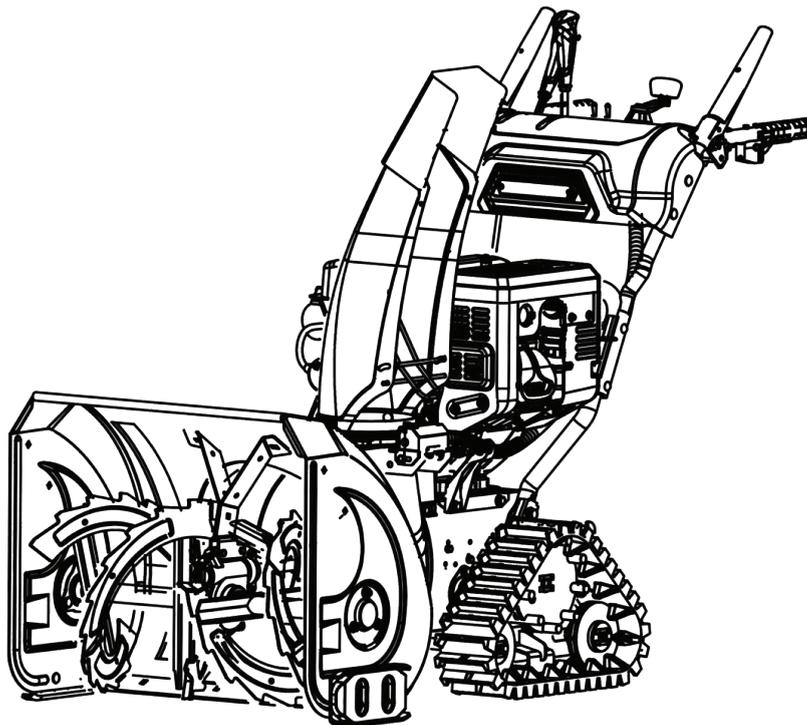
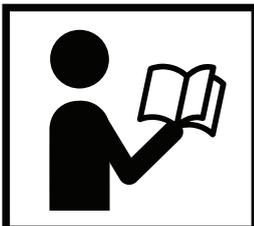


### MODEL TMG-GSB30

# 30" SELF-PROPELLED GAS-POWERED SNOW BLOWER 302CC ELECTRIC START



#### ⚠ WARNING



- Please read and understand 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
- Do not return the product to dealer. They are not equipped to handle your requests.

Missing parts or have questions on assembly?

Please call: 1-877-761-2819 or email: [cs@tmgindustrial.com](mailto:cs@tmgindustrial.com)

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## IMPORTANT SAFETY INFORMATION



**WARNING:** Read and thoroughly understand all instructions and safety information before operating this Snow blower. Failure to do so may cause serious injury or death. Do not allow anyone to operate this Snow blower who has not read this manual. As with all power equipment, a snow blower can be dangerous if used improperly; Do not operate this snow blower if you have doubts or questions concerning safe operation.

Call our customer service department at 1-877-761-2819, or visit [tmgindustrial.com](http://tmgindustrial.com) if you have any questions or concerns about the safe operation of this equipment.



### **DANGER:**

#### **Intended Use**

Do Not Use the Snow blower for any purpose other than for which it was designed. Any other use is unauthorized and may result in serious injury or death.

#### **Personal Protective Equipment**

Wear ANSI approved safety goggles, heavy-duty work boots and gloves during set up and operation. While this snow blower operates at a relatively low noise level, about 74dB, you may want to wear ear plugs or noise deafening headphones.



### **DANGER:**

**A SNOW BLOWER IS CAPABLE OF AMPUTATING HANDS AND FEET AND THROWING OBJECTS.  
FAILURE TO OBSERVE THE SAFETY INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH.**

#### **CALIFORNIA PROPOSITION 65 WARNING**

Engine exhaust, some of its constituents and certain product components contain or emit chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

#### **General Safety**

Failure to follow warnings, cautions, assembly and operation instructions in the Operation Manual may result in serious injury or death.



### **DANGER:**

#### **READ THE OPERATION MANUAL BEFORE OPERATION.**

- **Do not** permit children to operate this equipment at any time. Do not permit others that have not read and understood the complete Operation Manual to operate this equipment.
- **Do not** operate the snow blower when under the influence of alcohol, drugs or medication.
- **Do not** allow a person who is tired or otherwise impaired or not completely alert to operate the snow blower.

## IMPORTANT SAFETY INFORMATION



### DANGER:

**EVER place fingers, hands, or body near the snow blower when it is running. Do not lean or reach over the snow blower.**

- Do not aim the discharge at a person or animal.
- Keep all safety guards in place and in proper working order.
- Keep all people (except the operator) a minimum of 25 feet from the snow blower during operation.
- Do not transport the snow blower with the engine running.
- Do not tilt the machine while the engine is running.
- Do not leave the snow blower unattended when it is running. Turn off the engine before leaving the area.
- Never run the engine in an enclosed area or without proper ventilation as the exhaust from the engine contains carbon monoxide, which is an odorless, tasteless, and deadly poisonous.
- Fill the gasoline tank outdoors with the engine off and allow the engine to cool completely.
- Do not operate the engine with the air cleaner or cover over the carburetor air-intake removed, except for adjustment. Removal of such parts could create a fire hazard.
- The muffler and engine become very hot with use and can cause a severe burn; do not touch. Allow the engine to cool before refueling, doing maintenance, or making adjustments.

### Safety Decals

Safety labels on the snow blower are to remind you of important information while you are operating the unit.

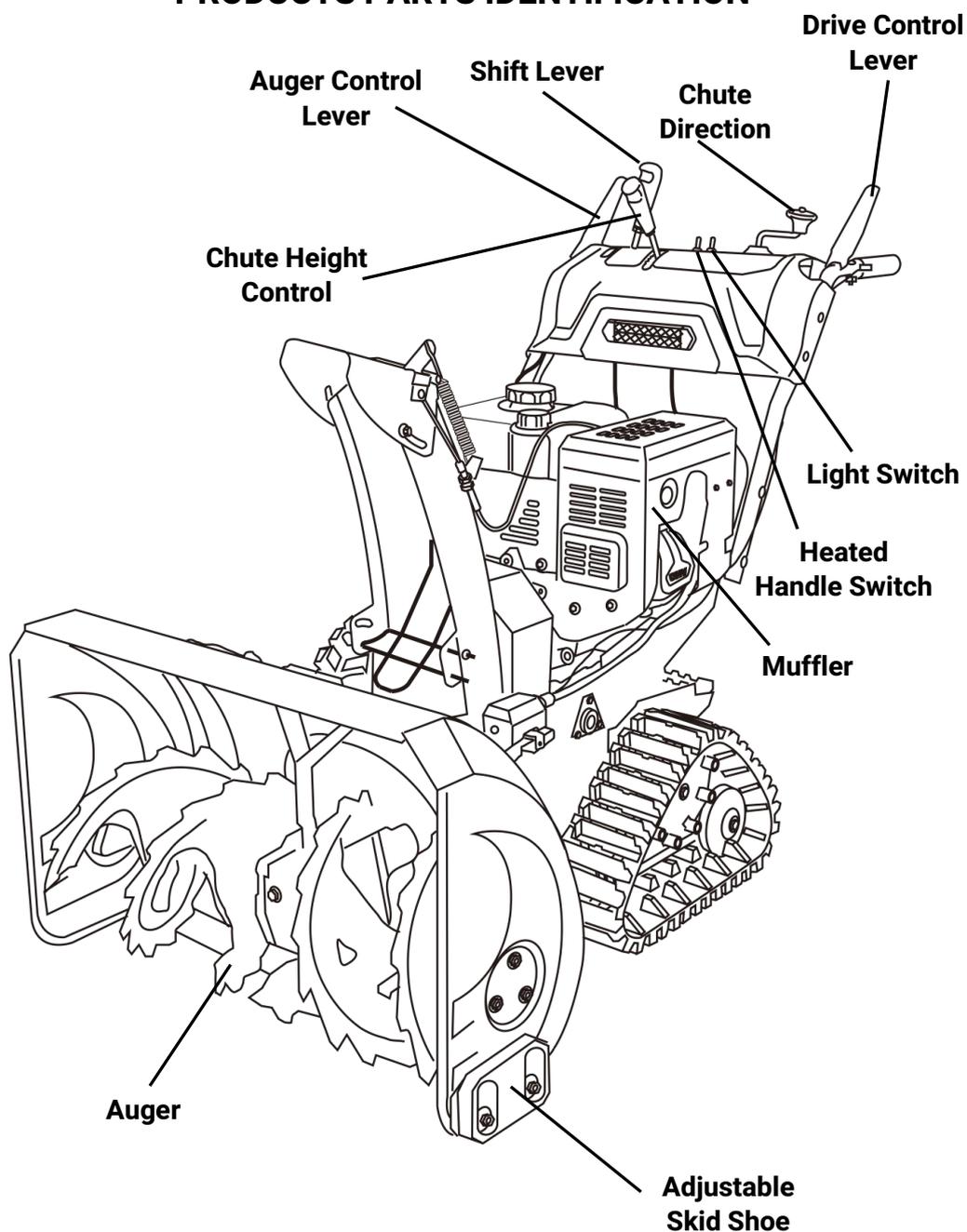
Make sure all safety warning decals are attached and in readable condition. Replace missing or defaced decals. Contact TMG Industrial at 1-877-761-2819 for replacement decals.



## PRODUCTS SPECIFICATIONS

Model No.	<b>TMG-GSB30</b>
Operating width	30 inch
Intake height	21 inch
Throwing distance	50 feet
Transmission	6 forward speeds and 2 reverse speeds
Auger diameter	15"
Chute rotation	190° turning radius on console
Power and type	302CC single cylinder, air cooled, 4-stroke, OHV
Electric starter	AC 120V 60Hz
Shipping Weight	326 lb
Shipping Size	44"x33"x31.5"

## PRODUCTS PARTS IDENTIFICATION



## UNPACKING AND SETUP

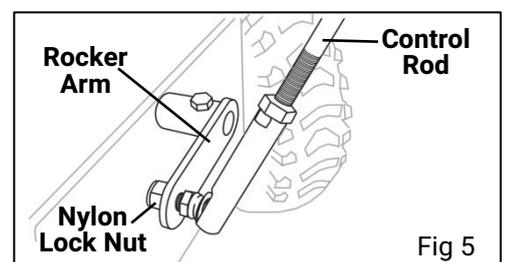
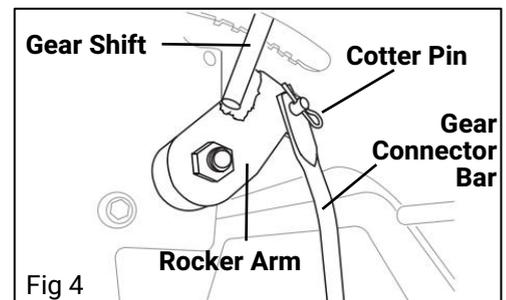
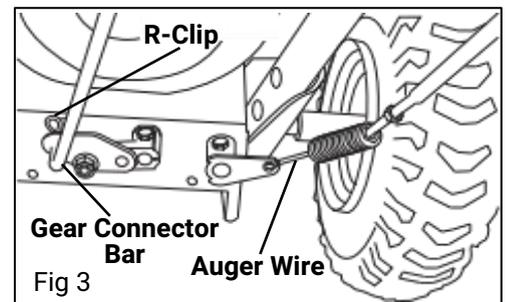
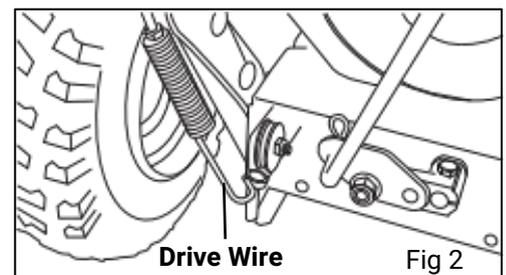
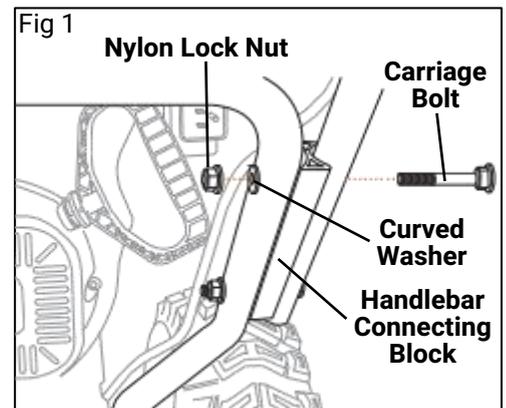
Your snow blower requires some assembly; Save the packing materials and box for future use as a storage container.

