BIGBEAR POWER

WE BUILD TOOLS, NOT TOYS.

# ASSEMBLY & OWNERSHIP MANUAL

## TRENCHER

## Model: BBT624

GX COMMERCIAL LLC
GX
LAS VEGAS NV
OUTDOOR POWER

A COMPLETE OWNERSHIP SYSTEM™ FOR A NATION OF HARD WORKERS.

Corporate Offices 4301 S Valley View Blvd STE 10 11 12 Las Vegas, NV 89103

# DO NOT RETURN TO THE STORE

## 5YR COVERAGE Warranty Policy included

Equipment with fuel is treated as hazardous material for D.O.T. transport and non-returnable per federal hazardous materials law (49 CFR § 173.220), including retailers' policies for gas outdoor power equipment.

Phone: 725-274-6171 EXT 1

Email: CUSTOMERSERVICE@BIGBEARPOWER.COM Website: www.BIGBEARPOWER.com CONTACT US

Thank you for choosing Big Bear Power.

If you have any problem with your equipment, do not return it to the retail store. Returning the machine to the store often triggers a lengthy, costly, and frustrating process that rarely resolves the problem—and can leave you without your equipment for weeks. Instead, we ask that you **contact a BigBear Power Specialist directly so we can help you**.

In the unlikely event that your machine needs attention or is missing a part, our team will:

- Diagnose the issue over the phone or via email – WE ANSWER OUR PHONES – M-F 8-4 PST

- Ship any necessary parts immediately from Las Vegas NV

- Guide you step-by-step. Our good ole USA Service is rated 5 stars by our most powerful customers

- Ensure your equipment performs as intended, getting you up and running.

We stand behind our products, and when an issue does occur, we move fast to make it right. Our goal is to minimize downtime for you—not create more. When you need help, we have your back.

Thank you for your trust in BigBear Power.

Gregory Neuer

Gregory Neuer - Owner - CEO

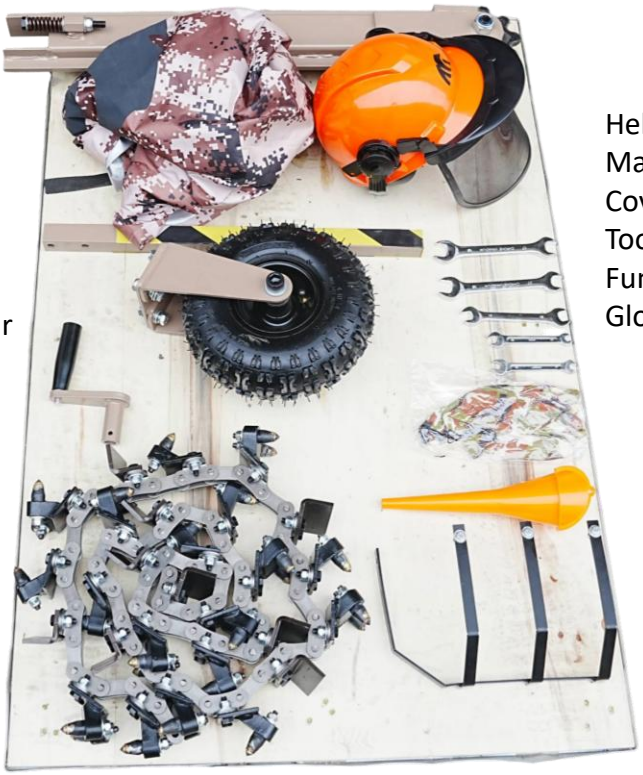
GX Commercial LLC – Bigbear Power

# STEP 1

# PART INSPECTION

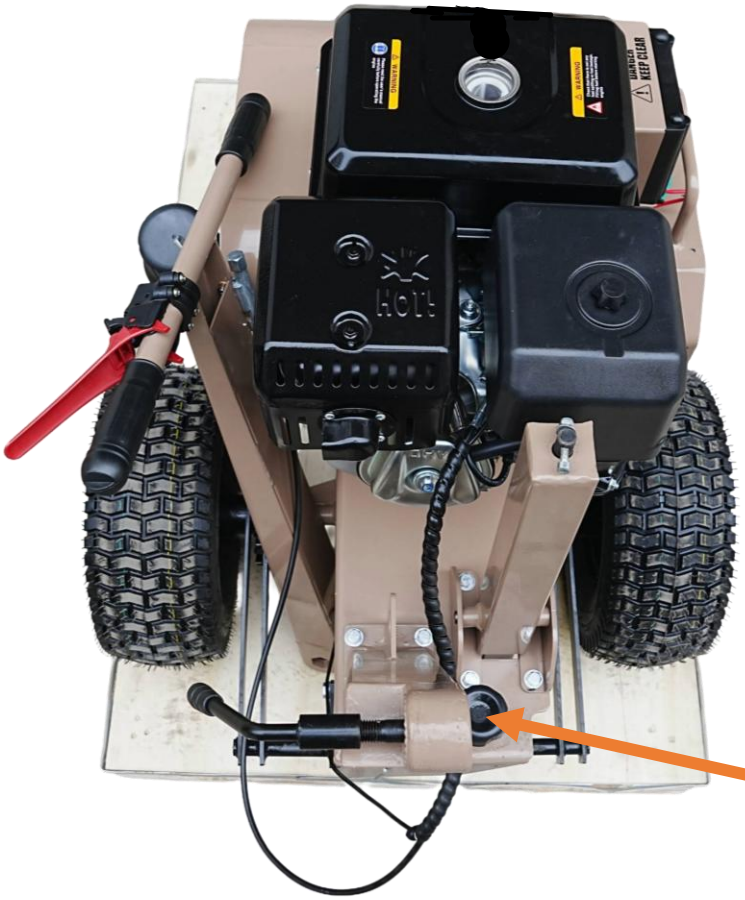
1. REMOVE THE TOP AND SIDES AND PARTS FROM THE CRATE
2. UNPACK ALL PARTS AND CHECK THAT YOU HAVE EVERYTHING.
3. MISSING PARTS? CALL 725-274-6171 GX COMMERCIAL PARTS DEPT
4. ASSEMBLE THE MACHINE ON THE PALLET

Trolley Wheel
Chain Bar,
Auger Guard
Tools
Crank Handle
Chain safety bar



Helmet
Manual
Cover
Tool bag,
Funnel
Gloves

ENGINE & CHASSIS



Turn the knob CW to unlock the wheel brake to move the machine.

Turn the knob CCW to engage the reverse ratchet brake when trenching

## STEP 2

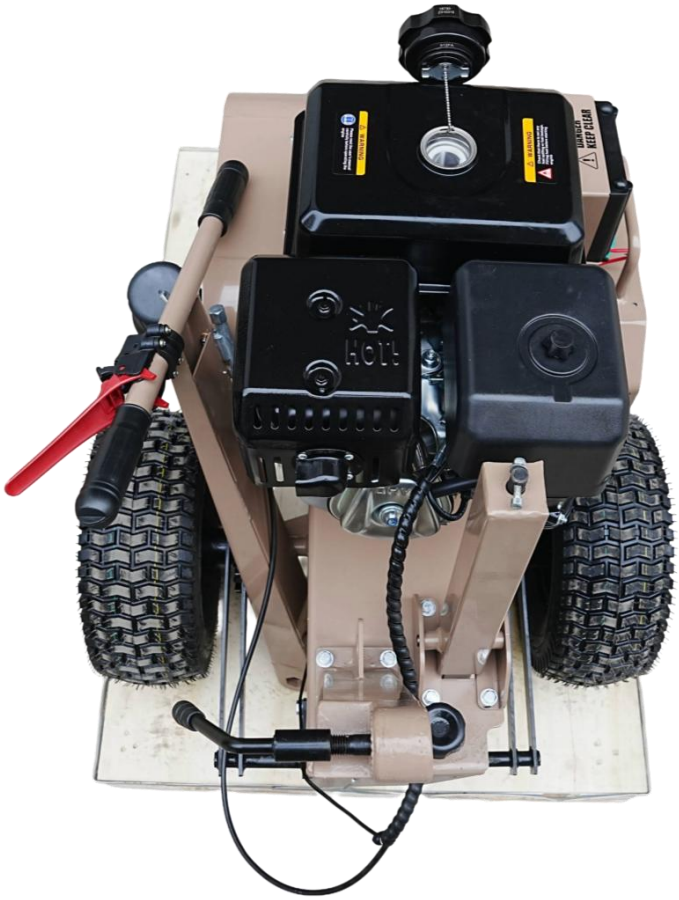
## GAS CAP INSTALL

1. REMOVE THE RING AND GAS CAP FROM THE PACKING
2. FEED THE CHAIN ONTO THE RING
3. MOUNT THE RING INTO THE GAS TANK FILLER NECK
4. TIGHTEN THE GAS CAP IN PLACE

1

2

3

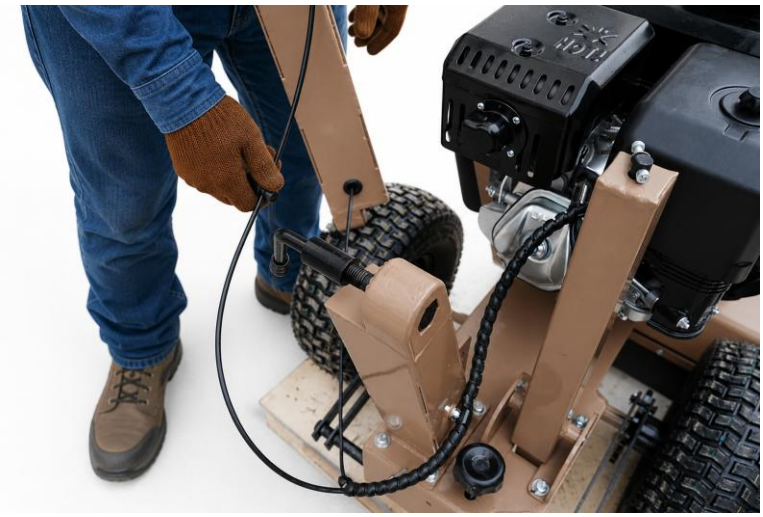


4

## STEP 3 ASSEMBLE THE HANDLE

1. REMOVE THE MAIN PIVOT BOLT
2. LINE UP THE HANDLE AS SHOWN
3. ADJUST TO THE ANGLE YOU LIKE AND TIGHTEN DOWN THE PIVOT BOLT

