



HTC 800 RXP



User Manual

HTC 800 RXP



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1 Introduction

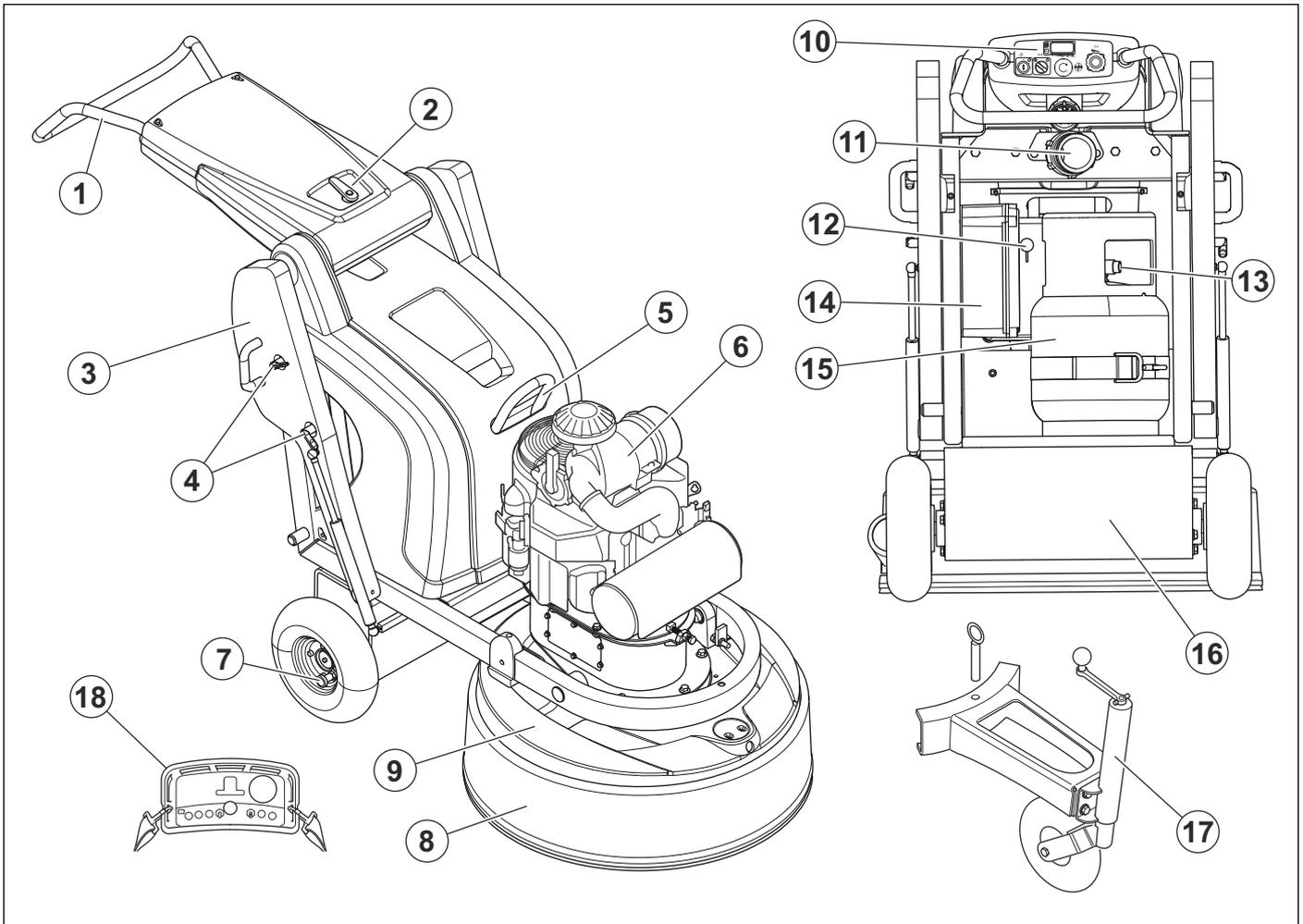
1.1 Product description

The product is a propane powered surface grinder that can be used to grind, strip, clean and polish horizontal surfaces. Only use P95 propane.

1.2 Intended use

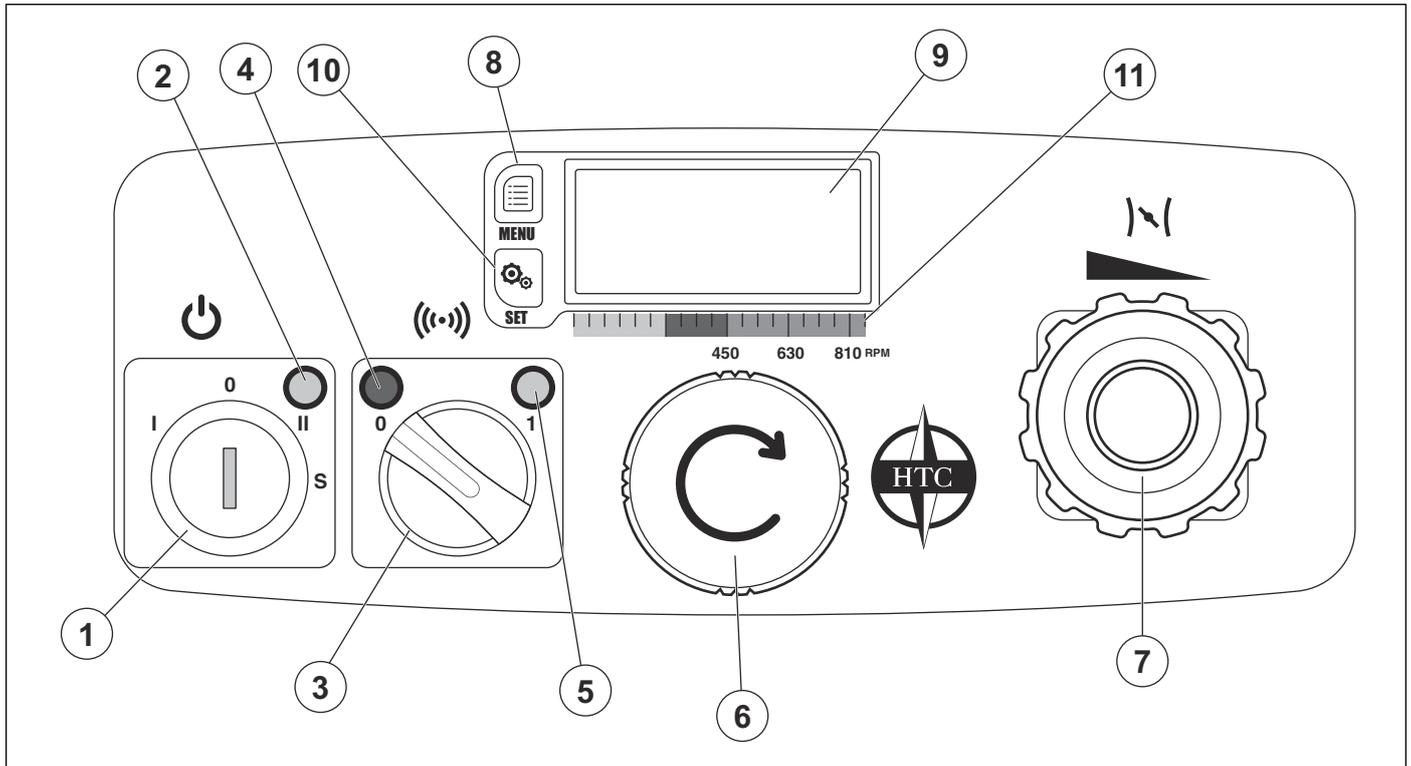
Only use the product to grind and polish natural stone, terrazzo, concrete, or other materials approved by HTC. Do not use the product for other tasks.

1.3 Product overview



- | | |
|--|---|
| 1. Handle | 11. Extraction connection |
| 2. Handle lock | 12. Main power switch |
| 3. Weights | 13. Propane connection |
| 4. Locking pin, weights | 14. Control cabinet |
| 5. Lifting eye | 15. Propane cylinder (Use only P95 propane) |
| 6. Engine | 16. Drive motor box |
| 7. Locking pin, wheel | 17. Support wheel |
| 8. Floating grinding cover outer movable section | 18. Remote control unit |
| 9. Floating grinding cover inner fixed section | |
| 10. Control panel | |

1.4 Control panel overview



WARNING: When you do not use the machine turn the START KEY to 0 and turn the knob RADIO ON/OFF to 0.

1. START KEY SWITCH

Start key to start/stop the machine's functions:

- 0: OFF
- I: Electric power ON
- II: Ignition ON
- S: Start the engine.

2. IGNITION - Standby indicator

The led bulb comes on when the the start key is in position II.

3. RADIO ON/OFF

Turn the knob to I to start the radio signal to the radio control unit.

4. COM ERROR - Communication error indicator

The led comes on if there is no connection between the machine and the radio control unit.

5. RADIO ENABLED - Radio control indicator

The led comes on when the knob "Radio ON/OFF" is turned to "ON".

6. EM-STOP - Emergency stop switch

If an emergency occurs, press the EM - stop to stop the machine.

7. THROTTLE

Use one of the methods that follows to adjust the throttle of the engine.

- Turn the knob.
- Push the center button on the knob and pull the knob rearward.

8. MENU BUTTON

Press the button to toggle between the settings in the display.

9. DISPLAY

See the section "Display" for detailed information.

10. SET BUTTON

Press the button to adjust the selected menu item.

