



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

SERVICE NO. 1285 LETTER

Date: July 24, 2020

(S)

MAINTENANCE ALERT

SUBJECT:

PROPER TIRE PRESSURE MAINTENANCE

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:

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

INSTRUCTIONS:

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 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).

ATA/JASC: 3244

(OVER)

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 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, on active, flying aircraft.

**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	50-53	52-55	55-58	57-60	
PA-46R-350T Matrix	50-53	52-55	55-58	57-60	
PA-46-500TP Meridian/M500:					
6 Ply Tire – P/N 551-606 (Nose)	50-53	52-55	N/A		
8 Ply Tires	P/N 551-612 (Nose)	70-74	73-76	N/A	
	P/N 551-609 (Main)	N/A		55-58	57-60
10 Ply Tire – P/N 551-619 (Nose)	88-92	92-97	N/A		
PA-46-600TP M600	88-92	92-97	95-99	99-104	

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).

MATERIAL REQUIRED: N/A

AVAILABILITY OF PARTS: N/A

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.
Att'n: Customer Service
2926 Piper Drive
Vero Beach, FL 32960
or:
CustomerService@piper.com
Please include in subject line: "Aircraft ownership update"



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

SERVICE NO. 1285A LETTER

Date: January 12, 2021

(S)

MAINTENANCE ALERT

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

SUBJECT:

PROPER TIRE PRESSURE MAINTENANCE

REASON FOR REVISION:

SL 1285A announces the availability of 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.

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)			
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10 Ply Tire – P/N 551-619 (Nose)	88-92	92-97	N/A	
PA-46-600TP M600	88-92	92-97	95-99	99-104

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).

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.

- Order the applicable tire and strut service instruction placards listed in Table 2, for the nose landing gear and main landing gear.
- 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).

- 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	100700-161	100700-160	VB-2793, Rev. 5 VB-2366, Rev. 5

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:

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Please include in subject line: "Aircraft ownership update"