# Walk-Behind Concrete Trowel CT36 • CT48 (BE) **Operator's Manual** EQUIPMENT

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To reduce the risk of injury, all operators and maintenance personnel must read and understand their machine's instruction manual in full before operating, changing accessories, or performing maintenance on that machine.

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## INTRODUCTION

Thank you for your purchase of this Third Coast Equipment, Inc. ("Third Coast") walk-behind concrete trowel. Please read this operator's manual in its entirety prior to using your new machine. This manual provides information pertaining to the safe use, proper operation, and routine maintenance of this machine. All operators and maintenance personnel must read and understand this manual in full before operating, changing accessories, or performing maintenance on this machine.

This manual is written for Third Coast machines in production at the time of publication, and Third Coast reserves the right to change any portion of this manual at any time without notice to reflect any changes to current production machine configurations or updates to regulatory compliance or for any other reason deemed appropriate by Third Coast.

The latest revision of this manual can be obtained by visiting us online at:

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# APPLICATIONS

A walk-behind concrete trowel is the ideal tool for finishing smaller concrete slabs or for performing edge work on larger concrete slabs. Finishing a slab with a concrete trowel helps to ensure a flat, smooth, and uniform finish to concrete surfaces while increasing the surface strength of the slab.

One of the key features of a troweled slab is reduced surface defects and air pockets. The troweling process will help ensure the flatness of your slab while simultaneously venting any air pockets that may later lead to surface defects. Trowels compress the top of the slab and lead to a more aesthetically pleasing finish.

When paired with chemical troweling aids such as colloidal silica, troweling concrete can also increase the efficiency of chemical reactions within the surface layer of the slab that improve surface curing time and reduce the need for adding water throughout the curing process. It is important to note that, although the surface layer may cure faster, troweling the surface of concrete reduces pores used for moisture transport, so the center cure time may be reduced. This does not affect slab strength, and can even reduce certain defects like curling; however, the extended cure times should be considered by jobsite engineers when painting or other finish flooring is to be installed over the new slab. A troweled slab may take longer to cure before finish flooring is installed.

Typical jobsites that benefit from power troweling include:

- Residential construction such as basements and garage floors
- Outbuildings

• Commercial construction. For larger commercial projects, a walk-behind trowel is typically used for edging as well as for troweling around protrusions such as plumbing and electrical fixtures.

# SAFETY LABELING

#### HAZARD & NOTICE ICONOGRAPHY

Third Coast machines use International Standardization Organization (ISO) compliant iconographic labeling to depict and differentiate this machine's dangers, warnings, and cautions (collectively referred to as "hazards") as well as to provide non-hazard related notices.

**NOTICE** Indicates information not related to machine hazards, including tips for improved operation or maintenance.

**A** CAUTION Indicates a hazard that **could** lead to minor or moderate injury if not avoided.

**WARNING** Indicates a hazard that **could** lead to serious injury or death if not avoided.

**DANGER** Indicates a hazard that **will** lead to serious injury or death if not avoided.

The one ISO label exception is the California Proposition 65 label, which per the California Office of Environmental Health Hazard Assessment (OEHHA) requirement is a yellow warning triangle.

All possible hazardous situations cannot be covered in any operator's manual. Care must be exercised by everyone using, maintaining, or working on or near this equipment. If you are ever in doubt of how to safely operate or service this equipment, cease operation immediately and contact Third Coast or any Third Coast authorized dealer for assistance.

#### MACHINE LABEL LOCATIONS

The following labels are included on this Third Coast machine and must be maintained as part of the machine. Any label that becomes illegible through operation, wear & tear, or for any other reason must be replaced before the machine is operated, transported, or serviced.



#### MACHINE LABELS

The following hazard, notice, and informational labels are included on this Third Coast machine and must be understood by all operators prior to operating this equipment.