1



2

3

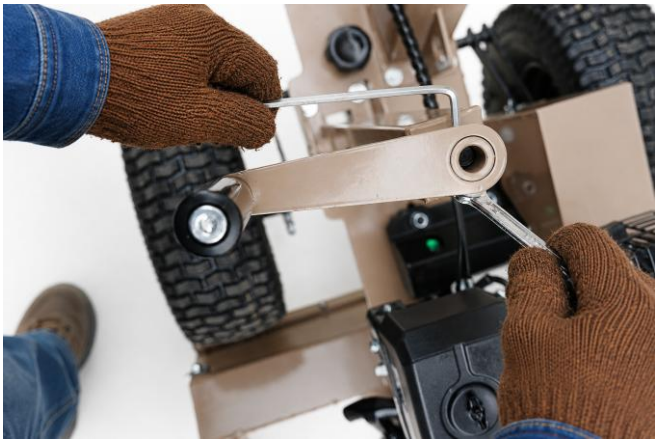
**MISSING PARTS? CALL 725-274-6171 GX COMMERCIAL PARTS DEPT**

## STEP 4 INSTALL THE CRANK HANDLE

1. REMOVE THE MOUNTING HARDWARE. PLACE HANDLE AS SHOWN
    1. IF THE BOLT DOES NOT PASS THRU, INSERT BOLT AND TURN THE HANDLE CCW A COUPLE OF TURNS, THEN THE BOLT WILL PASS THROUGH. THE CRANK COULD BE SET TOO LOW FOR THE HOLE TO ALIGN DURING FIRST INSTALLATION.
2. TIGHTEN ALL HARDWARE
3. TURN THE HANDLE CLOCKWISE TO RAISE THE MACHINE FOR THE NEXT STEP: TIRE INSTALLATION

1

2



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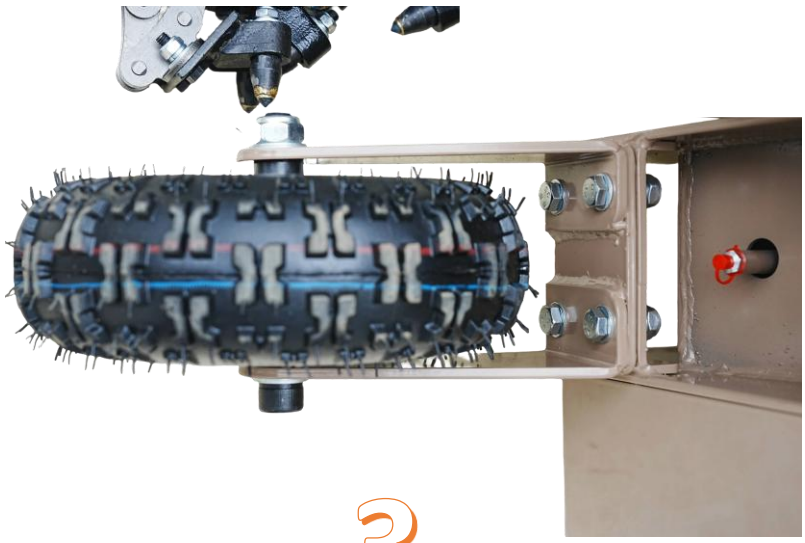
**MISSING PARTS? CALL 725-274-6171 GX COMMERCIAL PARTS DEPT**

## STEP 5 INSTALL TROLLEY WHEEL

1. INSTALL THE TROLLEY WHEEL AS SHOWN. DO NOT INSTALL UPSIDE DOWN. NOTE THE ANGLE ON THE SUPPORT BRACKET ORIENTATION.
2. INSTALL ALL THE HARDWARE
3. TIGHTEN ALL HARDWARE

1

2



3

**MISSING PARTS? CALL 725-274-6171 GX COMMERCIAL PARTS DEPT**

## STEP 6 INSTALL CHAIN BAR

1. CRANK HANDLE COUNTERCLOCKWISE TO RAISE THE BAR SUPPORT LEVEL
2. SLIDE THE CHAIN BAR ONTO THE GUIDE RAIL
3. POSITION THE BAR FULLY INSERTED
4. DURING THE NEXT STEP YOU MAY NEED TO ADJUST THE BAR SIDE SPRINGS TO ALLOW THE CHAIN TO BE COUPLED. THESE SPRINGS ARE TO TENSION THE CHAIN BY MOVING THE BAR AWAY FROM THE MACHINE.

1

2

3

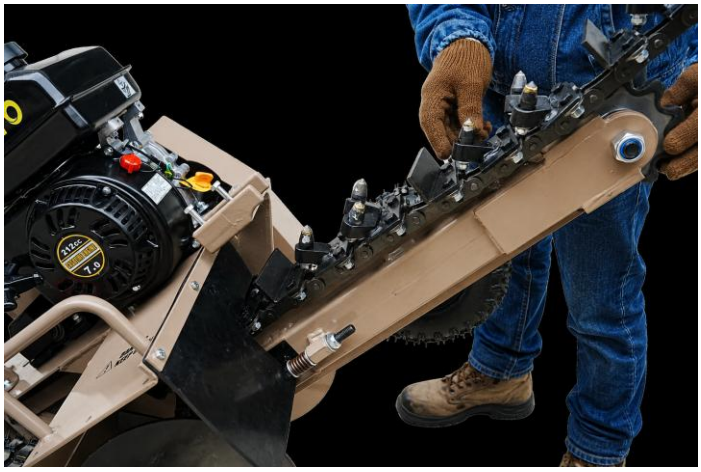
4

MISSING PARTS? CALL 725-274-6171 GX COMMERCIAL PARTS DEPT

## STEP 7 INSTALL THE CHAIN

1. INSTALL CHAIN TO THE BAR
2. POSITION TEETH FACING AS SHOWN
3. INSERT THE MASTER LINK
4. INSTALL LINK PLATE, COTTER PINS AND HARDWARE AS SHOWN.

1



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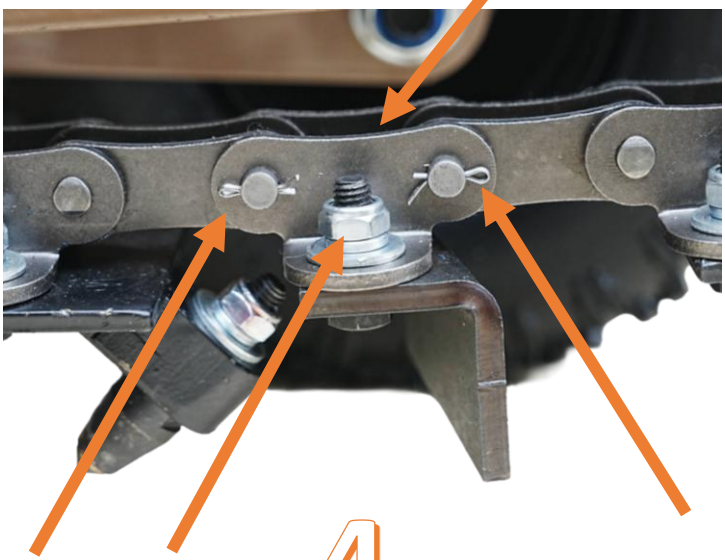

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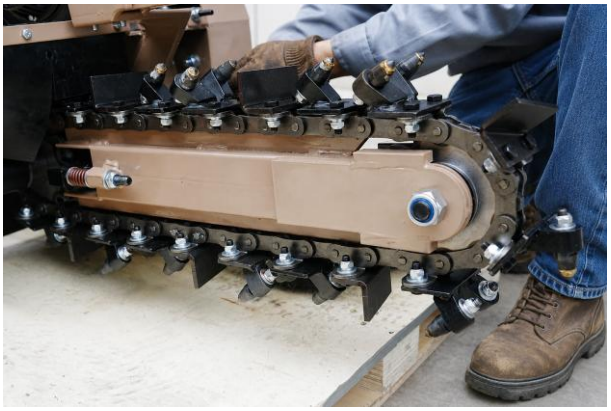
**MISSING PARTS? CALL 725-274-6171 GX COMMERCIAL PARTS DEPT**

## STEP 8 ADJUST THE BAR AND CHAIN TENSION

1. ADJUST THE CURBSIDE BAR SPRING
2. ADJUST THE ROADSIDE BAR SPRING
3. ADJUST SPRINGS TOGETHER TO KEEP BAR STRAIGHT
4. LEAVE SLACK IN THE CHAIN SO THE CHAIN RUNS EASILY ON THE BAR