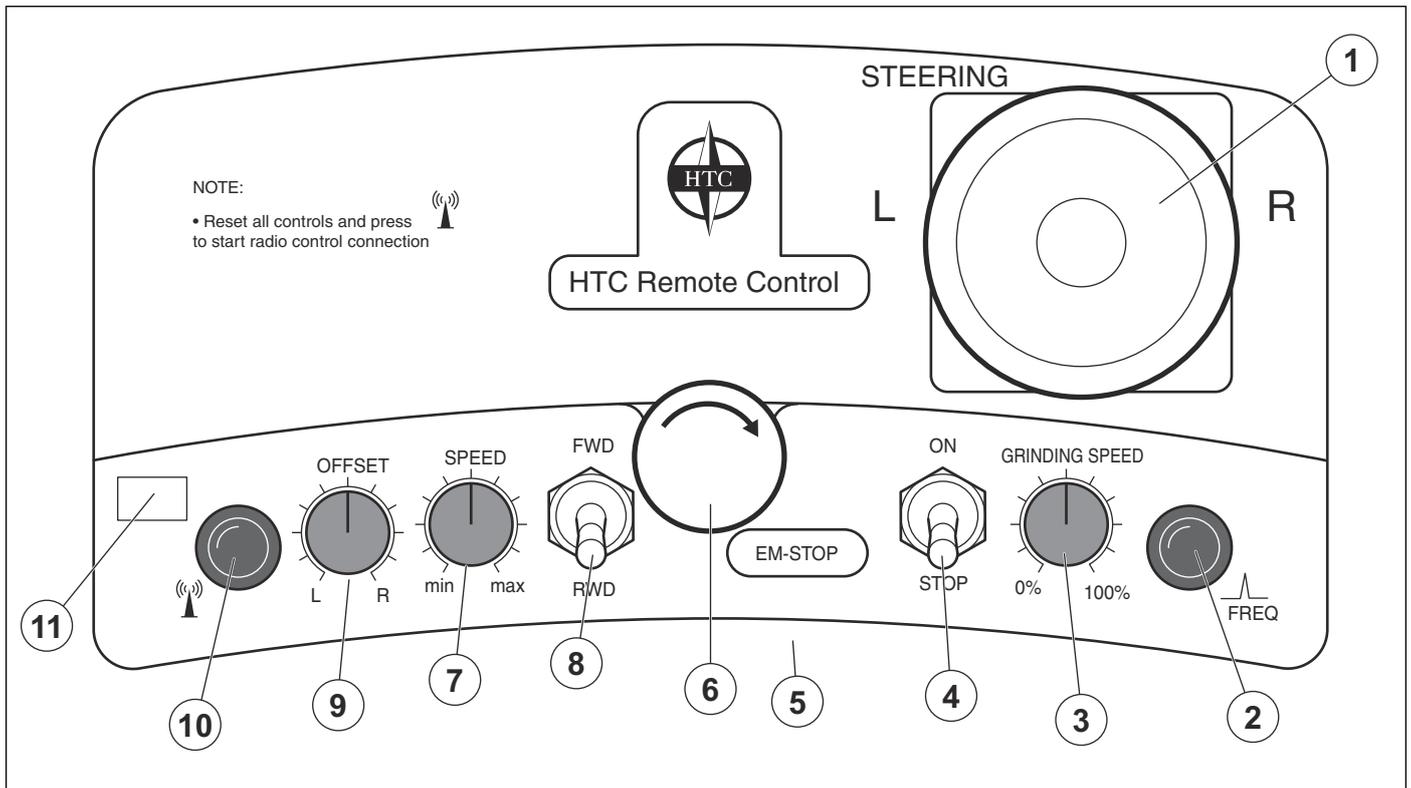
11. RPM GUIDE

A guide that shows the speed interval of the grinding discs.

- Yellow: Idle. Below 1400 rpm.
- Red: The clutch slips. Do not operate the machine between 1400 - 2000 rpm.
- Green: Correct rpm to use when operating the machine. 2000 - 3600 rpm.

Note: Always attach the machine to a winch when you transport the machine on a slanted surface.

1.5 Remote control unit overview



1. STEERING

To steer the machine to the right (R) and to left (L).

2. FREQ - Frequency button

Push the button to change the frequency of the radio control.

3. Not in use

4. ON/STOP - Motor ignition

Move the switch to ON to activate the ignition to the motor. Move the switch to STOP to stop the engine.

5. BATTERY COMPARTMENT

Holds the batteries that power the radio control unit.

6. EM-STOP

Push the button to break the radio contact between the radio control unit and the machine's receiver. This action stops the machine immediately. Rotate the button clockwise to reset.

7. SPEED (min - max)

Turn the knob to adjust the propulsion speed in the direction of movement.

8. FWD/RWD

Move the switch up to move the machine forward (FWD) or down to move the machine backwards (RWD).

9. OFFSET (L - R)

Turn the knob to the left (L) or the right (R) to adjust for any tendency to veer.

10. START RADIO COMMUNICATION

Press the button to start the radio communication between the radio control unit and the machine's receiver.

11. DISPLAY/CHANNEL INFO

Two dots blink with a red light when the radio control unit is active. The displays also shows information on the radio channel and any error messages. If the letter "L" appears and blinks rapidly, change or recharge the batteries. The radio control unit is active for about 30 min after the "L" appears for the first time.

Note: When a "L" appears in the display, take the radio control unit to a safe place and switch off the unit. Install two charged AA batteries 1.2 V NiMH, or alternatively two normal, non-rechargeable 1.5 V AA batteries.

1.6 Symbols on the product



Warning: Not careful or incorrect use can result in injury or death for the operator or others.



Please read the operator's manual carefully and make sure that you understand the instructions before use.



Always use approved ear protection.



Always use an approved breathing mask.



Always use approved protective boots



Risk of fire. Only use commercially available floor cleaners and waxes intended for machine application.

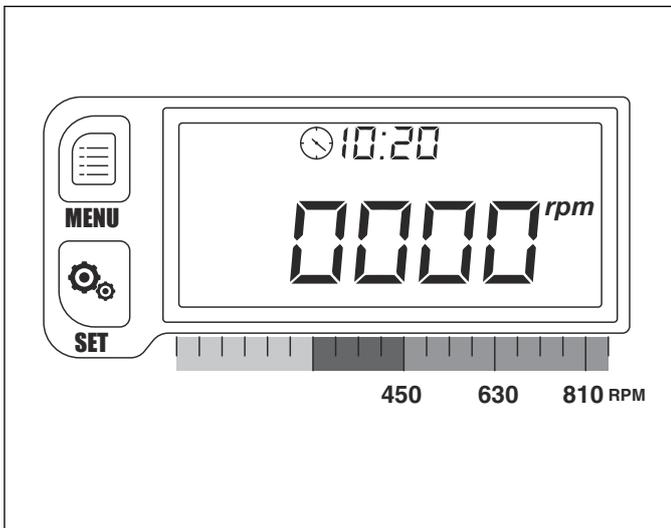


Risk of explosion. Grinding can cause an explosive mixture of fine dust and air. Only use a grinding machine in a area with good airflow.



Use only in areas with good airflow. Take precautions against exposure to carbon monoxide (CO) emissions.

1.7 Display



1.7.1 RPM

The display shows the rpm of the engine.

- Idling: 0 - 1400 rpm.
- Operating range: 2000 - 3600 rpm.



CAUTION: Do not run the machine between 1400 - 2000. The clutch can slip.

1.7.2 Clock

The display has a clock.

- The clock can show current time. Press MENU once and use SET button to change the time. Press and hold the MENU button to return to mainpage.
- The clock can show the total runtime. Press the MENU button once.
- The clock can show time to next scheduled service. Press and hold the MENU button until the symbol SUC shows.
-

1.7.3 Warning

The display shows warning symbols.

- Low battery warning. The display shows the symbol LOU and a warning triangle.
- Service warning. The display shows the symbol SUC and a warning triangle.

1.7.4 Display settings

The MENU button and the SET button adjusts the settings on the display.

- Press the MENU button to toggle through the settings.
- Press and hold the MENU button to activate the setting.
- Use the SET button to adjust the setting.
- Press the MENU button once to lock the setting.
- Press and hold MENU to return to mainpage.

Note: The display returns to the mainpage if inactive during 10 seconds.

1.7.5 Display menu

Use the MENU button and the SET button to adjust the settings on the display.

Menu items	Explanation and basic settings
Total runtime	Displays total runtime.
Time to next service	Press and hold MENU to reset the interval after service.
Max rpm	Shows the max rpm used during last work session.
Ignition	Set to "1P1r".
RPM limit	2000 - 3600 rpm
RPM warning	Set to "OFF".
Service warning	Set to 100h.
Voltage warning	Set to 11,0V.
Battery voltage	Shows UOL and voltage in V.
Reset to factory settings	Do not use.

1.8 Type plate



Model:
Part no:
Serial no: _____
MFG Date: _____



Voltage : Weight :
Rated Current : Max gradient:
Power :
Frequency : Enclosure :



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Made in Sweden

1. Model
2. Part number
3. Serial number
4. MFG date
5. CE
6. Power (kW)
7. Voltage (A)
8. Rated current (A)
9. Frequency (Hz)
10. Weight (kg)
11. Max gradient
12. Enclosure

1.9 Product liability

As referred to in the product liability laws, we are not liable for damages that our product causes if:

- the product is incorrectly repaired.
- the product is repaired with parts that are not from the manufacturer or not approved by the manufacturer.
- the product has an accessory that is not from the manufacturer or not approved by the manufacturer.
- the product is not repaired at an approved service center or by an approved authority.

Even though every effort has been made to make this manual as complete and accurate as possible, we bear no responsibility for incorrect or missing information. HTC reserves the right to change descriptions in this manual without giving prior notice.

2 Safety

2.1 Safety definitions

Warnings, cautions and notes are used to point out specially important parts of the manual.



WARNING: Used if there is a risk of injury or death for the operator or bystanders if the instructions in the manual are not obeyed.



CAUTION: Used if there is a risk of damage to the product, other materials or the adjacent area if the instructions in the manual are not obeyed.

Note: Used to give more information that is necessary in a given situation.

2.2 General safety instructions



WARNING: Read the warning instructions that follow before you use the product.

- The dust from the grinder harmful to breathe. Follow local regulations and use breathing protection.
- Only use the product outdoors or in an area with good airflow.
- Use a CO dosimeter when you operate the product.
- This product is dangerous if used incorrectly or if you are not careful. Injury or death can occur if you do not obey the safety instructions.
- Always be careful and use your common sense. If you are not sure how to operate the product in a special situation, stop and speak to your HTC dealer before you continue.
- Keep in mind that the operator will be held responsible for accidents that involve other persons or their property.
- Keep the product clean. Make sure that you can clearly read signs and decals.
- Do not let a child operate the product.
- Do not let a person, without knowledge of the instructions, operate the product.
- Always monitor a person, with decreased physical capacity or mental capacity, that uses the product. A responsible adult must be there at all times.
- Do not use the product if you are tired, ill, or under the influence of alcohol, drugs or medicine. This has a negative effect on your vision, alertness, coordination and judgment.
- Do not use the product if it is defective.
- Do not change this product or use it if it is possible that it has been changed by others.
- The machine may only be used or repaired by personnel who have received the appropriate theoretical and practical training and who have read this manual.

- Always make sure that a dust extractor is connected to the grinder during dry grinding to prevent exposing as far as possible operators, people in the vicinity, the grinder and other equipment to dust particles. Exposure to dust particles can cause personal injury and also damage to physical equipment.
- The operator must never leave the machine unattended.
- When working on an elevated surface where there is a risk of falling, the edges of the surface must be secured. The values for the machine's thrust and load capacity as well as the driving speed are given in the table for the machine's technical data in the chapter "Technical Data".
- When wet grinding (if the machine has that feature), the water tank must be filled with water. Only use cold water with no chemical additives.
- Do not use the product above 2000 m above the sea level.

