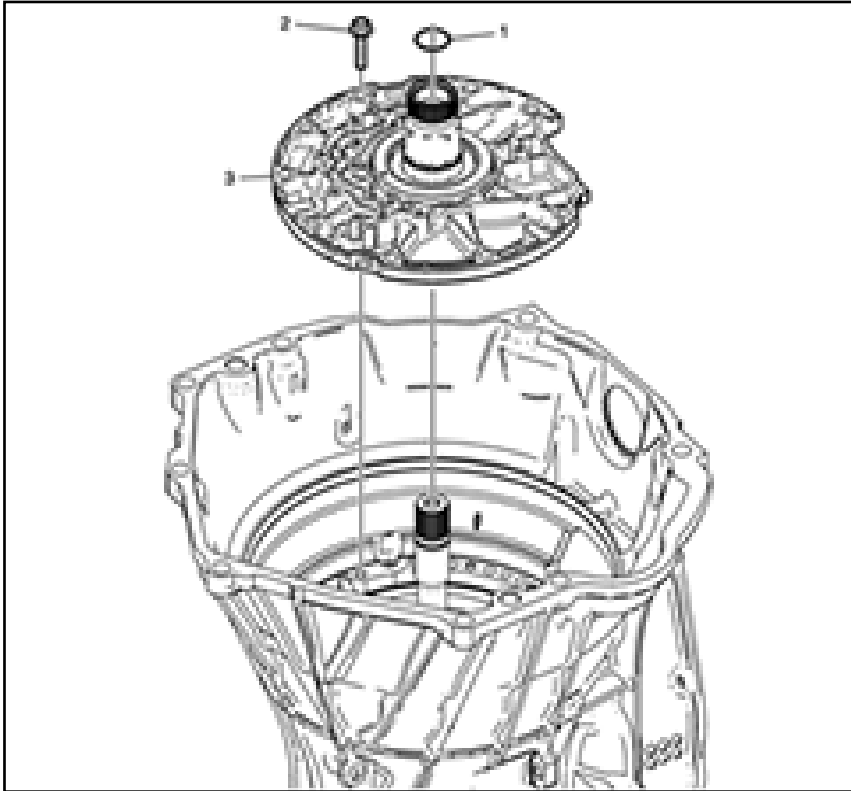
1. Remove the 11 front cover bolts (1). Discard the bolts. The bolts have a dry sealant on them and may only be used once.

Note: There are 2 different front cover configurations. Early design front covers have 3 threaded holes for service, late design front covers have 2 threaded holes.

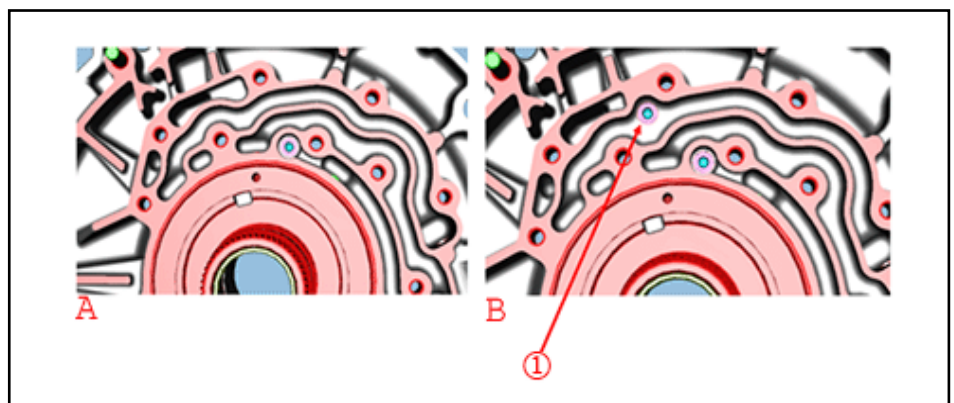
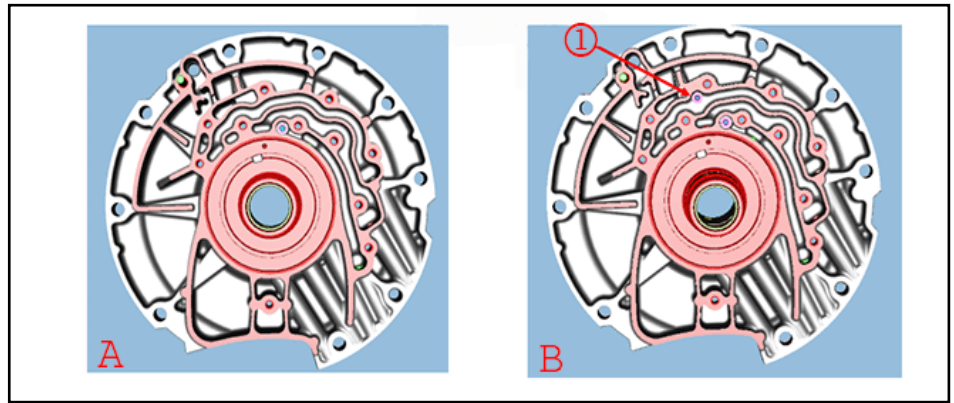
- Use two *GE-6125-1B* slide hammers and *DT-51791* slide hammer adapters in the threaded holes of the front cover to remove it from the case for applications with 3 threaded holes.
- Use the *GE-8433* puller bar and 2 bolts in the threaded holes of the front cover to remove it from the case for applications with 2 threaded holes.

