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PACKARD MOTOR CAR COMPANY

DETROIT MICHIGAN

November 20, 1925

To Packard Distributers and Dealers.

Subject, STEERING ADJUSTMENT

TO BE NOTED AND INITIALED BY	

Gentlemen:

After a new car has been driven approximately one thousand miles, an adjustment of the steering mechanism is advisable to eliminate any lost motion that may have developed. If this readjustment is properly made and the steering gear filled with the correct lubricant it will then operate for a long period without further attention.

First of all, the steering gear case should be filled with Whitmore's No. 52. This is a heavier lubricant than any we have previously used for this purpose and we strongly advise its use for the reason that it will not leak from the steering gear case and, due to its high surface tension, it will also prove very effective in preventing rattles and squeaks.

To properly fill the steering case an Alemite connector should be installed in place of the present pipe plug and the steering column tube backed off one or two turns to permit the lubricant to pass freely into the worm shaft and thrust bearings. The case should be filled, by an Alemite gun, with all the lubricant it will hold, which is determined when it comes out of the clamp screw slot in top of case.

If some other lubricant has been used in the gear it should be thoroughly cleaned out before the Whitmore's No. 52 is added, to get an immediate and satisfactory result. This can best be accomplished by removing the steering case cover and washing the worm and sector with gasoline and a brush.

To adjust the steering gear you should proceed in the following order:

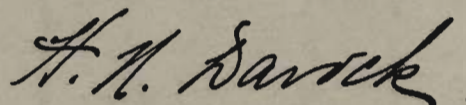
1. Fill the steering gear case with Whitmore's No. 52 as outlined above.
2. Disconnect the steering connecting rod from the steering lever. A good adjustment cannot be obtained unless this is done.
3. Tighten steering column tube down as far as it will go and then back off just enough so steering is free. This adjusts the end thrust of the worm.
4. Check the sector shaft for end play. It will seldom be necessary to change this adjustment, but if end play is found to exist, it can be taken up by removing the screw from the lock plate at the back of steering case and moving the lock plate toward front of car to the next hole.
5. Remove the backlash between the worm and sector. This should be done with the steering gear in a straight ahead position and by moving the eccentric bushing lock toward the front of car until there is no perceptible play when checked by moving the steering lever back and forth by hand. If, when the proper position is reached, a hole in the lock plate does not line up with the lockscrew hole in frame, the lock plate should be relocated on the splines of the eccentric bushing so as to bring these holes in line.

A change has recently been made in the eccentric bushing lock in order to prevent it from becoming loose on the splines of the bushing. The new lock is equipped with a clamp bolt so that it may be drawn up tight upon the splines, and, in any case where the old lock plate is found to be loose, it may be replaced with one of the new locks which should be ordered as follows:

1—0139808 Steering worm sector and shaft bushing lock assembly.

Yours very truly,

PACKARD MOTOR CAR COMPANY.



H. N. DAVOCK, Manager,
Technical Service Department.

HND:MHP: