

TC07 TURF CUTTER

Operating Instructions

Before commissioning the machine, read operating instructions and observe warning and safety instructions.



Manufacturer Details

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Machine Details

Model:	CAMON TC07 Turf Cutter
Serial Number:	
Engine Serial No:	
Date of Purchase:	
Supplier:	

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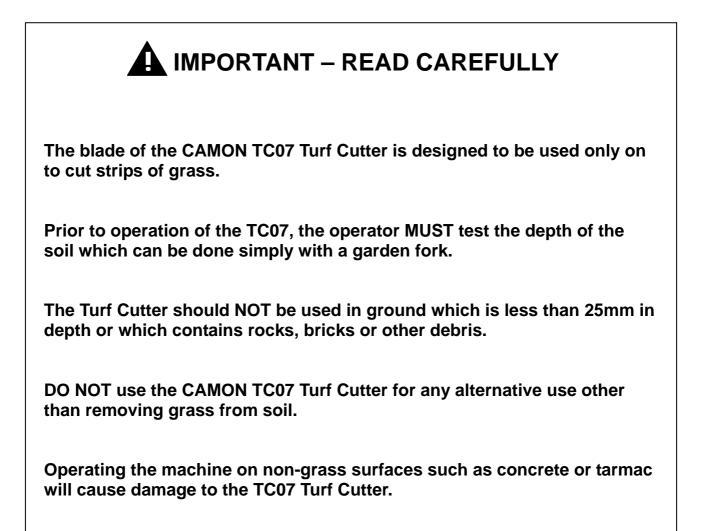
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1.0 What the Machine is Designed For

1.1 Applications

The CAMON TC07 Turf Cutter has been designed by Tracmaster for removing the top surface of lawn.

The benefit of using a TC07 Turf Cutter is the ease and efficiency with which the machine is able to cut consistent strips of turf away from the soil.



2.0 Specifications

ENGINE	
Engine Manufacturer	Honda
Engine Model	GX160
Engine Type	4-Stroke overhead valve, single cylinder
Engine Output	4kw
Engine Shaft Size	3/4" Straight
Spark Plug	BPR6ES(NGK) / W20EPR-U (DENSO)
Spark Plug Gap	0.70-0.80mm
Engine Ignition Type	Recoil
Cold Start System	Choke
Fuel Tank Capacity	3.6 litres
Fuel Type	Unleaded
Fuel Consumption	313g/kwhr
Air Filter	Paper
Rated Engine Speed	3600 rpm
Engine Oil	10w/30
Oil Filling Quantity	0.5 litres
Dry Weight	15kg

MACHINE	
Model	TC07
Working Width	40cm
Blade Types	Solid hardened steel
No of Blades	1
Clutch Type	Centrifugal
Blade Depth Adjustment	25mm to 40mm
Wheel Types	Pneumatic
Handlebar Feature	Foldable
Noise Level	86db
Vibration Acceleration Value	4m/s ²
Max gradient for operation on slope	20 degrees
Weight	90kg
Dimensions (I x w x h)	80 x 64 x 60cm

3.0 Unpacking and Assembly

3.1 Major Components Diagram



- 1 Engine On/Off Switch
- 2 Drive Lever
- 3 Vibration Mounts
- 4 Cutting Depth Controls
- 5 Fuel Tank
- 6 Engine
- 7 Wheels
- 8 Cutting Blade
- 9 Lifting Lever
- 10 Gear Selector Lever

3.2 Unpacking Instructions

Open the top of cardboard box.

Cut the box open by using a sharp knife to cut down through the four corners of the box.

Swivel the folded top part of the handle bar until it locates into position.

Insert the pin located on a chain to fix handlebars into position. Secure the pin with R-Clip.

Push the machine forward safely and gently out of the box.

Dispose of the cardboard box and other padding material.

4.0 Safety Instructions

4.1 Basic Safety Instructions

Before starting the machine, read and understand these operating instructions.

4.2 Main Components and Operating Elements

Below is a description of the main components of the TC07 Turf Cutter and how they operate.

4.3 Engine and Drive



The Honda GX160 is a four stroke engine that runs on standard unleaded fuel.

The engine is air cooled and therefore it is important that the grille covering the recoil rope is kept clear from debris.

The engine drive shaft is fitted with a centrifugal clutch that engages at a set engine speed and drives a fixed drive belt that is also connected to a pulley on the rotor shaft.

The engine air filter cleans the air drawn in by the engine. A clogged air filter will reduce performance.

The engine is fitted with a fuel on/off lever and a choke lever. Read the engine operating instructions to understand the operation of these levers.

4.4 Gear Selector Lever

The drive to the back axle of the TC07 Turf Cutter can be engaged and disengaged using the gear selector lever located at the rear of the machine, above the front axles.

Locating the gear lever in the '0' position disengages the drive from the back axle. The machine can be free wheeled in this position. Move the gear selector lever to the 'l' position to engage the engine drive to wheels.

NB: The power to the back axle from the engine is controlled by a centrifugal clutch that is attached to the engine. Moving the gear lever to the engaged position will not drive the machine automatically. It is only when the drive lever is activated and the engine revs are increased to a point at which the centrifugal clutch is engaged that the engine power is transferred to the back axle.

4.5 Drive Lever

The drive lever is located beneath the left hand handlebar grip.

This lever operates both the cutting blade and the driving power to the back wheels. It does this by raising the engine speed until a centrifugal clutch engages and transfers the engine power to the driven components of the TC07.

Letting go of the drive lever causes the engine revolutions to drop, the centrifugal clutch to disengage and both the engine drive and cutting blade to stop moving.

4.6 Cutting Depth Adjustment

The cutting depth of the blade is adjusted using the two adjuster knobs, the lower locking knob and the top height adjustment knob. The top height adjustment knob is connected to a length of threaded rod that is wound into and out of the chassis. These knobs are located in front of the handlebar mounting on the top section of the main chassis.

The lower knob is for locking the position of the top knob. To adjust the depth of the cutting blade, first loosen the lower locking knob. Once this knob is able to move freely, you can adjust the position of the top knob into and out of the chassis by turning it clockwise and anticlockwise.

Using the indicator sticker on the thread of the top knob it is possible to choose your required depth of cut. This ranges from 25mm to 40mm.

4.7 Machine Lifting Lever

Located at the rear of the machine, beneath the handlebars, this lever allows the operator to move the cutting blade in and out of the ground.

4.8 Commissioning

Prior to operation it is necessary to check engine oil level and add engine oil to the level indicated in the specification table on page 4.

The engine fuel tank will not contain fuel so will need filling to the recommended level before use.

4.9 General Safety Instructions

Be aware of all the safety requirements for the machine.

Visually check the machine for operational safety, complete components and fixed guarding prior to each use.

Read and be aware of the warning and instruction signs located on the machinery.

Cordon off the work area to access from the general public.

Before starting work clear the area of any objects that may cause damage to the machine.

Do not operate the machine if you are under the influence of alcohol or drugs. This equipment must only be operated by persons who are medically fit both physically and mentally.

Only work in good light and visibility.

Wear the correct personal protection equipment as instructed by this manual.

Operator clothing should not be loose and footwear should offer good grip.

Know how to stop the machine in an emergency.

4.10 Engine Specific Safety Instructions

Always ensure the engine is turned off and the fuel tap is turned off when transporting the machinery, cleaning the machinery and making adjustments.

Always start the engine in open air. Starting an engine within a confined space can lead to the inhalation of toxic substances.

Do not smoke or use a naked flame when refueling.

Use only unleaded petrol from fuel containers designed for this purpose. Refuel outdoors only and replace the fuel tank cap securely.

Do not mix oil with the fuel.

Leave one inch of space in the fuel tank during refilling.

Clear up any petrol spillages immediately.

Avoid contact with the engine during operation as it will become hot. Leave the engine to cool prior to contact.

Never interfere with the control settings of the engine.

5.0 Safety Instructions Starting and Operating

5.1 To Start the Engine

Using the dipstick provided, check the engine oil level. Top up with 10w/30 oil if the dipstick is clear of oil.	OIL FILLER CAP/DIPSTICK UPPER LIMIT	
Check the fuel level. Refill as necessary and as determined by the fuel tank type – see diagram.	MAXIMUM FUEL LEVEL (strainer type) FUEL TANK TOP 25 mm (1 inch) 25 mm (1 inch) Pture by Henda	
Switch the engine ignition switch to the ON position.	ENGINE SWITCH	
Turn the fuel tap located on the engine carburetor to the ON position. If the engine is cold or has not been operated recently set the choke lever on the carburetor to the ON position.	FUEL VALVE LEVER CHOKE LEVER THROTTLE LEVER Pitter by Honda	

Pull the engine recoil handle slowly until it engages then pull briskly to start the engine.

After the start, guide the cord back into its position. Do not let it snap back.

Once the engine has started, if the choke lever has been used, return this to its OFF position after the engine has run for a few seconds.

5.2 To Stop the Engine

Release the drive lever.

Switch the engine ON/OFF switch to the 'O' off position.

Turn the fuel tap lever to the OFF position.

WARNING: THE EXHAUST COVER MAY BE HOT - DO NOT TOUCH.

