

OWNER'S MANUAL

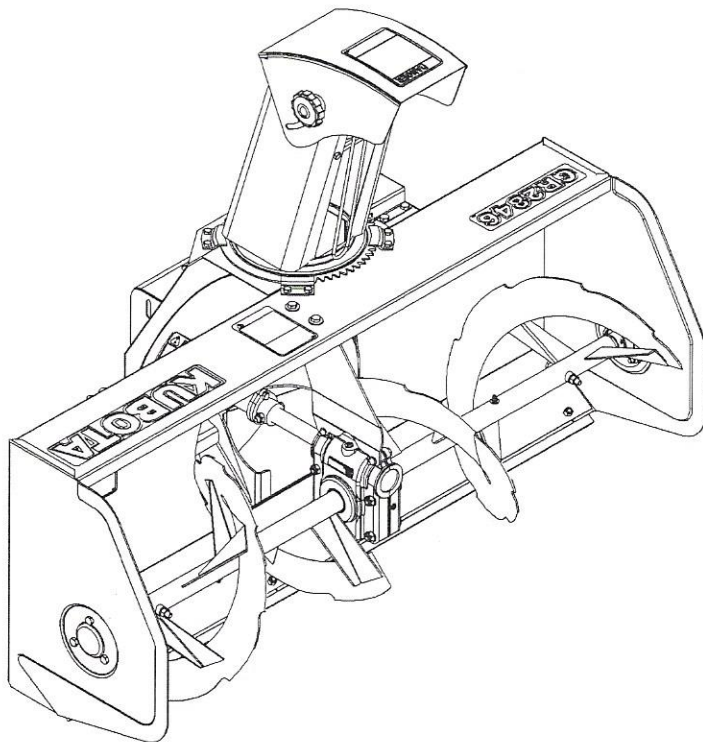
OM 0414SB-A /Rev1 05-17

MANUAL PN 77700- 03964

Kubota®

GR2846A - 46" FUN CONNECT SNOWBLOWER

SERIAL NO. 21216879 AND UP



For GR2020 AND GR2120 Tractors

CALIFORNIA PROPOSITION 65

⚠ WARNING:

Cancer and reproductive harm - www.P65Warnings.ca.gov

PLEASE READ THIS MANUAL CAREFULLY
KEEP READY AT ALL TIMES

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INTRODUCTION

TO THE PURCHASER

All products are designed to give safe, dependable service if they are operated and maintained according to instructions. **Read and understand this manual before operation.**

This manual has been prepared to assist the owner and operators in the safe operation and suitable maintenance of the snowblower. The information is applicable to products at the time of manufacture and does not include modifications made afterwards.

Read and understand this operator's manual before attempting to put snowblower into service. Familiarize yourself with the operating instructions and all the safety recommendations contained in this manual and those labeled on the snowblower and on the tractor. Follow the safety recommendations and make sure that those with whom you work follow them.

To assist your dealer in handling your needs, please record hereafter the model number and serial number of your snowblower and tractor. It is also advisable to supply them to your insurance company. It will be helpful in the event that snowblower or tractor is lost or stolen.

TRACTOR

SNOWBLOWER

MODEL:

SERIAL NUMBER:

DATE OF PURCHASE:

DEALER NAME:

Illustrations

The illustrations may not necessarily reproduce the full detail and the exact shape of the parts or depict the actual models, but are intended for reference only.

Direction Reference

All references to right and left, forward or rearward, are from the operator's seat, facing the steering wheel.

SAFETY PRECAUTIONS



SAFETY FIRST

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and on labels on the machine itself to warn of the possibility of personal injury. Read these instructions carefully. It is essential that you read the instructions and safety regulations before you attempt to assemble or use this snowblower.

⚠ DANGER : Indicates an immediate hazardous situation which, if not avoided, will result in death or serious injury.

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

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

IMPORTANT : Indicates that snowblower or property damage could result if instructions are not followed.

NOTE : Gives helpful information.

All products are designed to give safe, dependable service if they are operated and maintained according to instructions. **Read and understand this manual before operation.** It is the owner's responsibility to be certain anyone operating this product reads this manual, and all other applicable manuals, to become familiar with this snowblower and all safety precautions. Failure to do so could result in serious personal injury or snowblower damage. If you have any questions, consult your dealer.

BEFORE OPERATION

Children

Tragic accidents can occur if the operator is not alert to the presence of children. Children are generally attracted to machines and the work being done. Never assume children will remain where you last saw them.

1. Keep children out of the operating area and under the watchful eye of another responsible adult.
2. Be alert and turn machine off if children enter the work area.
3. Before and when backing, look behind for small children.
4. Never carry children while operating the machine. They may fall off and be seriously injured or interfere with the safe operation of the machine.
5. Never allow children to play on the machine or snowblower even when they are turned off.
6. Never allow children to operate the machine even under adult supervision.
7. Use extra care when approaching blind corners, shrubs, trees, or other obstructions that might hide children from sight.

SAFETY PRECAUTIONS - continued

NOTICE

A safe operator is the best assurance against accidents. All operators, no matter how experienced they may be, should read this operator's manual and all other related manuals before attempting to operate the snowblower. Please read the following section and pay particular attention to all safety recommendations contained in this manual and those labeled on the snowblower and on the tractor.

SNOWBLOWER

Before Operation

1. Read and understand both the tractor and this operator's manual before operating the equipment. Know how to operate all controls and how to stop the unit and disengage the controls quickly. Lack of knowledge could lead to accidents.
2. Never wear loose, torn, or bulky clothing around the tractor and the snowblower. It may catch on moving parts or controls, causing injury.
3. Before and during seasons, thoroughly inspect the area where the snowblower is to be used and remove all objects that may be thrown or cause damage to the snowblower.
4. Set transmission to neutral and disengage clutch, if equipped, before starting the engine.
5. Do not operate snowblower in wintertime without wearing adequate winter garments. Always wear protective clothing.
6. Never attempt to make any adjustments while engine is running. Read this manual carefully to acquaint yourself with the snowblower as well as the tractor operator's manual. Working with unfamiliar snowblower can lead to accidents. Be thoroughly familiar with the controls and proper use of the snowblower.
7. Keep all safety guards in place and verify hardware for proper tightening.
8. Check for moving parts excessive wear regularly. Replace worn parts with genuine parts.
9. Replace all missing, illegible, or damaged safety and warning decals. See list of decals in operator's manual.
10. Keep safety decals clean of dirt and grime.
11. Do not modify or alter this snowblower or any of its components or any snowblower function without first consulting your dealer.
12. Make sure the tractor is counterweighted as recommended by your dealer. Weights provide the necessary balance to improve stability, traction and steering.

SAFETY PRECAUTIONS - continued

Snowblower Operation

1. Before leaving the tractor/snowblower unattended, take all possible precautions. Park the tractor/snowblower on level ground, place the transmission in neutral, set the parking brake, disengage the PTO, lower the snowblower to the ground, place all levers including auxiliary control levers in neutral, shut off the engine and remove the ignition key.
2. Before starting the tractor/ snowblower, remove the ice that might have accumulated on the auger/fan, inspect and clean every rotating part.
3. Prior to operation, clear work area of all objects that can be picked up and thrown. Mark all curbs, pipes, etc. that cannot be moved.
4. Be sure the PTO switch/lever is in OFF/disengaged position before starting engine.
5. Exercise extreme caution when operating on or crossing a gravel drive, walks, or roads. Stay alert for hidden hazards or traffic.
6. Do not carry passengers.
7. Keep clear of all rotating parts. Do not put hands or feet under, or into snowblower with engine running. Be especially observant of the snowblower areas of discharge, intake or all other mechanical motions.
8. Park the tractor/snowblower on level ground, place the transmission in neutral, set the parking brake, disengage the PTO, lower the snowblower to the ground, place all control levers in neutral, shut off the engine, remove the ignition key and allow the rotating parts to stop BEFORE unclogging the housing or the chute and making any repairs, adjustments or inspections. Use only a 36" long stick of wood to unclog the snowblower.
9. For your safety, do not work under any hydraulically supported machine elements that may creep down, suddenly drop or be accidentally lowered.
10. If the snowblower starts to vibrate abnormally, disengage the PTO, stop the engine immediately and check for cause. Excessive vibration is generally a sign of trouble.
11. Do not run the engine indoors except when starting engine and transporting attachment in or out of building. Carbon monoxide gas is colorless, odorless and deadly.
12. Do not attempt to operate on steep slopes. If operating on slopes is necessary, exercise extreme caution when changing direction.
13. Never operate snowblower without guards, and other safety protective devices in place. All tractor and snowblower shields and covers must be correctly installed at all times. When necessary to remove these, they must be reinstalled immediately.
14. Never operate snowblower near glass enclosures, automobiles, window wells, embankments, etc., without proper adjustment of snow discharge angle.
15. Never operate machine at high transport speeds on a slippery surface.
16. Use extra caution when backing up.
17. Disengage power to auger/fan when transporting or when not in use.
18. Never operate the snowblower without good visibility and lighting.
19. Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable noises.
20. Never allow anyone near the work area.
21. Never allow anyone to operate the snowblower until they have read the manual completely and are thoroughly familiar with basic tractor and snowblower operation.

SAFETY PRECAUTIONS - continued

22. Make sure the tractor is counterweighted as recommended by your dealer. Weights provide the necessary balance to improve stability, traction and steering.
23. Always make sure all snowblower components are properly installed and securely fastened BEFORE operation.
24. Adjust housing height to clear gravel or crushed rocks surface.
25. Keep away from chute discharge. This chute has the capacity to throw debris at far distances.
26. Never direct chute discharge towards people or animals. A thrown debris can cause serious injury.

SAFETY PRECAUTIONS - continued

MAINTENANCE

ALWAYS USE GENUINE PARTS WHEN REPLACEMENT PARTS ARE REQUIRED

1. Keep the tractor and snowblower properly maintained.
2. Park the tractor/snowblower on level ground, place the transmission in neutral, set the parking brake, disengage the PTO, lower the snowblower to the ground, place all control levers in neutral, shut off the engine and remove the ignition key and allow the rotating parts to stop BEFORE making any snowblower adjustments.
3. To avoid injury, do not adjust, unblock the driving system, or service the snowblower with the tractor engine running. Make sure rotating components have completely stopped before leaving the operator's seat.
4. Keep the tractor/snowblower clean. Snow, dirt or ice build-up can lead to malfunction or personal injury from thawing and refreezing in garage.
5. Always wear eye protection when cleaning or servicing the snowblower.
6. DO NOT service the tractor while the engine is running or hot, or if the unit is in motion. Always lower snowblower to the ground. If necessary to service snowblower in raised position, securely support with stands or suitable blocking before working underneath. Do not rely on hydraulically supported devices for your safety. They can settle suddenly, leak down, or be accidentally lowered.
7. Do not attempt to service machine, clear obstructions or unclog the snowblower with the engine running. Always shut off engine and allow all motion to cease.
8. The manufacturer will not claim responsibility for fitment of unapproved parts and/or accessories and any damages as a result of their use.
9. Make sure all shields and guards are securely in place following all service, cleaning, or repair work.
10. Do not modify or alter this snowblower or any of its components or operating functions. If you have questions concerning modifications, consult with your dealer.
11. Do not operate a snowblower that is defective or has missing parts. Make sure that all recommended maintenance procedures are completed before operating the snowblower.
12. Check all controls regularly and adjust where necessary. Make sure that the brakes are evenly adjusted.
13. Periodically check all nuts and bolts for tightness, especially wheel hub and rim nuts.
14. To avoid serious personal injury: Escaping hydraulic/diesel fluid under pressure can penetrate the skin causing serious injury. Do not use your hands to check for leaks. Use a piece of cardboard or paper to search for leaks. If you are injured by escaping high pressure fluid, see a medical doctor at once.
15. Stop engine and relieve pressure before connecting or disconnecting hydraulic hoses. Tighten all connections before starting engine or pressurizing hoses.

SAFETY PRECAUTIONS - continued

STORAGE

Before storing the snowblower, certain precautions should be taken to protect it from deterioration.

1. Clean the snowblower thoroughly.
2. Make all the necessary repairs.
3. Replace all safety signs that are damaged, lost, or otherwise become illegible. If a part to be replaced has a sign on it, obtain a new safety sign from your dealer and install it in the same place as on the removed part.
4. Repaint all parts from which paint has worn or peeled.
5. Perform maintenance of the snowblower as instructed under "**Maintenance**" section.
6. When the snowblower are dry, oil all moving parts. Apply oil liberally to all surfaces to protect against rust.
7. Store in a dry place.
8. If snowblower has hydraulic components, install protective plugs and caps on the quick couplers.

DECALS

Replace immediately if damaged

WARNING

FAILURE TO FOLLOW SAFE OPERATING PROCEDURES MAY RESULT IN INJURY.

- FOR SAFE OPERATION FOLLOW ALL OPERATING INSTRUCTIONS AND SAFETY PRECAUTIONS IN OPERATOR'S MANUAL.
- EYE PROTECTION MUST BE WORN AT ALL TIMES.
- KEEP HANDS, FEET AND CLOTHING AWAY FROM POWER DRIVEN PARTS.
- STOP ENGINE BEFORE LEAVING OPERATOR POSITION.
- WAIT FOR ALL MOVEMENTS TO STOP BEFORE STARTING TO ADJUST, LUBRICATE, CLEAN OR UNLOAD THE MACHINE.
- KEEP THE AREA OF OPERATION CLEAR OF ALL PERSONS AND ANIMALS.
- KEEP ALL GUARDS AND SHIELDS IN PLACE.
- NEVER DIRECT DISCHARGE TOWARD BYSTANDERS, BUILDINGS, CARS ETC.
- ALWAYS USE A DUST MASK WHEN WORKING IN DUSTY CONDITIONS.
- KEEP PLASTIC MATERIALS AWAY FROM INTENSE HEAT AND OPEN FLAME.
- NEVER ALLOW PASSENGERS ON THE ATTACHMENT.

