



BIG BEAR POWER

GX COMMERCIAL LLC

4301 S VALLEY VIEW BLVD. STE 10 AND 11

LAS VEGAS, NV 89103

BBG2X2 BEAR CLAW ASSEMBLY MANUAL



REVISED 10-19-24

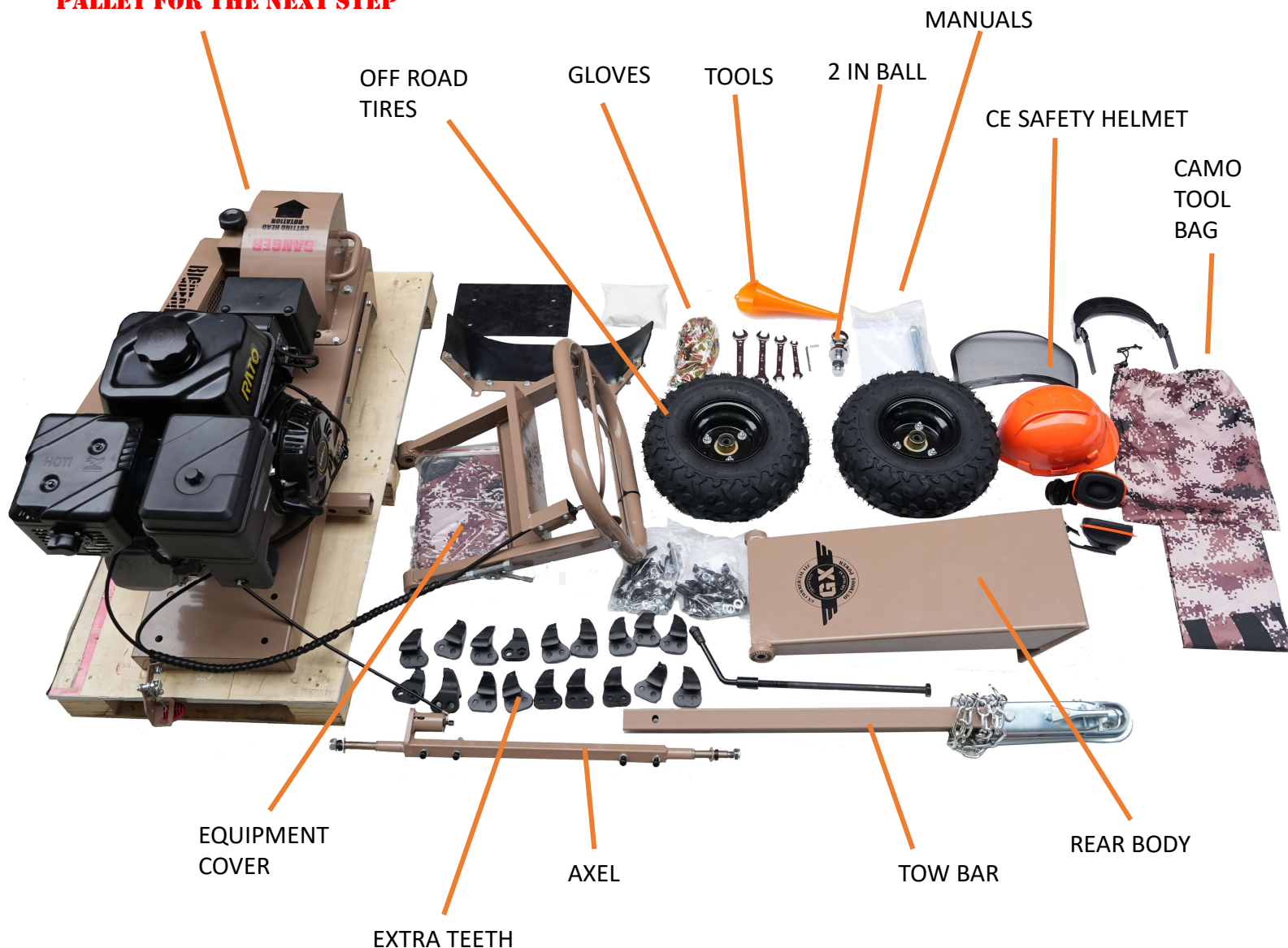
STEP 1

PART INSPECTION

1. REMOVE THE TOP AND SIDES AND PARTS FROM THE CRATE
2. UNPACK ALL PARTS AND CHECK THAT YOU HAVE EVERYTHING.
3. **LEAVE THE HEAVY ENGINE AND FRAME ON THE PALLET**
4. **BOLTS ARE PRE-INSTALLED IN MOUNTING LOCATIONS, CHECK PACKAGING IN CASE ANY HAVE VIBRATED LOOSE DURING SHIPPING.**

