

# **Hydraulic Tracked Dumper**

**Operator's Manual** 

MODEL NUMBER: T50/T50FL

**SERIAL NUMBER:** 

Both model number and serial number may be found on the main label. You should record both of them in a safe place for future use.

# FOR YOUR SAFETY

READ AND UNDERSTAND THE ENTIRE MANUAL BEFORE
OPERATING MACHINE

# **500KG Dumper Intended use statement**

You must read below before operating this machine

This machine has been developed and designed for the purpose of transporting hard material such as stone, brick, wood and construction debris.

This machine should only be used at the maximum gradients outlined in this manual. You must not exceed the maximum loading weight of 500KG. Material should only be loaded in the bucket area, this machine should not be used to tow or pull any object or vehicle.

At no time should this machine be used to carry a human being or animal of any kind!.

NO flammable, combustable or chemical products should be transported using this machine





# Crytec Limited Declaration of Conformity



1. Product Model / Type:

a. Product: Mini Power Dumper

b. Model: T50 / T50FL

2. Manufacturer:

a. Name: Crytec Limited

b. Address: Unit 1C Upper Mantle Close, Chesterfield S45 9ED, UK

3. This declaration is issued under the sole responsibility of the product manufacturer.

4. The object of the declaration described above is in conformity with the relevant UK Statutory Instruments:

2008 No 1597 The supply of Machinery (Safety) Regulations 2008 (and

their amendments) and the Essential Health and Safety and

the Essential Health and Safety Requirements

5. We hereby declare that the product described above, to which this declaration of conformity refers to, we have referenced the below designated standards used in relation to which conformity is declared:

Reference & Date Title		
EN ISO 12100 : 2010	Safety of Machinery	
EN ISO 3691-6:2015/AC:2016	Industrial Trucks - Safety	

as well as EN ISO 3744:1995 and ISO 6395:1988

6. Additional Information:

The technical documentation for the machinery is available from:

Name: Matthew Cryans

Address: Unit 1C Upper Mantle Close, Chesterfield S45 9ED

Signed for & on behalf of: Crytec Limited
Place of issue: United Kingdom
Date of Issue: 24/08/2022
Name: Matthew Cryans

Function: Director

Signature:

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## INTRODUCTION

Your new Hydraulic Tracked Dumper will more thansatisfy your expectations. It has been manufacturedunder stringent quality standards to meet superiorperformance criteria. You will find it easy and safeto operate, and with proper care, it will give you many years of dependable service.

Carefully read through this entire operator's manual before using this unit. Take special care to heed the cautions and warnings.

The 2-speeds, lies at the heart of the unit. It is oversized so as to manage safely the huge torques generated by the engine. Thanks to its efficient reduction gearing, it is capable of moving around in every situation and bearing any load.

The **Engine manufacturer** is responsible for all engine-related issues with regards to performance, power rating, specifications, warranty and service. Please refer to the

**Engine Manufacturer**'s owner's/operator's manual, packed separately with your unit, for more information.

Due to the small loading, this machine is suitable only for gardens, not for construction or other similar sites.

### **Specifications**

Item No.	
Engine	Single cylinder, four stroke, air cooling
Transmission	Fully hydraulic system
Displacement	212cc
Net power	4.4kW/3600rpm
Working pressure	16.5Mpa
Loding capacity	500kg
Hydraulic pump	Duplex gear pump
A-weighted sound power level:	98dB
LxWxH(mm)	2100x735x1180mm
Forward Traveling Speed	0-3.2km
Reverse Traveling Speed	0-1.23km
Gross weight	390kg
Handle vibration	Maximum 6.489m/s^2
Hydraulic motor	2 pcs

#### **RECYCLING AND DISPOSAL**

0 W

This marking indicates that this product should not be disposed with other household wastes. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or check with your local authority or local stores for advice of environmental safe recycling.

## **SYMBOLS**

The rating plate on your machine may show symbols. These represent important information about the product or instructions on its use.



Read these instructions carefully.



Wear eye protection. Wear hearing protection.



Wear protective gloves.



Wear safety footwear.



Do not remove or tamper with the protection and safety devices.



No smoking, sparks, or flames



Do not touch parts that are hot from operation. Serious burns may result.



Keep your hands clear from all rotating parts.



Never start or run the engine inside a closed area.



Do not operate on slopes with angle over 20° or tip loading at an inclined position.



Do not head downhill while moving on the slope with full load.



Be aware, objects may be thrown while in use.



Keep your feet and hands away from moving parts. Moving parts can crush or cut.



Danger! Keep your hands away from the space between the hopper and chassis while the bucket is falling down.



Be careful falling objects.



Tipping hazard!



The maximum horizontal climbing angle should not exceed 10 degrees.



The maximum longitudinal climbing angle should not exceed 20 degrees.



Head uphill while moving on the slope with full load.



Do not allow anyone sitting or standing in the hopper while driving.



The exhaust fumes are dangerous, containing carbon monoxide. Staying in the environment can lead to unconsciousness and death.



Always turn off the engine before starting maintenance.



Keep children and bystanders off and away.

## **SAFETY**

## **General Safety Rules**

#### **Understand Your Machine**

Read this manual and labels affixed to the machine to understand its limitations and potential hazards.

Be thoroughly familiar with the controls and their proper operation. Know how to stop the machine and disengage the controls quickly.

Make sure to read and understand all the instructions and safety precautions as outlined in the Engine Manufacturer's manual packed separately with your unit. Do not attempt to operate the machine until you fully understand how to properly operate and maintain the engine and konw how to avoid accidental injuries and/or property damage.

