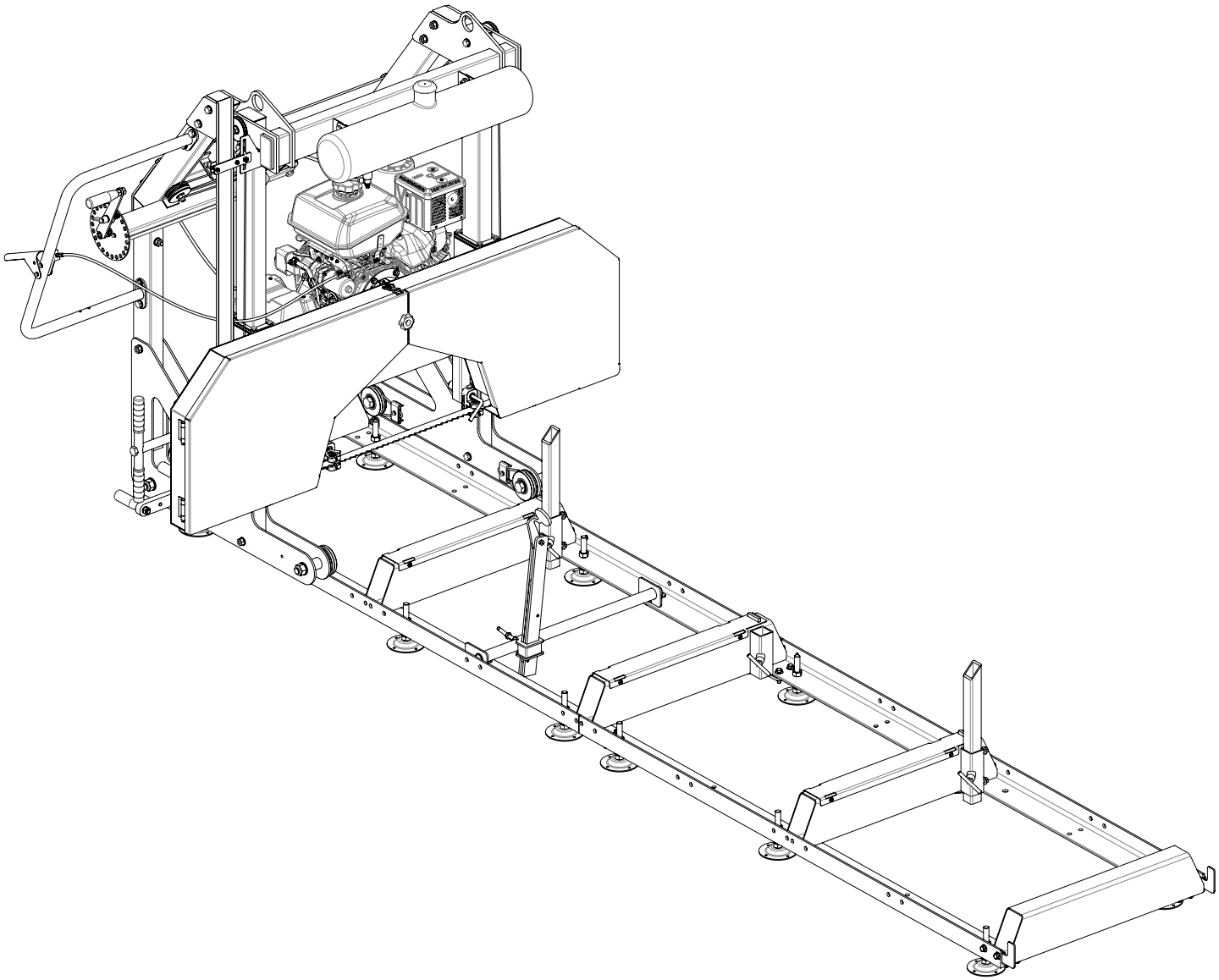
# HM130 PORTABLE SAWMILL



# OPERATOR'S MANUAL

0001641-M-EN: Rev A
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WOODLAND MILLS

DISCOVER THE WOODLAND™

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# INTRODUCTION

Congratulations on your purchase and welcome to Woodland Mills! This manual gives you the necessary information about your machine so you will be able to use it properly. The entire manual must be read and understood before you start using the machine. If any questions should arise that are not covered by this manual, please contact Woodland Mills Inc.