ENGINE AND CHASSIS

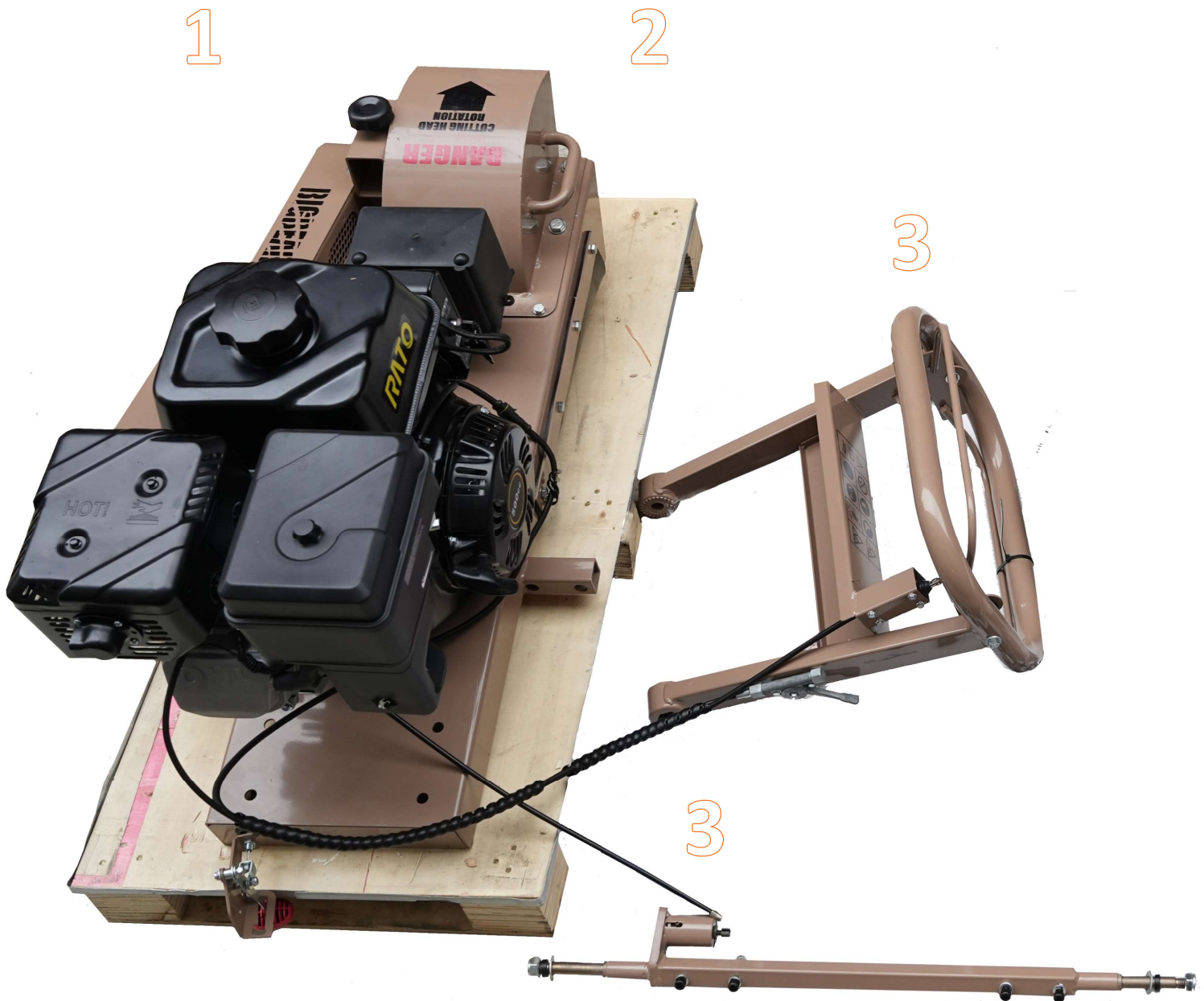
LEAVE THE HEAVY ENGINE FRAME ASSEMBLY ON THE PALLET FOR THE NEXT STEP



STEP 2

PRE-DEPLOYMENT

1. LEAVE THE ENGINE CHASSIS ASSEMBLY ON THE PALLET
2. WE RECOMMEND YOU ENLIST A HELPER TO ASSEMBLE THIS MACHINE
3. NOTE THAT THE AXLE AND THE CONTROL HANDLE CABLES ARE PRE-CONNECTED AT THE FACTORY. LEAVE CONNECTED DURING ASSEMBLY



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

STEP 3

ASSEMBLE THE AXLE TO THE FRAME

1. REMOVE THE MOUNTING HARDWARE FROM THE AXLE AND INSERT INTO THE FRAME ALIGNING THE MOUNTING HOLES.
2. NOTE THE POSITION OF THE BRAKE LEVER FACING REAR ON THE ROADSIDE.
3. INSTALL THE MOUNTING HARDWARE

1

SLIDE THE
AXLE INTO
THE FRAME

REMOVE THE
MOUNTING
HARDWARE



NOTE BRAKE
POSITION

2



3

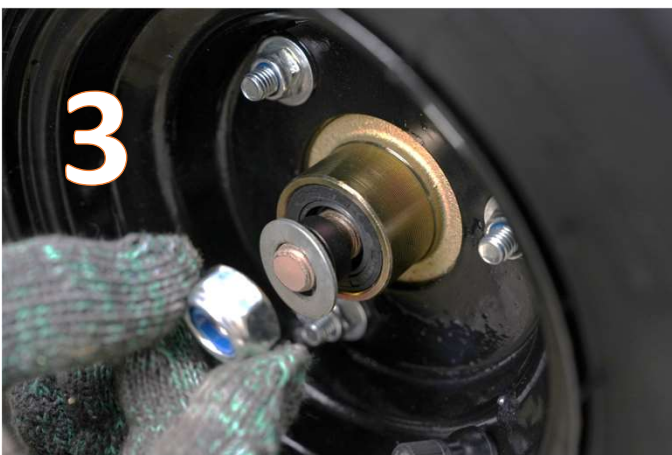
INSTALL AXLE
BOLTS BOTH
SIDES INTO
THE FRAME

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STEP 4

INSTALL THE ROADSIDE BRAKE WHEEL

- 1. IMPORTANT MOUNT THE WHEEL WITH THE BRAKE DISK ON THE ROADSIDE.**
- 2. INSTALL RIM ONTO THE AXLE AND INSTALL WASHER**
- 3. INSTALL THE LOCK NUT, AND TIGHTEN IT.**
- 4. ENSURING THE WHEEL SPINS FREELY**