1. Remove the front cover (2) and seal (3). Inspect the seal and replace if worn or damaged.

2. Remove the drive sprocket (5).
3. Remove the drive link assembly (6).
4. Remove the front support cover gasket (8). Discard the gasket.
5. Inspect the front (4) and rear (7) drive sprocket thrust

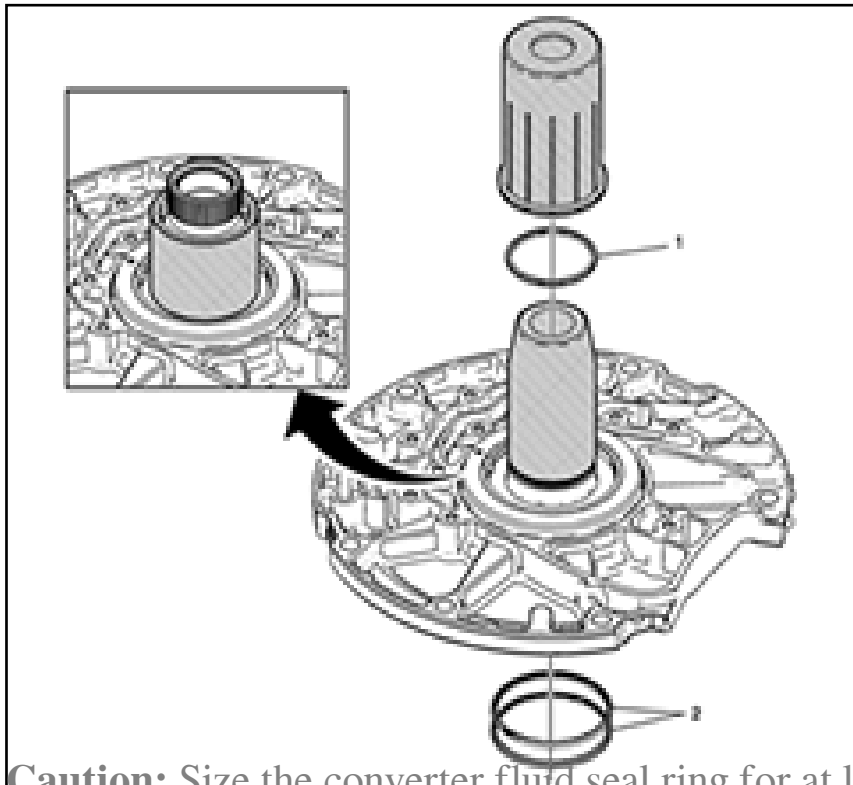


1. Remove the turbine shaft O-ring seal (1). Discard the seal.
2. Remove the nine stator shaft support bolts (2).
3. Remove the stator shaft support assembly (3).