229

70060-03763
(660988)

DANGER

TO AVOID SERIOUS INJURY: KEEP HANDS OUT OF THIS DISCHARGE CHUTE WHILE ENGINE IS RUNNING 133

70060-01211
(657761)

DANGER

AVOID INJURY FROM ROTATING AUGER KEEP HANDS, FEET AND CLOTHING AWAY 134

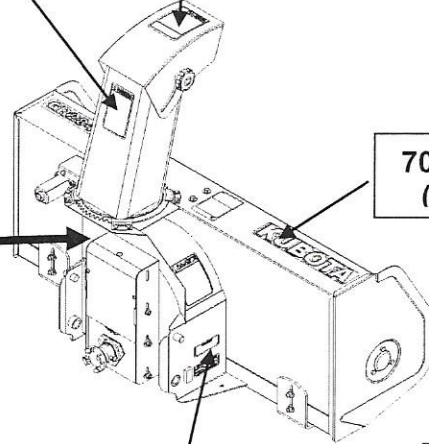
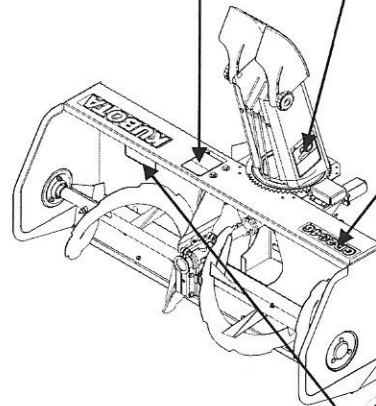
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DANGER

AVOID INJURY FROM ROTATING GEARS:
• KEEP HANDS AND CLOTHING AWAY
• STOP ENGINE AND REMOVE IGNITION KEY BEFORE COMING NEAR ROTATING GEARS
• DO NOT ATTEMPT TO INSTALL OR REMOVE ROTATING GEARS WITHOUT READING OPERATOR'S MANUAL 135

70060-04325
(2500329)

GR2846A
77700-03969
(2500883)



70060-02232
(2500484)

IMPORTANT

USE SPECIAL AUGER AND FAN SHEAR BOLTS ONLY. #70060-01338

TIGHTEN THE SHEAR BOLTS TO A TORQUE OF 9 FT-LBS (12N-M). #70060-01075

136

70060-01340
(657301)

STOP ENGINE BEFORE LUBRICATING. LUBRICATE CHAIN EVERY 4 HOURS WITH CHAIN SAW CHAIN LUBRICANT 137

70060-01674
(657804)

IMPORTANT

Before using:
-Oil level must be checked
-Fill with SAE 80W90, "AGMA 5 EP" extreme pressure oil or equivalent
-Read instructions manual 14

70060-01040
(655683)

CHUTE POSITION

Located on the tractor joystick

77700-05013
(2500915)

ASSEMBLY

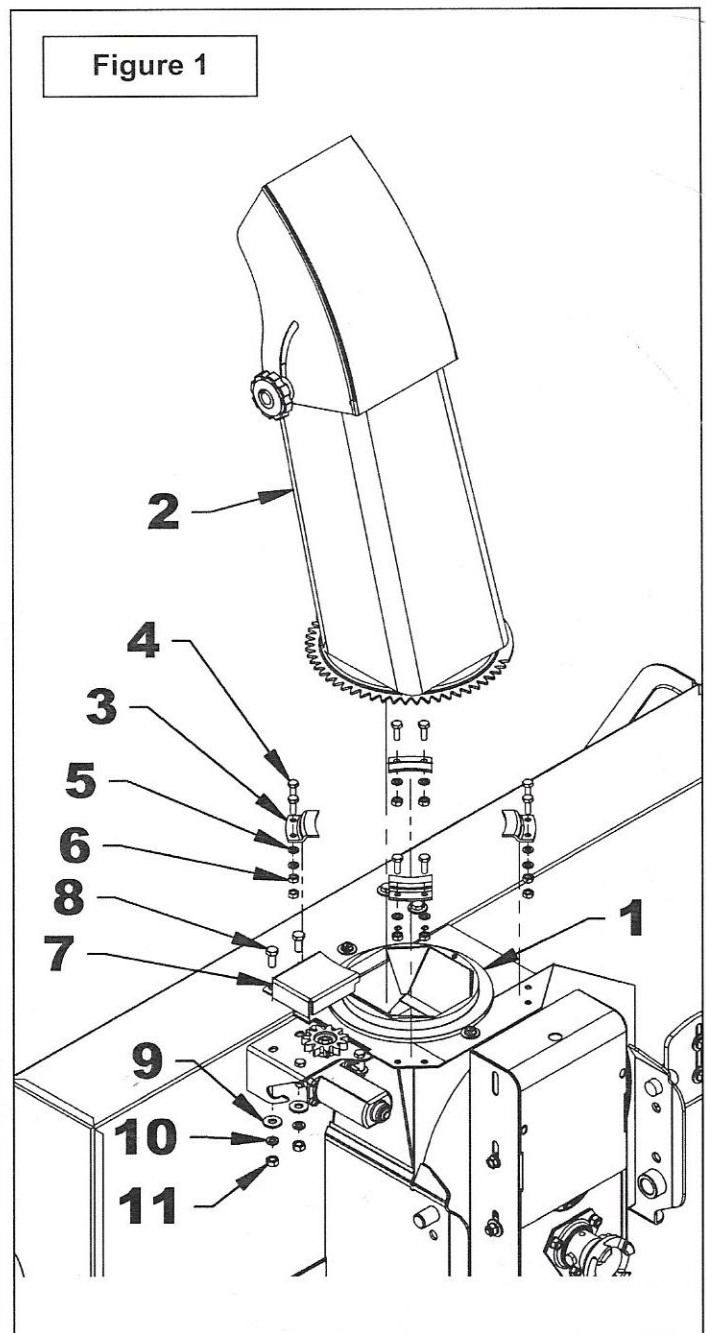
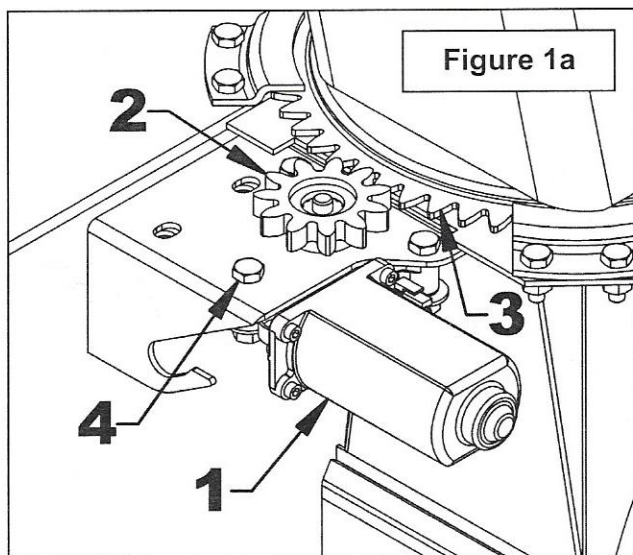
SNOWBLOWER ASSEMBLY

The snowblower is pre assembled at the factory, however, parts in the bag and box must be assembled. Use the present manual and lay out all parts for assembly. Separate bolts and nuts into various sizes. After assembly, torque all the bolts according to the "Torque Specification Table" enclosed at the end of the manual.

Chute and Rotation (Figures 1-1A)

NOTE: For chute and rotation assembly, return the snowblower to its normal position.

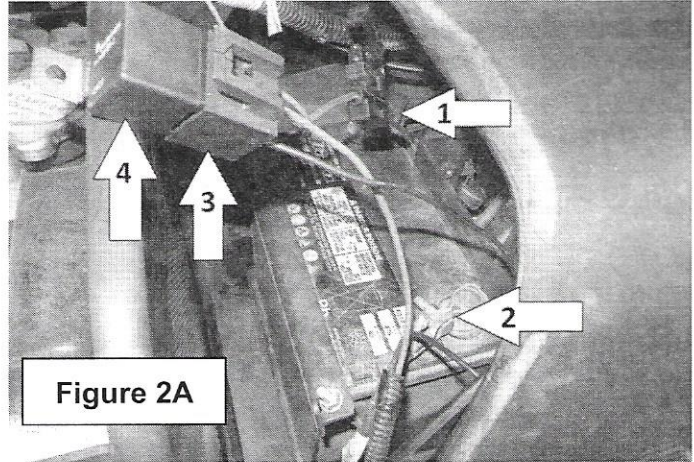
1. **Figure 1:** Place rotation bushing (item 1) over fan discharge, placing the marker up and to the right of the snowblower.
2. **Figure 1:** Remove the gear guard (item 7) by unscrewing the two 5/16"NC X 3/4" bolts (item 8), flat washers, lockwashers and nuts (items 9-10-11). Keep the parts close at hand.
3. **Figure 1:** Install chute (item 2) over rotation bushing (item 1) and secure with four retaining plates (item 3), using two 1/4" NC x 3/4" hex. bolts (item 4), 1/4" lockwashers (item 5) and 1/4"NC hex nuts (item 6).
4. **Figure 1a:** If the gears (items 2-3) are not well engaged together, loosen the three bolts (item 4) and move the motor (item 1) toward the chute. Tighten the bolts (item 4) at 10 ft-lb (13 N-M).
5. Reinstall the gear guard.



ASSEMBLY

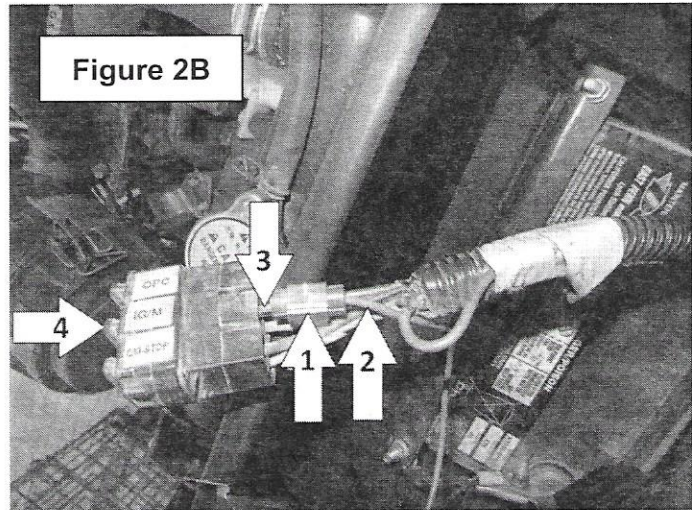
Installation of the Wiring Harness on the Tractor (Figures 2A to 2L)

1. **Figure 2A:** Under the tractor cab, disconnect the negative battery terminal (item 2). Attach the fuse wire to the battery positive terminal (item 1) and the black wire to the negative terminal (item 2).



2. **Figure 2A:** Install the relay (item 4) on the connector (item 3) and put electrical tape around them to prevent them from disconnecting.

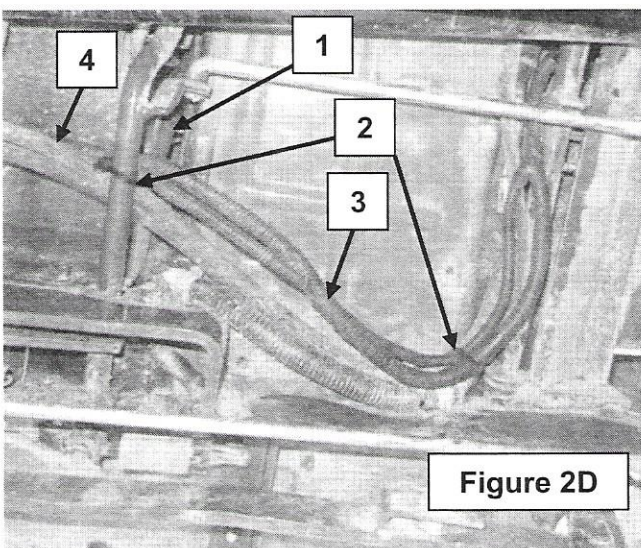
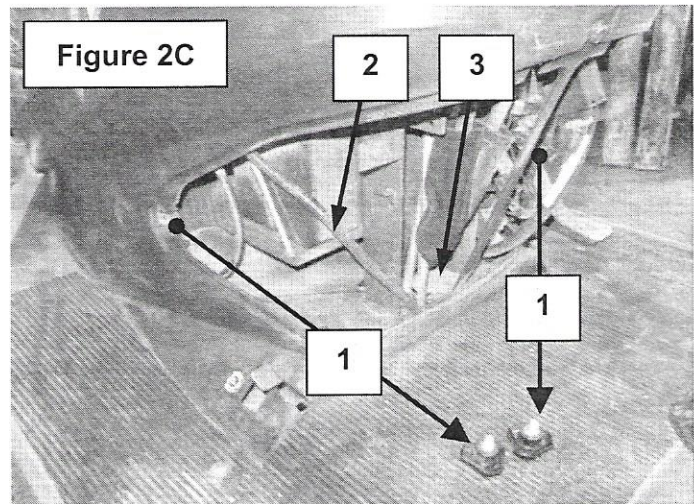
3. **Figure 2B:** Using the tap connector (item 1), put the brown wire (item 2) from the harness with the red/black wire (item 3) connected on the middle fuse of the tractor identified "IG/M" (item 4).



4. **Figure 2C:** Unscrew the two adjustment bolts (item 1) to remove the grill located above the steering and pass the rest of the harness (item 2) through the hole in the middle of the floor (item 3) as shown on figure.

5. **Figure 2C:** Reinstall the grill with the two adjustment bolts (items 1).

6. **Figure 2D:** From the hole of the floor (item 1), pass the part of the harness with a connector (item 4) toward the front of the tractor, and the one with twelve loose wires (item 3) towards the rear and attach them with tie wraps where indicated (item 2).



ASSEMBLY

Figure 2E & 2F: Remove the original tractor bolt (Figure 2F, item 2) and attach the electric control support (item 1) to the tractor with a 8mm x 1.25 x 25mm lg serrated flange bolt (item 2) and the spacer (item 3). Note: The original tractor bolt will no longer be used.

