Turf Teq, LLC

SIDEWINDER Broom

OPERATOR'S MANUAL

BROOM

TABLE OF CONTENTS

Turf Teq, LLC

Congratulations!

Thank you and congratulations on your purchase of a new Turf Teq Sidewinder t – Broom!

We are confident that your Sidewinder t – Broom will be one of the most gratifying pieces of equipment you will ever own. As a result of your investment in the Sidewinder t – Broom, you will eliminate the need for back–breaking work done with shovels and you will see an incredible increase in productivity.

Your happiness is our goal, so please let us know of any questions or issues you may have so that we may answer them or address them as quickly as possible. (Please have your serial number available when you call us). We would also like to hear from you on how much you enjoy your new Sidewinder t – Broom!

Turf Teq, LLC Toll Free (866) 503–TURF

Total Customer Satisfaction is our Goal

The Sidewinder t – Broom is designed to provide trouble–free operation. To ensure that you are satisfied with your Sidewinder t – Broom, we offer the following Guarantee of Satisfaction:

- The Sidewinder t – Broom is GUARANTEED TO THE ORIGINAL PURCHASER FOR ONE FULL YEAR against defects in materials and workmanship. If you feel that a part is defective, contact us and we replace the defective part and provide repair instructions as required..
- The engine is guaranteed by the engine manufacturer:
  Honda Engine: Two years in consumer use; two years in commercial use
- If your have questions or are not 100% satisfied with your Sidewinder t – Broom within the first 30 days of use, call us toll free at **1–866–503–TURF** and we will work to answer your questions and to resolve your concerns.

Please have the following information from your packing slip and from the Sidewinder t – Broom available when contacting our customer service department:

Name of Purchaser _____

Tractor

Model _____

Serial Number _____

Date Purchased _____

Sales Order Number _____

Broom

Model _____

Serial Number _____

Date Purchased _____

Sales Order Number _____

Turf Teq, LLC

WARRANTY AND LIMITATION OF LIABILITY

(Customer Copy – Page 1)

COVERAGE PROVIDED

Turf Teq, LLC, hereinafter called “Turf Teq” warrants to the original retail purchaser of each new Turf Teq Product that Turf Teq will replace any part thereof found to be defective in materials or workmanship within the time periods identified below.

DEFINITION

“Products” are machines, attachments, and Replacement Parts therefore supplied by Turf Teq.

WARRANTY PERIOD

12 months from the date of first retail purchase.

Replacement Parts are warranted for 60 days or to the end of the Warranty Period, whichever is longer.

LIMITATIONS, INCLUDING DISCLAIMER OF IMPLIED WARRANTIES AND CONSEQUENTIAL DAMAGES

This warranty gives you specific legal rights and you may also have other rights that vary depending on state or provincial laws.

Turf Teq does not authorize any person or Dealer to create for it any other obligation or liability in connection with these Products. **TO THE EXTENT ALLOWED BY LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS APPLICABLE TO THIS PRODUCT IS LIMITED TO THE STATED DURATION OF THIS WRITTEN WARRANTY. TURF TEQ IS NOT LIABLE FOR LOSS OF THE USE OF THE PRODUCT, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS OR CONSEQUENTIAL DAMAGES.**

Some states and provinces do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

The remedy of repair or replacement of a defective part during the warranty period herein specified shall be the purchaser’s exclusive remedy.

RIGHT TO MAKE DESIGN CHANGES

Turf Teq reserves the right to make changes in the design and other changes in its Products at any time and from time to time without notice and without incurring any obligation with respect to any product previously ordered from it, sold or shipped by it.

Turf Teq, LLC

WARRANTY AND LIMITATION OF LIABILITY

(Customer Copy – Page 2)

The warranty period will begin on the date of first retail sale.

The obligation of Turf Teq to purchase under this warranty is limited to the repair or replacement of defective parts free of charge using genuine Turf Teq Replacement Parts. Repair or replacement in accordance with this warranty shall constitute fulfillment of all liabilities of Turf Teq in respect to such Products.

Turf Teq shall review these warranty provisions with the purchaser prior to retail sale, secure his acknowledgement of delivery of this warranty and record the date of first retail sale.

WHAT IS NOT COVERED BY THE WARRANTY?

This warranty shall **NOT** apply under the following conditions:

1. With respect to vendor warranty items such as engines, which shall be warranted by their manufacturer, or local representative
    a. **Honda Engines** have a **2 YEAR WARRANTY** that is covered by American Honda Motor Corporation.
2. If the Product has been subject to misapplication, abuse, misuse, improper maintenance or other negligence, fire or other accident.
3. If parts or attachments other than those made or marketed by Turf Teq have been used in connection with the Product, and in the sole judgment of Turf Teq such use affects its performance, stability or reliability.
4. If the Product has been altered or repaired in a manner which, in the sole judgment of Turf Teq, affects its performance, stability or reliability.
5. Turf Teq shall have no liability for used equipment sold beyond the specified coverage period.
6. No warranty shall apply to damage resulting from accident or damage caused by environment (such as exposure to corrosive material). Turf Teq shall not be responsible for any costs relating to rental equipment used to replace the Product being repaired.
7. The warranty shall **NOT** apply to normal maintenance services, to normal replacement of service items, or to normal deterioration due to use or exposure. Turf Teq shall not be responsible for normal replacement parts such as belts, chains, clutches, filters, oil, brushes, or other parts that are worn out, unless they are determined by Turf Teq to be defective in material or workmanship.

Customer Signature _____

Date of Purchase _____

Date of Signature _____

Tractor Model Number _____

Tractor Serial Number _____

Broom Model Number _____

Broom Serial Number _____

Turf Teq, LLC

WARRANTY AND LIMITATION OF LIABILITY

(Turf Teq Warranty Registration Copy – Page 1)

Important: This copy must be completed, signed and returned to Turf Teq to register the product and activate the warranty.

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Turf Teq, LLC

WARRANTY AND LIMITATION OF LIABILITY

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4. If the Product has been altered or repaired in a manner which, in the sole judgment of Turf Teq, affects its performance, stability or reliability.
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Customer Signature _____

Date of Purchase _____

Date of Signature _____

Tractor Model Number _____Broom Model Number_____

Tractor Serial Number _____Broom Serial Number_____

Important: This copy must be completed, signed and returned to Turf Teq within 30 days of purchase to register the product and activate the warranty.

RETURN TO: **Turf Teq, LLC**
P.O. Box 127
New Holland, PA 17557

SAFETY INFORMATION

PERSONAL SAFETY

SAFETY PRECAUTIONS

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents, read and take the following precautions before operating the machine. Equipment should be operated only by those who are properly trained.

GENERAL INFORMATION

1. Read the Operator's Manual carefully before using the machine.
2. Only allow properly trained and qualified persons to operate the machine.
3. Keep safety decals clean.
4. Install shields before starting or operating the machine.
5. Make sure all shields are in place at all times.
6. Do not operate the broom over cables, wires, pipes or other objects.
7. Do not operate the broom on a roof or an elevated surface.

PERSONAL PREPARATION AND ATTIRE

1. Wear safely glasses while operating the machine to protect your eyes.
2. Wear safety shoes with non–slip treads. Do not go barefoot or wearing open–toed shoes while operating the machine.
3. Wear long pants
4. Use ear muffs or ear plugs to protect your hearing.

MACHINE SAFETY

MACHINE PREPARATION

1. Read the Operator's manual for the machine and engine before operating the machine.
2. Become familiar with the controls BEFORE starting to operate the machine.
3. Inspect the area you will be working in for hidden objects such as large rocks, wires and other obstructions. Operating the machine over obstacles could damage the machine, cause property damage or cause personal injury.
4. Wait for the engine to cool before refueling.
5. Fill the gasoline tank with the engine turned off and the machine outdoors.
6. Do not smoke while handling gasoline.
7. Keep any type of open flame away from the machine.
8. Make sure all shields are installed and secured.
9. Be sure the main drive belt is routed correctly to produce the correct brush speed for the material to be cleaned.

OPERATING THE MACHINE SAFELY

1. Shut off the engine, place the transmission selector in the engaged position when the machine is not in use. Engage the optional park brake if equipped.
2. Do not operate the machine engine in an enclosed building without adequate ventilation.
3. Make sure all shields are in place before starting the machine.
4. Do not leave the attachment in the raised position when the machine is parked.
5. Only allow properly trained personnel to operate the machine
6. Keep bystanders at least 75 feet away from the machine. The broom can throw objects at great speed and strike a bystander. Do not operate the machine when children or pets are in the area.
7. Disengage the main drive and stop the engine when a person or pet approaches the machine.
8. Be sure the main drive and the hydrostatic control are disengaged before starting the engine..
9. NEVER operate the machine without all the shields installed.
10. NEVER reach under the shields when the engine is running.
11. ALWAYS shut off the engine and disconnect the spark plug wire before making any adjustments to the machine.
12. ALWAYS shut off the engine and disconnect the spark plug wire before cleaning the machine.
13. Operate the machine during daylight hours.
14. Lower the attachment arm to the ground when the machine is turned off.
15. Keep the machine clean and do not allow combustible materials to accumulate on the machine.
16. Operate slowly on slopes and uneven terrain
17. DO NOT weld, cut, bend or otherwise modify your Turf Teq machine including any shielding. Altering or modifying your machine will void the warranty and may make the machine unsafe.
18. Make sure you operate at a speed where you have 100% control of the machine at all times.
19. Do not backup unless there is adequate clear space to safely maneuver.
20. Engage the attachment drive before lowering the attachment to the ground.
21. Keep feet and hands away from the brush.

SERVICING THE MACHINE SAFELY

1. Stop the engine before performing any service on the machine.
2. Remove the spark plug wire when working on the machine.
3. Wait for the engine to cool before working around the engine and muffler.

PERSONAL SAFETY DECALS

This manual shows machine decals with safety messages on, "WARNING," and "DANGER." These safety messages are intended for your personal safety and those working with you. Please read the safety messages and the specific information they contain.

WARNING: THE WORD "WARNING" IS USED WHERE THERE IS A POTENTIAL OR HIDDEN HAZARD WHICH HAS THE POSSIBILITY FOR SERIOUS INJURY OR DEATH IF YOU DO NOT FOLLOW THE OPERATING INSTRUCTIONS FOR YOUR MACHINE. IT IS USED TO WARN OPERATORS AND OTHERS TO EXERCISE EVERY APPROPRIATE MEANS TO AVOID A SURPRISE INVOLVEMENT WITH MACHINERY.

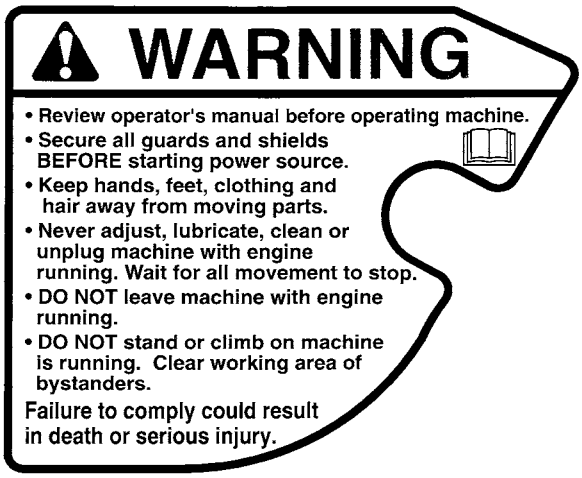
DANGER: THE WORD "DANGER" IS USED WHERE YOU ARE AT RISK OF BEING KILLED OR SERIOUSLY INJURED IF YOU DO NOT FOLLOW THE OPERATING INSTRUCTIONS IN CONNECTION WITH A SERIOUS HAZARD.

FAILURE TO FOLLOW THE "WARNING" AND "DANGER INSTRUCTIONS MAY RESULT IN SERIOUS BODILY INJURY OR DEATH.

SAFETY DECAL INFORMATION

The following safety decals were installed on the machine in the areas indicated. They are on the machine for your safety.

Keep the decals clean and legible at all times.



Located on the control console.

Located on rear of broom cover.

Located on front of broom cover.

SERIAL NUMBER LOCATIONS

SIDEWINDER™ - SUPER PIVOT SERIAL NUMBER LOCATION

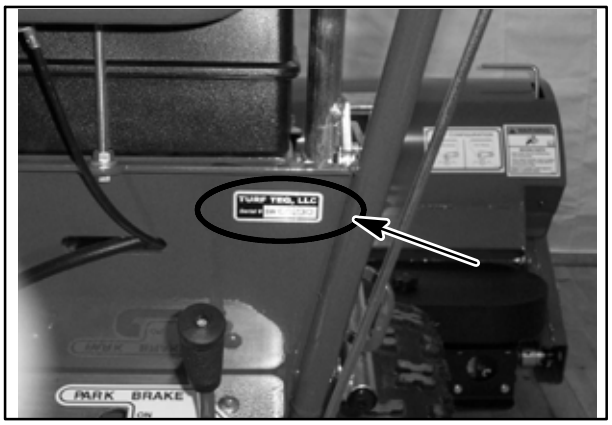
The serial number is located below the control panel as shown.

