

Manual

HTG-680P Propane Grinder

----- Version 1.1

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1. Introduction

XINGYI Machines are used for processing the floor surface. The scope of use of the machine depends on the choice of tools. In addition to the use and general functions, this manual describes information on the use, repair, and maintenance of the grinder. Contact your local dealer for further information.

1.1 Machine description

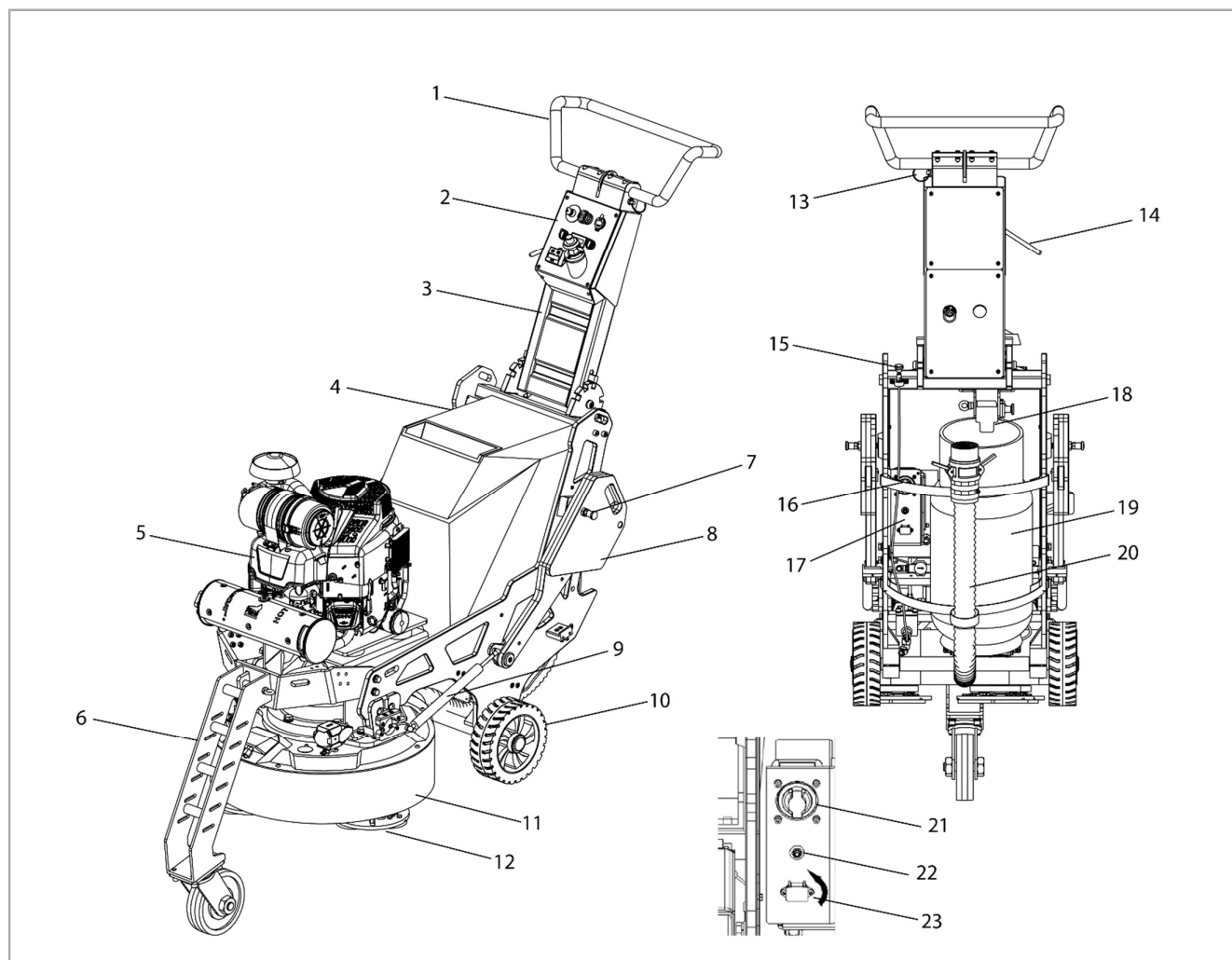
HTG-680P is a 3-head planetary floor grinder, equipped with a propane engine. It used to grind (rough grind, fine grind and polish) concrete, natural stone and terrazzo floors or other materials specified in this manual or recommend by XINGYI.

This machine is expected to be used in commercial applications such as hotels, schools, hospitals, factories, offices and warehouses and retail environments.

It is equipped with a transport wheel kit for mobilizing the machine on a job site.

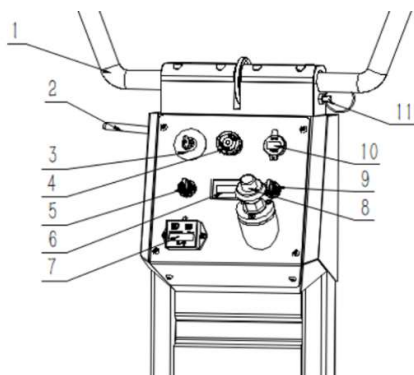
A water tank equipped can be used for wet grinding or mist spaying. To prevent crystalline silica exposure, posing a threat to the health of the operator and other workers, when dry grinding, make sure that a dust collection system of the proper CFM is connected to the grinder (The recommended dust collector for this machine is XINGYI IVC-45L or IVC-45P).

