

OWNER'S MANUAL TOTAL PROPANE DUST EXTRACTOR



USER & MAINTENANCE BOOK

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

IMPORTANT WARNINGS AND SAFETY INSTRUCTIONS

WARNING

CALIFORNIA PROP 65 WARNING

Use of this product can cause exposure to materials known to the State of California to cause cancer and/or birth defects or other reproductive harm. www.P65Warnings.ca.gov

AWARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

WARNING

This product contains one or more chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

WARNING

CARBON MONOXIDE WARNING

This machine contains a fossil fuel burning engine.
Use of this product can cause exposure to Carbon Monoxide.

A DANGER



Carbon Monoxide (CO) is a colorless, odorless, invisible gas.

Exposure to high levels will cause headaches, dizziness, and/or death. Obey all PPE requirements including, but not limited to Personal CO Monitoring Device(s) at all times and if high levels of CO are present, vacate the area immediately.

DANGER



All internal combustion engines produce CO.

Only use this machine in work areas that are adequately ventilated.

Failure to do so will result in injury or death.



WARRANTY REGISTRATION CARD

Form must be completed and submitted within 30 days from the date of purchase.

Customer Information				
First and Last Name				
Company Name				
Address	City	State	Zip Code	
Phone Number	Email			
Machine Information				
Machine Type	Machine Model			
Serial #	Purchase Date (dd/mm	n/yy)		

DiamaPro Systems® 3343 Peachtree Road NE Suite 145 #24 Atlanta, GA 30326

INTRODUCTION

Thank you for purchasing a DIAMAPRO SYSTEMS® product. This manual provides information and procedures to safely operate and maintain the DiamaPro Systems® TVX-P. For your own safety and protection from injury, carefully read, understand, and observe the safety instructions described in this manual. Keep this manual or a copy of it with the machine. If you lose this manual or need an additional copy, please contact DiamaPro Systems®. This machine is designed and built with user safety in mind; however, it can present hazards if improperly operated and serviced. Please follow the operating instructions carefully. If there are any questions regarding operating or servicing of this machine, please contact DiamaPro® Systems.

Disclaimer: DiamaPro Systems® and its affiliates take no responsibility for any damage, injury or death resulting from the incorrect or unsafe use of this product. Use of this product should be undertaken by competent persons only. It is the operator's responsibility to ensure that the following safety procedures are followed. If you are unsure, do not operate this product.

1. SAFETY INSTRUCTIONS

1.1 KNOW THE RULES & YOUR EQUIPMENT

Most job sites have rules governing equipment use & maintenance. Before starting at a new work location, check with the supervisor or safety coordinator. Ask about any rules or regulations you need to abide by. OSHA enforces federal laws within the United States that apply to the safe operation, application, & maintenance of equipment on job sites. It is the employer's responsibility to comply with these laws.

Do not operate this machine unless you carefully read the operations and maintenance manual

1.2 RECEIVE PROPER TRAINING

Do not operate this machine unless you have received operational and maintenance training from a DiamaPro® Systems representative or from an authorized distributor for DiamaPro® Systems

1.3 PROTECT YOUR FEET

Observe all applicable local, state and federal safety regulations. Wear OSHA approved foot protection.

1.4 PROTECT YOUR EYES

Observe all applicable local, state and federal safety regulations. Wear OSHA approved safety glasses.

1.5 PROTECT YOUR LUNGS

Breathable silica may be generated by use of this product. Silica can cause severe and permanent lung damage, cancer, and other serious diseases. Do not breath the dust. Do not rely on your sight or smell to determine if dust is in the air. Silica may be in the air without a visible dust cloud. If air monitoring equipment for silica is not provided by your employer at your work site, you MUST wear appropriate respiratory protection when using or servicing the machine. Consult your employer and OSHA regarding the appropriate respiratory protection.

1.6 PROTECT YOUR EARS

Observe all applicable local, state and federal safety regulations. Wear OSHA approved hearing protection.

1.7 DRESS PROPERLY

Do not wear loose clothing or jewelry that can be caught in moving parts. Wear protective hair covering to contain long hair. Keep hair away from motor air vent. Rubber gloves and non-skid footwear are recommended when working outdoors.

1.8 AVOID A DANGEROUS ENVIRONMENT

Do not expose machine to rain. Do not use machine in wet conditions. Keep work area well lit. When working at an elevated location, pay attention to articles and persons below.

1.9 KEEP WORK AREA CLEAN - DO NOT RUN OVER ANYTHING

Loose debris could be thrown from crack. Make sure area to be cut is clear from people and any loose objects, nuts, bolts, etc. Never run over any loose objects.

1.10 KEEP CHILDREN AND VISITORS AWAY

Keep children and visitors away from the work area.

1.11 AVOID FLAMMABLE LIQUID OR GASES

Never use machines in dangerous sites containing flammable, combustible or explosive materials such as lacquer, paint, benzene, thinner, gasoline, gases, and adhesive agents.

1.12 STORE IDLE EQUIPMENT

The machine should be stored in a dry and secure location when not in use. Keep equipment out of reach of children.

1.13 OBTAIN MATERIAL SAFETY DATA SHEET (MSDS) FOR ALL WORK SURFACE MATERIALS

This includes primers, all coatings, adhesives, tile and crack filling materials, etc. Do not attempt to cut, clean out or remove material without MSDS information. Consult MSDS sheet for hazards information. Be aware that some materials are explosive such as dust.

1.14 DO NOT OVERREACH

Always keep proper footing and balance.

