

# **OWNER'S MANUAL** Trencher







## **OWNER'S MANUAL** Assembly & Operating Instructions

# **BBT Trencher**

MODEL NO. BBT-TR-13.5BS



**C**N23701 **(E**)

#### To The Owner

Thank You!

Thank you for purchasing our trencher. It was carefully engineered to provide excellent performance when properly operated and maintained.

Please read this entire manual prior to operating the trencher. It instructs you how to safely and easily set up, operate and maintain your trencher. Please be sure that you, and any other persons who will operate the trencher, carefully follow the recommended safety practices at all times. Failure to do so could result in personal injury or property damage.

All information in this manual is relative to the most recent product information available at the time of printing. Review this manual frequently to familiarize yourself with the machine, its features and operation. Please be aware that this Owner's Manual may cover a range of product specifications for various models. Characteristics and features discussed and/or illustrated in this manual may not be applicable to all models. We reserve the right to change product specifications, designs and equipment without notice and without incurring obligation.

All the power testing information used to establish the power rating of the engine equipped on this trencher can be found at the engine manufacturer's manual or website. If you have any problems or questions concerning the machine, contact our Customer Support Department.

Throughout this manual, all references to right and left side of the trencher are observed from the operating position. 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 Manual packed separately with your trencher for more information.

#### **Customer Support**

Please do NOT return the trencher without first contacting the Customer Support Department at bbt@bbta.com.au.

If you have difficulty assembling this product or have any questions regarding the controls, operation, or maintenance of this trencher, please contact our Customer Support Department.

## SAVE THESE INSTRUCTIONS

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## **IMPORTANT SAFETY INFORMATION**



<u>WARNING:</u> Read and thoroughly understand all instructions in this manual and on the safety decals before assembling or operating this trencher. Failure to do so may cause serious injury or death. Do not allow anyone to operate this trencher who has not read this manual. As with all power equipment, a trencher can be dangerous if assembled or used improperly. Do not operate this trencher if you have any questions concerning its safe operation. To get answers to any questions, call our Customer Support Department.

This SAFETY ALERT SYMBOL identifies important safety messages in this manual. Failure to follow this important safety information may result in serious injury or death.

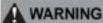


**DANGER!** This trencher was built to be operated according to the safe operation practices in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. This trencher is capable of amputating hands and feet and throwing debris. Failure to observe the following safety instructions could result in serious injury or death.

The following signals words and meanings are intended to explain the levels of risk associated with this product.

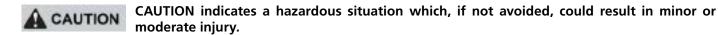


DANGER indicates a hazardous situation which, if not followed, will result in serious injury or death.



NOTICE

WARNING indicates a hazardous situation which, if not avoided, could result in serious injury or death.



NOTICE is important information about the proper use of your trencher. Failure to follow this

### **Additional Information and Potential Changes**

We reserve the right to discontinue, change, and improve its products at any time without notice or obligation to the purchaser. The descriptions and sections contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your machine.

instruction could result in damage to your trencher or property.

### **Operator Safety**

- Always wear the proper clothing and protective gear. Eye, ear and hand protection, hat, boots, gloves and dust masks are required.
- Keep hair, fingers and all other body parts away from openings and moving parts. Always wear long pants, boots and gloves. Secure hair so it is above shoulder length.
- Do not operate trencher indoors. For outdoor use only.
- Do not operate trencher when tired, ill or under the influence of alcohol, drugs or medication.
- Always assume the digging location contains underground utilities. Contact *Dial Before You Dig* to determine where electrical cables, gas lines, water pipes etc are buried before operation.
- Always use extreme caution while operating the tool. Be sure of your footing and physical capabilities.

### **Tool Safety**

- Inspect entire trencher before each use. Replace damaged or worn parts.
- Check for fuel leaks and make sure all fasteners are in place and securely fastened.
- Replace digging blades that are severely worn. Be sure the digging chain and engine is not moving.

### **Maintenance Safety**

- Maintain according to recommended procedures included in this manual.
- Disconnect the spark plug wire before performing maintenance.
- Stop engine before removing fuel cap.
- Use only genuine replacement parts of the engine manufacturer.

### **Fuel Safety**

- Refuel outdoors nowhere near any sparks or flames.
- Store fuel in a container approved for fuel.
- Do not smoke or allow smoking near fuel or the trencher or while using the trencher.
- Clean up all fuel spills before starting the engine.
- Move at least 4 metres away from fuelling site before starting engine.
- Stop engine before removing fuel cap.

### **Digging Safety**

- Be sure that the area is clear of potential hazards such as pipes, rocks or other materials that could possibly entangle itself around the digging chain or cause unstable footing before using the trencher.
- Keep others, by-standers and helpers outside a 5 metre hazard zone from the trencher.
- Hold the trencher handle firmly with both hands.
- Keep all your body and clothing away from the digging chain, auger and other moving parts.
- Inspect the digging site, soil, job specifications and operator experience may dictate that a different trencher or method be used to do the job.
- Do not leave trenchers open or unmarked.

### **Transportation And Storing**

- Always shut off the fuel valve and engine.
- Always allow the engine to cool.
- Store trencher and fuel where fuel vapours cannot reach sources of combustion like water heaters, electric motors, switches, furnaces etc.
- Always secure this trencher with tie downs or similar restraints when transporting.
- The trencher is to be stored in a manner that prevents it from falling, rolling or tipping over.





WARNING! This machine can cause serious injury to the operator and bystanders. The warning and safety instructions in this manual must be followed to provide reasonable safety and efficiency in using and storing. The operator is responsible for following the warnings and instructions in this manual and the trencher. Read the entire Operator's Manual before using this trencher! Restrict the use of this trencher

to persons who read, understand and follow the warnings and instructions in this manual and on the trencher. If you have not read and understand the warnings and instructions in this manual and on the trencher, you are not qualified to operate this trencher! Be familiar with the operation and service recommendations to ensure the best performance of your machine.

## DANGER



**KEEP BACK** 

Rotating shaft can cause severe injury. Keep arms, legs, hair and loose clothing away.



## DANGER

**KEEP CLEAR** Foot Crush Zone. May cause

serious injury. Keep Back!!

## DANGER



#### PROTECTION

Always wear hearing protection when operating the trencher



### **KEEP CLEAR**

Moving Digging Teeth will kill you or cut off arm or leg. Stay Away!

**CAUTION!** This machine is designed solely to dig trenches and must not be used for any other purpose. It should only be used by trained operators who are familiar with the content of this manual. It is potentially hazardous to fit or use any parts other than your dealer parts. We disclaim all liability for the consequences of such use, which in addition voids the machine warranty.

### Before using the Trencher

### NOTICE

- Operators must be fully trained before using this machine.
- User Manual is read and understood.
- Blades are in good condition and secure. All blades are sharpened or replaced in sets.
- All fasteners are checked for tightness.

### When using the Trencher

### WARNING

- Maintain strict discipline at all times and service machine at specified periods.
- Keep body parts, foreign objects and clothing clear of rotating auger and digging chain.
- Coming into contact with buried utilities while digging can cause severe injuries or DEATH.
- Contact appropriate utility representatives (Dial Before you Dig) to determine if/where electrical cables, gas lines, water pipes etc. are buried BEFORE operation.
- DO NOT operate the machine whilst under the influence of alcohol or drugs.