If the unit is to be used by someone other than original purchaser, or is to be loaned, rented, or sold, always provide this manual and any needed safety training before operation. The user can prevent and is responsible for accidents or injuries that may occur to themselves, to other people, or to property.

Do not force the machine beyond its limits. Use the correct machine for your application.

#### Personal Safety

Do not permit children to operate this machine at any time.

Keep children, pets, and other people not using the unit away from the work area. Be alert and shut off the unit if anyone enters work area. Keep children under the watchful care of a responsible adult.

Do not operate the machine while under the influence of drugs, alcohol, or any medication that could affect your ability to use it properly.

Dress properly: Wear long, heavy pants, work boots, and work gloves. Do not wear loose clothing, short pants, or jewelry of any kind. Secure long hair so it is above shoulder level. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

Protect eyes, face, and head from objects that may be thrown from the unit. Always wear safety goggles or safety glasses with side shields when operating.

Wear appropriate hearing protection.

Always keep hands and feet away from all moving parts during operation. Moving parts can cut or crush body parts.

Always keep hands and feet away from all pinch points.

Do not touch parts that might be hot from operation. Allow parts to cool before attempting to maintain, adjust, or service.

Stay alert, watch what you are doing, and use common sense when operating the machine.

Do not overreach. Do not operate the machine while barefoot or when wearing sandals or similar lightweight footwear. Wear protective footwear that will protect your feet and improve your footing on slippery surfaces. Keep proper footing and balance at all times. This enables better control of the machine in unexpected situations.

#### **Inspect Your Machine**

Check your machine before starting it. Keep guards in place and in working order. Make sure all nuts, bolts, etc., are securely tightened.

Never operate the machine when it is in need of repair or is in poor mechanical condition. Replace damaged, missing, or failed parts before using it. Check for fuel leaks. Keep the machine in safe working condition.

Do not use the machine if the engine's switch does not turn off the engine when running. Any gasoline powered machine that can't be controlled with the engine switch is dangerous and must be replaced.

Regularly check to see that keys and adjusting wrenches are removed from the machine area before starting it. A wrench or a key that is left attached to a rotating part of the machine may result in personal injury.

Avoid accidental starting. Be sure the engine's switch is off before transporting the machine or performing any maintenance or service

on the unit. Transporting or performing maintenance or service on a machine with its switch on invites accidents.

If the machine should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning sign of trouble.

#### **Engine Safety**

This machine is equipped with an internal combustion engine. Do not use on, or near, forest-covered or brush-covered land unless the exhaust system is equipped with a spark arrester meeting applicable local, state, or federal laws.

In the state of California, a spark arrester is required by law. Other states have similar laws. A spark arrester, if used, must be maintained in effective working order by the operator.

Never start or run the engine inside a closed area. The exhaust fumes are dangerous, containing carbon monoxide, an odorless and deadly gas. Operate this unit only in a well-ventilated outdoor area.

Do not tamper with the engine in an effort to get it to run at higher speeds. The maximum engine speed is preset by the manufacturer and is within safety limits. See engine manual.

Keep a Class B fire extinguisher on hand when operating this machine in dry areas as a precautionary measure.

#### **Fuel Safety**

Fuel is highly flammable, and its vapors can explode if ignited. Take precautions when using to reduce the chance of serious personal injury.

When refilling or draining the fuel tank, use an approved fuel storage container while in a clean, well-ventilated outdoor area. While adding fuel or operating the unit, do not smoke, and stay away from sparks, open flames, or other sources of ignition near the area of operation. Never fill the fuel tank indoors.

To avoid sparking or arcing, keep grounded conductive objects - such as tools - away from exposed, live electrical parts and connections. These events could ignite fumes or vapors.

Always stop the engine and allow it to cool before filling the fuel tank. Never remove the cap of the fuel tank or add fuel while the engine is running or when the engine is hot. Do not operate the machine with known leaks in the fuel system.

Loosen the fuel tank cap slowly to relieve any pressure in the tank.

Never overfill the fuel tank. Because engine heat can cause fuel to expand, never fill the tank to more than 1/2" below the bottom of the filler neck. This will provide space for fuel expansion.

Replace all fuel tank and container caps securely and wipe up spilled fuel. Never operate the unit without the fuel cap securely in place.

Avoid creating a source of ignition for spilled fuel. If fuel is spilled, do not attempt to start the engine. Instead, move the machine away from the area of spillage and avoid creating any source of ignition until fuel vapors have dissipated.

When fuel is spilled on yourself or your clothes, wash your skin and change clothes immediately.

Store fuel in containers specifically designed and approved for fuel storage.

Store fuel in a cool, well-ventilated area, safely away from sparks, open flames, or other sources of ignition.

Never store fuel - or a machine with fuel in the tank - inside a building where fumes may reach a spark, open flame, or any other source of ignition (such as a water heater, furnace, or clothes dryer). Allow the engine to cool before storing in any enclosure.

### **Specific Safety Rules**

Thoroughly inspect the area to be worked, keep the working area clean and free of debris to prevent tripping. Operate on a flat level ground.

Never place any part of your body where it would be in danger if movement should occur during assembly, installation, and operation, maintenance, repairing or moving.

Keep all bystanders, children, and pets at least 23m (75 feet) away. If you are approached, stop the unit immediately.

Do not mount anything on the dump box and never carry passengers

Never park the machine in a place with unstable ground which could give way, particularly when it is full.

Disengage clutch lever before starting the engine.