1

2



3

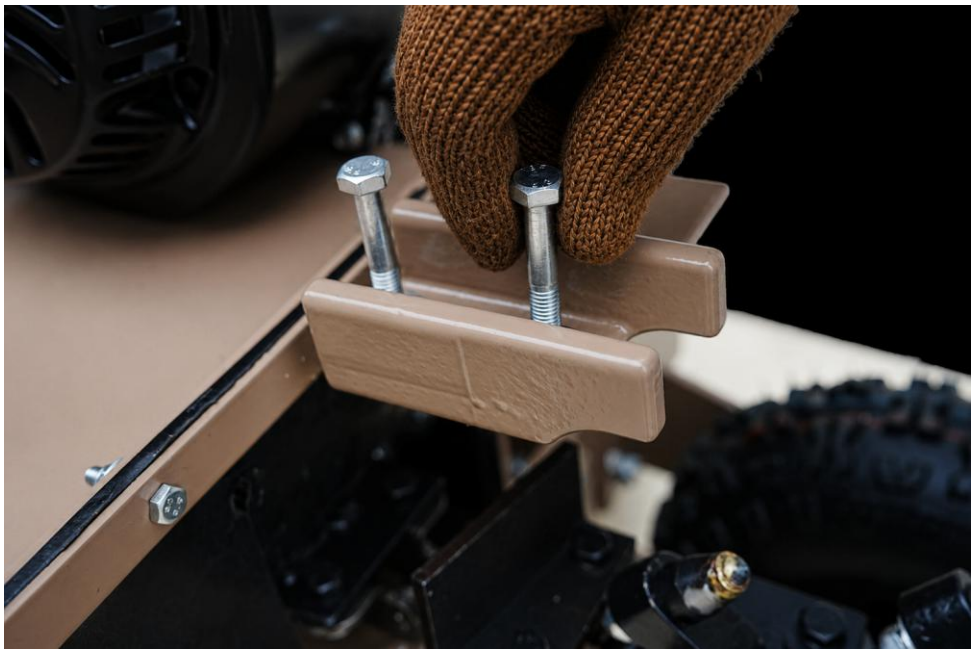
4

**MISSING PARTS? CALL 725-274-6171 GX COMMERCIAL PARTS DEPT**

## STEP 9 INSTALL SAFETY BAR

1. PREPARE TO MOUNT WITH HARDWARE PROVIDED
2. INSTALL SAFETY BAR AS SHOWN AND TIGHTEN ALL HARDWARE

1



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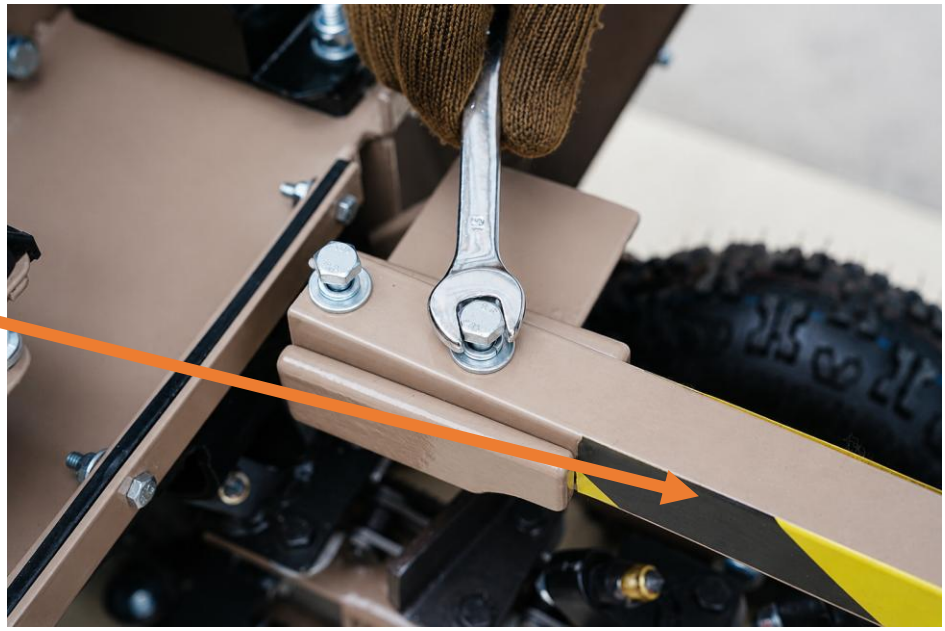


**MISSING PARTS? CALL 725-274-6171 GX COMMERCIAL PARTS DEPT**

## STEP 10 INSTALL AUGER GUARD

1. PREPARE TO MOUNT WITH HARDWARE PROVIDED
2. INSTALL GUARD AS SHOWN AND TIGHTEN ALL HARDWARE

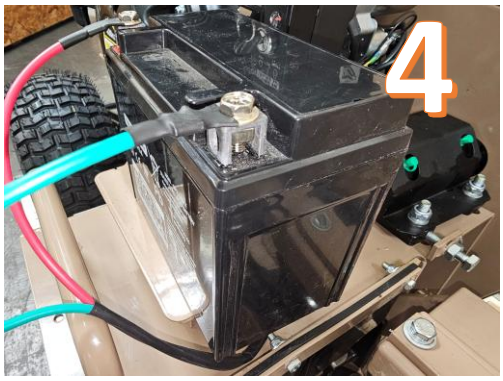
1

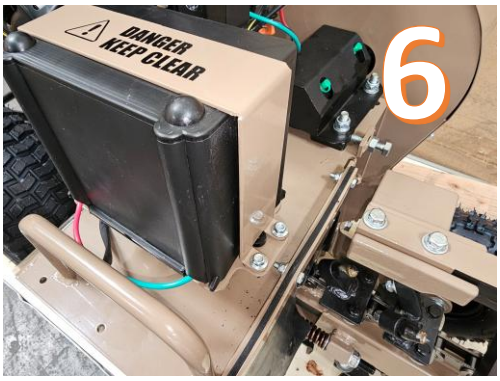
2

MISSING PARTS? CALL 725-274-6171 GX COMMERCIAL PARTS DEPT

## STEP 11 INSTALL BATTERY

1. REMOVE THE BATTERY BRACKET
2. SLIDE THE CASE AND THE BATTERY FROM THE MOUNTING PLATE
3. PREPARE THE HARDWARE AND THE WIRES RED TO RED GREEN TO BLACK
4. PLACE TERMINALS ON TOP AS SHOWN AND NUT UNDERNEATH
5. TIGHTEN HARDWARE AND BEND TERMINALS DOWN AS SHOWN
6. PLACE BATTERY IN CENTER OF MOUNT AND SLIDE ON THE COVER
7. INSTALL THE HOLDING BRACKET AND THE THREE SCREWS
8. INSPECT YOUR WORK





## STEP 12

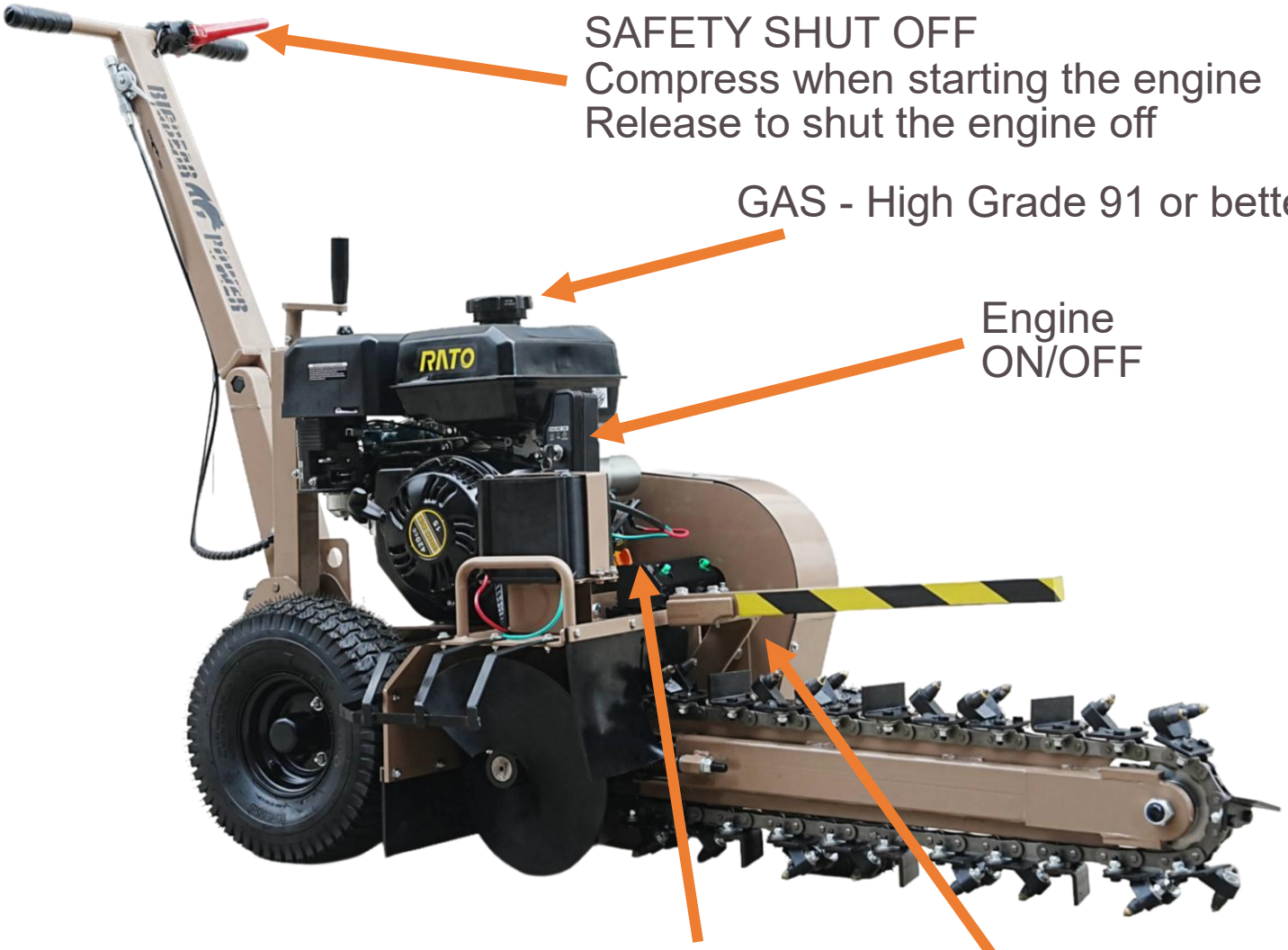
## INSPECT AND SECURE ANY NEEDED LOOSE WIRING WITH TWIST TIES

**MISSING PARTS? CALL 725-274-6171 GX COMMERCIAL PARTS DEPT**

## STEP 13

## ADDING GAS AND OIL

Your Trencher has low oil protection. Will not start if the oil is too low, and will protect the engine. ADD OIL DURING ASSEMBLY




Use conventional 10W30 for the break-in period during the first 20 hours.

Change oil after first 20 hours to 10W30 Mobil One or equivalent full synthetic oil and change after 150 hours. 15hp - 420cc requires 1.1L

