

## 4" Hydraulic Wood Chipper For Skid Steer

Model: BX42H



- Please read the product manual completely before assembly
- Check against the parts list to make sure all parts are received
- Wear proper safety goggles or other protective gears while in assembly

## Your Safety

**YOU** are responsible for the SAFE operation and maintenance of your JONOVA Skid Steer Mounted Wood Chipper. **YOU** must ensure that you and anyone else who is going to use, maintain or work around the Skid Steer Mounted Wood Chipper be familiar with the using and maintenance procedures and related **SAFETY** information contained in this manual. This manual will take you step-by-step through your working day and alerts you to all good safety practices that should be used while using the Skid Steer Mounted Wood Chipper.

Remember, **YOU** are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** using this equipment is familiar with the recommended using and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Skid Steer Mounted Wood Chipper owners must give operating instructions to operators or employees before allowing them to operate the machine, and at least annually thereafter.
  - The most important safety device on this equipment is a SAFE operator. It is the operator's responsibility to read and understand ALL Safety and Operating instructions in the manual and to follow these. Most accidents can be avoided.
  - A person who has not read and understood all using and safety instructions is not qualified to use the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
  - Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
  - Think SAFETY! Work SAFELY!
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## General Safety

1. Read and understand the Operator's Manual and all safety signs before using, maintaining, adjusting or cleaning the Skid Steer Mounted Wood Chipper.

2. Have a first-aid kit available for use should the need arise and know how to use it.

3. Have a fire extinguisher available for use should the need arise and know how to use it.

4. Do not allow riders.

5. Wear appropriate protective gear. This list includes but is not limited to:

- A hard hat
- Protective shoes with slip resistant soles
- Protective glasses, goggles, or face shield
- Heavy gloves
- Wet weather gear
- Hearing Protection
- Respirator or filter mask

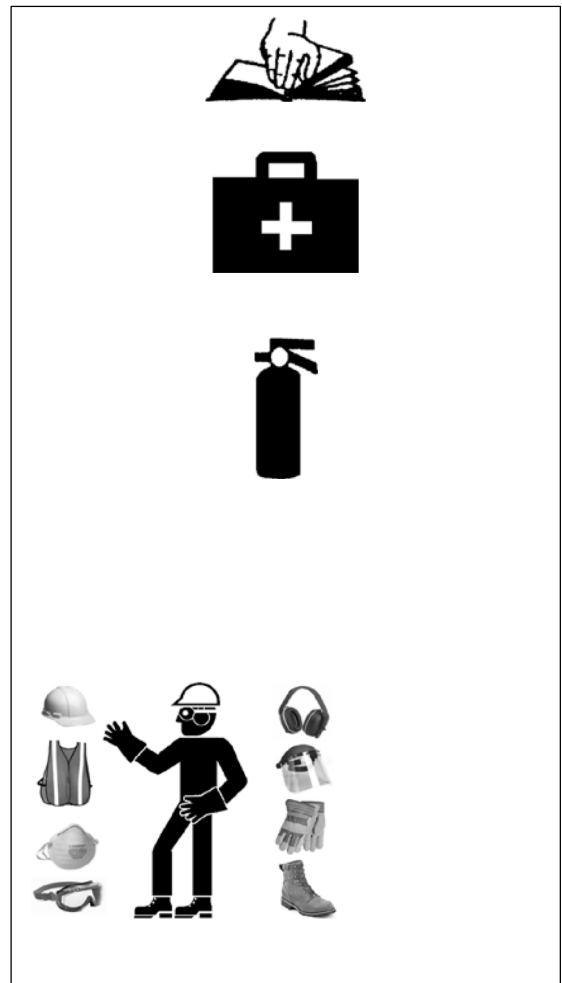
6. Install and secure all guards before starting.

7. Wear suitable ear protection for prolonged exposure to excessive noise.

8. Turn machine off, stop and disable engine, remove ignition key and place in your pocket, set park brake and wait for all moving parts to stop before servicing, adjusting, repairing, or unplugging.

9. Clear the area of people, especially small children, before using the unit.

10. Review safety related items annually with all personnel who will operating or maintaining the Skid Steer Mounted Wood Chipper.



## Equipment Safety Guidelines

1. Safety of the operator and bystanders is one of the main concerns in designing and developing equipment. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury or death, study the following precautions and insist those working with you, or for you to follow them.
  2. In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be used in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.
  3. Replace any safety sign or instruction sign that is not readable or is missing. Location of such safety signs is indicated in this manual.
  4. Never use alcoholic beverages or drugs which can hinder alertness or coordination while using this equipment. Consult your doctor about using this machine while taking prescription medications.
  5. Under no circumstances should young children be allowed to work with this equipment. Do not allow persons to use or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works. Review the safety instructions with all users annually.
  6. This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible, properly trained and physically able person familiar with machinery and trained in this equipment's operations. If the elderly are assisting with work, their physical limitations need to be recognized and accommodated.
  7. Never exceed the limits of a piece of machinery.  
If its ability to do a job, or to do so safely, is in question - **DON'T TRY IT.**
  8. Do not modify the equipment in any way. Unauthorized modification may result in serious injury or death and may impair the function and life of the equipment.
  9. In addition to the design and configuration of this implement, including Safety Signs and Safety Equipment, 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 the machine. Refer also to Safety Messages and operation instruction in each of the appropriate sections of the skid steer and machine manuals. Pay close attention to the Safety Signs affixed to the skid steer and the machine.
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## Safety Training

1. Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator or bystander.
2. In addition to the design and configuration of equipment, 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 this equipment.
3. It has been said, "The best safety feature is an informed, careful operator." We ask you to be that kind of an operator. It is the operator's responsibility to read and understand ALL Safety and Using instructions in the manual and to follow these. Accidents can be avoided.
4. the machine. If this machine is used by any person other than yourself, or is loaned or rented, it is the machine owner's responsibility to make certain that the operator, prior to using:
  - a. Reads and understands the operator's manuals.
  - b. Is instructed in safe and proper use.
5. Know your controls and how to stop the skid steer tractor and machine quickly in an emergency. Read this manual and the one provided with skid steer tractor.
6. Train all new personnel and review instructions frequently with existing workers. Be certain only a properly trained and physically able person will use the machinery. A person who has not read and understood all using and safety instructions is not qualified to use the machine. An untrained operator exposes himself and bystanders to possible serious injury or death. If the elderly are assisting with the work, their physical limitations need to be recognized and accommodated.

## Safety Signs

1. Always keep safety signs clean and legible.
  2. Replace safety signs that are missing or have become illegible.
  3. Replaced parts that displayed a safety sign should also display the current sign.
  4. Safety signs displayed in Section 3 each have a part number in the lower righthand corner. Use this part number when ordering replacement parts.
  5. Safety signs are available from your authorized Distributor or Dealer Parts Department or the factory.
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# IMPORTANT SAFETY INFORMATION

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## Preparation

1. Never use the machine until you have read and completely understand this manual, the skid steer tractor Operator's Manual and each of the Safety Messages found on the safety signs on the skid steer tractor and machine.

2. Personal protection equipment including hard hat, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintaining, repairing, removal, cleaning, or moving the unit. Do not allow long hair, loose fitting clothing or jewelry to be around equipment.



### 3. **PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!**

Power equipment with or without equipment attached can often be noisy enough to cause permanent, partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the Operator's position exceeds 80db. Noise over 85db on a long-term basis can cause severe hearing loss. Noise over 90db adjacent to the Operator over a long-term basis may cause permanent, total hearing loss. NOTE: Hearing loss from loud noise (from tractors, chain saws, radios, and other such sources close to the ear) is cumulative over a lifetime without hope of natural recovery.

