

# BlueBird

## CH 400 Chipper

### Safety and Operating instructions

Model number

968160040

968160041

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# Safety Information



**Attention; this machine can be dangerous! All operators should fully read all instructions and use extreme care and awareness when operating the Unit. Failure to follow the instructions or modify the equipment can result in personal injury.**

**Thank you** for purchasing the BlueBird chipper. It will allow you to clean up yards of branches and twigs up to 4 inches. Please become familiar with the unit before operating.

Enter your model number and serial number for future reference.

Model number \_\_\_\_\_ Serial number \_\_\_\_\_

If you have any problems or concerns about this unit please call your dealer or contact us at [Customerservice@BlueBirdturf.com](mailto:Customerservice@BlueBirdturf.com)

## Mandatory Operating preparation:

- Read this safety and operation manual to understand proper safety procedures and operation.
- Do not allow anyone to operate this unit without training
- Do not allow children to operate the chipper or feed anything into the unit.
- Do not put any part of your body in the chute area or near any moving part including clothing
- Never attempt any clearing of the machine while it is operating or coasting to a stop.
- All work should be done with the engine off, cooled down and the spark plug disconnected and moved away from the spark plug to prevent unwanted accidental start up.
- Do not operate this equipment under the influence of any type of medication or alcohol which might impair reflexes or judgment.
- Never try to retrieve anything from the feed hopper after inserting .
- Keep all observers especially children and pets away from unit including the discharge area.
- Wear safety glasses ,hard hat, ear protection, gloves, hard toe shoes and avoid loose fitting protective clothing.
- Check for all safety decals and instructions that should be legible

# Safety symbols used on equipment



Danger: this machine must be operated in a safe manner according to the directions in the manual. Failure to observe the instructions or modify or use the machine when repair is needed could result in serious injury or death. As with any power equipment caution should be observed!



**PROP. 65 WARNING**  
The State of California contains one or more chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.



Read the safety and operating manual: read and understand this manual before operating this equipment.



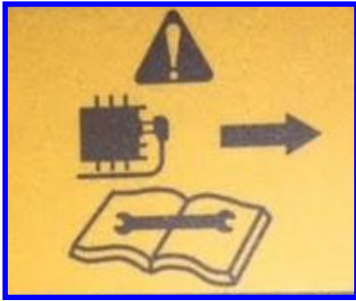
Eye and hearing protection must be worn when operating this equipment.



Warning : Rotating blades !  
Do not insert body parts into the chutes or openings inlet hopper.



# Safety symbols used on equipment continued:



Disconnect spark plug and read manual before servicing the equipment



Warning: Do not get in the path of discharge debris, it could cause injury.



Warning : Rotating blades!  
Do not insert body parts into the chutes or openings including inlet hopper.



Observe safety decals and their instructions.



Caution : Blades can cause serious injury!

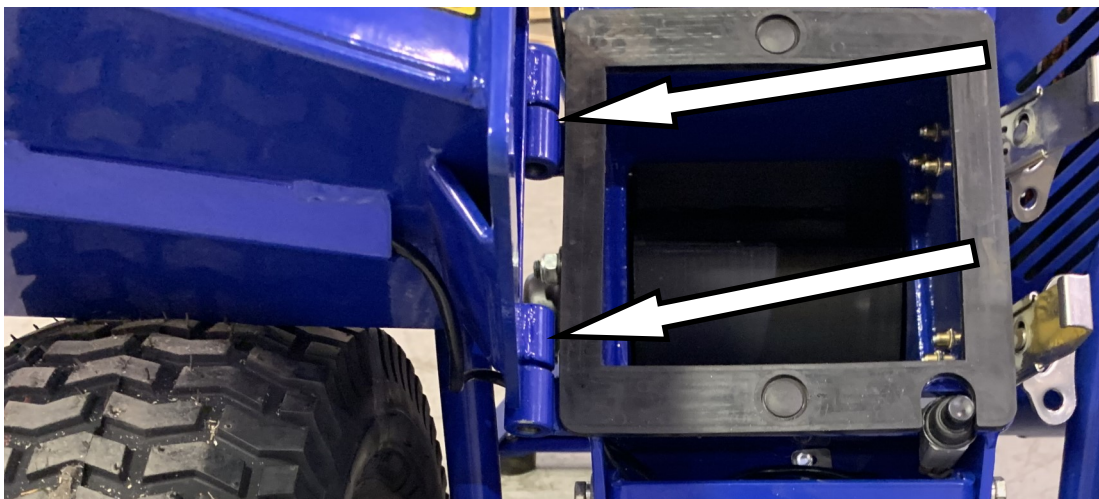
# Assembly

The crate is held down by four clips, two on each end. Lift off the shipping crate and remove straps holding down the unit to the pallet.

The tamping rod is located in a box along with the small output chute ( do not discard). A wrench is included for changing blades.