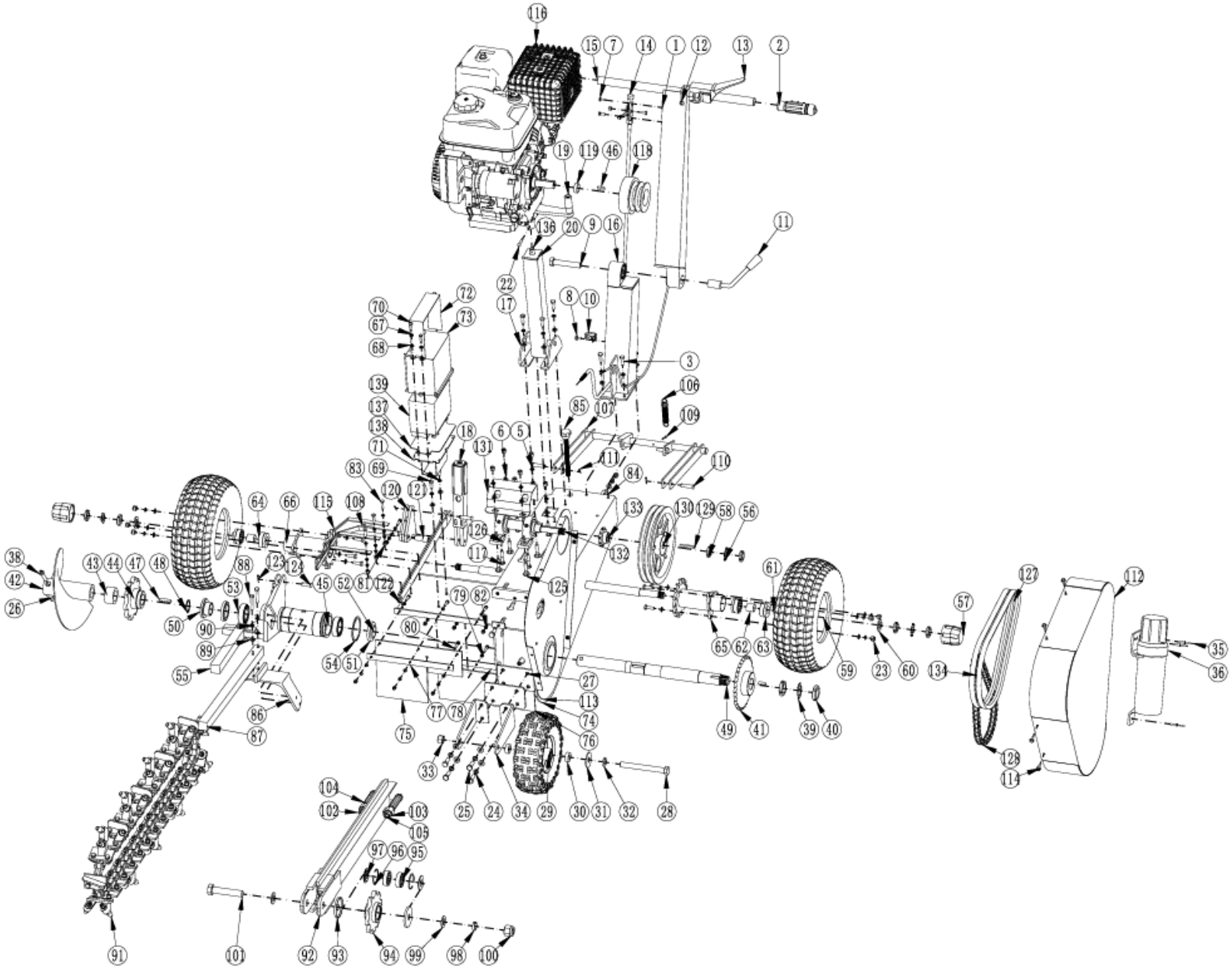
NLGI 3 grease is recommended for all grease zerks and shaft bearings

**MISSING PARTS? CALL 725-274-6171 GX COMMERCIAL PARTS DEPT**

## STEP 14 READING THE OPERATION AND SAFETY

1. Wear protective clothing, face, ear, eye and glove protection at all times
2. Check the safety shutoff on every use to ensure your safety
3. Always stay clear of the cutter even when the machine is off; the teeth can be hazardous if you're not paying attention. (Aka ankle biter)
4. Other persons in the area should be clear of the machine when running
5. DO NOT TRENCH UNDER THE INFLUENCE OF ALCOHOL OR DRUGS
6. Machine is designed for Trenching earth only.
7. Make sure there are no underground utilities where you are trenching.
8. Be aware that you might find tree roots and rocks when trenching. Remove them before continuing to trench.
9. Always stand behind the machine when the engine is running.
10. If you need to shut down the trencher during operation, simply release the safety shut-off, and the engine will shut off.
11. Remember, the muffler is hot, don't lay your gloves on the muffler.
12. If the machine is shaking, you might have a broken tooth. Shut it down immediately and inspect it.
13. Before you store your trencher, drain the gas, run it dry, and then place cardboard under the teeth to protect them from concrete chipping.
14. Check all hardware regularly as vibration may loosen hardware
15. **NEVER START WITH TRENCHER TEETH ON HARD SURFACES. START ENGINE WITH TEETH ON YARD AND FOREST GROUND ONLY.**

# BBT624 PARTS DRAWING



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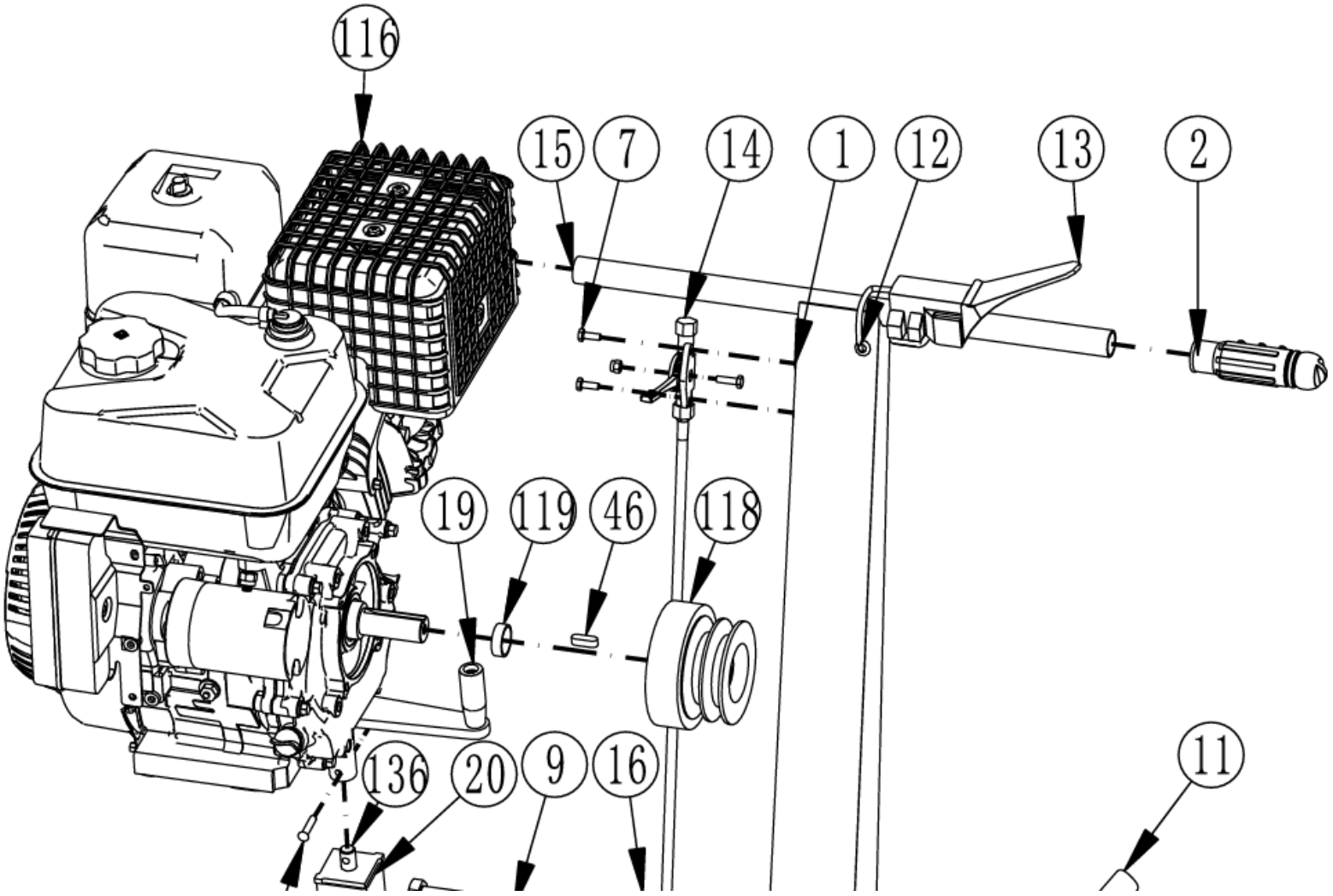

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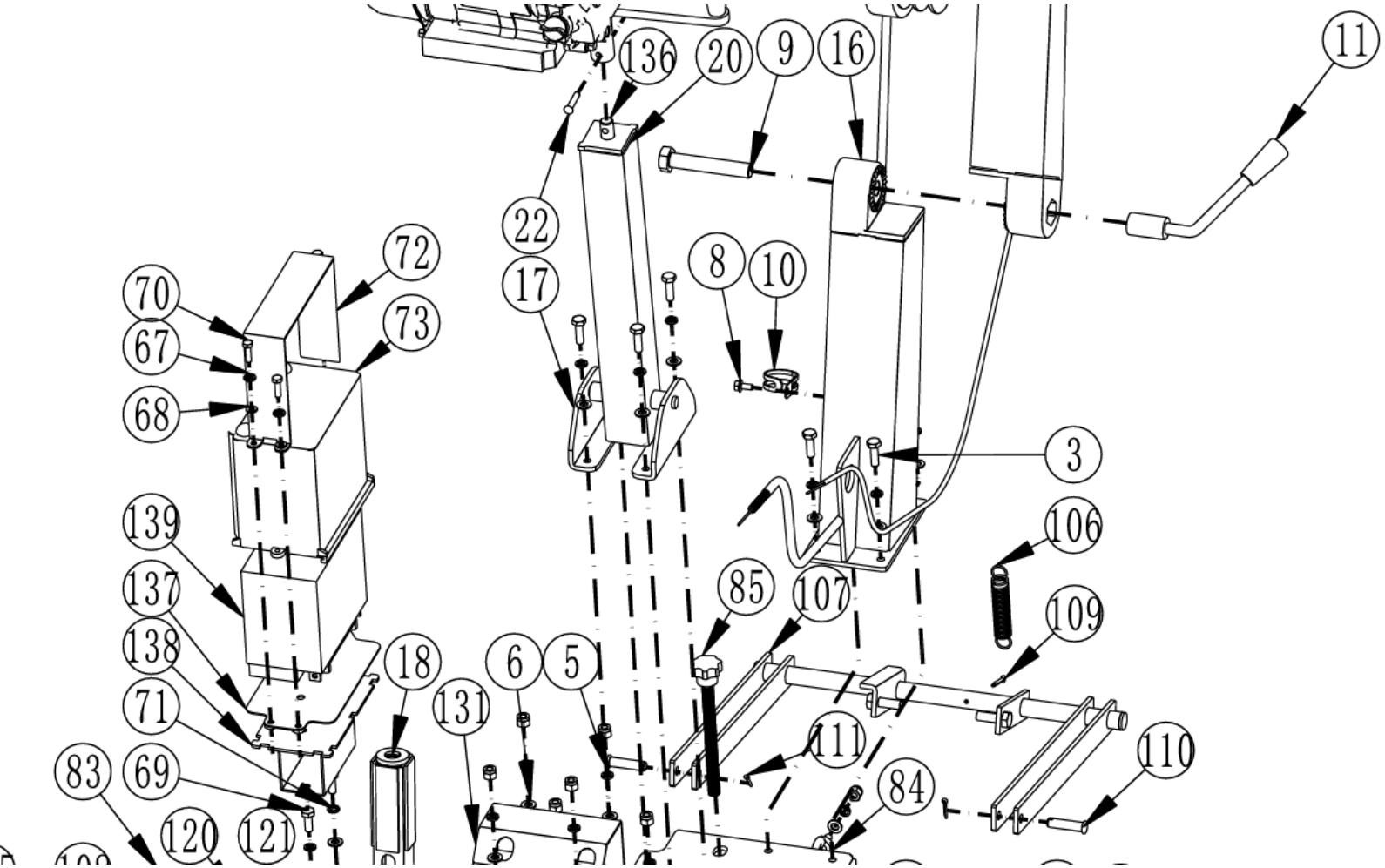