The serial number will be required when ordering parts.

For easy reference, enter Model and serial number on the lines:

Model _____

Serial Number _____



1

ENGINE SERIAL NUMBER LOCATION

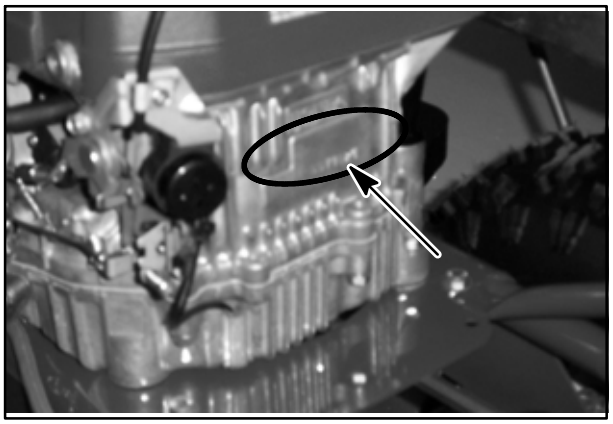
The Honda engine serial number is located on the backside of the engine as shown.

The serial number will be required when ordering parts.

For easy reference, enter the engine manufacturer and the serial number on these line:

Manufacturer _____

Serial Number _____



2

BROOM SERIAL NUMBER LOCATION

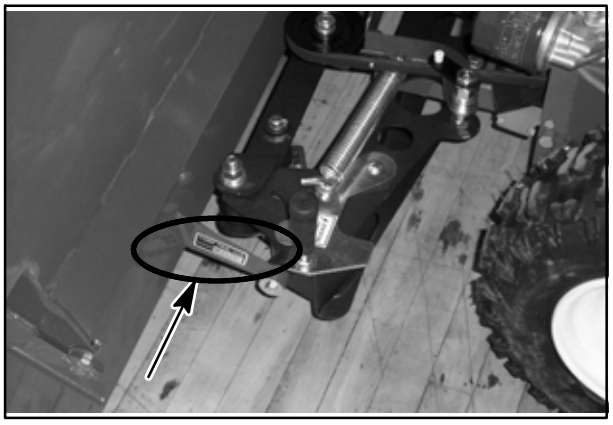
The serial number is located on the broom's left attaching arm as shown.

The serial number will be required when ordering parts.

For easy reference, enter Model and serial number on the lines:

Manufacturer _____

Serial Number _____



3

CONTROL LOCATIONS – OVERVIEW

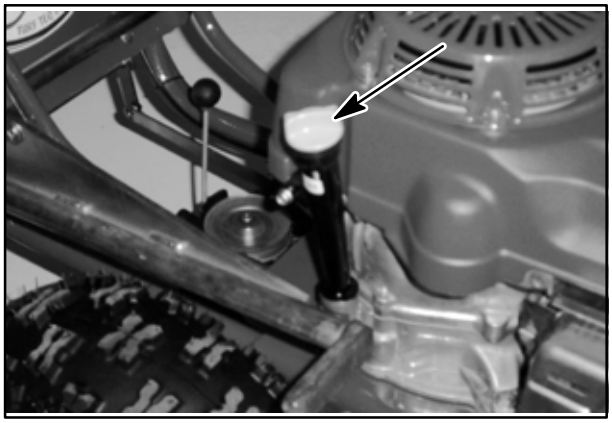
A. Hydrostatic transmission control lever
B. Adjustable speed control
C. Throttle control
D. Attachment drive engage/disengage with brake control lever
E. Swing control lever
F. Attachment raise/lower handle
G. Transmission engaged/disengaged lever
H. Park brake lever (Optional)
I. Broom pressure adjustment knob/control
J. Brush cover lock open latch
K. Tension lever for broom drive belt
L. Brush cover release levers

DAILY CHECKS TO PERFORM BEFORE STARTING THE ENGINE

CHECK ENGINE OIL LEVEL

1. Place the machine on a level surface then remove the oil dipstick.
2. Check the oil level as indicated in the engine owner's manual and fill with the recommended motor oil.

NOTE: *OVERFILLING THE ENGINE OIL WILL CAUSE LOSS OF POWER.*

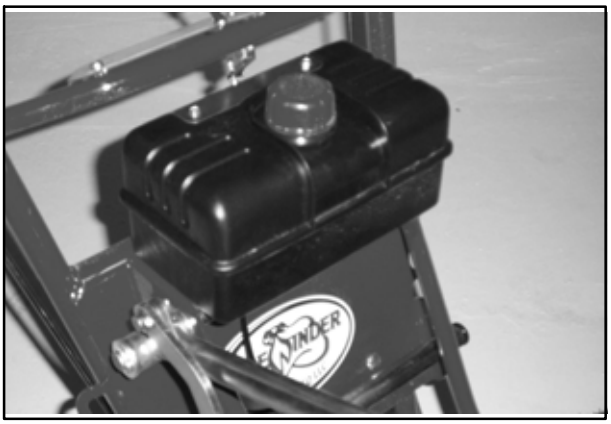


4

CHECK FUEL LEVEL

1. Remove the fuel tank cap.
2. Fill tank to the bottom of the fuel tank neck.
3. Use minimum of 86 octane gasoline.
4. Wipe any spilled fuel before staring the engine.

DO NOT OVERFILL THE FUEL TANK. OBSERVE ALL SAFETY STATEMENTS LISTED IN THE SAFETY INFORMATION SECTION

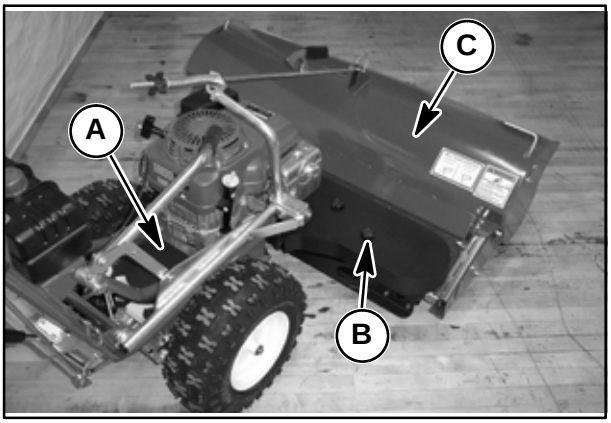


5

CHECK THAT ALL SHIELDS ARE INSTALLED AND ATTACHING HARDWARE IS TIGHT

1. Check the hydrostatic drive belt shield, A.
2. Check the main drive belt shield, B.
3. Check the brush cover, C.

NOTE: *DO NOT OPERATE THE MACHINE WITH LOOSE OR MISSING SHIELDS. REPLACE MISSING SHIELDS IMMEDIATELY.*



6

CHECK TIRE PRESSURES

Check tire pressures in the two tires and inflate to 14 psi. The tires may have liquid in them so when checking the tire pressure, the valve stem should be located at the top as shown.

7

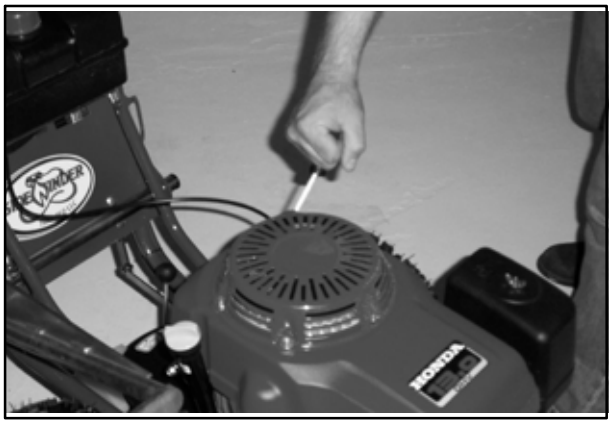
ENGINE OPERATION

STARTING A COLD ENGINE

1. Place the throttle control to the **CHOKE** position.

8

2. Pull the starter rope slowly and with low force until the slack is out of the rope and resistance is felt.
3. When resistance is felt, pull the rope with enough force to turn the engine fast enough to start the engine. Return the pull rope gently to the retracted position.

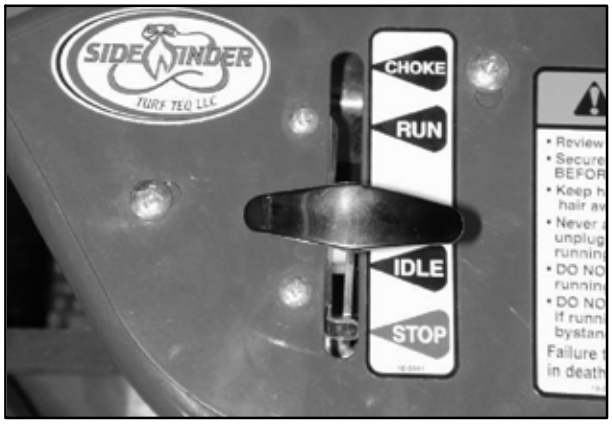


9

4. When the engine starts, position the throttle to the **RUN** position for 30 seconds to allow the engine to warm up.

10

5. After the engine has warmed up, slowly place the throttle to the **IDLE** position.



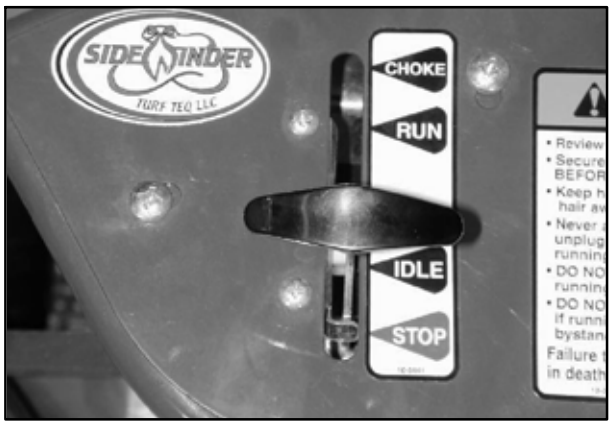
11

6. Move the throttle to the **RUN** position when operating the machine.

12

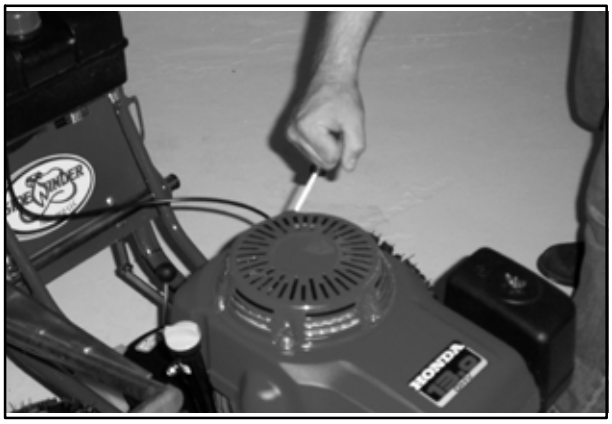
STARTING A WARM ENGINE

1. Place the throttle control slightly past the **IDLE** position.



13

2. Pull the starter rope slowly and with low force until the slack is out of the rope and resistance is felt.
3. When resistance is felt, pull the rope with enough force to turn the engine fast enough to start the engine.



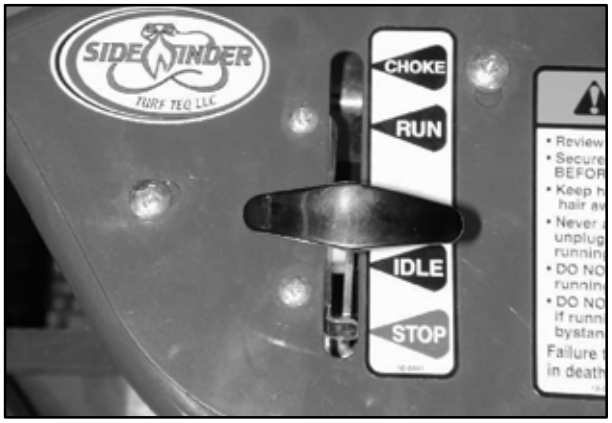
14

4. Move the throttle to the **RUN** position when operating the machine.

15

STOPPING THE ENGINE

1. Place the throttle to the **IDLE** position and allow the engine to idle for 30 seconds.



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2. Place the throttle in the **STOP** position and the engine should stop running.

NOTE: *ENGINE COMPONENTS GET VERY HOT DURING OPERATION. STOP THE ENGINE AND ALLOW IT TO COOL BEFORE DOING ANY WORK ON THE ENGINE.*

17

PARKING THE MACHINE

When parking the tractor for any period of time, use the following procedure.

