

△WARNING: All involved customers must be notified, all involved units must be corrected as per instruction herein.

Campaign no.: 2017-0012, 2018-0012, 2019-0024

October 8, 2024 Subject: Engine Output Shaft Can Break - Potential Loss of

Drive Power

No. **2019-12**

► REVISION 1 January 22, 2025 <

▶ TEXT(S) BETWEEN ARROWS IS (ARE) MODIFIED ELEMENT(S) TO THE PREVIOUS PUBLICATION. ◄

IMPORTANT

What should you do?

- Do not sell or deliver any involved vehicle that you have in stock as federal law requires you to complete
 the recall service on these vehicles before retail delivery.
- Unregistered vehicles cannot be sold until the campaign is performed.
- Contact all of your customers who purchased an affected vehicle and inform them about this Safety Recall notice.

MODEL YEAR	MODEL	ADMISSIBLE UNITS
Certain 2017 to 2019	Spyder RT and Spyder F3	Go to BOSSWeb/Warranty/Campaign Monitoring to know the quantity of units in your inventory impacted by this campaign.

IMPORTANT

 When a vehicle comes in for service, always type the VIN in Knowledge Center to check for pending campaigns or alerts.



– When performing any work on a vehicle, it is good practice to connect it to BUDS2 to ensure that all needed updates are done.



PROBLEM

The output shaft installed on affected vehicles may be exposed to stress concentration that could cause fatigue failure. The output shaft may break, resulting in a loss of drive power while driving. This can increase the risk of a crash.

► SOLUTION ◄

Inspect the mileage and if under the threshold, replace the output shaft.

► REQUIRED PARTS ◀

Order the parts through the regular channel.

Parts will be released progressively, starting at the end of January 2025, upon availability, to ensure an even distribution across the network.

NOTE: Your order will be processed despite the message generated by selective release "Contact your PA&A analyst" on BOSSWeb.

DESCRIPTION	PART NUMBER	QTY
Output shaft Replacement Kit	219800615	1

NOTE: The service products required to perform the output shaft replacement will be supplied through dealer inventory but compensated for the value of 5 quarts of coolant as well as an oil change kit with the campaign claim. This compensation will appear as *Oil Coolant Compensation* in your credit note.

All dealers in Canada and USA with two or more affected units will receive the new engine lifting tool auto-shipped.

For all other dealers or regions, order the tool through regular channel. Tools will be subject to selective release.

▶ CORRECTIVE ACTION ◄

Verifying Vehicle Mileage

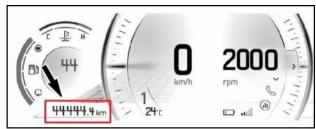
Verify vehicle mileage to confirm if the output shaft needs to be replaced or not.

Please note that a picture of the odometer reading will be required for claiming procedure.

MODEL / YEAR	MILEAGE	REPLACE OUTPUT SHAFT
F3, RT MY17	Less than 21748 miles (35000 km)	Yes
F3, RT MY17	21748 miles (35000 km) or Above	No
F3, RT MY18, MY19	Less than 37282 miles (60000 km)	Yes
F3, RT MY18, MY19	37282 miles (60000 km) or Above	No

If the mileage is equal or above the threshold, output shaft replacement is not required. Attach odometer picture to your claim. Claim *Inspection Only*.

If the mileage is below the threshold, output shaft replacement is required. Proceed with *Output Shaft Replacement*. You will need to connect the vehicle to BUDS during the procedure. Take a vehicle BUDS reading and attach the BUDS file to your claim.



TYPICAL - RT MY18 SHOWN

NOTE: Multifunction gauge display will vary according to vehicle year and model.

Output Shaft Replacement

Removing the Gearbox

 Remove front sprocket. Refer to <u>DRIVE BELT</u> <u>AND REAR WHEEL</u> Service Manual subsection. Refer to <u>TST 143615</u> (SPYDER Front Sprocket Removal) for additional information.