- (A) Old stator support asm 242
74636/24275106/2427265
6
- (B) New stator support asm
24277234

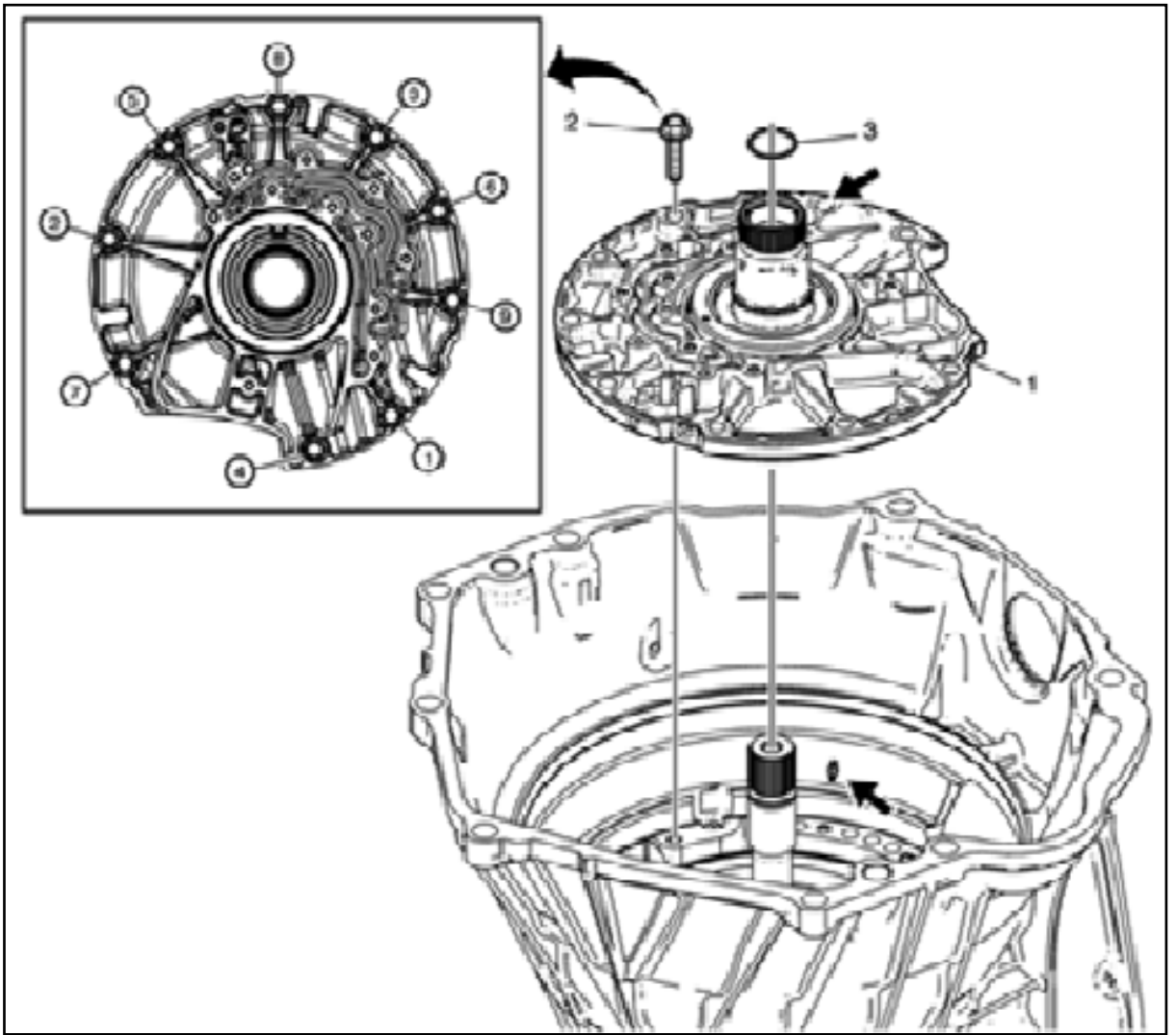
Note: The new stator shaft support assembly has a second check ball (1) added (see illustrations).



Caution: Size the converter fluid seal ring for at least 5 minutes after installation to obtain proper seal ring size. Failure to do so may cause internal transmission leaks and transmission damage.