2.2.1 Work area safety



WARNING: Read the warning instructions that follow before you use the product.

- Secure the area around the machine. No unauthorised persons should be within a 15-metre radius of the machine. If loose objects get under the grinding head, these may be flung out and cause personal injury.
- Never use the machine in an environment where there is a risk of explosion or fire. Familiarise yourself with the fire protection instructions for the working area and follow them.
- Remove objects from the work area before you use the product.
- Objects that hit against the cutting equipment can eject and cause damage to persons and objects. Keep bystanders and animals at a safe distance from the product.
- Never use the product in bad weather such as fog, rain, strong winds, intense cold and risk of lightning. To use the product in bad weather or in moist or wet locations is tiring. Bad weather can cause dangerous conditions, such as slippery surfaces.
- Look out for persons, objects and situations that can prevent safe operation of the product.
- Be careful when you go near hidden corners and objects that prevent a clear view.

2.2.2 Work safety



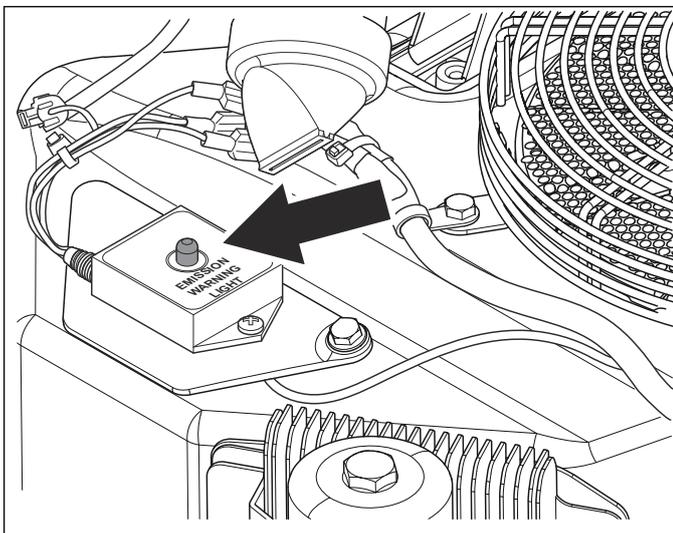
WARNING: Read the warning instructions that follow before you use the product.

- Make sure that there are fire extinguishers close to the work area.

- Use personal protective equipment. See *Personal protective equipment on page 9*.
- Do not operate the product in rain or wet conditions. The risk of electrical shock increases if water enters the product.
- Do not operate the product unless the tools and all covers are attached correctly. An incorrectly attached tool can come loose and cause personal injury.
- Do not perform maintenance on the product when you operate the product.
- If the discs hits an object or if vibrations occur, stop the product immediately. Stop the motor, turn the main power switch to OFF. Examine the product for damages. Repair damages or let an authorised service agent do the repair.
- Keep your hands and feet away from the rotating discs.
- Do not tilt the product when the motor is started.
- Never let the product stay out of view with the motor started. Stop the motor and make sure that the main power switch is OFF.

2.2.3 Emission safety module

The Propane engine has an Emission Safety Module which monitors the exhaust emissions. If the engine starts to produce too high emission levels the engine automatically stops. The red led bulb on the emission module comes on before the engine stops. If, this problem continues the fuel regulator needs adjustment by a approved technician. The red led bulb usually comes on when the engine starts.



2.3 Safety instructions for operation



WARNING: Read the warning instructions that follow before you use the product.

- Only start the machine with the grinding head lowered.
- During grinding, the tools become very hot. Tip the machine back and allow it to stand for a short while. Use protective gloves when removing the tools.

- The machine may only be used and moved on horizontal surfaces. There is a risk of crush injuries if the machine starts to roll.
- Do not use the emergency stop switch to stop the machine, except in emergencies.
- The machine cannot be moved manually if the drive wheels are locked and the radio control activated.
- Never deactivate the radio control function when you have stopped the machine on a sloping surface during loading, since the machine can start to move.

2.3.1 Personal protective equipment



WARNING: Read the warning instructions that follow before you use the product.

- Personal protective equipment cannot fully prevent injury but it decreases the degree of injury if an accident does occur. Let your dealer help you select the right equipment.
- Use heavy-duty slip-resistant boots or shoes. Do not use open shoes or go with bare feet.
- Use heavy, long pants.
- Use protective gloves when necessary, for example when you attach, examine or clean the cutting equipment.
- Use a respiratory mask.
- Always wear safety glasses or eye protection while you operate the product or do maintenance or repairs.
- Always use approved ear protection while you operate the product. Noise for a long period can cause noise-induced hearing loss.
- Do not wear loose fitting clothing or jewelry that can get caught in moving parts.

2.3.2 Safety devices on the product



WARNING: Read the warning instructions that follow before you use the product.

- Do not use a product with defective safety devices.
- Do a check of the safety devices regularly. If the safety devices are defective, speak to your HTC service agent.
- Make sure that the EM-stop on the control panel and the remote control unit functions correctly before you operate the product.

2.3.3 Battery safety



WARNING: Read the warning instructions that follow before you use the product.

- Risk of electrical shock. Do not connect the battery terminals to keys, coins, screws or other metal. This can cause a short circuit of the battery.
- Keep the batteries away from sunlight, heat or open flame. The battery can explode and cause burns and/or chemical burns.

- Keep the batteries away from rain and wet conditions.
- Keep the batteries away from microwaves and high pressure.
- Do not use a defective or damaged battery.
- Keep batteries in storage away from metal objects such as nails, coins, jewellery.
- The battery, that drives the motors for the machine's drive wheel, charges continuously when you operate the machine.

3 Safety instructions for maintenance



WARNING: Read the warning instructions that follow before you use the product.

- To prevent accidental start during maintenance, turn the main power switch to OFF.
- Do the maintenance work correctly to increase the lifetime of the product and decrease the risk of accidents. Let an approved service agent do the professional repairs. Speak to your nearest service agent for more information.
- Only do the maintenance work written in this operator's manual. More extensive work must be done by an approved service agent.
- Do not clean the machine using a high-pressure washer. Otherwise, moisture may penetrate electrical elements and damage the machine's drive system.
- During electro-welding work on the machine, the radio receiver must always be disconnected to avoid damage to the receiver's electrical system.
- Let your service agent regularly examine the product and make necessary adjustments and repairs.
- Replace damaged, worn or broken parts.
- Obey the instructions for how to change accessories. Only use accessories from the manufacturer.
- When not in operation, keep the product in a dry, indoor and locked area. Make sure that children and persons that are not approved cannot get access to the product.

4 Propane safety

4.1 Introduction



WARNING: Read the warning instructions that follow before you use the product.



CAUTION: Read the Propane Safety Manual before you use the product.

Propane is a flammable gas. Propane can explode if the proper cautions are not heeded. Propane is odorized with an agent having a distinct odor that is recognizable at very low concentrations. This helps in identifying leaks, even when they are small.

The two greatest hazards with propane powered floor care machines are

- Emission
- Fire/explosion

4.2 Emission

Propane can cause Carbon Monoxide Poisoning (CO). CO can be lethal within as little as 30 minutes exposure at 3,000 parts per million (ppm) concentration.

Before operating a machine using propane gas you must be trained and certified in proper handling and operating procedures.

If you smell propane while operating the machine:

1. Stop the engine.
2. Shut off the service valve on the propane cylinder.
3. Move the product to a well-ventilated area.
4. Remove the cylinder from the machine and take it outside the building.
5. If the cylinder is leaking, contact an approved repair shop to determine the cause of the leak and have the shop, not you, repair it.

4.3 Fire/Explosion

Leaking propane containers or hoses can cause fire. Propane vapor concentrated or confined to a small, restricted space may explode or ignite.

Make sure that the propane container is undamaged before attaching it to the machine.

If a fire occurs while the machine is being operated do the following:

1. Stop the motor.
2. Shut off the service valve on the propane cylinder, if it is possible. Be careful not to get burned.
3. Move the machine outside, if it is possible. If it is not possible, move it to a well-ventilated area away from flammable materials. Do not attempt to extinguish the flame from a gas leak. If you do, the gas will build up in the area and could reignite. Starve the fire by shutting off the supply of gas.

4. Have the machine and cylinder inspected before using them again.

4.4 Environment

Only use the product outdoors.

4.5 Propane cylinder

- When not in use, propane cylinders always should be stored outside in an upright position in a secure, tamperproof, steel mesh storage cabinet. Make sure that you store the propane cylinders according to national regulations.
- Make sure that the cylinder are securely fastened and standing in an upright position with the service valve closed, when transporting a it to a propane dealer or to a job.
- Only use propane motor fuel cylinder. Do not use the common household propane cylinder.
- Do not drop a propane cylinder.
- Do not smoke or use a device with an open flame when handling or transporting propane cylinders.

5 Operation

5.1 Introduction



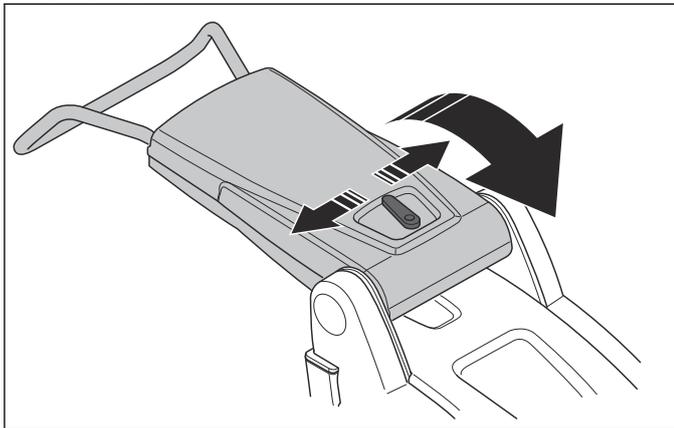
WARNING: Before you operate the product, you must read and understand the safety chapter.