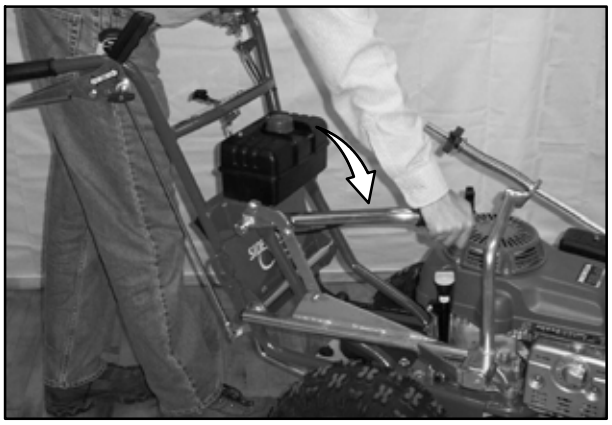
1. Stop the engine by placing the throttle control to the **STOP** position.

18

2. If equipped, place the OPTIONAL PARK BRAKE to the ON position.

19

3. Lower the HEIGHT CONTROL LEVER so the attachment is positioned on the ground.



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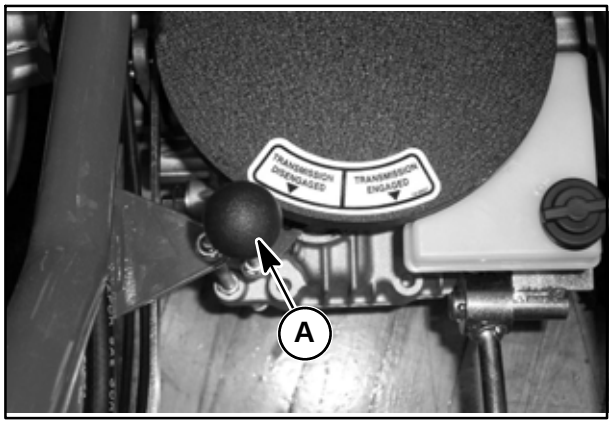
OPERATING THE TRANSMISSION CONTROL LEVER

The TRANSMISSION CONTROL LEVER disengages the transmission so the machine can be moved when the engine is not running. This feature makes it easy to push or pull the machine for precise movement when the engine is not running.

TRANSMISSION DISENGAGED

When LEVER, A, is position as shown, the machine can be pushed or pulled without the engine running.

NOTE: *In the Transmission Disengaged position, the transmission will not propel the machine in forward or reverse when the engine is running and the hydrostatic control lever is activated.*



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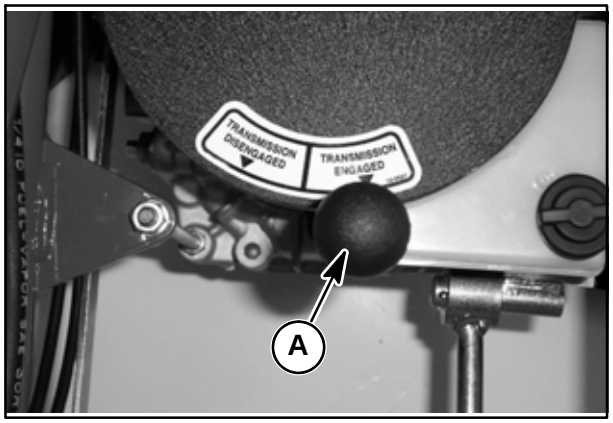
TRANSMISSION ENGAGED

When LEVER, A, is position as shown, the machine will be very hard to push or pull with the engine is not running.

NOTE: *In the Transmission Engaged position, the transmission will propel the machine forward or reverse when the engine is running and the hydrostatic control lever is activated.*



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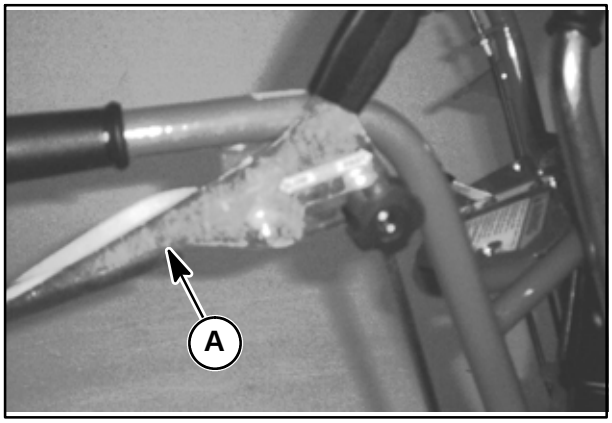
OPERATING THE DIRECTIONAL CONTROLS

STOPPING MOVEMENT WITH ENGINE RUNNING

1. RELEASE the HYDROSTATIC CONTROL LEVER, A. The lever will automatically go the neutral position as shown.
2. When the hydrostatic lever is in the neutral position the machine will not move.



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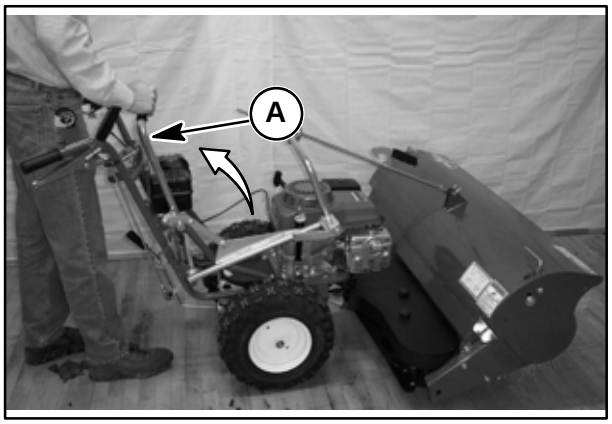
PRELIMINARY STEPS TO MOVING THE MACHINE IN ANY DIRECTION WITH ENGINE ON

1. Raise the attachment by lifting the attachment HEIGHT CONTROL LEVER, A, to the FULLY RAISED position as shown.



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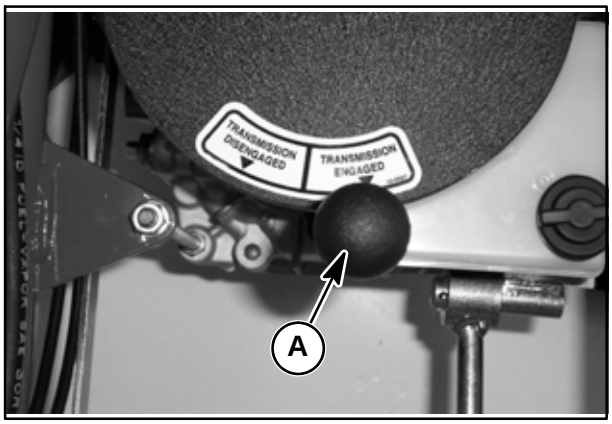
2. Place LEVER, A, in the TRANSMISSION ENGAGED position as shown.



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3. Start the engine using the procedure described in the ENGINE OPERATION Section.

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4. If equipped, place the OPTIONAL PARK BRAKE in the OFF position.

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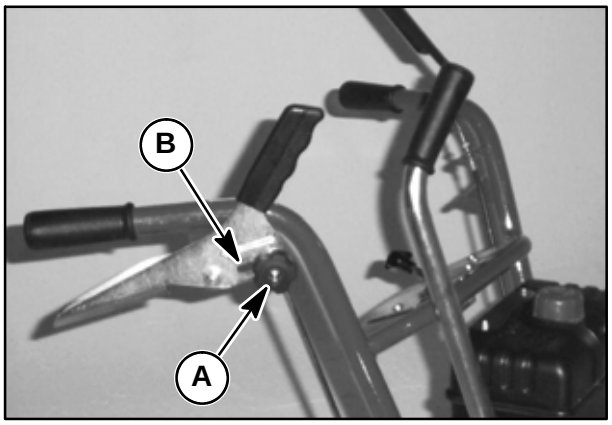
VARIABLE SPEED CONTROL ADJUSTMENT

1. Adjust to slowest speed.

The maximum forward and reverse speeds can be adjusted to meet specific operating conditions by moving the Control Knob, A, in the adjustment slot.

WARNING: Adjust to slowest speed setting, B, while learning to operate the machine and when operating in confined spaces.

NOTE: *Only adjust the variable speed control when the engine is stopped.*



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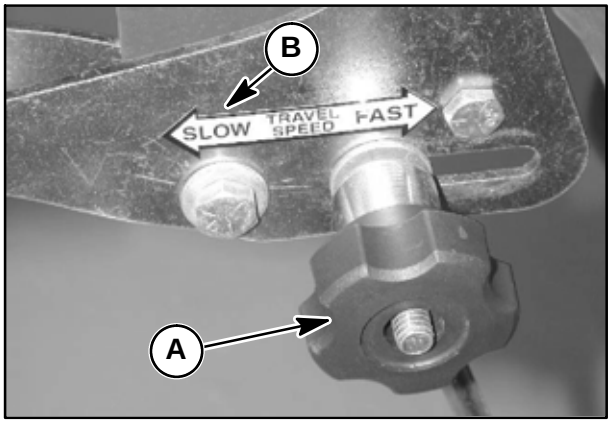
ADJUSTING THE VARIABLE SPEED CONTROL

1. Loosen the control knob, A.
2. Move the VARIABLE SPEED CONTROL KNOB forward to the FAST position to increase maximum speed. (Knob shown in fastest position.)
3. Move the VARIABLE SPEED CONTROL KNOB rearward to the SLOW position to decrease maximum speed.
4. Tighten control knob, A.

NOTE: *The optimum location of the VARIABLE SPEED CONTROL KNOB allows you to fully engage the hydrostatic control lever to achieve a comfortable operating speed for the ground conditions.*

NOTE: *Moving the VARIABLE SPEED CONTROL KNOB toward the FAST position increases hydrostatic control level effort.*

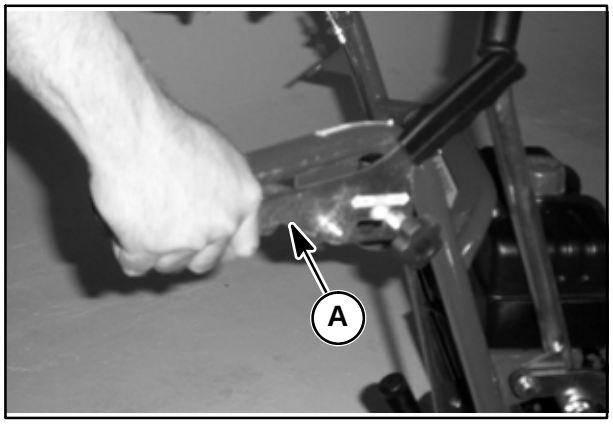
Moving the VARIABLE SPEED CONTROL KNOB toward the SLOW position decreases hydrostatic control level effort.



29

FORWARD DIRECTION

1. Complete the 4 steps in the PRELIMINARY STEPS TO MOVING THE MACHINE if not already completed.
2. SLOWLY apply pressure and PULL UP on the HYDROSTATIC CONTROL LEVER, A, as shown.
3. Forward speed is directly proportional to the amount the hydrostatic control lever is moved.
4. The more the lever is pulled up, the faster the forward ground speed will be.

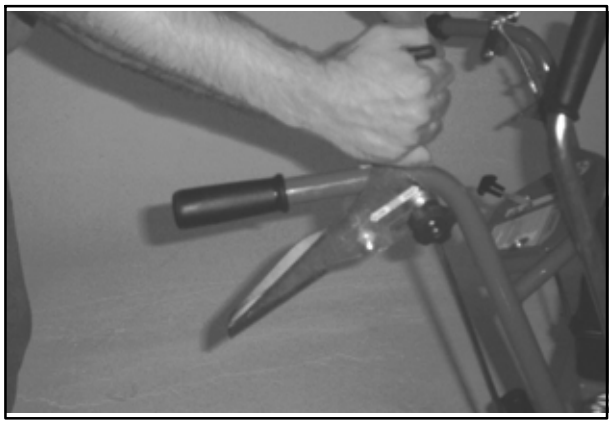


30

REVERSE DIRECTION

1. Complete the 4 steps in the PRELIMINARY STEPS TO MOVING THE MACHINE if not already completed.
2. SLOWLY apply pressure and PULL BACK on the HYDROSTATIC CONTROL LEVER as shown.
3. Reverse speed is directly proportional to the amount the hydrostatic control lever is moved.
4. The more the lever is pulled back, the faster the reverse ground speed will be.

