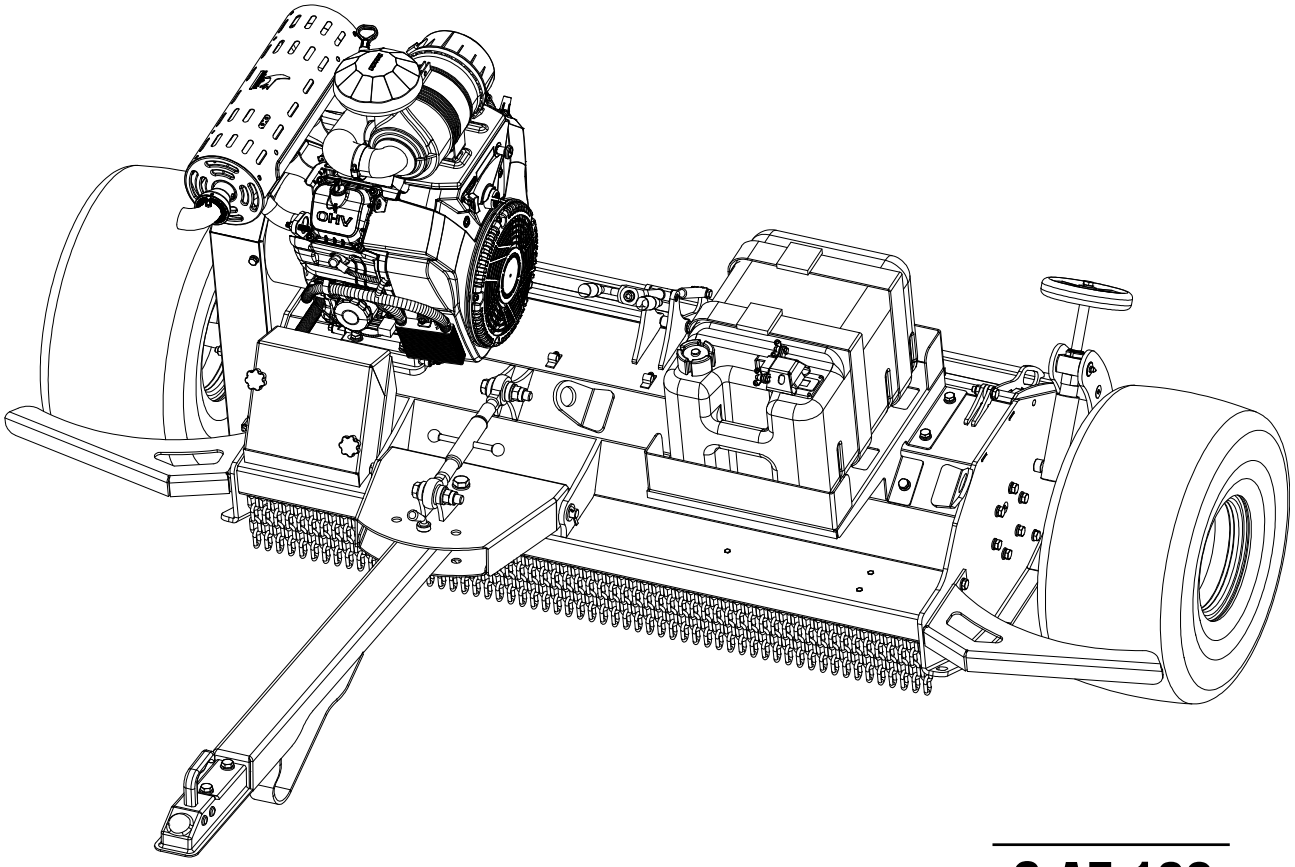
Flail Mower

Engine-powered ATV Compatible

OPERATR'S MANUAL



G.AF 160

Please carefully read this manual and follow all the instructions. Failure to comply with the warnings and precautions may result in serious injury or death.

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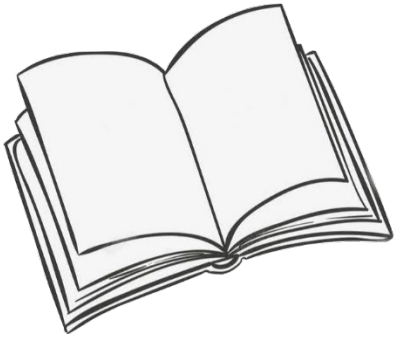
CONTENTS

SAFETY PRECAUTIONS

Listed below are common practices that may or may not be applicable to the products described in this manual.

Safety First



Careful operation is your best assurance against an accident.
Please be fully aware that you are responsible for the safe operation and maintenance of your implement. You must ensure that you and anyone else who is going to operate, maintain or work around the implement is familiar with the operating and maintenance procedures and related safe information contained in this manual. This manual is prepared to guide you through all essential operations related to this implement and alert you to all good safety practices that should be strictly followed.
Please constantly bear in mind that good safety practices not only protect you but also the people around you. Incorporate these practices an inseparable part into your safety program. Make sure that who operates this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury of death by ignoring good safety practices.

- Thoroughly read and understand the "Safety Labels" section. Read all instructions noted on them.
- Do not operate the equipment while under the influence of drugs or alcohol, as they impair your ability to safely and properly operate the equipment.
- The operator should be familiar with all functions of the tractor and attached implement, and be able to handle emergencies quickly.
- Make sure all guards and shields appropriate for the operation are in place and secured before operating the implement.
- Keep all bystanders away from equipment and work area. Start tractor from the driver's seat with hydraulic controls in neutral.
- Operate tractor and controls from the driver's seat only.
- Never dismount from a moving tractor or leave tractor unattended with engine running.
- Do not allow anyone to stand between the implement and tractor while backing up to the implement.
- Keep hands, feet, and clothing away from power-driven parts.
- While transporting and operating equipment, watch out for objects overhead and along the sides such as fences, trees, buildings, wires, etc.
- Do not turn tractor so tight as to cause hitched implement to ride up on the tractor's rear wheel.
- Store implement in a safe and secure area where children normally do not play. When needed, secure implement against falling with support blocks.

Safety Alert Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety and extra precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. Hazard control, and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

Be Aware of Signal Words

A signal word designates a degree or level of hazard seriousness. They are:

⚠ **DANGER**: Indicates a hazardous situation that, if not avoided, will result in death or serious injury.

⚠ **WARNING**: Indicates a hazardous situation that, if not avoided, could result in death or serious injury.

⚠ **CAUTION**: Indicates a hazardous situation that, if not avoided, may result in minor or moderate injury.

Be Aware of Special Notices

Special notices are intended to point out important and helpful information that should be followed. They are:

ATTENTION: Indicates that equipment or property damage could result if instructions are not followed.

NOTE: Indicates supplementary explanations that will be helpful when using the equipment.

Safety for Children

Tragedy can occur if the operator is not alert to the presence of children, Children generally are attracted to implements and their work.

- Never assume children will remain where you last saw them.
- Keep children out of the work area and under the watchful eye of a responsible adult.
- Be alert and shut the implement and tractor down if children enter the work area.
- Never carry children on the tractor or implement. There is not a safe place for them to ride. They may fall off and be run over or interfere with the control of the power machine.
- Never allow children to operate the power machine, even under adult supervision.
- Never allow children to play on the power machine or implement.

Operation Safety

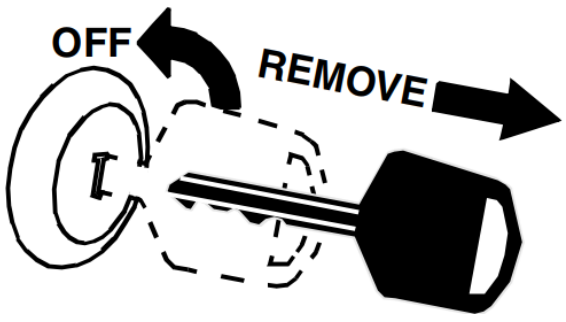
Use extra caution when backing up. Before the tractor starts to move, look down and behind to make sure the area is safety and clear.

Tractor Shutdown Safety

If engaged, disengage power take-off.

Park on solid, level ground and lower implement to ground or onto support blocks.

- Put tractor in park or set park brake.
- Turn off engine and remove ignition key to prevent unauthorized starting.
- Relieve all hydraulic pressure to auxiliary hydraulic lines.



- Wait for all components to stop before leaving operator's seat.
- Use steps, grab-handles and anti-slip surfaces when stepping on or off the tractor.
- If engaged, disengage power take-off.
- Park on solid, level ground and lower implement to ground or onto support blocks.
- Put tractor in park or set park brake.
- Turn off engine and remove ignition key to prevent unauthorized starting.
- Relieve all hydraulic pressure to auxiliary hydraulic lines.
- Wait for all components to stop before leaving operator's seat.
- Use steps, grab-handles and anti-slip surfaces when stepping on and off the tractor.

Use A Safety Chain

A safety chain will help control drawn machinery should it separate from the tractor drawbar.
Use a chain with the strength rating equal to or greater than the gross weight of the towed implement.

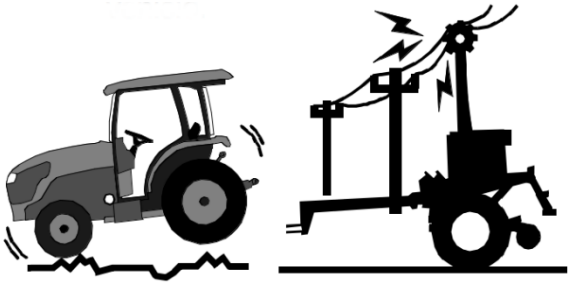
- Attach the chain to the tractor drawbar support or other specified anchor location. Allow only enough slack in the chain to permit turning.
- Always hitch the implement to the machine towing it. Do not use the safety chain to tow the implement.

Towing Safely

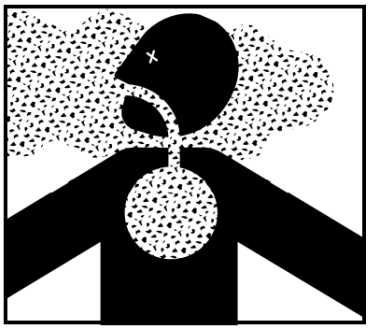
- Comply with federal, state, and local laws.
- Use towing vehicle and trailer of adequate size and capacity. Secure equipment towed on a trailer with chocks, tie downs, and chains.
  IMPORTANT: Do not tow a load that is more than double the weight of the vehicle towing the load.
- Sudden braking can cause a towed trailer to swerve unexpectedly. Reduce speed if trailer is not equipped with brakes.

Transport Safely

- Comply with federal, state, and local laws.
- Avoid contact with any overhead utility lines or electrically charged conductors.
- Engage park brake when stopped on an incline.
- Maximum transport speed for an implement is 30 km/h. DO NOT EXCEED.
- Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrains require a slower speed. Sudden braking can cause a towed load to swerve and upset.
- Do not tow an implement that, when fully loaded, weights more than 1.5 times the weight of towing vehicle.



Avoid Crystalline Silica (Quartz) Dust



Because crystalline silica is a basic component of sand and granite, many activities at construction sites produce dust containing crystalline silica. Trenching, sawing, and boring of material containing crystalline silica can produce dust containing crystalline silica particles. This dust can cause serious injury to the lungs (silicosis). There are guidelines which should be followed if crystalline silica (quartz) is present in the dust.

- Be aware of and follow OSHA (or other local, State, or Federal) guidelines for exposure to airborne crystalline silica.
- Know the work operations where exposure to crystalline silica may occur.
- Participate in air monitoring or training programs offered by the employer.
- Be aware of and use optional equipment controls such as water sprays, local exhaust ventilation, and enclosed cabs with positive pressure air conditioning if the machine has such equipment. Otherwise respirators shall be worn.
- Where respirators are required, wear a respirator approved for protection against crystalline silica containing dust. Do not alter respirator in any way. Workers who use tight-fitting respirators can not have beards/ mustaches which interfere with the respirator seal to the face.
- If possible, change into disposable or washable work clothes at the work site; shower and change into clean clothing before leaving the work site.
- Do not eat, drink, use tobacco products, or apply cosmetics in areas where there is dust containing crystalline silica.
- Store food, drink, and personal belongings away from the work area.
- Wash hands and face before eating, drinking, smoking, or applying cosmetics after leaving the exposure area.

Avoid Contact Blades

Keep away from rotating blades to avoid death or serious injury from blade contact.

- Stay away and keep hands, feet and body away from rotating blades, drivelines and parts until all moving elements have stopped.
- Do not put hands or feet under mower hood.
- Stop rotating blades disengage PTO and wait for blade to stop rotating before raising mower hood or swings.
- Stop look and listen before approaching the mower to make sure all rotating motion has stopped.
- If a material blockage occurs in the inlet or discharge areas of the mower, shut down tractor engine, disengage the PTO and wait for all rotating motions to stop. Place the tractor in park position, engage the parking brake and remove the key before leaving the operator's seat. Clear the blockage before processing with mowing. Be sure to keep feet and hands clear of the mower blades. If you raise the mower or swing to access the blockage, engage the swing lock up latch and securely block up the mower before placing any parts of the body beneath the mower.

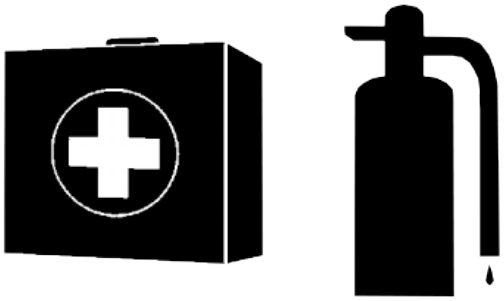
Maintenance Safety

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Follow good shop practices.

- Keep service area clean and dry.
- Be sure electrical outlets and tools are properly grounded.
- Use adequate light for the job at hand.
- Make sure there is plenty of ventilation. Never operate the engine of the tractor in a closed area. The exhaust gas may cause healthy problem.
- Before maintenance, shut off the tractor (See Tractor Shutdown Procedure).
- Allow equipment to cool before maintenance operation.
- Never work under the machine unless it is secured by a mechanical stand.
- Use personal protection devices such as safety goggles, hand gloves and hearing protectors, when performing any service or maintenance work. Use heavy gloves when handling blades.
- Only use original parts for service and maintenance.
- A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment.
- Periodically tighten all bolts, nuts and screws and check that all pins are properly installed to ensure unit is in a safe condition.
- Do not weld or torch on galvanized metal as it will release toxic fumes.
- Always make sure any material and waste products from the repair and maintenance of the implement are properly collected and disposed.
- Disconnect battery (If the implement has the battery) ground cable (-) before servicing or adjusting electrical systems or before welding on implement.
- Do not grease or oil implement while it is in operation.
- Do not work under any hydraulically supported equipment. It can settle, suddenly leak down, or be lowered accidentally. If it is necessary to work under the equipment, securely support it with stands or suitable blocking beforehand.
- When completing a maintenance or service function, make sure all safety shields and devices are installed before placing machine in service.

Preparation Before Maintenance

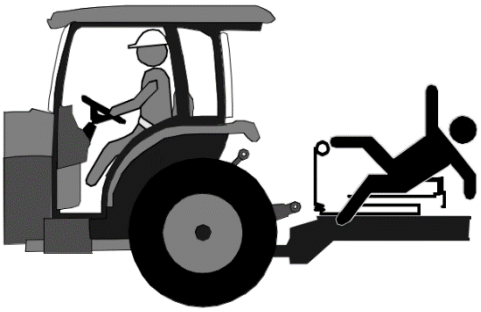
- Be prepared if a fire starts.
- Keep a first aid kit and fire extinguisher handy.
- Keep emergency numbers for ambulance, hospital and fire department near the working area.



Personal Protective Equipment

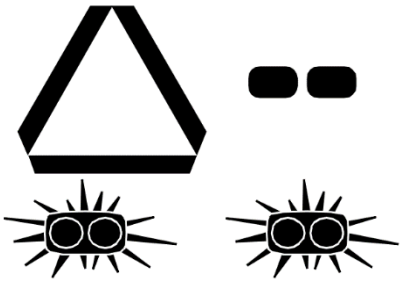
- Wear protective clothing and equipment appropriate for the job such as safety shoes, safety, glasses, hard hat, dust mask, and ear plugs.
- Clothing should fit snug without fringes and pull strings to avoid entanglement with moving parts.
- Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- Operating a machine safely requires the operator's full attention. Avoid wearing headphones while operating equipment.

Keep Riders Off Machinery



- Never carry riders on the tractor or implement.
- Riders obstruct operator's view and interfere with the control of the power machine.
- Riders can be struck by objects or thrown from the equipment.
- Never use the tractor or implement to lift or transport riders.

Safety Lights and Devices



- A slow moving power machine can create a hazard when driven on public roads. They are difficult to see, especially at night.
- Flashing warning lights and turn signals are recommended whenever driving on public roads.
- For tractors and other agriculture equipment, a Slow Moving Vehicle (SMV) sign is required when traveling on public roads.

Seat Belt and ROPS

- We recommends the use of a CAB or roll-over-protective structures (ROPS) and seat belt in almost all power machines. Combination of a CAB or ROPS and seat belt will reduce the risk of serious injury or death if the power machine should be upset.
- If ROPS is in the locked-up position, fasten seat belt snugly and securely to help protect against serious injury or death from falling and machine overturn.

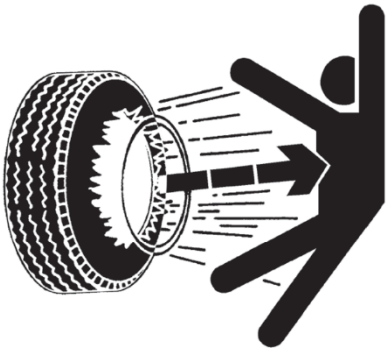
High Pressure Fluids Safety

- Escaping fluid under pressure will penetrate the skin or eyes causing serious injury.
- Relieve all residual pressure before disconnecting hydraulic lines or performing work on the hydraulic system.
- Make sure all hydraulic fluid connections are properly tightened/torqued and all hydraulic hoses and lines are in good condition before applying pressure to the system.
- Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks.
- Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- DO NOT DELAY. If an accident occurs, seek immediate emergency medical care or gangrene may result.

Handle Chemicals Properly

- Protective clothing should be worn.
- Handle all chemicals with care.
- Follow instructions on container label.
- Agricultural chemicals can be dangerous. Improper use can seriously injure persons, animals, plants, soil, and property.
- Inhaling smoke from any type of chemical fire can be a serious health hazard.
- Store or dispose of unused chemicals as specified by the chemical manufacturer.

Tire Maintenance Safety



- Tire changing can be dangerous and must be performed by trained personnel using the correct tools and equipment.
- Always properly match the wheel size to the properly sized tire.
- Always maintain correct tire pressure. Do not inflate tires above recommended pressures shown in the Operator's Manual.
- When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.
- Securely support the implement when changing a wheel.
- When removing and installing wheels, use wheel handling equipment adequate for the weight involved.
- Make sure wheel bolts have been tightened to the specified torque.