1.15 MAINTAIN MACHINE WITH CARE

Keep machine clean and follow maintenance procedures for better and safer performance. Keep handles dry, clean, and free from oil and grease. Follow instructions for lubricating and changing accessories.

1.16 STAY ALERT

Watch what you are doing. Use common sense. Do not operate machine when you are tired or fatigued.

1.17 DO NOT USE DRUGS, ALCOHOL, MEDICATION

Do not operate machine while under the influence of drugs, alcohol, or any medication.

1.18 KEEP ALL PARTS IN CORRECT POSITION

Do not operate machine with missing or improperly mounted parts.

1.19 CHECK DAMAGED PARTS

Verify all machine guards are in good condition and will function properly before using the machine. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect machine operation. A guard, power switch or other part that is damaged should be properly repaired or replaced by an authorized service center.

1.20 NEVER TOUCH MOVING PARTS

Never touch moving parts such as blades, belts, and others.

1.21 STOP OPERATION IMMEDIATELY IF ANY ABNORMALITY IS DETECTED

Stop using machine immediately if any abnormalities are observed during operation. Examples of abnormalities include unusual noise and vibration

1.22 WHEN REPLACING A PART, USE THE SAME TYPE AND QUALITY

When replacing a component part with a new one, use only the same type and quality of the previous part. Never attempt to repair a machine if you are unfamiliar with proper procedures and techniques required.

1.23 SAVE THESE INSTRUCTIONS

Refer to this operations and maintenance manual as well as any additional instructions included from other manufacturers.

2. OPERATING ENVIRONMENT SAFETY

2.1 OPERATING ENVIRONMENT

The DiamaPro Systems® TVX-P can be operated within the temperature range of 41°F to 86°F (5°C to 30°C). It's crucial to avoid using the machine during rainy or snowy weather conditions. Only use this machine in work areas that are adequately ventilated.

2.2 PROTECTION DEVICES

The DiamaPro Systems® TVX-P is equipped with multiple safety mechanisms, including: HEPA-Filter dust collector(s) & an emissions monitoring device (See Section 3). These device(s) and/or system(s) safeguard the operator and any other individuals from potential harm. It is imperative not to remove them. Instead, prior to utilizing the machinery, ensure that all safety devices are appropriately installed and operational

2.3 USAGE SAFETY

The DiamaPro Systems® TVX-P is intended to minimize associated hazards related to its operation. Nonetheless, it is not entirely feasible to eliminate the possibility of accidents with the machine. Inexperienced or untrained operators may cause residual risks associated with but not limited to:

- Positional hazards due to improper operator posture.
- Entanglement hazards arising from the use of unsuitable work attire.
- Training hazards caused by insufficient operational training.

2.4 SAFETY MEASURES FOR PROPANE

Always check all propane fittings are secure and no leaks are present. If leaks are present do not operate. Failure to do so may result in fire or explosion that could cause serious injury or death.

Propane or Liquefied petroleum gas (LPG) is a flammable gas with vapors that are denser than air. Like gasoline, improper handling of propane can lead to explosions. To aid in detecting leaks, propane may be mixed with an odorant that has a distinctive smell, detectable at low concentrations. When working with propane, it is essential to be aware and take necessary safety precautions. Lack of awareness could result in needless hazards. The two most significant dangers associated with propane-powered floor care machines are:

Carbon Monoxide Poisoning:



• Carbon monoxide poisoning is the most reported incident associated with propane-powered floor care machines, caused by excessive exhaust emissions. The symptoms include headaches, dizziness, and nausea. Engines with inadequate preventive maintenance practices, particularly those with unclean air filters and machines operated in enclosed spaces without sufficient ventilation, are a significant cause.

The use of substandard, inexpensive machines without emissions control technology and improperly adjusted carburetion could also contribute to the problem.

- Overfilled Fuel Cylinders:
 - Overfilling a propane cylinder (over 80% full) can increase risks such as (but not limited to) ruptures or leaks which can cause accidents, environmental hazards, and damage to property. This practice is hazardous, imprudent, and avoidable.
- Fire Precautions
 - Be mindful of the potential risks of fire when working with propane and take standard fire-safety measures.
 - There is a likelihood of fire resulting from leakage or venting of LPG vapor from fuel cylinders or carburetion equipment.
- Explosion Precautions
 - Be mindful of the potential risks of explosion when working with propane and take standard fire-safety measures.
 - Concentration or confinement of LPG vapor in a restricted or small space may cause ignition or explosion.
 - Propane may also experience a BLEVE: Boiling Liquid Expanding Vapor Explosion.

<u>2.5 SAFETY MEASURES FOR DUST</u>



Respirable crystalline silica causes damage to lungs and may cause cancer. Always wear respiratory protection during exposure. Always use appropriate dust control equipment to keep dust within OSHA and local regulation limits.

Cutting, especially when DRY cutting, generates dust that comes from the material being cut, which frequently contains silica. When dry-cutting, be sure to use an appropriate sized HEPA filtered dust collector.

Silica is a basic component of sand, quartz, concrete, brick clay, granite and numerous other minerals and rocks. Exposure to excessive amount of such dust can cause the following symptoms according to NTP* and IARC*:

- Respiratory diseases (affecting your ability to breath), including chronic bronchitis, silicosis, and pulmonary fibrosis from exposure to silica. These diseases may be fatal.
- Cancer
- Skin irritation and rash

*National Toxicology Program, International Agency for Research on Cancer

Take precautionary steps:

- Avoid inhalation of and skin contact with dust, mist, and fumes.
- Wet cut when feasible, to minimize dust.
- Wear and ensure that all bystanders wear appropriate respiratory protection such as dust masks designed to filter out microscopic particles (See OSHA 29 CFR Part 1910.1200).

