SOLENOID COVER/1977 AND LATER XL MODELS

Some solenoid covers, used in production since 1977, have the ability to conduct electricity. Investigation of this problem has uncovered that the suspect solenoid covers contain excessive amounts of carbon black mixed into the rubber compound. This carbon black has the ability to conduct electricity if the concentration is high enough. If a motorcycle has an affected solenoid cover installed, the cover could slowly drain the battery over an extended period of time.

This problem would most likely appear on a motorcycle that gets extremely limited use. In this case, whenever the customer goes to start his motorcycle, the battery will either be completely dead or have a very low charge. The unique thing about this problem is that the electric charging system will check out all right.

**NOTE**

This could also occur on FL/FX models due to excessive aluminum oxide in the silver covers. If conditions are similar, check using the procedure below.

If you encounter this type of occurrence on a 1977 or later XL model, follow the procedure below for inspection and repair.

**INSPECTION AND REPAIR PROCEDURE**

1. Set voltmeter to 10 volt scale.

2. First connect jumper wire to outside solenoid cover and battery positive post. Then connect voltmeter to inside solenoid boot and battery negative post (see Figure 1).

3. If needle reads anything or even flickers while solid contact is maintained, the cover is conductive.

4. If conductive, replace the solenoid cover, Part No. 31457-77. Hold replaced cover for possible inspection.

5. Before installing a new solenoid cover, check the replacement cover using the same procedure.

HARLEY-DAVIDSON MOTOR CO., INC.