LABEL	INTERPRETATION
Concrete Trowel CT48H   HP 9.0   Ibs. 220 Kg 100   Serial No. 3CECT48H225808 Manuf. Yr. 2023   THIRD COAST EQUIPMENT, Inc.   New Berlin, WI USA   www.thirdcoastequipment.com	NAMEPLATE: The nameplate contains important information about the model, weight, gross horsepower, manufacturer, and other machine-specific information.
A DANGER A GEFAHR A PELIGRO A DANGER	CARBON MONOXIDE: This label identifies the dangers of carbon monoxide emissions from the engine.
	NOISE: This label identifies the noise hazards of this machine and instructs the operator to wear appropriate hearing protection while operating.
Lwa 105dB	SOUND LEVEL: This label informs the operator that the sound power level produced by this machine may achieve 105dB.
CAUTION A VORSICHT A PRECAUCION A PRECAUTION	READ THE MANUAL: This label informs the operator to read the manual in its entirety prior to operation.
<u> </u>	PROP 65: This label identifies the hazard related to the emission of gasoline engine exhaust, as required by CA OEHHA.

Note, other labels are found on the engine of this machine, and their explanation will be provided in the engine manufacturer's operation manual.

# HAZARDS & RISKS

#### CALIFORNIA PROPOSITION 65 WARNING

**WARNING** Use of this product may expose you to certain chemicals, including gasoline engine exhaust, which are known to the State of California to cause cancer.

#### **GENERAL HAZARDS & RISKS**

**WARNING** General hazards are those that do not fall under a specific hazard classification, or that relate to multiple hazard classifications.

• Ensure all operators read and understand the operator's manual prior to using this machine.

• Never operate or allow anyone else to operate this machine without understanding the operational and safety controls of this machine. Even after reading the manual, new operators should receive instruction from an experienced operator.

- Never leave a machine operating while unattended.
- Use only accessories recommended by Third Coast. Any non-approved accessories may lead to operator injury or machine damage.
- Inspect this machine before every operation and at the required intervals listed in the "Care & Preventative Maintenance" section.
- Clean the machine during and after each use to ensure all safety labels remain legible. Replace any illegible safety labels before continued operation.
- Serious injury can result from improper or careless use of this machine.
- Keep this machine out of the reach of children at all times, including when not in use.

#### TRANSPORTATION HAZARDS

**WARNING** Failure to adequately secure this machine while transporting and failure to lift with proper form can result in damage to the equipment or injury or death.

• Inspect all lifting hardware (both on this machine and all ancillary lifting equipment) prior to lifting this machine.

- Never lift this machine while it is operating.
- Ensure the fuel cap is tight prior to lifting or transporting this machine.
- Only lift this machine with proper load-rated straps or slings rated for the weight and application.
- Never stand or work under a lifted machine.

• This machine is heavy. Lift using auxiliary equipment whenever possible. If you must lift manually, always have help from additional persons, ensure a clear path to your destination, ensure stable and clear ground, maintain a good grip on the machine, and lift with proper ergonomic form.

#### MECHANICAL HAZARDS

**WARNING** Certain mechanical hazards are inherit in operating this machine due to the weight, operation, travel, and vibration of this machine. Disregarding these warnings can lead to serious injury.

- Do not operate this machine unless all protective guards are in place.
- Keep hands and feet clear of rotating and moving parts.
- Ensure the engine operation switch is in the OFF position and the spark plug ignition lead is disconnected before removing the guards or making adjustments or repairs.
- Ensure the machine and the operator are set up on stable ground while in operation or service.
- Do not leave this machine unattended while in operation.
- When working in trenches, ensure adequate trench shoring is used to prevent collapse.
- Ensure the area in which you are working does not contain any live electrical cables, gas, water, or communication services that may be damaged by this equipment.
- Never stand on the unit while it is operating.
- Do not increase the governed no-load motor speed above 3,600 rpm; personal injury and damage to the machine may result.
- All machine and engine repairs should be conducted by a certified servicing dealership.

#### FIRE, EXPLOSION & THERMAL HAZARDS

**WARNING** Internal combustion engines contain flammable gasoline and generate spark and heat that pose certain hazards.

- Gasoline is extremely flammable and explosive under certain conditions.
- Ensure gasoline is only stored in an approved storage container.
- Do not refuel while the engine is operating or hot.
- Do not refuel in the vicinity of sparks or open flame.
- Do not refuel in confined spaces. Gasoline vapors may concentrate and ignite.
- Only fuel this machine on the ground. Do not fuel in truck beds or other areas where static electricity may be present.
- Do not overfill the fuel tank.
- Ensure the fuel cap is securely fitted after refueling.
- Avoid spilling gasoline when refilling; spilled gasoline or gasoline vapors may ignite. If spillage occurs, clean the area per local environmental regulations prior to resuming operation.
- Avoid contact with the engine and muffler while this machine is running or while it is hot. Extreme heat may cause severe burns.
- Do not operate this product in enclosed spaces or modify it in any way that reduces engine cooling. Never attempt to restrict airflow over the engine cooling fins.

