

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

### Campaign no.: 2010–0004

March 26<sup>th</sup>, 2010

Subject: Spyder<sup>™</sup> RT Gearbox Position Sensor No. 2010-4 Initialization

YEAR	MODEL	MODEL NUMBER	SERIAL NUMBER
2010	Spyder™ RT SM5 and SE5	A3AB, A4AA, A4AE, A4AG, A7AA, A7AD, A9AA, A9AC, A9AD, A9AF, B5AC	See attached list

# PROBLEM

Vehicles listed may have been produced without the gearbox position sensor (GBPS) being initialized and may display some or all of the following symptoms:

- Check engine light on
- Error in gear position readout in cluster
- Cruise control may not function
- Possible loss of automatic downshift feature on SE5 models.
- Gear shifting may take longer on SE5 models.

# SOLUTION

Carry out the gearbox position sensor initialization procedure.

# PROCEDURE

READ ALL INSTRUCTIONS COMPLETELY BE-FORE BEGINNING THE PROCEDURE.

## **Computer and Vehicle Preparation**

1. Ensure the vehicle battery is fully charged.

### **A** WARNING

Ensure the rear tire is well off the ground and cannot come into contact with any obstacle (ground, jack stand, etc.). Ensure the wheel and tire assembly is free of particles that could be thrown outward while rotating.

- 2. Lift and secure rear of vehicle off the ground so rear wheel may turn freely.
  - 2.1 Place vehicle on a level surface.
  - 2.2 Set transmission to NEUTRAL.
  - 2.3 Position a floor jack under the lower portion of the rear shock absorber and lift the rear of vehicle until the rear wheel is off the ground.

**NOTICE** The floor jack must be positioned so that it cups the lower portion of the rear shock absorber. Refer to illustration.



1. Lower portion of shock absorber

**NOTE:** It is highly recommended to install 4 wheel chocks, one in front and one behind each front wheel.



WHEEL CHOCK INSTALLATION, EACH FRONT WHEEL

3. Connect vehicle to the latest B.U.D.S. software applicable to this product.

### B.U.D.S. VERSION P2.3.29 or later applicable to this product

- 4. Connect all components before starting B.U.D.S. to ensure proper operation. Refer to CAN-AM 2010 SPYDER RT SHOP MANUAL
  Section 03–03 COMMUNICATION TOOLS AND B.U.D.S. SOFTWARE for details.
- 5. Turn ignition key to ON.



6. Start B.U.D.S. and logon.

**NOTE:** The following message will be displayed momentarily. If it does not disappear automatically, click on the "**Try active detection mode**" button.

<b>Information</b>			<u> </u>
No vehicle, th protocol.	detected. Make sure that the MPI® is p e module is powered-up and that you ha	properly connerve selected the	ected to the ne appropriate
		1 15	

**NOTE:** The Kw2000 (500K) icon will appear at the bottom of the screen indicating a successful connection. The number to the right indicates the quantity of modules detected.



- **TYPICAL SM5 ILLUSTRATED** 1. Icon indicating a successful connection
- 7. Ensure all modules are detected.

SPYDER RT MODEL	QUANTITY OF MODULES
SM5	6
SE5	7

## **General Initialization**

1. Ensure vehicle transmission is set to neutral (N). Rear wheel should turn freely.

**NOTE:** On SE5 models, the vehicle may be started in order to set the transmission to "N" if the vehicle was shut off with the transmission in gear.

2. In B.U.D.S., click on the following: .



- 1. Read Data
- Setting page tab
   ECM page tab
- 4. ECM first initialization Reset button

**NOTE:** Do not activate anything on the vehicle while the vehicle resets its parameters.

3. Follow the instructions provided in the following message boxes that appear on screen.

### Confirm

Make sure throttle cam of throttle body rests against idle stop screw and gear position sensor is set to neutral.

Mechanically place transmission to neutral position.

Cancel

Make sure the brake pedal is released.

WHEN YOU ARE READY, PRESS THE < OK> BUTTON TO START.