1.2 Machine overview



- | | |
|--------------------------|-----------------------------------|
| 1. Handlebar | 13. Handlebar adjusting pin |
| 2. Control panel | 14. Main handle adjustment lever |
| 3. Main handle | 15. Water valve |
| 4. Water tank | 16. Battery |
| 5. Engine | 17. Breaker panel |
| 6. Front transport wheel | 18. Tank lock |
| 7. Weight lock pin | 19. propane tank |
| 8. Weight kit | 20. Connection for dust extractor |
| 9. Air spring | 21. Battery switch |
| 10. Rear transport wheel | 22. reset button |
| 11. Gear box | 23. Battery charge port |
| 12. Grinding plate | |

Control panel overview



1. Handlebar
2. Main handle adjustment lever
3. Ignition key
4. Emergency stop button
5. Water spray switch
6. Battery indicator
7. RPM meter
8. Throttle control
9. LED switch
10. UBS port

1.3 Standard Delivery

The machine will come with the following items. If anything is lost, please contact your dealer.

- Dust skirt, 1
- 12V, 20 AH battery charger, 1
- 3" Velcro tooling adaptors, 18 (on the grinding head)
- Lifting strap, 1
- Tool bag, 1

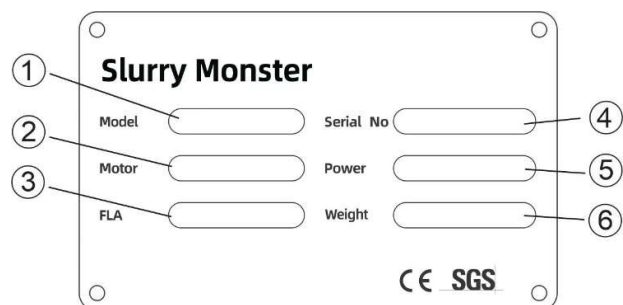
1.4 Liability

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

- The machine is incorrectly repaired.
- The machine is repaired with parts that are not from the manufacturer or not approved by the manufacturer.
- The machine has an accessory that is not from the

11. Handlebar adjusting pin

Machine name plate



1. Model name
2. Motor model
3. Full load amps
4. Serial number
5. Engine power
6. Net weight of machine

manufacturer or not approved by the manufacturer.

- The machine is not repaired at an approved service center or by an approved authority.

1.5 Warranty

This warranty only covers manufacturing defects. XINGYI 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 XINGYI MACHINE USA'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 dealer.

2. Safety

2.1 General safety instructions

This product is a dangerous tool if you are not careful or if you use the product incorrectly. This product can cause serious injury or death to the operator or others. Before you use the product, you must read and understand the contents of this operator's manual.

- Save all warnings and instructions.
- Comply with all applicable laws and regulations.
- The operator and the employer of the operator must know and prevent the risks during operation of the product.
- Do not let a person operate the product unless they read and understand the contents of the operator's manual.
- Do not operate the product unless you receive training before use. Make sure that all operators receive training.
- Do not let a child operate on the product.
- Only let approved persons operate the product.
- The operator is responsible for accidents that occur to other persons or their property.
- Do not use the product if you are tired, ill, or under the influence of alcohol, drugs or medicine.
- Always be careful and use your common sense. This product produces an electromagnetic field during operation. This field can under some circumstances interfere with active or passive medical implants. To decrease the risk of serious injury or death, we recommend persons with medical implants to speak to their physician and the medical implant manufacturer before operating this product.
- Keep the product clean. Make sure that you can clearly read signs and decals.
- Do not use the product if it is damaged.
- Do not make modifications to this product.
- Do not operate the product if it is possible that other persons have made modifications to the

product.

2.2 Safety instructions for operation

- Use personal protective equipment.
- Do not use the product in areas where fire or explosions can occur.
- Do not go away from the product when the engine is on.
- Always stop the engine before you go away from the product.
- The grinding head must touch the surface when you start the product.
- Do not start the product without the dust skirt installed. The dust skirt must seal fully between the product and the floor.
- Keep away from areas where the product can cause injury. The product can quickly change position and hit you.
- If the product does not operate correctly, stop the engine.
- Make sure that clothing, long hair and jewelry do not get caught in moving parts.
- Make sure that you are in a safe and stable position during operation.
- Do not operate the product unless you can get aid if an accident occurs.
- If vibrations occur in the product or the noise level from the product is unusually high, stop the product immediately. Examine the product for damage. Repair damages or let an approved service agent do the repair.
- Over exposure to vibration can cause circulatory damage or nerve damage to persons with decreased blood circulation. Get medical aid if you have symptoms of overexposure to vibration. These symptoms include numbness, loss of feeling, tingling, pricking, pain, loss of strength, changes in skin color or condition. These symptoms usually show in the fingers
- Always use approved accessories. Speak to your dealer for more information.
- During and after operation, do not touch the

muffler until the temperature of the muffler has decreased. Risk of burn injuries.

