# **OWNER'S MANUAL**

**Assembly & Operating Instructions** 

# **Stump Grinder 15HP**

MODEL NO. BBT-SG-15









#### To The Owner

Thank You!

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

Please read this entire manual prior to operating the stump grinder. It instructs you how to safely and easily set up, operate and maintain your stump grinder. Please be sure that you, and any other persons who will operate the stump grinder, 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 these stump grinders 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 stump grinder 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 stump grinder for more information.

#### **Customer Support**

Please do NOT return the stump grinder 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 stump grinder, 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 stump grinder. Failure to do so may cause serious injury or death. Do not allow anyone to operate this stump grinder who has not read this manual. As with all power equipment, a stump grinder can be dangerous if assembled or used improperly. Do not operate this stump grinder 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 stump grinder 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 stump grinder 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.



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



CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



NOTICE is important information about the proper use of your stump grinder. Failure to follow this instruction could result in damage to your stump grinder or property.

### **Key to symbols**

Symbol	Description
	READ THE OWNER'S MANUAL(S)  Read, understand and follow all instructions in the manual(s) before attempting to assemble and operate.
	FACE PROTECTION Always wear safety goggles or safety glasses with side shields, or a face shield when operating this product as well as ear protection.
	WEAR GLOVES Always wear nonslip, heavy-duty protective gloves when operating this product.
	WEAR SAFETY FOOTWEAR Always wear nonslip steel-toed safety footwear when operating this product.

## **PACKING LIST**



## **GENERAL SAFETY PRECAUTIONS**

#### Before using a new stump grinder

- Keep your work area clean and free from foreign objects.
- Do not operate the stump grinder in the presence of flammable liquids, gas or dust.
- Keep children and bystanders away whilst operating the stump grinder. Keep the work area free of all distractions.
- Only responsible, properly instructed individuals should operate this machine.
- An experienced operator must always supervise inexperienced operators.
- Do not expose the stump grinder to rain or wet conditions.
- Stay alert, be observant and use common sense when operating the stump grinder. Do not use the stump grinder while you are tired or under the influence of drugs, alcohol or medications. A moment of inattention while operating any stump grinder may result in serious personal injury.
- Use appropriate personal safety equipment. Always wear eye protection. Safety equipment such as dust masks, non-slip safety shoes, hard hats, or hearing protection worn during appropriate conditions will reduce personal injuries.
- Dress appropriately. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothing, jewellery or long hair can get caught in moving parts.
- Always wear earplugs or earmuffs to protect your ears.
- Do not start the engine until the machine is in the cutting position next to the stump.
- Do not overreach. Ensure you keep a secure footing and balance at all times to enable better control over the stump grinder in unexpected situations.
- Before removing the stump, check the stump for embedded nails, wire, metal fence posts and other metallic objects. It is important to also check for rocks or other buried impediments which may be thrown dangerously or cause unexpected machine movements if hit by the cutting wheel.
- Make sure that all shields and guards are in place and

- are in good condition prior to operating the machine. Check the cutting wheel for damage or missing teeth and replace as necessary.
- Ensure that everyone in the vicinity of the work area is aware of the danger zone associated with this machine (see diagram). You must avoid the danger zone at all times when the machine is in operation.
- Ensure that no one is working underneath or close to the machine before starting the engine or moving the machine. Make sure that the area is free of all nonessential personnel.
- Do not make any alterations or modifications to your stump grinder.
- Check with Dial before you Dig on 1100 for the location of potential buried pipes and cables where applicable, before operating the machine.

#### **Fuel safety**

- Use extreme care when handling fuel. Pay attention when re-fuelling as fuel is highly flammable and gives off hazardous vapours, which can be explosive. Never fuel the machine indoors or while the engine is hot or running.
- Never remove the fuel cap or add fuel to the machine with the power running. Stop the engine and allow the engine and exhaust components to cool before refuelling.
- Do not smoke while operating the machine, especially when re-fuelling.
- Fill the engine with 10w-30/10w-40/15w-30/15w-40 non-synthetic engine oil before use or serious damage will occur.
- Never re-fuel or store the machine in a place where there is an open flame, spark or other source of potential ignition.
- Do not attempt to start the engine if fuel has been spilled. Wipe away the spillage and ensure all fuel has dried before starting the machine.
- Always make sure the fuel cap is securely tightened and replaced before starting the machine.
- If the fuel tank needs to be drained, it should be done outdoors and into an approved fuel container.

