









OPERATOR'S MANUAL

IMPORTANT: Read before using your new machine

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USE ONLY GENUINE WERKMASTER PARTS AND ACCESSORIES FOR YOUR OWN SAFETY, THE SAFETY OF OTHERS AND THE LIFE OF YOUR MACHINE.

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INTRODUCTION

Congratulations on your purchase of a WerkMaster propane machine. WerkMaster machines allow professional surface prep, polishing, grinding, edging, buffing and restoration of virtually any surface material, including concrete, terrazzo, and stone. This manual is provided to assist you in the operation and maintenance of your WerkMaster machine.

WerkMaster has patented Octi-Disc technology with 8 counter rotating heads; that means more tools make more passes over the surface with greater speed, resulting in incredible productivity that no other machine can match.

IMPORTANT

WerkMaster is dedicated to our customers, their safety, and to providing information, services, and products that meet their needs.

Read this manual and all the safety precautions before attempting to operate WerkMaster machines. Failure to follow the safety precautions may result in damage to the machine, severe personal injury, or death.

If you or your operator cannot read English, have the manual explained fully before attempting to operate the machine.

It is the owner/operator's responsibility to ensure that the air-exchange system installed in any location where a propane grinder/polisher is being operated is of sufficient capacity and quality to support the use of such a machine. OSHA, WCB and other county, state, or federal agencies publish safety guidelines. Failure on the part of the owner/operator to ensure that a propane grinder/polisher can be operated safely in a given location may lead to injury, sickness or even loss of life.

This Operator's Manual has been prepared for instructional purposes only. WerkMaster does not claim or assume any responsibility for the operator's actions or safety.

To be completely aware of what local authorities require, contact the OSHA/WCB agency in your community.



MACHINE DESCRIPTIONS

WerkMaster machines include the Scarab, Termite XT, Viper XT, Raptor XT, TITAN XT and the COLOSSOS XT models. To see the complete family of WerkMaster machines, informational videos, tooling guide, chemicals and accessories, visit our website at <u>www.werkmaster.com</u>.

TITAN XT Propane and COLOSSOS XT Propane

- 7 Machines in 1– grinder, stripper, sander, buffer, burnisher, polisher and edger
- Remove thinset, epoxy, glue, paint, mastic, and micro toppings; work on spalled or rained out concrete
- Run wet or dry on concrete, stone, and terrazzo
- Exceed OSHA standards for indoor operation ensuring the safety of the operator and the workplace environment
- Edge to within 1/8" (3 mm) of the wall
- Come with EZ Bak tilt and adjustable, foldable handle for easy transport
- with an optional water feature.

The TITAN XT Propane

- Features WerkMaster Octi-Disc[™] technology with 8 counter rotating heads and the versatility of using our 6 3/4" (171 mm) ULTRA-FLEX Plug 'N Go tooling system
- Easy to use and operator friendly, with a 20" (51 cm) footprint
- Uses a powerful 18 HP Kawasaki motor with variable speed controls on the handle
- Features an electric clutch

The COLOSSOS XT Propane

- Features WerkMaster Octi-Disc[™] technology with 8 counter rotating heads and the versatility of using our 8" (203 mm) ULTRA-Flex Plug 'N Go tooling system
- Easy to use and operator friendly the Colossos XT Propane weighs only 800 lbs (364 kg), with a 24" (61 cm) footprint
- Uses a powerful 27 HP Kawasaki motor with variable speed controls on the handle

SPECIFICATIONS

MODEL	TITAN XT Propane	COLOSSOS XT Propane
Dimensions (I x w in)	20 x 20	24 x 24
(I x w cm)	51 x 51	61 x 61
Weight (lbs / kg)	600 / 272	800 / 364
Kawasaki Motor (HP)	18	27
Tank Capacity (lbs / kg)	20 / 9.1	33 / 15





SAFETY PRECAUTIONS

IMPORTANT

Read this manual and all the safety precautions before attempting to operate WerkMaster machines. Failure to follow the safety precautions may result in severe personal injury or death.

- **Definitions DANGER** indicates severe bodily injury or death may occur to you or other persons if safety precautions are ignored or are not adhered to. Read and observe all **DANGER** statements found in the Owner's Manual and on your machine.
 - WARNING indicates injury may occur to you or to other persons if safety precautions are ignored or are not adhered to. Read and observe all WARNING statements found in the Owner's Manual and on your machine.
 - CAUTION indicates damage may occur to the machine or to other property if safety precautions are ignored or are not adhered to. Read and observe all CAUTION statements found in the Owner's Manual and on your machine.



Failure to read the Owner's Manual prior to operating or attempting any service or maintenance procedure to your WerkMaster machine could result in damage to the machine, injury to you or to other personnel, or death.

- The moving parts of this machine can cause serious injury and/or damage. The operator must wear appropriate clothing and footwear. Do not allow clothing, hair, hands, feet, or other body parts to come into contact with rotating parts. Keep people away from the machine while it is in operation.
- 2. **NEVER** try to change the tooling or attempt to make adjustments to the machine while it is operation. Injury to the operator or bystanders could occur if the engine is running while changing the tooling or making adjustments.
- 3. Propane is a highly flammable fuel. Cigarette lighters, pilot lights or any other source of ignition may cause an explosion if it comes in contact with propane. All sources of ignition should be extinguished or removed entirely from the work area. **DO NOT SMOKE** in the vicinity of a propane grinder.
- 4. This machine emits carbon monoxide (CO). Asphyxiation could occur if the unit is used in an area with poor or inadequate ventilation. ONLY operate machine in a well-ventilated area. If the operator develops a headache, confusion, light-headedness, vertigo, drowsiness, dizziness and/or nausea SHUT OFF THE MACHINE IMMEDIATELY. Move to a well-ventilated area. If symptoms persist, get medical attention. Have the machine checked for carbon monoxide emissions by a qualified technician before using again.
- 5. Dangerous carbon monoxide emissions from this machine are greatly increased due to a dirty combustion air cleaner. Follow the engine manufacturer's air cleaner service instructions.



- 6. If you smell propane gas, shut off the machine and move it outside. Determine the source of the leak before using it again. NEVER vent propane gas inside a building. It is UNLAWFUL to store a propane bottle inside a building.
- 7. **NEVER** operate a WerkMaster machine under the influence of drugs, alcohol or when taking medications that impair the senses or reactions, or when excessively tired or under stress.
- 8. Crystalline silica from bricks and concrete and other masonry products can cause health problems. Your risk of exposure to this varies depending on how often this type of work is done. To reduce the risk, work in a wellventilated area, use a dust control system such as an industrial-style vacuum, and wear approved personal safety equipment such as a dust/particle respirator designed to filter out microscopic particles.

🕰 WARNING

- 1. ALWAYS wear hearing protection while using this machine. Long or continuous exposure to high noise levels may cause permanent hearing loss.
- 2. ALWAYS wear safety goggles and safety clothing while using this machine. Injury to the eyes and/or body can occur if protective clothing and/or equipment are not worn while using this machine.
- 3. **DO NOT** touch the muffler or exhaust pipe when they are hot. Severe burn or injury may occur.
- 4. Any alterations or modifications to this machine may result in damage to the machine or injury to the operator or bystanders. Alterations or modifications not authorized by the manufacturer voids any and all warranties and liabilities.
- 5. To avoid injury or property damage, do not leave the machine where it can be tampered with or started by persons untrained in its operation. **DO NOT** leave the machine running unattended.
- 6. Vibration from machinery may cause numbness or tingling of the fingers. Wearing warm clothing, gloves, exercising and refraining from smoking can reduce the effects of vibration. If the symptoms persist, discontinue operation of the machine.
- 7. Equipment should only be operated by personnel familiar with the correct and safe operation of the machine; who are in good physical condition and mental health (not fatigued). The operator and maintenance personnel must be physically able to handle the bulk, weight and power of this equipment.
- 8. This is a one-person machine. Maintain a safe operating distance from other personnel. It is the operator's responsibility to keep bystanders away during operation. Block off the work area in all directions with roping, safety netting, etc. for a safe distance. Failure to do so may result in others being injured by flying debris or being exposed to harmful dust and noise.