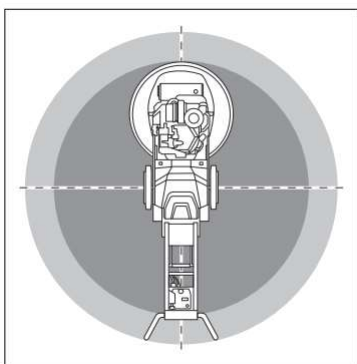
- Keep bystanders and objects away from the hot exhaust from the muffler

2.3 Personal protective equipment

- Always use correct personal protective equipment when you operate the product. The personal protective equipment does not erase the risk of injury. The personal protective equipment decreases the level of injury if an accident occurs. Let your dealer help you select the right equipment and when to use it.
- Do not use loose, heavy and not applicable clothing. Use clothes that let you move freely.
- Use rubber protective gloves that prevent skin irritation from wet concrete.
- Use protective gloves when you touch the propane tank. The propane tank can be very cold during operation.
- Always use approved hearing protection while you operate the product. Noise for a long period can cause noise-induced hearing loss.
- The product makes dust and fumes that contain dangerous chemicals. Use approved breathing protection.
- Use boots with steel toecaps and non-slip soles.
- Make sure that you have a first aid kit nearby.
- Sparks can occur when you operate the product. Make sure that you have a fire extinguisher nearby.

2.4 Work area safety

- During operation, keep bystanders away from the area shown in the illustration below. The



- operator must be very careful in this area during

operation. Make sure that only approved persons are in the work area.

- Do not use the product in fog, rain, strong winds, cold weather, risk of lightning or other bad weather conditions. To use the product in bad weather or in wet locations can have a negative effect on your alertness. Bad weather can cause dangerous work conditions.
- Look out for persons, objects and situations that can prevent safe operation of the product.
- Keep the work area sufficiently illuminated.
- Do not use the product in areas where fire or explosions can occur.

2.5 Propane safety

- Make sure that the ignition key is in off position when you do work on the propane tank.
- Only replace the propane tank when the ignition key is in off position.
- Propane is flammable and the fumes are explosive. Be careful to prevent injury, fire and explosion. Read all the instructions on the product and on the propane tank.
- Do not change the propane control equipment. Changes to the propane control equipment can cause dangerous levels of engine emissions.
- Do not breathe in the fuel fumes. The fuel fumes are poisonous and can cause injury. Make sure that the airflow is sufficient.
- Do not start the engine in an area without sufficient airflow. Propane is heavier than air and can accumulate in low areas. Not sufficient airflow increases the risk of fire or explosion from sparks, and the risk of injury from the fumes.
- Do not smoke near the product, the engine or the propane tank.
- Do not put hot objects near the propane or the engine.
- Keep the product away from sparks or flames.
- Examine the propane supply system for leaks regularly. If there are leaks, do not start the engine until the leaks are repaired.
- Do not keep propane tanks in a building.

Propane tanks must only be in a building during the operation of the product.

- Keep propane tanks in a safe area with sufficient airflow.

2.6 Exhaust fumes safety

- Exhaust fumes also contain unburned hydrocarbons including benzene.
- Long-term inhalation of exhaust fumes can cause health problems.
- The exhaust fumes from the engine contain carbon monoxide, which is an odorless, poisonous and very dangerous gas. To breathe carbon monoxide can cause death. Because carbon monoxide is odorless and cannot be seen, it is not possible to sense it. The symptom of carbon monoxide poisoning is dizziness, but it is possible that a person becomes unconscious without warning if the quantity or concentration of carbon monoxide is sufficient.
- Exhaust fumes that you can see, or smell also contain carbon monoxide.
- **WARNING:** Running an engine in a confined or badly ventilated area can result in death due to asphyxiation or carbon monoxide poisoning. Take precautions against exposure to carbon monoxide emissions. Wear CO detector badges when operating in confined areas. Only operate the product outdoors or in well-ventilated areas. Buildings must be provided with natural ventilation or continuous mechanical ventilation. The ventilation must remove the products of combustion to the outdoors.
- Do not breathe in the exhaust fumes.

2.7 Battery safety

- Only use the batteries that we recommend for your product. There is a risk of an explosion if the batteries are replaced with a battery of incorrect type. Speak to your dealer for more information.
- Use batteries that are rechargeable as a power supply for the related XINGYI products only. To prevent injury, do not use the battery as a power supply for other devices.