### Personal protective equipment

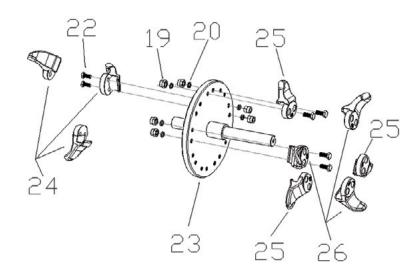


**WARNING!** Most stump grinder accidents happen when the chain touches the operator. You must use approved personal protective equipment whenever you use the stump grinder. Personal protective equipment cannot eliminate the risk of injury but it will reduce the degree of injury if an accident does happen.

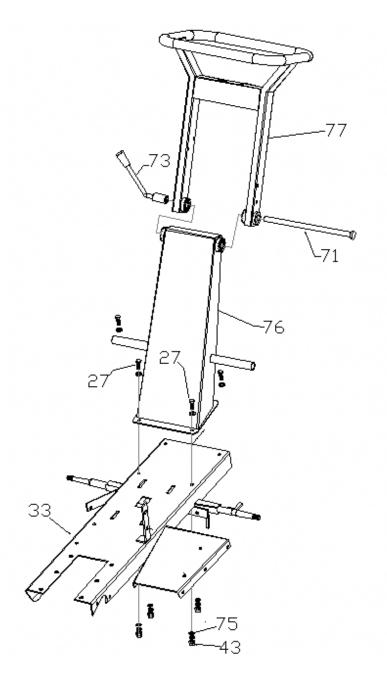
- Approved protective helmet
- Hearing protection
- Protective goggles or a visor
- Gloves with chainsaw protection
- Trousers with chainsaw protection
- Boots with chainsaw protection, steel toe-cap and non-slip sole
- Always have a first aid kit nearby
- Fire extinguisher and shovel
- Clothes should be close-fitting without restricting your freedom of movement.

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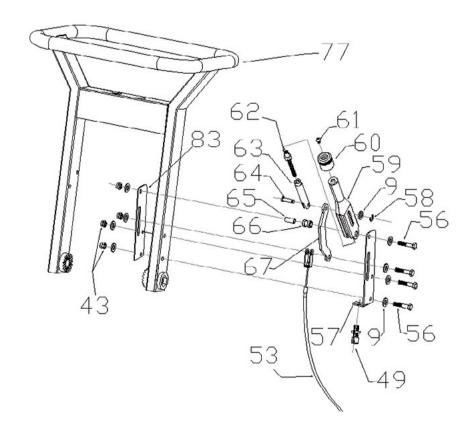
## **Blade assembly**