NOTE: *Do not back up with the attachment on the ground.*



31

MAIN DRIVE BELT TENSION & ROUTING

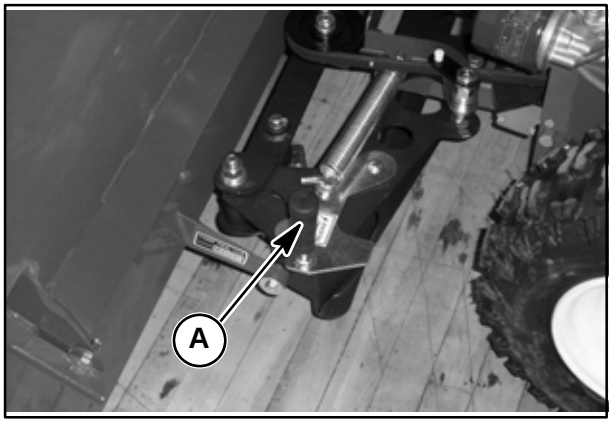
WARNING: For best results, the Main Drive Belt should be routed as specified for the material to be cleaned.

Operating the brush faster then requires will result in premature brush wear and in debris being thrown from the brush which could cause personal injury or machine damage.

TENSION HANDLE LOCATION

OPERATING POSITION – BELT TENSIONED

If the tension handle, A, is positioned as shown the belt is tensioned.

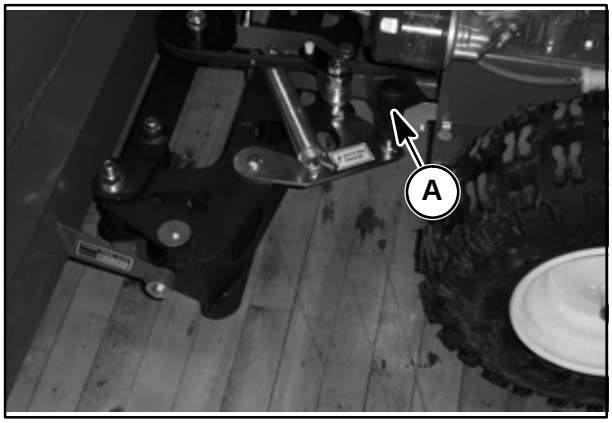


32

CHANGING SPEED POSITION – BELT NOT TENSIONED

If the tension handle, A, is positioned as show the belt is not tensioned.

NOTE: *The tension handle must be in the belt tensioned position before operating the broom or machine damage may occur.*



33

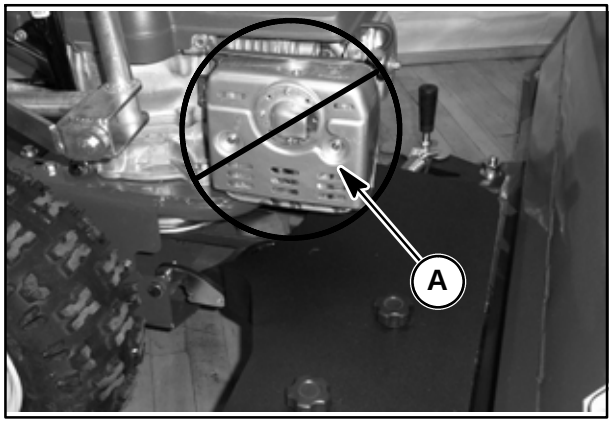
CHANGING BRUSH SPEED

WARNING: The muffler, A, is very hot during engine operation.

Do not work around or contact the muffler when it is hot.

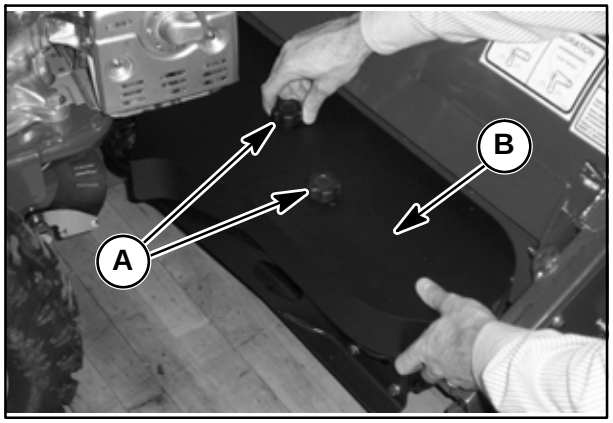
REMOVING THE MAIN DRIVE BELT SHIELD

1. Allow the engine and muffler, A, to cool before attempting to remove the shield.



34

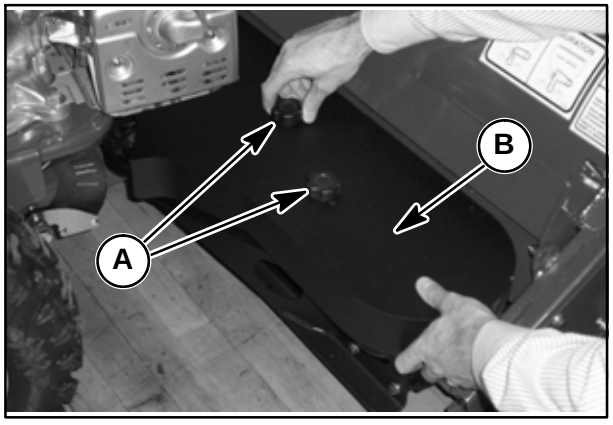
2. Remove the two shield retaining knobs, A, then remove shield, B.



35

INSTALLING THE MAIN DRIVE BELT SHIELD

1. Install the shield, B, then install and hand tighten the two retaining knobs, A.

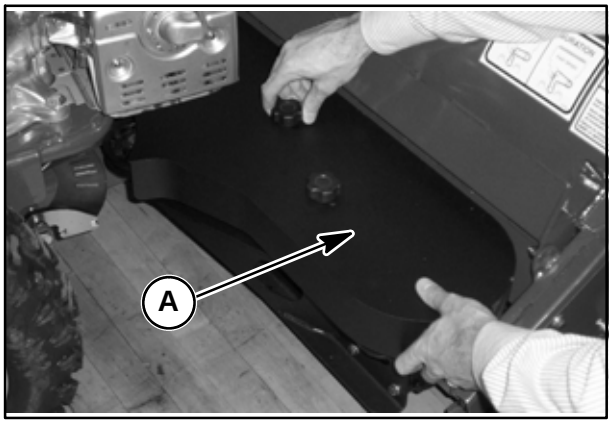


36

LOW SPEED – MAIN DRIVE BELT ROUTING

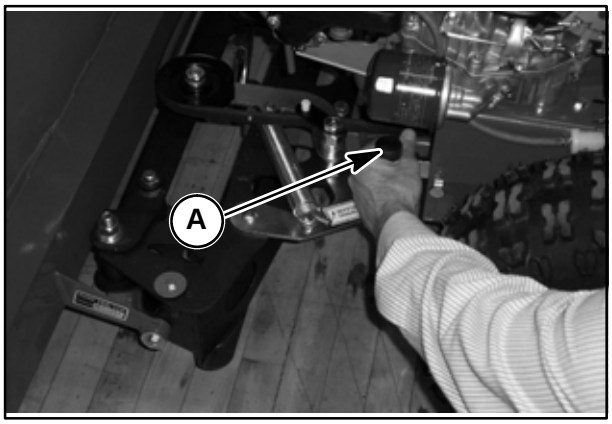
NOTE: *This position should be used for all applications except for snow removal.*

1. Remove the main drive belt shield, A, as previously described.



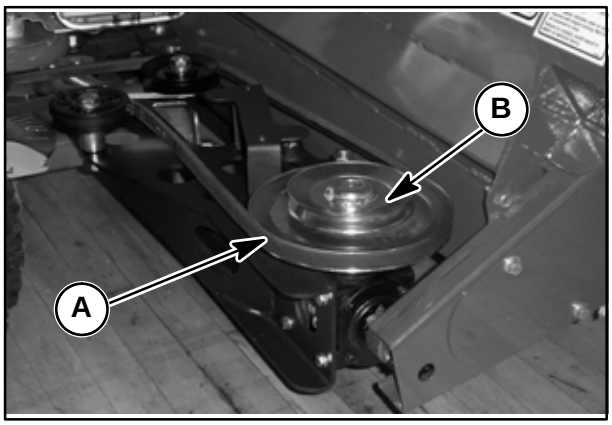
37

2. Remove belt tension by positioning the belt tensioning handle, A, as shown.



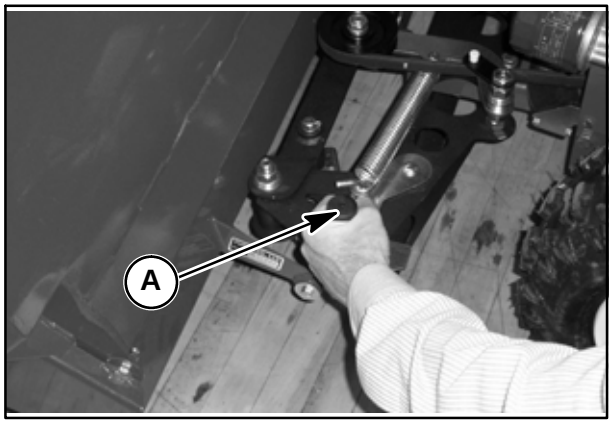
38

3. Place the main drive belt on the bottom groove, A, (larger diameter groove) of pulley, B, as shown.



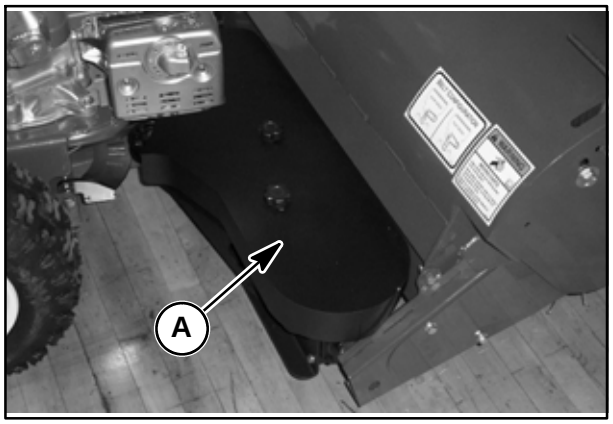
39

4. Tension belt by positioning the belt tension handle, A, as shown.



40

5. Replace the main drive belt shield, A, as previously described.

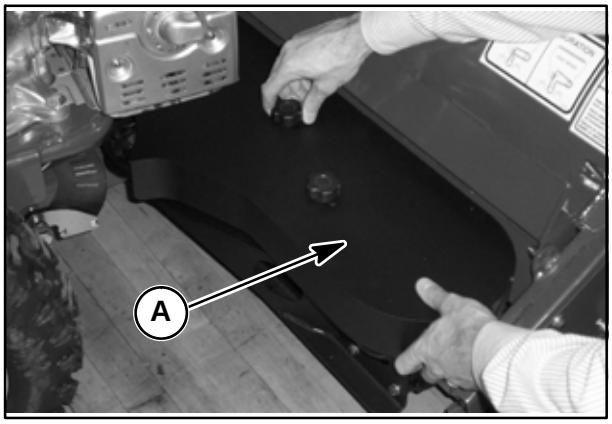


41

HIGH SPEED – MAIN DRIVE BELT ROUTING

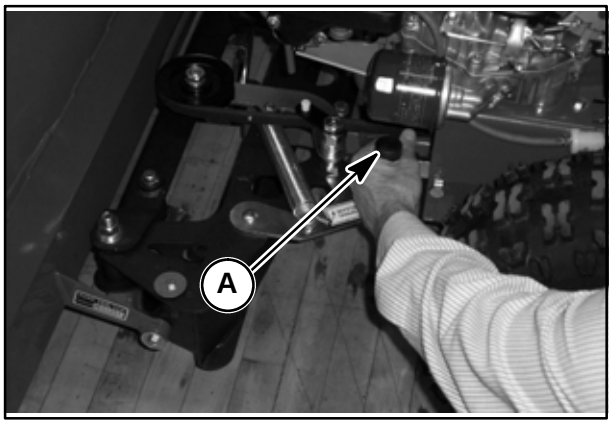
NOTE: *This position should be used for snow removal.*

