

TROUBLESHOOTING

Problem	Cause	Solution
Engine does not start	Spark plug wire disconnected.	Reconnect wire.
	Engine Throttle Control Lever incorrectly set.	Put lever in "START" position.
	Fuel tank empty.	Add fuel.
	Choke control (if so equipped) in incorrect position.	Move to "CHOKE" position.
	Stale gasoline.	Drain fuel and add fresh fuel.
	Dirty air filter.	Clean or replace filter.
	Defective or incorrectly gapped spark plug.	Inspect spark plug.
	Carburetor out of adjustment.	Contact Technical Support Team.
	Misadjusted throttle control.	Contact Technical Support Team.
	Dirt or water in fuel tank.	Contact Technical Support Team.
Engine runs poorly	Defective or incorrectly gapped spark plug.	Inspect spark plug.
	Dirty air filter(s).	Clean or replace.
	Carburetor out of adjustment.	Contact Technical Support Team.
	Stale gasoline.	Replace with fresh gasoline.
	Dirt or water in fuel tank.	Contact Technical Support Team.
	Engine cooling system clogged.	Clean air cooling system.
Engine overheats	Engine cooling system clogged.	Clean air cooling area.
	Carburetor out of adjustment.	Contact Technical Support Team.
	Oil level is low.	Check oil level.
Engine does not shut off	Misadjusted throttle control or ignition switch.	Contact Technical Support Team.
Wheels and Tines will not turn	Improper use of controls.	Review controls section.
	Worn, broken, or misadjusted drive belt(s).	See "Checking and Adjusting Forward Drive Belt Tension" or "Belt Tension Adjustment".
	Internal transmission wear or damage.	Contact local dealer or the factory.
	Bolt loose in transmission pulley.	Tighten bolt.
Tines turn, but wheels don't	Wheel Drive Pins not in WHEEL DRIVE.	See "Wheel Drive Pins".
	Bolt loose in transmission pulley.	Tighten bolt.
	Internal transmission wear or damage.	Contact Technical Support Team.
Wheels Turn, but tines don't	Tine holder mounting hardware missing.	Replace hardware.
	Bolt loose in transmission pulley.	Tighten bolt.
	Internal transmission wear or damage.	Contact Technical Support Team.
Poor tilling performance	Worn tines.	See "Tines" section.
	Improper Depth Regulator setting.	See "Depth Regulator Lever Adjustment".
	Incorrect throttle setting.	Adjust throttle on engine or speed control on handlebar to highest setting.
	Forward Drive Belt slipping.	See "Checking and Adjusting Forward Drive Belt Tension" or "Belt Tension Adjustment".

Difficulty Starting Engine (Recoil)

Problem	Cause	Solution
Something wrong with the fuel system: fuel supply is not smooth or no fuel supply	There is no enough fuel in fuel tank and fuel cock is closed.	Fill fuel, open fuel cock.
	Air vent in the fuel filler cap is clogged.	Dredge air vent.
	Fuel cock is clogged.	Clean first and then dredge.
	Improper or clogged main oil flow hole.	Readjust or clean. Blow to clear through.
	Needle valve is not closed properly or start hole is clogged.	Dismantle needle valve and repair, clean. Blow to get through.
	Float is damaged or sticking.	Repair float.
	Fuel is too filthy or deteriorated.	Replace.
	There is water in fuel.	Replace.
	Too much fuel in engine.	Drain extra fuel. Dry up spark plug electrodes.
	Wrong fuel brand.	Select proper fuel brand corresponding with the requirements.
No spark	Too much carbon deposit and dirt around electrodes.	Clear carbon deposits.
	Too much carbon deposit and dirt around electrodes.	Replace spark plug.
	Too much carbon deposit and dirt around electrodes.	Adjust to proper value.
Abnormal cylinder compression	Piston ring is at its wear limit.	Replace.
	Piston ring is broken.	Replace.
	Piston ring is sticking.	Clear up carbon fouling.
	Spark plug is not installed tightly or gasket is missing.	Tighten with a gasket in.
	Air leakage between cylinder block and cylinder head.	Check cylinder gasket and the flatness of the surface where the cylinder block contacts the cylinder head.
		Tighten cylinder head bolts in stipulated order to stipulated torque.
	Air leakage in the valves.	Check valve clearance and tightness. Repair if necessary.

