



**OWNER'S MANUAL**

***Model Number***

*700382 Subframe*

*700383 Compact Drive Mechanism*

*700384 Northeast Drive Mechanism*



***Berco***

***Subframe & Drive Mechanism***

*for*

***HUSQVARNA, JONSERED, POULAN, RALLYE, WEDEATER & YARD PRO  
tractors***

- \* ASSEMBLY
- \* OPERATION

- \* REPAIR PARTS
- \* MAINTENANCE

**CAUTION:**

**READ & FOLLOW ALL SAFETY RULES & INSTRUCTIONS BEFORE  
OPERATING YOUR EQUIPMENT**

# WARRANTY

## LIMITED ONE YEAR WARRANTY ON BERCO TRACTOR ATTACHMENTS

For one year from date of purchase, Bercomac Limitée will repair or replace free of charge at Bercomac's option, any parts which are defective as a result of defective materials or faulty workmanship.

### **COMMERCIAL OR RENTAL USE:**

Warranty on Berco attachments used for commercial or rental purposes is limited to 90 days.

### **This warranty does NOT cover:**

- \* **Wear items, such as shear pins and belts.**
- \* **Repairs due to customer abuse or neglect.**
- \* **Pre-delivery set-up.**
- \* **In home service.**

Warranty service is available by returning the "Berco" attachment to the authorized dealers.

**BERCOMAC Limitée**  
**92 Fortin N, Adstock, Québec, Canada, G0N 1S0**

# TABLE OF CONTENTS

	PAGE
INTRODUCTION .....	2
SAFETY PRECAUTIONS .....	3
ASSEMBLY	
Step 1: Tractor Preparation .....	5
Step 2: Subframe Installation .....	6
Step 3: Drive Mechanism Preparation .....	10
Step 4: Drive Mechanism Installation .....	12
Step 5: Snowblower Installation .....	13
Rotary Broom Installation .....	15
Blade Installation .....	17
MAINTENANCE & DISMOUNTING	
Maintenance .....	18
Drive Mechanism Dismounting .....	18
Belt Replacement .....	18
End of Season Storage .....	18
TORQUE SPECIFICATION TABLE .....	19
PARTS BREAKDOWN AND LISTS	
Compact Drive Mechanism .....	20
Northeast Drive Mechanism .....	22
Subframe .....	24
ATTACHMENTS .....	27
TROUBLESHOOTING	
See attachment owner's manual for this section. (Snowblower, Blade, Rotary Broom)	

# INTRODUCTION

## TO THE PURCHASER

This new attachment was carefully designed to give years of dependable service. This manual has been provided to assist in the safe operation and servicing of your attachment.

**NOTE:** All photographs and illustrations in the manual may not necessarily depict the actual models or attachment, but are intended for reference only and are based on the latest product information available at the time of publication.

Familiarize yourself fully with the safety recommendations and operating procedures before putting the machine to use. Carefully read, understand and follow these recommendations and insist that they be followed by those who will use this attachment.



**THIS SAFETY ALERT SYMBOL IDENTIFIES AN IMPORTANT SAFETY MESSAGE IN THIS MANUAL THAT HELPS YOU AND OTHERS AVOID PERSONAL INJURY OR EVEN DEATH. DANGER, WARNING, AND CAUTION ARE SIGNAL WORDS USED TO IDENTIFY THE LEVEL OF HAZARD. HOWEVER, REGARDLESS OF THE HAZARD, BE EXTREMELY CAREFUL.**

**DANGER:** Signals an extreme hazard that will cause serious injury or death if recommended precautions are not followed.

**WARNING:** Signals a hazard that may cause serious injury or death if the recommended precautions are not followed.

**CAUTION:** Signals a hazard that may cause minor or moderate injury if the recommended precautions are not followed.

Record your attachment serial number and purchase date in the section reserved below (there is no serial number on the subframe). Your dealer requires this information to give you prompt, efficient service when ordering replacement parts. Use only genuine parts when replacements are required.

If warranty repairs are required please present this registration booklet and original sales invoice to your selling dealer for warranty service.

**This manual should be kept for future reference.**

**Please check if you have received all the parts for your kit with the list of the bag and the list of the box.**

**SERIAL NUMBER :** \_\_\_\_\_

**PURCHASE DATE :** \_\_\_\_\_

***In this manual, right and left sides are determined by sitting on the tractor seat facing forward.***

In this manual, "attachment" means accessories that you install on the tractor, such as, snowblower, rotary broom, blade, rotary tiller, cab, subframe, etc...

# SAFETY PRECAUTIONS

Careful operation is your best insurance against an accident. Read this section carefully before operating the tractor and attachment. Failure to observe the following safety instructions could result in serious injury. All operators, no matter how experienced they may be, should read this and other manuals related to the tractor and attachments before operating. It is the owner's legal obligation to instruct all operators in safe operation.

## **TRAINING**



This symbol, "Safety Alert Symbol", is used throughout this manual and on the attachments safety labels to warn of the possibility of serious injuries. Please take special care in reading and understanding the safety precautions before operating the attachment or the tractor.

1. Read this owner's manual carefully. Be thoroughly familiar with the controls and proper use of the tractor and attachment. Know how to stop the unit and disengage the controls quickly.
2. Never allow children to operate attachment nor the tractor. Never allow adults to operate attachment nor the tractor without proper instructions.
3. No one should operate the tractor nor the attachment while intoxicated or while taking medication that impairs the senses or reactions.
4. Keep the area of operation clear of all persons, particularly small children and pets.

## **PREPARATION**

1. Thoroughly inspect the area where the attachment is to be used and remove door mats, all foreign objects and the like.
2. Disengage all clutches and shift into neutral before starting engine
3. Do not operate the attachment without wearing adequate garments. Avoid loose fitting clothing that can get caught in moving parts. Wear footwear that will improve footing on slippery surfaces.
4. Handle fuel with care, it is highly flammable.
  - a) Use approved fuel container.
  - b) Never add fuel to a running engine or hot engine.
  - c) Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
  - d) Never fill containers inside a vehicle, or on a truck or a trailer bed with a plastic liner. Always place containers on the ground, away from your vehicle, before filling.

- e) When practical, remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment on a trailer with a portable container, rather than from a gasoline dispenser nozzle.
  - f) Keep the nozzle in contact with the rim of the fuel tank or container opening at all times, until refuelling is complete. Do not use a nozzle lock-open device.
  - g) Replace fuel cap securely and wipe up spilled fuel.
  - h) If fuel is spilled on clothing, change clothing immediately.
5. Never attempt to make any adjustments while engine is running (except where specifically recommended by manufacturer).
  6. Always wear safety glasses or eye shields during operation or while performing an adjustment or repairs to protect eyes from foreign objects that may be thrown from the machine.
  7. **Never modify the attachment or any part without the written consent from the manufacturer.**

## **OPERATION**

1. Do not run engine indoors except when starting engine and transporting attachment, in or out of building. Do not operate or let motor run in a storage area without ventilation because gas contains carbon monoxide which is odourless, colourless and can cause death.
2. Do not carry passengers on attachment or tractor.
3. Take all possible precautions when leaving the machine unattended. Lower the attachment, shift into neutral, set the parking brake, stop the engine and remove the key. Wait for all moving parts to stop.

# SAFETY PRECAUTIONS

4. Use only attachments approved by the manufacturer (such as wheel chains, counterweights, cabs). You must use 100 lbs. of rear counterweight for better traction and a greater stability at all times when using an attachment that is installed on the front of a tractor.
5. Never operate an attachment without good visibility or light.

## **MAINTENANCE AND STORAGE**

1. Check shear bolts, mounting bolts, etc..., at frequent intervals for proper tightness to be sure attachment is in safe working condition.
2. Never store the machine with fuel in the tank inside a building where ignition sources are present, such as hot water tanks, space heaters, clothes dryers and the like. Allow engine to cool before storing in any enclosure.
3. Always refer to the owner's manual when you store than attachment for an extended period.
4. Maintain or replace safety and instructions labels, as necessary.

**WHENEVER YOU SEE THIS SYMBOL**



**IT MEANS:**

**WARNING!**

**BECOME ALERT !**

**YOUR SAFETY IS INVOLVED!**



**WARNING**



**FOR YOUR SECURITY:**

**Read the attachment owner's manual for safety precautions and rules.**

**Follow the assembly and operation instructions.**



**WARNING**



**TO PREVENT INJURIES AND FOR MORE TRACTION WHEN USING AN ATTACHMENT:**

**-Rear counterweight of 100 lbs. minimum is required to counterbalance the attachment's weight.**

**-Tractor manufacturer approved tire chains are required.**

**-Do not operate on a slope greater than 10°.**

**-When dismounting an attachment remove rear counterweights.**

# ASSEMBLY

**IMPORTANT: TORQUE ALL BOLTS ACCORDING TO TORQUE SPECIFICATION TABLE (SEE TABLE OF CONTENTS) WHEN STATED: TIGHTEN FIRMLY. REFER TO PARTS BREAKDOWN SECTION FOR PARTS IDENTIFICATION.**

**NOTE: This subframe was designed to fit various models of Lawn, Yard or Garden tractors. (See illustrations to identify your tractor).**

This subframe may be used to install different attachments (see attachments page). Once installed, it may remain permanently on the tractor. Before doing any modifications or installations on the tractor, open the tractor hood, disconnect the headlights and remove the hood. Disconnect the wire from the spark plug(s) and keep away from spark plug(s) to prevent accidental starting.

## STEP 1

### **TRACTOR PREPARATION:**

**IT IS NOT NECESSARY TO REMOVE THE MOWER DECK AT THIS STEP.**

According to the model of the tractor, remove the front attaching supports if they are bolted to the outside of the tractor's frame (one on each side) and the heat shield (save the bolts to install the new heat shield).

In order to install the subframe's supports, it may be necessary to remove certain bolts or certain parts.