#### CHEMICAL HAZARDS

**WARNING** Certain chemical hazards exist due to the presence of gasoline, grease, oil, and other chemicals presented by the combustion process including carbon monoxide, a colorless, odorless gas that can cause death if inhaled. Failure to follow the below instructions may lead to severe injury or death.

• Do not operate in a confined space or without adequate ventilation. Carbon monoxide exhaust gases from internal combustion engine driven equipment can cause death in confined spaces.

• Do not refuel this machine in confined spaces. Gasoline vapors may be hazardous to your

health, and concentrated gasoline vapors may cause an explosive atmosphere.

• Any fluids spilled from the machine, whether flammable or not, must be cleaned up in a manner consistent with all local environmental regulations.

• Always use approved fluids when maintaining or servicing this machine. Improper fluids may lead to poor performance or failures of the machine and may create a hazardous situation for the operator or bystanders. Dispose of all fluids properly in accordance with local regulations.

#### NOISE HAZARDS

**WARNING** This equipment exceeds the Occupational Safety & Health Administration ("OSHA") safe noise levels that can cause temporary or permanent hearing loss.

- Wear an approved hearing protection device while operating this machine as required by OSHA regulations to limit noise exposure as required by OSHA regulations.
- Bystanders may also require hearing protection, depending on their distance to the machine.

• Always be visually aware of your surroundings. While operating this machine, you may not hear other auditory warnings from nearby equipment. Heightened awareness is required.

## PERSONAL PROTECTIVE EQUIPMENT & HUMAN HEALTH HAZARDS

**WARNING** Proper personal protective equipment and operating practices are important to minimize the inherent hazards that this machine presents.

• Always wear proper protective clothing when operating this equipment, including hearing protection, respiratory protection, shatterproof eye protection, safety-toe boots, and other personal protective equipment ("PPE") as required by OSHA or local regulations.

- Wear A NIOSH/MSHA approved respirator when cutting, drilling, or grinding masonry to minimize the risk of silicosis and other respiratory hazards.
- Control silica dust at the source when possible using water or other suppression means.
- Exercise care when operating this unit. Exposure to vibration or repetitive work actions may be harmful to the hands and arms.

• Slip/trip/fall hazards are a major cause of serious injury and death. Beware of uneven or slippery work surfaces.

- Exercise care when working in the vicinity of open trenches, holes, or excavations.
- Never operate this equipment under the influence of drugs or alcohol. This includes prescription drugs without your doctor's consent.

• Never operate this equipment when you are not feeling well.

## ADDITIONAL HAZARDS

**WARNING** It is not possible to document all of the scenarios that could result from misuse of this machine, and proper operation and jobsite safety best practices should always be followed to minimize the occurrence and severity of all hazards.

- Only use this machine for its intended application.
- Always have an emergency preparedness plan, and practice it often.
- Always have a first aid kit and fire extinguisher on the jobsite. Ensure the fire extinguisher is rated for the applications, including fires caused by the combustion of gasoline.
- Do not work alone; always ensure someone else is on the jobsite with you.
- Know your jobsite address so you can give it to first responders in an emergency.

# OPERATION

## FAMILIARIZATION WITH THE TROWEL & ITS COMPONENTS

Prior to operating this concrete trowel, it is important to be aware of the critical components, safety features, and safe operating procedure of the trowel.

#### CENTRIFUGAL SWITCH

This trowel is equipped with a centrifugal kill switch. If the operator releases their grasp on the trowel, the handle will begin to swing in an arc shown in the image to the right, called the "trowel hazard zone." The centrifugal switch will engage automatically in this scenario to stop the engine. No person besides the operator should enter the trowel hazard zone. If you lose control of the trowel during operation, never try to grab the moving handle. Simply step out of the trowel hazard zone and wait for the trowel to shut down.