**COMPLETELY READ AND UNDERSTAND THE OPERATORS MANUAL BEFORE ATTEMPTING TO OPERATE THE SNOW BLOWER.**

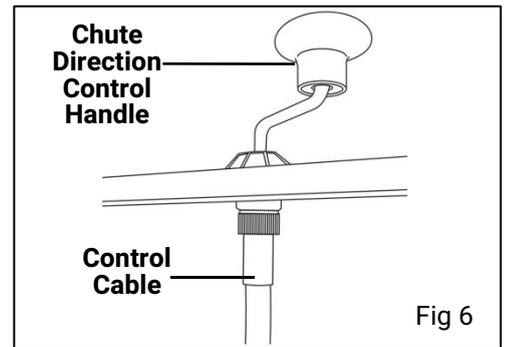
### Assembly

#### Handlebar and Shift Control Assembly

1. Carriage bolts, curved washers and nylon lock nuts have been provided in a hardware package. Align the two holes in the handlebar connector block with the two holes in the upper and lower handlebars assemblies on the snow blower. Push carriage bolts through from the outside and secure with a curved washer and nylon lock nut on the interior in two places on both sides of the snow blower. Tighten securely (see Figure 1).
2. Attach the drive wire on the left side of the snow blower (see Figure 2). Remove the R-clip that connects the drive wire to the control lever on the handlebars, then slip the wire off. Attach the other end of the drive wire with the spring mechanism to the connection ring and reattach the drive wire to the control lever reinserting the R-clip. After connecting the wire adjust the tension. The wire should be taught when connected. (See Control Wire Adjustment, page 20).
3. Attach the auger wire on the right side of the snow blower (see Figure 3). Remove the R-clip that connects the auger wire to the control lever on the handlebars, then slip the wire off. Attach the other end of the auger wire with the spring mechanism to the connection and reattach the auger wire to the control lever reinserting the R-clip. After connecting the wire adjust the tension. The wire should be taught when connected. (See Control Wire Adjustment, page 20).
4. Attach the gear shift rod to the rocker arm on the under side of the control panel and secure with a cotter pin (see Figure 4).
5. Attach the other end of the gear shift control rod to the rocker arm on the rear of the snow blower (see Figure 5). Pass the attachment bolt on the control rod through the hole in the rocker arm and secure with a nylon lock nut.



- Attach the wire harness for heated handle control to the harness coming off of the engine.

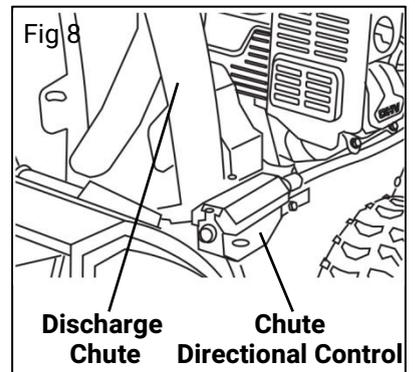
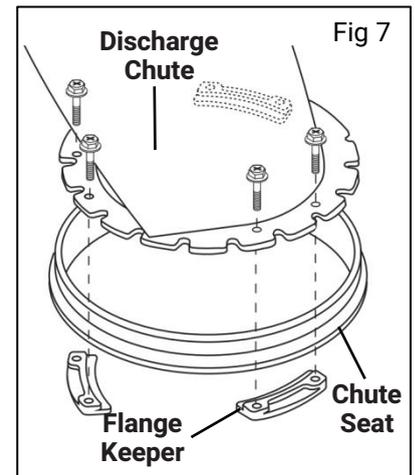


### Attaching the Shift Lever Handles

- Thread the shift lever handles on to the shift lever rods, one for the speed shift and one for the discharge height control.

### Attaching the Discharge Chute

- Attach the discharge chute to the snow blower by placing it on the chute seat on the snow blower on top of the plastic friction ring. Position the flange keeper beneath the chute seat lip. Align the two holes in the chute and two holes in the flange keeper and secure with two bolts from the top side (see Figure 7). Repeat in three locations to attach the discharge chute to the snow blower.
- Attach the chute crank bracket aligning the chute notches with the spiral end of the chute directional control assembly using the two hex bolts, flat washers and nylon lock nuts from the hardware kit (see Figure 8). Lubricate both ends of the chute directional control crank with petroleum jelly, paraffin wax, or light machine oil.



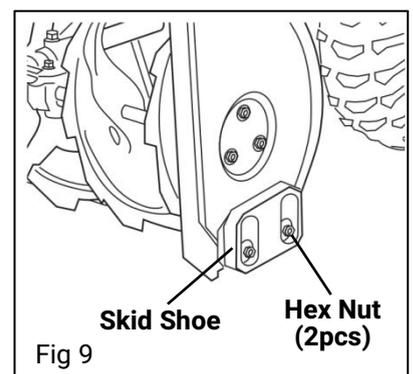
### Attaching the Chute Height Control Cable

- Attach the chute height control cable to the bracket underneath the control panel. Route the cable through the notch in the bottom bracket and tighten the two hex nuts on the top and bottom of the bracket. Then attach the cable end with the screw eye to the post on the upper bracket and secure with a R-clip.

**NOTE:** It will be easiest to attach the screw eye end of the cable to the bracket post when the chute height control knob is in the highest position (pulled towards the operator).

### Adjusting the Skid Shoes

- Position the skid shoes based on surface conditions. Adjust upward for hard-packed snow. Adjust downward when operating on gravel or crushed rock surfaces. Loosen the two hex nuts that retain the skid shoe in place and move up or down as desired, then retighten the lock nuts (see Figure 9). Repeat for the opposite side of the snow blower.



## Filling with Gasoline and Oil



### WARNING:

**FUEL IS HIGHLY FLAMMABLE AND POISONOUS ALWAYS FILL THE TANK WITH ENGINE OFF AND COOL.**

**ALWAYS CHECK THE FUEL LEVEL BEFORE OPERATING.**

Allow the engine to cool for at least two minutes before removing the fuel cap.

1. Place the snow blower on a level surface outdoors to fuel.
2. The fuel tank holds approximately 1.1 gallons of fuel. 87+ octane unleaded gasoline is recommended. Do not fill above the top of the fuel filter. Replace the fuel cap securely and wipe any excess from the fuel tank before starting the snow blower.



### WARNING:

**DO NOT REFUEL INDOORS OR NEAR ANY SOURCE OF POSSIBLE COMBUSTION.**

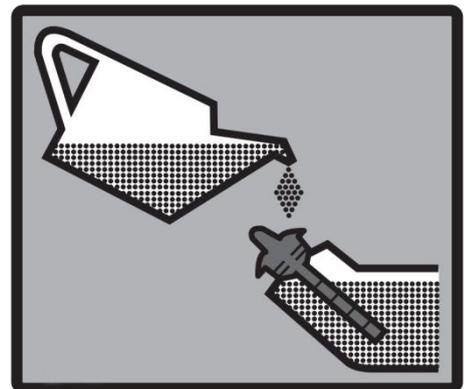
**DO NOT SMOKE WHILE FUELING.**

**DO NOT OVERFILL.**

**THE SNOW BLOWER IS SHIPPED WITHOUT FLUIDS. YOU MUST ADD OIL BEFORE STARTING THE ENGINE.**

3. Add engine oil to the upper level of the oil filler hole. SAE 10/30 motor oil is recommended for most environmental conditions. The oil capacity is 1 quart (0.95L).

Note: Do not thread the dipstick in when checking the oil level.



## Operation Precautions



### **DANGER:**

#### **COMPLETELY READ AND UNDERSTAND THIS MANUAL BEFORE ATTEMPTING TO OPERATE THE SNOW BLOWER**

1. Keep all safety guards in place and in proper working order at all times.
2. NEVER place fingers, hands, or body near the snow blower when it is running. Do not lean or reach over the snow blower when the machine is running.



### **DANGER:**

#### **STOP THE ENGINE TO UNCLOG THE DISCHARGE CHUTE. NEVER USE YOUR HAND TO CLEAN OUT THE DISCHARGE CHUTE OR AUGERS.**

3. Always stop the engine to dislodge snow from the discharge chute or from the augers. Wait ten seconds for the augers to stop rotating. Never use your hands to clear out the augers or discharge chute. Always use the clear-out tool provided or a similar tool.
4. Keep all people (except the operator) a minimum of 25 feet from the snow blower during operation.
5. Always aim the discharge chute away from people and animals.
6. Do not leave the snow blower unattended when it is running. Turn off the engine before leaving the area.
7. Do not use this piece of equipment while tired or under the influence of drugs, alcohol or medication.
8. Parts, especially exhaust system components, get very hot during use. Stay clear of hot parts.
9. Use extra caution when operating on gravel or other loose material.



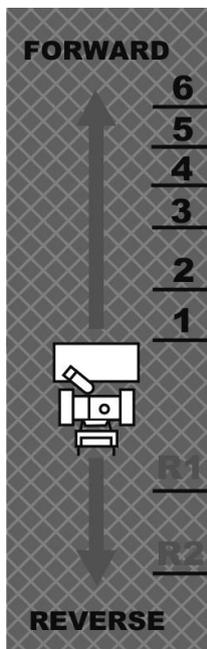
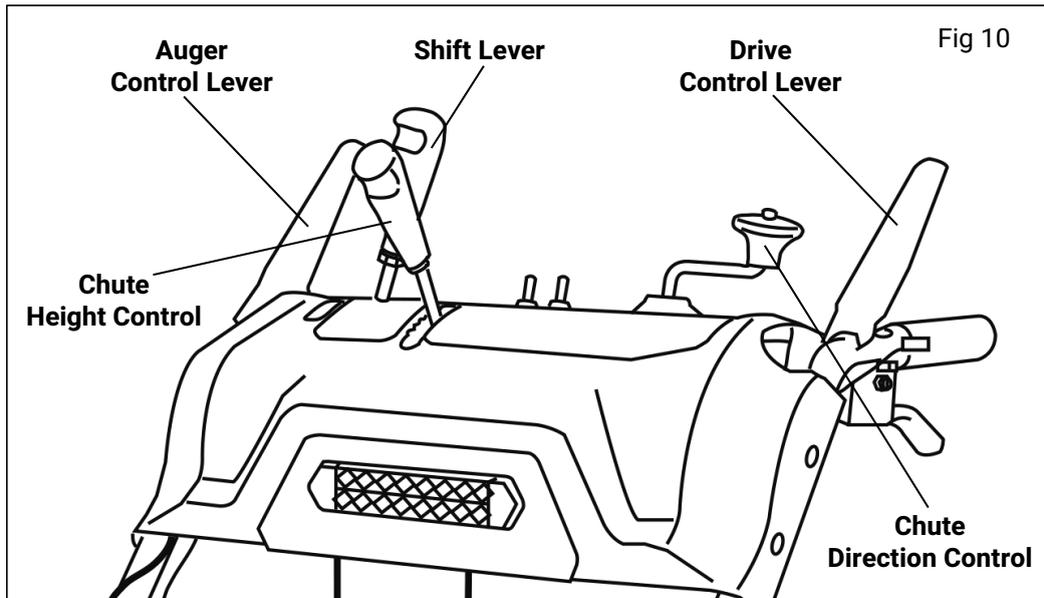
### **CAUTION:**

#### **DISENGAGE ALL CONTROL LEVERS AND STOP THE ENGINE BEFORE YOU LEAVE THE OPERATING POSITION.**

Wait until the auger/impeller comes to a complete stop before unclogging the chute assembly, making any adjustments, or inspections.

1. Exercise caution to avoid slipping or falling, especially when operating in reverse.
2. Thoroughly inspect the area where the equipment is to be used. Remove all foreign objects, which could be tripped over or thrown by the auger/impeller.
3. Always wear safety glasses or eye shields during operation and while performing an adjustment or repair to protect your eyes. Thrown objects which ricochet can cause serious injury to the eyes.
4. Operate the equipment with appropriate footwear, gloves and clothing. Avoid loose fitting clothing that can get caught in moving parts.
5. After striking a foreign object, stop the engine, remove the wire from the spark plug, thoroughly inspect the snow blower for any damage, and repair the damage before restarting and operating the snow blower.
6. The auger and drive controls must be depressed to operate. Do not override this safety feature. Both control levers must operate easily and automatically return to the disengaged position when released.
7. Do not overload the snow blower by attempting to clear snow too quickly.
8. Do not operate at high speed on icy or slippery surfaces.
9. Always be sure of your footing especially when driving in reverse.
10. If the snow blower should vibrate abnormally, stop the engine immediately, disconnect the spark plug and inspect for damage.

## Operation Control



There are six forward speeds and two reverse speeds. Release the drive control lever when changing speeds or direction.

### Shift Lever

The shift lever controls the direction of travel and ground speed. There are six forward speeds. Position one (1) is the slowest and position six (6) is the fastest. There are two reverse (R) speeds.

### Drive Control Lever

The drive control is located on the left handle. The drive control engages the transmission and propels the snow blower forwards or backwards. Select forward or reverse and the speed before depressing the drive control. Squeeze the control grip against the handle to engage the wheel drive. Release to stop.

### Auger Control Lever

The auger control is located on the right handle. The auger control engages the rotating auger and pushes snow upwards through the discharge chute. Squeeze the control grip against the handle to engage the augers and start snow throwing. Release to stop.

### Chute Direction Control

Rotate the discharge chute control to the direction that snow will be thrown.

### Chute Height Control

The chute height control can be moved backwards to throw snow farther away from the machine or forwards to throw snow closer.

## OPERATION



### CAUTION:

#### FILL WITH OIL BEFORE STARTING

Make sure the auger control and drive control are in the disengaged (released) position.

#### Recoil Starter

1. To start a cold engine, move the choke to the CHOKE position (to the left). To restart a warm engine, leave the Choke in the RUN position (to the right). (See Figure 11).
2. Push the ignition key all the way in. Push the primer two or three times for cold engine start, making sure to cover vent hole in the center of the primer when pushing. DO NOT use primer to restart a warm engine after a short shutdown. Additional priming maybe necessary if the temperature is below 15° Fahrenheit.
3. Open the fuel valve by moving to the ON position.
4. Slide the throttle 1/3 of the way to the right.
5. Grip the recoil starter handle and pull slowly several times to allow the gasoline to flow into the engine's carburetor. Then pull the recoil starter handle gently until resistance is felt. Allow cable to retract fully and then pull it quickly. Repeat until the engine starts.
6. Allow the engine to run for several seconds. The engine will not develop full power until it reaches the operating temperature. Then move the choke lever slowly to its RUN position (to the right).  
Moving the choke lever too fast could stall the engine.
7. Adjust the throttle as needed (see Figure 12).