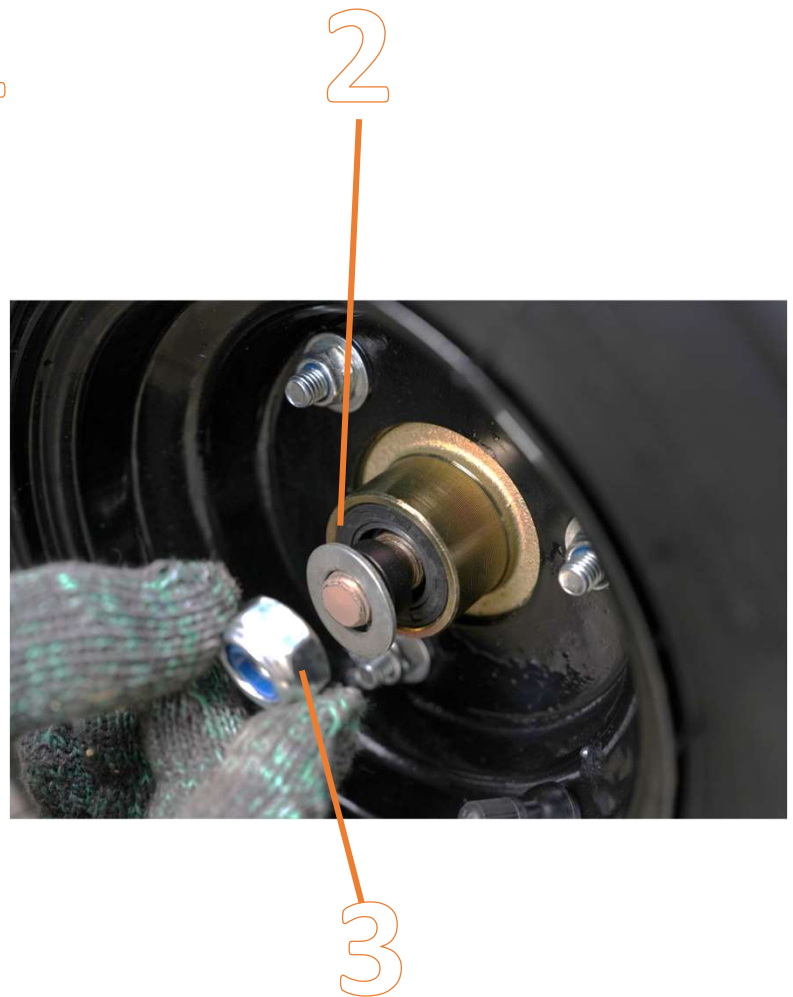
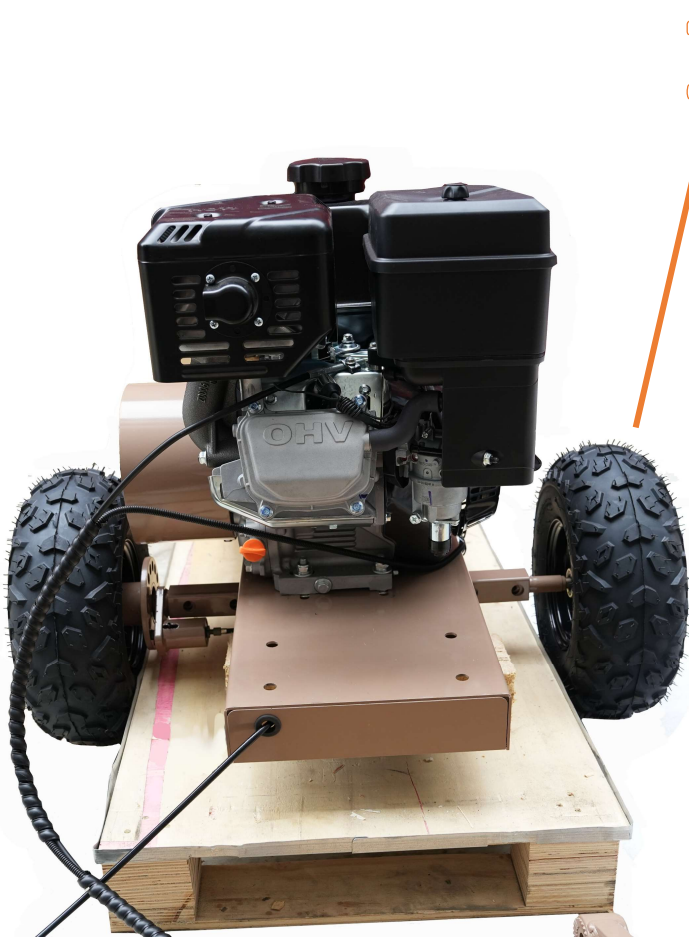


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STEP 5

INSTALL THE CURBSIDE TIRE

- 1. INSTALL THE CURBSIDE TIRE ONTO THE AXLE**
- 2. INSTALL THE WASHER AND TIGHTEN THE LOCKING NUT**
- 3. ENSURE THAT THE WHEEL SPINS FREELY**



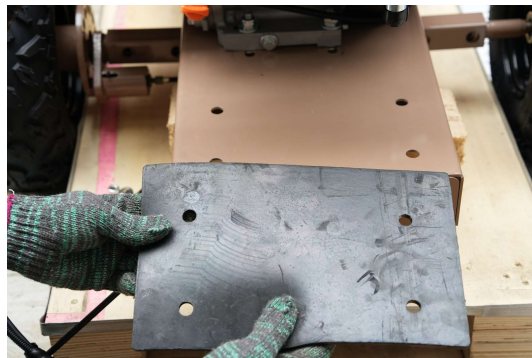
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STEP 6

INSTALL THE PIVOT BODY

1. **INSTALL THE RUBBER VIBRATION PAD AS SHOWN**
2. **REMOVE AND PREPARE THE HARDWARE FOR MOUNTING**
3. **POSITION THE BODY AS SHOWN INTO PLACE, A HELPER IS SUGGESTED**
4. **TIGHTEN ALL HARDWARE SECURELY**