2.6 SAFETY MEASURES FOR CARBON MONOXIDE

A DANGER



Carbon Monoxide (CO) is a colorless, odorless, invisible gas. Exposure to high levels will cause headaches, dizziness, and/ or death. Obey all PPE requirements including, but not limited to Personal CO Monitoring Device(s) at all times and if high levels of CO are present, vacate the area immediately.

A DANGER



All internal combustion engines produce CO.

Only use this machine in work areas that are adequately ventilated. Failure to do so will result in injury or death.

Carbon Monoxide (CO) is a colorless, odorless, invisible gas formed during the incomplete combustion of carbon containing fuels such as (but not limited to) gasoline or propane. Exposure to high levels of Carbon Monoxide can cause the following symptoms:

- Nausea
- Headaches
- Fatigue
- Dizziness
- Drowsiness
- Unconsciousness
- Death

The Occupational Health & Safety Administration (OSHA) has implemented an 8-hour time-weighted average (TWA) limit of 50 Parts per Million (PPM) of Carbon Monoxide in ambient air. All occupants must leave the enclosed area if the CO concentration in said space exceeds a ceiling of 100 PPM (OSHA 1917.24(a)).

This machine is equipped with a safety device to aid in the safety of the operator. This device is NOT a substitute for a certified personal CO Monitoring device, proper area ventilation, and all other required safety devices and procedures.

2.7 EMISSIONS

All propane-powered floor care machines generate emissions. While most are innocuous, some can be hazardous, even fatal. Carbon monoxide (CO) presents the most significant danger. See the Safety Measures for Carbon Monoxide section in the Operating Environment Safety section of the manual.

2.8 AGENCIES AND REGULATIONS

- National Fire Protection Agency (NFPA):
 - To operate a propane-powered floor care machine safely, it is necessary to adhere to specific safety regulations. The NFPA is responsible for ensuring safe propane use and storage, and their Standard for Storage and Handling of LP Gas should be consulted for guidance. Copies of this publication can be obtained by contacting the NPFA in Quincy, MA at 1-800-334-3555.
 - One important regulation set forth by the NFPA #58 is that all personnel who handle propane gas must be properly trained in its safe handling and operation procedures and carry a certification from their employer or training supervisor attesting to this fact. While this requirement primarily applies to individuals who fill and transport liquid propane gas, DiamaPro Systems® recommends that operators of propane-powered floor care machines in public areas also receive proper training and certification. Although NFPA 58 8-4.5 permits the use of propane-powered floor care equipment in buildings frequented by the public, including when they are occupied, DiamaPro Systems® suggests that these machines be used when occupancy is minimal.

- California Air Resource Board (CARB) & Environmental Protection Agency (EPA):
 - While CARB and EPA establish limits for propane-powered engines used outdoors, it is important to note that approval from CARB/EPA does not indicate that the engine is safe for indoor use.
- Canadian Gas Association (CGA):
 - A limit of 1500 ppm CO in exhaust flow has been established by the CGA.
- Occupational Health and Safety Administration (OSHA):
 - When it comes to propane-powered machines, OSHA has implemented an 8-hour time-weighted average (TWA) limit of 50 Parts per Million (PPM) of Carbon Monoxide in ambient air. All occupants must leave the enclosed area if the CO concentration in said space exceeds a ceiling of 100 PPM (OSHA 1917.24(a)).
- Department of Transportation (DOT):
 - Regulations have been set forth by the DOT regarding the safety of fuel cylinders, including those utilized on propane-powered floor care machines.
- Local Agencies:
 - Before granting approval for the use of certain equipment, local law enforcement agencies such as the Fire Marshall may rely on independent testing laboratories like UL and CGA. These labs conduct extensive testing of equipment and only issue their approval after a rigorous evaluation process. While not mandatory for all law enforcement agencies, the stamp of approval from these organizations serves as an additional assurance for operators that they are working with and around safe equipment.
 - Additional rules & regulations may differ based on location. Always check with the appropriate governing body before operating machinery.

2.9 PERSONAL PROTECTIVE EQUIPMENT

When operating this machine, it is important to:

- Wear safety shoes always.
- Wear certified hearing protection to safeguard your hearing.
- Wear a certified respirator for the environment.
- Ensure that all personnel in the work area wear safety glasses with side shields.
- Wear safety gloves when changing tools.
- Dress appropriately for the work environment.
- Use certified personal Carbon Monoxide monitors.

2.10 TESTING

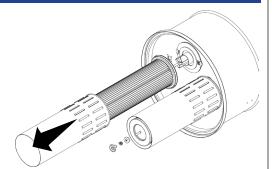
Numerous tools are available in the market for detecting toxic gases. However, only the ones specifically designed for detecting carbon monoxide resulting from combustion engines are deemed suitable for testing exhaust emissions from floor machines powered by propane. Certain instruments are meant for detecting "ambient air" and may get damaged if utilized for taking readings in the muffler or tailpipe. Hence, it is crucial to select the appropriate instrument to fulfill the testing requirements. In general, instruments that can detect readings in ppm (parts per million) ranging from 0 to 1000 are sufficient for examining ambient air, i.e., the air in the breathing zone of the operator. On the other hand, devices capable of testing carbon monoxide in the exhaust should be certified by the manufacturer for that purpose and should be able to read from 0 to at least 2000 ppm.