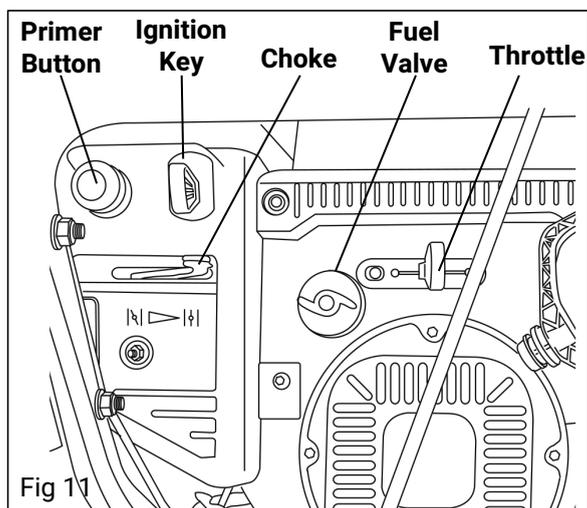


Fig 11

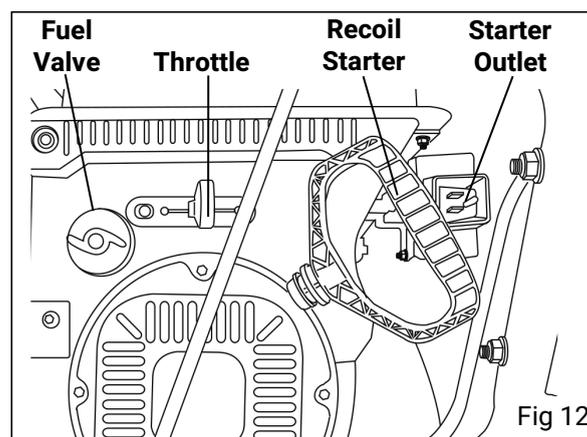


Fig 12

#### Electric Starter

1. Connect extension cord to the starter outlet on the engine and into a 120V AC outlet (see Figure 13).
2. Push the ignition key all the way in.
3. Slide the choke lever to the CHOKE position (left).
4. Slide the throttle 1/3 of the way to the right.
5. Push the electric starter button and hold for no more than 10 seconds at a time, until the engine runs.
6. Move the choke lever to the RUN position (right).
7. Adjust the throttle as needed.

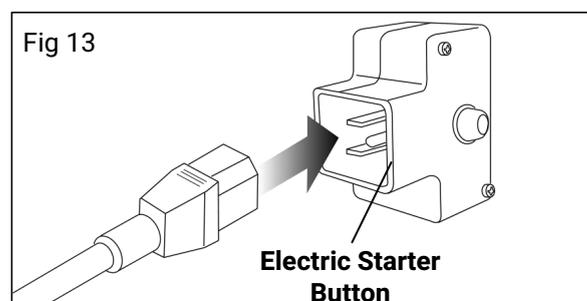


Fig 13

Electric Starter Button

## Engaging the Drive and Auger Controls

1. With the throttle control in the fast position, move shift lever into one of the six forward (F) or two reverse (R) positions. Select a speed appropriate for the snow conditions and a pace you're comfortable with. When selecting a drive speed, use slower speeds until you are familiar with the operation of the snow blower.
2. Squeeze the auger control against the handle and the auger will turn. Release it and the augers will stop.
3. Squeeze the drive control against the handle and snow blower will move. Release it and drive motion will stop.



### CAUTION:

**Do not reposition the shift lever (change speeds or direction of travel) without first releasing the drive control and bringing the snow blower to a complete stop.**

Shifting between speeds or directions while the drive control is engaged will result in premature wear to the snow blower's drive system.

4. Release both the auger control and the drive control to redirect the discharge chute.
5. To move from forward to reverse, release the drive control and the auger control and allow the rotating augers to stop before moving the shift lever to a new position.
6. **ALWAYS** release the auger and drive control and turn the engine off before dislodging snow accumulation from the augers or unclogging the discharge chute. **ALWAYS** use the clean-out tool provided. **NEVER** use your hands at any time to dislodge snow from the augers or unclog the discharge chute.

## Differential Traction Control

For easy turning when using the snow blower, use the red differential lever (see Figure 14). Engaging the differential lever releases the right traction wheel, but allows the left wheel to continue driving. Releasing the differential lever automatically engages both drive wheels for full traction.

**NOTE:** The differential lever will be more difficult to activate under a heavy load. Activate the lever before beginning a turn.

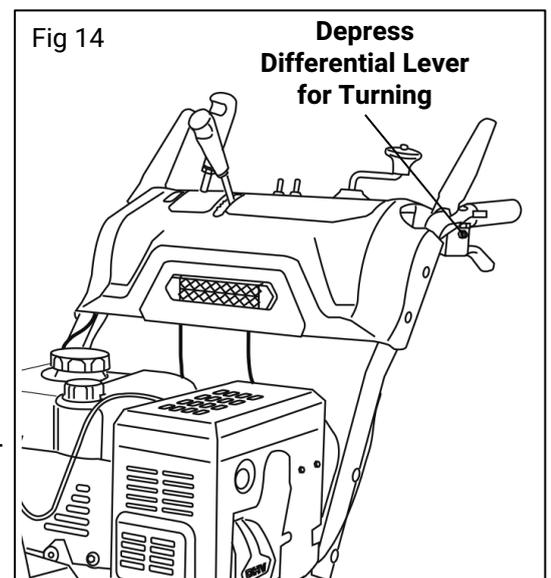


Fig 14

**Depress  
Differential Lever  
for Turning**

## MAINTENANCE



### WARNING:

**BEFORE PERFORMING ANY MAINTENANCE PROCEDURE STOP THE ENGINE, WAIT FIVE (5) MINUTES TO ALLOW ALL PARTS TO COOL.**

**Disconnect the spark plug wire, keeping it away from the spark plug.**

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual and the engine manufacturer's owner's manual for maintenance procedures.

Maintenance Checklist

### Maintenance Checklist

Maintenance Procedure	Before Each Use	Monthly/ 20 Hours	Every 6 Mo./ 100 Hours	Annually/ 300 Hours
Check Engine Fuel Level	X	X	X	X
Check Engine Oil Level	X			
Change Engine Oil		X1	X	
Check General Equipment Condition	X			
Lubricate Gear Shaft & Auger Shaft		X	X	X
Lubricate Wheels & Discharge Chute				X
Check Fuel Strainer	X		X	X
Check/Clean Spark Plug			X	X
Replace Spark Plug				X
Check/Adjust Idle Speed			X	X
Check/Adjust Valve Clearance*			X	X
Clean Fuel Tank, Strainer & Carburetor*			X	X
Clean Combustion Chamber*				X
Replace Fuel Lines*				X

X1 After the first 20 hours of operation, every 6 months of use thereafter

\* Service performed by qualified technician



## WARNING:

**TO PREVENT SERIOUS INJURY FROM ACCIDENTAL STARTING TURN THE POWER SWITCH OF THE ENGINE TO ITS "OFF" POSITION.**

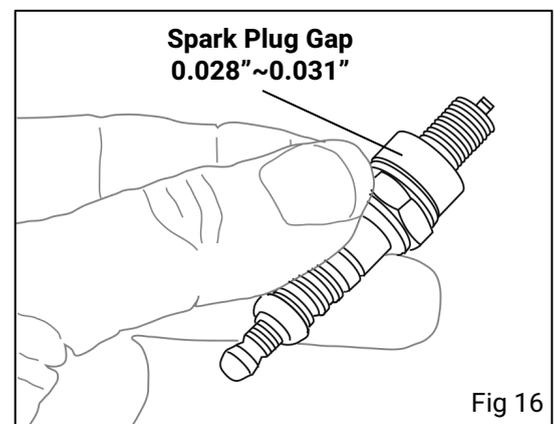
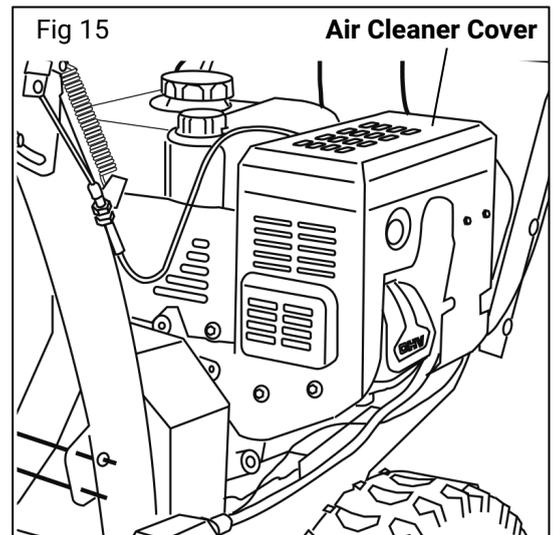
Wait for the engine to cool, and remove the spark plug wire before performing any inspection, maintenance, or cleaning procedures.

### Changing /Cleaning the Air Filter

1. Wipe off the air cleaner cover. Loosen the knob at the bottom of the air cleaner housing (see Figure 15).
2. Remove the air cleaner filter.
3. Wash the air filter in warm water and mild detergent several times. Rinse. Squeeze out excess water and allow it to dry completely. Soak the filter in lightweight oil briefly, then squeeze out the excess oil.
4. Install a new air filter or reinstall the cleaned air filter. Secure the air cleaner cover before use.

### Spark Plug Maintenance:

1. Disconnect spark plug wire from end of plug. Clean out debris from around the spark plug.
2. Using the spark plug wrench provided, remove the spark plug. Inspect the spark plug. If the electrode is oily, clean it using a clean, dry rag. If the electrode has deposits on it, polish it using emery paper. If the white insulator is cracked or chipped, replace the spark plug.
3. When installing a new spark plug, adjust the plug's gap to the specification on the technical specification chart. Do not pry against the electrode or the insulator, the spark plug can be damaged (see Figure 16).
4. Install the new spark plug or the cleaned spark plug into the engine. Gasket style spark plugs should be finger-tightened until the gasket contacts the cylinder head, then turned about 1/2 to 2/3 more rotation. Non-gasket-style spark plugs should be finger-tightened until the plug contacts the head, then about 1/16 turn more.





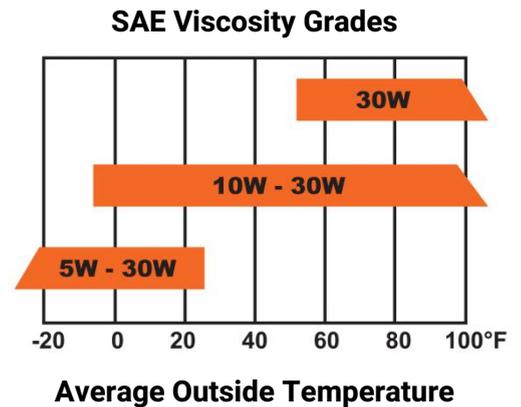
**WARNING:**

**OIL IS VERY HOT DURING OPERATION AND CAN CAUSE BURNS. WAIT FOR ENGINE TO COOL BEFORE CHANGING OIL.**

Wait for the engine to cool, and remove the spark plug wire before performing any inspection, maintenance, or cleaning procedures.

**Changing the engine oil**

1. Make sure the engine is stopped and is level.
2. Close the fuel valve.
3. Place a drain pan underneath the crankcase's drain plug.
4. Remove the drain plug and, if possible, tilt the crankcase slightly to help drain the oil out.
5. Replace the drain plug and tighten it.
6. Clean the top of the dipstick and the area around it.  
Remove the dipstick by threading it counterclockwise, and wipe it off with a clean lint free rag.



**Note:** Do not thread the dipstick in when checking the oil level.

7. Add the appropriate type of oil until the oil level is at the full level. SAE 10W-30 oil is recommended for general use for temperatures above 32°F. Use SAE 5W-30 for temperatures consistently below 32°F.
8. Thread the dipstick back in clockwise.



**WARNING:**

**DO NOT RUN THE ENGINE WITH TOO LITTLE OIL. THE ENGINE WILL BE PERMANENTLY DAMAGED.**

## LUBRICATION

### Gear Shaft

The gear (hex) shaft should be lubricated at least once a season or after every 20 hours of operation.

1. Remove the lower frame cover by removing the two screws which secure it (see Figure 17).
2. Apply a light coating of an all-weather multi-purpose grease to the hex shaft (see Figure 18).