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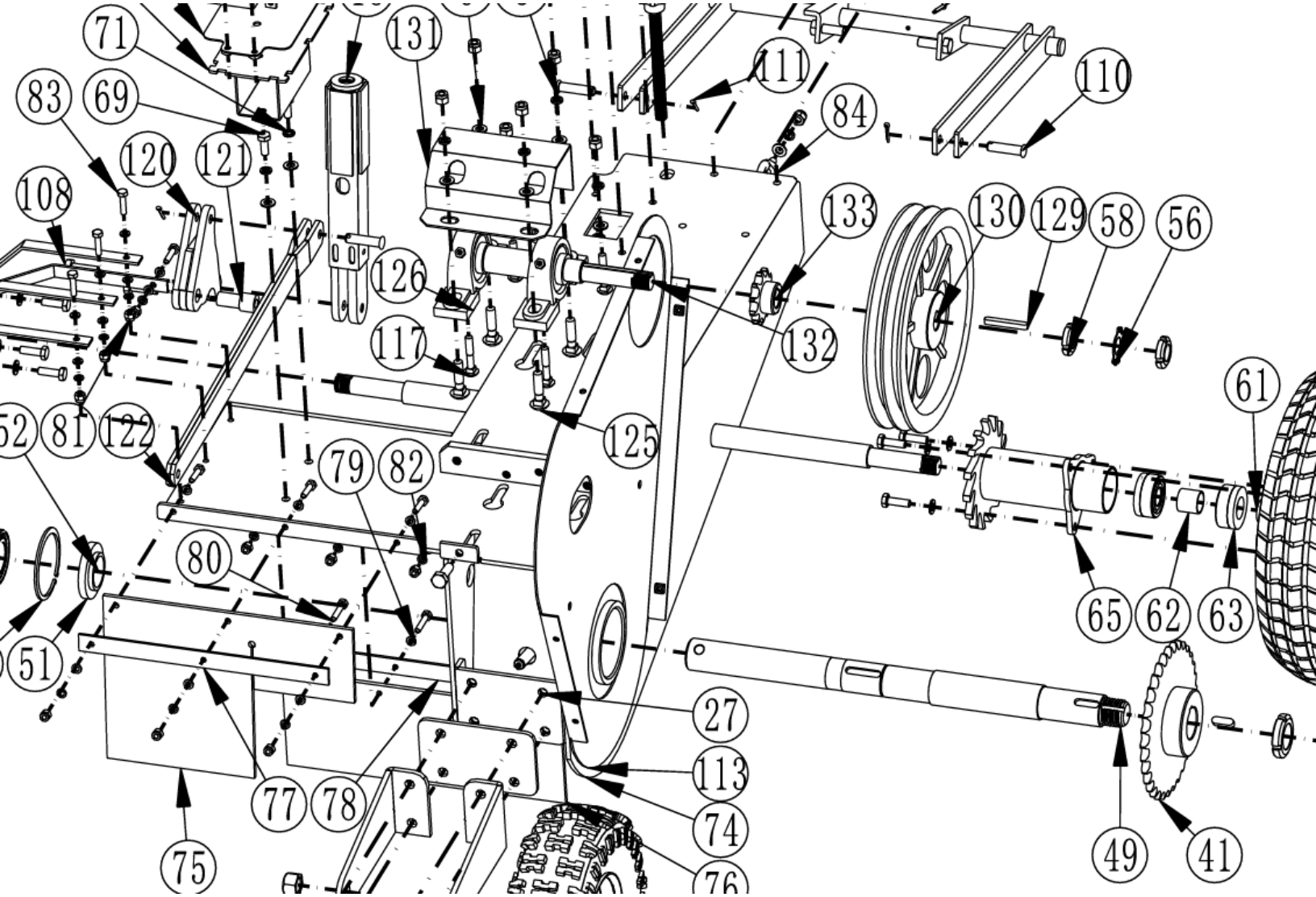

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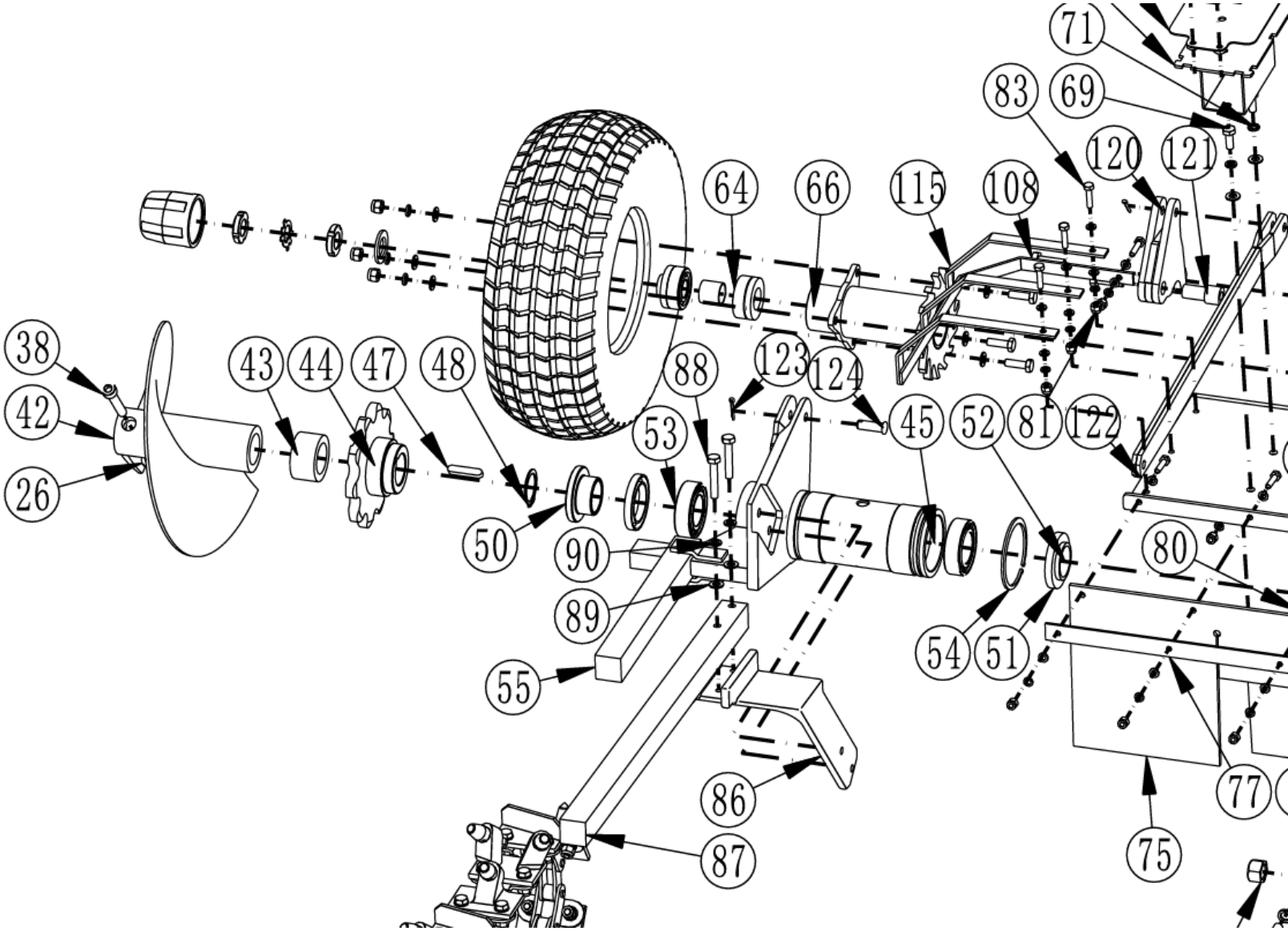

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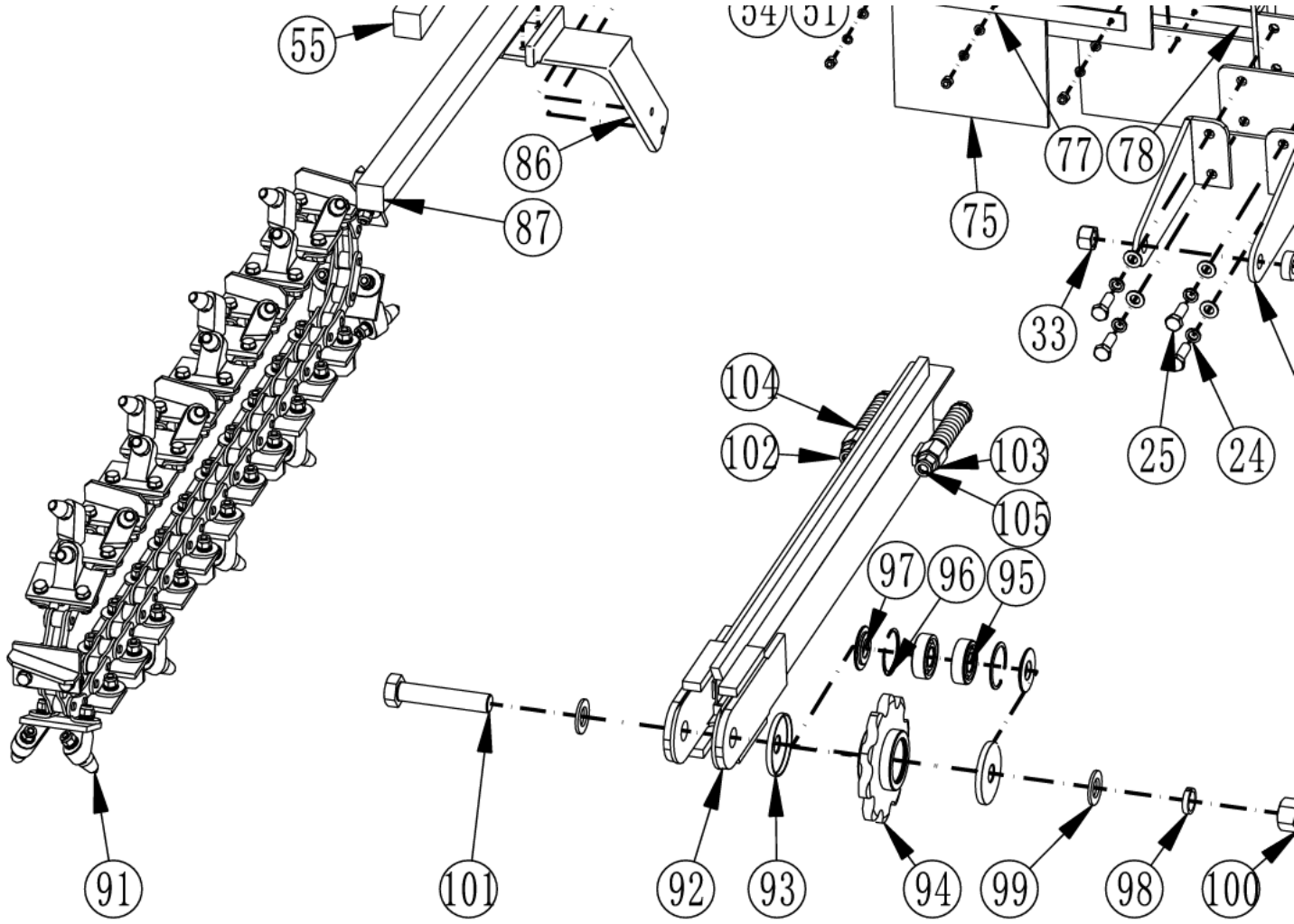