- Risk of electrical shock. Do not connect the battery terminals to keys, screws or other metal. This can cause a short circuit of the battery.
- If the battery leaks, do not let the liquid touch your body or eyes. If you have touched the liquid, clean the area with a large quantity of water and get medical aid.
- Do not use batteries that are non-rechargeable.
- Do not modify the battery.
- Do not put objects into the air slots of the battery.
- Keep the battery away from sunlight, heat or open flame. The battery can cause an explosion and cause burns and/or chemical burns.
- Keep the battery away from rain and wet conditions.
- Keep the battery away from microwaves and high pressure.
- Do not try to disassemble or break the battery.
- Use the battery in temperatures between - 10 °C/14 °F and 40 °C/104 °F.
- Do not clean the battery with water.
- Do not use damaged batteries or batteries that do not operate correctly.
- Keep batteries in storage away from metal objects such as nails, screws or jewelry.
- Keep the battery away from children.

2.8 Safety instructions for maintenance

- Keep all parts in good condition and make sure that all fixtures are correctly tightened.
- Do not use a product that is damaged or does not work correctly. Do the safety checks, maintenance and the servicing as given in this manual. All other maintenance work must be done by an approved service agent.
- Installation and repair of the supply system for propane must be done only by approved servicing personnel for propane systems.
- Stop the product when you replace the diamond tools. Turn the ignition key to 0 and push the emergency stop button.
- Do the inspection and/or maintenance with the engine stop.

- Do the maintenance to make sure that the

product operates correctly.

3. Operation

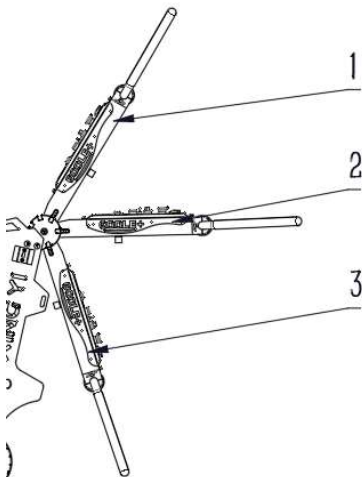
- Before you operate the product, read the operator's manual carefully and make sure that you understand the instructions.
- The following section describes how to change tools and how to operate the machine.
- The machine may be operated either way depending on the job site requirements and the operator's skill level. Only experienced operators should use self-propelled mode to run the machine. This product is a dangerous tool if you are not careful or if you use the product incorrectly. This product can cause serious injury or death to the operator or others. Before you use the product.

3.1 To connect or disconnect the transport wheel

- Tip the machine back and assemble the transport wheel.
- Tip the machine back and disassemble the transport wheel.

3.2 To set the main handle

Use the handle position lever to adjust the position of the handle. Hold the handle tightly with one hand to support the handle, pull the lever lock back to release the handle, rotate the handle to a position that suits you best and release the lever to lock. Be sure that the handle has locked into a notch.

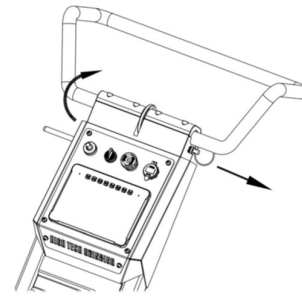


- Position 1 is for tilting the machine back.

- Position 2 is the operating position.
- Position 3 is the transport-position.

3.3 To set handlebar

The handlebar adjusting pin can be positioned at different positions to accommodate the specific user. Hold the handlebar with one hand, pull out the adjusting pin with the other hand, then release the adjusting bolt when it is rotated to proper position. Be sure that the pin has locked into a secure position.



3.4 To set weight

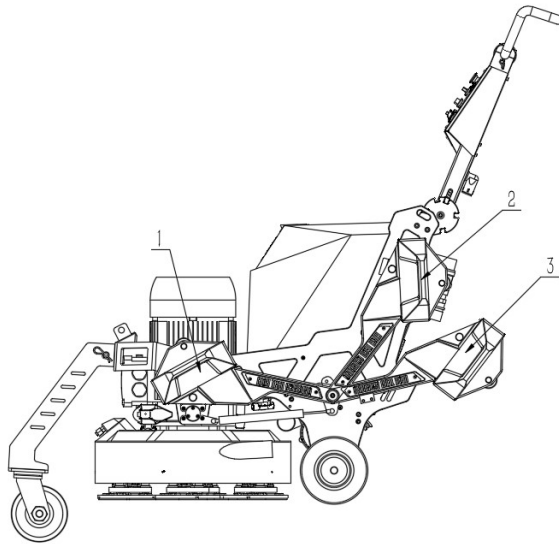
The machine is equipped with two weights to make it easy to move the machine's center of gravity. Each weight is provided with a locking pin, and a front limiting stop and a rear limiting stop on the frame of each side as well as a neutral position weight block.

Position 1----Pull the pin outwards and take hold of the weight and move the weight all the way forward until reaching the front stop.

Position 2----Lift the weight up until the pin locks into the neutral position weight block.

Position 3----Pull the pin outwards and take hold of the weight and move the weight all the way backward until reach the rear limiting stop.