1



2



3



4



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STEP 7

INSTALL THE REAR RUBBER CHIP SHIELD

1. **TURN MACHINE ONTO ITS SIDE AS SHOWN, CURBSIDE DOWN.**
2. **INSTALL THE REAR CHIP SHIELD AS SHOWN USING THE HARDWARE PROVIDED**
3. **PULL THE SIDE CHIP SHIELD INTO A STRAIGHT POSITION AS SHOWN**
4. **RETURN THE MACHINE TO LEVEL AND REMOVE THE FRONT OIL FILLER CAP. ADD 1.1L OF 10W-30 MOBILE 1 OR EQUIVALENT. FILL TO FULL MARK, THIS ENGINE HAS LOW OIL SHUTOFF PROTECTION AND WILL NOT START IF LOW ON OIL. THERE ARE 2 OIL FILL POINTS ON THIS ENGINE, EITHER ONE IS OKAY TO USE.**



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

STEP 8

INSTALL OPERATORS HANDLE

1. **THE MANUAL HOLDER POSITION IS ON TOP WHEN INSTALLING THE HANDLE. THIS TUBE IS ALSO GREAT FOR WRENCHES.**
2. **INSERT THE LONG BOLT FROM THE ROADSIDE**
3. **POSITION THE CONTROL CABLES TO GO UNDER THE ADJUSTMENT HANDLE**
4. **ASSEMBLE THE ADJUSTMENT HANDLE ON THE CURBSIDE**



3
TIP-
TIGHTEN
CENTER
NUT FOR
THROTTLE
TENSION



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

STEP 9

MOUNTING THE BRAKE CONTROL

- 1. MOUNT THE BRAKE CONTROL ON THE ROADSIDE OF THE HANDLE**
- 2. INSTALL USING THE HARDWARE PROVIDED**
 - **ENGAGE THE PIN BRAKE ON THE ROADSIDE WHEEL USING THE LEVER.**
 - **LOCKING ONE WHEEL IS OPTIONAL WHEN PIVOT GRINDING.**

1



2



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

OSHA SAFETY COMPLIANCE

According to OSHA guidelines, when operating a stump grinder, operators must wear appropriate personal protective equipment (PPE) including eye protection (safety glasses or face shield), hearing protection (earplugs or earmuffs), a hard hat, gloves, and sturdy work boots; ensure the work area is clear of obstacles and bystanders; and always follow the manufacturer's safety instructions and warnings displayed on the machine, which generally align with ANSI standards for stump grinder safety.

Key aspects of stump grinder safety as per OSHA standards:

- Proper PPE:**

- Eye protection: Safety glasses with side shields or a full-face shield.
- Hearing protection: Earplugs or earmuffs.
- Head protection: Hard hat
- Hand protection: Gloves
- Foot protection: Sturdy work boots

- Work area preparation:**

- Clear the area around the stump of debris, rocks, and any potential hazards.
- Ensure bystanders maintain a safe distance from the operating machine.
- Check for underground utilities before grinding.

- Machine operation:**

- Only operate the stump grinder in daylight or well-lit conditions.
- Follow the manufacturer's instructions for starting, stopping, and adjusting the machine.
- Maintain proper posture and body position while operating.

- Machine maintenance:**

- Regularly inspect the stump grinder for damage, worn parts, and proper guard function.
- Keep the cutting blades sharp and properly secured.
- Address any malfunctions promptly and do not operate the machine if issues are present.

Important points to remember:

- No loose clothing or jewelry:**

- Avoid wearing loose clothing, jewelry, or long hair that could get caught in the moving parts of the machine.

- Training and awareness:**

- Ensure all operators are properly trained in safe stump grinder operation and understand all safety procedures.

- Specific safety features:**

- Check if the stump grinder has a shutoff bar safety protection system and utilize them appropriately.

STARTING AND OPERATIONAL INSTRUCTIONS

GX COMMERCIAL RECOMMENDS: Always follow the OSHA safety guidelines

Starting the Engine:

•HEAVY DUTY CLUTCH DRIVE:

- Always start your machine with cutting head on soil, never on concrete or in rocks.
- BE AWARE - Once the engine starts, the higher RPM will engage the clutch, and the cutter head will rotate.
- SET THE ENGINE TO **LOW RPM THROTTLE**
- TURN THE GAS ON (use 91 octane is recommended)
- FULL CHOKE
- OSHA SHUTOFF BAR HOLD TO RUN POSITION
- TURN ELECTRIC START KEY OR PULL RECOIL START
- ONCE THE ENGINE STARTS RAISE THE CUTTER OFF THE GROUND BEFORE INCREASING THE RPM
- Maintenance the Engine per the Engine manual and reach out to us at Bigbear Power for any help you need.

•STUMP GRINDING

- Clear the area around the stump of debris, rocks, and any potential hazards.
- Ensure bystanders maintain a safe distance from the operating machine.
- Check for underground utilities before grinding.
- ALWAYS STAND BEHIND THE MACHINE WHEN GRINDING
- GRIND LEFT TO RIGHT ON THE STUMP, KEEPING BOTH HANDS ON THE SAFETY SHUT OFF BAR
- PLUNGE CUTTING THE STUMP FROM TOP DOWN ACHIEVES EXTRA WIDE CUTTER PATH.
- PLUNGE CUT FROM THE TOP THEN PUSH THE CUTTERS THOUGH TO THE OTHER SIDE OF THE STUMP.
- MOVE OVER CUTTER PATH TO THE RIGHT AND REPEAT PLUNGE CUTTING METHOD
- LET THE GRINDER DO THE WORK; LET THE TEETH ON THE BEAR CLAW DIG IN AND PULL THROUGH THE CUT

•MACHINE OPERATION

- WHEN GRINDING SHUT DOWN IF EXTREME VIBRATION IS NOTICED. YOU MAY HAVE A LOOSE TOOTH.
- REPAIR OR REPLACE THE TOOTH BEFORE CONTINUING.
- THE BIGBEAR BEAR CLAW SHOULD RUN SMOOTH AS HONEY WHEN EVERYTHING IS PROPER

•TOWING

- Max towing at 30MPH – off road only
- Trailer the grinder for street towing.

