

#### NOTE: Repair only if described symptoms exist or are noticed.

Campaign no.: 2011–0018 2012–0012

October 22th, 2012 Subject: Spyder RT - Analog Fuel Gauge

No. **2012-12** 

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER	
2011	Spyder RT Audio & Convenience			
	Spyder RT Techno		All for listed models	
	Spyder RT-S			
	Spyder RT LTD	A 11		
2012	Spyder RT Audio & Convenience	All		
	Spyder RT Techno			
	Spyder RT-S			
	Spyder RT LTD			

## PROBLEM

Analog fuel gauge needle does not have any dampening causing a variable fuel level reading.

# SOLUTION

Replace the analog fuel gauge with a new improved one (with stepper motor).

After fuel gauge installation, update the cluster software.

# **REQUIRED PARTS**

Order the new fuel gauge with stepper motor through the regular channel.

FUEL GAUGE WITH STEPPER MOTOR				
MODEL YEAR	MODEL	DESCRIPTION	PART NUMBER	QTY
2011	S and LTD	White backlight/Stainless steel bezel	710 003 506	1
	Audio & Convenience and Techno	White backlight/Black bezel	710 003 507	1
2012	S and LTD	Amber backlight/Stainless steel bezel	710 002 975	1
	Audio & Convenience and Techno	Amber backlight/Black bezel	710 002 976	1

# PROCEDURE

## Fuel Gauge Replacement

1. Remove the 4 gauge trim retaining screws.



- 1. Gauge trim retaining screws
- 2. Steer handlebar completely to the right.
- 3. Lift the LH lower section of gauge trim.
- 4. Unplug the analog fuel gauge.
- 5. Install the new fuel gauge.
- 6. Reinstall all removed parts.

TIGHTENING TORQUE			
Gauge trim screws	2.5 N∙m (22 lbf <b>∙in</b> )		

## Manual Cluster Update

1. Connect B.U.D.S. (**R3.4.2**. or a newer version) to vehicle.

**NOTE:** It is very important to use this version to have all required updates.

2. In B.U.D.S., click on Read Data.



3. Click on Module then select Cluster/ Update

**NOTE:** If an update is available, the following windows will appear. If the update is not needed (update grayed out), proceed with Cluster Software Validation.



4. Choose "YES".

**NOTE:** You are about to start reflashing and it takes about 2 minutes. Make sure you have stable voltage (12V) before starting update. Although screen "freezes" for a while, you must remain on the B.U.D.S.. The update still continue. It is important to never disconnect any cable while updating the cluster.

- 5. Click "OK" after the message: UPDATE HAS BEEN SUCCESSFULLY TRANSFERRED INTO CLUSTER.
- 6. Turn ignition key to OFF and remove it as per the following message.

Re Re	emove key from the vehicle post and wait until this message disappears before inserting the key again.
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7. Check the BRP Software Number as described in *CLUSTER SOFTWARE VERSION VALIDA-TION* 

#### **Cluster Software Version** Validation

# Symptom if the Cluster Does not Use the Proper Software Version

If the new fuel gauge with stepper motor is installed with an old version of the cluster software, the following situations may be observed:

- Fuel level is displayed in the digital display.
- Wrong fuel level appears on the analog gauge.
- Even if the fuel tank is full, the digital display may show 3 bars and the analog fuel gauge half.
- The "low fuel" signal turns on when the analog fuel tank will show half.
- The temperature gauge needle indicates the maximum (overheat) even if the engine is cold.

Using B.U.D.S. **R3.4.2**. or a newer version, check the Cluster Software Version.

#### Cluster Software Validation

- 1. Turn ignition key to ON position.
- 2. Click on Read Data.
- 3. Select Module drop down list, Cluster then Information



4. Look at the "BRP Software Number".

Scluster Information	
BRP Assembly Number:	710005+45
BRP Software Number:	xxxxxxxx
Supplier Part Number:	556120
Serial Number:	29(0120258
rbg2012-012-002_a	
INFORMATION ITEM	VALUE
BRP Software Number	710003447

If the BRP Software Number corresponds, turn ignition key OFF then unplug B.U.D.S. from vehicle.

**NOTICE** To avoid potential vehicle damage, it is very important to turn ignition key off BE-FORE exiting B.U.D.S. or unplugging the MPI-2 diagnostic cable from the vehicle.

If the BRP Software Number is different, perform a manual Cluster Update.

# WARRANTY

Submit a campaign claim using the following information. This will credit labor for the software update and parts installation.

Please keep parts at dealer's facility for 90 days.

## 2011 Models

Campaign Number	2011-0018
Claim Type	Campaign Claim
Action	Repair
Flat Rate Time	0.3 hour

Click in the **Repair** check box.

	*Action		
Inspect		Repair	ß
Upload F	ile		
mbg2012-010-004_be	'n		

## 2012 Models

Campaign Number	2012-0012
Claim Type	Campaign Claim
Action	Repair
Flat Rate Time	0.3 hour

Click in the **Repair** check box.

	*Action		
Inspect		Repair	
			B
Upload	File		
mbg2012-010-004_k	en		