Storage and Disposal Safety

Storage Safety

1. Store the machine in an area away from human activity. Do keep the machine out of the children's reach. Do not permit children to play on or around the stored machine.
2. Store the machine in a dry, level area.
3. Clean grease and oil as required and protect it from the elements.

Disposal Safety

1. Improper disposal of oil or other waste may be hazardous to the environment.
2. When oil is emptied from the machine, it must be poured into a leak-proof container suitable for oil. It is not permissible to store oil in a container used for food or drink, in order to avoid the oil being consumed by mistake and causing serious injury. It is prohibited to spill oil on the ground, or pour it into a drain or anywhere leading to a water source.
3. Discarded oil, fuel, coolant, brake fluid, filters and batteries may not be thrown away or emptied in just any way. Contact your local authority for further information.

Safety Labels

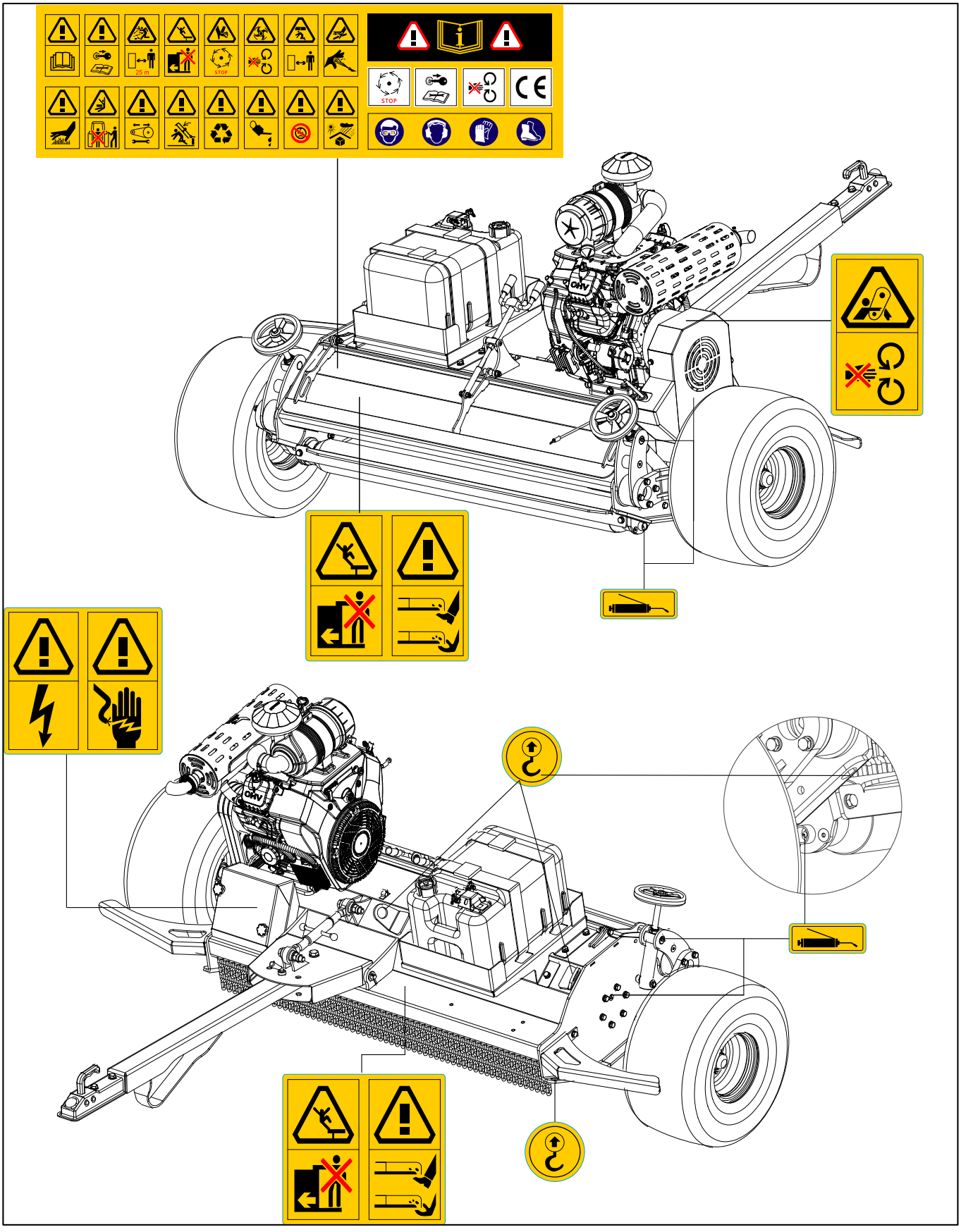
Your implement comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

1. Keep all safety labels clean and legible.
2. Replace all damaged or missing labels.
3. When ordering new components make sure the correct safety labels are included in the request.
4. Refer to steps below for proper label placement.

a) Clean surface area where label is to be placed.
b) Spray soapy water onto the cleaned area.
c) Peel backing from label and press label firmly onto the surface.
d) Squeeze out air bubbles with edge of a card or with a similar type of straight edge.

Labels Location

Labels locations below are common practices of BCRI180 machine that may or may not be applicable to the products described in this manual.



PRODUCT INTRODUCTION

Listed figure is common mower of G.AF160 that may or may not be applicable to the products described in this manual.

See Figure 2

Mowers are used for pasture clipping, crop residue shredding, heavy brush cutting, waterways, right-of - ways, roadside or highway mowing. Also, these mowers are used for cutting grass and other growth in public areas such as parks and cemeteries. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from this machine.

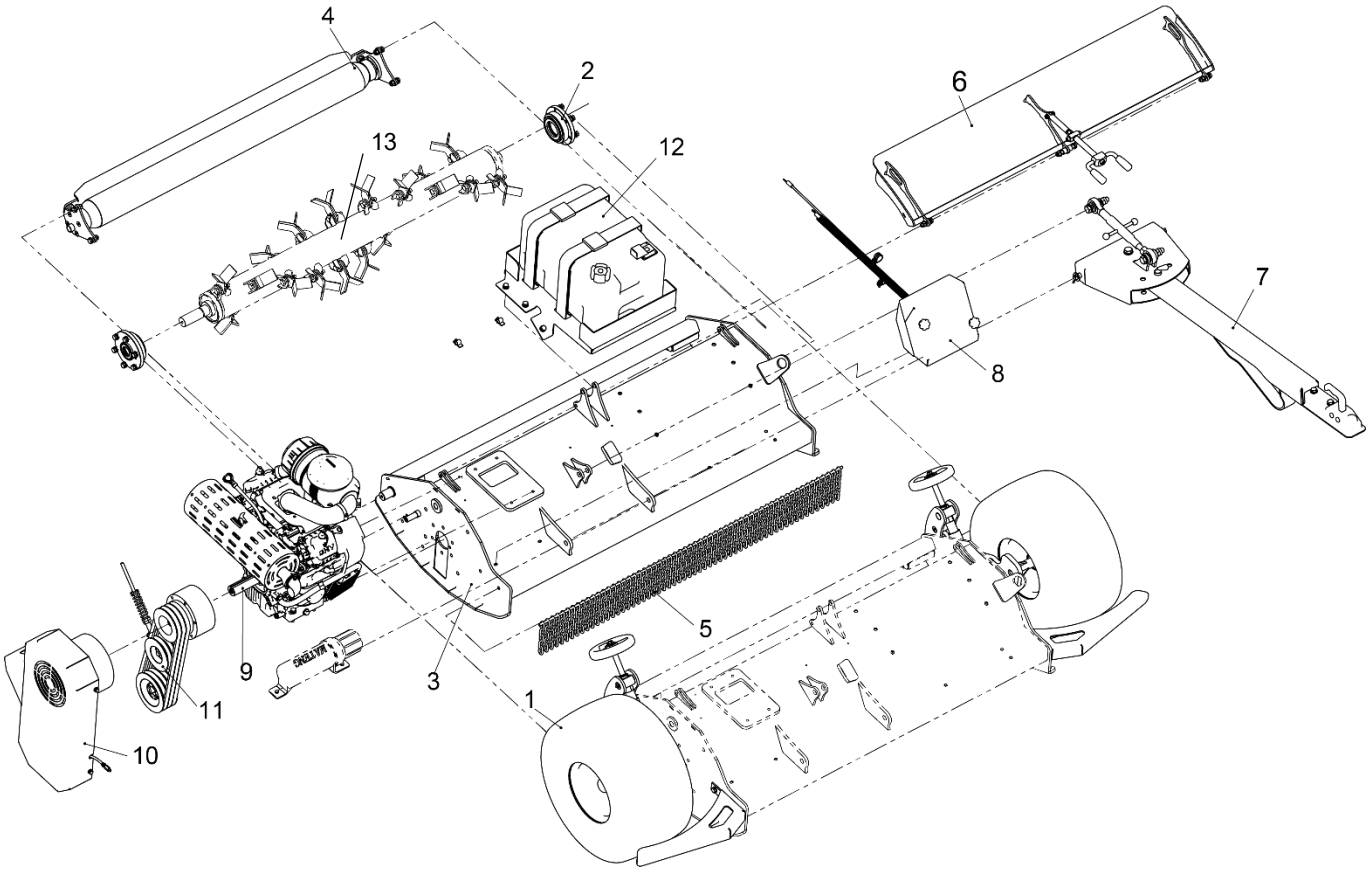


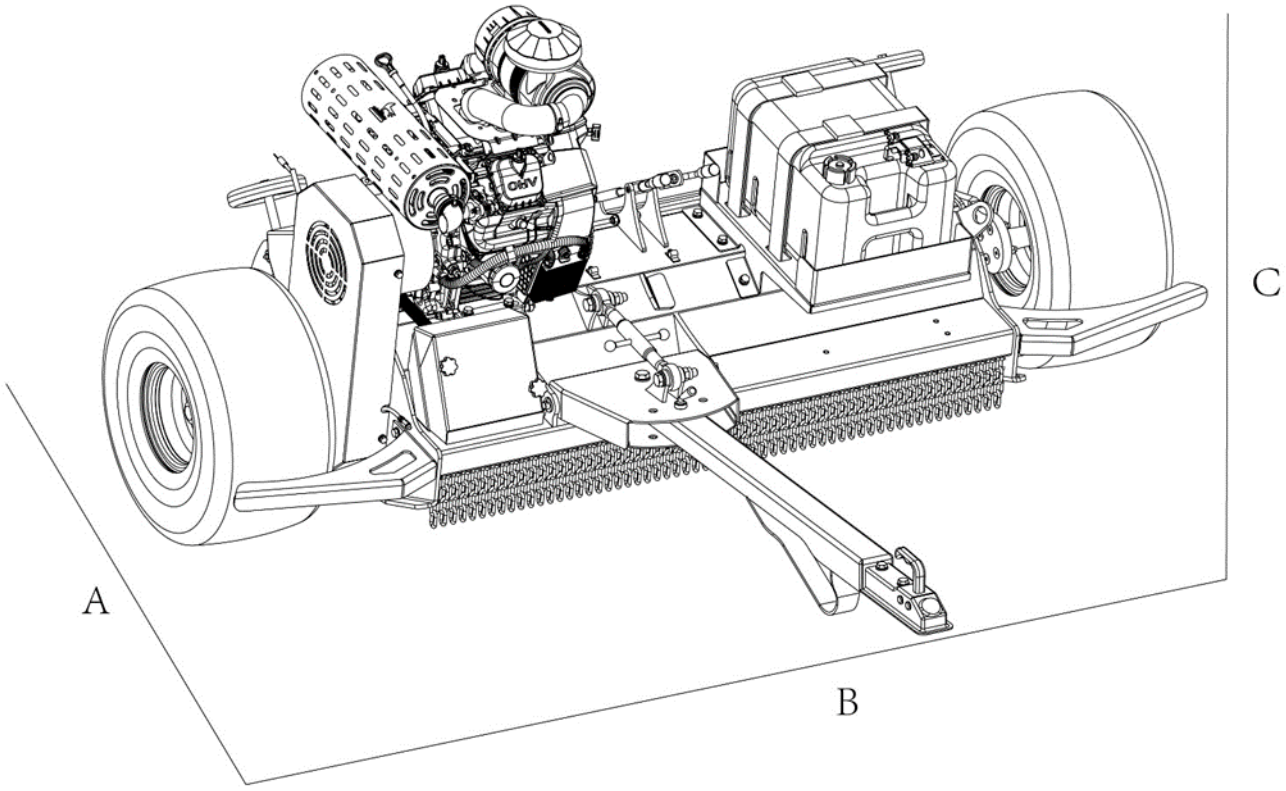
Figure 2

Main parts name and function list:

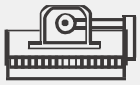
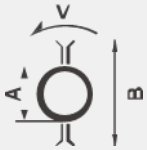
Item	Name	Functional Description
1	Tire components	To realize operations such as driving, braking and steering of the machine.
2	Blade shaft bearing seat	Adjust the center between blade shaft and bearing seat automatically via self-aligning ball bearing when the mower moves to make sure the blade shaft runs normally.
3	Hood assembly	Protecting people from harm during cutting procedure.
4	Roller assembly	As the mower moves forward, the rotating Roller rolls the grass close to the ground, and the cut material is then flattened over the field. Roller has three adjustable height from which it adapts to different grass heights

Item	Name	Functional Description
5	Protection component	Prevent the material from being thrown out.
6	Rear cover assembly	Easy to maintenance the blades in the hood.
7	Traction assembly	For connection to ATV
8	Battery mounting kit	Start-up power
9	Engine mounting components 1	Power the machine.
10	Side protection assembly	Protect the people or objects from harm of side driveline.
11	Side drive assembly	Transfer power generated by the engine to blade shaft and Roller.
12	OIL TANKS	Fuel supply to generators
13	Ordinary axle + blade	Cut the grass. Available with hammer blade.

Technical Date



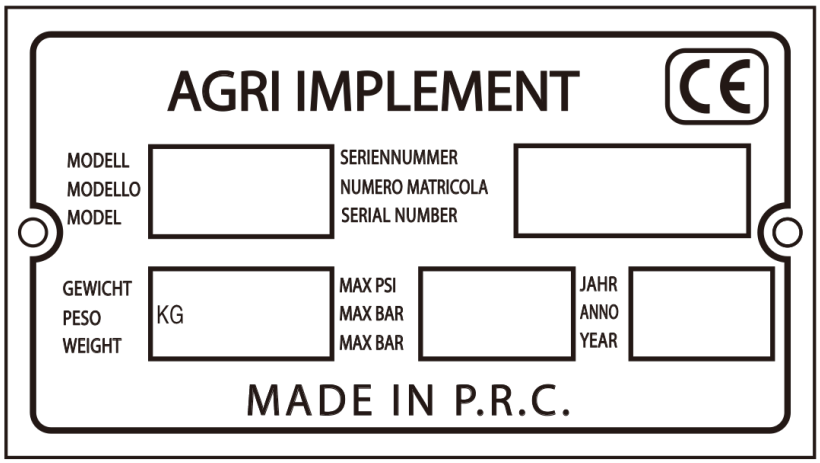
Implement specification table:

Model		G.AF160
A	cm	**210**
B		**250**
C		**111**
	cm	**160**
	HP	**25**
	RPM	**2300**
	A (mm)	**108**
	B (mm)	**328**

	V (m/s)	**40**
	N	**24**
	N	**3**
	Kg	**380**

Implement Identification

The identification nameplate is affixed to the frame of each implement. It contains the “CE” certification brand and information about (CE is only for European region, implement identification below is for reference): the Manufacturer, Type, Serial Number, Model Number, Weight. The nameplate (Shown in the below) is for reference only and is based on the real thing.



UNPACKING

After unpacking, please check the components shown in **Figure 1**. If you have any problem, please contact us freely.

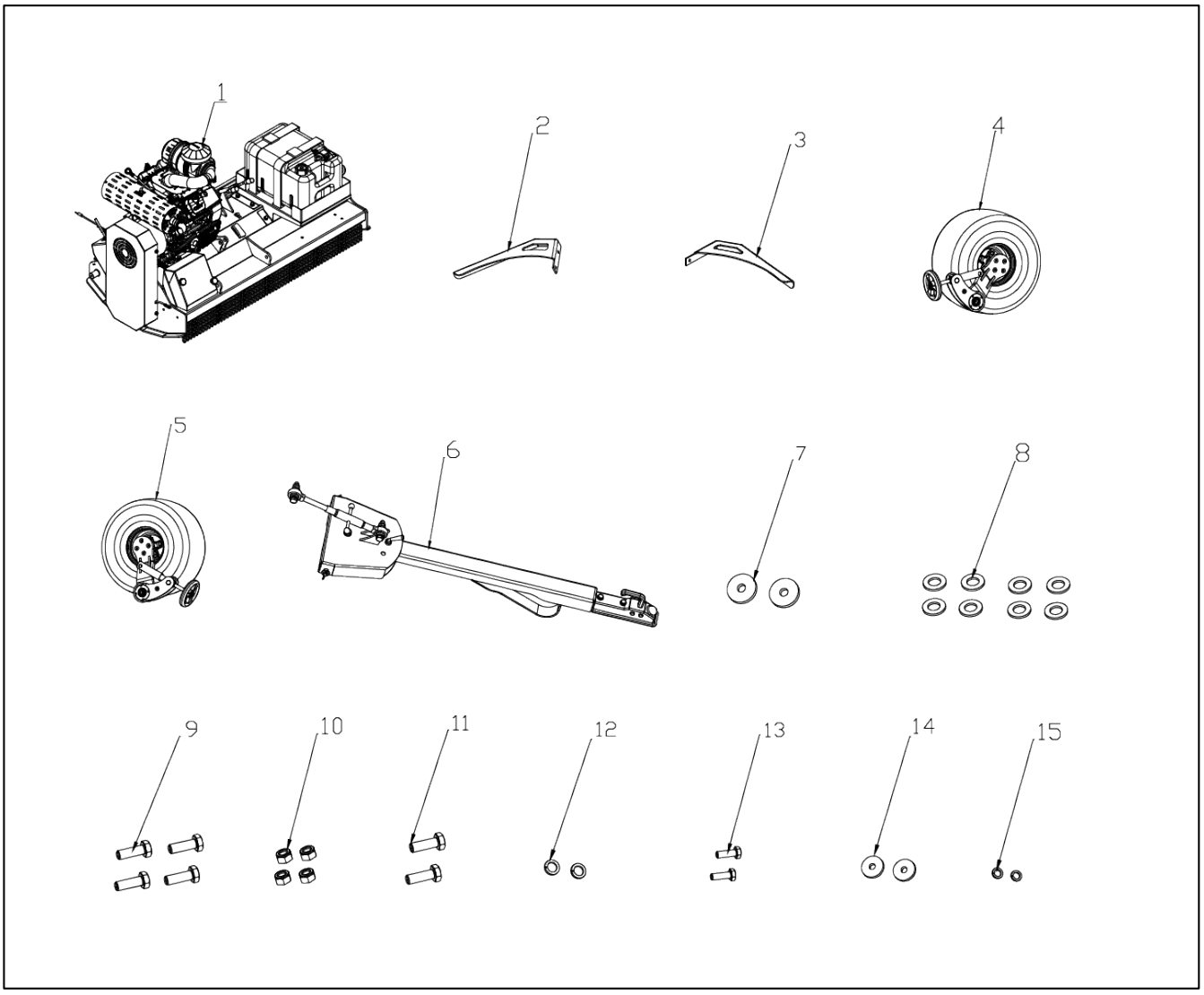


Figure 1

	Specification	Description	Qty	Packing method
1	/	Mainframe Components	1	single pack
2	G11001A13000-001	Left guard plate	1	single pack
3	G11001A13000-012	Right guard plate	1	single pack
4		Left tyre assembly	1	single pack
5		Right tyre assembly	1	single pack
6	G11001A09000-000	Traction assembly	1	single pack
7	G11001A13000-009	Adjustment shaft lever	2	Bale
8	GB/T95-10-EP•Zn	Plain washer	8	Bale
9	GB/T5783-M10×30-8.8-EP•Zn	Full Threaded Hex Bolts	4	Bale
10	GB/T889.1-M10-8-EP•Zn	1 Non-metallic insert hexagonal locknuts	4	Bale
11	GB/T5783-M10×25-8.8-EP•Zn	Full Threaded Hex Bolts	2	Bale
12	GB/T93-10-EP•Zn	Standard spring washers	2	Bale
13	GB/T5783-M8×16-8.8-EP•Zn	Full Threaded Hex Bolts	2	Bale
14	GB/T96.2-8-EP•Zn	large washer	2	Bale
15	GB/T93-8-EP•Zn	Standard spring washers	2	Bale

Tools used for installation				
No	Description	Specification	Conditions of Use	QTY
1	Open end wrench		M8、M10、 M12 、M16 bolt fastening	2
2	Hex key		M8、M10、 M12 、M16 bolt fastening	1
3	hammer			1
4	Torque wrench	10-220N.m	Measuring torque	1
5	Wind gun	1280t	Match the corresponding sleeve instead of the wrench to tighten the bolt	1

ASSEMBLY & SET-UP

Guard plate installation

1. Install the left and right guards to the side panels of the machine.
2. Insert M10 x 30 full-thread hexagonal bolts (#1), plain washer (#3), fixing locknuts (#2).
3. Apply correct torque, for all fasteners.

