



# OPERATIONS - PARTS MANUAL



**ATC130H / ATC170H**  
**Gasoline Rammer**

**allen**  
**ENGINEERING**  
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# Information Contained in this Manual



This manual provides information and procedures to safely operate and maintain the Allen Machine.

For your own safety and protection from personal injury, carefully read, understand, and observe the safety instructions described in this manual. Keep this manual or a copy of it with the machine at all times.

Always operate this machine in accordance with the instructions described in this manual. A well maintained piece of equipment will provide many years of trouble free operation.

This manual is divided into the following sections:

**SECTION 1  
SAFETY**

**SECTION 2  
OPERATIONS**

**SECTION 3  
SERVICE**

**SECTION 4  
PARTS**

Complete any warranty requirements as specified by the engine manufacturer in their instructions found inside the manual box located on the operator's control panel.

Your engine is not manufactured by Allen Engineering Corporation, Inc, and therefore is not covered under Allen Engineering Corporation, Inc warranty.

Your engine manufacturer should be contacted if you wish to purchase a parts manual or a repair manual for your engine.

Refer to enclosed owners engine manual for complete O&M instructions. See your battery manufacturer for battery warranty.

## 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

- This machine is heavy and must not be lifted single-handedly; either get help or use suitable lifting equipment.
- This machine is to be used for its intended application only.
- This machine must only be operated by well-trained personnel.
- The owner of this machine must observe, and train the user to observe, the effective laws of labour protection in the country of application.
- Personal Protective Equipment (PPE) must be worn by the operator whenever the equipment is being used.
- Cordon off the work area and keep members of the public and unauthorised personnel at a safe distance.
- This machine must be operated on ground where stability is guaranteed. When working near the rim of excavated trenches, use the machine properly so that the machine may not fall down or collapse the excavation.
- 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.

- This machine is designed to eliminate the possible risks arising from the use of it. However, risks DO reside, and these residual risks are not clearly recognisable and may cause personal injury or property damage, and possibly death. If such unpredictable and unrecognisable risks become apparent, the machine must be stopped immediately, and operator or his supervisor must take appropriate measure to eliminate such risks. It is sometimes necessary that the manufacturer must be informed of such event for future counter measuring.

### Fuel Safety



Fuel is flammable. It may cause injury and property damage. Shut down the engine, extinguish all open flames and do not smoke while filling the fuel tank. Always wipe up any spilled fuel.

- Before re-fuelling, switch off the engine and allow it to cool.
- When re-fuelling, use a proper funnel, and avoid spilling over the engine.
- When re-fuelling, DO NOT smoke or allow naked flames in the area.
- Spilt fuel must be made safe immediately by using sand. If fuel is spilt on your clothes, change them.
- Store fuel in an approved, purpose made container away from heat and sources of ignition.

### Health & Safety

#### ***Vibration***

Some vibration from the compacting operation is transmitted through the handle to the operator's hands. Ensure operator rotation and do not exceed the maximum recommended usage times.

#### ***Dust***

The compaction process can produce dust, which may be hazardous to your health. Always wear a mask that is suited to the type of dust being produced.

#### ***Fuel***

Do not ingest fuel or inhale fuel vapors and avoid contact with your skin. Wash fuel splashes immediately. If you get fuel in your eyes, irrigate with copious amounts of water and seek medical attention as soon as possible.



The exhaust fumes produced by this machine are highly toxic and can kill!

#### ***Exhaust Fumes***

Do not operate the Rammer indoors or in confined spaces. Make sure the work area is adequately ventilated.