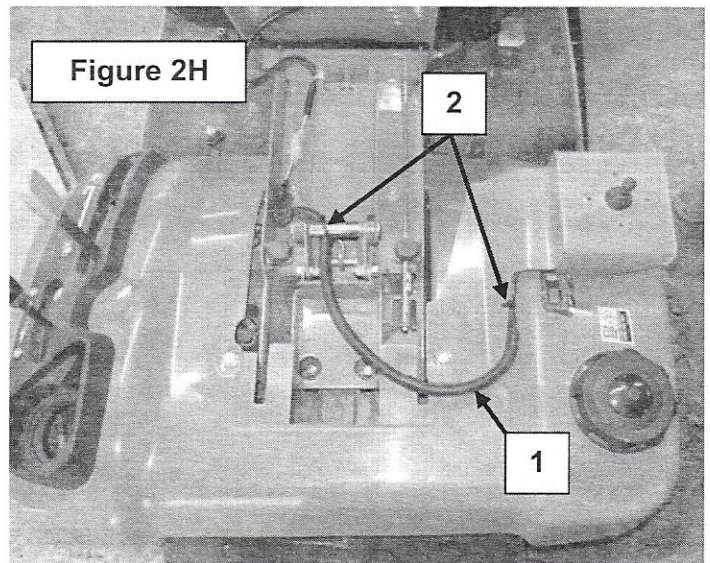
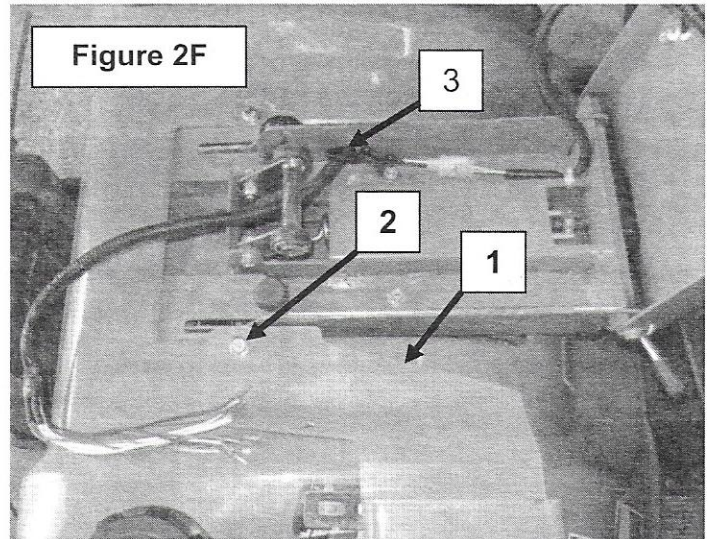
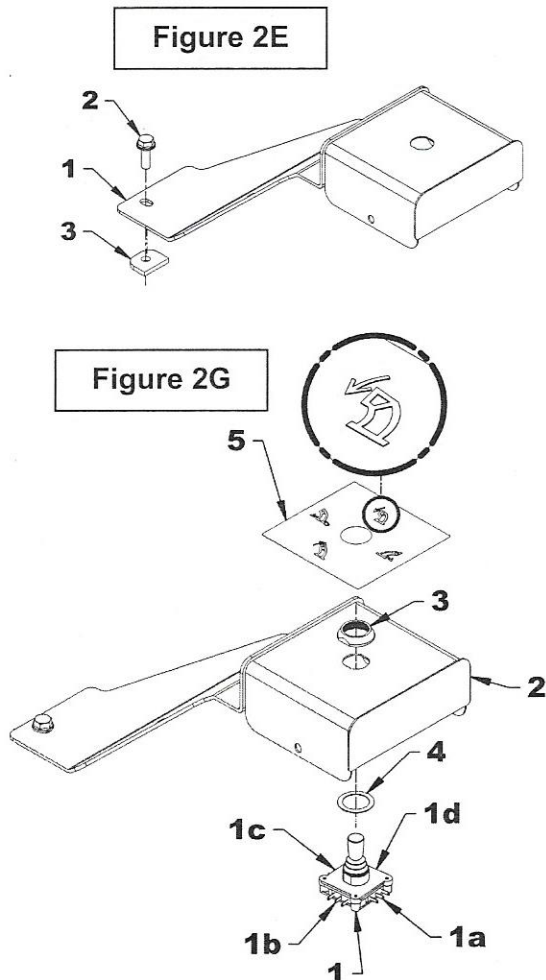
7. **Figure 2F:** From the side of the left rear wheel, insert the twelve wires part of the electric harness (item 3) and run it through the base of the tractor seat.

8. **Figure 2G:** Attach the harness connectors to the terminals of the electric control support (item 1). The black cables are attached to the NC terminals and the red cables to the NO terminals. Attach the yellow cable to the COM terminal 1a, the white cable to the COM terminal 1b, the blue cable to the COM terminal 1c and the green cable to the COM terminal 1d.

9. **Figure 2G:** Remove the plastic nut (item 3) from the base of the control lever (item 1). Remove the center of the gray foam ring provided with the lever and place the foam ring left (item 4) on the lever. Then insert the lever in the control support (item 2) and secure with the plastic nut. Make sure the cable positions correspond precisely to figure 2G.

10. **Figure 2G:** Install the chute position decal (item 5) on the electric control support (item 2) in the correct position illustrated in figure.

11. **Figure 2H:** Move the seat completely forward and place the harness as shown on figure. Secure the harness (item 1) at the location shown on figure with two nylon tie wraps (item 2). Return the seat to its original position.



ASSEMBLY

12. **Figure 2i:** Install the electric control support cover using three 1/4"NC x 1/2" lg bolts and nylon insert locknuts, while passing the harness (item 1) through the opening.
13. **Figures 2J-2K:** Run the part of the harness with the connector (item 1) along the 2 hydraulic hoses and make it exit on the front right side of the tractor (see figure 2K).
14. **Figure 2L:** Attach the connector protector (item 1) to the tractor frame as shown on figure with #10-24NC x 1" lg allen socket head capscrew (item 2), flat washer and nylon insert locknut then insert the harness's connector (item 3) in the connector protector (item 1).
15. **Figures 2J-2M:** Secure the wiring harness (item 1) with two ties wraps (item 2) as shown on the figures.

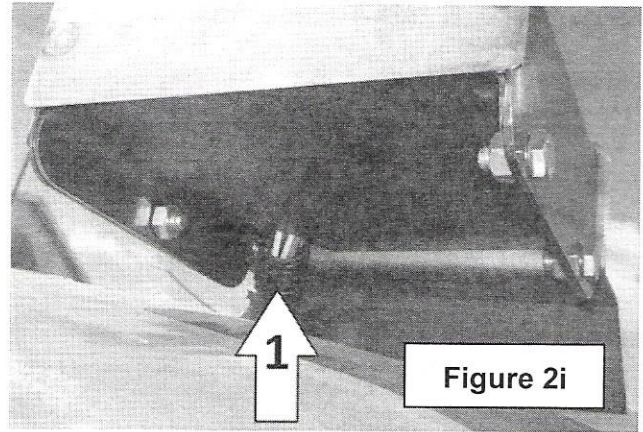


Figure 2i

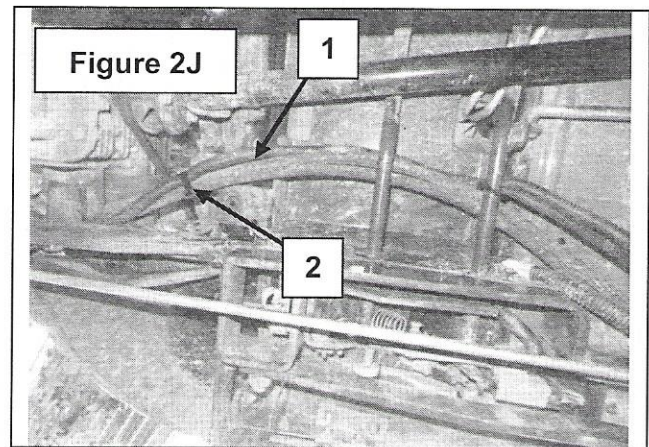


Figure 2J

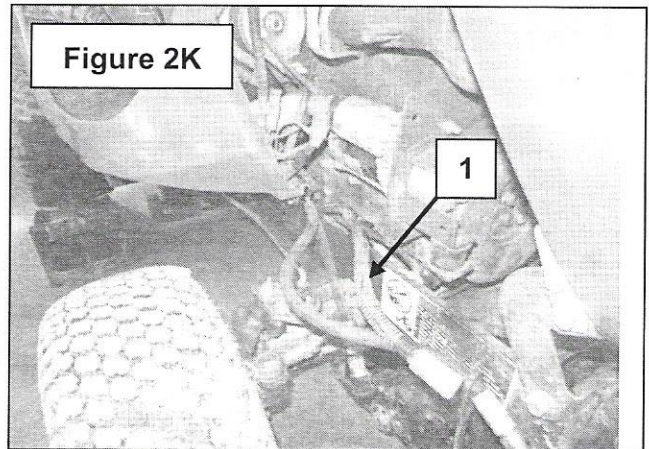


Figure 2K

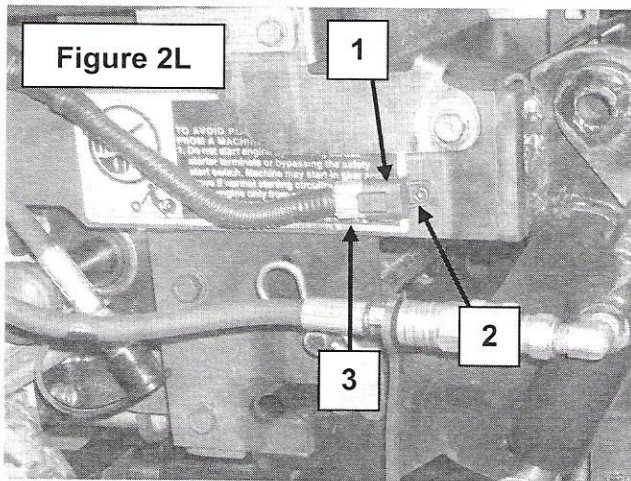


Figure 2L

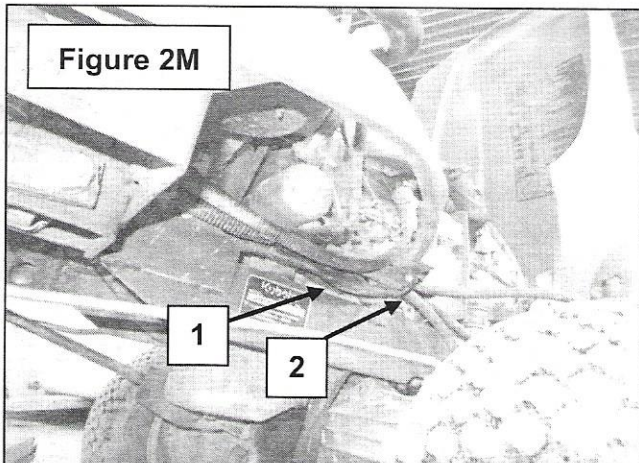
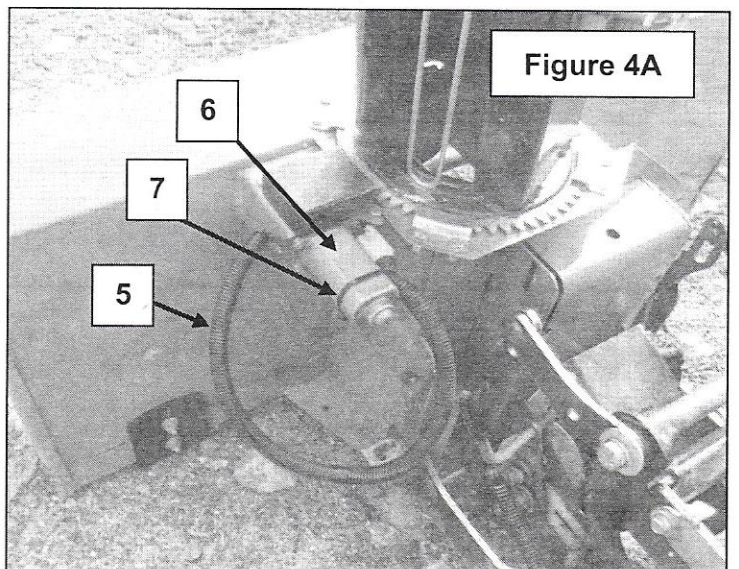
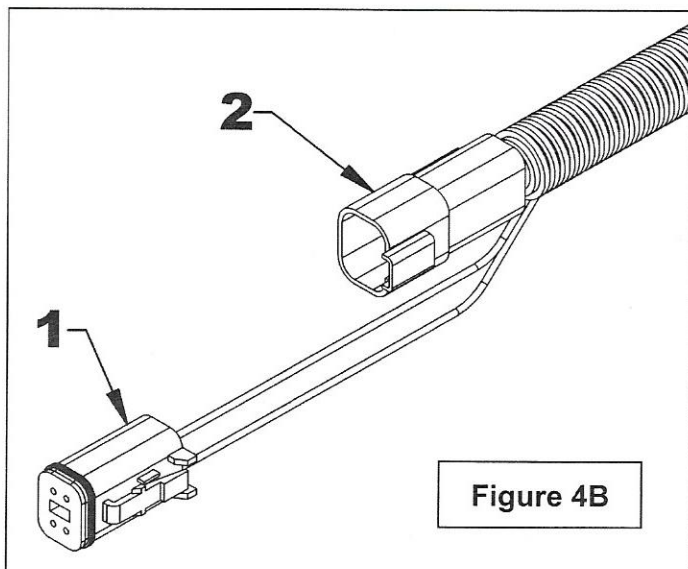
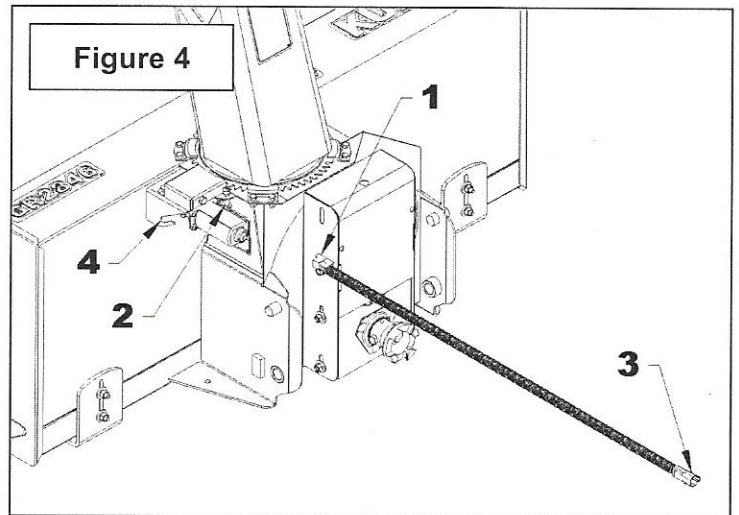
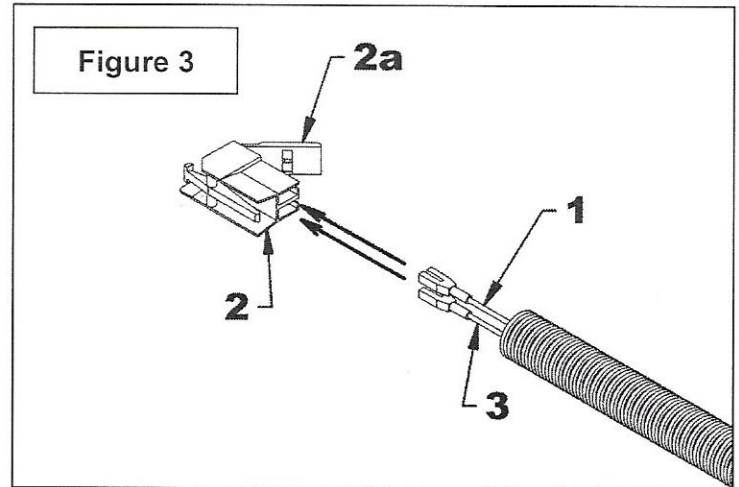


Figure 2M

ASSEMBLY

Installation of the Wiring Harness on the Snowblower (Figures 3-4-4A-4B)

1. **Figure 3:** Insert the yellow wire (item 1) and the blue wire (item 3) in the female connector (item 2) as shown on the figure and lock in place by pressing the plastic tab (item 2a).
2. **Figure 4:** Connect the 45" wiring harness (item 1) to the electric motor (item 2) and insert the other end of the harness (item 3) in the motor support slot (item 4).
3. **Figure 4A:** Secure the wiring harness (item 5) to the motor (item 6) with the 8" lg. tie wrap (item 7).
4. **Figure 4B:** Put the connector which serves as a dust plug (item 1) into the other connector (item 2).
5. **Figure 4A:** Put the harness in the motor support slot as shown.