**OWNER'S RECORD**

Please take a moment to record the following information about your sawmill. If you need to call for assistance, please be ready to provide your model and serial numbers. This information will allow us to help you more quickly when you call.

**MODEL NUMBER**

**SERIAL NUMBER**

**DATE OF PURCHASE**

This machine is designed for certain applications only. We strongly recommend that this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted us to determine if it can or should be performed on the product.

For technical questions and replacement parts, please contact Woodland Mills Inc.

# INTENDED USE

Woodland Mills wood sawmills are designed for acreage owners to aid in the milling of natural, untreated wood with the mill firmly supported on the ground. Materials that are processed may contain chemicals or by-products that could corrode the machine or damage it, resulting in safety concerns.

# SAFETY GUIDELINES

****SAVE THESE INSTRUCTIONS****

## WARNING!

Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

## WARNING!

The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product but must be supplied by the operator.

## WARNING!

Only operate the engine in a well ventilated area. Carbon Monoxide (CO) produced by the engine during use can kill. Do not use indoors, near windows, or in other sheltered areas.

NOTE: All Federal and State laws and any regulation having jurisdiction covering the safety requirements for use of the machine take precedence over the statements in this manual. Users of this machine must adhere to such regulations.

## WORK AREA

- **Keep work area clean, free of clutter and well lit.** Cluttered and dark work areas can cause accidents.
- **Do not use your sawmill where there is a risk of causing a fire or an explosion;** e.g. in the presence of flammable liquids, gasses, or dust. Power tools create sparks which may ignite the dust or fumes.
- **Keep children and bystanders away** while operating a power tool. Distractions can cause you to lose control, therefore, visitors should remain a safe distance from the work area.
- **Be aware of all power lines,** electrical circuits, water pipes and other mechanical hazards in your work area, particularly those hazards below the work surface hidden from the operator's view that may be unintentionally contacted and cause personal harm or property damage.
- **Be alert of your surroundings.** Using power tools in confined work areas may put you dangerously close to cutting tools and rotating parts.

## INTERNAL COMBUSTION ENGINE SAFETY

### WARNING!

Internal combustion engines present special hazards during operation and fuelling. Read and follow the warning instructions in the engine Owner's Manual and the safety guidelines below. Failure to follow the warnings and safety standards could result in severe injury or death.

- **DO NOT** run the machine indoors or in an enclosed area such as a deep trench unless adequate ventilation, through such items as exhaust fans or hoses, is provided. Exhaust gas from the engine contains poisonous carbon monoxide gas (CO); exposure to carbon monoxide can cause loss of consciousness and may lead to death.
- **DO NOT** smoke while operating the machine.
- **DO NOT** smoke when refuelling the engine.
- **DO NOT** refuel a hot or running engine.
- **DO NOT** refuel the engine near an open flame.
- **DO NOT** spill fuel when refuelling the engine.
- **DO NOT** run the engine near an open flame.
- **ALWAYS** refill the fuel tank in a well-ventilated area.
- **ALWAYS** replace the fuel tank cap after refuelling.
- **ALWAYS** check the fuel lines and the fuel tank for leaks and cracks before starting the engine. Do not run the machine if fuel leaks are present or the fuel lines are loose.
- **ALWAYS** avoid contact with hot fuel, oil, and exhaust fumes.

# PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool.** Do not use a power tool when you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- **Dress properly.** Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Air vents often cover moving parts and should be avoided.
- **Use safety apparel and equipment.** Use safety goggles or safety glasses with side shields which comply with current national standards, or when needed, a face shield. Use a dust mask in dusty work conditions. This applies to all persons in the work area. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate.
- **Do not overreach.** Keep proper footing and balance at all times.
- **Remove adjusting keys or wrenches** before connecting to the power supply or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may result in personal injury.
- **Never make blade guide adjustments, remove or install blades, or conduct any other maintenance or make any other adjustments while the engine is running.** Always shut the engine off, remove the ignition key, and turn the engine off before carrying out any of the aforementioned procedures. Consult your engine manual for safe shutdown procedures to prevent accidental ignition.

# TOOL USE AND CARE

- **Always** be sure the operator is familiar with proper safety precautions and operation techniques before using machine.
- **Never touch** the engine or muffler while the engine is on or immediately after it has been turned off. These areas get extremely hot and can cause burns.
- **Always** close the fuel valve on the engine when the machine is not in use.
- **Do not force the tool.** Tools do a better and safer job when used in the manner for which they are designed.
- **Never use the sawmill** with a malfunctioning switch or throttle. Any power tool that cannot be controlled with the switch is dangerous and must be repaired before using.
- Turn off the engine and place the switch in the locked or off position before servicing, adjusting, installing accessories or attachments, or storing. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- Secure logs with the log screw clamping device instead of with your hand or another individual's help. This safety precaution allows for proper tool operation using both hands.
- **Storing sawmill.** When the sawmill is not in use, store it in a dry, secure place or keep well covered and out of the reach of children. Inspect the sawmill for good working condition prior to storage and before re-use.
- **Maintain your sawmill.** It is recommended that the general condition of the sawmill be examined before it is used. Keep your sawmill in good repair by adopting a program of conscientious repair and maintenance in accordance with the recommended procedures found in this manual. If any abnormal vibrations or noise occurs, turn the sawmill off immediately and have the problem corrected before further use.
- **Keep saw blades sharp and clean.** Properly maintained bandsaw blades are less likely to bind and are easier to control.
- **Cleaning and Lubrication.** Use only soap and a damp cloth to clean your sawmill. Many household cleaners are harmful to plastic and rubber components on the sawmill.
- **Use only accessories that are recommended** by the manufacturer for your model. Accessories that may be suitable for another sawmill may create a risk of injury when used on the sawmill.
- **Always** operate machine with all safety devices and guards in place and in working order. DO NOT modify or make changes to safety devices. DO NOT operate machine if any safety devices or guards are missing or inoperative.
- **Never leave sawmill running unattended.**
- **Coiled blades can spring apart with considerable force and unpredictably in any direction.** Always deal with coiled blades, including those packaged in boxes, with the utmost care.
- **Never use the equipment to cut anything other than lumber** or for any purpose other than cutting lumber as described in this manual.

# EQUIPMENT OPERATION

1. Wear heavy-duty work gloves, ANSI-approved goggles behind a full face shield, steel-toed work boots, and a dust mask.
2. Operate only with assistance.
3. Cut-off branches from the lumber to be processed.
4. Place the lumber to be cut on the track supports.
5. Clamp the lumber firmly in place using the included log clamps and supports.
6. Fill the lubrication tank with clean water. Add a ¼ cup of liquid dish soap per full tank; add less if topping up a partially full tank. The soap helps keep the blade clean(er) when excess tree oils and sap are encountered.
7. Start and operate the engine according to the provided engine manual.
8. Depress the throttle to bring the blade up to speed—the throttle should be fully depressed while the saw is under load.
9. Roll the head assembly slowly along the track and against the lumber to make the cut.
10. Trim off the rounded sides of the log.
11. When the log is squared-off, boards or posts can be cut to standard or custom specifications.
12. To prevent accidents, turn off the engine and disconnect its spark plug wire after use. Wait for the engine to cool, clean external parts with a clean cloth, then store the equipment out of children's reach.

## WARNING!

To avoid death or serious injury, do not cut lumber containing embedded foreign objects such as nails, metal fragments, etc.