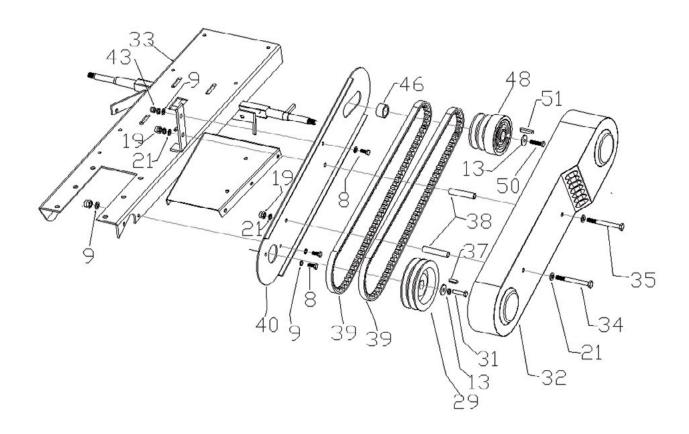
## Handrail assembly



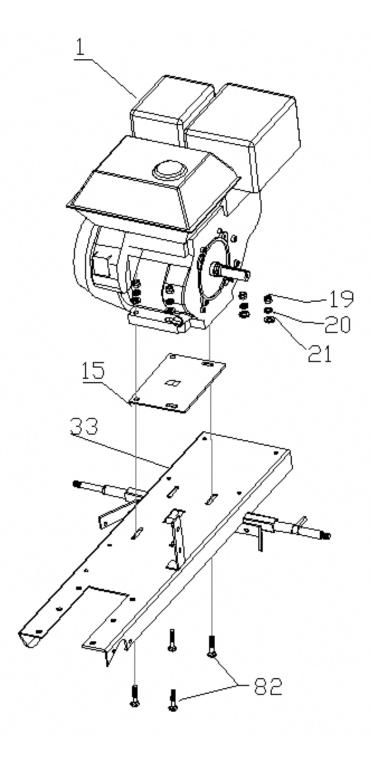
## **Brake assembly**

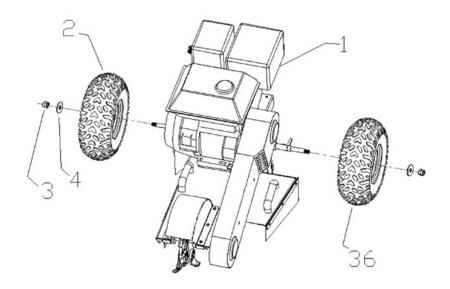


## **Drive system assembly**

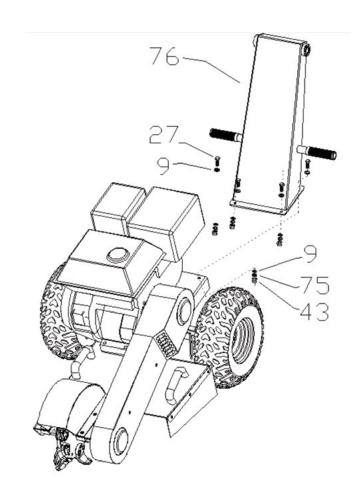


## **Engine assembly**

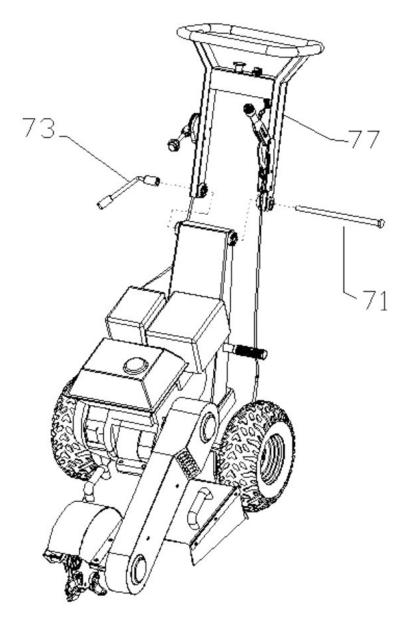




1	2	3	4	36
Engine	Wheel	Nylon locknut	Flat washer	Wheel



9	27	43	75	76
Flat washer	Outer six angle bolt	Nylon locknut	Spring washer	Arm handle

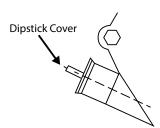


71	73	77
Outer six angle bolt	Adjustable handle bar	Handle

### **OPERATIONS**

#### Adding oil to the engine

- 1. Only fill the fuel tank to a level 15mm lower than the top of the fuel tank. Do not overfill.
- Use the dipstick to check the oil level. Use 10w-30/10w-40/15w-30/15w-40 non-synthetic engine oil. Fill to the correct level before use.



The engine is shipped without oil. Fill to the correct level before use. Operating the engine without oil or oil at a low level will destroy the engine. Any damage resulting from operating the machine without the appropriate level of oil will not be covered under warranty.

#### Starting the engine

- Lock the travel wheel by pulling the brake lever fully back.
- 2. Make sure the throttle is in the slow position.

Do not allow the rope to snap back. Return it by hand to prevent damage to the starter.

- 3. If the engine is cold, move the choke lever to the closed position.
- 4. Raise the cutter wheel 4 to 5 inches off the ground by pushing downwards on the handle bar and hold it in that position.

The next step may cause the cutter wheel to rotate - keep everyone clear.

- 5. Pull the starter rope lightly until resistance is felt, then pull briskly.
- 6. Move the choke lever to the open position.

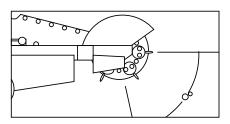
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The next step causes the cutter wheel to rotate - keep everyone clear.

 Move the throttle to the fast position. If the engine is cold, allow the engine to idle (throttle set to the slow position) for a few minutes before you commence cutting.

#### Removing stumps

- Remove all loose pieces of wood, stones, wire and other debris from the area before begin stump removal.
- Wind direction should be considered, as it influences the direction in which dust and wood chips are directed.



- Never operate the grinder after dark. There will not be adequate lighting for the operator to use the grinder safely.
- Always allow a cold engine time to warm up before you commence cutting a stump.
- Only the portion of cutting wheel within the 80-degree area shown below should engage the stump. Never undercut the stump or use the bottom of the cutting wheel for cutting purposes.
- Never leave the controls while the cutting wheel is rotating.