4. Clear working area of stones, branches or hidden obstacles that might be hooked or snagged, causing injury or damage.

5. Use only in daylight or good artificial light.

6. Be sure machine is properly mounted, adjusted and in good operating condition.

7. Ensure that all safety shielding, and safety signs are properly installed and in good condition.

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## Maintenance Safety

1. Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
2. 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.
3. Make sure there is plenty of ventilation. Never operate the engine of the towing vehicle in a closed building. The exhaust fumes may cause asphyxiation.
4. Before working on this machine, shut off the engine, set the brake, and turn fuel valve off.
5. Never work under equipment unless it is blocked securely.
6. Always use personal protection devices such as eye, hand and hearing protectors, when performing any service or maintenance work. Use heavy or leather gloves when handling blades.
7. Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer will not be responsible for injuries or damages caused by use of unapproved parts and/or accessories.
8. A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment.
9. Periodically tighten all bolts, nuts and screws and check that all electrical and fuel connections are properly secured to ensure unit is in a safe condition.
10. When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.



## Operating Safety

1. Please remember it is important that you read and heed the safety signs on the Skid Steer Mounted Wood Chipper. Clean or replace all safety signs if they cannot be clearly read and understood. They are there for your safety, as well as the safety of others. The safe use of this machine is strictly up to you, the operator.
  2. All things with moving parts are potentially hazardous. There is no substitute for a cautious, safe-minded operator who recognizes potential hazards and follows reasonable safety practices. The manufacturer has designed this Skid Steer Mounted Wood Chipper to be used with all its safety equipment properly attached, to minimize the chance of accidents. Study this manual to make sure you have all safety equipment attached.
  3. Close and secure rotor cover before operating.
  4. Close and secure all guards, deflectors and shields before starting and operating.
  5. Read and understand operator's manual before starting. Review safety instructions annually.
  6. Personal protection equipment including hearing protection, hard hat, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintaining, repairing, removal, or moving. Do not allow long hair, loose-fitting clothing, or jewelry to be around moving parts.
  7. Keep hydraulic lines and fittings tight, in good condition and free of leaks.
  8. Never place any part of your body where it would be in danger if movement should occur during assembly, installation, operation, maintenance, repairing, unplugging, or moving.
  9. Turn machine off, stop engine, remove ignition key and place in your pocket, set park brake and wait for all moving parts to stop before servicing, adjusting, repairing or unplugging.
  10. Do not run machine inside a closed building to prevent asphyxiation from engine exhaust.
  11. Use care when feeding material into chipper. Do not send metal, bottles, cans, rocks, glass or other foreign material into wood chipper. If foreign material enters chipper, stop machine, turn engine off and place ignition key in your pocket and wait for all moving parts to stop before removing material and/or unplugging. Inspect machine for damaged or loose parts before resuming work.
  12. Never use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
  13. Do not allow riders on this machine at any time. There is no safe place for any riders.
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# IMPORTANT SAFETY INFORMATION

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14. Never allow children or unauthorized people to operate or be around this machine.
15. Do not reach into rotor or feed hopper openings when the engine is running. Install and secure access covers before starting engine.
16. Keep the working area clean and free of debris to prevent tripping. Operate only on level ground.
17. Do not point discharge at people, animals or buildings. Rotor can expel wood chips fast enough to cause injury.
18. Do not move or transport chipper when the rotor is turning.
19. Do not exceed a safe travel speed when transporting.

## Hydraulic Safety

1. Make sure that all the components in the hydraulic system are kept in good condition and are clean.
2. Before applying pressure to the system, make sure all components are tight, and that lines, hoses and couplings are not damaged.
3. Do not attempt any makeshift repairs to the hydraulic lines, fittings, or hoses by using tapes, clamps or cements. The hydraulic system operates under extremely high pressure. Such repairs will fail suddenly and create a hazardous and unsafe condition.
4. Wear proper hand and eye protection when searching for a high-pressure hydraulic leak. Use a piece of wood or cardboard as a backstop instead of hands to isolate and identify a leak.



5. If injured by a concentrated high-pressure stream of hydraulic fluid, seek medical attention immediately. Serious infection or toxic reaction can develop from hydraulic fluid piercing the skin surface.
  6. Relieve pressure on hydraulic system before maintaining or working on system.
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## **Storage Safety**

1. Store the unit in an area away from human activity.
2. Do not children to play on or around the stored machine.
3. Store the unit in a dry, level area. Support the frame with planks if required.

## **Transport Safety**

1. Comply with state and local laws governing safety and transporting of machinery on public roads.
  2. Check that all the lights, reflectors and other lighting requirements are installed and in good working condition.
  3. Do not exceed a safe travel speed. Slow down for rough terrain and cornering.
  4. Fold up and secure feed hopper before moving or transporting.
  5. Be sure the chipper is attached positively to the skid steer with the lock pins fully engaged.
  6. Do not drink and drive.
  7. Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Watch for traffic when operating near or crossing roadways.
  8. Never allow riders on the machine.
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## Operation Safety

- Read and understand operator's manual before starting. Review safety instructions annually.
  - Turn machine off, stop engine, remove ignition key and place in your pocket, set park brake and wait for all moving parts to stop before servicing, adjusting, repairing, or unplugging.
  - Keep the working area clean and free of debris to prevent tripping. Operate only on level ground.
  - Close and secure rotor cover before operating.
  - Close and secure all guards, deflectors, and shields before starting and operating.
  - Keep hydraulic lines and fittings tight, in good condition and free of leaks.
  - Do not point discharge at people, animals or buildings. Rotor can expel wood chips fast enough to cause injury.
  - Do not allow children, animals, or unauthorized people into the working area.
  - Do not run machine inside a closed building to prevent asphyxiation from engine exhaust.
  - Use care when feeding material into chipper. Do not send metal, bottles, cans, rocks, glass or other foreign material into wood chipper. If foreign material enters chipper, stop machine, turn engine off and place ignition key in your pocket and wait for all moving parts to stop before removing material and/or unplugging. Inspect machine for damaged or loose parts before resuming work.
  - Always wear P.P.E. (Personal Protective Equipment) such as safety goggles and heavy gloves whenever operating machine.
  - Do not place hands or any body parts into feed hopper during operation.
  - Do not move or transport chipper when the rotor is turning.
  - Do not exceed a safe travel speed when transporting.
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## **To the New Operator or Owner**

The JONOVA Skid Steer Mounted Wood Chippers are designed to chip or chop scrap lumber, small trees, brush, limbs and other wood debris. The chipped material is fine enough to be composted or used in a variety of ways.

It is the responsibility of the owner or operator to read this manual and to train all other operators before they start working with the machine. Follow all safety instructions exactly. Safety is everyone's business. By following recommended procedures, a safe working environment is provided for the operator, bystanders, and the area around the worksite. Untrained operators are not qualified to use the machine.

Follow all safety instructions exactly. Safety is everyone's business. By following recommended procedures, a safe working environment is provided for the operator, bystanders, and the area around the worksite.

Untrained operators are not qualified to operate the machine.

Many features incorporated into this machine are the result of suggestions made by customers like you.

