

MANUFACTURING, INC.



Large Frame Snowthrowers

Initial setup

This Dealer Setup Instruction covers the following products:

L1226E Models

Mfg. No.	Description
1695326	SMIL1226E, 11.5GT Snowthrower
1695324	SNL1226E, 11.5GT Snowthrower
1695327	SMIL1226EX, 11.5GT Snowthrower (CE)
1695325	SNL1226EX, 11.5GT Snowthrower (CE)

L1428E Models

Mfg. No.	Description
1695330	SMIL1428E, 13.5GT Snowthrower
1695328	SNL1428E, 13.5GT Snowthrower
1695331	SMIL1428EX, 13.5GT Snowthrower(CE)
1695329	SNL1428EX, 13.5GT Snowthrower (CE)

L1530E Models

Mfg. No.	Description
1695334	SMIL1530E, 14.5GT Snowthrower
1695332	SNL1530E, 14.5GT Snowthrower
1695335	SMIL1530EX, 14.5GT Snowthrower (CE)
1695333	SNL1530EX, 14.5GT Snowthrower (CE)

L1632E Models

Mfg. No.	Description
1695338	SMIL1632E, 15.5GT Snowthrower
1695336	SNL1632E, 15.5GT Snowthrower
1695337	SNL1632EX, 15.5GT Snowthrower (CE)




Briggs & Stratton Yard Power Products Group
Copyright © 2007 Briggs & Stratton Corporation
Milwaukee, WI USA. All Rights Reserved

Form No. 1735189

SAFETY RULES



Read these safety rules and follow them closely. Failure to obey these rules could result in loss of control of unit, severe personal injury or death to you, or bystanders, or damage to property or equipment. The triangle  in text signifies important cautions or warnings which must be followed.

GENERAL OPERATION

- Read, understand, and follow all instructions in the manual and on the unit before starting.
- Only allow responsible adults, who are familiar with the instructions, to operate the unit (local regulations can restrict operator age).
- Clear the area of objects such as rocks, toys, wire, etc., which could be picked up and thrown.
- Be sure the area is clear of other people. Stop unit if anyone enters the area.
- Always look down and behind before and while travelling in reverse.
- Be aware of the discharge direction and do not point it at anyone. Do not point the discharge at glass enclosures, automobiles, or windows.
- Disengage all clutches (release drive and auger control levers) before starting the engine.
- Never leave a running unit unattended. Always disengage the auger and traction controls, stop engine, and remove keys.
- Stop engine before unclogging chute.
- Operate only in daylight or good artificial light.
- Do not operate the unit while under the influence of alcohol or drugs.
- Watch for traffic when operating near or crossing roadways.
- Use extra care when loading or unloading the unit into a trailer or truck.
- Keep in mind the operator is responsible for accidents occurring to other people or property.
- Data indicates that operators, age 60 years and above, are involved in a large percentage of power equipment-related injuries. These operators should evaluate their ability to

operate the unit safely enough to protect themselves and others from injury.

- All operators should seek and obtain professional and practical instruction.
- Always wear substantial footwear and appropriate winter clothing. Wear foot-ware that improves traction on slippery slopes. DO NOT wear long scarves or loose clothing that could become entangled in moving parts.
- Before using, always visually check that all hardware is present, in-tact, and secure. Replace worn or damaged parts.
- Never operate the machine with defective guards, or without safety protective devices in place.
- Stop engine before: refuelling, removing an attachment, making adjustments (unless the adjustment can be made from the operator's position).
- Follow the manufacturer's recommendation for wheel weights or counterweights.
- Adjust skid shoe height to clear gravel or crushed rock surfaces.
- Do not touch snowthrower parts which may be hot from operation. Allow such parts to cool before attempting to service the unit.

CLEARING A CLOGGED DISCHARGE CHUTE

Hand contact with the rotating impeller inside the discharge chute is the most common cause of injury associated with snowthrowers. Always use a clean out tool, not your hands, to clean out the discharge chute.

To clear the chute:

1. SHUT OFF THE ENGINE.
2. Wait 10 seconds to be sure the impeller blades have stopped rotating.
3. Always use a clean out tool, not your hands.

SLOPE OPERATION



WARNING

Never operate on slopes greater than 17.6 percent (10°) which is a rise of 3-1/2 feet (106 cm) vertically in 20 feet (607 cm) horizontally.

When operating on slopes use additional wheel weights or counterweights. See your dealer to determine which weights are available and appropriate for your unit.

Select slow ground speed before driving onto slope. Travel UP and DOWN the slope, never across the face, use caution when changing directions and DO NOT START OR STOP ON SLOPE.

Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. All slopes require extra caution. If you cannot back up the slope or if you feel uneasy on it, do not operate on it.

EMISSIONS

- Engine exhaust from this product contains chemicals known, in certain quantities, to cause cancer, birth defects, or other reproductive harm.
- Look for the relevant Emissions Durability Period and Air Index information on the engine emissions label.

Do

- See your authorized dealer for recommendations counterweights to improve stability.
- Travel up and down slopes, not across.
- Remove obstacles such as rocks, tree limbs, etc.
- Watch for holes, ruts, or bumps. Uneven terrain could overturn the unit. Snow can hide obstacles.
- Use slow speed. Tires may lose traction on slopes. Choose a low gear so that you will not have to stop or shift while on the slope.
- Keep all movement on the slopes slow and gradual. Do not make sudden changes in speed or direction.
- Always keep unit in gear especially when traveling downhill.

Do Not

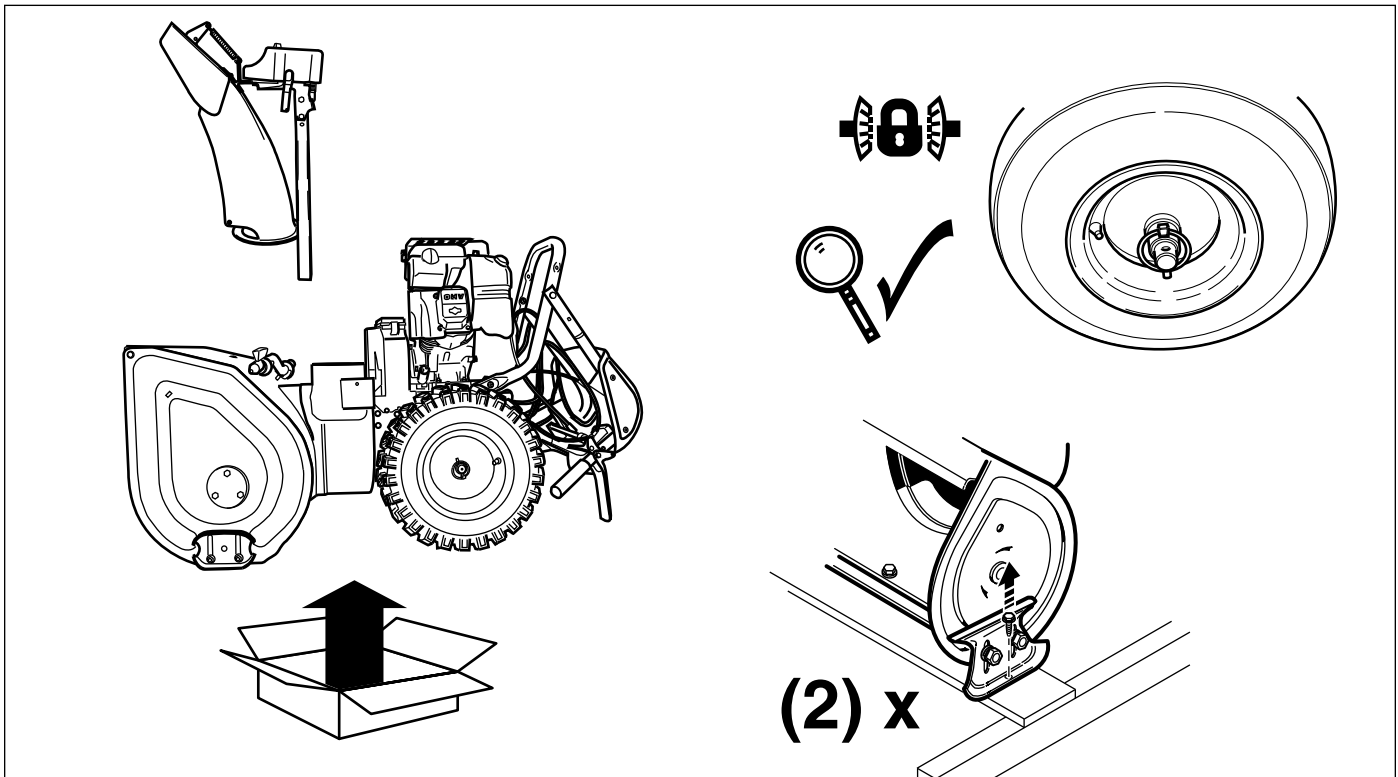
- Do not start or stop on a slope. If tires lose traction, disengage the auger and proceed slowly straight down the slope.
- Do not turn on slopes unless necessary, and then, turn slowly and gradually downhill, if possible.
- Do not operate near drop-offs, ditches, or embankments. The unit could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.
- Do not operate on wet surfaces. Reduced traction could cause sliding.
- Do not shift to neutral and coast down hills.

Table of Contents

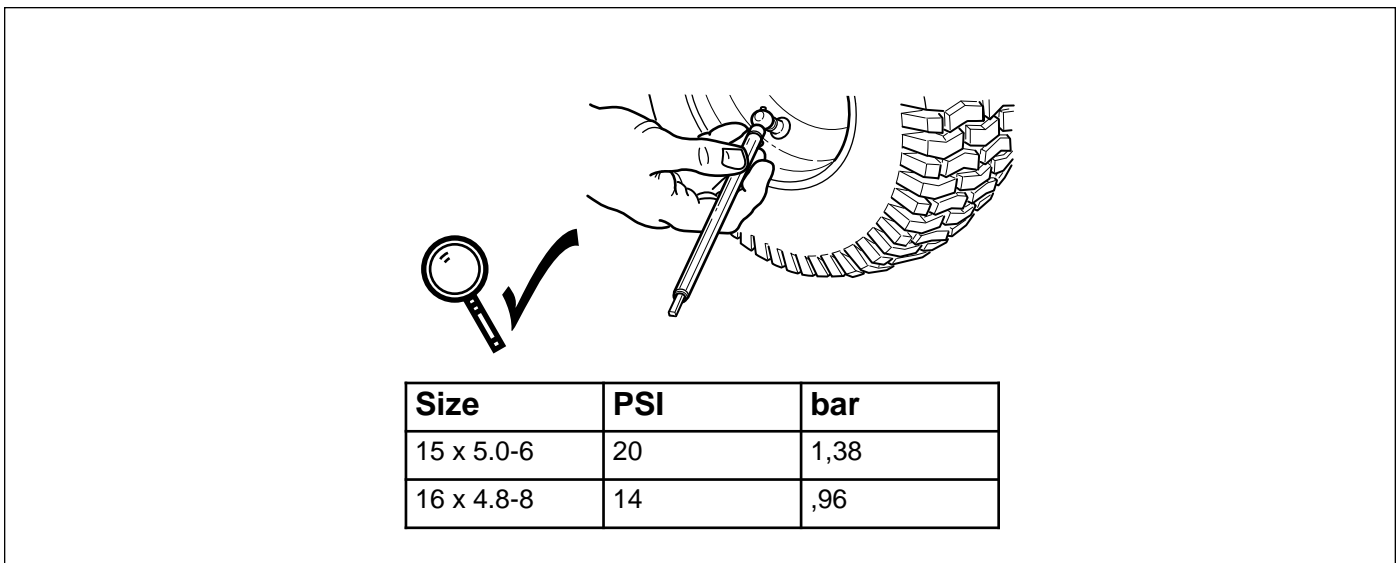
Unpacking	4
1. Uncrate	4
2. Check Tire Pressure	4
3. Install Drift Cutters	5
4. Install Handles	5
5. Install Chute	6
6. Install Chute Rotator Crank	6
7. Tube Handle Levers Cable Check	7
8. Connecting Shift Rod	7
9. Chute Rotator Brake Cable Installation	7
10. Cable Tie-Wrap Installation	9
11. Auger Shaft Lubrication	9
12. Auger Drive Lubrication	9
13. Auger Shaft Shear Pins	10
14. Deflector Hinge Lubrication	10
15. Axles and Control Lever Lubrication	10
16. Spout Rotator Lubrication	11
17. Hand Control Lubrication	11
18. Engine Lubrication	11
Perform Safety Checks	12
Check Engine Controls	12
Check Snowthrower Controls	13
Check Operations	13
Adjustments	14
Auger Drive Adjustment	14
Traction Drive Adjustment	14
Speed Drive Adjustment	15
Easy Turn™ Cable Adjustment	16
Scraper Bar & Skid Shoe Adjustment	17
Belt Adjustment	18
Belt Replacement	19
Auger Drive Belt	20
Traction Drive Belt	20



