REFER TO THIS LETTER BY NUMBER

## PACKARD MOTOR CAR COMPANY

DETROIT, MICHIGAN

October 17, 1930

TO BE NOTED AND INITIALED BY	

PACKARD DISTRIBUTERS AND DEALERS

Subject

To

SPEED, ACCELERATION OR HILL CLIMBING

## Gentlemen:

Motor cars today are being driven under a wide variety of operating conditions. Some owners wish a car for high speed driving in level countries, others want the maximum in hill climbing ability, while still others are looking for the utmost in acceleration from a standing start. We believe this latter group probably represents the majority of our customers.

In order to meet the demands of the majority all the eighth series models are equipped with a rear axle gearing of 4.69 to 1. This provides a combination of fine acceleration, good hill climbing ability and speed enough for all ordinary requirements.

A selected combination of rear axle gear ratio with the standard head or with a special high altitude head makes it possible to give the purchaser either extremely high speed with some loss in acceleration or extreme acceleration and hill climbing ability with some loss in top speed. In hilly territories you may wish to order your cars equipped with the optional 5 to 1 rear axle gears. It is dangerous however to use the high altitude head with higher than 4.69 to 1 axle ratio due to the increased power making it possible to turn the motor over at abnormal and dangerous speeds or R.P.M. We do not approve or authorize use of 5 to 1 axle ratio with high altitude head.............

If the buyer wishes a car for high speed driving in reasonably flat country a very fine result can be obtained by the installation of the optional 4.38 to 1 or even 4.07 to 1 rear axle gears and the high altitude cylinder head. This results in a beautifully smooth action at what might be called cruising speeds. We will equip no cars at the factory with the high altitude head which have anything lower than 4.38 to 1 rear axle gears except by special arrangement through the sales department.

The use of the high altitude head has the effect of slightly increasing the motor roughness and therefore should not be specified for the driver who insists on maximum smoothness of motor operation.

It is well to mention that spark plug life may be reduced through the use of high altitude heads and the consequent increased compression as the carbon builds up in the combustion chamber. It is also desirable to use ethyl gasoline in motors equipped with the high altitude heads.

(over)

All of this information is given you so that you may more exactly meet the requirements of a discriminating public. In other words by properly sizing up your customer and finding out what he wants most in his motor car, you can come nearer than ever before to meeting his wishes.

Yours very truly,

PACKARD MOTOR CAR COMPANY

JFP:PA (b) 2000 Dealers' G.L. No. 348 J. F. Page General Service Manager