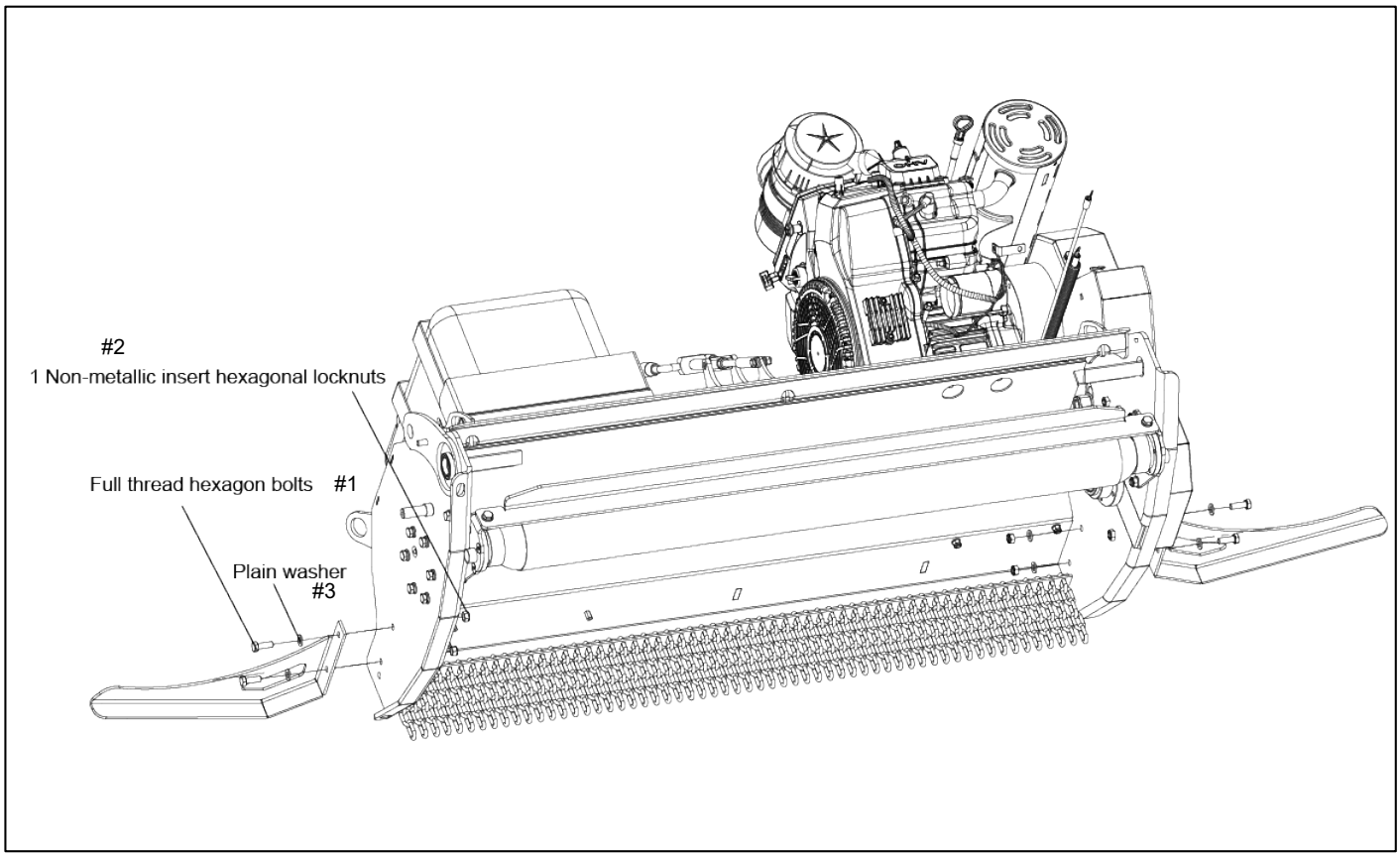


Figure 2

Tyre assembly installation

1. Install the tyre adjustment sleeve on the tyre assembly is connected to the adjustment mounting shaft on the side plate
2. Insert M10 x 25 full-thread hexagonal bolts (#1), spring washers (#2) and adjustment board (#3).
3. Connect the adjusting nut at the knuckle wheel to the side plate adjusting post
4. Insert M8×16 full-thread hexagonal bolts (#4), spring washers (#5) ， large plain washers(#6).

(Note: For the right tyre assembly, loosen the belt guard plate, install it and then tighten the bolt.)

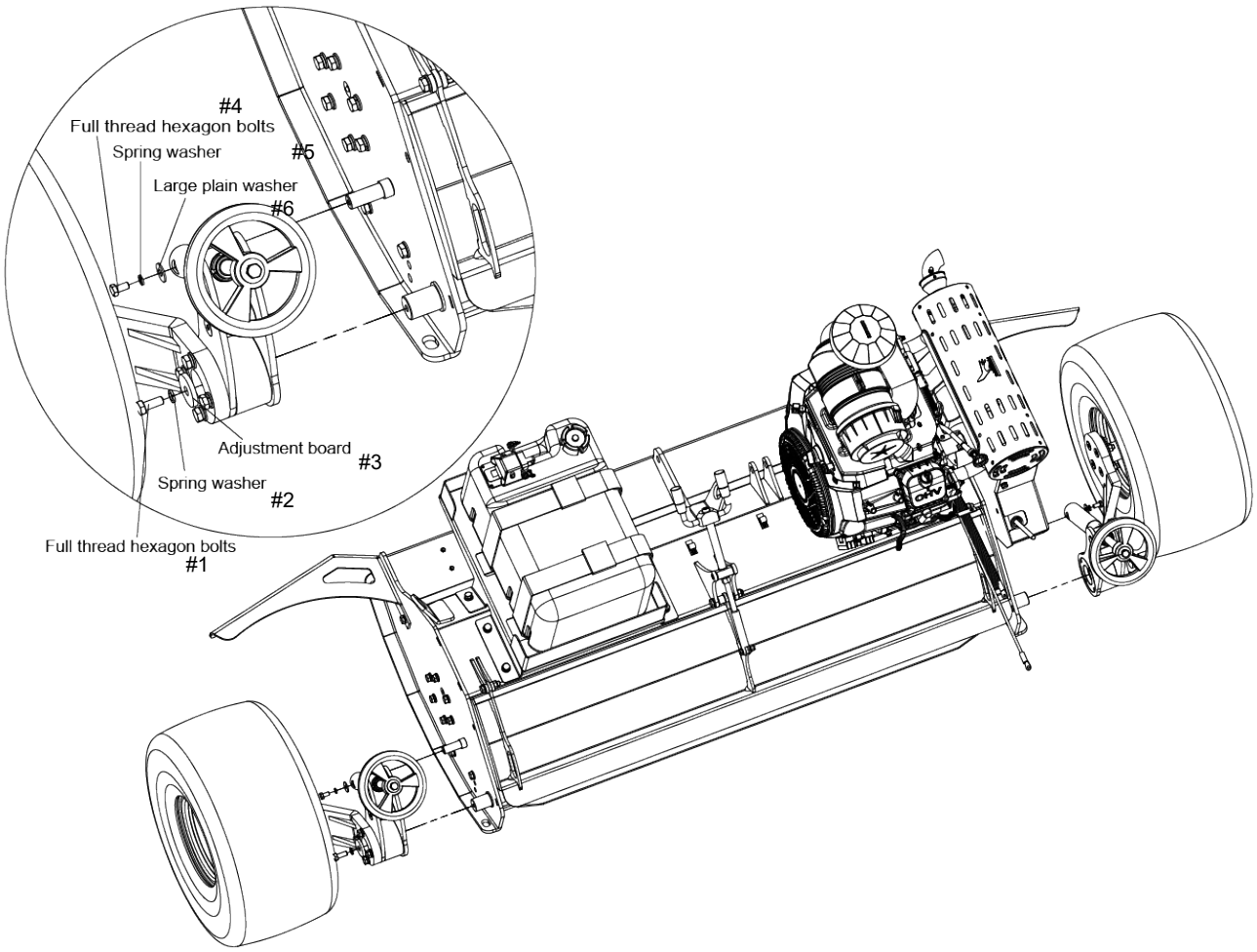


Figure 3

Traction assembly installation

1. Install the adjustable tie rods are mounted to tie rod holder plate 2 on the hood.
2. Insert M16 x 80 hexagonal bolts (#1)，plain washer (#2) ，M16 locknuts(#3).
3. Tie rod retainer plate mounted on the hood.
4. Insert Rod pin (#4), plain washer (#5), split pin (#6).

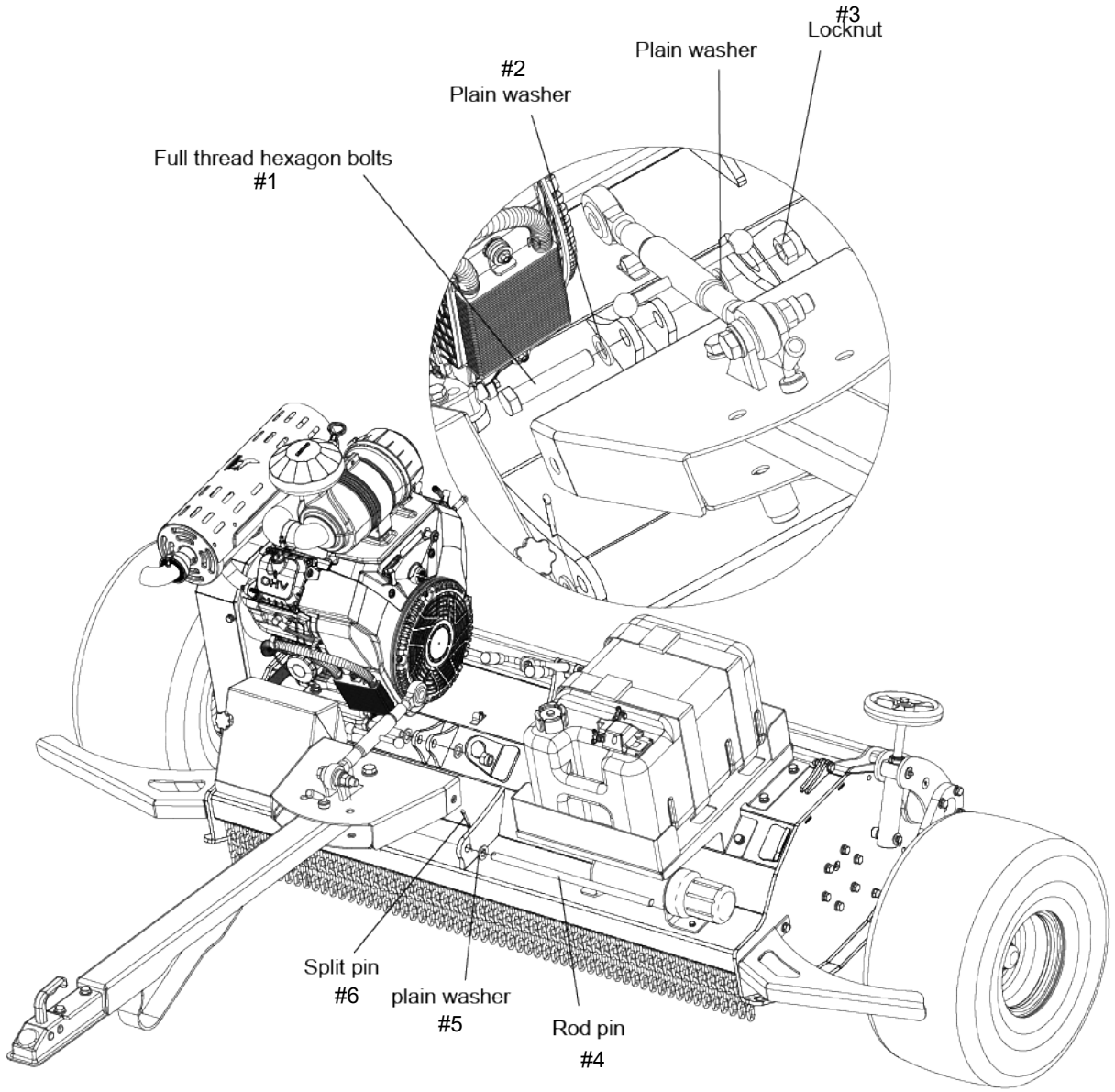


Figure 4

OPERATION

Checklist Before Operation

⚠CAUTION

Hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training involved in the operation, transport, storage, and maintenance of the mower. Therefore, it is absolutely essential that no one operates the machine without first having read, fully understood, and become totally familiar with the Operator's Manual. Make sure all operators have completed the Checklist below.

Before operating the machine, the following steps should be inspected carefully:

1. Before operating the machine, the following steps should be carefully checked:.
2. Check and lubricate all grease points on the machine and drive shaft before starting the machine.
3. Check that the machine is properly attached to the ATV. Make sure retainers are used on the retaining pins.
4. Check the blades. Make sure they are not damaged or broken and swing freely on their bases. Repair or replace as required.
5. Check and tighten blade bolts.
6. Check all rotating parts for tangles. Remove such material.
7. Install and secure all guards, hooks and covers before starting.
8. All others must leave the area before connecting ATV drive power.
9. Stop the motor and take the key with you before cleaning, repairing and lubricating the machine.
10. Do not go near the machine while it is running.

Adjusting Roller/Skid Height

⚠CAUTION

The roller must be adjusted into the same position on both sides.

The blades must never be less than 1" (2.5 cm) from the ground.

The skid shoes must be at least 3/4" (2 cm) off the ground when in operation.

There are three optional locations for roller height adjustment indicated

1. Park ATV and implement on a flat, level surface.
2. Lower ATV lift arms to bring the roller in contact with the ground and make sure the flail head is parallel with the ground.
3. Shut ATV down according to procedures mentioned in ATV manual.
4. Raise and secure the implement with solid and firm support blocks.
5. Untighten and remove the height adjustment bolt as well as associated washers and nuts;
6. Adjust roller to the desired height by choosing one of the three locations;

7. Secure the bolts with removed washers and nuts;
8. Accordingly adjust the skid shoe by untightening the bolts as well as associated washers and nuts.
9. Inspect blades to make sure they do not touch the ground. Blades that come in contact with the ground will wear quickly. If necessary, readjust cutting height to keep blades from touching the ground.

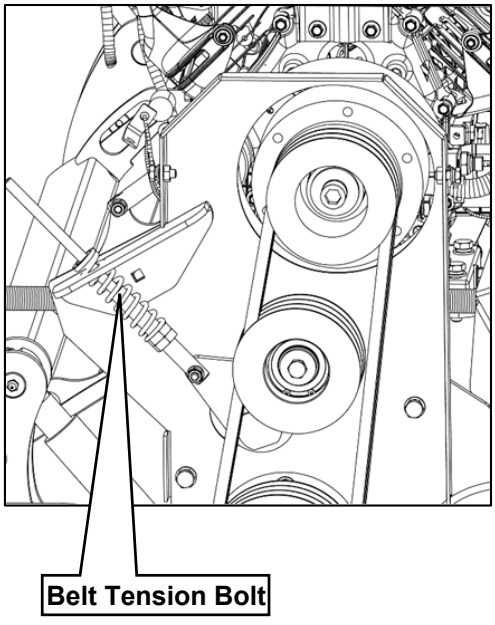
Adjusting the Belt

⚠CAUTION

- Always shut tractor down before servicing, adjusting, cleaning, or maintaining this implement
- Always wear appropriate PPE, such as gloves, safety glasses, and hearing protection to protect yourself from any potential hazards.
- Block the mower securely in place to prevent any movement during the adjustment process.
- Excessive tension on the belt may lead to premature failure of belt and drive components. Excessive tension on the belt may also lead to a safety hazard to the operator or bystanders.
- The Belt tension should be checked after the first 20 hours of use and every 40 hours thereafter.
- Check belt tension by applying approximately 22 pounds of pressure half way between the pulleys. The belt should deflect approximately 3/8".