Install both chutes on the unit. They slide in the matching hinge pins on the unit

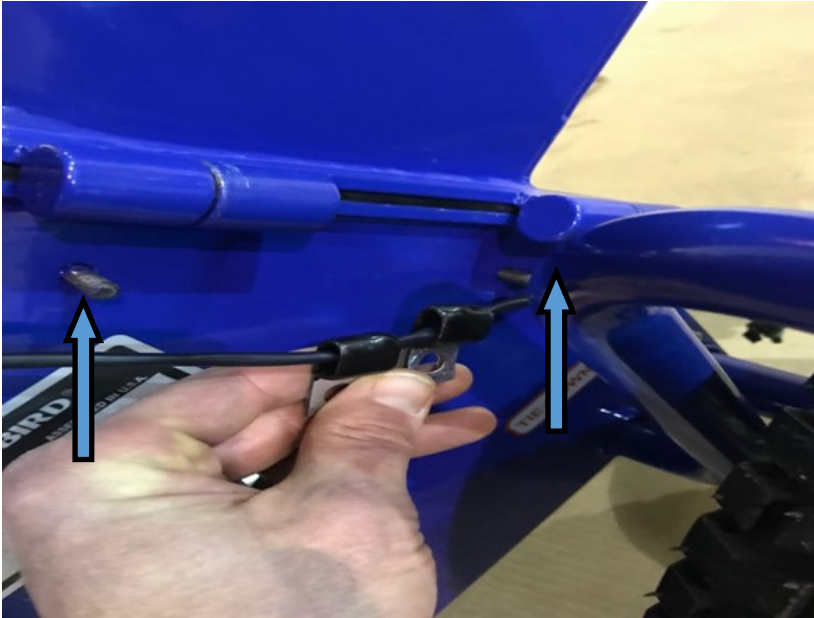


# Assembly

## Installing Bracket to retain intake chute

The bracket may already be installed on unit, this is to prevent from being lost.

Remove before installing intake chute then follow directions. The bracket can only be installed after installing the intake chute



Install intake chute on unit.  
Remove nuts from mounting bolts and remove the cable clips.  
Install the bracket on the bolts and replace the cable clips. Reinstall the nuts and tighten . Insure the clip is not binding on the hinge pin.



