



OWNER'S MANUAL
Model Number

700279-4
700280-1



BERCO
Subframe & Drive Mechanism
for
JOHN DEERE LT SERIES
Tractors

* ASSEMBLY
* OPERATION

* REPAIR PARTS
* MAINTENANCE

CAUTION:
READ & FOLLOW ALL SAFETY RULES & INSTRUCTIONS BEFORE
OPERATING YOUR EQUIPMENT



LIMITED WARRANTY

Conditions and Products Covered:

BERCOMAC guarantees any part of the product or accessory manufactured by BERCOMAC and found in the reasonable judgment of BERCOMAC to be defective in material and or workmanship will be repaired or replaced by an authorized dealer without charge up to our maximum labor rates and pre-established times. For replacement parts only standard ground freight services are covered. This warranty extends to the original retail purchaser only and is not transferable to any subsequent purchasers. This warranty applies to the products bought and used in North America.

Warranty Period

(from date of the original retail purchase)

- Residential use: 1 year
- Semi-commercial, professional or rental use: 90 days

Exceptions Noted Below; the following items are guaranteed by the original manufacturer and have their own warranty, conditions and limited time:

- Tire Chains: 90 days
- Engines: Will vary as per the manufacturer
Please refer to the engine manufacturer's warranty statement included with the unit. BERCOMAC is not authorized to handle warranty adjustments on engines.

Items and Conditions NOT Covered:

This warranty does not cover the following:

- Pick-up or delivery charges or in-home services fees.
- Any damage or deterioration of the unit, parts and or finish of these due to normal use, wear and tear, or exposure.
- Cost of regular use or maintenance service or parts, such as gas, oil, lubricants, tune-up parts, and adjustments.
- Any part or accessory which has been altered, modified, misused, neglected, accidentally damaged or not properly installed, maintained, stored or repaired not in accordance with the instructions in the owner's manual.
- Repair due to normal wear and or any wear items such as shear pins, bolts, belts, etc.
- Expedited freight fee services for replacement parts.
- Shear bolts and shear pins are to be considered as a preventive measure not as an assured protection, any damages resulting from the lack of shear bolts breakage are not covered.
- Damages due to product being installed on a vehicle other than stipulated in owner's manual.

NOTE: All warranty work must be performed by an authorized dealer using original (manufacturer) replacement parts.

NOTE: Bercomac reserves the right to change or improve the design of any part or accessory without assuming any obligation to modify any product previously manufactured.

Instructions for Obtaining Warranty Services:

Contact dealer where equipment was purchased or any other BERCO service dealer to arrange service at their dealership. Requests for warranty claims must be carried out through the same distribution network used to purchase the product. Don't forget to bring your proof of purchase (sales receipt) to the BERCOMAC dealer.

Owner's Responsibilities:

BERCOMAC's defective equipment or part must be returned to an authorized dealer within the warranty period for repairs. In the event that defective merchandise must be returned to manufacturer for repairs, freight fees are prepaid and a written authorization from BERCOMAC must be obtained by dealer prior to the shipment. This warranty extends only to equipment operated under normal conditions. To validate a warranty claim, it is the user's responsibility to maintain and service the unit as specified in the owner's manual or to have the unit serviced at their dealer at their expense.

General Conditions:

The sole liability of BERCOMAC with respect to this warranty shall be strictly and exclusively repair and replacement as mentioned herein. BERCOMAC shall not have any liability for any other costs, loss or damage, including but not limited to, any incidental or consequential loss or damage. Taking advantage of the warranty does not in any way extend the length or renewal of the warranty.

In particular, without being limited to, BERCOMAC shall have no liability or responsibility for:

- Travel time, overtime, after hours time or other extraordinary repair charges or relating to repairs and or replacements outside of normal business hours.
- Rental of like or similar replacement equipment during the period of any, repair or replacement work.
- Any communicating or travel charges.
- Loss or damage to person or property other than that covered by the terms of this warranty.
- Any claims for lost revenue, lost profit or any similar costs as a result of damage or repair.
- Attorney's fees.

BERCOMAC's responsibility in respect to claims is limited to making the required repairs or replacement without charge up to our maximum labor rates and pre-established times and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any product or accessory. In no event recovery of any kind be greater than the amount of the purchase price of the product sold.

This warranty gives you specific legal rights. You may also have other rights, which vary from state to state.

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INTRODUCTION

TO THE PURCHASER

This new accessory 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 : _____
(IF APPLICABLE)

MODEL NUMBER: _____

PURCHASE DATE : _____



SAFETY PRECAUTIONS



Careful operation is your best insurance against an accident. Read this section carefully before operating the vehicle and accessory. This accessory is capable of amputating hands and feet and throwing objects. 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 vehicle and accessory before operating. It is the owner's legal obligation to instruct all operators in safe operation of the accessory.

GLOSSARY:

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

In this manual, "accessories" means attachments (snowblower, rotary broom, blade etc.) that you install on the vehicle (lawn tractors, A.T.V. s etc).

TRAINING:



This symbol, "Safety Alert Symbol", is used throughout this manual and on the accessory's safety labels to warn of the possibility of serious injury. Please take special care in reading and understanding the safety precautions before operating the vehicle and accessory.

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

PREPARATION:

1. Thoroughly inspect the area where the accessory is to be used and remove door mats, all foreign objects and the like.
2. For motorized accessories, disengage all clutches and shift into neutral before starting engine.
3. Do not operate the accessory without wearing adequate winter outer 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 refueling 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 the engine (motor) is running (except when specifically recommended by manufacturer).
 6. Let the vehicle and accessory adjust to outdoor temperatures before using.
 7. Never use an accessory without proper guards, plates, or other safety protective devices in place
 8. Always make sure to wear the appropriate safety equipment required (glasses, muffs, mask...) for each type of product. See operation section.
 9. Always make sure of having safe traction on the vehicle by using the recommended accessories (chains, A.T.V. tracks, counterweights...). See operation section.
 10. Always make sure the all components are correctly installed. (driveline securely attached and locked at both ends, belts properly installed...)
 11. Always handle the winch cable with thick leather gloves.
 12. **Never modify the accessory or any part without the written consent from the manufacturer.**



SAFETY PRECAUTIONS



OPERATION:

1. Do not put hands or feet near, under or inside rotating parts.
2. Exercise extreme caution when operating on or crossing gravel drives, walks or roads. Stay alert for hidden hazards or traffic. Do not carry passengers.
3. After striking a foreign object, stop the engine (motor), disconnect the wire from the spark plug(s) and keep wire away to prevent accidental starting. Thoroughly inspect the accessory for any damage and repair damage before restarting and using the accessory.
4. If the unit should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.
5. Take all possible precautions when leaving the vehicle unattended. Disengage the power take-off, lower the attachment, place the transmission into neutral, set the parking brake, stop the engine and remove the contact key.
6. Do not run the engine indoors, except when starting the engine and for transporting in or out of the building. Do not operate or let motor run in a storage area without ventilation because gas contains carbon monoxide which is odorless, colorless and can cause death.
7. Never use the accessories across the face of slopes, go from top to bottom. Exercise extreme caution when using equipment on slopes. Do not attempt to clear a steep slope.
8. Never tolerate bystanders in the working zone. Never use an accessory in the direction of bystanders, it might throw gravel or debris that can hurt people or damage property.
9. Never operate the accessory at high transport speeds on slippery surfaces. Use care when backing up.
10. Do not carry passengers.
11. Disengage power to the accessory when it is transported or not in use.
12. Never operate the accessory without good visibility or light.
13. Keep the accessory away from heat sources or flames.
14. Never handle the winch cable or hook while in tension.

MAINTENANCE AND STORAGE

1. When cleaning, repairing or inspecting the vehicle and accessory, make certain that all moving parts have stopped. For gasoline engine, disconnect wire from the spark plug(s) and keep wire away to prevent accidental starting.
2. Check all the bolts and components at frequent intervals to make sure that they are properly tightened.
3. Never store a motorized accessory with fuel in the fuel tank inside a building where ignition sources are present such as hot water and space heaters, clothes dryers, and the like. Allow the engine to cool before storing in any enclosure.
4. Always refer to the owner's manual when you store the accessory and vehicle for a prolonged or an unspecified length of time.
5. Maintain or replace safety and instruction labels, as necessary.
6. For winter accessories, (if applicable), let the engine run for a few minutes after clean snow in order to prevent the rotary parts from freezing.
7. Inspect the vehicle's and accessory's air filter (if applicable) every day. Clean it or replace it as necessary. Change the oil more often when working in dusty conditions. See the vehicle's and accessory's owner's manual.



**THIS SYMBOL MEANS
DANGER !
BECOME ALERT !
YOUR SAFETY IS INVOLVED !**

ASSEMBLY

STEP 1

SUBFRAME INSTALLATION:

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: *You can install this subframe with or without the mower on tractor. However, on certain models the lift height of the mower deck will be reduced.*

However, the mower must be removed in order to install the drive mechanism.

Remove the bolts (items 1 & 2) from each side of the frame.

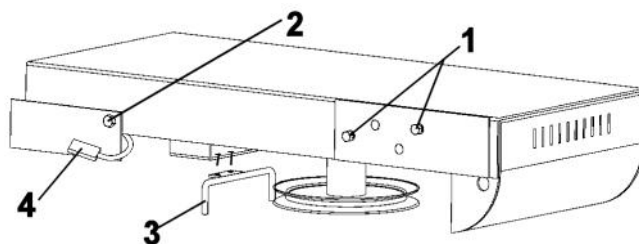
Disconnect wire from safety switch (item 4).

Remove the original belt guide from tractor (only if you install the drive mechanism) and replace it with the one (item 3) supplied with this kit as shown (the U-shaped rod towards the front). **DOES NOT APPLY TO THE LT190 MODEL.** Use the same bolt that you removed from tractor and a M6 x 10 supplied with the drive mechanism #700280.

NOTE: You must reinstall the original belt guide when the mower deck is reinstalled.

INSTALLING THE REFLECTORS

IMPORTANT: When operating the tractor with the front mounted attachment, install the two red-colored adhesive reflectors on the rear vertical surface of the tractor's fender.



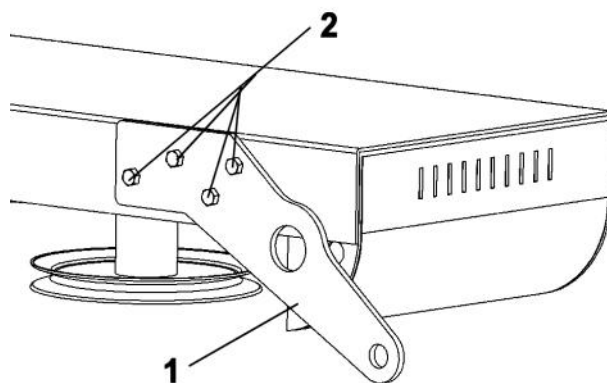
Change original belt guide

Install the front supports (item 1) with four 5/16 x 1" hex bolts (item 2) and flange nuts on each side.

The right front support has an extra hole for the exhaust. Do not tighten yet.

For the LT190 Models:

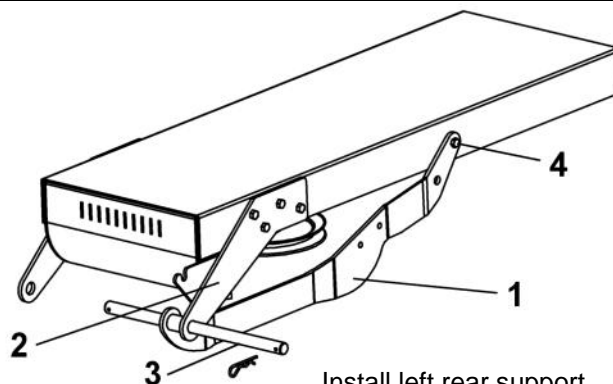
Install the front supports with two bolts from the tractor, two 5/16 x 1" hex bolts and two flange nuts included with this kit.



Install front supports

Install the left rear support (item 1) inside the front support (item 2) with a 3/4" Ø pin (item 3).

Secure the rear end with a 5/16 x 1" hex bolt (item 4) and flange nut. Do not tighten yet.



