



Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, FL, U.S.A. 32960

SERVICE NO. 1285B LETTER

Date: June 15, 2021

(S)

MAINTENANCE ALERT

Service Letter (SL) 1285B supersedes SL 1285A in its entirety.

SUBJECT:

PROPER TIRE PRESSURE MAINTENANCE

REASON FOR REVISION:

SL 1285B corrects tire inflation pressures for multiple models (Table 1), adds a note regarding significant changes in ambient temperatures, and announces new placards for PA-46-600TP M600 aircraft.

MODELS AFFECTED:

PA-46-310P Malibu
PA-46-350P Mirage/M350
PA-46R-350T Matrix
PA-46-500TP Meridian/M500
PA-46-600TP M600

SERIAL NUMBERS AFFECTED:

All
All
All
All
All

COMPLIANCE TIME:

Prior to first flight each day

APPROVAL:

The engineering aspects of this service document have been shown to comply with the applicable Federal Aviation Regulations and are FAA approved.

PURPOSE:

Part I:

Part I of this service letter provides guidelines to ensure that all of the affected aircraft are operated with properly serviced nose and main gear tire pressures.

Part II:

For the models identified in Part II, revised placards are available, and the applicable Piper Pilot's Operating Handbook revisions will be available soon.

ATA/JASC: 3244

(OVER)

INSTRUCTIONS:**Part I. Proper Tire Maintenance**

NOTE: Information provided in this service letter will be incorporated into a future revision of the applicable Pilot's Operating Handbooks (POH), placards for tire service instructions, and Piper Airplane Maintenance Manuals (AMM).

Until the revisions are provided, the tire pressure information in this service letter supersedes that which is currently provided in the applicable POHs, placards and AMMs. Until the applicable POH revision is provided, place a copy of this service letter in Section 8, near the Tire Inflation paragraph, in the applicable POH.

There are several safety benefits to proper tire maintenance, including its effect on ground steering. Maintaining proper aviation tire inflation pressure reduces the size of a tire's rolling contact patch, which reduces the magnitude of the force associated with ground steering.

According to tire manufacturers, aviation tire pressure should be checked daily, prior to the first flight of the day, when the tires are "cold." (A cold tire is one that has the same temperature as the ambient environment, and has not been operated for at least three hours.) If an aircraft is flown less than one time per day, tire pressure should be checked prior to each flight (as part of the preflight inspection).

Tire manufacturers state that aviation tires can acceptably lose no more than five (5) percent of pressure in a 24-hour period. (The nominal loaded tire pressure should be maintained daily, but a five percent loss in pressure is acceptable during a given day.) Tire manufacturers consider a tire pressure below 95 percent of the nominal loaded pressure during two (2) consecutive 24-hour periods to be a cause for inspection of the tire and wheel assembly.

A visual inspection of aviation tires is insufficient to determine whether or not they have acceptable tire pressure. When looking at a tire, it may appear to be properly inflated when it could, in fact, be significantly underinflated. The only way to verify proper tire pressure is to measure the tire pressure with a quality, calibrated tire gauge.

Table 1 provides the nominal loaded and unloaded tire pressure ranges for the affected aircraft. The applicable tire pressure provided in Table 1 shall be maintained daily – inflate tires if they are low – on active, flying aircraft.

NOTE: Use nitrogen, if available, to inflate tires. It will not sustain combustion and will reduce degradation, due to oxidation, of the liner material, casing plies, and wheel.

TABLE 1
LOADED AND UNLOADED TIRE INFLATION PRESSURE

MODEL	TIRE PRESSURE (psi of cold tire)			
	NOSE		MAIN	
	Unloaded (on jacks)	Loaded (weight on wheels)	Unloaded (on jacks)	Loaded (weight on wheels)
PA-46-310P Malibu	45	45	40	40
PA-46-350P Mirage/M350	50 max	50-52	55 max	55-57
PA-46R-350T Matrix	50 max	50-52	55 max	55-57
PA-46-500TP Meridian/M500:				
6 Ply Tire – P/N 551-606 (Nose)	50 max	50-52	N/A	
8 Ply Tires	P/N 551-612 (Nose)	70 max	N/A	
	P/N 551-609 (Main)	N/A	55 max	55-57
10 Ply Tire – P/N 551-619 (Nose)	88 max	88-92	N/A	
PA-46-600TP M600	88 max	88-92	95 max	95-99

NOTE: Pressures specified in Table 1 apply to wheel assemblies measured when tires are at ambient temperature, and either unloaded (aircraft on jacks, or tires that are not installed) or loaded (weight on wheels).

NOTE: As stated in tire manufacturers' tire care and maintenance manuals, inflation pressure should be adjusted for ambient temperature effects. When tires are going to be subjected to ambient temperature differences between two locations in excess of 50°F (27°C), inflation pressures should be adjusted to the colder temperature prior to takeoff. An ambient temperature change of 5°F (3°C) produces a pressure change of approximately one (1) percent.

For example, tire pressure on an aircraft that is departing Phoenix at 95°F (35° C) for Chicago at 45°F (7°C) should be adjusted for the destination's colder conditions. The difference is 50°F (28°C), so the tire pressure should be increased by 10 percent before departing Phoenix. This practice also applies when checking pressure in a heated hangar during the winter.

Part II. Replacement Placards and POH Revision

NOTE: As replacement placards for the affected aircraft models become available, as well as the applicable POH revisions, then Table 2, below, will be updated and a revision to this service letter will be published.

1. Order the applicable tire and strut service instruction placards listed in Table 2, for the nose landing gear and main landing gear.
2. Installation of the replacement placards is to be accomplished in conjunction with the incorporation of the applicable POH revision shown in Table 2.

NOTE: Upon completing Part II, remove any copy of this service letter from the POH (in Section 8, near the Tire Inflation paragraph).

3. Make a logbook entry documenting compliance with Part II of this service letter.

TABLE 2
REPLACEMENT TIRE AND STRUT SERVICE PLACARDS

PIPER MODEL	LANDING GEAR PLACARD		POH REVISION
	NOSE P/N	MAIN P/N ¹	
PA-46-600TP M600	100700-164	100700-163	VB-2793, Rev. 7
			VB-2366, Rev. 6

NOTE 1: Two main landing gear placards are required per aircraft.

MATERIAL REQUIRED: For Part II, applicable placards listed in Table 2, per aircraft

AVAILABILITY OF PARTS: Your Piper Approved Service Center

EFFECTIVITY DATE: This service letter is effective upon receipt.

SUMMARY: Please contact your Piper Approved Service Center to make arrangements for compliance with this service letter in accordance with the compliance time indicated.

NOTE: Please notify the factory of any address/ownership corrections. Changes should include aircraft model, serial number, and current owner's name and address.

Corrections and/or changes should be directed to:

PIPER AIRCRAFT, INC.
Attn: Customer Service
2926 Piper Drive
Vero Beach, FL 32960
or:
CustomerService@piper.com
Please include in subject line: "Aircraft ownership update"