4. Click OK button.

OK

Information		
Perform Key OFF/Key ON, don't need to wait for vehicle to shutdown.		
Press OK button ONLY after Key ON.		
Wait confirmation from ECM.		
Cancel		

5. Click OK button.

Information

1

Reset initialization TIMEOUT expired.

ОК

### 6. Click OK button.

nformation			
Initialization RESET Successful.			
	ОК		

7. Click OK button.

## **GBPS** Initialization

### 

Before starting engine, ensure the rear tire is well off the ground and cannot come into contact with any obstacle (ground, jack stand, etc.). Keep hands, tools, feet and clothing clear of rotating parts (rear wheel assembly, drive belt). Ensure no one is standing in close proximity to the vehicle.

- 1. Start vehicle engine.
- 2. Run transmission in each gear for a minimum of 15 seconds: R N 1-2-3-4-5 and back to N.

**NOTE:** On SE5 models, maintain engine RPM between 3200 and 3800 RPM in each forward gear to prevent the transmission from automatically down shifting to a lower gear.

### **A** CAUTION Do not exceed 3800 RPM.

**NOTICE** When selecting transmission from neutral "N" to another gear, apply the brake to stop rear wheel rotation.

**NOTE:** Ensure the transmission changes gear properly, and that the corresponding gear position is indicated in the multifunction display.



1. Gear position indication

**NOTE:** During the engine run, the cluster may show an orange screen and numerous indicator lights may come on (CHECK ENG, VSS, ABS, ABS, etc). This is to be expected.

3. When the transmission is back in "N", turn ignition key to OFF and wait for system power off.



4. Turn the ignition key ON.



5. Clear occurred fault codes using B.U.D.S., refer to appropriate *SHOP MANUAL*.

venice	Sealing	Monitoring	Activation	Fauls	History
Summary				<b>^</b>	
Code	State	Module	Count	C sle Time	Total Tin
**P0107	Active	ECM		1	
**P0122	Active	ECM		1	
**P0222	Active	ECM		1	
**P081B	Active	ECM		1	
**P212C	Active	ECM		1	
**P2228	Active	ECM	2	1	
C006C	Active	ECM		1	
··U0302	Active	ECM		1	
1			↓		
Active and Occurred	Faults -	Clear (	ccurred Faults		

1. Select the Faults page tab

2. Click on the Clear Occurred Faults button

6. Test ride the vehicle shifting through every gear.

**NOTE:** Ensure the transmission changes gear properly, and that the corresponding gear position is indicated in the multifunction display.

7. After the test ride, connect the vehicle to B.U.D.S. and check for fault codes.

If there are faults related to this procedure, erase the faults and redo the procedure.

If the fault(s) still occur, contact your BRP service representative.

# WARRANTY

## 2010-0004

Submit a warranty claim using the following information:

CAMPAIGN NUMBER	2010-0004
Claim type	Campaign claim
Action	Repair
Flat Rate Time	0.5 hour

# **SERIAL NUMBERS LISTING OF INVOLVED VEHICLES**

### Model: A3AB

000402 000406 From 000409 to 000418 From 000420 to 000436 000442 From 000445 to 000455 From 000457 to 000492 From 000589 to 000624 From 000697 to 000732

### Model: A4AA

From 000648 to 000651 000665 From 000667 to 000670 000673 000675 000679 From 000681 to 000696 From 000701 to 000784

### Model: A4AE

From 000277 to 000492 From 000829 to 000948 From 001045 to 001080

### Model: A4AG

From 000373 to 000475 From 000477 to 000540

### Model: A7AA

From 000493 to 000516 From 000565 to 000588 From 000673 to 000696

### Model: A7AD

From 001081 to 001128 From 001224 to 001271

### Model: A9AA

From 000073 to 000084 From 000109 to 000192 From 000325 to 000360 From 000517 to 000564 From 000625 to 000657 From 000659 to 000672 From 000733 to 000756

### Model: A9AC

From 000193 to 000216 From 000361 to 000396

### Model: A9AD

From 000517 to 000636 From 000781 to 000828 From 001009 to 001044 From 001129 to 001176 From 001272 to 001307 Model: A9AF

From 000637 to 000672

#### Model: B5AC

From 000949 to 000952 From 000958 to 000965 From 000970 to 001008