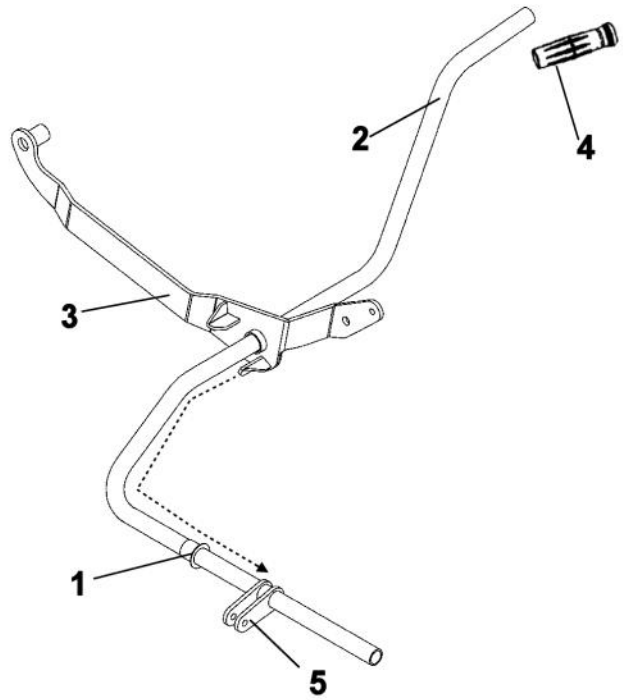
Install left rear support

ASSEMBLY

Slide the nylon bushing (item 1) flange first, down the lift arm (item 2) to the fork (item 5).

Slide the right rear support (item 3) down the lift arm, and onto the nylon bushing.

Install the handgrip (item 4) on the lift arm.



Install support on lift arm

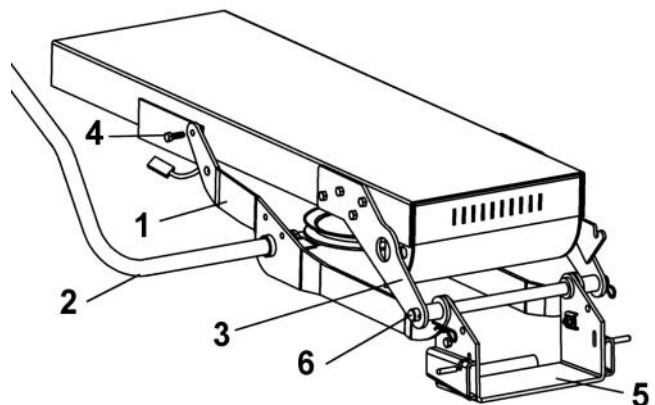
Install the right rear support assembly with the arm lift (items 1 & 2) inside the front support (item 3).

Secure the rear end with a 5/16 x 1" hex bolt (item 4) and flange nut.

Install the pivot support (item 5) between the front supports with a 3/4" Ø pin (item 6).

Secure with two 3 mm hair pins.

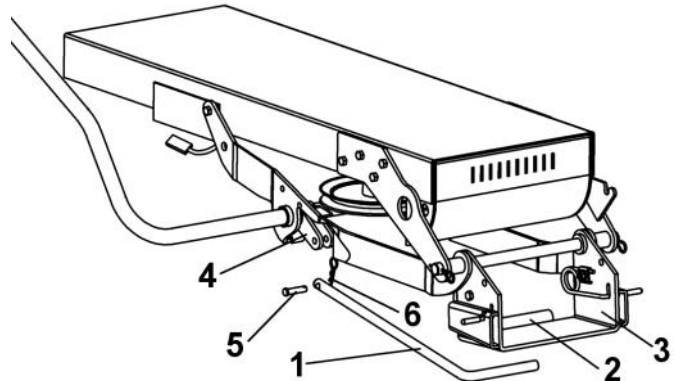
Tighten all bolts securely and reconnect the safety switch.



Install rear support and pivot support

ASSEMBLY

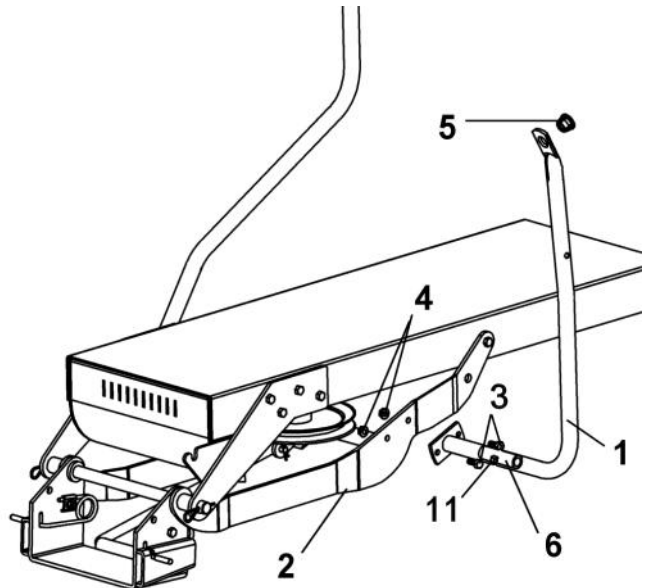
Install the push bar (item 1) by inserting it in the sleeve (item 2) welded on the pivot support (item 3). Install the other end in the fork (item 4) with a pin (item 5) the head toward the outside and with a 2.5 mm hair pin (item 6).



Install push bar

Install the handle support (item 1) on the left rear support (item 2) with two 5/16 x 3/4" hex bolts (item 3) and secure with flange nuts (item 4).

Install the plastic grommet (item 5) on the handle support (item 1).



Install handle support

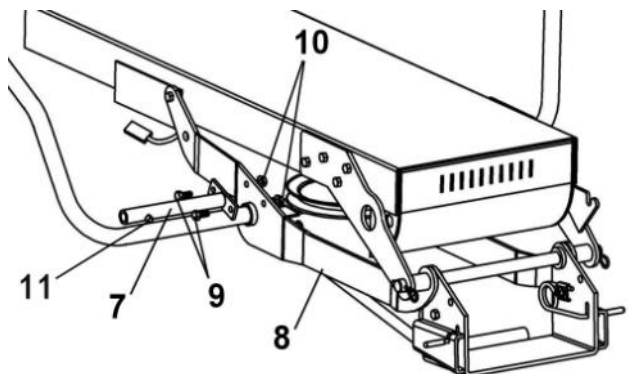
INSTALLATION OF THE SUPPORTS FOR THE BERCO CAB:(all models) (if required).

This subframe includes the front supports to be able to install the Berco cab.

The left support for the cab (item 6) is welded to the handle support (item 1).