**NOTE: Take note of the place and how the bolts and parts were installed in order to reinstall them in the same manner as before.**

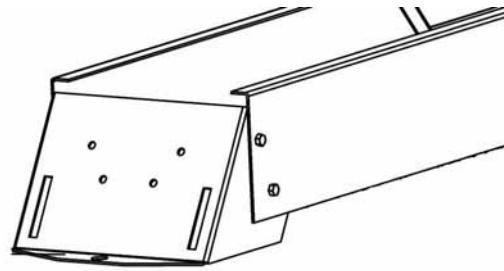
**If applicable, make sure that the belt guide does not touch any part when reinstalled.**

### **How to:**

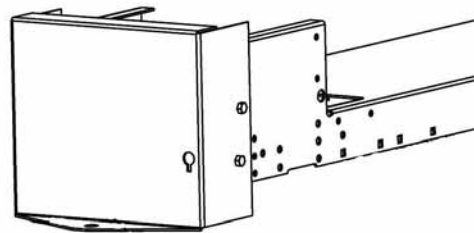
Take the right support (item 1) and place it on the right side of the tractor's frame.

Align the hole (item 2) on the right support with the hole (item 3) which is about 2" (according to the model of the tractor) from the edge of the tractor's front frame. Remove all the bolts and parts from the tractor's frame that will interfere with the installation of the support.

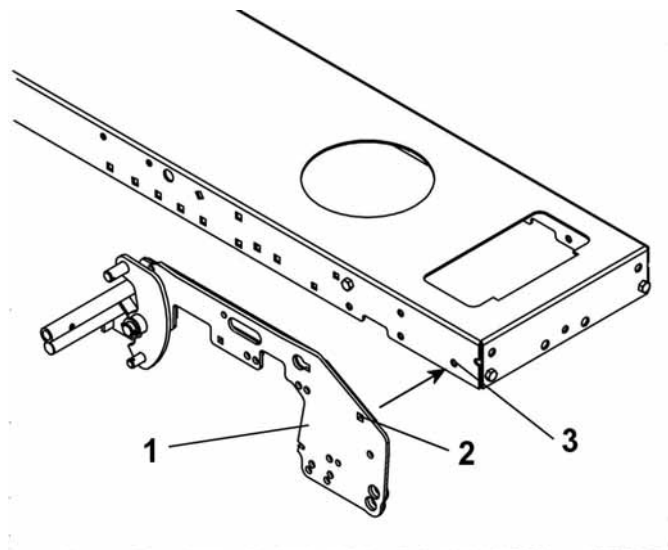
Do the same operation on the left side.



**Back end of Garden Tractor**



**Back end of Lawn & Yard Tractors**



Align the holes in order to identify and remove the bolts and/or parts that come into interference

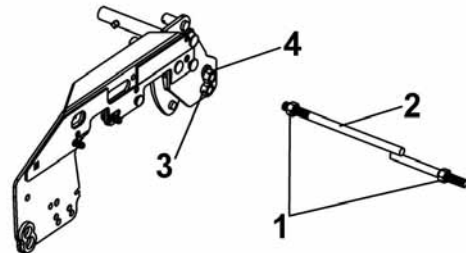
# ASSEMBLY

## STEP 2

### SUBFRAME INSTALLATION:

#### FOR LAWN & YARD TRACTORS:

Install a hex. nut 1/2" (item 1) on each end of the brace pin (item 2) (halfway down the threads).  
Install the longest end (item 2) of the brace pin in the top nut (item 4) welded on the right support.



Install brace pin

#### FOR GARDEN TRACTORS:

Install a hex. nut 1/2" (item 1) on each end of the brace pin (item 2) (halfway down the threads).  
Install the longest end (item 2) of the brace pin in the bottom nut (item 3) welded on the right support.

#### FOR LAWN & YARD TRACTORS:

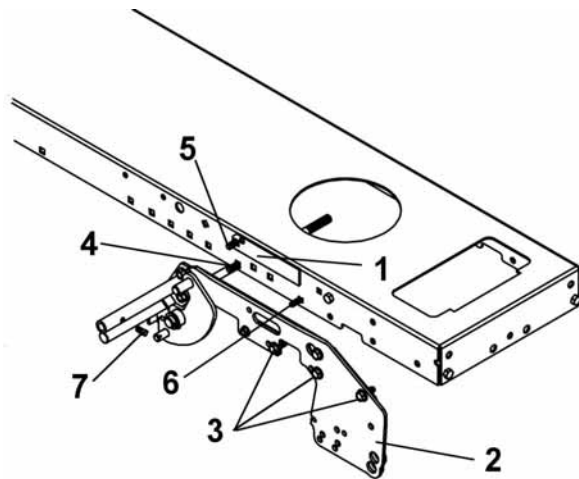
On the right side install the right support (item 2) and hold in place with three thread cutting screw 3/8 x 1" (item 3), one carriage bolt 5/16 x 1 (item 6) the head inside, one flange nut on the outside, one carriage bolt 3/8 x 1" (item 4) the head inside, one flange nut on the outside.

Slightly tighten the screws and bolts.

Slide the shim (item 1) between the tractor frame and the right support. Secure in place with a 3/8 x 1" carriage bolt the head inside (item 5) and with a flange nut.

(Make sure that the shim stays perpendicular with the top of the support).

Install the square head set screw 5/16 x 1/2" (item 7).  
Do not tighten the bolts nor nuts.



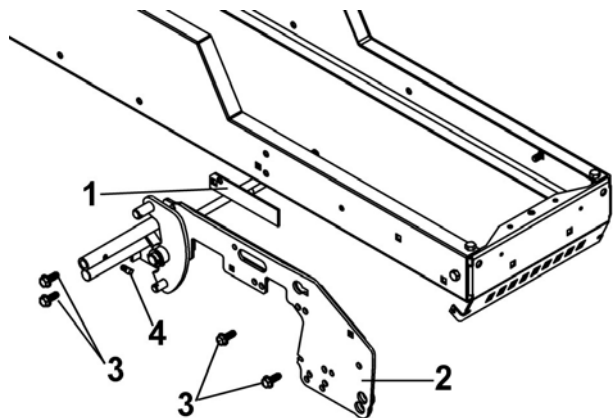
Install right support on the Lawn & Yard tractors

#### FOR GARDEN TRACTORS:

On the right side, install the shim (item 1) between the tractor frame and the right support (item 2) (make sure that the shim stays perpendicular with the top of the support) with four thread cutting screws 3/8 x 1" (item 3).

Install the square head set screw 5/16 x 1/2" (item 4).

Do not tighten the screws.



Install the right support on Garden tractor



# ASSEMBLY

## FOR LAWN & YARD TRACTORS:

Install the left support (item 1) by inserting the top hole (item 3) on the brace pin (item 2) as shown in figure A.

Hold in place with three thread cutting screws 3/8 x 1" (item 4), a carriage bolt 5/16 x 1" (item 5) (the head inside) and a flange nut.

Install the handle support (item 7) and secure in place with a hex bolt 3/8 x 1" (the head inside) (item 8) in the bottom hole. Secure with a flange nut.

Slide the shim (item 6) between the tractor frame and the support. (Make sure that the shim stays perpendicular with the top of the support).

Secure with the last hex bolt 3/8 x 1" (the head inside) (item 8) in the top hole of the handle support and secure with a flange nut.

Slightly tighten the screws and bolts.

Make sure that the brace pin (figure A, item 2) stays straight and does not come into contact with any part of the tractor (ex: the engine belt when mower deck is in raised position).

If you have removed the original supports from the tractor, in order to install the mower brackets (item 12) (included in this kit) inside the support, insert two hex. bolts 3/8 x 1 1/4" (item 10) (the heads on the outside) in the top holes of the right support .

To the inside of the support, insert the shim (item 11) and the mower bracket (item 12) on the bolts. Secure with two flange nuts.

Do the same operation on the left side.

Tighten firmly.

Install the new heat shield (item 13) with the bolts previously removed.

Install the plastic grommet (item 14) as shown.

Install the square head set screw 5/16 x 1/2" (item 15) in the cab support.

## Reinstall the parts:

Reinstall the parts previously removed in their original position. If applicable, in order to facilitate reinstallation of the parts, you may remove the lever (item 9) and reinstall it afterwards.

(If necessary, use the bolts supplied for this purpose).

Make sure the belt guide is functional and adjust in order to compensate for the thickness of the right support.

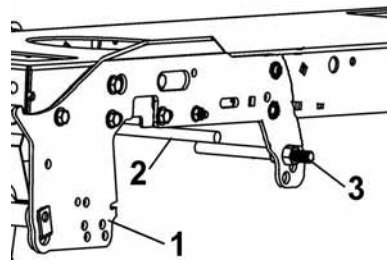
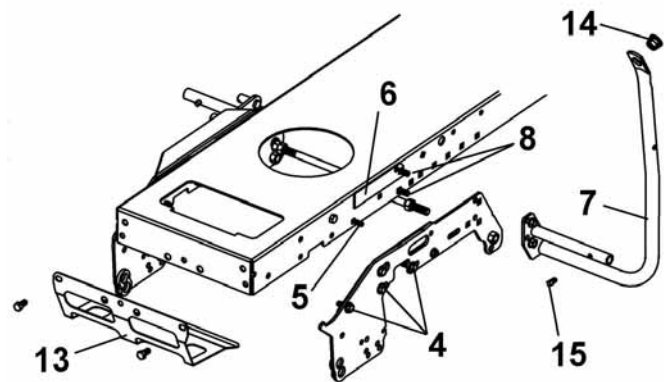
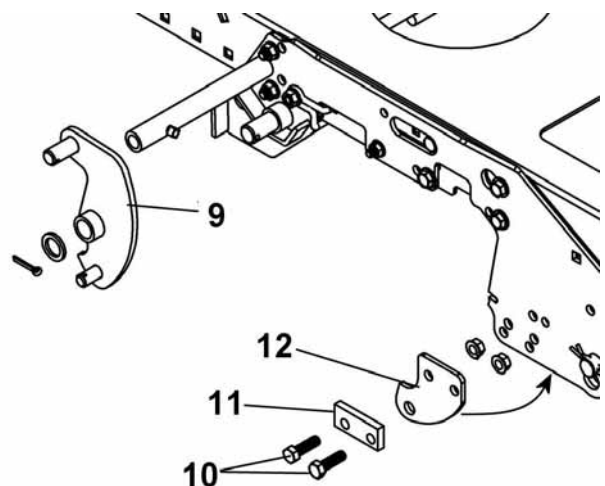


Figure A



Install the left support and the handle support on Lawn & Yard tractors



Install the mower brackets inside the support and other parts if applicable.

# ASSEMBLY

## **FOR GARDEN TRACTORS:**

Install the left support (item 1) by inserting it on the brace pin (item 2) as shown in figure A.