ASSEMBLY

Attaching the Snowblower to the Subframe (Figures 5-6-7-7A)

⚠ WARNING: To avoid serious personal injury: Park the tractor on level ground, place the transmission in neutral, set the parking brake, disengage the drive system, put all levers to neutral, shut off the engine, remove the ignition key and wait for all movement to stop **BEFORE** mounting the snowblower on the tractor.

1. **Figure 5:** Pull and turn each subframe "T" pin (item 1) to engage them in the slots.
2. **Figure 5:** Move the drive system engagement lever (item 2) forward as shown on figure.

3. **Figure 6:** Start the tractor, remove the parking brake and drive forward slowly lining up the tractor hitch with the snowblower hitch. Lower the subframe hitch enough to allow the hitch arm (item 1) to hook up to the snowblower hitch pins (item 2).
4. Raise the snowblower completely off the ground with the tractor hydraulic lever.

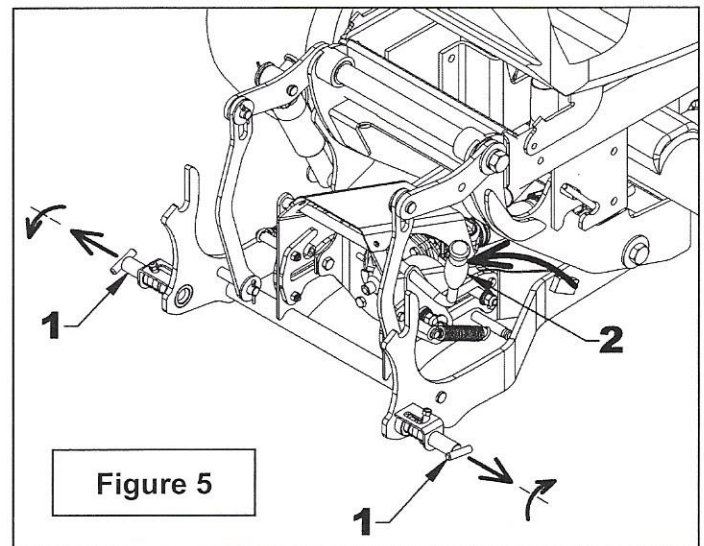


Figure 5

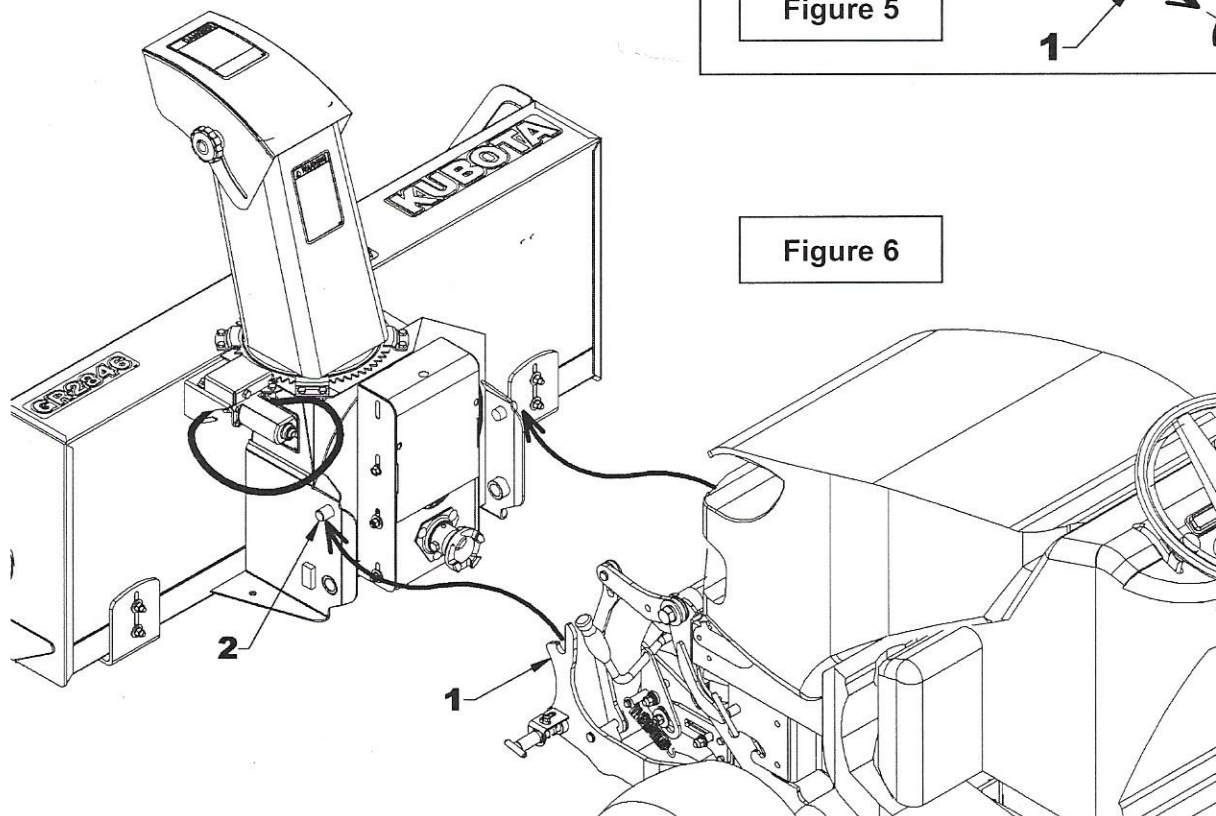
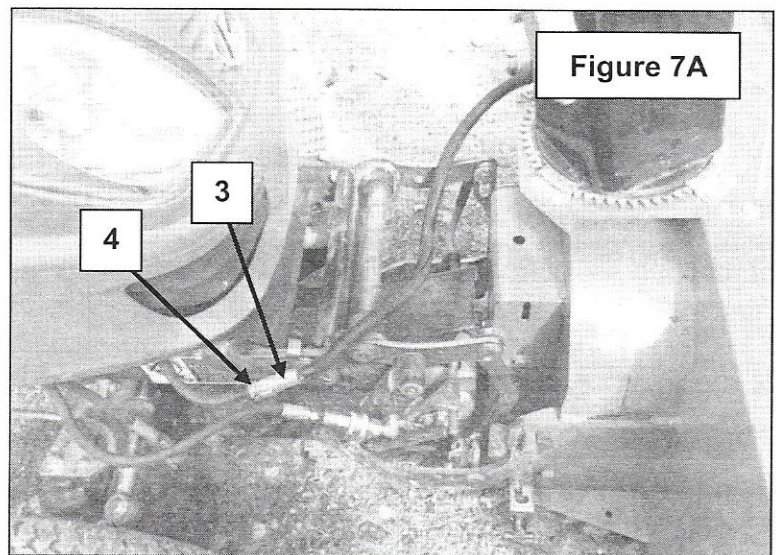
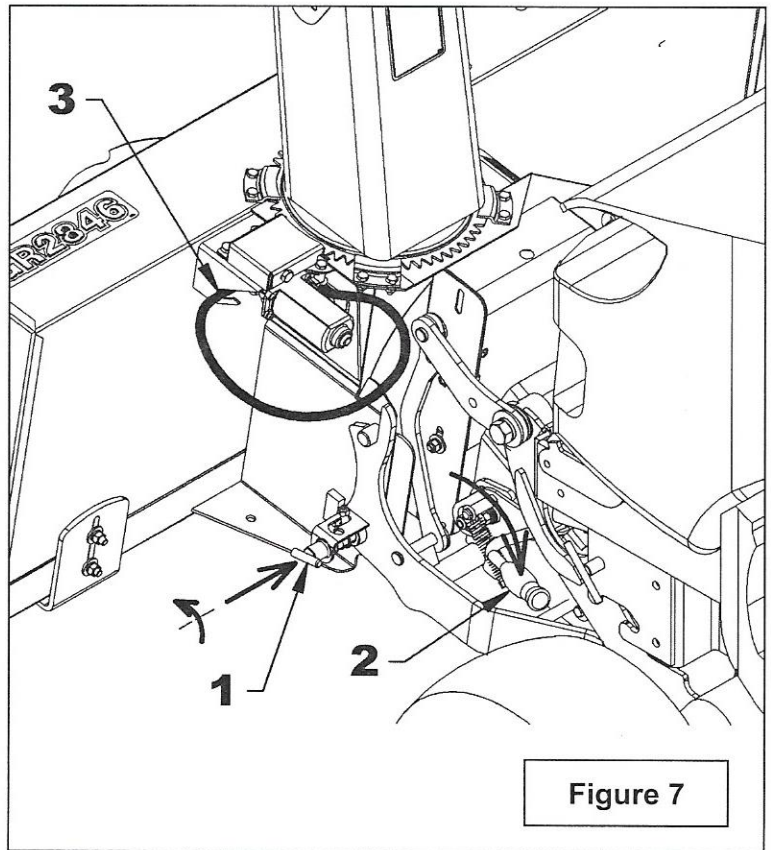


Figure 6

ASSEMBLY

5. **Figure 7:** Pull and turn the "T" pins (item 1) then release so they engage in the snowblower hitch bushings making sure they are completely inserted.
6. **Figure 7:** Move the drive system engagement lever (item 2) towards the rear as shown.
7. **Figure 7-7A:** Connect the snowblower harness (item 3) to the tractor harness (item 4).



ASSEMBLY

Removing the Snowblower from the Tractor (Figures 8-9)

⚠ WARNING: To avoid serious injury: Park the tractor on level ground, set to neutral, apply parking brake, disengage drive pulley, place all control levers to neutral, shut off the engine, remove the ignition key and make sure all rotating parts have stopped before leaving the operator's seat and removing the snowblower from the tractor.

1. Raise the snowblower off the ground with the tractor hydraulic lever.
2. **Figures 8:** Disconnect the harnesses and put the connector which serves as a dust plug (**figure 4B**, item 1) into the other connector (**figure 4B**, item 2). Then, insert this harness (item 3) in the motor support slot as shown and the tractor harness (**figure 2L**, item 3) in the connector protector (**figure 2L**, item 1).

3. **Figures 8:** Pull and turn the "T" pins (item 1) to engage them in the slots and release them from the snowblower.
4. **Figure 8:** Move the drive system engagement lever (item 2) forward as shown on figure.
5. **Figure 9:** With the tractor hydraulic lever, lower the snowblower to the ground until the hitch arms (item 1) unhook from the snowblower hitch pins (item 2).
6. Back the tractor away slowly to release the tow hitches.

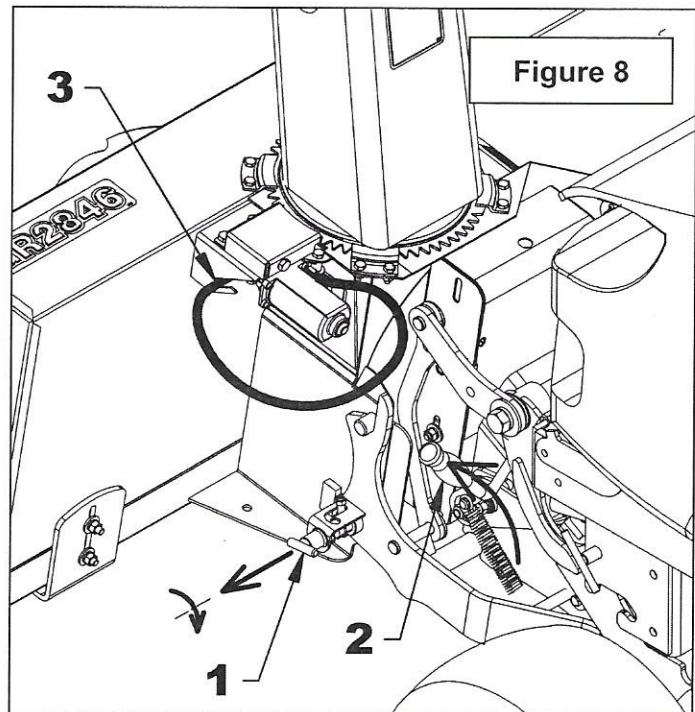
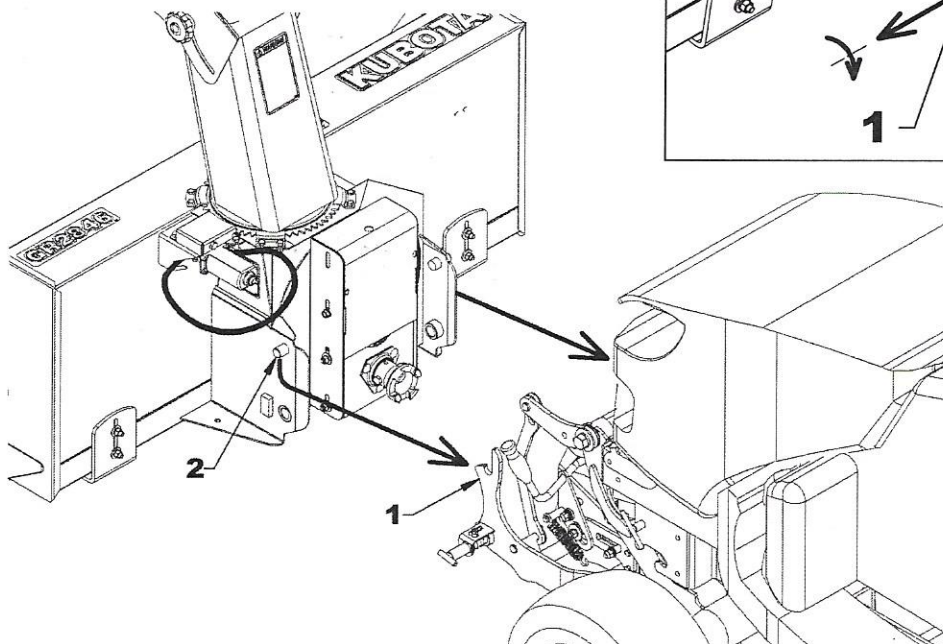


Figure 9



OPERATION

GENERAL PREPARATION

1. Read the operator's manual carefully before using the tractor and snowblower. Be thoroughly familiar with the controls and proper use of the equipment. Know how to stop the unit and disengage the controls quickly.
2. Wear adequate winter outer garments while operating the equipment.
3. Make sure the snowblower is clear of snow and other material before engaging the snowblower.
4. Make sure the auger and fan operate freely.
5. Check the oil level in the reduction box and if necessary, add AGMA 5EP, SAE 80W90 gear oil or equivalent.
6. Check the three shear bolts, one on each auger section and one between the fan and gearbox for proper tightness.
7. Adjust the skid shoes so the snowblower runs leveled.
8. Before engaging the snowblower drive, always have the engine running at idle.
9. Operate the snowblower at maximum engine RPM.