1

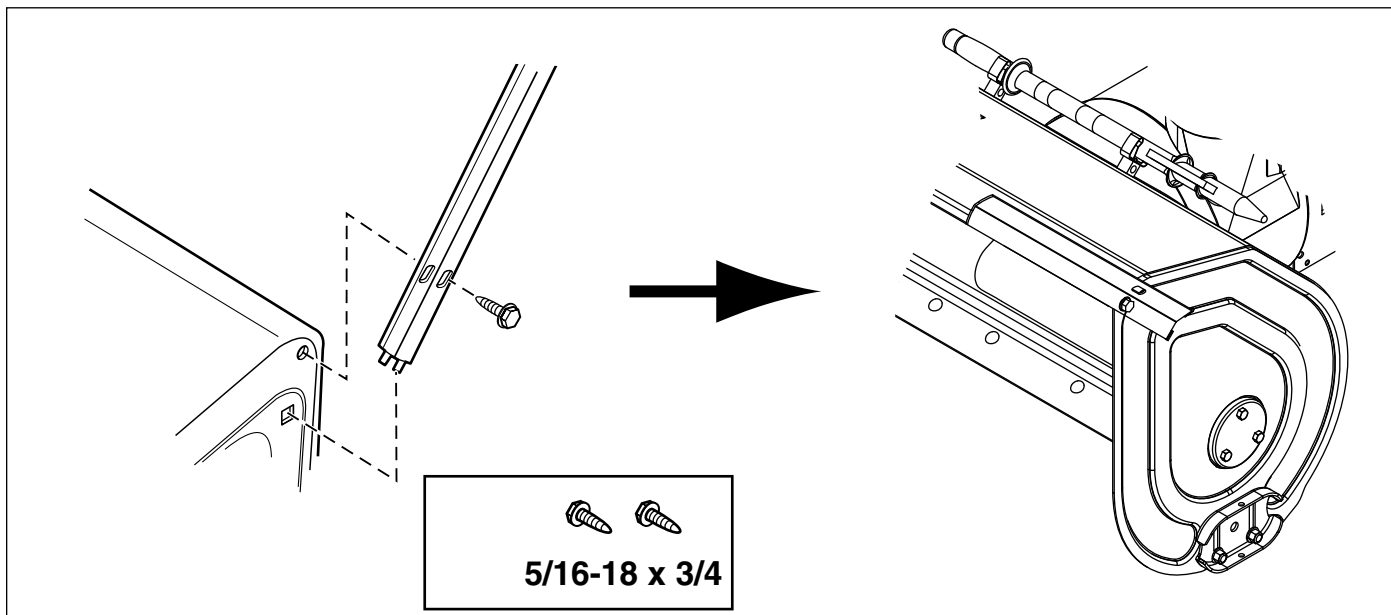


2

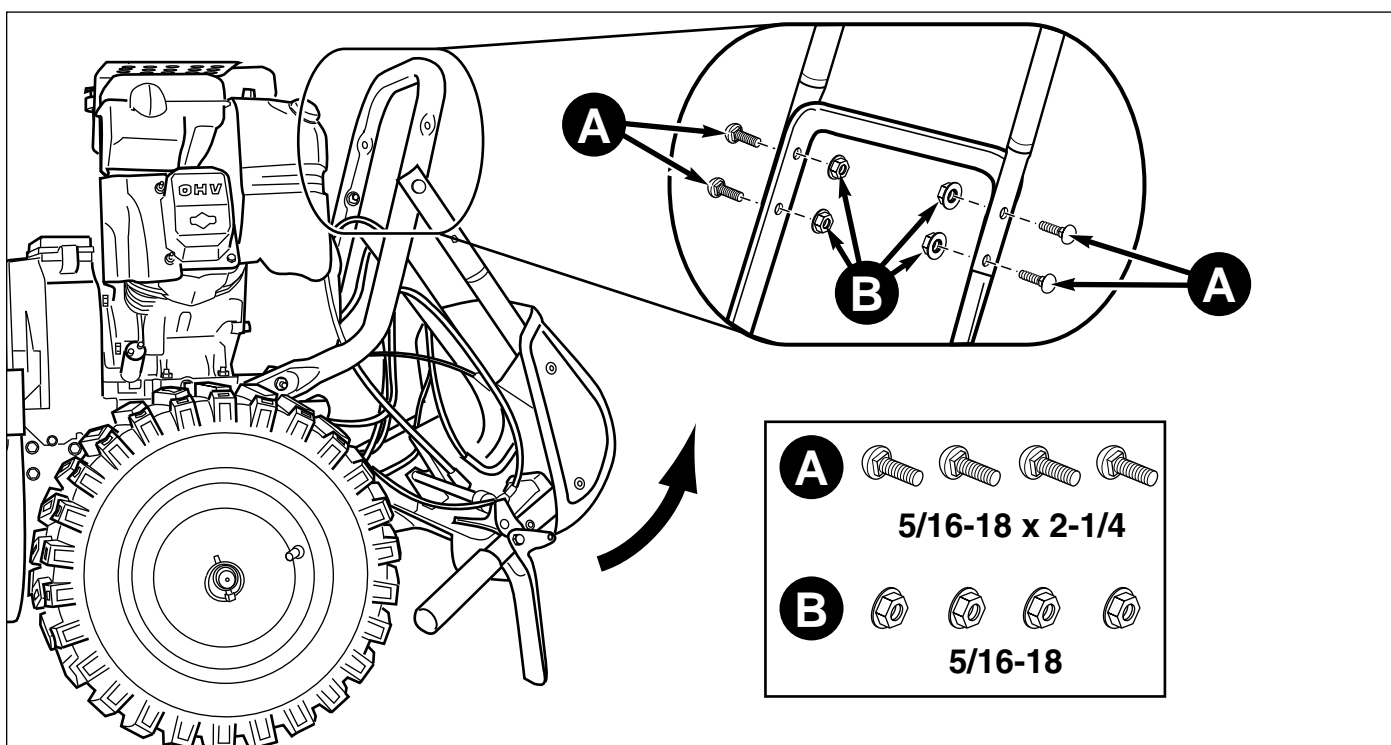




3

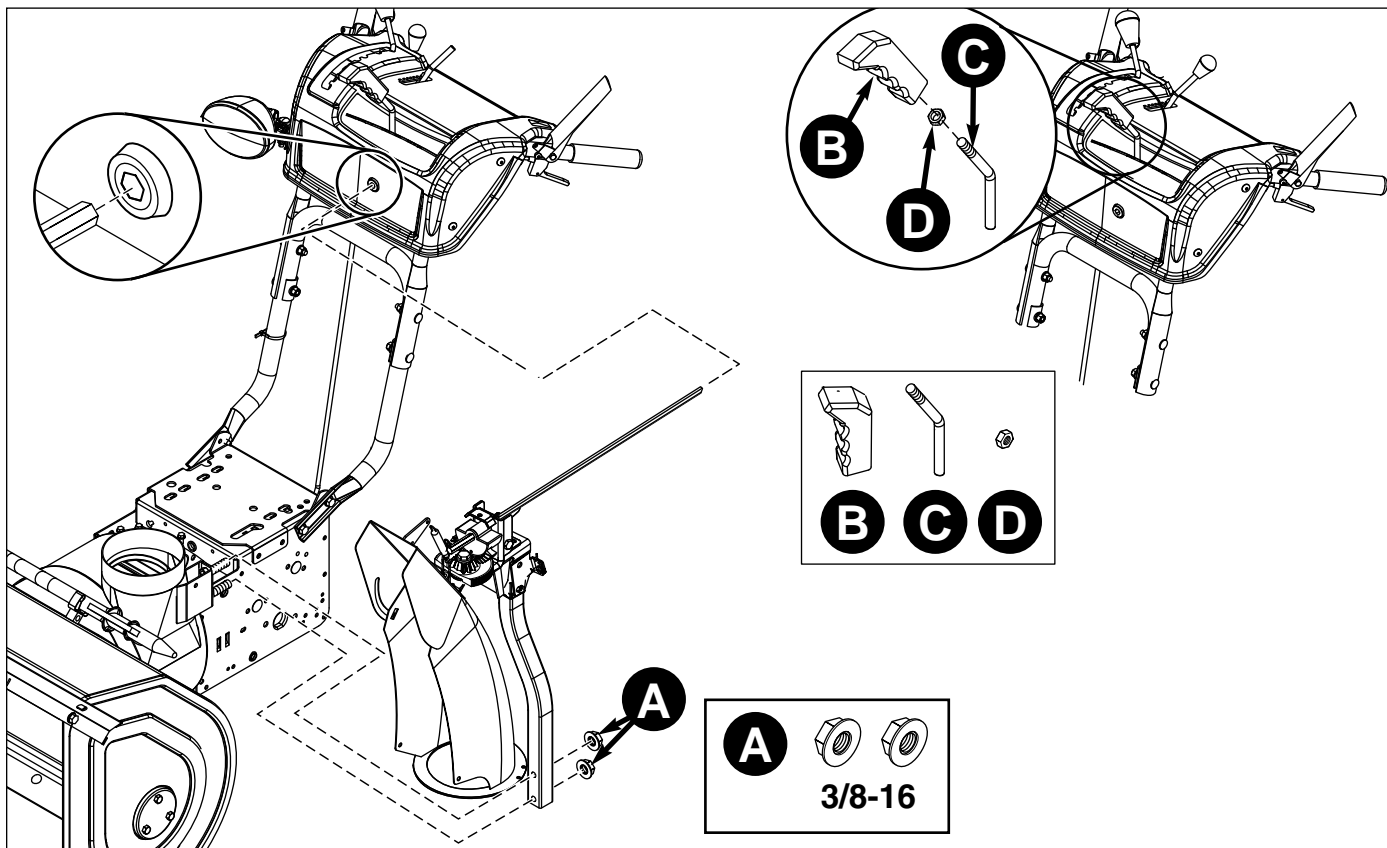


4

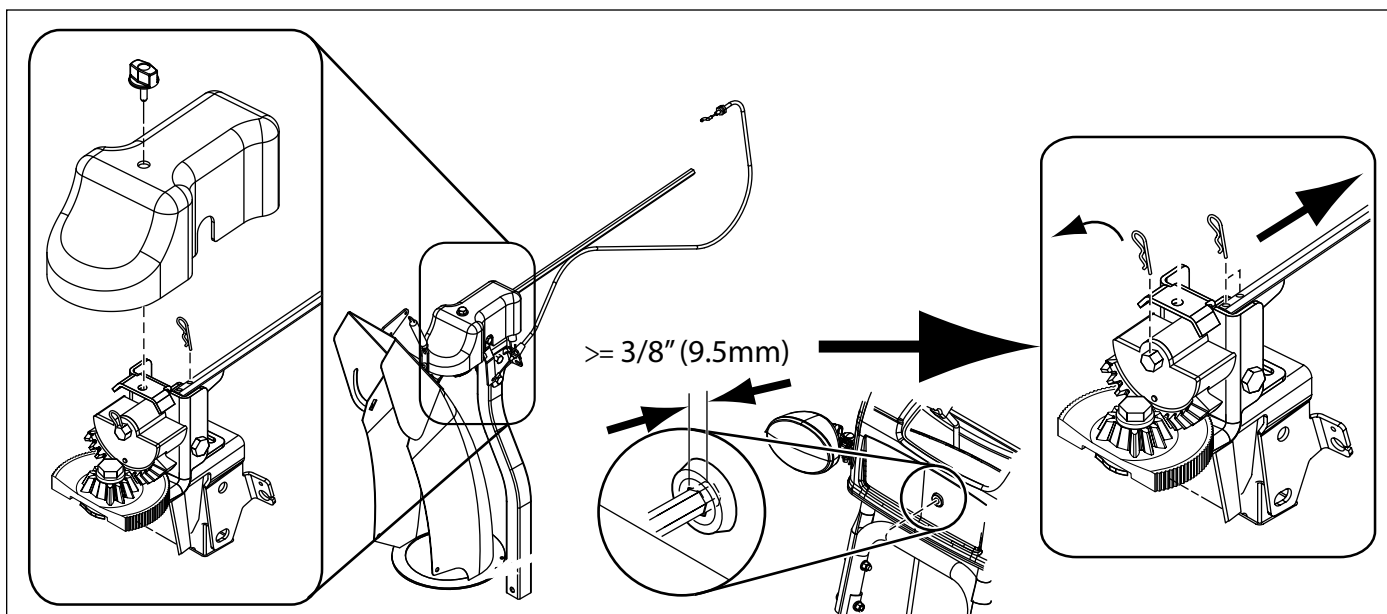




5

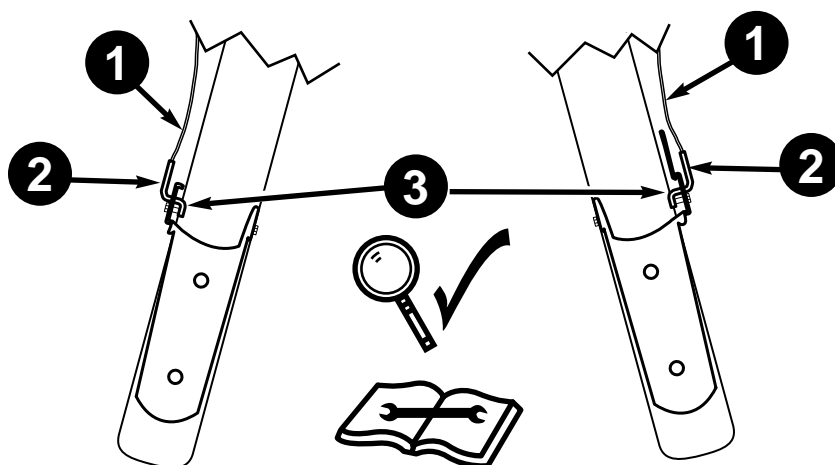