#### **Operating tips**

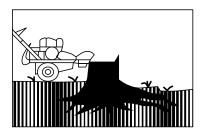
- Use smooth, comfortable side-to-side movements while operating the machine.
- If you need to cut smaller roots, it may be more effective to do so before, rather than after, cutting the stump.
- Should the chip build-up become excessive while cutting, shut off the machine and wait for the cutting wheel to stop rotating. Once the cutting wheel has stopped, retract the machine from the stump and rake away the chips. It is permissible to use the cutting wheel to push the chips off to the side if required.

To prevent any of the wheels from becoming stuck in the hole, move the grinder to the other side of the stump to continue removal or fill the hole with wood chips before continuing.

## **OPERATIONS**

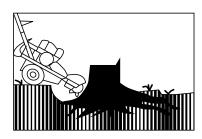
#### Prepare the grinder at the stump

Place the stump grinder into position with the cutting wheel near the top edge of the stump.



### **Removing roots**

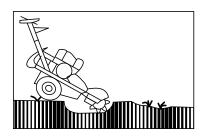
- 1. Make sure the throttle is set to fast. The cutting wheel will accelerate to cutting speed.
- Swing the cutting wheel to one side, then lower it into the nearest roots that are buried at the foot of the stump.
- 3. Swing the cutting wheel before each sweep, until the roots are sufficiently removed.



- 4. Raise the cutting wheel until the centre of the cutting wheel is just above the top of the stump.
- 5. Allow the cutting wheel to stop, release the brake and reposition the machine.
- 6. Lock the brake again.

### **Cutting the full stump**

- Make sure the throttle is set to fast. The cutting wheel will accelerate to cutting speed.
- Direct the cutting wheel against the stump, beginning with the nearest top corner of the stump, and steadily sweep it across the stump left and right, cutting away 1/2 inch of wood with each sweep.
- Raise and lower the cutting wheel between sweeps by lowering and raising the control handle.
- 4. Roll the machine forward and back, by pushing and pulling on the control handle. To do this, release the brake. Relock the brake once the machine has been repositioned and continue cutting.



#### Continue with final root removal

Cut the remaining roots as described in STEP 2 until satisfactorily removed.

#### Shutting off the grinder

- 1. When stopping the machine after normal operation, lower the engine speed to slow, and then push the emergency switch.
- 2. Set the park brake before leaving the controls.
- 3. Shut off the engine by pushing the on/off switch.

#### Normal shutdown procedure

In consideration of your own safety and that of others, you should always use the following normal shutdown procedures before leaving the controls for any reason, including cleaning, servicing, transporting or inspecting the stump grinder. Never deviate from this procedure unless instructed to do so in this user manual or in an emergency situation that requires it.

A rotating cutting wheel is very dangerous. Stand at the controls and ensure that the cutting wheel comes to a complete stop before doing anything else.

- 1. Move the engine throttle to the slow position.
- 2. Push the emergency (on/off) switch to stop the engine.
- 3. Set the park brake before leaving the controls.

### **Emergency shut down procedure**

- 1. Immediately push the emergency (on/off) switch for the engine and the machine will be shut off.
- Be sure to allow all moving parts to come to a complete stop.
- 3. Pull the brake lever to engage the brake.
- 4. Rectify the emergency situation before returning to normal operation.

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## **MAINTENANCE**

- Make sure all nuts, bolts and screws are tightened.
- Never store the machine with petrol in the tank inside a building where fumes can reach an open flame or spark. Allow the engine to cool before moving the stump grinder.
- To reduce fire hazards, keep the engine and petrol storage area free of grass, dirt and excessive grease.
- Replace worn or damaged parts for safety. If the fuel tank has to be drained, this should be done outdoors.
- Regularly check the oil level and add more oil or replace the oil if necessary.

- Frequently check the grinder and ensure that all bark and dirt deposits are removed from beneath the deck.
- Lubricate the wheel axle and bearings with grease regularly.
- Check the tightness of all bolts and screws at regular intervals. Nuts and bolts which are worn out or badly tightened can damage the engine or the frame.
- If the stump grinder hits an obstacle violently, stop the machine and take it to a specialist for inspection.

### **TRANSPORTATION**

The stump grinder is designed to be transported via a van or small trailer. The machine is equipped with grab bars that are to be used for both lifting the machine, and strapping it down. The stump grinder weighs approximately 110kg and should only be lifted using a correct apparatus or an adequate number of people working as a team.