Start the engine carefully according to instructions and with feet away from the moving parts.

Never leave the operating position when the engine is running.

Always hold the unit with both hands when operating. Keep a firm grip on the handlebars. Be aware that the machine may unexpectedly bounce upward or jump forward if the machine should strike buried obstacles such as large rocks or roots.

Walk, never run with the machine.

Do not overload the machine capacity. Drive at a safe speed, adjusting the speed to the slope of the land, the surface conditions of the road, and the weight of the load.

Use extreme caution when in reverse or pulling the machine towards you.

Exercise extreme caution when operating on or crossing gravel drives, walks, or roads. Stay alert for hidden hazards or traffic.

On soft ground, drive at the first forward/

reverse gear. Do not rapidly accelerate, turn sharply or stop.

Pay the utmost attention when working on frozen ground as the machine may tend to skid.

Do not operate the machine in confined areas where there may be a risk of crushing the operator between the machine and another object.

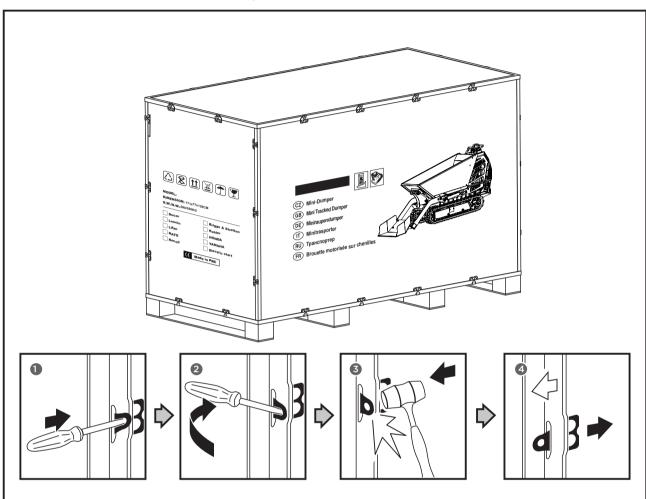
Never operate the machine on slopes where angle is over 20°.

When operating on a slope, whether moving forward or in reverse, always make certain that the weight is evenly balanced. Always move in directions parallel with the slope. Do not shift gears on slopes.

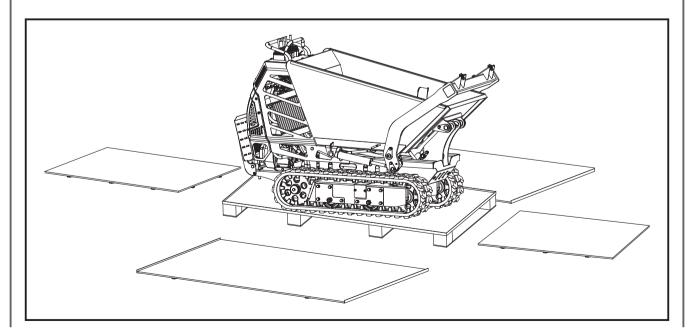
When dumping the contents of the hopper, the center of gravity will change continuously and the ground conditions will be essential for the stability of the machine. Use extra caution and control when dumping the hopper on e.g. wet clay.

# UNPACKING THE CONTAINER

Use the screwdriver and hammer to open all the side locks.

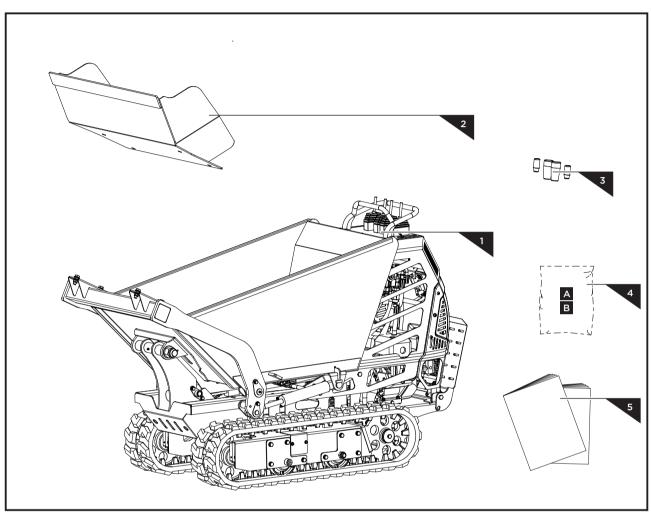


Remove all the plywood plates, and remove all the loose parts on the bottom pallets.



# **CONTENTS SUPPLIED**

The Hydraulic Tracked Dumper comes partially assembled and is shipped in carefully packed package. After all the parts have been removed from the package, you should have:



- 1. Main Body
- 2. Self-Loading Shovel

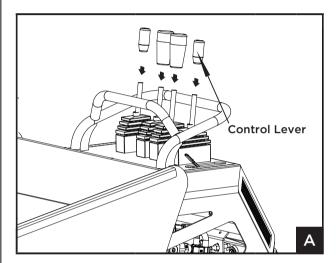
- 3. Control Lever
- 4. Hardware Bag
- 5. Operator's Manual & Engine Manual

## **ASSEMBLY**

This Hydraulic Tracked Dumper was partially assembled at the factory. To assemble your machine follow the below instructions.