6

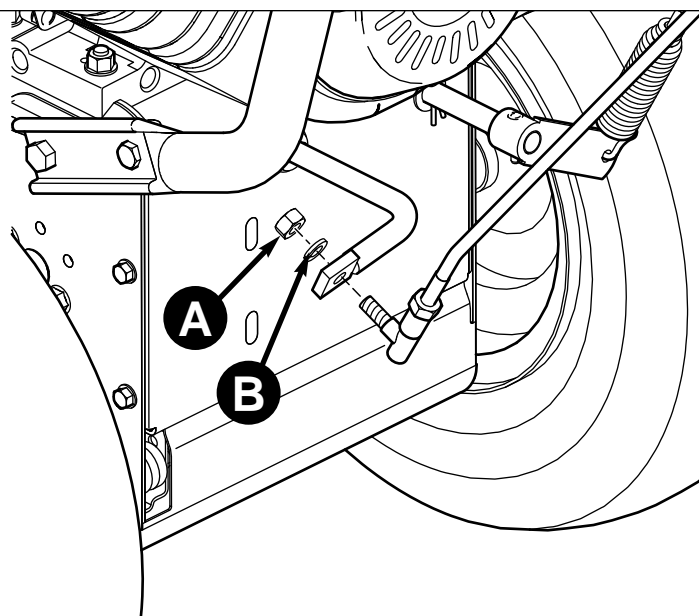






7



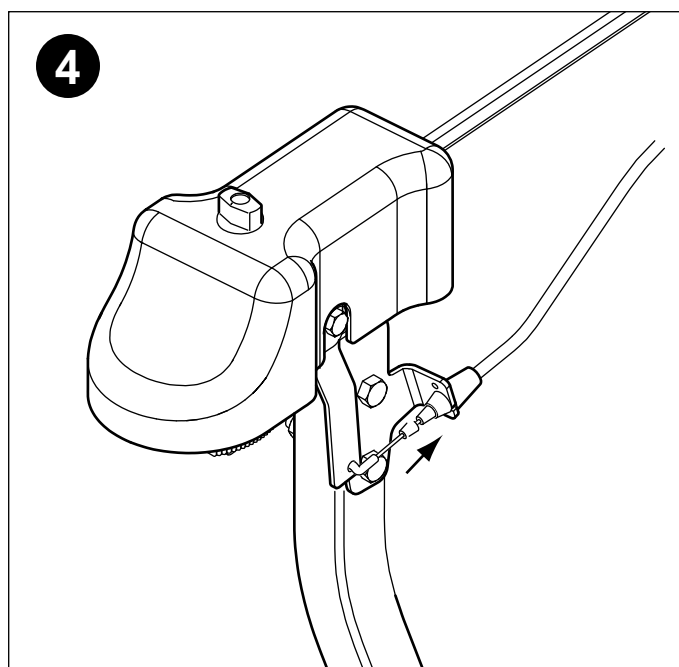
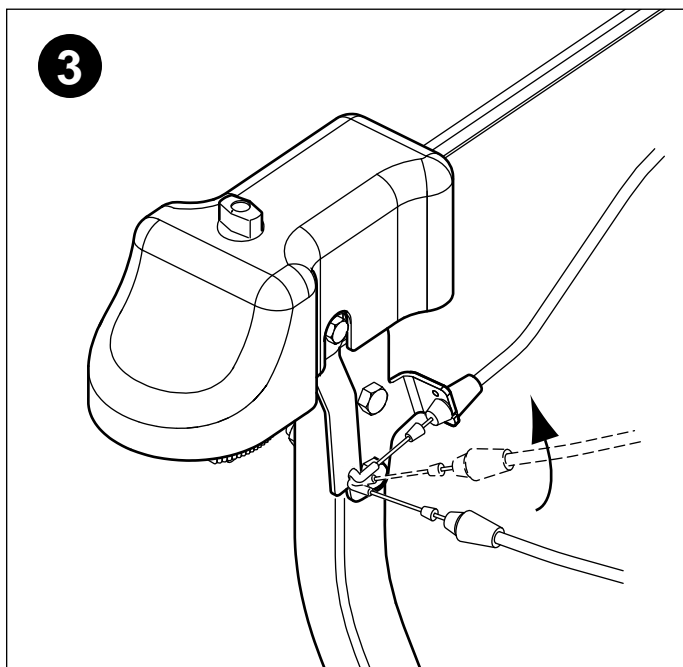
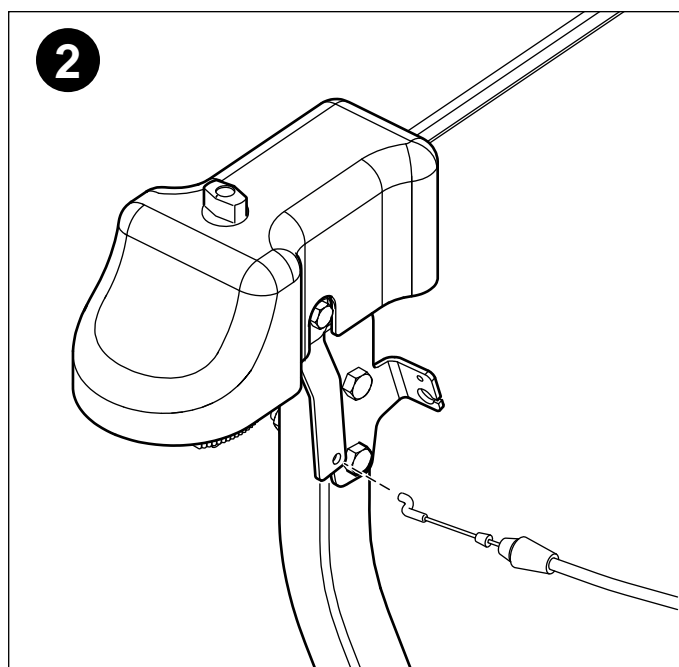
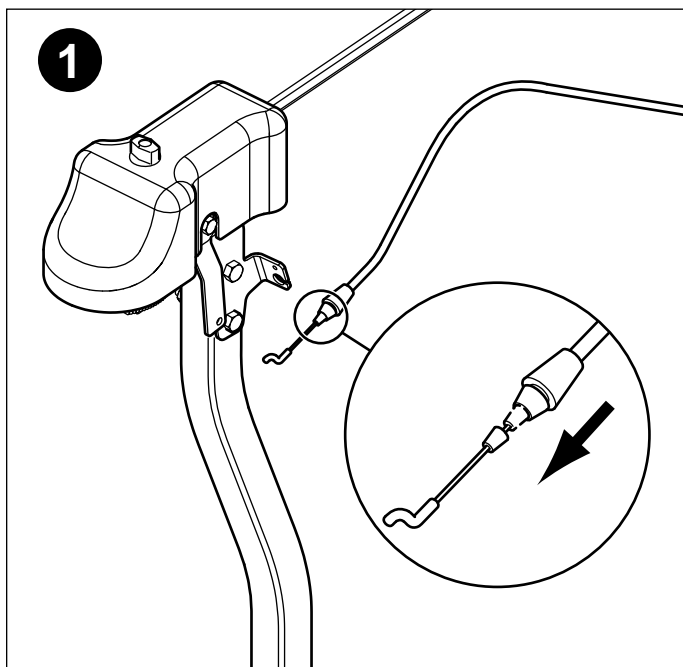
8