## WARNING!

The operator and any assistants must stay clear of the front and back of the blade whenever the engine is on.

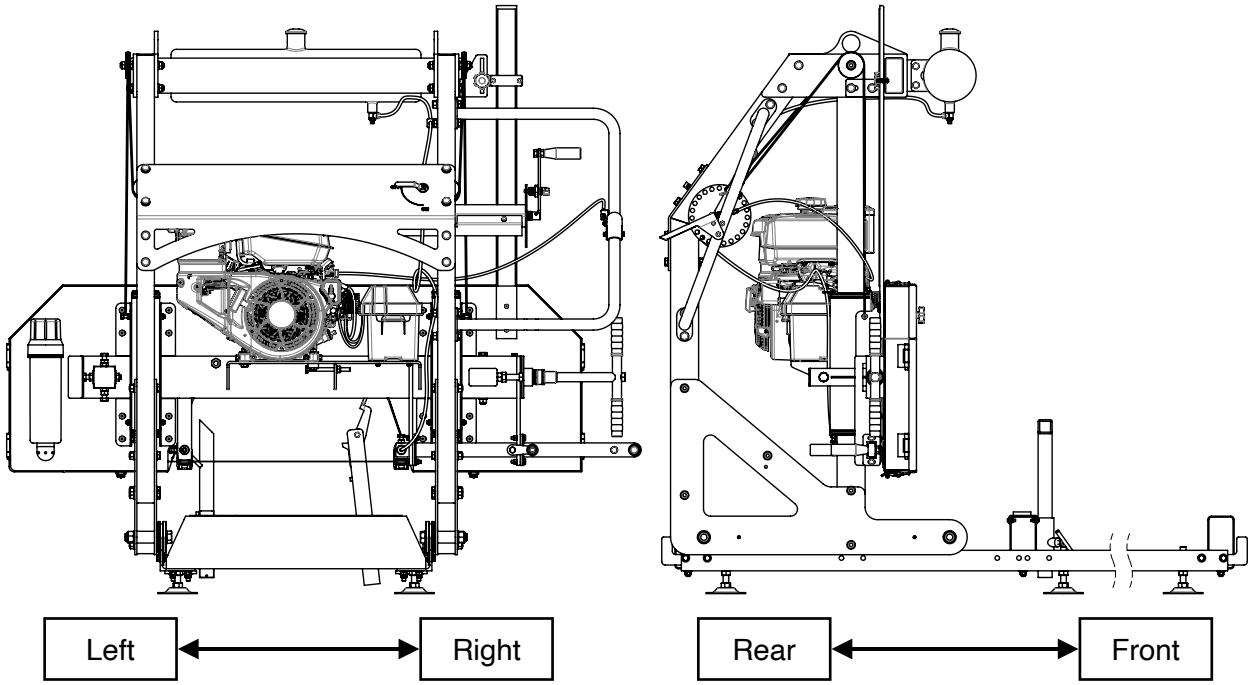
# MAINTENANCE

Proper and routine maintenance is critical to operator safety, achieving good milling results, and to prolong the life of your investment.