Some examples of instruments and systems for these purposes may include:

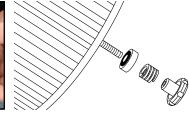
- Ambient Air Monitors
- Engine Exhaust Analyzers
- Gas Data Loggers

All instruments used for testing must be calibrated at the intervals recommended by the manufacturer. The test results must include the monitor's model number and date of calibration.

3. FILTER REPLACEMENT







- 1. Disconnect and lift the head.
- 2. Remove the filter's cylindrical steel protection (unscrewing the screws on the edge)
- 3. Unscrew the wing nut and remove the spring and washer
- 4. Replace the filter with a proper one for the vacuum cleaner in use
- 5. Install the new filter according to the label on the bottom of the filter
 - Washer with rubber part facing the base of the filter
 - Spring
 - Plastic wing nut
- Mount the cylindrical protection, then reconnect the head on the filtering chamber

4. TROUBLESHOOTING

You can thus solve any problem that may occur.

Suction capacity decreases slowly.

- Filter, nozzle, suction hose or suction pipe may be blocked.
- ► Check, clean accessories. Clean filter.

Dust comes out during the vacuuming.

- ▶ Filter has not been fastened correctly or is defective.
- ► Check to see if filter is sitting properly; replace if required.

5. COLLECTION BAG USE

The dust and the particles are collected in a bag placed in the container under the hopper.

The Infinity Max Bag system consists in a plastic tubular from which are obtained 20/30 bags of different weights and dimensions.

Once finished or damaged, the tubular must be replaced by a new refill. The operations below described must be carried out when machine is turned off.



1 - Close the bag with two distanced bands.



2 - Cut the strip between the two bands.



3 - Pull the Infinity Max Bag end to make a new bag.

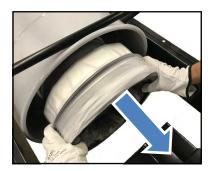
6. Infinity max MAX BAG REPLACEMENT



1- Cut the Infinity Max Bag in order to let it open.



2- Pull and rotate the retaining pins of the Infinity Max bag container in order to unfasten them.



3- Remove the Infinity Max Bag container and any waste.



4- Insert the new Infinity Max Bag with the inner part facing upwards.



5- Cut and remove the Infinity Max Bag closing bands.



6- Keep the inner part of the bag inside the container and pull it up to the lower edge.



7- Pull the outer part of the bag to create a new one.



8- Insert the container with the Infinity Max Bag.



9- Pull and rotate the retaining pins and insert them into their seats.



10- Pull the bag and place at the edge the band to create a new one. If necessary use two bands.

7. MAINTENANCE & REPAIR



Before carrying out the maintenance of the TVX-P, make sure you understand the contents of this manual.

Please contact DiamaPro® Systems for further explanations and information.

 The user shall be required to comply with the qualifications of the relevant personnel:



OPERATOR / ORDINARY MAINTENANCE TECHNICIAN:

carries out the tasks necessary for the basic functioning of the machine:

execution of the work cycle, implementation of operator commands, other operations closely linked to normal production, any cleaning and inspection operation performed on a daily basis, enforcement of ordinary maintenance operations. Works only with enabled safety functions.



MAINTENANCE TECHNICIAN SPECIALIST (AUTHORIZED DEALER)

Involved in all operating conditions and at all protection levels. Makes extraordinary operations that cannot be run by the user

Maintenance technicians must possess the skills required by this manual, as well as the mental and physical requirements necessary and sufficient to maintain and operate the machine. To ensure the functionality and durability of the machine daily maintenance must be performed, carrying out operations in compliance with the safety requirements.

Only the authorized dealer can make adjustments and operations that are not assigned to the operator. It is forbidden to make adjustments and interventions during machine operation. Before performing any maintenance operation disconnect the machine from the power sources and wait for the cooling of the hot parts (engine, spark-plug area, air filter area, etc.)

- Disengage the Clutch
- Bring the accelerator at idle speed.
- Close the propane tank valve.
- Stop the engine (position the ignition key to OFF).
- Allow machine to properly cool off
- Carry out maintenance operations with the machine stopped.

Before performing maintenance:

- Thoroughly clean the TVX-P. If in doubt about how to perform occasional repairs, contact our Technical Support or an authorized dealer.
- Upon finishing the job perform a thorough cleaning from processing residues.

7.1 SCHEDULED MAINTENANCE

Good maintenance requires constant and methodical control of all parts of the machine and adaptation of tests to its actual usage. Periodic inspections are crucial to keep the machine efficient and reduce repairs and any resulting dangers.

We recommend that you have your TVX-P serviced by an authorized dealer or a DiamaPro® Systems technician every 500 hours. Note: frequency is taken over considering a working day of 8 hours.

7.2 ROUTINE & ADDITIONAL MAINTENANCE



Replacement of the clutch belt

If, as a result of a visual inspection, it appears that the belts are worn or cracked, replace them, operating as follow:

- Allow motor to cool before replacing belts
- Reduce tension on belt by moving tensioner to slack position
- Remove belt under the clutch and tensioner, and over the turbine pulley
- Install new belt in opposite order, over turbine pulley and under the clutch and tensioner
- Set tension to XXNm



Engine oil filling

Refer to the engine manual and the MAINTENANCE CHAPTER OF THIS PUBLICATION. The oil filling must be performed with the machine off after hot parts have cooled.

- Remove oil fill cap
- Lower oil drain tube into an oil containment vessel and remove cap
- Unlock valve and let oil drain
- Once oil has drained, remove oil filter
- Install new oil filter, place fresh oil around filter seal before installing
- Close valve

IMPORTANT!