5.2 To adjust the handle

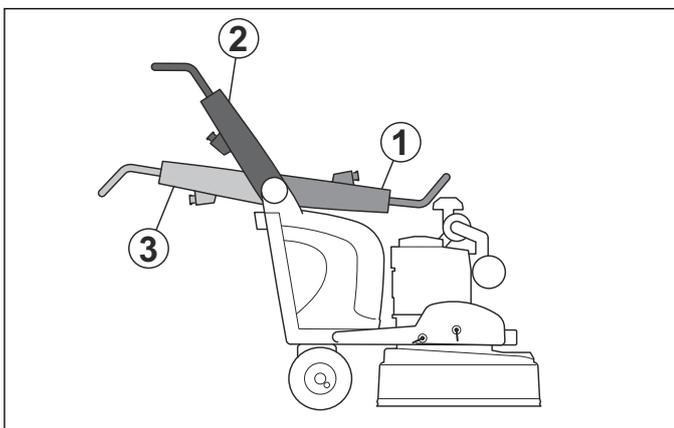


WARNING: There is a risk of crush injuries when adjusting the handle into the desired position. Make sure the handle lock locks properly in the desired position.

1. Loosen the handle by turning the handle lock to the left or the right.
2. Move the handle to the desired position. The handle locks automatically in the desired position.
3. Make sure that the handle lock returns to the original position to guarantee that the handle is locked properly.



5.2.1 Handle positions



1. Position 1
Use this position for transportation.
2. Position 2
Use this position when you tip the machine (to change the tools). This position can be used when you operate the machine with the radio control unit.
3. Position 3

Always use this position when you operate the product manually. This position can be used when you operate the machine with the radio control unit.

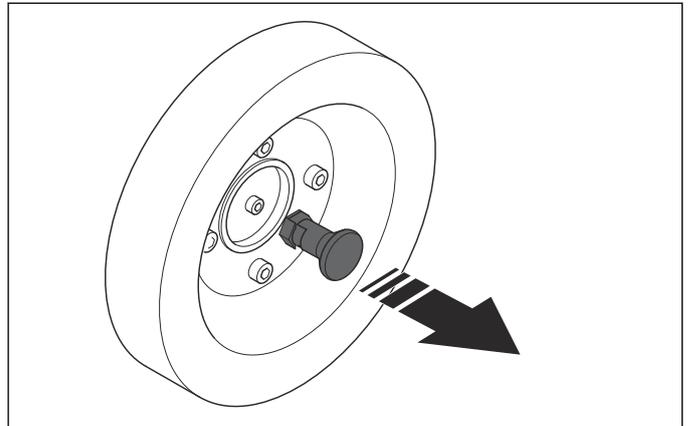
5.3 To adjust the drive lock on the wheels

The machine has a lock mechanism on each wheel. Use the drive lock to release or attach the wheels to its drive motors.

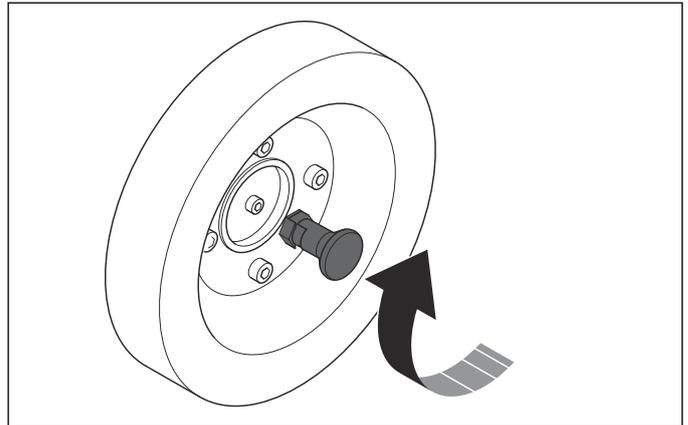
- Release the drive lock to move the machine manually.
- Lock the wheels to move the machine with the operating panel or the radio control unit.

Note: During troubleshooting, the wheels can be released from the drive motors and test driven without the machine moving.

1. Pull out the locking pin.



2. Turn the locking pin 90 and release it.

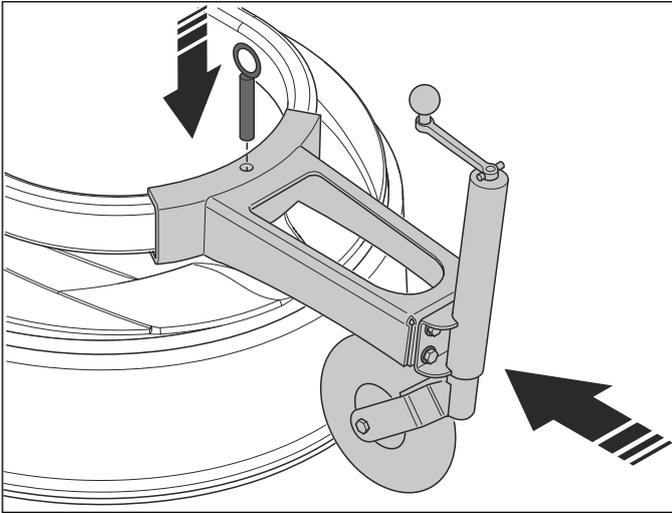


To lock the wheels do the instructions in the opposite sequence.

5.4 To use the support wheel

Use the support wheel to make it easy to move the machine.

1. Fit the support wheel on the chassis.
2. Lock the support wheel with the pin.



3. Rotate the crank on the front of the support wheel to adjust the height. Make sure that the machine tilts and the grinding head hangs completely free of the surface.
4. Release the drive locks of the wheels. See *To adjust the drive lock on the wheels on page 13*.

5.5 To use the weights

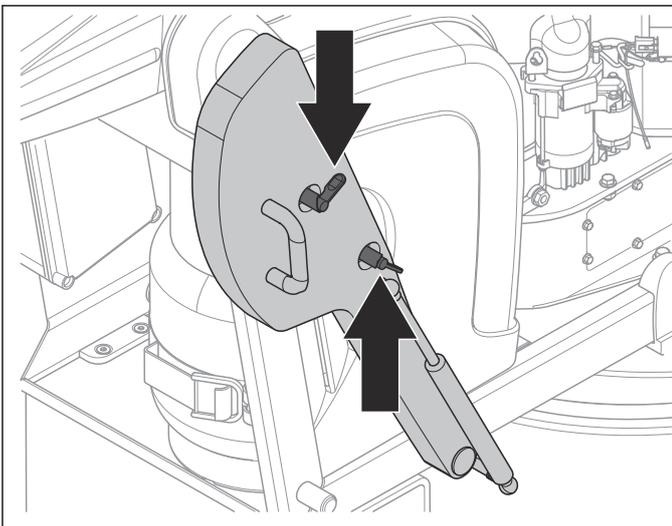


WARNING: Always make sure that the locking pins lock properly when the weights are placed in the desired position.

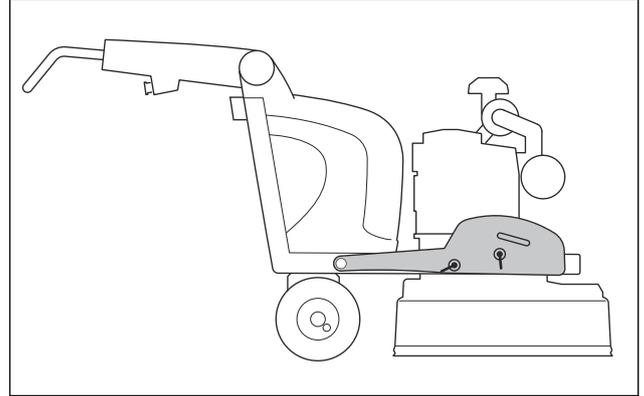


CAUTION: Fold up the weights during grinding. Too high grinding pressure causes damage to the machine and the floor.

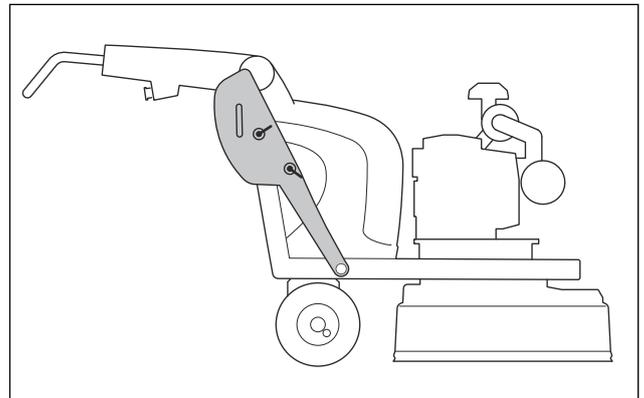
The machine has two weights to make it easy to move the machine's centre of gravity. Each weight has two locking pins with which the weights can be adjusted and locked in three positions; forward, up or backwards.



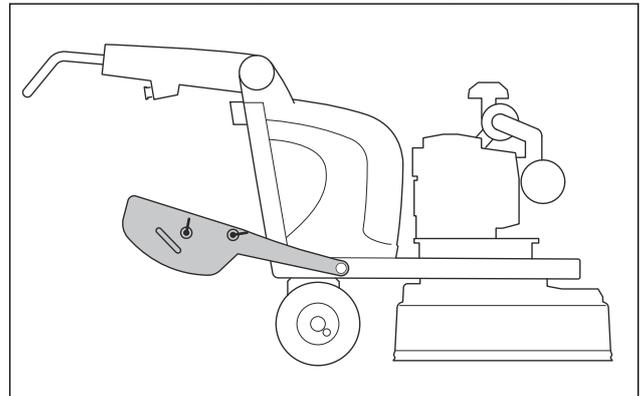
- **Position 1**
Move the weights forward to apply a greater pressure to the grinding discs which increases the grinding effect.



- **Position 2**
Move the weights to its upright position for normal grinding and transport.



- **Position 3**
Move the weights backward when you prepare to change the tools. Use the backward position when you use tools with high removal rate (T-Rex™).

