



# FIELD TROUBLESHOOTING GAS CONCRETE CHAIN SAWS

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

Diagnose in the order below:

### 1. AIR FILTER

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

### 2. STARTER

<b>IDENTIFICATION</b>	The starter rope pulls freely without noticeable resistance.
<b>CAUSE</b>	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.
<b>FIX</b>	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.
<b>NOTES</b>	<ol style="list-style-type: none"> <li>1. Cutting with saw in horizontal position with flywheel down accelerates slurry collection. Immediately wash starter assembly after use in this mode.</li> <li>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.</li> </ol>

### 3. FLOODED ENGINE

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

### 4. IGNITION

<b>IDENTIFICATION</b>	No obvious fuel issues and a spark plug not showing visible spark after removal and test per method in Note 1 below.
<b>CAUSE</b>	The spark plug is most likely dirty or contaminated. A secondary cause is an improper spark plug gap.
<b>FIX</b>	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.
<b>NOTES</b>	<ol style="list-style-type: none"> <li>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.</li> </ol>

### 5. LOW COMPRESSION

<b>IDENTIFICATION</b>	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).
<b>CAUSE</b>	Piston scoring/wear or stuck piston rings.
<b>FIX</b>	Contact ICS Servicing Dealer or Factory Service Center for evaluation.
<b>NOTES</b>	<ol style="list-style-type: none"> <li>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.</li> </ol>

