



OWNER'S MANUAL
MODEL NUMBER

700713



BERCO
ROUGH CUTTER 44"

- * 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.

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
SAFETY PRECAUTIONS	2
SAFETY DECALS	4
ASSEMBLY	
Assembly instructions	5
Step 1 Engine and battery preparation	6
Step 2 Rough Cutter assembly	6
Step 3 Control box installation	8
OPERATION	9
ADJUSTMENTS	13
MAINTENANCE	14
GENERAL TROUBLESHOOTING	15
PARTS BREAKDOWN AND PARTS LIST	
44" Rough Cutter	16
TORQUE SPECIFICATION TABLE	33

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. Children are often attracted to accessories. Never assume children will stay in place where you have last seen them. Keep children under surveillance of a responsible adult at all times.
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.
5. Never start or operate the accessories except from the operator's station on the power unit except if this is impossible.

PREPARATION:

1. Thoroughly inspect the area where the accessory is to be used and remove door mats, all foreign objects and the like which could be pick up and projected by accessory.
2. For motorized accessories, disengage all clutches and shift into neutral before starting engine.

3. Do not operate the accessory without wearing adequate 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 directly 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.

Always make sure to wear the appropriate safety equipment required (glasses, muffs, mask...) for each type of product. See operation section.

Always make sure of having safe traction on the vehicle by using the recommended accessories (chains, A.T.V. tracks, counterweights...). See operation section.

Always make sure all components are correctly installed. (driveline securely attached and locked at both ends, belts properly installed...)

If applicable, always handle the winch cable with thick leather gloves.

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. Do not use equipment until properly repaired.
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 ignition 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 use accessory on 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. If applicable, never handle the winch cable or hook while under tension.
15. Never use accessory if it has been dropped or damaged. Repair if necessary before re-using

MAINTENANCE AND STORAGE

1. When cleaning, repairing or inspecting the vehicle and accessory: stop the engine, set brake, remove ignition key, and wait 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 and in safe working condition.
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 clearing 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.

TRANSPORT

Review Transport Safety instructions in vehicle manual before moving.

2. Check with local authorities regarding transport on public roads and off road. Obey all applicable laws and regulations.
3. Make sure all lights and reflectors that are required by the local highway and transport authorities (example : SMV (Slow Moving Vehicle)) are in place, are clean, and can be seen clearly by all overtaking and oncoming traffic.
4. Never have the equipment in operation during transport.
5. Always travel at a safe speed.

SAFETY LABELS

REPLACE IF DECALS ARE DAMAGED
SEE PARTS BREAKDOWN FOR DECAL LOCATION



Decal #107584



To avoid serious injury:
Keep all parts of the body away from
moving components.
Decal #105946



Decal #105128



Decal #107585

ASSEMBLY

ASSEMBLY INSTRUCTIONS

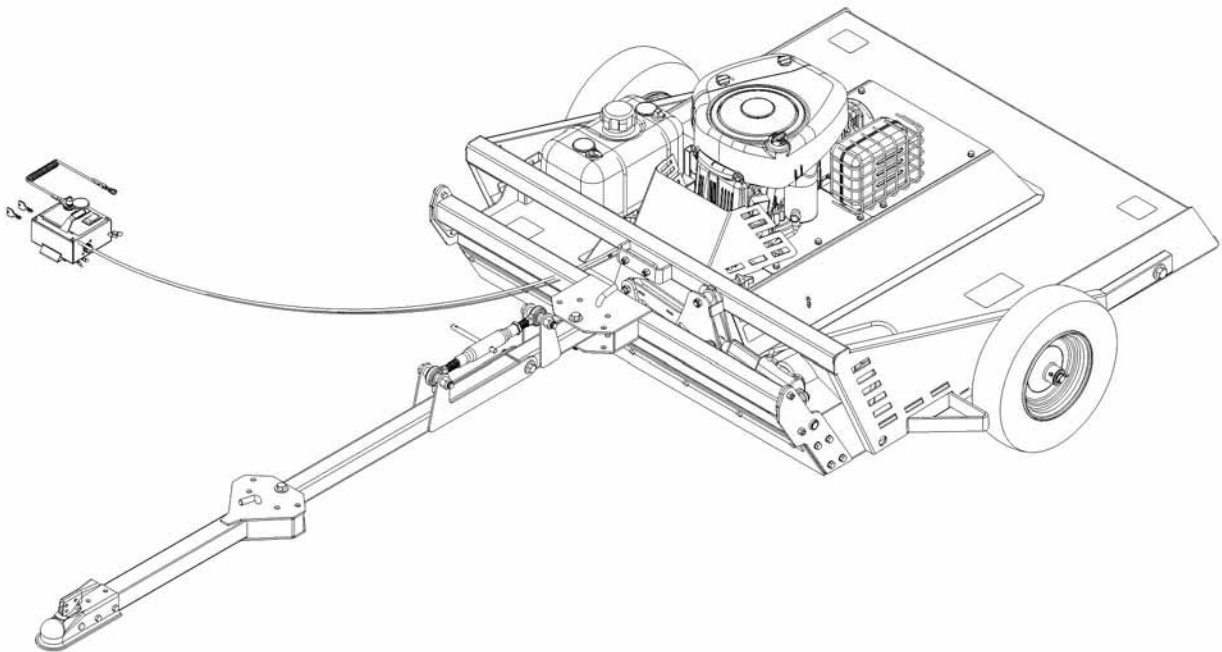
IMPORTANT: UNLESS OTHERWISE SPECIFIED TORQUE ALL BOLTS ACCORDING TO TORQUE SPECIFICATION TABLE (SEE TABLE OF CONTENTS) WHEN STATED: TIGHTEN FIRMLY. REFER TO PARTS BREAKDOWN SECTION FOR PART IDENTIFICATION.

NOTE: In this manual, the right and left side is determined being seated on the driver's seat.

INTENDED USE

The 44" Rough Cutter is designed to clear dense areas of grass and cut saplings in meadows and on small estates. It is not intended to create a finish cut on lawns. Your Rough Cutter should be towed behind an ATV, golf cart, lawn tractor or other approved vehicle with the help of a 2" reach ball hitch. It is not recommended for speeds exceeding 5 mph

Remove all the components from the shipping crate except the assembled rough cutter in order to help with the assembly.



Overall view

ASSEMBLY

STEP 1 ENGINE AND BATTERY PREPARATION

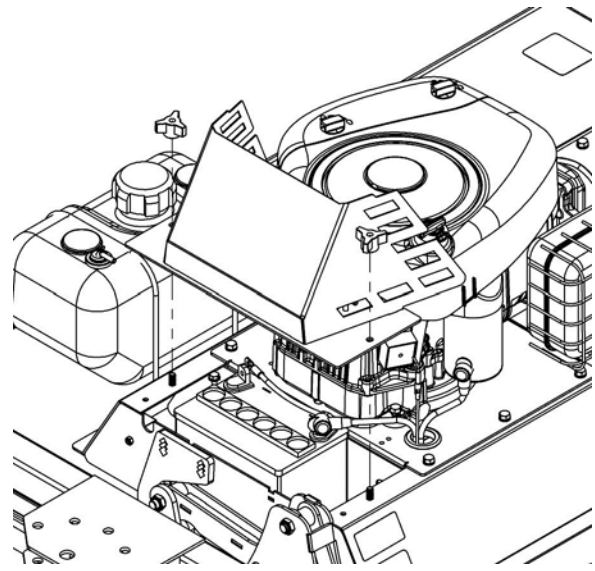
Disengage spark plug wire and place it where it cannot make a connection.

Add oil in the engine. Verify oil level and add if necessary before starting engine. (See engine owner's manual).

U1 battery must be purchased locally:

Check the battery. If the battery is put into service after the "month and year" of the date on the battery, it may need to be charged with a 12 volt battery charger. Follow the manufacturer's instructions for the battery or for the battery charger.

Attach battery cables to the battery, making sure to attach the red wire to the positive terminal first and the black wire to the negative terminal second.



NOTE: It is very important to put the safety cap on the battery's red post. Failure to do so can cause injuries or damage.

STEP 2 ROUGH CUTTER ASSEMBLY

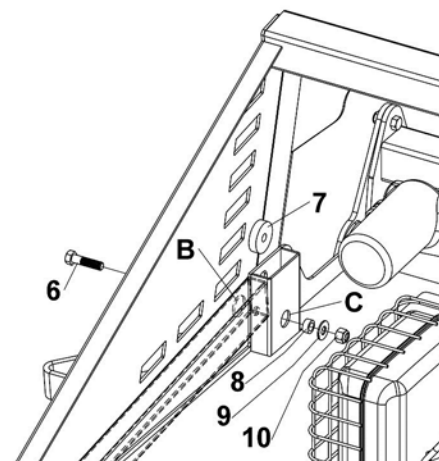
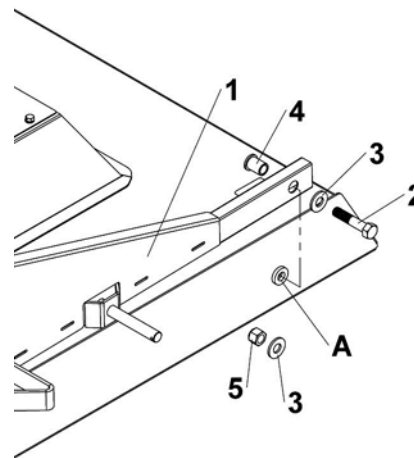
AXLE SUPPORT INSTALLATION

Remove the assembled rough cutter from the shipping crate so that you have access to hole "A" over the rough cutter. If necessary, lift the rough cutter with a jack and secure with axle stands. Make sure the rough cutter is stable and secure at all times to prevent injuries.

Install the axle support (item 1) as shown using a bolt 5/8 x 3" (item 2), two flat washers 11/16 (item 3), a bushing (item 4) and a nylon insert lock nut 5/8" (item 5). Do the same on the other side.

Then proceed with the installation of the lift guides. Align the hole "B" with the hole "C". Hold the axle support in place with wooden blocs or another element. The parts must be safely supported, because if the axle support moves while the fingers are in the A or B holes, there will be a risk of injury. Install as shown with a bolt 3/8 x 1-1/2" (item 6), nylon spacer UHMW (item 7), a sleeve (item 8), washer 3/8" (item 9) and a nylon insert lock nut 3/8" (item 10).