Hold in place with two thread cutting screws  $3/8 \times 1$ " (item 4). Install the handle support (item 5) with a hex bolt  $3/8 \times 1$ " (item 6) (the head inside) in the bottom hole and a flange nut.

Slide the shim (item 3) between the tractor frame and the left support (item 1) (make sure that the shim stays perpendicular with the top of the support) with the last hex bolt  $3/8 \times 1$ " (item 6) (the head inside) and a flange nut.

Make sure that the brace pin (figure A, item 2) stays straight and does not come into contact with any part of the tractor (ex: the engine belt when mower deck is in raised position). If it does, turn the brace pin to use another hole created for this purpose.

If you have removed the original supports from the tractor, in order to install the mower brackets (item 9), (included in this kit) inside the support insert two hex bolts  $3/8 \times 1 \frac{1}{4}$ " (item 7) (the heads on the outside) in the bottom holes of the right support.

To the inside of the support, attach the shim (item 8) and the mower bracket (item 9) on the bolts. Secure with two flange nuts.

Do the same operation on the left side. Tighten firmly.

Secure the heat shield with a thread cutting screw  $3/8 \times 1$ " (item 10) and a spacer (item 11) on each side as shown.

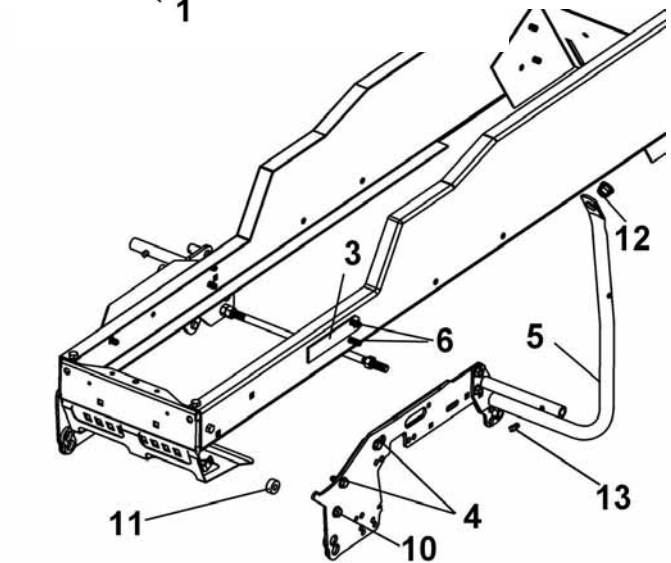
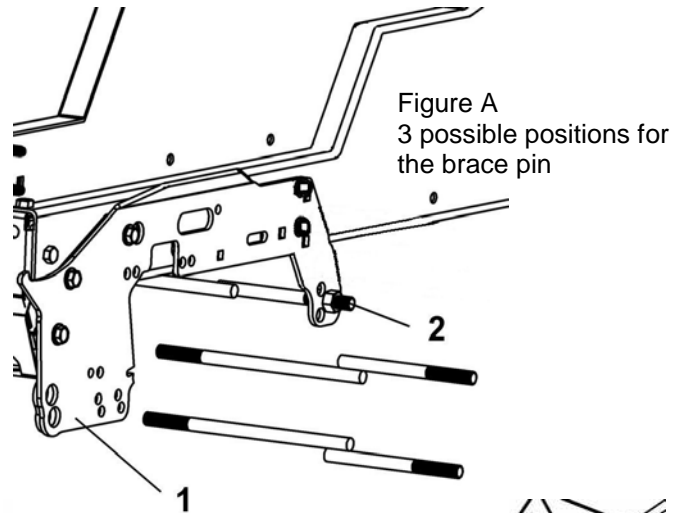
Install the plastic grommet (item 12) as shown.

Install the square head set screw  $5/16 \times 1/2$ " (item 13) in the cab support.

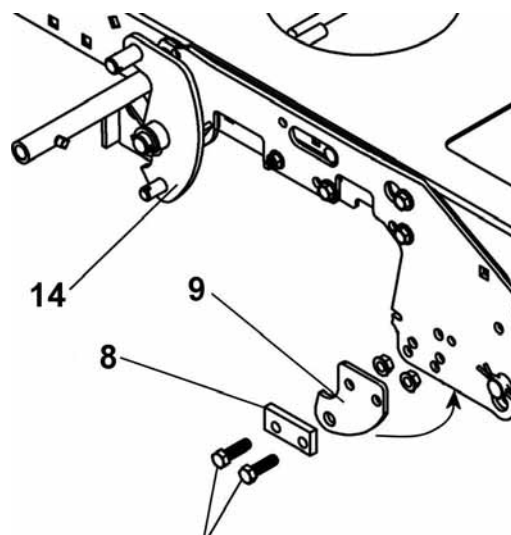
## **Reinstall the parts:**

Reinstall the parts previously removed in their original position. If applicable, in order to facilitate reinstallation of the parts, you may remove the lever (item 14) and reinstall it afterwards. (If necessary, use the bolts supplied for this purpose).

Make sure the belt guide is functional and adjust in order to compensate for the thickness of the right support.



Install the left support and the handle support



Install the mower brackets inside the support

# ASSEMBLY

## FOR LAWN, YARD AND GARDEN TRACTORS:

Turn the front wheels towards the left.

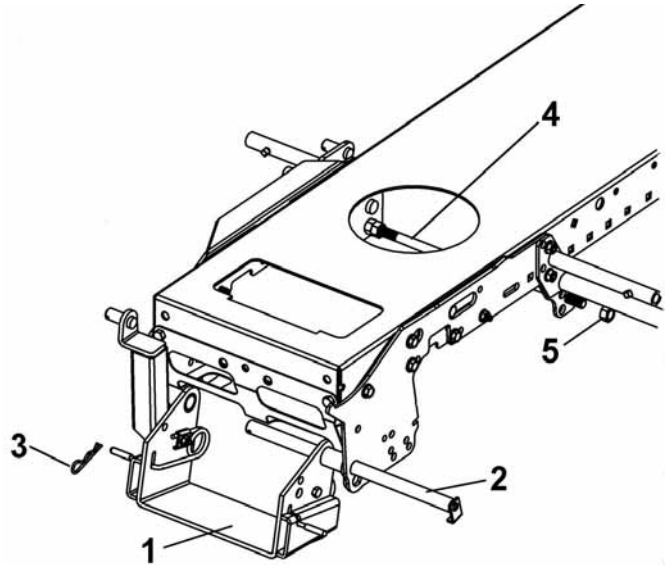
Install the pivot support (item 1) between the two supports and slide in place the pin (item 2) in the top hole **for Lawn & Yard tractors** or the bottom hole **for Garden tractors**.

Secure with the hair pin (item 3).

Tighten all the bolts.

Adjust the inside left hand side nut and right hand side nut of the brace pin (item 4) until they come into contact with the supports. Secure the brace pin with a hex nut 1/2" (item 5) on the left hand side.

Tighten the three nuts.



Install the pivot support and adjust the nuts on the brace pin.

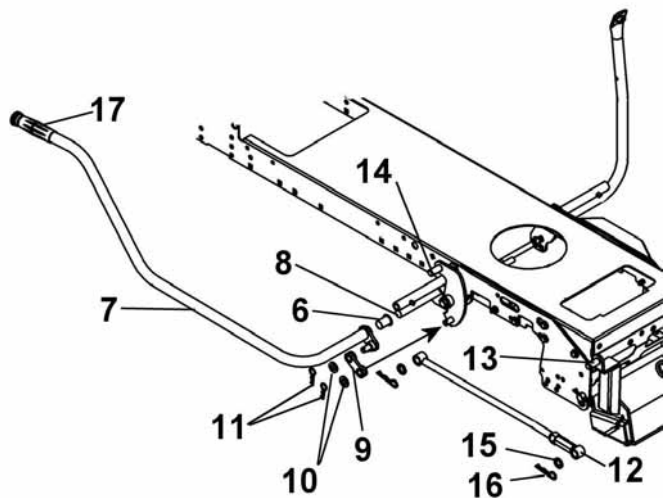
Insert the nylon bushing (item 6) in the lift arm (item 7). Insert the lift arm on the tube (item 8) of the right support. Install the link (item 9), one end on the lift arm pin and the other end on the lever pin.

Secure with two washers (item 10) and two hair pins 2.5mm (item 11).

Install the bended part of the link (item 12) (angle towards the inside) on the pivot support pin (item 13) and insert the other end of link on the lever pin (item 14).

Secure each end with a washer (item 15) and a hair pin 3mm (item 16).

Install the handgrip (item 17) on the lift arm as shown.



Install the lift arm

# ASSEMBLY

## VERY IMPORTANT

### ADJUST THE LIFT HEIGHT OF THE ACCESSORIES ON LAWN, YARD AND GARDEN TRACTORS.

This adjustment is necessary in order to allow the accessories to follow the contours of the ground and to avoid damage to the accessories.

The link (item 1) has an adjustment bolt (item 2) to adjust the height of the accessories:

**Compact Snowblower:** max. 4" from the ground.

**Northeast Snowblower:** max. 4" from the ground.

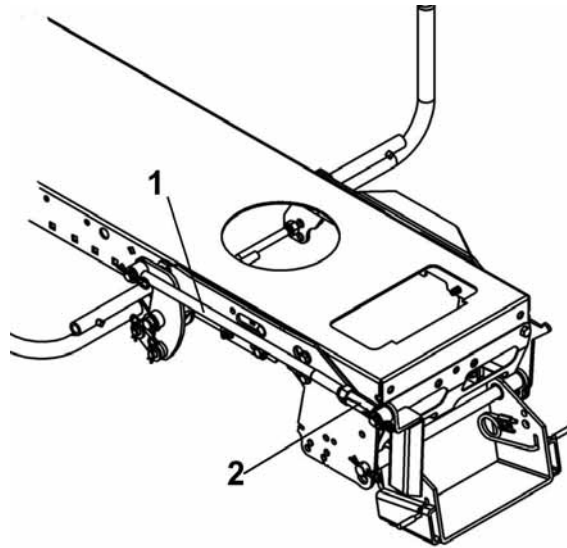
**Rotary Broom:** 1 1/2" over the swivel wheels.

**Utility Blade:** no restrictions.

When the adjustment is done tighten the lock nut.

ALSO SEE ACCESSORY INSTALLATION SECTION FOR TIRE PRESSURE.