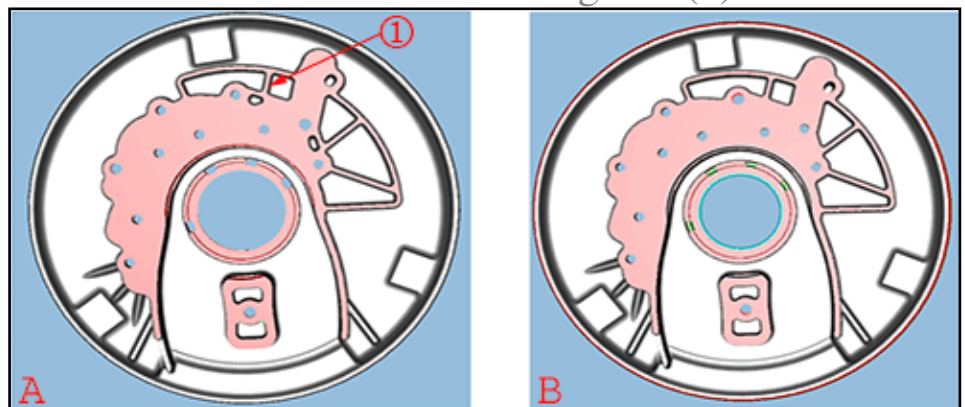
Note: Use the large taper side of *DT-50912-1* Seal Sizer for initial seal sizing, then flip the tool over for final sizing. The *DT-50912-1* seal sizer works for both the 8L90 and 8L45.

1. Using the *DT-50912* Seal Installer (8L90) or *DT-51196* Seal Installer (8L45), install a NEW torque converter fluid seal (1) on the stator shaft support assembly. Size the seal using the *DT-50912-1* Seal Sizer.
2. Install 2 NEW 1-3-5-6-7 Clutch Fluid Seal Rings (2).



Note: Align the bolt hole indicated by the arrow with the arrow that is cast into the case and push down to seat.

1. Install the NEW stator shaft support assembly (1).
2. Install the nine stator shaft support bolts (2). Tighten the bolts in the sequence shown. Tighten the bolts to $31 Y$ ($23 lb ft$).
3. Install a NEW turbine shaft O-ring seal (3).



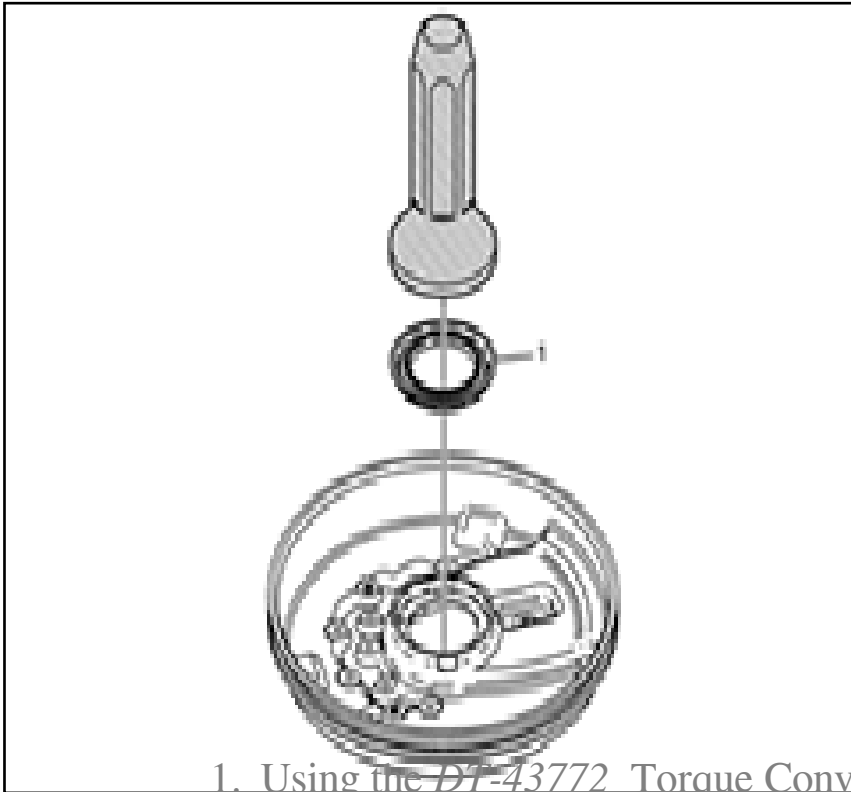
(A)

