



January 10, 1986

VENDOR SERVICE PUBLICATION

TO: All Piper Distributors, Factory Direct Dealers and
Piper Field Service Facilities

SUBJECT: Airborne Service Letter No. 29

PURPOSE: To distribute the attached Airborne Service Letter No. 29
to all Piper Distributors, Factory Direct Dealers and Piper Field Service
Facilities.

Detailed information is contained in the attached Airborne Service
Letter No. 29.

Airborne

Air & Fuel Products

Parker Hannifin Corporation
Airborne Division
711 Taylor Street
Elyria, Ohio 44036 USA
(216)323-4676, 777-9500
Telex: 24-3414

Service Letter

No. 29
16 October 1985

Subject: Overhauled Dry Air Pumps and Parts Replacement Kits

Applicability: All Aircraft Using Dry Air Pumps

It has come to our attention that Airborne dry air pumps are being overhauled or "field reconditioned" with FAA approval. Airborne has not authorized anyone to overhaul 211/212/241/242/441/442/842 series pumps and has not sold spare parts to field recondition these dry air pumps.

Inspection of overhauled dry air pumps and parts replacement kits from a number of suppliers has revealed that, in all cases, the overhauled and field reconditioned units did not conform to original manufacturer specifications. Also, Airborne tests of overhauled dry air pumps and parts replacement kits showed pump output flow and life expectancy to be significantly inferior to that of new Airborne pumps.

All overhauled 441/442 series deice pumps tested either broke during standard Airborne engineering evaluation tests or could not provide full boot inflation at altitude within the normal 6 second deice cycle. Most of the overhauled 211/212 series gyro pumps tested exhibited lower than normal flow and high operating temperatures.

AIRCRAFT OWNERS/OPERATORS SHOULD BE AWARE OF THE INCREASED RISK OF PUMP FAILURE AND/OR INADEQUATE PUMP FLOW WHEN USING OVERHAULED OR FIELD RECONDITIONED PUMPS.

- . For deice system 441/442 series pumps, inadequate deice boot inflation at altitude is not easily detected by in-flight visual checks or during ground run-up and may not be discovered until the boots fail to properly remove ice from the wings or empennage.
- . For 211/212 series gyro pumps, lower than normal flow can result in the loss of gyro operation, particularly at altitude. Higher than normal operating temperature will significantly shorten pump life, and may also damage the gyros in pressure instrument systems.

The use of overhauled or field reconditioned dry air pumps is an invitation to poor system performance and short pump life. Therefore, Airborne continues to recommend that any time an air pump is replaced, only a new air pump should be installed.