### Protecting Yourself and Those around You

#### WARNING

This is a high-powered machine, with moving parts operating with high energy. You must operate the machine safely. Unsafe operation can create a number of hazards for you, as well as anyone else in the nearby area. Always take the following precautions when using this machine:

- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people, their property, and themselves.
- Always wear protective goggles or safety glasses with side shields while using the trencher to protect your eyes from possible thrown debris.
- Avoid wearing loose clothing or jewellery, which can catch on moving parts.
- Wear shoes with non-slip treads when using your trencher. If you have safety shoes, we recommend wearing them. Do not use the machine while barefoot or wearing open shoes.
- Keep bystanders at least 5 metres away from your work area at all times. Stop the engine when another person or pet approaches.

### Safety for Children and Pets

#### WARNING

Tragic accidents can occur if the operator is not alert to the presence of children and pets.

Children are often attracted to the machine and the digging activity. Never assume that children will remain where you last saw them. Always follow these precautions:

- Keep children and pets at least 5 metres from the working area and ensure they are under the watchful care of a responsible adult.
- Be alert and turn the machine off if children or pets enter the work area.
- Never allow children to operate the trencher.

### Safety with Fuel-Powered Machines

#### WARNING

Fuel is a highly flammable liquid. Fuel also gives off a flammable vapour that can be easily ignited and cause an explosion. Never overlook the hazards of fuel. Always follow these precautions:

- Never fill the engine in an enclosed area or without proper ventilation as the exhaust from the engine contains carbon monoxide, which is an odourless, tasteless and deadly poisonous gas.
- Store all fuel and oil in containers specifically designed and approved for this purpose and keep away from heat and open flame, and out of the reach of children.
- Replace rubber fuel lines and grommets when worn or damaged and after 5 years of use.
- Fill the fuel tank outdoors with the engine off and allow the engine to cool completely. Don't handle fuel if you or anyone nearby is smoking, or if you're near anything that could cause it to ignite or explode. Reinstall the fuel tank cap and fuel container cap securely.
- If you spill fuel, do not attempt to start the engine. Move the machine away from the area of the spill and avoid creating any source of ignition until the gas vapours have dissipated. Wipe up any spilled fuel to prevent a fire hazard and properly dispose of the waste.
- Allow the engine to cool completely before storing in any enclosure. Never store a machine that has fuel in the tank, or a fuel container, near an open flame or spark such as a water heater, space heater, clothes dryer or furnace.
- Never make adjustments or repairs with the engine running. Shut down the engine, disconnect the spark plug wire, keeping it away from the spark plug to prevent accidental starting, wait 5 minutes before making adjustments or repairs.
- Never tamper with the engine's governor setting. The governor controls the maximum safe operation speed and
  protects the engine. Over-speeding the engine is dangerous and will cause damage on the engine and to the other
  moving parts of the machine.
- Keep combustible substances away from the engine when it is hot.
- Never cover the machine while the muffler is still hot.
- **Do not** operate the engine with the air cleaner of the carburettor air intake cover removed. Removal of such parts could create a fire hazard. Do not use flammable solutions to clean the air filter.
- The muffler and engine become very hot and can cause severe burns; do not touch.

### **General Safety**

#### WARNING

Operating this trencher safely is necessary to prevent or minimize the risk of death or serious injury. Unsafe operation can create a number of hazards for you. Always take the following precautions when operating:

- Your trencher is a powerful tool, not a toy. Exercise extreme caution at all times. The machine is designed to dig trenches. Do not use it for any other purpose.
- Know how to stop the trencher quickly.
- Exercise caution to avoid slipping or falling.
- See manufacturer's instructions for proper operation and installation of accessories.
- Never use the machine without ensuring that all guards and shields are in place.
- **Never**, under any conditions, remove, bend, cut, fit, weld or otherwise alter standard parts on the trencher. This includes all shields and guards. Modifications to your machine could cause personal injuries and property damage and will void your warranty.
- If the machine starts to make an unusual noise or vibrate, shut down the engine, disconnect the spark plug wire, keeping it away from the spark plug to prevent accidental starting, wait 5 minutes for engine to cool down, then inspect for damage. Vibration is generally a warning of trouble. Check damaged parts and clean, repair and/or replace as necessary.
- Never tamper with safety devices. Check their proper operation regularly.
- **Before** performing any maintenance or inspection procedure, shut down the engine, disconnect the spark plug wire keeping it away from the spark plug to prevent accidental starting, wait 5 minutes for machine to cool down.
- Never allow people who are unfamiliar with these instructions to use the trencher. Allow only responsible individuals who are familiar with these rules of safe operation to use your machine.
- Never overload or attempt to dig trenches beyond the manufacturer's recommendation. It could result in personal injury or damage to the machine.
- While using, don't hurry or take things for granted. When in doubt about the equipment or your surroundings stop the machine and take time to look things over.
- Never operate the machine when under the influence of alcohol, drugs, or medication.
- Use the machine only in daylight.
- Stay alert for hidden hazards or traffic.
- Keep all nuts and bolts tight and keep the equipment in good operating condition.

#### A Note to All Users

List of warnings and cautions cannot be all-inclusive. If a situation occurs that is not covered by this manual, the operator must apply common sense and operate this trencher in a safe manner.

## **OPERATING THE TRENCHER**

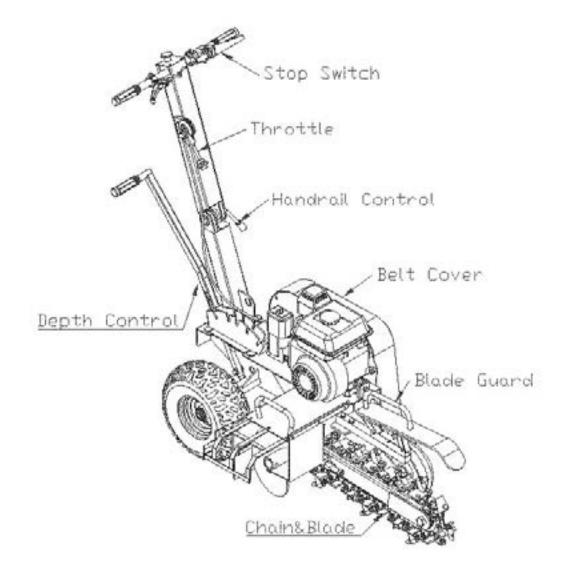
It may be helpful to better familiarize yourself with the features of your trencher before beginning the steps outlined in this chapter.



- 1. Read and understand all instructions, safety precautions, and/or warnings listed in *General Safety Rules* BEFORE operating the trencher. If any doubt or question arises about the correct or safe method of performing anything found in this manual, please contact the dealers in your area (www.bbta.com.au).
- 2. Before loading and operating the trencher, always wear protective gear, including safety goggles, hearing protection, tight-fitting gloves without draw strings or loose cuffs and steel-toed shoes.

## FAMILIAR WITH YOUR TRENCHER

It may be helpful to familiarise yourself with the controls and features of the trencher. If you have any questions, please contact the dealers in your area (www.bbta.com.au).