Bracket installed

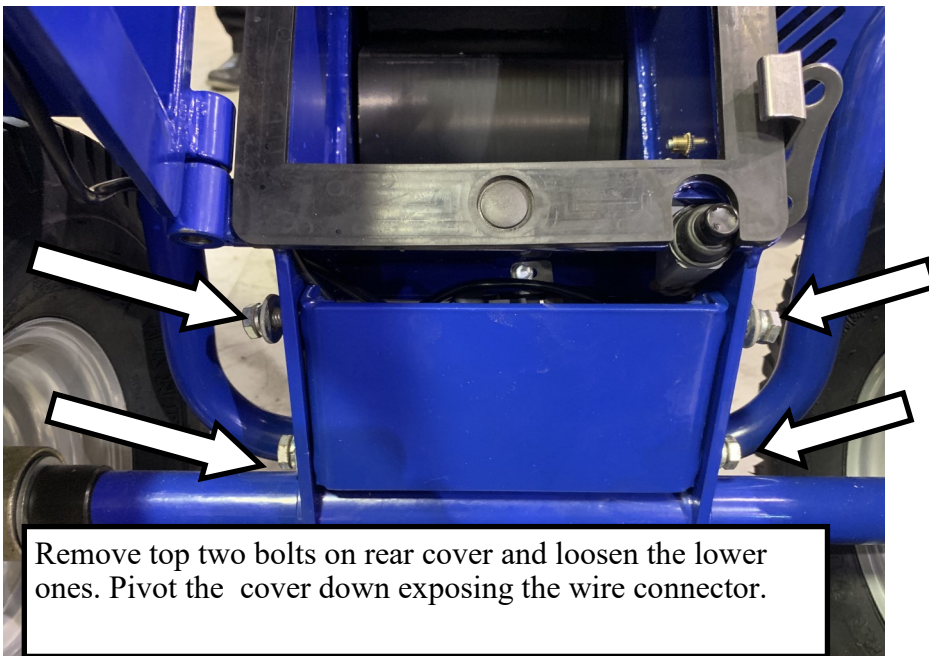


# Assembly

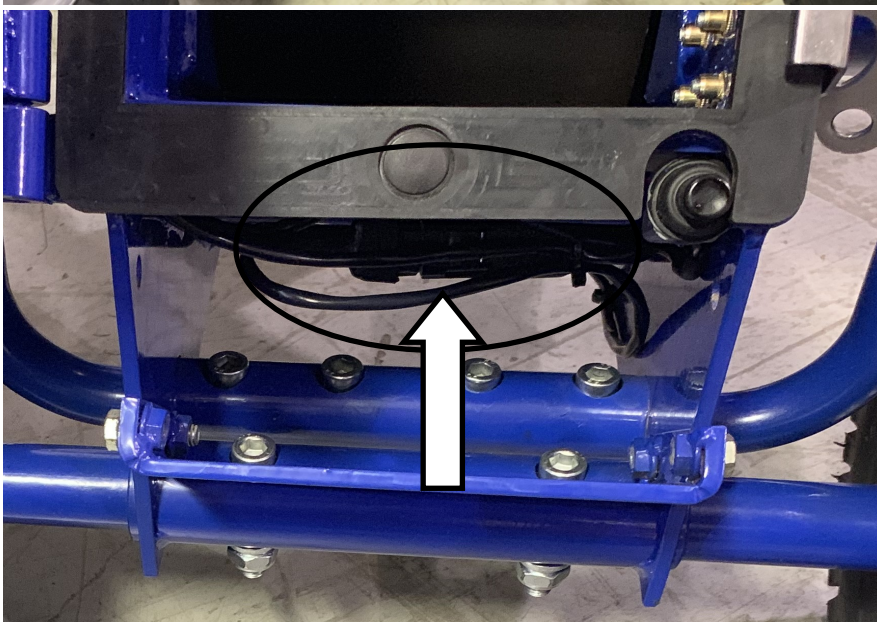
Unit with both chutes installed



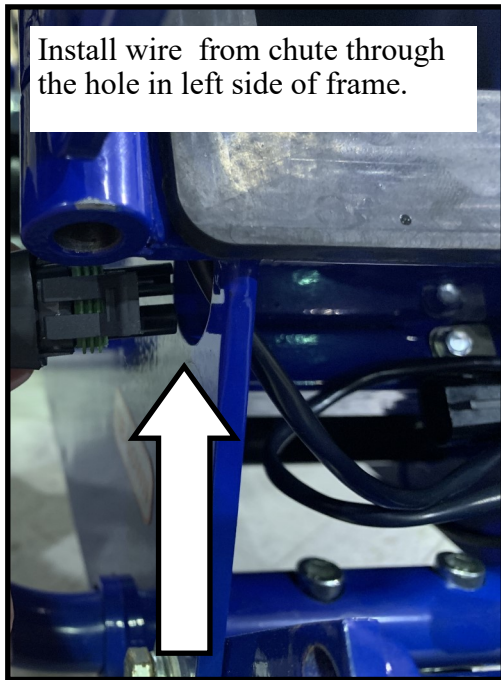
Wiring hookup



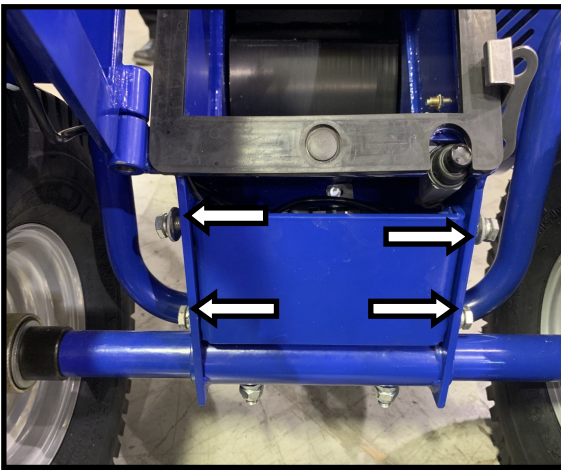
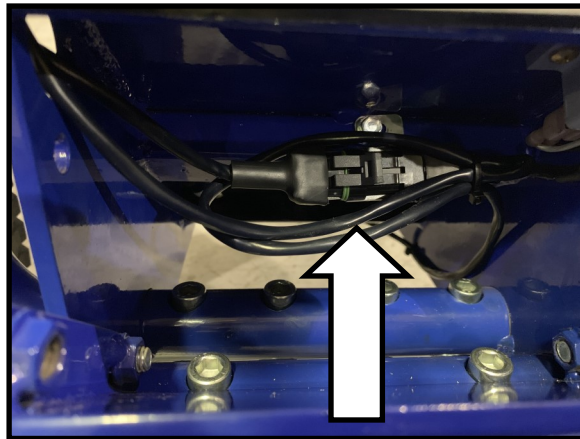
Remove top two bolts on rear cover and loosen the lower ones. Pivot the cover down exposing the wire connector.



# Assembly



Plug connectors together and replace the cover and tighten the bolts

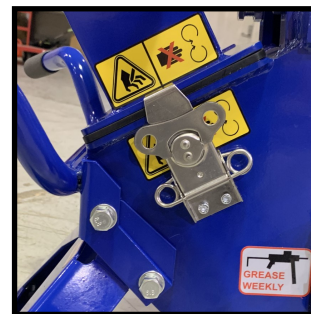


Latch both chutes by engaging in the chute, then turning the latch, then folding up the latch

Open latch

Engaged latch

Locked latch



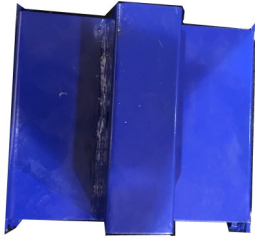


# Assembly

There is a drawbar that can be attached to so the unit can be pulled by a garden tractor or ATV.  
This can only be used off road and is not for over the road use.

**DO NOT USE A CAR OR TRUCK TO PULL THIS UNIT!**

Tow bar assembly if applicable:



Install bracket in drum housing in holes provided with associated hardware.



Insert drawbar and install with bolt washers and nut.



Make sure all hardware is tightened securely!

