

XB12 Driveability Diagnostics

Purpose

The XB12R/S Initial Care Program has identified some driveability concerns on a small population of motorcycles during the PDI. The symptom most often reported has been a stumble off idle and/or poor idle characteristics. To properly address these concerns and to ensure that our customers are delivered the most satisfying product, we have developed the following procedure to aid the technician in resolving these complaints.

Motorcycles Affected

2004 XB12R/S motorcycles that exhibit driveability concerns after the PDI test ride outlined in the PDI manual.

Required Dealer Action

When performing the PDI on all Buell XB12 models, evaluate the performance of the vehicles and if necessary, use the following procedure to correct any issues noted on the test ride. The need for action will be determined by an evaluation of driveability during test ride. Only a small percentage of the vehicles will require any action.

Service Procedure

Inspect fuel injector wires:

1. Remove right side engine air scoop.
2. Inspect fuel injector wires.

IMPORTANT NOTE

Rear wire should be green with a grey tracer and the front wire should be white with a yellow tracer. Do not rely on the harness tags for this inspection, harnesses have been found with incorrect markings.

- a. If injector wires are crossed front to rear, correct wiring and retest vehicle.
- b. If injector wires are not crossed proceed to the next section.

TPS Re-zero

1. Connect to Digital Technician and check for trouble codes before proceeding.
2. Select the Buell Calibration screen.
3. Select calibrations screen/TPS Function.
4. Select Buell TPS zero tab.
5. Select TP volts on screen.
6. Back off idle adjustment until TP volts stop decreasing and then continue to back out one full turn.
7. Open and **snap shut** throttle control grip 2-3 times.
8. Apply medium closed throttle pressure (rotate throttle grip to closed position).

NOTE

This is to ensure that the throttle plate is completely closed before beginning recalibration.

9. With ignition and run switch in the on position with engine off and throttle in the closed position press the TPS zero button at the bottom of the screen.
10. Select TPS zero button and perform TPS zero.

NOTE

When calibration is complete, dialogue box will appear on Digital Tech screen with message display "Command Sent Successfully". Press OK.

11. Turn idle adjustment cable screw clockwise until TPS degrees read 5.2-5.6 degrees.
12. Run vehicle until engine temperature is at 320 °F (160° C).
13. Set idle to 1050-1150 RPM.
14. Reset AFV to 100% and print data sheet.

IMPORTANT NOTE

In the interest of preserving customer safety and satisfaction, always check for outstanding recalls whenever any motorcycle is brought into your dealership for either maintenance or service.

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	LEAD TECHNICIAN	TECHNICIAN NO.1	TECHNICIAN NO. 2	TECHNICIAN NO. 3	TECHNICIAN NO. 4	RETURN THIS TO
INITIAL HERE									

Test Ride (as outlined in PDI)

NOTE

The process listed in the PDI manual ensures the bike is operated in "closed loop learn" which should allow the AFV to adapt to current conditions.

1. Reset AFV to 100% before test ride.
2. Test ride the vehicle as described in the PDI manual.
3. Reset idle speed as required.
4. After the test ride record the AFV reading_____ %.
5. Driveability acceptable?

NOTE

If driveability is not acceptable, proceed to the next section.

Verify Fuel Pressure

1. See FUEL PRESSURE TEST in the appropriate service manual in order to confirm that the fuel pressure is between 49-51 PSI (338-352 kPa).
2. Start vehicle and read fuel pressure and record reading.

Verify Static Timing

IMPORTANT NOTE

See Digital Technician and the applicable service manual for instructions.

NOTES

- Test ride motorcycle. Has the driveability issue been resolved?
- If the driveability issue has not been improved, see **Important Note** (Top of page).

IMPORTANT NOTE

If after following the above procedures the vehicle fails to perform properly, please call the XB12R/S Initial Care phone line (414) 343-8357 which allows direct access for technical support and warranty pre-approval decisions.

CREDIT PROCEDURE- VEHICLE REPAIR

After servicing each vehicle, file a warranty claim referencing Service Bulletin B-055 in the "Description of Repair" or "Comments" section of the claim. Please note the procedure does not require you to list a causal/failed part. Fill in the rest of the claim as follows:

Table 1. TPS Re-zero

Claim Type*	BMC/BPD
Primary Labor Code	7472
Time: Includes test ride	0.4 hr (All Models)
Customer Concern Code	9203
Condition Code	9110

Table 2. Verify Fuel Pressure

Claim Type*	BMC/BPD
Primary Labor Code	7477
Time:	0.5 hr (All Models)
Customer Concern Code	9203
Condition Code	9110

Table 3. Verify Static Timing

Claim Type*	BMC/BPD
Primary Labor Code	7478
Time: Includes test ride	0.5 hr (All Models)
Customer Concern Code	9203
Condition Code	9110