## SECTION 2 OPERATIONS

## Operations

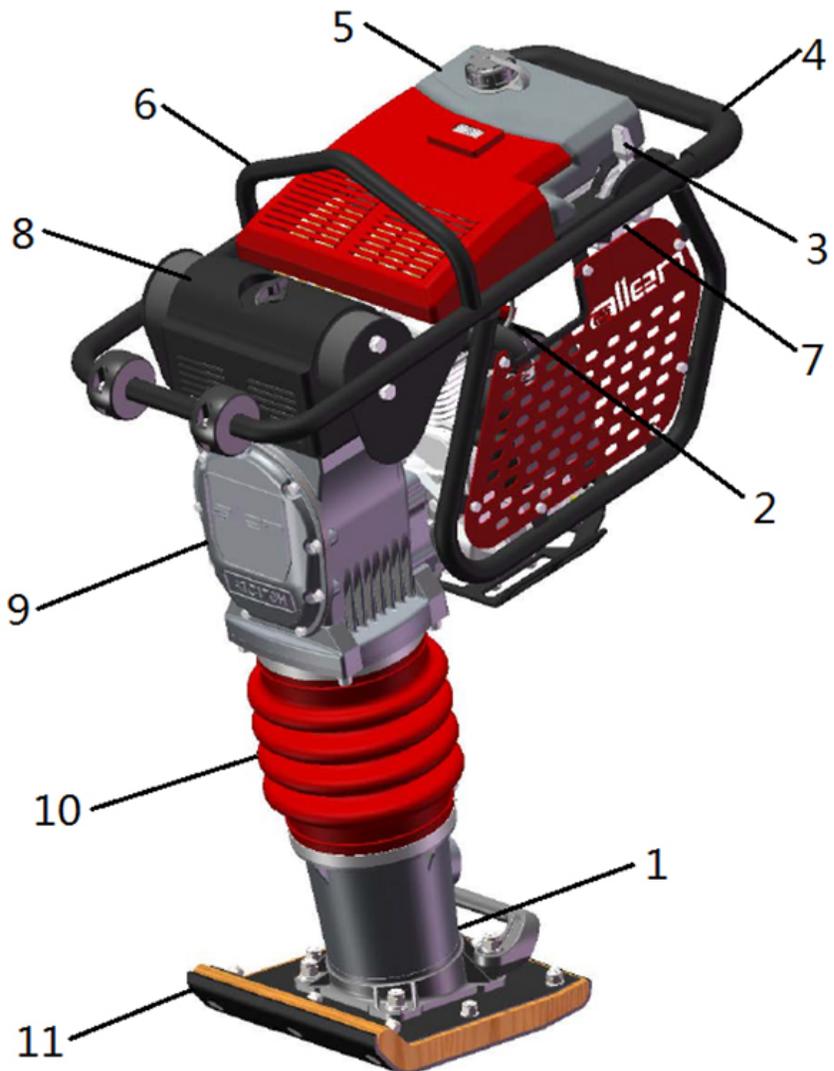
### Machine Description

#### *Intended Use*

This machine is intended for base preparation, driveways, foundations, curbs, and footings. It can also be used for repair work on streets, highways and/or pavements/sidewalks.

### ATC130H / ATC170H

1. Oil Plug/Site Glass
2. Engine
3. Throttle Lever
4. Operating Handle
5. Fuel Tank
6. Lifting Point
7. Fuel ON/OFF Lever
8. Primary Air Cleaner
9. Crankcase
10. Bellow
11. Ramming Shoe/Foot



### 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.



This machine uses unleaded petrol/gasoline!!

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

1. Open the fuel cock.
2. Set the engine switch to the ON position.
3. Set the speed control lever to the STARTING position (Halfway between HIGH and LOW position).
4. Move the choke lever to the CLOSED position.
5. Taking a firm hold of the Operating handle with one hand, grasp the recoil starter handle with the other, Pull the recoil starter handle until engine resistance is felt, then let starter return.
6. Taking care not to pull the starter rope fully out, pull the starter handle briskly.
7. Repeat until the engine fires.
8. Once the engine fires gradually set the choke lever to the OPEN position.
9. Let the engine run at idle for a few minutes to warm up.
10. After the engine has warmed up, the machine is ready for operation.
11. Move the throttle lever to the high speed 'H' position quickly to prevent damage from occurring to the clutch. The 'Full Throttle' position of this machine has been preset at the factory to achieve optimum machine performance.
12. With the engine running in the full throttle position, the machine will move forward and compact loose 'lifts'.
13. In preparation for stopping the engine, move the throttle lever to the LOW position.

## SECTION 2 OPERATIONS

### Operations (cont'd)

14. Allow the engine to idle for 1-3 minutes.
15. Set the engine switch to the OFF position. Do not touch the HOT engine part at this time.
16. Close the fuel cock.
17. Pull the recoil starter slowly until you feel resistance. Then release your hand from the starter knob to set it back to its original position. This will prevent any air or humidity from entering into the cylinder.

Model	Engine	Maximum RPM	
		Optimum	Upper Limit
ATC130H/ATC170H	HONDA GX100	3700~3800	4100

The Max rpm as shown above is the number of ignitions per minute. The number of ignitions per minute is different from the number of rotations of the engines Power Take-Off Shaft.



DO NOT alter this setting since irregular vibration or damage to the gear transmission mechanism can result, and both engine and machine warranties will be automatically voided.

Having carried out the check in the 'Pre-Start' section, you may now start the engine.



### Operation

This machine is fitted with a centrifugal clutch. This allows the engine to run at idle without driving the power transmission gears. As the engine speed is increased, the clutch will engage and the engine will drive the power transmission gears.

- To avoid damage to the centrifugal clutch, move the throttle lever quickly from the L to H position. For correct operation, the engine speed should be set to maximum.
- Avoid operating the machine on a fully compacted, hard, or non-yielding surface. Otherwise, the power transmission gears will be damaged and the life of the machine will be greatly reduced.
- When working in a narrow trench, if the ramming shoe should get caught between the walls of the trench, the rammer may miss-strike and can be severely damaged. The ramming shoe may especially be damaged severely.
- Be sure that the rammer is steered only with the handle. It should only be pushed. The rammer must not be pressed into the materials being compacted. Excessive pressure on the operating handle will lead to the unsatisfactory compaction due to the fact that the jumping action is hindered.

### Operation at High Altitude

For continuous High-Altitude operation above 1,000m (3,000FT), it will be necessary to change the engine main jet to a type that will allow for correct fueling of the engine. Otherwise, the unit will suffer from a lack of engine power and not work correctly. Please contact dealers for details.