AMF HARLEY-DAVIDSON SERVICE BULLETIN

No. 538B

September 25, 1969

This bulletin supercedes No. 538A

CHAIN HOUSING SEAL AND VENT PARTS-ELECTRA GLIDE

Adequate sealing of the Electra Glide chain compartment is necessary to keep the enfine lubrication system clean under dusty or wet road conditions, and to prevent the possibility of exhaust smoke at low engine speeds due to low vacuum in the oil scavenging system. When the chain compartment is sealed, however, it is necessary to control the amount of vacuum with a venting system, so that chain oiler flow will be normal.

To provide a weatherproof seal and to control the degree of vacuum in the chain compartment, later 1966 motorcycles have the following changes:

- 1. An O-ring seal is incorporated in the starter shaft deflector plate, Part No. 60516-65A.
- 2. A gasket seal, Part No. 60645-65 is installed between the starter solenoid and chain housing.
- 3. Chain compartment is vented to the crankcase oil tank vent line using large 3/8 inside diameter hoses, hose clamps and fittings with following part numbers:

10013 (6) Hose Clamp 63533-41 (1 Hose Nipple (1) Hose $5/8 \ 0.0 \times 8$ (1) Hose 5/8 0.0 x 14

(1) Hose $5/8 \cdot 0.0 \times 4$

63580-66A (1) Vent Line T-connection

Hose will only be sold in 25 ft. lengths under part No. 63500-68. Cut correct length from this 5/8" 0.0 hose.

All of the above parts are available in Kit form complete with installation instructions. Order Chain Housing Vent Kit, Part No. 63561-65. A copy of the installation instructions is enclosed with this bulletin.

These modifications are recommended for all 1965 and early 1966 Electra Glides at such time when they may be down for repairs. Remember that all 3 above changes must be made to have system function correctly.

NOTE: Vacuum gage, Part No. 96950-68 is available from the factory for checking to see if chain housing and vent system is air tight after installation of kit. The gage fitting screws into one of tapped holes for the inspection cover in chain housing. Vacuum should be 12 inches of water or more at 1500 RPM. A lower reading than this indicates an air leak into chain housing at the cover gasket, solenoid, starter shaft or hose. This must be corrected since leaks will allow dirt and moisture to enter lubrication system. Important:

In connection with any engine repairs, be sure to service engine lubrication system which includes cleaning oil tank, along with installing new oil filter and overhead oil supply screen. DO NOT OPERATE ENGINE WITHOUT OIL FILTER AT ANY TIME!

HARLEY-DAVIDSON MOTOR CO., INC.

PART NUMBER

63561-65 Rev. 9-69

INSTRUCTIONS

GENUINE PARTS
AND ACCESSORIES

CHAIN HOUSING VENT - ELECTRA GLIDE

PARTS LIST:

10020 (6) Hose Clamp, 11/16" 63533-41 (3) Hose Nipple

(1) Hose (Short)

(1) Hose (Medium)

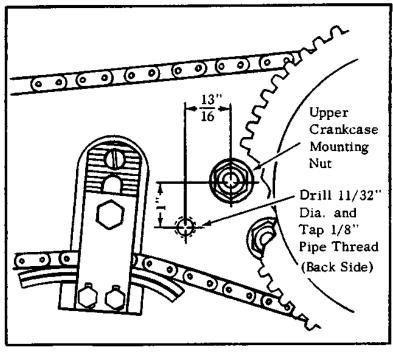
(1) Hose (Long)

63580-66A (1) Vent Line T-connection

60516-65A (1) Starter Shaft deflector plate with O-ring

60645-65 (1) Solenoid Gasket

Disconnect battery negative cable. Remove front chain housing cover, chain, clutch, engine sprocket and chain housing as described in Service Manual section 3A. Drill and tap hole in back side of chain housing for hose fitting. Locate hole as shown in diagram below. Install hose nipple and install medium-length hose on nipple. Use pincer type pliers, Part No. 97087-65 to tighten hose clamp on nipple.



LOCATION OF CHAIN HOUSING FITTING

While solenoid plunger is disengaged from starter shifter lever, remove solenoid switch and install sponge rubber gasket over rubber boot flush against switch body. Solenoid must fit flat against pad on chain housing. When reassembling chain housing, discard old starter drive shaft deflector plate, substituting plate with O-ring. O-ring side of plate should be toward starter motor. Be sure surface of starter shaft which contacts O-ring is very smooth with no roughness. If necessary, polish with very fine emery cloth to a smooth, bright finish.

Remove old crankcase to oil tank vent hose. Remove old oil tank vent fitting and crankcase vent fitting, substituting new hose nipples. Install short hose on crankcase nipple and apply clamp. Install long hose on oil tank nipple and apply clamp. Route hoses to location just behind oil pump and join with plastic tee, inserting long leg of plastic tee into chain case vent hose — other hoses into short legs of plastic tee and apply clamps. Reconnect battery and check engine operation.

IMPORTANT

After assembly, chain housing must be air tight. Vacuum in chain housing can be checked with Vacuum Gage, Part No. 96950-68. Gage fitting screws into one of tapped holes for inspection cover in chain housing. Vacuum should be 12 inches of water or more at 1500 RPM. A lower reading than this indicates an air leak into chain housing at gasket, solenoid, starter shaft or hoses.