NON COMPLIANCE WITH THESE INSTRUCTIONS MAY DAMAGE THE BELTS AND THE DRIVE MECHANISM.



Adjust the lift height of the accessories

## **STEP 3**

### DRIVE MECHANISM PREPARATION:

**NOTE:** You must remove the mower deck to install and use the drive mechanism.

Remove the left mower bracket.

Keep these parts for reinstallation of the mower deck.

### FOR LAWN & YARD TRACTORS:

Secure the square supports as shown with two carriage bolts 3/8 x 3/4" (item 1) the heads inside. Secure with two flange nuts.

Do the same operation on other side.

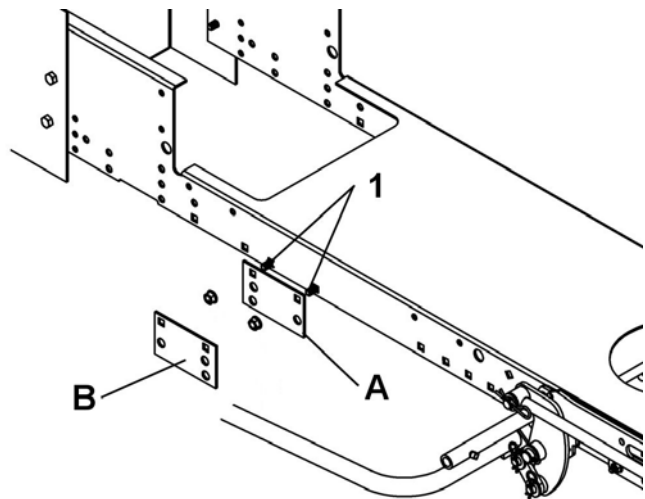
**Note:** Due to the wide variety of tractor models on the market, these supports can be installed in different ways. See illustration A or B.

### FOR GARDEN TRACTORS:

To install the drive mechanism, you must remove the two bolts from the footrests (from each side).

Secure the left support (longest support with point towards the front) and the right support (shortest support with point towards the front) with the bolts removed from the footrests. See figure A.

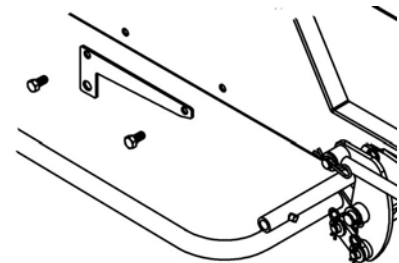
Install supports on  
Lawn & Yard tractors



B

A

Figure A,  
Install supports on  
Garden tractor



# ASSEMBLY

**NOTE:** This drive mechanism may be mounted on tractors with two types of clutch mechanisms. See the following instructions for those that are appropriate for your tractor.

## GARDEN TRACTORS WITH AN ELECTRIC CLUTCH.

No modifications are needed.

## LAWN & YARD TRACTORS WITH AN ELECTRIC CLUTCH

Remove the spring already installed on the idler arm (item 1).

Remove the support (item 2) and the shim (item 3) by removing the two bolts (item 4). Reinstall the support (item 2) and the shim (item 3) as shown in figure A. Secure with the bolts (item 4) and tighten firmly. Reinstall the spring on idler arm (item 1).

## LAWN & YARD TRACTORS WITH A MANUAL CLUTCH ACTIVATED BY A CABLE.

Remove the spring that is hooked to the idler arm (item 1)

Remove the support (item 2) and the shim (item 3) by removing the two bolts (item 4). Reinstall the support (item 2) without the shim as shown in figure B. Secure with the bolts (item 4) and tighten firmly.

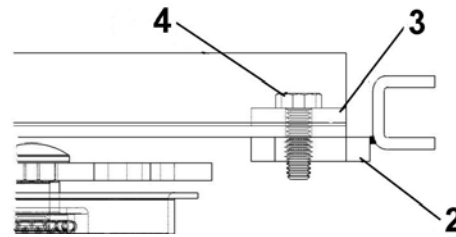
Reinstall the spring on idler arm (item 1).  
Cut the tie wrap that holds the cable to the frame.

**NOTE:** Depending on the mower deck model, there are two different cable lengths. To determine where to place the cable holder, hook the end of the cable spring (item 5) on the idler arm (item 1). Slide the cable shield (item 6) temporarily into the slot on the cable holder (item 7). To identify into which holes the cable holder will be bolted in, you must apply a slight tension on the cable. This adjustment must be done with the clutch arm in the off position.

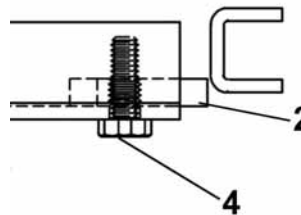
Remove the cable shield and secure the cable holder (item 7) on the frame using two 1/4 x 3/4" hex bolts (item 8) and flange nuts.

Reinstall the cable shield into the cable holder and secure with the hair pin previously removed.

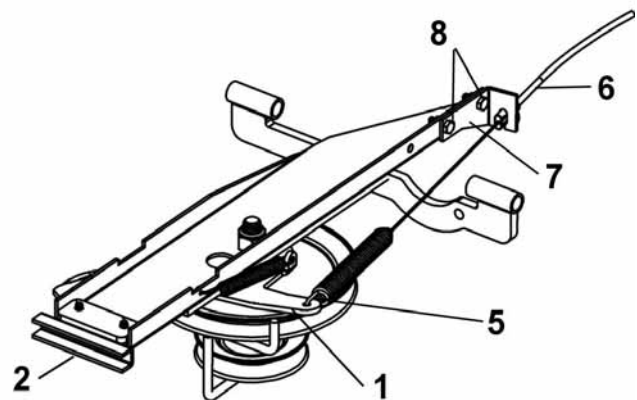
**NOTE:** The drive mechanism must be straight, to make sure the belt works well.



**Figure A**  
Install the support with shim for electric clutch as shown



**Figure B**  
Install the support without shim for manual clutch as shown.



Install cable holder

# ASSEMBLY

## STEP 4

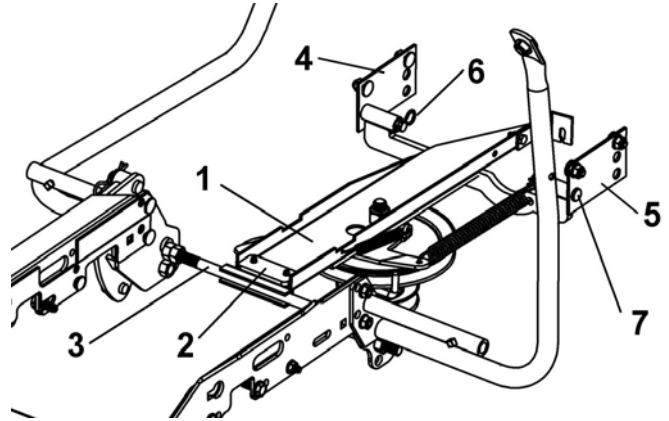
### **DRIVE MECHANISM INSTALLATION:**

Install the drive mechanism according to the appropriate figure for you tractor.

Install the drive mechanism (item 1) by hooking the front part of the drive frame (item 2) on the brace pin (item 3).

Lift and attach the rear portion of the drive frame between the supports (items 4 & 5) by inserting a pin (item 7) on each side. Secure with two 2.5 mm hair pins (item 6).

Install the primary belt on the engine pulley and route inside the belt guide.

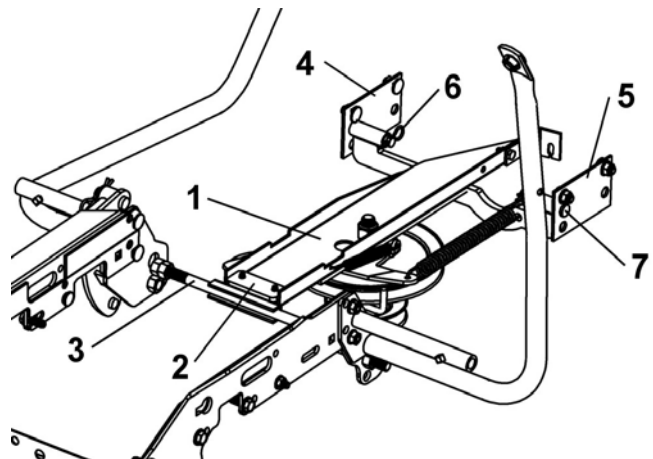


Install drive mechanism on Lawn & Yard tractors with manual clutch.

### **ON LAWN & YARD TRACTORS:**

Make sure the drive mechanism pulley is aligned with the engine pulley. If not, you may change the position of the square supports (item 5) as needed.

**NOTE:** After installation, attach the cable to the frame with the new tie wrap supplied with this kit.



Install drive mechanism on Lawn & Yard tractors with electric clutch.



## WARNING



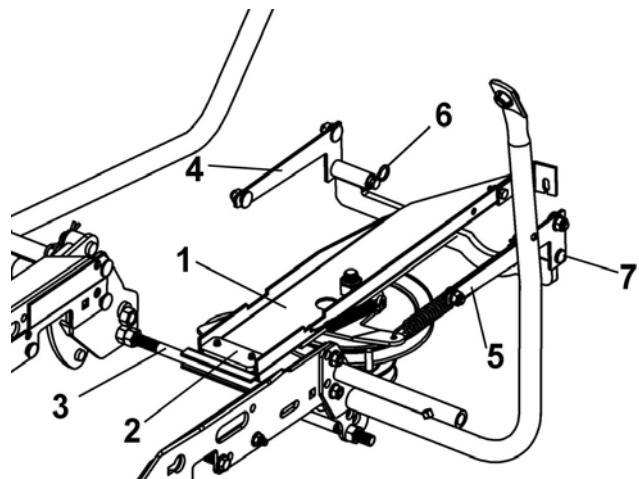
**TO PREVENT INJURIES DO THIS VERIFICATION WHEN THE ENGINE IS STOPPED.**

### **NOTE: Electric Clutch :**

If your tractor is equipped with an electric clutch, make sure the spring is well inserted in its place and the belt does not touch the belt guides at any point.

### **NOTE: Manual Clutch:**

If your tractor is equipped with a manual clutch, make sure the belt guide does not touch the belt at any point while the drive mechanism is engaged or disengaged.



Install drive mechanism on Garden tractor with electric clutch.