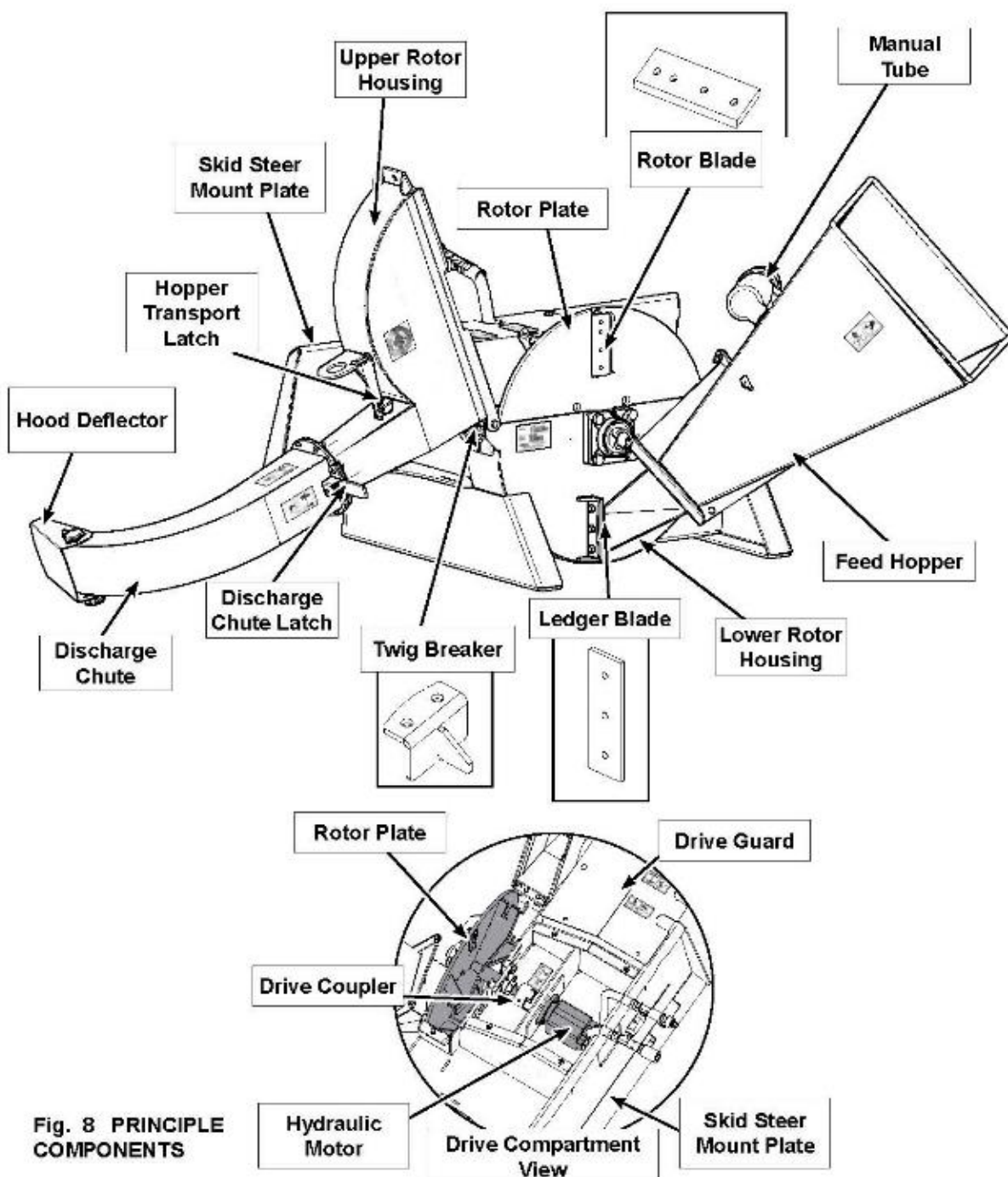
Read this manual carefully to learn how to use the chipper safely and how to set it to provide maximum field efficiency. By following the using instructions in conjunction with a good maintenance program, your Skid Steer Mounted Wood Chipper will provide many years of trouble-free service.

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## MACHINE COMPONENTS

The JONOVA Skid Steer Mounted Wood Chipper is a rotor with blades for chipping wood. A hinged feed hopper moves the wood material into the rotor. Each rotor is designed with 4 blades and a twig-breaker to generate the small pieces of wood. A stationary knife at the rear of the rotor housing is placed by the moving knives to shear, chip or chop the material.

The skid steer tractor provides rotational power through its hydraulic system into the hydraulic motor on the rotor shaft. This drive system is contained in the front frame.



## Machine Break-In

Although there are no operational restrictions on the Wood Chipper when used for the first time, it is recommended that the following mechanical items be checked:

### A. After operating for 1 hour:

1. Torque all fasteners and hardware.
2. Check condition of rotor bearings.
3. Check the condition and clearance of the twig-breaker, rotor and stationary blades. Adjust or replace as required.
4. Check for entangled material. Remove all entangled material before resuming work.
5. Lubricate all grease fittings.

### B. After operating for 10 hours:

1. Repeat steps 1 through 5 listed above. (Section A)
  2. Go to the normal servicing and maintenance schedule as defined in the Maintenance Section.
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## Pre-Operation Checklist

Efficient and safe operation of the JONOVA Skid Steer Mounted Wood Chipper requires that each operator reads and understands the using procedures and all related safety precautions outlined in this section. A pre-operation checklist is provided for the operator. It is important for both the personal safety and maintaining good mechanical condition that this checklist is followed.

Before operating the Wood Chipper and each time thereafter, the following areas should be checked off:

1. Lubricate the machine per the schedule outline in the Maintenance Section.
2. Check the rotor, blades, and twig-breaker. Remove any twine, wire or other material that has become entangled.
3. Check the condition and clearance of the twig- breaker, rotor, and stationary blades. Adjust or replace as required.
4. Check that all bearings turn freely. Replace any that are rough or seized.
5. Make sure that all guards and shields are in place, secured and functioning as designed.
6. Check the condition of the curtain in the feed hopper. It must be in good condition to prevent chips from flying out.



## MACHINE SET-UP

Follow this procedure to prepare and setup the machine at the work site:

1. Use the skid steer to position the Wood Chipper at the work site.

### IMPORTANT

Position the machine so the prevailing wind/breeze blows the exhaust gases/fumes away from the operator's station.

2. Lower the feed hopper down into its working configuration:
  - a. remove the nuts on the hopper anchor bolts,
  - b. unpin and the feeder hopper latch
  - c. carefully lower the hopper and secure it with the with the nuts on the anchor bolts.
  - d. Secure the feed hopper latch to the discharge chute with the latch pin