CARE INSTRUCTIONS

•BELTS

- Replace your belts annually
- Only use GX Commercial Bigbear OEM High-Performance V Belts sold on our web store
- Remove your belt cover and clean any chips or dust before each grinding job; your belts will last longer.
- Remove the center nut from the roadside wheel and slide tire outwards on the axle to make extra clearance for the belt cover to be removed. The Heavy Duty Racing Clutch inside the cover is very wide and powerful.
- While the cover is off, inspect the clutch, main drive pulley, and belts. Good idea to check before heading to the job site.



•STUMP GRINDING

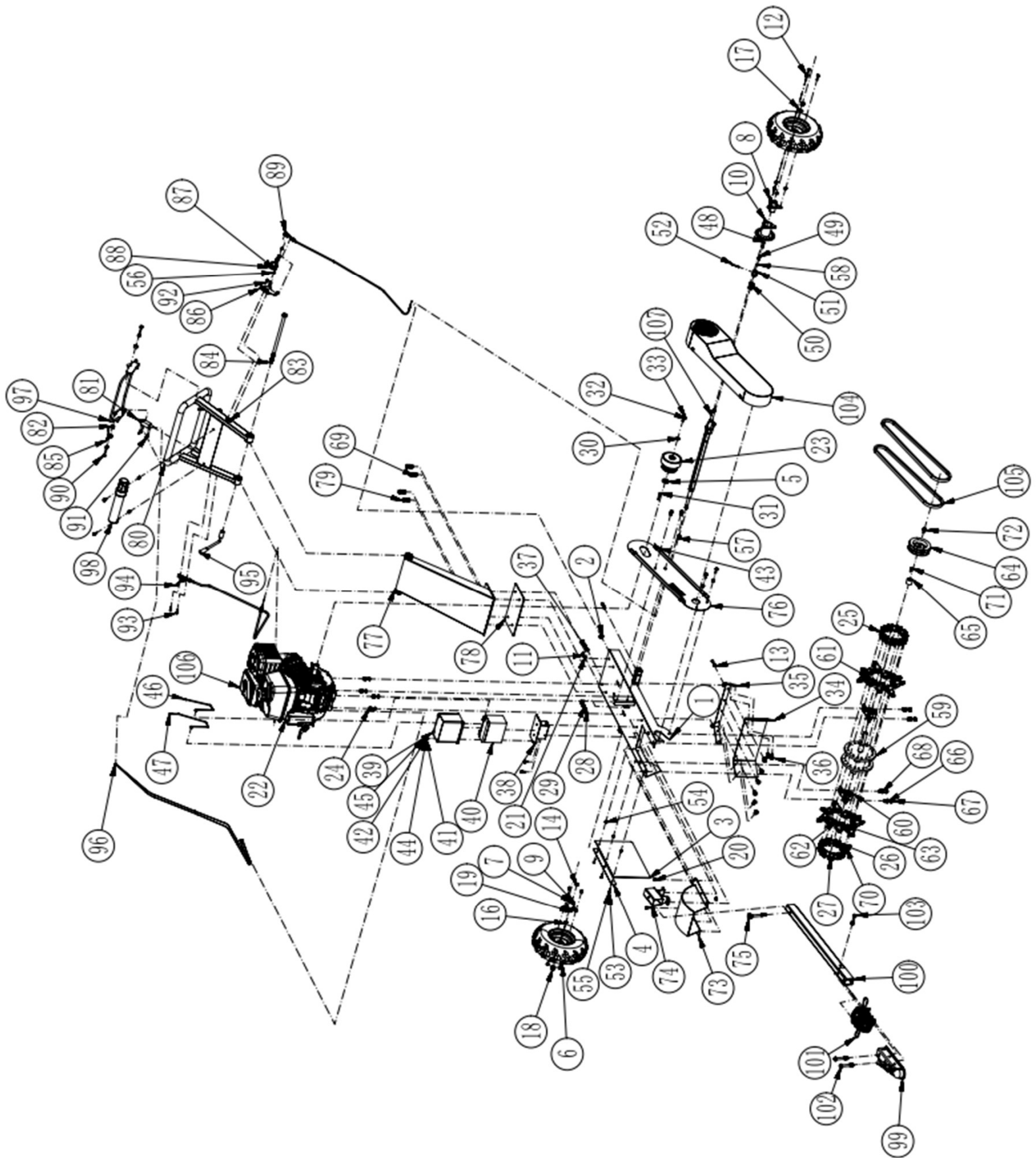
- Follow OSHA Safety
- GRIND LEFT TO RIGHT ON THE STUMP. PLUNGE CUTTING THE STUMP FROM TOP DOWN ACHIEVES EXTRA WIDE CUTTER PATH
- LET THE GRINDER DO THE WORK; LET THE TEETH ON THE BEAR CLAW DIG IN
- BIGBEAR IS NOT AFRAID OF ANY DIAMETER STUMP. JUST WORK IT LEFT TO RIGHT. TO CLEAR THE BELT GUARD
- HEIGHT OF 9 INCHES OR LOWER FROM THE GROUND UP IS OPTIMUM.

