

Quad City Ultralight Aircraft Corp.

100 Hour & Annual Inspection Report

Aircraft: _____ Registration: _____ Date: _____

Airframe serial #: _____ Engine Type; _____ Engine Serial #: _____

T.T. Airframe: _____ T.T. Engine: _____ TSOH Engine: _____

1.1) Check journey log and snag book for crew entered defects and correct .

ENGINE:

- 2.1) Overhaul single ignition Rotax. engine at 300 hours, dual ignition engines every 500 hour.
- 2.2) Check timing, fan belt tension and adjust as necessary.
- 2.3) Gap and replace spark plugs (ensure tightness of threaded pll18 tips and receptacles in caps).
- 2.4) Check intake boot(s) for cracks (change at 100 hrs.) and carburetor for tightness.
- 2.5) Check Carburetor main jet needles for wear at clips (change both every 100 hrs.)
- 2.6) Change fuel filter every 100hours or when dirty.
- 2.7) Check fuel lines for leaks, wear and tightness ..
- 2.8) Check that carburetor(s) reach idle and full throttle positions.
- 2.9) Check spark plug leads for condition and tightness..
- 2.10) Clean and re-oil air filter (5) and secure with lock wire.
- 2.11) Check muffler and mount for cracks, springs and retainers for wear and lock wire.
- 2.12) Lubricate exhaust ball joint (5) with Loctite anti-Seize compound.
- 2.13) Check all wiring for chafing, security, etc.
- 2.14) Check engine mounts for integrity.
- 2.15) Check starter cord for condition (recoil starters).
- 2.16) (ADS electric starters only- not required 00 OPL starter), Check and replace or re-grease. Starter clutch bearing, reinstall starter turning casing bolt counter clockwise only.

DRIVE SYSTEM:

- 3.1) If cog belt has 200 Hrs. (GT2 belts) or 1 year in service, replace.
- 3.2) Check belt (s) for wear and tension and lock wire tensioning belt.
- 3.3) Ensure tightness of top pulley nut (150 ft. lbs.), lock wire or cotter pin.
- 3A) Check top pulley for excessive bearing play, replace bearings as necessary.
- 3.5) Check marks on lower pulley bolt for signs of turning, re-torque if necessary.
- 3.6) Check propeller for condition, cleanliness, balance and mounting bolts for lock wire.
- 3.7) Check belt (5) for alignment on top and bottom pulleys.

COCKPIT:

- 4.1) Check operation of all controls and adjust tightness of pivot points.
- 4.2) Check rudder, aileron and throttle cables for condition, lubricate with JD. Cable lube.
- 4.3) Check pushrods, stick(s) and cable safeties and lubricate pivot points .
- 4.4) Check nose wheel shaft bearing. Lubricate with grease and re-tighten ..
- 4.5) Check instruments, lines and wiring for integrity.
- 4.6) Check seat and seat belt condition and attach points .
- 4.7) Check windshield. (doors) for, cleanliness, cracks .
- 4.8) Drain and clean fuel tank.
- 4.9) Check fuel tank and lines for chafing, kinking and integrity.
- 4.10) Check fuel tank cap vent hole is unobstructed .
- 4.11) Check strut attach bracket bolts for tightness, nuts inside fuselage, heads outside .
- 4.12) Check fabric for condition and cleanliness.

WINGS:

- 5.1) Check wing and aileron leading and trailing edges for dents, straightness.
- 5.2) Check fabric (and dope) for condition and appearance.
- 5.3) Check poly-tips and attaching rivets for condition (Dacron wings).
- 5.4) Check wing spar attaching bolts for play, safeties.
- 5.5) Check struts, jury struts for dents, straightness.
- 5.6) Check strut attach brackets for cracks, play.
- 5.7) Check aileron hinges for condition, ends pinched, lubricate withWD40
- 5.8) Check aileron pushrods. Bell-cranks for condition, safeties.
- 5.9) Check clearance sufficient between pushrods, gap covet (Stits wings)

EMPENNAGE CROUP:

- 6.1) Check stabilizers, fin and dorsal attach points for play, safeties.
- 6.2) Check strut attach brackets for cracks, play and safeties.
- 6.3) Check stabilizers, elevators, rudder. fin, and dorsal frames for dents. integrity.
- 6.4) Check stabilizer fin weldments for integrity
- 6.5) Check elevator, rudder hinges for integrity, play. safeties
- 6.6) Check rudder cables for safeties, wear, cleanliness, lubricate (change cables every 500 hrs)
- 6.7) Check elevator pushrods. Bell-cranks, horns for play, safeties
- 6.8) Check fabric, dope for condition and cleanliness.
- 6.9) Check tail-wheel for integrity.

LANDING GEAR:

- 7.1) Check main gear legs for straightness, cracks.
- 7.2) Check main gear weldments for integrity.
- 7.3) Check main gear axle weldments for straightness, integrity.
- 7.4) Check nose gear shaft. fork for straightness, integrity.
- 7.5) Check all wheel bearings, wheels, tires for condition and integrity.
- 7.6) Check tire pressures, free rotation of wheels, clearance from wheel-pants.
- 7.7) Check brakes, cables for wear, proper adjustment.
- 7.8) Check wheel-pants, attach brackets for cracks, and cleanliness.

GENERAL:

- 8.1) Service bulletins, advisories complied with.
- 8.2) Registration, stainless steel data plate on board.
- 8.3) Journey log entries current, this inspection signed out.

IMPORTANT NOTES: Always use AN type aircraft hardware only on your Challenger. Do not reuse nyloc nuts or cotter pins. Ensure that at least one thread protrudes through nyloc nuts for secure attachment. Do not over tighten fasteners. Use only castle nuts and cotter pins on rotating parts. Where locking type fasteners can not be used, use Loctite on the threads or fasteners. Use only stainless steel rivets for all structural applications.

REMARKS:

I hereby certify that all requirements in this engineering and inspection report have been met, and I have determined the aircraft to be airworthy.

DATE: _____

SIGNATURE _____

LICENSE # _____