Install the right support for the cab (item 7) on the right rear support (item 8) with two 5/16 x 3/4" hex bolts (item 9) and two flange nuts (item 10).

Use the 5/16 x 1/2" square head socket set screws (item 11) to secure the cab's front rod supports included with cab.



Install the right support for cab

ASSEMBLY

STEP 2

DRIVE MECHANISM INSTALLATION:

NOTE: Remove the mower deck to install the drive mechanism. Make sure to remember where the end of the clutch rod is connected to the tractor, because you must reconnect the rod in the same place when you install the drive mechanism or mower.

Remove the P.T.O. clutch rod (item 1) from the mower.

For the LT 166 model:

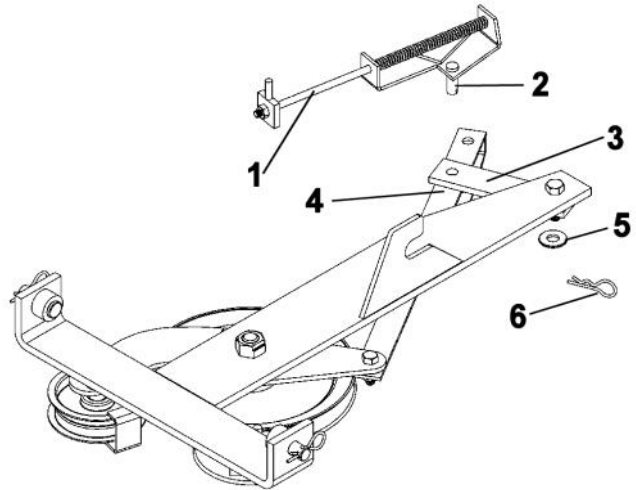
Insert the pin (item 2) in the hole on the tension bar (item 3) and in the hole (the farthest one from the edge) on the tension link (item 4).

Secure with a flat washer (item 5) and a 2.5 mm. hair pin (item 6).

For the LT 155 model:

Insert the pin (item 2) in the hole on the tension bar (item 3) and in the hole (the closest one to the edge) on the tension link (item 4).

Secure with a flat washer (item 5) and a 2.5 mm. hair pin (item 6).



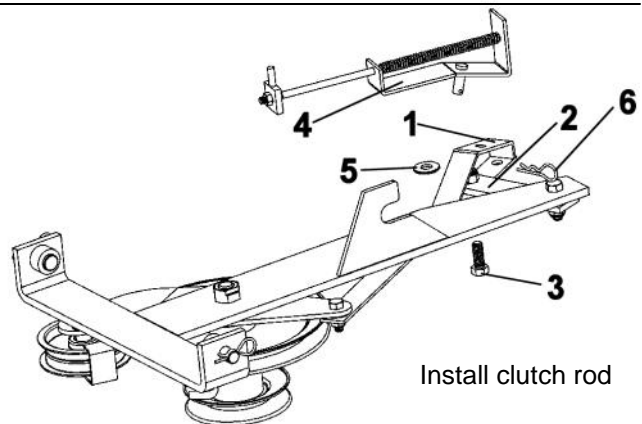
Install clutch rod

For tractors with a Freedom mower:

Remove the tension link (item 1) of the drive mechanism and reassemble upside down (the bent section must be on top). Secure the tension link (in the hole farthest to the bended part) in the tension bar (item 2) with a 3/8 x 1" hex bolt (item 3) and nylon insert lock nut.

Do not tighten the bolts in order to allow the clutch mechanism to move freely.

Install the mower clutch rod (item 4) with the pin in the hole located on the top of the tension link (item 1). Secure with a flat washer (item 5) and a 2.5 mm hair pin (item 6).



Install clutch rod

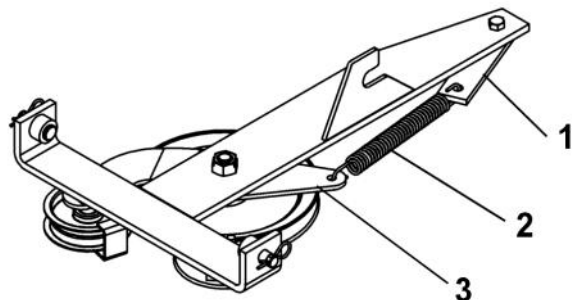
For the LT 190 model:

To be able to install the drive mechanism, you must remove the tension link.

Turn the tension bar (item 1) to the left towards the outside. Hook the spring (item 2) in the hole of the tension bar.

Stretch the spring to the other end of the idler arm (item 3).

Make sure the idler arm moves freely.



Install spring

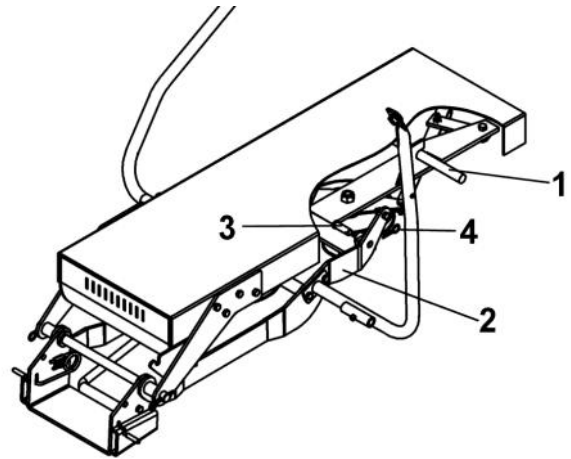
ASSEMBLY

Install the drive mechanism under the tractor by hooking the slotted part on the tractor's lift mechanism crossbar (item 1).

Attach the front end to the rear support (item 2) with two pins (item 3), the heads towards the inside.

Secure with a 2.5 mm. hair pin (item 4) on each side.

To make it easier to install the belt on the motor pulley, remove the belt from the drive mechanism pulley. Insert it around the motor pulley and put it back on the drive mechanism pulley.



Install drive mechanism

Install the clutch rod to the tractor's manual clutch lever mechanism the same way it was installed on the mower.

Secure with a 2.5 mm hair pin.

NOTE: Check to make sure the drive mechanism works well.

If the attachments do not stop rapidly when the drive mechanism is disengaged, readjust the clutch rod.

Check to be sure the belt does not touch the belt guides at any time when the P.T.O. clutch is engaged.

ASSEMBLY

STEP 3

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.

