

MAINTENANCE

Trouble Shooting

Possible Cause

Possible Remedy

Hard to Start

No gasoline in fuel tank or carburetor.....	Fill tank with new gasoline, open fuel shut-off valve. Check fuel lines, fuel strainer and carburetor.
Gasoline strainer or fuel lines clogged.....	Clean fuel strainer, check fuel lines and carburetor.
Impulse coupling inoperative (tractors with magneto).....	Flush with kerosene; refer to page 31.
Water in gasoline.....	Drain fuel tank and carburetor. Use new fuel and dry spark plugs; or see your dealer.
Water in cylinders.....	Check cylinder head gasket or look for clogged drain hole in exhaust manifold or muffler.
Choked improperly. Flooded engine.....	Follow starting instructions. See page 8.
Defective ignition or loose wiring.....	Check wiring, plugs, magneto, battery ignition unit, etc.; refer to pages 29 to 35.
Defective battery or cranking motor.....	Check and service; refer to page 37 or 40 or replace.
Spark plugs dirty or improper gap.....	Clean, adjust gap to .023 inch, or replace plugs.
Magneto grounded (tractors with magneto).....	Pull out on ignition switch. Check for other possible ground; also refer to "Magneto" on page 30.
Engine speed control not advanced.....	Advance lever $\frac{1}{8}$ for starting.
Lack of compression.....	See your dealer.
Flywheel ring gear teeth broken.....	See your dealer.
Too heavy grade of lubricating oil.....	Drain and refill with proper lubricant. Refer to the lubricant specifications on page 17.
Gears engaged.....	Put gearshift in neutral.
Internal seizure.....	See your dealer.

Engine Operates Irregular or Knocks

Engine incorrectly timed.....	Retime. See page 32 or page 35.
Spark plugs dirty; wrong gap or wrong type.....	Clean; reset gap to .023 inch or replace.
Poor or weak spark.....	Check magneto or battery ignition unit if spark is good from coil. Check distributor points and gap; spark plugs, and wiring; see page 29 or 34.
Carburetor setting incorrect.....	Adjust; see "Carburetor" on page 24.
Poor grade fuel or water in fuel.....	Drain and use a good grade of clean fuel.
Engine overheating.....	Check cooling system and fan belt; see "Engine Overheats" on page 57.
Engine valves at fault.....	Check valve clearance; or see your dealer.
Air leaks around intake manifold.....	Check gasket and tighten nuts.
Engine smokes.....	Check air cleaner oil level. Check fuel delivery at carburetor. Check for worn piston and rings; or see your dealer.
Excessive carbon in engine.....	See your dealer.
Loose piston pin or bearings.....	See your dealer.
Broken rings or loose pistons.....	See your dealer.
Worn connecting rod and main bearings.....	See your dealer.
Governor sticking or needs adjustment.....	See your dealer.

Lack of Power

Engine speed control lever not advanced.....	Advance engine speed control lever.
Engine cold or overheated.....	Run engine until it warms up before putting under load. Check cooling system; or see your dealer.
Engine overloaded.....	Reduce load.
Engine knocks excessively.....	Use good fuel; also check timing; or see your dealer.