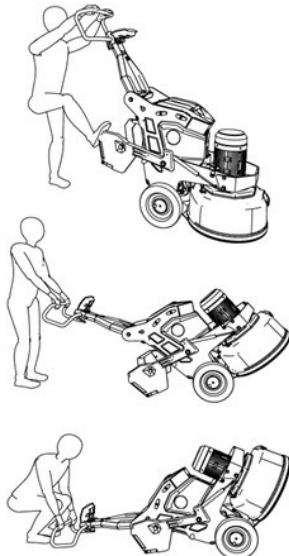
In order for the grinding pressure to be maximized, the weights shall be placed in position 1 and to be minimized in position 3. If the machine feels heavy to operate, it may be due to the placing of the weights. Raise the weights to position 2, position 3 to relieve the grinding head. Ensure that the weights are in the same position on both sides to prevent the risk of uneven grinding.



3.5 Access to grinding tools

Raise the handle to the high position in accordance with the **Handle setting**. Lower the weights back. Hold the handlebar and place a foot on one of the weights. See **Weight setting**. Carefully, tip the machine backwards, until the weights reach the floor.

Ensure that the machine lies supported on the rear frame.



3.6 To Fit diamond tools

Metal bonded diamond tools are used for removal of material and resin bonded diamond tools are used to polish surfaces. Select the correct diamond tools for the surface. Speak to your XINGYI dealer or go to

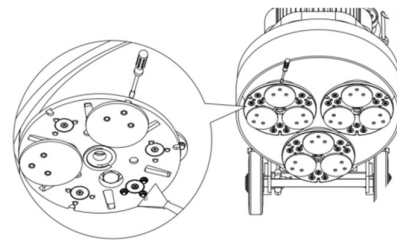
<https://xingyimachineusa.com/> for support to select the correct tool.

The machine uses a full set or half set of diamond tools (9 or 18 diamond tools).

Insert the flat-blade screwdriver into the slot to remove the Velcro adapter. Align the 3 holes on the tool with the 3 pins on the grinding plate and the tool will be attached immediately by magnet which is embedded in the tool plate.

The tool plate holds the tools in place for the grinding application.

Use Velcro adapter to attach resin bonded diamond tools.

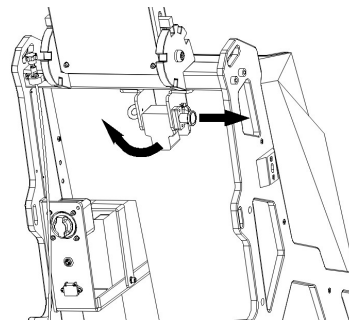


3.7 To connect a dust collector

1. Examine the dust extractor hose for damages.
2. Make sure that the filters in the dust extractor are clean and not damaged.
3. Make sure that the grinding head is not in operation.
4. Connect the dust collector hose to the grinder.
4. Hang the dust collector hose on the frame to prevent tension in the dust collector hose.

3.8 To connect and disconnect the propane tank

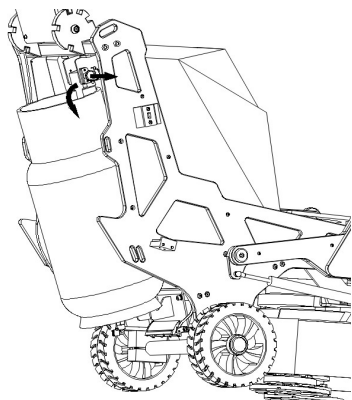
1. Pull out the lock pin and flip the lock block over.



2. Place the propane tank onto the holder plate. Pull out the lock pin again, allow the lock

block to fall onto the tank handle, then release the pin to secure the handle.

3. Make sure that the propane tank is tightly held in position by the lock and the holder plate. The propane tank cannot move when the propane tank is correctly installed.



4. Connect the propane hose from the product to the propane tank.
5. Make sure that the propane hose is correctly connected to the fuel valve on the engine.
6. Make sure all couplers are in line. Tighten the couplers by hand to connect the propane tank to the product. CAUTION: Do not use a tool to complete the connection of the propane tank to the product. The couplers can be damaged.
7. Turn the propane tank valve counterclockwise until it stops to start the flow of the propane.
8. Do a soap test on all propane lines.
9. Disconnect in the opposite sequence.
10. If the propane tank is connected and the product is not in operation, close the propane tank valve.

3.9 To start and operate the product

1. Connect the propane tank and turn the valve counterclockwise to supply the propane to the engine.
2. Turn the battery switch clockwise to ON position.



3. Dis-engage the Emergency stop.
4. Turn the ignition key clockwise to 1 position.
5. Pull out and turn the throttle control to idle speed for the engine.
6. Turn and hold the ignition key to the engine's start position. When the engine starts, immediately release the ignition key. The ignition key goes to the "1" position.
7. Before you operate the product, wait 3-5 minutes and let the engine become warm at idle speed, and the light on the emission warning module equipped with the muffler turns green.



8. Pull out and turn the throttle control to full RPM for the engine.
9. Push the product forward across the floor surface. Maintain the engine speed up to 2600 RPM to prevent the centrifugal clutch from slipping and burning.

3.10 To stop the product

1. Pull out and turn the throttle control to idle speed for the engine
2. Turn the propane tank valve clockwise to stop the propane supply to the engine.

3. Keep the tool plates against the surface until they stop fully.
4. Wait until the engine stops. The engine stops when there is no fuel in the line.
5. Turn the ignition key to the engine stop position.