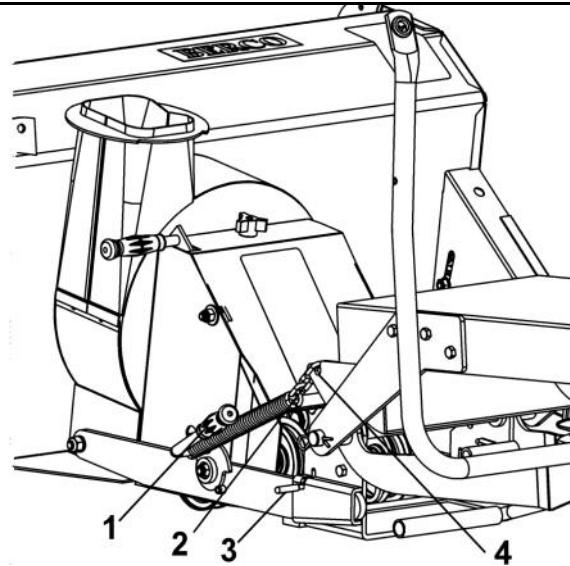
Disconnect the wire from the spark plug(s) and keep away from spark plug(s) to prevent accidental starting.

Attach the snowblower to the subframe as shown.

Make sure the snowblower is pushed in until locked into place by the springs (item 3).

Turn the handle (item 1) towards the back and install the chain (item 2) on the hook (item 4).

Turn the handle towards the front to apply tension on the spring.



Install snowblower

Remove belt guard.

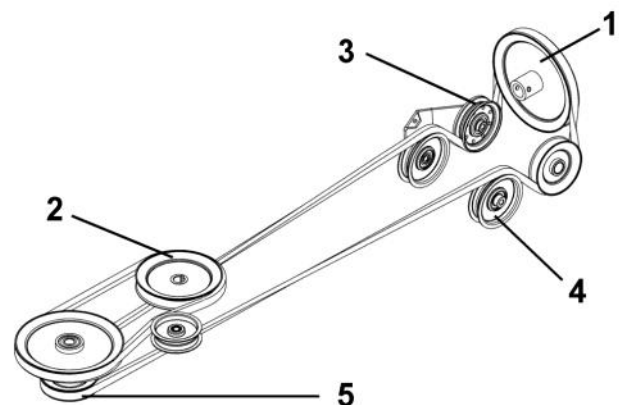
Install the belt around the pulleys as shown.

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: V pulley L.H.

Item 4: Flat pulley R.H.

Item 5: Drive mechanism pulley



CAUTION



The belt tension arm is spring loaded & needs to be held firmly while displacing to prevent injury.



CAUTION



Never use the snowblower without the belt guard.

Install V-belt and belt guard

ASSEMBLY

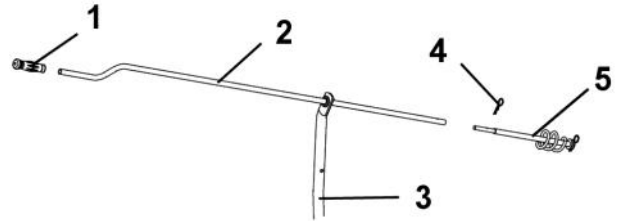
VERIFY BELT ROUTING:

- 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.

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

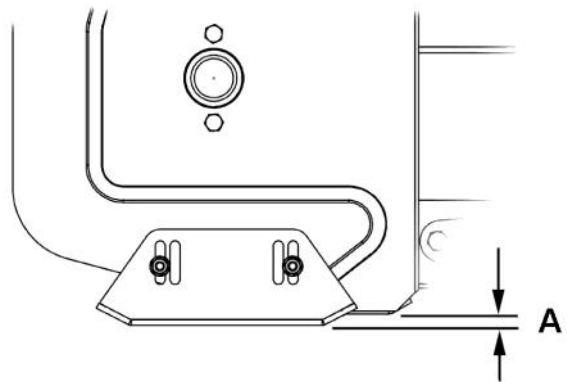
VERIFY SKID SHOE ADJUSTMENT:

Level Paved Surface: Adjust skid shoes to obtain 3/16" to 1/4" clearance between cutting edge and surface.

Uneven or Gravel Surface: Adjust skid shoes to obtain 1/2" to 5/8" clearance between cutting edge and surface.

VERIFY TIRE PRESSURE:

Tire pressure must be even on both sides of tractor according to the vehicle's owner's manual.



Adjust skid shoes

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).



WARNING



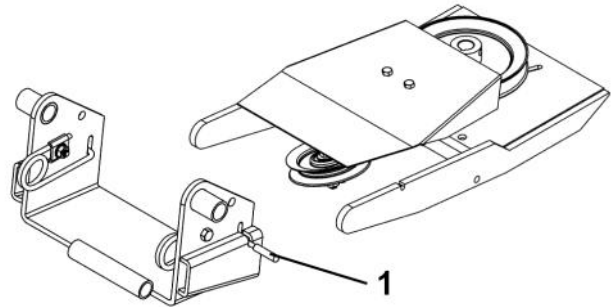
TO PREVENT INJURIES:

Stop the motor.

Apply parking brake.

Remove the ignition key.

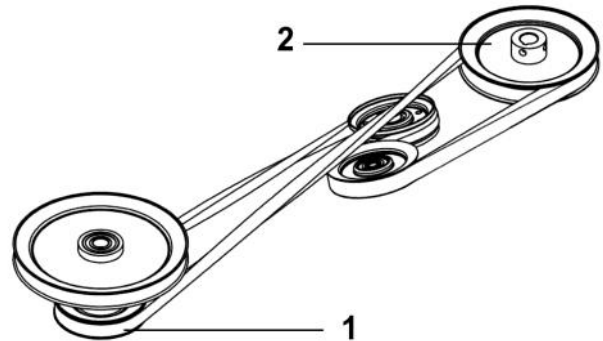
Disconnect the wire from the spark plug(s) and keep away from spark plug(s) to prevent accidental starting.



Attach rotary broom to subframe

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

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



Item 1: Drive mechanism pulley
Item 2: Rotary broom pulley

Install belt



CAUTION



Never use the Rotary Broom without the belt guard.