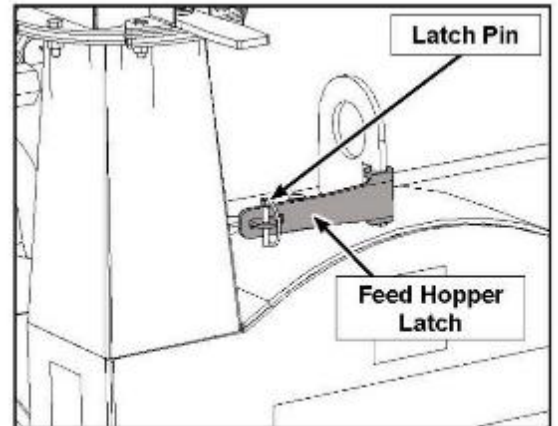


Fig. 12 FEED HOPPER LATCH SECURED

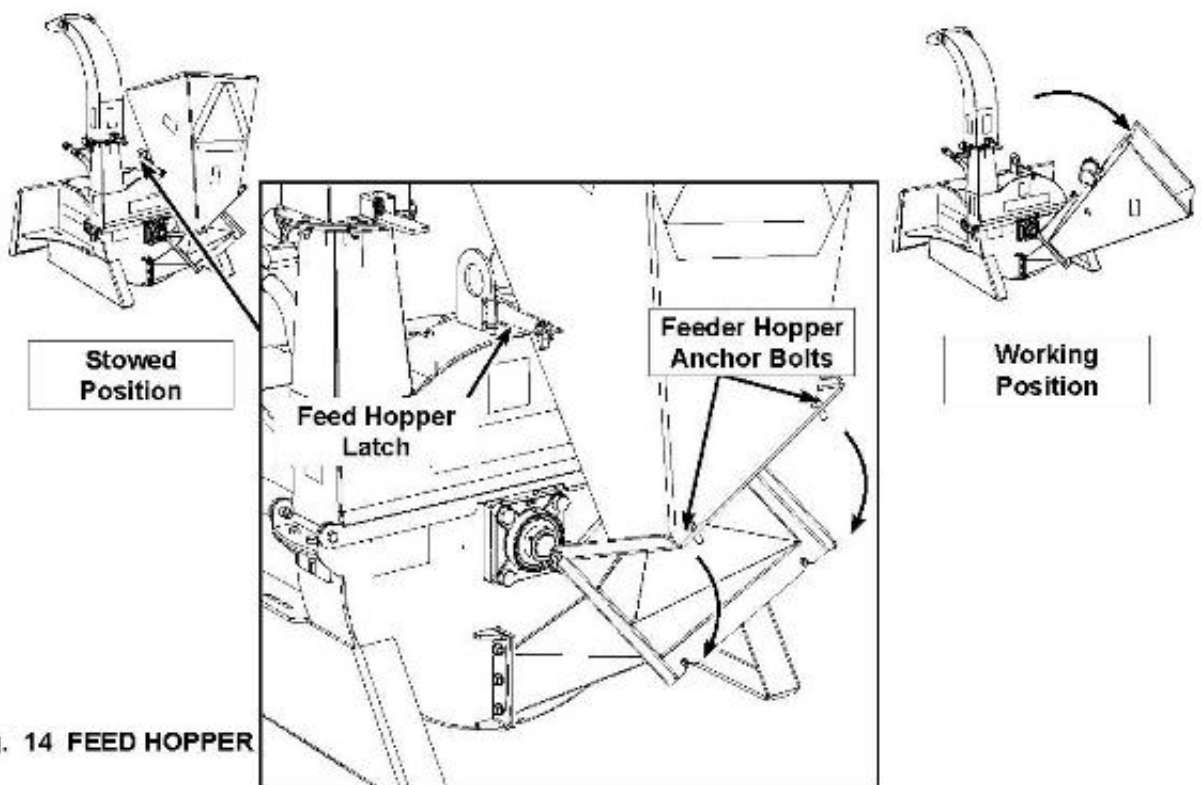


Fig. 14 FEED HOPPER



# OPERATION

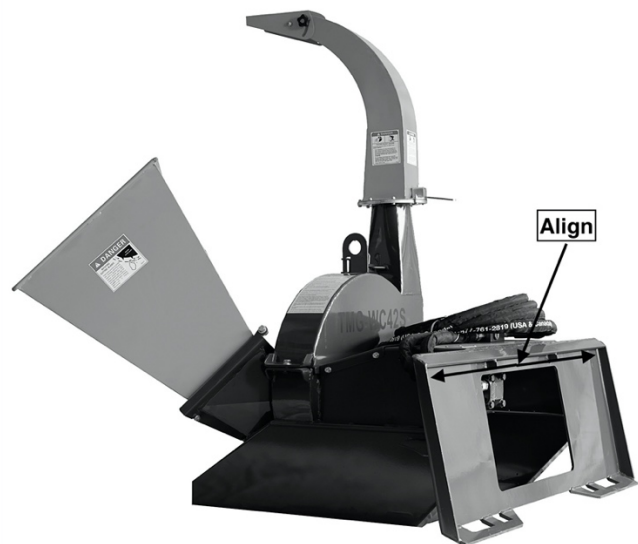
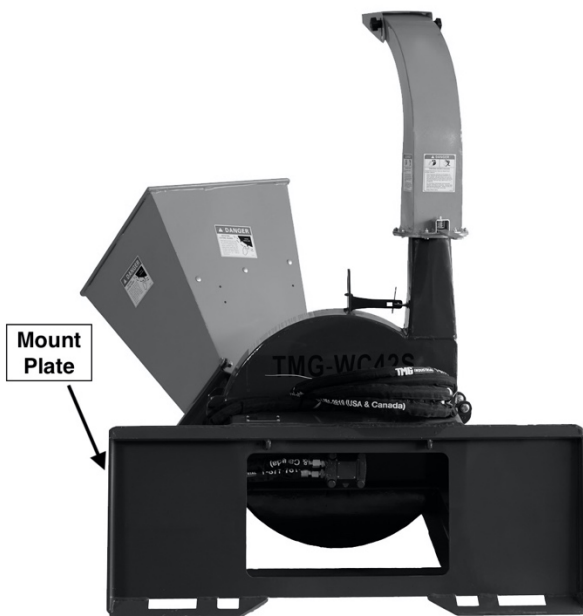
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## HYDRAULIC CONNECTIONS & MOUNTING

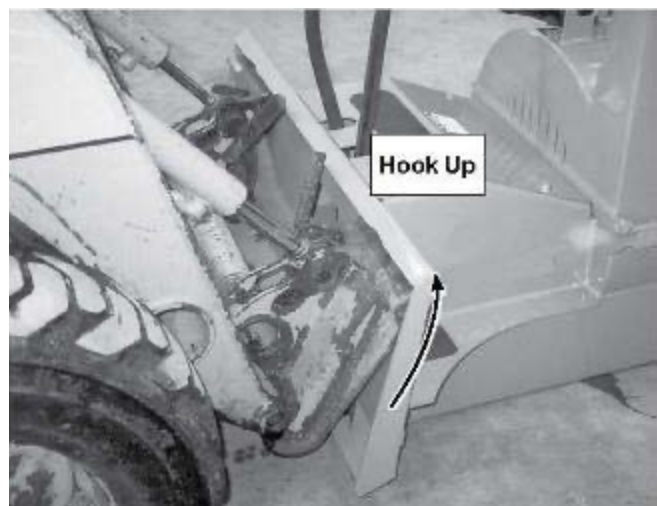
The machine is shipped from the factory in a basic, universal configuration that allows it to be mounted to any model skid steer. However, the skid steer must be equipped with a remote hydraulic outlet on the front of the cab frame.

The wood chipper should always be located on a level, dry area that is free of debris and other foreign objects. When attaching the wood chipper to a skid steer, follow this procedure:

1. Make sure that all bystanders, especially small children are clear of the work area.
2. Make sure there is enough room and clearance to safely drive up to the wood chipper.
3. Drive up to the wood chipper while aligning the mounting components, and hook up into the mount.



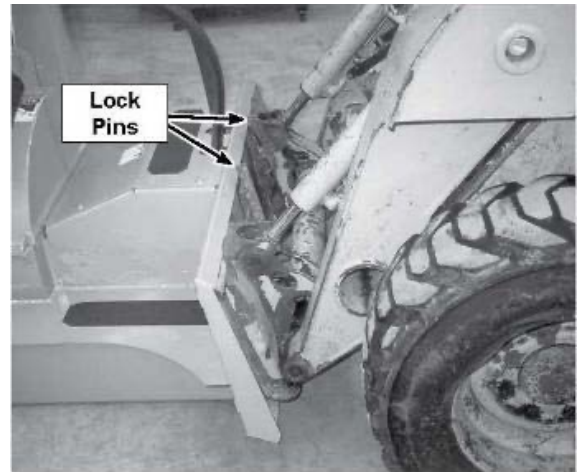
4. Secure the mounting:
  - a. Drive into the mounting frame.
  - b. Seat the top of the face plate into the frame of the wood chipper.
  - c. Raise the loader and tilt the face plate until it is fully mated.