### Wheels

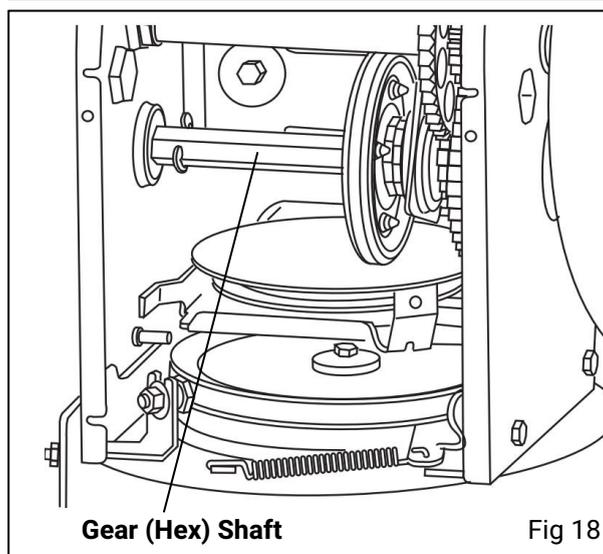
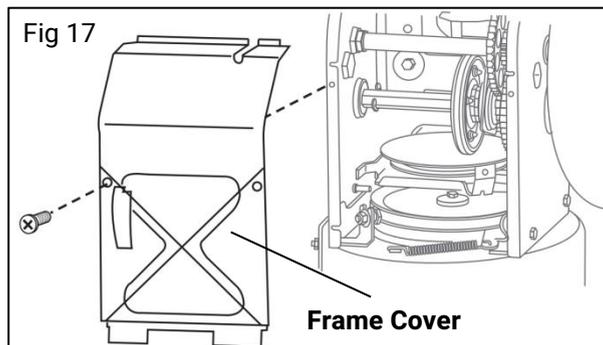
At least once a season, remove both wheels. Clean and coat the axles with a multipurpose automotive grease then reinstall.

### Auger Shaft

At least once a season, remove the shear pins on the auger shaft (see Figure 19). Spray lubricant inside shaft, around the spacers. Also lubricate the flange bearings found at either end of the shaft.

### Gear Case

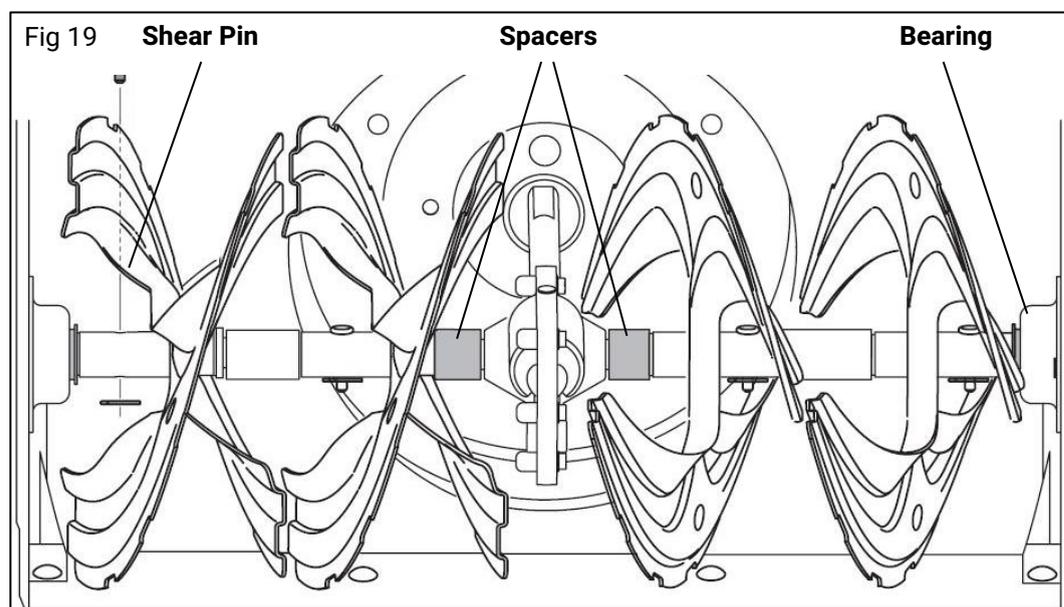
The auger gear case has been filled with grease and sealed at the factory. If disassembled from any reason, lubricate with two ounces of new grease.



**NOTE:** Do not over fill the gear case. Damage to the seals could result. Be sure the vent plug is free of grease in order to relieve pressure.

### Chute Directional Control

Once annually, lubricate both ends of the chute directional control crank with petroleum jelly, paraffin wax, or light machine oil.



### Shear Pin Replacement

The auger is attached to the spiral shaft with shear pins secured with cotter pins. If the auger should strike a foreign object or ice jam, the snow blower is designed to shear off those pins (see Figure 20). If the auger will not rotate, check if the pins have been sheared. When replacing shear pins, spray an oil lubricant into the shaft before inserting new pins.

### Shave Plate and Skid Shoes

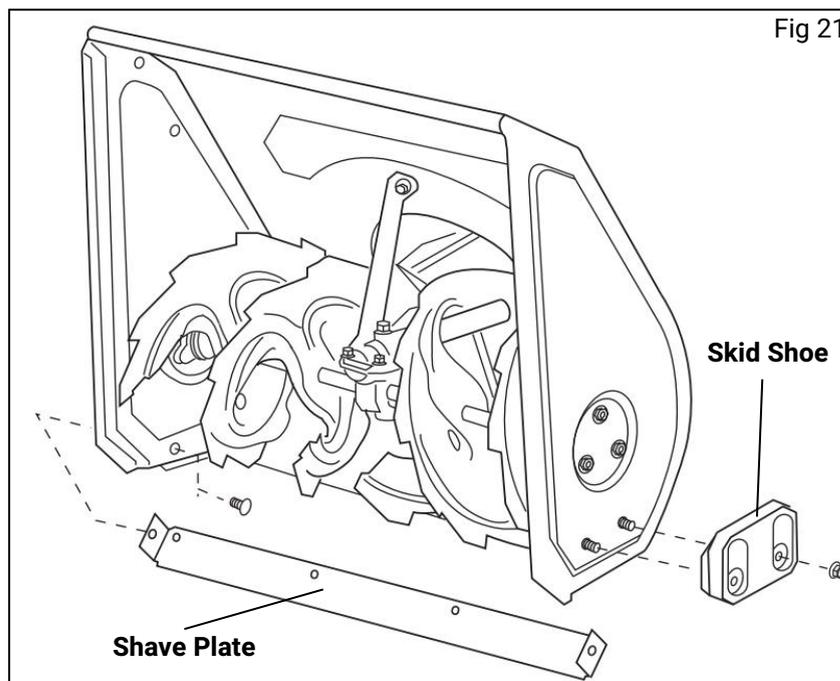
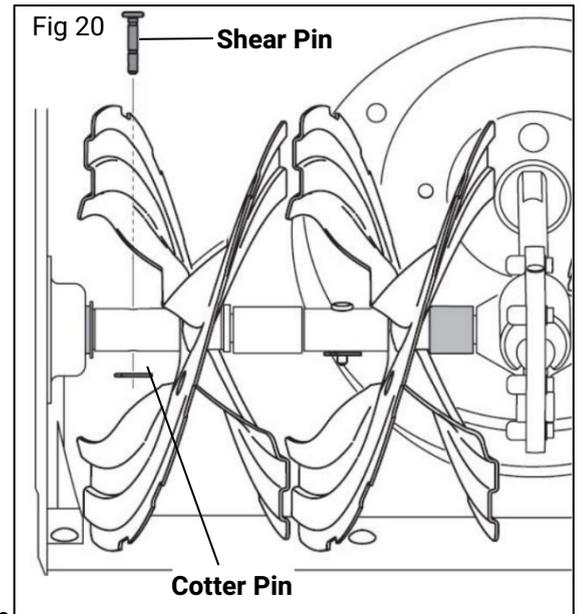
The shave plate and skid shoes on the bottom of the snow blower are subject to wear. They should be checked periodically and replaced when necessary.

#### To remove skid shoes:

1. Remove the four carriage bolts and hex flange nuts which secure them to the snow blower (see Figure 21).
2. Reassemble new skid shoes with the four carriage bolts (two on each side) and hex flange nuts.

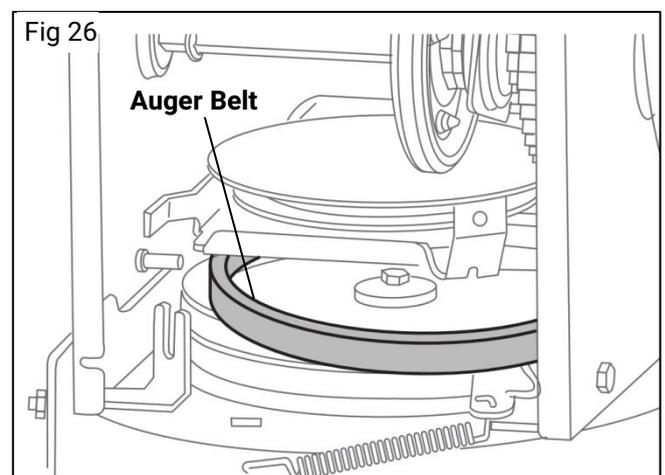
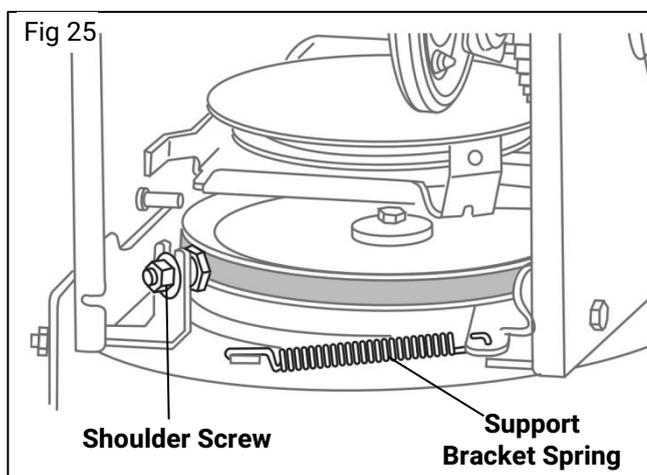
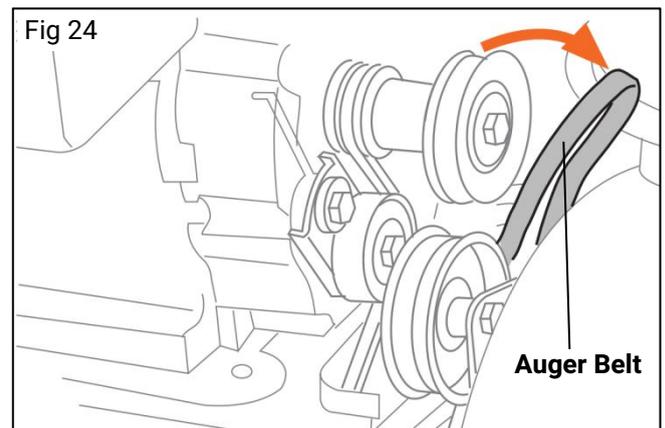
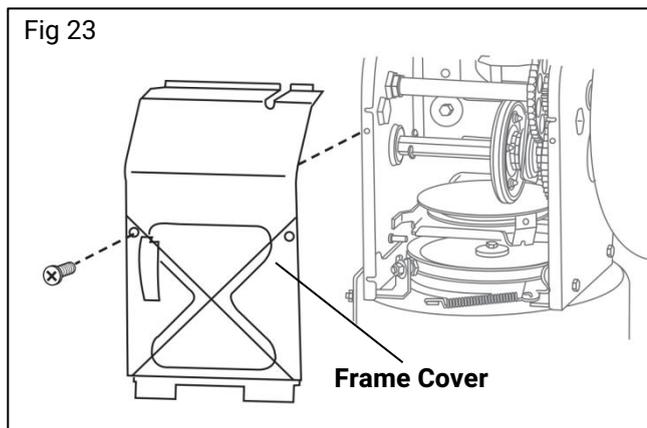
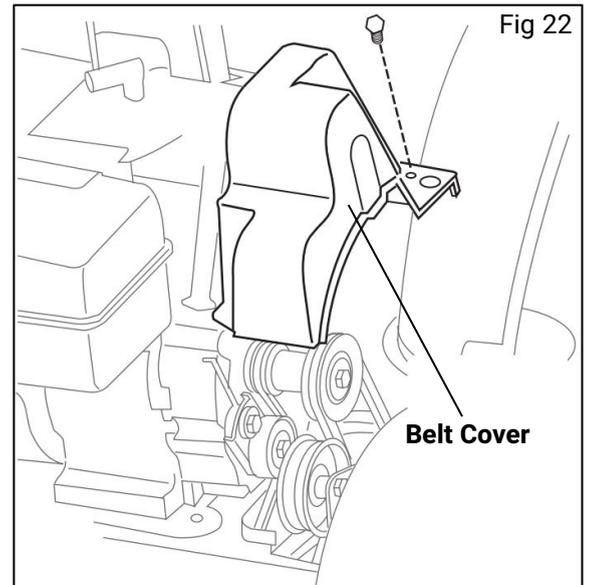
#### To remove shave plate:

1. Remove the carriage bolts and hex nuts which attach it to the snow blower housing (see Figure 21).
2. Reassemble new shave plate, making sure heads of carriage bolts are to the inside of housing. Tighten securely.