#### **BLADE PITCH KNOB**

This trowel features adjustable pitch combination blades that can be used for floating and finishing by adjusting the angle. To increase the angle of the blades, turn the blade pitch adjustment knob in the clockwise direction. To decrease the angle, turn the blade pitch knob in the counter-clockwise direction.

### THROTTLE

The throttle is used to adjust engine operating speed.

#### GUARD RING

The guard ring is a protective steel cage that helps prevent the operator from contacting the spinning blades. Never attempt to remove, defeat, or reach into the guard ring of an operating machine.

#### GEARBOX

The gearbox converts high-speed engine output into a lower-speed, usable output for turning the blades. It uses oil lubrication and requires periodic service to ensure smooth operation.

#### DRIVE SYSTEM

Two pulleys connected by a V-belt form the drive system that couples the engine to the gearbox. The V-belt must be inspected and replaced periodically for proper system performance.



#### STEPS BEFORE FIRST USE

To get you up and running faster, pre-delivery service is completed by Third Coast prior to shipping your machine to you. This consists of filling all fluids (except gasoline) to proper levels, torquing all fasteners to the proper operational torque, and validating machine operation and performance. Upon receipt of your machine, you only need to attach the handle to the machine using the included hardware, and connect the throttle and pitch adjustment cables to the handle.

#### DAILY PRE-OPERATION INSPECTION

The following inspections must be completed prior to each daily use of the trowel, and again after every four hours of machine operation.

- Visually inspect the machine for signs of damage. Remove any dirt, debris, or material that may have accumulated from prior use.
- Clear any dust accumulation from the air filter, carburetor, and engine cooling fins.
- Check all hardware to ensure proper tightness. See the "Care & Preventive Maintenance" section for proper fastener torque.
- Check the engine oil level and gearbox oil level, and refill as needed.
- Check for fuel and oil leaks, and repair as needed.
- Confirm proper blade pitch operation by cycling the blades through their entire pitch range.
- Confirm centrifugal switch operation by ensuring the switch head moves freely in its housing.

#### STARTING THE ENGINE

The CT36 model is equipped with a Honda GX160 engine, and the CT48 model is equipped with a Honda GX270 engine. Starting procedures are the same for either engine:

- Position the On/Off lever and fuel valve to the ON position, and the throttle lever to the idle position (
- Position the centrifugal switch in the forward (ON) position.
- If starting a cold engine, position the choke lever in the CLOSED position indicated by the full choke icon (). A warm engine may only need partial or no choke ().
- Gently pull the recoil starter until mild resistance is felt, then pull sharply to turn over the engine. Allow the recoil starter to gently return to the retracted position.

• Repeat pulling the recoil starter as needed until the engine is running.

- As the engine warms up, begin moving the choke lever slowly to the OPEN position ([+]). If the engine stalls, repeat the entire startup process and proceed more slowly in transitioning the choke from CLOSED to OPEN.
- Allow the engine a few minutes to warm up in the idle position before operating the machine.

• To operate, move the throttle lever towards the FAST position, indicated by the icon of a rabbit (, until the desired speed is reached.



#### **OPERATING THE TROWEL**

• To begin troweling your concrete slab, it is recommended to start with the blades in the lowest pitch position (float position) and increase the pitch gradually until the desired result is obtained.

• To operate the trowel, adjust the throttle lever towards the FAST position ( ) until the desired operational speed is reached.

• To move the trowel to the right, push down on the handle. To move the trowel to the left, lift up on the handle. To move the trowel forwards or backwards, push the handle in the desired direction. Do not force the trowel or attempt to retard its motion; let the trowel do the work with as minimal operator input as possible.

• This trowel can be operated over a range of engine speeds. In general, when you first start floating the slab, it is advisable to use a slower engine speed. As the slab cures and hardens, and as you increase the blade pitch, engine speed should also be increased.

• Keep both hands on the trowel handle at all times. If accidentally released, step out of the trowel safety zone and wait until the trowel shuts down.

• To briefly pause troweling, set the throttle to the IDLE (-----) position. Do not attempt to hold an operating trowel in a fixed position. Do not leave an idling machine unattended. If the machine will be unattended, follow the shutdown instructions listed under the "Powering off the Trowel" section.

#### POWERING OFF THE TROWEL

• To shut down the trowel during the workday, when further work is expected within 24 hours, position the On/Off lever to the OFF position.

