



Owner's Manual

Forward Vibratory Plate Compactor

Models

TPD60

TPD70

TPD80

TPD90

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1. PREFACE

This manual contains important information on how to use Tacom Forward Vibratory Plate Compactors properly and safely. Read through this manual BEFORE you attempt to operate the machine.

Remember, it is the owner's responsibility to understand and communicate all information, especially safety and operation information, in this owner's manual to all operators of this unit.

2. SPECIFICATIONS

Model	TPD60	TPD70	TPD80	TPD90
Weight	132 lbs (60kg)	154 lbs (70kg)	176 lbs (80kg)	198 lbs (90kg)
Base Plate Width	14.2 in (360mm)	15.4 in (390mm)	16.5 in (420mm)	19.7 in (500mm)
Base Plate Length	19.3 in (490mm)	22.4 in (570mm)	23.4 in (595mm)	23.4 in (595mm)
Overall Width	14.2 in (360mm)	15.4 in (390mm)	16.5 in (420mm)	19.7 in (500mm)
Overall Length	36.6 in (930mm)	37.0 in (940mm)	43.7in (1110mm)	43.7in (1110mm)
Overall Height	33.3 in (845mm)	33.3 in (845mm)	33.9 in (860mm)	33.9 in (860mm)
Vibration Frequency	5800 vpm	5800 vpm	6100 vpm	6100 vpm
Centrifugal Force	2440 lbs	3000 lbs	3580 lbs	4040 lbs
Travel Speed	65-75 fpm	65-75 fpm	65-75 fpm	69-82 fpm
Engine Type	4 Stroke, Air Cooled, OHV Gasoline Engine			
Engine Model	Honda GX120K1		Honda GX160K1	
Engine Rated Output	3.5 hp (2.6KW)		4.8 hp (3.5KW)	
Engine Max. Output	4.0 hp (2.9KW)		5.5 hp (4.1KW)	
Fuel Tank Capacity	.66 US Gal. (2.5 liters)		.95 US Gal. (3.6 liters)	
Fuel	Automotive Gasoline			

3. SAFETY

The following safety instructions must be followed to avoid any property damage, personal injury, or possible death.

3.1. General Safety

- 3.1.1. This machine must be operated by well-trained personnel, and for its intended purpose only.
- 3.1.2. The owner of the machine must observe, and have the operator of the machine observe, the effective labor protection regulations in the country of application.
- 3.1.3. It is the owner's responsibility to understand and communicate all information, especially safety and operation information, in this owner's manual to all operators of this unit.
- 3.1.4. This machine must be operated on the ground where the stability is guaranteed.
- 3.1.5. Keep the work area clean and free from obstacles.
- 3.1.6. Keep unauthorized personnel away from the machine during operation.
- 3.1.7. ALWAYS wear proper O.S.H.A approved ear protection, hard-hat (helmet), dusk mask, safety goggles, gloves, and steel toe capped shoes during assembly and operation.
- 3.1.8. Do not wear loose clothing, jewelry, etc. near machinery.
- 3.1.9. Ignition systems can cause severe electrical shocks. Avoid contacting these systems or their wiring.
- 3.1.10. Set the engine switch to the "OFF" position before transportation or maintenance.
- 3.1.11. Close the fuel shut-off valve before transportation or storage.
- 3.1.12. Do not attempt to remove any cover or guard. Always check the condition of guards and covers before operation.
- 3.1.13. Never leave the engine running unattended.
- 3.1.14. This machine is heavy, and must not be lifted single-handedly. Use proper hoist to lift the machine.
- 3.1.15. The engine is liable to be extremely hot during and immediately after operation.
DO NOT TOUCH HOT ENGINE
- 3.1.16. Fuel is flammable. Handle Fuel Very Carefully.
- 3.1.17. Before refueling, switch off the engine and allow it to cool.
- 3.1.18. Wipe off any spilt fuel from the engine and the machine.
- 3.1.19. Keep the fuel in proper containers and in a safe place.

3.1.20. Exhaust Fumes Contain Poisonous Carbon Monoxide. Operate the machine only where proper ventilation is guaranteed.

3.2. Safety Notices & Decals

3.2.1. Read all safety decals carefully. Keep all notices and decals in good condition. If any become damaged or illegible, replace as necessary.

3.3. Residual Risks

This machine is designed to eliminate the possible risks arising from the use of it. However, the risks DO reside, and these residual risks are not clearly recognizable, and may cause personal injury or property damage, and possible death. If such unpredictable and unrecognizable risks become apparent, the machine must be stopped immediately, and the 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.