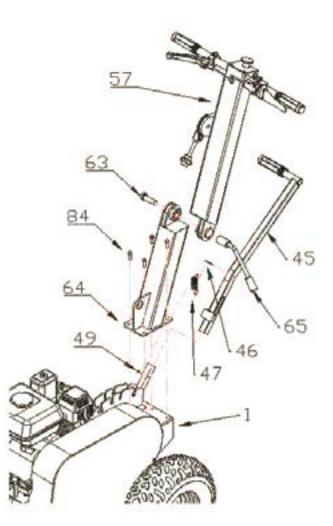


#### NOTICE

- 1. It is your responsibility as the operator of this piece of equipment to know what specific requirements, precautions and work hazards exist. You must read and understand all of the information contained in the user manual.
- 2. The trencher is a small, operator propelled, chain-type trencher designed for the installation of lines that require a narrow shallow trench. It has more than enough power to trench through the toughest soils, however, because of its small size, low horse power and trench capacity, it is limited in what it is capable of doing. The job site, soil conditions, job specifications and operator experience may dictate that a different tool or method be used to do the job.
- 3. The digging chain has tendency to pull the trencher in the opposite direction you want to dig. For this reason, be sure that the digging teeth are not in contact with the ground or other objects while starting the engine and that the wheel lock device engages before lowering the digging bar into the ground. Be sure that you have a firm grip on the machine and are ready to control it when the digging bar comes in contact with the ground.
- 4. The trencher has a tendency to "hop" or "buck" under certain conditions. This can be the result of certain soil conditions or buried objects that the trencher cannot cut through or lift to the surface. The trencher must be stopped and the object removed or restart the trench beyond the object.

## **ASSEMBLING THE TRENCHER**

### Step 1: Assembling the handle system



| Ref. No | Description             | Ref. No. | Description        |
|---------|-------------------------|----------|--------------------|
| 1       | Main frame              | 57       | Upper handle       |
| 45      | Shift Handle and spring | 63       | M16 bolt           |
| 46      | Cotter pin              | 64       | Coil fixation      |
| 47      | Shift handle and spring | 65       | Angle arm          |
| 49      | M8 bolt                 | 84       | M8*20 hexagon bolt |

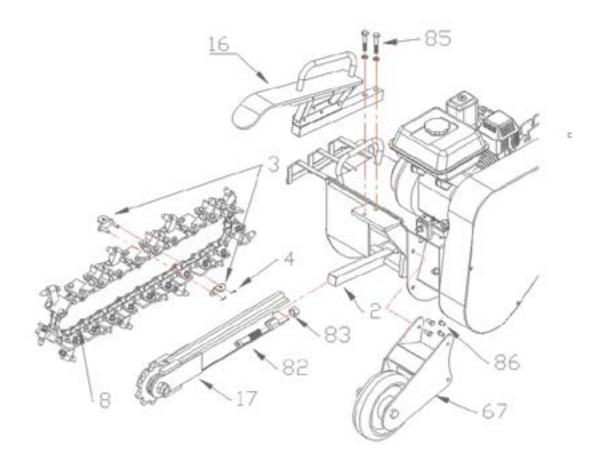
a. Secure lower handle (64) to the main frame (1) tightly with bolts (84).

b. Assemble upper handle (57) to the lower handle (64), secure them with bolt (63) and angle arm (65) tightly.

c. Plug shift arm (45) to the right place as figure shows and hold it with bolt (49) and spring (47), then secure the other side of the spring with pin (46) to the arm (45).

## **ASSEMBLING THE TRENCHER**

### Step 2: Assembling the blade system



| Ref. No | Description      | Ref. No. | Description |
|---------|------------------|----------|-------------|
| 2       | Chain axle plate | 67       | Front wheel |
| 3       | Chain lock       | 82       | M16 bolt    |
| 4       | Cotter pin       | 83       | M16 bolt    |
| 8       | Chain            | 85       | M8 bolt     |
| 16      | Chain cover      | 86       | M8 bolt     |
| 17      | Chain adapter    |          |             |

a. Plug chain adapter (17) to the chain axle (2);

b. Hold the chain (8) around chain adapter (17) and axle (2), then secure two head of the chain with chain pin (4) and chain lock (3);

c. Secure bolt (82) until the chain is tight enough;

d. Fix chain cover (16) securely with bolts (85) and tighten as shown in the diagram above.

## **STARTING AND STOPPING**

### Starting

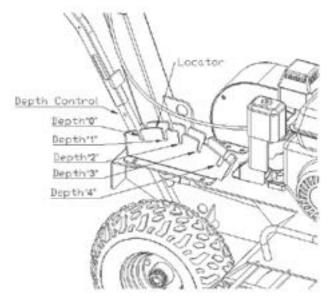
Be sure the depth control is in the "0" depth position and move both stop switches to the "ON" position. Always stand to the rear of the trencher, away from the side delivery auger and digging chain while starting the engine. Always start the trencher at the job site and allow it to warm up. While the machine is running, check that all controls are working properly before using.

#### Start the engine following the procedures

- 1. Make sure the fuel shut-off valve is in the "ON" position.
- 2. Move the choke control lever to the "CHOKE" position (should only be needed if the engine is cold).
- 3. Move the throttle control lever to the "FAST" position.
- 4. **Recoil Start:** Turn the Ignition Switch to the "ON" position. Grasp the recoil starter handle and slowly pull until you feel resistance. Let the cord retract a little bit then pull the cord rapidly to start the engine. One or two pulls usually starts the engine.
- 5. **Electric Start:** Turn and hold the Key in the start position until Engine starts then let the Key return to run position.
- 6. Move the choke control lever (if used for cold engine) slowly back to the "RUN" position when the engine is running well.
- 7. If the trencher has not been running (cold engine), warm up the engine by running the engine at half throttle for 3 to 4 minutes, then advance the engine throttle control to the maximum speed.

### Trenching

Be sure the digging chain is not turning when the engine is at an idle. Be sure the engine is off or at an idle before moving the trencher at the job site.



| WORK POSITION | 600mm TRENCHER |
|---------------|----------------|
| Depth " 0 "   | 0mm            |
| Depth " 1 "   | 200mm          |
| Depth " 2 "   | 400mm          |
| Depth " 3 "   | 600mm          |
| Depth " 4 "   |                |

**NOTE:** All depths are approximate. Actual depth may vary depending upon soil conditions and trencher blade wear. Also, soil conditions and operator experience will dictate actual trenching action and speed.

#### A general description on how to trench

- 1. With the engine running and at an idle and the depth control in the depth "0", apply downward pressure on the handle to raise the digging chain.
- 2. Lift the depth control handle and slowly move the lever forward into the desired depth notch.
- 3. Apply downward pressure to the handlebar so the digging chain is not in contact with the ground. Increase the engine speed and hold on to the handlebar with both hands. Slowly relieve the downward pressure on the handlebar allowing the digging chain to penetrate the soil until the chosen depth is reached.
- 4. Using an intermittent pulling action, pull the trencher toward you 10-15cm then relax your pull, allowing the trencher to again reach the chosen depth.
- 5. Repeat this action until you have finished the job. The wheel lock will aid you in this operation by helping to hold the trencher in position until the next motion is started.

#### Stopping

There are two stop switches on the trencher; one on the handle bar and one on the engine. Refer to the engine manual for the switch location on your trencher. The operator can turn the trencher off at any time by switching either stop switch to the "OFF" position. Both switches must be "ON" before the engine can start.

#### Stopping the engine following the procedures

- 1. Switching stop switch on handle.
- 2. Move the Throttle Lever to IDLE.
- 3. Recoil Start: Turn the Ignition Switch to the OFF position.
- 4. Electric Start: Turn the Key to the OFF position.

#### When Blocked

If the chain stops moving while digging trenches, the engine should be stopped, remove the mud or anything which is stuck in the chain, then restart the engine, and start digging again.

## SAFETY

## **Operator Safety**

#### WARNING

- 1. All the rack and pinion should be greased before every use.
- 2. Always wear the proper clothing and protective gear. Eye and ear protection, hard hat, boots, gloves and dust masks are what is required.
- 3. Keep hair, fingers, and all other body parts away from openings and moving parts. Always wear, long pants, boots and gloves. Secure hair so it is above shoulder length.
- 4. Do not operate trencher indoors. Outdoor use only.
- 5. Do not operate trencher when tired, ill or under the influence of alcohol, drugs or medication.
- 6. Always assume the digging location contains underground utilities. Contact the appropriate utility company (Dial Before You Dig) to determine where electrical cables, gas lines, water pipes, etc. are buried before operation.
- 7. Always use extreme caution while operating the tool. Be sure of your footing and physical capabilities.