•TEETH REPLACEMENT

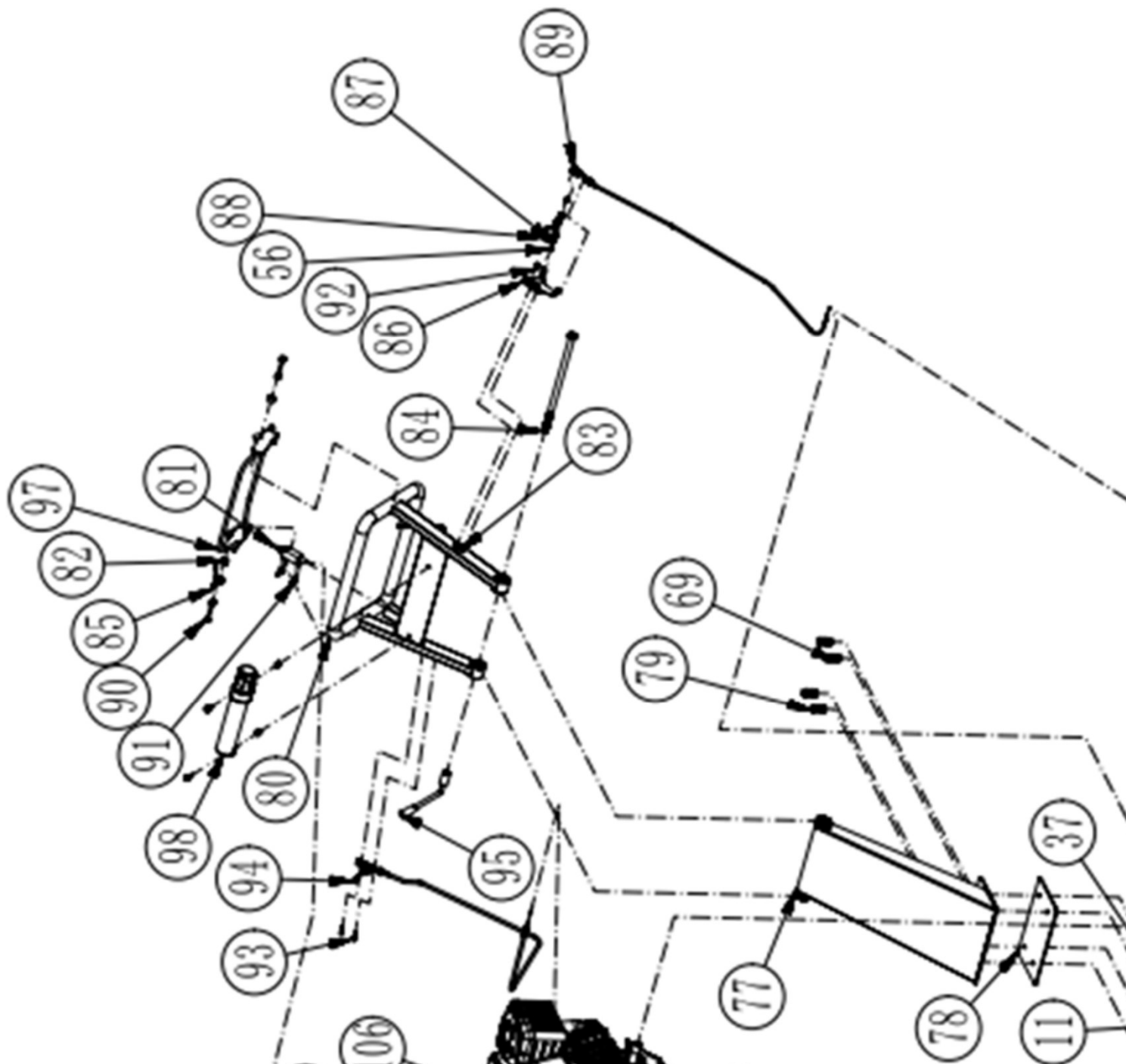
•**Important Instructions:** - **Do not tip your machine back with your teeth looking at the stars.** Doing so can cause the oil in your engine to flood the combustion cylinder. - **If you have already done this:**

1. Remove the spark plug and let the machine sit overnight.
2. In the morning, give it a shot of starter ether.
3. Replace the spark plug and start the machine.- The engine may smoke until the oil burns off, but rest assured, it should not be damaged. Happy grinding, and thanks for choosing Bigbear Power!