Old cover 24272660

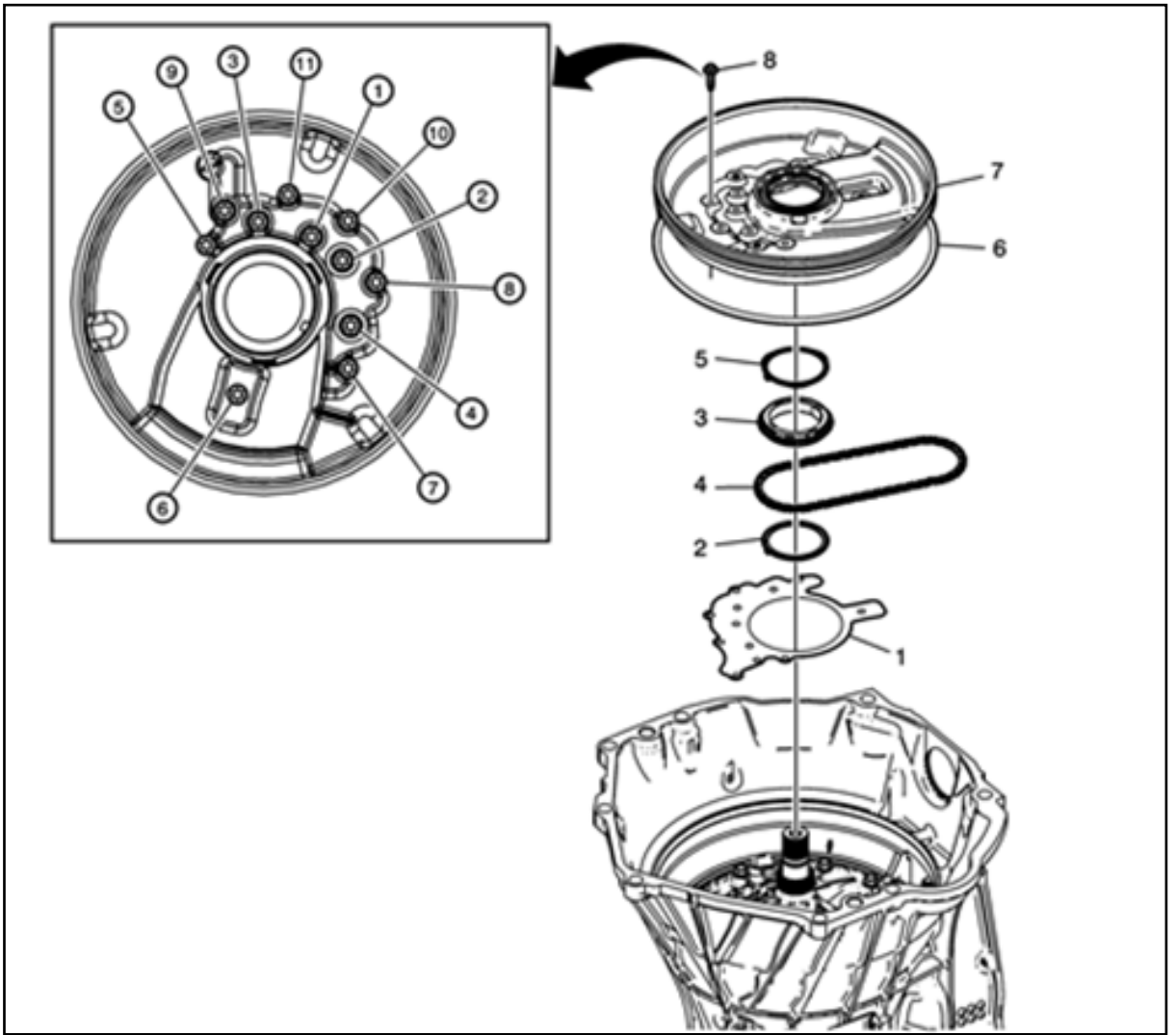
(B)

New cover 24277964

Note: The casting void has been eliminated from the underside of the cover (see illustration).