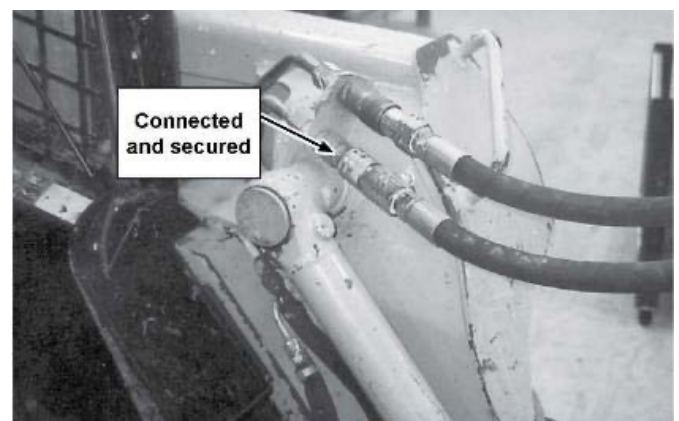
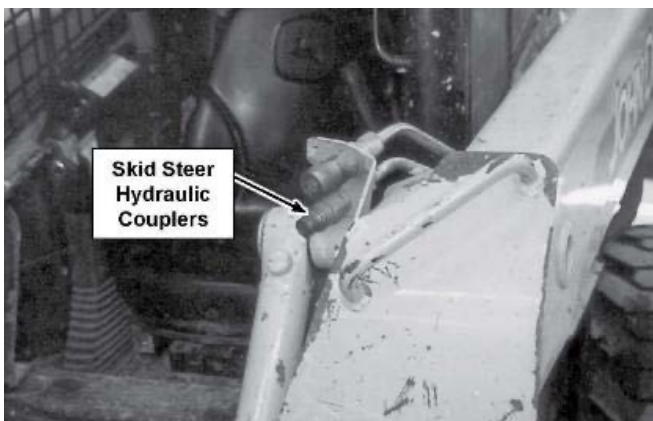
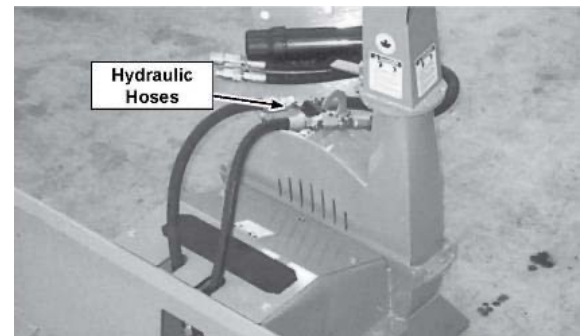
# OPERATION

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5. Engage the lock pins to secure the wood chipper to the loader.



6. Connect the hydraulics:
  - a. Use a clean rag or paper towel to clean the dirt from the couplers on the hose ends of the skid steer.
  - b. Connect the hoses to the skid steer couplers. Be sure the couplers are securely seated.
  - c. Route and secure the hoses along the frame with clips, tape or plastic ties to prevent binding and pinching. Be sure to provide slack for tilting.



7. Raise the wood chipper.
8. Check that all hydraulic connections and locks are secure before beginning work.

Reverse the above procedure when unhooking.

Place planks or boards under the frame for extra support if required.

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## CHIPPING OPERATION

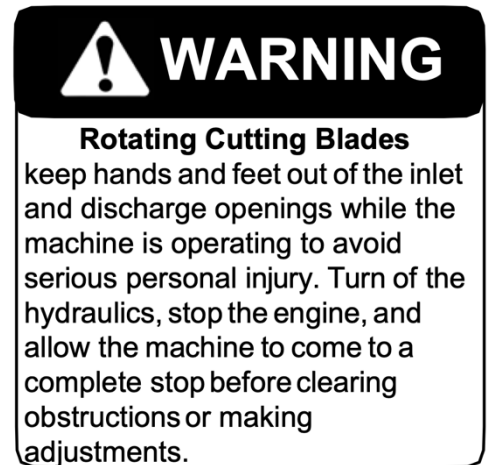
The Wood Chipper is a strong, rugged machine that is built to a straightforward design which provides consistent chipping of logs up to 4" (102mm)

Always wear personal protective equipment (PPE) whenever operating the machine. This includes but is not limited to protective shoes with slip resistant soles, protective goggles or face shield, heavy gloves, hearing protection and protective clothing.

Do not place metal, bottles, cans, rocks, glass or other solid material into the wood chipper. If something like this gets into the machine, stop the machine immediately for a detailed inspection. Stop engine, remove ignition key and place in your pocket and wait for all moving parts to stop before inspecting or unplugging. Inspect machine for damaged or loosened parts before resuming work.

**Caution and care should be exercised when feeding material into the feeder. Do not reach into the hopper past the curtain barrier.**

- a. Before beginning to feed the rotor is up to speed.
- b. Slowly slide the wooden material into the feed hopper and move it into the rotor.
- c. Do not force the material into the rotor, as the material engages the rotor, the rotor will draw the material in. Use continuous lite pressure to guide in the material.
- d. Be aware of how much material you feed in, slow down or stop if the rotor begins to slow down.
- e. Do not reach into the feed hopper further than the curtain to be sure not to contact the blades on the rotor.
- f. Use a stick or branch to push any piece of material into the rotor that does not move on its own. If the jam persists then stop the engine and wait for the rotor to stop and then clear the jam. Do not take a chance with getting your hand caught in the rotor.
- g. Ensure your wood chip pile is contained and doesn't affect the immediate work area.



## Unplugging

Although the machine is designed to handle a wide variety of material without any problem, occasionally it plugs. When the machine plugs, follow this procedure to unplug:

- a. Clear the area of bystanders, especially small children.
- b. Turn off the hydraulics, stop the engine, remove the ignition key and place it in your pocket and wait for all moving parts to stop before unplugging.
- c. Pull the material out of the feed hopper. Be sure all the material is out, and nothing is jammed or wedged between the input opening and the rotor.
- d. Pull the material out of the discharge hood. Use a stick to poke loose any material jammed into the discharge hood. Do not allow anything to remain in this area.
- e. Check that everyone is clear of machine before restarting engine.
- f. Start the engine turn on the hydraulics, and resume working.

## Severe Plug

- a. Clear the area of bystanders, especially small children.
  - b. Turn off the hydraulics, stop the engine, remove the ignition key and place it in your pocket or remove spark plug wire, and wait for all moving parts to stop before unplugging.
  - c. Loosen the feed hopper anchor nuts and raise the feed hopper.
  - d. Remove jammed material from inside the rotor compartment.
  - e. Clean out the discharge area/rotor.
  - f. Open the upper rotary housing and clean out the housing.
  - g. Be sure to turn the rotor by hand to be sure there is nothing jammed between the rotor and stationary blades.
  - h. Close, install and fold down all components opened to unplug. Tighten fasteners to their specified torque.
  - i. Check that everyone is clear of machine before restarting engine.
  - j. Start the engine turn on the hydraulics and resume working.
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## MAINTENANCE

By following a careful service and maintenance program for your machine, you will enjoy many years of trouble-free operation.

### Blade and Breaker Maintenance

The rotor and ledger blades need to be sharp for the Chipper to perform as expected. Periodic inspection is recommended. Keep the blades sharp to reduce the amount of power required during operation. Watch the sharpness of the blades when processing material with a lot of sand, soil or dirt mixed with it. Reverse or sharpen the blades if the cutting edge becomes dull. Twig breaker should be inspected for gouges or bent.

### Rotor Blades:

The rotor is equipped with 4 blades spaced evenly to keep the rotor in balance. If one needs to be changed, the one opposite should also be changed.

It is recommended that the rotor blades be removed from the rotor when sharpening. Always sharpen the blades at a 45° angle to provide the best cutting effect as it meets the stationary blade. Be sure to tighten the blade mounting bolts to their specified torque when reinstalling the blades to the rotor.