6. Turn the battery switch counterclockwise to OFF position.
7. Press the emergency stop.

4. Maintenance

For all servicing and repair work on the product, special training is necessary. We guarantee the availability of professional repairs and servicing. If your dealer is not a service agent, speak to them for information about the nearest service agent. For more detailed information, refer to

<https://xingyimachineusa.com/>

4.1 To do before maintenance

1. Use personal protective equipment.
2. Use approved respiratory protection. The dust from the product is dangerous to your health.
3. Park the product on a level surface.
4. Stop the engine and disconnect the battery and the propane tank to prevent accidental start during maintenance.
5. Clean the area around the product from oil and dirt. Remove unwanted objects.

6. Set out clear signs to give a warning to bystanders that maintenance work is in progress.
7. Keep fire extinguishers, medical supplies and an emergency phone nearby.

4.2 Maintenance schedule

✓ = General maintenance done by the operator.
The instructions are not given in this operator's manual

× = The instructions are given in this operator's manual.

! = The instructions are not given in this operator's manual. Let an approved service agent do the maintenance.

General product maintenance	Daily	Weekly	Every 100 h	Yearly
Do check the ignition lock	✓			
Do check the throttle control	✓			
Do check the emergency stop button.	×			
Do check the attachment points and the lock function for the handle.		✓		
Do check the attachment points and the lock function for the weights.				
Clean the external surfaces of the product.	×			
Do check the oil cooling fins. If it is necessary, clean the oil cooling fins.	×			
Do a general inspection.	×			
Do check the grinding discs.		✓		
Do check the battery level	×			
Examine the propane tank and all lines for leaks.	×			
Do check the engine oil level.	×			
Replace the filter with the carbon monoxide detector.			×	
Replace the engine oil.			×	
Replace the oil filter.			×	
Replace the air filters.			×	

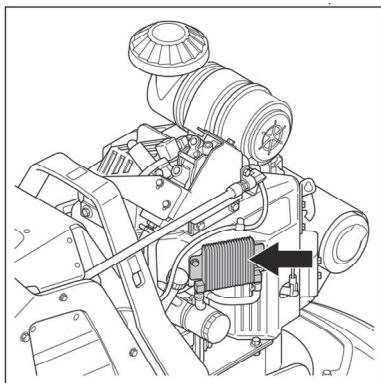
Examine the spark plug.			×	
Do the service on the drive system for grinding discs.				!
Do check the connection between chassis and grinding head.		✓		
Replace the gearbox oil.				!

4.3 To clean the product

1. Remove blockage from all air openings.
The product must always have sufficiently cool temperature.
2. Do not use chemicals to clean the product.
3. Do not clean electrical components with water.
4. Do not clean the carbon monoxide detector with water or use water near the detector.
5. The filter in the carbon monoxide detector is sensitive.
6. Always clean all the equipment at the end of the work day. Clean the components at the bottom surface of the grinding head with a high-pressure washer.

4.4 To clean the cooling fins

1. Clean the oil cooling fins with a brush or with compressed air and vacuum.



4.5 To do a general inspection

1. Make sure that nuts and screws are tight.
2. Make sure that the head locks are tight. If it is necessary, tighten the head locks and use LOCTITE® 680 thread locker.

4.6 To examine the propane tank and lines

1. Make sure that the propane tank has no damage.
2. Connect the propane tank to the product.

3. Apply a soap mixture as a spray at all lines and connections. For soap mixture use 50% soap and 50% water.
4. If there are bubbles, there is a leakage. Do not start the engine if there is a leakage. Speak to an approved service agent.

4.7 To fill the propane tank

Do not fill the propane tank too much. If the propane tank is filled too much, frost shows on the propane lines or on the regulator.

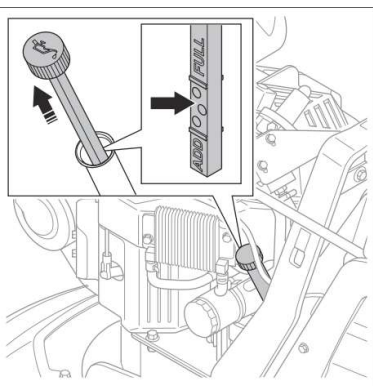
1. Stop the product.
2. Make sure that the propane tank valve is closed.
3. Remove the propane tank from the product.
4. Fill the propane tank with new propane or replace the propane tank.
5. If the propane tank is filled too much, use a screwdriver at the propane tank valve to release unwanted propane. Release the propane in a safe procedure.
6. Install the filled/new propane tank to the product
7. If the weather is cold, keep the product indoors before use to warm up the propane tank. You can also use a propane tank heat blanket to warm up the propane tank.

4.8 To examine the oil level

The oil type is Engine oil 10-30.

Examine the oil level each day before you operate the product.