WARNING To avoid serious personal injury: Do not use your hands to unclog the chute. Use a stick or board at least 36" (925mm) long. Do not attempt to unclog the chute while engine is running. If the chute is clogged, shut off the tractor engine, remove the key and clear the snow from the chute.

OPERATING CONTROLS

Engine Speed

1. Start the tractor engine. Let the engine warm up at least one minute before engaging the drive mechanism then increase speed gradually.
2. Make sure the snowblower head is properly positioned and engage the drive mechanism.
3. Adjust the ground speed according to conditions. For maximum power, run engine at or near full throttle.

IMPORTANT: Use full RPM power when blowing wet, sticky snow. Low RPM power will tend to clog the chute.

Work and Travel Speed

Travel speed will depend on the depth and density of the snow to be cleared. Normally, ground speed will range from 2 to 4 km/h (1.2 and 2.5 mph) for light, dry snowfalls (3-6"), and 1-3 mph (0.6 and 1.9 mph) for heavy, wet or drifted snow.

Increasing Traction and Stability

Make sure that the tractor is equipped with counterweights as recommended by your dealer. The weights give stability needed to prevent tilting, loss of traction or of direction.

OPERATION

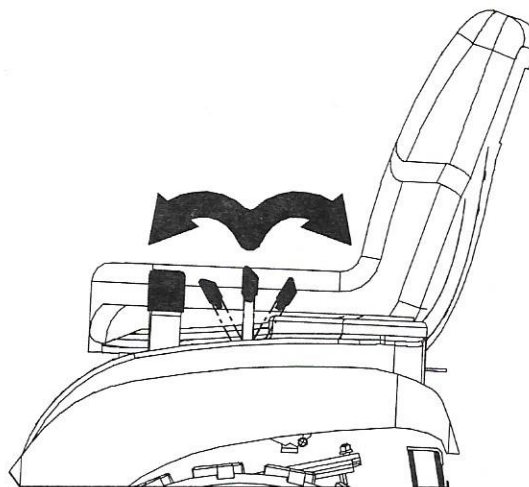
Up and Down Control

The hydraulic system of the snowblower is the same as the one of the tractor mower.

Push the lawnmower latch located on the left side of the driver seat:

- **Backward:** to raise the snowblower.
- **Forward:** to lower the snowblower.

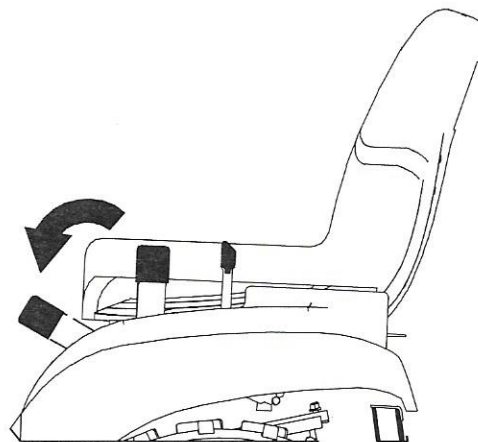
When the lifting lever is released, it goes back to its initial position at the center.



Engaging the Drive Mechanism

The drive mechanism of the snowblower uses the same PTO as the one of the tractor mower. The engagement lever is located on the left side of the driver seat.

- To **engage** the snowblower, push the engagement lever and place it in the notch. This will make the augers and the fan turn.
- To **disengage**, push slightly on the engagement lever and disengage it from the notch. This will bring it back to its initial position.



OPERATION

ADJUSTMENTS

⚠ ATTENTION: To avoid personal injury, be sure the tractor engine is off, the drive shaft disengaged, and all movement has stopped before making any adjustments.

Deflector Adjustment

Set the angle of deflection according to the distance the snow must be thrown. To set the deflector angle:

- Loosen the deflector knobs located on the side of the deflector and adjust the deflector to the appropriate angle.
- Retighten the knobs.

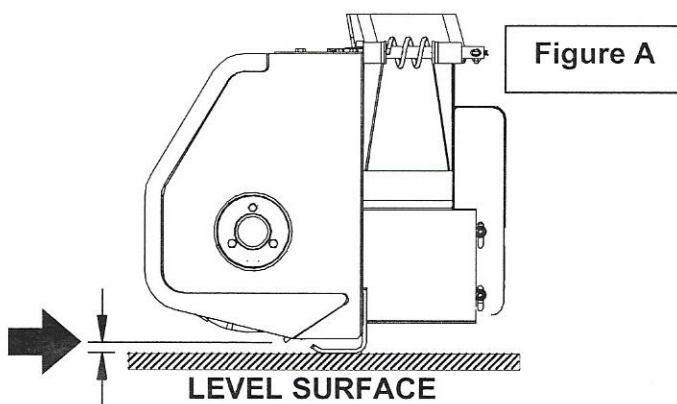
Skid Shoe Adjustment (Figure A)

Adjust the snowblower so that the skid shoes run level and according to the surface conditions so that stones are not thrown with the snow. Adjust both skid shoes to the same height to keep the cutting edge level and adjust upwards for smooth surfaces.

Loosen skid shoe bolts and adjust according to instructions below, and securely tighten bolts:

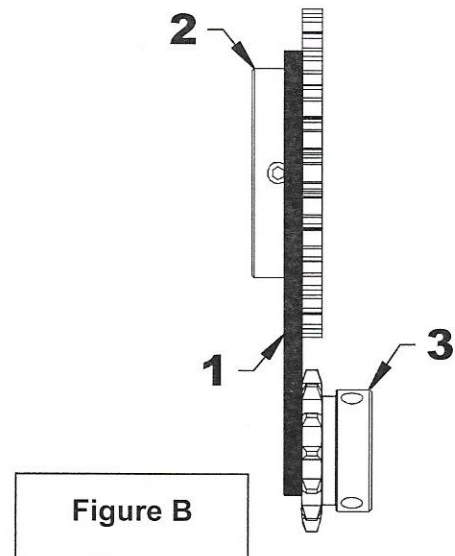
Clearance between cutting edge and surface:

- *Level paved surface :* Adjust to 1/16" to 1/8"
- *Uneven or gravel surface:* Adjust to 1/2" to 5/8"



Sprocket Alignment (Figure B)

To check the alignment of the two sprockets lean a ruler or straight bar (item 1) against the sprocket (item 3). Unscrew the 5/16"NC setscrews of the sprocket (item 2) and lean it against the ruler or straight bar (item 1).



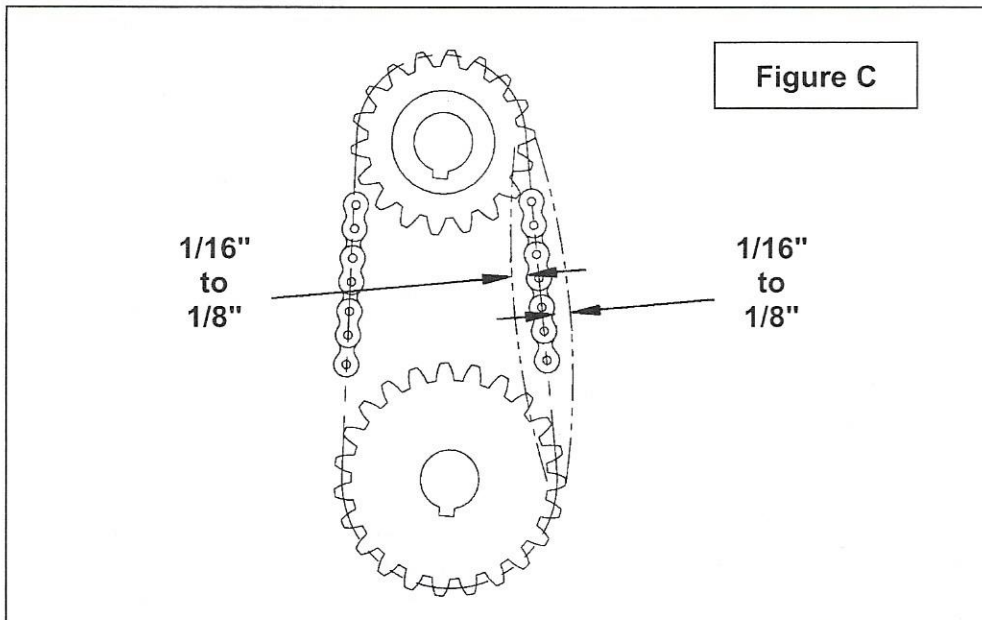
⚠ WARNING: If the sprockets alignment is not done carefully the chain may be broken or released from the two gears and can cause important damages to the snowblower and serious personal injury.

OPERATION

Drive Chain Adjustment (figure C)

IMPORTANT: The chain must be adjusted after the first 8 hours of operation and every 24 hours of operation after that.

- Remove the reduction box cover and loosen the 4 bolts that attach the reduction box to the snowblower. Adjust chain to obtain a deflection of between $1/16''$ and $1/8''$. Tighten the 4 bolts of the reduction box. And reinstall the reduction box cover.



OPERATION

K.R.A. SYSTEM OVERRIDE MODE

(For lawn tractors equipped with K.R.A. system)

⚠ CAUTION: To avoid serious personal injury: Before and when backing, look down and behind the machine to be sure no bystanders, especially children, have entered the area.

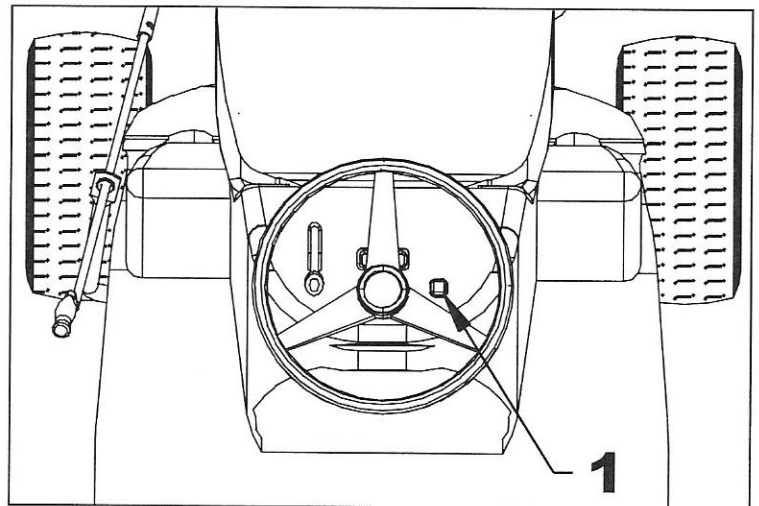
NOTE: K.R.A. System override switch allows the operator to mow or operate attachments while in reverse if the operator deems it absolutely necessary and safe to do so (i.e. the operator should make sure that no bystanders, especially children, have entered the area.)

If the owner does not wish certain operators to use the override switch allowing mowing or implement operation in reverse, then he or she may remove the fuse from the system to prevent override.

1. Start the engine.
2. Set the throttle to the "FAST" position
3. Push the PTO lever to the "ENGAGED" position.
4. Stop the machine (set the speed control pedal to NEUTRAL) or depress the speed control pedal forward.

5. Push the K.R.A. System override switch. (See figure below)
6. Look down and behind the machine to be sure that no bystanders, especially children have entered the area.
7. Depress the speed control pedal with the heel of your right foot to move in the reverse direction.

NOTE: Refer to your tractor operator's manual for more detailed information.



OPERATION

SNOW REMOVAL METHODS

When removing snow, do not use the snowblower as a dozer blade to push snow. Let the snowblower work its way through deep drifts. If the speed of your tractor is too fast, the snowblower may become overloaded and clog. For best results, raise the snowblower and remove a top layer of snow. A second pass with the snowblower will remove the remaining snow.

IMPORTANT: Use full RPM power when removing wet, sticky snow. Low RPM power will tend to clog the chute.

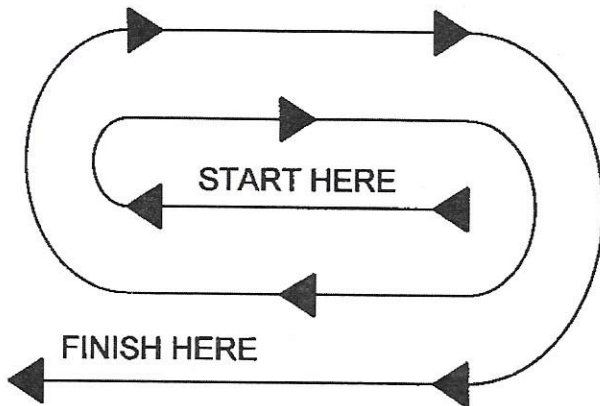


CAUTION: To avoid serious injury: Do not use hands or feet to unclog chute. Do not attempt to clear clogged chute of snow while tractor engine is running. If the chute clogs, disengage the drive shaft, shut off the tractor engine, remove the ignition key, wait for all movement to stop, and then clear the snow from the chute.

A definite pattern of operation is required to thoroughly clean the snow area. These patterns will avoid throwing snow in unwanted places as well as eliminating a second removal of snow.

PATTERN 1

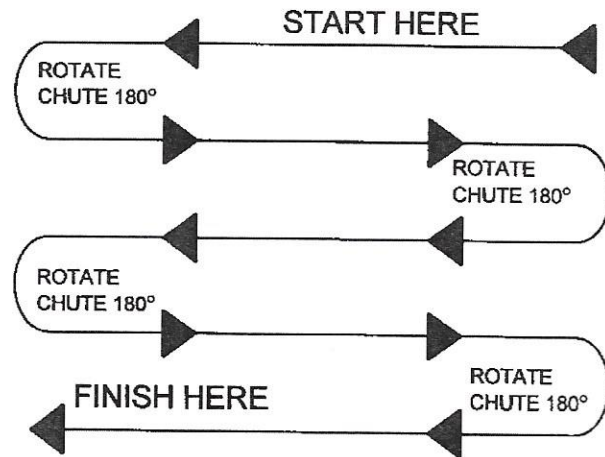
DISCHARGE SNOW BOTH SIDES



DISCHARGE SNOW BOTH SIDES

Where it is possible to throw the snow to the left and right (above), as on a long driveway, it is advantageous to start in the middle. Plow from one end to the other, throwing snow to both sides without changing the direction of the discharge guide

PATTERN 2



DISCHARGE SNOW THIS SIDE ONLY

If the snow can only be thrown to one side of the driveway or sidewalk (above), start on the opposite side. At the end of the first pass, rotate the discharge guide 180 degrees for the return pass. At the end of each succeeding pass, rotate the discharge guide 180 degrees to maintain direction of throw in the same area.

