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# **NAVAJO** *chieftain*

PILOT'S OPERATING MANUAL



BY



**This manual is incomplete without an APPROPRIATE FAA APPROVED AIRPLANE FLIGHT MANUAL and an APPROPRIATE WEIGHT AND BALANCE REPORT.**

## WARNING

EXTREME CARE MUST BE EXERCISED TO LIMIT THE USE OF THIS MANUAL TO APPLICABLE AIRCRAFT. THIS MANUAL REVISED AS INDICATED BELOW OR SUBSEQUENTLY REVISED IS VALID FOR USE WITH THE AIRPLANE IDENTIFIED BELOW WHEN APPROVED BY PIPER AIRCRAFT CORPORATION. SUBSEQUENT REVISIONS SUPPLIED BY PIPER AIRCRAFT CORPORATION MUST BE PROPERLY INSERTED.

MODEL PA-31-350

Assurance that the airplane is in an airworthy condition is the responsibility of the owner. The pilot in command is responsible for determining that the airplane is safe for flight. The pilot is also responsible for remaining within the operating limitations outlined by the Airplane Flight Manual, instrument markings, and placards.

This Pilot's Operating Manual is not designed as a substitute for adequate and competent flight instruction, knowledge of the current airworthiness directives, applicable federal air regulations, or advisory circulars. It is not intended to be a guide for basic flight instruction or a training manual for transition from single to multi-engine flying.

If an inconsistency of information exists between the Pilot's Operating Manual and the Airplane Flight Manual approved by the FAA, the Airplane Flight Manual shall be the authority.

A complete or partial replacement of this manual, Part No. 761 486, may be obtained only from Piper Customer Services.

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Piper Aircraft Corporation  
761 486

Issued: October 1972

© 1972-1977, 1979-1982, 1984, 1997, 2002, 2005, 2012

**REVISED: October 22, 2012**

## APPLICABILITY

The aircraft serial number eligibility bracket for application of this manual is 31-5000 through 31-7652177. The specific application of this manual is limited to the Piper PA-31-350 model airplane designated by serial number and registration number on the back of the title page of this manual.

## WARNING

INSPECTION, MAINTENANCE AND PARTS REQUIREMENTS FOR ALL NON-PIPER APPROVED STC INSTALLATIONS ARE NOT INCLUDED IN THIS HANDBOOK. WHEN A NON-PIPER APPROVED STC INSTALLATION IS INCORPORATED ON THE AIRPLANE, THOSE PORTIONS OF THE AIRPLANE AFFECTED BY THE INSTALLATION MUST BE INSPECTED IN ACCORDANCE WITH THE INSPECTION PROGRAM PUBLISHED BY THE OWNER OF THE STC. SINCE NON-PIPER APPROVED STC INSTALLATIONS MAY CHANGE SYSTEMS INTERFACE, OPERATING CHARACTERISTICS AND COMPONENT LOADS OR STRESSES ON ADJACENT STRUCTURES, PIPER PROVIDED INSPECTION CRITERIA MAY NOT BE VALID FOR AIRPLANES WITH NON-PIPER APPROVED STC INSTALLATIONS.

## REVISIONS

The information compiled in the Pilot's Operating Manual will be kept current by revisions distributed to the airplane owners.

Revision material will consist of information necessary to update the text of the present manual and/or to add information to cover added airplane equipment.

### I. Revisions

Revisions will be distributed whenever necessary as complete page replacements or additions and shall be inserted into the manual in accordance with the instructions given below:

1. Revision pages will replace only pages with the same page number.
2. Insert all additional pages in proper numerical order within each section.
3. Page numbers followed by a small letter shall be inserted in direct sequence with the same common numbered page.

### II. Identification of Revised Material

Revised text and illustrations shall be indicated by a black vertical line along the left hand margin of the page, opposite revised, added or deleted material. A line opposite the page number or section title and printing date, will indicate that the text or illustration was unchanged but material was relocated to a different page or that an entire page was added.

Black lines will indicate only current revisions with changes and additions to or deletions of existing text and illustrations. Changes in capitalization, spelling, punctuation or the physical location of material on a page will not be identified by symbols.

### III. Original Pages Issued

The original pages issued for this manual prior to revision are given below:

1-1 through 1-4, 2-1 through 2-40, 3-1 through 3-90, 4-1 through 4-12, 5-1 through 5-8, 6-1 through 6-8, 7-1 through 7-4, 8-1 through 8-12, 9-1 through 9-22.