1. Remove the main drive belt shield as previously described.



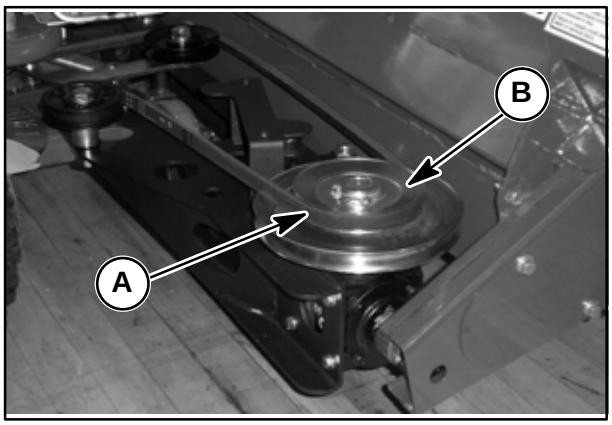
42

2. Remove belt tension by positioning the belt tensioning handle, A, as shown.



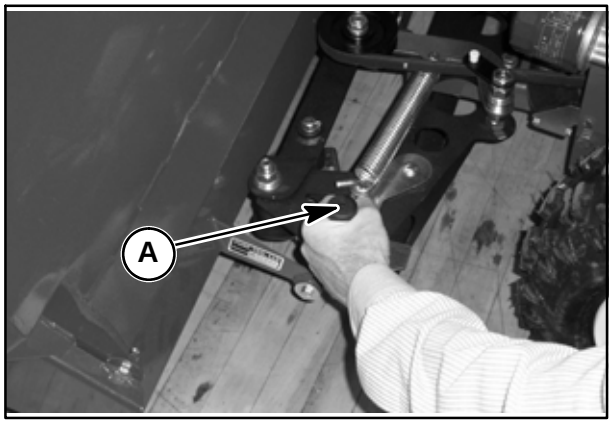
43

3. Place the main drive belt on the top groove, A, (smaller diameter groove) of pulley, B, as shown.



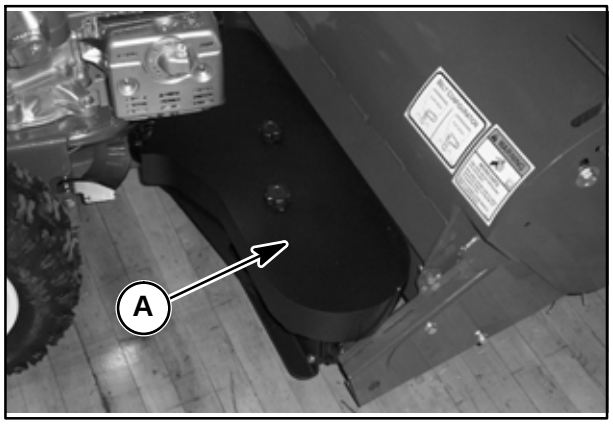
44

4. Tension belt by positioning the belt tension handle, A, as shown.



45

5. Replace the main drive belt shield, A, as previously described.



46

POSITIONING THE ADJUSTABLE ANGLE SIDEWINDER™ – BROOM

POSITION THE BROOM ATTACHMENT STRAIGHT FORWARD FOR TRANSPORTING AS THIS PROVIDES MAXIMUM STABILITY.

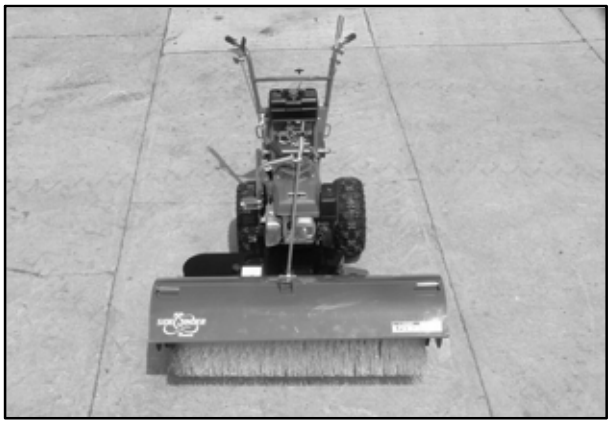
NOTE: *Only change the Attachment arm position when the Sidewinder™ – Broom is on a level, hard surface.*

NOTE: *Left and right are determined by standing behind the machine facing the direction of travel.*

BROOM POSITIONS

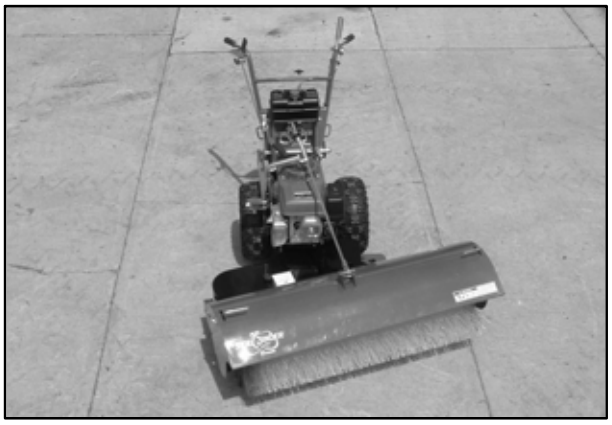
The BROOM can be positioned as follows:

1. Straight ahead



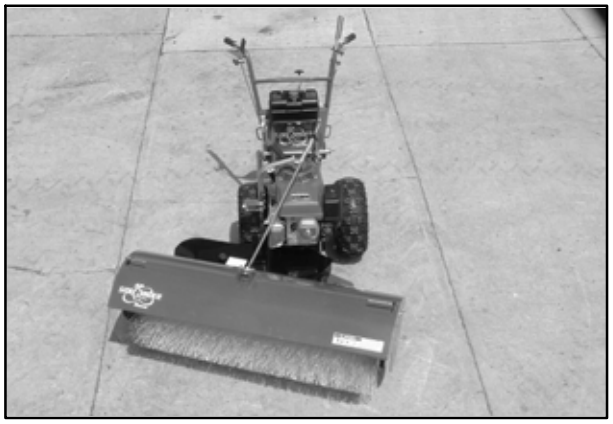
47

2. Pivoted to the Left



48

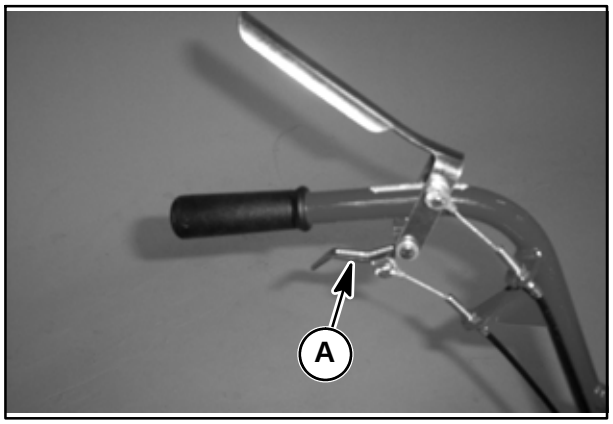
3. Pivoted to the right



49

SIDEWINDER™ – SUPER PIVOT SWING CONTROL LEVER

The swing control lever is shown at A.



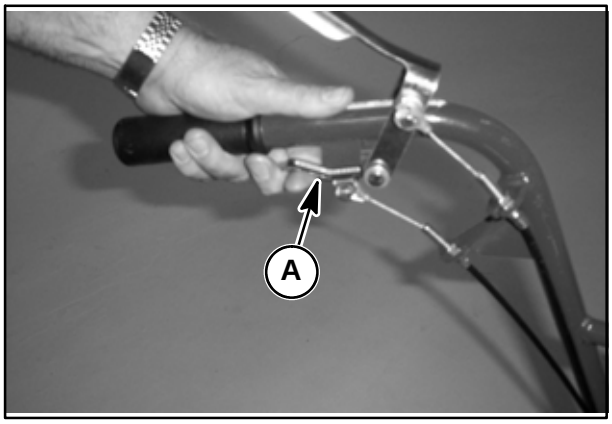
50

ADJUSTING BROOM ANGLE

1. Stop the engine by positioning the throttle to the **STOP** position.

51

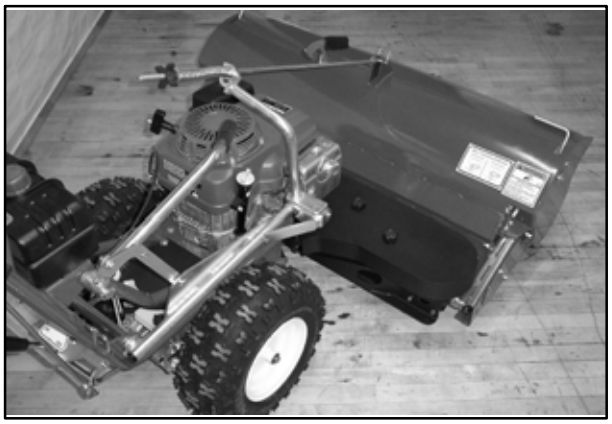
2. Lift up and hold the SWING CONTROL LEVER, A.



52

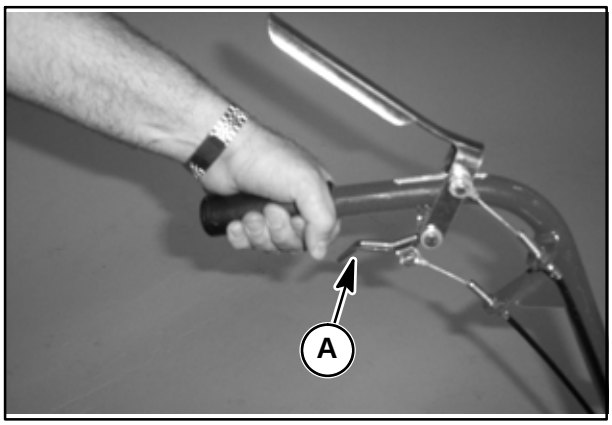
3. Push forward on the handlebar on the side you want the broom to pivot toward. At the same time, pull rearward on the other handlebar until the desired angle is achieved.

NOTE: *Only change broom position when the machine is on a level hard surface.*



53

4. Release the SWING CONTROL LEVER, A, and it will lock the broom in position.



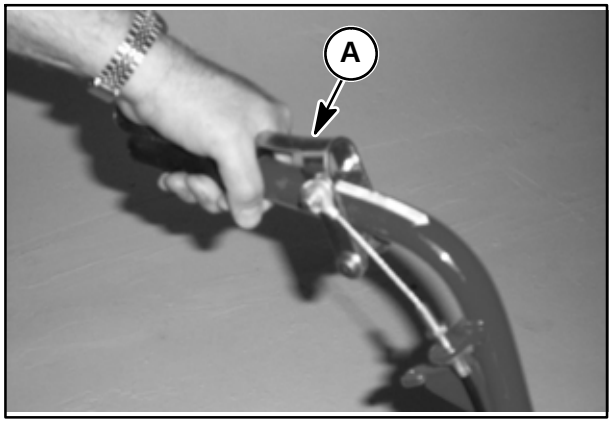
54

OPERATING THE BROOM

STARTING THE BROOM

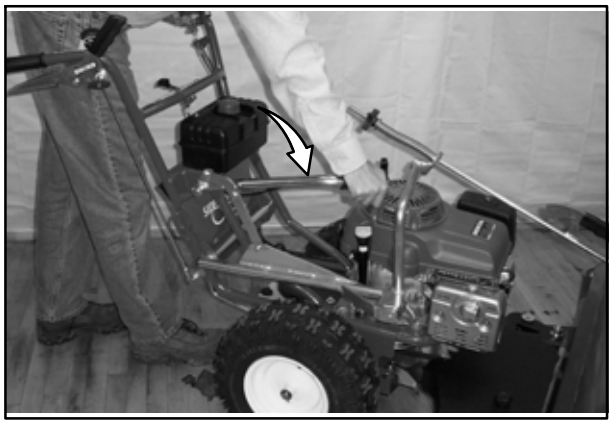
1. Raise the broom.
2. Start the engine and place the throttle to the run position as described in the STARTING THE ENGINE SECTION.
3. Depress the BROOM DRIVE CONTROL AND BRAKE LEVER, A, as shown. This releases the brake and engages the drive.

NOTE: *Engage attachment before lowering onto the ground.*



55

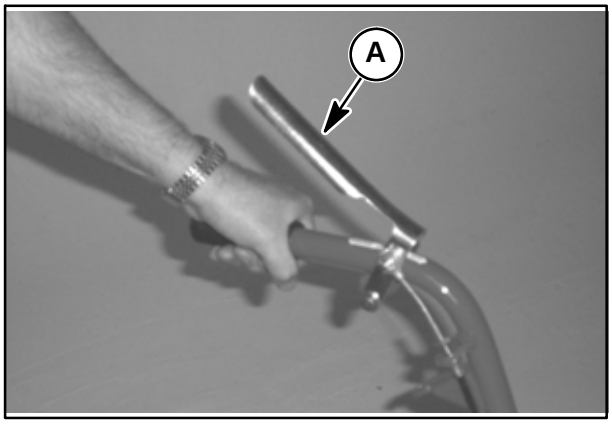
4. Lower the BROOM RAISE/LOWER CONTROL LEVER as shown to lower the broom.



