



# Inspect For Rear Drive Unit Breather

<b>Classification</b>	Campaign Bulletin	<b>Section/Group</b>	40 - Rear Drive Unit	<b>Country/Region</b>	North America
<b>Year</b>	2017	<b>Model</b>	Model 3	<b>Version</b>	All

**Bulletin Classification:** *This campaign bulletin addresses a known non-safety-related condition and provides recommended technical diagnosis and repair procedures. Apply this procedure to all vehicles in the affected VIN range listed. These instructions assume knowledge of motor vehicle and high voltage electrical component repairs, and should only be executed by trained professionals. Tesla assumes no liability for injury or property damage due to a failure to properly follow these instructions or repairs attempted by unqualified individuals.*

## Condition

Certain Model 3 vehicles might have been manufactured without a rear drive unit (RDU) breather, and consequently might have contaminated gearbox fluid.

## Correction

Inspect the vehicle for symptoms related to the condition. If symptoms are present, install a breather or replace the rear drive unit, depending upon inspection results.

Correction Description	Correction	Time
SB-19-40-002 Not Applicable	S011940002	0.00
Inspect For RDU Breather, No Breather Installation Necessary	S021940002	0.25
Inspect For RDU Breather And Install Breather	S031940002	3.5
Inspect For RDU Breather, Flush Gearbox, And Install Breather	S041940002	4.55
Inspect For RDU Breather, Flush Gearbox, Inspect Oil Screen, And Install Breather	S051940002	4.65
Inspect For RDU Breather, Flush Gearbox, Inspect Oil Screen, And Replace Rear Drive Unit	S061940002	6.55

Required Part(s):	Part Number	Description	Quantity
	<b>If necessary:</b>		
	1095038-00-A	OIL FILTER,SYNTHETIC,3DU	3
	1111033-00-D	M3 2R BOLSTER CLIP	1
	1117669-00-A	BOLT,5-LOBE,M6X19,[109],ZNNI,MAT,PTP,SEAL	2
	1108958-00-A	SEAL,PROBE LID,HVBAT	1
	1108907-00-A	BREATHER, NITTO Z-PLUG-S	1
	1101758-00-A	ASY,BREATHER,3DU	1
	1447684-00-A	BOLT,HF,M14-2.0x103,[10.9],ZNFL,SMAT	4
	1094961-00-A	ASY, OIL SCREEN MOLDED	1
	1108210-00-A	OIL PUMP O-RING,HNBR,ID 38x2MM,BLACK,50A	1
	1108211-00-A	OIL PUMP O-RING,HNBR,ID 58x2MM,BLACK,50A	1
	1108214-00-A	OIL PUMP O-RING,HNBR,AS568-142,GREEN,50A	1
	1120980-00-D	ASY,3DUR,MOSFET-HC	1

**Shop supplies:**

- Shop towel
- Funnel
- LUBRICANT, ATF-9
- COOLANT, TESLA G-48

These part numbers were current at the time of publication. Use the revisions listed or later, unless otherwise specified in the Parts Manual.

Special Tool(s):	Part Number	Description
	1129405-00-A	Video Scope, OTC 3880X
	1131264-00-A	Switchbox, Oil Pump, Model 3
	1129348-00-A	Jump Start, XP-10

## Inspection

- Remove the mid aero shield panel (refer to Service Manual procedure 12030502).
- Use the video scope to inspect the top of the rear drive unit gearbox (Figure 1).
  - If a breather is installed (Figure 2), make a note in the Cause Narrative field of the Repair Order, install the mid aero shield panel (Service Manual procedure 12030502), and discontinue this procedure.
  - If a breather is not installed, make a note in the Cause Narrative field of the Repair Order, create a Toolbox session, escalate the Toolbox session to zone, and continue to the next step.