See Figure 5

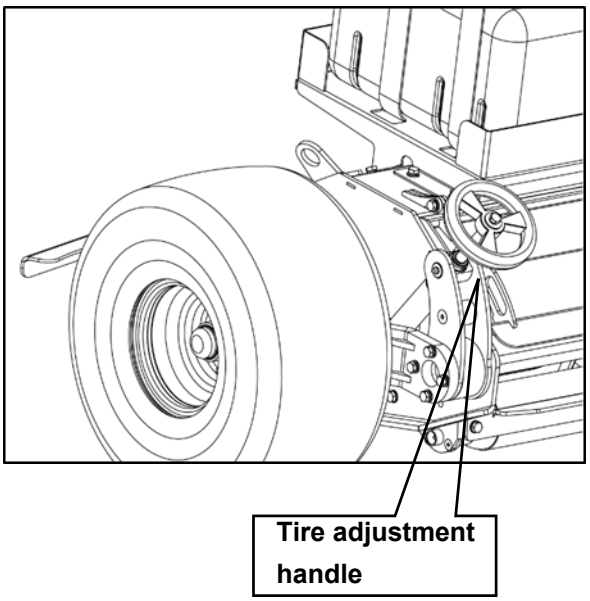
Belt tension adjustment steps:
Loosen the bolts, split lock washers and common washers to remove the belt guard;
Loosen the jamb nut;
Turn the adjusting nut until desired belt tension is achieved;
Tighten the jamb nut;
Put back the belt guard by tightening the removed bolts and washers.



Tire adjustment handle

Figure 6

Adjusting the steering wheel on either side allows you to adjust the height of the tyres, raising or lowering them.



Drawbar Offsetting

WARNING

- **Changing the drawbar angle must be undertaken with the engine switched off & the ignition keys removed. Failure to do so could result in injury or damage to the machine**

Figure 7

The drawbar can be offset to the left or right horizontally as well as be tilted vertically as indicated.

Pull up and bend the handle of quick fastener 90° downward;

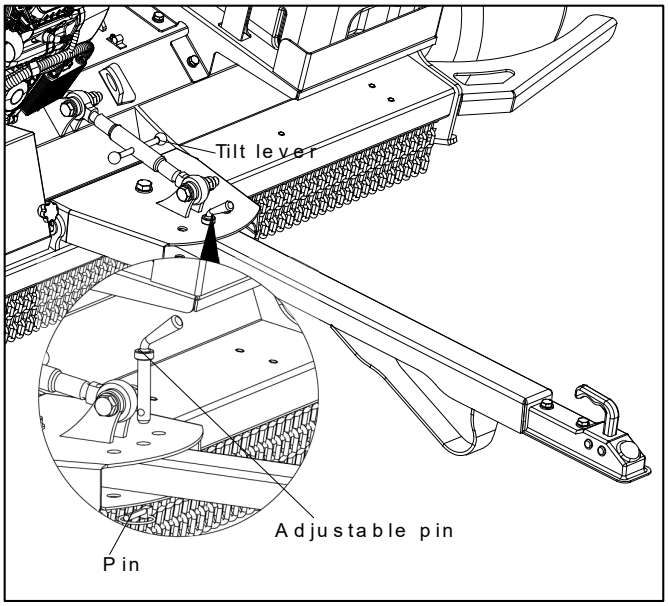
Untighten the quick fastener and the bolt collar by turning the handle;

Move the drawbar horizontally into the desired location;

Push down and tighten the quick fastener and the bolt collar;

Lift the handle to be in vertical position.

Rotate the tilt lever to incline the drawbar upward or downward for better compatibility with the towing vehicle.



Starting the Machine

⚠WARNING

- The flail mower must only be in the working position while moving forward and must be raised when backing-up. Operating the flail mower in the working position while backing-up can seriously damage the flail mower.
- Never use the flail mower with the tractor straddling a ditch.
- Only operate the flail mower inclined when in the lateral extended configuration. When the mower is in the center configuration, only operate it horizontally.
- Make sure that there are no persons or animals in the vicinity.

⚠DANGER

To avoid ATV overturning hazard

- Never allow the ATV to take the weight of the flail mower when working on inclined surfaces (ditches, slopes etc.), as the combined weight of the ATV and flail mower may cause the ATV to overturn.
- Lightweight ATV with rear attached implements may need weights added to the front to maintain steering control.
- Consult your ATV Operator's Manual to determine proper weight requirements and maximum weight limitations.
- Survey any incline surface the ATV will be traveling on for holes and low depressions in the ground that the ATV wheel can drop into suddenly causing the ATV to overturn unexpectedly. Avoid such drop-offs.

Inspection Before Starting

Before starting the machine, check and adjust the following items:

1. Whether the engine is connected to the power supply
2. Oil level in fuel tank.
3. Lubricant nipples on bearings.
4. All bolts, nuts, and screws.

SERVICE AND MAINTENANCE

General Service

The period recommended is based on normal operating conditions. Severe or unusual conditions may require more frequent service.

Each 4 hours of work:

Check and tighten nuts and bolts..

Lubrication Parts

Lubrication parts :

Interval	Type	Name	Parts Image	Remark
25 Hours	 Multi-purpose Grease	**Other parts**	If the GREASE labels () are posted on the machine, you need to lubricate it regularly. Recommend lubrication interval is 25hours.	

Tightening Torque

Please follow the table below to identify the torque value as required.

Torque Values Chart for Common Bolt Sizes												
	Bolt Head Identification							Bolt Head Identification				
												
Bolt Size (inches)	Grade 2		Grade 5		Grade 8		**Bolt Size** (Metric)	Class 5.8		Class 8.8		Class 10.9	
in-tpi [1]	N · m [2]	ft-lb [3]	N · m	ft-lb	N · m	ft-lb	mm x pitch [4]	N · m	ft-lb	N · m	ft-lb	N · m	ft-lb
1/4" - 20	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7
1/4" - 28	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11
5/16" - 18	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27
5/16" - 24	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29
3/8" - 16	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53
3/8" - 24	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62
7/16" - 14	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93
7/16" - 20	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97
1/2" - 13	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105
1/2" - 20	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150
9/16" - 12	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	215	160
9/16" - 18	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230
5/8" - 11	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245
5/8" - 18	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300
3/4" - 10	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355
3/4" - 16	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450
7/8" - 9	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665
7/8" - 14	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780
1" - 8	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845
1" - 12	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550
1-1/8" - 7	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710
1-1/8" - 12	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700
1-1/4" - 7	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220
1-1/4" - 12	750	555	1680	1240	2730	2010	[1] in-tpi = nominal thread diameter in inches-threads per inch						
1-3/8" - 6	890	655	1990	1470	3230	2380	[2] N· m = newton-meters						
1-3/8" - 12	1010	745	2270	1670	3680	2710	[3] ft-lb= foot pounds						
1-1/2" - 6	1180	870	2640	1950	4290	3160	[4] mm x pitch = nominal thread diameter in millimeters x thread pitch						
1-1/2" - 12	1330	980	2970	2190	4820	3560							
Torque tolerance + 0%, -15% of torquing values. Unless otherwise specified use torque values listed above. All locknuts or lubricated fasteners: Use 75% of torque value. (i.e. 1/2"-13 GR5 = 76 ft-lb; 75% of 76 or .75 x 76 = 57 ft-lb)													

Replacing the Blade

Frequently check rotor blades to make sure they are in good working condition and properly secured to the rotor.
Replace worn or damaged parts with new blades.

IMPORTANT:

- Make sure that the replacement of blade with other same weight. This will be a balance of rotor spinning.
- Recommend blade is the original factory accessories.

The blade have a Crushing edge on both the leading and trailing edges.
When the leading edge wears out, turn existing pair of blade around 180 ° and reinstall. Replaced blades should be the same length as original parts to maintain rotor balance. Refer to Figure 16and 17:
Hammer blades replacement steps (See **Figure 8**):

1. Remove locknut (#4), spring washer (#3), hexagon head bolt (#2).
2. Remove existing blade (#1)
3. Install a new blade.
4. Install blade with bolt, spring washer and locknut, refer to **Figure 8**.
5. Tighten locknut with correct torque.
6. Lubricate points.

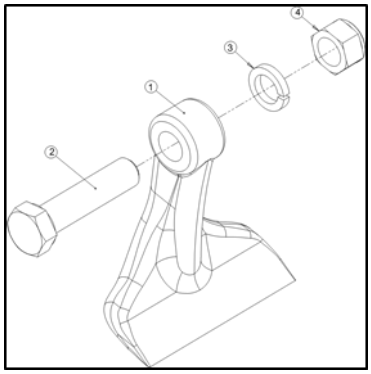


Figure 8

Note: If the images shown in the above figure are different from the machine, please check **EXPLODED VIEW AND PARTS LIST**.

STORAGE AND TRANSPORT

Storage

Before storage the implement, you should following the steps below:

1. Remove any dirt and grease that may have accumulated on the mower and moving parts. Scrape off compacted dirt from under the hood. Clean the machine inside and out so as to avoid corrosion.
2. Check rotor, blades, blade mounts, and blade bolts for wear and replace if necessary.
3. Don’t spray water on the rolling bearing if you clean the machine with high pressure sprayer.
4. Check and clean the universal joint, driving belt press roller, or replace them if they are not in good condition. Lubricate wherever needed.
5. Recoat the parts rubbed and damaged for anti-corrosion.
6. Store the machine in a dry, level area.

Transport

⚠WARNING

- Always disengage power take-off before raising mower to transport position.
- When traveling on roadways, travel in such a way that other vehicles may pass you safely. Always use LED lights, clean reflectors, and a slow moving vehicle sign that is visible from the back to warn operators in other vehicles of your presence.
- Always comply with all federal, state, and local laws.

Before transport the implement, you should following the steps below:

1. When raising mower to transport position, be sure driveline does not contact tractor or mower. If needed, adjust and set tractor 3-point lift height to limit mower movement and to protect driveline.
2. Be sure to reduce tractor ground speed when turning, leaving enough clearance so that the mower does not contact obstacles such as buildings, trees, fences, etc.
3. Select a safe ground travel speed when transporting from one area to another. When traveling on roadways, transport in such a way that faster moving vehicles may pass safely.
4. When traveling over rough or hilly terrain, shift tractor to a lower gear.

TROUBLESHOOTING

Listed general troubleshooting is the common malfunction that may or may not be application to the described in this manual. If you have any problem not covered in the list, please contact us for technical supporting.

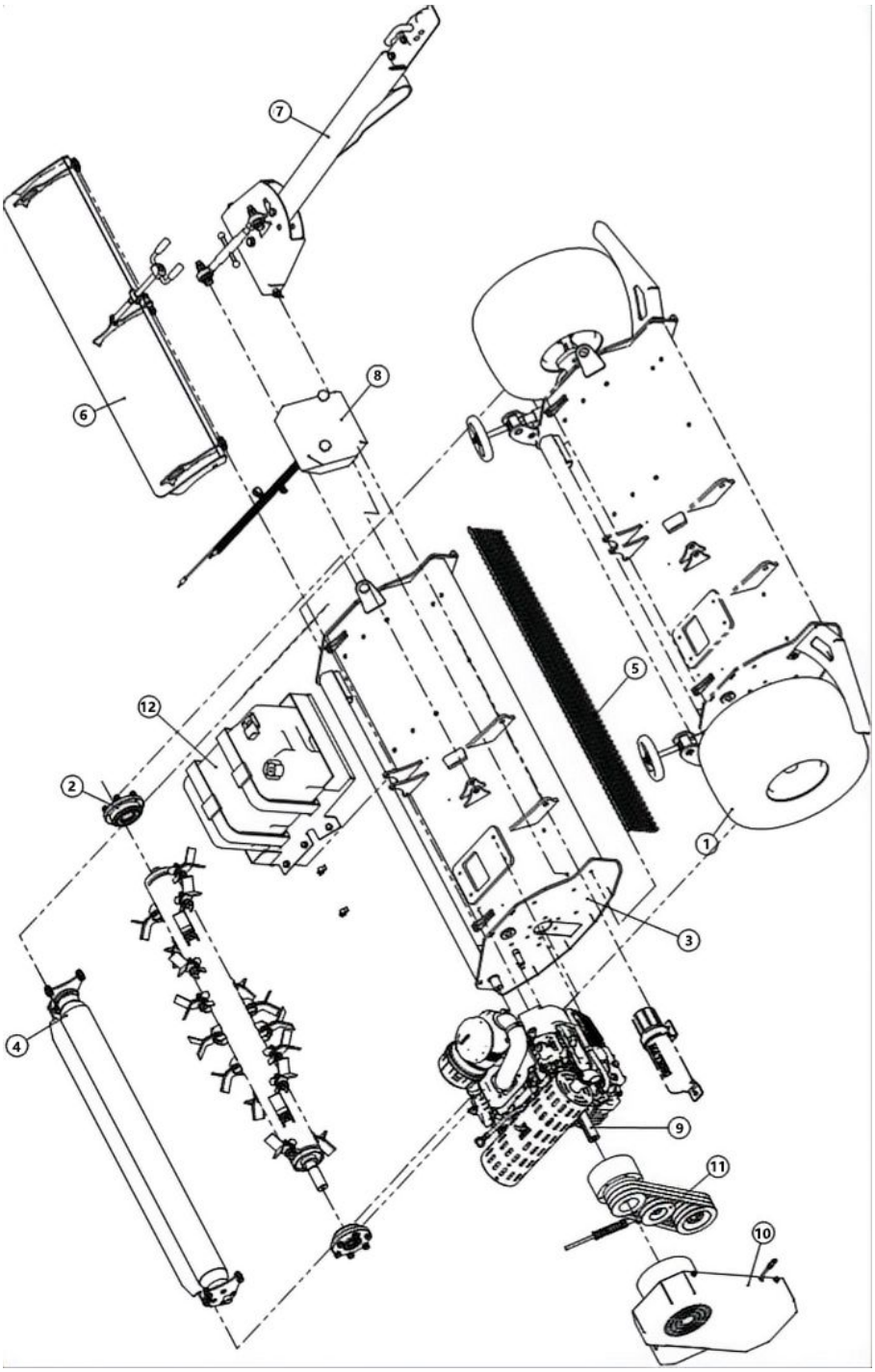
General troubleshooting list:

Malfunction	Possible Cause	Solution
Belt slippage	Blades touch the ground	Adjust the skids or roller correctly
	Belts worn	Replace a new belts
	Belt is not tensioned correctly	Correct belt tension, see **Adjusting the Belt**
	Belt tensioner is damaged	Replace a new one
	Clogging	Clean the machine to remove accumulated debris.
Belt failure	Incorrect belt alignment	Align the belts.
	Belt tensioner spring has lost its memory or is broken	Replace belt tensioner spring and belts.
Significant machine vibration	Worn blades	Replace the blades
	Missing	
	Broken blades	
	Worn rotor support bearings	Replace the bearings
	Rotor fouled with debris	Clean rotor
	Loose parts	Tighten bolts and fasteners
	Incorrect power take-off speed	Select correct tractor power take-off speed
Excessively rapid blade wear	Blades touching the ground	Check and, if necessary, adjust cut height.
Blades tear rather than cut, shredded material not distributed evenly	Ground speed too high	Reduce the speed
	Cut height too low	Adjust cut height
	Excessive build-up of material under the flail head	Clean the flail head
	Clogging	Clean the machine to remove accumulated debris
Roller does not turn easily	Insufficient greasing	Grease as indicated
	Roller casing bearings worn	Replace the bearings

Malfunction	Possible Cause	Solution
	Roller or mounts damaged or bent	Replace damaged parts
Excessive driveline noise	Insufficient greasing	Apply grease as indicated in the Maintenance section
	Worn trunnion bearing	Replace bearings
	Exceeds 25 degrees	Do not exceed 25 degrees
Unit overheating	Not enough oil in the unit	Check seals and gaskets and replace any that are damaged
		Top off the oil
	Incorrect oil type	Replace with the prescribed type of oil
	Excessive oil	Restore correct oil level
	Overloading	Observe the prescribed speed and power conditions

EXPLODED VIEW AND PARTS LIST

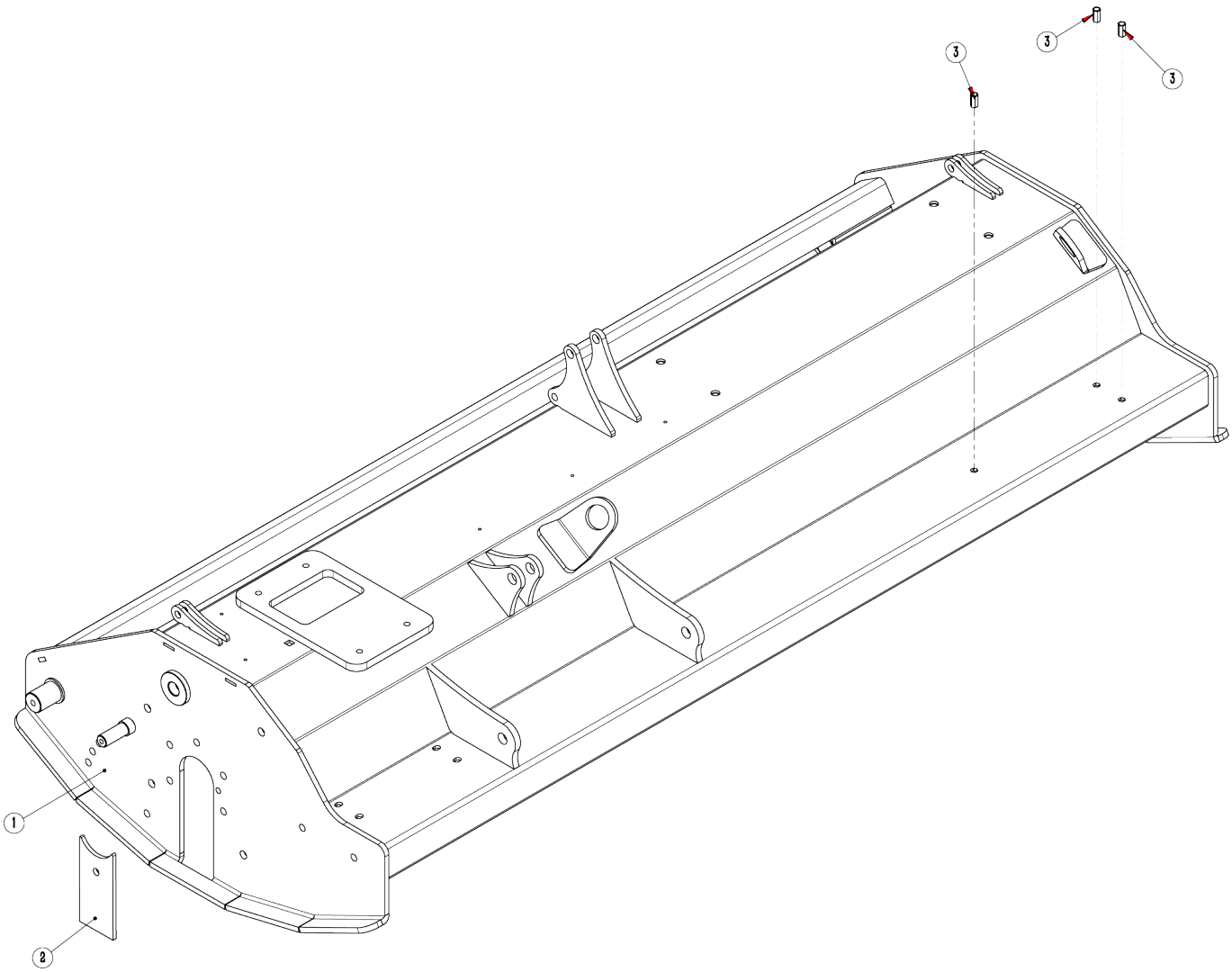
MACHINE ASSEMBLY



POS.	COD.	Specification	Description	Qty
1	2060105467	G11001A13000-000	Tire components	1
2	2060105468	G11001A04000-000	Cutter shaft bearing block assembly	1
3	2060106704	G11003A01000-000	Hood assembly	1

