

# **HUDSON MOTOR CAR COMPANY**

## **General Technical Policies & Information Bulletins**

**1938**

No. 4 - Car Loading Charge, High Output Generator  
Loose Fan Belts & Ground Straps, Battery Charging



**General Technical Policies  
AND Information  
1938 Bulletin Series  
Effective October 1st**

4

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**SUBJECT**

TO ALL MASTER DEALERS:

CAR  
LOADING  
CHANGE

Effective with shipments of Hudson 112 models beginning February 3d, a new method of securing the front ends of both floor and staged cars in rail shipments is being allowed, which minimizes the possibility of front spring breakage due to rough handling in transit.

In the new method a special anchor plate is attached to each frame side rail at the front end, held in place by the front bumper bracket bolts. The front hold down chains, which secure the car to the loading frame or the freight car floor, are attached to these plates thus relieving the front springs of undue stresses.

These plates, of course, must not be allowed to remain on the cars but should be removed and discarded at the time of unloading or during new car inspection. This operation simply entails the removal and replacement of the two front bumper to frame bolt nuts on each side of the car.

HIGH  
OUTPUT  
GENERATOR  
AND  
REGULATOR

Whenever radios are installed in the Hudson 112 cars, it is important that the equipment High Output Generator and Current Assembly, also be fitted, in order to insure adequate capacity and protection to the electrical system.

LOOSE  
FAN BELTS

As you know, the Standard Generator used on the Hudson 112 model, has a peak output of 17 to 19 amperes while the optional equipment generator with the regulator assembly is capable of 29 to 32 ampere charging rate. The Current Regulator Assembly, is also known as the Generator Charge Control Kit, should always be installed with the High Rate Generator because if not and the charging rate is stepped up to the proper value to take care of radio installation, there is a strong possibility that difficulty, due to burned out light bulbs or radio tubes, might result. The Current Regulator Assembly cannot be installed with the Standard Generator on the Hudson 112.

Our investigation of the few complaints we have received on run down has shown that in a vast majority of cases the difficulty is directly chargeable to loose and slipping fan belts. It must be borne in mind that considerably more power is required, to drive the high output put generator of later year makes of cars and fan belt conditions which were of little importance in connection with the older, smaller, units, now can seriously impair generator output and performance. Therefore, when complaints of run down batteries, low, generator charging rate or failure of the generator dash signal light to go out immediately after starting the engine are registered, the fan belt condition end adjustment should be looked into. Anti-freeze solution, grease and oil and dirt deposited on the sides of the belt tend to glaze the surfaces and, destroy its frictional properties resulting in slippage, even with proper tension.

(OVER)

Cooling system and oil leaks should be corrected and when the belt has become too badly saturated, glazed or worn, it should be replaced with a new one. Paint on the belt also aggravates slippage and should be removed. Proper adjustment of the belt calls for 3/4" of slack, measured by placing a straight edge on the generator and fan pulleys and pressing the belt downward at a point midway between these pulleys. A fan belt looser than this will cause slippage even when in good condition, while a belt too tightly adjusted will shorten the life of the generator and water pump bearings.

LOOSE  
GROUND  
STRAPS

Another point which should be carefully checked when seeking a cause for run down batteries is the buttery ground strap. Looseness of the ground strap, either at the battery or frame ends, introduces a high resistance and prevents the generator from properly charging the battery. When inspecting this detail also be sure to check the bond or connection between the battery terminal and the strap proper as some cases of looseness at this point also been reported.

BATTERY  
CHARGING

Although we have called attention from time to time to the necessity of properly checking and servicing batteries on new cars, reports received from the field indicate that this is not generally being done. The service rendered by the battery during its life and the operation of the entire electrical system is so greatly dependent upon the care given the battery during this critical period, that we urge you to see that the batteries of all new cars in storage or on the show room floor are periodically checked kept properly charged.

If you will make it a point to do this and be sure the battery of every new car shows a gravity reading of at least 1280 before the car is placed in service, complaints of run down batteries and related difficulties, will be at a minimum.

J. Blum

Technical Service Manager