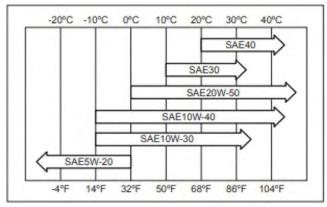
TO AVOID DAMAGE TO THE MACHINE

STRICTLY follow the engine manufacturer's recommended oil in the manual provided with the machine. 10W-40 is recommended.

- Add oil. Check level on dipstick.
- Tighten oil fill cap
- Check for any leaks

Oil Viscosity

Choose the viscosity according to the temperature as follows:



NOTE

Although 10W-40 engine oil is the recommended oil for most conditions, the oil viscosity may need to be changed to accommodate atmospheric conditions. Please contact the authorized dealer if running machine in extreme conditions for the correct oil choice.



Battery

If not using the machine for an extended period of time, turn off the battery circuit switch.

IMPORTANT!

Always remove the battery for charging.

Only recharge the battery in a dry environment. Protect the contacts from dirt and moisture stagnation. Don't spray with water.

Battery replacement

- Remove battery from holder
- Remove the positive & negative terminal connections
- Remove battery and replace with a DiamaPro® Systems recommended battery

Battery change and maintenance

When replacing the battery on the TVX-P, always remove the battery from the battery box. When changing the battery, ensure the terminals are firmly connected to the terminal posts.



CAUTION ALWAYS REPLACE TERMINAL COVERS

OVER THE TERMINALS OF THE BATTERY

When charging the battery, ALWAYS remove and disconnect from the TVX-P. Failure to do so may cause damage to the machine.

7. MAINTENANCE & REPAIR (cont).

FREQUENCY	PROCEDURES
FIRST 8 HOURS (BREAK-IN PERIOD)	-CHANGE OIL & OIL FILTER -INSPECT CLUTCH BELT TENSION -INSPECT TURBINE SEALS AND HOSE CONNECTIONS
EVERY 50 HOURS	-CHANGE OIL & OIL FILTER -CHECK & CLEAN OIL COOLER FINS -INSPECT CLUTCH BELT TENSION
EVERY 100 HOURS	-REPLACE SPARK PLUGS -INSPECT CLUTCH BELT TENSION
EVERY 250 HOURS	-CHECK BATTERY WITH LOAD TESTER. REPLACE IF NEEDED -REPLACE PRIMARY & SECONDARY AIR FILTER -CHECK VALVE CLEARANCE. ADJUST IF NEEDED.
EVERY 500 HOURS	-REPLACE CLUTCH BELT
EVERY 1000 HOURS	-INSPECT ELECTROMAGNETIC CLUTCH. REPLACE IF NEEDEDINSPECT ANTI-ROTATION. REPLACE IF NEEDED

NAME OF OPERATION	FREQUENCY	PERSON IN CHARGE	OPERATING INSTRUCTIONS	STATE OF MACHINE
		MECHANICAL PAR	RTS	
General Cleaning	At each start		Wash the dirty parts with a brush and water	Machine stopped /Power sources disconnected
Engine Air Filter	At each start		Check and Clean engine air filter if necessary, especially if you are working in dusty conditions or replace it; follow the instructions given in the engine	Machine stopped /Power sources disconnected
Engine Oil Level	At each start	T	Add oil if low or replace oil and oil filter if needed	Machine stopped /Power sources disconnected
Wheels & Wheel Bearings	At each start		Inspect wheels & wheel bearings for damage or excessive wear. Replace if needed.	Machine stopped /Power sources disconnected
Dust Control System	At each start		Inspect cannister for damage or excessive wear. Replace if needed.	Machine stopped /Power sources disconnected
Check Propane Level & Supply	At each start		It is recommended to make sure that the propane contains no water and not to use mixtures or diesel. Perform this operation in a well-ventilated environment and away from possible sources of heat or flames. Make use of specific P.P.E. (mask) as shown in the residual risks table of this publication. REFER TO THE ENGINE MANUAL	Machine stopped /Power sources disconnected
Battery	Weekly or every 40 hours		The TVX-P is equipped with a maintenance-free battery. DO NOT TRY TO FILL. Clean the two battery poles to remove oxidation.	Machine stopped /Power sources disconnected

7. MAINTENANCE & REPAIR (cont).

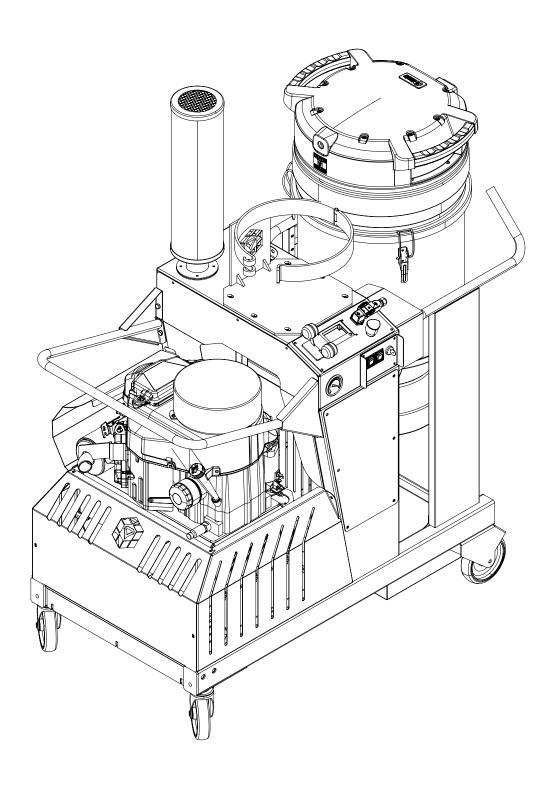
NAME OF OPERATION	FREQUENCY	PERSON IN CHARGE	OPERATING INSTRUCTIONS	STATE OF MACHINE
		MECHANICA	L PARTS	
Spark Plugs	Weekly Or every 40 hours		Inspect Spark Plugs. If you need a replacement, refer to the engine manual. Be careful when removing the spark plug: • wait for the engine to cool down; •remove the cap; • remove the spark plug down away from the spark plug holder (because spark may be triggered).	Machine stopped /Power sources disconnected
Clutch Belt	Daily		Check belt for proper tension or abnormal wear. Replace if needed	Machine stopped /Power sources disconnected
		SAFETY SY	STEMS	
Safety Systems	Weekly Or every 40 hours		Please note the requirement to perform the checking and recording of verifications of safety components every 6 months.	
Integrity of Pictograms				