VERIFY BELT ROUTING:

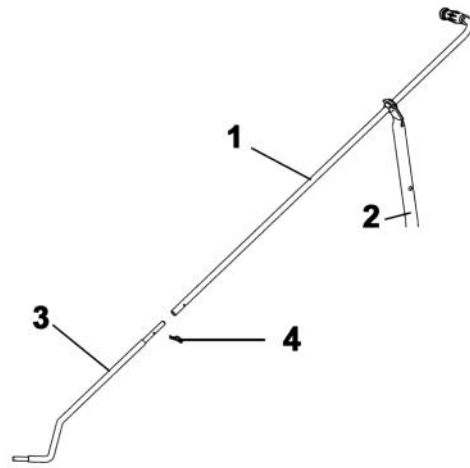
- Lower the rotary broom to the ground and let it run for a few seconds under supervision.
- Disengage the rotary broom and stop the engine.
- Check the belts to make sure they are well inserted on the pulleys and have not flipped on their sides in the pulleys and that they do not touch the belt guides.

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:

Level Paved Surface: Adjust skid shoes to obtain 3/16" to 1/4" clearance between cutting edge and surface.

Uneven or Gravel Surface: Adjust skid shoes to obtain 1/2" to 5/8" clearance between cutting edge and surface.

ASSEMBLY

UTILITY BLADE INSTALLATION:

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



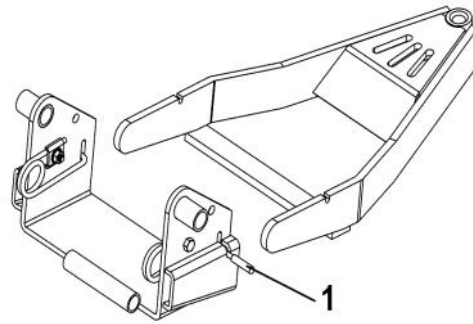
WARNING



FOR YOUR SECURITY:

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

Follow the assembly and operation instructions.



Attach the blade to the subframe as shown.

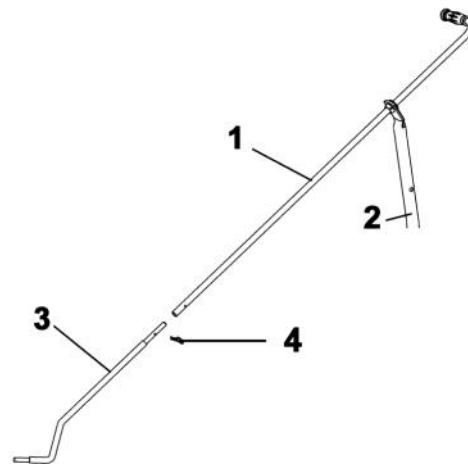
Make sure the blade is pushed in until locked into place by the springs (item 1).

Attach Utility Blade to subframe

Insert the 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:

Level Paved Surface: Adjust skid shoes to obtain 3/16" to 1/4" clearance between cutting edge and surface.

Uneven or Gravel Surface: Adjust skid shoes to obtain 1/2" to 5/8" clearance between cutting edge and surface.

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 disconnecting the clutch rod and by removing the pins in front. Carefully lower to the ground. Detach the V-belt from engine pulley.
- 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:

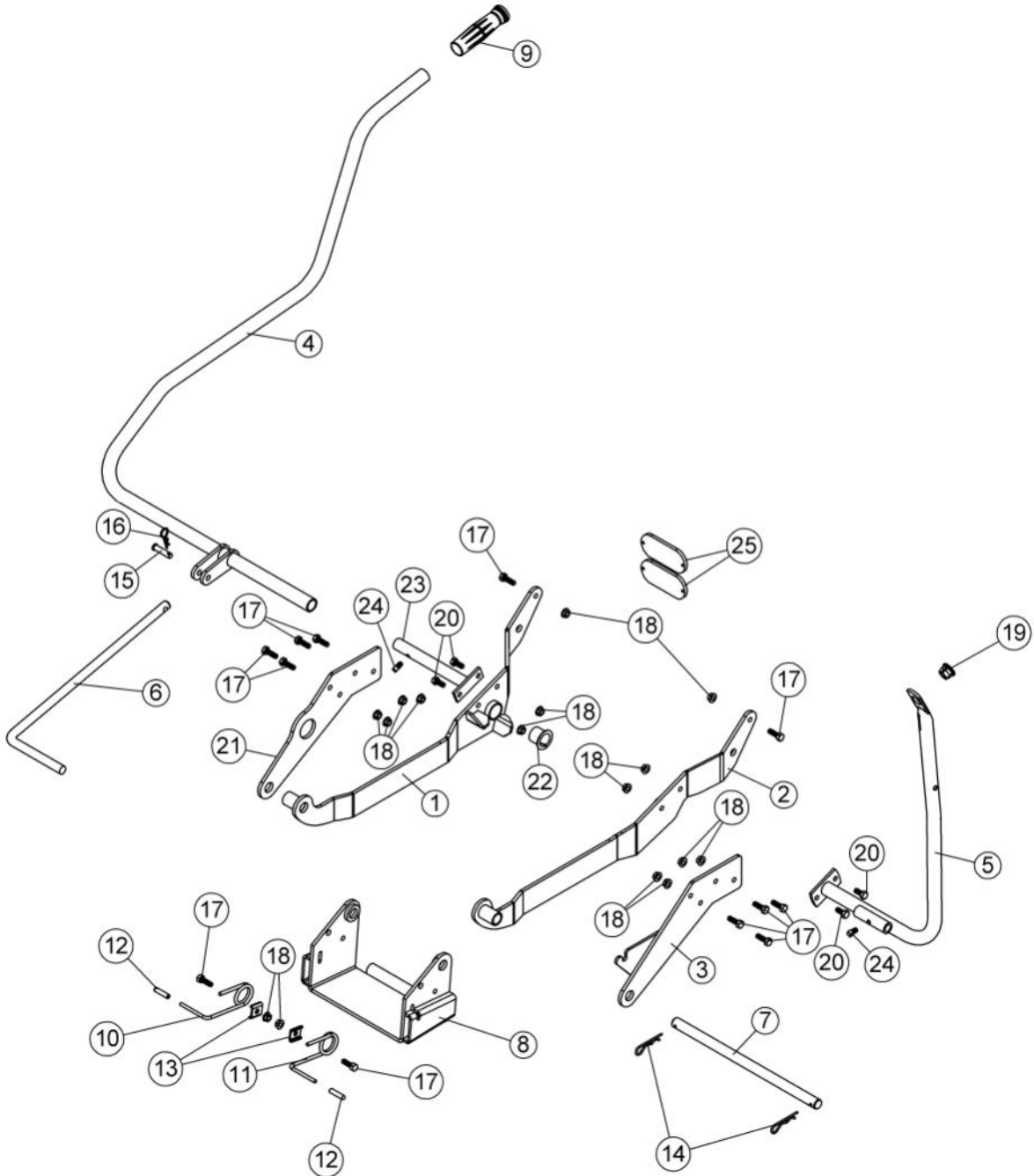
Before proceeding with this step, notice carefully how the belt guide is installed to avoid damage to the belt. When re-installing, remove the bolt which retains the tension pulley and the belt guide. Replace the belt and re-install the tension pulley and belt guide. Before tightening make sure the belt guide does not touch the belt at any time. Re-install the drive mechanism.