3.3.1. Mechanical Hazard

Personal injury or property damage may be caused by knocks, crushing, slipping, tripping, falling or by flying chips due mainly to the improper or careless handling of the machine, or working in a confined area.

To prevent such hazards, wear proper working gloves, close-fitting clothing, protective shoes, and face and eye protection. Clear the obstacles around the site to prevent unpredictable movement of the machine.

3.3.2. Hazards caused by fuel and oil

Oil and fuel used in this machine may cause the following hazards:

- Poisoning if the fuel or oil vapor is inhaled.
- Allergies if the fuel or oil comes in contact with the skin.
- Fire and Explosion if the fuel and oil is handled near smoking or open fires.

WHEN HANDLING THE FUEL OR OIL, SMOKING OR USE OF OPEN FIRE IS STRICTLY PROHIBITED.

Keep the fuel and oil in the suitable and approved container, and keep the container in a cool and dark place to prevent any hazard arising from the storage. Use extra caution when handling fuel. Remember, gasoline is highly flammable. When refueling, be sure to do so after the engine has completely cooled off, and avoid spilling over the engine.

3.3.3. Hazards from noise

Noise from the machine itself, as well as noise from the ground being compacted, may cause hearing difficulties or physical disorder such as loss of balance or consciousness disorder. **WEAR PROPER EAR PROTECTION DURING OPERATION.**

4. INTENDED USE

This machine is intended for the base preparation for concrete slabs, driveways, foundations, curbs, footings, and asphalt parking lots. It can also be used for repair work on streets, highways, sidewalks and hot and cold asphalt compaction.

5. OPERATING INSTRUCTIONS

5.1. Preparation

5.1.1. Pre-operation checks

- Check for fuel level
Check the fuel level and refuel if necessary. Be sure to confirm that the engine is cooled off when refueling. Wipe off any spilt fuel before starting. Use clean fuel, use of contaminated fuel may damage the fuel system.
- Check oil level in the engine
Check the oil level in the engine using the oil level gauge. The oil should be seen between the H and L position. Use proper engine oil with the proper viscosity.
- Check for any leaks of fuel and oil
Check thoroughly around the engine to confirm that there is no leak of fuel or oil. If any leak is apparent, DO NOT use the machine, and have it repaired at an authorized service facility.
- Check that the air filter is clean
Excessive dirt/dust accumulation within the filter element will cause erratic engine operation.

5.2. Operating the engine

NOTICE: Refer to the engine operation manual for detailed engine operating instructions.

5.2.1. Open the Fuel Shut-off Valve at the fuel tank.

5.2.2. Set the engine switch to "ON" position.

5.2.3. Set the Throttle Lever halfway between "H" and "L" position.

5.2.4. Move the Choke Lever to close it. When the engine is warm, let the lever partially open.

5.2.5. Hold the machine firmly with one hand, and slowly pull the recoil starter with the other hand, until you feel resistance.

5.2.6. Pull the recoil starter briskly to start the engine.

5.2.7. Move the Choke Lever to the "OPEN" position and let the engine run at idle for 2-3 minutes.

5.3. Operation

5.3.1. After the engine has warmed up, the machine is ready for operation.

5.3.2. 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.

NOTICE: DO NOT alter this setting since damage to the bearings and eccentric can result and both the engine and machine warranty will be automatically voided.

5.3.3. With the engine running in the full throttle position, the machine will move forward under its own power and compact loose "lifts".

CAUTION ON OPERATION

Extreme caution must be taken when operating this machine on sloping areas. Severe engine damage may result from extended operation on slopes of 20 degrees or greater since oil within the engine cannot properly lubricate and cool internal working parts.

Engine damage due to machine operation on slopes of 20 degrees or greater will void engine warranty.

HINTS ON OPERATION

- During uphill compaction, it may be necessary to swing the handle over and pull the machine slightly.
- When compacting on sloping terrain, the machine may tend to slide sideways. The operator must steer toward the rise causing the machine to travel at an angle.
- When operating the machine in wet or damp soil, it may occasionally be required to clean the bottom of the base plate. Mud accumulation on the base plate will slow the machine down and prevent efficient soil compaction.
- When operating this compactor on asphalt surfaces, it is recommended that an environmentally friendly release agent be applied to the bottom of the base plate to prevent asphalt sticking and/or accumulation.
- Operating the machine on fully compacted, hard, or non-yielding surfaces will damage bearings and the eccentric shafts, and will greatly reduce the life of the machine.

5.4. Stopping

5.4.1. In preparation for stopping the engine, the throttle lever should be moved to the low speed position.

5.4.2. Allow the engine to idle for 1-3 minutes.

5.4.3. Turn the engine switch to "OFF"

WARNING: Be careful not to touch HOT engine parts at this time.