MAINTENANCE

MAINTENANCE

ALWAYS USE GENUINE PARTS WHEN REPLACEMENT PARTS ARE REQUIRED.



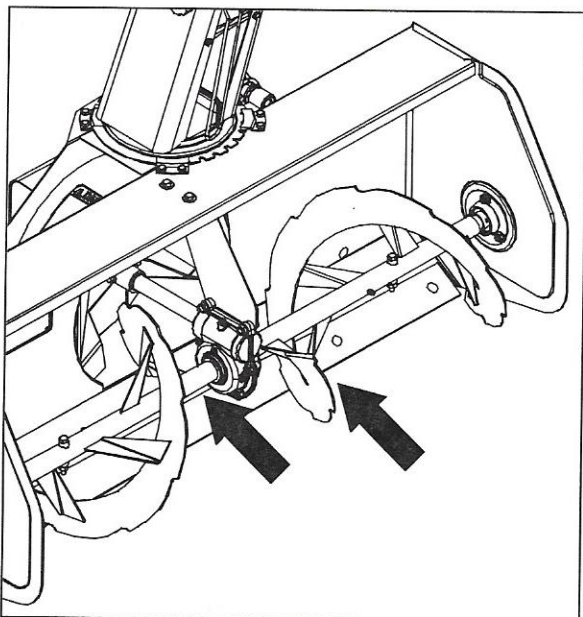
WARNING

To avoid serious injury:

- Before cleaning, adjusting or repairing the snowblower: bring the tractor to a complete stop, lower the implement, shut off the engine and remove the ignition key.
- Never park the tractor inside a building where an open flame or sparks are present. Allow the engine to cool down before storing in any enclosure.
- Run the snowblower a few minutes after blowing snow to prevent freeze up of auger and fan.
- Provide adequate blocking before working under the snowblower when in raised position.

Auger Repositioning

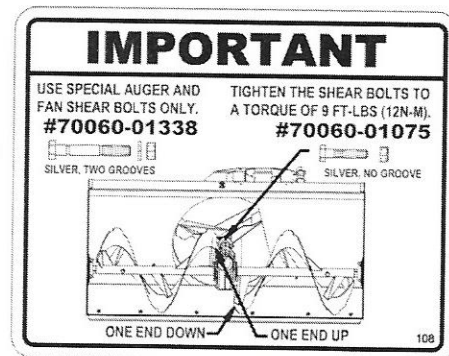
After shear bolt breakage on one of the augers, make sure to reposition the augers as shown on the figure below.



CAUTION: Some oil may still be present in the hose, protect adequately the working surface to prevent any damage.

Shear Bolts

1. Always use grade 5 shear bolt on fan shear assembly (70060-01075) and grade 5 on auger sections (70060-01338) as shown on decal 70060-01340.
2. Check shear bolts at frequent intervals for proper tightness to make sure the snowblower is in safe working condition.



70060-01340
(657301)

MAINTENANCE

Gearbox

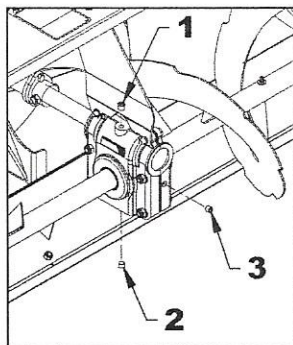
When servicing either the gearbox or the reduction box, the tightness of the casing must be restored. To do so, apply a layer of silicone to the casing before closing it. Allow the silicone to cure for at least 24 hours before filling it with oil.

Oil Level Check

WARNING:

To avoid serious personal injury: Park the tractor on level ground, place the transmission in neutral, set the parking brake, disengage the drive system, place all controls in neutral, shut off the engine, remove the ignition key and make sure all movement has stopped.

1. Place a container under the gearbox to collect the oil.
2. Remove the 1/4"NPT allen plug (item 1).
3. Remove the 1/8"NPT allen overflow plug (item 3) on the gearbox side. Fill in the gear box in the 1/4"NPT plug hole with AGMA 5EP extreme pressure oil, SAE 80W90 gear oil or equivalent, until some oil flow a little from the overflow hole. Apply thread sealant to the 1/8"NPT allen plug and tighten it on the gearbox side.
4. Apply thread sealant to the 1/4"NPT allen plug and tighten it.



Oil Change

IMPORTANT: Replace the gearbox oil every 200 hours of use.

Park the tractor on a level surface and engage the snowblower for 5 minutes or so to make the oil clear.

WARNING:

To avoid serious personal injury: Park the tractor on level ground, place the transmission in neutral, set the parking brake, disengage the drive system, place all controls in neutral, shut off the engine, remove the ignition key and make sure all movement has stopped.

1. Place a container under the gearbox to collect the oil.
2. Remove the 1/4"NPT allen plug (item 1) then remove the 1/8"NPT allen plug (item 2) under the gearbox.
3. When the gearbox is emptied from the old oil, apply thread sealant to the 1/8"NPT allen plug and screw it under the gearbox.
4. Remove the 1/8"NPT allen overflow plug (item 3) on the gearbox side. Fill in the gear box in the 1/4"NPT plug hole with AGMA 5EP extreme pressure oil, SAE 80W90 gear oil or equivalent, until some oil flow a little from the overflow hole. Apply thread sealant to the 1/8"NPT allen plug and tighten it on the gearbox side.
5. Apply thread sealant to the 1/4"NPT allen plug and tighten it.

MAINTENANCE

STORAGE

Before storing the snowblower, certain precautions should be taken to protect it from deterioration.

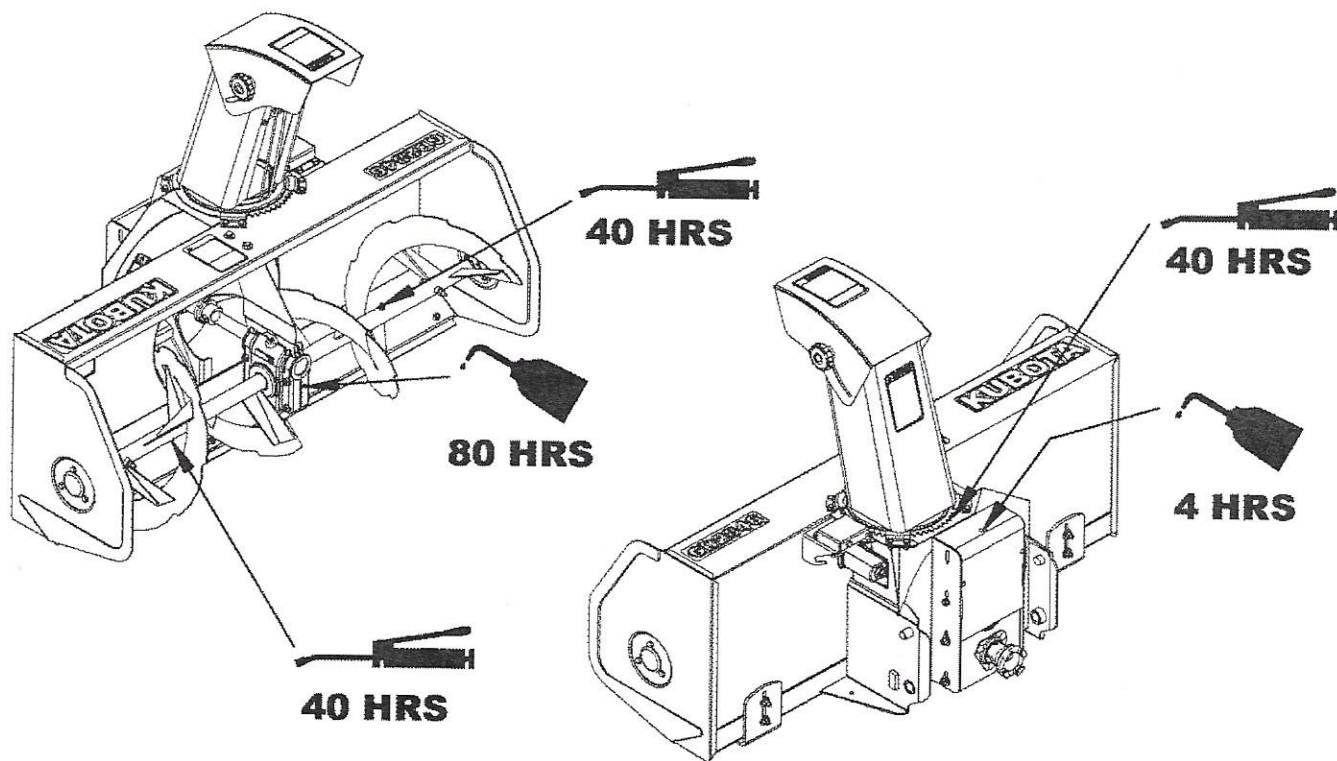
1. Clean the snowblower thoroughly.
2. Make all the necessary repairs.
3. Replace all safety signs that are damaged, lost, or otherwise become illegible. If a part to be replaced has a sign on it, obtain a new safety sign from your dealer and install it in the same place as on the removed part.
4. Repaint all parts from which paint has worn or peeled.
5. Lubricate subframe and snowblower as instructed under "**Maintenance**" section.
6. When the snowblower and subframe are dry, oil all moving parts. Apply oil liberally to all surfaces to protect against rust.
7. Store in a dry place.
8. If snowblower has hydraulic components, install protective plugs and caps on the quick couplers.

MAINTENANCE

LUBRICATION

Use a grease gun and lubricate as follows

DESCRIPTION	INTERVAL	LUBRICATION REQUIRED
Drive chain	4 hours and after each operation	Lubricate with heavy chainsaw oil
Auger	40 hours of operation and at the end of the season	Inject grease in each auger grease fitting.
Gearbox	80 hours and at the start of each season	Check the oil level. If needed, add AGMA 5EP extreme pressure oil, SAE 80W90 gear oil or equivalent
Rotation gear	40 hours of operation	Grease rotation gear.



PARTS

INTRODUCTION

All parts are illustrated in "exploded views" which show the individual parts in their normal relationship to each other. Reference numbers are used in the illustrations. These numbers correspond to those in the "Reference Number" (REF) column, and are followed by the description and quantity required.

O/L - "Obtain Locally" in the part number column indicates common hardware that is available at your local hardware supply.

All reference to right and left, forward or rearward, is from the operator seat facing the equipment while in operation.

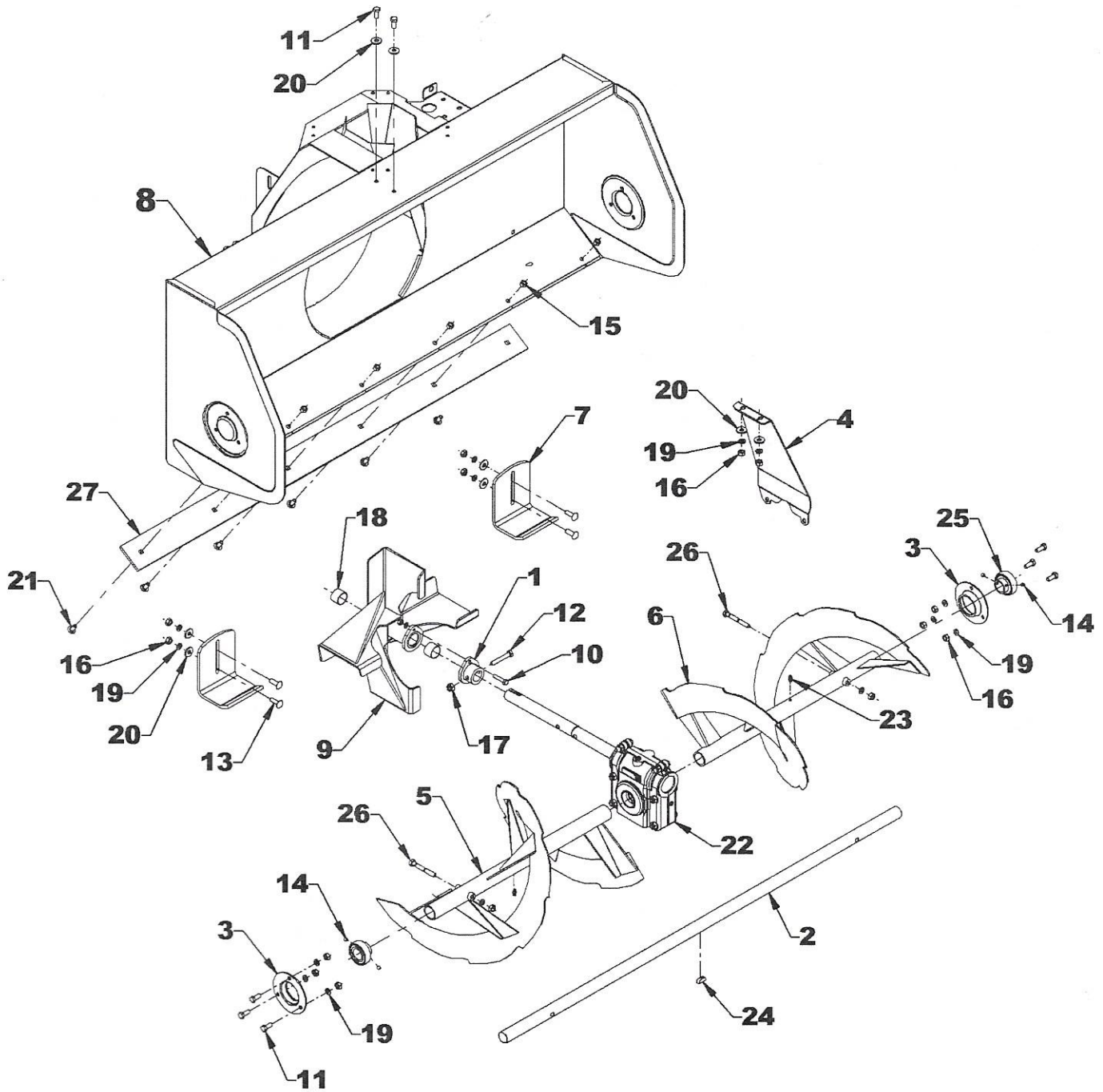
Orders must give the complete description, correct part number, the total amount required, the serial number, the method of shipment and the shipping address.

The manufacturer reserves the rights to change, modify, or eliminate from time to time, for technical or other reasons, certain or all data, specifications, or the product or products themselves, without any liability or obligation.

The parts listed here are available through your local dealer.

