## **TRANSPORTATION**

- 1. Always shut off engine when transporting machine.
- 2. Make sure lifting device has enough capacity to hold machine ( see identification plate on machine for weight).
- 3.Use central lifting point (a) (c) (as optional) when lifting machine.
- 4. Trolley wheel (b) as optional is used for short distance transportation.

TROUBLESHOOTING		
SYMPTOM	POSSIBLE CAUSES	SOLUTION
Travel Speed too low,	Engine speed too low?	Set engine speed to correct RPM.
and vibration is weak	Clutch slips?	Check or replace clutch
	V- belt slips?	Adjust or replace V-belt
	Excessive oil in vibration?	Drain excess oil and fill to proper lever
	Malfunction in vibrator housing?	Check eccentric, gears and counter weights
	Bearing Failure?	Replace Bearing
	Insufficient engine output?	Check engine, compression, etc.

## **ENGINE TROUBLE SHOOTING**

SYMPTOM	POSSIBLE CAUSES	SOLUTION
Difficult to start, "Fuel is available, but no SPARK at spark plug'.	Spark plugs bridging?	Check gap, insulation or replace spark plug.
	Carbon deposit on spark plug?	Clean or replace spark plug.
	Short circuit due to deficient spark plug	Check spark plug insulation, replace if worn
	insulation?	
	Improper spark plug gap?	Set to proper gap
Difficult to start, "Fuel is available, but no SPARK at spark plug."	ON/OFF switch is shorted?	Check switch wiring, replace switch
	Ignition coil detective?	Replace ignition coil
	Improper spark gap, point's dirty?	Set correct spark gap and clean points
	Condenser insulation worm of short cir-	
	cuiting?	Replace condenser
	Spark plug wire broken or short circuiting?	Replace defective spark plug wiring
Difficult to start, "Fuel is available, spark is present and compression is normal."	Wrong fuel type?	Flush fuel system, and replace with correct type of fuel
	Water or dust in fuel system?	Flush fuel system
	Air cleaner dirty?	Clean or replace air cleaner
Difficult to start, "Fuel is available, spark is present and compression	Suction/exhaust value stuck or protruded?	Re-seat valves
	Piston ring and/or cylinder worn?	Replace piston rings and or piston
is low.	Cylinder head and/or spark plug not tight-	Torque cylinder head bolts and spark plug
	ened properly?	
No fuel present at arburetor	Fuel not available in fuel tank?	Fill with correct type of fuel
1	Fuel cock does not open properly?	Apply lubricant to loosen fuel cock level, replace if necessary
	Fuel filter clogged?	Replace fuel filter
	Fuel tank cap breather hole clogged?	Clean or replace fuel tank cap
	Air in fuel line?	Bleed fuel fine
"Weak in power" compression	Air cleaner not clean?	Clean or replace cleaner
is proper and does not mistires	Improper level in carburetor?	Check float adjustment, re-build carburetor
* *	Defective spark plug?	Clean or replace spark plug
"Weak in power" compression	Water in fuel system?	Flush fuel system, and replace with correct type of fuel
is proper but mistires	Dirty spark plug?	Clean or replace spark plug
	Ignition coil defective?	Replace ignition coil
Engine overheats	Spark plug heat value improper?	Replace with correct type of spark plug
	Correct type of fuel?	Replace with correct of fuel
	Cooling fins dirty?	Clean cooling fins
Rotational speed fluctuates.	Governor adjusted correctly?	Adjust governor
	Governor spring defective?	Replace governor spring
	Fuel flow restricted?	Check entire fuel system for leaks or clogs
Recoil starter malfunction	Recoil mechanism clogged with dust and dirt?	Clean recoil assembly with soap and water
	Spiral spring loose?	Replace spiral spring