• To shut down the trowel and prepare it for short-term storage (between 1 day and 30 days), position the throttle lever to the IDLE ( ) position while the engine is still running, then position the fuel On/Off lever to the OFF position. Allow the engine to consume the fuel in the carburetor until the engine shuts off, then turn the engine On/Off switch to the OFF position. This procedure allows the carburetor to empty its fuel, which reduces the chance for gumming or plugging of the carburetor.

• When preparing for short-term storage, it is always recommended to treat the fuel with a fuel stabilizer to help ensure it is ready for its next operation.

• To prepare the trowel for extended storage (more than 30 days), see the "Extended Storage" section.

#### EMERGENCY SHUTDOWN PROCEDURE

To shut down the trowel in an emergency situation, position the On/Off switch to the OFF position. It is also acceptable to manually pull the centrifugal switch towards the operator in an emergency situation.

To shut down a runaway trowel, where the operator has accidentally released the handle during operation, simply step back out of the trowel hazard zone and allow the centrifugal switch to engage and stop the engine. Never attempt to intercept a runaway trowel manually; severe injury may result.

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# TIPS FOR PROPER TROWELING

A concrete slab is ready to trowel when a typical work boot leaves a 1/8" to 1/4" indent in the surface while walking normally over the slab. Prior to this, the slab is too soft and the trowel will not be effective; troweling too early may do more harm than good. When first starting to operate the trowel, keep the blade pitch lower in the float position. Slowly increase blade pitch to the desired target as the slab cures. Over time, you will develop a feel for proper blade pitch to achieve the desired surface finish.

Proper form for trowel operation is to allow the trowel to swing in a wide arc from side to side while the operator guides it backwards, as pictured below. The trowel should move fairly easily when the blade angle is properly set for the hardness of the concrete being troweled. It should not stick to the concrete or sink in. Backwards movement is used to ensure the trowel will cover any indentations in the slab from your footprints as you progress down the slab. Exercise care while walking backwards, and always ensure you are aware of your surroundings. It is recommended to use a spotter for safety purposes.

Practice makes perfect; you do not need to risk a brand new slab to practice your technique. The surface of an existing slab of fully cured concrete can make an excellent way to practice your troweling skills without worrying about damage to a new slab. Simply wet the surface with a hose to simulate the feel of the trowel over a fresh slab. Pay particular attention to troweling around objects, such as plumbing and electrical protrusions and sill plates. This trowel is not an edging trowel, and you will not be able to trowel directly to the edge of these objects. These remaining spaces can be worked by hand or by a specialized edging trowel.

Operating a trowel should be a smooth, fairly effortless process, and for best surface finish of the concrete, the trowel should be allowed to do the work while the operator provides gentle guidance. Muscling the trowel is a likely indicator that the blade pitch is set improperly or the concrete is too soft to be troweled.

Knowing when to stop troweling is important, and it is possible to overwork a slab. As a general rule of thumb, the more you trowel a slab, the faster the outside will cure, but the slower the inside will cure, since the troweling process closes off some of the concrete's pores that otherwise enable moisture transport from the center of the slab. If heavily troweled, a slab will need a longer cure time before any finish coatings can be applied.



# EXTENDED STORAGE

Following proper long-term storage procedures ensures the machine is ready to operate when you return to it. The following procedures should always be performed when the machine will not be in use for the next 30 days:

- Drain the fuel tank completely.
- Operate the machine to consume any residual fuel in the fuel lines and carburetor.
- Thoroughly clean the exterior of the machine with a damp rag, then dry it. Do not use solvents.
- Check and repair any leaks and tighten any loose hardware prior to storage.
- Check the engine oil, and top off if necessary.
- Clean the fuel filter.
- Clean or replace the air filter.

• Remove the spark plug and pour 1-2cc (about a half-teaspoon) of engine oil into the spark plug hole. Pull the recoil starter a few times to distribute this oil while the spark plug is removed. Replace the spark plug.

• Store the machine in a clean and dry indoor storage location.

# LIFTING & TRANSPORTATION

Safe lifting practices must always be followed when moving this trowel over long distances to and from the jobsite and when moving it short distances across the jobsite or on and off the slab.