- 9. Be sure all safety decals on the machine can be clearly read and understood. Replace damaged or missing decals immediately.
- 10. Maintain the machine in safe operating condition with all guards in place and secure, all mechanical fasteners tight, all controls in working order and the grinder configured for the job application. **DO NOT** operate this machine if there are loose parts. Frequently inspect the machine for loose parts. This will promote safe operation and a long life for the machine.
- 11. To prevent damage to the grinder and/or serious personal injury, avoid protruding slab inserts, nails, screws, Hilti anchors, rebar, embedded bolts, debris, pipe extensions, machinery bases or any objects that transmit a sudden shock to the grinding assembly.
- 12. Inspect the discs carefully before installing. Do not use any discs that exhibit signs of damage since serious personal injury and/or damage to the equipment may result.



NEVER OVERFILL THE PROPANE TANK. ONLY FILL TO 80%.

1. Overfilling the propane tank is the number one cause of problems with a propane machine. Overfilling may cause the engine to run poorly or not at all. Overfilling allows propane to enter the fuel control system, possibly ruining the lock off / regulator assembly. This voids the warranty on affected parts of the machine. To avoid problems, *read and understand fully*, the section Filling Propane Tanks. It is recommended to always have an authorized propane dealer fill the tank(s) and to use tanks with an Overfill Protection Device (OPD).

PROPANE SAFETY INFORMATON

Facts About As a fuel, propane gas is unmatched for both safety and dependability. It has LP Gas Propane been used as a domestic household fuel for over half a century and for over thirty years as an internal combustion engine fuel. Propane is a highly flammable fuel that is contained under pressure as a liquid. Vaporized gas has a similar explosive force to gasoline and mixtures as low as 2% LP gas-to-air may be ignited in a closed environment. Care should be exercised to avoid escaping vapor as it can freeze skin and cause frost bite. Vaporized fuel is heavier than air and will collect in the lowest confined space available. **Facts About** Propane tanks are constructed according to ASME or Federal DOT #4ET20 Propane Tanks pressure safety codes. Including the tank, all valves and fittings are UL listed. Propane gas is noncorrosive and will not rust the inside of a tank. Should the tank exterior become damaged or rusted, discontinue use, **DO NOT** tamper with tank gauges or safety relief valves. **NEVER** use a tank not intended for use with a propane buffer. **DO NOT** substitute tanks that are used with a barbecue grill, etc. WerkMaster recommends having propane tanks tested once a year by an authorized National LP Gas Association propane dealer.



The fuel tank is supplied directly from the manufacturer and is empty of fuel. The tank must be purged at the time of the first fill. Local propane fuel vendors should be familiar with this operation and will provide this service.

Recommended Purge Procedure New containers may contain vapor, air, or other contaminants. It is essential that these be removed before filling the container and putting it into service. Air in the container will cause abnormally high pressure, with the result that the pressure relief valve may open. Air in the system is also likely to cause a lean mixture, making ignition difficult. If a cylinder is suspected of being depressurized or open to the atmosphere for a period of time, it must be re-purged.

See an authorized propane dealer for proper purging of your tank.

Symptoms of a non-purged cylinder:

- Relief valve opens due to over-pressurized cylinder creating hazardous situation.
- Moisture in the cylinder.
- Grinder operates initially but shuts down when fuel mixture becomes too lean.

Filling Propane Tanks The TITAN XT Propane uses a 20 lb (9.1 kg) and the COLOSSOS XT Propane uses a 33 lb (15 kg) capacity aluminum or steel tank that meets the DOT 4E240 standards. These standards are also listed by UL. The steel cylinder meets European TPED specifications and is CE compliant.

ALWAYS have an authorized propane dealer fill your tank. Fill through the service valve **ONLY**.

OVERFILLING PROPANE TANKS IS HAZARDOUS. The tank should **NEVER** be completely filled; 80% of the total tank volume is considered full at ALL times. EXPANSION MUST BE ALLOWED FOR.

A CAUTION

The engine and the fuel system on your WerkMaster are designed to run on vapor propane, **NOT** liquid propane. Liquid propane and vapor propane are **NOT** interchangeable. Interchanging the fuel will **VOID THE WARRANTY**.





Tanks

- **Storing Propane** Propane tanks should **NOT** be stored in buildings used by employees, the public, or frequented by anyone passing through.
 - When not in use, propane tanks should always be stored in an upright position in a secure, tamper-proof, steel mesh storage cabinet. The cabinet may be located next to the building, but with at least five (5) feet (1.5 m) of space between the cabinet and the nearest building opening (door or window).
 - Full or empty, propane tanks should **NEVER** be left or stored in small, enclosed areas, in an enclosed van or trailer, or near an open flame or heatproducing device.



PROPANE TANKS SHOULD ALWAYS BE INSTALLED, USED, STORED, AND TRANSPORTED IN AN UPRIGHT POSITION.

The National Fire Protection Association (NFPA) Standard for Storage and Handling of LP Gas is the appropriate authority for safe propane use. A copy of this publication is available through the National Fire Protection Association (1.800.344.3555) or www.NFPA.org.

Storing the • Store machine in a dry location, temperature not to exceed 120° F (50° C). Machine away from objects that may fall and damage it, and away from open flames or heat producing devices.

- **NEVER** store the machine with propane tanks installed.
- Make sure the machine is properly cleaned before storing.

Transporting • the Machine

- When transporting a propane-powered machine with the propane tank installed, the tank should be securely fastened and the service valve closed. Any propane tanks not installed should be upright and securely fastened to avoid movement and damage.
 - Check the propane tanks for overfilling **BEFORE** transporting; if overfilled use the bleeder valve to vent the propane outside in a safe area. See diagram on page 14.
 - Ensure the machine if turned OFF when loading onto a truck or trailer.
 - **ONLY** use a truck or trailer that will support the weight of the machine.
 - Block the wheels and tie the machine down securely to the truck or trailer.



ENGINE EMISSIONS AND CARBON MONOXIDE SAFETY

	<u> ▲ DANGER</u>
	All engines powered by LPG (Liquid Propane Gas), including this engine, produce carbon monoxide (CO). It is a FATAL POISON gas that is a colorless, odorless, tasteless, and non-irritating. It is produced by incomplete combustion of carbonaceous material such as LPG.
	Failure to provide for proper venting of CO produced during the operation of combustion-powered engines may result in SERIOUS INJURY OR DEATH to the operator and those in the contaminated area.
	The effects of CO can be experienced at different exposure levels, depending on the health of the individual. Conditions that affect the tolerance of the individual are smoking, age, temperature, humidity, and other conditions.
	Symptoms include light-headedness, confusion, headaches, vertigo, drowsiness, dizziness and/or nausea.
	If the operator experiences any of these symptoms STOP USING THE MACHINE IMMEDIATELY. Move to a well-ventilated area. If symptoms persist, get medical attention.
	A WARNING
	All distributors, owners, and operators should be aware of the potential effects of CO and the methods used to prevent over-exposure.
CO Exposure Limits	Please refer to OSHA, WCB or local workplace industry guidelines for CO exposure limits.
Methods to Reduce the Risks of CO Poisoning	Air Exchange and CO Diffusion CO does not mix with air on its own. Air currents can "stir" the CO and dilute the concentration values by mixing it with the available air. Stirring the air can occur by walking and with the use of fans and ventilation systems.
	Application Considerations Consider the operation you are performing and the size of the area to be worked. A low movement operation such as glue/mastic removal in a smaller area will increase the build-up of CO; while a much quicker operation, such as polishing with 3000 grit over the same area, may not have the same potential for CO build- up.
	Stirring or CO mixing MUST be forced by the use of fans in order to reduce the high concentration of CO when activity is concentrated to a smaller area while performing a low movement operation.



Air Quality Monitoring

Use of a monitor/detector is essential for the safe operation of any equipment that has the potential to produce CO. See local regulations for the approved monitors/detectors and their correct methods of use.

Room Size and Time Estimations

The concentration and volume of CO production, the size of the area, and the amount of air exchange are factors involved with determining safe time limits for operation in a specific room size.