### **Tool Safety**

#### A CAUTION

- 1. Inspect entire trencher before each use. Replace damaged or worn parts.
- 2. Check for fuel leaks and make sure all fasteners are in place and securely fastened.
- 3. Replace digging blades that are severely worn. Be sure the digging chain and engine is not moving.

### Fuel Safety

#### A WARNING

- 1. Refuel outdoors and where there are no sparks and flames.
- 2. Store fuel in a container approved for fuel.
- 3. Do not smoke or allow smoking near fuel or the trencher or while using the trencher.
- 4. Clean up all fuel spills before starting engine.
- 5. Move at least 4 metres away from fueling site before starting engine.
- 6. Stop engine before removing fuel cap.

### **Digging Safety**

#### WARNING

- 1. Be sure that the area is clear of potential hazards, such as pipes, rocks or other materials that could possibly entangle itself around the digging chain or cause unstable footing before using the trencher.
- 2. Keep others bystanders and helpers outside a 5 metre hazard zone from the trencher. Hold the trencher handle firmly with both hands.
- 3. Keep all your body and clothing away from the digging chain, auger and other moving parts.
- 4. Inspect the digging site. Soil, job specifications and operator experience may dictate that a different trencher or method be used to do the job.
- 5. Do not leave trenches open or unmarked.

## MAINTENANCE

### **Maintaining Your Trencher**

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual and the engine manufacturer's user manual for maintenance procedures.

### **Maintenance Safety**

- 1. Before performing any maintenance procedure or inspection, stop the engine, wait five minutes to allow all parts to cool.
- 2. Disconnect the spark plug wire, keeping it away from the spark plug. Disconnect the Battery Terminals (Electrical start only).
- 3. Stop engine before removing fuel cap.
- 4. Use only genuine replacement parts of the engine manufacturer.

## MAINTENANCE

### **Regular Maintenance Checklist**

| Procedure                         | Before Each Use    | Every 3 Hours | Every 25 Hours | Every 100 Hours |
|-----------------------------------|--------------------|---------------|----------------|-----------------|
| Check engine oil level            | 0                  |               |                |                 |
| Check general equipment condition | 0                  |               |                |                 |
| Check wedge for sharpness         | 0                  |               |                |                 |
| Grease surface of slide rail      |                    | 0             |                |                 |
| Check belts                       | 0                  |               |                |                 |
| Grease rack and pinion            |                    | 0             |                |                 |
| Check tyre pressure               |                    |               | 0              |                 |
| Clean engine exterior and cooling |                    |               | 0              |                 |
| Change engine oil                 | First time 5 hours |               |                | Every 12 months |
| Replace air filter                |                    |               |                | 0               |
| Replace spark plug                |                    |               |                | 0               |

### NOTICE

### **Engine Service**

Lubrication

Refer to the engine manufacturer's user manual for engine maintenance.

All Bearings of trencher are sealed units and should have sufficient lubricant to last the life of your machine with normal use.

## **SPECIFICATIONS**

| Model name       | BBT-TR-13.5BS                   |
|------------------|---------------------------------|
| Engine           | Briggs & Stratton 13HP 4 Stroke |
| Power            | Petrol                          |
| Trench Capacity  | 60m/hour                        |
| Trench Width     | 100mm                           |
| Trench Depth     | 200,400,600mm                   |
| Blade            | 27 carbide alloy blades         |
| Chain Length     | 2000mm                          |
| Chain Speed(Max) | 550m/min                        |
| Tyre             | 145/7.0-6                       |
| Overall Height   | 1100mm                          |
| Overall Length   | 2100mm                          |
| Overall Width    | 720mm                           |
| Weight           | 185kgs                          |
|                  |                                 |

#### SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

## TRANSPORTATION

### **Transportation and Storing**

- 1. Always shut off the fuel valve and engine.
- 2. Always allow the engine to cool.
- 3. Store trencher and fuel where fuel vapours cannot reach sources of combustion like, water heaters, electric motors, switches, furnaces, etc.
- 4. Always secure this trencher with tie downs or similar restraints when transporting.
- 5. The trencher shall be stored in manner that prevents it from falling, rolling or tipping over.

## TROUBLESHOOTING

Most problems are easy to fix. Consult the Troubleshooting Table below for common problems and their solutions. If you continue to experience problems, contact the dealers in your area.

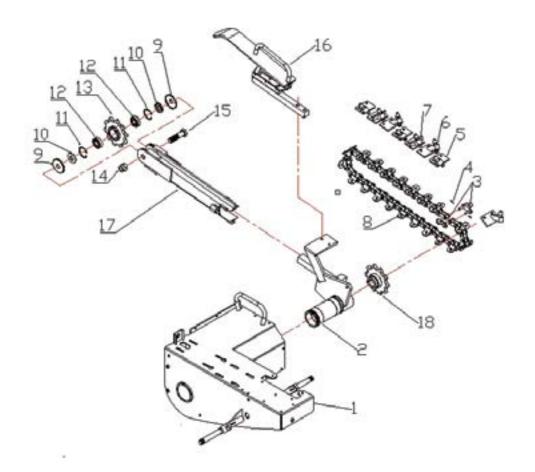
### A WARNING

Before performing any maintenance procedure or inspection, stop the engine, wait five minutes to allow all parts to cool. Disconnect the spark plug wire, keeping it away from the spark plug.

#### Troubleshooting Table

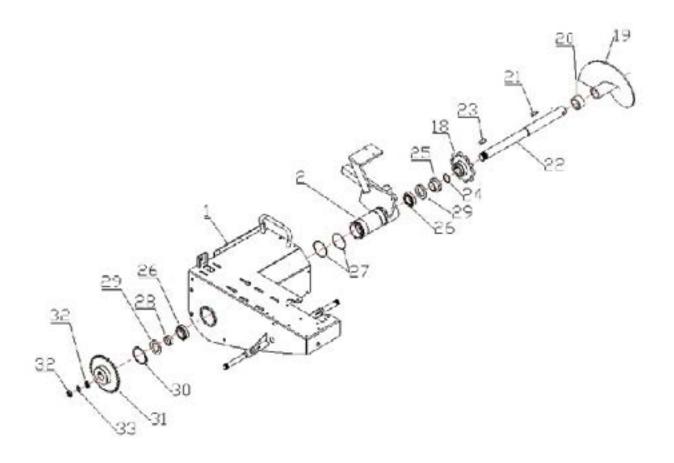
| <b>SYMPTOM</b>  | POSSIBLE CAUSE  |
|---|---|
| The engine won't start.<br>(Please refer to the engine user manual for<br>engine-specific procedures.)                              | <ul> <li>Is the ignition switch in the "ON" position?</li> <li>Is the fuel shut-off valve on?</li> <li>Are you using fresh, clean fuel? If the fuel is older than 14 days, change it.</li> <li>Is the spark plug clean? If the spark plug is dirty or cracked, change it. If it's oily, leave it out, hold a rag over the plug hole and pull the recoil cord several times to blow out any oil in the cylinder, then wipe off the</li> </ul>  |
| The engine lacks power or is not running<br>smoothly.<br>(Please refer to the engine user manual for<br>engine-specific procedures) | <ul> <li>plug and reinsert it.</li> <li>Check that the Throttle lever is in the "Run" position.</li> <li>Is the air filter clean? If it's dirty, change it following the procedure in the engine manufacturer's owner's manual.</li> <li>Is the spark plug clean? If it's dirty or cracked, change it. If it's oily, leave it out, hold a rag over the plug hole and pull the recoil cord several times to blow out any oil in the cylinder, then wipe off the plug and reinsert it.</li> <li>Are you using fresh, clean fuel? If the fuel is older than 14 days, change it. Does your engine have the right amount of clean oil ? If it's dirty, change it following the procedure in the engine manufacturer's owner's manual.</li> </ul> |
| Engine smokes.<br>(Please refer to the engine user manual for<br>engine-specific procedures.)                                       | <ul> <li>Check the oil level and adjust as needed.</li> <li>Check the oil level and adjust as needed.</li> <li>Check the air filter and clean or replace if needed.</li> <li>You may be using the wrong oil - too light for the temperature.</li> <li>Refer to your Engine Owner's manual for detailed information.</li> <li>Clean the cooling fins if they're dirty.</li> </ul>  |