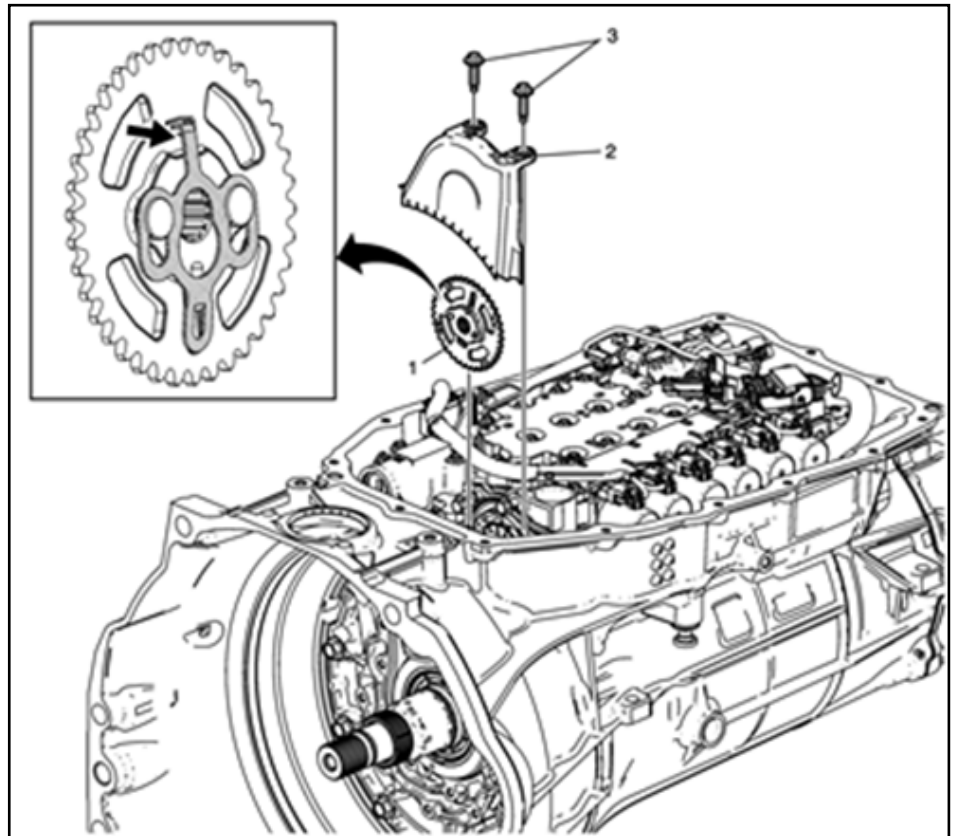
1. Using the *DT-43772* Torque Converter Seal Installer, install a NEW torque converter fluid seal (1) on the front cover.



1. Install a NEW front support cover gasket (1).
2. Install the (rear) drive sprocket thrust washer (2) on the stator shaft support assembly.
3. Install the drive sprocket (3) and drive link assembly (4).
4. Install the (front) support cover gasket (5) on the front cover (7).
5. Install the front cover seal (6) on the front cover (7).

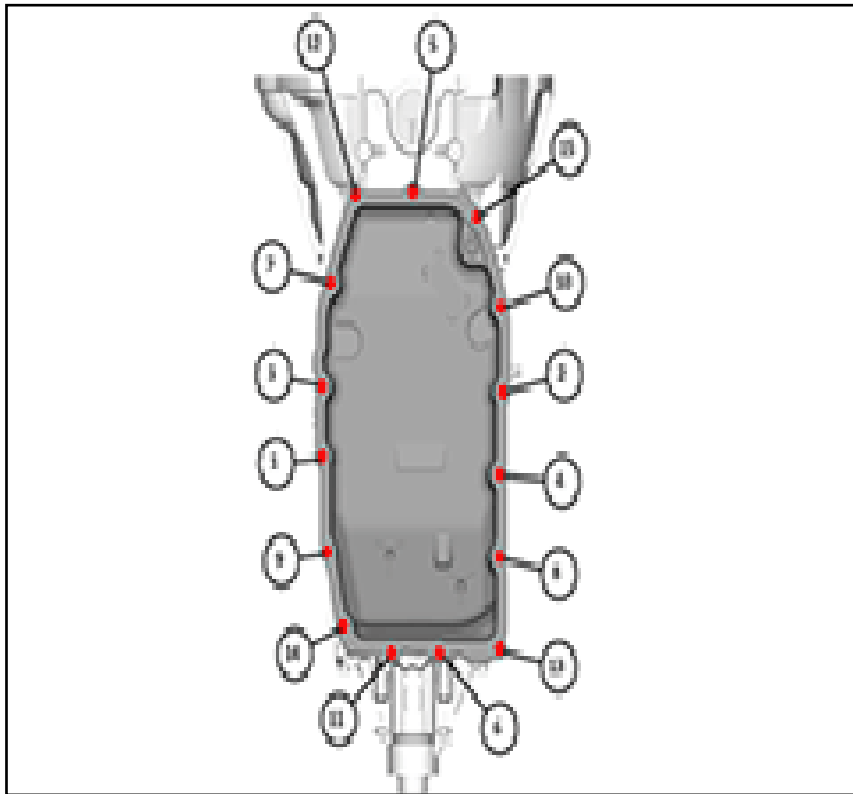
Note: Ensure the drive link assembly is not pinched by the front cover and moves freely on the drive sprocket.