A		5/16
B		5/16

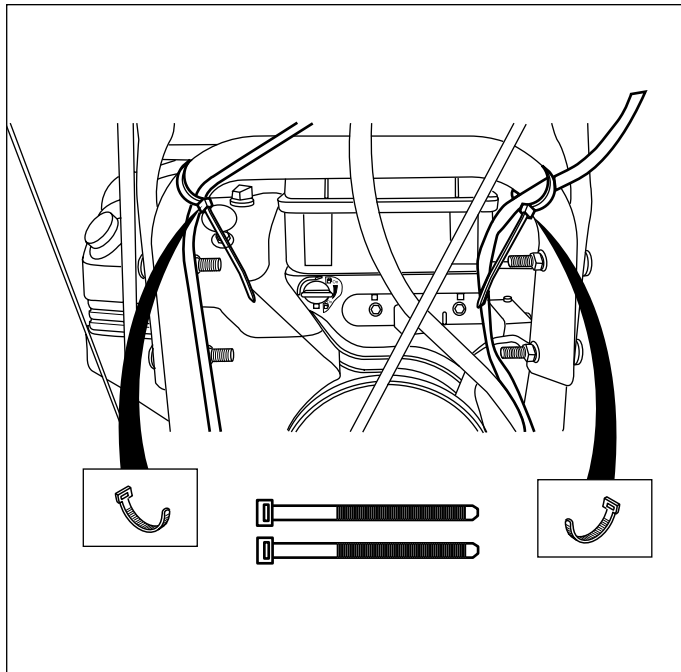
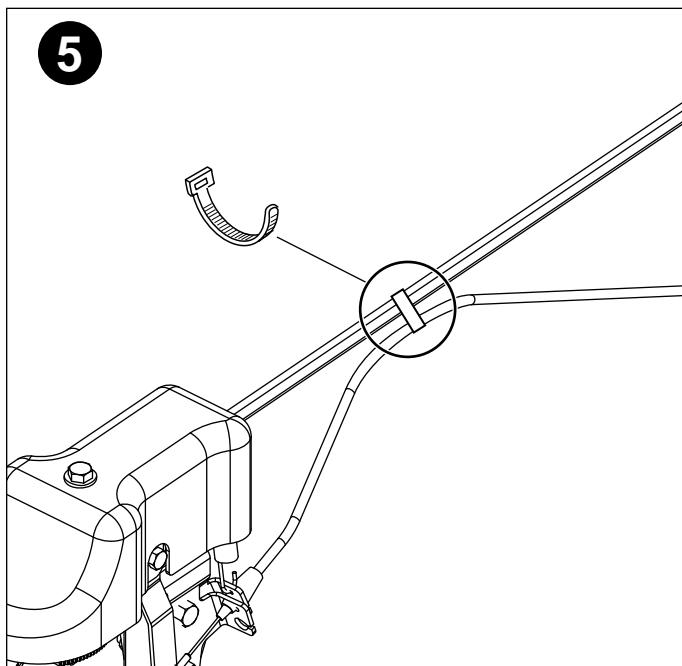


