

OWNERS' HANDBOOK

FOR

Operation and Maintenance

OF

THE PIPER TRI-PACER

PA-22-160

PA-22-150



PIPER AIRCRAFT CORPORATION

LOCK HAVEN, PA., U. S. A.

NOTICE

THIS HANDBOOK IS NOT DESIGNED, NOR CAN ANY HANDBOOK SERVE, AS A SUBSTITUTE FOR ADEQUATE AND COMPETENT FLIGHT INSTRUCTION, OR KNOWLEDGE OF THE CURRENT AIRWORTHINESS DIRECTIVES, THE APPLICABLE FEDERAL AIR REGULATIONS, AND ADVISORY CIRCULARS. IT IS NOT INTENDED TO BE A GUIDE OF BASIC FLIGHT INSTRUCTION, NOR A TRAINING MANUAL.

THE HANDBOOK IS DESIGNED:

1. TO HELP YOU OPERATE YOUR TRI-PACER WITH SAFETY AND CONFIDENCE.
2. TO MORE FULLY ACQUAINT YOU WITH THE BASIC PERFORMANCE AND HANDLING CHARACTERISTICS OF THE AIRPLANE.
3. TO MORE FULLY EXPLAIN YOUR TRI-PACER'S OPERATION THAN IS PERMISSIBLE TO SET FORTH IN THE AIRPLANE FLIGHT MANUAL.

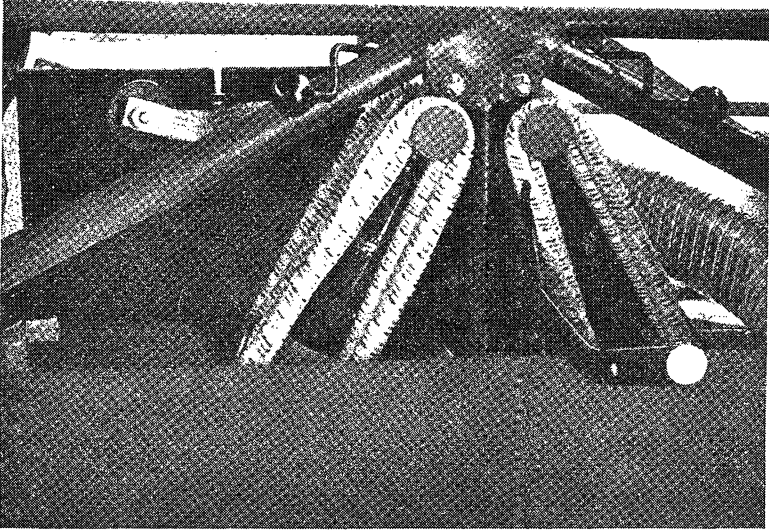
IF THERE IS ANY INCONSISTENCY BETWEEN THIS HANDBOOK AND THE AIRPLANE FLIGHT MANUAL APPROVED BY THE F.A.A., THE AIRPLANE FLIGHT MANUAL SHALL GOVERN.

Revised text and illustrations shall be indicated by a black vertical line in the margin opposite the change. A line opposite the page number will indicate that material was relocated.

Additional copies of this manual, Piper No. 753 526, may be obtained from your Piper Dealer.

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rudder action to give coordinated turns, still the controls can be crossed if desired to obtain slips or skids.

VI. Fuel System:

Two eighteen gallon fuel tanks located in the wings provide fuel storage in the Tri-Pacer. The tanks are drained individually according to the position of the fuel selector valve on the left forward cabin wall.

The rear fuel line from the right tank has a low point under the right front seat at which point is located a quick drain gascolator. The drain in this gascolator, which should be checked frequently for water or sediment, is reached through an opening in the right landing gear belly fairing.

An electric fuel gauge for each tank is located on the lower right side of the instrument panel.

The main fuel strainer, through which all fuel going to the carburetor flows, is located on the lower left engine side of the firewall. It is provided with a quick drain and should be drained regularly.

Fuel screens are provided at tank outlets, in the strainer and at the carburetor.

The engine primer pump on the right side of the instrument panel takes fuel from the main gascolator and pumps it directly to all four cylinders of the engine. To prevent malfunctioning of the engine, the primer must be locked in at all times except when in use.

An idle cut-off is incorporated in the mixture control so that full extension of the control stops the flow of fuel at the carburetor. The cut-off should always be used to stop the engine.

An eight gallon reserve fuel tank which fits under the rear seat is available as optional equipment. The fuel from this tank is pumped by an electric pump under the co-pilot's seat to the fuel strainer for the right main tank. From the strainer the fuel passes up the main supply line to the right tank.

To use the reserve fuel supply, first use the right tank until it is at least half empty, preferably completely empty; this must be done while sufficient fuel remains in the left tank to continue to operate the engine until the right main supply is replenished. When the right tank is half full or less, switch the selector valve to left tank and pull the reserve fuel knob. The reserve fuel will then be pumped into the right tank, in a period of about 25 minutes. Then turn the reserve pump off.

Fuel should not be pumped from the reserve tank to the right main tank while the selector valve is at the right tank position.

VII. Electrical System:

The master switch for the electrical system is located on the master switch fuse box under the left side of the pilot's seat. In the "up" position of this switch the main fuse is engaged; the "down" position is for the spare fuse, and the central position is "off".

The starter button is located on the bottom of the master switch fuse box. The starter cannot be operated unless the master switch is on.

Circuit breakers for the radio, lights and generator are in a bracket under the left side of the instrument panel. These units auto-

Carburetor heat should be checked during the warm up to make sure the heat control operation is satisfactory and to clear out the engine if any ice has formed. It should also be checked in flight occasionally when outside air temperatures are between 20° and 70° to see if icing is occurring in the carburetor. In most cases when the engine loses speed without apparent cause, the use of carburetor heat will correct this condition.

IV. Take-off, Climbs, Stalls and Taxiing:

Before take-off, it is very important that the fuel selector be checked to make sure it is on the proper tank.

CAUTION

When fuel quantity in right tank is 1/3 or less use only in level flight.

The carburetor heat should be off for take-off, and the mixture rich, except a minimum amount of leaning is permitted to obtain smooth engine operation when taking off at high elevation.

Take-off in the Tri-Pacer is accomplished as follows:

(1) Set stabilizer trim to approximately neutral with exact setting determined by the loading of the plane.

(2) Apply full throttle, allowing plane to maintain its level attitude until take-off speed (50-60 MPH) is approached, then ease back control wheel to obtain climbing attitude.

(3) For take-offs in heavy grass, snow, or in other speed retarding surfaces, drag on the landing gear can be reduced by raising the nose wheel off of the surface during the take-off run by applying back pressure on the control wheel shortly after the throttle is opened.

(4) The application of full flaps as take-off speed is approached, will reduce the take-off run about 20 percent. Flaps can be pulled down before the take-off run is started but will reduce the acceleration of the plane somewhat if kept down throughout the take-off.

(5) Crosswind take-offs in the Tri-Pacer should be made similarly to those in normal winds, with directional control maintained during and after the take-off roll by use of the rudder pedals. It may be desirable to hold the nose wheel on the ground somewhat longer than usual in strong crosswinds.