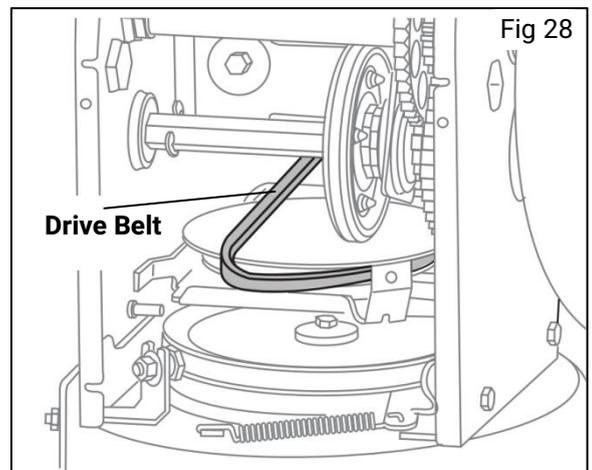
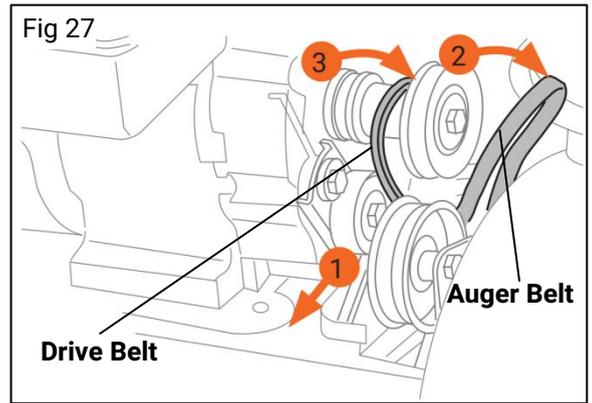
## Auger Belt Replacement

1. Remove the belt cover on the front of the engine by removing the two self-tapping screws (see Figure 22). Drain the gasoline from the snow blower, or place a container to catch leakage from the gas cap.
2. Carefully pivot the snow blower up and forward so that it rests on the auger housing. Remove the frame cover from the underside of the snow blower by removing four self-tapping screws which secure it (see Figure 23).
3. Roll the auger belt off the engine pulley (see Figure 24).
4. Loosen and remove the shoulder screw which restrains the belt from jumping off of the pulley. Unhook the support bracket spring from the frame (see Figure 25).
5. Remove the belt from the auger pulley, slip the belt between the support bracket and the auger pulley (see Figure 26).
6. Attach a new auger belt and reassemble by following the instructions in reverse order.



## Drive Belt Replacement

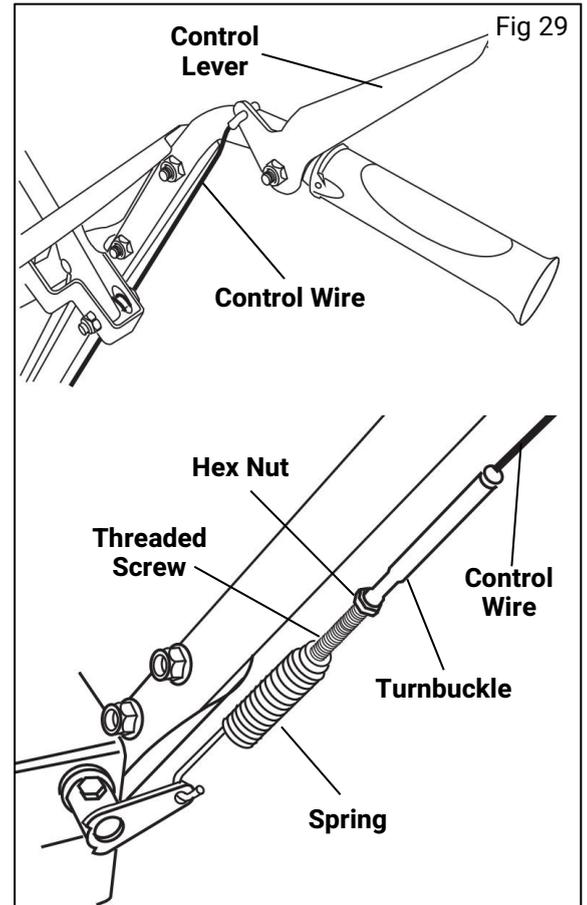
1. Remove the belt cover on the front of the engine by removing the two self-tapping screws (see Figure 27). Drain the gasoline from the snow blower, or place a container to catch leakage from the gas cap.
2. Carefully pivot the snow blower up and forward so that it rests on the auger housing. Remove the frame cover from the underside of the snow blower by removing four self-tapping screws which secure it (see Figure 23).
3. Roll the auger belt off the engine pulley (see Figure 27).
4. Loosen and remove the shoulder screw which restrains the belt from jumping off of the pulley. Unhook the support bracket spring from the frame (see Figure 25).
5. Remove the belt from the auger pulley, slip the belt between the support bracket and the auger pulley (see Figure 26).
6. See Figure 27 and follow the steps below:
  - ① Grasp the idler pulley and pivot it toward the right.
  - ② Roll the auger belt off the engine pulley.
  - ③ Lift the drive belt off engine pulley.
7. Remove the belt from the drive pulley, slip the belt between the support bracket and the drive pulley (see Figure 28).
8. Attach a new drive belt, replace the auger belt and reassemble by following the instructions in reverse order.



### Control Wire Adjustment

When the auger or drive belts are adjusted or replaced, or after a long time of use, the control wires may need to be adjusted. The control wires for the drive control and the auger control are attached to the auger lever and the drive lever on the handlebar. There is a long threaded screw attached through the connecting spring near the base of the snow blower. The screw threads into the control wire turnbuckle which is secured by a hex nut. Make adjustments to the wire's tension with the lever in the upwards (disengaged) position (see Figure 29).

1. To adjust the tension loosen the hex nut, unthread the hex nut to move it down the screw length one half inch or more.
2. Next rotate the turnbuckle which threads the screw into the turnbuckle until the desired tension is achieved. You can also rotate the screw with a small diameter phillips head screwdriver placed up through the bottom of the spring.
3. Then re-thread the hex nut until it is tight against the housing and tighten with pliers or wrench.



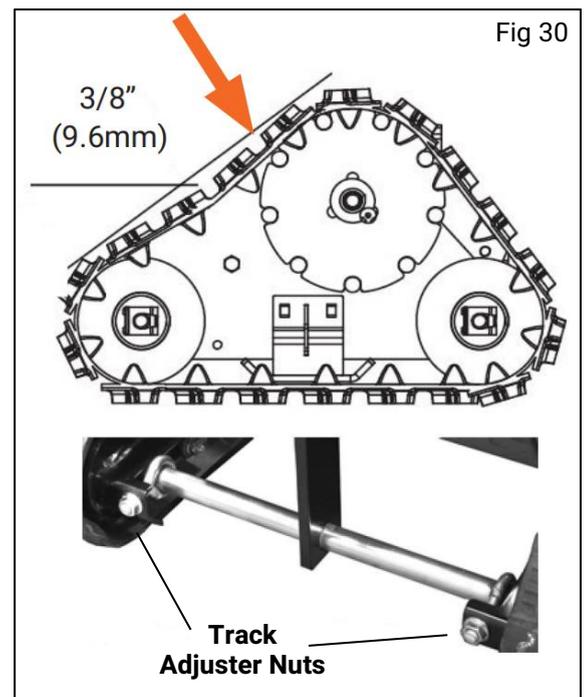
The control wire should be taught to operate correctly on both the auger and the drive controls.

### Track Tension Adjustment

Check the track tension by applying pressure on the track midway between the upper and rear track rollers. Deflection should be approximately 3/8" (9.6 mm). If deflection is excessive, tighten the track tension. If unit pulls to the left or right when a straight path is desired adjust the track tension. If the unit is pulling to the left, tighten the left track adjuster. If the unit is pulling to the right, tighten the right track adjuster.

To adjust (see Figure 30):

1. Tighten the adjuster nut to tighten the track tension.  
Loosen the adjuster nut to reduce track tension.
2. Check that unit tracks straight with no pulling to either side.



## ENGINE TROUBLESHOOTING



**WARNING:**

**BEFORE PERFORMING ANY MAINTENANCE PROCEDURE STOP THE ENGINE, WAIT FIVE (5) MINUTES TO ALLOW ALL PARTS TO COOL.**

Disconnect the spark plug wire, keeping it away from the spark plug.

Problem	Solution
<p><b>The engine will not start.</b></p> <ul style="list-style-type: none"> <li>• No fuel in tank or fuel valve closed.</li> <li>• Choke not in start position.</li> <li>• Low quality or deteriorated, old gasoline.</li> <li>• Dirty fuel passageways blocking fuel flow.</li> <li>• Carburetor needle stuck. Smell of fuel in air.</li> <li>• Too much fuel in chamber.</li> <li>• Spark plug wire not connected securely.</li> <li>• Spark plug electrode wet or dirty.</li> <li>• Incorrect spark plug gap.</li> <li>• Spark plug wire or spark plug broken.</li> <li>• Cylinder not lubricated after long storage.</li> <li>• Clogged fuel filter.</li> </ul>	<ul style="list-style-type: none"> <li>• Add fuel and open fuel valve.</li> <li>• Place choke in START position and pull recoil starter.</li> <li>• Drain fuel. Add fresh 87+ octane unleaded gasoline.</li> <li>• Clean out fuel passageways using fuel additive.</li> <li>• Gently tap side of carburetor with screwdriver handle.</li> <li>• Turn choke to RUN position.</li> <li>• Connect spark plug wire securely to spark plug.</li> <li>• Remove and clean spark plug. Reinstall spark plug and restart.</li> <li>• Reset spark plug gap according to specifications.</li> <li>• Replace spark plug and/or spark plug wire.</li> <li>• Remove spark plug. Pour tablespoon of oil into spark plug hole. Replace spark plug. Crank engine a few times and try to start.</li> <li>• Replace fuel filter.</li> <li>• If the engine still will not start, visit our web site at <a href="http://www.tmgindustrial.com">www.tmgindustrial.com</a> or call 1-877-761-2819 for assistance.</li> </ul>
<p><b>Engine misfires, backfires or knocks.</b></p> <ul style="list-style-type: none"> <li>• Spark plug wire loose.</li> <li>• Incorrect spark plug gap.</li> <li>• Spark plug wire or spark plug broken.</li> <li>• Low quality or deteriorated, old gasoline.</li> <li>• Engine too cold.</li> <li>• Engine knocks.</li> </ul>	<ul style="list-style-type: none"> <li>• Tighten spark plug wire.</li> <li>• Reset spark plug gap according to specifications (see page 14).</li> <li>• Replace spark plug and/or spark plug wire.</li> <li>• Drain fuel. Add new fresh 87+ octane unleaded gasoline.</li> <li>• Use cold weather fuel and oil additives.</li> <li>• Engine overloaded, do not exceed recommended load rating.</li> </ul>
<p><b>Engine stops suddenly.</b></p> <ul style="list-style-type: none"> <li>• Low quality or deteriorated, old gasoline.</li> <li>• Defective fuel cap creates vacuum.</li> <li>• Improper idle speed.</li> <li>• Incorrect timing, deposit buildup, worn engine or other mechanical problem.</li> </ul>	<ul style="list-style-type: none"> <li>• Drain fuel. Add fresh 87+ octane unleaded gasoline.</li> <li>• Test and replace fuel cap.</li> <li>• Move choke to RUN position.</li> <li>• Requires qualified technician.</li> </ul>

## SNOW BLOWER TROUBLESHOOTING

Problem	Solution
<p><b>No snow through blower's discharge chute.</b></p> <ul style="list-style-type: none"> <li>• Discharge chute and/or auger is clogged</li> <li>• Auger is not rotating</li> </ul>	<ul style="list-style-type: none"> <li>• Disengage the auger and drive controls, stop the engine, wait ten seconds for the auger to stop rotating, then using the clean-out tool provided, remove the snow clogging the chute.</li> <li>• Shear pin(s) are missing or broken and need to be replaced.</li> </ul>
<p><b>Snow not completely removed from surface</b></p> <ul style="list-style-type: none"> <li>• Skid shoe needs adjustment</li> </ul>	<ul style="list-style-type: none"> <li>• Disengage the auger and drive controls, stop the engine, wait ten seconds for the auger to stop rotating. Loosen the two hex nuts on the skid shoe on either side of the snow blower. Raise the skid shoes so the entire bottom surface of the skid shoe rests on the ground evenly. Retighten the hex nuts on both sides. This adjustment allows the auger to come into closer contact with the ground surface.</li> </ul>
<p><b>Snow not evenly removed from surface</b></p> <ul style="list-style-type: none"> <li>• Tires not inflated evenly</li> <li>• Skid shoes not correctly adjusted</li> </ul>	<ul style="list-style-type: none"> <li>• Check tire pressure, inflate both tires to the same pressure recommended (15-20 psi) so auger is level on the ground.</li> <li>• Make sure that skid shoes are at same height.</li> </ul>
<p><b>Cannot adjust the discharge chute</b></p> <ul style="list-style-type: none"> <li>• Moving parts are frozen</li> </ul>	<ul style="list-style-type: none"> <li>• In extreme cold environments some controls and moving parts may freeze. Do not use excessive force to operate frozen controls. Allow the engine to run for several minutes to warm up and thaw frozen parts.</li> </ul>
<p><b>Snow blower continually clogs</b></p> <ul style="list-style-type: none"> <li>• Machine does not propel itself forward</li> </ul>	<ul style="list-style-type: none"> <li>• Operate at a slower pace to allow the snow blower to dispel snow through the discharge chute. Forcing the snow blower to move faster than it can remove the snow will result in clogged auger and/or discharge chute. Do not overload the blower in extremely heavy or wet snow.</li> </ul>