5.4.4. Close the fuel cock.

5.4.5. After the engine has cooled, it is highly recommended to wipe off the machine and inspect oil seals for any unusual leakage from the engine or eccentric housing. It is also recommended that a cover be placed over the machine at this time to provide protection to the machine as well as the engine.

6. MAINTENANCE INSTRUCTIONS

When assembling, lubricating, or adjusting any part of the machine, make certain to stop the engine and disconnect the spark plug wire.

6.1. Service the engine according to the engine manufacturer's specifications. Refer to the engine operation and maintenance manual.

6.2. Maintenance: Every 8 hours or daily

6.2.1. Check for loose bolts and nuts, retighten if necessary.

- 6.2.2. Check and clean the air filter element, re-lube the element according to engine manufacturer's recommendations. If operating conditions are unusually dusty and severe, filter elements cleaning should be done more frequently.
- 6.2.3. Check oil level in crankcase and replenish as necessary. Recommended engine oil is SAE 10W-30.
- 6.2.4. Check oil level in eccentric housing using the following procedures:
 - 6.2.4.1. Make sure that the machine has not been run in the last 10 minutes.
 - 6.2.4.2. Set the machine on a level surface, remove the dipstick and wipe off the end. Fully thread the dipstick back into the eccentric housing, remove the dipstick and note the amount of oil on its end. There should be approximately 1.5 to 3.0mm of oil on the dipstick. Replenish as necessary with SAE30 oil

NOTICE: Care should be taken not to overfill the eccentric housing with oil, as the engine will run slow and not produce enough vibration for efficient compaction. Overfilling will also cause overheating of the eccentric housing which will damage the bearings and seal.
- 6.3. Maintenance: Every 50 hours or weekly
 - 6.3.1. Check for loose bolts and nuts. Retighten if necessary.
 - 6.3.2. Remove belt guard and check belt tension. The belt should deflect by approximately 10 to 15mm when the center of the belt between pulleys is pushed with thumb. Adjust the tension if necessary, and replace belt guard.
 - 6.3.3. Check eccentric seal for leaks. Replace if unusual amounts of leakage are noticed.
- 6.4. Maintenance: Every 450-500 hours
 - 6.4.1. Change the eccentric oil. See the FUEL & LUBRICANT section for the recommended oil level. Use SAE30 oil. Do not overfill.

7. LONG TERM STORAGE

- 7.1. Prepare the engine per engine manufacturer's specifications
- 7.2. Clean up oil and dust accumulation on rubber parts.
- 7.3. Clean the base plate and wipe on a light coat of oil to prevent rust formation.
- 7.4. Cover the machine and store it in a dry place.

8. FUEL & LUBRICANT

FUEL		AUTOMOTIVE GASOLINE			
ENGINE OIL		Motor Oil of proper viscosity for 4 stroke gasoline engine			
ECCENTRIC HOUSE OIL		Motor Oil, SAE10E30			
CAPACITIES					
Model	Engine	Fuel Tank	Engine Oil	Eccentric Housing	Belt Size
TPD60	Honda GX120K1	2.5 liters	600cc	180cc	A-30" RED
TPD70	Honda GX120K1	2.5 liters	600cc	180cc	A-30" RED
TPD80	Honda GX160K1	3.6 liters	600cc	200cc	A-33" RED
TPD90	Honda GX160K1	3.6 liters	600cc	200cc	A-33" RED

9. TROUBLESHOOTING

Trouble	Possible Causes	Countermeasure
Engine will not start or stops suddenly	No fuel	Supply the fuel
	Engine switch set to "OFF"	Set the engine switch to "ON"
	Spark plug being carbonized	Clean the spark plug or replace it with a new one
	Fuel strainer being clogged	Clean the fuel strainer
	Carburetor being clogged	Clean the carburetor
	Low oil shutdown	Supply proper amount of oil
Engine runs, but the machine does not produce any vibration	Air cleaner element clogged	Dismantle the cleaner element and clean the element with proper solvent (see engine manual)
	Throttle wire being stretched	Replace throttle wire
	Lack of engine power	Refer to engine manual

	Centrifugal clutch slipping	Dismantle the clutch assembly and clean the shoe and drum with proper solvent
	Improper v-belt tension or excessive wear of v-belt	Adjust v-belt tension or replace worn belt with a new one
Slow or irregular vibration	Excessive oil in the eccentric housing	Adjust the oil level in the eccentric housing
	Centrifugal clutch slipping	Dismantle the clutch assembly and clean the shoe and drum with proper solvent
	Improper v-belt tension or excessive wear of v-belt	Adjust v-belt tension or replace worn belt with a new one