1. Turn off the hydraulics, stop the engine, remove the ignition key, and place it in your pocket and wait for all moving parts to stop.
2. Remove the bolt that secures the upper rotor housing, and carefully open the rotor housing.
3. Manually rotate chipper rotor plate so that the blade is fully exposed
4. Remove the bolts that hold the rotor blade to the rotor, remove the blade.
5. Rotate the blade and reinstall or replace with new or resharpened blade.

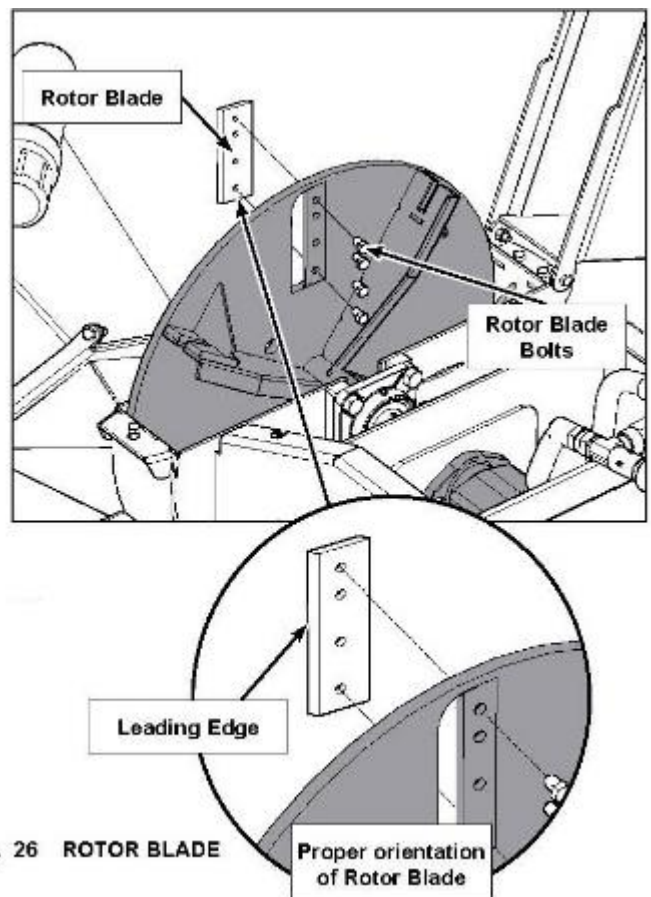


Fig. 26 ROTOR BLADE

# MAINTENANCE

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6. Ensure the blade is properly oriented, with the leading edge out. The blade is designed to fit into the rotor one way only. See diagram for proper installation.
7. Tighten down bolts as specified in the torque chart.
8. Repeat steps for remaining blades.

## Ledger Blades:

The JONOVA-BX42H is equipped with a ledger (stationary) blade that acts as a shear for the moving rotor blades. The ledger blade is designed with 4 usable corners. When the corner facing the rotor blade rounds over, remove the blade and reinstall with a different corner facing the rotor blade. It is recommended that the clearance between the rotor and stationary blades be set and maintained at 1/32 to 1/16 " (.76 - 1.52 mm) to obtain the best performance.

1. Turn off the hydraulics, stop the engine, remove the ignition key and place it in your pocket and wait for all moving parts to stop.
2. Remove the 2 bolts that hold the ledger blade to the ledger mount, remove the blade.
3. Rotate the blade and replace or replace with new or re-sharpened blade.
4. Hand tighten the bolts and set the clearance between the ledger and rotor blades at 1/32 - 1/16" .
5. Tighten down bolts as specified in the torque chart

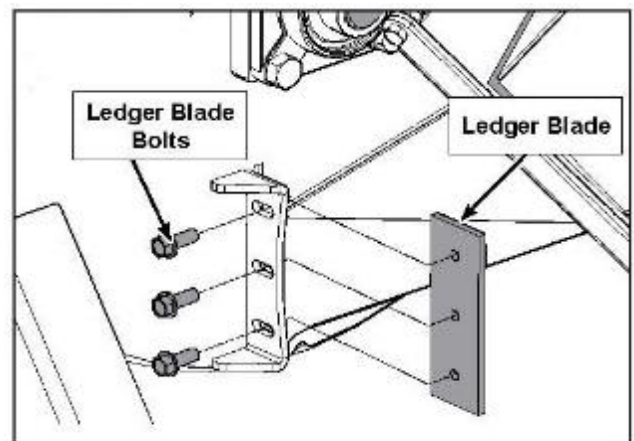


Fig. 27 LEDGER BLADE

## Bolt Torque

### CHECKING BOLT TORQUE

The tables shown below give correct torque values for various bolts and cap screws. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or cap screws unless otherwise specified in this manual.

When using locking elements, increase torque values by 5%.

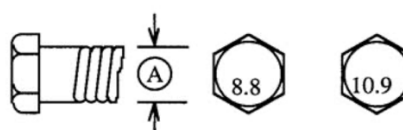
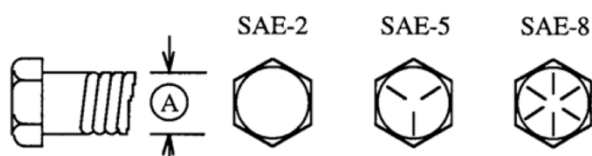
\* Torque value for bolts and cap screws are identified by their head markings

#### ENGLISH TORQUE SPECIFICATIONS

Bolt Diameter "A"	Bolt Torque*					
	SAE 2 (N.m) (lb-ft)		SAE 5 (N.m) (lb-ft)		SAE 8 (N.m) (lb-ft)	
1/4"	8	6	12	9	17	12
5/16"	13	10	25	19	36	27
3/8"	27	20	45	33	63	45
7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	220	165
5/8"	128	95	215	160	305	220
3/4"	225	165	390	290	540	400
7/8"	230	170	570	420	880	650
1"	345	225	850	630	1320	970

#### METRIC TORQUE SPECIFICATIONS

Bolt Diameter "A"	Bolt Torque*			
	8.8 (N.m) (lb-ft)		10.9 (N.m) (lb-ft)	
M3	.5	.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	774
M30	1495	1103	2100	1550
M36	2600	1917	3675	2710



