



VSP-24

October 22, 1980

To: All Piper Distributors, Dealers and CORPAC's

Subject: Parker Hannifin Corporation Product Reference
Memo (PRM) Nos. 13 and 14
Parker Hannifin (Cleveland) Brake Lining
Conditioning Procedures

Purpose: To distribute the attached publications to Piper Field Service Facilities. These publications detail the proper conditioning procedures for Organic (PRM No. 13) and Metallic (PRM No. 14) brake linings.

Product Reference Memo

PRM No.

13

ORGANIC BRAKE LINING CONDITIONING PROCEDURE

The brake lining material used in this brake assembly is an asbestos based organic composition. This material must be properly conditioned (cured resins) in order to provide optimum service life. The purpose of the conditioning is to cure the resins in the lining. Excessive heat applied before curing (high energy) will carburize the lining material, thus preventing the attainment of required braking coefficient.

Conditioning may be accomplished as follows:

1. Perform a minimum of six light pedal effort braking applications from 25 to 40 mph. Allow the brake discs to partially cool between stops.

This conditioning procedure will generate sufficient heat to cure the resins in the lining, yet will not cause the material to become carburized due to excessive heat. Once the linings are cured, the braking system will provide many hours of maintenance free service.

Parker Hannifin Corporation
Aircraft Wheel and Brake Division
P.O. Box 158, Avon, Ohio 44011 USA
(216) 934-5221



Product Reference Memo

PRM No.

14

METALLIC BRAKE LINING CONDITIONING PROCEDURE

The brake lining material used in this brake assembly is an iron based metallic composition. This material must be properly conditioned (glazed) in order to provide optimum service life.

Dynamometer tests have shown that at low braking energies, unglazed linings experience greater wear and the brake discs can become severely scored.

Conditioning may be accomplished as follows:

1. Perform three consecutive hard braking applications from 45 to 50 mph. Do not allow the brake discs to cool substantially between stops.
2. On aircraft with tail wheels, exercise caution during stopping to prevent tail lifting. Due to the efficiency of these brakes, extremely hard braking could result in lifting the tail from the ground.

This conditioning procedure will wear off high spots and generate sufficient heat to glaze the linings. Once the linings are glazed, the braking system will provide many hours of maintenance free service.

Parker Hannifin Corporation
Aircraft Wheel and Brake Division
P.O. Box 158, Avon, Ohio 44011 USA
(216) 934-5221