Notice orientation



# Pre-operation

## Read and understand this manual before operation!

- Never fuel the unit or run the unit in an enclosed space. Residual gas fumes could be ignited by a water heater or furnace in a garage. Gas fumes are very flammable and you should change clothes if some is spilled on you.
- Clean up any spills and do not dispose of gas soaked rags in the trash, they may spontaneously combust.
- Never smoke while fueling the unit. Make sure the fuel cap is secure on both the machine and the gas can after fueling.
- Use fresh gasoline and keep lid on gas can when not refueling.
- Store fuel away from heat or flame.
- Use a fuel stabilizer to insure gas will remain volatile.
- Make sure the unit is on a stable level surface.
- Check all bolts and guards to make sure they are tight and in proper working order.

## Starting information

- Check to make sure the discharge and inlet are empty.
- Fill fuel tank before starting and also check the oil level.
- Start engine based on engine manual directions.
- Allow unit to reach full speed and then insert material no larger than 4 inches. Forcing larger than specified material could harm you or damage the equipment.
- Do not touch muffler during operation.
- Not every situation can be covered in a manual, use good judgement and never push equipment beyond its capability.

# Operation

**Attention!** The stop button will kill the engine if the situation arises that needs the unit off immediately!

Located on top of  
Intake chute



- This machine is designed to chipping small branches. Any other use is not intended.
- The customer is responsible for third parties and any damage to their property.
- When feeding in branches, make sure there are no nails or screws on the wood going into the chipper.
- Do not overload the machine, never attempt to alter engine governor to increase speed.
- When the discharge pile grows larger move the chipper or the debris so as not to affect the discharge flow. When moving the unit always shut off the unit and allow to stop.
- Never modify a guard and keep them in good working order.
- Never look into the intake or discharge chutes when the unit is running, debris could kick-back at operator.
- Keep the air intake on the engine clean of debris.
- Never remove the air cleaner while the engine is operating.
- Never leave the unit running unsupervised.
- The unit should only be used with ample lighting (daylight preferred).
- The tamper can assist with pushing small debris or branches in the hopper. It is carefully designed to prevent entry into the blade. Never use the tamper if it is damaged in anyway or bent. And never use the handle end towards the blades.



# Maintenance



**WARNING**

When performing any maintenance on this unit, spark plug wire must be disconnected and placed away from spark plug to prevent accidental starting!

Servicing the blade:

- Turn off engine and remove spark plug wire.  
After removing make sure the plug wire is not laying near the spark plug!

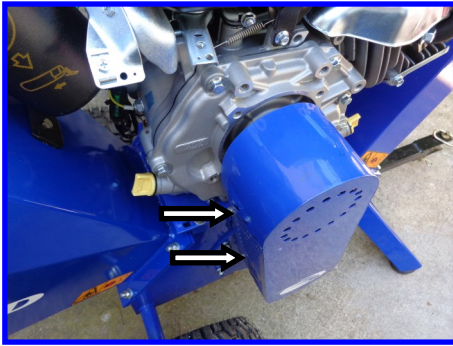


- Rotate the drum until the blade is visible like the above photo. You can rotate the drum by pulling the starter cord but can be rotated by hand (wearing gloves) more precisely. Remove the three bolts holding the blade and remove. Rotate the blade, using the other cutting surface or replace the blade. Torque bolts to 37 ft/lbs. Use blue Loctite on clean threads.

# Maintenance

## Belt replacement and Adjustment:

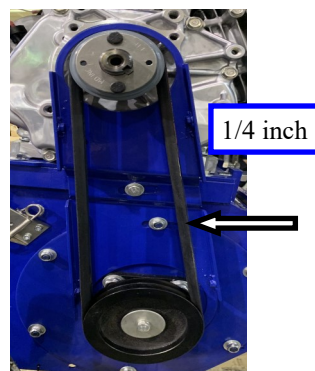
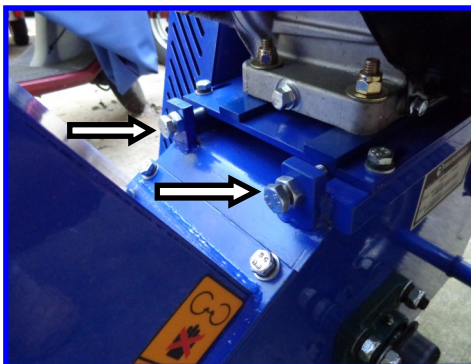
- Remove the 4 bolts from the shroud ( two on each side)



- Loosen (4) engine plate hold down bolts (not the engine bolts ).



- Loosen tensioning bolts and move engine plate to remove belt.
- Tighten to tension belt to about 1/4 inch deflection.

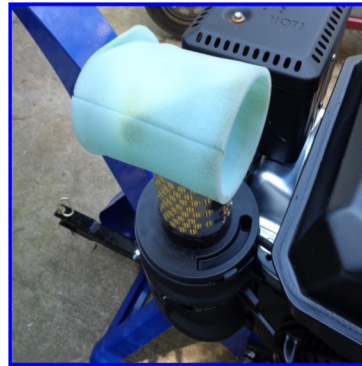


# Maintenance

- Clean air filter after 15-25 hrs of use or at least once a season. The filter is easy to clean and the inside filter should last 100 hours. Check more often if you are in dusty conditions. The air cleaner captures large debris for easy disposal.