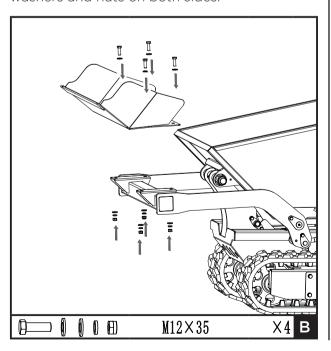
#### **Control Lever Assembly**

Insert the control levers into the connecting sleeves and tighten them.



#### **Shovel Assembly**

Attach the connecting plates of the self-loading shovel to the connecting plates of the chassis from outside and align the holes. Secure the connection with four M12x35 bolts, washers and nuts on both sides.



#### **Engine Oil**

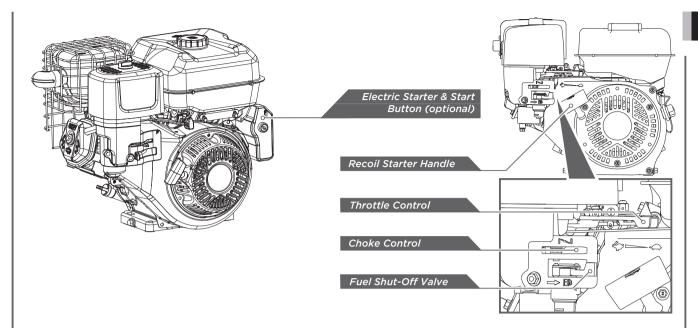
OIL HAS BEEN DRAINED FOR SHIPPING.



Failure to fill engine sump with oil before starting engine will result in permanent damage and void engine warranty.

Add oil according to **Engine Manual** packed separately with your track dumper.

# **KNOW YOUR MACHINE Features and Controls** Hopper Control lever Right wheel steering lever Shovel Lifting lever Left wheel steering lever Speed Control Lever Emergency stop button Electri Lock Self-loading Shovel Hopper TRACK



#### **Speed Control Lever**

The speed control lever only has two positions: the highest speed and the lowest speed.





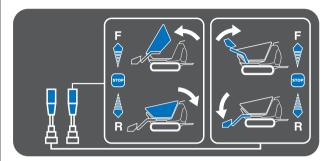
Always release the clutch control lever before changing speeds. Failure to do so will result in damage to the power barrow. Slower speeds are for heavier loads, while faster speeds are for transporting light loads or an empty hopper. It is recommended that you use a slower speed until you are familiar with the operation of the power trackbarrow.

If the engine slows down under a load or the tracks slip, shift the machine into a lower gear.

If the front of the machine rides up, shift the machine into a lower gear. If the front continues to ride up, lift up on the handles.

#### **Hydraulic Tipping Lever**

Use your left hand, push the lever to forward direction to tip the hopper, pull back the lever to flat the hopper in its original position.

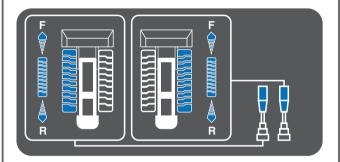


#### Left/Right Steering Lever

Operate the lever to turn left/right.



Operate the steering levers only at a reduced speed.



# Shovel Speed Control Valve & Hopper Speed Control Valve

The valves have been set in factory, so no need to adjust them under normal circumstances.

If it's necessary, rotate the valve on the left counterclockwise to increase the lifting speed of the shovel and clockwise to decrease the speed; rotate the valve on the right counterclockwise to increase the falling speed of the hopper and clockwise to decrease the speed.

#### Engine On/Off Switch

The engine switch has two positions. OFF - engine will not start or run. ON - engine will start and run.

#### **Recoil Starter Handle**

The recoil starter handle is used to start the engine.



Under any circumstance do not exceed manufacturer's recommended pressure. Excessive pressure when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury. Refer to side wall of tire for recommended pressure.



Equal tire pressure should be maintained at all times. If the tire pressure is not equal in both tires, the machine may not travel in a straight path and the scraper blade may wear unevenly.

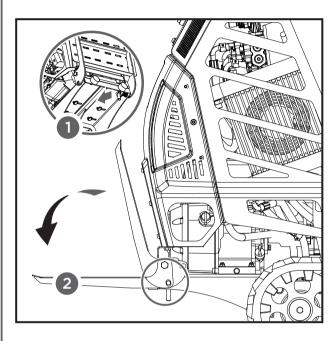


Keep tires free of gasoline and oil, which can harm rubber.

#### **Foot Plate**

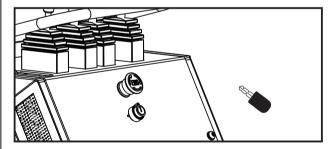
Pull the ring to pull out the pin as shown in step 1, and then rotate the foot plate to level it.

Lift up the plate until the rotation pin returns. Thus the plate can be secured in upright position.



#### Ignition Switch (12V DC electric start) (optional)

The ignition switch is operated by a removable key which has 3 positions of STOP, RUN and START.



#### Electric Starter & Start Button ((optional))

The electric starter will start a properly choked and cranked engine when the key is turned (12V DC) is pushed.

To start the machine, connect the electric starter to an electric power source with an approved extension cord and press the start button.

- 1. Turning operation requires the ball valve at low speed. Operate it only after adjusting the throttle according to the actual load. Do not make a turn when the ball valve is at high speed gear;
- 2. For driving, it is necessary to stably control the valve lever. Avoid sudden stop or start in operation;
- 3. For normal driving start, it is necessary to stably control the valve lever to start when the ball valve is at low speed gear;



- 4. To stop at high speed, the ball valve needs to be switched to the low speed gear or small throttle state to stabilize the control valve lever to stop;
- 5. During normal driving, do not loosen one of the two travel control valve levers to avoid misoperation of high-speed turning;
- 6. When driving up and down, the foot plate should be closed. Do not stand on the plate to operate the dumper on a slope.
- 7. When the self-loading shovel falls back, the valve levers need to be stably controlled to avoid big impact between the shovel and ground.

