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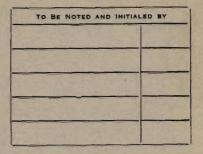
## PACKARD MOTOR CAR COMPANY

## DETROIT MICHIGAN

March 5, 1930.

To: Packard Distributers and Dealers.

SUBJECT: FAN BELT ADJUSTMENT 626



## Gentlemen:

In order to secure satisfactory results from the water pump and fan belt on the 626 motor it is necessary that the tension of the fan belt be properly regulated.

If the belt adjustment is too loose the tension will be insufficient to drive the pump and fan at high speeds, and the consequent slippage will cause the belt to deteriorate very rapidly. A slipping fan belt can always be identified by the characteristic noise which is caused by the friction between the belt and the upper pulley.

If the belt is excessively tight it may cause the distortion of the water pump shaft, and when this occurs the pump is apt to leak and the leakage and distortion may continue to a point where the entire pump must be replaced.

The 626 fan has an exceptionally large capacity and is larger than is actually necessary for most operating conditions. When a car is driven at high speeds a large fan is not required, because the movement of the car itself sets up a flow of air through the radiator which is almost sufficient for cooling purposes. For driving of this character the diameter of the fan may be reduced and the load on the fan belt will be so greatly decreased that no difficulty will be experienced in obtaining satisfactory life.

The accompanying cut illustrates the method by which this may be accomplished. Each fan blade is cut off 1" from the end so that the fan diameter is reduced from  $20\frac{1}{2}$ " to  $18\frac{1}{2}$ ". After cutting the end off the first blade the piece which is removed may be used as a marking template in order that the same amount may be taken from each blade and the running balance of the fan retained. The ends should be dressed with a file in order to remove any sharp edges which might cause an increase in fan noise.

When a car is driven at low speeds on open throttle as in climbing long grades, the full fan capacity is required, and where the driving is of this character it will not be advisable to reduce the diameter of the fan. There would be no reason, moreover, for such a reduction because there is no tendency toward belt slippage at the lower motor speeds, even when the belt tension is moderate.

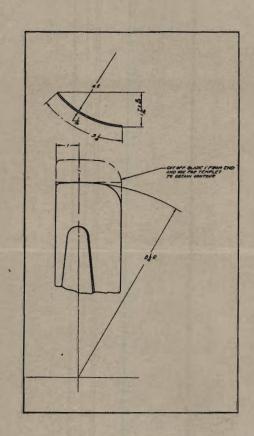
Therefore, the question as to whether or not the fan diameter should be reduced can be decided only through familiarity with the manner in which the car is driven. Rapid belt depreciation will be found only in cars driven at high speeds, and these cars do not need the large fan area.

Yours very truly,

PACKARD MOTOR CAR COMPANY.

T. A. Stalker.

Manager Technical Department.



TAS:CN