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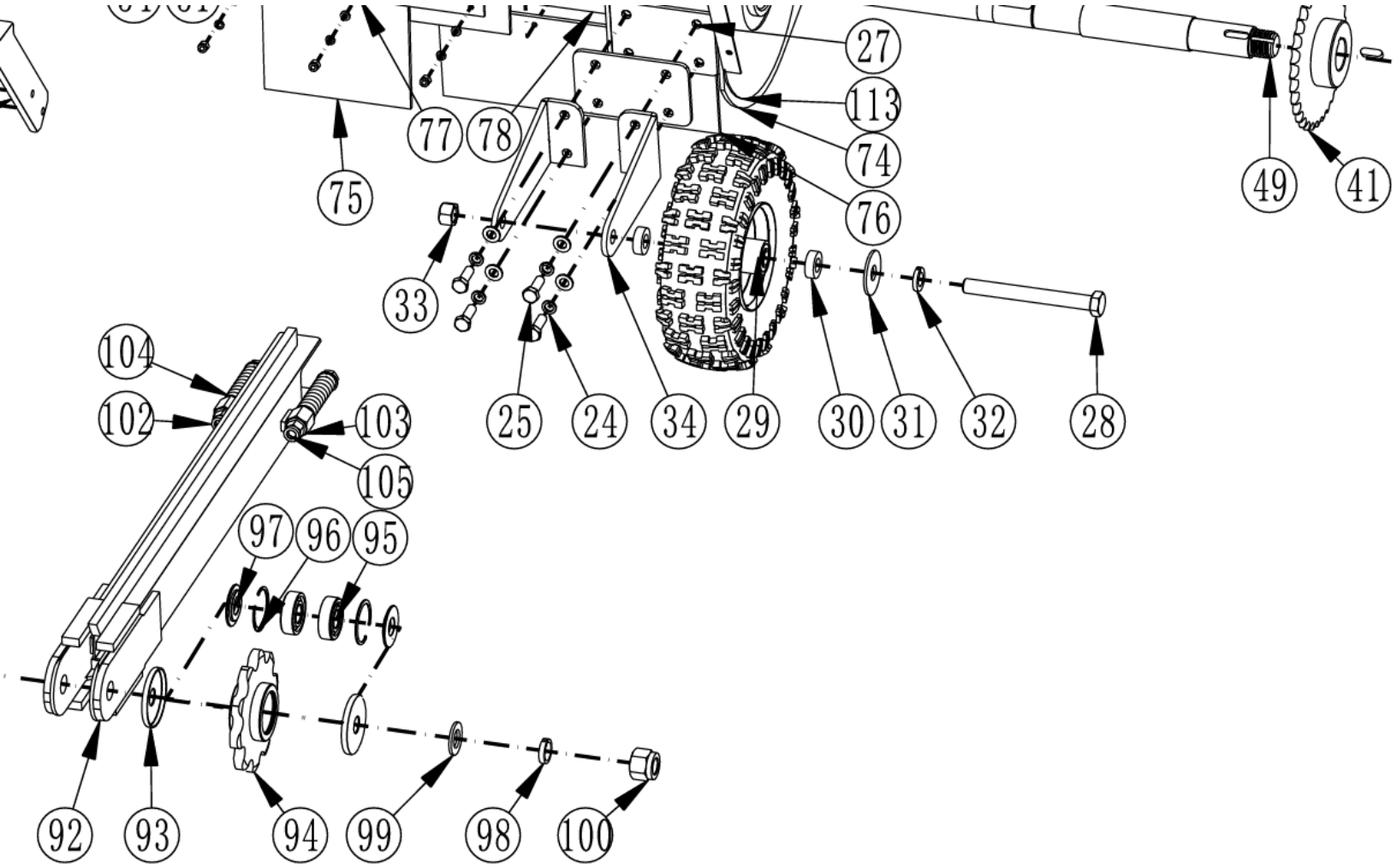

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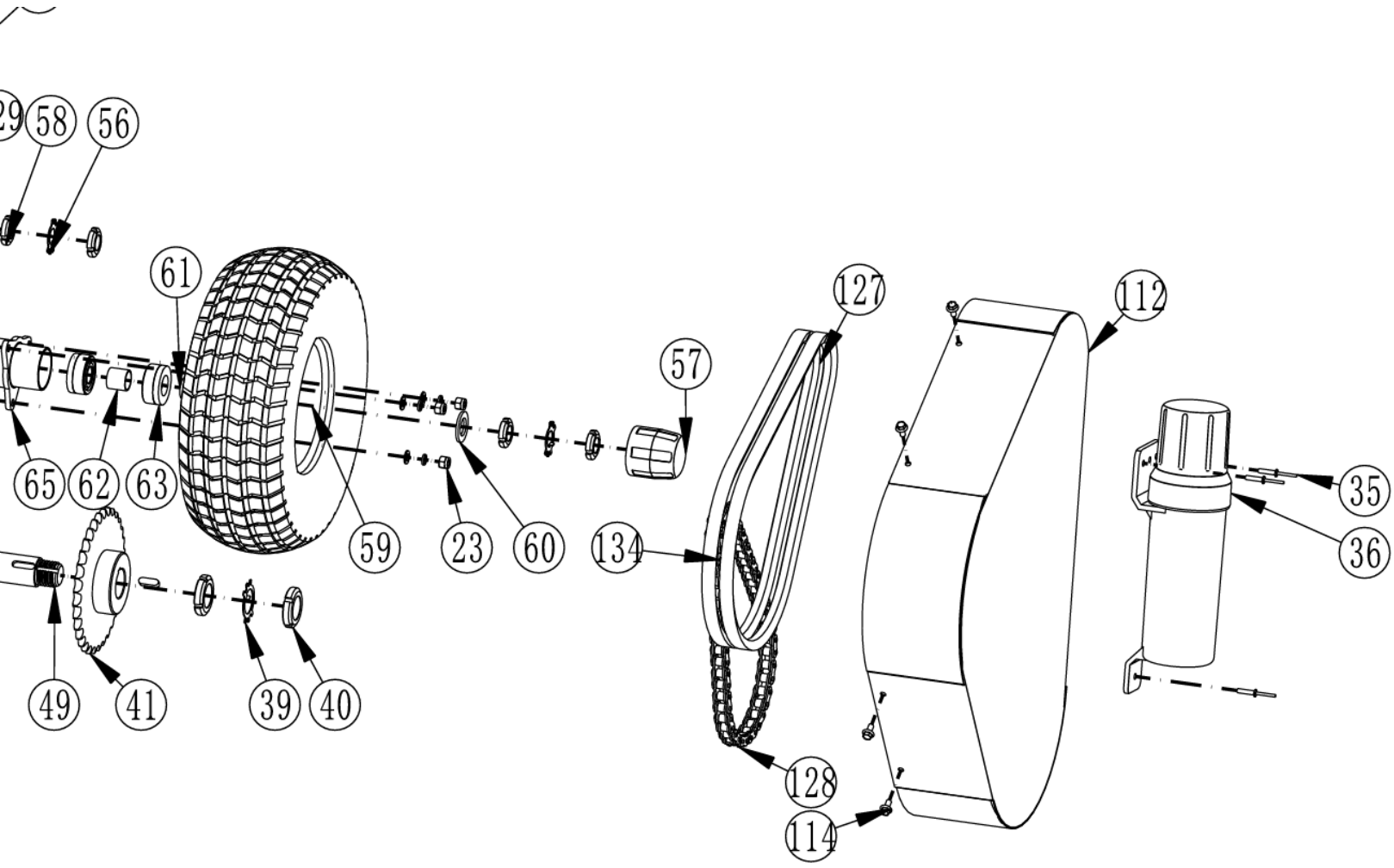

