



SERVICE No. 240 BULLETIN

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

December 13, 1966

SUBJECT:

Inspection of Aileron Balance Weight Assembly, Rudder Horn Assembly and Stabilator Balance Weight Assembly for Corrosion.

MODELS AFFECTED:

GROUP I

PA-28-140 Cherokee, Serial Nos. 28-20000 to 28-20622 incl.

PA-28-150-160-180 Cherokee, Serial Nos. 28-2 to 28-35 incl., 28-37 to 28-497 incl., 28-499 to 28-543 incl., 28-545 to 28-1307 incl., 28-1309 to 28-2136 incl.

PA-28-235 Cherokee, Serial Nos. 28-10000 to 28-10590 incl.

GROUP II

PA-28-140 Cherokee, Serial Nos. 28-20623 to 28-21383 incl.

PA-28-150-160-180 Cherokee, Serial Nos. 28-2137 to 28-3021 incl.

PA-28-235 Cherokee, Serial Nos. 28-10591 to 28-10719 incl.

PA-32-260 Cherokee, Serial Nos. 32-1 to 32-307 incl.

GROUP III

PA-28-140 Cherokee, Serial Nos. 28-21384 to 28-21765 incl., 28-21767 to 28-21786 incl., 28-21788 to 28-21807 incl., 28-21809 to 28-21835 incl., 28-21837 to 28-21856 incl., 28-21858 to 28-21877 incl., 28-21879 to 28-22003 incl., 28-22005 to 28-22010 incl., 28-22012 to 28-22026 incl., 28-22028 to 28-22032 incl., 28-22035 to 28-22040 incl., 28-22043 to 28-22050 incl., 28-22052 to 28-22056 incl., 28-22058, 28-22059, 28-22061, 28-22062, 28-22063, 28-22064, 28-22066, 28-22071, 28-22074, 28-22080, 28-22082, 28-22088

PA-28-150-160-180 Cherokee, Serial Nos. 28-3022 to 28-3499 incl., 28-3501, 28-3502, 28-3503, 28-3505, 28-3506, 28-3507, 28-3508, 28-3510, 28-3512 to 28-3528 incl., 28-3530 to 28-3537 incl., 28-3541, 28-3543, 28-3545 to 28-3549 incl., 28-3552, 28-3555, 28-3556, 28-3557, 28-3562

PA-28-235 Cherokee, Serial Nos. 28-10720, 28-10721, 28-10732

(over)

GROUP III (continued)

PA-32-260 Cherokee Six, Serial Nos. 32-308 to 32-540 incl., 32-542 to 32-558 incl., 32-560 to 32-570 incl., 32-572 to 32-677 incl., 32-679 to 32-683 incl., 32-685, 32-689, 32-690, 32-692 to 32-698 incl., 32-700, 32-701, 32-702, 32-704 to 32-711 incl., 32-714, 32-716, 32-717, 32-719, 32-720, 32-721, 32-722, 32-725, 32-727, 32-730, 32-733, 32-740, 32-741, 32-742, 32-744, 32-745, 32-746, 32-749.

COMPLIANCE DATE: GROUP I - Prior to but not later than July 31, 1967
 GROUP II - Prior to but not later than July 31, 1968
 GROUP III - Prior to but not later than July 31, 1969

A few reports have been received indicating that internal corrosion has been observed in the tubes of the following assemblies:

<u>PART NO.</u>	<u>NOMENCLATURE</u>	<u>MODELS AFFECTED</u>
62369-00	Aileron Balance Weight	PA-28-140-150-160-180-235
62369-01	Aileron Balance Weight	PA-32-260
63546-00	Rudder Horn Assembly	PA-28-140-150-160-180-235, PA-32-260
63578-00	Balance Weight Assembly - Stabilator	PA-28-140-150-160-180
65310-00	Balance Weight Assembly - Stabilator	PA-28-235
68432-00	Balance Weight Assembly - Stabilator	PA-32-260

An inspection must be performed in accordance with the following inspection procedure:

INSPECTION PROCEDURE

INSPECTION OF AILERON BALANCE WEIGHT ASSEMBLY

1. With the aileron in the extreme up position, observe the condition of inside of aileron balance weight tube through the hole in the bracket fastened to the aileron rib.

INSPECTION OF RUDDER HORN ASSEMBLY

1. Remove the upper fairing of the tailcone fairing assembly.
2. Insert a mirror at the end of the tube and with a flashlight to provide adequate illumination, observe the condition of the inside diameter of rudder horn tube.

INSPECTION OF STABILATOR BALANCE WEIGHT ASSEMBLY

1. Positioned at the leading edge of the stabilator, insert a mirror at the aft end of balance weight tube and with a flashlight observe the condition of the inside diameter of the balance weight tube.

If there is no evidence of a protective coating on the interior of the tube and/or there is evidence of corrosion, the following action must be accomplished:

AILERON BALANCE WEIGHT ASSEMBLY

1. Equipment required:
 - a. Drill motor
 - b. Flexible shaft with a wire brush attachment or equivalent
2. With the aileron locked in the down position, insert the flexible shaft into the hole in end of aileron balance weight bracket using forward and backward motion to bring all loose corrosion out of the tube.
3. With the aileron in the up position, fill the tube with a zinc chromate solution or equivalent and drain with the aileron in the down position.

RUDDER HORN ASSEMBLY

1. Unfasten the rudder cables and remove the rudder from the fin assembly.
2. Clean out all corrosion on the inside of rudder horn tube with a wire brush.
3. Apply a zinc chromate solution or equivalent to the inside of the tube to prevent further corrosion.
4. Re-install the rudder assembly and re-rig in accordance with the instructions contained in the Service Manual.

STABILATOR BALANCE WEIGHT ASSEMBLY

1. Unfasten the stabilator control cables and remove stabilator balance weight tube assembly from the stabilator assembly.
2. Remove the balance weight from the tube.
3. Clean out all corrosion on the inside of the tube with a wire brush.
4. Apply a zinc chromate solution or equivalent to prevent further corrosion.
5. Re-assemble the balance weight and tube onto the stabilator assembly and re-rig in accordance with the instructions contained in the Service Manual.