

CESSNA AIRCRAFT COMPANY
MODEL 340
 SERVICE MANUAL

LANDING GEAR

WARNING: Anytime a landing gear retraction or extension system component has been removed, replaced or the tension on the downlocks adjusted, the entire landing gear system must be re-rigged.

The landing gear is a fully retractable tricycle landing gear consisting of a main gear located aft of each engine nacelle, and a nose gear located in the nose section of the fuselage. Each landing gear is connected mechanically to a single gearbox driven by an electric motor. In the event of landing gear electrical system failure, the landing gear can be extended by operating the manual extension hand crank located at the right aide of the pilot's seat. Limit switches control the UP and DOWN limits and prevent overtravel by opening the electrical circuits to the motor when the correct amount of travel has been attained. There is a position indicator switch located on each gear to indicate when the landing gear is down and locked. A safety switch prevents accidental retraction on the ground by opening the landing gear electrical circuit while the weight of the airplane is on the landing gear.

For press fit bearing replacement, refer to Chapter 5.

Troubleshooting The Landing Gear System.

TROUBLE	PROBABLE CAUSE	CORRECTION
LANDING GEAR FAILS TO RETRACT - GEAR MOTOR OPERATES	Manual extension crank improperly stowed.	Stow crank properly.
	Failed landing gear actuator.	Refer to Landing Gear and Flap System Components Overhaul/Parts Manual.
	Failed reduction unit.	Refer to Landing Gear and Flap System Components Overhaul/Parts Manual.
	Pin sheared on gear motor shaft.	Replace pin.
	Broken bolts or retracting linkage, or disconnected retracting linkage.	Replace broken parts. Connect linkage if disconnected.
LANDING GEAR FAILS TO RETRACT - GEAR MOTOR DOES NOT OPERATE	Circuit breaker out.	Reset circuit breaker.
	Failed circuit breaker.	Replace circuit breaker.
	Insufficient electrical power.	Recharge batteries. Check voltage regulators.
	Failed UP limit switch.	Replace switch. Adjust in accordance with rigging procedures.
	Failed landing gear safety switch.	Replace switch.
	Incorrectly adjusted landing gear safety switch.	Adjust safety switch.
	Failed landing gear relay.	Replace relay.
	Failed landing gear switch.	Replace switch.
	Failed landing gear motor.	Replace motor.
	Failed UP electrical circuit.	Repair circuit.
LANDING GEAR FAILS TO RETRACT COMPLETELY	Landing gear incorrectly rigged for retracted position.	Rig in accordance with rigging procedures.
	Circuit breaker out, due to overload caused by incorrect landing gear rigging.	Reset circuit breaker and rig in accordance with rigging procedures.
	Circuit breaker out, due to overload caused by failed retracting linkage.	Reset circuit breaker, replace failed linkage, and rig in accordance with rigging procedures.