

# Technical BULLETIN

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## 2007 PZ50W/FXW/GTW/MW/VTW Hard Starting in Extreme Cold Temperatures

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### INTRODUCTION

**Symptom:** Some affected units have experienced hard starting in temperatures below -15°F (-26°C).

**Cause:** Reduced engine cranking speed in extremely cold temperatures affects the engine decompression and ECU calibration. This can reduce the engine starting performance.

**Remedy:** Install ECU kit, which includes a new ECU, two decompression springs, and a cylinder head cover gasket (see *Parts Information* section for more details).

### Additional Notes:

It is normal for the engine to crank for several seconds before starting. However, early-season extended-cranking time or engine not starting in temperatures above -15°F (-26°C) is usually associated with the following:

- Stale gasoline (more than 30 days old) or summer-blend gasoline;
- Contaminated spark plugs caused by stale gasoline; or
- A weak or discharged battery caused by long cranking.
- It can also be caused by repeatedly starting and stopping the engine without allowing the engine to reach operating temperature.

Should this be the problem, then perform the following:

1. Drain the fuel from the machine and replace it with fresh premium gasoline.
2. Replace the spark plugs.
3. Charge the battery properly using the correct charger.
4. Do not start and stop the engine without allowing it to reach operating temperature.



### DEALER ACTION SUMMARY

#### Sold

**Units:** Contact those customers who have reported hard starting in extreme cold temperatures and arrange a convenient time to install the new exhaust decompression springs and ECU.

#### Unsold

**Units:** N/A

#### Parts

**Required:** Yes, Order one ECU kit per unit as required.

**Warranty:** Submit a Service-Per-Bulletin (90 Code) Warranty Request for parts and labor. This 90-code expires December 31, 2009.



## AFFECTED RANGE

All 2007 PZ50W (Phazer)  
All 2007 PZ50GTW (Phazer GT)  
All 2007 PZ50FXW (Phazer FX)  
All 2007 PZ50MW (Phazer Mountain Lite)  
All 2007 PZ50VTW (Venture Lite)



## SERVICE PROCEDURES

For the following procedure, refer to the appropriate sections in the Service Manual (P/N: LIT-12618-02-58) available on YDS.

1. Remove the seat, fuel tank and any other parts (side panels, tank cover, and spark plug caps) to access the engine cylinder head cover.
2. Disconnect the negative (-) cable from the battery.
3. Remove the cylinder head cover.
4. Position the camshaft, by using the primary clutch to turn the engine in the normal direction of rotation (clockwise), to access the exhaust decompression spring.

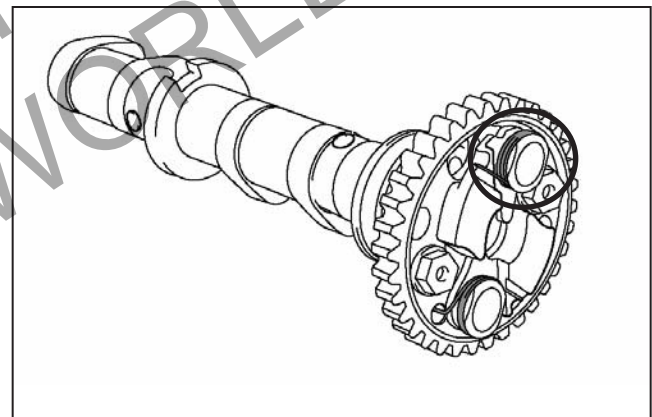
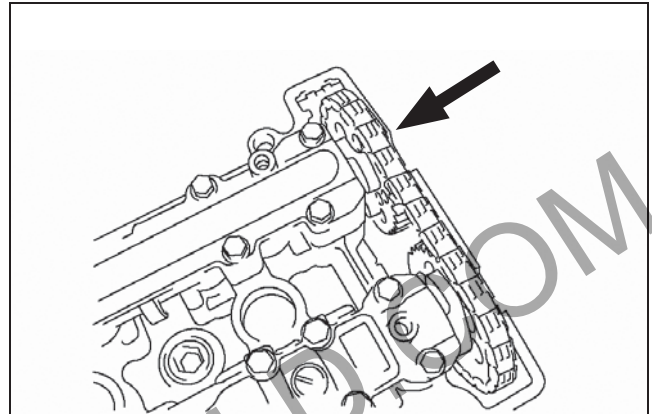
### CAUTION:

**Always turn the crankshaft in the direction of normal rotation (clockwise).**

5. Place a rag in and around the cam chain passage to prevent items from falling into the bottom of the engine.

**NOTE:** Removing the camshaft is not required. A removed camshaft is illustrated as an example.

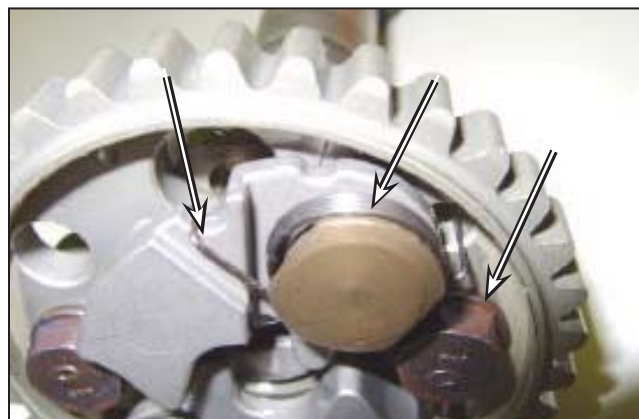
6. Remove the decompression spring as shown in the adjacent photo. Take care not to drop the spring into the engine.



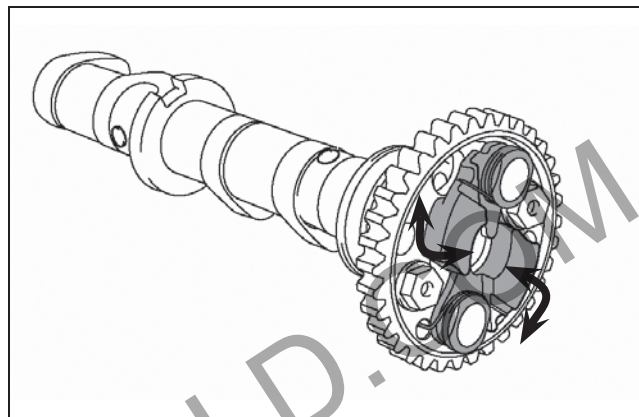
7. Install the new decompression spring.

**NOTE:** Check that the spring is properly installed as shown in the adjacent photo.

8. Using the primary clutch, turn the engine in the normal (clockwise) direction of rotation to access the other spring. Install the second spring.



9. Check the decompression operation. By moving the weights outward by hand, when working correctly, the weights will return to their initial position.

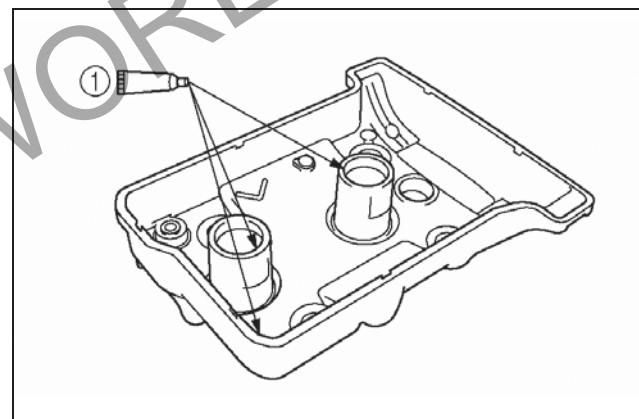


10. Re-install the cylinder head cover using the new gasket supplied in the kit.

Apply Yamabond 4 Motorsports to the cover ① surface and the mating surfaces of the cylinder head cover gasket and cylinder head ②.