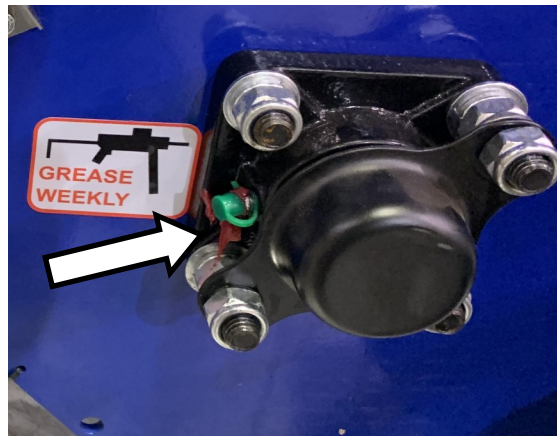


\*Kohler has a different style air cleaner with a pre filter to protect the main filter



## Bearing Lubrication:

- The bearings should be lubricated every 25 hours of operation. Use a high temperature synthetic grease such as Mobilith SHC 220.

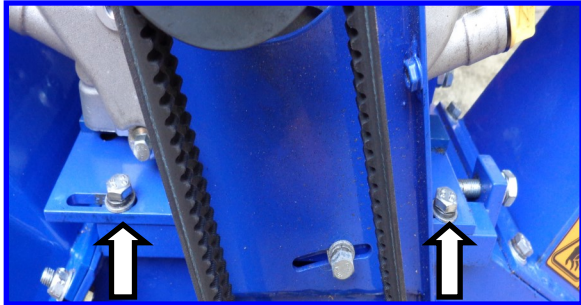




# Maintenance

## Pulley removal and installation

- ◆ When replacing the pulley you will have to loosen the belt tension on the engine mounting bracket (see picture below, 4 bolts). On some units the tilting the whole engine plate is easier to remove the belts



- ◆ Remove the bolts on the old bushing and insert back into the threaded holes on the bushing. Tighten each alternately until the pulley comes off the bushing. Remove the bushing and pulley.
- ◆ Do not use any lubrication on this installation. It is imperative the all parts are dry and clean including the shaft, the bore and taper surfaces of the bushing, pulley and the cap screws. Place new bushing and new pulley on shaft lining up the **unthreaded** holes on the bushing with the threaded holes in the pulley. Insert the key in the keyway. Line up using a straight edge with lower pulley. Use this for a guide to placement since the pulley will move slightly when tightened. Start the threads by hand and tighten the bolts alternately with increasing torque until you reach 95 in/lbs (8ft/lbs). the bushing should be. Check alignment after installation.



- ◆ Re-tension belt and to 1/4 inch deflection , gripping moderately. Reinstall belt shield and check operation.

# Maintenance

## Blade to Block adjustment:

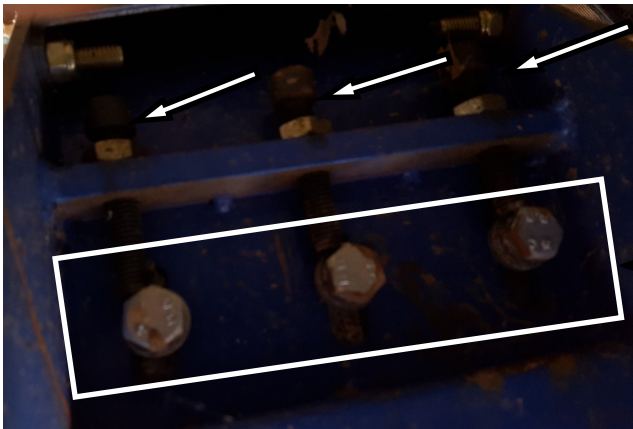
This adjustment is only necessary if you replace the cutting block, normal blade replacement does not require resetting the block.



Gap between blade and block should be between .040 and .050 inches. Use a feeler gauge to measure.

If adjustment is necessary , loosen bolts holding down the block bolts. Loosen block bolts and adjust block to proper clearance. Retighten the block bolts the tighten the hold down bolts. Rotate the drum to check clearance.

NOTICE THE BLOCK ADJSUTMENT BOLTS ARE IN A SLOT



BOLTS HOLDING THE BOLTS IN POSITION

BLOCK ADJSUTMENT BOLTS

# Storage

- Some pieces of power equipment are used seasonally. This can cause problems due to the fact fuel has a limited shelf life.
- It is very hard to remove all fuel from a carburetor so it is recommended to add fuel stabilizer to the fuel and fill up the fuel tank.
- Run the unit for two minutes to have the fuel get into all parts of the carburetor and shut off the engine. By having the fuel tank full it reduces air space which helps with prolonging the life of the fuel.
- Even when using stabilized fuel if the unit is not run for over 9 months the stabilized fuel should be discarded (please dispose of correctly according to local codes) and refilled with fresh fuel.
- Using old fuel can leave deposits in the engine and cause hard starting.
- Make sure unit is clean before storage. The unit can be washed out with the engine running but make sure it dries completely before storing.
- Change oil as prescribed in the engine manual that comes with the unit.