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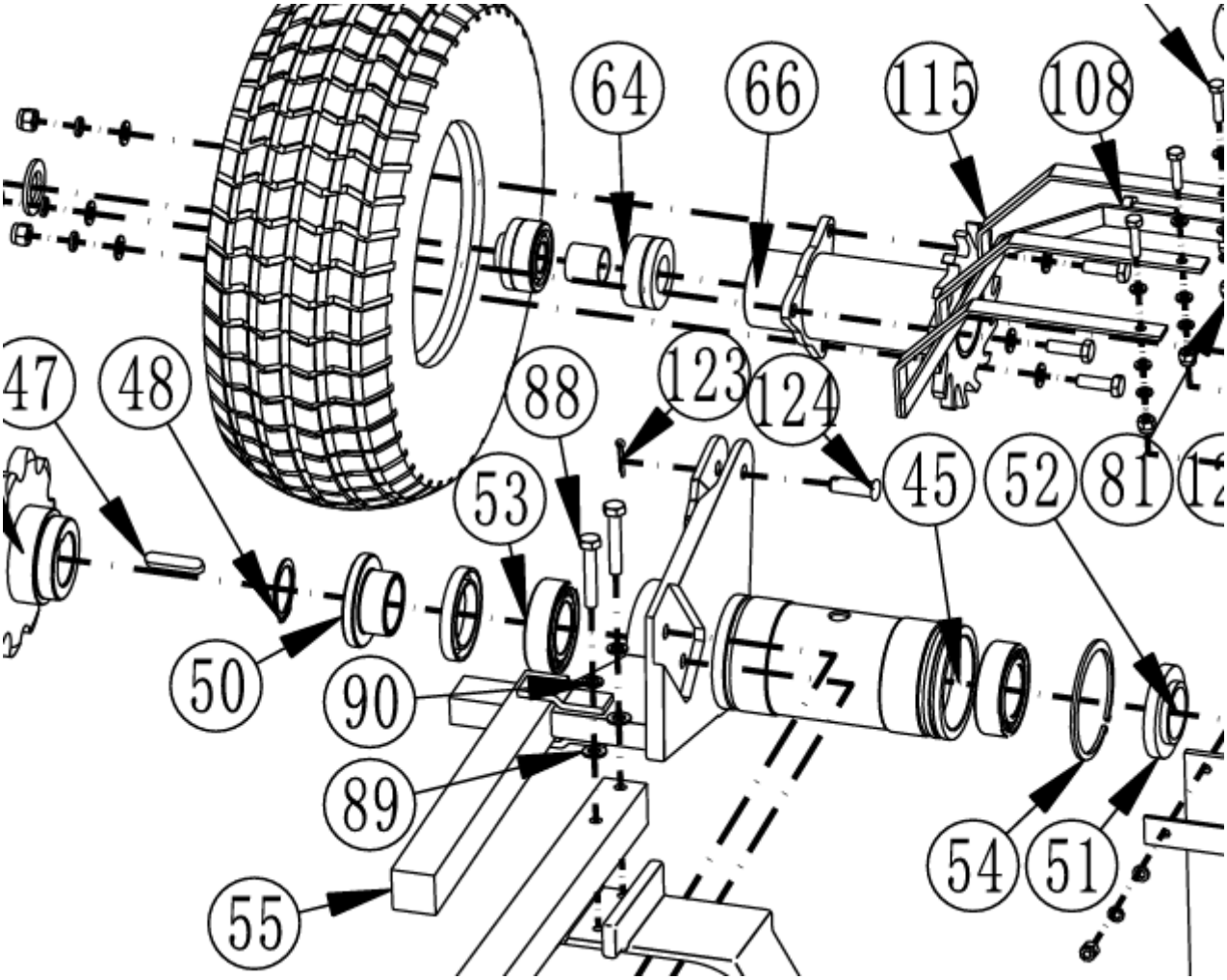

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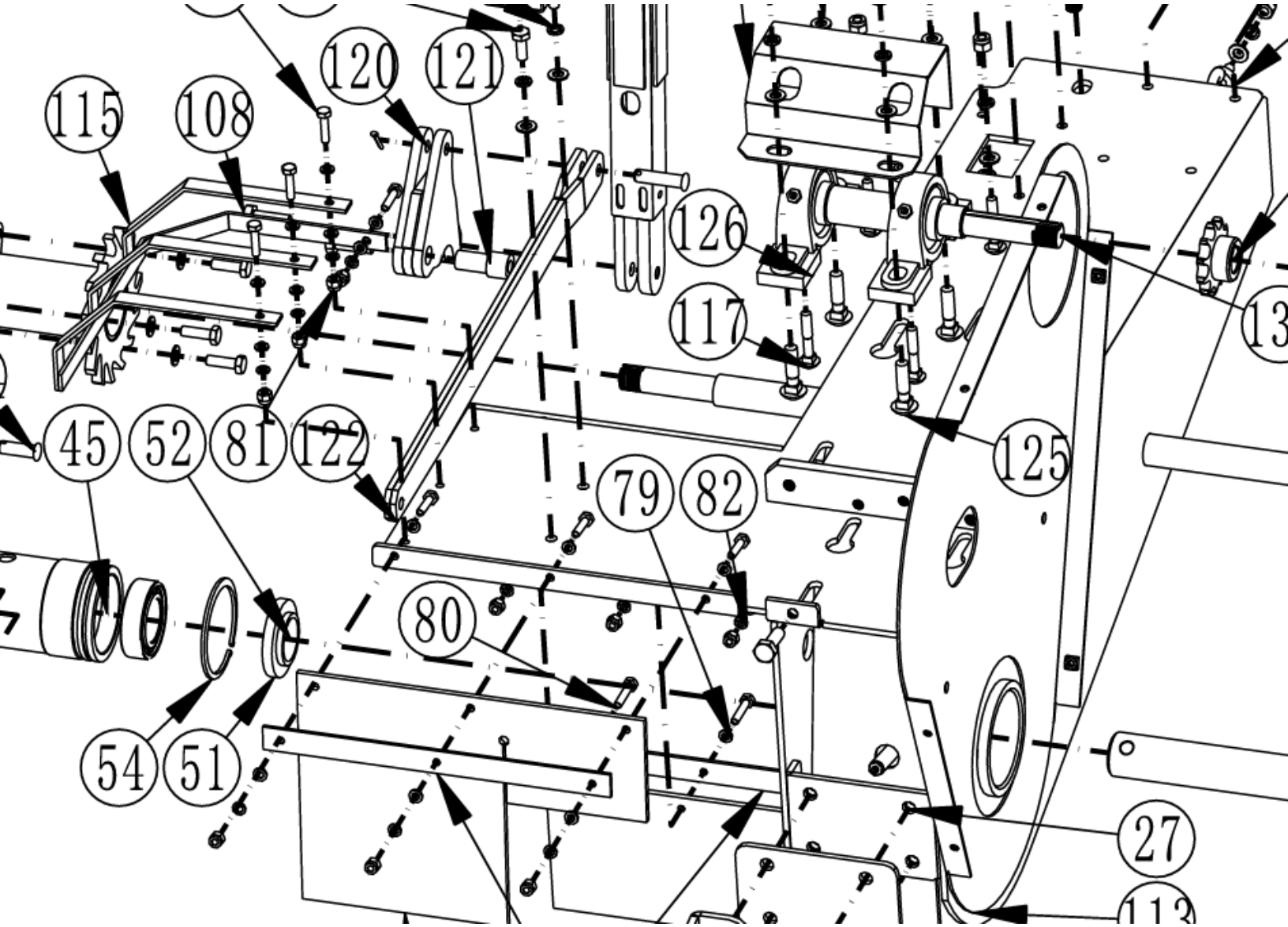

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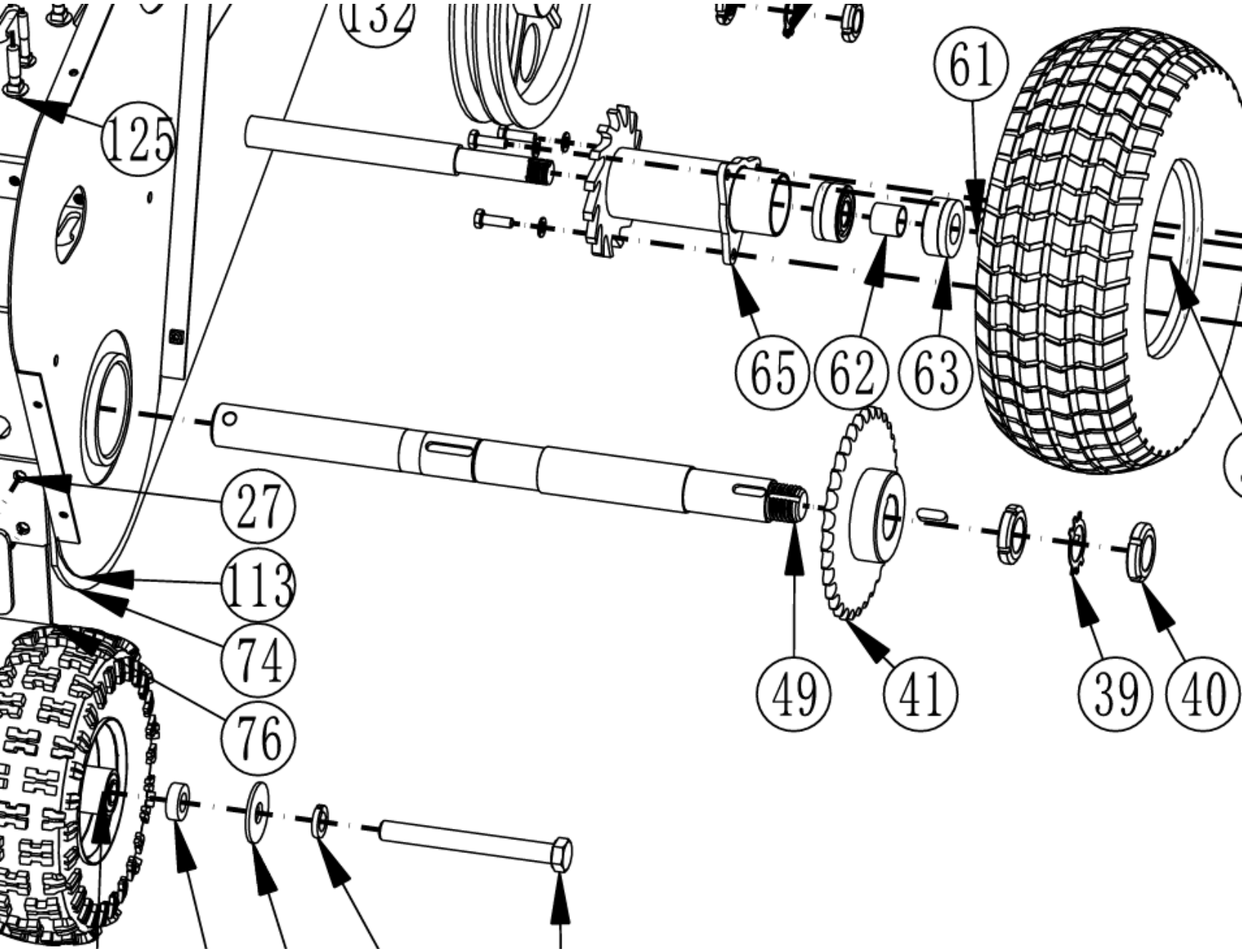