NOTE: The sprocket might be difficult to remove because of Loctite 609 residues on splines.

NOTICE

Use indirect heat to avoid damage to gearbox components and seals.

- 2. Drain coolant. Refer to <u>COOLING SYSTEM</u> Service Manual subsection.
- Remove engine from vehicle. Refer to <u>ENGINE</u>
 <u>REMOVAL AND INSTALLATION</u> Service Manual
 subsection. However, if the engine lifting tool
 (P/N 529036300) is not available at your
 dealership, use the new engine lifting tool as the
 previous tool is obsolete.

SERVICE TOOL		
Engine Lifting Tool	P/N 529036678	

- 4. Remove alternator. Refer to <u>ALTERNATOR</u> Service Manual subsection.
- 5. Remove clutch cover and clutch drum. Refer to <u>CLUTCH (SE6)</u> or <u>CLUTCH (SM6)</u> Service <u>Manual</u> subsection.
- 6. Remove the gearbox. Refer to <u>GEARBOX</u> Service Manual subsection.

Opening the Gearbox

- 1. Remove and carefully lay the components (order and orientation) when disassembling the gearbox to ensure ease of reinstallation.
- Replace the output shaft (Main shaft). Refer to Disassembling the Gearbox in GEARBOX subsection.
- 3. Remove Free pinion 33T (4th gear) from the removed output shaft and reinstall it on new output shaft.

NOTE: Refer to the following Video Link for additional visual instructions.

VIDEO

<u>SPYDER Output Shaft Replacement Help Video –</u> TST 143633

Cleaning

- 1. Clean gear housing halves sealing surfaces.
- 2. Clean cylinder block mating surfaces.

NOTICE

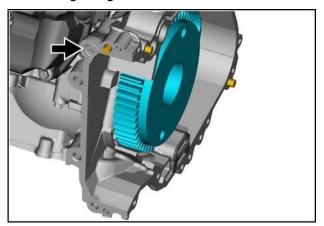
Carefully clean mating surfaces using a brass brush and Loctite chisel (gasket remover) or an equivalent to avoid damaging the surfaces. Brush in one direction first, then perpendicular to this initial pass.

- 3. Clean screw head supporting surfaces.
- Clean gearbox case with XPS Brakes and Parts Cleaner or an equivalent and dry with compressed air.

SERVICE PRODUCT

XPS Brakes and Parts Cleaner

NOTE: Make sure that the hole (oil orifice) on the cylinder block does not get clogged before reinstalling the gearbox.



- 5. Clean alternator flange mating surfaces.
- Clean out and lubricate alternator shaft cavity. Refer to <u>ALTERNATOR</u> Service Manual subsection.

ALTERNATOR SHAFT BORE		
Service product	COPASLIP	
Corvido product	(P/N 420297430)	

ALTERNATOR INPUT SHAFT SPLINE		
AND O-RING		
Service product	XPS 5W-40 Synthetic Oil	

If the XPS oil is not available, use an equivalent synthetic 5W40 4-stroke SAE motorcycle engine oil compatible with wet clutches meeting or exceeding both following lubricant industry specifications:

- JASO MA2
- API service classification SN

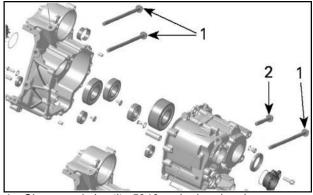
7. Reinstall Gearbox.

However, pay attention to the following:

Clean previously removed screws using a steel brush then reuse. For the longer ones, apply sealant Loctite 5910 under the screw head surface all around.

SERVICE PRODUCT

Loctite 5910 Sealing Compound



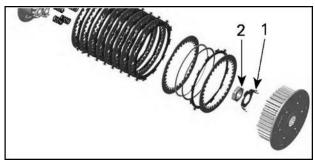
1. Clean, apply Loctite 5910 under head and reuse.