9

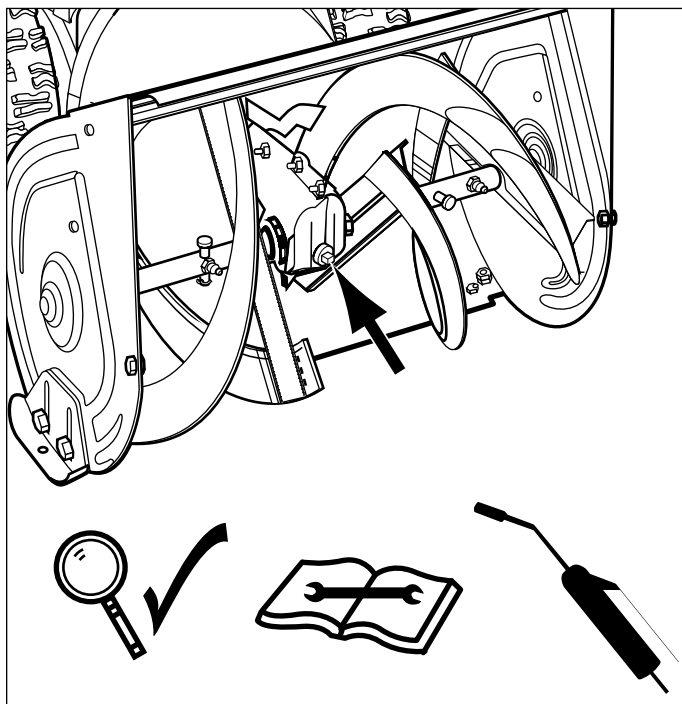




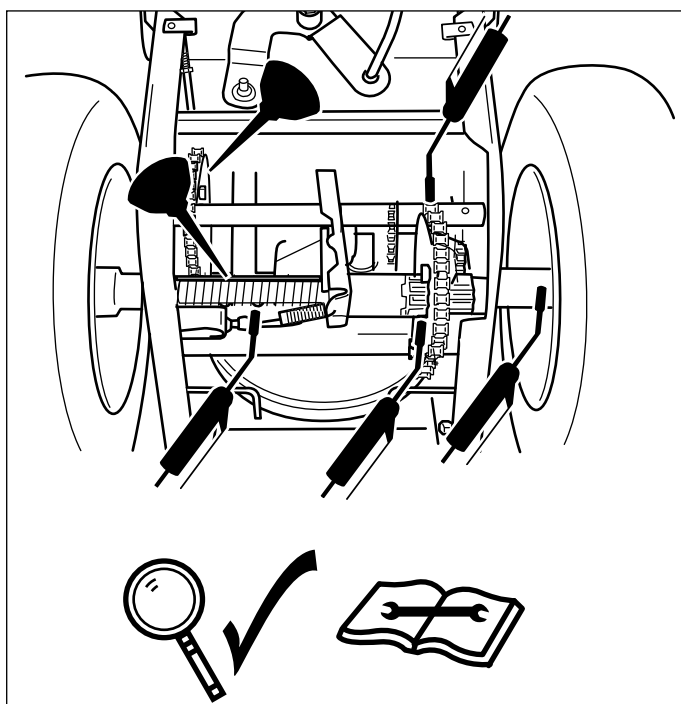
10



11

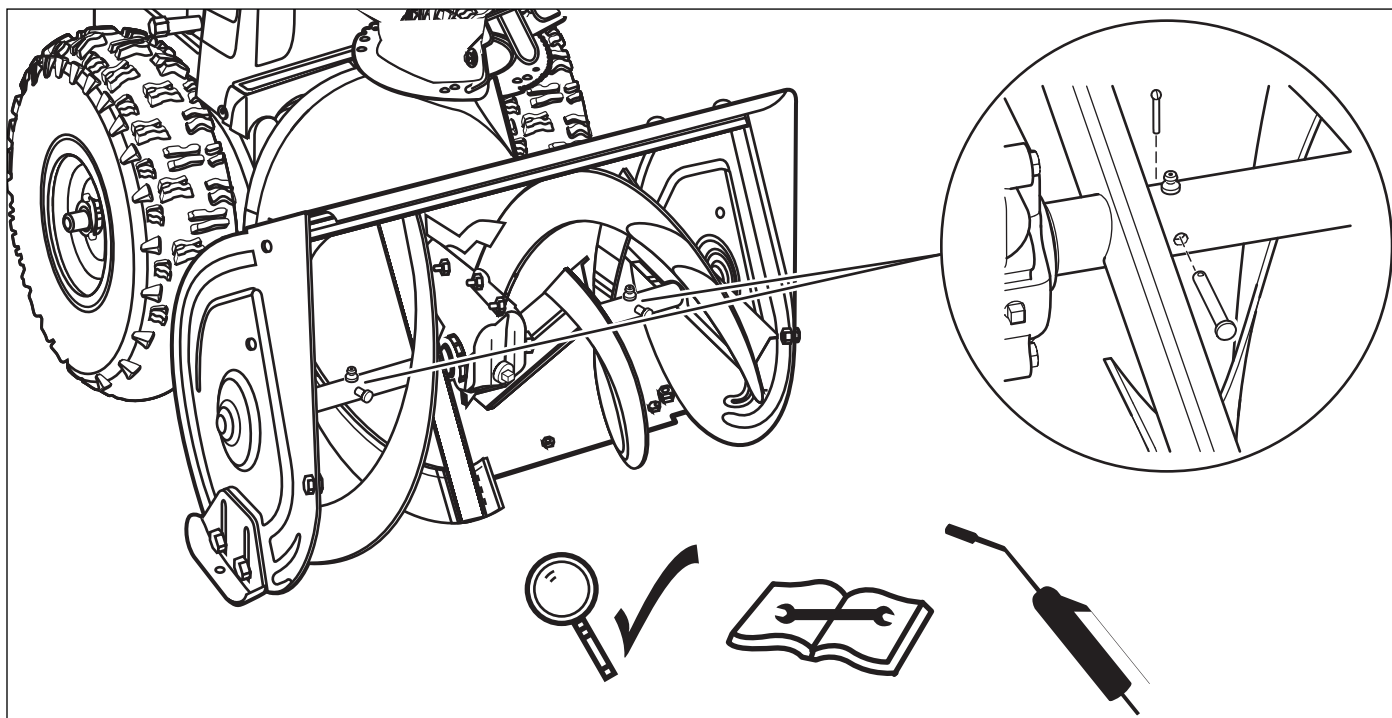


12

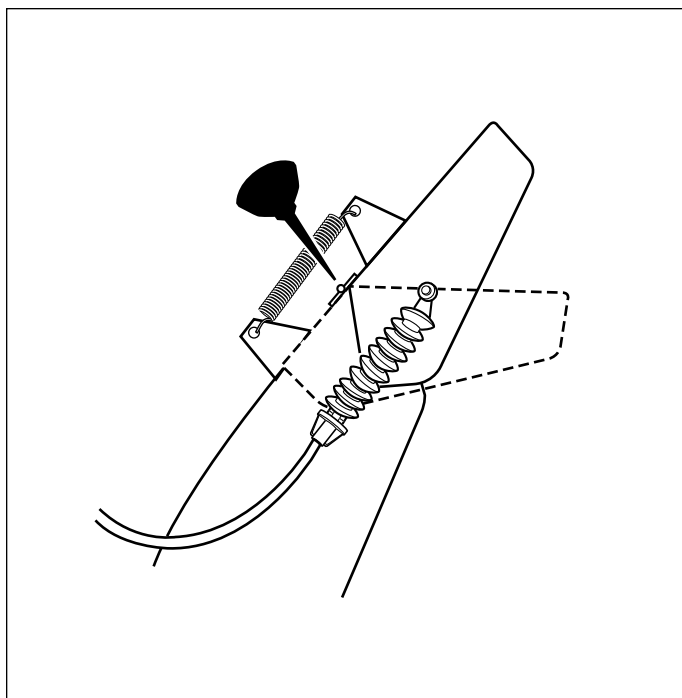




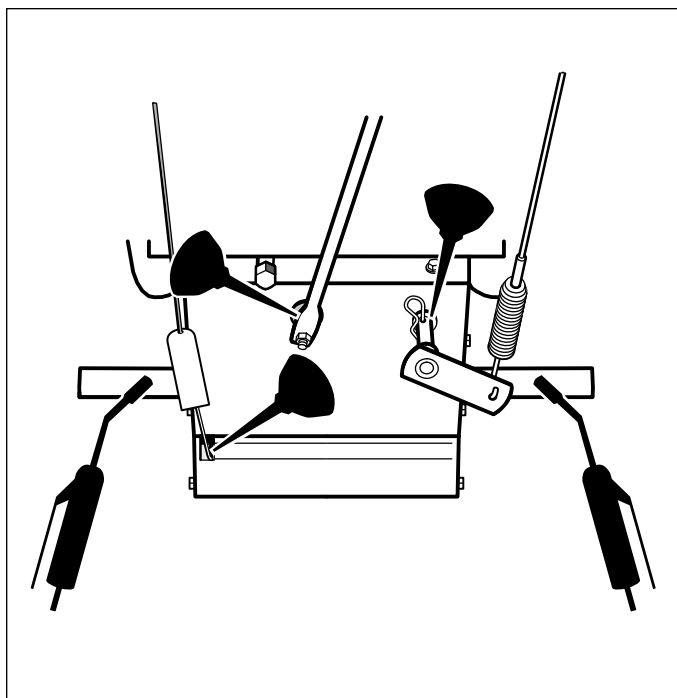
13



14

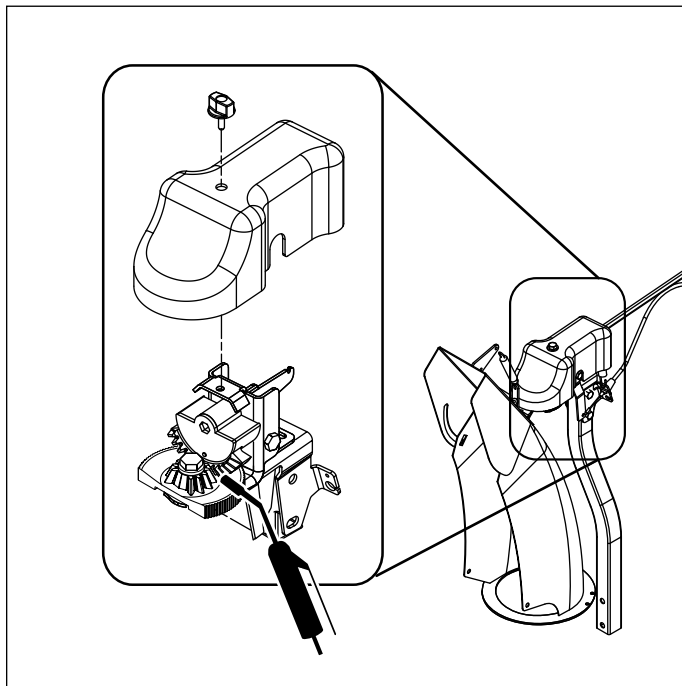


15

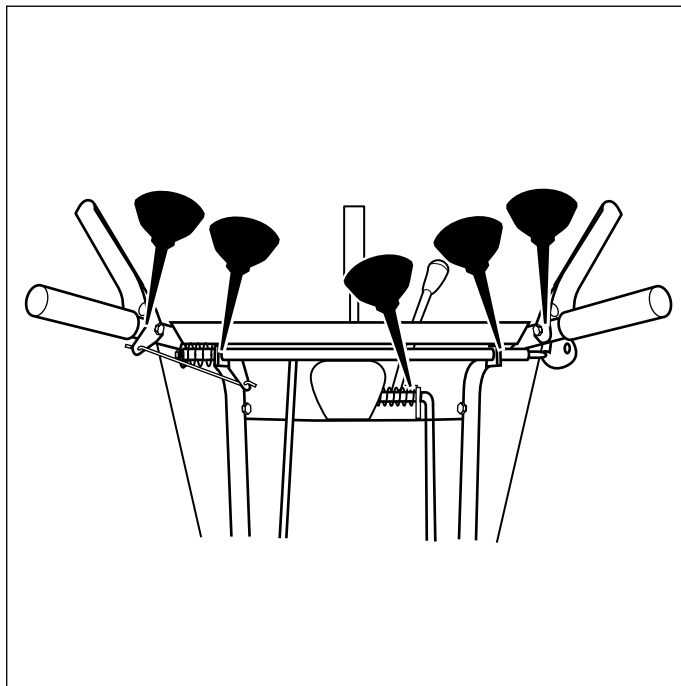




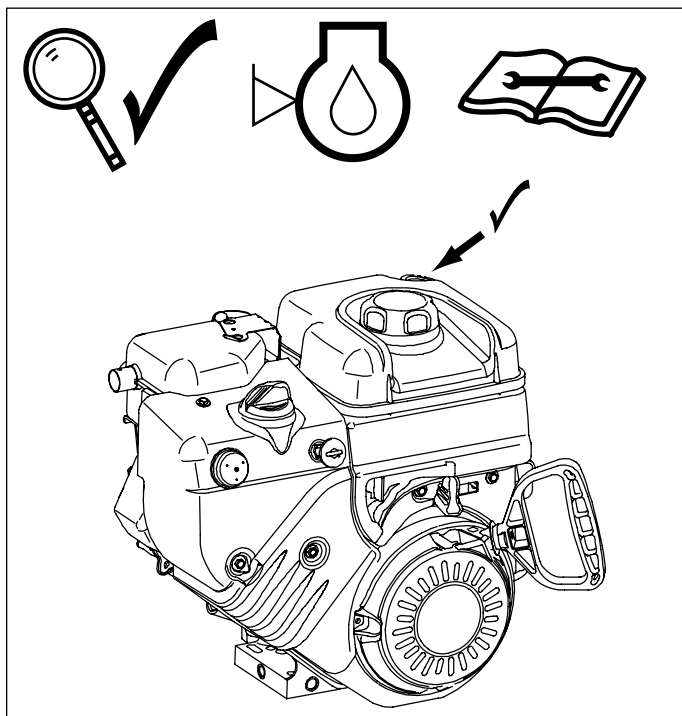
16



17



18



Setup



Perform Safety Checks

Check Engine Controls

1. Make sure all safety guards are in place and all nuts, bolts, clips, cotter pins and wires are secure.
2. Check to make sure spark plug wire is attached.
3. Check all controls for proper operation:
 - a. The engine should stop when the key is removed.
 - b. The throttle should control the engine speed and stop the engine when moved to the STOP position.
 - c. The fuel shut-off valve should stop the flow of fuel to the engine
 - d. The recoil starter or electric starter (if equipped) should crank the engine when activated.
4. Check the engine area for oil or gasoline leaks. Correct any problems in accordance with the engine manufacturers instructions.

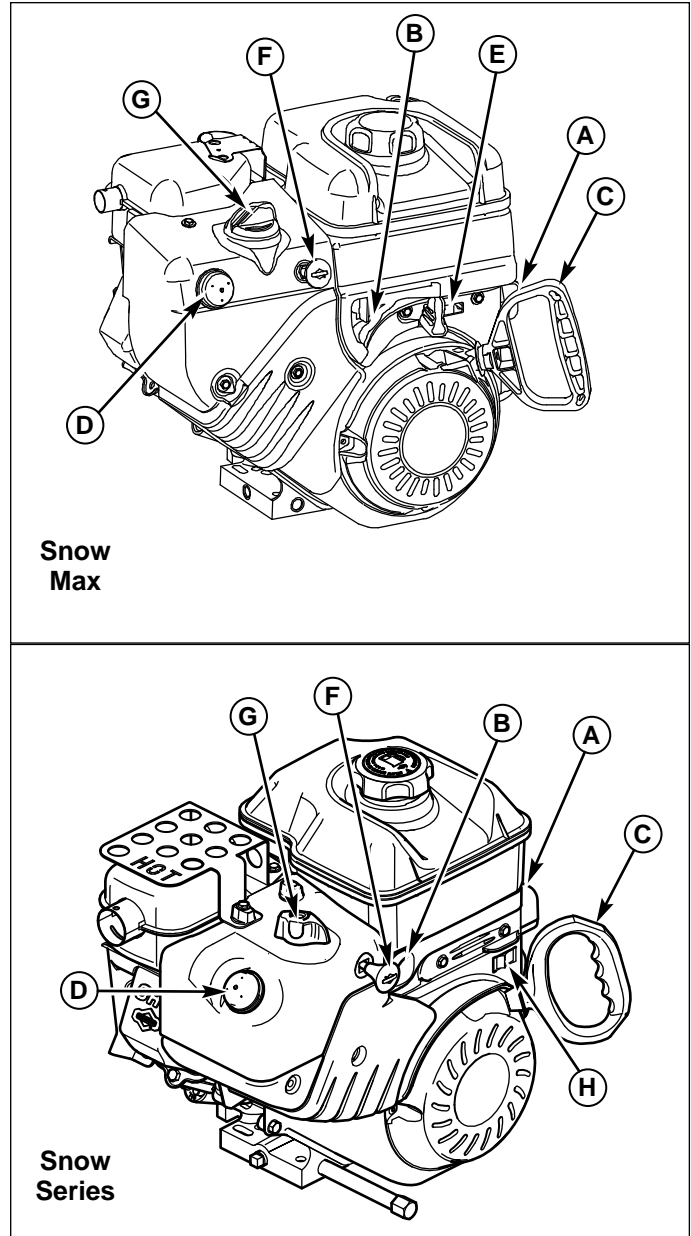


Figure 1. Engine Controls

- A. Electric Start Button**
- B. Fuel Valve (Select Models)**
- C. Starter Handle**
- D. Primer Button**
- E. Throttle Lever (Snow Max Models Only)**
- F. Engine Key**
- G. Choke Knob**
- H. Stop Switch**



Perform Safety Checks

Check Snowthrower Controls

1. Check the skid shoes to make sure they are set at the desired height. Adjust if necessary.
2. Check the traction drive control (B, Figure 2). Snowthrower motion should stop when the control is released.
3. Check the auger control (C). Auger movement should stop when the control is released.
4. Check the manual chute direction control (D) for proper operation. The discharge chute should rotate freely in both directions.
5. Check the remote deflector control (E) for proper operation. The deflector should pivot freely up and down when the chute deflector control (E) is pushed to the left and either moved forward or backward.
6. Check the speed selector (A) for smooth operation. The control must move freely into each speed position gate and remain in position when released.

If controls do not function properly, perform the appropriate adjustment as shown in the Adjustment Section.

7. The auger is secured to the shaft by shear pins, which will break if the auger strikes an object. Extra shear pins are provided. Keep these pins in the compartment on the belt cover. Lubricate the auger shaft.

Check Operations

1. With engine at full speed, engage the auger control and release. Do this ten (10) times. **Auger should come to a complete stop within five seconds each time.** If not, perform Auger Adjustments.
3. Engage traction control and release. Do this ten times. Unit should come to a complete stop each time. If it does not, perform the Traction Drive Adjustments.
4. Remove the engine key. The engine must stop.
5. Move the throttle to STOP or push the stop switch. The engine must stop.

