No. 626

August 2, 1971

CHARGING SYSTEM / 1971 SPRINT

During the 1971 model season, our supplier of Sprint generator brushes made a change in the brush material. The new brushes were found to be the cause of arcing and wear. Also, the undercut between the segments tend to fill up with material and become shorted. This condition then causes low generator output and high cut-in speed.

If you have any cases where dead batteries or low generator output are a recurring problem, it is recommended that you service the generator brushes and commutator as follows:

- 1. Replace brushes marked AG-7 and use brushes marked E-961 exclusively. (Return any AG-7 brushes you have in stock to the factory for credit and order E-961 brushes under part No. 30452-62P (NEGATIVE) and Part No. 30454-62PA (POSITIVE). The positive brush has an insulated wire.)
- 2. Check brush springs for correct pressure on the brushes to be sure the springs have not weakened from overheating. If the springs appear to have overheated, replace with new springs, part No. 30453-61P.
- 3. If commutator is not in good condition, it should be turned down in a lathe and mica between segments under cut as explained in Section 5E of the Service Manual.
- 4. To be sure that Sprint batteries are in fully charged condition before placing in service, they should be charged after activation for a period of from 12 to 24 hours at 1/2 ampere.
- 5. Battery charge rate can be improved by reducing the load on the electrical system. In states requiring headlamp operation day and night, or for night operation, a lower wattage headlamp is recommended. Replace 45/40 watt unit part No. 67717-59 with 30/30 watt unit part No. 67716-68. The lower wattage unit is standard equipment on all Sprints above VIN 3C 12246 H2.
- 6. On the SX model with external battery, check battery positive lead for clearance with metal tool box WITH FULL WEIGHT OF RIDER ON SEAT. Grounding condition will be indicated by engine cutting out when going over bumps and eventually causing a dead battery.

HARLEY-DAVIDSON MOTOR CO., INC.