

The majority of these notes came from the SWPC Forums, Email List and Lycoming Manuals or Piper Information.

Cable Tensions

RUDDER SLACK
AILERONS 35 LBS
ELEVATORS 35 LBS
STAB. TRIM 10-14 LBS
FLAP ADJUSTED SO THAT THE FLAPS START MOVING WHEN
THE FLAP HANDLE STARTS TO MOVE.

Main Landing Gear Toe-In/Toe-Out

Pacer and Tail wheel conversions - $\frac{3}{4}$ degrees per side is a good recommendation
0 degrees to $1\frac{1}{2}$ degrees is acceptable (toe-in should be same for each gear).

Engine Mounts Bolts (Through Rubber Mounts)

Torque to 40 inch pounds as stated in Piper Service Letter 349 and in Piper Service Aid Misc/TP-1001A. According to Piper power plant installation drawing #12690 the distance measured from the INSIDE edge of the washer to washer should be 1.840 inches. Personally, I stick to the 40 inch pounds. Much easier.

Carburetor Mount Studs/Bolts

They Lycoming Parts Manual calls for a 1/4" plain washer STD-8 (AN960-4), a 1/4" internal teeth lock washer STD-160 (MS35333-40), and a 1/4-20 plain nut STD-1411 (AN315-4). Never reuse an internal tooth lock washer.

Carburetor Drain Plug 1/4-18 NPT 120-144 in-lbs
Carburetor Drain Plug 1/8-27 NPT 50-60 in-lbs

Magneto - Screw Plate Nuts 10-32 (attach ignition cable outlet plate to magneto) - 15 in-lbs

Lycoming Engine

Lyc oil sump pan nuts torque - 40 in-lbs
Lyc Exhaust Port Studs - 40 in-lbs Min
Nuts to Attach Exhaust Stacks to Cylinder Head - 160-180 in-lbs

Hose Clamps (worm type) 1/4 inch Hex Head and below - 20 in-lbs
Hose Clamps (worm type) 5/16inch Hex Head and above - 45 in-lbs
Hose Clamps (cylinder head drain back) - 10 in-lbs

The Spark Plug Torque for Textron Lycoming engines (which includes the O-235) Is 35 Ft-lb or in In-lb 420.

Prop Bolt Torque (DRY THREADS) - 3/8 inch diameter bolts - 300 in-lbs = 25 ft-lbs

Compression Struts - Torque Value on Wing?

Not 100 to 140 in-lbs, I am rebuilding a 1950 pacer and started to torque mine to this value and striped out one of the threaded fitting in #1 strut. It was recommended to me that snug was tight enough as there is a locking tab on each bolt and the bolts are not in tension. I have now torque mine to the low end of the shear torque value for 5/16-24 which is 60 to 85 in-lbs. I have been unable to find any specific torque values in the blue prints or parts manuals so I am using AC43.13-1B/2A.