### 1. Chain System



| Ref. No | SKU               | Description      | Ref. No | SKU               | Description   |
|---------|-------------------|------------------|---------|-------------------|---------------|
| 1       | BBT-TR-13.5BS-001 | Main frame       | 10      | BBT-TR-13.5BS-010 | Bearing guard |
| 2       | BBT-TR-13.5BS-002 | Chain axle plate | 11      | BBT-TR-13.5BS-011 | Bead flange   |
| 3       | BBT-TR-13.5BS-003 | Chain lock       | 12      | BBT-TR-13.5BS-012 | 6204 bearing  |
| 4       | BBT-TR-13.5BS-004 | Cotter pin       | 13      | BBT-TR-13.5BS-013 | Chain wheel B |
| 5       | BBT-TR-13.5BS-005 | Left blade       | 14      | BBT-TR-13.5BS-014 | M20 bolt      |
| 6       | BBT-TR-13.5BS-006 | Middle blade     | 15      | BBT-TR-13.5BS-015 | M20 bolt      |
| 7       | BBT-TR-13.5BS-007 | Right blade      | 16      | BBT-TR-13.5BS-016 | Chain cover   |
| 8       | BBT-TR-13.5BS-008 | Chain            | 17      | BBT-TR-13.5BS-017 | Chain adapter |
| 9       | BBT-TR-13.5BS-009 | Chain spacer     | 18      | BBT-TR-13.5BS-018 | Chain wheel A |

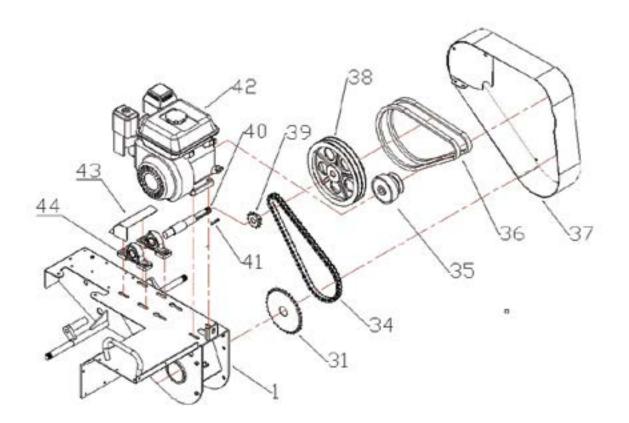
## 2. Gear System



| Ref. No | SKU                 | Description      |
|---------|---------------------|------------------|
| 1       | BBT-TR-13.5BS-001.1 | Main frame       |
| 2       | BBT-TR-13.5BS-002.1 | Chain axle plate |
| 18      | BBT-TR-13.5BS-018.1 | Chain wheel A    |
| 19      | BBT-TR-13.5BS-019.1 | Ridge            |
| 20      | BBT-TR-13.5BS-020.1 | Ridge spacer     |
| 21      | BBT-TR-13.5BS-021.1 | 8*7 keyway       |
| 22      | BBT-TR-13.5BS-022.1 | Gear axle        |
| 23      | BBT-TR-13.5BS-023.1 | 8*7 keyway       |
| 24      | BBT-TR-13.5BS-024.1 | Outer circlip    |

| Ref. No | SKU                 | Description                    |
|---------|---------------------|--------------------------------|
| 25      | BBT-TR-13.5BS-025.1 | Taper bearing flange<br>spacer |
| 26      | BBT-TR-13.5BS-026.1 | Taper bearing base             |
| 27      | BBT-TR-13.5BS-027.1 | O-ring                         |
| 28      | BBT-TR-13.5BS-028.1 | Taper bearing base             |
| 29      | BBT-TR-13.5BS-029.1 | Skeleton oil seal              |
| 30      | BBT-TR-13.5BS-030.1 | Bead flange                    |
| 31      | BBT-TR-13.5BS-031.1 | Gear wheel                     |
| 32      | BBT-TR-13.5BS-032.1 | M30x1.5 screw nut              |
| 33      | BBT-TR-13.5BS-033.1 | Washer of M30 screw nut        |

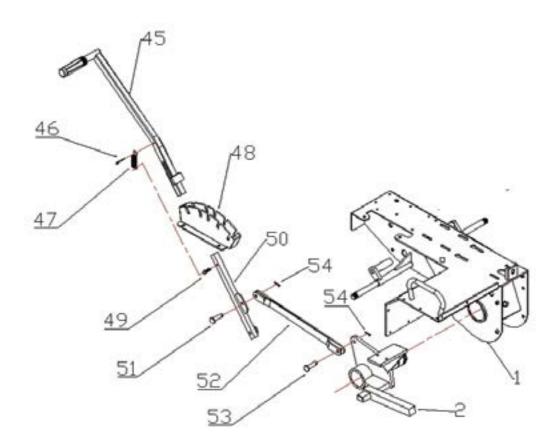
## 3. Drive System



| Ref. No | SKU                 | Description | R |
|---------|---------------------|-------------|---|
| 1       | BBT-TR-13.5BS-001.2 | Main frame  |   |
| 31      | BBT-TR-13.5BS-031.2 | Gear wheel  |   |
| 34      | BBT-TR-13.5BS-034.2 | Drive chain |   |
| 35      | BBT-TR-13.5BS-035.2 | Clutch      |   |
| 36      | BBT-TR-13.5BS-036.2 | Belt        |   |
| 37      | BBT-TR-13.5BS-037.2 | Belt cover  |   |
| 38      | BBT-TR-13.5BS-038.2 | Pulley      |   |

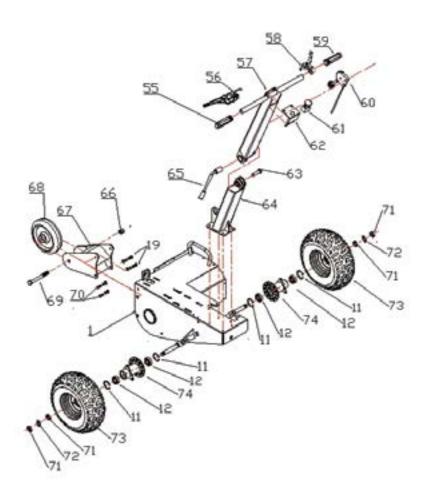
| Ref. No | SKU                 | Description       |
|---------|---------------------|-------------------|
| 39      | BBT-TR-13.5BS-039.2 | Small chain wheel |
| 40      | BBT-TR-13.5BS-040.2 | Drive shaft       |
| 41      | BBT-TR-13.5BS-041.2 | 6*6 keyway        |
| 42      | BBT-TR-13.5BS-042.2 | Engine            |
| 43      | BBT-TR-13.5BS-043.2 | Bearing cover     |
| 44      | BBT-TR-13.5BS-044.2 | Bearing           |