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.

PARTS BREAKDOWN

Subframe 700279-4



PARTS LIST

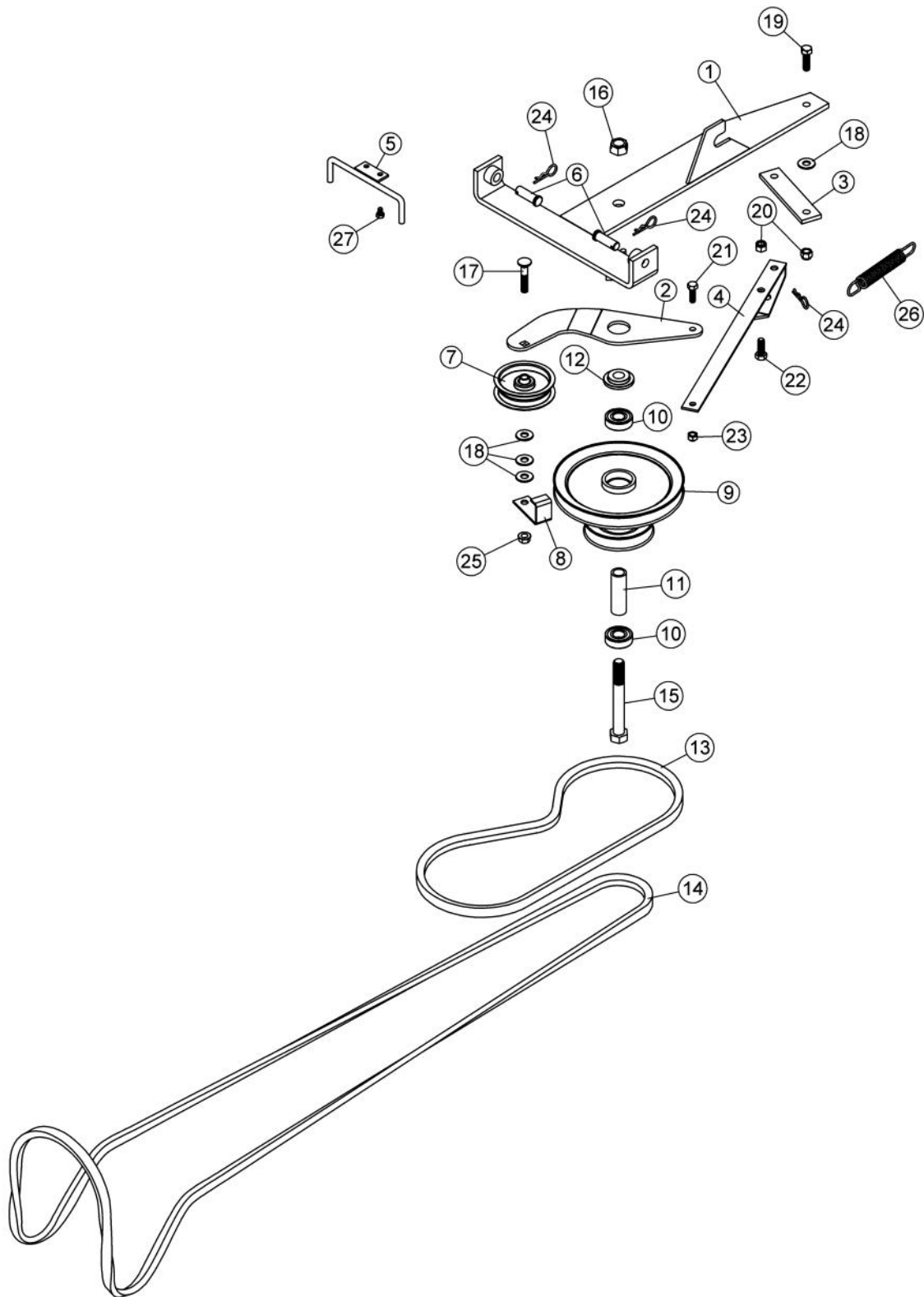
Subframe 700279-4

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
1	Right rear support	Support arrière droit	1	103472
2	Left rear support	Support arrière gauche	1	102984
3	Left front support	Support avant gauche	1	102985
4	Lift arm	Bras de relevage	1	102986
5	Handle support	Support de manivelle	1	102987
6	Push bar	Barre de poussée	1	102988
7	Pin	Goupille	1	102989
8	Pivot support	Support de pivot	1	102981
9	Handgrip	Poignée de plastique	1	102025
10	Right spring lock	Ressort de barrure droit	1	102209
11	Left spring lock	Ressort de barrure gauche	1	102208
12	Handgrip	Poignée	2	102248
13	Spring bracket	Fixation du ressort	2	102210
14	Hair pin 3mm	Goupille à ressort 3mm	2	102617
15	Pin	Goupille	1	102772
16	Hair pin 2.5mm	Goupille à ressort 2.5mm	1	102013
17	Hex. bolt 5/16" n.c. x 1"	Boulon hex. 5/16" n.c. x 1"	12	O/L
18	Flange nut 5/16" n.c.	Écrou à bride 5/16" n.c.	16	O/L
19	Plastic grommet	Oeillet de plastique	1	102063
20	Hex. bolt 5/16" n.c. x 3/4"	Boulon hex. 5/16" n.c. x 3/4"	4	O/L
21	Right front support	Support avant droit	1	103022
22	Nylon bushing	Coussinet en nylon	1	103087
23	Cab support	Support de cabine	1	103895
24	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
25	Reflector (Pack of 2)	Réflecteur (Ensemble de 2)	1	106108