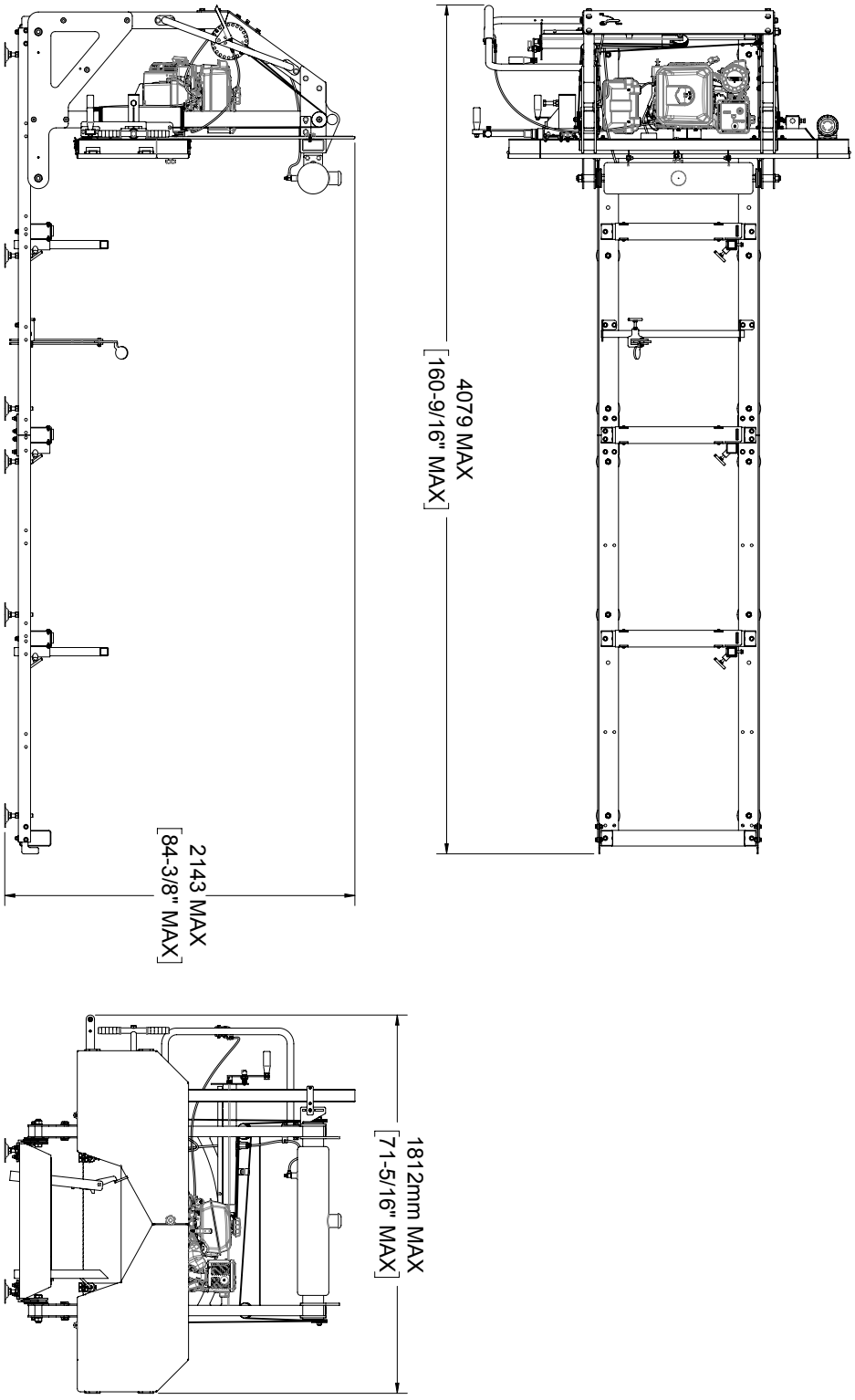
- **Band Wheel Bearings** — Inspect before use to ensure they are not worn. Bearings are sealed and do not need to be greased.
- **Blade Guide Bearings** — Inspect before use for excessive grooves or scoring in the bearing case. Replace if necessary.
- **Blade Tension** — Grease threads of tensioning T-handle when dry or as required. Use multi-purpose, extreme-pressure grease.
- **Log Clamps** — Spray the cam mechanism with dry silicone spray frequently.
- **Belts** — Periodically check the condition and wear of the drive and idler belt. Ensure that the blade does not ride on the band wheels.
- **Drive Belt** — Periodically check the tension of the drive belt.
- **Carriage Posts (Front)** — Spray posts before use with a silicone spray lubricant such as 3-in-1 or Jig-A-Loo.
- **Band Wheel Guards** — Routinely remove any build-up of sawdust that may collect inside the band wheel guards.
- **Lubrication Tank** — Only fill with a water and dish soap mixture, or in winter months use windshield washer fluid. Do not leave lubricant in tank if temperature falls below 0˚ C.
- **Blade Lubricant** — Never use diesel fuel or kerosene as blade lubricant. These substances lead to premature wear of your belts and poor sawing performance. For winter operation, replace the water lubricant with windshield washer fluid.
- **Engine** — Check the engine oil level before each use and maintain the engine per the instructions set out by the engine manufacturer in the engine manual. The engine is equipped with an oil alert system and will not start without adding oil before starting.
- **Lifting Cables** — Before, during, and after operation, regularly inspect the cables for any wear or kinks. Ensure that the cables are in perfect condition. Oil the coiled part of the cable often to prevent premature wear. Replace with new cables as necessary.