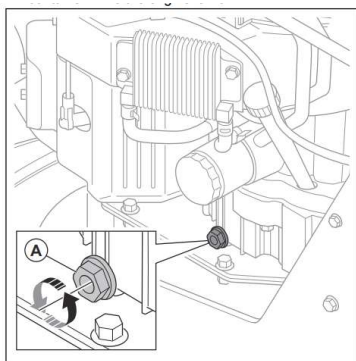
1. Remove the oil gauge from the tube.
2. Examine the oil level. Make sure that the oil level is between "Min." and "Max".



4.9 To change the oil

Change the engine oil every 100 hours of operation.

1. Operate the product to make sure that the engine oil is warm. Hot engine oil can cause injury. Make sure the engine is warm, not hot, before you remove the oil.
2. Make sure that the product is on a flat surface.
3. Stop the product.
4. Put a container beneath the oil filter before you remove the oil filter.
5. Remove the oil drain plug and drain the oil into a container while the engine is warm.
6. Attach the oil drain plug.
7. Fill the engine with oil and examine the oil level.

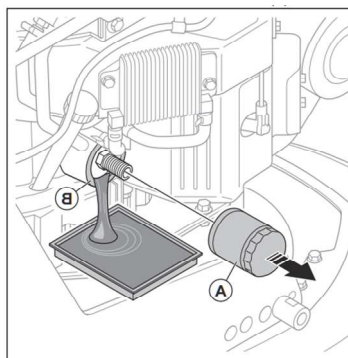


4.10 To change the oil filter

Change the oil filter each 200 hours of operation.

1. Drain the engine oil into a container.
2. Turn the oil filter counterclockwise and remove the oil filter(A).
3. Put clean engine oil on the seal of new filter.

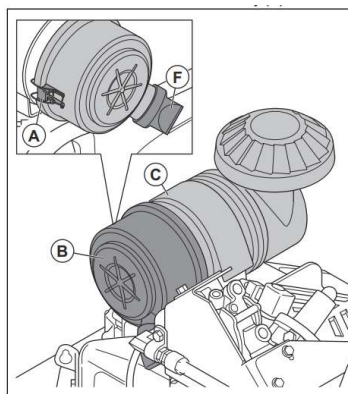
4. Attach the new filter. Turn the filter clockwise until the seal touches the surface (B). Then turn the filter $\frac{2}{3}$ of a turn more.



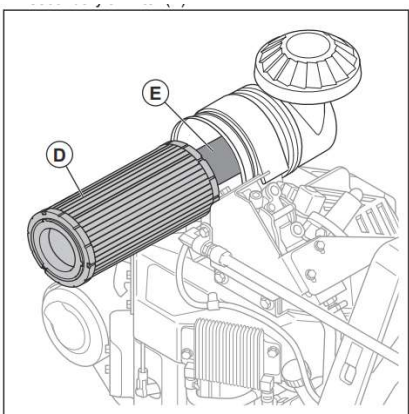
5. Use engine oil to fill the engine.
6. Run the engine for 3 minutes. Stop the engine and examine the oil filter for leakage.
7. The oil level decreases after a filter change. Do a check of the oil level and fill the oil if it is necessary.

4.11 To change the air filters

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



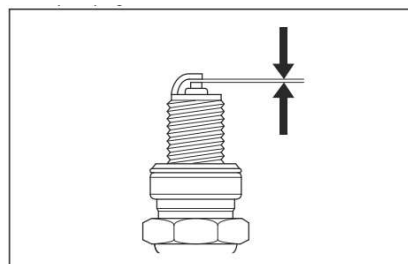
2. Unlock the clamps (A) and remove the case (B).
3. Remove the primary air filter (D). Remove the secondary air filter (E).



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

4.12 To clean or change the spark plug

1. Clean or replace the spark plugs every 100 hours of operation.
2. Make sure that the engine is cool.
3. Remove the spark plug cap from the spark plug and remove the spark plug.
4. Clean the electrodes. Use a wire brush to remove carbon deposits.
5. Examine the spark plug for damage. Replace the spark plug if it is necessary.
6. Examine the spark plug distance. The distance must be 0.75 mm (0.030 in). To change the distance, use a spark plug tool to bend the side electrode.
7. Install the spark plug. Tighten the spark plugs to 22 Nm (2.2 kgf·m, 16 ft·lb).
8. Fit the spark plug cap.



4.13 To charge the battery

Use a 12 V battery charger made for lead-acid batteries when the battery level indicated is lower than 20%.

- Connect the 3-hole plug of the charger to the battery charging port.
- Plug the other end of the charger into a power source.

4.14 To replace the gearbox oil.

- The machine gear box oil should be changed after the first 500 hours of operation, after that gear oil should be changed annually.
- There is a drain-plug under the gear box, where the grinding plates are attached. The fill location is on top of the gear box cover. GHP-680P holds approx. 1.5 gallons / 6L of gear oil. The recommended oil is VG320 or VG460, these are ISO-VG mm²/s DIN-51519, at 40°C.
- Contact your retailer for service options and information or go to <https://www.youtube.com/watch?v=8tHoJxnyn2M> for the video of changing gear oil.