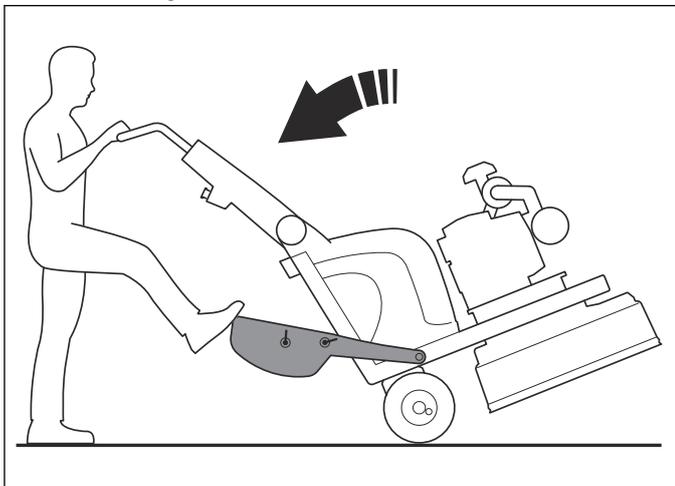


5.6 To access the grinding tools

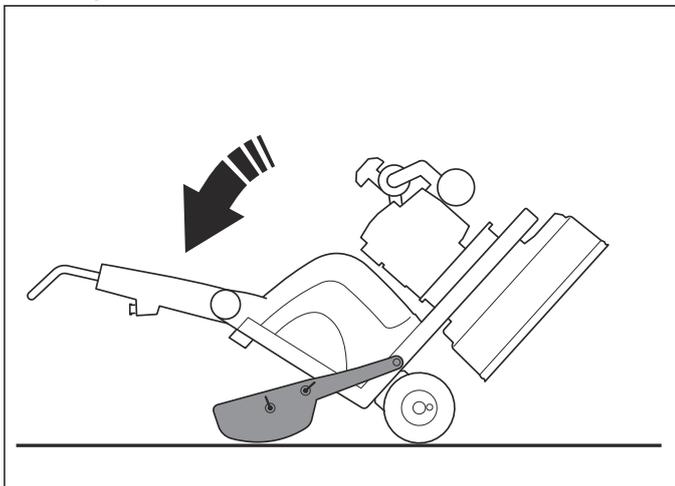


WARNING: Before you change the tools, you must read and understand the safety chapter.

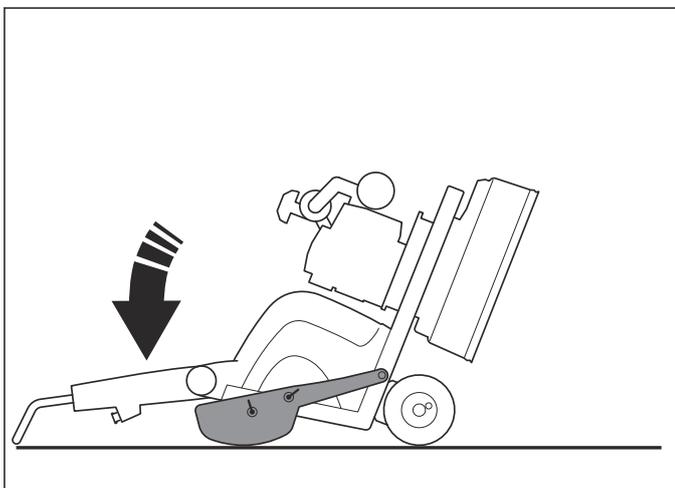
1. Set the handle to the rear position.
2. Fold the weights back and place a foot against one of the weights.



3. Tip the machine backwards carefully, until the weights reach the floor.

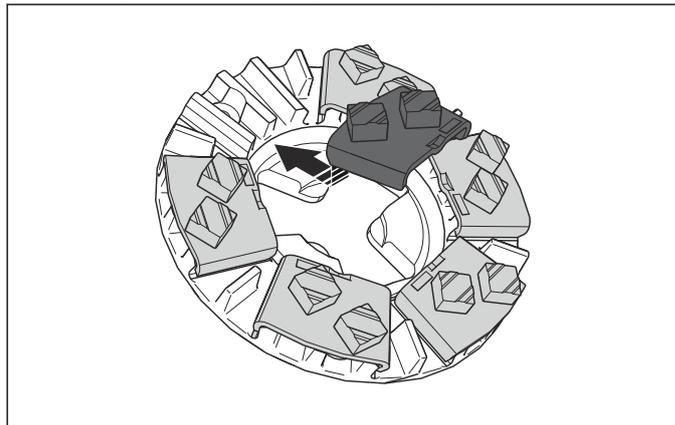


4. Tip the machine further back, until all of the machine reaches the floor.

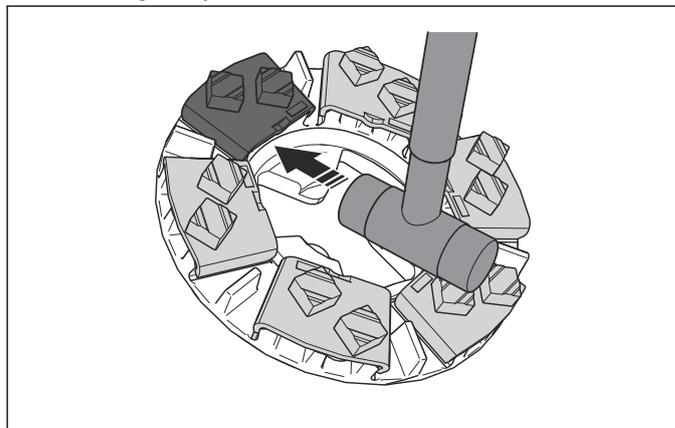


5.7 To fit the grinding tools

1. Slide the grinding tool diagonally, from above, down into the appropriate guide slot on the tool holder. Then push the tool fully into the guide slot.

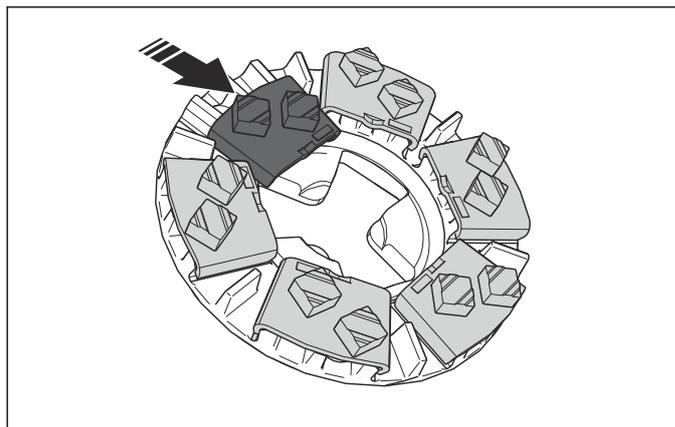


2. Lock the grinding tool into the tool holder by giving it a few light taps with a rubber hammer.



5.8 To remove the grinding tools

1. Remove the grinding tool by giving it a few light taps with a rubber hammer so the locking mechanism releases.
2. Pull out the tool.



5.9 To move the machine manually

1. Turn the power switch to off.
2. Release the drive lock on the wheels. See *To adjust the drive lock on the wheels* on page 13.

3. Attach the support wheel. See *To use the support wheel on page 14*.
4. Move the machine with the handle.

5.10 To use the remote control to move the machine

1. Lock the drive lock on the wheels. See *To adjust the drive lock on the wheels on page 13*.
2. Turn off the propane.
3. Turn the START KEY SWITCH to I.
4. Turn the RADIO ON/OFF switch to I.
5. Press the START RADIO COMMUNICATION button on the remote control unit. The red led bulb (COM ERROR) on the control panel goes out, if the connection is successful.
6. Use the FWD/RWD switch and STEERING knob to move the machine.

5.11 To operate the grinder manually



CAUTION: The emergency stop switch, (EM-Stop) must only be used in an emergency. Usage may decrease the lifespan of the machine's electrical components.

Note: Drive the machine manually in difficult to navigate spaces.

The operator pushes the machine forward across the floor surface and operates the machine with the control panel.

5.11.1 To start

1. Release the drive lock on the wheels. See *To adjust the drive lock on the wheels on page 13*.
2. Connect the propane cylinder to the propane hose. Make sure that the propane tank and the hose is properly connected and that the hose is properly connected to the fuel lockoff safety valve on the engine.
3. Turn the propane cylinder valve counter clockwise until it stops to activate the flow of the propane.
4. Examine the connections for propane leaks. Propane emits a foul "garbage" odor. If a leakage occurs do not continue to start the machine. Fix the leakage before you start the machine.
5. Turn the main power switch to "ON".
6. Release the EM-stop.
7. Turn the START KEY SWITCH to II.
8. Make sure that the RADIO SWITCH is in its "0" position.

9. Turn the START KEY SWITCH to the right to start the engine. Do not try to start the engine for more than 5 seconds at a time. Excessive starter running may result in damage to the starter. The engine can require more than one start attempt.
10. Before you operate the product, wait 3 - 5 minutes and let the engine become warm. Idle at max. 1400 rpm.

5.11.2 To stop

1. Push the THROTTLE knob. This will set the engine to the idle position.
2. Turn the propane cylinder valve clockwise until it stops to turn off the propane supply to the engine. Allow the engine to burn all the fuel in the line.
3. Turn the START KEY SWITCH to "0".
4. Turn the main power switch to "OFF".

5.12 To operate the grinder with the radio control unit



WARNING: Do not leave the machine unattended when operating using the radio control unit.

Note: Drive the machine manually in difficult to navigate spaces.

When you use the radio control unit to operate the machine, the machine moves forward with the aid of the motors in the drive motor box.

5.12.1 To prepare the radio control unit

Note: Rechargeable batteries must be fully charged before they are used for the first time.

1. Remove the screws on the battery cover on the radio control unit.
2. Put two charged AA batteries 1.2 V NiMH, or two non-rechargeable 1.5 V AA batteries, in the battery compartment.
3. Close the cover and tighten the screws.

5.12.2 To start

Note: After the RADIO SWITCH has been activated, you have 30 seconds to connect the radio control unit to the machine.

1. Lock the drive lock on the wheels. See *To adjust the drive lock on the wheels on page 13*.
2. Connect the propane cylinder to the propane hose. Make sure that the propane tank and the hose is properly connected and that the hose is properly connected to the fuel lockoff safety valve on the engine.
3. Turn the propane cylinder valve counter clockwise until it stops to activate the flow of the propane.
4. Examine the connections for propane leaks. Propane emits a foul "garbage" odor. If a leakage occurs do not continue to start the machine. Fix the leakage before you start the machine.
5. Turn the main power switch to "ON".
6. Release the EM-stop.
7. Turn the START KEY SWITCH to II.
8. Turn the RADIO SWITCH to "I". The red and green leds bulbs comes on.
9. Make sure that the FWD/RWD switch is in its neutral position.
10. Press and hold the START RADIO COMMUNICATION button on the remote control unit. Press and hold the button until the COM ERROR light (red led) on the control panel turns off.
11. Put the ON/STOP switch is in its "ON" position.
12. Turn the START KEY SWITCH to the right to start the engine. Do not try to start the engine for more than 5 seconds at a time. Excessive starter running may result in damage to the starter. The engine can require more than one start attempt.
13. Before you operate the product, wait 3 - 5 minutes and let the engine become warm. Idle at max. 1400 rpm.
14. Adjust the rotation speed of the discs. Set the rotation speed to 2000 rpm or more.
15. Set the FWD/RWD switch to FWD to start grinding.