PARTS

SNOWBLOWER ASSEMBLY



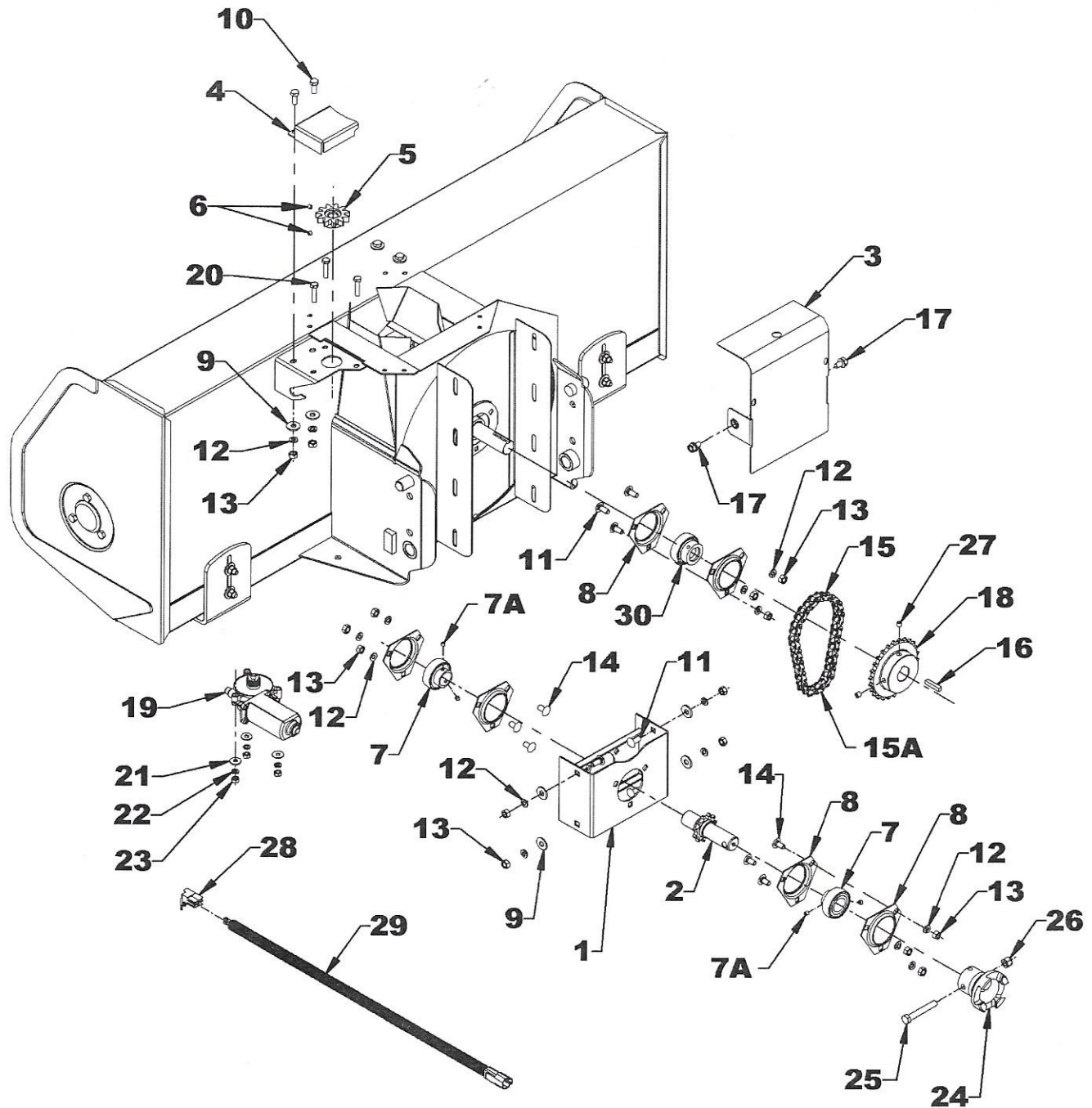
PARTS

SNOWBLOWER ASSEMBLY

REF	PART#	QTY	DESCRIPTION	CODE
1	70060-01287	1	Shear plate	655874
2	70060-01305	1	Output shaft	655976
3	70060-01409	2	Flange	657334
4	70001-00537	1	Gearbox support	662879
5	70060-01904	1	Auger - RH	666735
6	70060-01905	1	Auger - LH	666736
7	77700-02285	2	Skid shoe	669674
8	77700-04117	1	Housing	670031
9	77700-04118	1	Fan cw (incl. bushings #30)	670032
10	77700-01075	1	Shearbolt 1/4" NC x 1 1/4" gr.5 (incl. lockw. & nut)	656053
11	75599-01215	8	Hex. bolt 5/16" NC x 3/4" gr.5 PTD	0100018
12	77700-04112	1	Hex. bolt 5/16" NC x 2" gr.8 PTD	0100024
13	70001-00793	4	Carriage bolt 5/16" NC x 1" PTD	0300003
14	77700-02662	4	Allen socket setscrew 1/4" NC x 1/4" gr5 black	0500002
15	70001-00794	6	Stover nut 5/16" NC PTD	1100002
16	75599-31012	12	Hex. nut 5/16" NC PTD	0900002
17	75599-31912	1	Nylon insert lock nut 5/16" NC PTD	1000005
18	70060-02757	2	Oilite bushing	4300055
19	75599-33012	12	Lockwasher 5/16" PTD	1200003
20	75599-32012	8	Flat washer 5/16" (3/8" int) PTD	1400003
21	70060-04188	6	Carriage bolt 5/16" NC x 3/4" lg PTD	0300002
22	70060-02189	1	Worm gearbox cw	4500035
23	70060-00940	2	Grease fitting 1/4" NF	654106
24	70060-01306	1	Key 1/4" x 7/8" woodruff #807	655967
25	70060-70338	2	Bearing 1" with setscrew	665494
26	70060-01338	2	Shearbolt 5/16" NC x 2 1/4" (incl. lockwasher & nut)	657295
27	70060-01416	1	Cutting edge	657352

PARTS

DRIVE SYSTEM



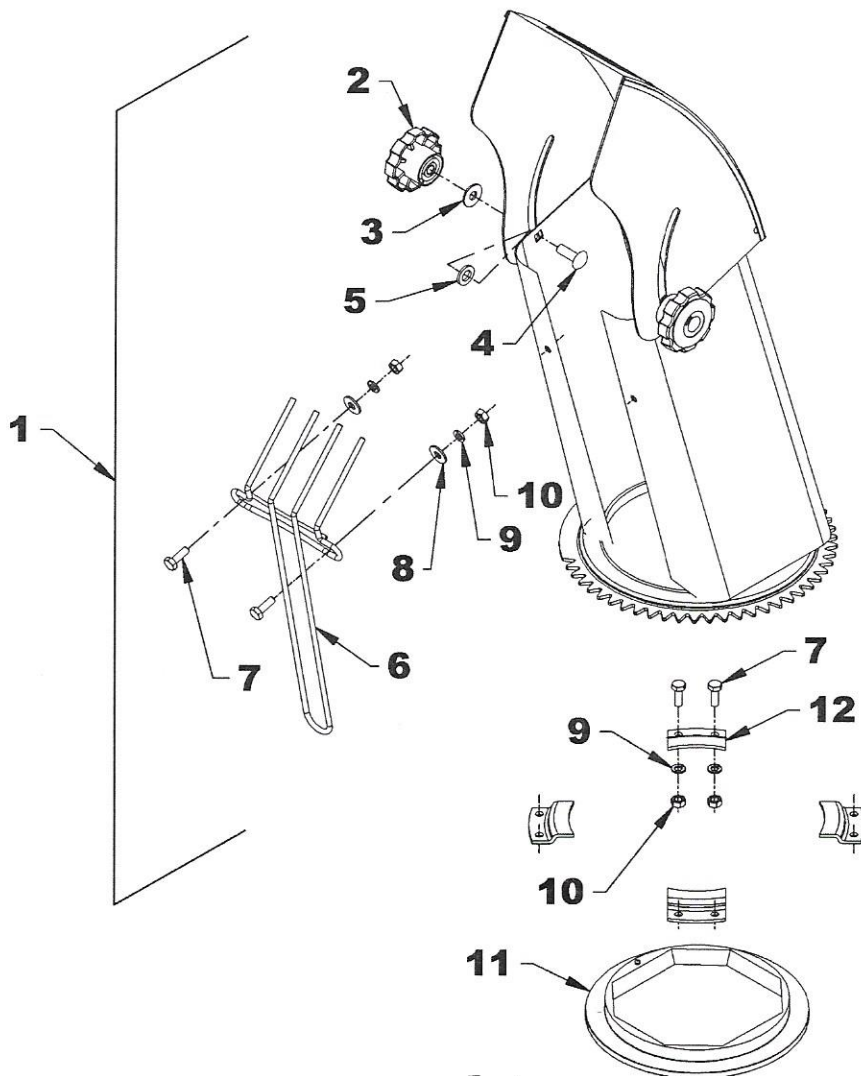
PARTS

DRIVE SYSTEM				
REF	PART#	QTY	DESCRIPTION	CODE
1	70060-01423	1	Reduction box	657355
2	77700-04116	1	Driven shaft with sprocket (11 teeth)	670030
3	77700-02284	1	Reduction box cover	669613
4	77700-04119	1	Gear shield	670034
5	77700-04120	1	Motor gear	670035
6	70060-02707	2	Allen socket setscrew 1/4" NF x 1/4"lg gr.5 black	0500003
7	70060-70338	2	Bearing 1" with setscrew	665494
7a	77700-02662	6	Allen socket setscrew 1/4" NC x 1/4"lg gr.5 black	0500002
8	70060-01426	6	Triangular flange 3 holes PTD for 1" bearing	656589
9	75599-32012	6	Flat washer 5/16" (3/8" int) PTD	1400003
10	75599-01215	3	Hex. bolt 5/16" NC x 3/4" gr.5 PTD	0100018
11	70060-04188	7	Carriage bolt 5/16" NC x 3/4" PTD	0300002
12	75599-33012	15	Lockwasher 5/16" PTD.	1200003
13	75599-31012	15	Hex. nut 5/16" NC PTD	0900002
14	70060-00787	6	Carriage bolt 5/16" NC x 5/8" PTD	0300001
15	77700-04114	1	Chain #40 x 34 links LL (incl. connecting link)	656177
15a	70060-01427	1	Connecting link	656178
16	70060-00814	1	Key 1/4" x 1/4" x 1 1/4"lg	654643
17	70060-01993	2	Serrated flange bolt 5/16" NC x 1/2" PTD	0200065
18	77700-04113	1	Sprocket 40B26 including setscrew	656161
19	70060-04080	1	Electric motor	662455
20	75599-01125	3	Hex. bolt 1/4" NC x 1 1/4" gr.5 PTD	0100005
21	75599-32011	3	Flat washer 1/4"(5/16" int.) PTD	1400002
22	75599-33011	3	Lockwasher 1/4" PTD	1200002
23	75599-31011	3	Hex. nut 1/4" NC PTD	0900001
24	77700-04129	1	Female automatic clutch shaft	4700247
25	75599-01350	1	Hex. bolt 3/8" NC x 2 1/2" gr.5 PTD	0100044
26	75599-31913	1	Nylon insert locknut 3/8" NC PTD	1000006
27	77700-00701	2	Allen socket setscrew 5/16" NC x 5/16" gr5 black	0500009
28	77700-01186	1	Female connector	662469
29	77700-03960	1	Wiring harness – snowblower motor	4000106
30	70060-70339	1	Bearing 1" with locking collar	665495

PARTS

CHUTE WITH DEFLECTOR

REF	PART#	QTY	DESCRIPTION	CODE
1	77700-04124	1	Chute ass'y cw	670051
2	70060-01419	2	Knob 5/16" NC (nut included)	657309
3	70060-03052	2	Flat washer nylon 11/32" dia. hole	658467
4	70001-00793	2	Carriage bolt 5/16" NC x 1" PTD	0300003
5	70060-03053	2	Flat washer nylon 7/16" dia. hole	658468
6	70060-01358	1	Hand guard	657308
7	75599-01115	10	Hex. Bolt 1/4" NC x 3/4", gr5 PTD	0100003
8	75599-32011	2	Flat washer 1/4" (5/16" hole), PTD	1400002
9	75599-33011	10	Lockwasher 1/4", PTD	1200002
10	75599-31011	10	Hex. nut 1/4" NC PTD	0900001
11	70060-01357	1	Chute Rotation bushing	657338
12	70060-01353	4	Retaining plate	657333