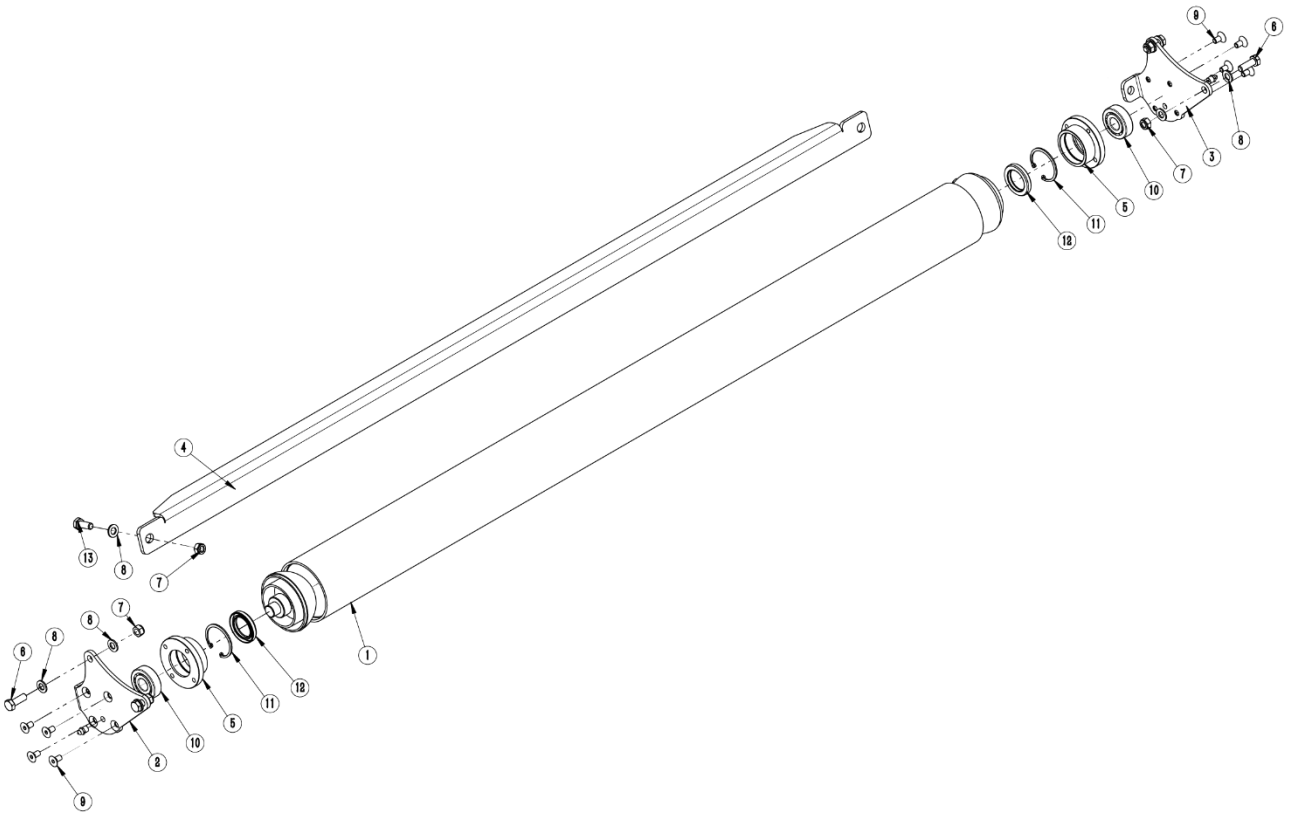
4	2060106705	G11003A03000-000	Roller assembly	1
5	2060106706	G11003A10000-000	Protection assembly	1
6	2060106707	G11003A05000-000	Rear cover assembly	1
7	2060105474	G11001A09000-000	Traction assembly	1
8	2060105475	G11001A15000-000	Battery mounting kit	1
9	2060105476	G11001A14000-000	Engine mounting assembly	1
10	2060105477	G11001A08000-000	Side protection cover assembly	1
11	2060105466	G11001A07000-000	Side drive assembly	1
12	2090005594	G11003A16000-000	Oil tank	1

HOOD ASSEMBLY



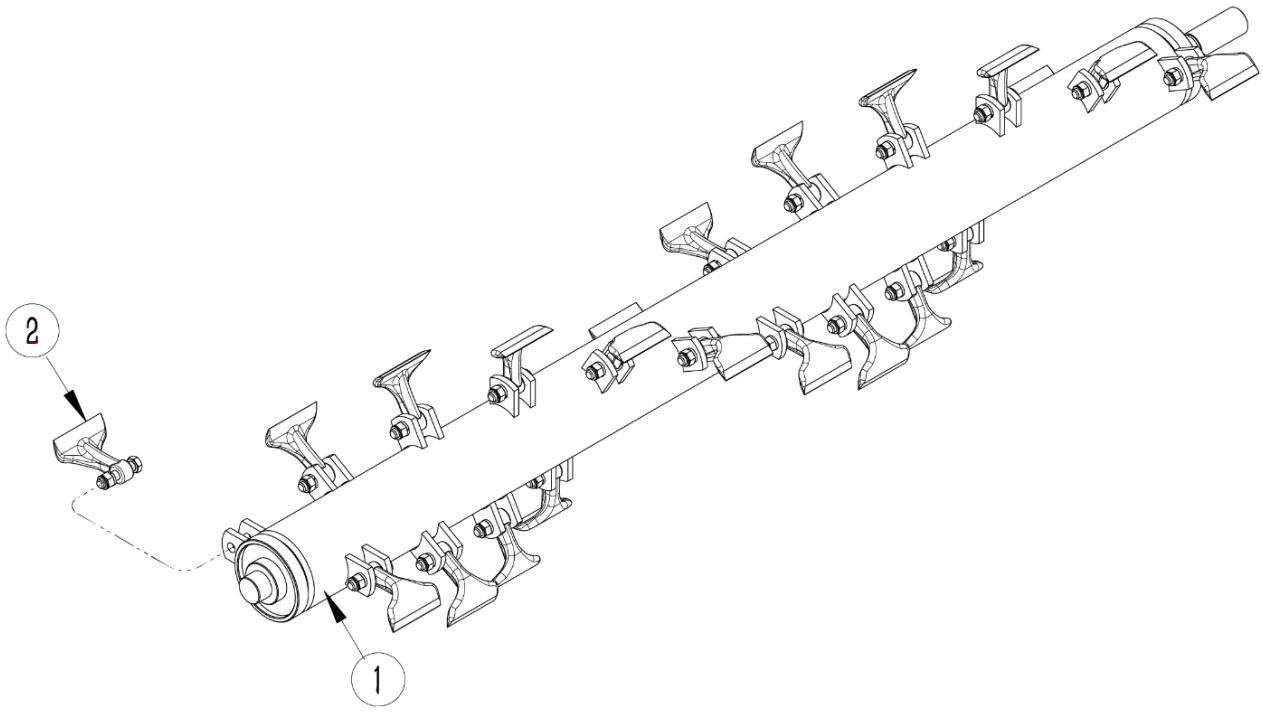
POS.	COD.	Specification	Description	Qty
1	2020001994	G11001A01100-000	Panel hood weldment	1
2	2000001001	G11001A01000-001	Side plate	1
3	3051800002	M6×18-8-EP•Zn•P	Small countersunk full hexagon rivet nut	3

ROLLER ASSEMBLY



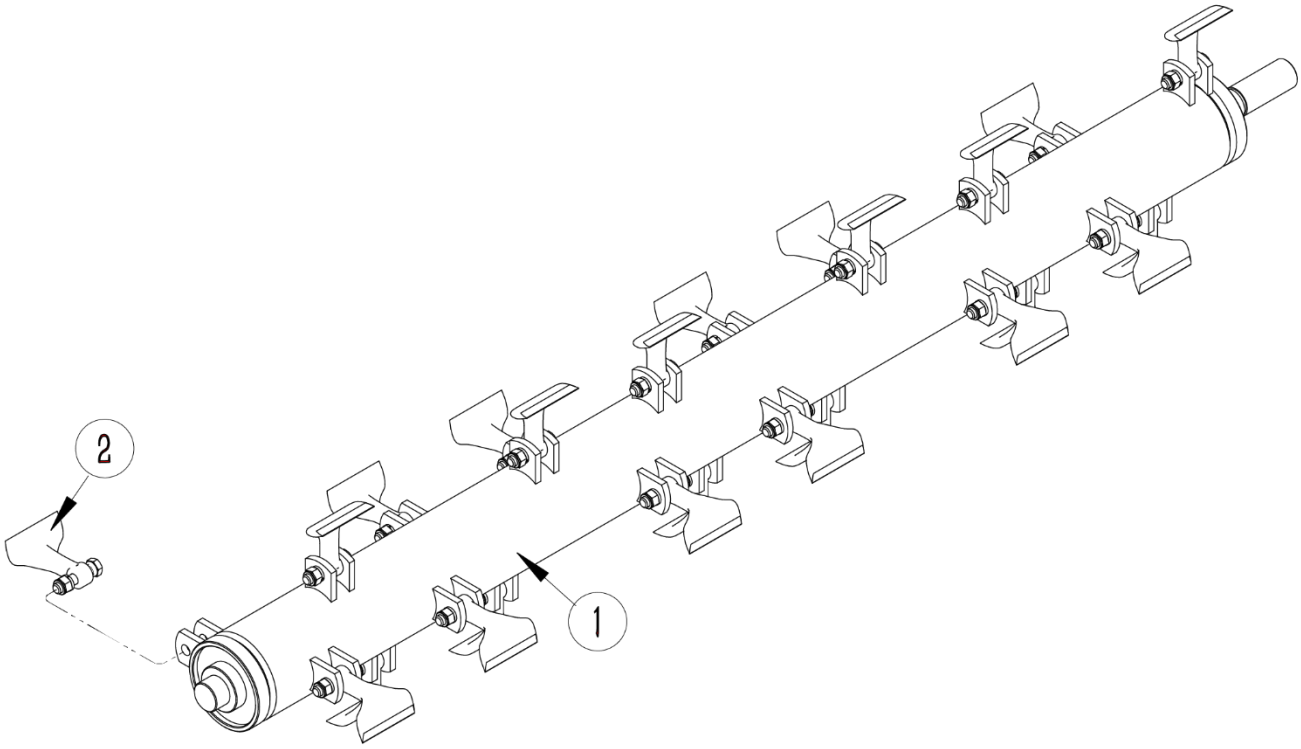
POS.	COD.	Specification	Description	Qty
1	2020001999	G11001A03100-000	Drum welding parts	1
2	2000001004	G11001A03000-001	Drum left adjustment plate	1
3	2000001002	G11001A03000-002	Drum right adjustment plate	1
4	2000001011	G11001A03000-003	Scraper	1
5	3240300005	G01009A03000-001	Bearing Block	2
6	3040100045	GB/T5783-M10×30- 8.8-EP•Zn	Full-thread hexagon bolts	4
7	3050500004	GB/T889.1-M10-8-EP•Zn	Locknut	6
8	3080100006	GB/T95-10-EP•Zn	Plain washer	10
9	3060200017	GB/T70.3-M8×16-8.8-EP•Zn	HSCS-Countersunk	8
10	3100200006	GB/T281-1304	Self-aligning ball bearing	2
11	3080600033	GB/T893-52-A	Circlips for holes	2
12	3170100007	GB/T13871.1-FB- 35×52×8-NBR	shaft seal	2
13	3040100043	GB/T5783-M10×25- 8.8-EP•Zn	Full-thread hexagon bolts	2
14	3170400005	DIN71412-A G1/8 304	Grease nipple	2

BLADE ASSEMBLY



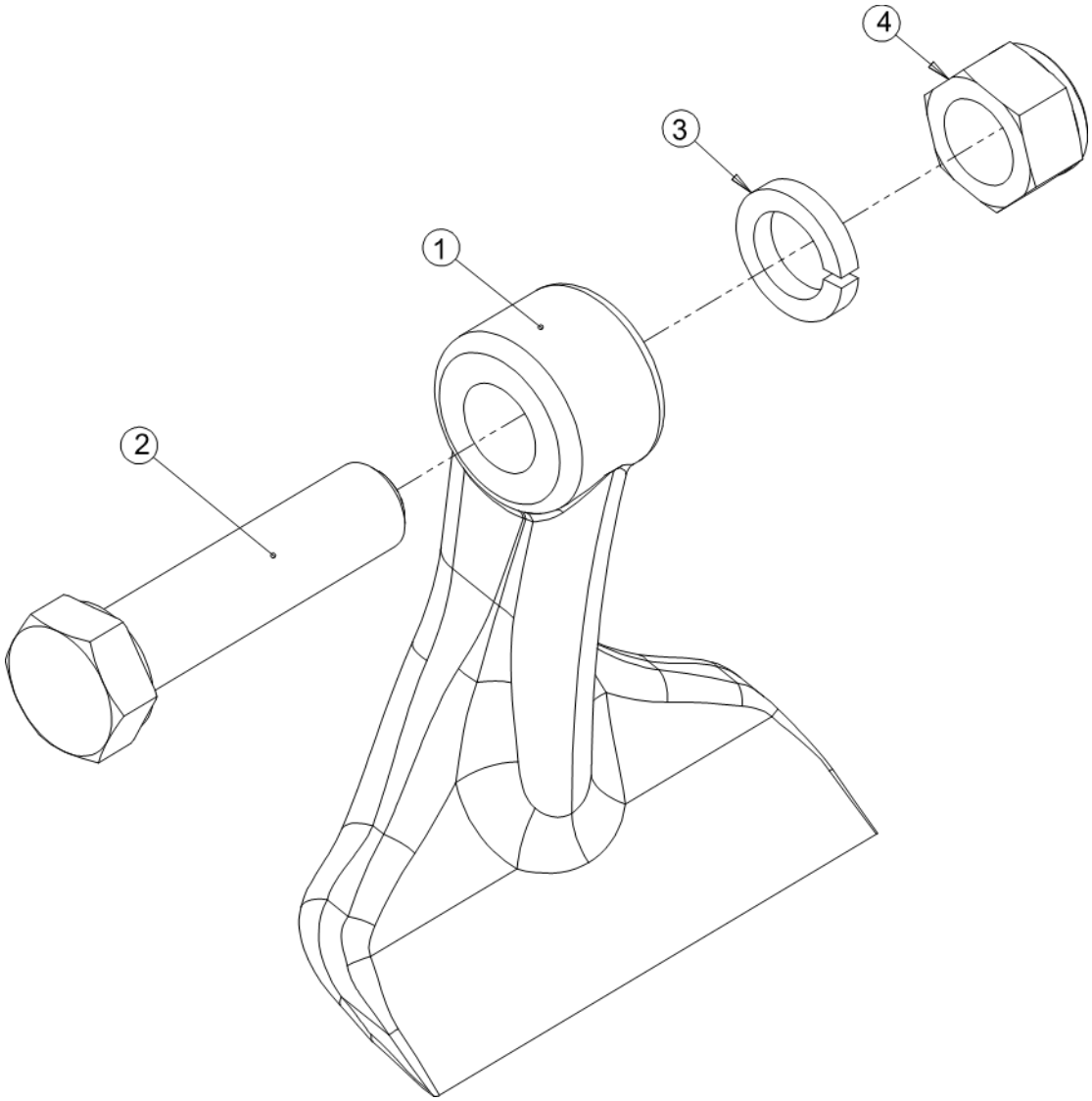
POS.	COD.	Specification	Description	Qty
1	2020002006	G11001A02100-000	Knife shaft welding	1
2	2060205384	G11006A02200-000	Blade components	24

Option



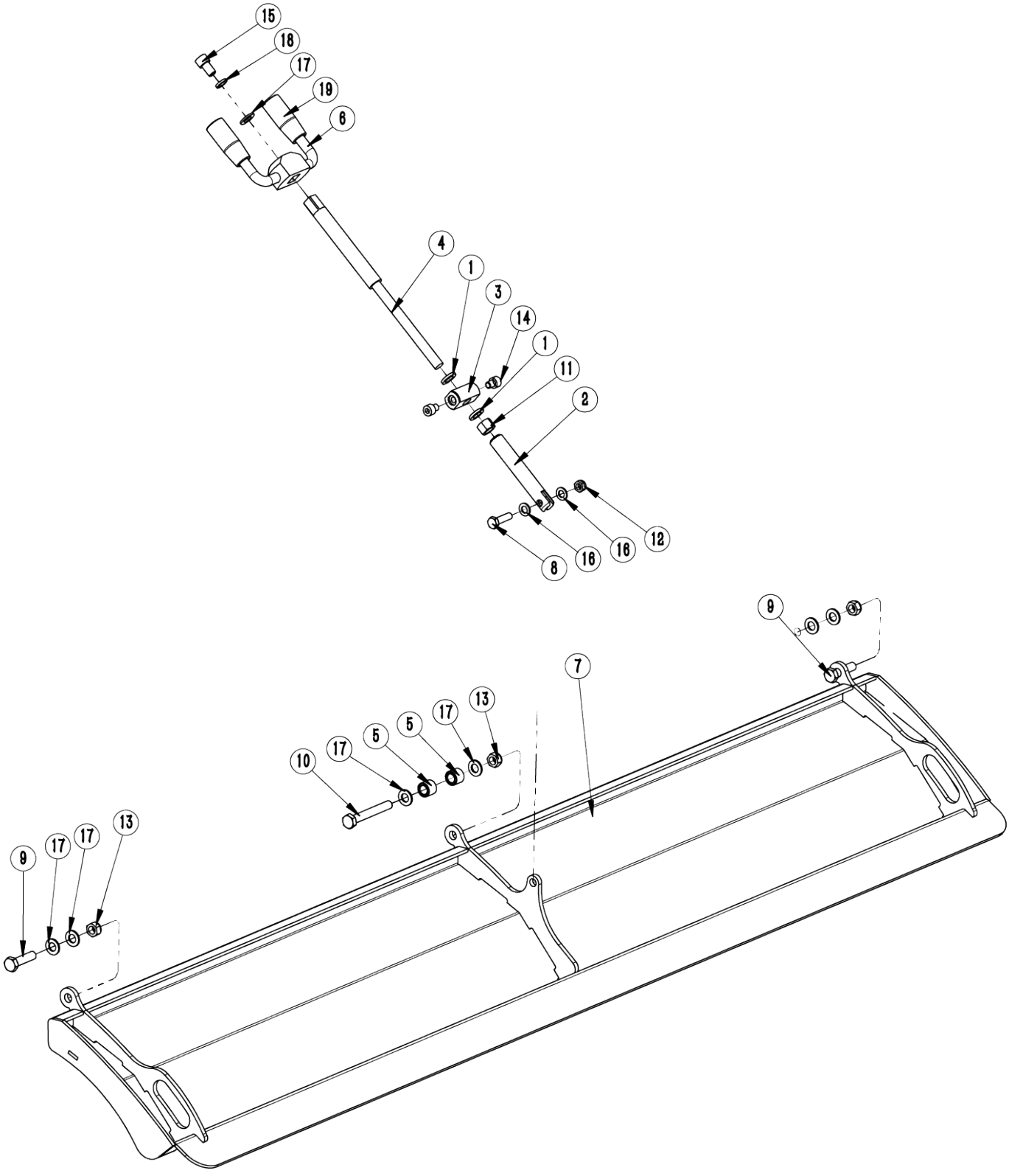
POS.	COD.	Specification	Description	Qty
1	2020002058	G11001B02100-000	Knife shaft welding	1
2	2060205384	G11006A02200-000	Blade components	24