The smaller the work area and the slower the movement, the greater the build-up of CO. Fans **MUST** be used to stir the air and reduce the concentration of CO.

Maintenance of Equipment

LPG engines are dependent on engine tune-ups and air filter replacements. CO concentration (production) increases when the air-to-fuel ratio becomes fuel rich. Follow the recommended Maintenance Schedule for the engine.

CO Safety Equipment Available

WerkMaster propane machines are equipped with a catalytic muffler and a ClearSKY monitoring system to reduce the CO emissions and to promote a safer work environment.

CLEARSKY TECHNOLOGY

WerkMaster's ClearSKY **GREEN**, environmentally friendly technology meets LEED standards and contains multiple safety features to ensure safe operation while creating a clean environment. WerkMaster machines are manufactured to exceed EPA and OSHA safety standards for carbon monoxide emissions. The technology delivers a 98% reduction in emissions over conventional propane systems.



EMISSION CONTROL SYSTEM

WerkMaster propane machines are equipped with a catalytic muffler and a ClearSKY monitoring system to reduce the CO emissions and to promote a safer work environment.

The ClearSKy emission control unit has an on-board diagnostic system that allows for constant monitoring of the engine by precisely maintaining the air-to-fuel ratio (A/F).



The **RED** CHECK ENGINE LIGHT comes on when starting up; indicating that power is being supplied to the engine. It goes out after 40 seconds. If the controller is unable to maintain the proper mixture, the red light will come on and stay on indicating that engine maintenance and/or service is needed. The CHECK ENGINE light is triggered by rich conditions lasting longer than $1 \ 1/2 - 2$ minutes.

The **YELLOW** O2 SENSOR LIGHT is yellow on initial start-up. After 40 seconds it becomes a monitoring light for the oxygen sensor. A green color indicates lean condition; a red color indicates rich condition. If the light is cycling steadily from green to red it indicates proper control of the A/F mixture.

A steady lean condition (**GREEN**) or a steady rich condition (**RED**) indicates that the controller is unable to maintain the stoichiometric A/F ratio, signaling a problem with the engine and/or the controller.

The four **ORANGE** MODULATION LIGHTS indicate the modulation percentage of the solenoid valve. It is normal for these lights to oscillate indicating changing modulation as required to control the A/F mixture.

Tampering with the Emission Control System is prohibited and will **VOID THE WARRANTY.**

DO NOT alter, change or tamper with:

- Carburetor and internal parts
- Spark plugs
- Magneto or electronic ignition system
- Fuel filter element
- Air cleaner elements
- Crankcase
- Cylinder heads
- Breather chamber and internal parts
- Intake pipe and tube
- · Throttle body and internal parts
- Fuel lock-off
- Intake pipe and tube

NOT an all-inclusive list.



MACHINE OPERATION



Machine Controls

- Ignition Switch (A) Used to start machine.
- Emergency Stop Button (B) Used to stop machine in the event of an emergency.
- Throttle Control Lever (C) Used to control the speed of the engine.
- Clutch Levers (D) When applied, the clutch will engage and the pad drivers under the machine will spin.
- Handle Adjustment Pin (E) Used to adjust the height of the handle for operating, transporting and tilting the machine for tooling changes.
- Green Engine START Button (F) Used to start engine.
- Yellow Light (G) Indicates the key is in the RUN position and that the machine can be started.
- Hour Meter/Tachometer (H) Records the number of hours a machine has been powered ON and displays the engine speed. The meter displays hours when the machine is turned OFF and the engine speed when the machine is turned ON.

Preparing the Machine for Use

BEFORE using any type of power equipment, proper safety dictates you should inspect the machine.

- 1. Adjust the handle to a comfortable height and tighten the bolts.
- 2. Make sure the bonnet dust filter on top of the engine is clean.
- 3. Inspect the air filter. Clean or replace as needed.
- 4. Check the engine OIL LEVEL before starting the machine and every four(4) hours thereafter. **DO NOT** screw the dipstick in to get the reading.
- 5. **ALWAYS** have the propane tank filled by an authorized propane dealer.
- 6. Inspect the condition of the pad driver and tooling. Ensure the pad driver and tooling are properly attached, in good condition and that each pad driver has grommets securing the tooling. ALWAYS turn off the engine to clean or replace the pad driver or tools.
- 7. Check the fuel lines for signs of wear and tear such as cracks or corrosion.



For the TITAN XT Propane: EZ Bak **Tilt Operation**

В

- Fig 2
- Fig 1 1. Close the valve on the propane tank.
- 2. Allow the engine to stop and turn the ignition key OFF.
- 3. Lower the step down plate (B) by releasing the pull pin (A).
- 4. Remove the propane tank.
- 5. Ensure the handle is in its full upright position (Fig 1). Tilt the machine back by stepping on the step down plate and pulling down on the handle (Fig 2).
- 6. Slowly lift the machine back to the upright position by using the step down plate to prevent the TITAN XT Propane from hitting the floor.
- 7. Reinstall the propane tank.
- 8. Fold the step down plate up and secure by replacing the pull pin.

For the COLOSSOS XT Propane:



- 1. Close the valve on the propane tank.
- 2. Allow the engine to stop and turn the ignition key OFF.
- 3. Lower and unfold the step down plate (B) by releasing the pull pin (A).
- 4. Remove the propane tank.
- 5. Ensure the handle is in its full upright position (Fig 1). Tilt the machine back by unfolding and stepping on the step down plate and pulling down on the handle (Fig 2).



- 6. Slowly lift the machine back to the upright position by using the step down plate to prevent the COLOSSOS XT Propane from hitting the floor.
- 7. Reinstall the propane tank.
- 8. Fold the step down plate in and up and secure by replacing the pull pin.

Changing Tooling

ALWAYS turn the engine OFF when performing any operation to the bottom of the machine.



To change tooling:

- 1. Close the valve on the propane tank.
- 2. Allow the engine to stop and turn the ignition key OFF. Remove the propane tank.
- 3. Ensure the handle is in its full upright position. Tilt the machine back to the EZ Bak position.
- 4. Choose the appropriate tooling holder attachment magnetic Plug 'N Go plate for Metal Bond tools or Foam/Velcro Adapter plate.
- 5. Insert the two (2) shear pins into the rubber grommets. Attach the corresponding tooling to the plate. Follow the above diagram for tooling placement. Refer to the Tooling Selection Guide at www.werkmaster.com/machine-specific-tooling for the best choice of tooling and the number of tools needed per plate.
- 6. Return the machine to the upright position following EZ Bak instructions.

Adjusting the Dust Skirt

The dust skirt serves as a seal for the bottom of the machine to act as a vacuum chamber helping the dust stay contained under the machine. If the skirt is too far from the ground, the dust containment is reduced.

To adjust the skirt:

1. Pull one end of the skirt off of the machine until you reach the middle of the skirt.



2. Position the skirt until it's barley touching the ground and repeat with the other end.



Avoid positioning the dust skirt too low, as it will drag against the ground wearing it out prematurely and possibly preventing smooth machine movement.

Installing and Removing the Propane Tank

- To install the propane tank:
- 1. Slowly lower the step down plate by releasing the pull pin.
- **2.** Undo the Velcro strap. Place the propane tank in the shroud housing and position to allow access to the service valves.
- 3. Connect the fuel hose coupling to the service valve. **HAND TIGHTEN ONLY**. Make sure the coupling is not cross-threaded and check for leakage by noting any propane odours immediately after the tank is connected. This connection **MUST** be secure because the service valve has a safety valve inside which will only open if the fuel line fitting is completely seated into the service valve.
- 4. Secure the tank using the Velcro strap.
- 5. Fold up and secure the step down plate by replacing the pull pin.

Pressure Relief Valve Liquid Level Sight Gauge





To remove the propane tank:

- 1. Turn off the service valve.
- 2. Follow the steps above but instead, disconnect the fuel hose coupling and remove the tank from the shroud housing.
- **3.** Return to handle to the upright position.

ALWAYS open the service valve slowly to allow pressure to equalize in the hoses. Opening quickly may cause the flow check valve to engage, limiting fuel flow.

📤 CAUTION

ALWAYS connect or change propane tanks in a well-ventilated area.