**REVISED: July 25, 2005**

## REVISIONS ISSUED

Current Permanent and Temporary Revisions to the PA-31-350 Pilot's Operating Manual issued October, 1972 are as follows:

761 486 (PR730228)	Permanent Revision to P/O/M & F/M	Dated February 28, 1973
761 486 (PR730518)	Permanent Revision to F/M	Dated May 18, 1973
761 486 (PR731114)	Permanent Revision to P/O/M, F/M & W/B	Dated November 14, 1973
761 486 (PR740408)	Permanent Revision to F/M	Dated April 8, 1974
761 486 (PR740603)	Permanent Revision to P/O/M & F/M	Dated June 3, 1974
761 486 (PR741011)	Permanent Revision to P/O/M, A F/M & W/B	Dated October 11, 1974
761 486 (PR741213)	Permanent Revision to P/O/M, A F/M & W/B	Dated December 13, 1974
761 486 (PR750321)	Permanent Revision to P/O/M	Dated March 21, 1975
761 486 (PR750829)	Permanent Revision to P/O/M, A F/M & W/B	Dated August 29, 1975
761 486 (PR760213)	Permanent Revision to P/O/M and A F/M	Dated February 13, 1976
761 486 (PR760430)	Permanent Revision to P/O/M and A F/M	Dated April 30, 1976
761 486 (PR770225)	Permanent Revision to P/O/M and A F/M	Dated February 25, 1977
761 486 (PR770609)	Permanent Revision to P/O/M and A F/M	Dated June 9, 1977
761 486 (PR790410)	Permanent Revision to P/O/M and A F/M	Dated April 10, 1979
761 486 (PR790723)	Permanent Revision to P/O/M, A F/M & W/B	Dated July 23, 1979
761 486 (PR800404)	Permanent Revision to P/O/M and A F/M	Dated April 4, 1980
761 486 (PR800829)	Permanent Revision to P/O/M and A F/M	Dated August 29, 1980
761 486 (PR810130)	Permanent Revision to P/O/M and A F/M	Dated January 30, 1981
761 486 (PR820317)	Permanent Revision to P/O/M and A F/M	Dated March 17, 1982

**REVISIONS ISSUED (cont.)**

761 486 (PR840709)	Permanent Revision to P/O/M and A F/M	Dated July 9, 1984
761 486 (PR970311)	Permanent Revision to P/O/M and A F/M	Dated March 11, 1997
761 486 (PR020506)	Permanent Revision to P/O/M and A F/M	Dated May 6, 2002
761 486 (PR050725)	Permanent Revision to P/O/M and A F/M Remove temporary page (Blue) 2-12a, from P/O/M and destroy.	Dated July 25, 2005
761 486 (PR051215)	Permanent Revision to AF/M	Dated December 15, 2005
761-486 (PR121022)	Permanent Revision to P/O/M.	Dated October 22, 2012

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**GENERAL SPECIFICATIONS**

**PERFORMANCE**

Published figures are for the Standard PA-31-350 airplane flown at gross weight under standard conditions at sea level unless otherwise stated. Performance for a specific airplane may vary from published figures depending upon the equipment installed, the condition of engines, airplane and equipment, atmospheric conditions and piloting technique.

Takeoff Ground Run (normal) (ft) .....	1760
Takeoff Distance over 50-ft obstacle (normal) (ft).....	2720
Accelerate - Stop Distance (7000 lb) (ft).....	3700
Minimum Controllable Single-Engine Speed (mph) .....	90
Best Rate of Climb Speed (mph) .....	120
Best Rate of Climb (ft per min) .....	1390
Best Angle of Climb Speed (mph) .....	100
Best Single-Engine Rate of Climb Speed (mph).....	125
Best Single-Engine Rate of Climb (ft per min).....	230
Best Single-Engine Angle of Climb Speed (mph).....	122
Service Ceiling (ft) .....	27,200
Absolute Ceiling (ft).....	28,300
Single-Engine Service Ceiling (ft) .....	13,700
Single-Engine Absolute Ceiling (ft).....	15,500
Top Speed at 15,000 ft (mph) .....	270
Cruising Speed (260 BHP, at 20,000 ft) (best power) (mph).....	250
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Cruising Range (260 BHP, 2400 RPM at 20,000 ft) (best economy) (miles) .....	1185*
Cruising Range (230 BHP, 2300 RPM at 24,000 ft) (best economy) (miles) .....	1270*
Cruising Range (195 BHP, 2200 RPM at 16,000 ft) (best economy) (miles) .....	1225*

\*182 gal. usable fuel

\*\*45 min. reserve