<p><b>Auger does not engage.</b></p> <ul style="list-style-type: none"> <li>• Auger control wire is too loose.</li> <li>• Auger is not rotating.</li> <li>• Auger belt is off the pulley, broken or worn.</li> </ul>	<ul style="list-style-type: none"> <li>• If there is too much slack in the auger control wire, the augers will not be engaged properly. Turn off the engine. Adjust the tension of the auger control wire (see page 20).</li> <li>• Shear pin(s) are missing or broken and need to be replaced.</li> <li>• Turn off the engine and allow to cool down for several minutes. Put the auger belt back on the pulley or replace the belt as needed. (See page 18).</li> </ul>
<p><b>Snow blower does not propel itself.</b> <b>Drive control does not engage.</b></p> <ul style="list-style-type: none"> <li>• Drive control wire is too loose.</li> <li>• Drive belt is off the pulley, broken or worn.</li> <li>• Friction wheel is worn.</li> </ul>	<ul style="list-style-type: none"> <li>• If there is too much slack in the drive control wire, the drive will not be engaged properly. Turn off the engine. Adjust the the tension of the drive control wire (see page 20).</li> <li>• Turn off the engine and allow to cool down for several minutes. Put the drive belt back on the pulley or replace the belt as needed. (See page 19).</li> <li>• Refer to a qualified service technician for friction wheel replacement.</li> </ul>
<p><b>Snow blower vibrates excessively.</b></p> <ul style="list-style-type: none"> <li>• Damaged auger or loose parts.</li> </ul>	<ul style="list-style-type: none"> <li>• Turn off the engine and allow to cool down for several minutes. Disconnect the spark plug wire. Examine the auger, replace shear pins if missing or broken, tighten all connecting bolts. If excessive vibration continues have the snow blower serviced by a qualified technician.</li> </ul>

## STORAGE



### WARNING:

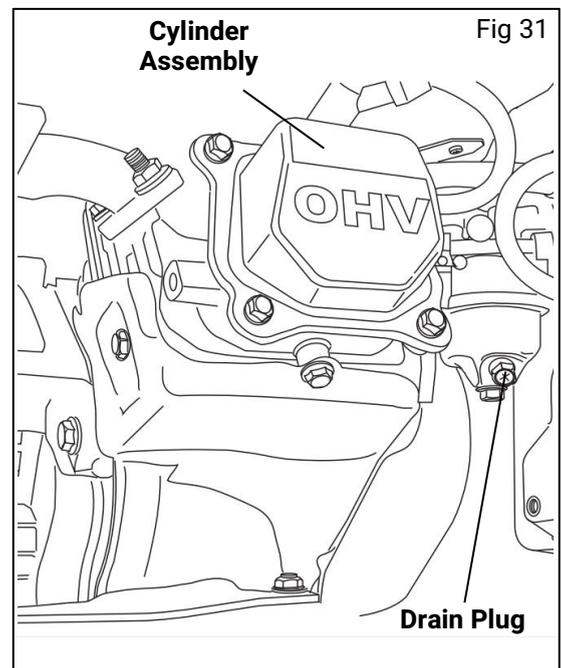
### DO NOT STORE SNOW BLOWER WITH FUEL IN TANK INDOORS

**Do not store in poorly ventilated areas, or near furnace, water heater, clothes dryer or gas appliance.**

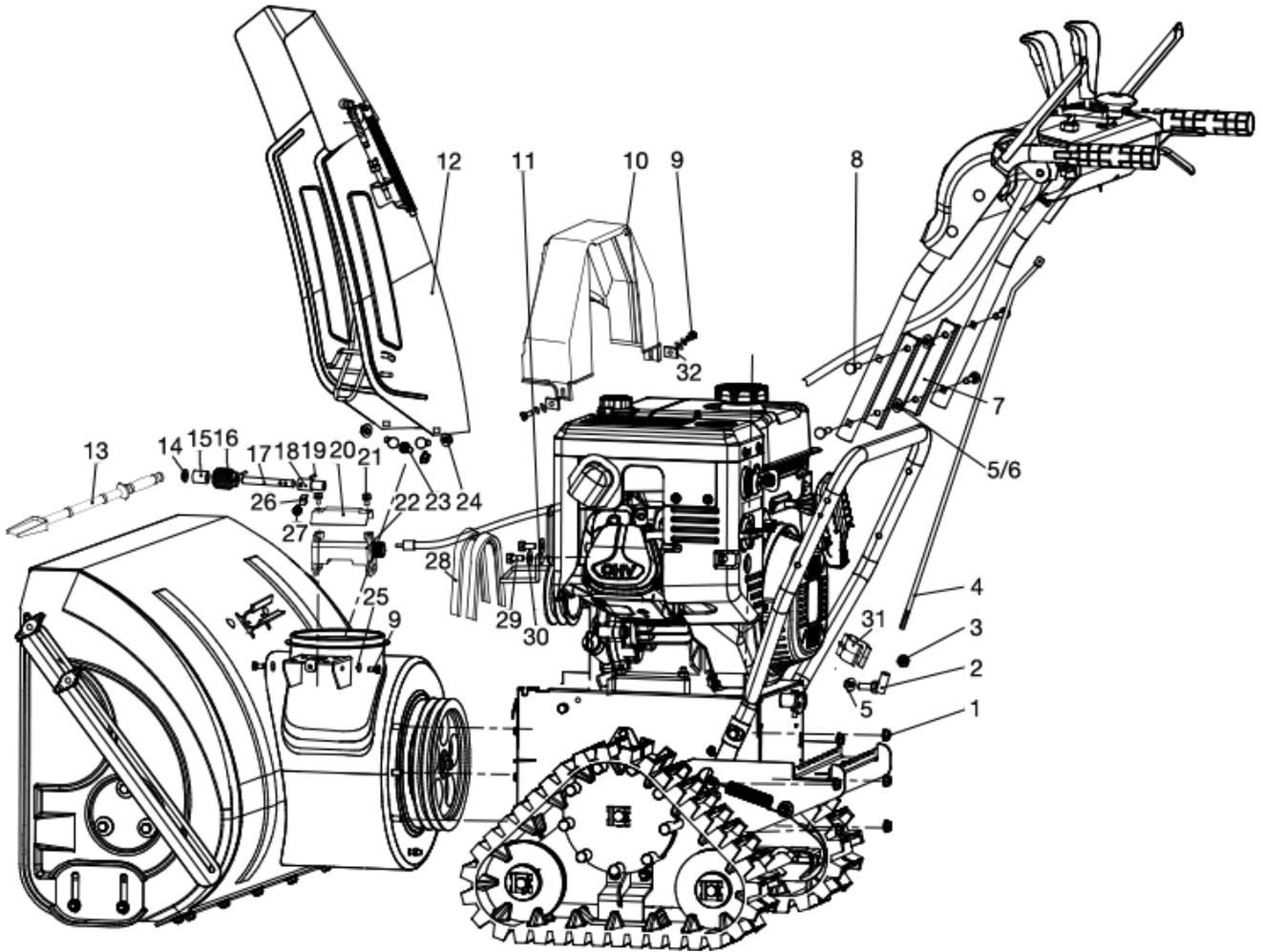
1. For short term storage wait for the engine to cool, then clean the engine with a clean cloth.
2. When the snow blower is to be stored for longer than 30 days, prepare the engine for storage by emptying the fuel tank and draining all fuel lines.

**Note:** As an alternative to draining the fuel system, a fuel stabilizer can be added to a full gas tank. Do not drain the carburetor if using a fuel stabilizer.

3. Run the engine until all the fuel has been consumed and the engine stops.
4. Drain the carburetor (see Figure 31).
5. Clean out area around spark plug and remove. Pour one tablespoon of engine oil into the cylinder through the spark plug hole. Reinstall the spark plug, but leave the spark plug wire disconnected. Pull recoil starter handle to distribute oil in the cylinder. Stop after one or two revolutions when you feel the piston start the compression stroke (when you start to feel resistance).
6. Apply a thin coat of rust preventive oil to all uncoated metal parts.
7. Cover and store in a dry, well-ventilated area out of reach of children.



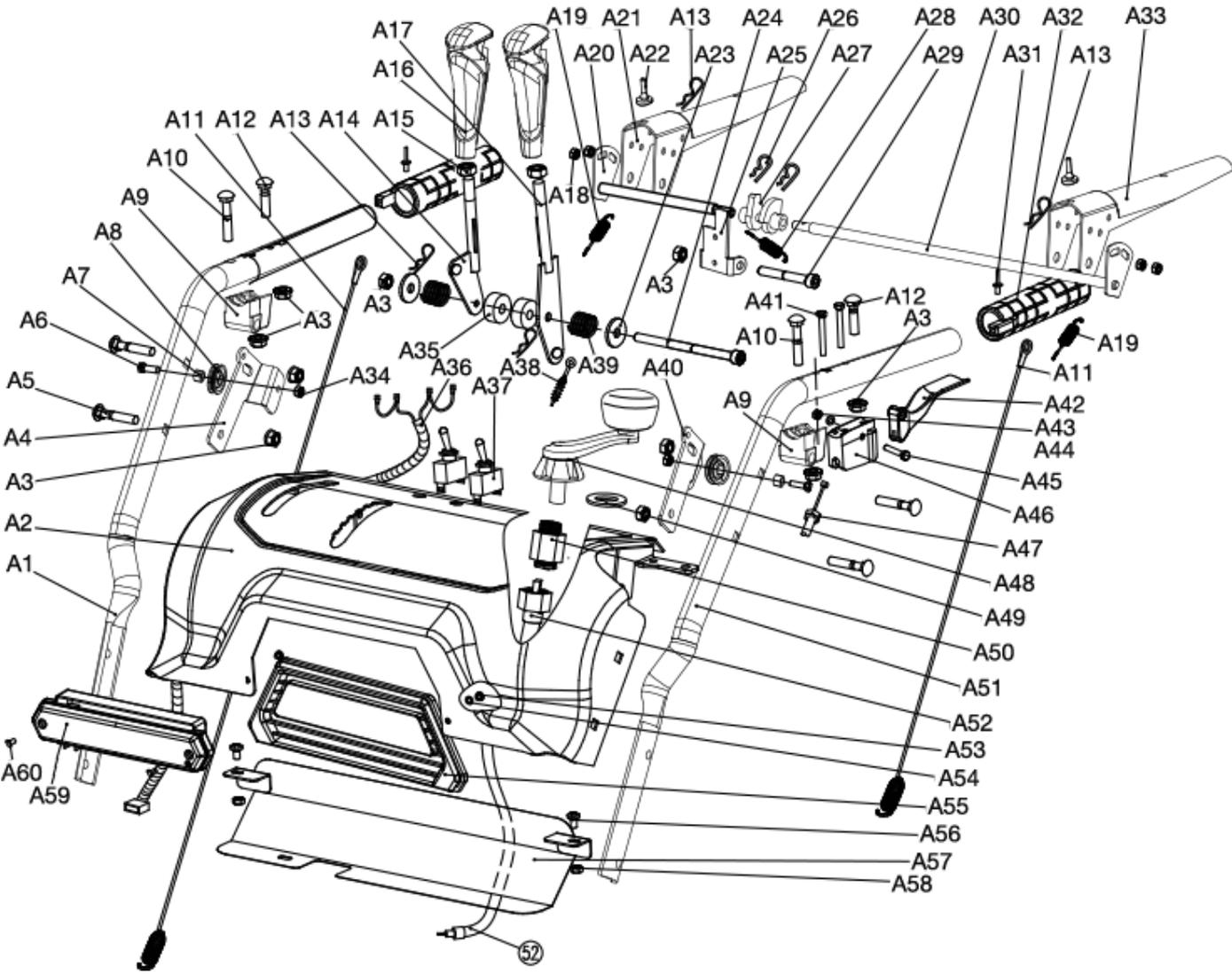
## DIAGRAM--ENSEMBLE



## PARTS LIST -- ENSEMBLE

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
1	Jam nut M8	6	17	Mandrel	8
2	Right gimbal	1	18	Lower connection tube	12
3	Nut M8x1	1	19	Elastic cylindrical pin 3*18	1
4	Gear connector bar	1	20	Rotating frame cover	1
5	Nut M8	5	21	Screw M6X16	2
6	Concave gasket Ø8*22*2	4	22	Rotating frame	4
7	Armrest aluminum pad	2	23	Bolt M8X16	1
8	Bolts M8X55	4	24	Hexagon lock nut M8	2
9	Hexagon head combination bolts M6X16	4	25	Washer Ø6	2
10	Belt cover	1	26	Friction pad	8
11	Belt rod	1	27	Friction spring	1
12	chute assembly	1	28	Belt	3
13	Snow shovel	1	29	Bolt M8x20	2
14	Helical bracket washers	1	30	Washer Ø8	3
15	Long washers	1	31	Cable holder	3
16	Hollow worm	1	32	Belt cover washer	1