1. Install the front cover (7).
2. Install the 11 NEW front cover bolts (8). Gradually tighten the bolts in the sequence shown. Tighten the bolts a first pass to *6.5 Y (58 lb in)*. Tighten the bolts a final pass *30 Degrees*.



Note: Ensure the driven sprocket locking tab is in the unlocked position before installing the sprocket. The driven sprocket locking tab is located on the back of the sprocket and faces the pump.

3. Install the drive link (chain) to the driven sprocket (1) and then install the driven sprocket to the oil pump shaft. Rotate the sprocket as shown and push down on the tab until it locks the driven sprocket in place.
4. Install the fluid baffle (2).
5. Using the DT-48285 Torx Plus socket, secure the baffle using two NEW fluid baffle bolts (3). Tighten the bolts a first pass to *4 Y (35 lb in)*. Tighten the bolts a final pass to *45 degrees*.



1. Install the fluid pan and gasket and secure with 15 bolts. Tighten the bolts to *10 Y (89 lb in)* in the sequence shown.
2. Install the transmission into the vehicle. Refer to *Transmission Replacement* in SI.

Parts Information

Description	Part Number	Qty	Trans Model	Component Number in Disassembled Views
GASKET-A/TRNS	24260071	1 (if required)	8L45/8L90	48
FLUID PAN				
BOLT/SCR EW-A/TRNS	11548404	2	8L45/8L90	12
FLUID BFL				
BOLT/SCR	11548201	11	8L45/8L90	3

EW- A/TRNS CASE FRT CVR SEAL-	24266366	1 (if required)	8L90	5
A/TRNS CASE FRT CVR SEAL-	24251906	1 (if required)	8L45	5
A/TRNS CASE FRT CVR GASKET-	24272658	1	8L90	19
A/TRNS FRT SUPT CVR GASKET-	24264863	1	8L45	19
A/TRNS FRT SUPT CVR WASHER-	24259119	1 (if required)	8L45/8L90	6
DRV SPKT THR (FRONT) WASHER-	24259427	1 (if required)	8L45/8L90	8
DRV SPKT THR (REAR) SEAL-	24261849	1	8L90	500
TURB SHF (O RING)	(Part of 24271697 kit)			
SEAL-	24261848	1	8L45	500
TURB SHF	(Part of			

(O RING)	24277071 kit)			
SUPPORT ASM- STATOR SHF	24277234	1	8L90	14
SUPPORT ASM- STATOR SHF	24277230	1	8L45	14
COVER- A/TRNS CASE FRT	24277964	1 (if required)	8L90	4
SEAL-T/CV FLUID	24259216	1	8L45/8L90	18
RING-1-3-5 -6-7 CLU FLUID SEAL	24266593	2	8L90	15
RING-1-3-5 -6-7 CLU FLUID SEAL	24266594	2	8L45	15
SEAL ASM- T/CV FLUID FLUID, A/TRANS (DEXRON HP ATF) (1 QUART)	24266709 19300536-U S 19300537-C A	1	As Required 8L45/8L90	2

Online URL:

<https://www.corvetteactioncenter.com/tech/knowledgebase/article/2016-corvette-service-bulletin-delayed-engagement-after-sitting-with-engine-off-1275.html>