416: 2010 Buell Service Information



July 29, 2009



APPLIES TO	SYMPTOMS
	Part Availability, Installation or Fitment UpdatesLiterature Updates or Corrections

This tech tip is meant to provide an overview of the 2010 Buell Models but is not all inclusive, for more details refer to the 2010 service literature.

1125 Models

The 1125 alternator rotor nut torque has changed and requires the updated TDC locking pin to tighten. DO NOT USE your current locking pin part # B-48858 (red handle) it is necessary to use the updated B-48858-A (blue handle) locking pin. This new torque can be used on all 2008 & Later 1125 models.

- 1. Apply LOCTITE 272 (red) to the threads and the mating face of the crankshaft nut.
- 2. Tighten to 285 Nm (210 ft-lbs).
- 3. Loosen the nut counterclockwise approximately 720 degrees.
- 4. Tighten to 285 Nm (210 ft-lbs).
- 5. Loosen the nut counterclockwise approximately 720 degrees.
- 6. Final torque to 400 Nm (295 ft-lbs).

Camshaft Gear Fasteners

The camshaft gear fasteners have a new torque, the new torque can be used on all 2008 & Later 1125 models.

- 1. Tighten to 20 Nm (15 ft-lbs).
- 2. Turn each fastener +80 degrees.

Other Changes

- We have improved the clutch slave cylinder components, if you need to replace these on 2008-2009 models please use kit # X2086.1AM.
- Please note that some models have different rear wheel bearings. See the 2010 service literature for more information.
- There is a new connector used for the taillight. It is called a JST connector. This connector requires a new crimper and extractor which are included with your essential tools.

XB Models

- A front Oxygen sensor and fuel pressure sensor have been added for 2010.
- We have revisited the oil check procedure and a revised procedure is included in this document that can be used on 2008 & Later XB models.
- Please note that some models have different rear wheel bearings. See the 2010 service literature for more information.
- There is a new connector used for the taillight. It is called a JST connector. This connector requires a new crimper and extractor which are included with your essential tools.

2010 1125 Oil Check Procedure

The oil check procedure and oil capacities have changed for the 2010 1125 engine (this does not apply to the 2008-2009 engines).

The new capacities are:	Liters	Quarts
Without filter	2.9L	3.0qt
With filter	3.2L	3.3qt

Pre ride Inspection:

An accurate engine oil check can only be made with the engine at normal operating temperature.

- With motorcycle on the side stand look at the oil level in the sight gauge. An indicated oil level between the lower and upper lines on the oil level sight gauge is acceptable for engine operation.
- 2. If there is no oil present in the sight gauge lift the motorcycle to a straight up and down position to see if any oil appears in the sight gauge.
- 3. If oil appears proceed to the Hot Check.
- 4. If no oil appears place motorcycle on sidestand and add oil in 0.1 L (3.4 fl oz) increments just until you see oil in the gauge and then proceed to the Hot Check.

Hot Check Procedure:

- To bring the motorcycle to normal operating temperature, ride the motorcycle for at least 10 minutes and 8 kilometers (5 miles).
- 2. Park the motorcycle on the sidestand while idling and remove the oil fill plug.
- 3. Idle the engine one (1) minute. Shut off the engine.
- 4. Read the oil level in the sight gauge.
 - a. Below the lower line: Add oil in 0.1 L (3.4 fl oz) increments until the level is between the upper and lower lines.
 - b. Between the upper and lower lines: It is safe to operate the motorcycle.
 - c. At (or above) the upper line: Drain oil at 0.2 L (6.8 fl oz) increments until the oil level is between the lines.
- 5. Reinstall the oil fill plug.

2008-2010 XB Oil Check Procedure

An accurate engine oil check can only be made with the engine at normal operating temperature (Hot Check).

Pre Ride Inspection:

1. Remove the oil filler plug/dipstick and visually check for oil in the tank.

NOTE

If the oil pressure lamp stays lit after starting the engine, immediately shut the engine off.

- 2. If oil is not visible in the tank, screw the dipstick back in and start the engine.
- 3. Let the engine idle for 30 seconds then shut the engine off
- 4. Remove the oil level dipstick and visually check for oil in the tank.
- 5. If there is no oil in the tank, add oil in 6.8 fl oz (0.2 L) increments.
- 6. Screw the filler plug/dipstick in completely and remove to read the dipstick.
- 7. When oil is present on the bottom of the dipstick, perform a hot check.

Hot Check Procedure:

- 1. Ride the motorcycle for at least 10 minutes and 5 mi (8 km) to bring the engine to normal operating temperature.
- 2. On the sidestand, idle the motorcycle for one to two minutes. Turn the engine OFF.
- 3. Remove the dipstick and wipe the dipstick clean.

NOTE

Do not over tighten oil filler/dipstick cap.

- 4. Screw the dipstick fully into the oil tank.
- 5. Remove dipstick and read the oil level.
 - a. Below the lower line: Add only enough oil until the level reads between the upper and lower lines. Recommended viscosity depends upon ambient temperature.
 - b. Between the upper and lower lines: It is safe to operate the motorcycle.
 - c. At (or above) the upper line: Drain oil until the level reads between the upper and lower lines.
- 6. Screw the dipstick fully into the oil tank.