5.12.3 To stop

1. Put the FWD/RWD switch to neutral on the remote control unit.
2. Reduce the throttle to idle speed (1200 rpm).
3. Turn the propane cylinder valve clockwise until it stops to turn off the propane supply to the engine.
4. Allow the engine to burn all the fuel in the line.
5. Put the ON/OFF switch to STOP on the remote control unit

6. Press the EM-stop on the remote control unit.
7. Turn the START KEY SWITCH to "0".
8. Press the EM-stop on the control panel. Always do this step when shutting off the machine.
9. Turn the main power switch to "OFF".

5.12.4 To change the radio frequency



CAUTION: If the error code "Jt" is shown on the display, immediately contact the HTC Service Centre for instructions.

If several machines are used in the same workplace, there can be interference with the radio communication.

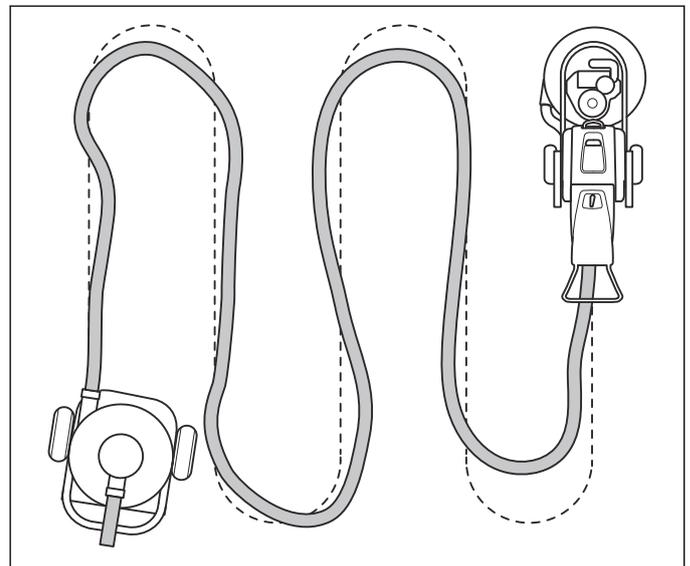
1. Stop the machine. See *To stop on page 17*.
2. Press and hold the RADIO COMMUNICATION button to start radio communication.
3. Press the frequency button "FREQ". The machine's radio receiver automatically searches for the new frequency, the number of the selected frequency channel is shown briefly on the radio control unit's display.
4. Release the RADIO COMMUNICATION button to start the radio communication.
5. Start the machine. See *To start on page 17*.

5.13 Emergency stop

- If you operate the machine with the control panel, press the EM STOP on the control panel.
- If you operate the machine with the remote control unit, press the EM STOP on the remote control unit.

5.14 To make operation easier

Put the suction hose on the floor as shown in the illustration. This procedure makes sure that the hose is not in the work area or in the path of the machine. If, you use this procedure, it is not necessary to stop the machine to change the position of the hose.



6 Maintenance

6.1 Introduction



WARNING: Before you do maintenance, you must read and understand the safety chapter.

For all servicing and repair work on the product, special training is necessary. Repair work must be carried out by a HTC Service Centre, which has trained service personnel and uses HTC original parts and accessories. We guarantee the availability of professional repairs and servicing. Only original tools and spare parts from HTC

may be used. Otherwise, neither the CE marking nor the warranty will be valid. If your dealer is not a service agent, speak to them for information about the nearest service agent.

6.2 Maintenance schedule

The maintenance intervals are calculated from daily use of the product. The intervals change if the product is not used daily.

	Daily	Weekly	Monthly*
Examine the engine oil level.	X		
Change the engine oil.			X
Clean the machine and the remote control unit.		X	
Examine the grinding tools. Abnormal or uneven wear may indicate a damaged grinding holder.	X		
Examine the tool holder and grinding holder to make sure that there are no damages or cracks. Replace the parts if there is any damage.	X		
Remove any residues of building material from the radio control unit.	X		
Examine the connection of hoses and cables. Adjust them if it is necessary.	X		
Examine the fastening between chassis and grinding head – gap, wear, dry cracks. Replace the bushes, if necessary.		X	
Examine the grinding holders. If the grinding holders oscillate or wobble significantly, they are damaged.	X		
Examine the upper belt. Turn the large disc. If the disc rotates freely the belt is broken. Replace the belt if it is damaged.		X	
Examine the grinding cover – seal, wear, cracks, brush list, extraction, hoses, couplings.		X	
Examine the seals on the electrical cabinet.		X	
Examine the electrical cabinet for wear. Make sure the electrical cabinet is securely attached to the machine.		X	
Examine the radio's rubber bellows on the joystick and switches. Replace the bellows, if it is necessary.		X	
Examine the warning decal. Replace if it is necessary.	X		
Tighten anything that may have vibrated loose.			X
Remove the grinding cover and examine for damages.			X
Scrape and vacuum-clean the parts shielded by the grinding cover.			X
Test run and listen for any dissonance from the bearings.			X
Examine the radio control unit's EM-STOP button. Make sure it functions correctly.	X		
Examine the control panel's EM-STOP button. Make sure it functions correctly.	X		
Examine the air filter. Replace the air filter, if it is necessary.		X	

* Or every 100 hours of use.

6.3 To replace the batteries in the remote control unit

Replace the batteries in the remote control unit when "L" appears in the display and blinks quickly. See *To prepare the radio control unit on page 16*.

6.4 To examine the oil level



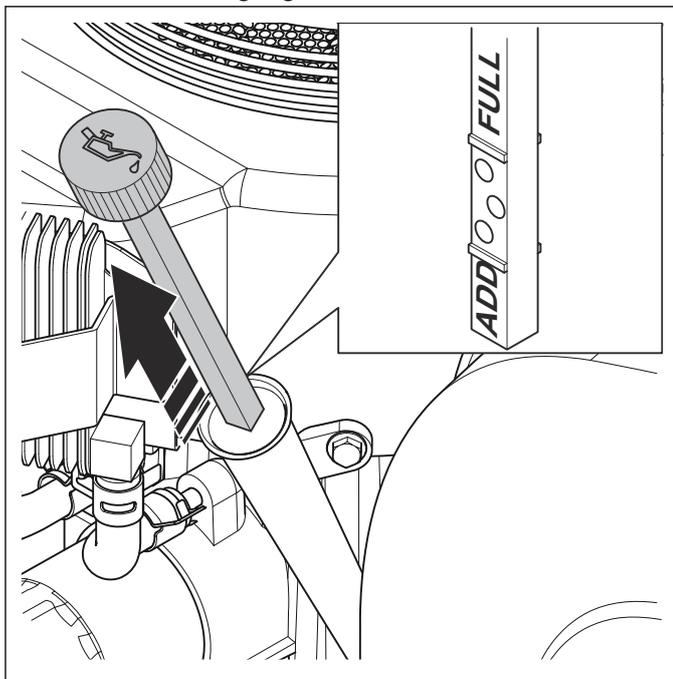
WARNING: Hot engine oil can cause injury. Make sure the engine is warm, not hot, before you remove the oil.

Examine the oil level every day before you operate the machine.

Table 1: Engine oil capacity

FX801V / FX751V	2.1 L (2.2 US-qt) [when oil filter is not removed]
	2.3 L (2.4 US-qt) [when oil filter is removed]

1. Remove the oil gauge from the tube.

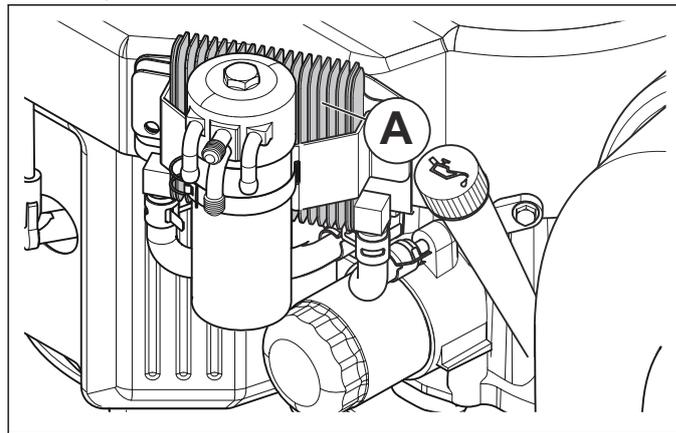


2. Examine the oil level. Make sure that the oil level is between "add" and "full".

6.5 To clean the oil cooler

Check and clean oil cooler fins every 100 hours.

1. Clean dirt off the fins with a brush or with compressed air.



6.6 To change the oil



WARNING: Hot engine oil can cause injury. Make sure the engine is warm, not hot, before you remove the oil.

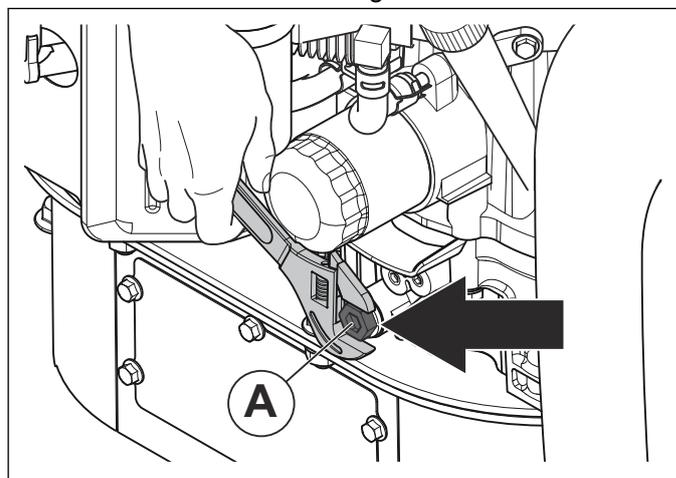


WARNING: Engine oil is a toxic substance. Make sure that you obey national regulations when you dispose the engine oil.

Note: Before you remove the oil filter, put a suitable container under the filter.

Change the oil every 100 hours of operation.

1. Operate the machine to make sure that the engine oil is warm.
2. Make sure that the machine is on a flat surface.
3. Stop the machine.
4. Remove the oil drain plug (A) and drain the oil into a suitable container while engine is warm.



5. Attach the oil drain plug.
6. Fill the engine with oil and examine the oil level

6.7 To change the oil filter



WARNING: Hot engine oil can cause injury. Make sure the engine is cool before you remove the oil filter.