## 4. Depth Control System



| Ref. No | SKU                 | Description         | Ref. No | SKU                 | Description          |
|---------|---------------------|---------------------|---------|---------------------|----------------------|
| 1       | BBT-TR-13.5BS-001.3 | Main frame          | 49      | BBT-TR-13.5BS-049.3 | Cotter pin           |
| 2       | BBT-TR-13.5BS-002.3 | Chain axle plate    | 50      | BBT-TR-13.5BS-050.3 | Depth control handle |
| 45      | BBT-TR-13.5BS-045.3 | Shift handle        | 51      | BBT-TR-13.5BS-051.3 | Pin                  |
| 46      | BBT-TR-13.5BS-046.3 | Cotter pin          | 52      | BBT-TR-13.5BS-052.3 | Shift rod            |
| 47      | BBT-TR-13.5BS-047.3 | Shift handle spring | 53      | BBT-TR-13.5BS-053.3 | Pin                  |
| 48      | BBT-TR-13.5BS-048.3 | Shift deck          | 54      | BBT-TR-13.5BS-054.3 | Cotter pin           |

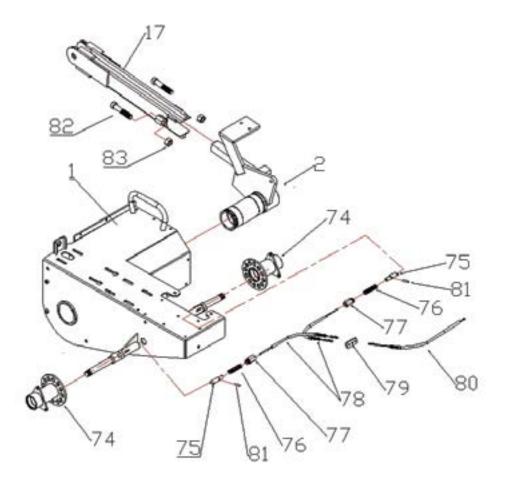
### 5. Main Frame



| Ref. No | SKU                 | Description                     |
|---------|---------------------|---------------------------------|
| 1       | BBT-TR-13.5BS-001.4 | Main frame                      |
| 11      | BBT-TR-13.5BS-011.4 | Bead flange                     |
| 12      | BBT-TR-13.5BS-012.4 | 6204 bearing                    |
| 19      | BBT-TR-13.5BS-019.4 | washer                          |
| 55      | BBT-TR-13.5BS-055.4 | Handle cover                    |
| 56      | BBT-TR-13.5BS-056.4 | Emergency stop handle           |
| 57      | BBT-TR-13.5BS-057.4 | Upper handle                    |
| 58      | BBT-TR-13.5BS-058.4 | Handle                          |
| 59      | BBT-TR-13.5BS-059.4 | Handle cover                    |
| 60      | BBT-TR-13.5BS-060.4 | Throttle switch                 |
| 61      | BBT-TR-13.5BS-061.4 | Emergency stop switch           |
| 62      | BBT-TR-13.5BS-062.4 | Plate for emergency stop switch |

| Ref. No | SKU                 | Description          |
|---------|---------------------|----------------------|
| 63      | BBT-TR-13.5BS-063.4 | M16 bolt             |
| 64      | BBT-TR-13.5BS-064.4 | Lower handle         |
| 65      | BBT-TR-13.5BS-065.4 | Angle arm            |
| 66      | BBT-TR-13.5BS-066.4 | M16 bolt             |
| 67      | BBT-TR-13.5BS-067.4 | Frame of front wheel |
| 68      | BBT-TR-13.5BS-068.4 | Front wheel          |
| 69      | BBT-TR-13.5BS-069.4 | M16 bolt             |
| 70      | BBT-TR-13.5BS-070.4 | M8 bolt              |
| 71      | BBT-TR-13.5BS-071.4 | M20x1.5 bolt         |
| 72      | BBT-TR-13.5BS-072.4 | Washer of M20 bolt   |
| 73      | BBT-TR-13.5BS-073.4 | Tyre                 |

## 6. Ratchet Assembly



| Ref. No | SKU                 | Description     | Ref. No | SKU                 | Description             |
|---------|---------------------|-----------------|---------|---------------------|-------------------------|
| 1       | BBT-TR-13.5BS-001.5 | Main frame      | 78      | BBT-TR-13.5BS-078.5 | Short stay wire         |
| 2       | BBT-TR-13.5BS-002.5 | Outer shaft     | 79      | BBT-TR-13.5BS-079.5 | Connecting link of stay |
| 17      | BBT-TR-13.5BS-017.5 | Link frame      |         |                     | wire                    |
| 74      | BBT-TR-13.5BS-074.5 | Ratchet wheel   | 80      | BBT-TR-13.5BS-080.5 | Long stay wire          |
| 75      | BBT-TR-13.5BS-075.5 | Cotter pin      | 81      | BBT-TR-13.5BS-081.5 | Cotter pin              |
| 76      | BBT-TR-13.5BS-076.5 | Spring          | 82      | BBT-TR-13.5BS-082.5 | M16 bolt                |
| 77      | BBT-TR-13.5BS-077.5 | Threaded sleeve | 83      | BBT-TR-13.5BS-083.5 | M16 screw               |
| L       |                     |                 |         |                     |                         |

| PART# | SKU               | DESCRIPTION                 |
|-------|-------------------|-----------------------------|
| 1     | BBT-TR-13.5BS-001 | Main frame                  |
| 2     | BBT-TR-13.5BS-002 | Chain axle plate            |
| 3     | BBT-TR-13.5BS-003 | Chain lock                  |
| 4     | BBT-TR-13.5BS-004 | Cotter pin                  |
| 5     | BBT-TR-13.5BS-005 | Left blade                  |
| 6     | BBT-TR-13.5BS-006 | Right blade                 |
| 7     | BBT-TR-13.5BS-007 | Middle blade                |
| 8     | BBT-TR-13.5BS-008 | Chain                       |
| 9     | BBT-TR-13.5BS-009 | Chain spacer                |
| 10    | BBT-TR-13.5BS-010 | Bearing guard               |
| 11    | BBT-TR-13.5BS-011 | Bead flange                 |
| 12    | BBT-TR-13.5BS-012 | 6204 bearing                |
| 13    | BBT-TR-13.5BS-013 | Chain wheel B               |
| 14    | BBT-TR-13.5BS-014 | M20 bolt                    |
| 15    | BBT-TR-13.5BS-015 | M20 bolt                    |
| 16    | BBT-TR-13.5BS-016 | Chain cover                 |
| 17    | BBT-TR-13.5BS-017 | Chain adapter               |
| 18    | BBT-TR-13.5BS-018 | Chain wheel A               |
| 19    | BBT-TR-13.5BS-019 | Ridge                       |
| 20    | BBT-TR-13.5BS-020 | Ridge spacer                |
| 21    | BBT-TR-13.5BS-021 | 8 x 7 keyway                |
| 22    | BBT-TR-13.5BS-022 | Gear axle                   |
| 23    | BBT-TR-13.5BS-023 | 8 x 7 keyway                |
| 24    | BBT-TR-13.5BS-024 | Outer circlip               |
| 25    | BBT-TR-13.5BS-025 | Taper bearing flange spacer |
| 26    | BBT-TR-13.5BS-026 | Taper bearing base          |
| 27    | BBT-TR-13.5BS-027 | O-ring                      |
| 28    | BBT-TR-13.5BS-028 | Taper bearing base          |
| 29    | BBT-TR-13.5BS-029 | Skeleton oil seal           |
| 30    | BBT-TR-13.5BS-030 | Bead flange                 |
| 31    | BBT-TR-13.5BS-031 | Gear wheel                  |
| 32    | BBT-TR-13.5BS-032 | M30X1.5 screw nut           |
| 33    | BBT-TR-13.5BS-033 | Washer M30x1.5 screw nut    |
| 34    | BBT-TR-13.5BS-034 | Drive chain                 |
| 35    | BBT-TR-13.5BS-035 | Clutch                      |
| 36    | BBT-TR-13.5BS-036 | Belt                        |
| 37    | BBT-TR-13.5BS-037 | Belt cover                  |
| 38    | BBT-TR-13.5BS-038 | Pulley                      |
| 39    | BBT-TR-13.5BS-039 | Small chain wheel           |
| 40    | BBT-TR-13.5BS-040 | Drive shaft                 |
| 41    | BBT-TR-13.5BS-041 | 6 x 6 keyway                |
| 42    | BBT-TR-13.5BS-042 | Engine                      |
| 43    | BBT-TR-13.5BS-043 | Bearing Cover               |