7. MAINTENANCE & REPAIR (cont).

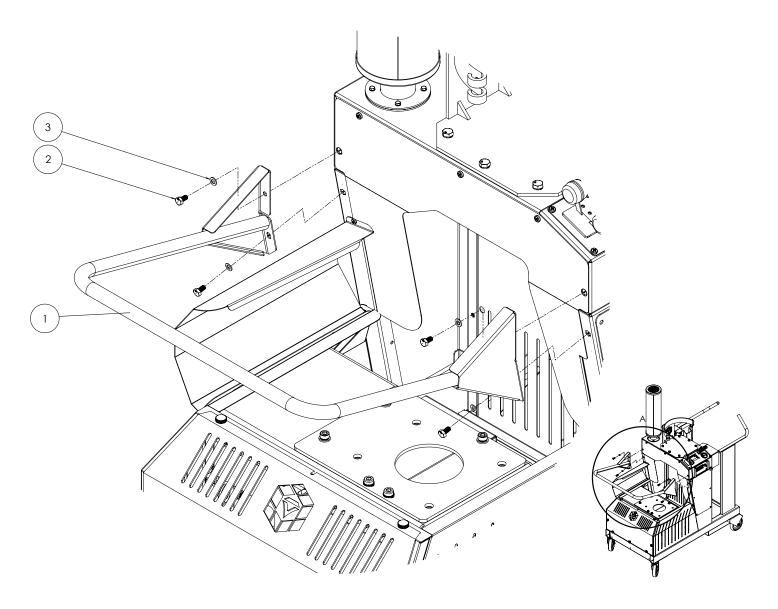
NAME OF	FREQUENCY	PERSON IN	OPERATING INSTRUCTIONS	STATE OF
OPERATION	TREGOZNOT	CHARGE	OI ERATING INSTRUCTIONS	MACHINE
		MECH	ANICAL PARTS	
Spark plugs	Weekly Or every 40 hours		Inspect Spark Plugs. If you need a replacement, refer to the engine manual. Be careful when removing the spark plug: • wait for the engine to cool down; •remove the cap; • remove the spark plug down away from the spark plug holder (because spark may be triggered).	Machine stopped /Power sources disconnected
Clutch Belt	Daily		Check belt for proper tension or abnormal wear. Replace if needed	Machine stopped /Power sources disconnected
		SAFE	TY SYSTEMS	
Safety Systems	Weekly Or every 40 hours		Please note the requirement to perform the checking and recording of verifications of safety components every 6 months.	Machine Stopped
Integrity of Pictograms				Machine stopped /Power sources disconnected



TVX-P PARTS LIST

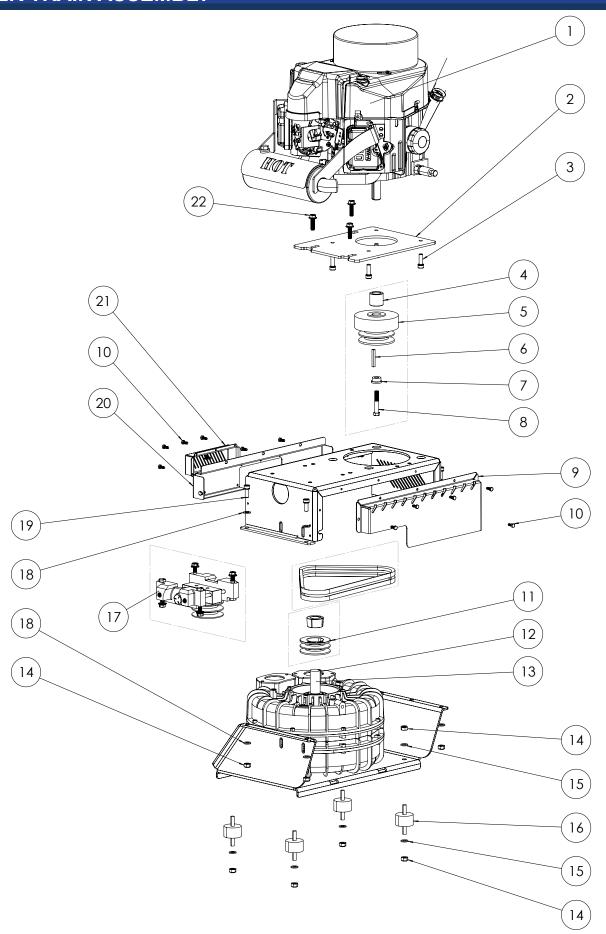


FRONT HANDLE



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	DP-TVXP-FRNTHDL	FRONT HANDLE	1
2	DP-GH-A164	FRONT HANDLE BOLT	4
3	DP-GH-A116	FRONT HANDLE WASHER	4