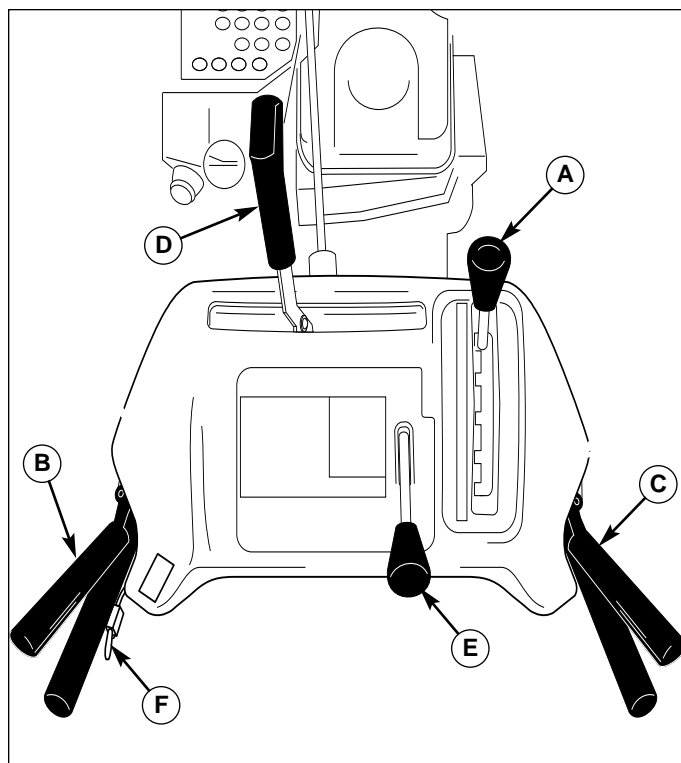


Figure 2. Controls (from operator's position)

- A. Speed Selector**
- B. Traction Control & Free-Hand™ Control**
- C. Auger Engage Control**
- D. Chute Rotator Control**
- E. Remote Deflector Control**
- F. Easy Turn Lever**



Auger Drive Adjustment

WARNING

Do not over-tighten, as this may lift the lever and cause auger drive to be engaged without depressing the Auger Control.

1. Check that the auger cable (A, Figure 3) is on top of cable button (B) as shown in Figure 3.
2. With the drive lever released, the hook (B, Figure 4) should barely touch the lever (C) without raising it. There can be a maximum 1/32" clearance as shown.
3. To adjust, loosen nut (D) by holding the adjusting flats (A) and turning nut (D). Turn adjustment flats and hold screw. The adjustment screw (E) is a phillips screw and the head can be held or turned by inserting a screwdriver through the spring (F).
4. Hold adjusting flats (A) and tighten nut (D).
5. Start unit and check auger. Auger must not be engaged unless auger control is depressed.
6. With engine running, fully depress auger control, the auger should engage and run normally.
7. Release auger control. **Auger must stop within 5 seconds.**
8. If auger does not operate properly, stop engine and recheck drive linkage adjustments.
9. If auger linkage is properly adjusted, auger drive belt tension may require adjustment. See adjusting the auger belt in this section of the manual

TRACTION DRIVE ADJUSTMENT

Initial Adjustment

WARNING

Do not over-tighten, as this may cause traction drive to engage without depressing the traction drive control (arm must remain in down position).

Verify that the cables are not over-tightened: With speed selector in position 1 and traction drive control fully released, push snowthrower forward. The unit should move forward freely.

If unit does not move forward freely, the cable has been over-tightened. To remedy, loosen tension on clutch cable slightly, and recheck.

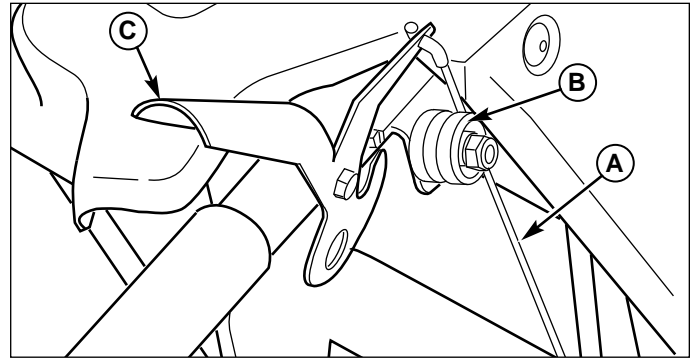


Figure 3. Auger Cable Button

- A. Auger Drive Cable
- B. Auger Cable Button
- C. Lever

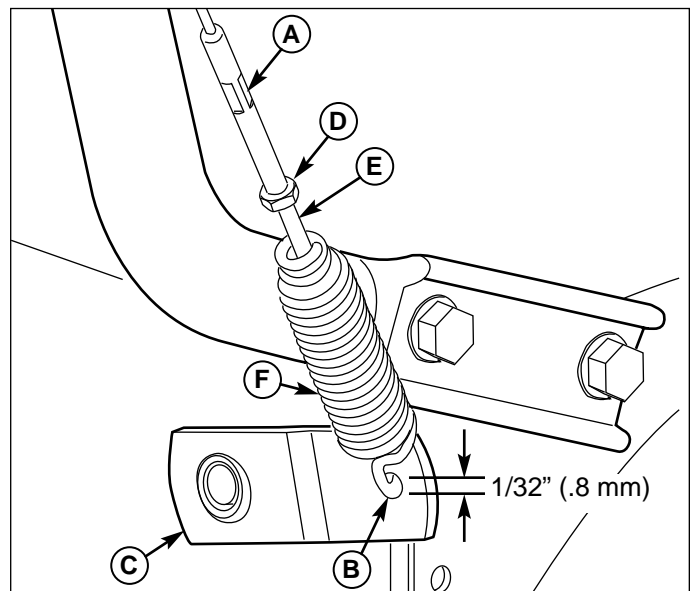


Figure 4. Auger Drive Adjustment

- A. Adjusting Flats
- B. Spring Hook
- C. Lever
- D. Adjustment Nut
- E. Adjustment Screw
- F. Spring

1. With the drive lever released there should be slack in the cable when moved slightly from side to side.
2. To adjust tension on the cable slide the cable boot (A, Figure 5) off the cable adjustment bracket (D).
3. Move the "Z" hook (C) from the cable adjustment bracket (D) to a different adjustment hole. The cable should have slack. The cable should have no tension or load.

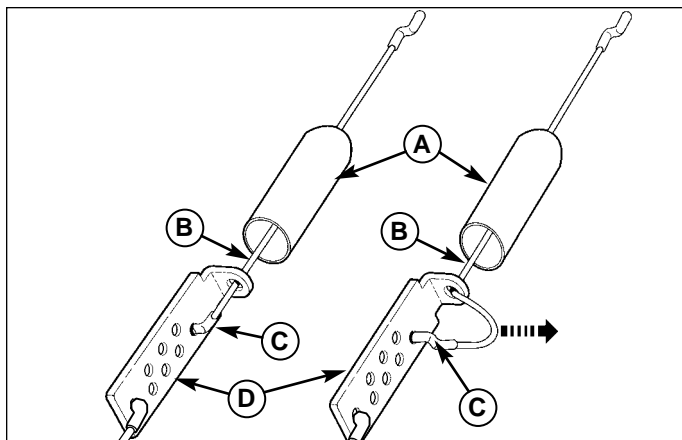


Figure 5. Traction Drive Cable Adjustment

- A. Cable Boot
- B. Traction Drive Cable
- C. "Z" Hook
- D. Cable Adjustment Bracket

Note: If the cable is too slack the unit will not drive. If the cable is too tight the drive will be engaged without pushing the handle down.

4. Slide the cable boot (A) over the cable adjustment bracket.

Run-In Adjustment

ALL MODELS

1. After 5 hours of use, check for proper adjustment. Readjust clutch cable if necessary by increasing tension on cable. A small amount of arm movement is permissible if unit passes operating checks described in the Warning above.

SPEED DRIVE ADJUSTMENT

WARNING

Gasoline is highly flammable and must be handled with care. Drain gasoline outdoors. Never drain the tank when the engine is still hot from recent operation. Do not allow open flame, smoking or matches in the area. Avoid over-filling and wipe up any spills.

1. Remove the gas from the gas tank.
2. Disconnect the spark plug wire.
3. Stand snowthrower on the front of the auger housing (C, Figure 6).
4. Remove the capscrews (A) on each side of the bottom panel (B).
5. Remove the bottom panel (B).
6. Position the shift speed lever in the lowest forward speed.

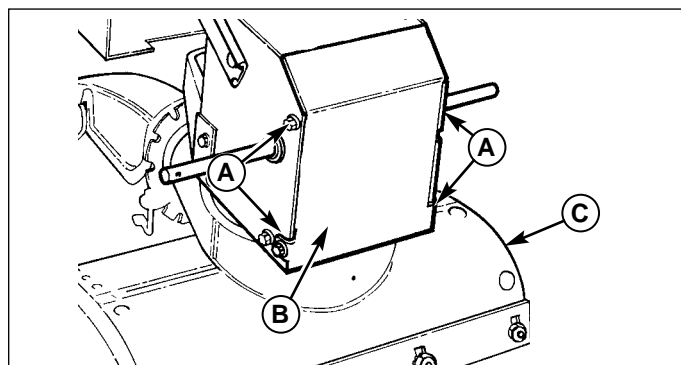


Figure 6. Bottom Cover

- A. Capscrews
- B. Bottom Panel
- C. Auger Housing

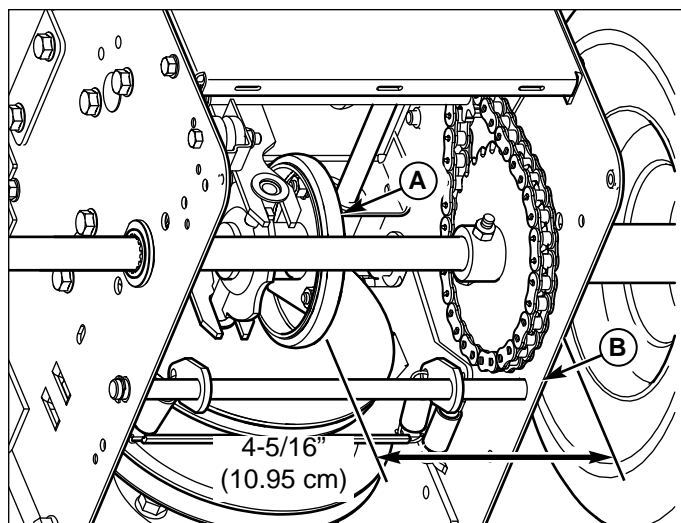


Figure 7. Friction Disc Measurement

- A. Friction Disk
- B. Frame

7. Note the position of the friction wheel (A, Figure 7). The correct distance from the right side of the friction wheel to the outside of the frame is 4-5/16" (10.95 cm). If the friction wheel is not in the correct position, adjust as follows.