Adjusting the Handle

To adjust the handle:



- 1. On the **TITAN XT Propane**, firmly grasp and hold onto the handle with one hand; with the other hand pull the spring-loaded pop pin (A). Adjust the handle to the desired position and release the pop pin.
- 2. On the **COLOSSOS XT Propane**, firmly grasp and hold onto the handle with one hand; with the other hand remove the pull pin (A), adjust the handle to the desired position and replace the pull pin.

There are five positions that can be selected:

- The vertical position is used for tilting the machine back to change tooling and to maneuver the machine.
- The most forward position is used to transport, store or ship the machine.
- The three most back positions are used for selecting operating positions.



ALWAYS make sure the pin is engaged **BEFORE** moving or operating the machine. Failure to check the pin is securely engaged could result in damage to the machine or injury to the operator as the handle could release unexpectedly when the machine is being operated or tilted back.



Removing and Reattaching the Handle Assembly

- To disconnect the handle assembly:
- 1. Close the valve on the propane tank. Using an adjustable wrench, disconnect the fuel hose from the regulator.
- 2. Underneath the handle assembly, locate and disconnect the battery plug.



- 3. On the front of the engine, disconnect the throttle linkage by gently pulling on the linkage.
- 4. On the ECU control box, disconnect the 8-pin connector.





5. Unscrew the two bolts attaching the handle assembly frame to the main body of the machine.



Bolts

6. Roll the handle assembly away from the main body.

To reattach the handle assembly: reverse the order of the steps above.



Attaching the Vacuum Hose

- To attach the vacuum hose:
- 1. Attach a standard 2" vacuum hose to the left, the right, or both vacuum ports.
- 2. Always refer to the vacuum manual for operating procedures.



Starting the Machine

DO NOT TILT THE MACHINE BACK WHILE STARTING. Doing so can cause the tooling to release from the machine and cause damage to the floor and harm to the operator.

- 1. Start in the **IDLE 'SLOW'** throttle position. This creates a vacuum necessary to open the lock-off valve inside the regulator. Activating the throttle lever will keep the lock-off valve from opening and the engine from getting fuel so the engine will not start. Proper maintenance will insure easy starting.
- 2. Open the service valve on the propane tank about one and a half turns.
- 3. Turn on the ignition key. The yellow light on the handle will turn on.
- 4. Push green START button for a MAXIMUM of 5 to 6 seconds or until the engine fires. Serious starter damage will result if this is exceeded and may void warranty.
- 5. Operate the engine at half throttle for approximately two minutes for proper warm-up.

1 IMPORTANT

If the engine refuses to start see the Troubleshooting Guide page 27.



Adjusting the Speed	To increase the speed, pull the throttle lever towards you. To decrease the speed, push the throttle lever away from you. The RPM will be displayed on the digital tachometer on the handle.
Activating the Tooling	To engage disks, gently squeeze the left, the right, or both clutch activation levers. ALWAYS keep the machine moving while the tooling is engaged. To disengage the disks on the TITAN XT Propane , release one clutch activation lever. To disengage disks on the COLOSSOS XT Propane release both clutch activation levers.
Stopping the Engine	 Close the service valve on the propane tank. ALWAYS allow the engine to run until it stops from lack of fuel. The emergency stop button should be used ONLY IN AN EMERGENCY.
Stopping the Machine	To stop the machine, turn the ignition key OFF. Ensure the yellow light is off.



MAINTENANCE

General *Fuel control system:* To ensure personal safety, adjustments should **ONLY** be made by a qualified LPG system technician or an authorized service center using an exhaust gas analyzer. **DO NOT** operate the machine if carbon monoxide levels exceed OSHA/WCB/local standards.

Recommended Maintenance Items

- Change engine oil.
- Check pad driver for loose parts.
- Check wheel bolts.
- Check engine mount bolts.
- Check handle bolts
- Check for leakage of engine oil at the various seals.

DO NOT exceed the 100 hours oil change interval. Oil changes more frequent than 100 hours will give even longer engine life.

Daily

- ily Wipe down the machine after every job.
 - Gently remove dirt and debris from the Velcro hook material using a wire brush. This will ensure maximum adhesion.
 - Check the Rear Pivoting Assembly (RPA) bolts are tight.
 - Vacuum the underside of machine
 - Check all fasteners and tighten if necessary.

Weekly

- Remove pad drivers and wipe down bearing shields with a damp cloth. DO NOT use sharp objects or abrasive pads to clean the bearing shields. This can compromise the bearing seal. Re-install pad drivers using a generous amount of blue thread locking compound.
 - Using a soft scrub pad, remove any excess dirt build-up from the bottom plate and back side of the pad drivers.
 - **DO NOT** use an abrasive material on the silicone seals around the vacuum tubes. If the silicone seal is damaged, degrease affected area and apply silicone sealer over the damaged area. Failure to inspect the seal could lead to drive train contamination and possible drive train failure.

Monthly

- Check all strain reliefs and make sure they are tight. (Strain reliefs are the plastic nuts that secure the wires that come out of the handle)
 - Remove pad drivers and inspect threads to make sure that there are no signs of cross threading or stripping. Remove excess thread locking compound from bolts using a wire brush or by washing the bolts in a solvent. Re-install pad drivers using a generous amount of blue thread locking compound.
 - Clean and lubricate the wheels.
 - Using an extremely light abrasive pad, remove any topical rust from the shafts.



Prevent accidental starting during engine service by removing the spark plug caps.

NOTE: The service intervals can be used as a guide. Service more frequently as necessary, depending on operating conditions.

• Service more frequently under dusty conditions.

K Service to be preformed by an authorized Kawasaki dealer.

TITAN X	T PR	OPAN	IE MA	INTEN	ANCE	CHAR		
				IN	TERVAL			
MAINTENANCE	Daily	First 8 hrs	Every 25 hrs	Every 50 hrs	Every 100 hrs	Every 200 hrs	Every 250 hrs	Every 300 hrs
Check and add engine oil								
Check for loose or lost nuts, screws and bolts	•							
Check for fuel and oil leakage								
Check battery electrolyte level	•							
 Check or clean air inlet screen 	•							
 Clean air cleaner foam element 			•					
 Clean air cleaner paper element 					•			
 Clean dust/dirt from K cylinder/cylinder head fins 					•			
Tighten nuts and screws					•			
Change engine oil		•			•			
Clean and re-gap spark plugs					•			
Change oil filter								
 Replace air cleaner paper element 						•		
K Clean combustion chamber								•
K Check and adjust valve clearance								•
K Clean and lap valve seating surface								•



Prevent accidental starting during engine service by removing the spark plug caps.

NOTE: The service intervals can be used as a guide. Service more frequently as necessary, depending on operating conditions.

• Service more frequently under dusty conditions.

K Service to be preformed by an authorized Kawasaki dealer.

COLOSSO	S XT I	PROP	ANE	MAINT	ENANC	E CHA	ART	
					TERVAL			
MAINTENANCE	Daily	First 8 hrs	Every 25 hrs	Every 100 hrs	Every 200 hrs	Every 250 hrs	Every 300 hrs	Every 500 hrs
Check and add engine oil								
Check for loose or lost nuts, screws and bolts	•							
Check for fuel and oil leakage	•							
Check battery electrolyte level	•							
 Check or clean air inlet screen 	•							
 Clean air cleaner foam element 			•					
 Clean air cleaner paper element 			•	•				
 Clean dust/dirt from K cylinder/cylinder head fins 				•				
Tighten nuts and screws				•				
Change engine oil		•		•				
Clean and re-gap spark plugs								
Change oil filter					•			
 Replace air cleaner paper element 						•		
K Clean combustion chamber							•	
K Check and adjust valve clearance							•	
 K Clean and lap valve seating ♦ surface 							•	
Replace air cleaner foam element								



- **Plug 'N Go Tooling** WerkMaster's patent pending **ULTRA-FLEX Plug 'N Go Tooling System** is a major advancement in tooling design. WerkMaster machines not only flatten a floor, but they also follow a very wavy, uneven floor using the same tools and drive plates on all floor surfaces. Using various hardness rubber grommets, bumpers and INDEXING, no need to add heavy weights, simply increase or reduce point pressure by easily adding or removing Plug 'N Go segments. Eliminates the frustration and pain of dealing with lippage, expansion joints, large cracks.
 - **Indexing** Indexing is a function of our ULTRA-FLEX Plug 'N Go tooling system. It allows the operator to adjust the Plug 'N Go plates to a RIGID or FLEX mode. RIGID mode is used to flatten floors. FLEX mode allows the operator to follow the contours and undulations of the floor eliminating tool marks and optimizing the finish.



