

SECTION 1 SAFETY

Safety Information



This CAUTION sign indicates a potential hazard, which if ignored could result in injuries to the operator and/or those close by, as well as damaging the machine.



This WARNING sign indicates a potential hazard, which if ignored could result in the DEATH of the operator and/or those close by.

For your own personal protection and for the safety of those around you, please read and ensure you fully understand the following safety information. It is the responsibility of the operator to ensure that he/she fully understands how to operate this equipment safely. If you are unsure about the safe and correct use of the Vibratory Plate Compactor, consult your supervisor or ALLEN.



Improper maintenance can be hazardous. Read and understand this section before you perform any maintenance, service or repairs.

General Safety

- The owner of this machine must observe, and also train the user of the machine to observe the effective labour protection laws in the country of application.
- Use suitable lifting equipment to lift the machine.
- This machine is to be used for its intended application only.
- This machine must only be operated by well-trained personnel.
- Personal Protective Equipment (PPE) must be worn by the operator whenever the equipment is being used.
- The machine must be operated on ground where stability is guaranteed. When working near the rim of excavated trenches, keep a sensible distance from the edge so that there is no danger of the machine falling down or the trench collapsing.
- Cordon off the work area and keep members of the public and unauthorised personnel at a safe distance.
- Make sure you know how to safely switch this machine OFF before you switch it ON in case you run into any difficulties.
- ALWAYS switch OFF the engine before servicing it.
- During use, the engine becomes very hot. ALWAYS allow the engine to cool down before touching it.
- NEVER leave the engine running and unattended.
- NEVER remove or tamper with any fitted guards; they are there for your own protection. If they are damaged or missing, DO NOT USE THE MACHINE until the guard has been replaced or repaired.
- ALWAYS switch OFF the engine before transporting it, moving it around site or servicing it.
- Do not operate the machine when you are ill, feeling tired or when under the influence of alcohol or drugs.
- If the surface to be compacted is on a slope, take great care when controlling the Plate Compactor's direction of travel. Always work up and down a slope; not across.