#### PRIOR TO LIFTING OR TRANSPORTING YOUR MACHINE:

- Power down the machine.
- Ensure all hardware, including the fuel cap, is secure on the machine. Tighten any loose bolts.
- Close the fuel valve.

#### TO LIFT THIS MACHINE:

- Use a single-point lift strap or hook rated for the weight.
- Attach the lift strap only through the lift eye.
- Lift straight upwards, never at an angle.
- Never lift higher than necessary.
- Never walk underneath the machine when lifted.

#### TO TRANSPORT THIS MACHINE:

• When transporting over the road, always tie down the machine using tie-down straps of adequate strength for the weight of this machine.

• Always use more than one strap to secure this machine.



# CARE & PREVENTATIVE MAINTENANCE

Third Coast trowels are designed to provide years of trouble-free service, but as with all power equipment, periodic maintenance is required to keep this machine running smoothly. Maintenance is a normal part of ownership of any trowel and must be carried out on-time per the prescribed intervals or sooner, as needed. Please note, this operator's manual is not a service guide. All service should be done by a qualified, trained service technician.

**CAUTION** Inspection and other service should always be carried out on hard, level ground with the engine shut down.

#### MACHINE INSPECTION INTERVALS

This trowel must be inspected, at a minimum, at the intervals described in "Table 1" below. In tough operating environments, more frequent inspection is recommended.

TABLE 1: MAINTENANCE/INSPECTION				
ITEM	OPERATION HOURS			
Basic operation check	Every 8 hours or every day			
Full visual inspection	Every 8 hours or every day			
V-belt check	Every 8 hours or every day			
Lubricate clutch, arms, and thrust plate	Every 40 hours or weekly			
Inspect blades for wear and replace if needed	Every 40 hours or weekly			
Remove, clean, and reinstall clutch, arms, and thrust collar	Every 200 hours			
Adjust blade arms	Every 200 hours			
Grease arm bearings	Every 200 hours			
Check and replace arm bushings, thrust collar bushings, and shaft seals	Every 2,000 hours or yearly			
Check pitch control cables and replace if needed	Every 2,000 hours or yearly			

#### DAILY OPERATIONAL CHECKS

Prior to each daily use of the equipment and at the start of each operator's shift:

• Visually inspect the machine for signs of damage. Remove any dirt, debris, or material that may have accumulated from prior use.

- Clear any dust accumulation from the air filter, carburetor, and engine cooling fins.
- Check all hardware to ensure proper tightness. See the "Care & Preventive Maintenance" section for proper fastener torque.

- Check the engine oil level and gearbox oil level, and refill as needed.
- Check for fuel and oil leaks, and repair as needed.
- Confirm proper blade pitch operation by cycling the blades through their entire pitch range.
- Confirm centrifugal switch operation by ensuring the switch head moves freely in its housing.

## WEEKLY OPERATIONAL CHECKS

After each week of operation, or each 40 hours, whichever occurs first:

- Lubricate the clutch, arms, and thrust plate.
- Inspect blades and replace worn blades. Blades should always be replaced as a set.

## MONTHLY OPERATIONAL CHECKS

After each month of operation, or each 200 hours, whichever occurs first:

- Completely remove, clean, and lubricate the clutch, arms, and thrust collar.
- Adjust blade arms and grease blade arm bearings.

## ANNUAL OPERATIONAL CHECKS

After each year of operation, or each 2,000 hours, whichever occurs first:

- Inspect and replace (as needed) arm bushings, thrust collar bushings, and shaft seals.
- Inspect pitch control cable and throttle cable, and replace as needed.

## ENGINE INSPECTION & MAINTENANCE TABLES

To maximize the lifespan of your Honda engine, inspect and maintain it per the schedule in "Table 2" below. The below maintenance summary is taken from the Honda manual and is not a substitute for reading your engine manual.

TABLE 2: ENGINE MAINTENANCE			
ITEM	OPERATION HOURS		
Inspect for oil leakage	Every 8 hours or daily		
Check oil level	Every 8 hours or daily		
Check for loose or missing hardware	Every 8 hours or daily		
Replace engine oil	After first 20 hours, then every 100 hours		
Clean or replace air filter	Every 50 hours		
Inspect/replace throttle cable	Every 2,000 hours or annually		

A complete list of required engine maintenance tasks can be found in your Honda engine manual.