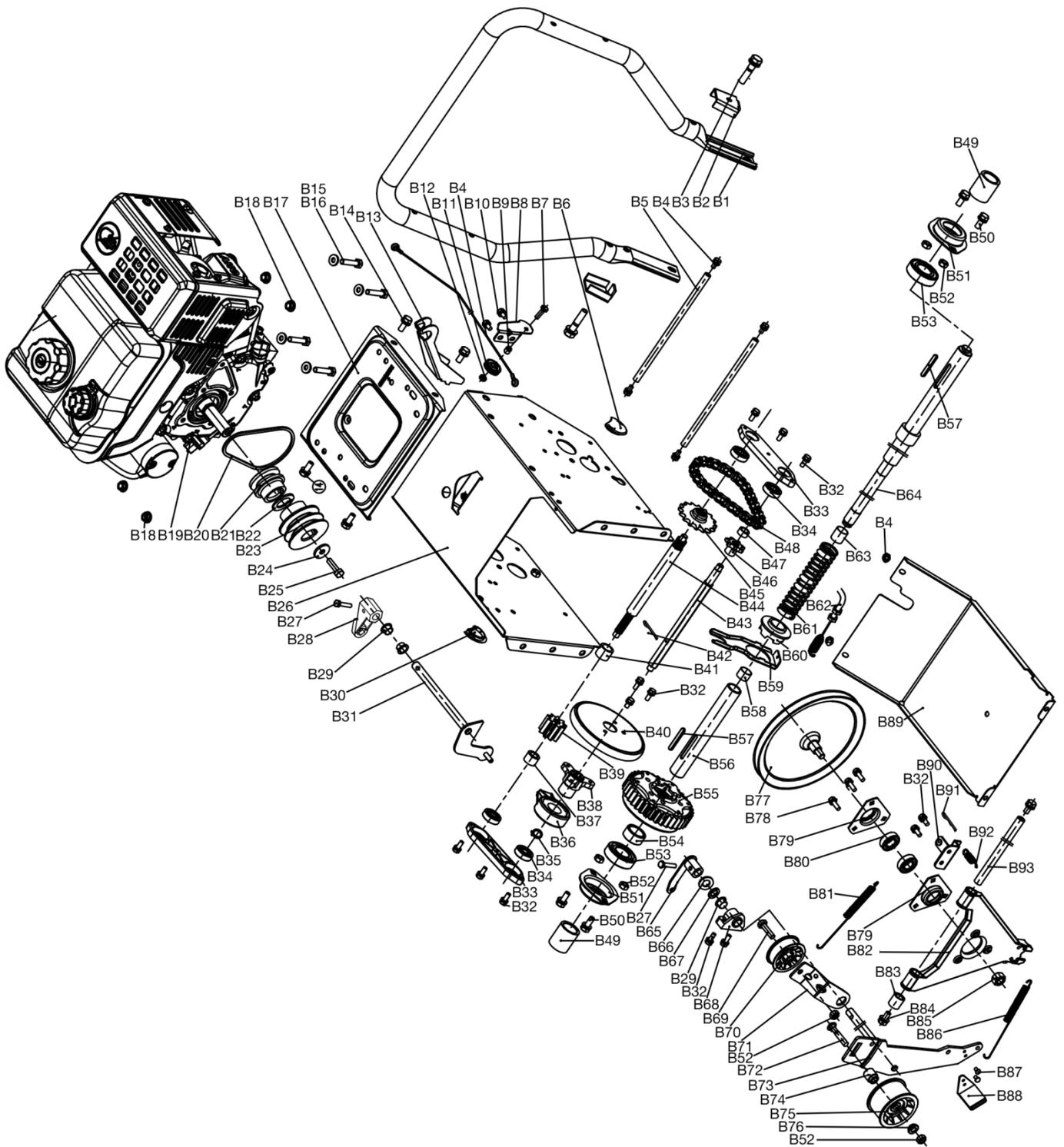
# DIAGRAM (A) --OPERATION ASSEMBLY



## PARTS LIST (A) -- OPERATION ASSEMBLY

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
A1	Upper handle (right)	1	A31	Rivet 4x10	4
A2	Panel	1	A32	Heated handle	2
A3	Nut M8	10	A33	Left control lever	1
A4	Right pulley set	1	A34	Jam nut M6	2
A5	Bolt M8x40	4	A35	Short bushing	2
A6	Bolt M6x20	2	A36	Input wire	1
A7	Small shaft sleeve	2	A37	Switch	2
A8	Pulley	2	A38	Deflector cable	1
A9	Handle seat	2	A39	Spring	1
A10	Bolt M8x45	2	A40	Left pulley seat	1
A11	long cable	2	A41	Screw M5x35	2
A12	Bolt M8x35	2	A42	Differential handle	1
A13	B pin Ø1.5X25	4	A43	Jam nut M6	1
A14	Gear handle lever	1	A44	Flat washer Ø6	1
A15	Nut M10	2	A45	Handle bolt	1
A16	Gear handle	2	A46	Differential handle seat	1
A17	Deflector handle lever	1	A47	Differential cable	1
A18	Jam nut M6	4	A48	Rotating handle	1
A19	Spring	2	A49	Rubber pad	10
A20	Short rod	1	A50	Lower fixing seat for rotating lever	1
A21	Right control lever	1	A51	Upper handle (left)	1
A22	Rubber pad	2	A52	Flexible shaft	2
A23	Washer Ø8	2	A53	Screw M6x10	2
A24	Screw M8x150	1	A54	Flat washer Ø6	2
A25	Stopper	1	A55	Decoration plate for light	1
A26	Pin	2	A56	Bolt M6x16	2
A27	Cam	1	A57	Cover	1
A28	Stopper spring	1	A58	Jam nut M6	2
A29	Screw M8x60	1	A59	LED light	1
A30	Long rod	1	A60	Screw ST3.5x16-F	2

# DIAGRAM (B) --POWER ASSEMBLY



## PARTS LIST (B) -- POWER ASSEMBLY

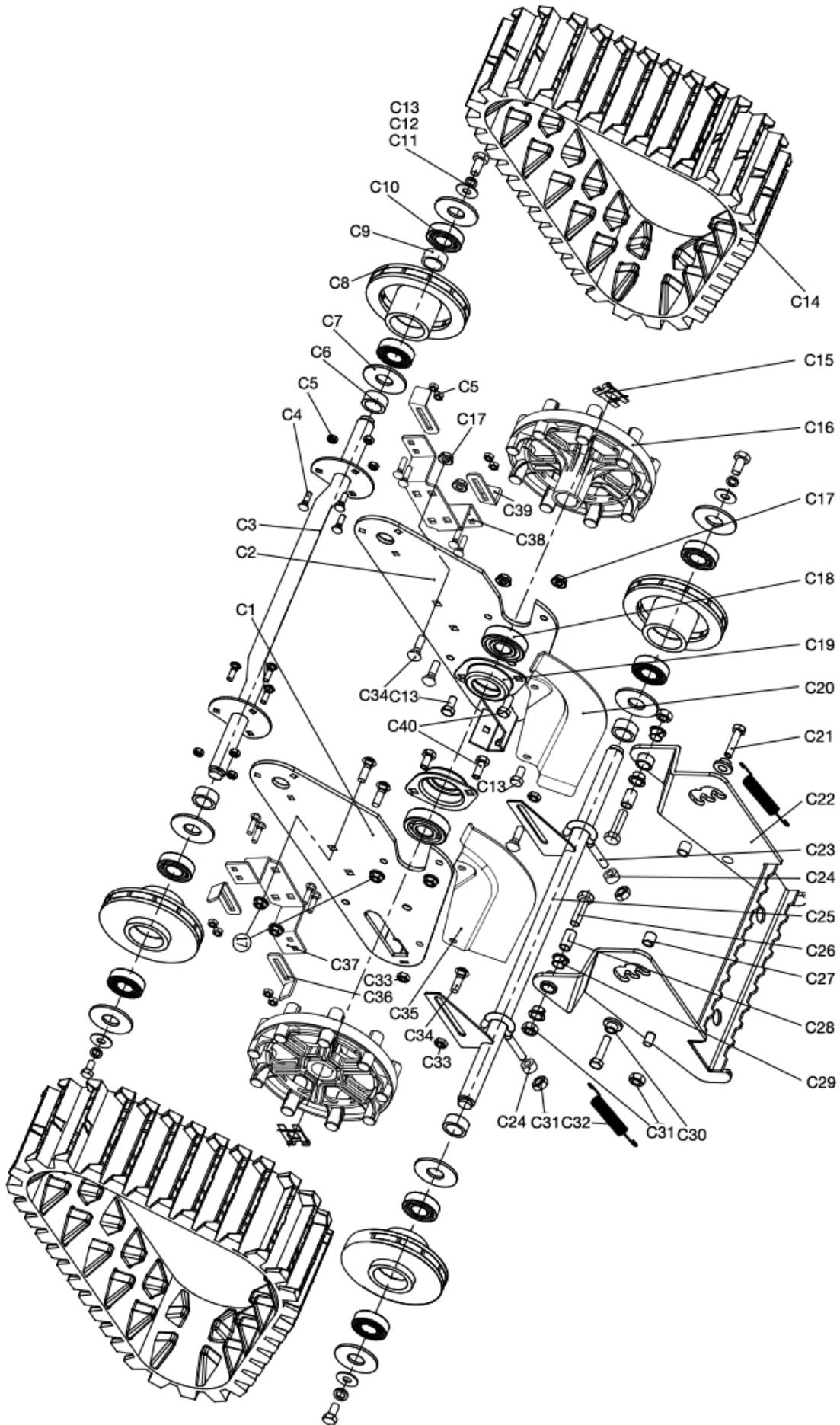
PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
B1	Handlebar	1	B40	Rubber wheel	1
B2	Handle connecting plate	2	B41	Sleeve 18x23x18	1
B3	Bolt M10x45	2	B42	B pinchcock	1
B4	Bolt M6x16	8	B43	Hexagon shaft	1
B5	Strut	2	B44	Transit shaft	1
B6	Cover 2	1	B45	Chain wheel	1
B7	Bolt M6x20	1	B46	Small chain wheel	1
B8	Pulley seat	1	B47	Sleeve 12x15x8	1
B9	Small shaft sleeve	1	B48	Chain 085-26	1
B10	Short wire	1	B49	Shaft sleeve	2
B11	Pulley	1	B50	Bolt M8x16	4
B12	Jam nut M6	1	B51	Bearing seat	2
B13	Connecting plate	1	B52	Jam nut M8	4
B14	Bolt M8x20	4	B53	Ball bearing 6205	2
B15	Bolt M8x40	4	B54	Shaft sleeve 25x34x16	1
B16	Washer Ø24*8*2	4	B55	Differential	1
B17	Engine plate	1	B56	Short semi-shaft	1
B18	Jam nut M8	4	B57	Flat key 6x4x45	2
B19	Engine	1	B58	Bronze sleeve 1	1
B20	Belt	1	B59	Fork plate	1
B21	Drive wheel	1	B60	Auxiliary differential part	1
B22	Washer	4	B61	Big spring	1
B23	Drive pulley 2	1	B62	Differential cable	1
B24	Washer Ø8	1	B63	Bronze sleeve 2	1
B25	Bolt 5/16-24*1 1/4	1	B64	Long shaft	1
B26	Transmission box assembly	1	B65	Tension connector	1
B27	Bolt M6x20	2	B66	Flat washer Ø12	1
B28	Shift connector	1	B67	Spring washer Ø13	1
B29	Plastic sleeve	3	B68	Fixing block	1
B30	Cover 3	1	B69	Bolt M8x30	1
B31	Shift fork	1	B70	Small tension pulley	1
B32	Bolt M6x16	13	B71	Small tension plate	1
B33	Bearing seat	2	B72	Bolt M8x45	1
B34	Ball bearing 6200	4	B73	Big tension combination	1
B35	Circlip 25	1	B74	Bushing	1
B36	Shift bearing	1	B75	Big tension pulley	1
B37	Sleeve 15x20x15	1	B76	Pad	1
B38	Rubber wheel seat	1	B77	Belt pulley	1
B39	Small gear	1	B78	Bolt M6x20	3

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
B79	Delta bearing seat	2	B87	Rivet 4x12	2
B80	Ball bearing 6002	2	B88	Brake block	1
B81	Spring	1	B89	Bottom plate for transmission box	1
B82	Support for friction disc	1	B90	Position part	1
B83	Sleeve 13x20x20	1	B91	B pin Ø1.5x25	1
B84	Bolt M8x16	2	B92	Reset spring	1
B85	Jam nut M12	1	B93	Strut	1
B86	Brake spring	1			