| PART#         SKU         DESCRIPTION           44         BBT-TR-13.5BS-044         Bearing           45         BBT-TR-13.5BS-045         Shift Handle           46         BBT-TR-13.5BS-047         Shaft handle spring           47         BBT-TR-13.5BS-048         Shaft deck           49         BBT-TR-13.5BS-049         Cotter pin           50         BBT-TR-13.5BS-050         Depth control handle           51         BBT-TR-13.5BS-052         Shift rod           52         BBT-TR-13.5BS-053         Pin           53         BBT-TR-13.5BS-054         Cotter pin           54         BBT-TR-13.5BS-055         Handle cover           55         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-057         Upper handle           58         BBT-TR-13.5BS-058         Handle cover           56         BBT-TR-13.5BS-059         Handle cover           58         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-061         Emergency stop switch           61         BBT-TR-13.5BS-062         Plate of emergency stop switch           62         BBT-TR-13.5BS-065         Angle arm           63         BBT-TR-13.5BS- |      |
|--|------|
| 11         DBT TR 13:55 011         Detains           45         BBT-TR-13:5BS-045         Shift Handle           46         BBT-TR-13:5BS-046         Cotter pin           47         BBT-TR-13:5BS-047         Shaft handle spring           48         BBT-TR-13:5BS-049         Cotter pin           50         BBT-TR-13:5BS-049         Cotter pin           50         BBT-TR-13:5BS-050         Depth control handle           51         BBT-TR-13:5BS-052         Shift rod           52         BBT-TR-13:5BS-053         Pin           52         BBT-TR-13:5BS-054         Cotter pin           54         BBT-TR-13:5BS-055         Handle cover           56         BBT-TR-13:5BS-056         Emergency stop handle           57         BBT-TR-13:5BS-059         Handle cover           60         BBT-TR-13:5BS-059         Handle cover           61         BBT-TR-13:5BS-060         Throttle switch           61         BBT-TR-13:5BS-062         Plate of emergency stop switch           62         BBT-TR-13:5BS-064         Lower handle           63         BBT-TR-13:5BS-065         Angle arm           64         BBT-TR-13:5BS-066         M16 bolt           65         BBT-TR-13:5BS-0 |      |
| 46         BBT-TR-13.5BS-046         Cotter pin           47         BBT-TR-13.5BS-047         Shaft handle spring           48         BBT-TR-13.5BS-048         Shaft deck           49         BBT-TR-13.5BS-049         Cotter pin           50         BBT-TR-13.5BS-050         Depth control handle           51         BBT-TR-13.5BS-051         Pin           52         BBT-TR-13.5BS-052         Shift rod           53         BBT-TR-13.5BS-054         Cotter pin           54         BBT-TR-13.5BS-055         Handle cover           55         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-058         Handle           58         BBT-TR-13.5BS-059         Handle cover           56         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-059         Handle cover           61         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop sw           63         BBT-TR-13.5BS-064         Lower handle           64         BBT-TR-13.5BS-065         Angle arm           65         BBT-TR |      |
| 47         BBT-TR-13.5BS-047         Shaft handle spring           48         BBT-TR-13.5BS-048         Shaft deck           49         BBT-TR-13.5BS-049         Cotter pin           50         BBT-TR-13.5BS-050         Depth control handle           51         BBT-TR-13.5BS-052         Shift rod           52         BBT-TR-13.5BS-052         Shift rod           53         BBT-TR-13.5BS-053         Pin           54         BBT-TR-13.5BS-054         Cotter pin           55         BBT-TR-13.5BS-055         Handle cover           56         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-059         Handle cover           58         BBT-TR-13.5BS-059         Handle           59         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop sw           63         BBT-TR-13.5BS-064         Lower handle           64         BBT-TR-13.5BS-065         Angle arm           65         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5 |      |
| 48         BBT-TR-13.5BS-048         Shaft deck           49         BBT-TR-13.5BS-049         Cotter pin           50         BBT-TR-13.5BS-050         Depth control handle           51         BBT-TR-13.5BS-052         Shift rod           52         BBT-TR-13.5BS-053         Pin           53         BBT-TR-13.5BS-054         Cotter pin           54         BBT-TR-13.5BS-054         Cotter pin           55         BBT-TR-13.5BS-055         Handle cover           56         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-057         Upper handle           58         BBT-TR-13.5BS-058         Handle cover           60         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop sw           63         BBT-TR-13.5BS-065         Angle arm           64         BBT-TR-13.5BS-066         M16 bolt           65         BBT-TR-13.5BS-066         M16 bolt           66         BBT-TR-13.5BS-068         Front wheel           67         BBT-TR-13.5BS-06 |      |
| 49         BBT-TR-13.5BS-049         Cotter pin           50         BBT-TR-13.5BS-050         Depth control handle           51         BBT-TR-13.5BS-051         Pin           52         BBT-TR-13.5BS-052         Shift rod           53         BBT-TR-13.5BS-053         Pin           54         BBT-TR-13.5BS-054         Cotter pin           55         BBT-TR-13.5BS-055         Handle cover           56         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-057         Upper handle           58         BBT-TR-13.5BS-058         Handle cover           60         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop sw           63         BBT-TR-13.5BS-064         Lower handle           64         BBT-TR-13.5BS-065         Angle arm           65         BBT-TR-13.5BS-066         M16 bolt           64         BBT-TR-13.5BS-067         Frame of front wheel           65         BBT-TR-13.5BS-068         Front wheel           68         BBT-TR-13 |      |
| 50         BBT-TR-13.5BS-050         Depth control handle           51         BBT-TR-13.5BS-051         Pin           52         BBT-TR-13.5BS-052         Shift rod           53         BBT-TR-13.5BS-053         Pin           54         BBT-TR-13.5BS-054         Cotter pin           55         BBT-TR-13.5BS-055         Handle cover           56         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-058         Handle           58         BBT-TR-13.5BS-059         Handle cover           58         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop switch           63         BBT-TR-13.5BS-064         Lower handle           64         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           67         BBT-TR-13.5B |      |
| 51         BBT-TR-13.5BS-051         Pin           52         BBT-TR-13.5BS-052         Shift rod           53         BBT-TR-13.5BS-053         Pin           54         BBT-TR-13.5BS-054         Cotter pin           55         BBT-TR-13.5BS-055         Handle cover           56         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-057         Upper handle           58         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop switch           63         BBT-TR-13.5BS-063         M16 bolt           64         BBT-TR-13.5BS-064         Lower handle           65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           67         BBT-TR-13.5BS-069         M16 bolt           68         BBT-TR-13.5BS-069         M16 bolt           69         BBT-TR-13.5BS-070          |      |
| 52         BBT-TR-13.5BS-052         Shift rod           53         BBT-TR-13.5BS-053         Pin           54         BBT-TR-13.5BS-054         Cotter pin           55         BBT-TR-13.5BS-055         Handle cover           56         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-057         Upper handle           58         BBT-TR-13.5BS-058         Handle cover           60         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop sw           63         BBT-TR-13.5BS-063         M16 bolt           64         BBT-TR-13.5BS-064         Lower handle           65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           69         BBT-TR-13.5BS-070         M8 bolt           70         BBT-TR-13.5BS-071         M20x1.5 bolt           71         BBT-TR-13.5BS-072< |      |