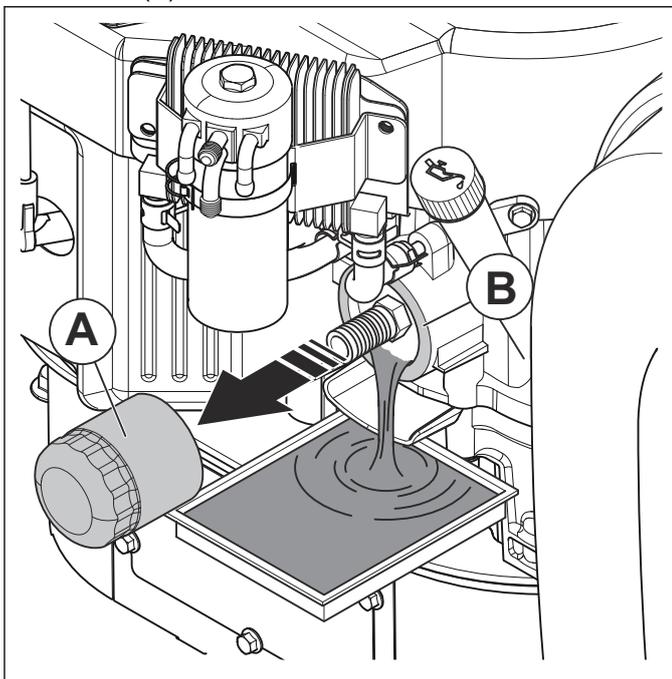


WARNING: Engine oil is a toxic substance. Make sure that you obey national regulations when you dispose the engine oil.

Note: Before you remove the oil filter, put a suitable container under the filter.

Change the oil filter every 200 hours of operation.

1. Drain the engine oil into a suitable container.
2. Rotate the oil filter counterclockwise and remove the oil filter (A).



3. Put clean engine oil on the seal of new filter.
4. Attach the new filter. Rotate the filter clockwise until the seal touches the mounting surface (B). Then rotate the filter 2/3 turn more.
5. Fill the engine with engine oil.
6. Run the engine for 3 minutes. Stop the engine, and examine the oil filter for leakage.
7. Add oil to compensate for oil level drop due to oil filter capacity.

6.8 To change the Air Filters

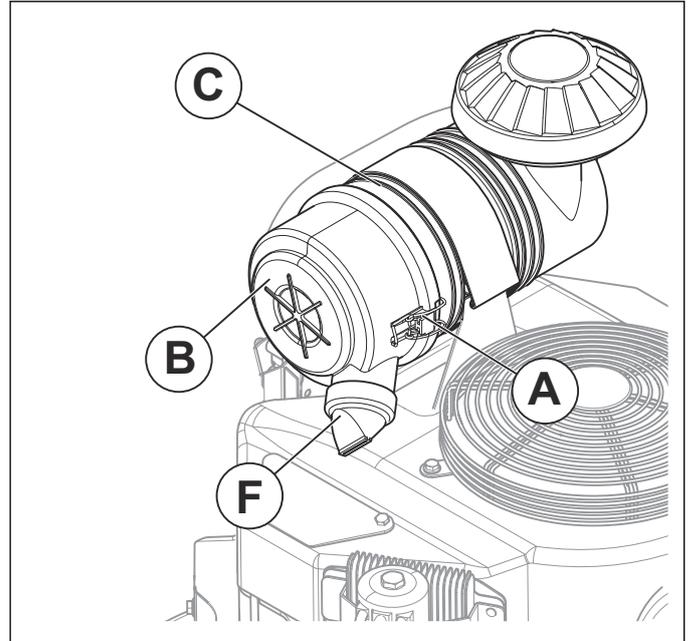
Note: Do not run the engine with the air filters removed.

Note: Do not wash the air filters. Do not use oil to clean the air filters. Do not use pressurized air to clean the airfilters.

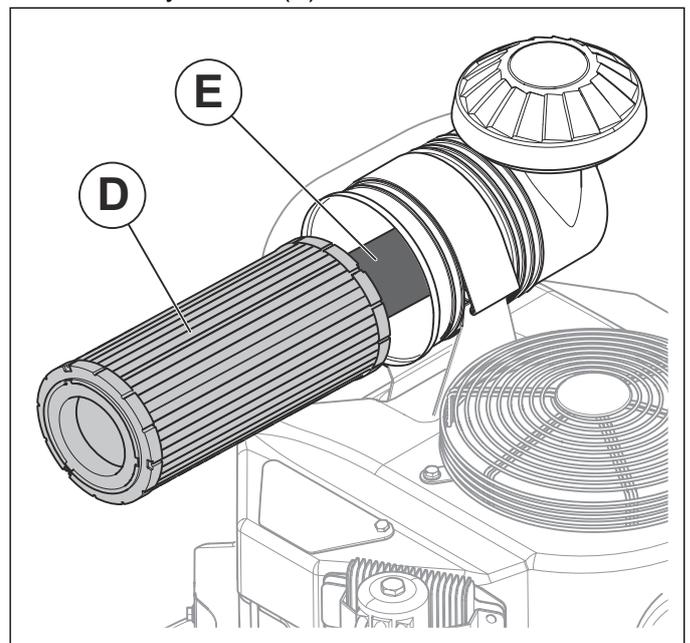
Note: Operating in dusty or dirty condition may require more frequent maintenance.

Do not clean the air filters. Replace each air filter according to the maintenance schedule.

1. Open the cap (F) to dust ejector valve to remove dust and water from the air filter body (C).



2. Unfasten the 2 clamps (A) and remove the case (B).
3. Remove the primary air filter (D). Remove the secondary air filter (E).



4. Put the new air filters in the air filter body.
5. Put the case on the air filter body and fasten the clamps.

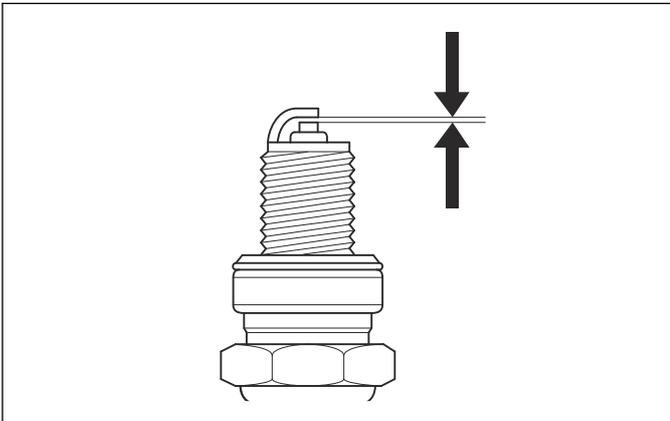
6.9 To clean or change the spark plug



WARNING: Hot engine oil can cause injury. Make sure the engine is cool before you remove spark plug.

Clean or replace the spark plugs every 100 hours of operation.

1. Make sure that the engine is cool.
2. Remove the spark plug cap from the spark plug and remove the spark plug.
3. Clean the electrodes. Use a wire brush to remove carbon deposits.
4. Examine the spark plug for damage. Replace the spark plug, if it is necessary.
5. Examine the spark plug gap. The gap must be 0.75 mm (0.030 in). To change the gap, bend the side electrode with a spark plug tool.



6. Install the spark plug. Tighten the spark plugs to 22 Nm (2.2 kgf·m, 16 ft·lb).
7. Fit the spark plug cap.

7 Troubleshooting

7.1 Troubleshooting

This chapter describes some of the faults that may occur and how to deal with these faults. If the fault cannot be dealt with, or if there are other faults, contact your nearest retailer.

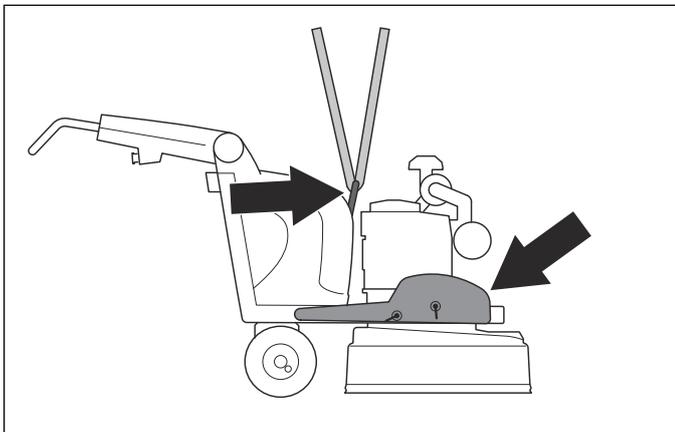
Problem	Possible cause	Possible procedure
The machine will not start.	The emergency stop switch on the control panel is activated.	Reset the switch by turning it counter clockwise.
	The F11 fuse is damaged.	Replace the F11 fuse.
	The starter battery is not charged.	Charge the starter battery.
The engine will not start.	The propane cylinder is empty.	Change propane cylinder.
	The fuel shut off valve is not activated.	Make sure that the fuel shut off valve activates once the ignition activates.
	The engine does not ignite.	Speak to your nearest dealer.
The engine does not start when the RADIO switch is in mode I.	The grinding switch is switched to "OFF" on the radio control unit.	Make sure that the grinding switch is switched to "ON" on the radio control unit.
The engine starts but shuts off shortly after.	The propane cylinder is almost empty.	Replace the propane cylinder.
	Damaged emission module.	Speak to your nearest dealer.
The engine starts but shuts off after 1 - 2 minutes.	Incorrect signal to the emission module.	Change air filter. If the problem continues speak to your nearest dealer.
The engine shuts off unexpectedly.	The emission values have exceeded the permitted levels. A red led bulb on the emission control	Speak to your nearest dealer.
The machine can't connect to the radio control unit.	INSERT POSSIBLE CAUSE	INSERT SOLUTION
The drive motor of the wheels does not function properly.	DC/DC converter damaged.	Speak to your nearest dealer.
	The drive motor batteries are not charged.	Charge the drive motor batteries.
The machine does not move.	The drive lock of the wheels are not in their correct position.	Lock the wheels with the locking pin.
The machine smells burnt	The clutch slips.	Make sure that the engine rev is not between 1400 - 2000 rpm.
The machine vibrates or wears the tool unevenly.	Damaged belt	Examine the belt and replace, if it is necessary.
	Damaged grinding holders	If the grinder holders need reconditioning, contact HTC for information about spare parts.
The machine is grinding at an angle.	INSERT POSSIBLE CAUSE	Recondition the grinding holder.
	Damaged upper belt	Examine the upper belt. Turn the large disc in one direction or the other, there should be resistance. If it turns freely, the belt is broken and must be replaced.