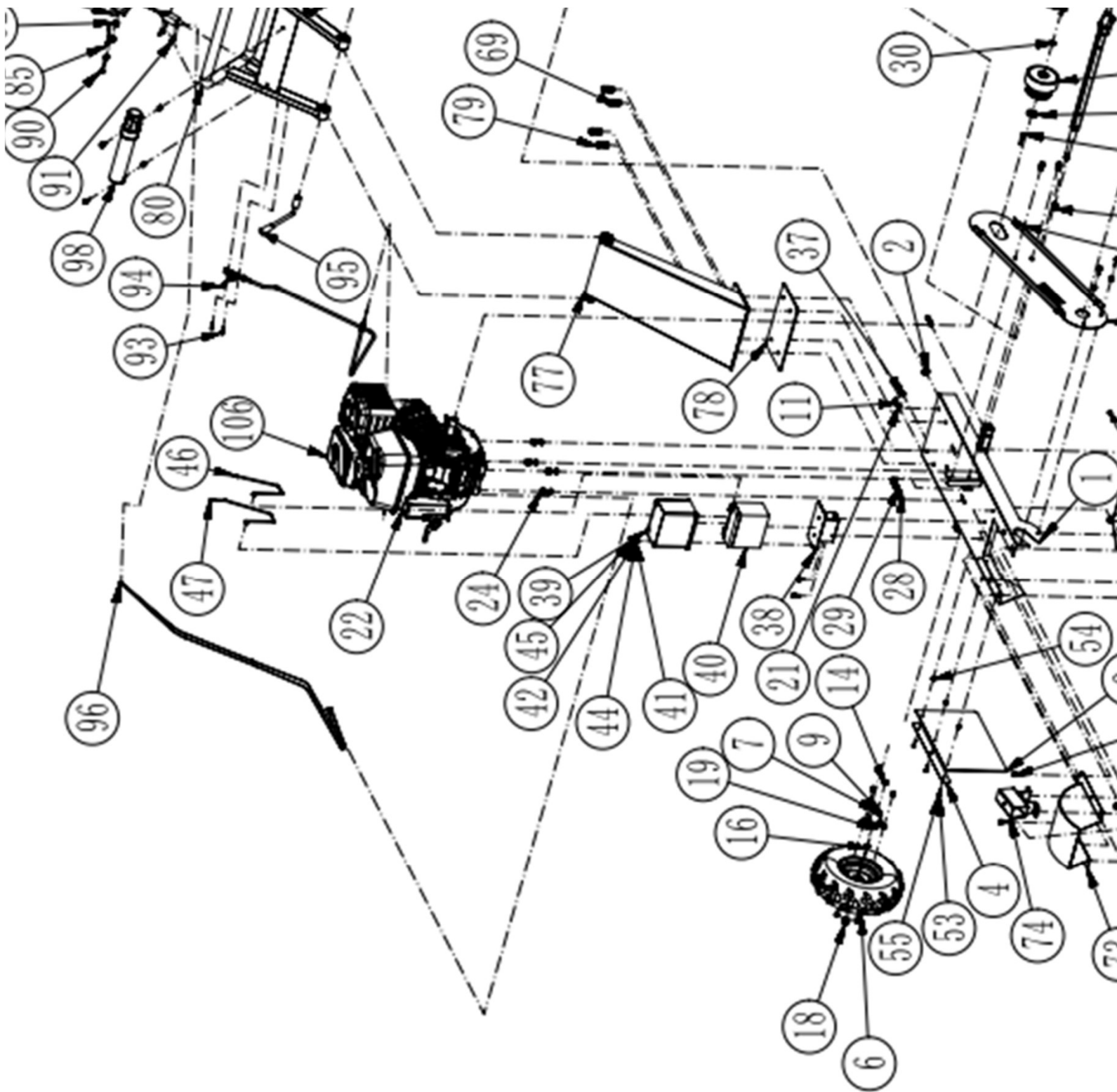
BBG2X2 PARTS DIAGRAM



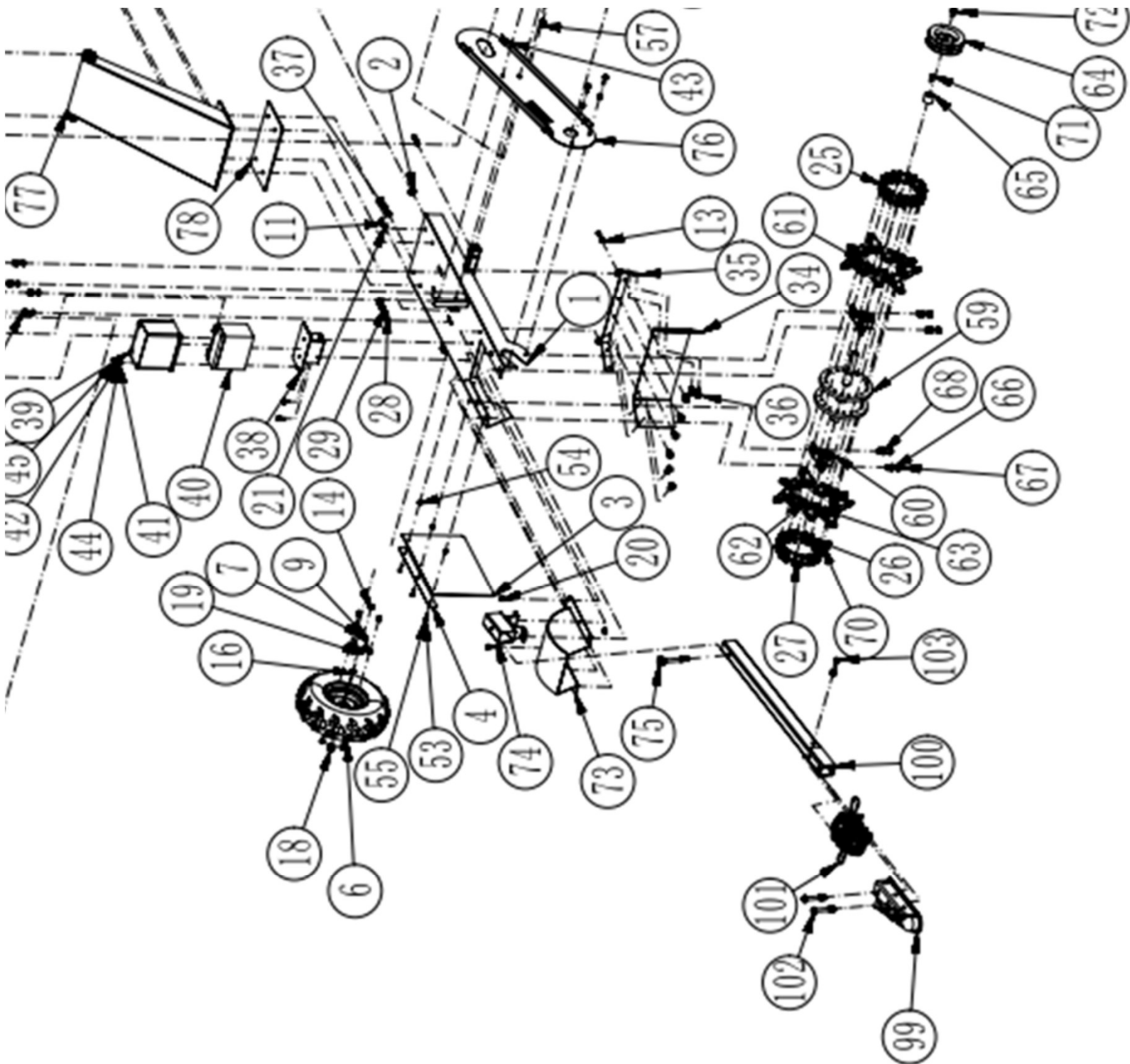
BBG2X2 PARTS DIAGRAM



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BBG2X2 PARTS DIAGRAM

Dash NO	PART NAME		Dash NO	PART NAME
1	Rack welded body		53	M6*25 Hexagon bolts
2	Wire protection rubber ring		54	6 Spring pad
3	Side fenders		55	M6 Flat washers
4	Side fender molding		56	M6 Lock nut
5	Clutch gasket		57	M8 Brake cable adjustment screw
6	145/70-6 tire		58	Brake cable limiter
7	6002 Angular contact ball bearings,		59	Cutter head welding body
8	Left flange		60	P205 Spherical ball bearings with vertical seat
9	32 Sealing ring		61	Right blade welding body
10	Brake chuck welded body		62	Left cutter head welding body
11	M8 Flat washers		63	Middle blade welding body
12	M8*30 Hexagon bolts		64	Cutter pulley
13	M8 Lock nut		65	Cutter pulley spacer
14	8 Spring pad		66	M12 Flat washers
15	Flange bearing inner spacer		67	M12*75 Hexagon bolts
16	Flange outer spacer		68	12 Spring pad
17	M14 Flat washers		69	M12 Lock nut
18	M14 Lock nut		70	M10*40 Hexagon head bolts
19	Right flange		71	Cutter pulley flat key
20	M8*25 Hexagon head bolts		72	M8 Extra large washers
21	M8*45 Hexagon socket head bolts		73	Knife cover welding body
22	Electric door lock		74	Towbar fixing bracket welding body
23	96 125 clutch		75	M12*100 Bakelite bolts
24	M10*45 Square neck bolts with cup head		76	Belt cover inner plate welding body
25	M10 Flat washers		77	Lower handrail welding body
26	10 Spring pad		78	Lower armrest shock pad
27	M10 Lock nut		79	M12*35 Hexagon bolts
28	M12*70 Hexagon bolts,		80	Upper handrail welding body
29	M12 Ordinary nuts		81	Limit switch
30	Clutch outer gasket		82	Emergency stop switch fixing sleeve
31	6.3 Flat key		83	M6 Rivet nuts
32	M10 Extra large washers		84	M16*360 Hexagon bolts
33	3/8-24UNF*30 Hexagon head bolts		85	Torsion Spring
34	Rear fender		86	Brake cable fixing block
35	Rear fender fixing plate		87	Brake cable handle fixing block
36	M8 Large washer		88	Brake cable handle
37	M8*50 Hexagon socket head bolts		89	Brake cable
38	Battery box fixing seat welding body		90	M8*70 Hexagon bolts
39	Battery Box		91	M5*16 Hexagon head bolts
40	6DM14 Battery		92	M6*16 Hexagon head bolts
41	5 Spring pad		93	M6*20 Hexagon head bolts