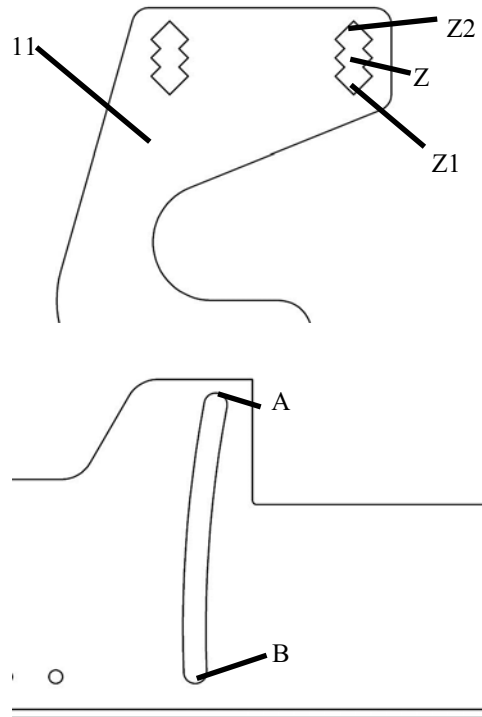
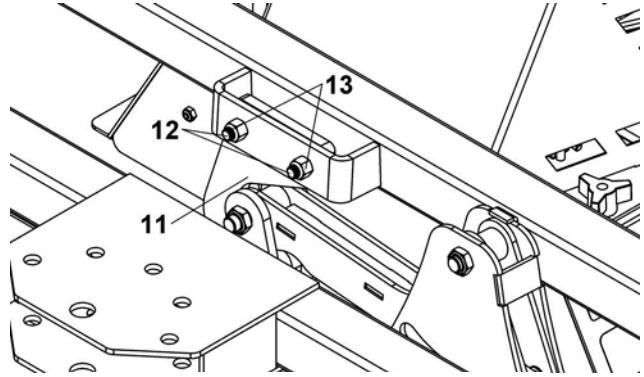
Note : make sure that the nylon spacer (item 7) is between the axle support (item1) and the rough cutter frame



ASSEMBLY

LIFT SUPPORT INSTALLATION

Remove the supports which hold the axle support in place and assemble the lift support (item 11) to the axle support as shown using two carriage bolts 3/8 x 1-1/4" (item 12) and two nuts 3/8" (item 13). Use the middle hole Z on the lift support.

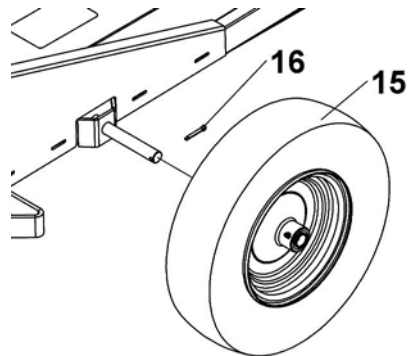


NOTE: Once this is done, activate the rough cutter lift system. The sleeves (item 8, previous page) (left and right side) must never come into contact with the top nor the bottom of the oblong holes. If the sleeves come into contact with the top (item A) use the Z1 holes to install the lift link. If the sleeves come into contact with the bottom (item B) use the Z2 holes to install the lift link. This will guarantee a longer life of the actuator.

Reconnect the spark plug cable.

WHEEL INSTALLATION

Install the wheels (item 15) and secure with the cotter pins (item 16).

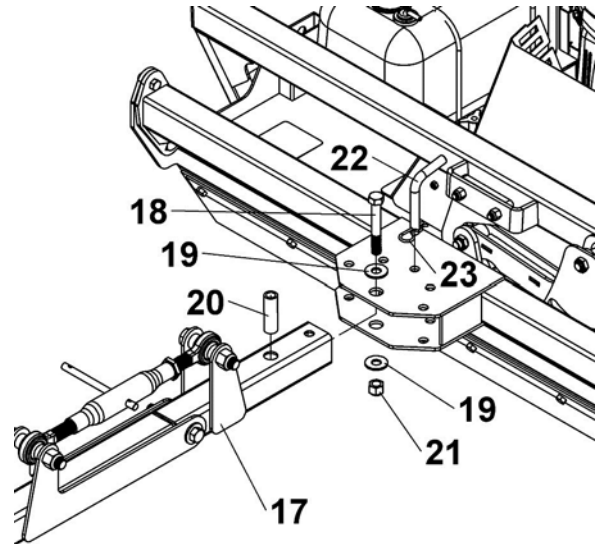


ASSEMBLY

TOW BAR INSTALLATION

Install the tow bar assembly (item 17) as shown using a bolt 1/2 x 3-1/2" (item 18), two washers 1/2" (item 19), a sleeve (item 20) and a nut 5/8" (item 21). Finally secure the position of the tow bar with the pin (item 22) and a cotter pin (item 23).

Reconnect the spark plug cable.



STEP 3 CONTROL BOX INSTALLATION

Choose between the two ways of installing the control box support (item 1).

Option A

Use two hex bolts 1/4" x 1 1/2" (item 2), two spacers (item 3) and two flange nuts 1/4" (item 4) to attach the control box support to the support brackets (item 5).

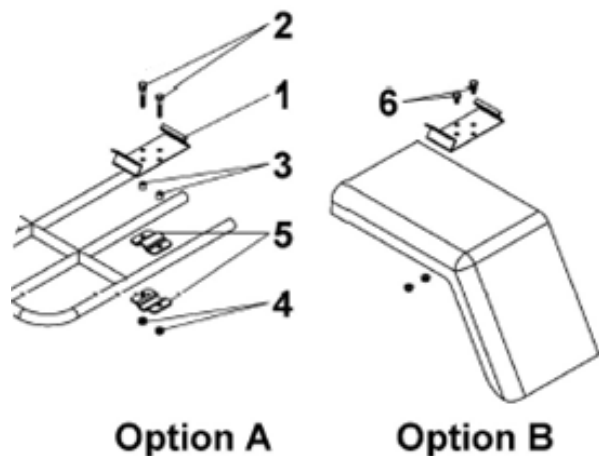
NOTE: Choose the right hole combination on the control box support in order to orient the front of the control box towards the driving controls of the vehicle. (see operation section to see how control box is oriented), Furthermore, make sure to have free access at all times to the equipment's controls in order to safely control the equipment.

Option B

Drill two holes of 1 9/16" apart on the vehicle. Secure the control box support with two bolts 1/4" x 1/2" (item 6) and two flange nuts 1/4".

Insert the control box in the control box support.

NOTE: In order to prevent damage due to water accumulation, make sure to place the control box horizontally.



OPERATION



CAUTION



Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the equipment and the mowing activity. ***Never assume that children will remain where you last saw them.***



DANGER



ALWAYS OPERATE FROM THE DRIVER'S SEAT AND ALWAYS INSTALL ON YOURSELF THE EMERGENCY SWITCH LANYARD THAT IS LINKED TO THE CONTROL BOX.
NEVER OPERATE WITHOUT THIS LANYARD .

OPERATING THE TRAIL CUTTER

The operation of any mower can produce foreign objects to be thrown into the eyes, resulting in severe eye damage.

Always wear certified safety glasses or wide-vision safety goggles over spectacles before starting any cutting machine and while operating such a machine.

The operation of any mower produces sound waves that are damaging to the human ear. Ear protection is recommended.

Do not operate on slopes of more than 15 degrees.

Do not use equipment driving backwards. Always look down and behind, before and while driving backwards.

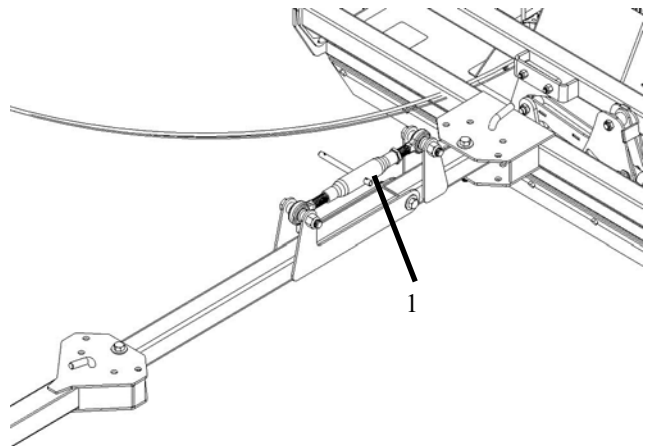
ATTACHING TRAIL CUTTER TO TOW VEHICLE

A 2" BALL HITCH IS REQUIRED ON THE TOWING VEHICLE.

Back the vehicle up to desired towing position.

Offset the Trail Cutter to the side opposite the tow vehicle discharge (if any). This prevents the tow vehicle from throwing grass into Rough Cutter's engine.

Adjust the height of the rough cutter using the adjustment screw (item 1).



OPERATION

INSTALL THE CONTROL BOX IN ITS SUPPORT

Put the control box in the support previously installed.

Attach the electrical cable and the engine control cable to the equipment and to the vehicle, if necessary use cable ties. The control wire must go under the axle support.

NOTE: Be careful to secure the cables to avoid any damage caused by a contact with the vehicle, equipment itself or any other object that can be found in the area of these cables.

FAMILIARIZATION WITH THE CONTROL BOX

Item 1: Ignition switch.

Using the key: Allows to start the engine or you may turn the key to the accessory setting to activate the controls without starting the engine. The light (item 7) is on when the key is turned to the accessory or start setting.

Always remove the key when the equipment is left without surveillance.

Item 2: Throttle lever

Push towards the front to increase engine speed, push completely to the end to "start"

Item 3: Emergency switch

Push to stop equipment quickly.

Item 4: Safety lanyard:

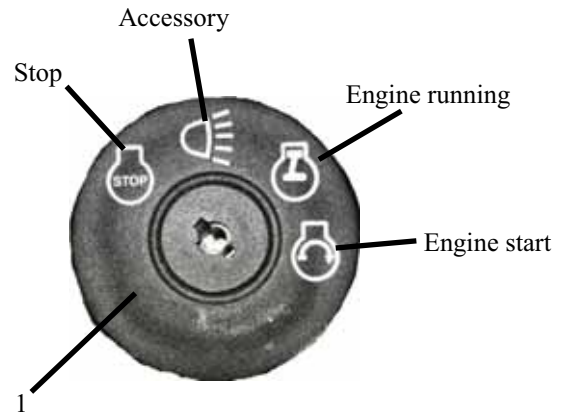
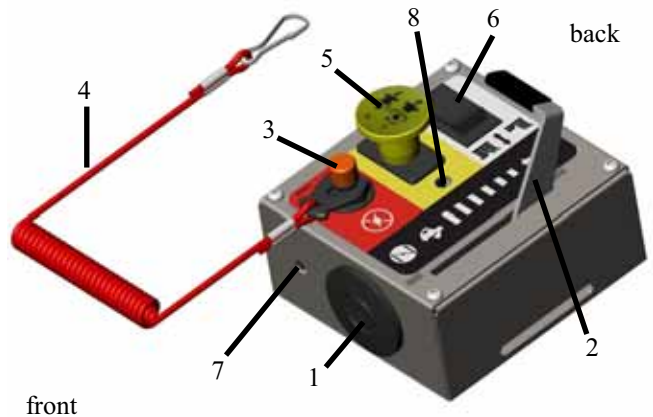
Links the operator to the control box. If the operator leaves the driver's seat without stopping the equipment, the equipment will stop (the cable will disconnect itself from the control box).