#### TIGHTENING TORQUE TABLES

The threaded fasteners on this machine are all right handed, coarse-thread, metric, Class 8.8 or Class 12.9 fasteners.

All fasteners on this machine are marked by strength class and must be torqued to the proper specification for that class. To identify whether a fastener is a Class 8.8 or Class 12.9 fastener, check the identifying marks stamped on the head.





TABLE 3: TIGHTENING TORQUE FOR CLASS 8.8 FASTENERS, FT-LB								
THREAD SIZE>	M6	M8	M10	M12	M14	M16	M18	M20
TORQUE, FT·LB>	9	22	44	76	122	190	262	370
TORQUE, N·M>	12	30	60	103	165	257	355	501

TABLE 4: TIGHTENING TORQUE FOR CLASS 12.9 FASTENERS, N·M								
THREAD SIZE>	M6	M8	M10	M12	M14	M16	M18	M20
TORQUE, FT·LB>	16	38	75	131	209	326	451	636
TORQUE, N·M>	22	52	102	178	283	442	611	862

# SPECIFICATIONS

#### MACHINE SPECIFICATIONS

TABLE 5: TROWEL SPECIFICATIONS					
WEIGHT & DIMENSIONS CT36 CT48					
Operating Weight, lb	198	300			
Overall Length, in (L)	70.9	78.7			
Overall Width, in (W)	38.2	48.0			
Overall Height, in (H)	35.8	39.0			
Blade Working Diameter, in	36	46			
# of Blades	4	4			
Blade Size, in	8x14	8x18			
Lift Eye Diameter, in	1-9/16"	1-9/16"			
PERFORMANCE DATA CT36 CT48					
Gearbox Oil Type	Mobil Glygoyle 460				
Gearbox Oil Capacity	750mL	750mL			
Drive Belt	A25 1/2"x27" B25 5/8"x28"				

#### MACHINE DIMENSIONS REFERENCE DIAGRAMS





#### ENGINE SPECIFICATIONS

Third Coast 36" trowels come equipped with a Honda GX160 engine, while 48" trowels come equipped with a Honda GX270 engine.

TABLE 6: ENGINE SPECIFICATIONS						
HONDA GX160 HONDA GX270						
Engine Manufacturer	Honda	Honda				
Horsepower, Net	4.8 HP	8.4 HP				
Operating Speed	3,600 rpm	3,600 rpm				
Bore	68mm	77mm				
Stroke	45mm	58mm				
Displacement	163 cm³	270 cm <sup>3</sup>				
Compression Ratio	9:1	8.5:1				
Lubrication	Splash	Splash				
Engine Oil Type	SAE 30 or 10W-30	SAE 30 or 10W-30				
Engine Oil Capacity	20.3 fl oz (0.6L)	37fl oz (1.1L)				

Notice: Both trowel and engine specifications are subject to change at any time. The specifications in the manual provided with your machine are accurate for your machine. If accessing this manual online, please note the specifications may not match your machine.

# TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Engine does not start,	Ignition switch in Off "O" position.	Turn switch to On "I" position.
but nas spark.	Fuel valve in Off position.	Move fuel lever to the On position.
	Fuel level too low.	Fill fuel tank.
	Stale or old fuel.	Confirm fuel is clear, fresh, and free of water and contaminants. Replace fuel if necessary.
	Summer blend fuel used in temperatures below 45°F.	Replace with winter blend fuel (manufactured October 15 - April 15).
	Oil level too low (oil sensor will prevent starting).	Check oil level and refill.
	Fuel system clogged.	Clean fuel filter, fuel lines, carburetor float needle valve, carburetor bowl, and carburetor fuel nozzles, and try again.
Engine has no spark,	Spark plug worn or damaged.	Replace spark plug.
or has weak spark.	Poor connection between ignition wire and spark plug.	Check connection between ignition wire and spark plug. Tighten or replace.
	Damaged ignition kill switch.	Check ignitions kill switch function and replace if needed.
	Worn or damaged ignition coil.	Check for spark from ignition coil using spark tester or inductive tachometer. Replace if no spark present.
	Centrifugal switch in OFF position.	Confirm centrifugal switch is in the operating position.
Engine is difficult to start, or will not remain running at idle.	Clogged fuel system.	Clean fuel filter, fuel lines, carburetor float needle valve, carburetor bowl, and carburetor fuel nozzles, and try again
	Stale or old fuel.	Confirm fuel is clear, fresh, and free of water and contaminants. Replace fuel if necessary.
	Summer blend fuel used in temperatures below 45°F.	Replace with winter blend fuel (manufactured October 15 - April 15).
Engine will not reach full speed.	Choke lever is in ON position.	Move choke lever to OFF position after warming up the engine.
	Stale or old fuel.	Confirm fuel is clear, fresh, and free of water and contaminants. Replace fuel if necessary.
	Dirty air filter.	Inspect the air filter. Replace if necessary.