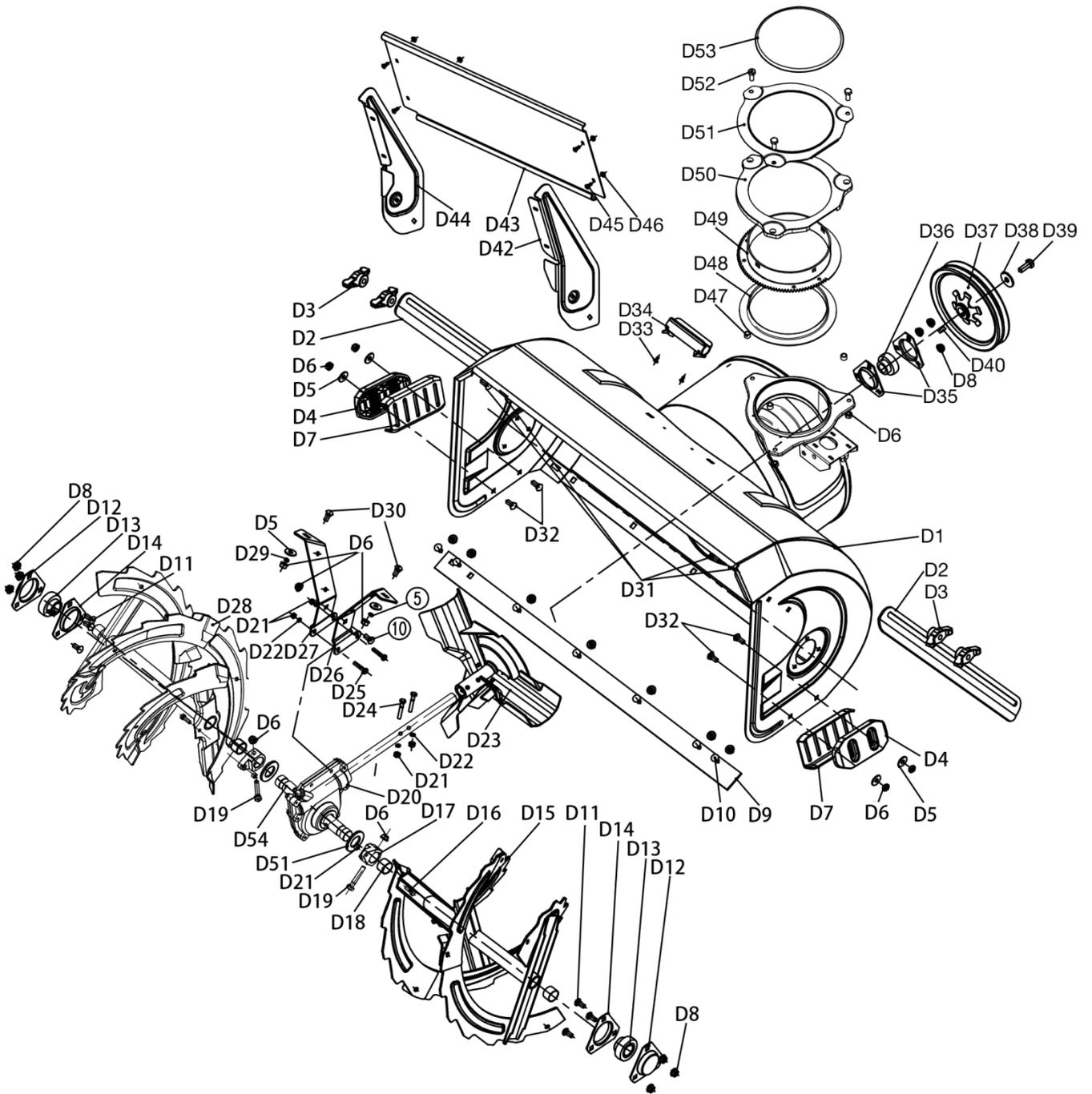
### PARTS LIST (C) -- WALKING ASSEMBLY

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
C1	Pedrail bracket,left	1	C21	Bolt M10x45	2
C2	Pedrail bracket,right	1	C22	Pedal assemble	1
C3	Front pedrail shaft	1	C23	Hook	2
C4	Bolt M6x16	14	C24	Hook washer	2
C5	Jam nut M6	14	C25	Rear axle for pedrail	1
C6	Shaft bushing	4	C26	Bolt M10x70	2
C7	Big washer	8	C27	Bushing	2
C8	Lder pulley	4	C28	Bushing,middle	2
C9	Bushing	4	C29	Plastic bushing	4
C10	Ball bearing 6004-2rs	8	C30	Pad	2
C11	Washer Ø8	4	C31	Jam nut M10	6
C12	Spring washer Ø8	4	C32	Reset spring	2
C13	Bolt M8x16	8	C33	Nut M8	6
C14	Pedrail	2	C34	Bolt M8x18	6
C15	Clip	2	C35	Right plate for rubber track	1
C16	Pedrail pulley	2	C36	Right scrapper	2
C17	Jam nut M8	6	C37	Scrapper seat	1
C18	Ball bearing 6205-2rs	2	C38	Scrapper seat 2	1
C19	Rhombus bearing seat	2	C39	Left scrapper	2
C20	Left plate for rubber track	1	C40	Bolt M8x20	2

# DIAGRAM (C) --WALKING ASSEMBLY



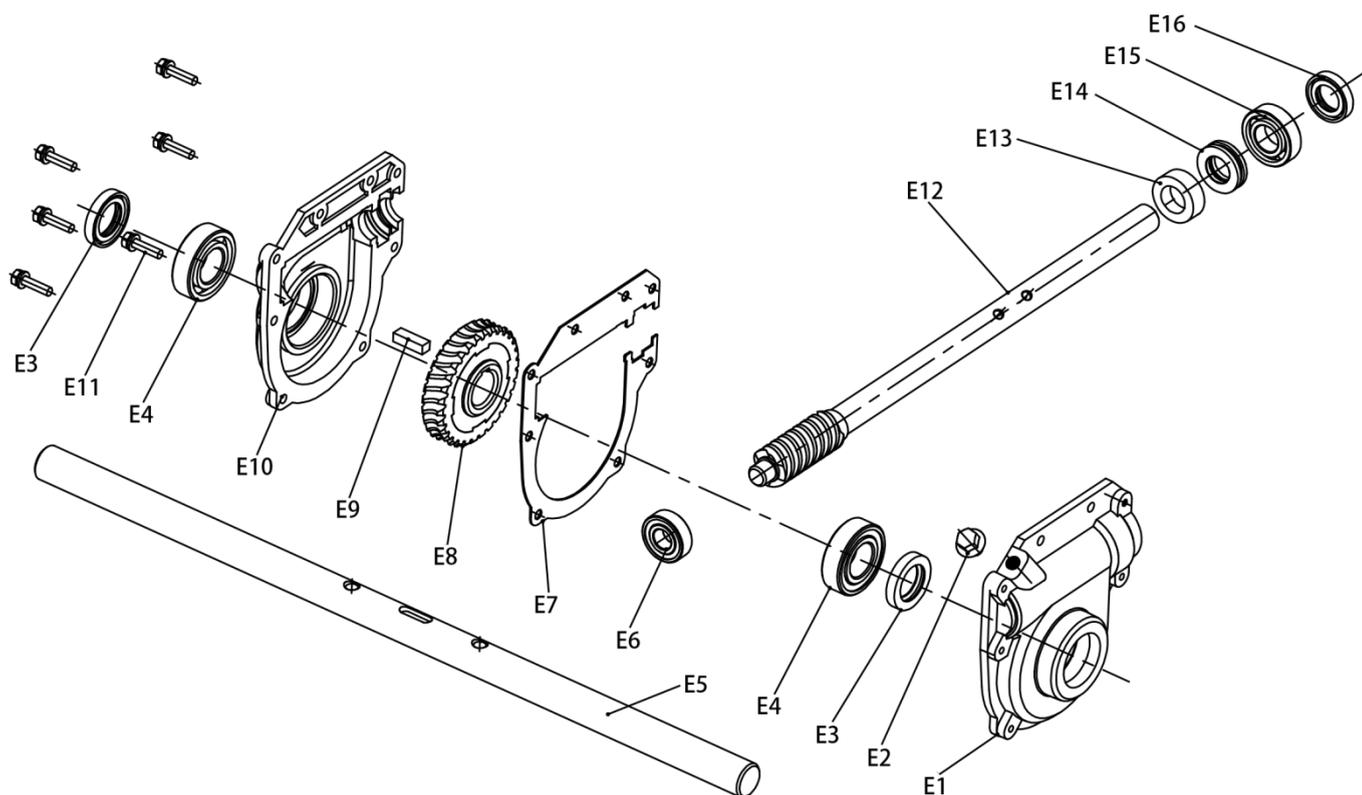
## DIAGRAM (D) --AUGER ASSEMBLY



## PARTS LIST (D) -- AUGER ASSEMBLY

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
D1	Housing assemble	1	D28	Left auger	1
D2	Housing bar (optional)	2	D29	Washer Ø8	2
D3	Plastic nut (optional)	4	D30	Bolt M8x20	2
D4	Skid shoe	2	D31	Bolt M8x20 (optional)	4
D5	Washer Ø8	6	D32	BoltM8x25	4
D6	Nut M8	19	D33	Screw ST4.2x9.5-F	2
D7	Skid shoe	2	D34	Shovel support	1
D8	Nut M8	9	D35	Bearing seat	2
D9	Shave plate	1	D36	Ball bearing SB204	1
D10	Bolt M8x16	8	D37	Belt pulley	1
D11	Bolt M8x18	6	D38	Washer Ø10	1
D12	Bearing seat	2	D39	Bolt M10x25	1
D13	Bearing SB205	2	D40	A flat key 6x20	1
D14	Bearing seat 205	2	D41	Plastic washer	2
D15	Right auger	1	D42	Right support for higher plate (optional)	1
D16	Bolt M6x20	2	D43	Higher plate (optional)	1
D17	Coupling	2	D44	Left support for higher plate (optional)	1
D18	Sleeve	4	D45	Bolt M8x16 (optional)	4
D19	Bolt M8x45	2	D46	Nut M8 (optional)	4
D20	Gear box	1	D47	Sleeve	3
D21	Jam nut M6	6	D48	Gear washer	1
D22	Washer Ø6	4	D49	Gear plate	1
D23	Fan	1	D50	Gear plate cover	1
D24	Bolt M6x40	2	D51	Metal cover	1
D25	Bolt M6x30	2	D52	Bolt M8x25	3
D26	Right support	1	D53	Rubber ring	1
D27	Left support	1	D54	Output shaft	1

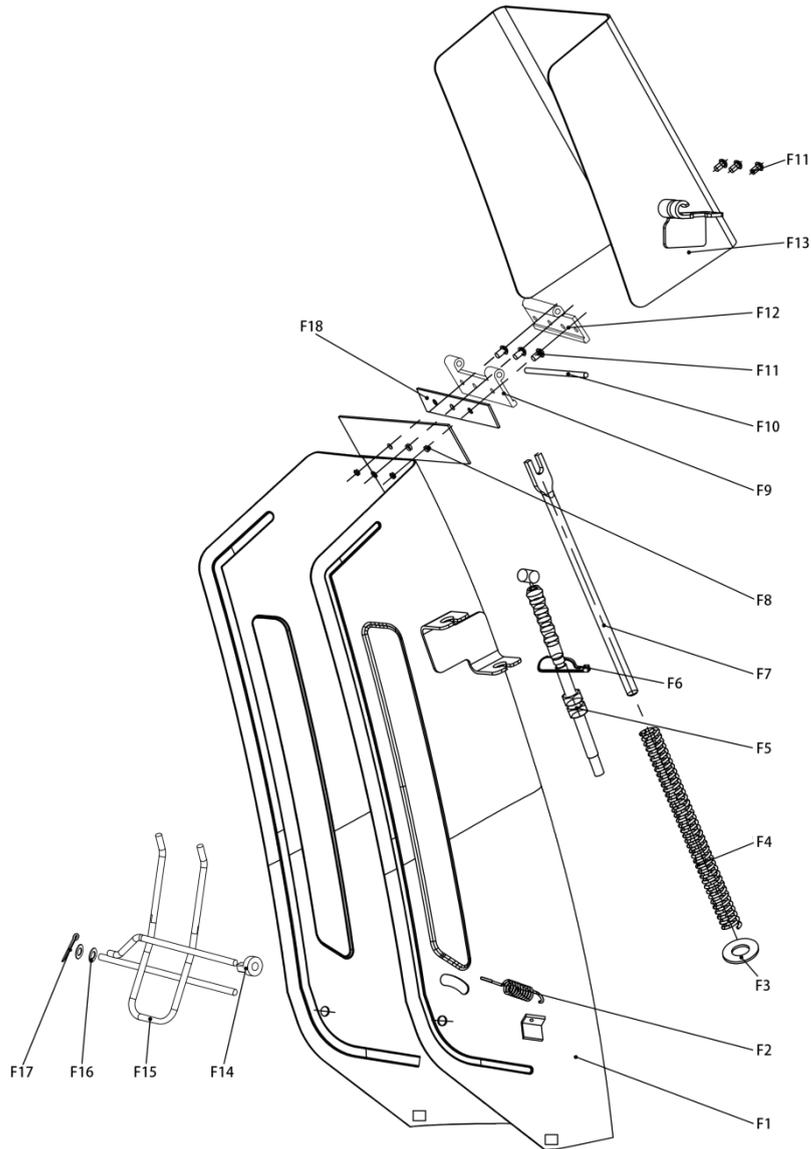
## DIAGRAM (E) --WORM GEAR BOX ASSEMBLY



## PARTS LIST (E) -- WORM GEAR BOX ASSEMBLY

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
E1	Worm case right	1	E9	Key A8*25	1
E2	Bolt M10x15	1	E10	Worm case left	1
E3	Seal ring 25x40x7	2	E11	Bolt M6x25	6
E4	Bearing 6205	2	E12	Worm shaft	1
E5	Auger shaft 30	1	E13	Sleeve	1
E6	Bearing 6202	1	E14	Bearing 51104	1
E7	Paper washer	1	E15	Bearing 6004	1
E8	Worm	1	E16	Seal ring 20x35x7	1

## DIAGRAM (F) --CHUTE ASSEMBLY



## PARTS LIST (F) -- CHUTE ASSEMBLY

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
F1	Chute welded	1	F10	Hinge axle	1
F2	Spring	1	F11	Rivet 4x10	7
F3	Washer Ø8	1	F12	Upper hinge	1
F4	Deflector spring	1	F13	Deflector	1
F5	Deflector cable	1	F14	Washer for barrier	1
F6	Tie	1	F15	Barrier	1
F7	Strut	1	F16	Plastic washer	1
F8	Sealing pad	1	F17	Pin 2*16	1
F9	Lower hinge	1	F18	Sealing pad	1