5. Transportation, Storage and Disposal

5.1 Transportation

- The wheels let you move the product shorter distances. For longer distances, lift the product to move it or put the machine on a vehicle.
- Do not tow the product behind a vehicle.
- Be very careful when you move the product manually or on surfaces with a slope. Small slopes can result in a fast movement that is not possible to brake by hand.
- Safety the product during transportation.

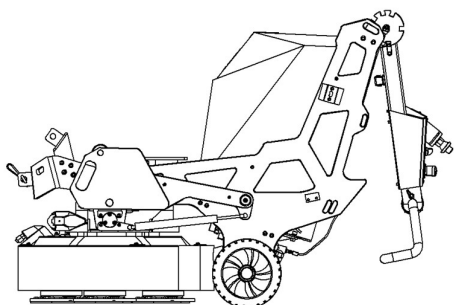
Make sure that it cannot move.

- Put some type of protection on the product during transportation. The protection keeps natural elements such as rain and snow away from the product.
- Always use the lifting eye on the product when you lift the product.
- Do not lift the product with the handlebar, engine, chassis or other parts.
- Transportation is best done on a pallet.
- Always lift the product with a lift or forklift.

- Do not use a forklift if the product is not put on a pallet or carriage. This can cause damage to the grinding discs and other internal components.
- During transportation, the grinding head must be on the ground. To prevent damage to the lock mechanism of the grinding plates, keep the tool plates installed.

To set the product in transport position

- Fold down the handle.
- Adjust the weights to forward position.
- Make sure that the grinding head touches the surface.

**To move the product up and down a ramp**

WARNING: Be very careful when you move the machine up and down ramps. The machine is heavy and there is a risk of injury if the machine falls or moves too quickly.

WARNING: For ramps with a steep slope, always use a winch. Do not walk or stay below or near the machine.

- To move the product down a ramp, operate the product forward slowly.
- To move the product up a ramp, operate the product rearward slowly.
- Do not turn the product to the left or to the right more than 45° on a ramp.

To lift the machine

1. Set the product in the transport position.
2. Attach the lifting equipment to the lifting eyes.
3. Lift the machine safely.

To attach the product to a transportation vehicle

1. Make sure that the working wheels are against the ground.
2. Attach tie-down straps in the lifting eye and tighten the tie-down straps to the transportation vehicle.

5.2 Storage

- Keep the machine in a dry and frost-free area.
- Clean the machine and do a complete servicing before you put the product in storage.
- Always store LPG tanks outside. Remove all propane tanks from inside the building except during equipment use. Store the propane tanks in a secure and well-ventilated area.

5.3 Disposal of the product

- Symbols on the product or the packaging of the product indicate that this product cannot be handled as domestic waste. It must be submitted to an appropriate recycling station for the recovery of electrical and electronic equipment.
- Make sure to disconnect the propane tank and remove the battery from the product before submitting it to an appropriate recycling station. Submit the battery to an appropriate recycling station.
- By ensuring that this product is taken care of correctly, you can help to counteract the potential negative impact on the environment and people that can otherwise result through the incorrect waste management of this product. For more detailed information about recycling this product, contact your municipality, your domestic waste service or the shop from where you purchased the product.

6. Troubleshooting

Problem	Possible Cause	Solution
The product does not start.	The battery is not charged.	Charge the battery.
	The Battery switch is OFF position.	Turn the battery switch to ON position
The engine does not start.	The emergency stop button is engaged	Turn the emergency stop button on the control panel clockwise to disengaged
	The propane tank is empty.	Fill or replace the propane tank.
	The propane tank valve is closed.	Turn the propane tank valve to open the propane tank.
	The ignition is damaged.	Speak to an approved service agent.
	The fuse is damaged.	Examine the fuse on the engine. If the fuse is damaged, replace the fuse.
	The battery is not charged.	Charge the battery
The engine starts but stops after a short time.	The propane tank is almost empty.	Fill or replace the propane tank.
	If the emission warning light turns red, the carbon monoxide values are higher than permitted levels.	Make sure that the work area has good airflow.
The product smells of smoke	The clutch disengages.	Make sure that the engine speed is up to 2600 rpm.
The product sounds as if it decreases the speed too much.	The pressure in the propane tank is too low	Fill or replace the propane tank.
	This can be caused by a fault with the engine or fault with wire to the engine.	If the problem continues, speak to an approved service agent.
	The surface is too thick, or the diamond tool configuration is incorrect.	Push down the handlebar slightly to lift the grinding head from the surface when you start the product.

7. Technical Data

GHP-680P	
Engine model	Vanguard 810cc
Engine power	26 HP
Working width	660 mm / 26 in
Grinding disc	3 × 9 in
Type of battery	Lead-acid battery, 12 V, 20 Ah
Fuel	Propane Vapor
Head pressure in position 1 (forward), kg/lb.	239 / 528
Head pressure in position 2 (neutral), kg/lb.	170 / 377
Head pressure in position 3 (backward), kg/lb.	161 / 357
Total weight, kg/lb.	527 / 1162
Water tank	15L / 4Gal
Storage temperature	-20° - 60°C / -4°-140°F
Operating temperature	-10°-40°C / 14°-104°F
Humidity	Below 95% (no condensation)

8. Dimensions