Item 5: Engagement switch

Pull to engage, push to disengage. The light (item 8) is on when equipment is engaged.

Item 6: Height adjustment switch.

Allows to adjust the cutting height.



OPERATION

STARTING THE ENGINE

See engine manufacturer's recommendations for the type and amount of oil and fuel used.

Make sure the tow vehicle parking brake is set, mower is level, and blades are disengaged. Engine must be level to accurately check and fill oil.

Do not overfill.

Check spark plug wire, oil, and fuel.

Check all electrical connections for debris buildup .

BEFORE STARTING TO WORK, SIT ON THE DRIVER'S SEAT AND ALWAYS INSTALL ON YOURSELF THE EMERGENCY SWITCH LANYARD THAT IS LINKED TO THE CONTROL BOX.

Using the control box, follow these steps:

Set the throttle lever on the control box to "START" position.

Turn key to the "ACCESSORY" setting, then to the "START" setting.

Set throttle lever to minimum RPM.

Allow engine to idle a few moments before engaging the blades.

ENGAGING BLADES

BEFORE ENGAGING THE BLADES, MAKE SURE THE ENGINE IS RUNNING AT MINIMUM RPM.

NOTE: Do not attempt to start the unit with engagement knob pulled up in the "ENGAGED" position.

Engage blades by pulling up the knob.

Push down the knob to disengage the blades.

Then gradually increase the engine's rpm to maximum.

OPERATION & TRANSPORTATION

BREAKING IN YOUR CUTTER

Set the vehicle parking brake and chock the wheels.

With the engine running at minimum rpm, slowly engage the blades.

In a safe environment, (i.e. no children or pets) allow blades to rotate and engine to idle for 5 minutes, breaking in the belt for a longer life.

Stop cutter.

STOPPING THE ENGINE

Make sure the tow vehicle parking brake is set.

Disengage cutting blades.

Reduce engine to idle speed and allow engine to run momentarily for cooling.

Turn the key to the "OFF" setting.

STARTING TO CUT

Adjust the cutting height using the height adjustment knob on the control box.

Double check that cutter is well attached to vehicle.

Always follow the "starting the engine" instructions on the preceding page, start the rough cutter engine.

Engage the blades following the instructions on the preceding pages.

Start mowing at a slow travel speed.

STOPPING THE CUTTING SESSION

Bring tow vehicle to a complete stop, set the parking brake and disengage blades.

Turn key switch to the "OFF" setting.

Always remember to remove keys to avoid accidental start or irresponsible usage.

SUGGESTED CUTTING PRACTICES

Operate cutter engine at full throttle to assure the best cutting performance and maximum material discharge.

Allow wet grass to dry. Wet grass will clump and collect under the mowing deck.

The rough cutter should be started with tow vehicle in low gear and increased only as safe mowing conditions permit. **Cutting speed should not exceed 5 mph.**

Cutting conditions and the types of grass or brush will vary from place to place. You may find when cutting dense areas that the pressure of the wheel tracks may cause the grass to be pushed down and not effectively mowed. If this happens you may want to mow the area twice. Once with the cutter raised and the second cutting at the desired height. The second cutting should be at a right angle from the previous for best results.

Reducing the travel speed will help cut dense growth. This allows the blades the time necessary to make its initial cut, and regain momentum to continue cutting and discharging debris properly. The engine may stall if you are mowing too fast!

Do not attempt to cut areas that the tow vehicle cannot maneuver through and/or slopes that you do not feel comfortable riding.

TRANSPORTING CUTTER

Stop Trail Cutter.

Place Trail Cutter deck in its highest position.

When transporting without the use of a tow vehicle, remove spark plug wire and place it where it cannot contact the spark plug.

ADJUSTMENTS



WARNING



STOP THE ENGINE AND DISCONNECT THE SPARK PLUG CABLE BEFORE DOING ANY ADJUSTMENTS ON THE ROUGH CUTTER.

FRONT TO BACK ADJUSTMENT

For best cutting results, the cutter deck should be parallel to the ground. To check parallel adjustment, measure the distance from the bottom edge of the deck in both the front and rear of the deck. This adjustment is best done while the tow vehicle and Rough Cutter are attached together.

Adjust as needed using the adjustment screw (item 1)

CUTTER HEIGHT ADJUSTMENT

There is approximately 4" of height adjustment.

Adjust the height with the knob for the height control on the control box.

Dense areas should be cut in two pass.

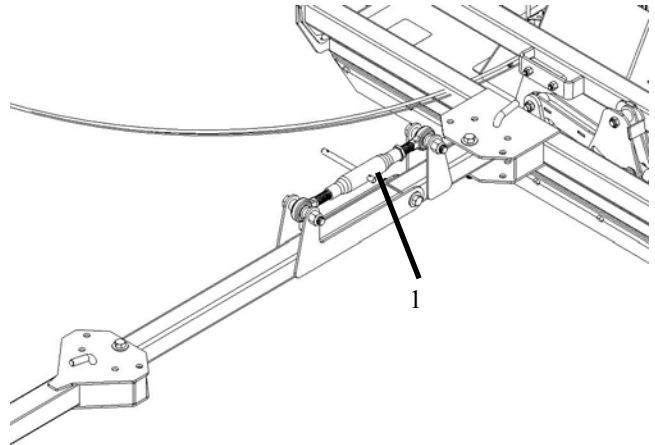
Push handle down to lock height position in place.

TOW HITCH OFFSET

Offset the cutter to the side opposite the discharge of the tow vehicle

It is recommended if the tow vehicle is equipped with a mid-mount mower to overlap the cut approximately 6". This may vary depending on mowing terrain, obstacles, and/or tow vehicle. Always keep safety the first priority.

Always keep the tow vehicle cutter raised higher than the Trail Cutter.



MAINTENANCE

ALWAYS PRACTICE SAFE MAINTENANCE

Always understand the procedures before doing any work. Use the proper tools and equipment, refer to the Owner's manual for additional information.

GENERAL RECOMMENDATIONS

The warranty on this rough cutter does not cover items that have been subjected to operator abuse or negligence. To receive full value from the warranty, operator must maintain unit as instructed in this manual.

Some adjustments will need to be made periodically to maintain your unit properly.

BEFORE EACH SEASON

A new spark plug and clean air filter assure proper air fuel mixture and help your engine run better and last longer.

Replace the spark plug.

Clean or replace the air filter.

Check blades and belts for wear. If wear is detected, please replace.

BEFORE EACH USE

Check engine oil level. Do this twice to ensure an accurate reading.

Check condition of air filter and clean or replace if necessary.

Check blade operation.

Check for loose fasteners, if so, please tighten.

DAILY MAINTENANCE

Make sure all nuts and bolts are tight and cotter pins and retainer springs are secure.

Keep blades sharp.

BLADE CARE AND SERVICE

For best results cutter blades must be kept sharp. The blades can be sharpened with a few strokes of a file or grinding wheel.

DO NOT attempt to sharpen while on the rough cutter.

Important: Replace blades that have been damaged or deeply nicked.

Important: Check blade and spindle hardware on a regular basis to make sure nuts are tight.

Blade installation:

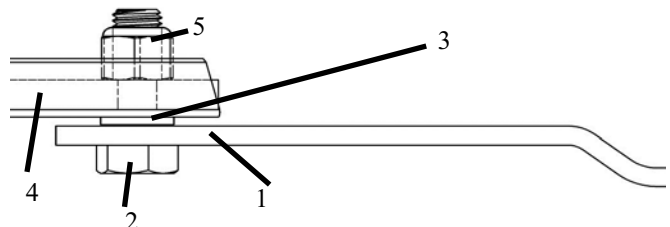
To install a blade, put in place the blade (item 1) with a bolt 3/4 x 2-1/4 grade 8 (item 2) making sure to place the shim (item 3) between the blade and the stump jumper (item 4). Put some extra strong locktite on the threads of the stump jumper. Tighten the bolt (item 2) by hand until the blade can not move freely. Then loosen 1/8 turn. Firmly hold in place the position of the bolt and the stump jumper. Secure the assembly by putting some extra strong locktite on the bolt and inserting the nylon insert lock nut 3/4", (item 5). Torque according to the torque specification table.

If the bolt and the stump jumper are not held in place before tightening; there is a risk that the bolt will tighten up and will lock the blade rotation.

After installation the blade must rotate freely. If not this will cause vibrations that can cause damages or even injuries.

Before using the equipment again, follow the necessary waiting period according to the locktite manufacturer's instructions.

NOTE: You must use a new nylon insert lock nut every time you change a blade and a new bolt if the old one is damaged.



GENERAL TROUBLESHOOTING

The unit is not cutting level.

Level deck. Check air pressure of all tires; make sure they are equal. See tires for maximum inflation.

Without the engine running, make certain blades are installed identically.

The engine will not start.

Disengage blades, turn key switch to the "OFF" position, check battery and all other electrical connections and inspect spark plug and wire.

Contact engine manufacturer or authorized and qualified mechanic.

Engine runs poorly.

See engine manual.

Check adjustment of the throttle.

Replace fuel, clean fuel filter and fuel line.

Check spark plug and gap.

Cutter bounces excessively while towing.

Decrease tire pressure.

Tow at a lower speed.

The cutter vibrates abnormally.