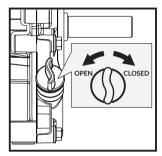
#### Operation

#### Add Oil To Engine



The engine is shipped without oil. Do not start the engine before adding oil. Please refer to your engine manual for the proper grade of oil to add.

- 1. Make sure the power trackbarrow is on a flat, level surface.
- 2. Remove the oil fill cap/dipstick to add oil.



3. Using a funnel, add oil up to the FULL mark on the dipstick. (See engine manual for oil capacity, oil recommendation, and location of fill cap.)



DO NOT OVERFILL. Check engine oil level daily and add as needed.

#### Add Gasoline To Engine



Gasoline is highly flammable and explosive. You can be burned or seriously injured when handling fuel. Use extreme care when handling gasoline.

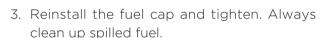


Fill the fuel tank outdoors, never indoors. Gasoline vapors can ignite if they collect inside an enclosure. Explosion can result.

- 1. The engine must be off and allowed to cool at least two minutes before adding fuel.
- 2. Remove the fuel filler cap and fill the tank. (See engine manual for fuel capacity, fuel recommendation, and location of fuel cap.)

#### IMPORTANT: DO NOT OVERFILL!

This equipment and/or its engine may include evaporative emissions control system components, required to meet EPA and/ or CARB regulations, that will only function properly when the fuel tank has been filled to the recommended level. Overfilling may cause permanent damage to evaporative emissions control system components. Filling to the recommended level ensures a vapor gap required to allow for fuel expansion. Pay close attention while filling the fuel tank to ensure that the recommended fuel level inside the tank is not exceeded. Use a portable gasoline container with an appropriately sized dispensing spout when filling the tank. Do not use a funnel or other device that obstructs the view of the tank filling



#### Starting Engine

1. Move the engine switch to the ON position.



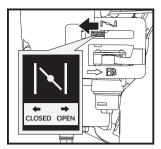
process.

2. Open the fuel shut-off valve.

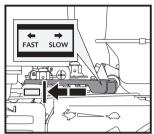


3. Move the choke lever to the CLOSED position.

If the engine is hot, closing the choke is not necessary.



4. Move the throttle lever slightly to the FAST speed.



5. Pull the recoil starter until the engine starts. Return the recoil to the home position after each pull. Repeat the steps as needed. Once engine has started, set the throttle to the FAST position before you operate the unit.



Rapid retraction of the starter cord (kickback) will pull your handand arm toward the engine faster than you can let go. Broken bones, fractures, bruises, or sprains could result.

#### Operating

After engine warms up, pull throttle lever to accelerate engine speed.

The Mini Tracked Dumper has the steering levers on the handlebars and this makes steering very easy. To turn right or left, simply operate the corresponding right or left steering lever.

The sensitivity of the steering increases in proportion to the speed of the machine and that with the empty machine, a light pressure on the lever is all that is needed to turn. While when the machine is loaded, more pressure is required.

The Mini Tracked Dumper has a maximum capacity of 500kg. However, it is advisable to assess the load and adjust it according to the ground on which the machine will be used.

It is therefore advisable to cover such stretches using low gear and taking extra care. In such situations, the machine should be kept in low gear for the whole stretch.

Avoid sharp turns and frequent changes of direction while driving on the road, in particularly on rough, hard terrains full of sharp, uneven points with a high degree of friction.

Remember to be careful when working in adverse weather conditions (ice, heavy rain and snow) oron types of ground that could make the Mini Tracked Dumper unstable.

When the clutch control lever is released, the machine will stop and brake automatically.

If the machine is stopped on a steep slope, a wedge should be placed against one of the wheels.

#### Idle Speed

Set the throttle control lever to the SLOW position to reduce stress on the engine when work is not being performed. Lowering the engine speed will help extend the life of the engine, as well as conserve fuel and reduce noise level.

#### STOP ENGINE

To stop the engine in an emergency, simply turn the engine switch to the OFF position. Under normal conditions, use the following procedure:

- 1. Move the throttle lever to the SLOW ( position.
- 2. Let the engine idle for one or two minutes.
- 3. Turn the engine switch to the OFF position.
- 4. Turn the fuel valve lever to the OFF ( position.



Sudden stopping at a high speed under a heavy load is not recommended. Engine damage may result.



Do not move the choke control to CLOSE to stop the engine. Backfire or engine damage may occur.

#### Starting and Stopping the Engine



Before starting the engine, check engine oil level and ensure the engine is served as described in the **Engine Manual** with the snow blower.

#### Cold Start - Electric Starter (optional)

The engine is equipped with both A.C. electric starter and a recoil starter. The electric starter is equipped with a three-wire power cord and plug and is designed to operate at the voltage shown in the label.



Do not use the electric starter if your household voltage different from the one shown on the electric starter.

- 1. Insert safety ignition key into ignition slot until it clicks. Do not turn the key.
- 2. Be sure fuel shutoff valve is in the OPEN position.
- 3. Move choke control to OFF position.
- 4. Push the primer 2 or 3 times. When temperature is below -25°C (15°F), additional priming may be needed. When temperature is above 10°C (50°F), priming is not necessary.