Problem	Possible cause	Possible procedure
The machine stops - radio control	Other equipment can interfere with the radio traffic between the machine and the radio control unit, which means that the communication error indicator (ComError) can start to blink on and off. When the contact between the machine and the radio control has been broken for too long the machine stops for safety reasons.	Switch off any interfering equipment and restart the machine.
The machine cannot cope.	High load	Press the handle down slightly so that the grinding head eases slightly away from the surface being ground.
	Sticky coating on the surface being ground.	Run half of the machine on the surface to be cleaned and half on the clean surface. This removes any residue from the tools.
	Damaged or incorrectly fitted tools on the machine.	Examine the tools. Refit the tools or replace the tools, if it is necessary.
The grinding does not start, even though the motor appears to function correctly.	The belt in the gearbox is broken.	Replace the belt in the gearbox.
	The clutch slips.	Speak to your nearest dealer.

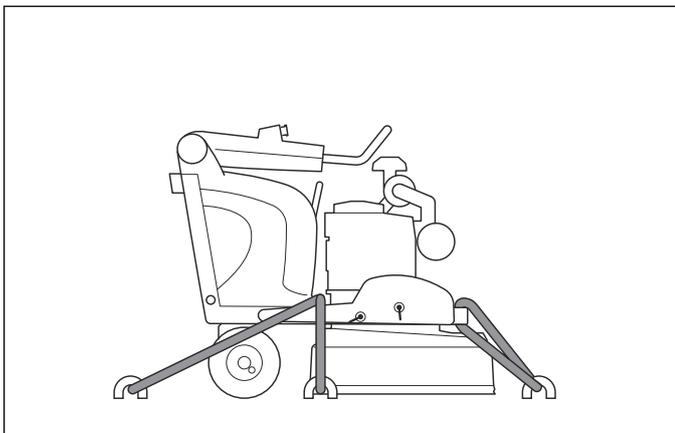
8 Transportation, storage and disposal

8.1 Transportation

The machine cannot be moved manually if the drive wheels are locked and the radio control activated. When lifting the grinder use lifting straps. Attach the lifting straps in the lifting eye, see figure 1. Only use lifting straps approved for lifting equipment. Make sure that the weights are locked in the forward position and that the handle is in its back position, see figure 1.



Always make sure that the grinder is securely anchored to its surroundings and the grinding head is lowered against the surface. Make sure that the securing straps or other equipment used for anchoring during transport are tightened over non-moving parts, e.g. the grinder's chassis.



8.2 Storage

The machine should be stored in a heated, dry area when not in use. Otherwise, it may be damaged by condensation and cold. If the machine is stored in a cold area (below 0°C), it must be kept in a warm area (above 0°C) for at least two hours before use.

Always make sure that the grinder is securely anchored to its surroundings and the grinding head is lowered against the surface. Make sure that the securing straps or other equipment used for anchoring during transport are tightened over non-moving parts, e.g. the grinder's chassis.

8.3 Disposal

For recycling and scrapping of components, see the applicable national regulations for each country. The machine or machine components can also be returned to HTC for recycling.

	Material	Waste management
Chassis	Electro-galvanised steel	Metal recycling*
Handle	Plastic covered steel	Metal recycling*
Cover	Plastic, ABS	Plastic recycling/ Combustible
Wheels	Metal, plastic and rubber	Metal recycling*
Grinding head		
Lower cover	Aluminium	Metal recycling*
Cover	Plastic, ABS	Plastic recycling/ Combustible
External plate and steel components	Electro-galvanised steel	Metal recycling*
Other components	Steel	
Electrical system		
Cables	Copper conductors with Neoprene and PVC coating	Waste cable
Motor	Metal: Steel, aluminium and plastic	Electronic waste
Control cabinet	Plastic	Metal recycling*
Electrical components	Metal and plastic	Electronic waste

* Separate the different metal parts, if it is possible.

9 Technical data

9.1 Technical data , HTC 800RXP

	HTC 800RXP
Output	18,3 kW / 24,5 hp
Control voltage	12 V / 24 V
Total machine weight	525 kg / 1160 lbs
Chassis weight (including weights)	235 kg / 518 lbs
Weight, grinding head	290 kg / 641 lbs
Weights	2x33 kg / 2x73 lbs
Grinding diameter	800 mm / 31,5 inch
Grinding pressure, position 1	350 kg / 770 lbs
Grinding pressure, position 2	269 kg / 595 lbs
Grinding pressure, position 3	248 kg / 548 lbs
Rotational speed, grinding discs	815 rpm
Grinding discs	270 mm / 6,9 inch
Storage temperature (short term, e.g. transport)	-30 - +50 C° / -22 - +122 F°
Working temperature	-5 - +40 C° / 23 - 104 F°
Humidity	5 - 90 %
Sound pressure level*	N/A dBA
Sound power level*	N/A dBA
Vibrations, Floor preparation (T-Rex)	3,7 m/s ²
Permitted daily exposure, Floor preparation (T-Rex)	14,6 h
Transmitter frequency	433 MHz (433.100 - 434.750 MHz)
Transmitter power	< 10 mW

* This machine is tested for noise in accordance with ISO 3741 and ISO 11202.

** Hand and arm-weighted vibration level [m/s²] for HTC 800RXP have been measured using equipment approved in accordance with ISO 5349-1:2001. Measurement uncertainty for the measuring equipment is given as +/- 2%. The machine has been tested in accordance with ISO 5349-2:2001 and ISO 20643:2005 in order to identify the operations that contribute to the most frequent vibration exposures. At vibration levels > 2.5 m/s², the exposure time should be limited in accordance with the table above. For vibration levels > 5 m/s², immediate measures must be taken by the employer to ensure that the exposure time does not exceed the time specified in the table below.

9.2 Electrical system

9.2.1 Fuses and relays

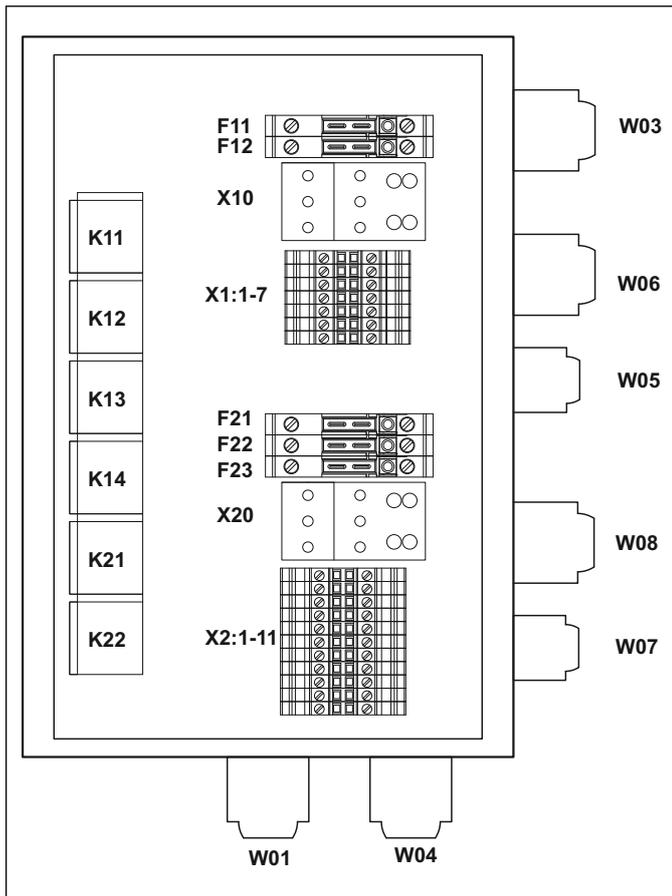


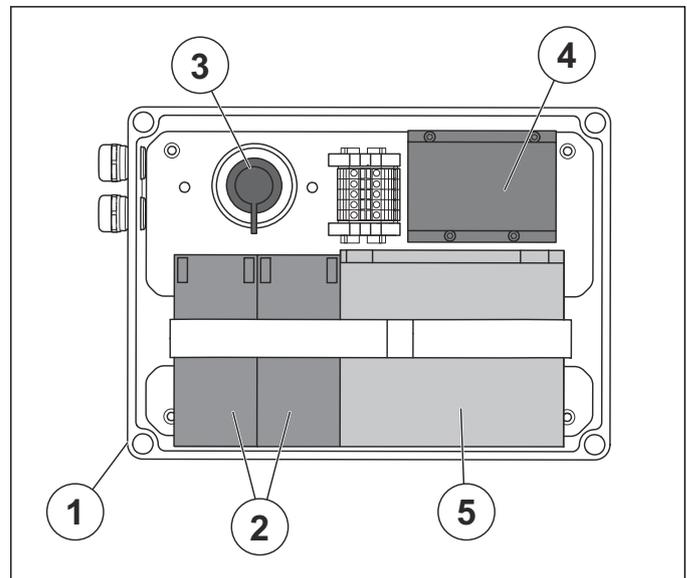
Table 2: Fuses

Fuse	Function
F11	12V fuse for ignition lock
F12	12V fuse for DC/DC converter
F21	24 VDC fuse for right drive engine
F22	24 VDC fuse for left drive engine
F23	24 VDC fuse for radio system

Table 3: Relays

Relay	Function
K11	Radio system
K12	Right drive engine
K13	Left drive engine
K14	Activates DC/DC converter
Engine	Bypasses the oil pressure guard and emission control module during start.
K21	Enables a RUN signal to the engine when the radio control unit is activated and the emergency stop is not activated.
K22	Shuts down the ignition system when the radio control switch =1, the radio control unit and the emergency stop is not activated.

9.2.2 Battery box



1. Enclosure
2. Drive batteries
3. Main power switch
4. DC/DC converter
5. Start battery

DC/DC Converter

The DC/DC converter change 12V voltage to 24V charging voltage for the batteries of the drive motors. The charging voltage must be 27,4VDC +/- 0,2V.

Emission module

The emission module examines the emission values. If the values are below the approved limit, the led bulb of the emission module does not come on. If the values increase above the approved limit, the led bulb of the emission module comes on and the engine stops. When the engine starts the emission module waits 1 - 2 minutes before it examines the values.

10 Warranty

This warranty only covers manufacturing defects. HTC bears no responsibility for damage that arises or occurs during transportation, unpacking or use. In no instance and under no circumstances shall the manufacturer be held responsible for damage and defects caused by incorrect use, corrosion or use outside the prescribed specifications. The manufacturer is not responsible for indirect damage or costs under any circumstances. For complete information on the manufacturer's warranty period, see HTC's current warranty terms. Local distributors may have special warranty terms specified in their terms of sale, delivery and warranty. If there is any uncertainty regarding warranty terms, please contact your retailer.

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