

January 18, 1955

To: ZONES AND DEALERS

TORSION-LEVEL SUSPENSION - LIMIT SWITCH AND COMPENSATOR Subject: MOTOR

All Torsion-Level Suspension equipped 55th Series cars built prior to December 20, 1954, should be checked immediately for load compensator over-travel and excessive amperage draw of the compensator motor.

When the load compensator over-travels, the compensator ball stud levers may strike and in some cases bend the solenoid and limit switch mounting brackets. In so doing, the limit switch is pushed farther away permitting still more over-travel resulting in blown fuses and possible serious damage to the compensator housing and gears.

Excessive amperage draw of the compensator motor is generally caused by the driving pin coming loose in the motor armature and rubbing the housing or the armature rubbing the field pole shoes. Compensator overtravel also may cause excessive amperage draw.

These cars should be inspected in the exact sequence as listed:

- 1. Turn the compensator instrument board switch to "on" and raise the car on a hoist.
- 2. Remove the 20 AMP. fuse from the compensator circuit, located in the plastic fuse holder near the starter motor. Connect a low reading ammeter in the circuit in place of the fuse.
- 3. Using a screwdriver, ground the rear terminal on the limit switch to the frame bracket and raise the car until the limit switch shuts off the circuit.
  - Check the amperage draw on the ammeter. Watch the compensator levers for interference at the limit switch and the compensator gear housing mounting brackets.
- 4. Ground the front terminal on the limit switch to the frame bracket and lower the car until the limit switch shuts off the circuit, again watching the amperage draw and for interference of the compensator levers at the mounting brackets.
- 5. If the levers strike the mounting brackets, check the amperage draw up to the point just before they strike. The amperage draw should not exceed 17 amperes.

If lever interference at the mounting brackets is found, install a new limit switch, part number 472179. The flat horizontal bar on the lever of the new switch is 2 1/16" long and will prevent over-travel and possible

(Over)

damage to the compensator.

If the compensator motor amperage draw exceeds 17 amperes, remove the motor assembly and install a new armature, part number 458999.

A supply of these new armatures is being shipped to each Zone but it will be necessary to order the new limit switches as the limit switch condition will rarely be found.

Return the removed armatures and limit switches on an RFA in the usual manner to the Claims Adjustment Section at Utica, Michigan.

Note: This bulletin has reference to cars with vehicle numbers 5562-1001 through 1427 inclusive.

Very truly yours,

H. N. Johnson

Assistant Service Manager

HGL:tf