RIGID mode is when the stoppers do not line up the holes in the Plug 'N Go plate. This makes for a firm, almost inflexible movement of the plate.

To adjust to RIGID mode:

- 1. Turn off the service valve. Allow the engine to stop and turn the ignition key OFF.
- 2. Remove the propane tank and put the machine in the EZ Bak position.
- Remove one of the Plug 'N Go plates. Turn the plate 180° so that the stoppers DO NOT line up with the holes in the plate. Do the same for each of the 8 heads.
- 4. Slowly return the machine to the upright position; replace the propane tank.

FLEX mode is when the stoppers line up with the holes in the Plug 'N Go plate. This makes for a flexible plate that can conform to the work surface.

To adjust to FLEX mode:

- 1. Turn off the service valve. 2. Allow the engine to stop and turn the ignition key OFF.
- 2. Remove the propane tank and put the machine in the EZ Bak position.
- Remove one of the Plug 'N Go plates. Turn the plate 180° so that the stoppers line up with the holes in the plate. Do the same for each of the 8 heads.
- 4. Slowly return the machine to the upright position; replace the propane tank.



Installing and Removing the Pad Driver

To install and remove the pad driver on the bottom of your machine, you will need a 9/16" socket wrench, a soft face mallet, and some medium strength thread locker (blue Loctite 243 or equivalent).



To remove the pad driver:

- 1. Slip the socket wrench over the pad driver bolt and strike the wrench with the soft face mallet in a counter-clockwise direction.
- 2. When installing a new pad driver or re-installing an existing one, apply a generous amount of thread locker compound to the end of the bolt and fit it through the hole in the pad driver. Reapply thread locking compound every time a pad driver is removed.
- 3. Line up the bolt to the threaded end of the shaft and start the first couple of threads.
- 4. Once the bolt is engaged, make sure that the drive shaft tongue is properly seated within the pad driver's slot before tightening the bolt all the way.
- 5. Slip the socket wrench over the pad driver bolt and strike the wrench with the soft face mallet in a clockwise direction.

Failure to seat the pad driver correctly on the shaft could result in the pad driver slot being stripped out, the threads in the shaft being stripped, the machine leaving heavy tool marks, and the tooling overheating.

Rotation Pattern of Tooling Plates



Discs 1, 2, 3 and 4 rotate clockwise

Discs 5, 6, 7 and 8 rotate counter-clockwise

View of WerkMaster from the bottom with numbered discs and clockwise and counter-clockwise labelling.



Installing and Removing	The battery is located in the shroud housing beneath the propane tank and is covered with a black rubber mat.
the Battery	To remove and install the battery:
	1. Stop the engine and turn the ignition key OFF.
	2. Undo the Velcro strap that secures the propane tank in position.
	3. Disconnect and remove the tank.
	 Lift the black rubber mat. Unscrew the M6 hex nuts from the posts and remove the rubber bar holding the battery in place.
	 Disconnect the battery by removing the BLACK negative (-) cable first, then the RED positive (+) cable.
	6. Remove the battery from its housing and replace with a new battery.
	 Connect the new battery by reconnecting the RED positive (+) cable, then the BLACK negative (-) cable. Make sure all connections are tight.
	 Replace the rubber bar and screw on the hex nuts to the posts. Replace the black rubber mat.
	 Insert and connect the propane tank and secure in position with the Velcro strap.

Changing The Oil

Hot oil can cause severe burns. Be careful when changing the oil. Dispose of used oil properly.

The oil should be changed after the first 8 hours and then every 100 hours.

To change the oil:

- 1. Move the machine to a level surface.
- 2. Start and warm the machine so the oil will drain easily and completely.
- 3. Stop the engine and turn the ignition key OFF.
- 4. Slowly remove the drain plug and let the oil drain into a suitable container. It may be necessary to loosen the fill cap in order for the oil to drain.



— Drain Plug



- 5. When the oil has drained, replace the drain plug.
- 6. Remove the oil fill cap and add clean SH or SJ SAE30 oil.

For the TITAN XT Propane use:

- 1.6 US qt (1.5 L) when the filter is not changed
- 1.8 US qt (1.7 L) when the filter is changed.

For the COLOSSOS XT Propane use:

- 2.2 US qt (2.1 L) when the filter is not changed
- 2.4 US qt (2.3 L) when the filter is changed.
- 7. Run the engine at slow idle for 2 minutes. Stop the engine and check the oil level. Add oil if needed.

Changing the Oil Filter

Be careful when draining hot oil; it can cause severe burns. Engine oil is toxic. Dispose of used oil properly.

Change the oil filter after every 200 hours of operation.

Oil Filter



To change the oil filter:

- 1. Move the machine to a level surface.
- 2. Start and warm the machine so the oil will drain easily and completely.
- 3. Stop the engine and turn the ignition key OFF.
- 4. Drain engine oil into suitable container.
- 5. Place a suitable container under the filter connection. Remove the oil filter by turning counter-clockwise.
- 6. Coat the seal of the new filter with clean engine oil.
- 7. Install the new filter by turning clockwise until the seal contacts the mounting. Give the filter a further 2/3 turn BY HAND.



- 8. Fill with new oil.
- 9. Run the engine for 3 minutes; stop the engine and check for leaks.

10. Check oil level. Add oil if necessary.

Changing the Air Filter

DO NOT run the engine with the air filter removed.

TITAN XT Propane Air Filter



COLOSSOS XT Propane Air Filter



To change the air filter:

- 1. On the **TITAN XT Propane**, unscrew the two screws securing the air filter cover.
- 2. Remove the paper and foam elements by pulling them out.
- 3. Replace with new filters, replace the cover and secure by replacing the screws.
- 1. On the **COLOSSOS XT Propane**, push open the cap on the case of the air filter body to expel dust and/or water accumulated inside.
- 2. Unfasten the two retaining clamps and remove the case from the air filter.
- 3. Remove the paper and foam elements by pulling them out.
- 4. Replace with new filters, reinstall case and fasten retaining clamps

DO NOT clean, wash, oil or use pressurized air on the air filter. **Replace**, do not clean, the air filter.



TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Engine is hard to start.	Propane cylinder is not properly connected.	Check connection and open service valve slowly.
	Battery is weak.	Charge or replace battery.
	Oil level is too low.	Check the oil level and add oil if needed.
	Insufficient vacuum.	Put the engine throttle in the idle 'slow' position.
	Coil air gap out of adjustment.	Adjust coil air gap. Have the machine serviced by an authorized Kawasaki dealer.
	Spark plug or head bolts loose.	Re-torque. Have the machine serviced by an authorized Kawasaki dealer.
	Head gasket blown or valves need adjusting.	Replace head gasket. Adjust valves, replace if necessary. Have the machine serviced by an authorized Kawasaki dealer.
	Propane cylinder is empty.	Installed properly filled cylinder.
Engine will not start.	Oil level is low.	Check the oil level and add oil if needed.
	Dead battery	Replace battery.
	Plug between starter and battery (located under handle) is not connected.	Connect starter plug to battery.
	Insufficient vacuum.	Place the engine throttle in the idle 'slow' position.
		Check the regulator vacuum hose for breaks, pinched hose, or a bad connection.
	Head gasket is blown or valves need adjusting.	Replace head gasket, adjust valves and replace if necessary. Have the machine serviced by an authorized Kawasaki dealer.
	Wires broken or disconnected.	Reconnect or replace wires.
	Coil(s) defective.	Replace coil. Have the machine serviced by an authorized Kawasak dealer.
	Spark plug gap is incorrect.	TITAN XT Propane: Adjust gap to 0.025 in (0.64 mm).
		COLOSSOS XT Propane: Adjust gap to 0.030 in (0.75 mm)
	Spark plug is defective. ClearSKY shut the machine down.	Replace spark plug. If the light is on, turn the key switch off and wait 30 seconds. Try
	Insufficient vacuum.	again.
Engine lacks power.		Put the engine throttle in the idle 'slow' position. Check the regulator vacuum hose for breaks, pinched hose, or a bac connection.
	Dirty air filter(s).	Clean or replace the primary filter (paper element).
		Clean or replace the secondary filter (foam element).
	Head gasket leaking.	Replace head gasket. Have the machine serviced by an authorized Kawasaki dealer.
	No compression.	Worn piston ring(s) and/or cylinder head(s) need replacing. Have the machine serviced by an authorized Kawasaki dealer.
	Fuel mixture is too lean.	Check and if necessary adjust fuel mixture.
	Valves need adjusting or replacing.	Adjust valves. Have the machine serviced by an authorized Kawasaki dealer.
Surging idle.		Have the machine serviced by an authorized Kawasaki dealer.
Engine starts and idles but quits as the throttle is	Propane tank not properly connected.	Check the service valve. Contact Technical Support: 866.373.9375.
advanced. Starter barely turns the engine over.	Battery is weak.	Check the charge on the battery. Recharge or replace if needed.
Solenoid just clicks	Battery is weak.	Check the charge on the battery. Recharge or replace if needed.
Facility stars and size	Propane cylinder is empty.	Install properly filled cylinder.
Engine stops running.	Engine oil level is low.	Check the oil level and oil if needed.
	Dirty air filter.	Clean both filters and if necessary replace.
	ClearSKY shuts the machine down.	Check close loop vacuum line.
		Clean air filters and if necessary replace.
		Check for any loose wiring or fuel line connections. Service machine and check fuel settings.
Clutch will not engage.	Loose connection.	Check wiring for bad connection or broken wire.
	Clutch is bad.	Replace if necessary. Contact Technical Support: 866.373.9375.
Engine begins to backfire regularly, suddenly	Spark plug is damaged.	Check the spark plug boots for cracks. Remove the spark plug lead from the spark plug and replace the boot. Contact Technical Support 866.373.9375.



EXPLODED VIEW AND PARTS LIST – TITAN XT PROPANE





ITEM 1 2 3 4 5 6	QTY 2 17 11	PART NUMBER 110-0088-00	COPANE PARTS LIST DESCRIPTION
1 2 3 4 5 6	2 17		
2 3 4 5 6	17	110-0088-00	
3 4 5 6			Vacuum Tube Assembly
4 5 6	11	500-0013-00	Bearing
5 6		590-0140-00	Fastener
6	7	500-0264-00	Sprocket
	1	500-0265-00	Sprocket
-	1	550-0007-00	Key Stock
7	1	500-0248-00	Bushing
8	1	500-0256-00	Sprocket
9 10	1	500-0006-00 100-0628-00	Bearing Idler Shaft Spacer
10	1	100-0628-00	Offset Idler Shaft
12	1	520-0041-00	Belt
13	1	100-0585-01	Bearing Plate
10	8	100-0629-00	Spacer
15	8	590-0120-00	Fastener
16	1	100-0651-00	Idler Wrench
17	1	590-0245-00	Fastener
18	3	590-0169-00	Fastener
19	1	008-0343-00	Weather Strip
20	1	590-0260-00	Fastener
21	1	590-0261-00	Nut
22	8	590-0142-00	Washer
23	1	100-0725-00	Belt Access Plate
24	11	590-0114-00	Fastener
25	7	590-0124-00	Fastener
26	1	520-0040-00	Belt
27	2	590-0159-00	Fastener
28	16	008-0208-00	Bumper
29	24	008-0154-00	Bumper
30	16	008-0189-00	Grommet
31	12	590-0128-00	Fastener
32 33	8	008-0363-01 008-0357-00	Pad Driver
34	1		Loop Dust Skirt
35	48	008-0358-00 580-0033-00	Magnet
36	48	590-0182-00	Fastener
37	8	008-0362-00	Plate
38	16	008-0142-03	Shear Pins
39	16	590-0019-00	Fastener
40	1	120-0049-00	Engine
41	1	540-0311-00	Clutch
42	1	550-0024-00	Кеу
43	4	590-0040-00	Fastener
44	4	590-0065-00	Washer
45	8	008-0310-01	Suspension Foam
46	1	110-0097-00	Cover Assembly
47	1	540-0277-00	Enclosure
48	1	500-0252-00	Sprocket
49	2	540-0070-00	Strain Relief
50	1	510-0021-00	Soft Start Module
51	1	540-0278-00 510-0038-00	Circuit Breaker
52 53	1	510-0038-00	Emission Control Unit
53 54	4	590-0112-00	Fastener Fastener
55	4	540-0286-00	Pin Power Connector Set
56	1	540-0280-00	Pin Power Connector Set
57	2	540-0071-00	Strain Relief
58	2	590-0250-00	Washer
59	1	100-0809-00	Engine Sleeve
60	1	590-0240-00	Washer
61	1	590-0238-00	Fastener
62	2	580-0095-00	Wheel
63	1	590-0237-00	Fastener



ITEM	QTY	PART NUMBER	DESCRIPTION TITAN XT PROPANE cont'd
64	1	580-0070-00	Pin
65	2	590-0192-00	Fastener
66	2	590-0263-00	Fastener
67	1	540-0271-00	Hour Meter/Tachometer
68	1	540-0147-00	Button
69	1	540-0005-00	Button
70	1	540-0236-00	Light
71	1	540-0193-00	Ignition Switch
72	2	540-0179-01	Bumper
73	1	580-0204-00	Cable
74	2	590-0242-00	Fastener
75	2	590-0259-00	Fastener
76	1	540-0234-00	Switch
77	2	590-0214-00	Fastener
78	1	580-0112-00	Spring
79	1	590-0212-00	Fastener
80	1	100-0343-02	Clutch Lever Plate
81	1	100-0687*0	Handle Junction Box
82	2	580-0122-00	Handle Grip
83	1	540-0144-00	Strain Relief
84	1	100-0215-01	Handle Cover Plate
85	1	130-0115-00	Handle Assembly
86	1	580-0088-00	Handle
87	1	100-0726-00	Protection Plate
88	1	130-0117-00	Main Frame Assembly
89	2	540-0179-00	Bumper
90	1	580-0107-00	Key Ring
90	2	540-0240-00	Bumper
92	2	590-0234-00	Washer
93	2	590-0232-00	Washer
94	1	510-0012-00	Propane Tank
94 95	1	100-0713-00	Control Box Mounting Block
96	1	540-0241-00	Battery
97	2	590-0048-00	Fastener
97	1	510-0033-00	Rubber Battery Bar
99	8	590-0133-00	Fastener
100	1	510-0063-00	Rubber Mat
100	1	580-0114-00	Strap
101	4	590-0115-00	Fastener
102	4	580-0104-00	Chain
103	1	100-0741-00	Drive Train Lower Plate
104	1	100-0741-00	Drive Train Lower Plate
	1		Shroud Assembly
106	1	120-0051-00	
107		510-0058-00	Hose
108	2	510-0062-00	Hose Fitting
109	1	510-0026-00	Hose Fitting
110	2	590-0273-00	Screw
111	2	540-0194-00	Plug
112	2	590-0274-00	Fastener
113	1	100-0747-00	Regulator Mount Plate
114	1	590-0113-00	Fastener
115	1	130-0114-00	Handle Posts
116	1	120-0050-00	Engine Mount Adapter Assembly
117	1	540-0175-00	Strain Relief
118	1	540-0176-00	Strain Relief
119	2	590-0190-00	Fastener
120	8	008-0354-01	Plate Assembly
121	8	008-0361-00	Plate Assembly