| 53         BBT-TR-13.5BS-053         Pin           54         BBT-TR-13.5BS-054         Cotter pin           55         BBT-TR-13.5BS-055         Handle cover           56         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-057         Upper handle           58         BBT-TR-13.5BS-059         Handle cover           58         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop switch           63         BBT-TR-13.5BS-064         Lower handle           64         BBT-TR-13.5BS-065         Angle arm           65         BBT-TR-13.5BS-066         M16 bolt           64         BBT-TR-13.5BS-067         Frame of front wheel           65         BBT-TR-13.5BS-068         Front wheel           68         BBT-TR-13.5BS-069         M16 bolt           67         BBT-TR-13.5BS-069         M16 bolt           68         BBT-TR-13.5BS-069         M16 bolt           69         BBT-TR-13.5BS-070         M8 bolt           70         BBT-TR-13.5BS-07 |      |
| 54         BBT-TR-13.5BS-054         Cotter pin           55         BBT-TR-13.5BS-055         Handle cover           56         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-057         Upper handle           58         BBT-TR-13.5BS-058         Handle           59         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop switch           62         BBT-TR-13.5BS-063         M16 bolt           64         BBT-TR-13.5BS-064         Lower handle           65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR |      |
| 55         BBT-TR-13.5BS-055         Handle cover           56         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-057         Upper handle           58         BBT-TR-13.5BS-058         Handle           59         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop switch           63         BBT-TR-13.5BS-064         Lower handle           64         BBT-TR-13.5BS-065         Angle arm           65         BBT-TR-13.5BS-066         M16 bolt           64         BBT-TR-13.5BS-066         M16 bolt           65         BBT-TR-13.5BS-066         M16 bolt           66         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-1 |      |
| 56         BBT-TR-13.5BS-056         Emergency stop handle           57         BBT-TR-13.5BS-057         Upper handle           58         BBT-TR-13.5BS-058         Handle           59         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop switch           63         BBT-TR-13.5BS-063         M16 bolt           64         BBT-TR-13.5BS-064         Lower handle           65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-066         M16 bolt           68         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre                                       |      |
| 57         BBT-TR-13.5BS-057         Upper handle           58         BBT-TR-13.5BS-058         Handle           59         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop switch           62         BBT-TR-13.5BS-063         M16 bolt           63         BBT-TR-13.5BS-064         Lower handle           64         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-066         M16 bolt           68         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre  |      |
| 58         BBT-TR-13.5BS-058         Handle           59         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop sw           63         BBT-TR-13.5BS-063         M16 bolt           64         BBT-TR-13.5BS-064         Lower handle           65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-066         M16 bolt           68         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre  |      |
| 59         BBT-TR-13.5BS-059         Handle cover           60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop switch           63         BBT-TR-13.5BS-063         M16 bolt           64         BBT-TR-13.5BS-064         Lower handle           65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-066         M16 bolt           68         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-066         M16 bolt           68         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre  |      |
| 60         BBT-TR-13.5BS-060         Throttle switch           61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop sw           63         BBT-TR-13.5BS-063         M16 bolt           64         BBT-TR-13.5BS-064         Lower handle           65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-066         M16 bolt           68         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre  |      |
| 61         BBT-TR-13.5BS-061         Emergency stop switch           62         BBT-TR-13.5BS-062         Plate of emergency stop sw           63         BBT-TR-13.5BS-063         M16 bolt           64         BBT-TR-13.5BS-064         Lower handle           65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-066         M16 bolt           68         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre   |      |
| 62         BBT-TR-13.5BS-062         Plate of emergency stop sw           63         BBT-TR-13.5BS-063         M16 bolt           64         BBT-TR-13.5BS-064         Lower handle           65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-066         M16 bolt           68         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-069         M16 bolt           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre  |      |
| 63         BBT-TR-13.5BS-063         M16 bolt           64         BBT-TR-13.5BS-064         Lower handle           65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-068         Front wheel           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre   |      |
| 64         BBT-TR-13.5BS-064         Lower handle           65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-068         Front wheel           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre   | itch |
| 65         BBT-TR-13.5BS-065         Angle arm           66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-068         Front wheel           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre   |      |
| 66         BBT-TR-13.5BS-066         M16 bolt           67         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-068         Front wheel           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre  |      |
| 67         BBT-TR-13.5BS-067         Frame of front wheel           68         BBT-TR-13.5BS-068         Front wheel           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre  |      |
| 68         BBT-TR-13.5BS-068         Front wheel           69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre  |      |
| 69         BBT-TR-13.5BS-069         M16 bolt           70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre   |      |
| 70         BBT-TR-13.5BS-070         M8 bolt           71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre   |      |
| 71         BBT-TR-13.5BS-071         M20x1.5 bolt           72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre  |      |
| 72         BBT-TR-13.5BS-072         Washer of M20 bolt           73         BBT-TR-13.5BS-073         Tyre  |      |
| 73 BBT-TR-13.5BS-073 Tyre  |      |
|  |      |
| 74 BBT-TR-13.5BS-074 Ratcher wheel   |      |
|  |      |
| 75 BBT-TR-13.5BS-075 Cotter pin  |      |
| 76 BBT-TR-13.5BS-076 Spring  |      |
| 77 BBT-TR-13.5BS-077 Threaded sleeve   |      |
| 78 BBT-TR-13.5BS-078 Short stay wire   |      |
| 79 BBT-TR-13.5BS-079 Connecting link of stay wire  | 3    |
| 80 BBT-TR-13.5BS-080 Long stay wire  |      |
| 81 BBT-TR-13.5BS-081 Cotter pin  |      |
| 82 BBT-TR-13.5BS-082 M16 bolt  |      |
| 83 BBT-TR-13.5BS-083 M16 bolt  |      |
| 84 BBT-TR-13.5BS-084 M8 bolt   |      |
| 85 BBT-TR-13.5BS-085 M10 bolt  |      |
| 86 BBT-TR-13.5BS-086 M8 bolt   |      |

## WARRANTY & SERVICE

#### Warranties

Bigger Boyz Toyz offer a 1-year parts warranty on all products used for domestic use from the date of purchase. For all commercial use, a 3-month parts warranty period applies, unless specified in the item listing. All conditions below are based upon the product being faulty or not performing as described. In the instance where a return is required, the purchaser is liable for any shipping cost. Warranties will only be determined by a Bigger Boyz Toyz Technician upon inspection.

Warranties do not cover accidents, misuse, neglect, natural disaster or act of God or other external causes, or damage caused by operating the equipment in a manner that is not described in the instructions.

Warranty does not cover consumables such as tyres, blades, pull starts and belts.

Our products come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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