<b>SPECIFICATIONS</b>			
Funda	42 FUD 4 Ct - 1		
Engine	13.5HP 4 Stroke		
Brake	Drum Brake		
Belt	2PCS v Belt		
Clutch	Centrifugal Clutch		
Blades	9 Blades w Tungsten (3x left, 3x right, 3x middle)		
Cutting Depth	12inch		
Packing Size			
Gross Weight	130kgs		
Net Weight	110kgs		

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

## **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.

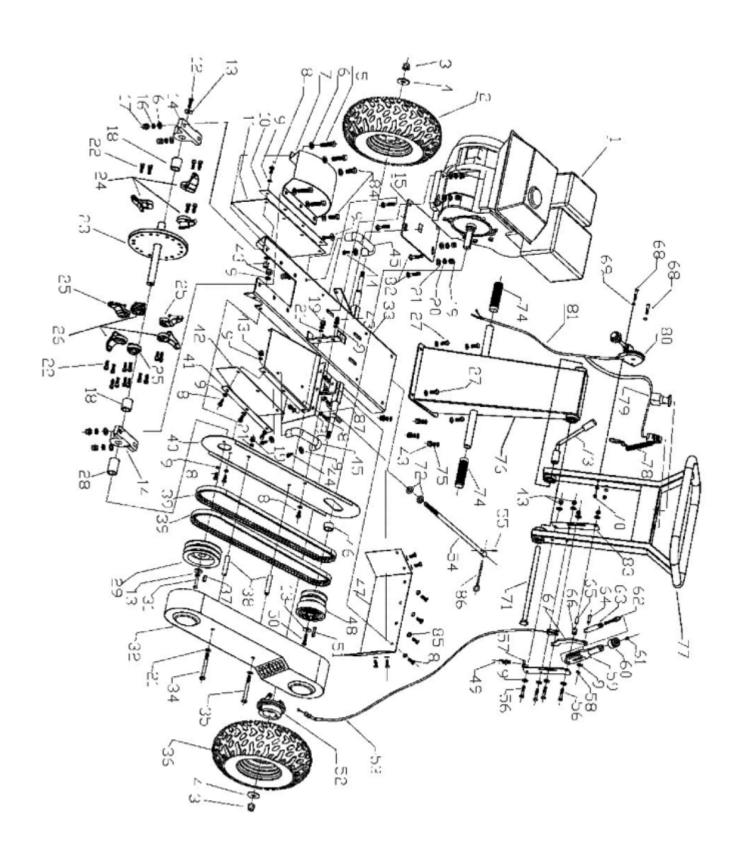
#### **Spare Parts**

Spare parts are available. Please see our website (www.bbta.com.au) or contact us at bbt@bbta.com.au for more details.

BBT-SG-15 WWW.BBTA.COM.AU

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## **EXPLODED DIAGRAM & PARTS LIST**



WWW.BBTA.COM.AU BBT-SG-15

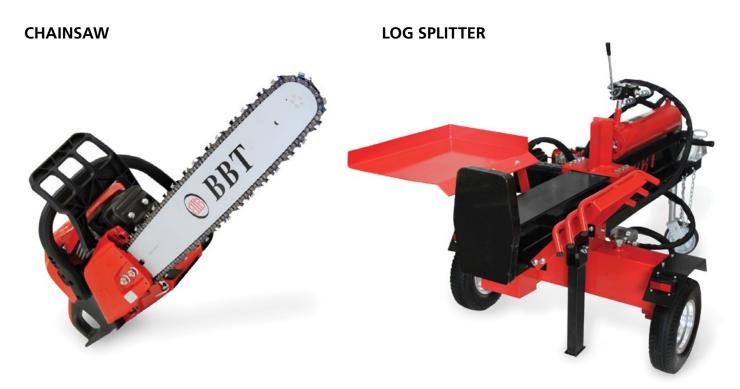
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# **EXPLODED DIAGRAM & PARTS LIST**