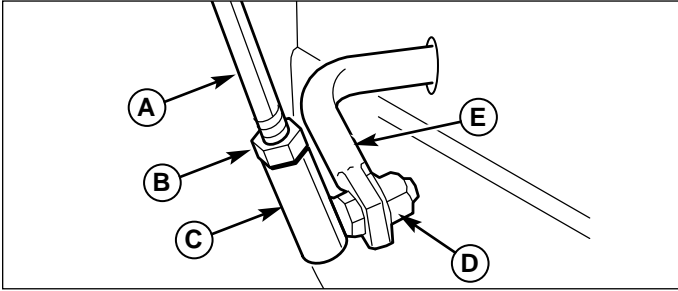


Figure 8. Speed Selector Linkage

- A. Speed Selector Rod**
- B. Jam Nut**
- C. Ball Joint**
- D. Locknut**
- E. Shift Rod**

8. Loosen the jam nut (B, Figure 8).
9. Remove locknut (D).
10. Move the friction wheel (A, Figure 7) to the correct distance 4-5/16" (10.95 cm).
11. Turn the ball joint (C, Figure 8) until it is aligned with the mounting hole in the shifter rod (E). When aligned, attach the ball joint (C) to the shifter rod (E) and tighten the jam nut (B) and locknut (D).
12. Check that the snowthrower operates in R1. If not follow procedures 1-11 and readjust as necessary.
13. Install the bottom panel (B, Figure 6) and tighten the capscrews (A).

EASY TURN™ CABLE ADJUSTMENT

If the Easy Turn™ cable has stretched, the gears will not disengage when the control lever is activated. Adjust the cable using the following procedure.

1. Turn the engine off and disconnect the spark plug wire.
2. Loosen the jam nut (B, Figure 9).
3. Turn the adjustment nut (A) to lengthen or shorten the cable. The cable should be tightened just until all slack is removed from the lever, however it must not engage the Easy Turn™ release without depressing the control lever.
4. Tighten the jam nut.

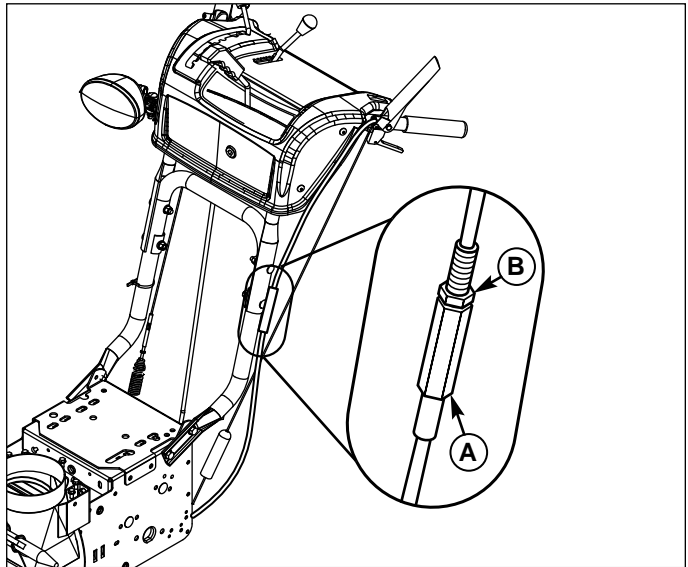


Figure 9. Easy Turn™ Cable Adjustment

- A. Adjustment Nut**
- B. Jam Nut**



Scraper Bar & Skid Shoe Adjustment

On smooth surfaces such as concrete or asphalt, the scraper bar should scrape the surface. On surfaces such as gravel, the scraper bar should be high enough so that it will not pick up gravel or debris.

The height of the scraper bar is controlled by raising or lowering the Skid Shoes (See Figure 10).

1. To raise the scraper bar height, rest the scraper bar on a strip of wood equal in thickness to the desired height.
2. Make sure the scraper bar is parallel to the ground surface.
3. Loosen the skid shoe nuts and let the skid shoes drop to the surface.
4. Tighten the nuts, making sure the Skid Shoes are adjusted equally and are parallel to the surface.
5. To lower the height of the scraper bar, raise the Skid Shoes.
6. If the scraper bar becomes worn, it can be adjusted by loosening the nuts and bolts attaching it to the snowthrower, making the adjustment, and tightening the hardware. It may also be replaced by removing the mounting nuts and bolts attaching it to the snowthrower.

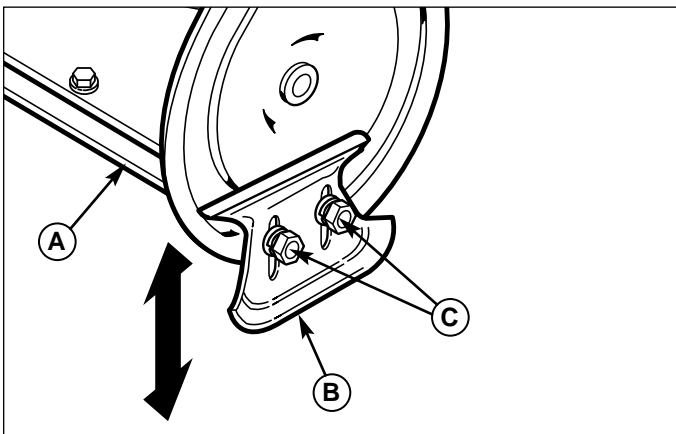


Figure 10. Skid Shoe Adjustment

- A. Scraper Bar**
- B. Skid Shoe**
- C. Nuts**



Belt Adjustment

Auger Drive Belt

If your snowthrower will not discharge snow, check the control cable adjustment. If it is correct, then check the condition of the auger drive belt. If it is damaged or loose, replace it (see Belt Replacement in this section of the manual).

1. Disconnect spark plug wire.
2. Loosen screw (B, Figure 11) from belt cover (A). Remove belt cover (A).
3. Loosen nut (D, Figure 12) on auger idler pulley (B) and move auger idler pulley towards belt about 1/8 inch (3mm).
4. Tighten nut (D).
5. Engage auger drive clutch. Check tension on belt (opposite idler pulley). Belt should deflect about 1/2 inch (12.5 mm) with moderate pressure see Figure 12). You may have to move the idler pulley more than once to obtain the correct tension.
6. Reinstall belt cover (A, Figure 11) securing with screws (B).
7. Whenever belts are adjusted or replaced, the auger drive or traction drive controls will need to be adjusted. (see Auger Drive or Traction Drive Adjustment in this section of the manual).
8. Attach the spark plug wire.
9. Auger must stop within 5 seconds.

Traction Drive Belt

The traction drive belt has constant spring pressure and does not require an adjustment. If the traction drive belt is slipping, replace the belt. See Belt Replacement.

Note: After adjustments are complete, make sure the drive disengages when released.

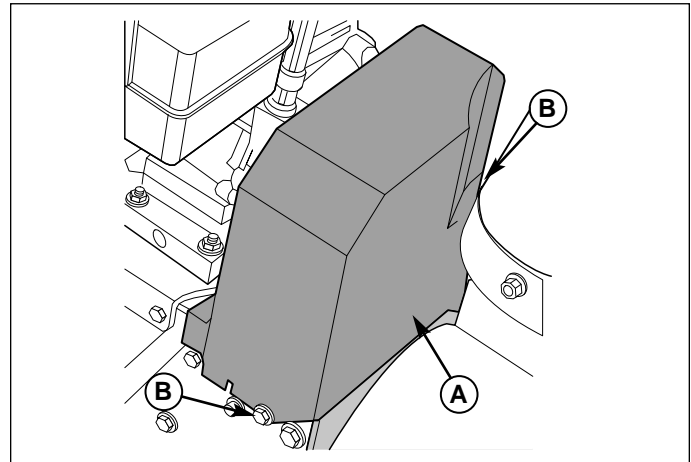


Figure 11. Belt Cover

A. Belt Cover
B. Screws

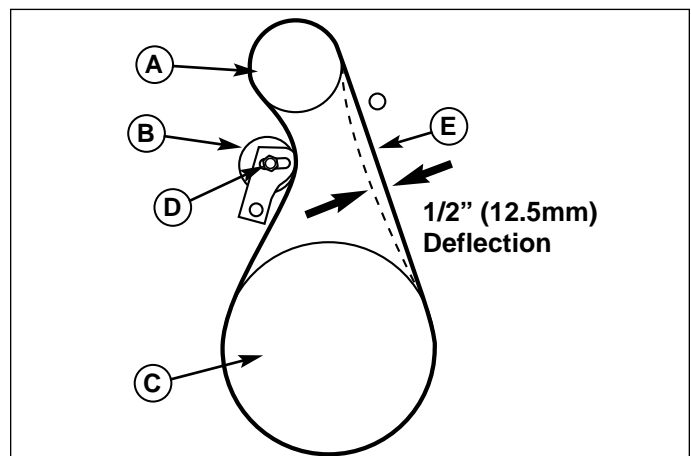


Figure 12. Auger Belt Deflection

A. Engine Drive Pulley
B. Idler Pulley (Engaged Position)
C. Auger Drive Pulley
D. Nut
E. Auger Belt



Belt Replacement

Auger Drive Belt

The drive belts are of special construction and must be replaced with original factory replacement belts available from your nearest authorized service center. Some steps require the assistance of a second person. If the auger drive belt is damaged, the snow thrower will not discharge snow. Replace the damaged belt as follows.

1. Disconnect the spark plug wire.
2. Remove the capscrews (A, Figure 13) on each side of the bottom panel (B).
3. Remove the bottom panel (B).

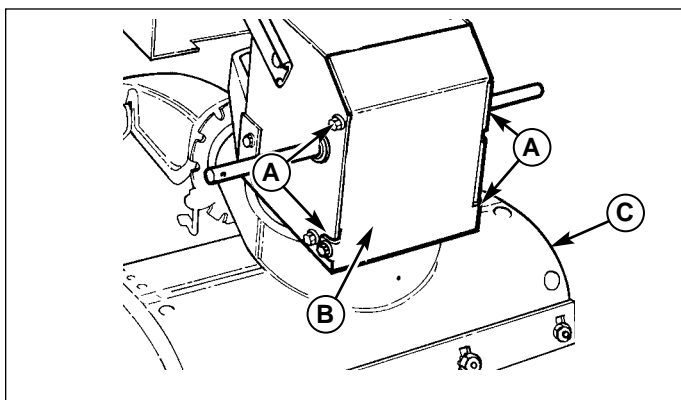


Figure 13. Bottom Cover

- A. Capscrews
- B. Bottom Panel
- C. Auger Housing

4. Loosen screws (B, Figure 11) from belt cover (A). Remove belt cover (A).
5. Loosen the belt guide (B, Figure 14). Pull the belt guide away from the auger drive pulley (C).
6. Pull the auger idler pulley (K) away from the auger drive belt (D) and slip the belt off of the idler.
7. Remove the auger drive belt (D) from the engine pulley. To remove the auger drive belt (D), the auger drive pulley (C) may have to be partially rotated.
8. Index or point the spout to the center of the machine so that the rotator control is in the center of the dash panel.