## **Specifications & Capacities**

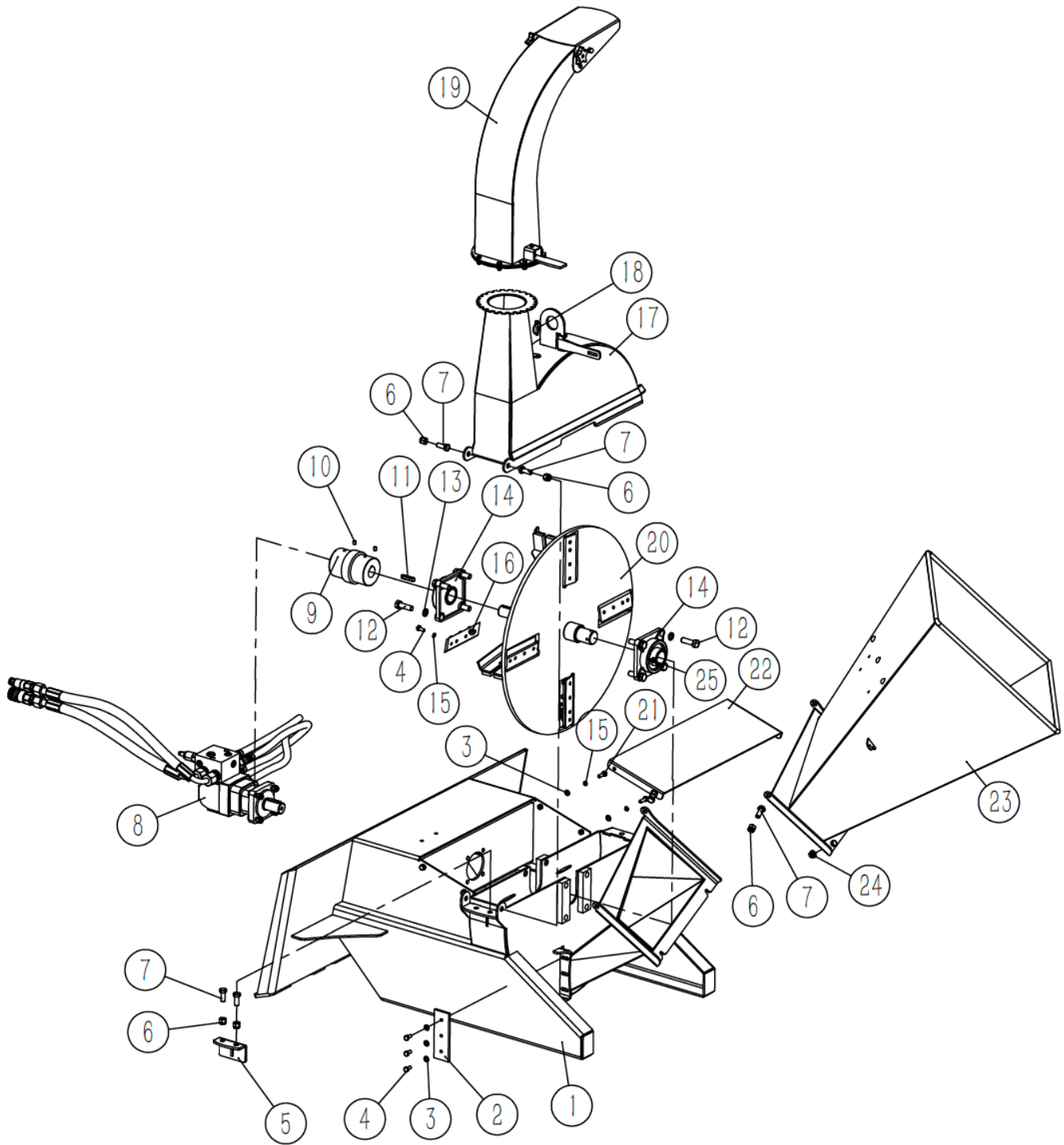
- Universal skid steer mount
  - Chipping capacity: 4"
  - Max hydraulic pressure: 2900 psi
  - Hydraulic flow rate: 14-20GPM
  - Speed rated: 450-650 RPM
  - Rotor size: 25"
  - Rotor weight: 36kg
  - Rotor knives: 4/reversible
  - Discharge hood height: 59"
  - Feeding housing opening: 4" x 10"
  - Hopper opening: 20" x 20"
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# PARTS LIST

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## BX42H Wood Chipper Assembly



# PARTS LIST

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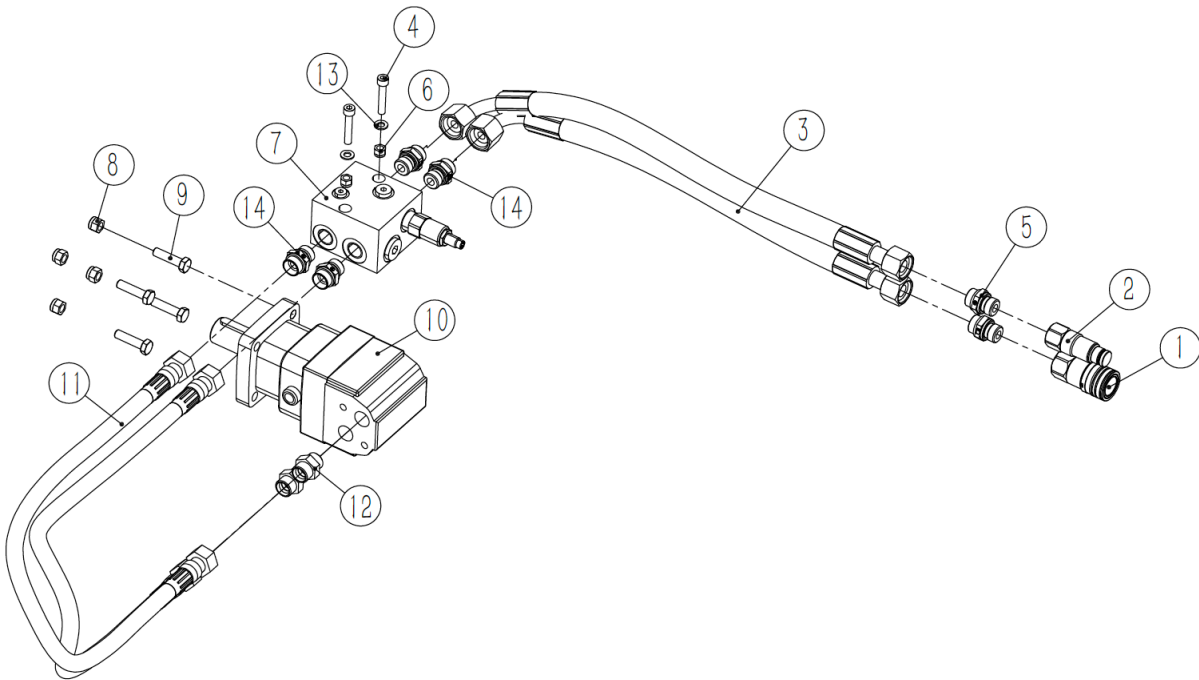
## BX42H Wood Chipper Assembly

No.	Part No.	Part Description	QTY
1	BX42H.3	Housing, Bottom Rotor	1
2	BX42S-4	Knife, Ledger	1
3	GB/T 97.1	WASHER 8	7
4	GB/T 5786	Bolt M8*18	19
5	BX42S.6	Twig Breaker	1
6	GB/T 889.1	Nut M12	7
7	GB/T 5783	Bolt M12*30	7
8	BX42H.7	Hydraulic components	1
9	BX42H.10	Coupling XL5	1
10	GB/T 77	Stop screw M8*12	2
11	GB/T 1096	Flat key A10*45	1
12	GB/T 5786	Bolt M14*1.5*40	8
13	GB/T 93	SPRING WASHER 14	8
14	GB/T7810	Bearing UCF208	2
15	GB/T 93	SPRING WASHER 8	20
16	BX42S-3	Knife, Rotor	4
17	BX42S.4	Upper Weldment	1
18	GB/T4329	Lick pin 10	1
19	BX42S.1	Discharge Chute	1
20	BX42H.5	Rotor Weldment	1
21	GB/T 5783	Bolt M8*20	4
22	BX42H.8	Cover	1
23	BX42S.2	Self-Feed Hopper	1
24	GB/T6177.1	Nut M10	2
25	JB/T7940	Grease nipple M6	2