5.3 Safety Equipment

The TC07 operator must be wearing:

- Ear Defenders
- Gloves
- Protective Footwear
- Safety Glasses

5.4 Operation

Before turf cutting can be carried out, the grass must be cut short and be cleared of any objects such as stones or sticks that would damage the Turf Cutter.

WARNING: USING THE TURF CUTTER ON LONG GRASS WILL QUICKLY CAUSE DAMAGE TO COMPONENTS OF THE MACHINE. WE RECOMMEND GRASS IS CUT PRIOR TO SCARIFIYING.

Do not operate the Turf Cutter on wet lawns or in wet weather.

Do not operate the machine in very hard dry ground.

When safety checks have been completed, start the engine following the correct procedure.

Position the Turf Cutter in the direction you wish to cut turf.

Set the thickness of turf required by using the height adjustment knob.

Ensure the gear lever is in the 'O' position.

Lift the drive lever on the handlebar to engage the drive to the blade.

Lower the lifting lever to lower the blade into the ground.

Move the gear lever from the 'O' position to the 'I' position.

At the end of the strip of turf, raise the lifting lever to raise the blade out of the ground.

Release the drive lever stopping the drive to the wheels and the blade.

Move the gear selector lever to the disengaged position 'O'.

Do not work the Turf Cutter on slopes of more than 20 degrees and always work across the slope, not up and down it.

5.5 Procedure for Unexpected Shut Down

Release the operating lever

Turn the engine operating switch located on the engine to the OFF position.

Ensure the tines have stopped rotating prior to moving the machine.

5.6 Residual Risks of the TC07 Turf Cutter

The TC07 Turf Cutter is designed to be pushed by the operator during transportation. It has no brake system and the operator must hold firmly onto the machine at all times when the machine is on sloped areas.

6.0 Maintenance

6.1 Schedule

	Operation	Daily	Every Week	Every Month
Engine	Check engine oil level 10W/30 See separate engine manual	X	Х	
Machine	Check condition of blade	Х		
	Check belt condition			Х
	Check operating lever and cable		Х	
	Check protection cover condition			Х
	Check bearings			Х
	Lubricate wheel bearings			Х
	Tighten all nuts and bolts			Х

6.2 Basic Maintenance

Check that all guards are fitted securely.

Ensure the cable connecting the drive lever to the engine is securely fastened at both ends and shows no sign of wear.

Check the pressure of pnuematic tyres and ensure that they do not show any indentations or significant wear and tear.

Ensure the wheels are held securely and the fixed pin that holds the wheels onto the axles is in place.

6.3 Engine

6.3.1 Check Engine Oil Level

This is to be checked prior to each use and every 8 hours during operation.

Check only when the engine is off and in a horizontal position.

Clean the oil filler plug and its surrounding parts.

Remove the oil filler plug. Clean the dipstick with a clean cloth and put the oil filler plug all the way back into the engine. Remove the oil filler plug and check the oil level.

Refill the oil if indicator shows more is required. For the Honda GX160 the recommended oil is SAE 10w/30.

6.3.2 Change Engine Oil

Refer to the engine manufacturer's manual for location of components and more detailed assistance.

Do not change the oil if the engine is hot.

The first oil change is after 50 hours of work.

Subsequent oil changes should be made after each 100 hours of work.

At extreme temperatures or conditions change the oil after every 50 hours.

Open the drain plug on the engine and the filling plug and drain the oil into a suitable container or use a suction pump to remove oil through filler neck.

Ensure the waste oil is disposed of properly.

Re-fit the drain plug and tighten.

Fill fresh engine oil through the oil filling opening. Use a funnel or similar device for ease of filling.

Replace the oil filler plug and tighten.

6.3.3 Air Filter

Inspection Check:

Remove the air cleaner cover and inspect the filter elements.

Cleaning:

See diagram below containing information provided by Honda

0.22	
Cleaning	STANDARD DUAL-FILTER- ELEMENT TYPE
Dual-Filter-Element Types	WING NUT
 Remove the wing nut from the air cleaner cover, and 	AIR CLEANER
remove the cover.	
 Remove the wing nut from the air filter, and remove the filter. 	PAPER FILTER ELEMENT
3. Remove the foam filter from the paper filter.	FOAM FILTER ELEMENT
 Inspect both air filter elements, and replace them if they are damaged. 	GASKET
Picture by Honda	

6.3.4 Spark Plug

Clean and replace.

6.4 Cleaning

After cleaning, particularly if a pressure washer has been used, ensure any lubrication points are re-lubricated.

Clean the engine with a cloth only. Avoid spraying the engine with jets of water as this may leak into the fuel and ignition systems.