AXLE ASSEMBLY



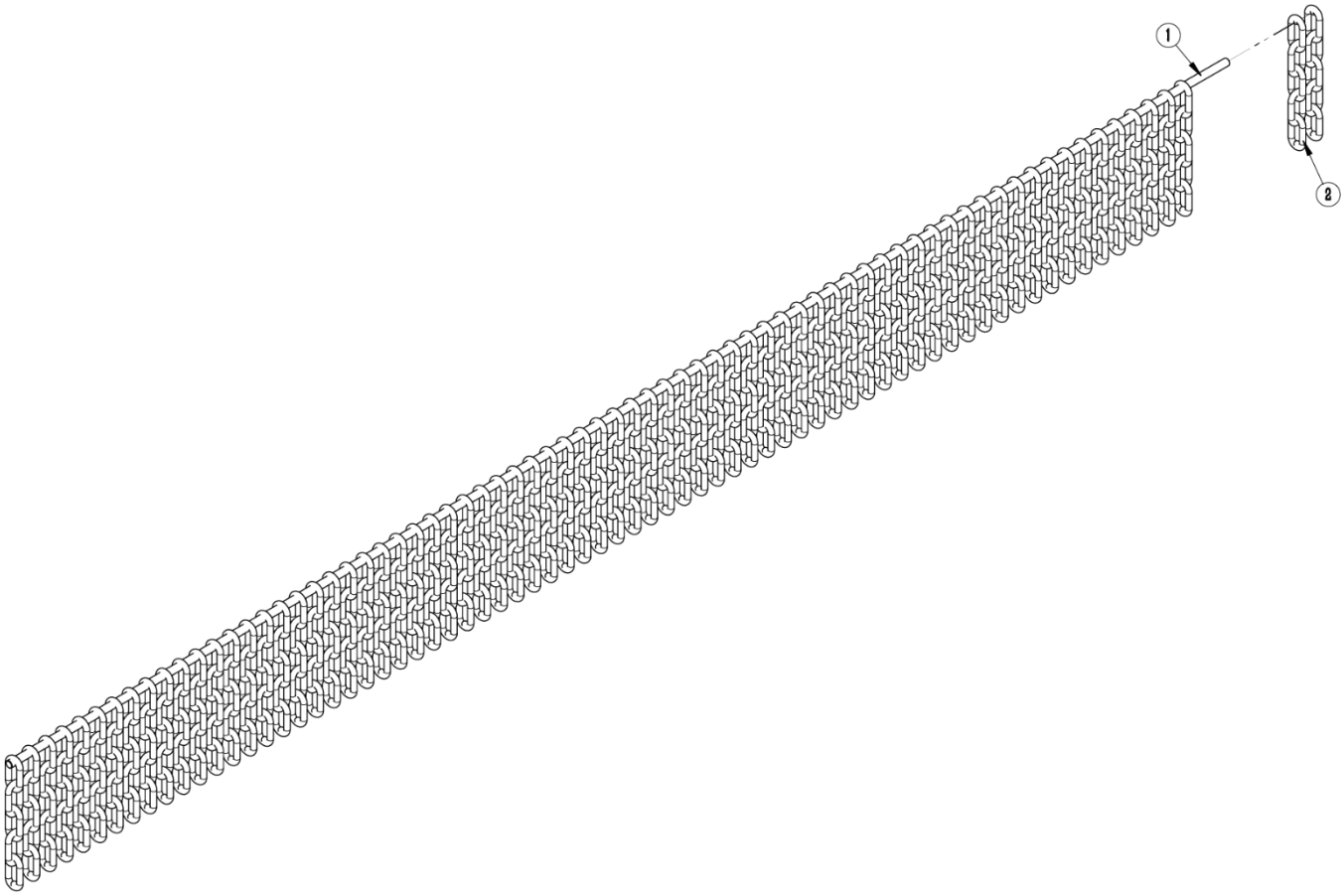
POS.	COD.	Specification	Description	Qty
1	3220100034	MT01020	Blade	1
2	3040300020	GB/T5782-M12×55-10.9-O	Hexagon head bolts	1
3	3080500009	GB/T93-12-EP•Zn	Spring washer	1
4	3050500007	GB/T889.1-M12-8-EP•Zn	Locknut	1

REAR COVER ASSEMBLY



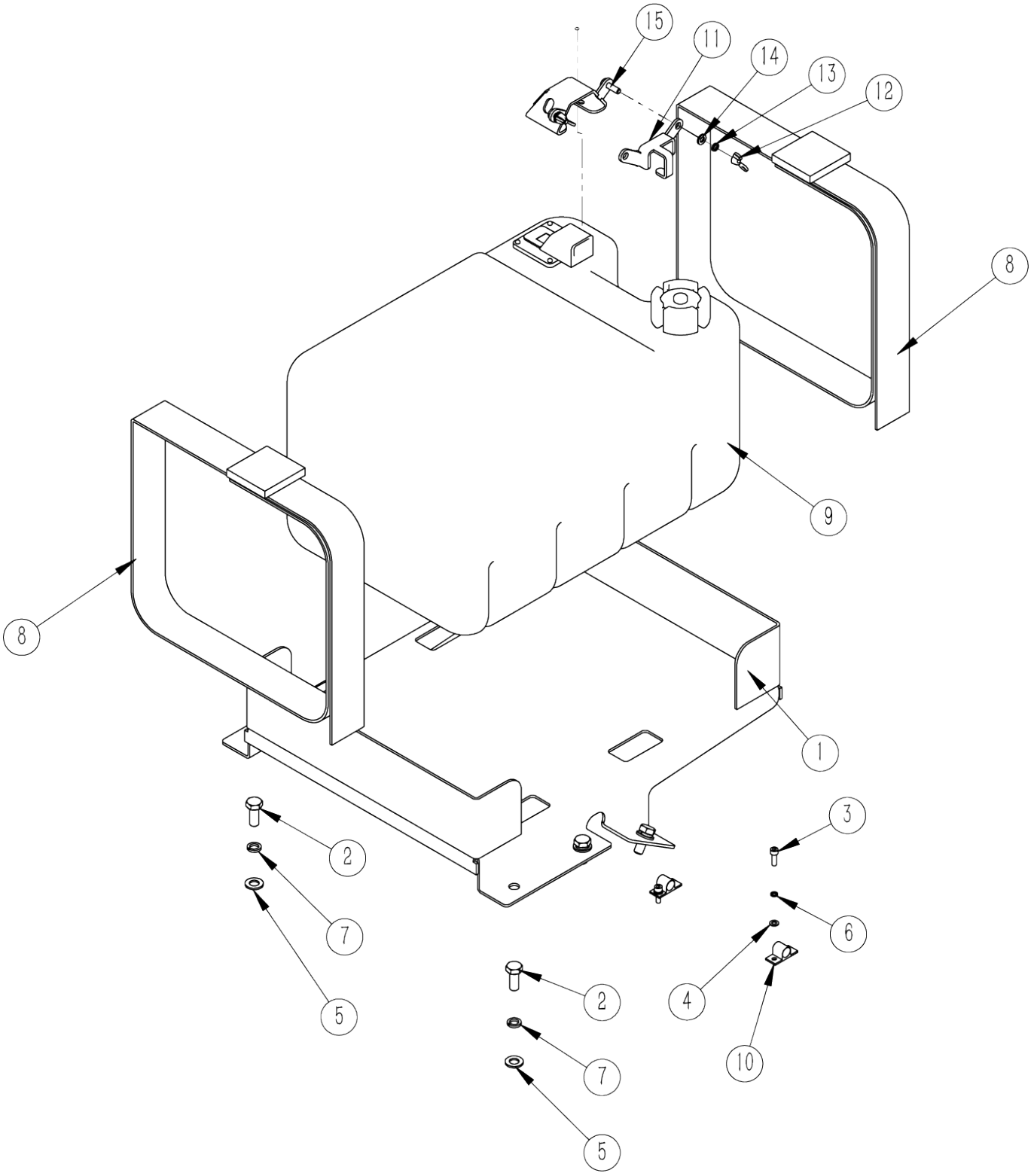
POS.	COD.	Specification	Description	Qty
1	2000001013	G11001A05000-004	Gasket	2
2	2010000729	G11001A05000-001	Threaded sleeve	1
3	2010000730	G11001A05000-002	Turn	1
4	2010000731	G11001A05000-003	Joystick	1
5	2010000732	G11001A05000-005	Spacer	2
6	2020001986	G11001A05200-000	Handle welded parts	1
7	2020001995	G11001A05100-000	Cover plate welded parts	1
8	3040100025	GB/T5783-M8×30-8.8-EP•Zn	Full-thread hexagon bolts	1
9	3040100047	GB/T5783-M10×40-8.8-EP•Zn	Full-thread hexagon bolts	2
10	3040100054	GB/T5783-M10×75-8.8-EP•Zn	Full-thread hexagon bolts	1
11	3050100007	GB/T41-M12-5-EP•Zn	Hexagon Nuts	1
12	3050500003	GB/T889.1-M8-8-EP•Zn	Locknut	1
13	3050500004	GB/T889.1-M10-8-EP•Zn	Locknut	3
14	3060100615	GB/T70.1-M8×10-8.8-EP•Zn	Hexagon socket head cap screws	2
15	3060100037	GB/T70.1-M10×16-8.8-EP•Zn	Hexagon socket head cap screws	1
16	3080100004	GB/T95-8-EP•Zn	Plain washer	2
17	3080100006	GB/T95-10-EP•Zn	Plain washer	7
18	3080500008	GB/T93-10-EP•Zn	Spring washer	1
19	3210500004	G11001A05000-006	The gloves	2

PROTECTION ASSEMBLY



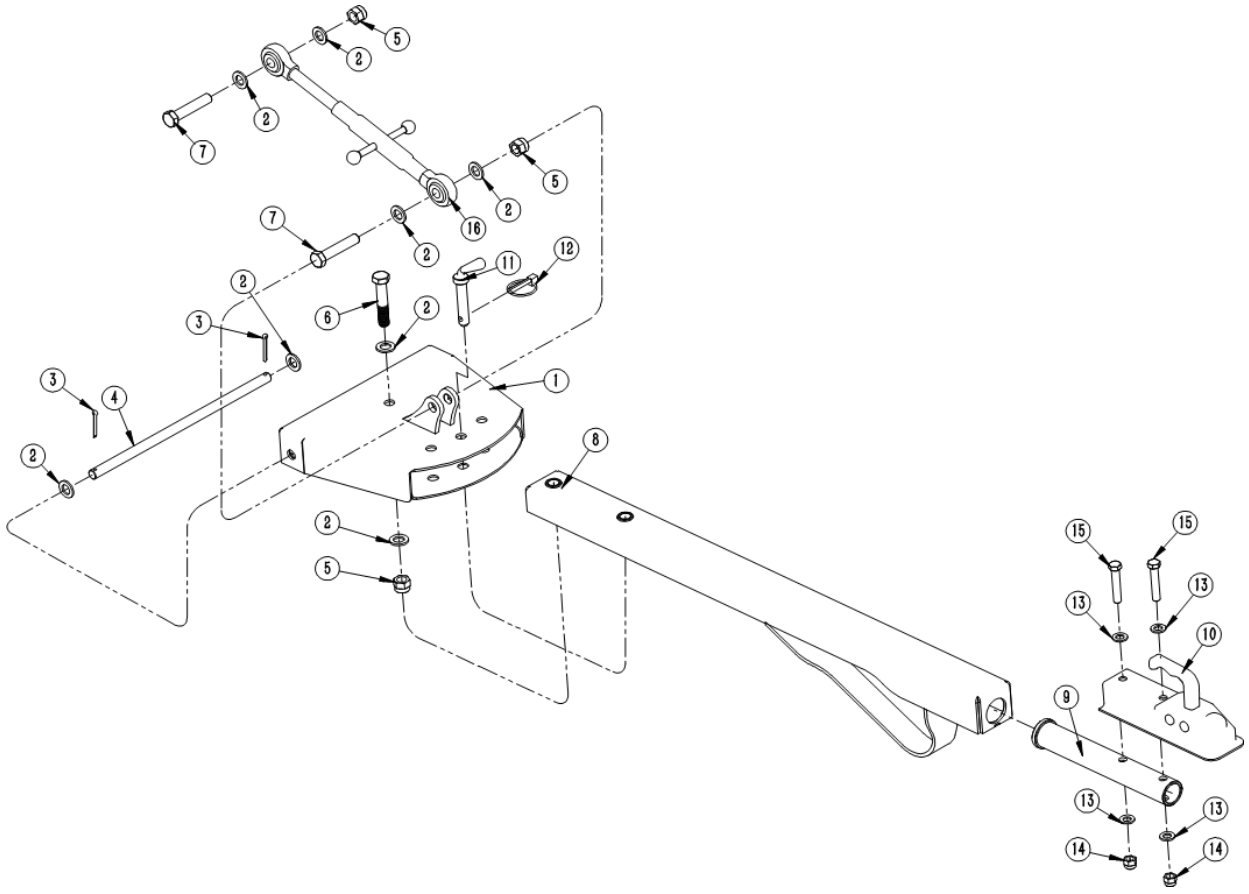
POS.	COD.	Specification	Description	Qty
1	2010000722	G11001A10000-001	Chain pin	1
2	3130100010	6×28×20-5	Galvanized chain	73

OIL TANKS



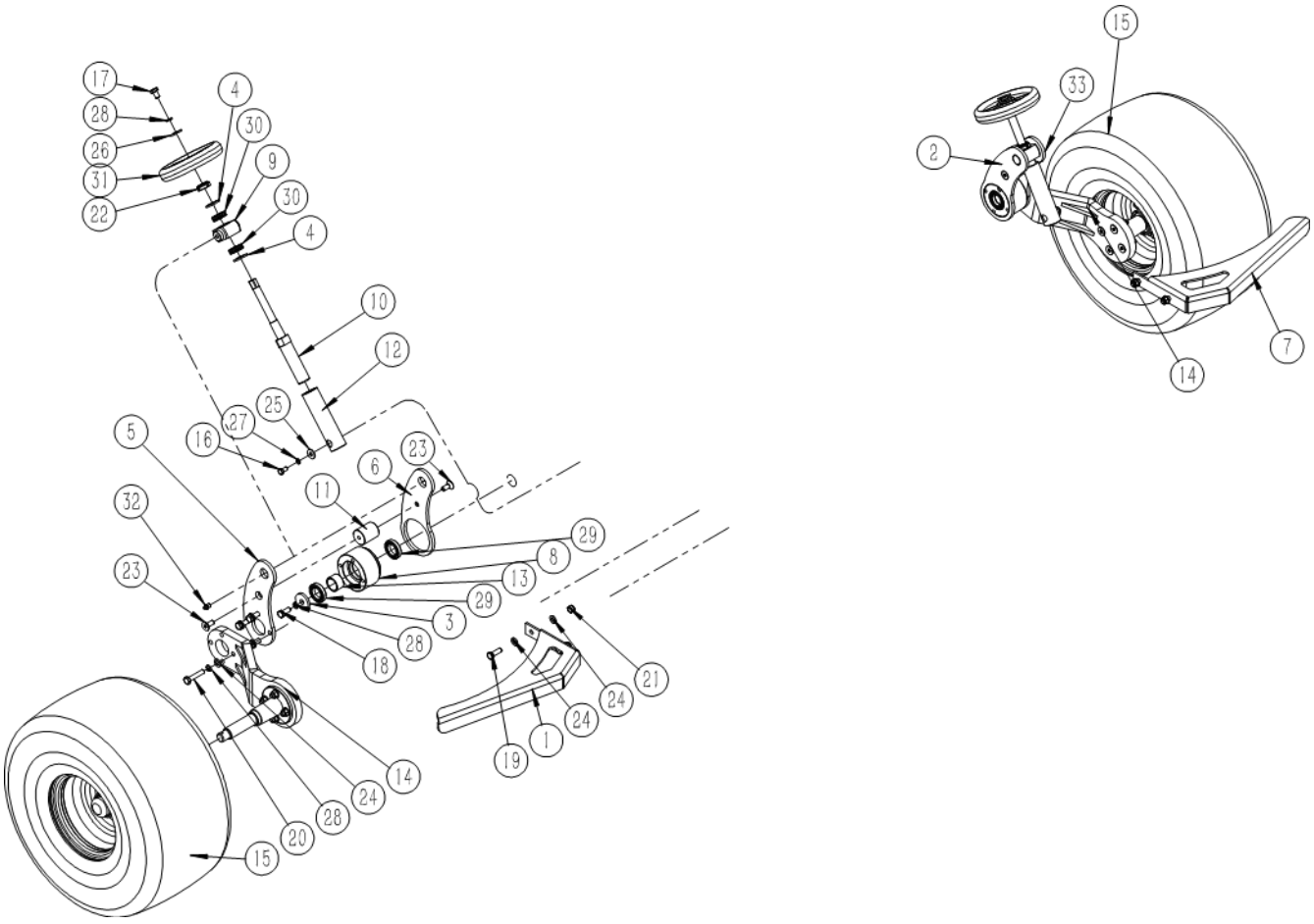
POS.	COD.	Specification	Description	24L/Qty
1	2020006179	G11003A16100-000	Plate weldment	1
2	3040100043	GB/T5783-M10×25-8.8-EP•Zn	Full-thread hexagon bolts	6
3	3060100004	GB/T70.1-M5×16-8.8-EP•Zn	Hexagon socket head cap screws	2
4	3080100002	GB/T95-5-EP•Zn	Plain washer	2
5	3080100006	GB/T95-10-EP•Zn	Plain washer	6
6	3080500005	GB/T93-5-EP•Zn	Spring washer	2
7	3080500008	GB/T93-10-EP•Zn	Spring washer	6
8	3130600601	1500×50mm	Accessories	2
9	3200200660	24L-L2100	Accessories	1
10	3210100603	8J-S-12	Lock	2
11	2000006108	G11001B16300-000	plate	1
12	3051300601	GB/T 62.1-2004	Wing nuts	2
13	3080500006	GB/T93-6-EP•Zn	Spring washer	2
14	3080100003	GB/T95-6-EP•Zn	Plain washer	2
15	2020007212	G11001B16200-000	Plate weldment	1