# ASSEMBLY

## STEP 5

### **SNOWBLOWER INSTALLATION:**

Refer to snowblower owner's manual, parts breakdown section for parts identification.



## WARNING



### **FOR YOUR SECURITY:**

Read the snowblower's owner's manual for safety precautions and rules.  
Follow the assembly and operation instructions.



## WARNING



### **TO PREVENT INJURIES:**

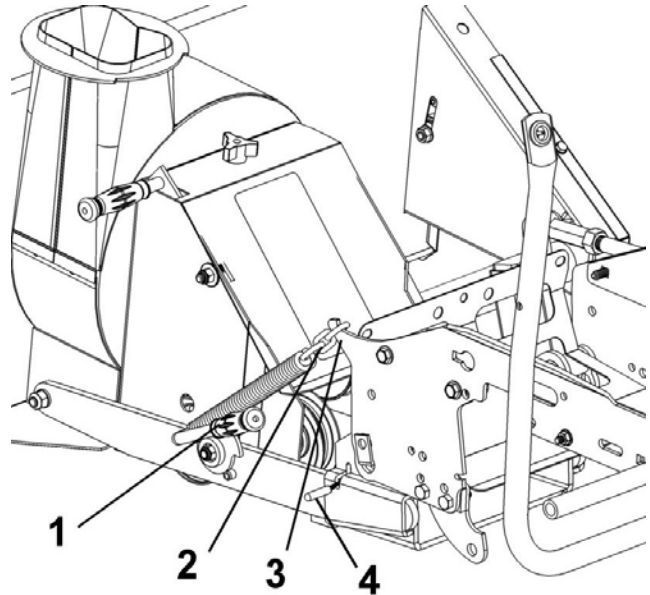
Stop the motor.  
Apply parking brake.  
Remove the ignition key.  
Disconnect the wire from the spark plug(s) and keep away from spark plug(s) to prevent accidental starting.

Attach the snowblower to the subframe as shown.

Make sure the snowblower is pushed in until locked into place by the springs (item 4).

Lift the snowblower by pulling the lift arm. Turn the tension arm (item 1) towards the back. Hook the chain (item 2) (of the helper spring) on the tip (item 3) of the left support intended for this purpose. Turn the tension arm towards the front to apply tension on the spring.

Lower the snowblower.



Install snowblower and lift assist spring



## CAUTION



The belt tension arm and lift assist spring are spring loaded & needs to be held firmly while displacing to prevent injury.

### **BELT INSTALLATION:**

Remove the belt guard.

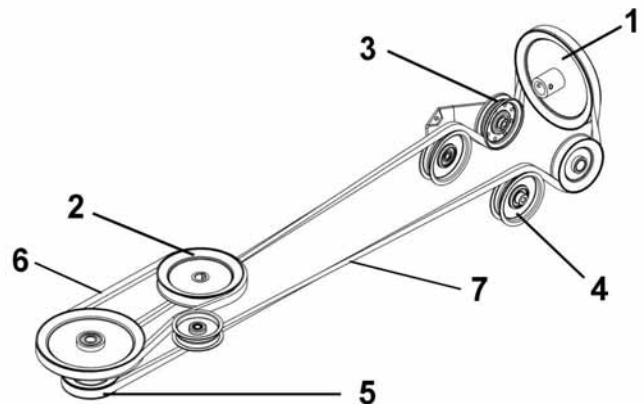
Install the belt around the pulleys as shown.

Install the belt on the drive mechanism pulley (item 5) under the tractor.

Apply tension on the belt by pulling up the belt tension arm.

Reinstall the belt guard.

**NOTE:** See belt replacement instructions in the maintenance section of the snowblower owner's manual.



- Item 1: Snowblower pulley
- Item 2: Tractor engine pulley
- Item 3: Flat pulley L.H.
- Item 4: Flat pulley R.H.
- Item 5: Drive mechanism pulley
- Item 6: Drive mechanism belt
- Item 7: Snowblower belt

Install-belt and belt guard



## CAUTION



Never use the snowblower without the belt guard.

# ASSEMBLY

## **VERIFY BELT ROUTING:**

- Lower the snowblower to the ground and let it run for a few seconds under supervision.
- Disengage the snowblower and stop the engine.
- Remove the belt guard.
- Check the belts to make sure they are well inserted on the pulleys and have not flipped on their sides in the pulleys and that they do not touch the belt guides.
- Reinstall the belt guard.



## **WARNING**

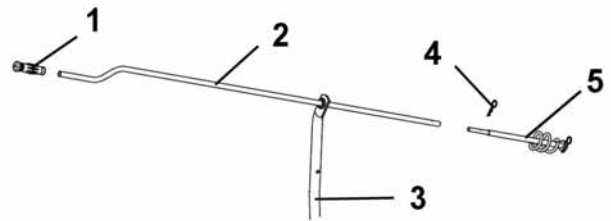


### **TO PREVENT INJURIES:**

**It is the person who installs the drive mechanism responsibility to make sure that when the clutch is disengaged that all moving parts stop.**

**For more information, do not hesitate to contact the technical support.**

Insert the handgrip (item 1) on the handle (item 2).  
Insert the handle (item 2) through the support (item 3) as shown.  
Insert the handle (item 2) in the rotation worm (item 5) and secure with a 2.5 mm. hair pin (item 4).



Install handle

## **VERIFY SKID SHOE ADJUSTMENT:**

**LEVEL PAVED SURFACE:** Adjust skid shoes to allow 3/16" to 1/4" clearance (A) between cutting edge and surface.

**UNEVEN OR GRAVEL SURFACE:** Adjust skid shoes to allow 1/2" to 5/8" clearance (A) between cutting edge and surface.

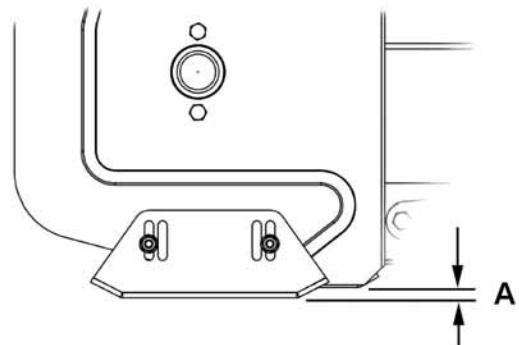
## **VERIFY TIRE PRESSURE:**

Check and adjust tractor tire pressure as follows:

Front tires: 14-15 psi

Back tires: 7-8 psi

Tire pressure must be even on both sides of tractor.



Adjust skid shoe



# ASSEMBLY

## **ROTARY BROOM INSTALLATION:**

Refer to rotary broom owner's manual, parts breakdown section for parts identification.



## **WARNING**



### **FOR YOUR SECURITY:**

Read the Rotary Broom owner's manual for safety precautions and rules.

Follow the assembly and operation instructions.

Attach the rotary broom to the subframe as shown.

Make sure the rotary broom is pushed in until locked into place by the springs (item 1).



## **CAUTION**



**Never use the Rotary Broom without the belt guard.**



## **WARNING**



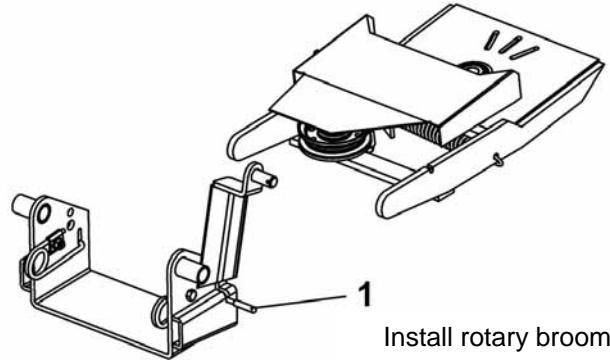
### **TO PREVENT INJURIES:**

Stop the motor.

Apply parking brake.

Remove the ignition key.

Disconnect the wire from the spark plug(s) and keep away from spark plug(s) to prevent accidental starting.



## **BELT INSTALLATION**

**NOTE:** See belt replacement instructions in the maintenance section of the owner's manual for the broom.

Remove the belt guard.

Install the belt on the drive mechanism pulley (item 1) as shown.

Reinstall the belt guard.

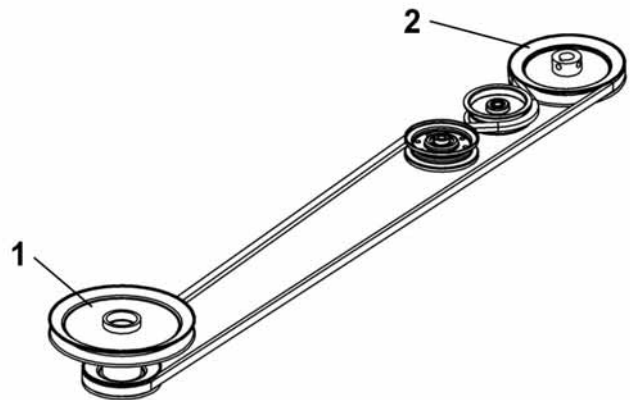
**TIP:** Because of strong tension on the spring and to facilitate installation of the belt, the broom must be on the ground and remove the belt from the engine pulley.

### **VERIFY BELT ROUTING:**

-Lower the rotary broom to the ground and let it run for a few seconds under supervision.

-Disengage the rotary broom and stop the engine.

-Check the belts to make sure they are well inserted on the pulleys and have not flipped on their sides in the pulleys and that they do not touch the belt guides.



Item 1: Drive mechanism pulley

Item 2: Rotary broom pulley



## **WARNING**



### **TO PREVENT INJURIES:**

It is the person who installs the drive mechanism responsibility to make sure that when the clutch is disengaged that all moving parts stop.

For more information, do not hesitate to contact the technical support.

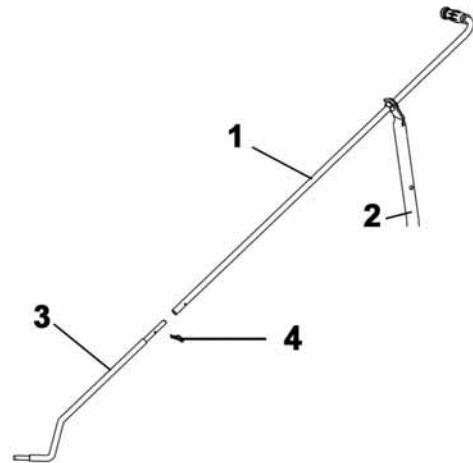
Install belt

# ASSEMBLY

Insert handgrip on the handle.

