



FIELD TROUBLESHOOTING GAS CONCRETE CHAIN SAWS

FIVE PROBABLE CAUSES IF SAW IS REPORTED “NOT ABLE TO START” or “WON’T RUN WELL”

Diagnose in the order below:

1. AIR FILTER

IDENTIFICATION	A gradual decrease in power or loss of full throttle RPM.
CAUSE	The air filter is dirty and/or clogged.
FIX	Remove and clean/replace air filter.
NOTES	<ol style="list-style-type: none"> 1. Refer to Operator’s Manual for cleaning procedures. 2. A dirty air filter will contribute significantly to engine flooding, spark plug build-up and/or low compression failures.

2. STARTER

IDENTIFICATION	The starter rope pulls freely without noticeable resistance.
CAUSE	Concrete slurry will get inside the starter housing assembly during cutting, causing the starter pawls to stick and not engage when the rope is pulled.
FIX	Remove starter assembly and clean or replace starter and lube with lightweight penetrating oil (WD40/TriFlow). For starter assembly repair or installation, refer to Operator’s Manual.
NOTES	<ol style="list-style-type: none"> 1. Cutting with saw in horizontal position with flywheel down accelerates slurry collection. Immediately wash starter assembly after use in this mode. 2. Clean or replace the appropriate starter cover assembly components when you encounter a starter with a frayed starter cord, broken rewind spring, or other mechanical damage.

3. FLOODED ENGINE

IDENTIFICATION	Smell of fuel and/or a wet, fuel soaked spark plug after removal.
CAUSE	Commonly caused by leaving choke on after first ignition spark. May also be caused by excess rope pulls.
FIX	Remove spark plug and pull rope to discharge excess fuel from cylinder. Air dry spark plug or replace with correct spark plug.

4. IGNITION

IDENTIFICATION	No obvious fuel issues and a spark plug not showing visible spark after removal and test per method in Note 1 below.
CAUSE	The spark plug is most likely dirty or contaminated. A secondary cause is an improper spark plug gap.
FIX	Remove spark plug and clean or replace. Re-gap spark plug to .020 in (0.05 mm). Refer to Operator’s Manual for more details. If no spark is visible or if the spark is weak (yellow in color), replace ignition system coil.
NOTES	<ol style="list-style-type: none"> 1. Test method: Always ensure ignition switch is ON. Remove plug and connect the plug lead to a new spark plug. Place plug on top of cylinder to ground and crank the engine several times by pulling the recoil starter. A healthy ignition should produce a strong blue spark.

5. LOW COMPRESSION

IDENTIFICATION	The starter rope pulls upwards with very little resisting force from piston. If possible, this should be verified with a compression gauge or by an ICS Servicing Dealer (see Note 1).
CAUSE	Piston scoring/wear or stuck piston rings.
FIX	Contact ICS Servicing Dealer or Factory Service Center for evaluation.
NOTES	<ol style="list-style-type: none"> 1. If compression is checked with a compression gauge, a reading below 125 psi indicates piston damage. New saw compression is 130 to 160 psi.