TRACTION ASSEMBLY



POS.	COD.	Specification	Description	Qty
1	2020001996	G11001A09100-000	Tie rod seat welded parts	1
2	3080100009	GB/T95-16-EP•Zn	Plain washer	8
3	3120100107	GB/T91-5×40	Split pin	2
4	2010000718	G11001A09000-001	Rod pin	1
5	3050500009	GB/T889.1-M16-8-EP•Zn	Locknut	3
6	3040300059	GB/T5782-M16×85-8.8-EP•Zn	Hexagon head bolts	1
7	3040300057	GB/T5782-M16×80-8.8-EP•Zn	Hexagon head bolts	2
8	2020001997	G11001A09200-000	Tie rod welding	1
9	2010000717	G11001A09000-002	Connecting pipe	1
10	3130500003	50×50"	Hitch ball coupler	1
11	2010000719	G11001A09000-003	Tire height adjustment pin	1
12	3120400009	GB/T4329-8-EP•Zn	Pin	1
13	3080100007	GB/T95-12-EP•Zn	Plain washer	4
14	3050500007	GB/T889.1-M12-8-EP•Zn	Locknut	2
15	3040100076	GB/T5783-M12×65-8.8-EP•Zn	Full-thread hexagon bolts	2
16	3130500609	G11001A09000-004	Adjusting lever assembly	1

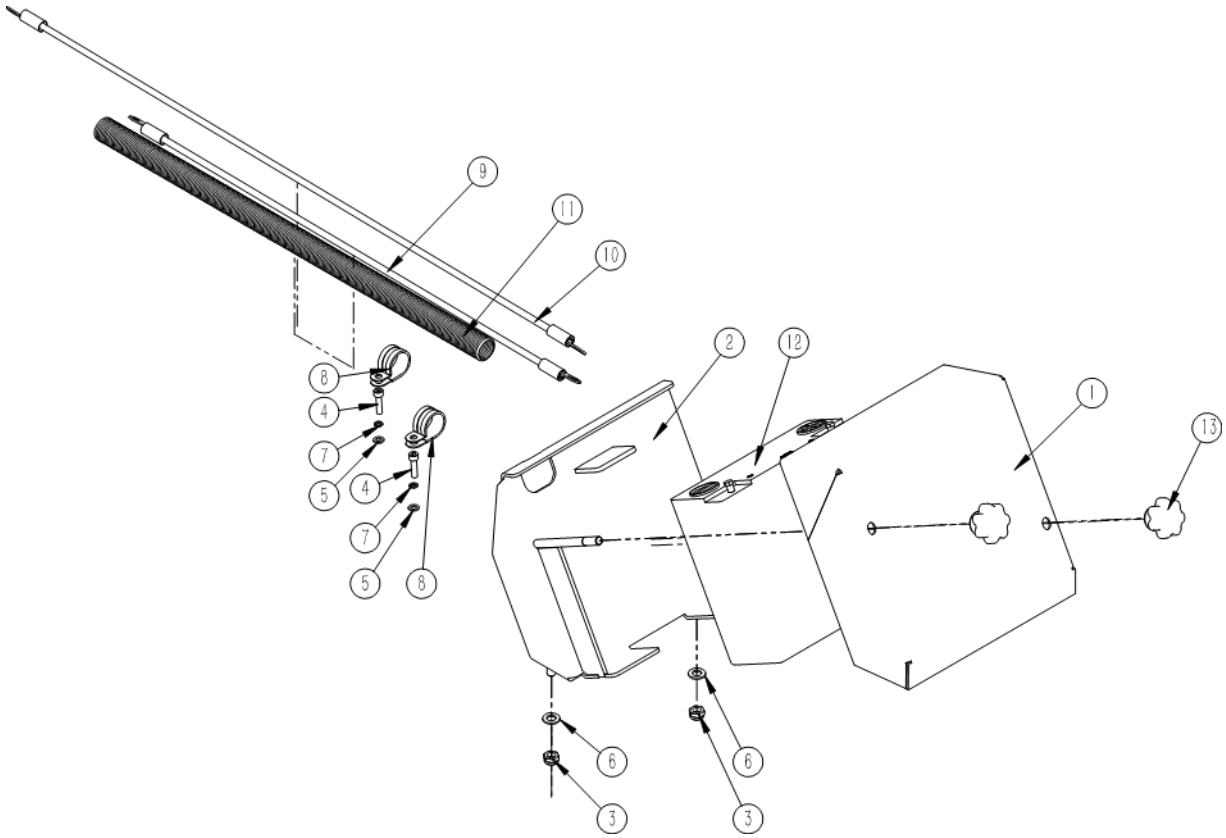
TIRE ASSEMBLY



POS.	COD.	Specification	Description	Qty
1	2000001003	G11001A13000-012	Right guard	1
2	2000001007	G11001A13000-004	Large hole adjustment plate	1
3	2000001008	G11001A13000-009	Adjust the shaft pressure plate	2
4	2000001012	G11001A13000-011	Gasket	4
5	2000006565	G11001B13000-013	Adjustment board 2	1
6	2000001015	G11001A13000-014	Large hole adjustment plate 2	1
7	2000001018	G11001A13000-001	Left guard	1
8	2010006244	G11001B13000-003	Tire adjusting sleeve	2
9	2010000724	G11001A13000-005	Adjust the bearing seat	2
10	2010000725	G11001A13000-006	Adjusting screw	2

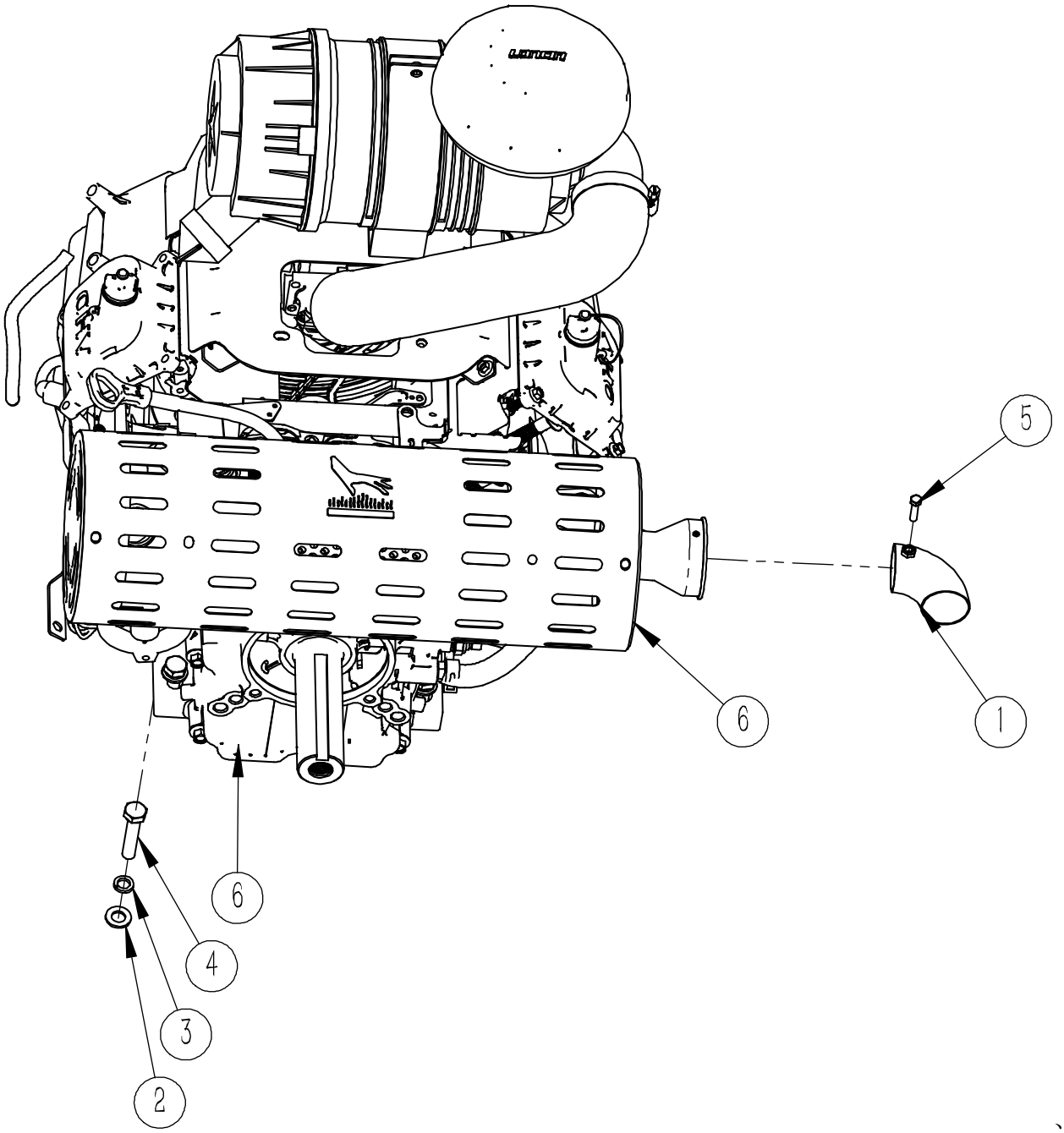
11	2010000726	G11001A13000-008	Adjustment plate	2
12	2010000727	G11001A13000-010	Adjusting screw sleeve	2
13	2010000728	G11001A13000-002	Spacer	2
14	2060304858	G11006A13200-000	Regulator plate components	2
15	2090006048	G11001B13100-000	Tire components	2
16	3040100021	GB/T5783-M8×16-8.8-EP•Zn	Full-thread hexagon bolts	2
17	3040100039	GB/T5783-M10×16-8.8-EP•Zn	Full-thread hexagon bolts	2
18	3040100043	GB/T5783-M10×25-8.8-EP•Zn	Full-thread hexagon bolts	2
19	3040100045	GB/T5783-M10×30-8.8-EP•Zn	Full-thread hexagon bolts	4
20	3040100049	GB/T5783-M10×50-8.8-EP•Zn	Full-thread hexagon bolts	8
21	3050500004	GB/T889.1-M10-8-EP•Zn	Locknut	4
22	3051000005	M20x1.5(OW-GUK20)	Round Lock net	2
23	3060200033	GB/T70.3-M10×25-8.8-EP•Zn	HSCS-Countersunk	4
24	3080100006	GB/T95-10-EP•Zn	Plain washer	16
25	3080200008	GB/T96.2-8-EP•Zn	Large plain washer	2
26	3080200009	GB/T96.2-10-EP•Zn	Large plain washer	2
27	3080500007	GB/T93-8-EP•Zn	Spring washer	2
28	3080500008	GB/T93-10-EP•Zn	Spring washer	12
29	3100100063	UBC-61906-2Z	Deep groove ball bearing	4
30	3100400001	GB/T301-51104	Thrust ball bearing	4
31	3140100045	Φ160-14×14	Adjust the hand wheel	2
32	3170400005	DIN71412-A G1/8 304	Grease nipple	2
33	2000006566	G11001B13000-007	Adjustment plate	1

BATTERY MOUNTING KIT



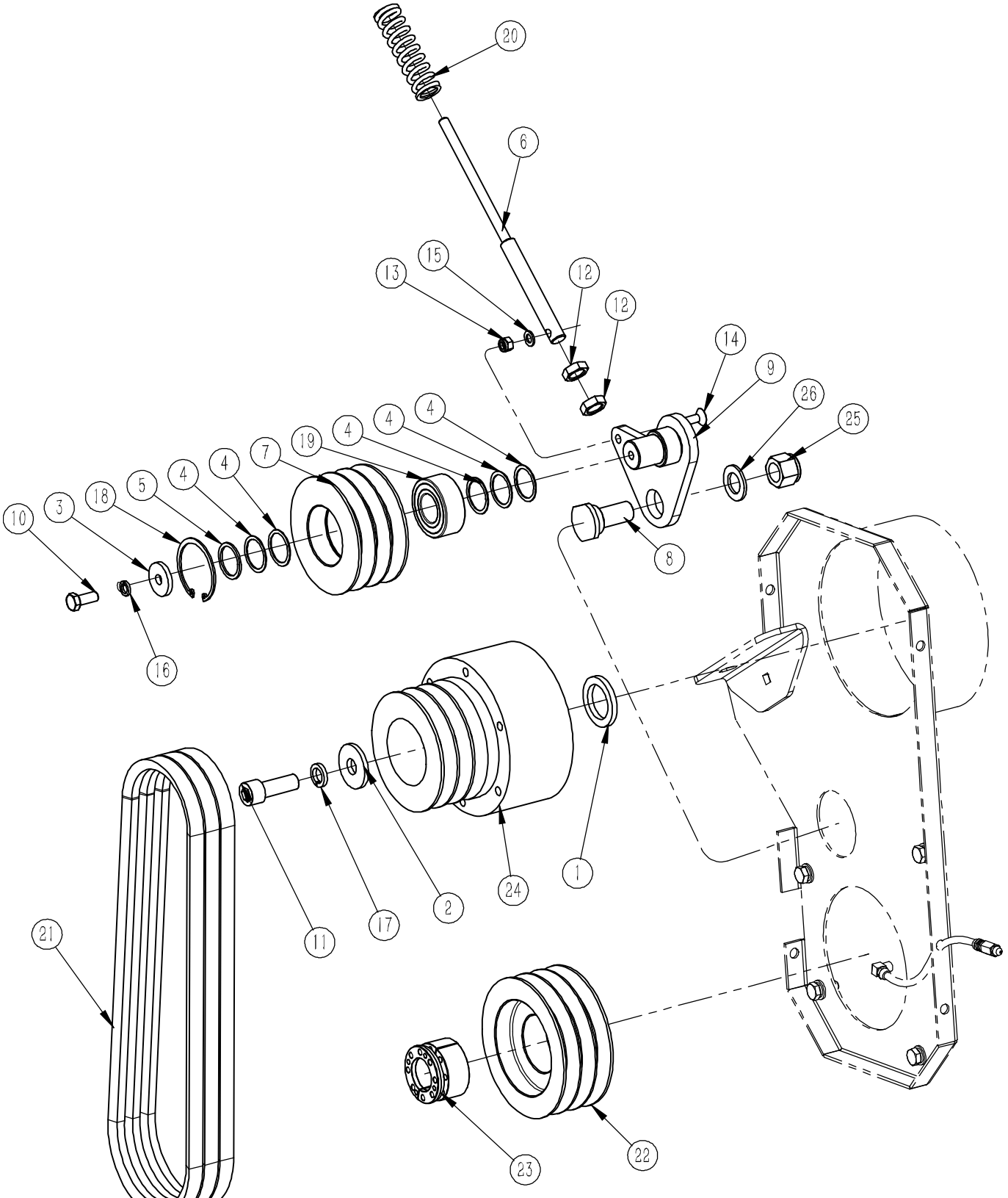
POS.	COD.	Specification	Description	Qty
1	2000001016	G11001A15000-001	Battery mounting panel	1
2	2020002002	G11001A15100-000	Battery mounting plate welding	1
3	3050500003	GB/T889.1-M8-8-EP•Zn	Locknut	2
4	3060100005	GB/T70.1-M5×20-8.8-EP•Zn	Hexagon socket head cap screws	2
5	3080100002	GB/T95-5-EP•Zn	Plain washer	2
6	3080100004	GB/T95-8-EP•Zn	Plain washer	2
7	3080500005	GB/T93-5-EP•Zn	Spring washer	2
8	3130600020	Φ22	22mm clamp	2
9	3190100024	520-8AWG-M6-M10	Negative main line black	1
10	3190100025	820-8AWG-M6-M8	The main line of positive pole	1
11	3190100615	AD25-ID20	corrugated pipe	1
12	3190400001	12V-20AH(180*75*168)	Battery	1
13	3210500016	M8	Rubber	2

ENGINE MOUNTING ASSEMBLY



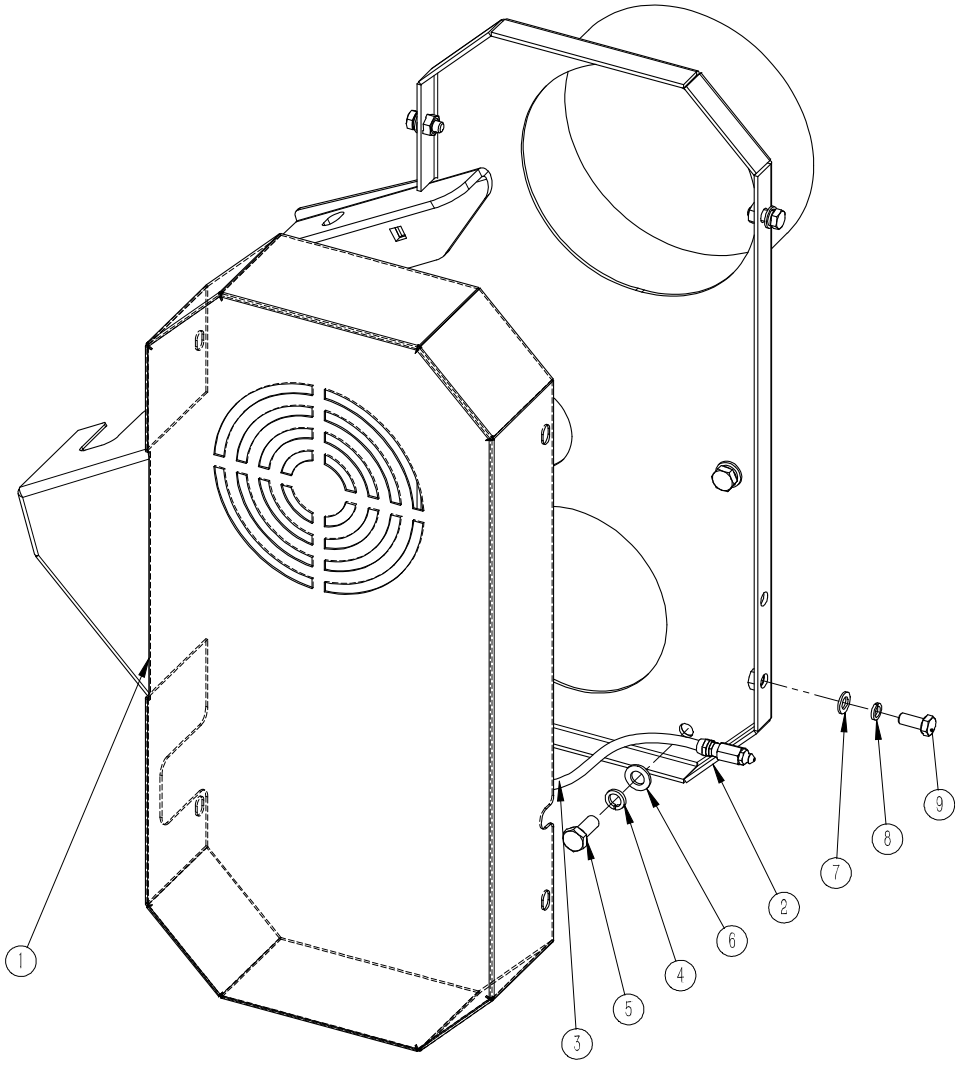
POS.	COD.	Specification	Description	Qty
1	2020002005	G11001A14100-000	Exhaust pipe welding	1
2	3080100006	GB/T95-10-EP•Zn	Plain washer	4
3	3080500008	GB/T93-10-EP•Zn	Spring washer	4
4	3040100049	GB/T5783-M10×50-8.8-EP•Zn	Full-thread hexagon bolts	4
5	3040100002	GB/T5783-M5×20-8.8-EP•Zn	Full-thread hexagon bolts	1
6	3200200032	2V80	engine	1