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# PARTS LIST

## BX42H Hydraulic components

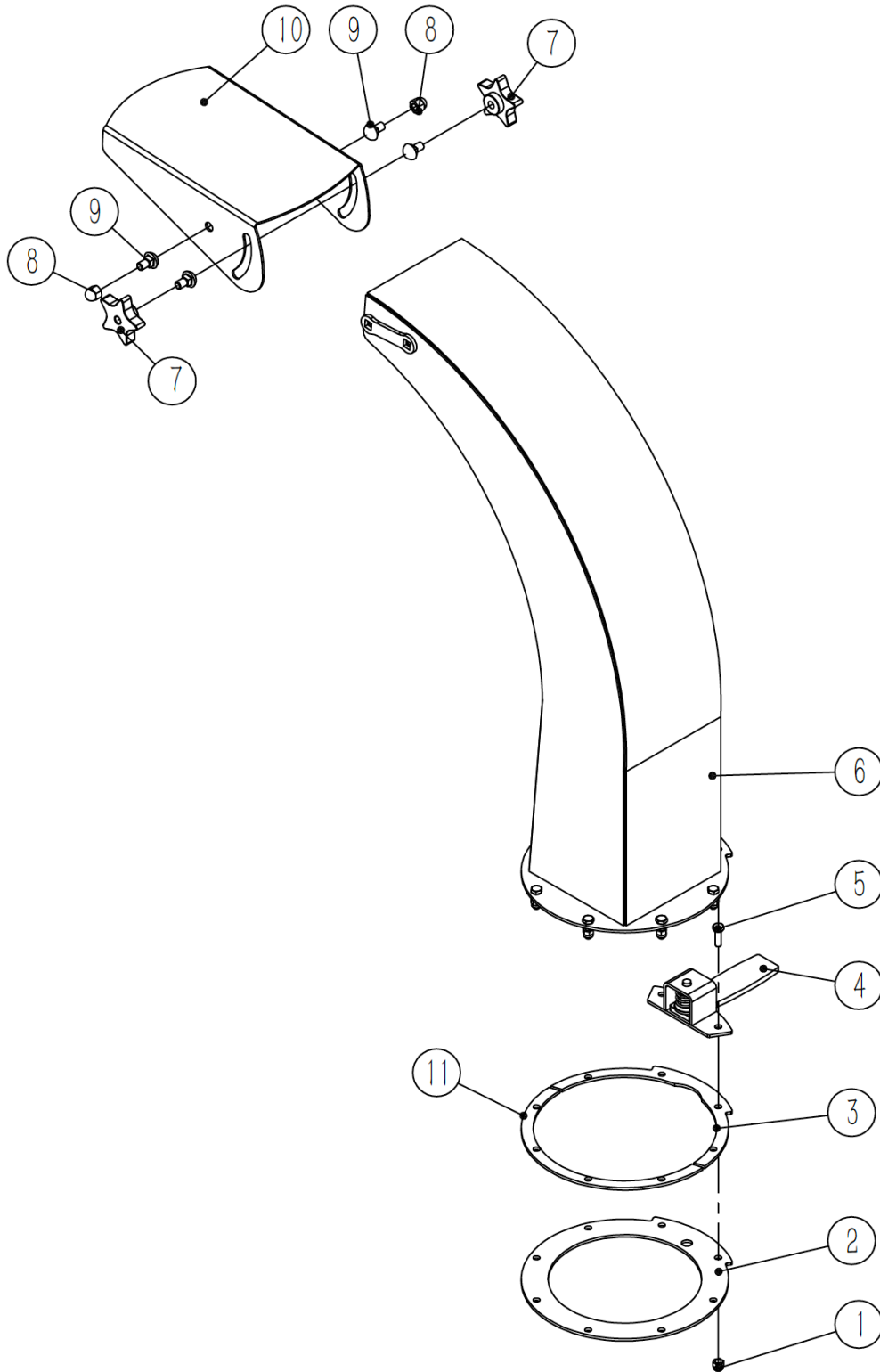


Part No.	Part Description	QTY
KIS-PT-G04SP	FLAT FACED COUPLERS G1/2 FEMALE	1
KIS-PT-G04SP	FLAT FACED COUPLERS G1/2 MALE	1
BX42H.7.2	Oil hose 02	1
GB/T 70.1	Hex socket screw M8*40	2
GE15LR12EDOMD	END STRAIGHT JOINT G1/2"-M22*1.5	2
GB/T 889.1	NUT M8	2
BX42H.7.3	Overflow valve block	1
GB/T 889.1	NUT M10	4
GB/T 5783	Bolt M10*40	4
BMSY-100-SP-B-M	Motor	1
BX42H.7.1	Oil hose 01	1
GE15LM22x1.5EDOMD	END STRAIGHT JOINT M22*1.5-M22*1.5	2
GB/T 97.1	WASHER 8	2

# PARTS LIST

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## BX42H Discharge Chute Assembly



# PARTS LIST

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## BX42H Discharge Chute Assembly

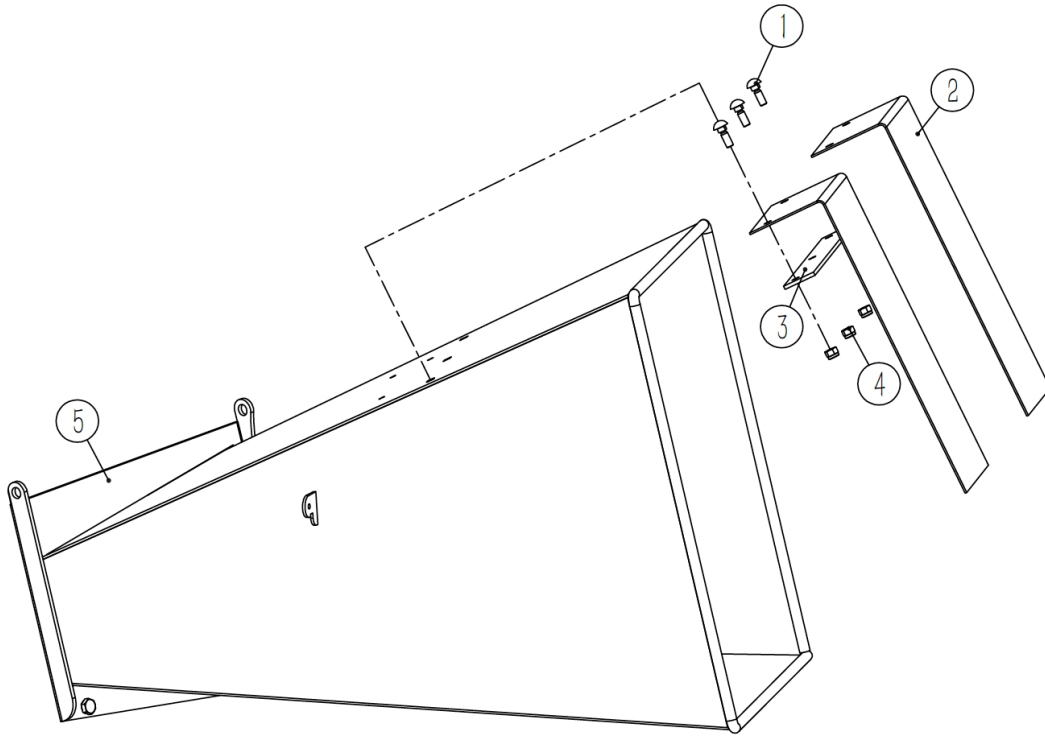
No.	Part No.	Part Description	QTY
1	GB/T889.1	Nut M6	8
2	BX42S.1-1	Plate, Hood Capture	1
3	BX42S.1-3	Plate, Spacer Ring	2
4	BX42S.1.2	Hood Latch	1
5	GB/T5783	Bolt M*20	8
6	BX42S.1.1	Discharge Chute	1
7	JB/T7274.4	Knob 8*32	2
8	GB/T802	Nut M8	2
9	GB/T12	Bolt M8*16	4
10	BX42S.1-4	Deflector, Discharge Chute	1
11	BX42S.1-2	Plate, Spacer Ring	2

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# PARTS LIST

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## BX42H Infeed Hopper Assembly



No.	Part No.	Part Description	QTY
1	GB/T12	Bolt M8*25	3
2	BX42S.2-2	Flap, Hopper	2
3	BX42S.2-1	Strap, Hopper Flap	1
4	GB/T889.1	Nut M8	3
5	BX42S.2.1	Infeed Hopper	1

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