

LCT Engine Troubleshooting Guide



ENGINE

Complaint	Symptom and possible causes	Remedy
<p>Engine will not start, or is hard to start</p>	<p>Fuel system</p> <ol style="list-style-type: none"> 1. Fuel tank is empty 2. Stale fuel 3. Fuel petcock is turned off 4. Verify correct choke position 5. Clogged fuel filter or fuel line 6. Fuel cap not venting properly 7. Dirty/gummed up carburetor <p>Ignition</p> <ol style="list-style-type: none"> 1. Ignition switch in "OFF" position 2. Low oil level 3. Wet spark plug 4. Fouled spark plug 5. Spark plug wire damaged 6. Spark plug boot defective 7. Ignition coil air gap is too wide 8. Kill switch wire bare or grounded 9. Defective ignition coil <p>Compression (compression tester and or cylinder leak tester required)</p> <ol style="list-style-type: none"> 1. Poor seating of spark plug 2. Valves out of adjustment 3. Excessively worn piston rings 4. Worn cylinder bore 5. Failed head gasket 6. Worn valve guides or poor seating of valves 8. Worn camshaft lobes 	<p>Fill</p> <p>Replace</p> <p>Turn on</p> <p>Adjust</p> <p>Replace</p> <p>Replace</p> <p>Replace</p> <p>Switch to "On"</p> <p>Fill to spec</p> <p>Dry off</p> <p>Replace</p> <p>Replace</p> <p>Replace</p> <p>Reset</p> <p>Replace</p> <p>Replace</p> <p>Retighten</p> <p>Adjust</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p>
<p>Engine idles poorly</p>	<ol style="list-style-type: none"> 1. Stale fuel 2. Incorrect gasoline type 3. Idle speed misadjustment 4. Too wide spark plug gap 5. Defective spark plug 6. Ignition coil air gap too wide 7. Defective ignition coil 8. Dirty/gummed up carburetor 9. Out of adjustment tappet clearance 10. Poor seating of valves 11. Defective valve guides 12. Worn down camshaft 	<p>Replace</p> <p>Replace</p> <p>Adjust</p> <p>Adjust or replace</p> <p>Replace</p> <p>Adjust</p> <p>Replace</p> <p>Replace</p> <p>Adjust</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p>
<p>Engine stalls easily</p>	<ol style="list-style-type: none"> 1. Stale fuel 2. Incorrect gasoline type 3. Fouled spark plug 4. Clogged fuel line 5. Valves out of adjustment 6. Dirty/gummed up carburetor 	<p>Replace</p> <p>Replace</p> <p>Replace</p> <p>Replace</p> <p>Adjust</p> <p>Replace</p>

LCT Engine Troubleshooting Guide



ENGINE

Complaint	Symptom and possible causes	Remedy
<p>Noisy Engine</p>	<p>Excessive Valve Noise</p> <ol style="list-style-type: none"> 1. Too large valve clearance 2. Weakened or broken valve spring 3. Worn tappet or cam lobe 4. Worn and burnt camshaft journal <p>Noise seems to come from piston</p> <ol style="list-style-type: none"> 1. Worn piston or cylinder 2. Carbon deposits in combustion chamber 3. Worn piston pin or piston pin bore 4. Worn piston rings or ring grooves <p>Noise seems to come from crankshaft</p> <ol style="list-style-type: none"> 1. Rattling bearings due to wear 2. Worn and burnt main bearings 3. Worn and burnt pin bearing 4. Too large endplay <p>Noise seems to come from outside of engine</p> <ol style="list-style-type: none"> 1. Loose trim item 	<p>Adjust</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p> <p>Clean</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p> <p>Tighten</p>
<p>Engine runs poorly in high speed range</p>	<p>Defective engine internal / electrical parts</p> <ol style="list-style-type: none"> 1. Stale fuel 2. Incorrect gasoline type 3. Clogged air cleaner element 4. Improper spark plug gap 5. Defective spark plug 6. Clogged fuel line, resulting in inadequate fuel supply to carburetor 7. Dirty/gummed up carburetor 8. Ignition coil air gap too wide 9. Defective ignition coil 10. Weakened valve springs 11. Worn camshaft 12. Worn bearings 13. Blown head gasket <p>Defective air flow system</p> <ol style="list-style-type: none"> 1. carburetor gasket leak - air bypassing carburetor throttle plate causing engine to run lean 	<p>Replace</p> <p>Replace</p> <p>Replace</p> <p>Adjust</p> <p>Replace</p> <p>Replace</p> <p>Replace</p> <p>Adjust</p> <p>Replace</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace engine</p> <p>Replace</p>

LCT Engine Troubleshooting Guide



ENGINE

Complaint	Symptom and possible causes	Remedy
Engine lacks power	Defective engine internal / electrical parts <ol style="list-style-type: none"> 1. Loss of valve clearance 2. Clogged air filter element 3. Fouled spark plug 4. Incorrect spark plug 5. Too much engine oil 6. Not enough oil in engine 7. Air fins clogged on engine causing to overheat 8. Carburetor gasket leak - sucking air causing engine to run lean 9. Weakened valve springs 10. Worn piston ring or cylinder 11. Poor seating of valves 	Adjust Replace Replace Replace Adjust Adjust Remove debris Replace Replace Replace
Exhaust smoke	Blue or White smoke <ol style="list-style-type: none"> 1. Too much engine oil in the engine 2. Worn piston rings or cylinder 3. Worn valve guides 4. Scored or scuffed cylinder wall 5. Worn valve stems 6. Defective intake valve stem seal 7. Worn oil rings 8. Blown head gasket 9. Engine operating at improper angle 10. Crankcase breather system malfunction 	Adjust Replace engine Replace engine Replace engine Replace engine Replace engine Replace engine Replace engine Check and repair
	Black smoke <ol style="list-style-type: none"> 1. Choke closed 2. Clogged air filter element 	Adjust Replace
No sparking or poor sparking	<ol style="list-style-type: none"> 1. Defective spark plug 2. Defective ignition coil 3. Open-circuit wiring connection 	Replace Replace Check and repair

LCT Engine Troubleshooting Guide



ENGINE

Complaint	Symptom and possible causes	Remedy
Spark plug fouled	<ol style="list-style-type: none">1. Incorrect gasoline2. Dirty air cleaner element3. Too cold spark plug4. Worn piston rings5. Worn piston or cylinder6. Excessive clearance of valve stems in valve guides7. Worn valve stem oil seal	Replace Replace Use hotter plug Replace engine Replace engine Replace engine Replace engine
Spark plug electrodes overheat or burn	<ol style="list-style-type: none">1. Too hot spark plug2. Air fins clogged on engine causing overheating3. Loose spark plug4. Too lean fuel mixture	Use colder plug Remove debris Tighten Check for air leak