SECTION 2 OPERATIONS

Operations

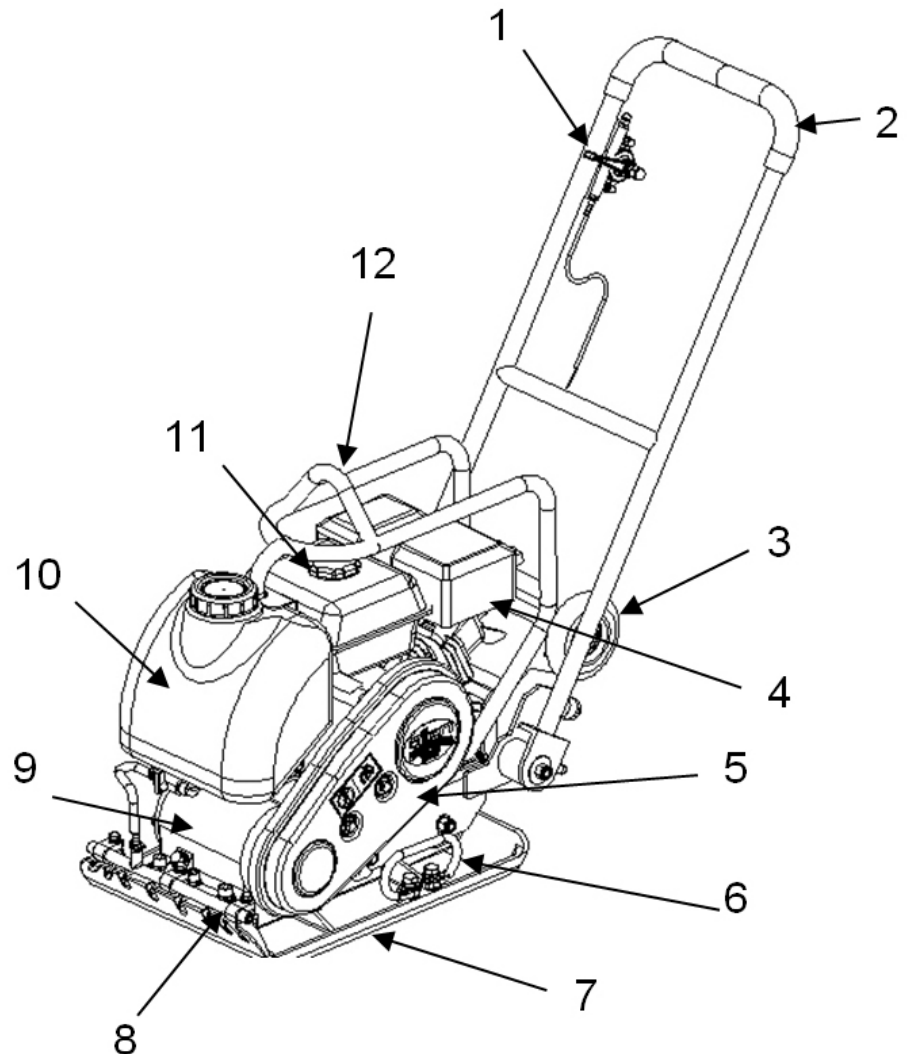
Machine Description

Intended Use

The Vibratory Plate Compactor is designed for compacting loose, granular soils, gravel, paving stones and asphalt. It is intended to be used in confined areas and areas next to structures such as walls, curbs, and foundations. Plate Compactors with water tanks can be used for compacting asphalt. The Plate Compactor is not recommended for the compaction of cohesive soils with heavy clay content. For cohesive soil, use a Tamping Rammer.

APC140H

1. Throttle
2. Operating Handle
3. Wheels
4. Engine
5. Belt Guard
6. Lifting Handle
7. Base Plate
8. Water Sprinkler
9. Exciter Housing
10. Water tank
11. Fuel Tank
12. Lifting Hook

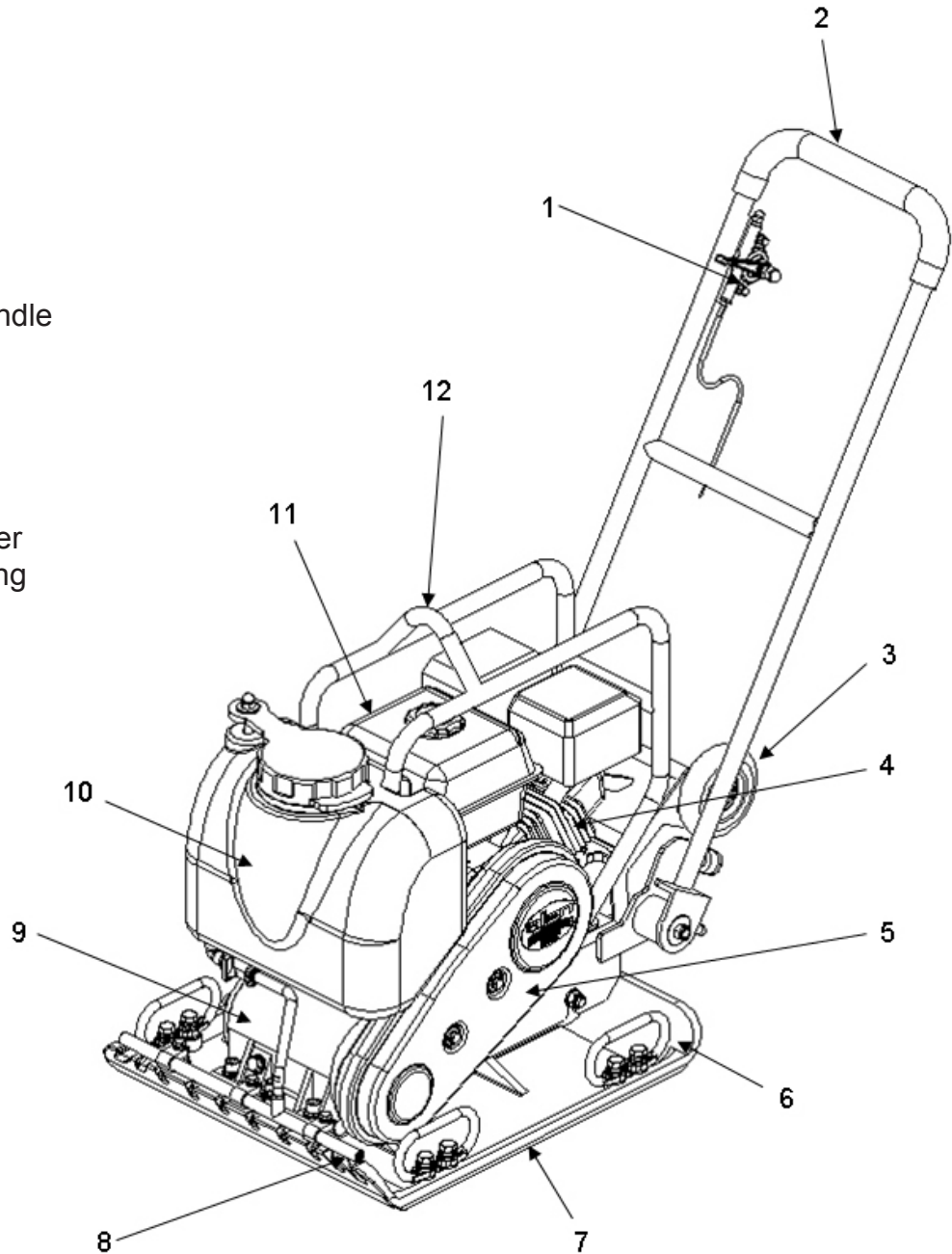


SECTION 2 OPERATIONS

Operations (cont'd)