2. Clean and reuse.



TYPICAL - APPLY LOCTITE 5910 UNDER SCREW HEAD

8. Reinstall Clutch. Refer to <u>CLUTCH (SE6)</u> or <u>CLUTCH (SM6)</u> Service Manual subsection. However install tab washer and clutch hub retaining nut included in the kit. Apply threadlocker on threads and tighten clutch hub retaining nut to **new** specification.



- 1. Tab washer included in kit
- 2. Clutch hub retaining nut included in kit

SERVICE PRODUCT
Loctite 648 (green)

TIGHTENIN	G TORQUE
Clutch hub retaining nut	190 N•m ± 10 N•m (140 lbf•ft ± 7 lbf•ft)

9. Reinstall:

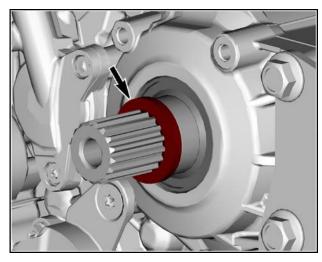
- Alternator
- Engine

Re-Installing the Sprocket

1. Thoroughly clean the sprocket surface. Remove all traces of Loctite 609 residues on splines.

NOTE: Use a soft brush to clean each spline individually.

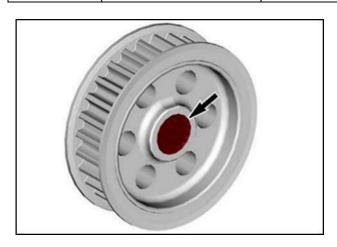
2. Install the washer on the shaft.



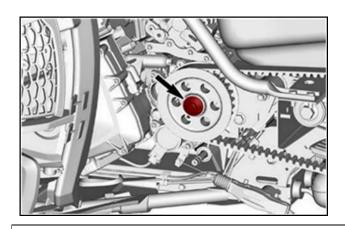
 Apply retaining compounds sealant in the splines of the sprocket on the chamfered side. Make sure that there is a uniform layer of sealant in every spline.

SERVICE PRODUCT

Loctite 609 Retaining Compounds or equivalent (603 available worldwide)



4. Install the sprocket with the chamfered side first until it is in contact with the washer. Install the screw. Tighten to specification.



TIGHTENING TORQUE

Front sprocket screw

150 N•m ± 5 N•m (111 lbf•ft ± 4 lbf•ft)

- 5. Adjust the drive belt alignment. Refer to <u>ADJUSTING THE DRIVE BELT</u> ALIGNMENT Service Manual subsection.
- 6. Adjust the drive belt tension.
 Refer to <u>DRIVE BELT AND REAR</u>
 <u>WHEEL</u> Service Manual subsection.
- 7. Reinstall all previously removed parts.
- 8. Connect vehicle to BUDS.
- 9. Activate venting of HCM oil circuit. Refer to venting procedure in <u>ELECTRONIC SHIFT</u> <u>SYSTEM (SE6)</u> Service Manual subsection.

► WARRANTY <

Submit a warranty claim using the following information.

For claiming procedure, refer to the **online** *DEALER/DISTRIBUTOR WARRANTY GUIDE*.

MY2017 Models

Inspection Only (Mileage Validation)

With BOSSWeb

Product Line	Roadster
Unit Model Year	2017
Campaign/Bulletin/ Description	12 / 2019-12 / SPYDER OUTPUT SHAFT
*Action	
Inspect	Repair
•	
Total Labor Time Paid	0.1 hour

Inspection (Mileage Validation) and Output Shaft Replacement

With BOSSWeb

Product Line	Roadster
Unit Model Year	2017
Campaign/Bulletin/ Description	12 / 2019-12 / SPYDER OUTPUT SHAFT
*Action	
Inspect	Repair
•	
Total Labor Time Paid	8.4 hours
Mandatory Attachments	BUDS File

With Warranty On Demand

CLAIM DETAILS	
Claim Type	Unit Campaign
Serial Number	Enter Serial Number
Warranty Campaign	Select 2017 SPYDER OUTPUT SHAFT Bulletin 2019-12 - Output Shaft / Mileage Validation only-3WV- 2017-0012 from the drop- down list
Date of Repair	Inspection date
Total Labor Time Paid	0.1 hour
Mandatory Attachments	Picture of ODOMETER