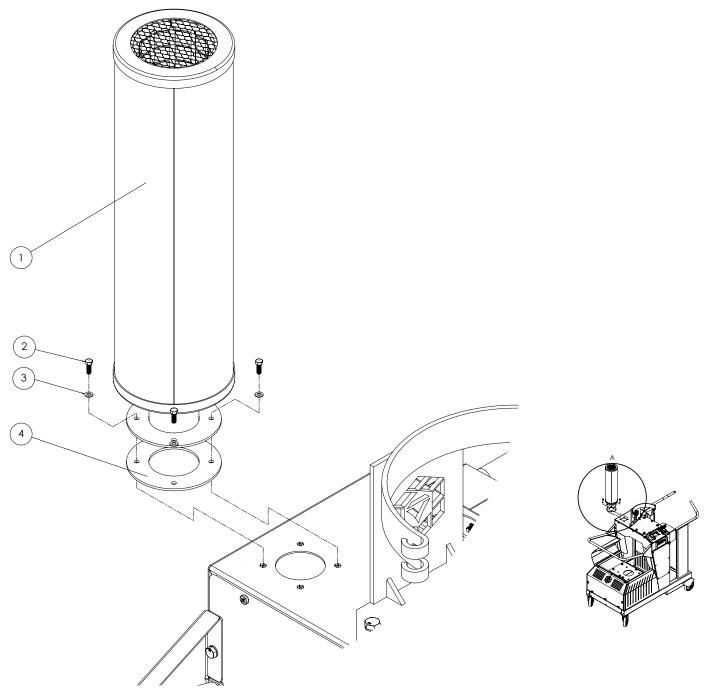
POWER TRAIN ASSEMBLY



POWER TRAIN ASSEMBLY

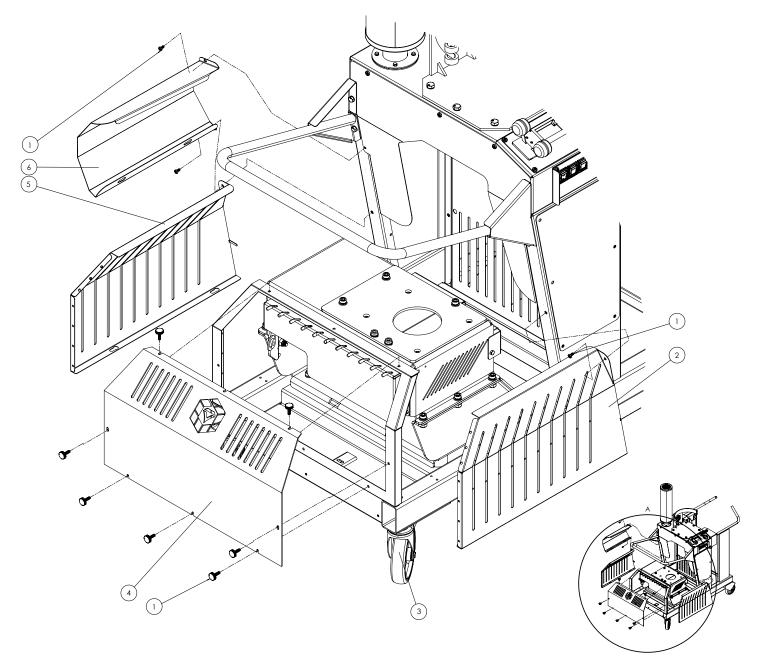
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	LX600-S008	17 HP KAWASAKI ENGINE	1
2	DP-TVXP-MTRMNT	MOTOR MOUNT PLATE	1
3	DP-GH-DX0276	HEX HEAD BOLTS FOR ENGINE MOUNTING	4
4	DP-TVXP-CLTSPCR	CLUTCH SPACER	1
5	DP-TVXP-CLTCH	TVX-P CLUTCH	1
6	ROG-601330	CLUTCH KEY	1
7	ROG-600406	CLUTCH SPACER	1
8	DP-GH-A702	ZINC YELLOW-CHROMATE PLATED HEX HEAD SCREW	1
9	DP-TVXP-FBLTCV	FRONT BELT COVER	1
10	DP-GH-M6T1L15H	18-8 STAINLESS STEEL HEX HEAD SCREW	15
11	DP-TVXP-TRBBSH	TURBINE BUSHING	1
12	DP-TVXP-TRBKEY	TURBINE KEY	1
13	DP-TVXP-TURBINE	TVX-P TURBINE	1
14	DP-GH-A118	MEDIUM-STRENGTH STEEL NYLON-INSERT LOCKNUT	13
15	DP-GH-A113	GENERAL PURPOSE STEEL WASHER	8
16	DP-TVXP-ANTVIB	ANTIVIBRATION BUSHING	4
17	DP-TVXP-TSNRKIT	BELT TENSIONER KIT	1
18	DP-GH-A1131	GENERAL PURPOSE STEEL WASHER	10
19	DP-GH-A520	ALLOY STEEL SOCKET HEAD SCREW	5
20	DP-TVXP-RGARDA	REAR BELT GUARD PART A	1
21	DP-TVXP-RGARDB	REAR BELT GUARD PART B	1
22	DP-GH-DX0282	CLASS 8.8 STEEL FLANGED HEX HEAD SCREW	3