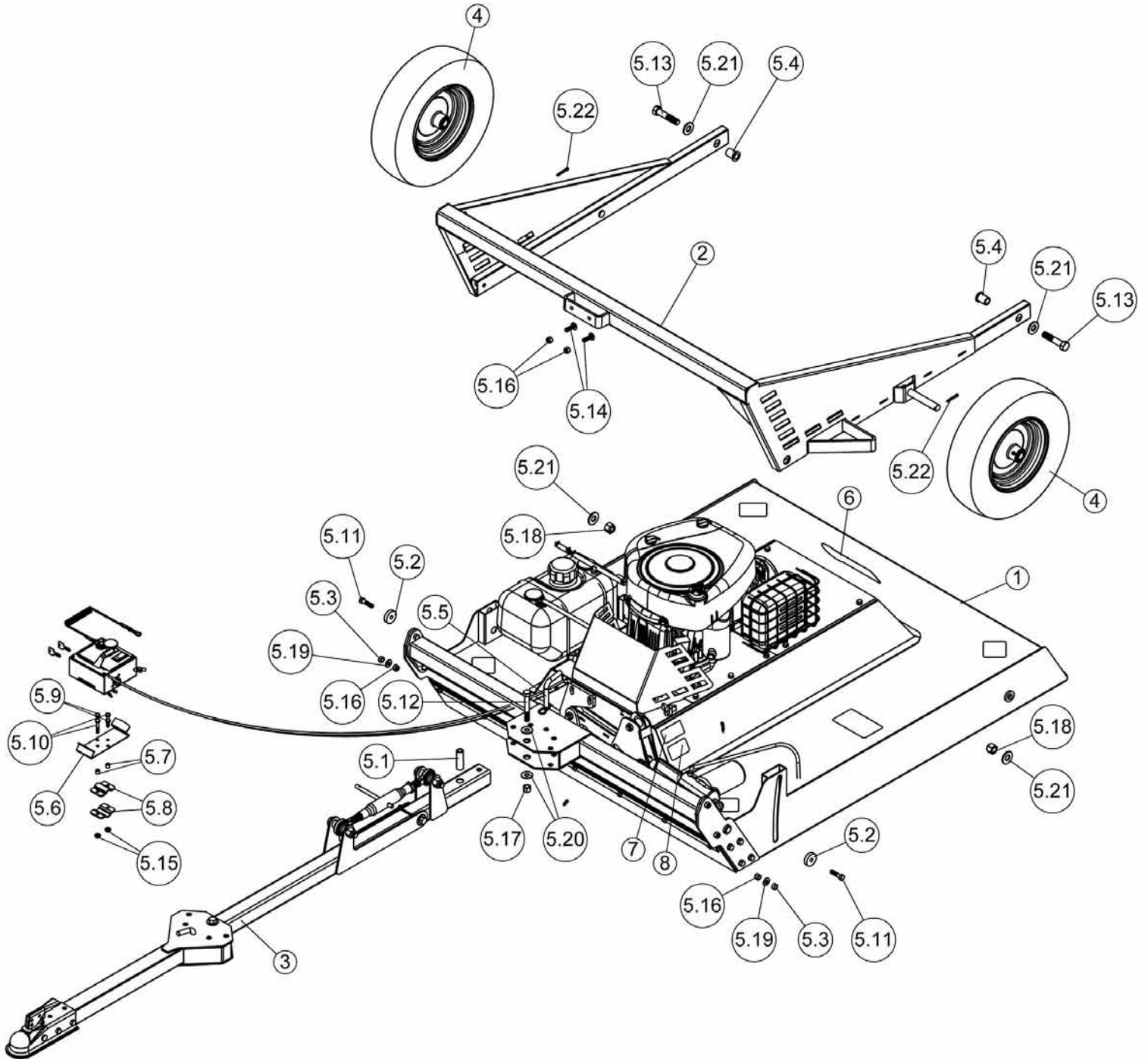
The blade does not rotate freely on its support.

Check installation (see blade maintenance section)

WEAR YOUR SAFETY GLASSES

FORESIGHT IS BETTER THAN NO SIGHT.

NOMENCLATURE / PARTS BREAKDOWN
Débrousailleuse #700713
Rough cutter #700713

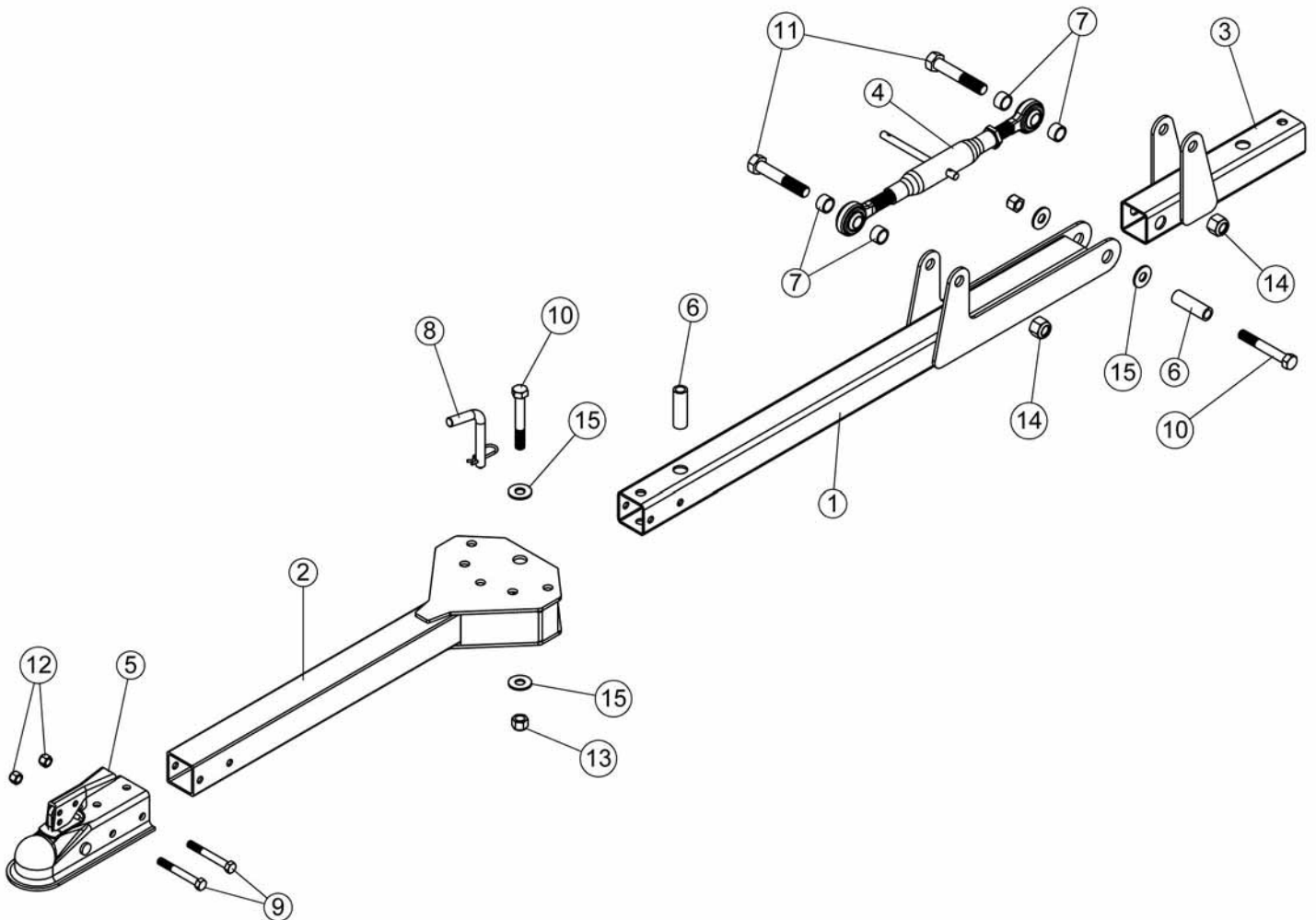


NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST
Débrousailleuse #700713
Rough cutter #700713

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Rough cutter assembly	Débrousailleuse assemblée	1	501026
2	Axles support	Support d'essieu	1	107338-Y02
3	Tow bar assembly	Barre d'attache assemblé	1	501017
4	Wheel assembly	Roue assemblée	2	107275
5	Hardware bag	Sac de quincaillerie	1	107500
5.1	Sleeve	Douille	1	107347
5.2	UHMW Spacer	Espaceur UHMW	2	107348
5.3	Sleeve	Douille	2	106300
5.4	Bushing	Coussinet	2	107361
5.5	Pin	Goupille	1	107362
5.6	Box support	Support de la boîte	1	107581
5.7	Spacer	Espaceur	2	103368
5.8	Support bracket	Fixation du support	2	103068
5.9	Hex. bolt 1/4" n.c. x 1/2" GR5	Boulon hex. 1/4" n.c. x 1/2" GR5	2	O/L (300NC.5P_1-4x1-2)
5.10	Hex. bolt 1/4" n.c. x 1 1/2" GR5	Boulon hex. 1/4" n.c. x 1 1/2" GR5	2	O/L (300NC.5P_1-4x1-1-2)
5.11	Hex. bolt 3/8" n.c. x 1 1/2" GR5	Boulon hex. 3/8" n.c. x 1 1/2" GR5	2	O/L (300NC.5P_3-8x1-1-2)
5.12	Hex. bolt 1/2" n.c. x 3 1/2" GR5	Boulon hex. 1/2" n.c. x 3 1/2" GR5	1	O/L (300NC.5P_1-2x3-1-2)
5.13	Hex. bolt 5/8" n.c. x 3" GR5	Boulon hex 5/8" n.c. x 3" GR5	2	O/L (300NC.5P_5-8x3)
5.14	Carriage bolt 3/8" n.c. x 1 1/4 " GR5	Boulon à carrosserie 3/8" n.c. x 1 1/4 " GR5	2	O/L (320NC.5P_3-8x1-1-4)
5.15	Flange nut 1/4" n.c.	Écrou à bride 1/4" n.c.	2	O/L (334NC.P_1-4)
5.16	Nylon Insert lock Nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	4	O/L (335NC.P_3-8)
5.17	Nylon Insert lock Nut 1/2" n.c.	Écrou à garniture de nylon 1/2" n.c.	1	O/L (335NC.P_1-2)
5.18	Nylon Insert lock Nut 5/8" n.c.	Écrou à garniture de nylon 5/8" n.c.	2	O/L (335NC.P_5-8)
5.19	Flat washer 3/8" hole	Rondelle plate 3/8" trou	2	O/L (360.P_3-8T)
5.20	Flat washer 1/2" hole	Rondelle plate 1/2" trou	2	O/L (360.P_1-2T)
5.21	Flat washer 11/16" hole	Rondelle plate 11/16" trou	4	O/L (360.P_11-16T)
5.22	Cotter pin 3/16" x 1-1/2"	Goupille fendue 3/16" x 1-1/2"	2	O/L (375.P_3-16X1-1-2)
5.23	List of bag	Liste de sac	1	-
6	Berco decal	Décalque Berco	1	102471
7	Serial number	Numéro de série	1	REF.
8	Made in Canada decal	Décalque Fabriqué au Canada	1	REF.