Insert the handle (item 1) through the support (item 2) as shown.

Install the handle on the control rod (item 3) as shown and secure with a 2.5 mm. hair pin (item 4).



Install handle

## **VERIFY TIRE PRESSURE:**

Check and adjust tractor tire pressure as follows:

Front tires:	14-15 psi
Back tires:	7-8 psi

Tire pressure must be even on both sides of the tractor.

# ASSEMBLY

## **BLADE INSTALLATION:**

Refer to blade owner's manual, parts breakdown section for parts identification.



## **WARNING**



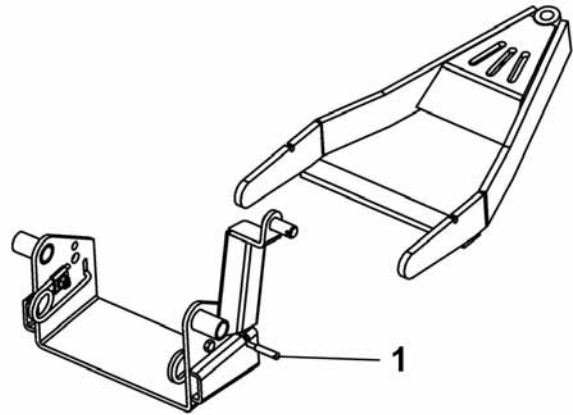
### **FOR YOUR SECURITY:**

Read the Blade owner's manual for safety precautions and rules.

Follow the assembly and operation instructions.

Attach the blade to the subframe as shown.

Make sure the blade is pushed in until locked into place by the springs (item 1).

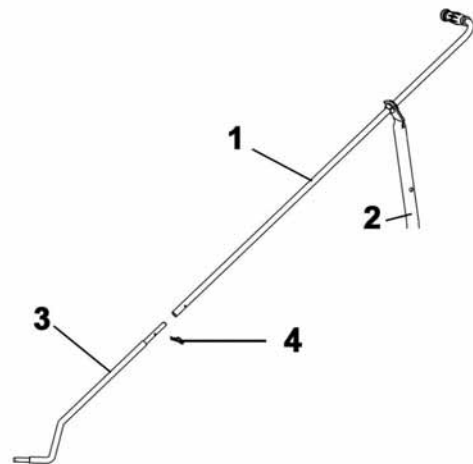


Install the blade

Insert the handgrip on the handle.

Insert the handle (item 1) through the handle support (item 2) as shown.

Install the handle on the control rod (item 3) as shown and secure with a 2.5 mm hair pin (item 4).



Install handle

## **VERIFY TIRE PRESSURE:**

Check and adjust tractor tire pressure as follows:

Front tires:	14-15 psi
Back tires:	7-8 psi

Tire pressure must be even on both sides of the tractor.

# MAINTENANCE & DISMOUNTING

## **MAINTENANCE**

- a) Check mounting bolts at frequent intervals for proper tightness to be sure equipment is in safe working condition.
- b) Apply oil at all pivot points.

## **DRIVE MECHANISM DISMOUNTING**

**SEE ATTACHMENT OWNER'S MANUAL (SNOWBLOWER, BROOM AND BLADE) FOR DISMOUNTING INSTRUCTIONS.**

- a) Dismount the attachment.
- b) Remove the rear counterweight when you remove the front attachment.
- c) Dismount the drive mechanism by supporting it in hand and removing the two hair pins and the pins. Carefully lower to the ground. Remove the V-belt from engine pulley.

### Manual clutch activated by cable:

Unhook cable shield by removing the hair pin. Unhook spring. Pull out drive mechanism from underneath tractor.

- d) You may leave the subframe on tractor all year long or remove it if preferred.
- e) Reinstall mower if needed.

## **BELT REPLACEMENT**

### **Drive Mechanism Belt:**

Dismount the drive mechanism.

Remove the bolt which retains the tension pulley. Replace the belt and re-install the tension pulley. Before tightening make sure the belt guide does not touch the belt at any time. Re-install the drive mechanism.

### Manual Clutch:

With the engine stopped, engaged and disengage the clutch and make sure the belt does not come into contact with the belt guide.

### Electric Clutch:

Make sure the belt does not come into contact with the belt guide.

## **END OF SEASON STORAGE**

- a) Clean and paint all parts from which paint has worn.
- b) Apply oil at all pivot points.
- c) Inspect and replace all defective parts before using again.

# TORQUE SPECIFICATION TABLE

## GENERAL TORQUE SPECIFICATION TABLE USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

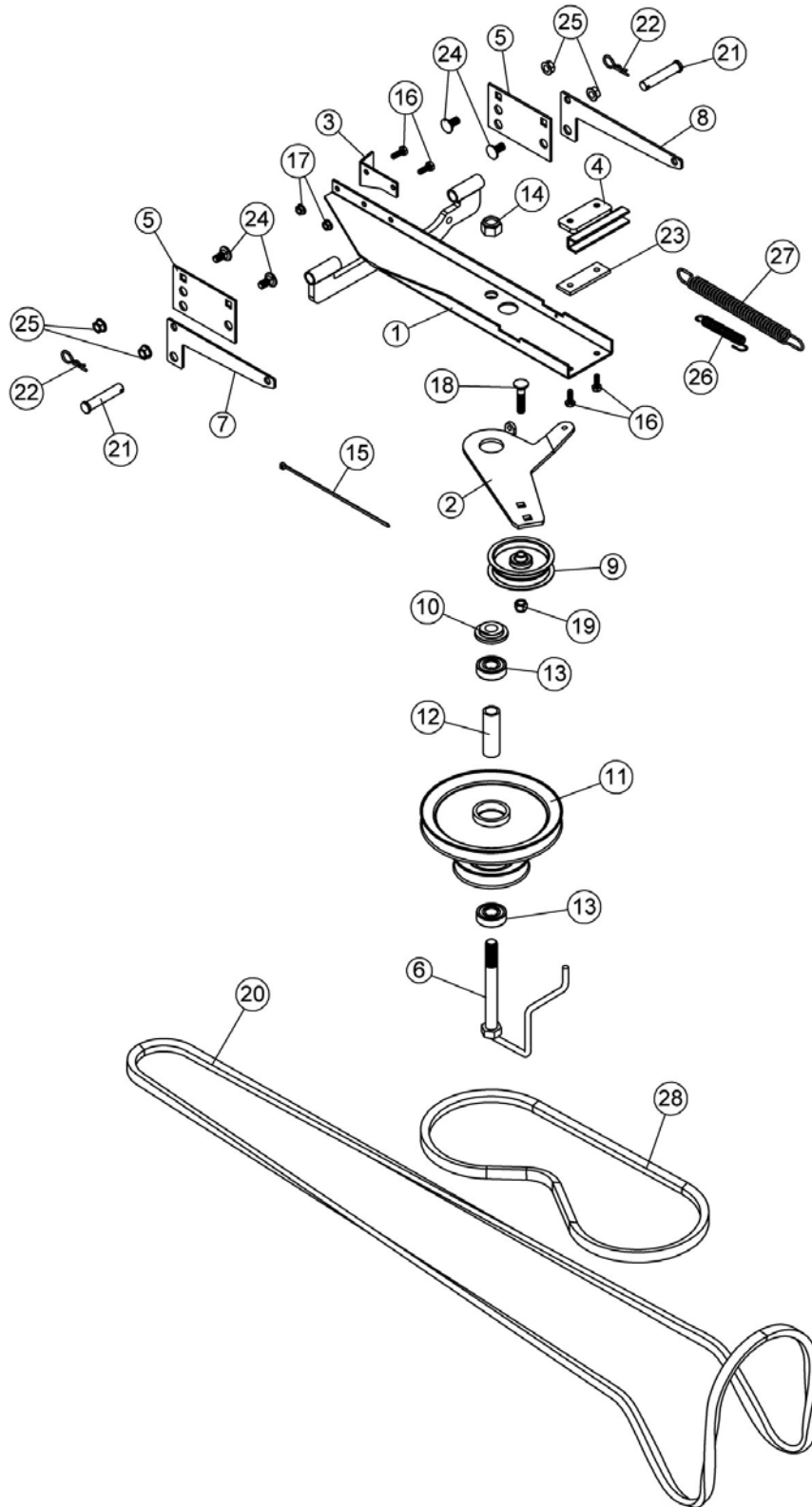
NOTE: These values apply to fasteners as received from supplier, dry or when lubricated with normal oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.

SEE Grade No.		2				5				8 *			
BOLT HEAD IDENTIFICATION MARKS AS PER GRADE NOTE MANUFACTURING MARKS WILL VARY		TORQUE				TORQUE				TORQUE			
BOLT SIZE		POUNDS FEET		NEWTON-METERS		POUNDS FEET		NEWTON-METERS		POUNDS FEET		NEWTON-METERS	
Inches	Millimetre	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1/4"	6.35	5	6	6.8	8.13	9	11	12.2	14.9	12	15	16.3	30.3
5/16"	7.94	10	12	13.6	16.3	17	20.5	23.1	27.8	24	29	32.5	39.3
3/8"	9.53	20	23	27.1	31.2	35	42	47.5	57	45	54	61	73.2
7/16"	11.11	30	35	40.7	47.4	54	64	73.2	86.8	70	84	94.9	113.9
1/2"	12.7	45	52	61	70.5	80	96	108.5	130.2	110	132	149.2	179
9/16"	14.29	65	75	88.1	101.6	110	132	149.2	179	160	192	217	260.4
5/8"	15.88	95	105	128.7	142.3	150	180	203.4	244.1	220	264	298.3	358
3/4"	19.05	150	185	203.3	250.7	270	324	366.1	439.3	380	456	515.3	618.3
7/8"	22.23	160	200	216.8	271	400	480	542.4	650.9	600	720	813.6	976.3
1"	25.4	250	300	338.8	406.5	580	696	786.5	943.8	900	1080	1220.4	1464.5