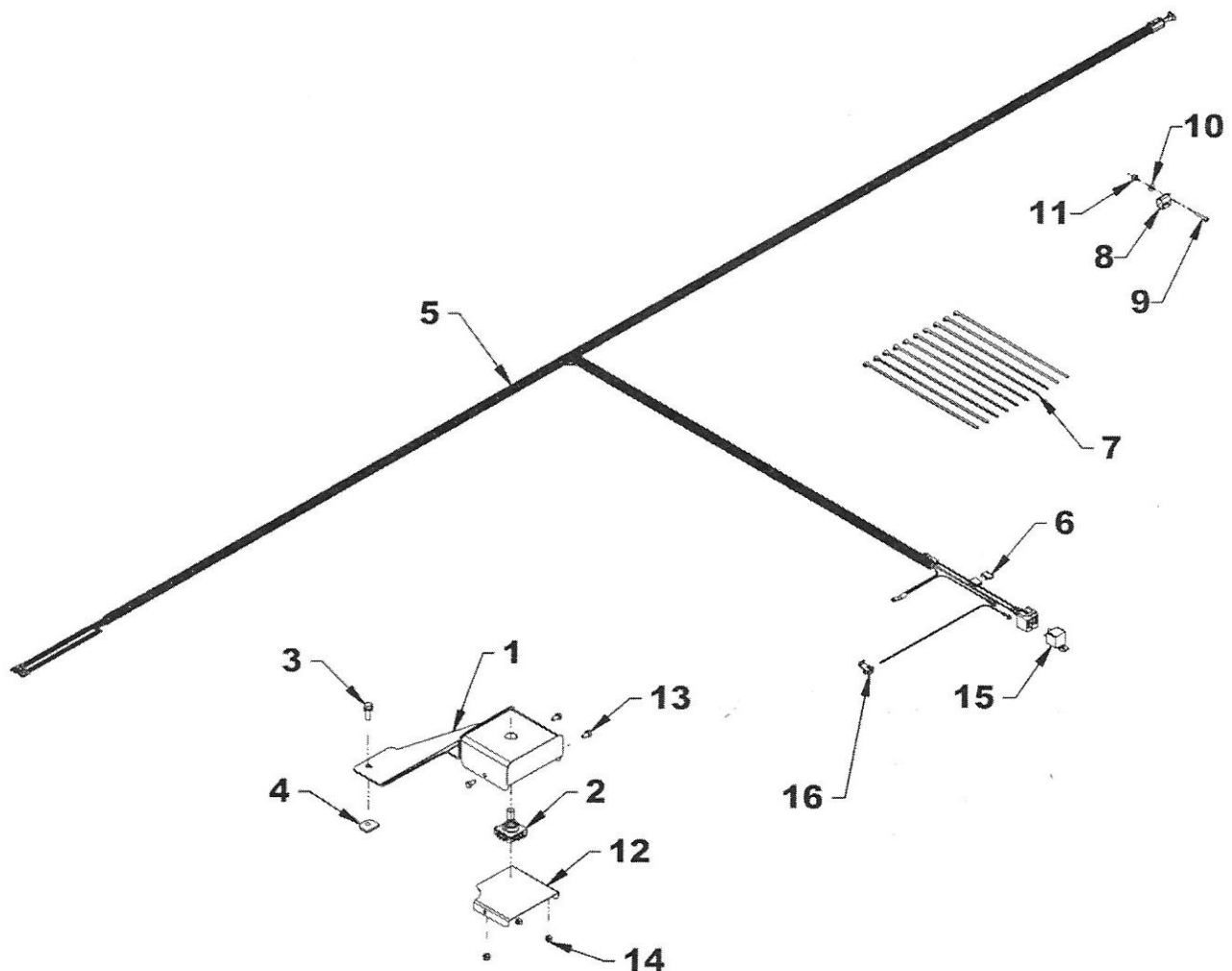


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PARTS

TRACTOR'S ELECTRIC COMPONENTS

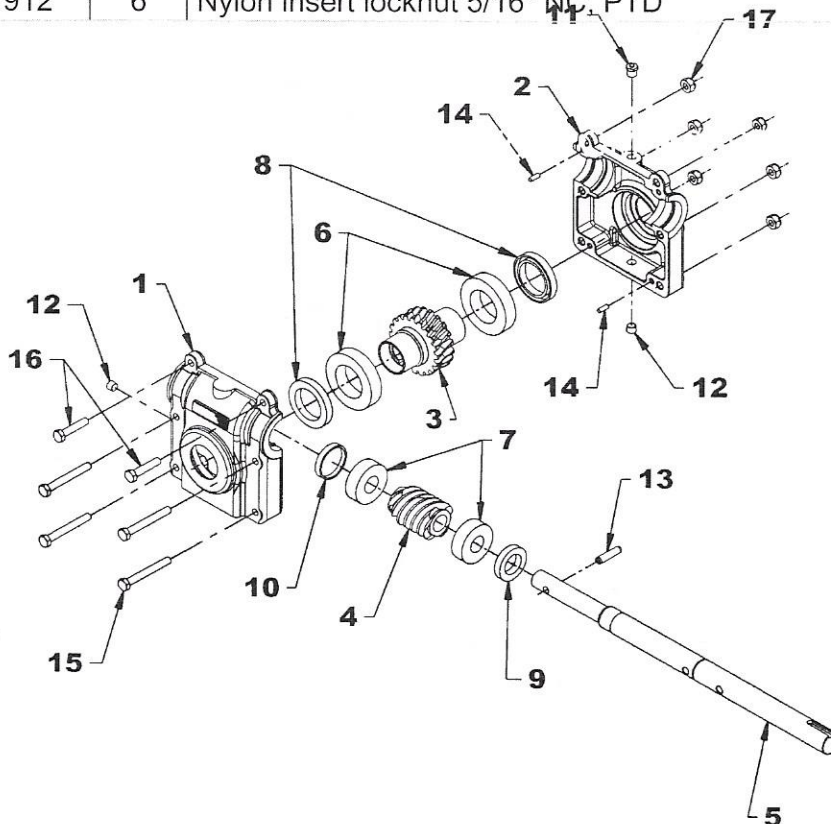
REF	PART#	QTY	DESCRIPTION	CODE
1	77700-04122	1	Electric control support	670043
2	77700-04128	1	Electric control lever	4000103
3	70060-70412	1	Serrated flange bolt 8mm x 1.25 x 25mm lg PTD	0200056
4	77700-04123	1	Spacer	670050
5	77700-03961	1	Wiring harness – power supply	4000107
6	77700-04115	1	Fuse 20 amps	663284
7	77700-00947	10	Nylon tie wrap 11" lg. X 5mm, black	2100005
8	77700-04127	1	Connector protector	4000101
9	70060-02583	1	Allen socket head cap screw 10-24 NC x 1, gr.5	0800009
10	77700-01248	1	Flat washer #12 (1/4 int) PTD	1400016
11	77700-00991	1	Nylon insert locknut 10-24 NC PTD	1000002
12	77700-03959	1	Electric control support cover	670259
13	75599-01110	3	Hex. Bolt 1/4" NC x 1/2", gr5 PTD	0100001
14	75599-31911	3	Nylon insert locknut 1/4" NC PTD	1000003
15	77700-00951	1	12V Relay 30A	4000028
16	70060-03482	1	Tap connector	656665



PARTS

WORM GEARBOX (70060-02189)

REF	PART#	QTY	DESCRIPTION	CODE
	70060-02189	1	Gear box assembly	4500035
	70060-01913	1	Casing kit (items 1 and 2)	4500021
1	-----	1	Left casing	-----
2	-----	1	Right casing	-----
	Not available	1	Worm and gear kit (items 3 and 4)	-----
3	-----	1	Gear	-----
4	-----	1	Worm	-----
5	70060-02190	1	Driving shaft	4500036
6	70060-03797	2	Bearing	661147
7	70060-01908	2	Bearing	663234
	70060-01066	1	Seal kit (items 8 and 9)	665775
8	-----	2	Seal	-----
9	-----	1	Seal	-----
10	70060-03800	1	Cap	661150
11	70060-00840	1	Breather 1/8" NPT, 5 PSI, PTD	654927
12	70060-01428	2	Plug 1/8" NPT, PTD	656090
13	70060-01909	1	Spring pin 5/16" dia. x 1 1/4" lg.	663243
14	70060-01910	2	Dowel pin 3/16" dia. x 1/2" lg.	663245
15	77700-01718	4	Hex. bolt 5/16" NC x 2 1/2" lg., PTD	0100026
16	75599-01230	2	Hex. bolt 5/16" NC x 1 1/2" lg., PTD	0100021
17	75599-31912	6	Nylon insert locknut 5/16" NC, PTD	1000005

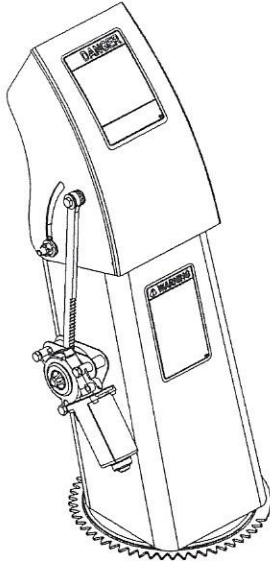


SPECIFICATION

Features and Specifications	GR2846A
Type	Clockwise
Overall width	46"
Overall height (without chute)	19"
Overall height (with chute)	44"
Overall length (without hitch)	22 1/2"
Cutting width	46"
Cutting height	17 1/2"
Frame thickness	16 Ga.
Side thickness	12 Ga.
Back housing thickness	14 Ga.
Side housing thickness	14 Ga.
Number of phase	2
Impeller drive	Chain #40
Driving sprocket	40C11
Driven sprocket	40B30
Auger drive	Worm gear box ratio 5:1
Auger diameter	12 3/4"
Auger pitch	15"
Impeller diameter	13 3/4"
Number of blades on impeller	4
Chute position	Left
Chute rotation	Manual
Adjustable deflector	Yes
Adjustable skid shoes	Yes
Replaceable cutting blade	Yes
Number of shear bolts on auger	2
Number of shear bolts on impeller	1
Hitch system	Fun connect
Approx. shipping weight	260 lbs

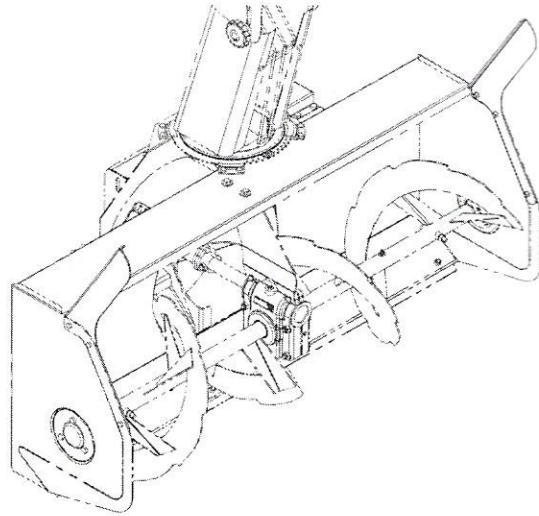
AVAILABLE OPTIONS

ELECTRIC DEFLECTOR



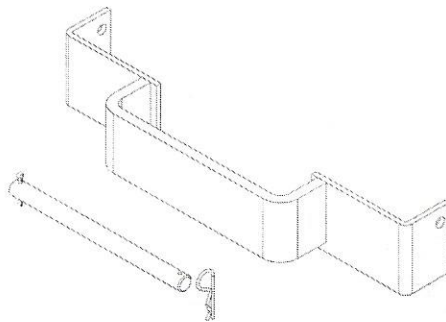
GR2706

DRIFT CUTTERS



GR2714

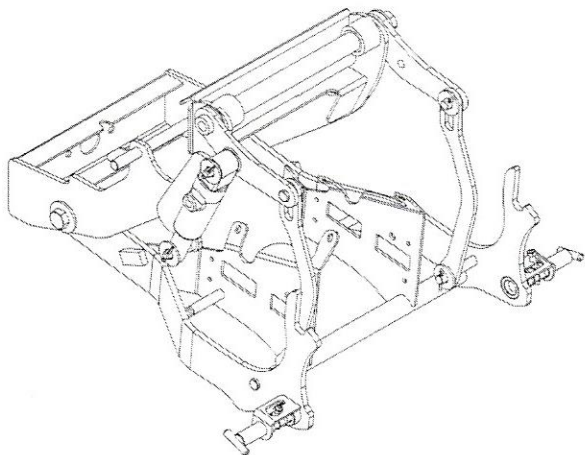
REAR COUNTERWEIGHT SUPPORT



GR2703

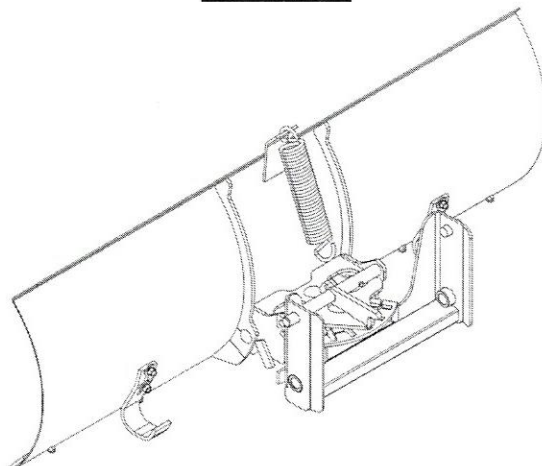
AVAILABLE EQUIPMENT

Fun/Sure Connect Hitch



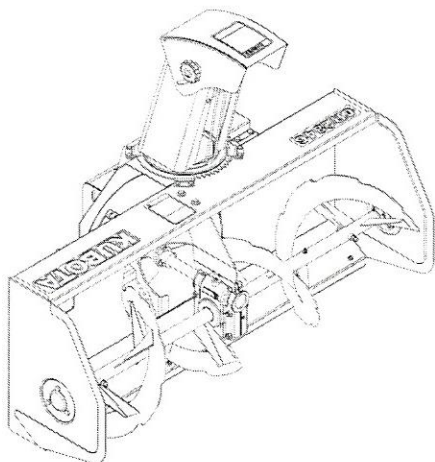
GR2700B

48" Blade



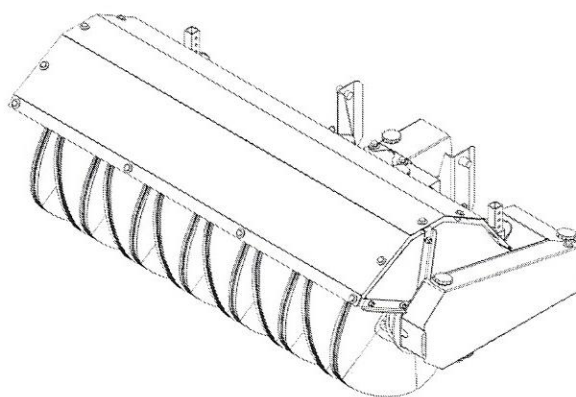
GR2848

46" Snowblower



GR2846A

47" Rotary Broom



GR2847







TORQUE SPECIFICATION TABLE

GENERAL SPECIFICATION TABLE

USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

Note: These values apply to fasteners as received from supplier dry, or when lubricated with normal engine oil. They do not apply if special graphited or moly sulphide greases or other extreme pressure lubricants are used. These values apply to dry conditions; under lubricated conditions reduce by 25% the torques in this table.

BOLT HEAD IDENTIFICATION

INCHES Bolt Size	 Grade 2		 Grade 5		 Grade 8		METRIC Bolt Size	 Class 5.8		 Class 8.8		 NP Class 10.9	
	in-tpi ¹	N-m ²	lbs-ft ³	N-m	lbs-ft	N-m		lbs-ft	mm,pitch ⁴	N-m	lbs-ft	N-m	lbs-ft
1/4" - 20NC	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7
1/4" - 28NF	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11
5/16" - 18NC	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27
5/16" - 24NF	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29
3/8" - 16NC	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53
3/8" - 24NF	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62
7/16" - 14NC	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93
7/16" - 20NF	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97
1/2" - 13NC	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105
1/2" - 20NF	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150
9/16" - 12NC	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	215	160
9/16" - 18NF	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230
5/8" - 11NC	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245
5/8" - 18NF	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300
3/4" - 10NC	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355
3/4" - 16NF	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450
7/8" - 9NC	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665
7/8" - 14NF	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780
1" - 8NC	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845
1" - 12NF	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550
1 1/8" - 7NC	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710
1 1/8" - 12NF	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700
1 1/4" - 7NC	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220
1 1/4" - 12NF	750	555	1680	1240	2730	2010							
1 3/8" - 6NC	890	655	1990	1470	3230	2380							
1 3/8" - 12NF	1010	745	2270	1670	3680	2710							
1 1/2" - 6NC	1180	870	2640	1950	4290	3160							
1 1/2" - 12NF	1330	980	2970	2190	4820	3560							

*Torque tolerance +0%, -15% of torquing values. Unless otherwise specified use torque values listed above

*NOTE: 1 lbs-ft = 12 lbs-in

- ¹ in-tpi = nominal thread diameter in inches-threads per inch
- ² N-m = newton-meters
- ³ lbs-ft= pounds-foot
- ⁴ mm x pitch = nominal thread diameter in millimeters x thread Pitch

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