**Yamabond 4 Motorsports:  
ACC-BOND4-MC-00**

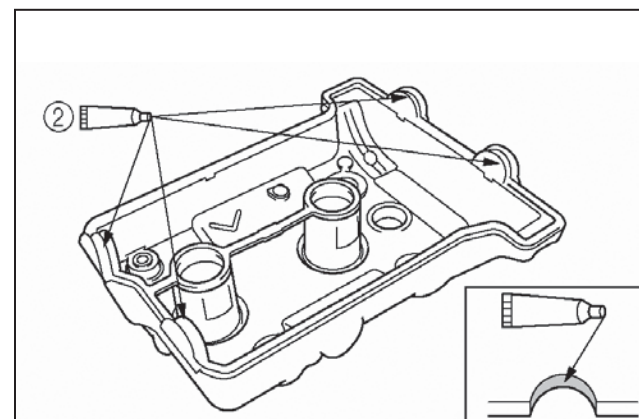


Tighten the cylinder head cover bolts in gradual steps and in a crisscross pattern.

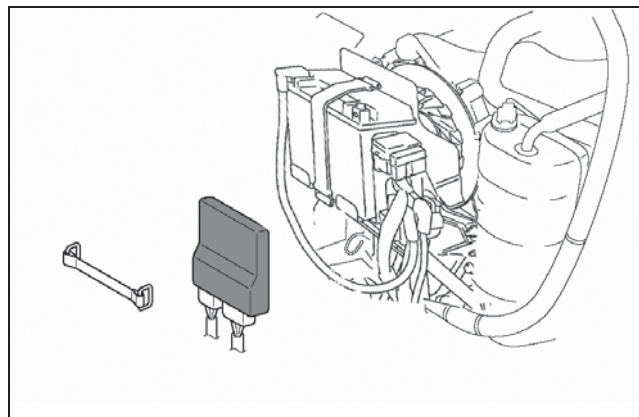


**Cylinder head cover bolt tightening  
torque:**

**12 Nm (1.2 m•kg, 8.7 ft•lb)**



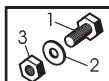
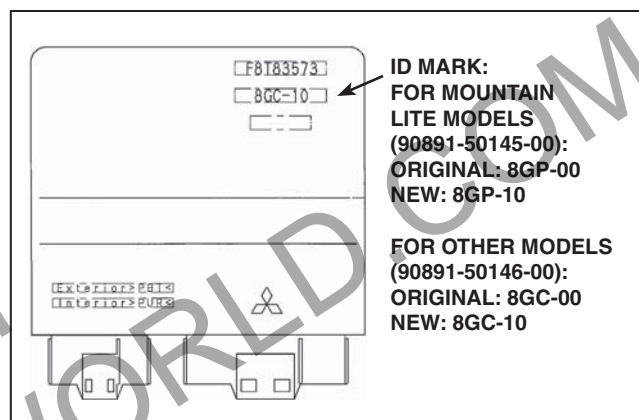
11. Exchange the ECU with the new one in the kit.
12. Reconnect the negative cable to the battery.
13. Reinstall the fuel tank, seat, and the other parts removed in step 1.
14. Tag and hold all replaced parts (ECU and springs) for 120 days from the date of request.



## IDENTIFICATION PROCEDURE

If you encounter an unfamiliar unit and you are unsure if the unit has been modified, check the ECU (see adjacent illustration).

Alternatively, you can check the modification status by checking Unit Status under Service/Warranty Claims on YDS or by contacting your Regional Technical Advisor (RTA).



## PARTS INFORMATION

Part Number	Description	Qty.	Dealer Cost
90891-50145-00	PZ50 Mountain Lite ECU Kit (Fits PZ50M only)	1	\$236.87
90891-50146-00	PZ50 ECU Kit (Fits all other PZ models)	1	\$236.87

**NOTE:** This kit includes: One ECU, two decompression springs, and a cylinder head cover gasket. You will also need a small amount of Yamabond 4 Motorsports (ACC-BOND4-MC-00).



## WARRANTY INFORMATION

Service of all affected units is authorized regardless of warranty status until this 90-code expires on December 31, 2009.

To receive credit for the parts and labor, select **090UG** from the Problem Code pull-down menu in the Yamaha Dealer System (YDS). If submitting a paper warranty claim, use Problem Code **90UG**. The labor allowance for this modification is **1.1** hours. Tag and hold all replaced parts (ECU and springs) for 90 days from the date you submit your claim.