\*Thick nuts must be used with grade 8 bolts

METRIC BOLT TORQUE SPECIFICATIONS							
Size Screw	Grade No.	Pitch (mm)	COARSE THREAD		FINE THREAD		
			Pounds Feet	Newton-Meters	Pitch (mm)	Pounds Feet	Newton-Meters
M6	4T	1.00	3.6 - 5.8	4.9 - 7.9	-	-	-
	7T		5.8 - 9.4	7.9 - 12.7		-	-
	8T		7.2 - 10	9.8 - 13.6		-	-
M8	4T	1.25	7.2 - 14	9.8 - 19	1.00	12 - 17	16.3 - 23
	7T		17 - 22	23 - 29.8		19 - 27	25.7 - 36.6
	8T		20 - 26	27.1 - 35.2		22 - 31	29.8 - 42
M10	4T	1.50	20 - 25	27.1 - 33.9	1.25	20 - 29	27.1 - 39.3
	7T		34 - 40	46.1 - 54.2		35 - 47	47.4 - 63.7
	8T		38 - 46	51.5 - 62.3		40 - 52	54.2 - 70.5
M12	4T	1.75	28 - 34	37.9 - 46.1	1.25	31 - 41	42 - 55.6
	7T		51 - 59	69.1 - 79.9		56 - 68	75.9 - 92.1
	8T		57 - 66	77.2 - 89.4		62 - 75	84 - 101.6
M14	4T	2.00	49 - 56	66.4 - 75.9	1.50	52 - 64	70.5 - 86.7
	7T		81 - 93	109.8 - 126		90 - 106	122 - 143.6
	8T		96 - 109	130.1 - 147.7		107 - 124	145 - 168
M16	4T	2.00	67 - 77	90.8 - 104.3	1.50	69 - 83	93.5 - 112.5
	7T		116 - 130	157.2 - 176.2		120 - 138	162.6 - 187
	8T		129 - 145	174.8 - 196.5		140 - 158	189.7 - 214.1
M18	4T	2.00	88 - 100	119.2 - 136	1.50	100 - 117	136 - 158.5
	7T		150 - 168	203.3 - 227.6		177 - 199	239.8 - 269.6
	8T		175 - 194	237.1 - 262.9		202 - 231	273.7 - 313
M20	4T	2.50	108 - 130	146.3 - 176.2	1.50	132 - 150	178.9 - 203.3
	7T		186 - 205	252 - 277.8		206 - 242	279.1 - 327.9
	8T		213 - 249	288.6 - 337.4		246 - 289	333.3 - 391.6

**PARTS BREAKDOWN / NOMENCLATURE DES PIÈCES  
DRIVE MECHANISM COMPACT 700383  
MÉCANISME D'ENTRAÎNEMENT COMPACT 700383**

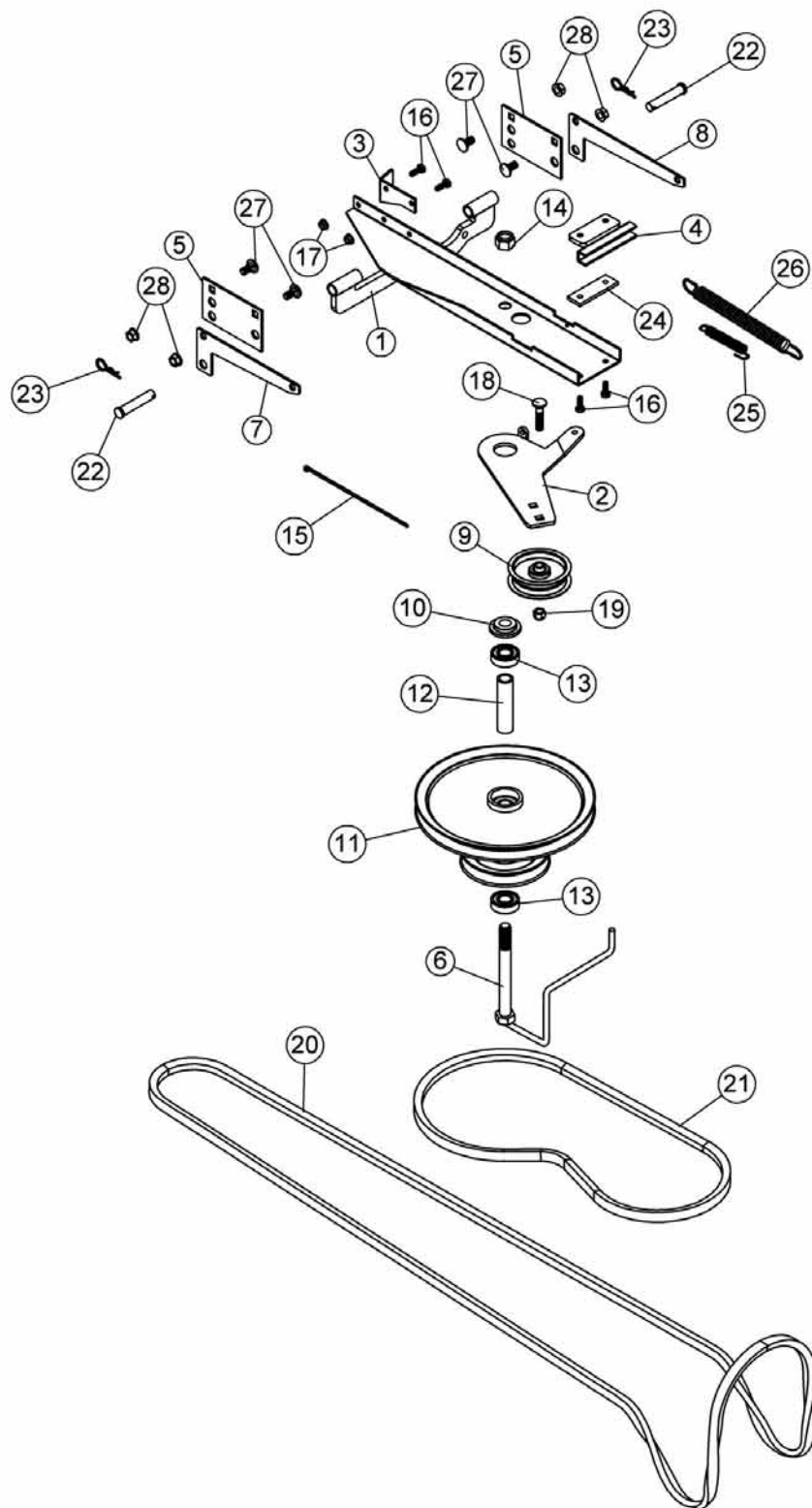


## PARTS LIST / LISTE DES PIÈCES

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
1	Drive frame	Châssis d'entraînement	1	104097
2	Idler arm	Bras de tension	1	104096
3	Cable holder	Fixation du câble	1	104092
4	Support	Support	1	104098
5	Support	Support	2	104100
6	Belt guide	Guide-courroie	1	104095
7	Left support	Support gauche	1	104093
8	Right support	Support droit	1	104094
9	Flat pulley	Poulie plate	1	102839
10	Flange washer	Rondelle à bride	1	102969
11	Double pulley inc. 102736 & 102782	Poulie double inc. 102736 & 102782	1	102692
12	Sleeve	Douille	1	102782
13	Bearing	Roulement à billes	2	102736
14	Nylon insert lock nut 5/8" n.c.	Écrou à garniture de nylon 5/8" n.c.	1	O/L
15	Tie wrap 8"	Attache de nylon 8"	1	O/L
16	Hex. bolt 1/4" n.c. x 3/4"	Boulon hex. 1/4" n.c. x 3/4"	4	O/L
17	Flange nut 1/4" n.c.	Écrou à bride 1/4" n.c.	2	O/L
18	Carriage bolt 3/8" n.c. x 1 3/4"	Boulon à carrosserie 3/8" n.c. x 1 3/4"	1	O/L
19	Nylon insert lock nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	1	O/L
20	V-Belt, B-112	Courroie en V, B-112	1	103010
21	Pin	Goupille	2	102189
22	Hair pin 2.5mm	Goupille à ressort 2.5mm	2	102013
23	Shim	Cale	1	104099
24	Carriage bolt 3/8" n.c. x 3/4"	Boulon à carrosserie 3/8" n.c. x 3/4"	4	O/L
25	Flange nut 3/8" n.c.	Écrou à bride 3/8" n.c.	4	O/L
26	Spring 1/2"	Ressort 1/2"	1	102003
27	Spring	Ressort	1	102304
28	V-Belt A-45	Courroie en V A-45	1	104103

O/L = Obtain locally/ obtenir localement

**PARTS BREAKDOWN / NOMENCLATURE DES PIÈCES  
NORTHEAST DRIVE MECHANISM 700384  
MÉCANISME D'ENTRAÎNEMENT NORDET 700384**



