NOTE: Reset must be done each time the throttle position sensor (TPS) is loosened or removed or throttle body(ies) is(are) replaced or MPEM is replaced.

CAUTION: An improperly adjusted TPS may lead to poor engine performance and emission compliance could possibly be affected.

Use the vehicle communication kit (VCK) with the B.U.D.S. software to perform this adjustment.

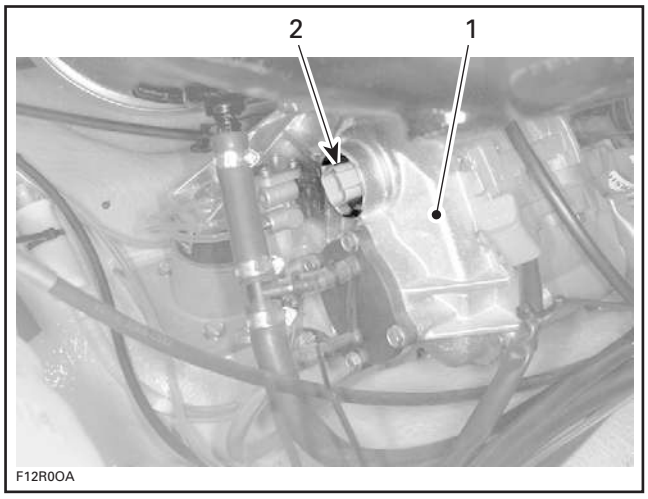
Ensure the throttle body plate stop lever rest against its stopper. Open throttle approximately one quarter then quickly release. Repeat 2 - 3 times to settle throttle plate. If stopper does not rest against its stop lever, perform throttle cable adjustment. Refer to **Throttle Body** in **Air Induction System** above.

Push the **Reset** button in the **Setting** section of B.U.D.S.

NOTE: There is no idle speed adjustment to perform. The MPEM takes care of that. If TPS are not within the allowed range while resetting the closed TPS, the MPEM will generate a fault code and not accept the setting.

Start engine and make sure it operates normally through its full engine RPM range. If fault codes appear, refer to **DI System Fault Codes** in DIAGNOSTIC PROCEDURES section for more information.

CRANKSHAFT POSITION SENSOR (CPS)



1. Magneto cover
2. CPS connector

Check for RPM display at the information center **while cranking** engine. If it displays approximately 300 RPM, the CPS circuitry is properly working.

Otherwise, validate the information center is working by activating the tachometer using the software B.U.D.S. under **Activation**. If it does not display 3000 RPM, the information center may be faulty and needs to be tested.

If the information center correctly displayed 3000 RPM, perform the following tests.

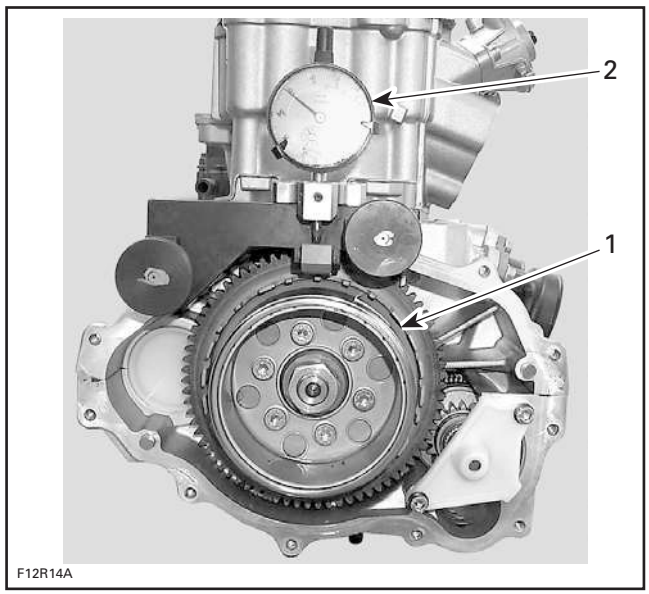
NOTE: Take into account that a CPS fault can be triggered by bent or missing encoder wheel teeth. Check the teeth condition. Also, bad connections in magneto connector could generate electrical noise that would make you wrongly think the CPS is faulty. Check pins and wires.

Encoder Wheel Inspection

To check the encoder wheel for bent teeth, proceed as follows.

Remove magneto cover. Refer to magneto system in ENGINE section.

Install a dial indicator on cranckase casting. Position the gauge on a tooth and set it to zero (0). Rotate flywheel and check needle movement. The maximum allowed difference between teeth is 0.15 mm (.006 in). Otherwise, straighten the tooth or replace the encoder wheel.



1. Encoder wheel
2. Dial indicator

Properly reinstall cover.