O/L = Obtain Locally

NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST
Barre d'attache assemblée #501017
Tow bar assembly #501017

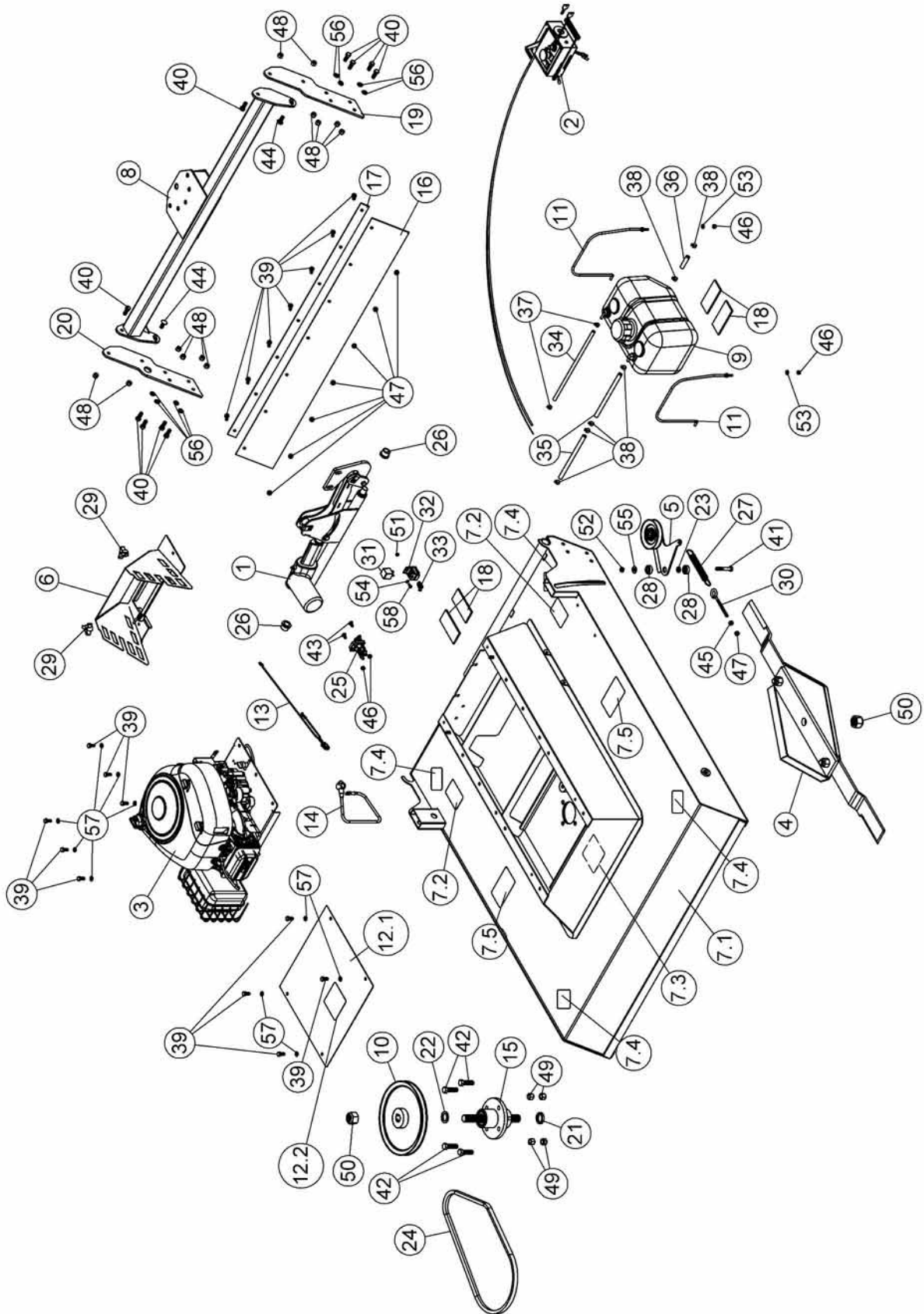


NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST
Barre d'attache assemblé #501017
Tow bar assembly #501017

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Intermediate hitch bar	Barre d'attache intermédiaire	1	107483
2	Front hitch bar	Barre d'attache avant	1	107485
3	Rear hitch bar	Barre d'attache arrière	1	107484
4	Top link	Lien supérieur	1	107356
5	Hitch	Attache	1	106130
6	Sleeve	Douille	2	107347
7	Sleeve	Douille	4	107486
8	Pin	Goupille	1	107362
9	Hex. bolt 3/8" n.c. x 3" GR5	Boulon hex. 3/8" n.c. x 3" GR5	2	O/L (300NC.5P_3-8x3)
10	Hex. bolt 1/2" n.c. x 3 1/2" GR5	Boulon hex. 1/2" n.c. x 3 1/2" GR5	2	O/L (300NC.5P_1-2x3-1-2)
11	Hex. bolt 5/8" n.c. x 3 1/2" GR5	Boulon hex 5/8" n.c. x 3 1/2" GR5	2	O/L (300NC.5P_5-8x3-1-2)
12	Nylon Insert lock Nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	2	O/L (335NC.P_3-8)
13	Nylon Insert lock Nut 1/2" n.c.	Écrou à garniture de nylon 1/2" n.c.	2	O/L (335NC.P_1-2)
14	Nylon Insert lock Nut 5/8" n.c.	Écrou à garniture de nylon 5/8" n.c.	2	O/L (335NC.P_5-8)
15	Flat washer 1/2" hole	Rondelle plate 1/2" trou	4	O/L (360.P_1-2T)

O/L = Obtain Locally

NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST
Débrousailleuse assemblée #501026
Rough cutter assembly #501026



NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST
Débroussailleuse assemblée #501026
Rough cutter assembly #501026

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Lift arm assembly	Support de relevage assemblé	1	501013
2	Control box assembly	Boîte de contrôle assemblée	1	501025
3	Engine assembly	Moteur assemblé	1	501014
4	Blades assembly	Lame assemblées	1	501015
5	Bender assembly	Tendeur assemblé	1	501016
6	Guard assembly	Garde assemblé	1	501019
7	Frame #107334 with safety decals	Châssis #107334 a/ déc. de sécurité	1	107586
7.1	Frame	Châssis	1	107334
7.2	Decal pinch point	Décalque point de pincement	2	105946
7.3	Decal danger belts	Décalque danger courroies	1	105128
7.4	Mower projection decal	Décalque projection tondeuse	4	107584
7.5	General message mower decal	Décalque tondeuse message général	2	107585
8	Hitch frame	Châssis d'attache	1	107336
9	2.5 Gallon EPA gasoline tank	Réservoir à essence 2.5 gallon EPA	1	107264
10	V pulley	Poulie en V	1	104774
11	Fuel tank tie-down	Attache réservoir	2	107351
12	Cover #107350 with safety decal	Couvercle #107350 a/ déc. de séc.	1	107587
12.1	Cover	Couvercle	1	107350
12.2	Decal danger belts	Décalque danger courroies	1	105128
13	Wire assembly	Fil assemblé	1	107455
14	Wire assembly	Fil assemblé	1	107490
15	Hub assembly	Moyeu assemblé	1	107590
16	Rubber flap	Rabat en caoutchouc	1	107342
17	Flap fixture	Fixation de rabat	1	107343
18	Tank pad	Coussinet de réservoir	4	107369
19	Support plate	Plaque de support	1	107592
20	Support plate	Plaque de support	1	107482
21	Clutch spacer	Espaceur d'embrayage	1	106616
22	Special flat washer	Rondelle plate spéciale	1	106338
23	Spacer	Espaceur	1	107032
24	V-Belt B-47	Courroie en V B-47	1	107354
25	Relay	Relais	1	107274