56

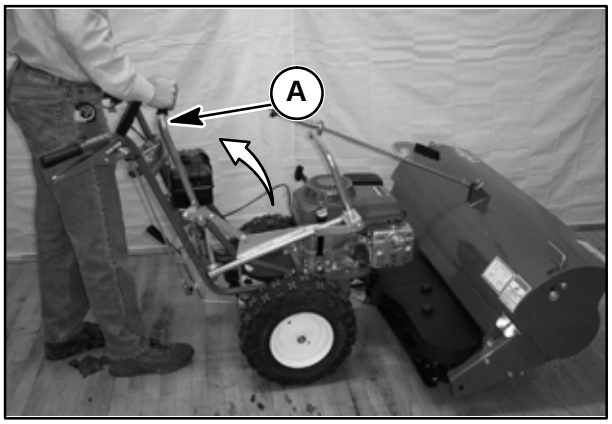
STOPPING THE BROOM

1. Release the BROOM DRIVE CONTROL AND BRAKE LEVER, A, as shown. This will disengage the drive and apply the brake to stop the broom from turning.



57

2. Raise the BROOM RAISE/LOWER CONTROL LEVER, A, as shown.



58

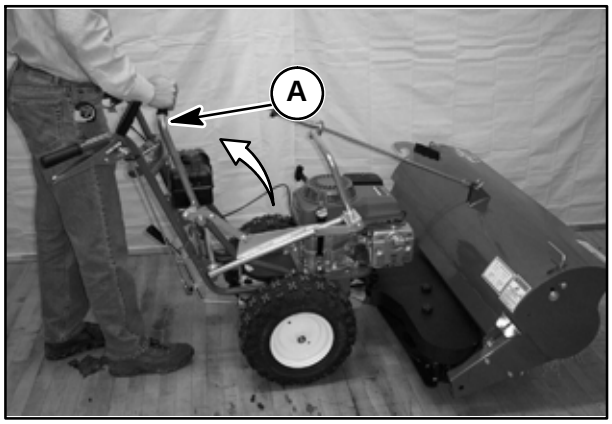
ADJUSTING THE BRUSH PRESSURE

ADJUSTMENT PROCEDURE

1. Stop the engine by placing the throttle in the **STOP** position.

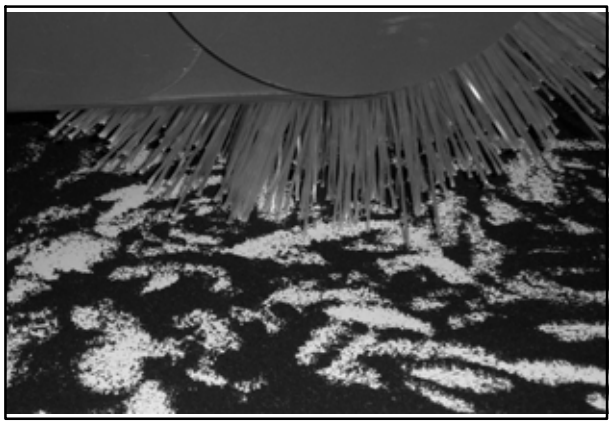
59

2. Raise the BROOM RAISE/LOWER CONTROL LEVER, A, as shown.



60

3. Position the broom over the debris to be swept.



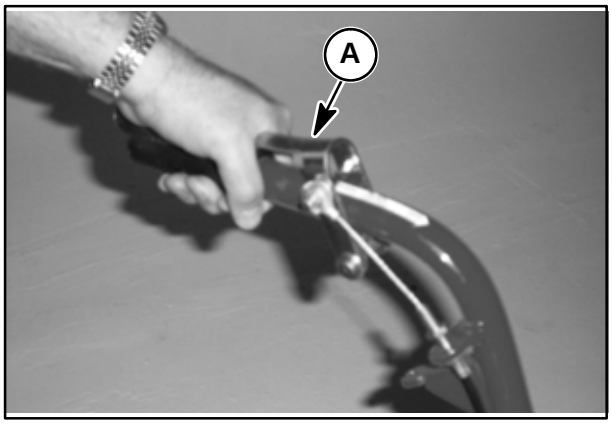
61

4. Start the engine and place the throttle to the run position as described in the STARTING THE ENGINE SECTION.

62

5. Engage the broom drive by depressing the BROOM DRIVE CONTROL AND BRAKE LEVER, A, as shown.

NOTE: *Engage attachment before lowering the broom.*

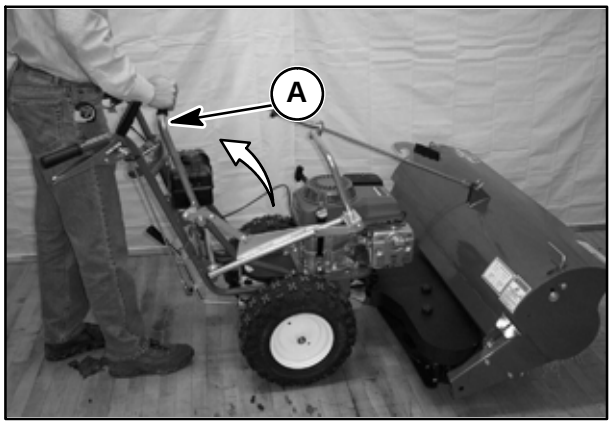


63

6. Fully lower the BROOM RAISE/LOWER CONTROL LEVER as shown.

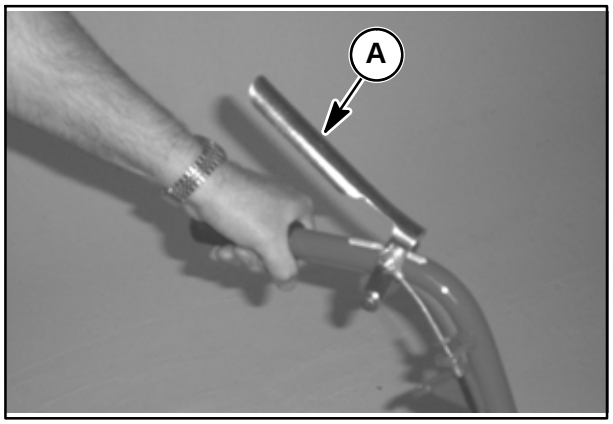
64

7. Raise the BROOM RAISE/LOWER CONTROL LEVER, A, as shown.



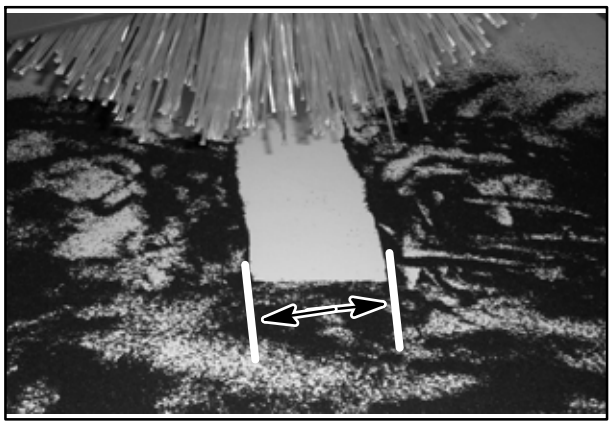
65

8. Release the BROOM DRIVE CONTROL AND BRAKE LEVER, A, as shown. This will disengage the drive and apply the brake to stop the broom from turning.



66

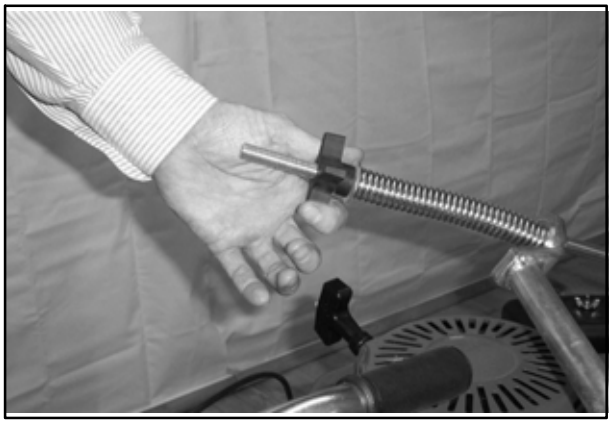
9. Measure the width of the strip that was cleaned by the broom. The strip should be 2” to 4” .



67

10. If the strip is below 2” turn the PRESSURE CONTROL KNOB counterclockwise to increase pressure and the width of the strip.
11. If the strip is wider then 4” turn the PRESSURE CONTROL KNOB clockwise to decrease pressure and narrow the strip.
12. Repeat steps 2 through 9 until the 2’ to 4”clean strip is obtained.

NOTE: *The narrowest width clean strip is desired because it yields the longest brush life.*



68

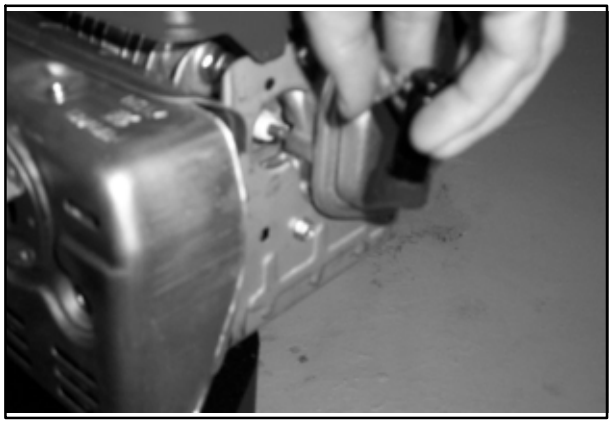
OPERATING THE BROOM HOOD

OPENING THE HOOD

1. Place the throttle in the **STOP** position and stop the engine.

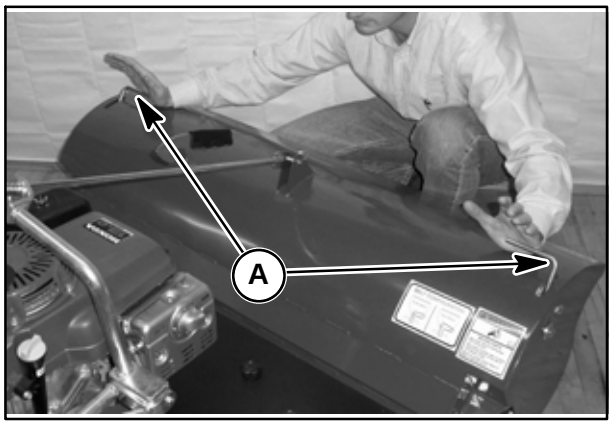
69

2. Remove the spark plug wire from the spark plug.



70

3. Push rearward on the hood latches, A.

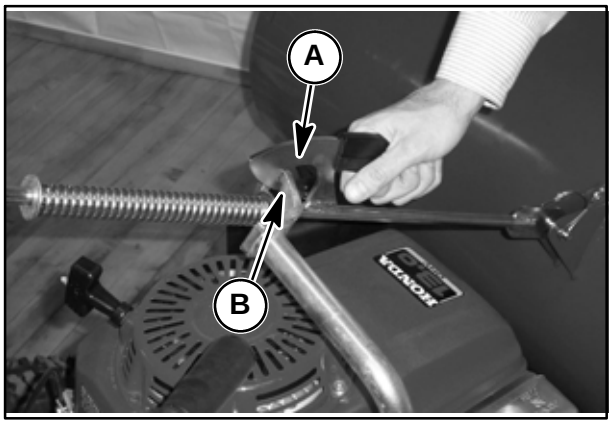


71

4. Raise the hood as shown.

72

5. Latch the hook, A, in the retaining opening, B, to keep the hood in the raised position.



73

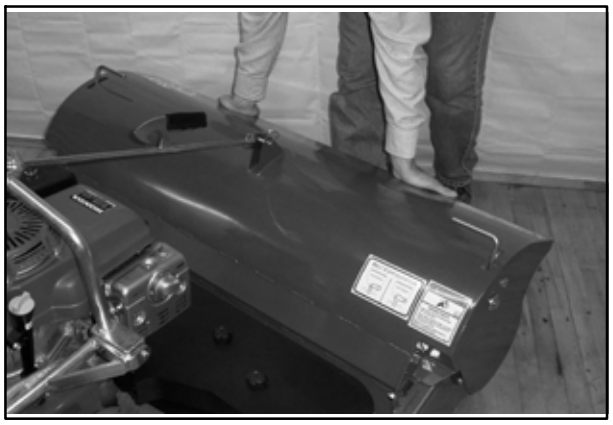
CLOSING THE HOOD

WARNING: The hood must be closed during broom operation. Operating the broom with the hood open may cause injury.