Over priming may cause flooding, preventing the engine from starting. If you do flood the engine, wait a few minutes before attempting to start and do not push the primer.



Some snow engine is not equipped with primer as priming is not needed for such engine.

- 5. Connect the extension cord to the engine.
- 6. Plug the other end of the extension cord into a three-wire grounded receptacle.
- 7. Push starter button until engine starts.



To prevent damaging the electric starter, do not run it more than 5 continuous seconds each time you try to start. Wait 10 seconds between each attempt.

- 8. When the engine starts, release the starter button and slowly move the choke control to the FULL position.
- 9. Disconnect the extension cord from the receptacle first, then from the engine.

#### Cold Start - Electric Starter (12V DC) (optional)

- 1. Be sure fuel shutoff valve is in the OPEN position.
- 2. Move choke control to OFF position.
- 3. Push the primer 2 or 3 times. When temperature is below -25°C (15°F), additional priming may be needed. When temperature is above 10°C (50°F), priming is not necessary.



Over priming may cause flooding, preventing the engine from starting. If you do flood the engine, wait a few minutes before attempting to start and do not push the primer.



Some snow engine is not equipped with primer as priming is not needed for such engine.

4. Turn ignition key to the START position until engine starts.



To prevent damaging the electric starter, do not run it more than 5 continuous seconds each time you try to start. Wait 10 seconds between each attempt.

5. When the engine starts, release the ignition key into RUN position and slowly move the choke control to the FULL position.

## **MAINTENANCE**

Maintaining your Mini Tracked Dumper will ensure long life to the machine and its components.

#### **Preventive Maintenance**

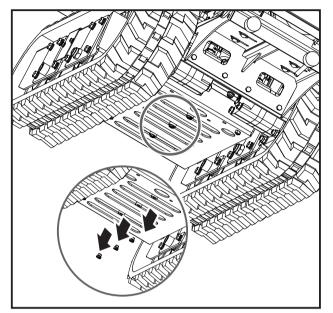
- 1. Turn off the engine and disengage all command levers. The engine must be cool.
- 2. Keep the engine's throttle lever in its SLOW position and remove the spark plug wire from the spark plug and secure.
- 3. Inspect the general condition of the power trackbarrow. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, and any other condition that may affect its safe operation.
- 4. Use a soft brush, vacuum or compressed air to remove all contaminants from the machine. Then use high quality light oil to lubricate all moving parts.
- 5. Check the spark plug wire regularly for signs of wear, and replace when needed.



Never use a "pressure washer" to clean your unit. Water can penetrate tight areas of the machine and its transmission case and cause damage to spindles, gears, bearings, or the engine. The use of pressure washers will result in shortened life and reduce serviceability.

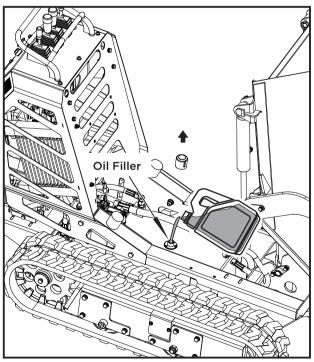
#### **Hydraulic Oil**

Operate the valve levers to lift the self-loading shovel to the highest position and tip the hopper to the extreme. Unscrew the oil plug and drain the oil into a container.



Remove the oil dipstick with gasket and add hydraulic oil. The recommended hydraulic oil is 10W AW32, ASLE H-150, or ISO 32. Tank capacity is 22.5L.

Attention! Do not operate the valve levers during draining or adding oil, to prevent the shovel and hopper from falling.

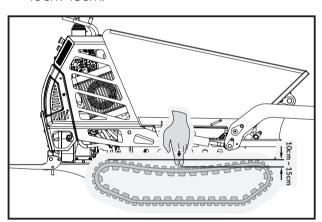


#### **Tightening Tracks**

With use, tracks tend to loosen. When operating with loose tracks, they tend to slip over the driving wheel causing it to jump its housing, thus damaging wear to the housing.

To check track tightness, proceed as follows.

- Set the machine on a flat surface with compact ground, or on asphalt or pavement.
- 2. Lift the machine and set it on blocks or supports rated for the weight of the machine so that the tracks are approximately 10 cm off the ground.
- 3. Measure the track midline vs. the horizontal line. The reading must not be more than 10cm~15cm.

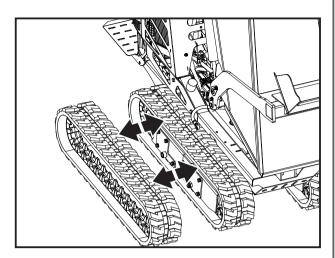


#### **Replacing Tracks**

Check the condition of the tracks periodically. If any track is cracked or frayed, it should be replaced as soon as convenient.

- 1. Lift up the hopper and insert a support rod for safety purposes.
- 2. Lift the machine and set it on blocks or supports rated for the weight of the machine so that the tracks are approximately 4" off the ground.
- 3. Remove the two nuts M10 with washers and take off the front guard plate.
- 4. Loosen the adjusting bolts and pull the steering wheel axle toward the engine, then track will be loosen.

5. Pull out the whole track.

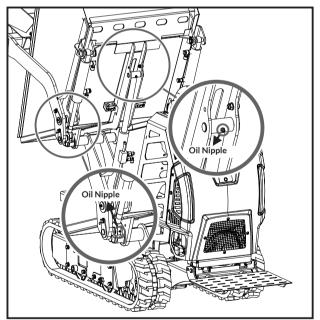




When removing or installing the tracks, be careful not to get your fingers caught between the track and pulley.