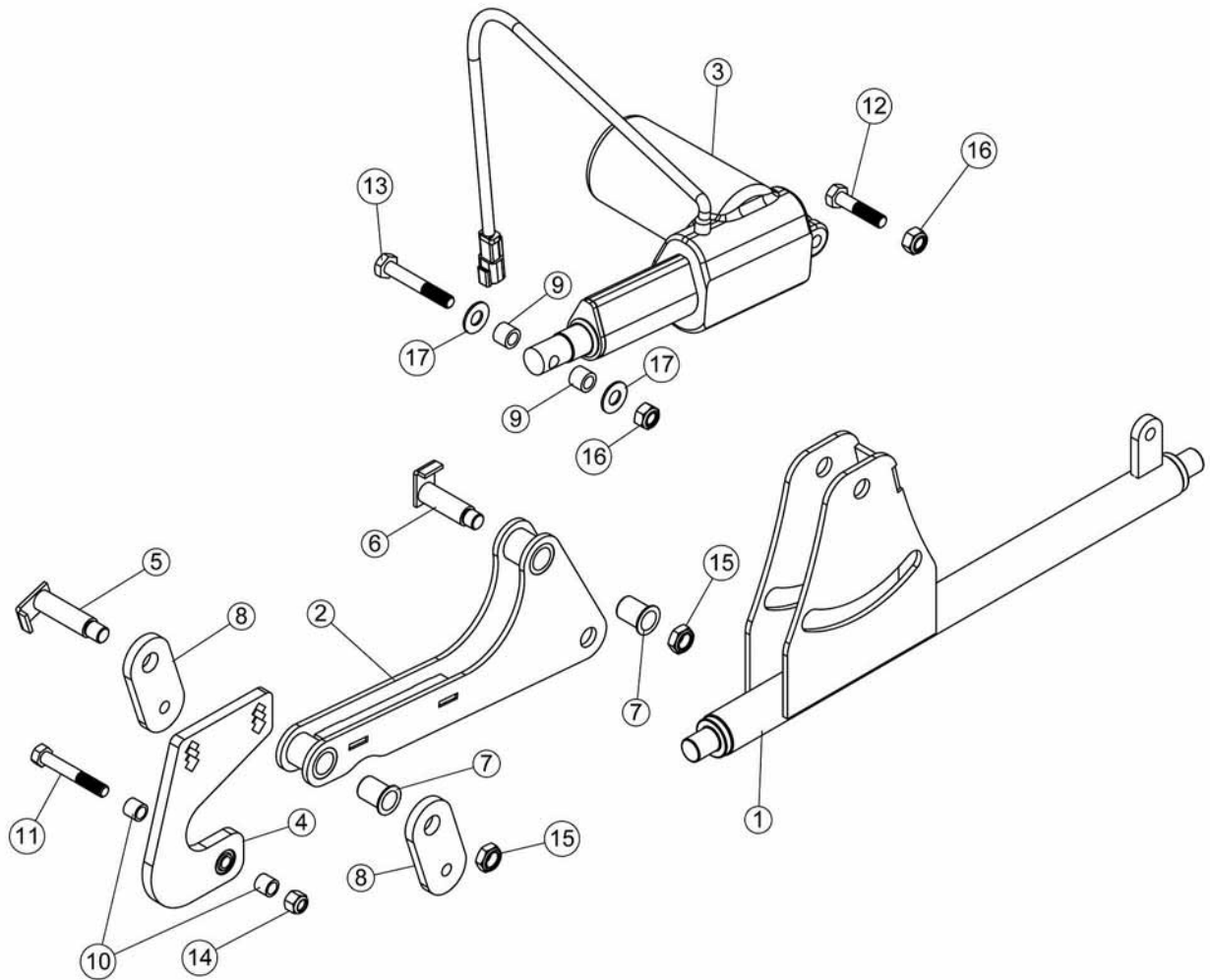
O/L = Obtain Locally

NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST
Débroussailleuse assemblée #501026
Rough cutter assembly #501026

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
26	Bushing	Coussinet	2	107360
27	Spring	Ressort	1	102304
28	Ball Bearing 1614 2RS	Roulement à billes	2	107054
29	Knob	Bouton	2	103027
30	Eye bolt	Boulon à oeillet	1	102087
31	Relay	Relais	1	104405
32	Relay connector	Connecteur de relais	1	107501
33	Relay connector key	Clef du connecteur de relais	1	107502
34	Low pressure fuel hose EPA 3/16"	Tuyau à essence basse pression EPA 3/16"	1	107571
35	Fuel hose EPA 1/4"	Tuyau à essence EPA 1/4"	2	107572
36	Fuel hose EPA 1/4"	Tuyau à essence EPA 1/4"	1	107714
37	Spring action hose clamp for 7/16" hose	Collier de serrage à ressort pour tuyau 7/16"	2	107310
38	Spring action hose clamp for 1/2" hose	Collier de serrage à ressort pour tuyau 1/2"	6	107269
39	Hex. bolt 5/16" n.c. x 3/4" GR5	Boulon hex. 5/16" n.c. x 3/4" GR5	17	O/L (300NC.5P_5-16x3-4)
40	Hex. bolt 3/8" n.c. x 1" GR5	Boulon hex. 3/8" n.c. x 1" GR5	10	O/L (300NC.5P_3-8x1)
41	Hex. bolt 3/8" n.c. x 2 1/4" GR5	Boulon hex. 3/8" n.c. x 2 1/4" GR5	1	O/L (300NC.5P_3-8x2-1-4)
42	Hex. bolt 1/2" n.c. x 1 3/4" GR5	Boulon hex. 1/2" n.c. x 1 3/4" GR5	4	O/L (300NC.5P_1-2x1-3-4)
43	Carriage bolt 1/4" n.c. x 5/8" GR5	Boulon à carrosserie 1/4" n.c. x 5/8" GR5	2	O/L (320NC.5P_1-4x5-8)
44	Carriage bolt 3/8" n.c. x 1" GR5	Boulon à carrosserie 3/8" n.c. x 1" GR5	2	O/L (320NC.5P_3-8x1)
45	Hex. nut 5/16" n.c. GR5	Écrou hex. 5/16" n.c. GR5	1	O/L (330NC.P_5-16)
46	Nylon Insert lock Nut 1/4" n.c.	Écrou à garniture de nylon 1/4" n.c.	4	O/L (335NC.P_1-4)
47	Nylon Insert lock Nut 5/16" n.c. GR5	Écrou à garniture de nylon 5/16" n.c. GR5	8	O/L (335NC.P_5-16)
48	Nylon Insert lock Nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	12	O/L (335NC.P_3-8)
49	Nylon Insert lock Nut 1/2" n.c.	Écrou à garniture de nylon 1/2" n.c.	4	O/L (335NC.P_1-2)
50	Nylon insert lock nut 1" n.c	Écrou à garniture de nylon 1" n.c	2	O/L (335NC.P_1)
51	Nylon Insert lock Nut #10x24 n.c.	Écrou à garniture de nylon #10x24 n.c.	1	O/L (335NC.P_#10X24)
52	Nylon insert lock nut 3/8" n.c. (thin)	Écrou à garniture de nylon 3/8" n.c. (mince)	1	O/L (336NC.P_3-8)
53	Flat washer 1/4" hole	Rondelle plate 1/4" trou	2	O/L (360.P_1-4T)
54	Flat washer #10 hole	Rondelle plate #10 trou	1	O/L (360.P_#10T)
55	Flat washer 3/8" hole	Rondelle plate 3/8" trou	1	O/L (360.P_3-8T)
56	Lock washer 3/8"	Rondelle de blocage 3/8"	8	O/L (362.P_3-8)
57	Lock washer 5/16"	Rondelle de blocage 5/16"	10	O/L (362.P_5-16)
58	Machine screw Pan head no.10 x 24 x 1/2"	Vis mécanique tête pan no.10 x 24 x 1/2"	1	O/L (395NC.P_#10x24x1-2)

O/L = Obtain Locally

NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST
Support de relevage assemblé #501013
Lift arm assembly #501013



Support de relevage assemblé #501013
Lift arm assembly #501013

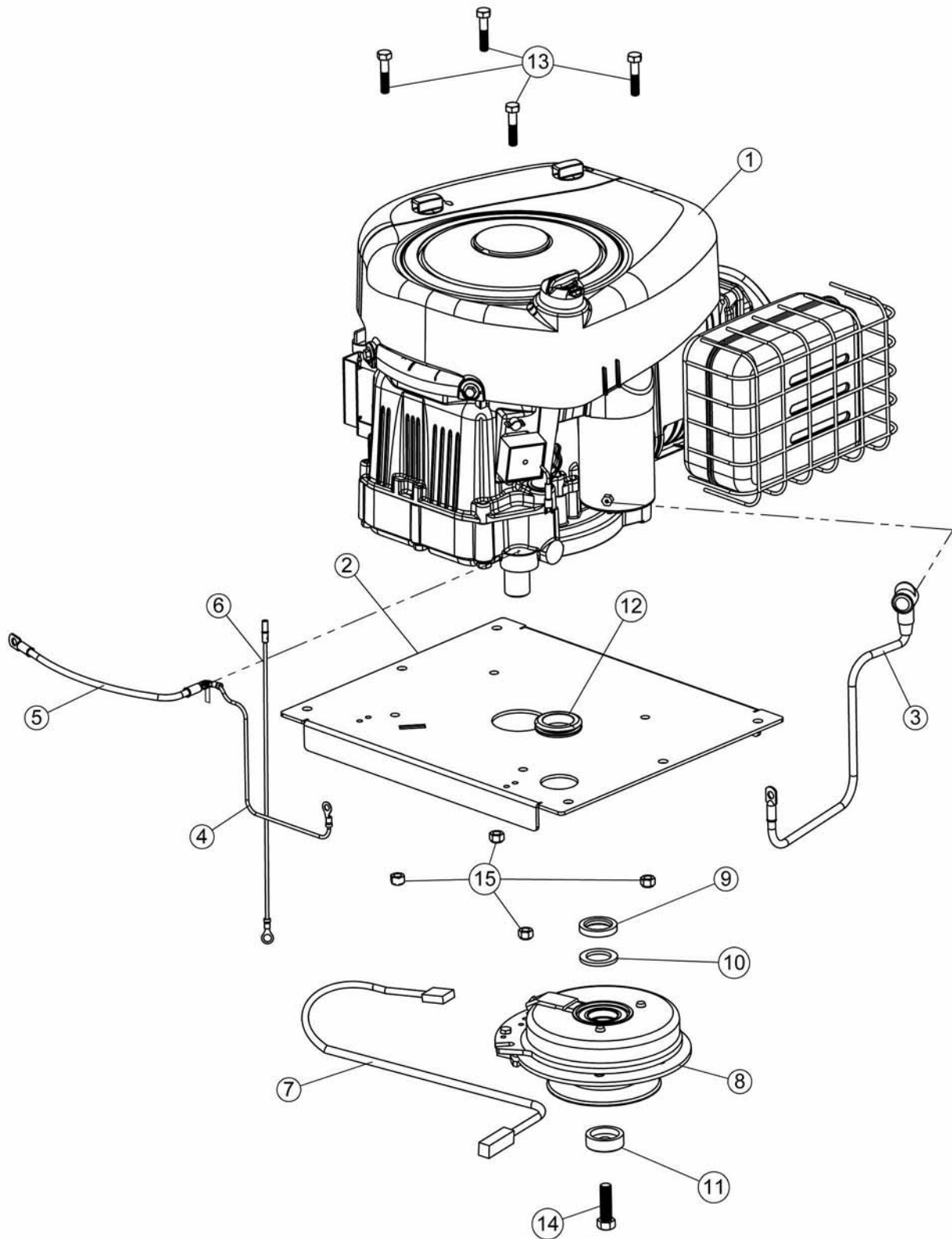
REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Lift support	Support de relevage	1	107339
2	Lift arm	Bras de relevage	1	107340
3	Electric actuator	Actuateur électrique	1	107156
4	Center link	Lien central	1	107357
5	Pivot pin	Goupille de pivot	1	105862
6	Pivot pin	Goupille de pivot	1	107407
7	Bushing	Coussinet	2	107403
8	Link	Lien	2	107346
9	Sleeve	Douille	2	102326
10	Sleeve	Douille	2	105877
11	Hex. bolt 3/8" n.c. x 2 1/2" GR5	Boulon hex. 3/8" n.c. x 2 1/2" GR5	1	O/L (300NC.5P_3-8x2-1-2)
12	Hex. bolt M10 x 1.50 x 45 GR8.8	Boulon hex. M10 x 1.50 x 45 GR8.8	1	O/L (310.8.8P_M10X1.50X45)
13	Hex. bolt M10 x 1.50 x 65 GR8.8	Boulon hex. M10 x 1.50 x 65 GR8.8	1	O/L (310.8.8P_M10X1.50X65)
14	Nylon Insert lock Nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	1	O/L (335NC.P_3-8)
15	Nylon insert lock nut 1/2" n.c. (thin)	Écrou à garniture de nylon 1/2" n.c. (mince)	2	O/L (336NC.P_1-2)
16	Nylon Insert lock Nut M10 x 1.50 GR8.8	Écrou à garniture de nylon M10 x 1.50 GR8.8	2	O/L (352.P_M10X1.50)
17	Flat washer 7/16" hole	Rondelle plate 7/16" trou	2	O/L (360.P_7-16T)