# Troubleshooting

Do not pull rope if you feel it is locked up, clean out debris from hopper, then try again.

Clearing a clogged intake chute:



**When performing any maintenance on this unit, spark plug wire must be disconnected and located away from spark plug to prevent accidental starting! Wear gloves when working in blade area!**



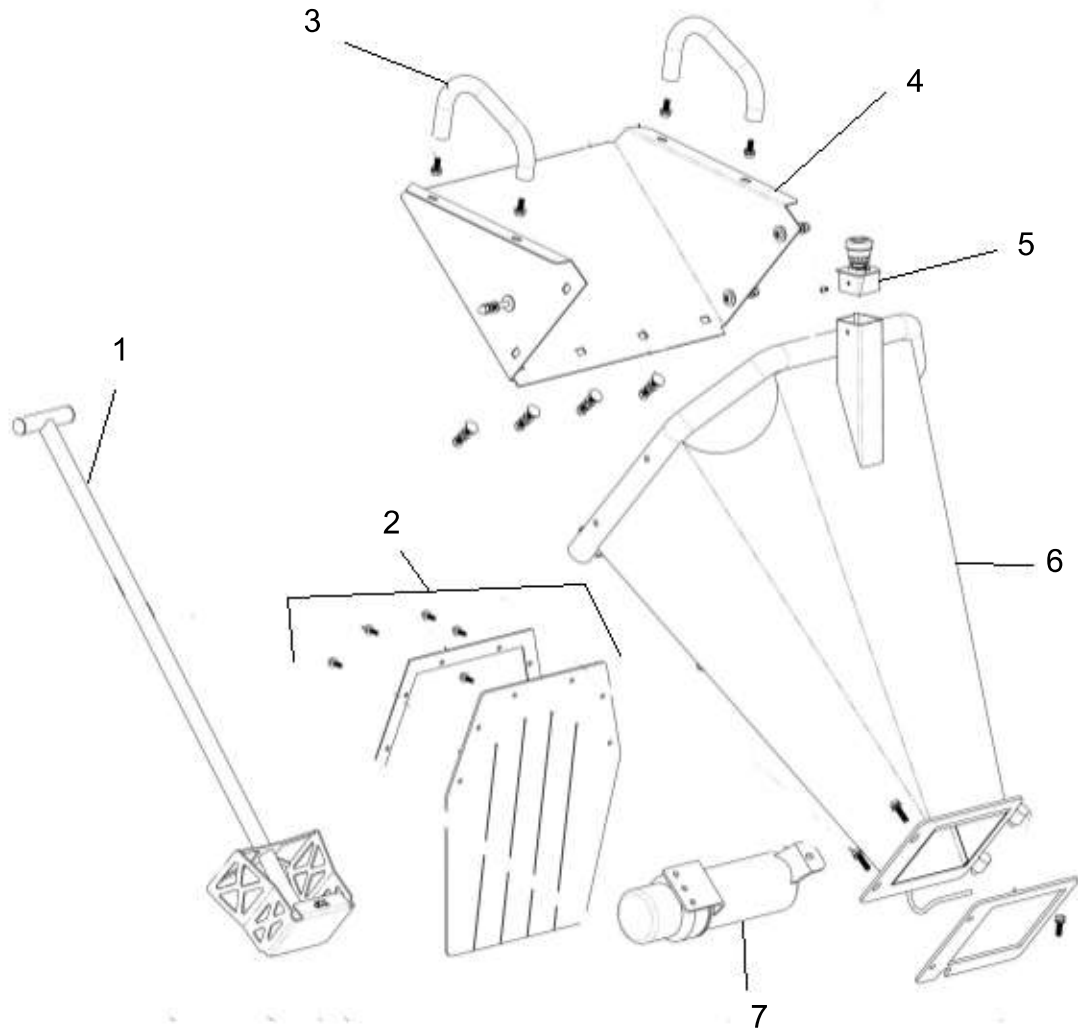
Intake chute

Loosen the clamps and rotate either chute to access the blade area. Try clearing intake chute first.