#### Lubrication

There are two oil cups on the shovel cylinder and the hopper cylinder each, which require regular lubricating oil injection.



Separation of tire and rim parts is possible when they are serviced incorrectly.

Do not attempt to mount a tire without the proper equipment and experience to perform the job.



Do not inflate the ties above the recommended pressure.

Do not weld or heat a wheel and tire assembly. Welding can structurally weaken or deform the wheel. Heating can cause an increase in the air pressure resulting in burst.

Do not stand in front or over the tire assembly while inflatig.

#### **Engine Maintenance**

Refer to the Engine Manual included in your unit for the information on engine maintenance. Your engine manual provides detailed information and a maintenance schedule for performing the tasks.

## **STORAGE**

If the Mini Tracked Dumper will not be used for a period longer than 30 days, follow the steps below to prepare your unit for storage.

- Drain the fuel tank completely. Stored fuel containing ethanol or MTBE can start to go stale in 30 days. Stale fuel has high gum content and can clog the carburetor and restrict fuel flow.
- 2. Start the engine and allow it to run until it stops. This ensures no fuel is left in the carburetor. Run the engine until it stops. This helps prevent gum deposits from forming inside the carburetor and possible engine damage.
- 3. While the engine is still warm, drain the oil from the engine. Refill with fresh oil of the grade recommended in the **Engine Manual**.
- 4. Use clean cloths to clean off the outside of the machine and to keep the air vents free of obstructions.



Do not use strong detergents or petroleum based cleaners when cleaning plastic parts. Chemicals can damage plastics.

- 5. Inspect for any loose or damaged parts. Repair or replace damaged parts and tighten loose screws, nuts or bolts.
- 6. Store your unit on flat ground in a clean, dry building that has good ventilation.

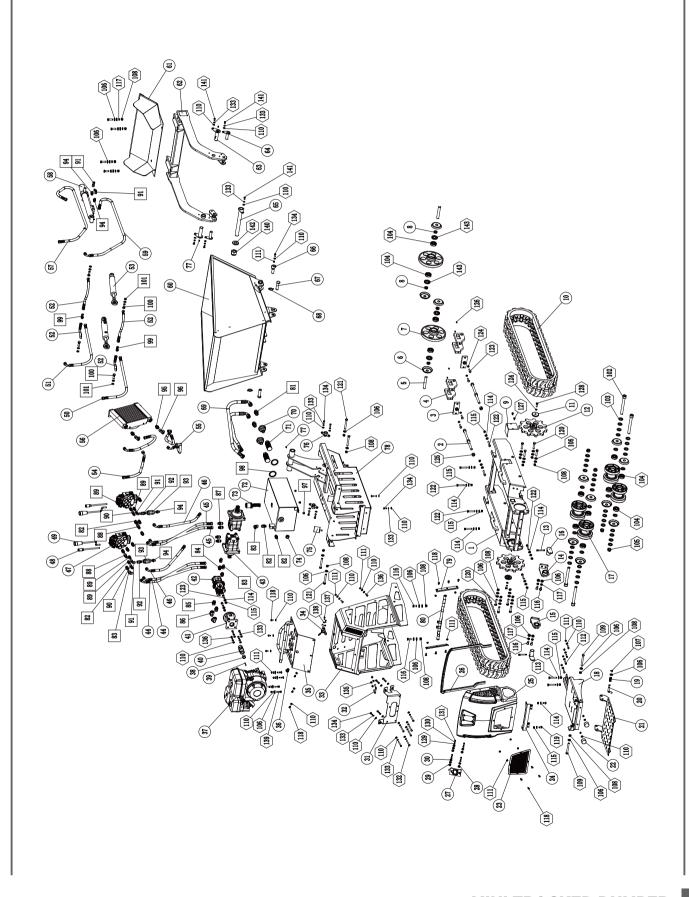


Do not store the machine with fuel in a non-ventilated area where fuel fumes may reach flame, sparks, pilot lights or any ignition sources.

# TROUBLE SHOOTING

Problem	Cause	Remedy
Engine fails to start.	<ol> <li>Spark plug wire disconnected.</li> <li>Out of fuel or stale fuel.</li> <li>Choke not in open position.</li> <li>Blocked fuel line.</li> <li>Fouled spark plug.</li> <li>Engine flooding.</li> </ol>	<ol> <li>Attach spark plug wire securely to spark plug.</li> <li>Fill with clean, fresh gasoline.</li> <li>Throttle must be positioned at choke for a cold start.</li> <li>Clean the fuel line.</li> <li>Clean, adjust gap, or replace.</li> <li>Wait a few minutes to restart, but do not prime.</li> </ol>
Engine runs erratically.	<ol> <li>Spark plug wire loose.</li> <li>Unit running on CHOKE.</li> <li>Blocked fuel line or stale fuel.</li> <li>Vent plugged.</li> <li>Water or dirt in fuel system.</li> <li>Dirty air cleaner.</li> <li>Improper carburetor adjustment.</li> </ol>	<ol> <li>Connect and tighten spark plug wire.</li> <li>Move choke lever to OFF.</li> <li>Clean fuel line. Fill tank with clean, fresh gasoline.</li> <li>Clear vent.</li> <li>Drain fuel tank. Refill with fresh fuel.</li> <li>Clean or replace air cleaner.</li> <li>Refer to Engine Manual.</li> </ol>
Engine overheats.	<ol> <li>Engine oil level low.</li> <li>Dirty air cleaner.</li> <li>Air flow restricted.</li> <li>Carburetor not adjusted properly.</li> </ol>	<ol> <li>Fill crankcase with proper oil.</li> <li>Clean air cleaner.</li> <li>Remove housing and clean.</li> <li>Refer to Engine Manual.</li> </ol>
One of the two tracks is blocked.	Foreign bodies have worked their way between the track and the frame.	Remove the foreign body.
Machine does not move while engine is running.	1. Gear is not properly selected. 2. Driving tracks not tight enough.	<ol> <li>Ensure gear lever is not in-between two different gears.</li> <li>Tighten driving tracks.</li> </ol>