# TECHNICAL SPECIFICATIONS

| COMPONENT | HM130-ES SPECIFICATION |
|---|---|
| Gasoline Engine | 14 hp Kohler Command Pro w/ Electric Start |
| Maximum Log Diameter | 30" (762 mm) |
| Maximum Board Width | 22" (558 mm) |
| Maximum Board Thickness | 7" (178 mm) |
| Blade Size | 1-¼" x 144" (32 mm x 3657 mm) |
| Track Length | 153-½" (3900 mm) |
| Track Width | 30-½" (775 mm) |
| Track Height Adjustability (top of bunk) | 7-⅞ to 10-⅝" (200 to 270 mm) |
| Product Weight | 850 lb (386 kg) |
| Product Shipping Weight | 900 lb (408 kg) |



# OVERALL DIMENSIONS



# ASSEMBLY

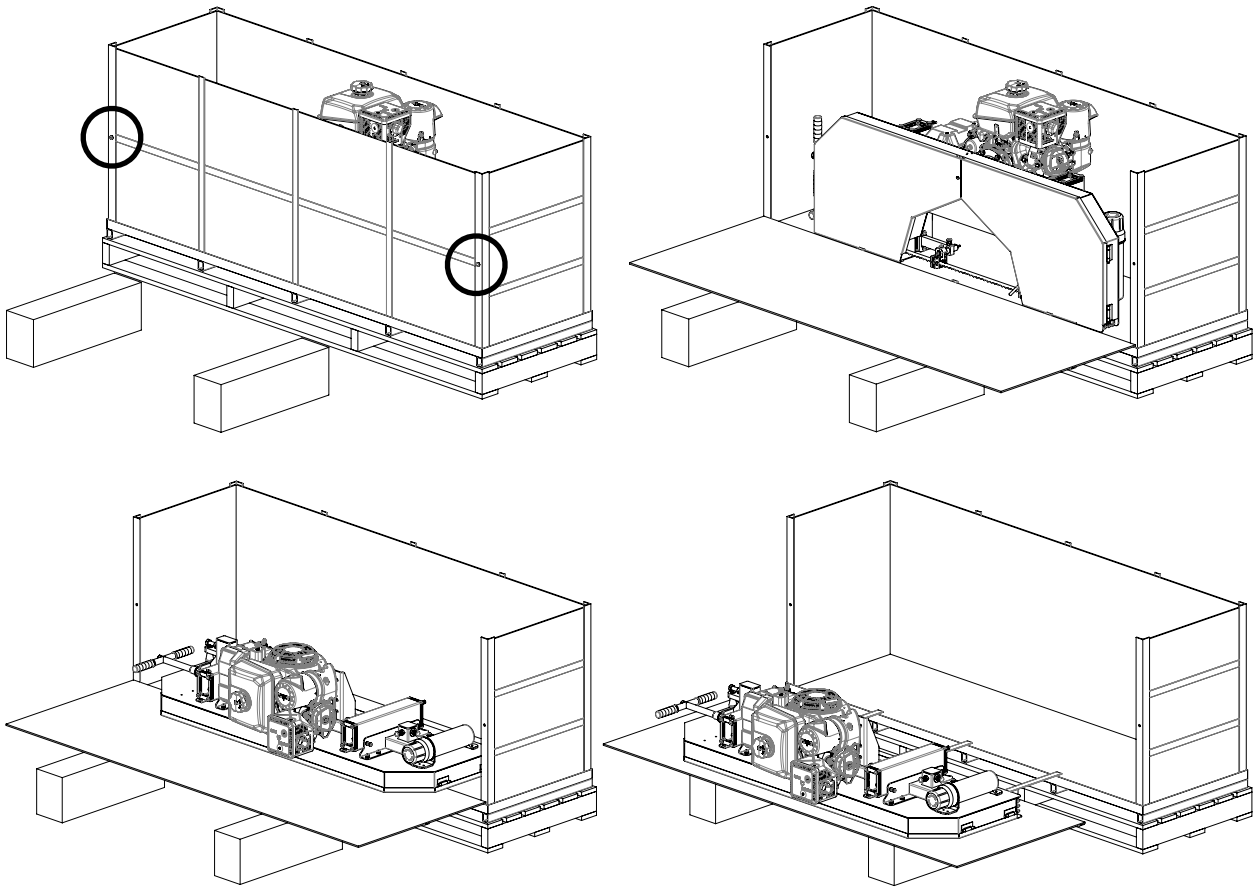
## 1. TOOLS REQUIRED

| TOOL | SPECIFICATION |
|---|---|
| Wrench/Socket | 7 mm (2X) |
| Wrench/Socket | 10 mm (2X) |
| Wrench/Socket | 13 mm (2X) |
| Wrench/Socket | 14 mm (2X) |
| Wrench/Socket | 15 mm (2X) |
| Wrench/Socket | 16 mm (2X) |
| Wrench/Socket | 17 mm (2X) |
| Wrench/Socket | 18 mm (2X) |
| Wrench/Socket | 19 mm (2X) |
| Wrench | 24 mm or Adjustable Wrench (2X) |
| Wrench | 30 mm or Adjustable Wrench (2X) |
| Hex Key | 3 mm |
| Hex Key | 4 mm |
| Phillips Head Screwdriver | No. 3 |
| Torque Wrench | Capable of at least 25 ft•lb (34 N•m) |
| Tape Measure | Standard Inch/Metric Tape Measure |

