

Super Decathlon

Speeds (MPH @ max gross weight)

| | |
|--------------------------|---------------|
| V _{st} | 53 |
| V _r | 56 |
| V _x | 58 |
| V _y | 80 |
| V _a | 132 |
| V _g | 58 |
| V _{no} | 160 |
| V _{ne} | 200 |
| Max Crosswind Comp | 20 (17 Knots) |

Specifications

| | |
|----------------------------|-----------|
| Standard empty weight..... | 1305 lbs |
| Gross weight | 1800 lbs |
| G-rating | |
| Normal | +5 to -3 |
| Aerobic..... | +6 to -5 |
| Fuel | |
| Total..... | 40 gal |
| Useable..... | 37 gal |
| Pressure..... | 14-45 psi |
| Inverted flight time..... | 2 minutes |

Fuel starvation may occur after a series of inverted flights since the header tank may have insufficient time to refill

| | |
|---------------|---------------------------------|
| Oil | 6-8 qts |
| Tire pressure | |
| Main(s)..... | 24 psi (6.00x6, 4-ply or 6-ply) |
| Tail | 40 psi (2.8x2.5) |

**Avoid continuous operation between 2000-2250 RPMs
2600-2700 RPMs**

Tail slides or tumbling maneuvers are not approved in this aircraft

Cabin

| | |
|-----------------------------|---------------------------|
| Dispatch status..... | Signed/In-progress |
| Required docs (ARROW) | on board |
| Ignition switches | off |
| Avionics..... | off |
| Circuit breakers | check in |
| Master switch | on |
| Hobbs time | record from clock |
| Hobbs time | select for Hobbs hours |
| Reset switch..... | push for Hobbs tenths |
| Tach time | record |
| Fuel gauges | verify operational |
| Exterior lights | verify operational |
| Master switch | off |
| Cabin interior..... | clean/free of loose items |

Right Wing

| | |
|------------------------|-------------------|
| Inspection holes | covered |
| Ailerons..... | movement/security |

| | |
|-----------------------------|----------------------------|
| Spades | securely attached |
| Wingtip/nav lights | undamaged |
| Leading edge condition..... | undamaged |
| Lift struts..... | undamaged |
| Tiedown..... | remove |
| Right main gear | tire inflation/brake lines |
| Fuel quantity | check visually |
| Fuel cap | secured |

Nose

| | |
|----------------------------|---------------------------------|
| Engine cowling | secure/undamaged |
| Oil level | 6-8 qts, secured |
| Gas collator | drained/free of debris or water |
| Propeller/spinner | undamaged |
| Engine cooling inlets..... | unobstructed |
| Alternator belt | condition |
| Air filter inlet..... | unobstructed |
| Windshield..... | clean/undamaged |

Left Wing

| | |
|-----------------------------|----------------------------|
| Fuel quantity | check |
| Fuel cap | secured |
| Left main gear..... | tire inflation/brake lines |
| Tiedown..... | remove |
| Pitot tube | unobstructed |
| Stall warning switch | moves freely |
| Lift struts..... | undamaged |
| Leading edge condition..... | undamaged |
| Wingtip/nav lights | undamaged |
| Ailerons | movement/security |
| Spades | securely attached |
| Inspection holes..... | covered |

Empennage

| | |
|--------------------------------|---------------------------|
| General surface condition..... | undamaged |
| Static air vent..... | unobstructed |
| Fuel belly drain | sump |
| Elevator | movement/security/linkage |
| Trim tab | security/linkage |
| Rudder | movement/security/linkage |
| Brace wires..... | security/condition |
| Tail tie down | remove |
| Tail wheel | inflation/tread |

Before Startup

| | |
|-----------------------------|------------------|
| Passenger briefing..... | complete |
| Seats/belts/harnesses | adjusted/secure |
| Cabin door..... | closed |
| Windows..... | as desired |
| Flight controls | free and correct |
| Avionics..... | off |