PART#	SKU	DESCRIPTION	QTY
1	SP-SG-15-001	Engine	1
2	SP-SG-15-002	The right tyre	1
3	SP-SG-15-003	Nylon locknut	2
4	SP-SG-15-004	Flat washer	2
5	SP-SG-15-005	Hexagon socket screw	4
6	SP-SG-15-006	Flat washer	12
7	SP-SG-15-007	Cutter shield	1
8	SP-SG-15-008	Hex round head bolt	21
9	SP-SG-15-009	Flat washer	44
10	SP-SG-15-0010	Long layering	1
11	SP-SG-15-0011	Long spacer	1
12	SP-SG-15-0012	Hexagon socket screw	1
13	SP-SG-15-0013	Big washer	2
14	SP-SG-15-0014	Vertical bearing	2
15	SP-SG-15-0015	Power holding board	1
16	SP-SG-15-0016	Spring washer	8
17	SP-SG-15-0017	Nylon locknut	8
18	SP-SG-15-0018	The spacer	2
19	SP-SG-15-0019	Nylon locknut	19
20	SP-SG-15-0020	Spring washer	9
21	SP-SG-15-0021	Flat washer	30
22	SP-SG-15-0022	Hexagon socket screw	
23	SP-SG-15-0023	Cutter plate	1
24	SP-SG-15-0024	Right cutter	3
25	SP-SG-15-0025	Straight cutter	3
26	SP-SG-15-0026	Left cutter	3
27	SP-SG-15-0027	Hex bolt	1
28	SP-SG-15-0028	Edge spacer	1
29	SP-SG-15-0029	Large pulley	1
30	SP-SG-15-0030	Small spacer	1
31	SP-SG-15-0031	Hexagon socket screw	1
32	SP-SG-15-0032	Bell cover	1
33	SP-SG-15-0033	Chassis assembly	1
34	SP-SG-15-0034	Hex bolt	1
35	SP-SG-15-0035	Hex bolt	1
36	SP-SG-15-0036	Left tyre	1
37	SP-SG-15-0037	Flat key	1
38	SP-SG-15-0038	Casing	2
39	SP-SG-15-0039	Belt	2
40	SP-SG-15-0040	Deputy belt cover plate	1
41	SP-SG-15-0041	Short layering	1
42	SP-SG-15-0042	Inclined spacer	1
43	SP-SG-15-0043	Nylon locknut	25

PART#	SKU	DESCRIPTION	QTY
44	SP-SG-15-0044	Hexagon socket screw	4
45	SP-SG-15-0045	Handle	2
46	SP-SG-15-0046	Engine spacer	1
47	SP-SG-15-0047	Partition panel	1
48	SP-SG-15-0048	Clutch pulley	1
49	SP-SG-15-0049	Handbrake cable adjusting bolt	1
50	SP-SG-15-0050	Engine bolt	1
51	SP-SG-15-0051	Flat washer come with engine	1
52	SP-SG-15-0052	Brake	1
53	SP-SG-15-0053	Handbrake cable	1
54	SP-SG-15-0054	Adjustment screw	1
55	SP-SG-15-0055	Cylindrical spring pin	3
56	SP-SG-15-0056	Adjustment screw	4
57	SP-SG-15-0057	Outer mounting plate	1
58	SP-SG-15-0058	Shaft collar	1
59	SP-SG-15-0059	The handbrake	1
60	SP-SG-15-0060	Lid	1
61	SP-SG-15-0061	Hex round head bolt	3
62	SP-SG-15-0062	Threaded rod	1
63	SP-SG-15-0063	Connecting pipe	1
64	SP-SG-15-0064	Alex pin	1
65	SP-SG-15-0065	Liner	1
66	SP-SG-15-0066	Spacer sleeve	2
67	SP-SG-15-0067	Connecting plate	2
68	SP-SG-15-0068	Hex bolt	2
69	SP-SG-15-0069	Flat Washer	1
70	SP-SG-15-0070	Nylon locknut	2
71	SP-SG-15-0071	Hex bolt	2
72	SP-SG-15-0072	Flat washer	2
73	SP-SG-15-0073	Angle adjustment knob	2
74	SP-SG-15-0074	Hand sets	1
75	SP-SG-15-0075	Spring washer	1
76	SP-SG-15-0076	Handrail support	1
77	SP-SG-15-0077	Handrail	1
78	SP-SG-15-0078	Safety rope switch	1
79	SP-SG-15-0079	Emergency stop switch	1
80	SP-SG-15-0080	Throttle switch	1
81	SP-SG-15-0081	Throttle cable	1
82	SP-SG-15-0082	Step bolt	4
83	SP-SG-15-0083	Inner mounting plate	1
84	SP-SG-15-0084	Hexagon socket screw	2
85	SP-SG-15-0085	Flat washer	11
86	SP-SG-15-0086	Rocker	1

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