DO NOT PRESSURE WASH THE TRANSMISSION ASSEMBLY.

6.5 Troubleshooting

6.5.1 Machine

Have all serious malfunctions on the machine and engine repaired by an authorized Tracmaster or Honda agent.

Problem	Possible Cause	Remedy
	Broken belt	Replace belt
No drive to blade	Damaged centrifugal clutch	Replace clutch
Deer der th	Height lever not used	Lower the lever into cutting position
Poor depth	Adjuster knobs incorrectly set	Adjust knob positions to allow deeper cut

6.5.2 Engine

Problem	Possible Cause	Remedy
	Spark plug connector not connected	Connect spark plug connector
	Choke lever is not actuated	Actuate choke lever
Engine does not start	Fuel tank empty	Fill fuel tank
	Fuel line clogged	Clean fuel line
	Defective spark plug	Clean or replace spark plug
	Engine has too much fuel	Dry and adjust spark plug and start engine
Engine overheats	Low engine oil	Refill immediately
	Impaired cooling	Clean cooling fan grille
	Air filter clogged	Clean air filter

6.5.3 Lubricants

Use the specified 10w/30 oil specified by Honda for the engine oil.

To lubricate the roller bearings in the wheels we recommend using bio-lubricating grease.

7.0 Transportation, Storage and Handling

7.1 Transportation

Use ramps where possible to manoeuvre the Turf Cutter into a transportation vehicle.

The TC07 Turf Cutter must be fixed securely using straps and by placing chocks behind the wheels.

Always transport the TC07 Turf Cutter horizontally and not tilted at an angle.

Ensure that the fuel control lever on the engine is moved into the OFF position so fuel does not leak into the carburetor during transportation.

7.2 Storage

Always clean the machine and thoroughly dry prior to storage and ensure all lubrication points have been re-greased.

For periods of long storage, change the engine oil.

Either drain the fuel completely or fill the fuel tank and add fuel stabilizer.

Do not store the Turf Cutter in wet rooms, where fertiliser is stored, or in stables as heavy corrosion may occur.

Always store the machine in an horizontal position.

7.3 Handling

Do not attempt to lift the machine alone. At least two people is the minimum required.

Gloves must be worn when lifting the TC07 Turf Cutter.

Do not tilt the machine so that fuel can leak into the air filter of the engine.

When performing maintenance on the Turf Cutter when it is situated on a work bench, ensure that the machine is firmly held in position at all times.

Do not lift the machine solely by the engine at any point.

8.0 Service Record

To ensure your machine is kept in peak condition we recommend that your Turf Cutter is serviced regularly.

Contact Tracmaster on 01444 247689 to find out who your local Authorised Agent is.

Company:	Company:
Date:	Date:
Company:	Company:
Date:	Date:
Company:	Company:
Date:	Date:

Warranty Registration

To validate your warranty please complete the form below and return it to:

Tracmaster Ltd, Sovereign Centre, Victoria Road, Burgess Hill RH15 9LR Alternatively visit <u>www.tracmaster.co.uk</u> and complete the online form.

CUSTOMER DETAILS

Name:	
Company (if applicable)	:
Address:	
	Postcode:
Email:	
Phone:	
MACHINE DETAILS	
Machine:	CAMON Turf Cutter
Model:	TC07
Serial Number:	
Engine Serial Number:	
Purchase Date:	
SUPPLIER DETAILS (i	f not supplied directly by Tracmaster)
Dealer Name:	
Dealer Address:	
	Postcode:

We will never pass your details to any third party, however, we may occasionally send you emails with offers and promotions, if you do not want us to do this please tick this box.

EC Declaration of Conformity



Tracmaster Ltd declares that the machinery stipulated below complies with all the relevant provisions of:

Machinery Directive 2006/42/EC

EMC Directive 89/336/EEC

and the National Laws and Regulations adopting these directives and other relevant directive.

Manufacturer:	Tracmaster Ltd Sovereign Centre Victoria Road Burgess Hill RH15 9LR UNITED KINGDOM
Machine Description	n: Lawn Turf Cutter
Туре:	CAMON TC07
Serial No:	
Harmonised Standa	rds applied: (including parts of):
EN 12100-1:2003	Safety of Machinery: Basic Principles. Terminology. Methodology
EN 12100-2:2003	Safety of Machinery: Basic Principles. Technical Principles
EN 13857:2008	Safety distances to prevent hazard zones being reached by upper and lower limbs.
Responsible Persor	n: Stephen Pitt
Position in Compan	y: Managing Director
Address:	Tracmaster Ltd, Sovereign Centre, Victoria Road, Burgess Hill, RH15 9LR
Date:	August 2010
Signature:	Stepler Vitte



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