SIDE DRIVE ASSEMBLY



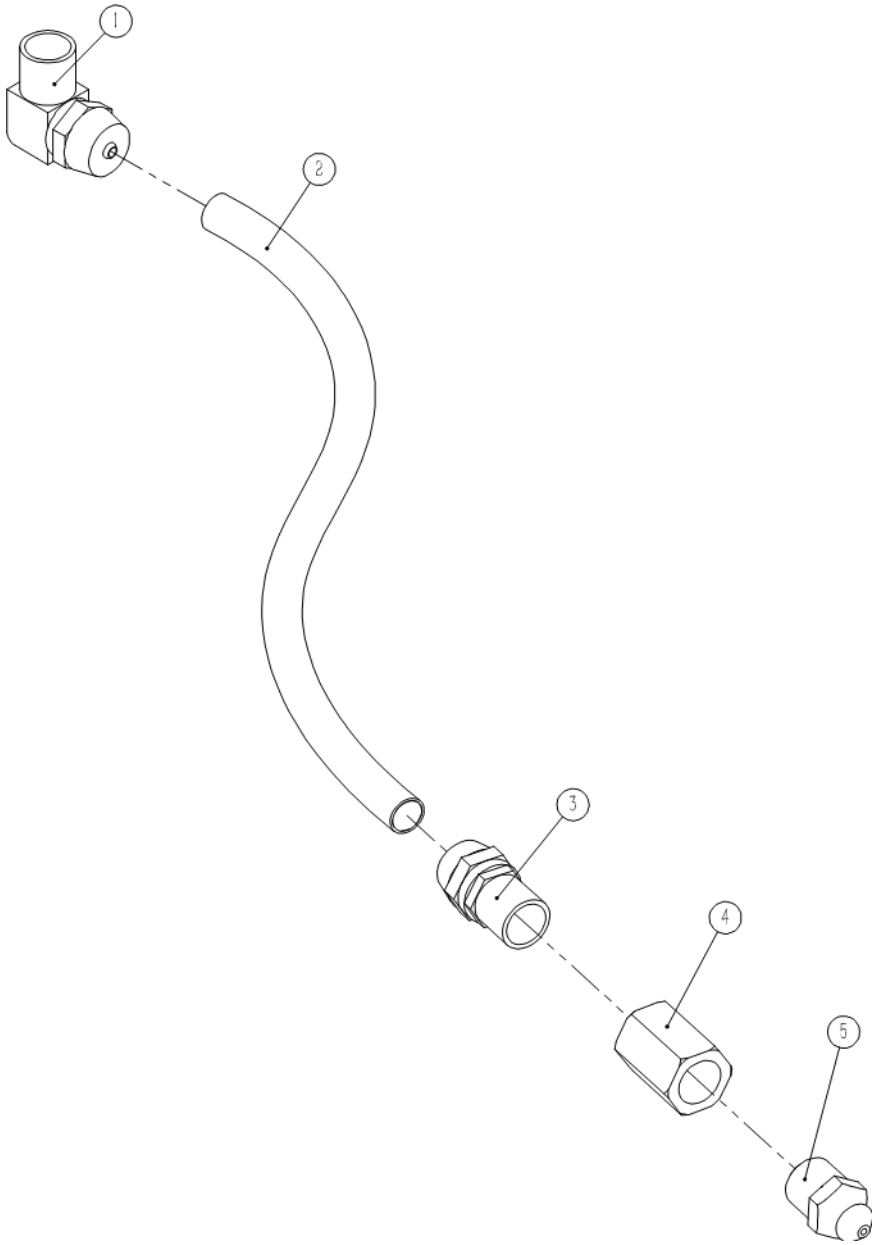
POS.	COD.	Specification	Description	Qty
1	2000001009	G11001A07000-002	Clutch washer	1
2	2000001010	G11001A07000-001	Engine shaft end cover	1
3	2000001017	G11001A07000-003	Pressure plate	1
4	2000004898	G11001A07000-005	Plate	5
5	2000004901	G11001A07000-006	Plate	1
6	2010004848	G11001A07000-007	Axle	1
7	2010004850	G11001A07000-004	Tension wheel	1
8	2010004868	G11001A07000-008	Tighten axle	1
9	2020007083	G11006A07100-000	Plate	1
10	3040100043	GB/T5783-M10×25-8.8-EP•Zn	Full-thread hexagon bolts	1
11	3041600023	5/8-18×45	HSCS-Cap 5/8-18×45	1
12	3050300006	GB/T6172.1-M16-04-EP•Zn	Hexagon thin nut	2
13	3050500003	GB/T889.1-M8-8-EP•Zn	Locknut	1
14	3060200022	GB/T70.3-M8×40-8.8-EP•Zn	HSCS-Countersunk	1
15	3080100004	GB/T95-8-EP•Zn	Plain washer	1
16	3080500008	GB/T93-10-EP•Zn	Spring washer	1
17	3080500011	GB/T93-16-EP•Zn	Spring washer	1
18	3080600038	GB/T893-62-A	Circlips for holes	1
19	3101600014	GB/T296-3206-2RS	Angular contact ball bearing	1
20	3110200029	F11007A09000-006	Spring	1
21	3160300602	GATES-XPB1150	GATES belt	3
22	3160400062	SPB110-3-1-60-HT200-O	Pulley	1
23	3160500001	Z3A-35×60	Expanding sleeve	1
24	3161100608	NC01005900A	Accessories	1
25	3050500011	GB/T889.1-M20-8-EP•Zn	Locknut	1
26	3080100011	GB/T95-20-EP•Zn	Plain washer	1

SIDE PROTECTION COVER ASSEMBLY



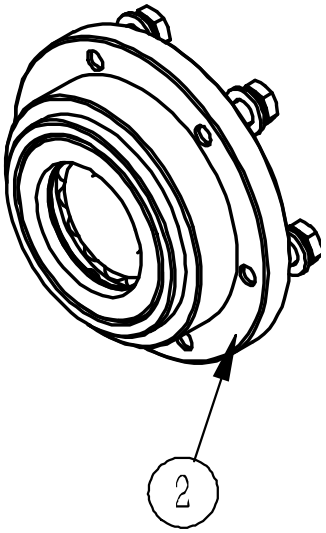
POS.	COD.	Specification	Description	Qty
1	2020004916	G11001A08200-000	Welding	1
2	2020004915	G11001A08300-000	Welding	1
3	2090000194	G11001A08100-000	Grease nipple set	1
4	3080500008	GB/T93-10-EP•Zn	Spring washer	4
5	3040100043	GB/T5783-M10×25-8.8-EP•Zn	Full-thread hexagon bolts	4
6	3080100006	GB/T95-10-EP•Zn	Plain washer	4
7	3080100004	GB/T95-8-EP•Zn	Plain washer	4
8	3080500007	GB/T93-8-EP•Zn	Spring washer	4
9	3040100022	GB/T5783-M8×20-8.8-EP•Zn	Full-thread hexagon bolts	4

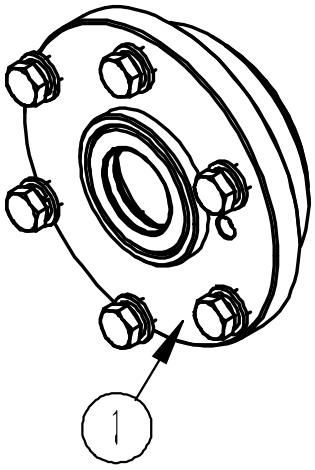
GREASE NIPPLE SET



POS.	COD.	Specification	Description	Qty
1	3170400014	JB/T7056-G1/8	G1/8 Right angle fitting	1
2	3180200152	L=300	Transparent hose	1
3	3170400015	JB/T7056-G1/8	G1/8 Coupling	1
4	3170400016	JB/T7056-G1/8	G1/8 Adapter	1
5	3170400005	DIN71412-A G1/8 304	Grease nipple	1

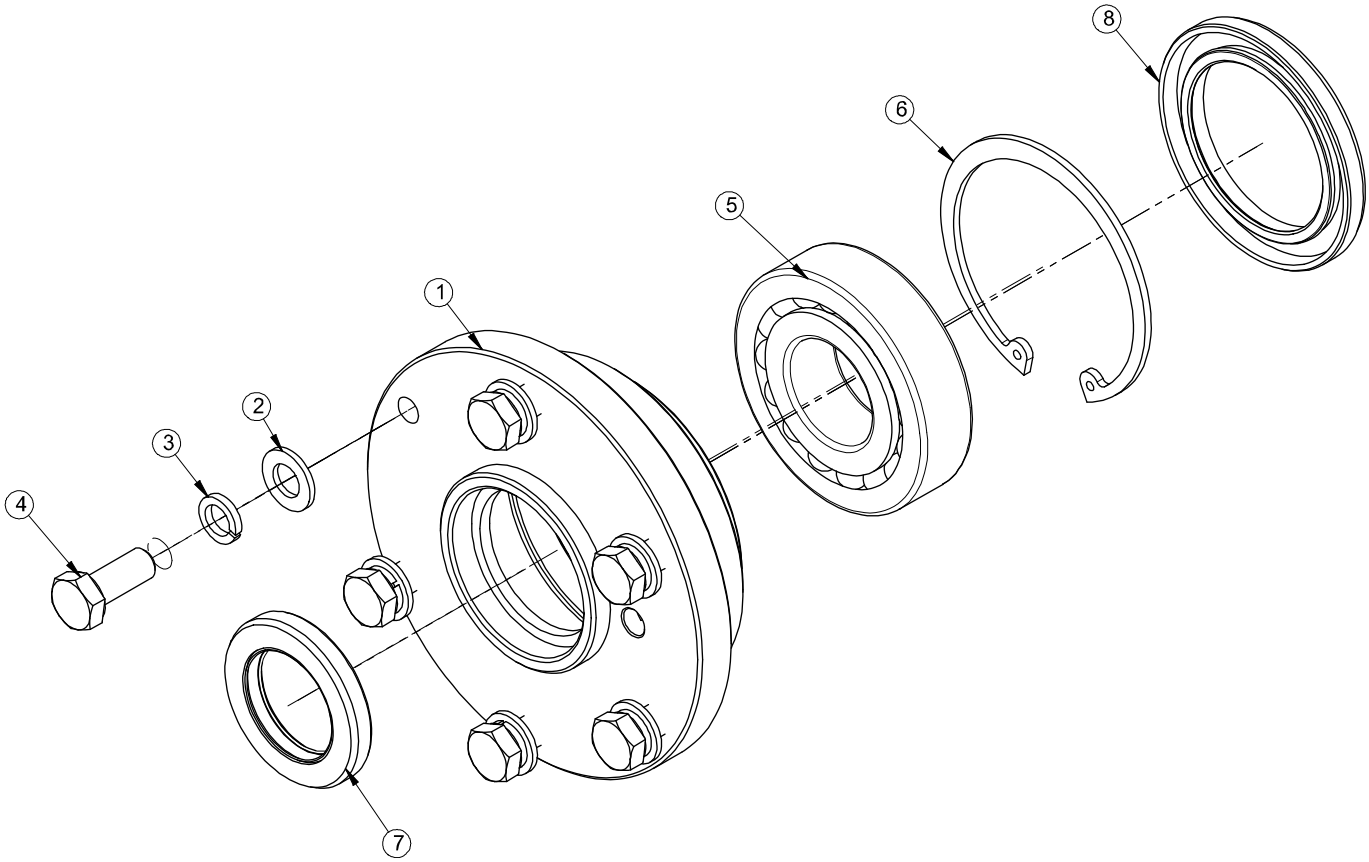
CUTTER SHAFT BEARING BLOCK ASSEMBLY





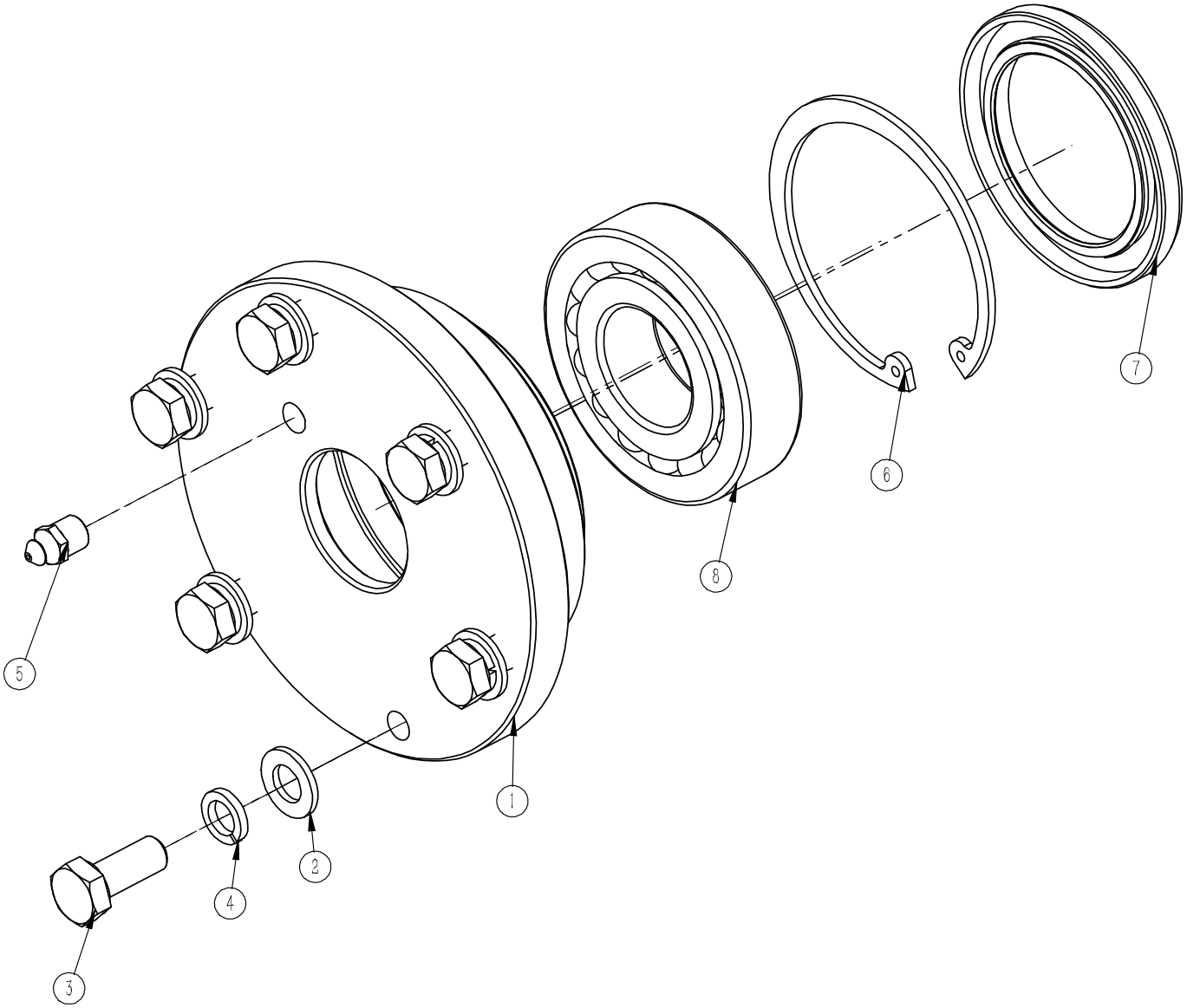
POS.	COD.	Specification	Description	Qty
1	2060204968	G11001A04100-000	Left knife shaft bearing block assembly	1
2	2060204969	G11001A04200-000	Right knife shaft bearing block assembly	1

LEFT KNIFE SHAFT BEARING BLOCK ASSEMBLY



POS	COD.	Specification	Description	Qty
1	3150100061	G11001A04100-001	Long shaft head bearing seat	1
2	3080100006	GB/T95-10-EP•Zn	Plain washer	6
3	3080500008	GB/T93-10-EP•Zn	Spring washer	6
4	3040100043	GB/T5783-M10×25-8.8-EP•Zn	Full-thread hexagon bolts	6
5	3100200008	GB/T281-1307	Self-aligning ball bearing	1
6	3080600046	GB/T893-80-A	Circlips for holes	1
7	3170100008	GB/T13871.1-FB-35×55×8-NBR	shaft seal	1
8	3170100046	GB/T13871.1-FB-55×80×8-NBR	shaft seal	1

RIGHT KNIFE SHAFT BEARING BLOCK ASSEMBLY



POS.	COD.	Specification	Description	Qty
1	3150100004	F01001A05000-001	Bearing seat	1
2	3080100006	GB/T95-10-EP•Zn	Plain washer	6
3	3040100043	GB/T5783-M10×25-8.8-EP•Zn	Full-thread hexagon bolts	6
4	3080500008	GB/T93-10-EP•Zn	Spring washer	6
5	3170400005	DIN71412-A G1/8 304	Grease nipple	1
6	3080600046	GB/T893-80-A	Circlips for holes	1
7	3170100046	GB/T13871.1-FB-55×80×8-NBR	shaft seal	1
8	3100200008	GB/T281-1307	Self-aligning ball bearing	1

WARRANTY

The Manufacturer warrants to the original purchaser that this product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit and Driveline: 18 months Parts and Labor

Blades and Belts: Consumables materials

This Warranty is limited to the replacement of any defective part by the Manufacturer and the installation by the dealer of any such replacement part, and does not cover common wear items. The Manufacturer reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This Warranty does not apply to any part or product which in Manufacturer's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product is not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

Claims under this Warranty should be made to the dealer which originally sold the product and all warranty adjustments must be made through an authorized Manufacturer dealer. The Manufacturer reserves the right to make changes in materials or design of the product at any time without notice.

This Warranty shall not be interpreted to render Manufacturer liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, the Manufacturer shall not be liable for damages resulting from any cause beyond its reasonable control. This Warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.