With Warranty On Demand

CLAIM DETAILS	
Claim Type	Unit Campaign
Serial Number	Enter Serial Number
Warranty Campaign	Select 2017 SPYDER OUTPUT SHAFT Bulletin 2019-12 - Output Shaft / Mileage Inspect + Shaft replacement-3WV-2017-0012 from the drop-down list
Date of Repair	Repair date
Total Labor Time Paid	8.4 hours
Mandatory Attachments	BUDS File

MY2018 Models

Inspection Only (Mileage Validation)

With BOSSWeb

Product Line	Roadster
Unit Model Year	2018
Campaign/Bulletin/ Description	12 / 2019-12 / SPYDER OUTPUT SHAFT
*Action	
Inspect	Repair
•	
Total Labor Time Paid	0.1 hour
Mandatory Attachments	Picture of ODOMETER

Inspection (Mileage Validation) and Output Shaft Replacement

With BOSSWeb

Product Line	Roadster
Unit Model Year	2018
Campaign/Bulletin/ Description	12 / 2019-12 / SPYDER OUTPUT SHAFT
*Action	
Inspect	Repair
•	
Total Labor Time Paid	8.4 hours
Mandatory	BUDS File

With Warranty On Demand

CLAIM DETAILS	
Claim Type	Unit Campaign
Serial Number	Enter Serial Number
Warranty Campaign	Select 2018 SPYDER OUTPUT SHAFT Bulletin 2019-12 - Output Shaft / Mileage Validation only-3WV- 2018-0012 from the drop- down list
Date of Repair	Inspection date
Total Labor Time Paid	0.1 hour
Mandatory Attachments	Picture of ODOMETER

With Warranty On Demand

CLAIM DETAILS	
Claim Type	Unit Campaign
Serial Number	Enter Serial Number
Warranty Campaign	Select 2018 SPYDER OUTPUT SHAFT Bulletin 2019-12 - Output Shaft / Mileage Inspect + Shaft replacement-3WV-2018-0012 from the drop-down list
Date of Repair	Repair date
Total Labor Time Paid	8.4 hours
Mandatory Attachments	BUDS File

MY2019 Models

Inspection Only (Mileage Validation)

With BOSSWeb

Product Line	Roadster
Unit Model Year	2019
Campaign/Bulletin/ Description	24 / 2019-12 / SPYDER OUTPUT SHAFT
*Action	
Inspect	Repair
•	
Total Labor Time Paid	0.1 hour
Mandatory Attachments	Picture of ODOMETER

Inspection (Mileage Validation) and Output Shaft Replacement

With BOSSWeb

Product Line	Roadster
Unit Model Year	2019
Campaign/Bulletin/ Description	24 / 2019-12 / SPYDER OUTPUT SHAFT
*Action	
Inspect	Repair
	•
Total Labor Time Paid	8.4 hours

With Warranty On Demand

CLAIM DETAILS	
Claim Type	Unit Campaign
Serial Number	Enter Serial Number
Warranty Campaign	Select 2019 SPYDER OUTPUT SHAFT Bulletin 2019-12 - Output Shaft / Mileage Validation only-3WV- 2019-0024 from the drop- down list
Date of Repair	Inspection date
Total Labor Time Paid	0.1 hour
Mandatory Attachments	Picture of ODOMETER

With Warranty On Demand

CLAIM DETAILS	
Claim Type	Unit Campaign
Serial Number	Enter Serial Number
Warranty Campaign	Select 2019 SPYDER OUTPUT SHAFT Bulletin 2019-12 - Output Shaft / Mileage Inspect + Shaft replacement-3WV-2019-0024 from the drop-down list
Date of Repair	Repair date
Total Labor Time Paid	8.4 hours
Mandatory Attachments	BUDS File