EXHAUST STACK



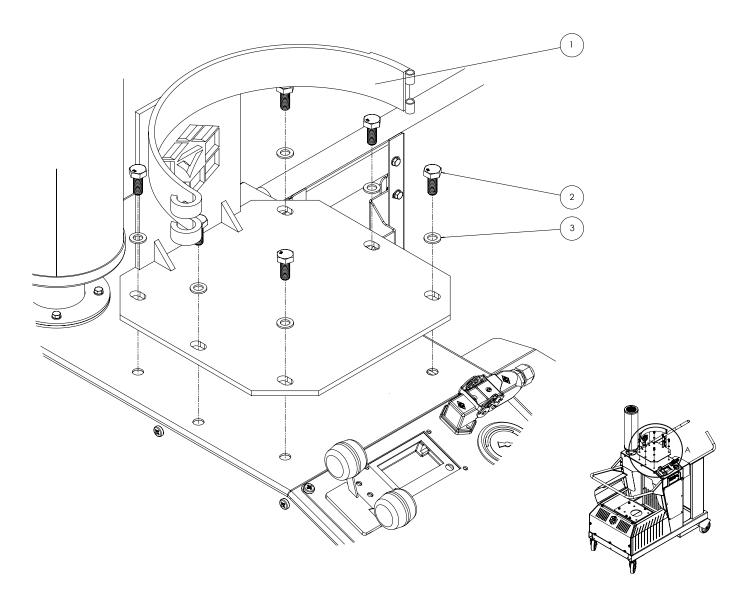
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	DP-TVXP-EXHSTK	TURBINE EXHAUST STACK	1
2	DP-GH-A552	TURBINE EXHAUST BOLT	4
3	DP-GH-A240	TURBINE EXHAUST WASHER	4
4	DP-TVXP-CRGSKT	CORK GASKET	1

FRONT COVERS



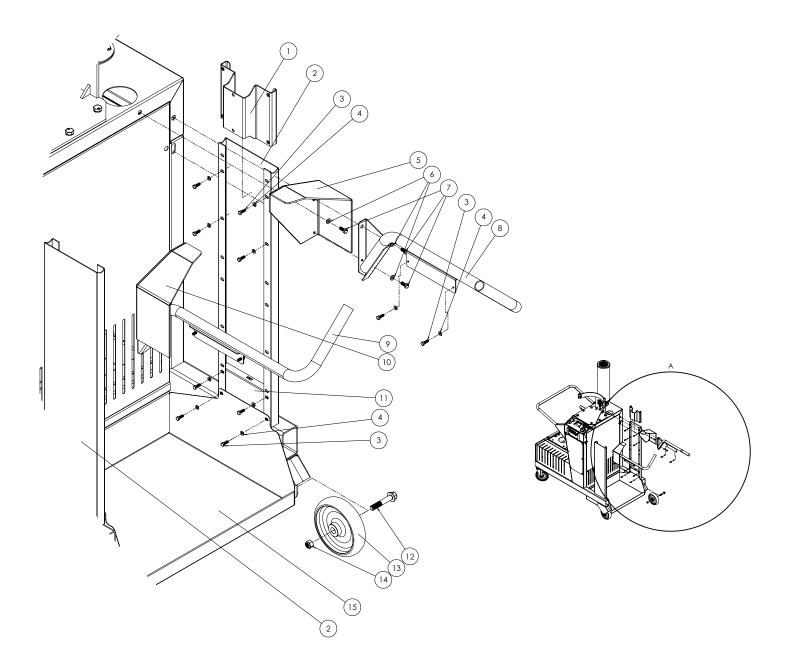
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	DP-GH-A320	PANEL COVER BOLTS	10
2	DP-TVXP-SPRCVR	SIDE PANEL COVER (RIGHT SIDE)	1
3	DP-TVXP-FRNTCSTR	FRONT CASTER	2
4	DP-TVXP-SPFCVR	SIDE PANEL COVER (FRONT)	1
5	DP-TVXP-SPLCVR	SIDE PANEL COVER (LEFT SIDE)	1
6	DP-TVXP-SPECVR	SIDE PANEL EXHAUST COVER	1

PROPANE TANK MOUNT



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	DP-TVXP-PRPNTB	PROPANE TANK BRACKET	1
2	DP-GH-A098	TANK BRACKET MOUNTING BOLT	6
3	DP-GH-A625	TANK BRACKET MOUNTING WASHER	6

REAR HANDLE



REAR HANDLE

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	DP-TVXP-VTBRKT	VACUUM TANK BRACKET	2
2	DP-TVXP-VCMTUR	VACUUM TANK UPRIGHT	2
3	DP-GH-A552	CANISTER MOUNTING BOLT	24
4	DP-GH-A240	CANISTER MOUNTING WASHER	24
5	DP-TVXP-RHDLCR	REAR HANDLE MOUNT COVER (RIGHT SIDE)	1
6	DP-GH-A111	REAR HANDLE MOUNTING WASHER	6
7	DP-GH-A152	REAR HANDLE MOUNTING BOLT	6
8	DP-TVXP-REARHR	REAR HANDLE RIGHT SIDE	1
9	DP-TVXP-REARHL	REAR HANDLE LEFT SIDE	1
10	DP-TVXP-RHDLCL	REAR HANDLE MOUNT COVER (LEFT SIDE)	1
11	DP-TVXP-TNKUBS	TANK UPRIGHT BRACKETS	2
12	DP-GH-A145	REAR CASTER MOUNTING BOLT	2
13	DP-TVXP-CSTR	REAR WHEEL CASTER	2
14	DP-GH-A421	REAR CASTER NUT	2
15	DP-TVXP-VCMBPN	VACUUM BAG PAN	1



DiamaPro Systems® 3343 Peachtree Road NE Suite 145 #24 Atlanta, GA 30326 800-622-2048