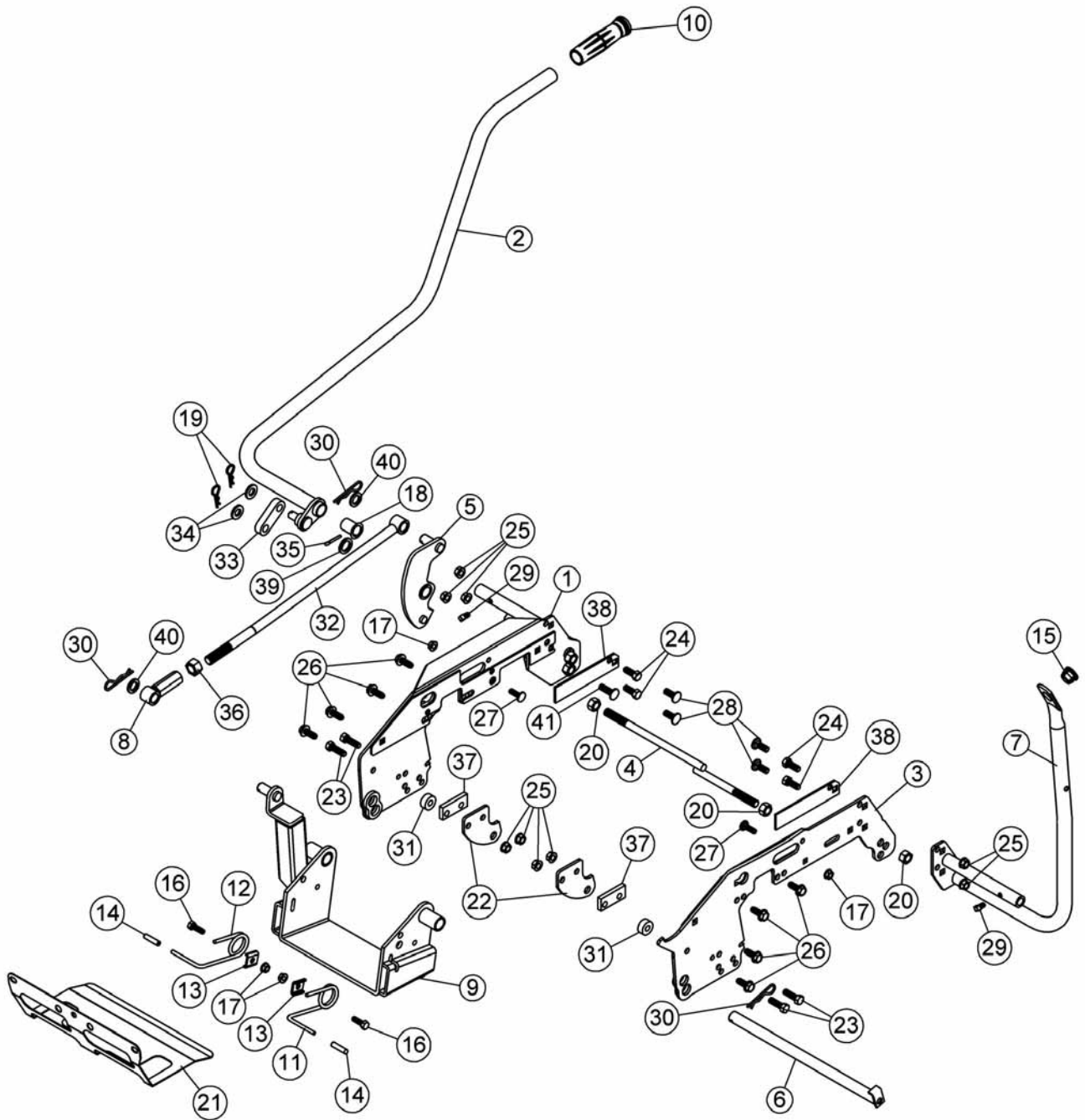


## PARTS LIST / LISTE DES PIÈCES

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
1	Drive frame	Châssis d'entraînement	1	104097
2	Idler arm	Bras de tension	1	104096
3	Cable holder	Fixation du câble	1	104092
4	Support	Support	1	104098
5	Support	Support	2	104100
6	Belt guide	Guide-courroie	1	104043
7	Left support	Support gauche	1	104093
8	Right support	Support droit	1	104094
9	Flat pulley	Poulie plate	1	102839
10	Flange washer	Rondelle à bride	1	102969
11	Double pulley inc. 102736 & 103035	Poulie double inc. 102736 & 103035	1	103040
12	Sleeve	Douille	1	103035
13	Bearing	Roulement à billes	2	102736
14	Nylon insert lock nut 5/8" n.c.	Écrou à garniture de nylon 5/8" n.c.	1	O/L
15	Tie wrap 8"	Attache de nylon 8"	1	O/L
16	Hex. bolt 1/4" n.c. x 3/4"	Boulon hex. 1/4" n.c. x 3/4"	4	O/L
17	Flange nut 1/4" n.c.	Écrou à bride 1/4" n.c.	2	O/L
18	Carriage bolt 3/8" n.c. x 1 3/4"	Boulon à carrosserie 3/8" n.c. x 1 3/4"	1	O/L
19	Nylon insert lock nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	1	O/L
20	V-Belt B-118	Courroie en V, B-118	1	104044
21	V-Belt A-50	Courroie en V, A-50	1	104104
22	Pin	Goupille	2	102189
23	Hair pin 2.5mm	Goupille à ressort 2.5mm	2	102013
24	Shim	Cale	1	104099
25	Spring 1/2"	Ressort 1/2"	1	102003
26	Spring	Ressort	1	102304
27	Carriage bolt 3/8" n.c. x 3/4"	Boulon à carrosserie 3/8" n.c. x 3/4"	4	O/L
28	Flange nut 3/8" n.c.	Écrou à bride 3/8" n.c.	4	O/L

O/L = Obtain locally/ obtenir localement

# PARTS BREAKDOWN / NOMENCLATURE DES PIÈCES SUBFRAME / SOUS-CHÂSSIS



## PARTS LIST / LISTE DES PIÈCES

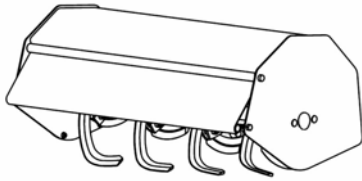
Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
1	Right support	Support droit	1	104081
2	Lift arm	Bras de relevage	1	104083
3	Left support	Support gauche	1	104082
4	Brace pin	Tige de renfort	1	104086
5	Lever	Levier	1	104088
6	Pin	Goupille	1	104085
7	Handle support	Support de manivelle	1	104084
8	Adjustment bolt	Boulon d'ajustement	1	104087
9	Pivot support	Support de pivot	1	104119
10	Handgrip	Poignée de plastique	1	102025
11	Left spring lock	Ressort de barrure gauche	1	102208
12	Right spring lock	Ressort de barrure droit	1	102209
13	Spring bracket	Fixation du ressort	2	102210
14	Handgrip	Poignée	2	102248
15	Plastic grommet	Oeillet de plastique	1	102063
16	Hex. bolt 5/16" n.c. x 1"	Boulon hex. 5/16" n.c. x 1"	2	O/L
17	Flange nut 5/16" n.c.	Écrou à bride 5/16" n.c.	4	O/L
18	Nylon bushing	Coussinet en nylon	1	104039
19	Hair pin 2.5mm	Goupille à ressort 2.5mm	2	102013
20	Hex. nut 1/2" n.c.	Écrou hex. 1/2" n.c.	3	O/L
21	Heat shield	Pare-chaleur	1	103114
22	Mower bracket	Fixation de tondeuse	2	103113
23	Hex. bolt 3/8" n.c. x 1 1/4"	Boulon hex. 3/8" n.c. x 1 1/4"	4	O/L
24	Hex. bolt 3/8" n.c. x 1"	Boulon hex. 3/8" n.c. x 1"	4	O/L
25	Flange nut 3/8" n.c.	Écrou à bride 3/8" n.c.	9	O/L
26	Thread cutting screws 3/8" n.c. x 1"	Vis à filetage coupante 3/8" n.c. x 1"	8	O/L
27	Carriage bolt 5/16" n.c. x 1"	Boulon à carrosserie 5/16" n.c. x 1"	2	O/L
28	Carriage bolt 3/8" n.c. x 1"	Boulon à carrosserie 3/8" n.c. x 1"	4	O/L
29	Square head set screw 5/16" n.c. x 1/2"	Vis à pression à tête carrée 5/16" n.c. x 1/2"	2	O/L
30	Hair pin 3mm	Goupille à ressort 3mm	3	102617
31	Spacer	Espaceur	2	104091
32	Link	Lien	1	104117
33	Link	Lien	1	104118
34	Washer	Rondelle	2	104122
35	Cotter pin 5/32" x 1 1/4"	Goupille fendue 5/32" x 1 1/4"	1	O/L
36	Hex. nut 5/8" n.c.	Écrou hex. 5/8" n.c.	1	O/L
37	Shim	Cale	2	104120
38	Shim	Cale	2	104121

## PARTS LIST / LISTE DES PIÈCES

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
39	Washer	Rondelle	1	104113
40	Washer	Rondelle	2	104125
41	Carriage bolt 3/8" n.c. x 1 1/4"	Boulon à carrosserie 3/8" n.c. x 1 1/4"	1	O/L

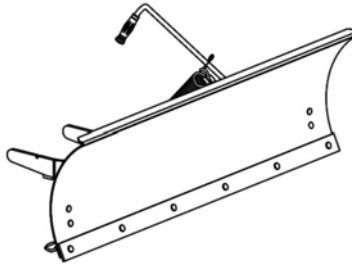
O/L = Obtain locally/obtenir localement

# ATTACHMENTS



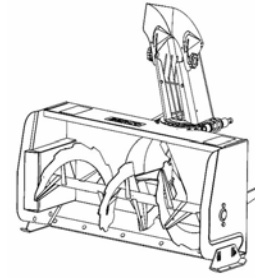
**ROTARY TILLER #700312**

Mounts to the rear of lawn, yard & garden tractors 14 to 25 HP. Comes complete with drive & manual lift mechanisms & mounting hardware.



**UTILITY BLADE #700266**

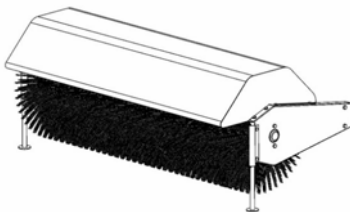
Mounts on the same subframe as the snowblower & rotary broom.



**SNOWBLOWER**

#700255-40"  
#700374-44"  
#700378-48"

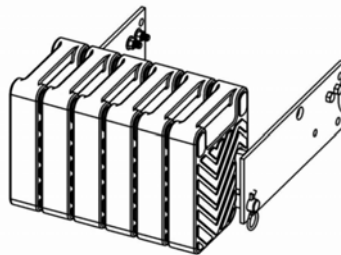
Fits on same subframe as rotary broom and utility blade.



**ROTARY BROOM**

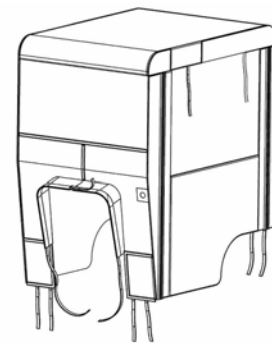
#700380 with nylon brush  
#700381 with polypropylene brush.

Fits on same subframe as snowblower & utility blade.  
Requires an adaptor.



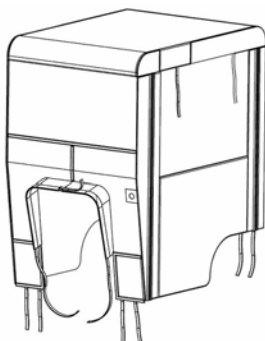
**COUNTERWEIGHT**

#700240 Universal rear weights  
#700246 Rear weights Electrolux  
Required for safety and traction.  
Counterbalances weight of attachment.



**TRACTOR WINTER CAB**  
#700271

Universal type fits on a wide variety of lawn and garden tractors.



**TRACTOR SCREEN CAB**  
#700313

Universal type fits on a wide variety of lawn and garden tractors.