



WARRANTY BULLETIN

WARRANTY CAMPAIGN

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

Campaign no.: 2019-0004

January 17, 2019

Subject: **Ryker™ - Oil Missing in the Gearbox**

No. **2019-2**

REVISION 1
March 5, 2019

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

MODEL YEAR	MODEL	ADMISSIBLE UNITS
2019	Ryker™ Series	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

Some Rykers were shipped without oil in the gearbox.

REQUIRED GEARBOX OIL

▶ XPS™ RECOMMENDED GEARBOX OIL ◀

▶ 4T 5W40 Synthetic blend oil ◀

SOLUTION

During the PDI, verify the gearbox oil level and re-fill if required.

PARTS REQUIRED

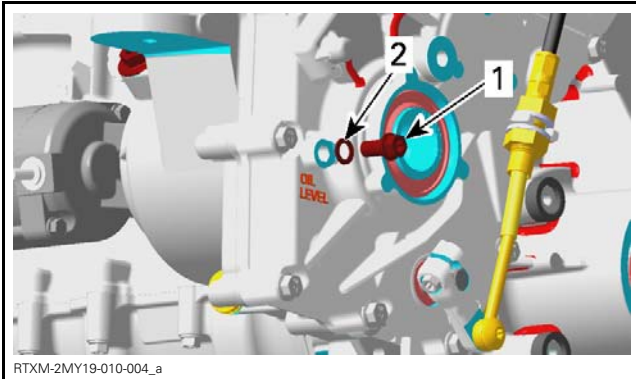
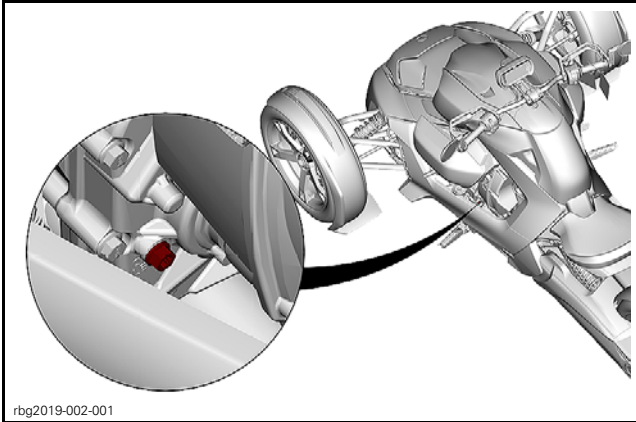
Order through normal channel.

DESCRIPTION	PART NUMBER	QUANTITY
Sealing ring	420950141	1
O-ring*	420650350	1
*Only if filling is required		

CORRECTIVE ACTION

Verifying the Gearbox Oil Level

1. Place the vehicle on a level surface.
2. Stop the engine and move the park position lever in the locking position.
3. Remove the gearbox oil level plug and discard sealing ring.



1. Oil level plug
2. Sealing ring

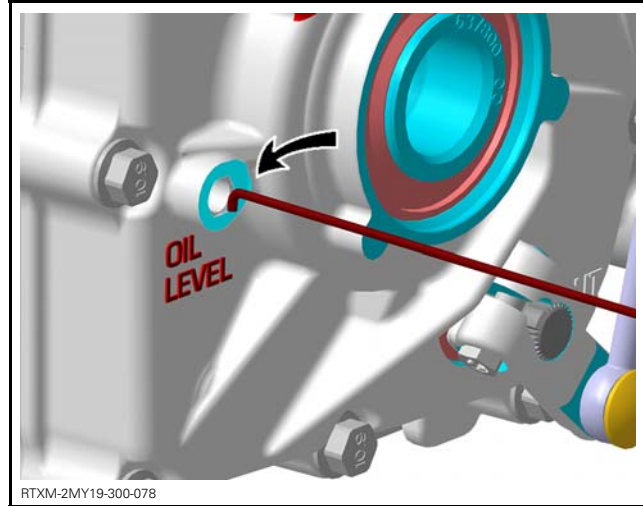
4. Check the oil level as follow.

NOTICE Operating the gearbox with an improper oil level may severely damage gearbox.

<u>GEARBOX OIL CONDITION</u>	<u>LEVEL</u>
<u>Cold</u>	<u>The oil shall be at 3 mm (1/8 in) maximum below the bottom of the oil level hole.</u>
<u>Hot</u>	<u>The oil shall be level with the bottom of the oil level hole.</u>

► To check the gearbox oil level when oil is cold, do the following.

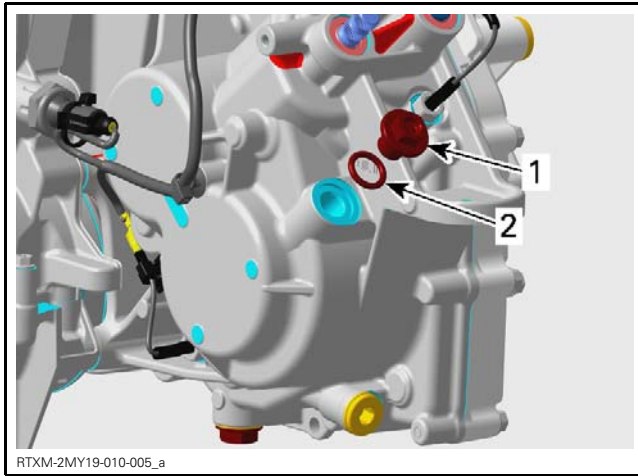
1. Insert a clean 90° pick tool, or any other suitable tool with the end fold at 90°, through the oil level bore.
2. Press the tool against the lower threads, the tip downwards.
3. Remove the tool and check if there is oil on its tip.



<u>RESULT</u>	<u>PROCEDURE</u>
<u>No oil on the tool tip</u>	<u>Perform steps 5 and 6</u>
<u>Oil on tool tip: the level is below 3 mm (1/8 in) of the bottom of the oil level hole</u>	<u>Perform steps 5 and 6. Add a small amount of oil only, repeat until proper level is reached.</u>
<u>Oil on tool tip: the level is between 3 mm (1/8 in) and the bottom of the oil level hole</u>	<u>Go directly to step 6</u>

5. Remove oil filler plug (discard O-ring) and fill in gearbox oil.

<u>GEARBOX OIL MAXIMUM CAPACITY</u>
<u>500 ml (.53 qt (U.S. liq.))</u> <u>(oil must be level with the oil level hole)</u>



1. Oil filler plug
2. O-ring

6. Reinstall the oil level plug and oil filler plug with a **NEW** sealing ring and **NEW** O-ring. Tighten to specification.

TIGHTENING TORQUE	
Oil level plug	15 N•m ± 2 N•m (133 lbf•in ± 18 lbf•in)
Oil filler plug	4.5 N•m ± 0.5 N•m (40 lbf•in ± 4 lbf•in)

WARRANTY

Submit a warranty claim using the following information.

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

Product Line	ROAD
Unit Model Year	2019
Campaign/Bulletin/Description	4 / 2019-2 / Ryker Oil Missing in the Gearbox
*Action	
Inspect	Repair
<input type="checkbox"/>	<input checked="" type="checkbox"/>
Total Labor time paid*	0.3 hour
Expiration date	January 31, 2023

*The "Total Labor Time Paid" includes all required parts and product to perform this bulletin.