EXPLODED VIEW AND PARTS LIST – COLOSSOS XT PROPANE







			DRODANE DADTS LIST
ITEM	QTY	PART NUMBER	PROPANE PARTS LIST DESCRIPTION
	QII	FART NOWIDER	DESCRIPTION
1	16	008-0143-03	Screw
2	24	008-0154-00	Bumper
3	16	008-0189-00	Grommet
4	16	008-0208-00	Bumper
5	1	008-0309-01	Dust Skirt
6	8	008-0310-01	Suspension Foam
7	1	008-0319-00	Weather Strip
8	1	008-0320-00	Velcro Loop
9	8	008-0359-02	Pad Driver Plate
10 11	8	008-0360-00	Plate
12	1	130-0082-01	Idler Shaft Spacer Handle Tube Assembly
12	8	100-0176-00	Spacer
14	1	100-0170-00	Handle Cover Plate
15	1	120-0017-02	Engine Mounting Adapter Assembly
16	1	100-0328-01	Access Plate
17	1	100-0392-00	Regulator Mount
18	2	110-0073-00	Vacuum Tube Assembly
19	2	100-0555-01	Hitch
20	7	100-0578-01	Drive
21	1	100-0579+01	Drive Train Lower Plate
22	1	100-0580-01	Drive Train Upper Plate
23	1	110-0079-01	Cover Assembly
24	1	100-0584-01	Drive Shaft
25	1	100-0585-01	Bearing Plate
26	1	120-0031-01	Shroud Assembly
27	2	130-0078-01	Handle
28 29	2	130-0083-01 130-0085-01	Handle Handle
30	1	100-0605-00	Motor Sleeve
31	1	100-0606-01	Handle Protection Plate
32	1	100-0607-00	Handle Wheel Axle
33	1	100-0609-02	Offset Idler Shaft
34	1	100-0611-00	Idler Wrench
35	1	100-0615-02	Cable Bracket
36	2	130-0080-01	Handle
37	1	100-0687-00	Handle Junction Box
38	17	500-0013-00	Bearing
39	8	500-0091-00	Bushing
40	8	500-0191-00	Sprocket
41	2	500-0197-00	Bearing
42	2	500-0198-00	Bearing
43 44	1	500-0247*00 500-0248-00	Sprocket Bushing
44 45	1	500-0248-00	Sprocket
46	1	510-0013-00	Propane Tank
47	1	510-0021-00	Soft Start Module
48	1	510-0026-00	Hose Fitting
49	1	510-0032-00	Rubber Mat
50	1	510-0033-00	Rubber Bar
51	1	510-0038-00	Emission Control Unit
52	1	510-0058-00	Hose
53	2	510-0062-00	Hose Fitting
54	1	520-0041-00	Belt
55	1	520-0043-00	Belt
56	1	530-0034-00	Engine
57	1	540-0005-00	Button
58	2	540-0070-00	Strain Relief
59	2	540-0071-00	Strain Relief
60 61	1	540-0144-00	Strain Relief
61	2	540-0147-00 540-0179-00	Button Bumper
62 63	2	540-0179-00	Bumper
00	4	J+0-01/3-01	Dumper



ITEM	QTY	PART NUMBER	DESCRIPTION COLOSSOS XT PROPANE cont'd
64	1	540-0192-00	Pin Power Connector Set
65	1	540-0193-00	Switch
66	2	540-0194-00	Plug
67	2	540-0234-00	Switch
68	1	540-0236-00	Light
69	1	540-0238-01	Clutch
70	2	540-0230-01	Bumper
70	1	540-0240-00	•
	1		Battery
72		540-0271-00	Tachometer
73	1	540-0277-00	Enclosure
74	1	540-0278-00	Circuit Breaker
75	1	540-0286-00	Pin Power Connector Set
76	1	550-0007-00	Key Stock
77	8	550-0022-00	Кеу
78	1	550-0024-00	Кеу
79	48	580-0033-00	Magnet
80	2	580-0095-00	Wheel
81	2	580-0098-00	Retaining Ring
82	1	580-0104-00	Chain
83	1	580-0107-00	Key Ring
84	1	580-0111-00	Throttle
85	1	580-0114-00	Cinching Strap
86	2	580-0122-00	Handle Grip
87	1	580-0190-00	Quick Release Pin
88	2	590-0000-00	Washer
89	2	590-0048-00	Fastener
90	16	590-0055-00	Fastener
90	4		Fastener
91		590-0112-00	
-	10	590-0114-00	Fastener
93	8	590-0120-00	Fastener
94	4	590-0124-00	Fastener
95	12	590-0128-00	Fastener
96	2	590-0132-00	Fastener
97	9	590-0133-00	Fastener
98	4	590-0135-00	Fastener
99	1	590-1036-00	Fastener
100	11	590-0140-00	Fastener
101	8	590-0142-00	Washer
102	1	590-0143-00	Washer
103	2	590-0146-00	Washer
104	2	590-0147-00	Washer
105	8	590-0159-00	Fastener
106	2	590-0166-00	Fastener
107	3	590-0169-00	Fastener
108	2	590-0171-00	Fastener
100	48	590-0182-00	Fastener
110	40	590-0189-00	Fastener
111	5	590-0190-00	Fastener
	2	590-0192-00	
112			Fastener
113	2	590-0194-00	Fastener
114	2	590-0212-00	Fastener
115	4	590-0214-00	Fastener
116	2	590-0230-00	Washer
117	4	590-0232-00	Washer
118	1	590-0237-00	Fastener
119	1	590-0238-00	Fastener
120	1	590-0240-00	Washer
121	4	590-0242-00	Fastener
	4		Fastener
122	1	590-0244-00	i asterier
122 123	1	590-0245-00	Fastener



WARRANTY INFORMATION

	WerkMaster Grinders & Sanders Inc., herein referred to as WerkMaster, warrants that each new machine manufactured by WerkMaster to be free from defects in material and workmanship in normal use and service for a period of (3) three years from date of shipment to the original Purchaser or Distributor.
	Accessories or equipment furnished and installed on the product by WerkMaster but manufactured by others, including but not limited to engines, motors, electrical components, transmissions, etc. such as the Kawasaki motor, shall carry the accessory manufacturer's own warranty.
Terms & Conditions	WerkMaster will, at its option, repair or replace, at a WerkMaster factory or a point designated by WerkMaster, any part, which shall appear to the satisfaction of WerkMaster inspection, to have been defective in material or workmanship. WerkMaster reserves the right to modify, alter and improve any part or parts without incurring any obligation to replace any part or parts previously sold without such modified, altered or improved part or parts.
	This warranty is in lieu of and excludes all other warranties, expressed, implied, statutory, or otherwise created under applicable law including, but not limited to the warranty of merchantability and the warranty of fitness for a particular purpose. In no event shall the Seller or the Manufacturer of the product be liable for special, incidental, or consequential damages, including loss of profits, whether or not caused by or resulting from the negligence of the Seller and/or the Manufacturer of the product unless specifically provided herein.
	In addition, this warranty shall not apply to any products or portions thereof which, at WerkMaster's discretion, have been subjected to abuse, misuse, improper installation, maintenance, or operation, electrical failure or abnormal conditions, and to products which have been tampered with, altered, modified, repaired, reworked by anyone not approved by the seller, or used in any manner inconsistent with the provisions of the above or any instructions or specifications provided with or for the product.
	Except for conditions or warranties, which may not be excluded by law, the Seller makes no warranty of its own on any item warranted by WerkMaster, and makes no warranty on other items unless it delivers to the Purchaser a separate written warranty document specifically warranting the item. The Seller has no authority to make any representation or promise on behalf of WerkMaster or to modify the terms or limitations of this warranty in any way.
Delivery, Damages, Shortages	Seller shall use reasonable efforts to attempt to cause the Products to be delivered as provided for in these Terms & Conditions. Delivery to the initial common carrier shall constitute the delivery to the Purchaser. Seller's responsibility, in so far as transportation risks are concerned, ceases upon the delivery of the Products in good condition to such carrier at the F.O.B. point and all the Products shall be shipped at the Purchaser's risk. Seller shall not be responsible or liable for any loss of income and/or profits, or incidental, special, consequential damages resulting from Seller's delayed performance in shipment and delivery.