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Engine shuts off after	Fuel valve partially closed.	Move fuel lever to Open position.
operating for a short	Oil level too low. Low oil cutoff engaged.	Check oil level. Refill if necessary.
period of time.	Fuel system clogged.	Clean fuel filter, fuel lines, carburetor float needle valve, carburetor bowl, and carburetor fuel nozzles, and try again.
Engine shuts off after being operated for a long period of time.	Winter blend fuel used in temperatures >70°F causing vapor lock.	Winter blend (manufactured October 15 - April 15) evaporates too easily. Replace with summer blend fuel.
	Fuel level too low.	Fill fuel tank.
	Oil level too low. Low oil cutoff engaged.	Check oil level. Refill if necessary.
Engine operates	Engine speed too low.	Only operate at full throttle.
normally, but will not transmit any power to trowel (blades do not	Loose drive belt.	Check belt tension. Proper tension is 1/4" - 3/8" deflection when pressing on middle of belt.
rotate).	Broken V-belt.	Replace V-belt.
	Failed or slipping clutch.	Confirm clutch is engaging at full throttle. Replace if not engaging.
Engine achieves full RPM and blades engage, but machine lacks power.	Dirty air cleaner	Clean or replace air filter.
	Improper fuel level in carburetor.	Check carburetor float, and rebuild carburetor as needed.
	Slipping V-belt due to loose tension.	Check V-belt tension. Proper tension is 1/4" - 3/8" deflection when pressing on middle of belt.
	Worn V-belt.	Check the belt condition and replace if stretched or showing visible wear.
	Slipping clutch.	Confirm clutch is operating at the same rotational speed as the engine. Replace clutch if slipping.
Bouncing motion,	Worn blades	Replace blades if visibly worn.
swirls in concrete, or rolling of concrete while troweling.	Inconsistent blade pitch across each blade.	Adjust pitch so all blades match.
	Bent trowel arm(s).	Replace the damaged arms.
	Worn thrust bearing.	Replace thrust bearing if not spinning freely.
	Thrust collar is worn or damaged.	Check flatness of thrust collar, replace if >0.02" variance in flatness across the surface.

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Clutch is sluggish to	Worn V-belt.	Replace belt.
respond or slips.	Worn clutch.	Repair or replace clutch.
	Gearbox bearings worn.	Verify input shaft rotates when moved by hand. If not, replace shaft bearings.
	Gearbox damaged.	Rotate input shaft by hand, and confirm output shaft rotates. If not, replace all gears as a set.
Rolling motion while operating.	Main shaft out of straightness tolerance.	Check shaft for straightness at spider connection; must be within 0.003".
	Improper yoke alignment.	Replace yoke if both ends are not engaging the wear cap evenly.
	Blade pitch is inconsistent.	Adjust individual blade angles to ensure all blades match.
Trowel does not shut down when in runaway	Dirty or stuck centrifugal switch.	Clean centrifugal switch contacts.
condition.	Damaged or defective switch or wiring.	Replace centrifugal switch assembly.

# WARRANTY



Third Coast Equipment stands behind all of its products with a best in class warranty, including:

- Five-year warranty on spare parts
- Four-year warranty on Vanguard engines
- Three-year warranty on Honda engines
- Two-year warranty on labor

This limited warranty contains certain exclusions and limitations and is restricted to repair or replacement of the machine or affected parts only. Other exclusions may apply.

To view the full Third Coast Equipment warranty policy, visit: <u>HTTPS://THIRDCOASTEQUIPMENT.COM/WARRANTY-POLICY</u>





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