If engine still doesn't start, contact our Technical Support Team for service and/or repair.

WARNING

- When testing the spark plug, never hold the high-voltage wire of the spark plug with wet hand.
- Make sure there is no spilled fuel outside the engine and that the spark plug isn't covered with fuel.
- To prevent fire, keep sparks far away from the spark plug mounting hole.

Gasoline Engine: No Power

Problem	Cause	Solution
When increasing throttle, speed increase slow (or even decreases and stops running)/poor compression	Air in fuel line or fuel line clogged.	Exhaust air or dredge fuel line.
	Main oil flow hole is not adjusted properly.	Readjust.
	In carburetor, needle valve hole and main oil flow hole clogged.	Clean and blow to clear.
	Fuel cock is clogged up.	Clean/replace damaged part.
	Too much carbon deposit in combustion chamber.	Clear away.
	Too much carbon fouling in muffler and exhaust pipe.	Clear away.
	Air cleaner is clogged up.	Clean air cleaner filter element.
	Intake pipe is leaking.	Repair or replace.
	Piston or cylinder or piston ring is worn.	Replace the worn part.
	Air leakage from the surface where the cylinder block contacts the cylinder head.	Replace cylinder gasket.
	Too big or too small valve clearance.	Readjust.
	Valve tightness is poor.	Repair.

Gasoline Engine Running Roughly

Problem	Cause	Solution
Knocking sound	Piston, cylinder or piston ring is worn excessively.	Replace the worn part.
	Piston pin and piston pin hole are worn excessively.	Replace piston or piston pin.
	Piston pin and piston pin hole are worn excessively.	Replace tie rod.
	Roller bearing for crankshaft main shaft is worn.	Replace roller bearing.
Abnormal combustion	Engine is too hot.	Shut down and allow engine to cool off before troubleshooting.
	Too much carbon deposit in combustion chamber.	Clear away.
	Improper gasoline brand or low gasoline quality.	Replace with qualified gasoline.
Spark plug	There is water in float chamber.	Clean.
	Improper spark plug electrodes clearance.	Adjust.
	Faulty spark plug.	Replace spark plug.

Stops Suddenly When Running

Problem	Cause	Solution
Stops suddenly while running	Operated on a hill.	Keep engine oil level within targets and operate tiller on inclines less than 15 degrees, or disconnect oil sensor wire temporarily.
	Unit bounces or hops.	
	Pulling back swiftly on the handlebars.	
	Fuel is empty.	Refill fuel.
	Carburetor is clogged.	Check fuel line and dredge.
	Float is leaking.	Repair.
	Needle valve is stuck.	Dismantle float chamber and eliminate.
	Spark plug is punctured, or short-circuited by carbon deposit.	Replace spark plug.
	Side electrode of spark plug is dropped out.	Replace spark plug.
	Ignition coil is punctured or short-circuited.	Replace ignition coil.
	Cylinder is seriously scored and valve dropped out.	Repair or replace damaged parts.

Engine is Overheating

Problem	Cause	Solution
Engine is overheating	Oil level is low	Fill oil to proper level
	Exhaust pipe blocked up	Clean exhaust pipe
	Shroud leaking	Repair damaged part
	Cooling fins blocked by foreign matter	Clean cooling fins
	Cooling fan loosened and malfunctioning.	Reinstall properly
	Connection rod deformation has made piston and cylinder bushing side wear	Replace connection rod
	Cylinder or piston or piston ring is worn and made a space between cylinder and crankcase	Replace the worn parts
	Crankshaft main bearing burned out	Replace main bearing
Beating sound	Piston, piston ring or cylinder is worn	Replace the worn part
	Connection rod or piston pin and piston pin hole are worn	Replace the worn part
	Crankshaft main neck is worn	Replace the worn bearing
	Piston ring is broken	Replace piston ring
Metal beating sound when abnormal combustion occurs	Too much carbon deposit in combustion chamber	Clear away carbon deposit
	Insufficient electrode clearance of spark plug	Adjust electrode clearance properly
Other	Improper valve clearance	Readjust valve clearance properly
	Fly wheel is not connected with crankshaft tightly	Tighten

For further technical support:

Technical Support Team
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