1. Lift the hook from the opening.

74

2. Push down on the hood to be sure the hood latches are engaged.



75

CHANGING THE BRUSH

BRUSH REMOVAL AND DISASSEMBLY

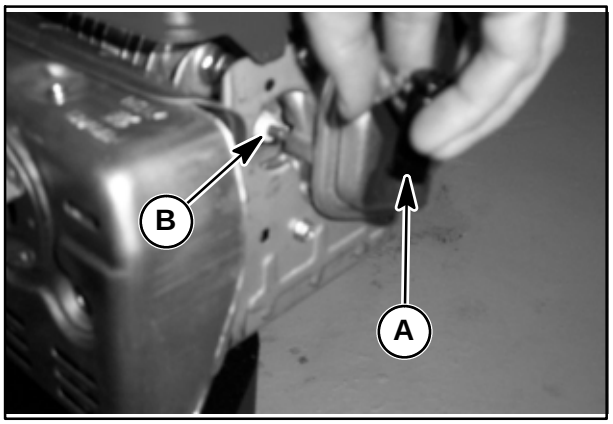
1. Place the throttle in the **STOP** position and stop the engine.

76

2. If equipped, place the OPTIONAL PARK BRAKE in the ON position.

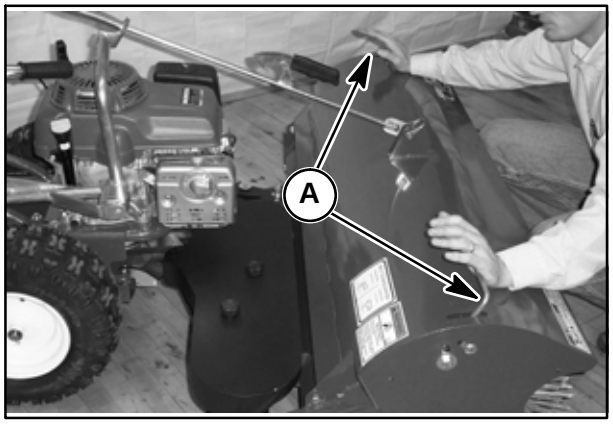
77

3. Remove the spark plug wire, A, from the spark plug, B.



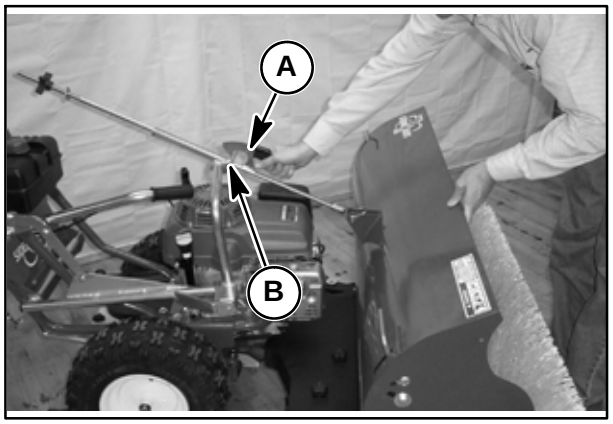
78

4. Push rearward on the hood latches, A, as shown to open the hood..



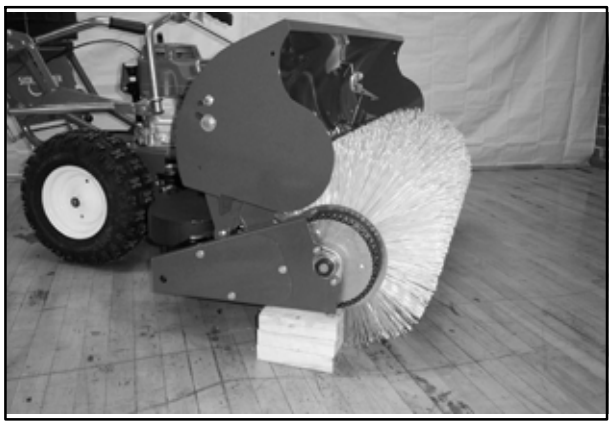
79

5. Raise the hood and place the hook on latch, A, in the retainer opening, B, as shown.



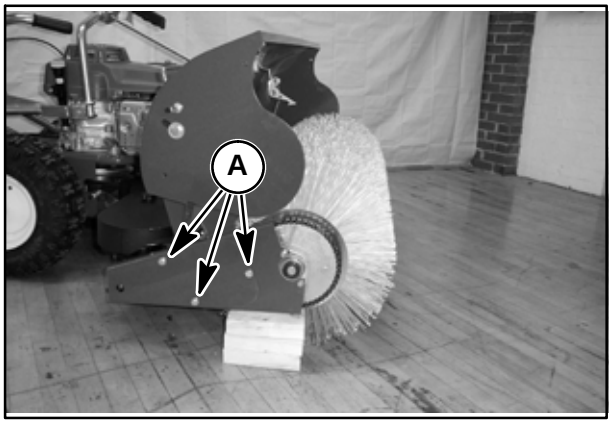
80

6. Raise the broom and place three 2X4 blocks under the broom frame. Lower the broom on to the 2X4's as shown.



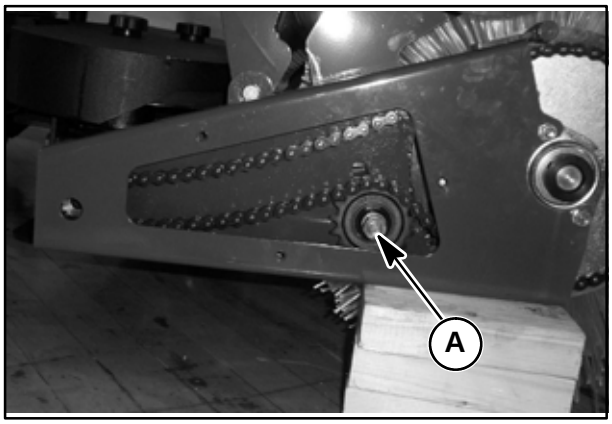
81

7. Remove the 3 bolts, A, that hold the access panel for the tensioning sprocket.



82

8. Loosen tension idler bolt, A, and remove all tension on the chain. Do not remove the bolt.

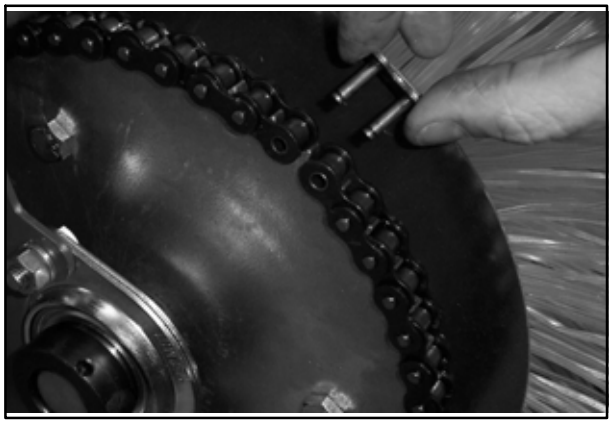


83

9. Remove the chain master link lock.

84

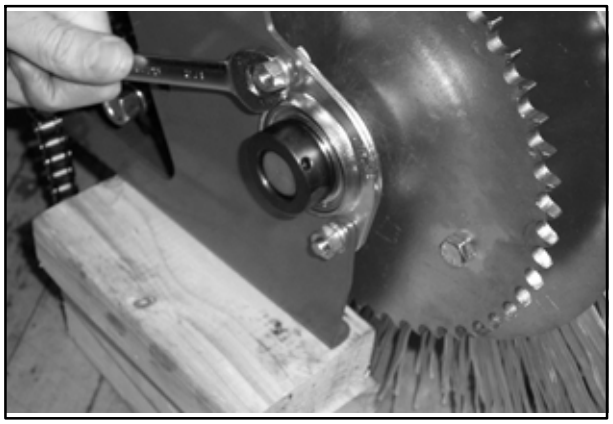
10. Remove the master link and remove the chain from the sprocket.



85

11. Loosen the two bearing attaching bolts, but do not remove them.

NOTE: *Do not loosen or remove the locking collar.*



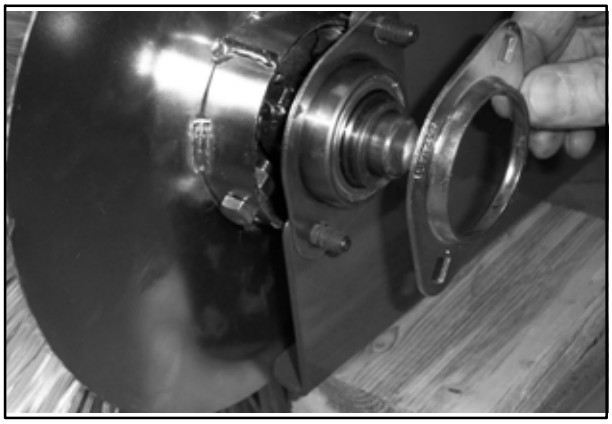
86

12. Remove the two attaching nuts on the left side of the brush.

87

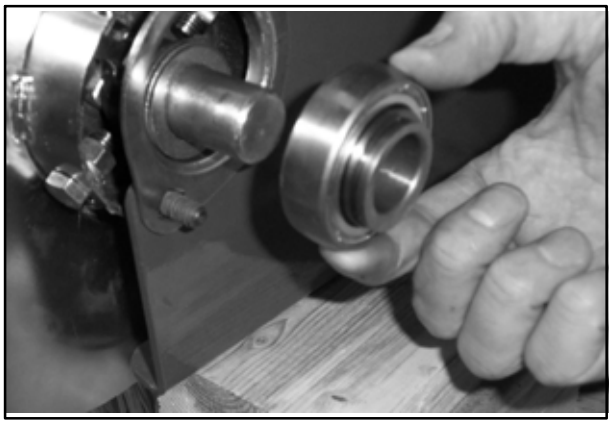
13. Remove the outer bearing flange.

NOTE: *The flanges are on the outside of the frame and the bolts are welded in the frame.*



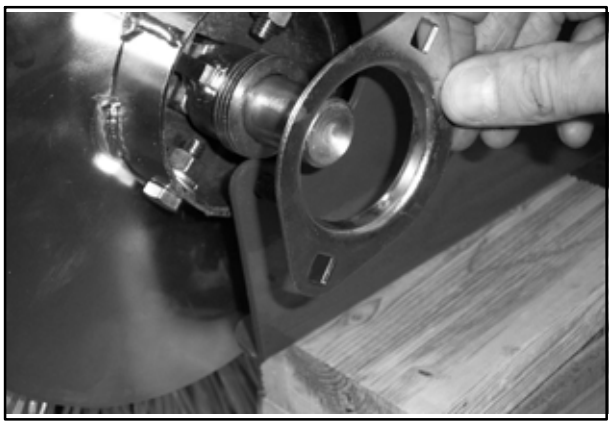
88

14. Remove the bearing.



89

15. Remove the inner flange.



90

16. Remove the shims and keep them for reuse.

NOTE: *Count the shims and keep them together as they space the brush in the frame.*

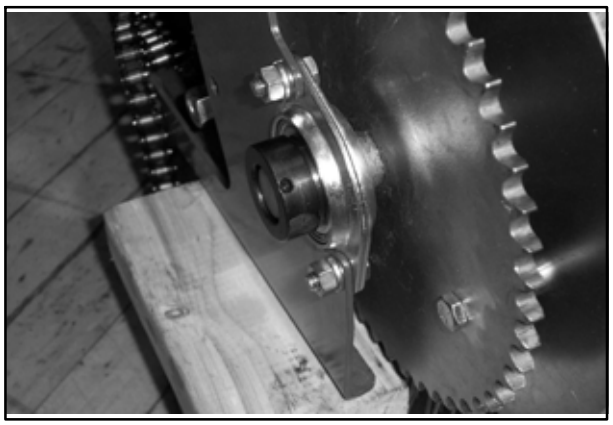
91

17. Remove the drive lug.

92

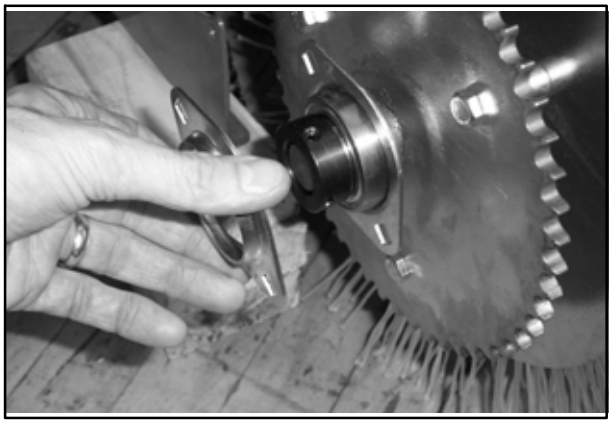
18. Remove the two retaining bolts from the right side bearing that were loosened previously.