Return of Defective Products	Defective or failed material shall be held at the Purchaser's premises until authorization has been granted by Seller to return or dispose of Products. Products that are to be returned for final inspection must be returned Freight Prepaid in the most economical way. Credit will be issued for material found to be defective upon Seller's inspection based on prices at time of purchase
FORCE MAJEURE	Seller's obligation hereunder are subject to, and Seller shall not be held responsible for, any delay or failure to make delivery of all or any part of the Product due to labor difficulties, fires, casualties, accidents, acts of the elements, acts of God, transportation difficulties, delays by a common carrier, inability to obtain Product, materials or components or qualified labor sufficient to timely perform part of or all of the obligations contained in these terms and conditions, governmental regulations or actions, strikes, damage to or destruction in whole or part of manufacturing plant, riots, terrorist attacks or incidents, civil commotions, warlike conditions, flood, tidal waves, typhoon, hurricane, earthquake, lightning, explosion or any other causes, contingencies or circumstances within CANADA not subject to the Seller's control which prevent or hinder the manufacture or delivery of the Products or make the fulfillment of these terms and conditions impracticable. In the event of the occurrence of any of the foregoing, at the option of Seller, Seller shall be excused from the performance under these Terms and Conditions, or the performance of the Seller shall be correspondingly extended. This document sets forth the terms and conditions pursuant to which the purchaser ("Purchaser") will purchase and WerkMaster Grinders and Sanders Inc. ("Seller") will sell the products, accessories, attachments (collectively "the Products") ordered by the Purchaser. These terms and conditions shall govern and apply to the sale of Seller's Products to Purchaser, regardless of any terms and conditions appearing on any purchase order or other forms submitted by Purchaser to Seller, or the inconsistency of any terms therein and herein.

To get the best protection from your WerkMaster Warranty be sure to register your product(s) online at <u>http://www.werkmaster.com/warranty</u>.

WerkMaster Grinders and Sanders Inc. 6932 Greenwood Street, Burnaby, BC V5A 1X8 tel: 604.629.8700 | toll free: 1.866.373.WERK | fax: 604.444.4231 www.werkmaster.com | email: info@werkmaster.com





Operation and Safety Guide TITAN XT PROPANE[™]

Vendor Website: www.werkmaster.com





SAFETY TOPICS:

Read the Operator's Manual or the Operation and Safety Guide and all the safety precautions before attempting to operate WerkMaster machines. Failure to follow the safety precautions could result in severe personal injury or death.

SAFETY CHECKLIST:

WARNING: ALWAYS turn off the machine when changing discs/tooling, before servicing, and when not in use.

 Before starting the machine do a check for loose, cracked or worn parts, oil levels, leaks, that the handle and propane tank are secure and that all connections are properly fitted.
 Ensure the work area is properly ventilated, particularly if working in a small, closed-in area.

3. Propane is highly flammable, so cigarette lighters, pilot lights or any other source of ignition may cause an explosion if in contact with propane. All sources of ignition should be extinguished or removed from the work area. DO NOT smoke in the vicinity of propane.

4. Never operate the machine under the influence of drugs or alcohol or when extremely fatigued.

5. If the equipment doesn't start or stops unexpectedly first check your propane tank and the connections then go to <u>www.werkmaster.com</u> or call Technical Support: 866.373.9375.



WARNING: Never turn on the equipment while it is tilted back. Any discs/tooling attached to the bottom could eject and become a lethal projectile.

Wear appropriate personal safety equipment such as hearing and eye protection and a dust mask or respirator.



Technical Support: 866-373-9375

Tool Application: The TITAN XT PROPANE[™] can be used to grind and/or polish various floor surfaces.



Tool Operation:

Step	Action
1	Ensure the handle is in its full upright position (Fig1). Tilt the equipmen back by releasing the step down plate (A). While stepping on the step down plate, pull down on the handle. Choose the appropriate tooling holder attachment – 8" magnetic Plug 'N Go plate for metal bond tools or 8" Foam/Velcro Adapter plate. Insert the 2 shear pins into the rubbe grommets. Then attach the corresponding tooling to the plates (E).
2	Lift the equipment back to the upright position using the step down plate to prevent the TITAN XT Propane from hitting the floor. Loosen and lower the dust skirt (B) so that it is just above the working surface.
3	Adjust the handle to a comfortable operating position by pulling out and re-inserting the release pin at the swivel joint (C). Connect the vacuum hose(s) to the vacuum pipes (D) located on either side.
4	Ensure the machine is in the IDLE throttle position. Open the service valve on the propane tank about one and a half turns. Turn the key ON and push the GREEN start button. The yellow light on the handle will come on. Engage the clutch by squeezing the left, the right, or both activation levers.
5	Stop the engine by shutting off the service valve on the propane tank. ALWAYS allow the engine to run until it stops from lack of fuel.
6	Stop the machine by turning the ignition key OFF. Ensure the yellow light is off.
7	When the equipment is in operation it should move smoothly and without chattering. If chattering or excessive vibration occurs stop the machine, turn it off, tilt it back and verify that all the Plug 'N Go/Adapto plates are installed correctly and the tooling is seated properly.
8	Move the equipment continuously in any direction using a circular motion. Be sure keep it moving at all times to prevent unwanted marks View training videos at www.werkmaster.com .



Operation and Safety Guide COLOSSOS XT PROPANE[™]

Vendor Website: www.werkmaster.com

Technical Support: 866-373-9375



SAFETY TOPICS:

Read the Operator's Manual or the Operation and Safety Guide and all the safety precautions before attempting to operate WerkMaster machines. Failure to follow the safety precautions could result in severe personal injury or death.

SAFETY CHECKLIST:



WARNING: ALWAYS turn off the machine when changing discs/tooling, before servicing, and when not in use.

 Before starting the machine do a check for loose, cracked or worn parts, oil levels, leaks, that the handle and propane tank are secure and that all connections are properly fitted.
 Ensure the work area is properly ventilated, particularly if working in a small, closed-in area.

3. Propane is highly flammable, so cigarette lighters, pilot lights or any other source of ignition may cause an explosion if in contact with propane. All sources of ignition should be extinguished or removed from the work area. DO NOT smoke in the vicinity of propane.

4. Never operate the machine under the influence of drugs or alcohol or when extremely fatigued.

5. If the equipment doesn't start or stops unexpectedly first check your propane tank and the connections then go to <u>www.werkmaster.com</u> or call Technical Support: 866.373.9375.



WARNING: Never turn on the equipment while it is tilted back. Any discs/tooling attached to the bottom could eject and become a lethal projectile.

Wear appropriate personal safety equipment such as hearing and eye protection and a dust mask or respirator.



Tool Operation:

Step	Action
1	Ensure the handle is in its full upright position (Fig1). Tilt the equipment back by releasing and unfolding the step down plate (A). While stepping on the step down plate, pull down on the handle. Choose the appropriate tooling holder attachment – 8" magnetic Plug 'N Go plate for metal bond tools or 8" Foam/Velcro Adapter plate. Insert the 2 shear pins into the rubber grommets. Then attach the corresponding tooling to the plates (E).
2	Lift the equipment back to the upright position using the step down plate to prevent the COLOSSOS XT Propane from hitting the floor. Loosen and lower the dust skirt (B) so that it is just above the working surface.
3	Adjust the handle to a comfortable operating position by pulling out and re-inserting the pull pin at the swivel joint (D). Connect the vacuum hose(s) to the vacuum ports (C) located on either side of the machine.
4	Ensure the machine is in the SLOW IDLE throttle position. Open the service valve on the propane tank about one and a half turns. The yellow light on the handle will illuminate. Turn the ignition key ON and push the GREEN start button. The yellow light on the handle will come on. Engage the clutch by squeezing the left, the right, or both activatior levers.
5	Stop the engine by shutting off the service valve on the propane tank. ALWAYS allow the engine to run until it stops from lack of fuel.
6	Stop the machine by turning the ignition key OFF. Ensure the yellow light is off.
7	When the equipment is in operation it should move smoothly and without chattering. If chattering or excessive vibration occurs stop the machine, turn it off, tilt it back and verify that all the Plug 'N Go/Adapton plates are installed correctly and the tooling is seated properly.
8	Move the equipment continuously in any direction using a circular motion. Be sure keep it moving at all times to prevent unwanted marks View training videos at <u>www.werkmaster.com</u> .