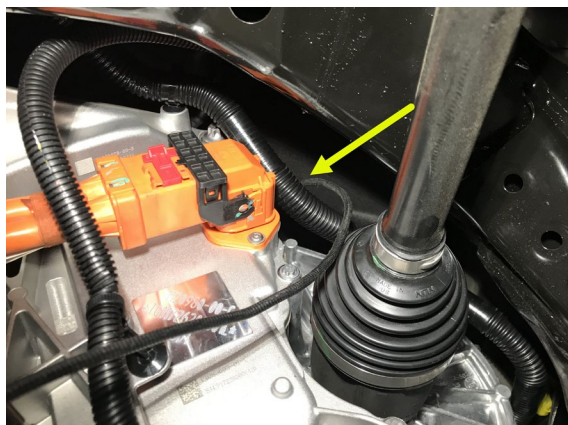


Figure 1 (Video scope camera placement location)







Figure 2 (Video scope view of breather installed)

3. Drain the fluid from the gearbox into a clean pan for inspection, and allow to sit for 5 minutes (refer to Service Manual procedure 40300102).

**TIP:** A transparent pan can make inspection for water and debris easier.

4. After 5 minutes, inspect the fluid.
5. Cover a funnel with one layer of a clean shop towel, pour the fluid through the shop towel and funnel into a second pan, and inspect the fluid and shop towel as this is done.
6. Make a note of the color, consistency, contamination, and any pertinent information in the “Cause Narrative” field of the Repair Order and the Toolbox session, and then perform the appropriate procedure as indicated in this table:

Color	Consistency	Contamination	Visually	Procedure
Purple	Transparent	None		<b>Install the Breather</b>
Purple	Transparent	Water at bottom of drain pan, no debris		<b>Flush the Gearbox</b>
Lilac	Milky or frothy	Water well mixed with fluid, no debris		<b>Flush the Gearbox</b>
Any	Debris	Debris, such as metal shavings, with or without water		<b>Inspect the Oil Screen</b>

## Procedures

**NOTE:** Perform only one of the following procedures.

### Install the Breather

1. Install the breather (refer to Service Manual procedure 40305402).
2. Refill the gearbox with new fluid (refer to Service Manual procedure 40300102).

## Flush the Gearbox

1. Refill the gearbox with new fluid (refer to Service Manual procedure 40300102).
2. Use the XP-10 jump start and oil pump switchbox to operate the oil pump for 5 minutes.
3. Drain and refill the gearbox with new fluid (refer to Service Manual procedure 40300102).
4. Use the XP-10 jump start and oil pump switchbox to operate the oil pump for 5 minutes.
5. Drain the gearbox fluid (refer to Service Manual procedure 40300102).
6. Install the breather (refer to Service Manual procedure 40305402).
7. Refill the gearbox with new fluid (refer to Service Manual procedure 40300102).

## Inspect the Oil Screen

1. Refill the gearbox with new fluid (refer to Service Manual procedure 40300102).
2. Use the XP-10 jump start and oil pump switchbox to operate the oil pump for 5 minutes.
3. Drain and refill the gearbox with new fluid (refer to Service Manual procedure 40300102).
4. Use the XP-10 jump start and oil pump switchbox to operate the oil pump for 5 minutes.
5. Drain the gearbox fluid (refer to Service Manual procedure 40300102).
6. Remove the oil screen (refer to Service Manual procedure 40305002).
7. Inspect the oil pump and oil screen for debris.
  - If debris is found on either the oil pump or oil screen, make a note in the “Cause Narrative” field of the Repair Order and Toolbox session, take photographs of the debris and attach them to the session, escalate the session, and wait for further instruction.
  - If debris is not found, continue to the next step.
8. Install a new oil screen and the removed oil pump (refer to Service Manual procedure 40305002).
9. Install the breather (refer to Service Manual procedure 40305402).
10. Refill the gearbox with new fluid (refer to Service Manual procedure 40300102).

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**Affected VIN(s)** Affected Model 3 vehicles built between approximately November 2, 2017 and March 14, 2018.

**NOTE:** This is a simplified summary of the affected VIN list. Refer to the VIN/Bulletin Tracker or Customer/Vehicle profile to determine applicability of this bulletin for a particular vehicle.

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