42	M5 Flat washers		94	Throttle switch assembly
43	M8*20 Hexagonal bolt		95	M16 Handle assembly
44	M5 Lock nut		96	Travel switch line
45	M5*20 Hexagon bolts		97	Emergency stop switch frame welding body
46	Battery positive cable		98	Small tool cup assembly
47	Battery negative cable		99	American trailer head
48	Brake pin		100	Tow bar welding body
49	Compression spring in the bayonet fixing sleeve		101	Chain
50	Compression spring outside the bayonet fixing sleeve		102	M12*90 Hexagon bolts
51	Brake pin fixing sleeve welding body		103	M10*65 Hexagon head bolts
52	5*50 Elastic cylindrical pin		104	Belt cover welding body
			105	B-1448 Ordinary V-belt
			106	RATO 15HP 500CC
			107	Axle welding body



BIGBEAR POWER

**GX COMMERCIAL LLC
4301 S VALLEY VIEW BLVD. STE 10 AND 11
LAS VEGAS, NV 89103**

EXTENDED 5YR LIMITED WARRANTY

- GX COMMERCIAL LLC WARRANTS BBG2X2 STUMP GRINDER FOR MANUFACTURER'S DEFECTS FOR 5 YEARS, BOTH ENGINE AND CHASSIS, AS FOLLOWS.
- GX COMMERCIAL LLC WILL PROVIDE PARTS AND LABOR WITHIN THE FIRST 30 DAYS TO THE ORIGINAL PURCHASER. GX COMMERCIAL LLC WILL REPAIR OR REPLACE, AT OUR OPTION, THE DEFECTIVE EQUIPMENT.
- AFTER 30 DAYS, GX COMMERCIAL LLC WILL PROVIDE TO THE ORIGINAL PURCHASER FOR 5 YEARS REPLACEMENT PARTS FOR DEFECTIVE PARTS.
- ITEMS NOT COVERED BY THIS WARRANTY ARE TEETH, BELTS, TIRES, NUTS AND BOLTS, HARDWARE, AND BATTERIES. NON-INTENDED USE OR MISUSE OF EQUIPMENT IS NOT COVERED.
- CUSTOMER ACCEPTED FREIGHT DAMAGE IS NOT COVERED BY WARRANTY.
- MINOR SCRATCH AND DENTS FROM SHIPPING IS NOT COVERED.
- RATO ENGINES HAVE 1 YEAR WARRANTY; A 4 YEAR OEM COMMERCIAL EXTENDED WARRANTY IS INCLUDED AT NO EXTRA COST. GX COMMERCIAL LLC WILL REPAIR OR REPLACE RATO ENGINES AT OUR CHOICE FOR 5 YEARS FROM THE PURCHASE DATE.
- THIS EXTENDED WARRANTY APPLIES TO BOTH RESIDENTIAL AND COMMERCIAL USE OF THE EQUIPMENT BASED ON PROPER MAINTENANCE AND RECORDS OF PROVEN REGULAR SCHEDULED OIL CHANGES, FILTERS, AND SPARK PLUG MAINTENANCE
- THIS WARRANTY APPLIES ONLY TO EQUIPMENT MAINTAINED WITH GX COMMERCIAL BIGBEAR POWER OEM PARTS.
- THE USE OF AFTER-MARKET NON-OEM PARTS VOIDS THIS WARRANTY. ONLY OEM TEETH, BOLTS AND BELTS FOR SAFETY AND PERFORMANCE ARE TO BE USED ON THE STUMP GRINDER.
- WARRANTY NON-TRANSFERABLE. THIS WARRANTY IS FOR THE ORIGINAL OWNER ONLY.