# BBT624 PARTS LIST

| PC NO | | QTY |
|---|---|---|
| 1 | M6 Rivet Nut | 2 |
| 2 | Handle Grip | 2 |
| 3 | GB-T5783-2000, M8X25 Hex Bolt | 14 |
| 4 | Protective Coil | 1 |
| 5 | GB93-87, 8 Spring Washer | 23 |
| 6 | GB-T95-2002, M8 Flat Washer | 29 |
| 7 | GB-T5783-2000, M6X16 Hex Bolt | 2 |
| 8 | GB5789-86, M6X12 Hex Flange Bolt | 1 |
| 9 | GB-T5780-2000, M16X90 Hex Bolt | 1 |
| 10 | Iron Cable Tie | 1 |
| 11 | Angle Adjustment Handle Assembly | 1 |
| 12 | 11 Protective Coil | 1 |
| 13 | Flameout Switch | 1 |
| 14 | Throttle Switch | 1 |
| 15 | Upper Armrest Welded Assembly | 1 |
| 16 | Lower Armrest Welded Part | 1 |
| 17 | Bearing Bushing Support Plate | 2 |
| 18 | Lifting Rod Welded Part | 1 |
| 19 | Rocker Arm Assembly | 1 |
| 20 | Height Adjustment Frame Welded Assembly | 1 |
| 21 | GB-T91-2000, 1.8×16 Split Pin | 1 |
| 22 | GB882-88 Type B Pin Shaft 6×30 | 1 |
| 23 | GB-T6182-2000, M8×1.25 Lock Nut | 19 |
| 24 | GB93-87, 10 Spring Washer | 5 |
| 25 | Hex Head Bolt Full Thread Grade C M10×30_STEP | 4 |
| 26 | GB-T95-2002, M10 Flat Washer | 5 |
| 27 | GB39-1988, M10 Weld Nut | 4 |
| 28 | GB/T5781-2000 Hex Head Bolt Full Thread Grade C M16×150_STEP | 1 |
| 29 | 4.1-4 Tire | 1 |
| 30 | 16×30×10 Spacer Sleeve | 2 |
| 31 | GB/T96.2-2002 Large Washer Grade C 16×3_STEP | 1 |
| 32 | GB/T7244-1987 Heavy Duty Spring Washer_Assembly_16×4.8_STEP | 1 |
| 33 | GB/T6185-2000 Type 2 All Metal Hex Lock Nut M16_STEP | 1 |
| 34 | Front Wheel Fixing Frame Welded Assembly | 1 |

# BBT624 PARTS LIST

| PC NO | | QTY |
|---|---|---|
| 35 | Diameter 5 Aluminum Rivet | 3 |
| 36 | Tool Cup | 1 |
| 37 | GB-T6182-2000, M10×1.5 Lock Nut | 1 |
| 38 | GB-T70.1-2000, M10×60 Hex Socket Head Cap Screw | 1 |
| 39 | M30 Round Nut Lock Washer | 1 |
| 40 | GB812-88, M30×1.5 Round Nut | 2 |
| 41 | Driven Sprocket | 1 |
| 42 | Ridger Welded Assembly | 1 |
| 43 | Ridger Spacer Sleeve | 1 |
| 44 | Driving Ditching Sprocket | 1 |
| 45 | O-Ring Seal 70 | 2 |
| 46 | 8×7×25 Flat Key | 2 |
| 47 | 8×7×40 Flat Key | 1 |
| 48 | 35 External Circlip | 1 |
| 49 | Large Sprocket Shaft | 1 |
| 50 | Tapered Bearing Flange Spacer Sleeve | 1 |
| 51 | 42 Sealing Ring | 2 |
| 52 | Large Sprocket Spacer Sleeve | 1 |
| 53 | 32007 Tapered Roller Bearing | 2 |
| 54 | 76 External Circlip | 1 |
| 55 | Sprocket Shaft Plate Welded Assembly | 1 |
| 56 | M20 Round Nut Lock Washer | 3 |
| 57 | Wheel Hub Rubber Cover | 2 |
| 58 | GB812-88, M20×1.5 Round Nut | 6 |
| 59 | 15×6×6 Tire | 2 |
| 60 | GB-T95-2002, M20 Flat Washer | 2 |
| 61 | Tire Bearing Outer Spacer Sleeve | 2 |
| 62 | Tire Bearing Inner Spacer Sleeve | 2 |
| 63 | 47 Sealing Ring | 4 |
| 64 | GB-T292_AC-1994, 6204_AC Deep Groove Ball Bearing | 4 |
| 65 | Left Ratchet Tooth Welded Assembly | 1 |
| 66 | Right Ratchet Tooth Welded Assembly 1 | 1 |
| 67 | Spring Washer 2 M6 | 5 |
| 68 | Flat Washer M6 | 3 |

# BBT624 PARTS LIST

| PC NO | | QTY |
|---|---|---|
| 69 | Bolt 2 M8X20 | 2 |
| 70 | Bolt M6X20 | 3 |
| 71 | Flat Washer 2 M8 | 2 |
| 72 | Press Strip | 1 |
| 73 | Battery Box | 1 |
| 74 | Frame Welded Assembly | 1 |
| 75 | Ridger Upper Mudguard | 1 |
| 76 | Ridger Lower Mudguard | 1 |
| 77 | 3-Hole Rubber Press Strip | 1 |
| 78 | 4-Hole Rubber Press Strip | 1 |
| 79 | GB-T848-2002,M6 | 22 |
| 80 | GB-T5781-2000,M6X30 | 4 |
| 81 | GB-T6182-2000,M6X1 | 11 |
| 82 | GB859-87,6 | 11 |
| 83 | GB-T5781-2000,M6X25 | 7 |
| 84 | GB825_A-88,M8 | 1 |
| 85 | M12×140 Bakelite Bolt | 1 |
| 86 | Ditching Chain Cover Support Frame | 1 |
| 87 | Ditching Chain Cover Square Steel | 1 |
| 88 | GB-T5781-2000,M8X45 | 2 |
| 89 | GB-T95-2002,M8 | 2 |
| 90 | GB859-87,8 | 2 |
| 91 | Ditching Chain | 1 |
| 92 | Chain Frame Welded Assembly | 1 |
| 93 | Driven Ditching Sprocket Outer Cover | 2 |
| 94 | Driven Ditching Sprocket | 1 |
| 95 | GB-T292_AC-1994, 7204_AC Angular Contact Ball Bearing | 2 |
| 96 | 47 Internal Circlip | 2 |
| 97 | Driven Sprocket Spacer Sleeve | 2 |
| 98 | GB7244-87, 20 Heavy Duty Spring Washer | 1 |
| 99 | GB-T97.1-2002, M20 Flat Washer | 2 |
| 100 | GB-T6182-2000, M20×2.5 Lock Nut | 1 |
| 101 | GB-T5781-2000, M20×100 Hex Head Bolt Full Thread Grade C | 1 |
| 102 | GB-T6182-2000, M12×1.75 Lock Nut | 2 |

# BBT624 PARTS LIST

| PC NO | | QTY |
|---|---|---|
| 103 | GB-T95-2002, M12 Flat Washer | 6 |
| 104 | 14×22×76 Chain Frame Compression Spring | 2 |
| 105 | GB-T5780-2000, M12×120 Hex Head Bolt Half Thread | 2 |
| 106 | 2×18×105 Backstop Frame Tension Spring | 1 |
| 107 | Backstop Frame Welded Assembly | 1 |
| 108 | GB-T5780-2000, M10×30 Hex Head Bolt Half Thread | 5 |
| 109 | GB-T91-2000, 3.7×28 Split Pin | 1 |
| 110 | GB882_B-86, 10×40 Type B Pin Shaft | 3 |
| 111 | GB-T91-2000, 2.9×16 Split Pin | 2 |
| 112 | Belt Cover Outer Shell Welded Part | 1 |
| 113 | Belt Cover Inner Plate Welded Part 1 | 1 |
| 114 | GB/T5789-1986 Hex Head Flange Bolt M6×12 | 6 |
| 115 | Ridger Protective Cover Welded Assembly | 1 |
| 116 | Dajiang DH420E | 1 |
| 117 | GB12-88, M8×45 Square Neck Large Pan Head Bolt | 4 |
| 118 | Clutch | 1 |
| 119 | 26×30×9.5 Spacer Sleeve | 1 |
| 120 | Swing Arm Welded Assembly | 1 |
| 121 | Rotating Block Spacer Sleeve | 1 |
| 122 | Gear Shift Extension Rod Long Plate Welded Part | 1 |
| 123 | GB-T91-2000, 2.9×20 Split Pin | 2 |
| 124 | GB882_B-86, 10×30 Type B Pin Shaft | 1 |
| 125 | GB12-88, M10×40 Square Neck Large Pan Head Bolt | 4 |
| 126 | P205 Pillow Block Bearing | 2 |
| 127 | Standard V-Belt | 2 |
| 128 | 10A Roller Chain Link | 1 |
| 129 | 6×6×50 Flat Key | 1 |
| 130 | Pulley | 1 |
| 131 | Bearing Housing Cover Welded Assembly | 1 |
| 132 | Pulley Shaft | 1 |
| 133 | Driving Sprocket | 1 |
| 134 | 10A Roller Closed Chain Link | 1 |
| 135 | GB-T276_60000_2Z-1994, 6002_2Z Deep Groove Ball Bearing | 1 |
| 136 | Trapezoidal Screw Rod | 1 |
| 137 | Battery Cover Welded Assembly | 1 |
| 138 | Battery Mounting Bracket Welded Assembly | 1 |
| 139 | 6DM14 Battery | 1 |

# BIG BEAR POWER

**WE BUILD TOOLS, NOT TOYS,**
FOR HARDWORKING AMERICANS.

We stand behind every machine we build with warranties that have your back. Our customer service is rated #1 in the country because we answer the phone, we listen, and we take care of our customers.

When you call, you're not just a number—you're part of the Big Bear family. If you ever have an issue, big or small, call us anytime. We're here to help and we'll make it right.

**WE BUILD IT. WE STAND BEHIND IT. WE'VE GOT YOUR BACK.**

## EXTENDED 5-YR LIMITED GAS-POWERED WARRANTY

| | |
|---|---|
| **ENGINES:** | **RATO ENGINES** – GX Commercial LLC will provide OEM parts or replace the engine at our discretion for 5 years from the purchase date, at no cost to the original owner, with proof of purchase receipt. The warranty is not transferable.<br>**OTHER ENGINE BRANDS** – are covered under their original OEM warranty. The warranty is not transferable. |
| **CHASSIS:** | GX Commercial LLC will provide replacement parts to the original purchaser for 5 years for defective chassis components. |

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|---|---|
| **WARRANTY EXCLUSIONS:** | Tires, Cutting Blades, Cutting Teeth, Labor, Anvils, Belts, Hardware, 12V Batteries, wiring, damage, misuse, accessories, shipping damage, including minor scratches and dents. |
| **FOREST READY KITS:** | Promotional accessories, when provided, including Oil funnels, hand tools, files, ear protection, safety glasses, gloves, helmets, and Lithium chainsaws, are excluded from warranty. |

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|---|---|
| **CHAINSAWS:** | 2 yr warranty when purchased separately. GX Commercial LLC will provide, at our discretion, parts or replacements, at no cost for the original owner, with proof of purchase. The warranty is not transferable. |

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CUSTOMER SERVICE
725-274-6171
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