APC210H

1. Throttle
2. Operating Handle
3. Wheels
4. Engine
5. Belt Guard
6. Lifting Handle
7. Base Plate
8. Water Sprinkler
9. Exciter Housing
10. Water tank
11. Fuel Tank
12. Lifting Hook



Pre-start Checks

The following pre-start checks must be performed before the start of each work session or after every four hours of use, whichever is first. Please refer to the Service and Maintenance section for detailed guidance. If any fault is discovered, the Plate Compactor must not be used until the fault is rectified.

1. Thoroughly inspect the machine for signs of damage, Make sure all guards are in place and secured.
2. Check hoses, filler openings, drain plugs and other areas for signs of leakage. Fix any leaks before operating.
3. Check the engine oil level and top up as necessary. Use proper engine oil with the proper viscosity (SAE 10W-30 is recommended).
4. Check the engine fuel level and top us as necessary. Use clean fuel. The use of contaminated fuel may damage the fuel system.
5. Check the air filter is clean. Excessive dirt/dust accumulation within the filter element will cause erratic engine operation. Clean the air filter element when it is contaminated (refer to the Service and Maintenance section).
6. Check for fuel and oil leaks.

Start/Stop Procedure

Before starting the engine, make sure that the Safety Switch is in the ON position and the Throttle Lever is set to the idle position.

1. Take the Plate Compactor to where it is required. Use suitable lifting equipment to position the Plate Compactor where it is necessary. Make sure the lifting equipment has a WLL (Working Load Limit) suitable for the Plate Compactor weight. Attach suitable slings or chains only to the lifting point.
2. Never leave the engine running during transporting, even if it is for a short period of time.
3. Having carried out the checks listed in the 'pre-start' section, you may start the engine. ALLEN Plate Compactors are fitted with a centrifugal clutch which allows the engine to run at idle speed without driving the Plate Compactor. Centrifugal clutch will be engaged as the speed of engine is increased. For correct operation, the engine speed should be set to maximum.

Before Starting Gasoline Engine

4. Check the oil in the engine crankcase. Be sure to maintain the proper level per the engine manufacturer specifications. If the oil is dirty and in need of changing, follow the Engine User Manual instructions.
5. Check the fuel supply. Refer to Engine User Manual.

SECTION 2 OPERATIONS

Operations (cont'd)

Operation

1. Run the engine at full throttle and allow the Plate Compactor to pull itself along at its normal speed.
2. When operating on an incline it may be necessary to assist the Plate Compactor by pushing it forward slightly.
3. When operating downhill hold the Plate Compactor back slightly, if it begins to pick up speed.
4. Depending on the material being compacted, 3 or 4 passes are recommended to achieve the best compaction.
5. While a certain amount of moisture in the soil is necessary, excessive moisture may cause soil particles to stick together and prevent good compaction.
6. If soil is extremely wet, allow it to dry somewhat before compacting.
7. If soil is so dry as to create dust clouds while operating Plate Compactor, some moisture should be added to the ground material to improve compaction. This will also reduce service to the air filter.
8. When using the Plate Compactor on paving stones, attach a pad to the bottom of the plate to prevent chipping or grinding surface of stones.



Do not operate the plate on concrete or on extremely hard, dry, compacted surfaces. The plate will jump rather than vibrate and could damage both the plate and the engine.



SECTION 3 SERVICE

Troubleshooting

Problems	Possible Causes	Countermeasures
Engine will not start.	a. No fuel getting to engine.	a. Open fuel tap. Fill fuel tank.
	b. Engine switched off.	b. Switch engine on.
	c. Spark plug fouled.	c. Clean, check and reset plug gap.
	d. Engine cold.	d. Close choke.
	e. Engine flooded.	e. Open choke, fully open throttle, pull recoil starter until engine fires.
Unit will not vibrate.	a. Engine speed too slow.	a. Set throttle speed to fast.
	b. Drive belt tension loose.	b. Adjust belt tension.
	c. Air Filter Blocked.	c. Clean or change air filter.
	d. Drive Failure.	d. Contact agent or ALLEN.
	e. Exciter Failure.	e. Contact agent or ALLEN.
Asphalt adhering to plate.	Lack of lubrication.	Use water.
Bituminous surface flaking (laminating).	Over compaction.	Remove and relay.
Low travel speed.	a. Layer thickness too deep.	a. Remove some of the material.
	b. Moisture content too high or too low.	b. Remove material and adjust.
Plate jumps or compacts unevenly.	a. Ground surface too hard.	a. Stop compaction immediately.
	b. Shock mounts loose or damaged.	b. Tighten or replace shock mounts.