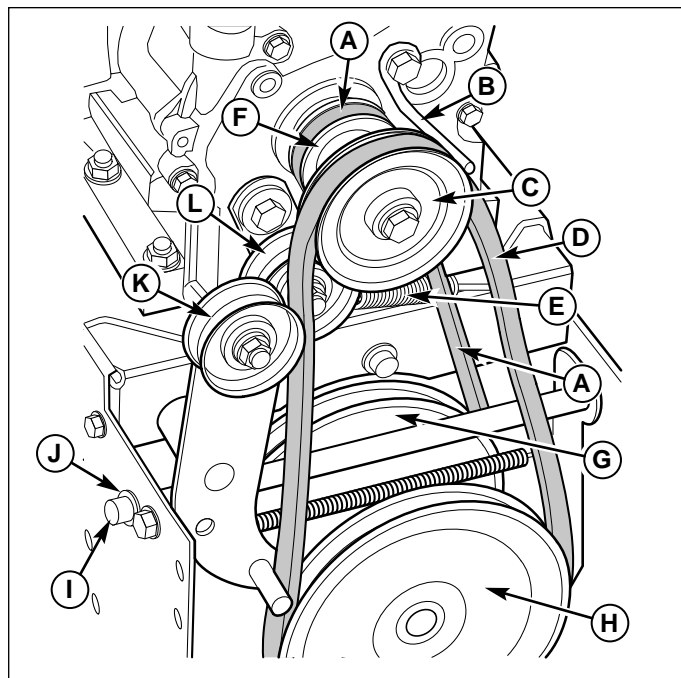


Figure 14. Pulleys and Belts

- A. Traction Drive Belt
- B. Belt Guide
- C. Auger Drive Pulley, Engine
- D. Auger Drive Belt
- E. Traction Drive Spring
- F. Traction Drive Pulley, Engine
- G. Traction Drive Pulley
- H. Impeller Pulley
- I. Swing Plate Axle Rod
- J. "E"-Ring
- K. Auger Idler Pulley
- L. Traction Drive Idler Pulley

Large Frame Snowthrowers

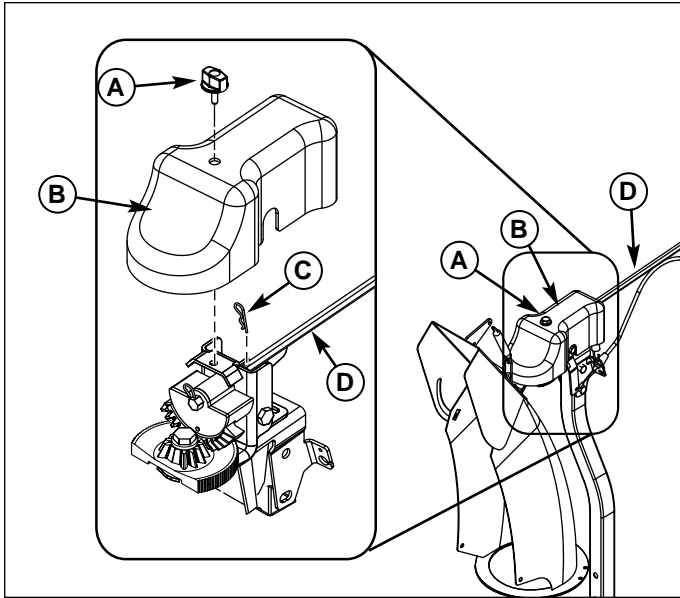


Figure 15. Spout Rotator Rod

- A. Special Nut**
- B. Cover**
- C. Hair Pin**
- D. Spout Rotator Rod**

9. Remove special nut (A, Figure 15) and cover (B).
10. Remove hair pin (C) and slide rod forward about 3 inches until hex shaft separates from the handle control.
11. Remove the upper four capscrews (A, Figure 16) that hold together the auger housing (C) and the frame (D). Loosen the lower two capscrews (B). The auger housing (C) and the frame (D) can now be split apart for removal of the belt.
12. Remove the old auger drive belt (D, Figure 14) from the impeller pulley. Replace the auger drive belt with an original factory replacement belt (available from an authorized service center).
13. Install the new auger drive belt (D) onto the impeller pulley (H).

NOTE: To assemble the auger housing to the frame, have someone hold the auger clutch lever in the **ENGAGED** position. This will move the idler arm and pulley enough to allow the auger drive pulley to move back into position.

14. Assemble the auger housing (C, Figure 16) to the frame with the four upper capscrews (A) that were removed in step 11. Tighten the two lower capscrews (B).
15. Index or point the spout rotator to the center of the machine so the rotator control is in the center of the dash panel.

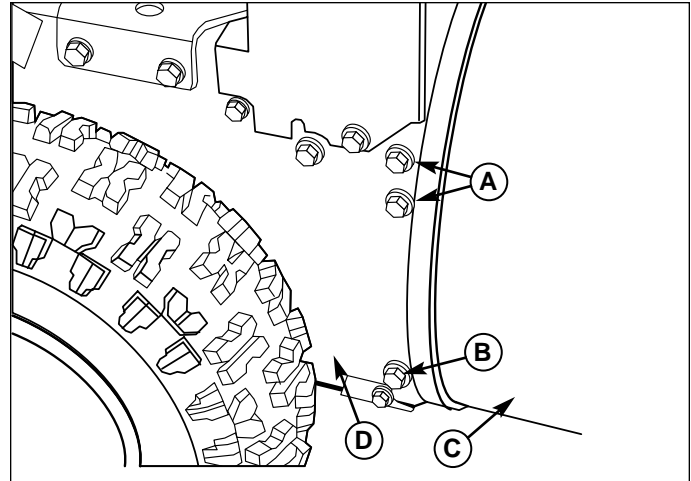


Figure 16. Frame and Axle Housing

- A. Upper Capscrews**
- B. Lower Capscrews**
- C. Auger Housing**
- D. Frame**

16. Slide spout rotator rod (B, Figure 17) into hex dash opening (A).

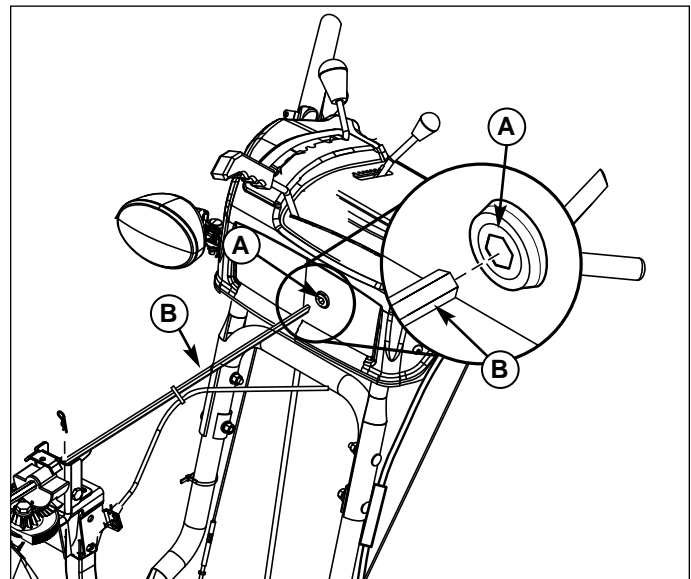


Figure 17. Install Spout Rotator Rod

- A. Hex Dash Opening**
- B. Spout Rotator Rod**

17. Insert hair pin (C, Figure 15) into spout rotator rod (D).
18. Install cover (B) and secure with special nut (A).
19. Install the auger drive belt (D, Figure 13) onto the engine pulley (C).
20. Slip the auger drive belt (D) under the idler pulley (K).
21. Adjust the auger drive belt. See "How To Adjust The Auger Drive Belt" in the Service section.

22. Adjust the belt guide. See "Belt Adjustment" in the Adjustment section.
23. Install the belt cover (A, Figure 11). Tighten screws (B).
24. Check the adjustment of the cables. See "Drive Adjustments" in the Adjustment section.
25. Install the bottom panel (B, Figure 13).
26. Tighten the capscrews (A) on each side of the bottom panel (B).
27. Connect the spark plug wire.
28. Test for proper operation and re-adjust the controls as needed.

13. Adjust the belt guide. See "Belt Adjustment" in the adjustment section of the manual.
14. Install the bottom panel (B, Figure 13). Tighten 1/4-20 screws to 25-35 lb-in (2,8-3,9 Nm).

15. Install the belt cover (A, Figure 11). Tighten 1/4-20 screws (B) to 25-35 lb-in (2,8-3,9 Nm).

Note: Caution must be taken when tightening the screws that secure the belt cover. Over tightening the screws will deform the plastic.

16. Check the adjustment of the cables. See "Drive Adjustments" in the Adjustment section.
17. Connect the spark plug wire.

Traction Drive Belt

If the snow thrower will not move forward, check the traction drive belt for wear or damage. If the traction drive belt is worn or damaged, replace the belt as follows.

1. Disconnect the spark plug wire.
 2. Remove the auger drive belt. See "Belt Replacement" in this section.
 3. Remove the traction drive spring (E, Figure 14).
 4. Remove the e-ring (J, Figure 14) from one end of the swing plate axle rod (I).
 5. Remove the swing plate axle rod (I) to allow the swing plate (A, Figure 14) to pivot forward.
 6. Remove the old traction drive belt (A) from the traction drive pulley (G) and from the traction drive pulley (F). Replace the traction drive belt (A) with an original factory replacement belt available from an authorized Dealer.
 7. Install the new traction drive belt (A) onto the traction drive pulley (G) and onto traction drive pulley (F).
 8. Make sure the traction drive idler pulley (L) is properly aligned with the traction drive belt (A).
 9. Install the swing plate axle rod (I) and secure with the e-ring (J) removed earlier.
 10. The bottom of the swing plate (A, Figure 18) must be positioned between the alignment tabs (B). Make sure the swing plate is properly secured.
- NOTE: If the drive will not engage after the traction drive belt has been replaced, then check to make sure that the swing plate is positioned between the alignment tabs.*
11. Attach the traction drive spring (E, Figure 14).
 12. Install and adjust the auger drive belt. See Belt Replacement in this section of the manual.

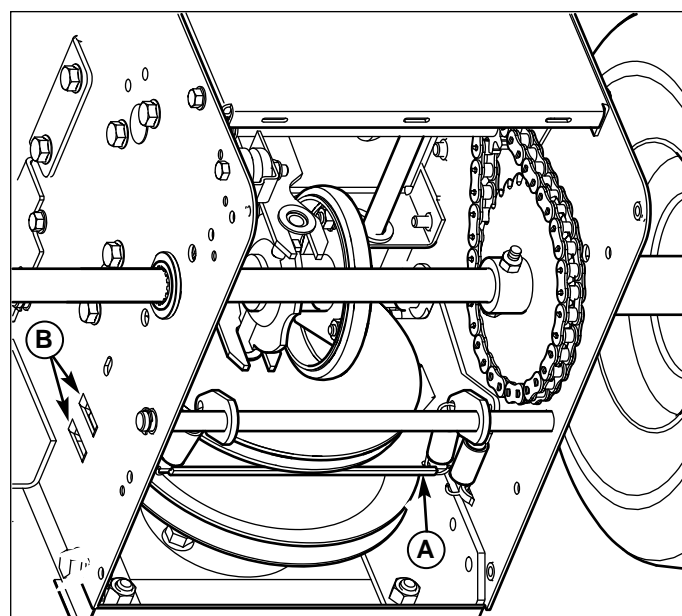


Figure 18. Traction Belt Change
A. Swing Plate
B. Alignment Tabs

Large Frame Snowthrowers



MANUFACTURING, INC.
500 N Spring Street / PO Box 997
Port Washington, WI 53074-0997

www.SimplicityMfg.com



PRODUCTS
535 Macon Street
McDonough, GA 30253

www.Snapper.com

Briggs & Stratton Yard Power Products Group
Copyright © 2006 Briggs & Stratton Corporation
Milwaukee, WI USA. All Rights Reserved