NOTE: *The bearing flanges are on the inside of the frame.*



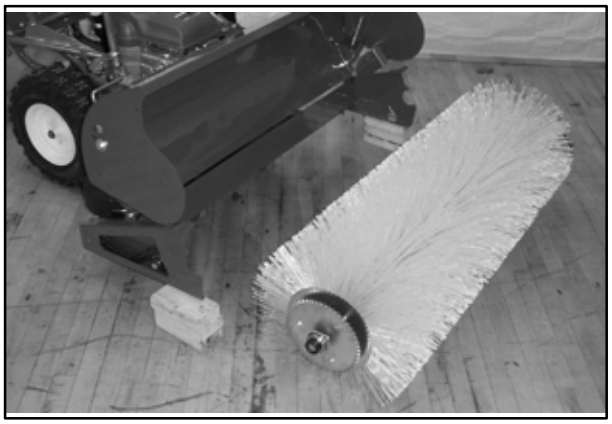
93

19. Slide the brush to the left side the remove the outer bearing flange. DO NOT REMOVE THE LOCK COLLAR OR BEARING.



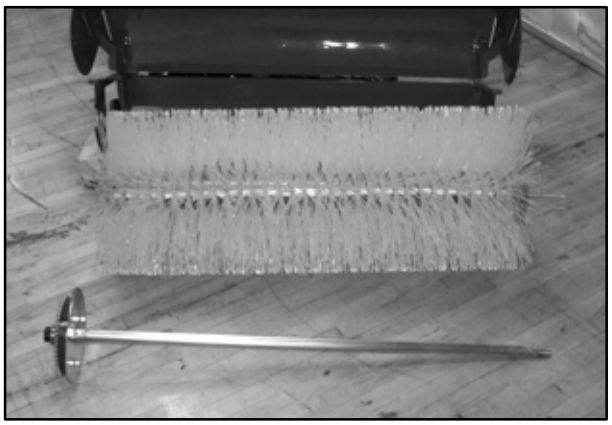
94

20. Roll the brush out of the frame.



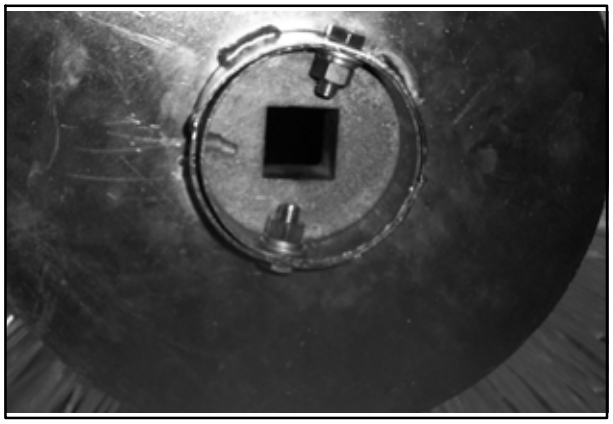
95

21. Remove the square shaft assembly from the brush.



96

22. Remove the two bolts holding the brush end guard from the brush.



97

23. Remove the brush end guard from the brush tube.

98

BRUSH ASSEMBLY AND INSTALLATION

1. Installation is the reverse of removal.
2. Leave all bearing attaching hardware loose until the brush is in the frame and the bolts have been installed through the bearing flanges.
3. Rotate the broom slowly while tightening the hardware to be sure nothing is binding and/or hitting he frame.
4. When completed, install all shields then run the engine at idle and slowly engage the broom drive. Stop the broom immediately if any unusual noise is heard or if the broom has vibrations not present before disassembly.

ENGINE MAINTENANCE

See engine manufactures owners manual.

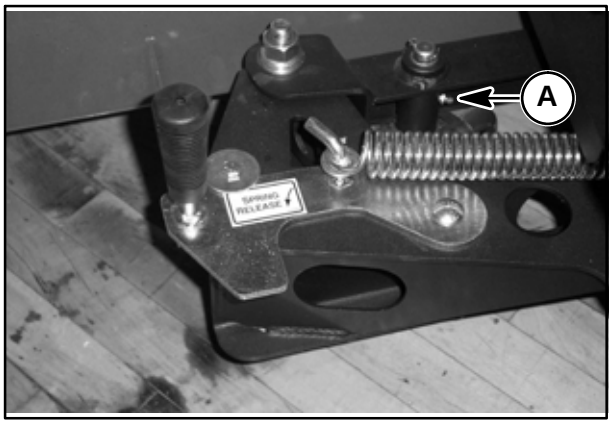
LUBRICATION

Lubricate the following grease points every 10 hours or on an annual basis whichever comes first.

Use a SAE all weather, high temperature, multipurpose grease.

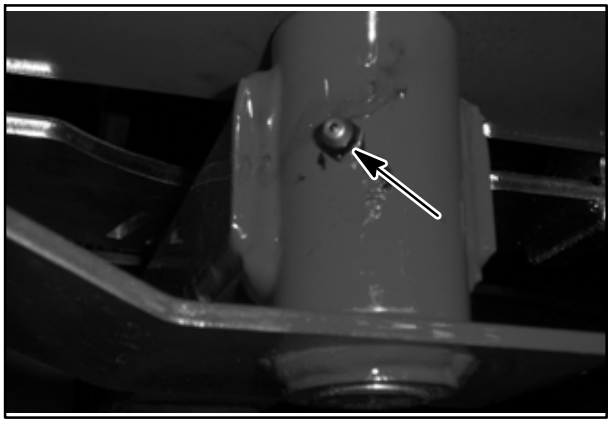
Add grease to the fittings until there is a slight increase in effort needed to operate the grease gun handle.

Dolly wheel pivot at A. Each dolly pivot has one grease point.



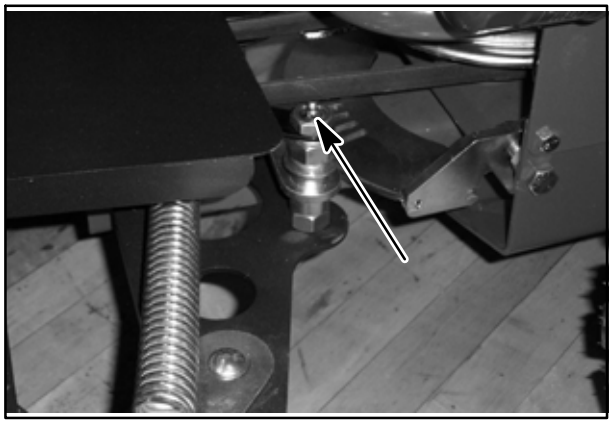
99

Attaching pivot located at the pivot located under the frame below the engine.



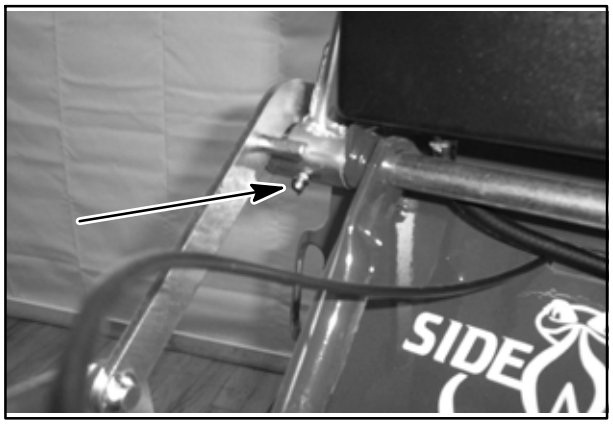
100

Belt tension pivot



101

Attachment lift arm pivot.



102

TRANSMISSION

1. The transmission does not require service.
2. The clear bottle on top of the transmission is for overflow only and will not have oil in it.

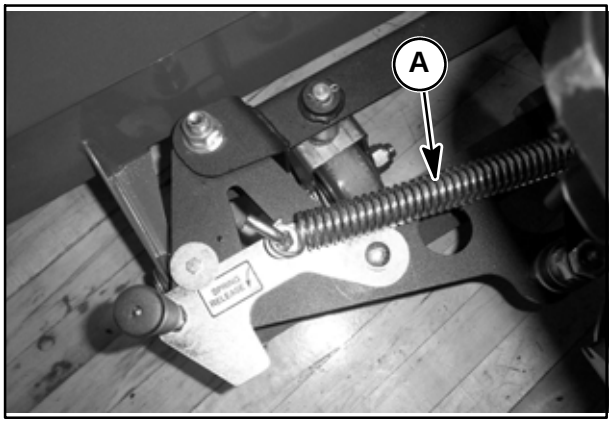
103

SIDEWINDER™ – BROOM BELT AND CHAIN TENSION AND ADJUSTMENT

MAIN DRIVE BELT

CHECKING AND ADJUSTING BELT TENSION

There is no tension check needed because the belt is automatically tensioned by spring, A.

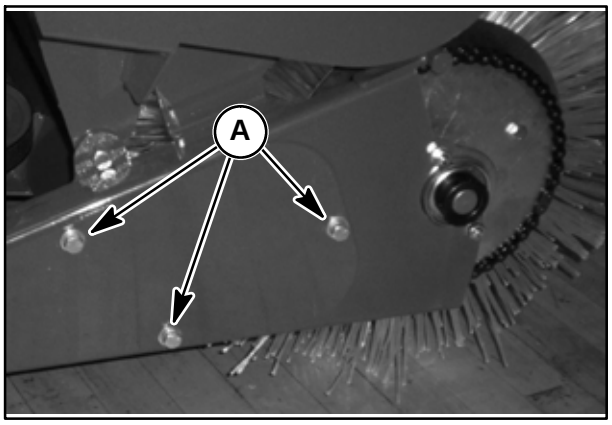


104

BROOM DRIVE CHAIN

CHECKING AND ADJUSTING CHAIN TENSION

1. Remove the three bolts, A, holding the cover and remove the cover.

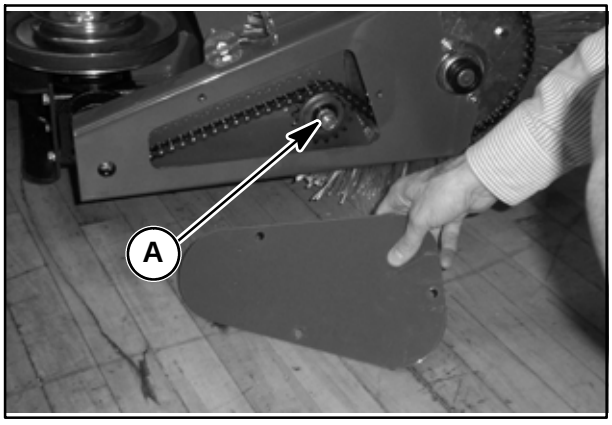


105

2. Adjust chain tension idler, A, so the chain has 1/8” slack on the lower section of chain. Tighten the idler adjusting bolt.

NOTE: *Do not over tighten the chain or sprocket and bearing damage may occur.*

3. Reinstall the cover and three bolts remover in step 1.



106

END OF SEASON STORAGE SERVICE

CLEAN THE ENTIRE MACHINE AND ENGINE

Thoroughly clean the machine and engine then blow dry with 50 PSI compressed air.

ENGINE SERVICE

1. Refer to the engine manufactures manuals for specific recommendations and procedures.

MACHINE SERVICE

1. Lubricate all grease point as shown in the Lubrication Section.
2. Lubricate all linkage pivot points.
3. Spray exposed cabled with a fluid lubricant to prevent binding and rust.
4. Lubricate chain with chain lubricant.
5. Examine all belts for damage and replace as required.
6. Check the condition of all shields and replace as required.
7. Check safety decals and replace as required.
8. Check all bearing and gearboxes for bearing condition. Replace any loose bearings.
9. Check condition of the brush and replace as required.

SPECIFICATIONS

ENGINE
Honda – GXV390K1 13.0 HP

FUEL TANK
1.0 US Gallon

TRANSMISSION
Tuff Torq model K46
Hydrostatic
Infinite variable control

GROUND SPEED
0 – 4.2 mph

WEIGHT
420 Lbs.

DIMENSIONS
53” W x 43” H x 77” L

DRIVES
Engine mounted clutch/brake
Heavy duty bevel gearbox with sealed bearings

TIRES
Rear = 18 x 6.5 heavy 4-Ply lugged

ATTACHMENT ARM
Variable angle 0 to 18 degrees each side

CONTROLS
Park Brake – optional
Variable speed control lever
Implement positioning lever

FRAME
Heavy formed tube mainframe

BRUSH SPEEDS
Small sheave (fast speed)
High idle = 3250 Engine RPM = 312 Brush RPM = 1470 Brush feet / minute
Low idle = 1500 Engine RPM = 144 Brush RPM = 678 Brush feet / minute

Large sheave (slow speed)
High idle = 3250 Engine RPM = 195 Brush RPM = 918 Brush feet / minute
Low idle = 1500 Engine RPM = 90 Brush RPM = 424 Brush feet / minute

NOTE: *Brush RPM is not a good comparison due to different brush diameters used by manufactures. Our brush is 18 inches in diameter. Other companies use brushes from 18 inches – 24 inches in diameter which changes the tip speed.*

SWB01–1204
Printed in U.S.A.