# **PARTS SCHEDULE**



# **Parts List**

No.	Description	Q'ty
1	Chassis	1
2	Tension Screw	2
3	Tensioning bracket	2
4	Bracket lateral plate	4
5	Tensioning shaft	2
6	Dust cap	12
7	Tensioning wheel	2
8	Shaft sleeve	4
9	Tensioning coverplate	2
10	Rubber track	2
11	Driving wheel ring washer	2
12	Driving wheel	2
13	Pin	2
14	Right parking base	1
15	Left parking base	1
16	Parking safety pin	2
17	Track roller	4
18	Engine foundation	1
19	Pressure spring	1
20	Locking pin	1
21	Pedal	1
22	Pedal cushion rubber	2
23	Mesh plate	1
24	Engine cover hinged plate	1
25	Engine cover	1
26	Rubber strip	1
27	Engine cover latch	1
28	Gasket3	2
29	Gasket1	4
30	Gasket2	4
31	Control valve bracket	1
32	Latch Pin	1
33	Console	1
34	Throttle	1
35	Control panel	1

No.	Description	Q'ty
36	Emergency stop button	1
37	7HP Gasoline Engine	1
38	Engine bushing	1
39	Engine flat key	1
40	Shaft coupling	1
41	Pump bracket	1
42	Duplex pump	1
43	Hydraulic motor	2
44	Left motor hydraulic hose	2
45	Right motor hydraulic hose	2
46	Inlet hose	2
47	Control valve	2
48	Control handle	2
49	Hydro-motor control handle	2
50	Front shovel hydraulic hose1	1
51	Front shovel hydraulic hose2	1
52	Front shovel hydraulic hose3	4
53	Cylinder	2
54	Upper oil return pipe	2
55	Lower oil return pipe	2
56	Radiator	1
57	Hydraulic hose	1
58	Cylinder	1
59	Hydraulic hose	1
60	Tipping bucket	1
61	Front shovel	1
62	Shovel support	1
63	Shaft pin	2
64	Shaft pin	2
65	Shaft pin	1
66	Shaft pin	1
67	Locating pin	2
68	Ring detent	2
69	Suction hose	2
70	Filter element	2

No.	Description	Q'ty
71	Oil filter	2
72	Hydraulic oil tank	1
73	Air filter	1
74	Oil pointer	1
75	Rubber pad	2
76	Shaft sleeve	2
77	Filling cup	3
78	Frame	1
79	Engine cover lateral plate	2
80	Engine cover support tube	1
81	Transit joint 1CM-26WD	2
82	Transit joint 1CM-18WD	10
83	Transit joint 2C9-18	4
84	Transit joint 1CB-18-08WD	2
85	Transit joint 1CB-26-08WD	2
86	Transit joint 2C-16	2
87	Transit joint 1CO-18-10	4
88	Transit joint 2C-18	2
89	Transit joint 1CM-16-18WD	4
90	Transit joint 2C-16	2
91	Transit joint 2C9-16	4
92	Transit joint 2BC-06-16WD	2
93	Throttle valve	2
94	Transit joint 1CB-16-06WD	4
95	Transit joint 1CB-18-12WD	2
96	Transit joint CC-18	2
97	Oil plug 4MN-10WD	3
98	Compound gasket 52	2
99	Tee-Junction AC-16	2
100	Metric hinged bolt 700M-14	4
101	Bonded washer 14	8
102	Hex socket cap screw M20x185	4
103	Flat washer 20	40
104	Bearing 6304	12
105	Lock nut M20	4
106	Flat washer 20	43
107	Cotter pin 3.2x25	1

No.	Description	Q'ty
108	Lock nut M12	20
109	Hex bolt M12x110	2
110	Flat washer 8	46
111	Lock nut M8	21
112	Hex bolt M8x35	4
113	Hex bolt M10x65	2
114	Flat washer 10	22
115	Lock nut M10	14
116	Hex bolt M12x25	6
117	Spring washer 12	8
118	Hex flat head screw M8x16	16
119	Hex bolt M10x20	2
120	Hex bolt M12x55	8
121	Hex bolt M12x100	4
122	Hex bolt M10x60	8
123	Hex bolt M10x35	6
124	Spring washer10	6
125	BS Bolt 3/8-16	2
126	Hex flat locking screw M6x12	4
127	Hex head flange bolt M6x12	4
128	BS Bolt 3/8-16	2
129	Flat washer 5	4
130	Spring washer 5	4
131	Hex bolt M5x10	4
132	Hex bolt M8x65	6
133	Spring washer 8	25
134	Hex bolt M8x20	11
135	Hex nut M8	4
136	Hex bolt M8x25	6
137	Hex bolt M6x20	2
138	Flat washer 6	2
139	Carriage bolt M8x40	4
140	Lock nut M30	1
141	Hex bolt M8x16	5
142	Flat washer 30	1
143	TC Oil seal 28x52x7	4
144		