O/L = Obtain Locally

NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST

Moteur assemblé #501014

Engine assembly #501014



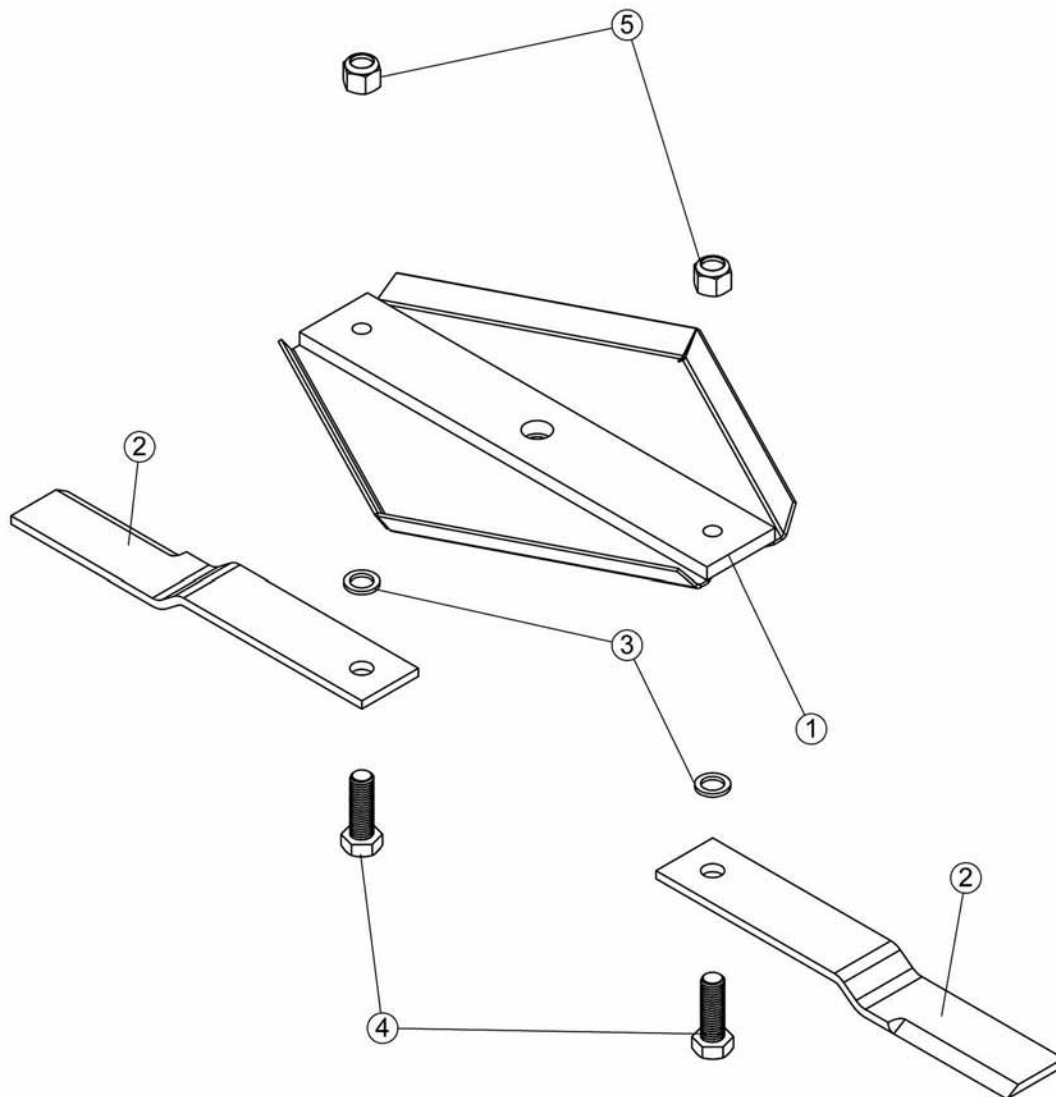
NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST
Moteur assemblé #501014
Engine assembly #501014

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Vertical engine 17.5 hp	Moteur vertical 17.5 hp	1	107201
2	Engine base	Base du moteur	1	107335
3	Wire assebly	Fil assemblé	1	107490
4	Wire assembly	Fil assemblé	1	107454
5	Wire assembly	Fil assemblé	1	107491
6	Wire assembly	Fil assemblé	1	107452
7	Wire Assembly	Fil Assemblé	1	106548
8	Electric Clutch	Embrayage Électrique	1	107459
9	Clutch spacer	Espaceur d'embrayage	1	106616
10	Special flat washer	Rondelle plate spéciale	1	106338
11	Flange washer	Rondelle à bride	1	103976
12	Grommet	Oeillet	1	107365
13	Hex. bolt 5/16" n.c. x 1 1/2"	Boulon hex. 5/16" n.c. x 1 1/2"	4	O/L (300NC.5P_5-16x1-1-2)
14	Hex. bolt 7/16" n.f. x 1 1/2" GR5	Boulon hex. 7/16" n.f. x 1 1/2" GR5	1	O/L (300NF.5P_7-16x11-2)
15	Nylon Insert lock Nut 5/16" n.c. GR5	Écrou à garniture de nylon 5/16" n.c. GR5	4	O/L (335NC.P_5-16)

NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST

Lame assemblées #501015

Blades assembly #501015



NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST

Lame assemblées #501015

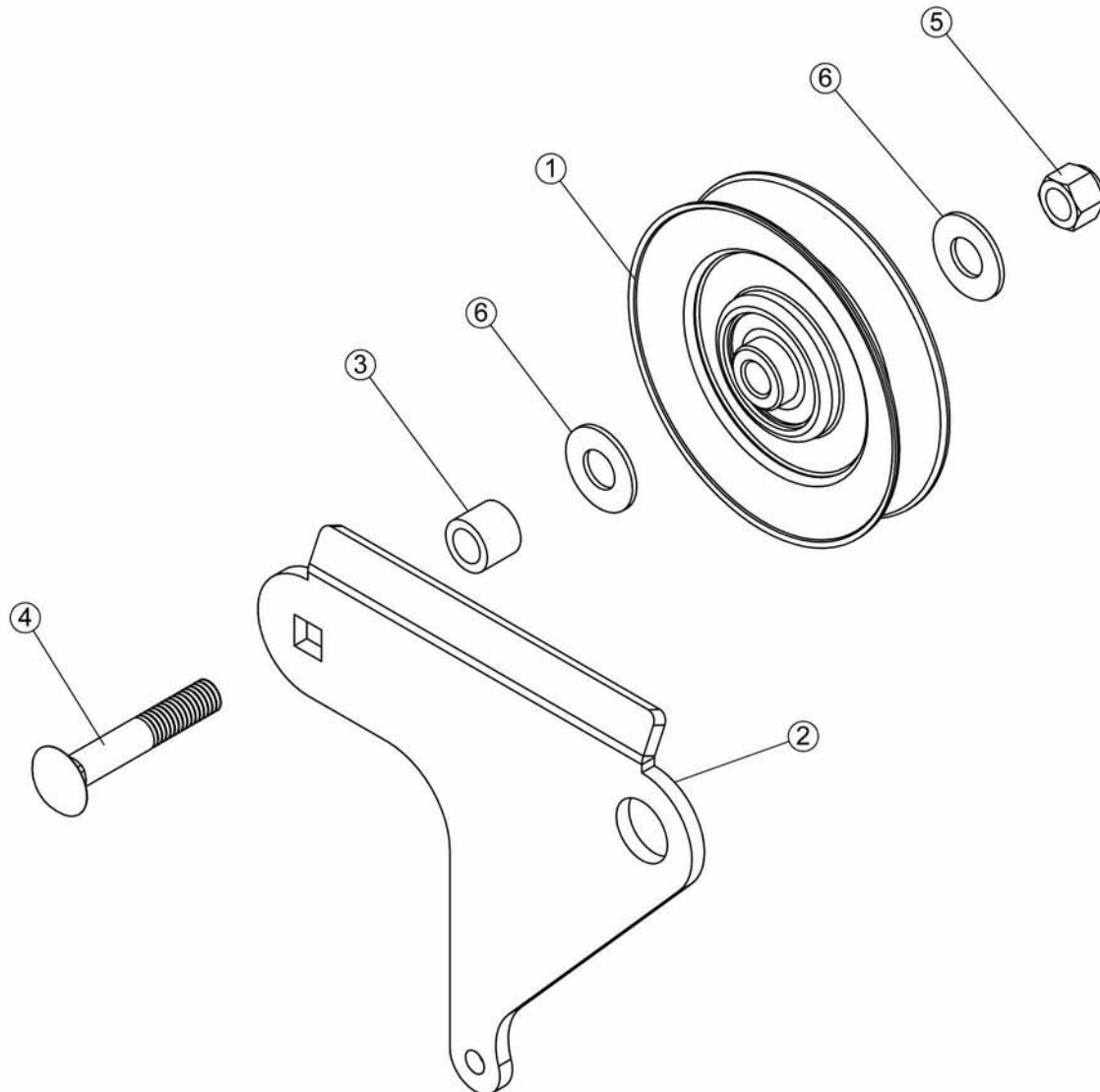
Blades assembly #501015

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Stump jumper	Saute obstacle	1	107341
2	Mower blade 15,5" one hole	Lame de tondeuse 15" un trou	2	107265
3	Shim	Cale	2	107366
4	Hex. bolt 3/4" n.c. x 2 1/4" GR8	Boulon hex. 3/4" n.c. x 2 1/4" GR8	2	O/L (300NC.8P_3-4x2-1-4)
5	Nylon Insert lock Nut 3/4" n.c.	Écrou à garniture de nylon 3/4" n.c.	2	O/L (335NC.P_3-4)

NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST

Tendeur assemblé #501016

Bender assembly #501016



NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST

Tendeur assemblé #501016

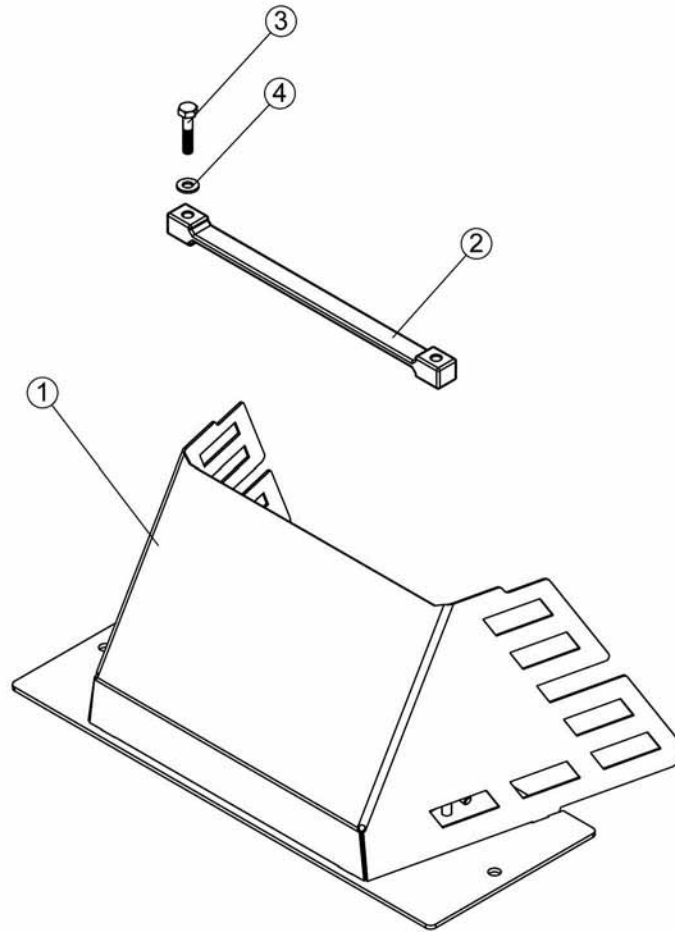
Bender assembly #501016

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	V-Pulley	Poulie en V	1	102766
2	Bender	Tendeur	1	107349
3	Sleeve	Douille	1	102326
4	Carriage bolt 3/8" n.c. x 2 1/4" GR5	Boulon à carrosserie 3/8" n.c. x 2 1/4" GR5	1	O/L (320NC.5P_3-8x2-1-4)
5	Nylon Insert lock Nut 3/8" n.c.	Écrou à garniture de nylon 3/8" n.c.	1	O/L (335NC.P_3-8)
6	Flat washer 7/16" hole	Rondelle plate 7/16" trou	2	O/L (360.P_7-16T)

NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST

Garde assemblé #501019

Guard assembly #501019



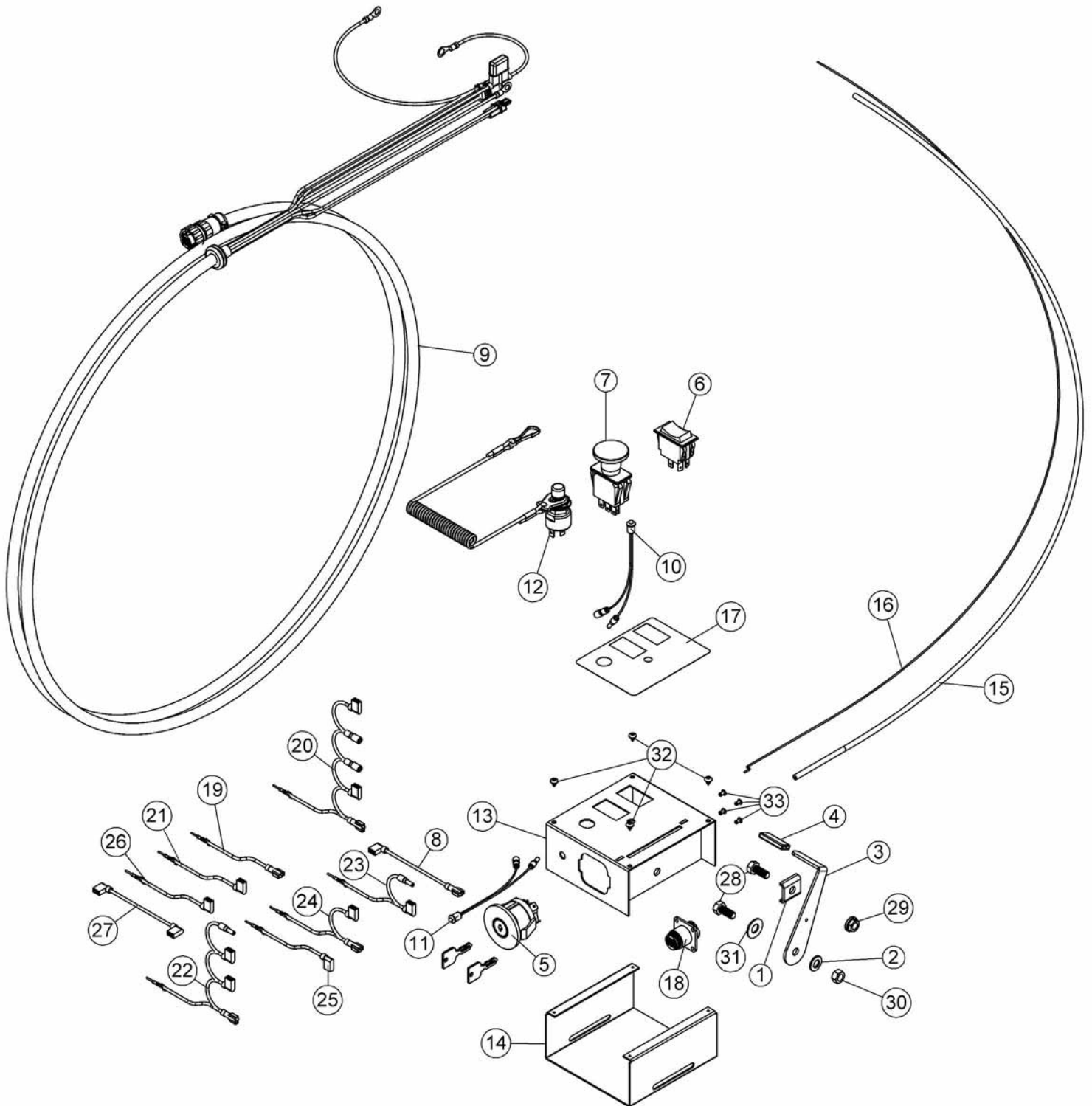
NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST

Garde assemblé #501019

Guard assembly #501019

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Guard	Garde	1	107337
2	Rubber strap	Sangle en caoutchouc	1	107363
3	Hex. bolt 1/4" n.c. x 1 1/4" GR5	Boulon hex. 1/4" n.c. x 1 1/4" GR5	1	O/L (300NC.5P_1-4x1-1-4)
4	Flat washer 1/4" hole	Rondelle plate 1/4" trou	1	O/L (360.P_1-4T)

NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST
Boîte de contrôle assemblée #501025
Control box assembly #501025



NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST
Boîte de contrôle assemblée #501025
Control box assembly #501025

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Spring bracket	Fixation du ressort	1	102210
2	Belleville washer 3/8"	Rondelle Belleville 3/8"	1	102144
3	Throttle arm	Bras d'accélérateur	1	102541
4	Handle grip	Poignée de plastique	1	102546
5	Ignition switch	Commutateur d'ignition	1	104015
6	Switch	Commutateur	1	107446
7	Emergency switch	Interrupteur d'urgence	1	107447
8	Wire assembly	Fil assemblé	1	107448
9	Wire assembly	Fil assemblé	1	107449
10	Warning light	Avertisseur lumineux	1	107456
11	Warning light	Avertisseur lumineux	1	107457
12	Emergency switch with lanyard	Interrupteur d'urgence avec cordon	1	107472
13	Box cover	Couvercle de la boîte	1	107579
14	Box	Boîte	1	107580
15	Cable shield	Gaine de câble	1	107582
16	Inner wire	Broche intérieure	1	107583
17	Control box decal	Décalque de la boîte de contrôle	1	107628
18	Circular connector flange receptacle	Connecteur circulaire réceptacle à bride	1	107700
19	Wire assembly	Fil assemblé	1	107703
20	Wire assembly	Fil assemblé	1	107704
21	Wire assembly	Fil assemblé	1	107705
22	Wire assembly	Fil assemblé	1	107706
23	Wire assembly	Fil assemblé	1	107707
24	Wire assembly	Fil assemblé	1	107708
25	Wire assembly	Fil assemblé	1	107709
26	Wire assembly	Fil assemblé	1	107710
27	Wire assembly	Fil assemblé	1	107713

O/L = Obtain Locally

NOMENCLATURE ET LISTE DES PIÈCES / PARTS BREAKDOWN & PART LIST
Boîte de contrôle assemblée #501025
Control box assembly #501025

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
17	Control box decal	Décalque de la boîte de contrôle	1	107628
28	Hex. bolt 5/16" n.c. x 3/4" GR5	Boulon hex. 5/16" n.c. x 3/4" GR5	2	O/L (300NC.5P_5-16x3-4)
29	Flange nut 5/16" n.c.	Écrou à bride 5/16" n.c.	1	O/L (334NC.P_5-16)
30	Stover lock nut 5/16" n.c.	Écrou de blocage 5/16" n.c.	1	O/L (338NC.P_5-16)
31	Flat washer 3/8" hole	Rondelle plate 3/8" trou	1	O/L (360.P_3-8T)
32	Metal screw P.H. #8 x 1/4"	Vis à métal P.H. #8 x 1/4"	4	O/L (400.P_8x1-4)
33	Pop-rivet 1/8" x 3/16" no.AD-43BS	Rivet pop 1/8" x 3/16" no.AD-43BS	4	O/L (415_1-8x3-16)

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



***WHEN PERFORMANCE
& DEPENDABILITY
ARE NON NEGOTIABLE!***

**Bercomac Limitée
92, Fortin North, Adstock, Quebec, Canada, G0N 1S0**

WWW.BERCOMAC.COM

PRINTED IN CANADA

(ORIGINAL NOTICE)