O/L = Obtain locally

PARTS BREAKDOWN

Drive mechanism 700280-1



PARTS LIST

Drive mechanism 700280-1

Ref. Réf.	English description	Description française	Qty. Qté.	Part # Pièce #
1	Drive frame	Châssis d'entraînement	1	102990
2	Idler arm	Bras de tension	1	102991
3	Tension bar	Barre de tension	1	102992
4	Tension link	Lien de tension	1	102993
5	Belt guide	Guide-courroie	1	102994
6	Pin	Goupille	2	102995
7	Flat pulley	Poulie plate	1	102839
8	Belt guide	Guide-courroie	1	102840
9	Double pulley inc. 102736 & 102782	Poulie double inc. 102736 & 102782	1	102692
10	Bearing	Roulement à billes	2	102736
11	Sleeve	Douille	1	102782
12	Flange washer	Rondelle à bride	1	102969
13	V-Belt A-40	Courroie en V A-40	1	102999
14	V-Belt B-112	Courroie en V B-112	1	103010
15	Hex. bolt 5/8" n.c. x 5"	Boulon hex. 5/8" n.c. x 5"	1	O/L
16	Stover lock nut 5/8" n.c.	Écrou de blocage 5/8" n.c.	1	O/L
17	Carriage bolt 3/8" n.c. x 2"	Boulon à carrosserie 3/8" n.c. x 2"	1	O/L
18	Flat washer 7/16" hole	Rondelle plate 7/16" trou	4	O/L
19	Hex. bolt 3/8" n.c. x 1 1/4"	Boulon hex. 3/8" n.c. x 1 1/4"	1	O/L
20	Nylon insert lock nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	2	O/L
21	Hex. bolt 5/16" n.c. x 1"	Boulon hex. 5/16" n.c. x 1"	1	O/L
22	Hex. bolt 3/8" n.c. x 1"	Boulon hex. 3/8" n.c. x 1"	1	O/L
23	Nylon insert lock nut 5/16" n.c.	Écrou à garniture de nylon 5/16" n.c.	1	O/L
24	Hair pin 2.5mm	Goupille à ressort 2.5mm	3	102013
25	Flange nut 3/8" n.c.	Écrou à bride 3/8" n.c.	1	O/L
26	Spring	Ressort	1	102304
27	Hex. bolt M6 x 1.00 x 10	Boulon hex. M6 x 1.00 x 10	1	O/L

O/L = Obtain locally

TORQUE SPECIFICATION TABLE

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

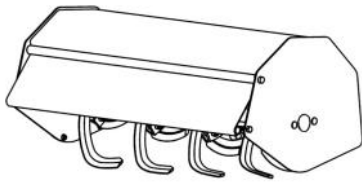
NOTE: These values apply to fasteners as received from supplier, dry or when lubricated with normal oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.

* Thick nuts must be used with grade 8 bolts

SEE Grade No.		2				5				8 *			
BOLT HEAD IDENTIFICATION MARKS AS PER GRADE NOTE MANUFACTURING MARKS WILL VARY		TORQUE				TORQUE				TORQUE			
BOLT SIZE		FOOT POUNDS		NEW TON-METERS		FOOT POUNDS		NEW TON-METERS		FOOT POUNDS		NEW TON-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

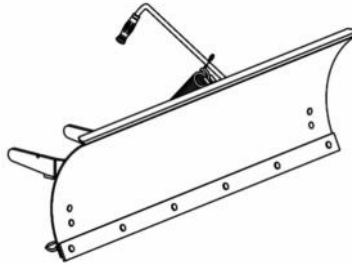
METRIC BOLT TORQUE SPECIFICATIONS							
		COARSE THREAD			FINE THREAD		
Size Screw	Grade No.	Pitch (mm)	Foot Pounds	Newton-Meters	Pitch (mm)	Foot Pounds	Newton-Meters
M6	4T	1.00	3.6 - 5.8	4.9 - 7.9	-	-	-
	7T		5.8 - 9.4	7.9 - 12.7		-	-
	8T		7.2 - 10	9.8 - 13.6		-	-
M8	4T	1.25	7.2 - 14	9.8 - 19	1.00	12 - 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

ATTACHMENTS



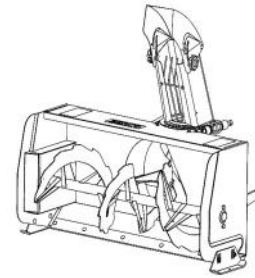
ROTARY TILLER #700312

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



UTILITY BLADE #700266

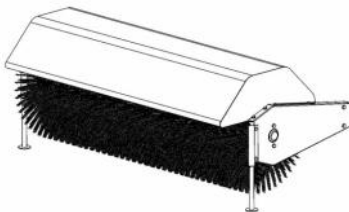
Mounts on the same subframe as the snowblower & rotary broom.



SNOWBLOWER

#700210 40"
#700211 44"
#700255 40"

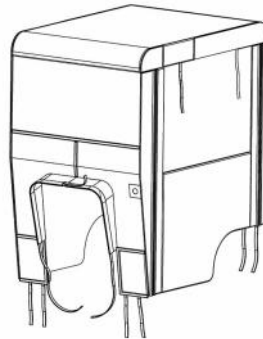
Fits on same subframe as rotary broom and utility blade.



ROTARY BROOMS

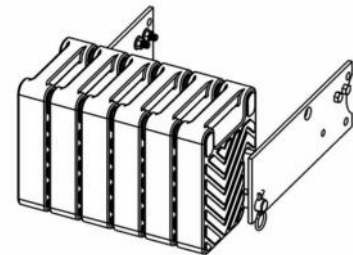
#700380 with nylon brush
/#700381 with polypropylene brush.

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



TRACTOR WINTER CAB #700271

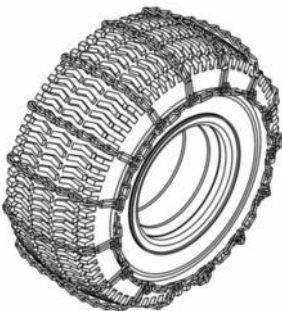
Universal type fits on a wide variety of lawn and garden tractors.



COUNTERWEIGHT

According to tractor model

Required for safety and traction. Counterbalances weight of attachment.



TIRE CHAINS

Two link spacing. Required for traction and safety.
Pkg. of 2



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& DEPENDABILITY
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