Output chute

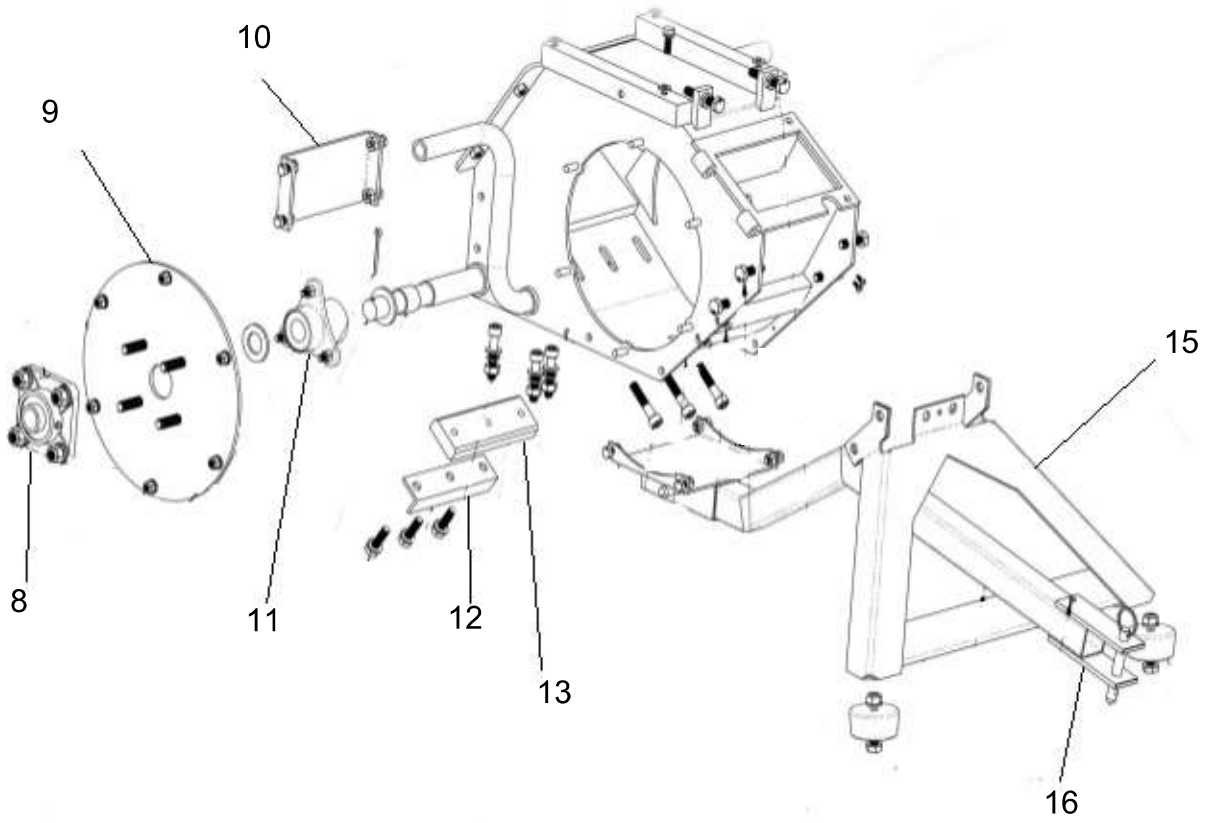


# Parts

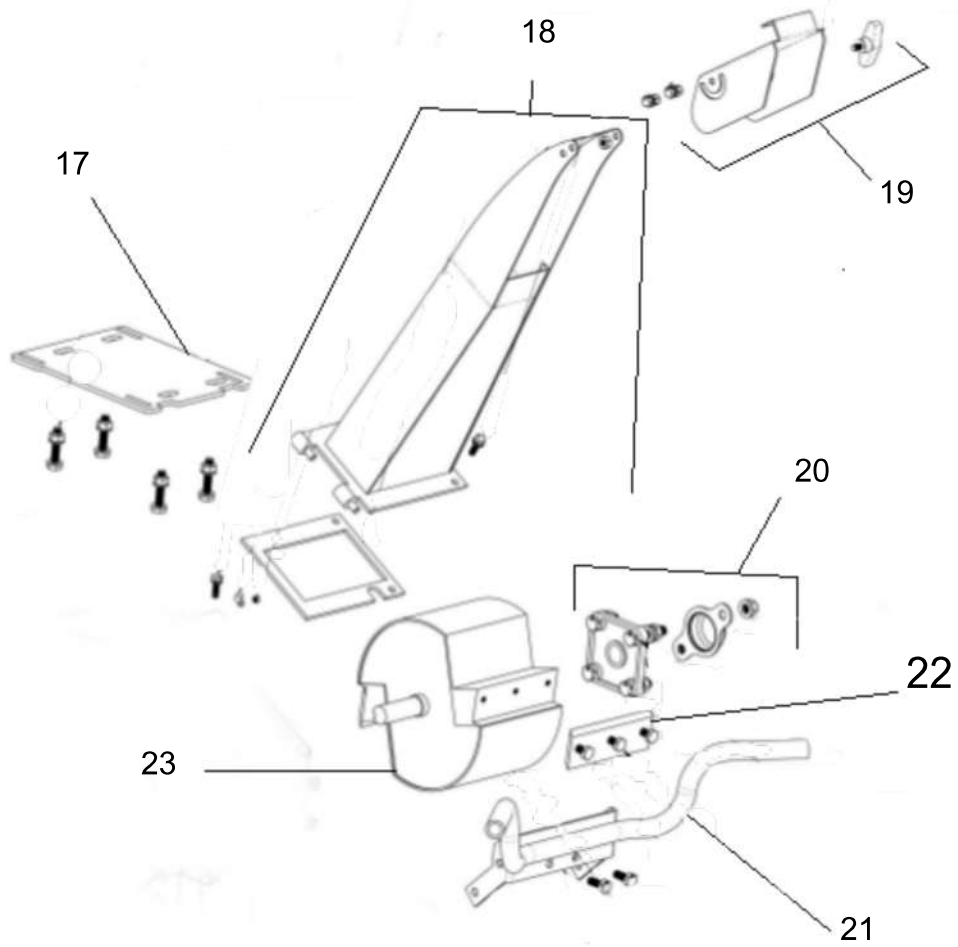




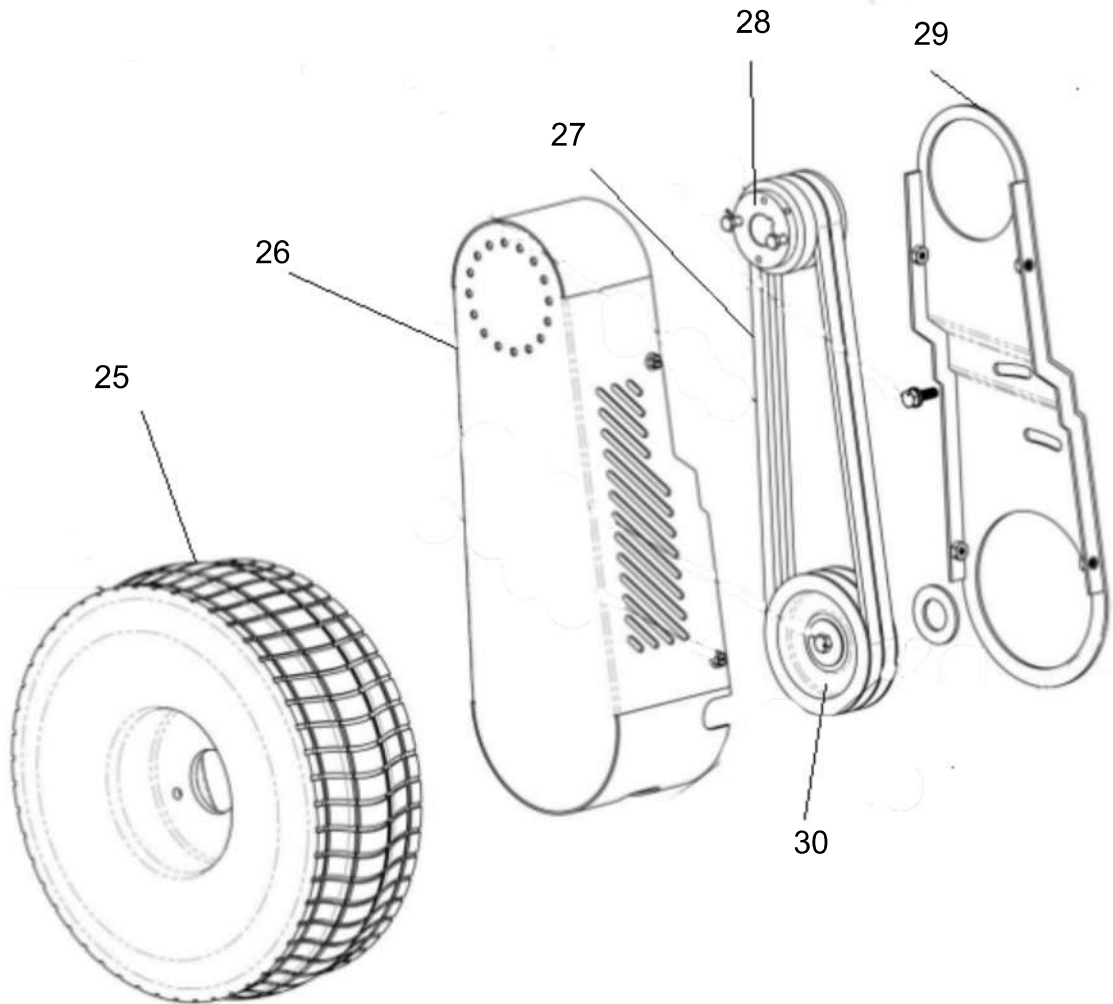
# Parts



# Parts



# Parts



## PARTS DESCRIPTION

1. Tamper.....	577120807
2. Debris guard .....	577120740
3. Handles.....	577120430
4. Input extension.....	577120429
5. Stop switch.....	577121106
6. Input chute .....	577120753
7. Holder for manual.....	577121105
8. Bearing.....	577120736
9. Wheel plate and nuts.....	577120752
10. Cross brace kit.....	577120783
11. Wheel hub.....	577120806
12. Angle.....	577120742
13. Cutting block and bolts.....	577120422
14. Blank	
15. Stand.....	577120768
16. Tow bar.....	577120933
17. Engine plate.....	577121259
18. Output chute.....	577120763
19. Deflector.....	577120764
20. Bearing and cap/ bolts.....	577120735
21. Lift handle.....	577120770
22. Blade set.....	577120426
23. Cutting drum.....	577120738
24. Blank	
25. Tire with hub.....	577120749
26. Belt guard.....	577120792
27. Belt.....	577120433
28. Pulley and bushing.....	577122043
29. Back plate.....	577120791
30. Lower pulley.....	577120435
Not shown	
Wiring Harness.....	577122296
Switches on intake and exit chutes.....	539020017

Notes:

Manual # 160 120939 RT2

BlueBird Turf Products  
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