Engine Start

| | |
|---------------------------|-----------------------------|
| Brakes | applied |
| Fuel shut-off valve | on |
| Mixture | rich |
| Propeller | full forward |
| Throttle | open ¼ inch |
| Master switch | on |
| Beacon | on |
| Fuel pump | on until fuel flow observed |
| Ignition switches | on |

| | |
|-----------------------|-----------------------------------|
| Prop area | clear left/center/right |
| Ignition button | push to start |
| Throttle | 1000 rpm |
| Oil pressure | normal within 20 secs |
| Ammeter | ensure alternator charging |
| Fuel timer..... | start |
| Mixture..... | lean for ground ops |
| Avionics | on |
| Transponder | standby |
| Radios | obtain weather and taxi clearance |

Taxi

| | |
|----------------|---------------------|
| Brakes | check |
| Controls | positioned for wind |

Ground check/Engine run-up

| | |
|-------------------------|----------------------------------|
| Aircraft | turn into the wind |
| Controls | full aft for remainder of run-up |
| Brakes | apply |
| Door/window | closed/latched |
| Elevator trim..... | set to takeoff position |
| Mixture | lean for density altitude |
| Propeller | full forward |
| Throttle | 1800 rpm |
| Oil pressure..... | normal |
| Oil temperature | normal |
| Alternator | charging |
| Magnetos | 175 rpm drop/run smooth |
| Alternate air..... | check operation |
| Idle check..... | verify engine operation |
| Throttle | 1000 rpm |
| Flight instruments..... | set |
| Radios | notify tower/take-off clearance |

Before Takeoff

| | |
|----------------------------|--------------------------------|
| Landing light | on |
| Anti-collision lights..... | on |
| Position lights..... | on after dark |
| Transponder | alt |
| Runway..... | clear on final/ahead/departure |
| Fuel pump..... | on |

Normal Takeoff

| | |
|--------------------------------------------|----------------|
| Throttle | full |
| <i>Check instruments and engine gauges</i> | |
| Attitude | raise the tail |

On the ground with the tail raised, the wheel brakes are extremely sensitive. It is recommended that directional control be maintained with the use of rudder only.

| | |
|--------------------|-----------|
| Rotate | 55-60 MPH |
| Initial climb-out | |
| Normal | 75-80 MPH |
| Cruise climb | 80-90 MPH |
| 50' obstacle..... | 58 MPH |

Climb-out (once clear of all obstacles)

| | |
|---------------------|---------|
| Engine gauges | check |
| Airspeed..... | 87 KIAS |
| Fuel pump..... | off |

Cruise

| | |
|--------------------------------|----------------------|
| Throttle | 2400-2500 rpm |
| Mixture | lean above 3000' msl |
| Heading indicator/compass..... | crosscheck |
| Landing/Taxi lights..... | off |

Descent/Landing

| | |
|-------------------------------|------------------|
| Seatbelts and harnesses | secure |
| Fuel pump | on |
| Mixture | enrich as needed |
| Throttle | 15 inHG |
| Propeller..... | full forward |
| Airspeed | |
| Normal..... | 70-75 MPH |
| Crosswind..... | 75-80 MPH |
| Short field | 60 MPH |

The use of wheel brakes is not recommended until after the tail wheel is in contact with the ground. For maximum braking, the control stick should be FULL AFT.

After Landing

| | |
|----------------------|--------------------------|
| Runway | clear/exited |
| Transponder | standby |
| Exterior lights..... | as needed |
| Fuel pump | off |
| Elevator trim | set for takeoff |
| Radios | obtain clearance to taxi |

Shutdown

| | |
|------------------------------|---------------------|
| Lights (except beacon) | off |
| Avionics..... | off |
| Mixture | full lean |
| Ignition switches | off |
| Master switch | off |
| Hobbs & tach time | record |
| Aircraft..... | tied down/in hangar |
| Main gear | chocked |
| Leading edges/surfaces..... | wipe down |

Controls may be locked by securing the seat belt around the front control stick in a full aft position.

WARNING: The information needed in any checklist varies between individual aircraft and while we believe the information in this checklist to be accurate, no representations are made as to the degree of accuracy of this information. This information constitutes only partial information and is not to be used as a substitute for the information contained in the approved pilot's operating handbook. Use of this checklist indicates that the user assumes all risk of use and consents to bear all liability associated with the use of this product.