During several of the assembly steps, more than one socket or wrench of the same size may be required to assemble the hardware. A socket or box wrench in combination with an adjustable wrench can be utilized if multiple same size tools are in limited supply.

# 2. UNPACKING

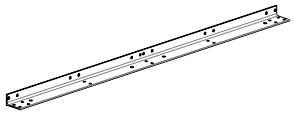
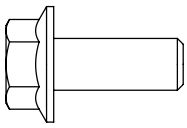
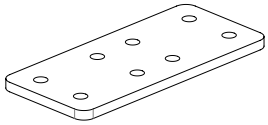
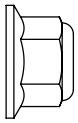
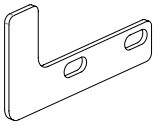
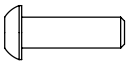
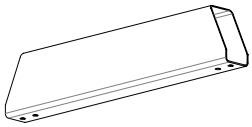
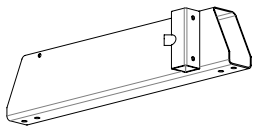
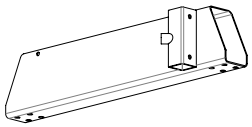
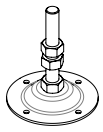
Unpack the contents of the crate except for the saw head and the two long boxes in the bottom that contain the sections of track. Unfasten the two (2) M8 bolts/nuts on the front of the crate using a socket/wrench. Place two (2) 6-8" (150-200 mm) tall support blocks in front of the crate, bend the front of the crate down, and then lay the cardboard wall over it. Carefully rotate the saw head down onto the cardboard and support blocks and slide it out of the crate as shown below.



The two long track boxes can now be removed and the crate discarded.

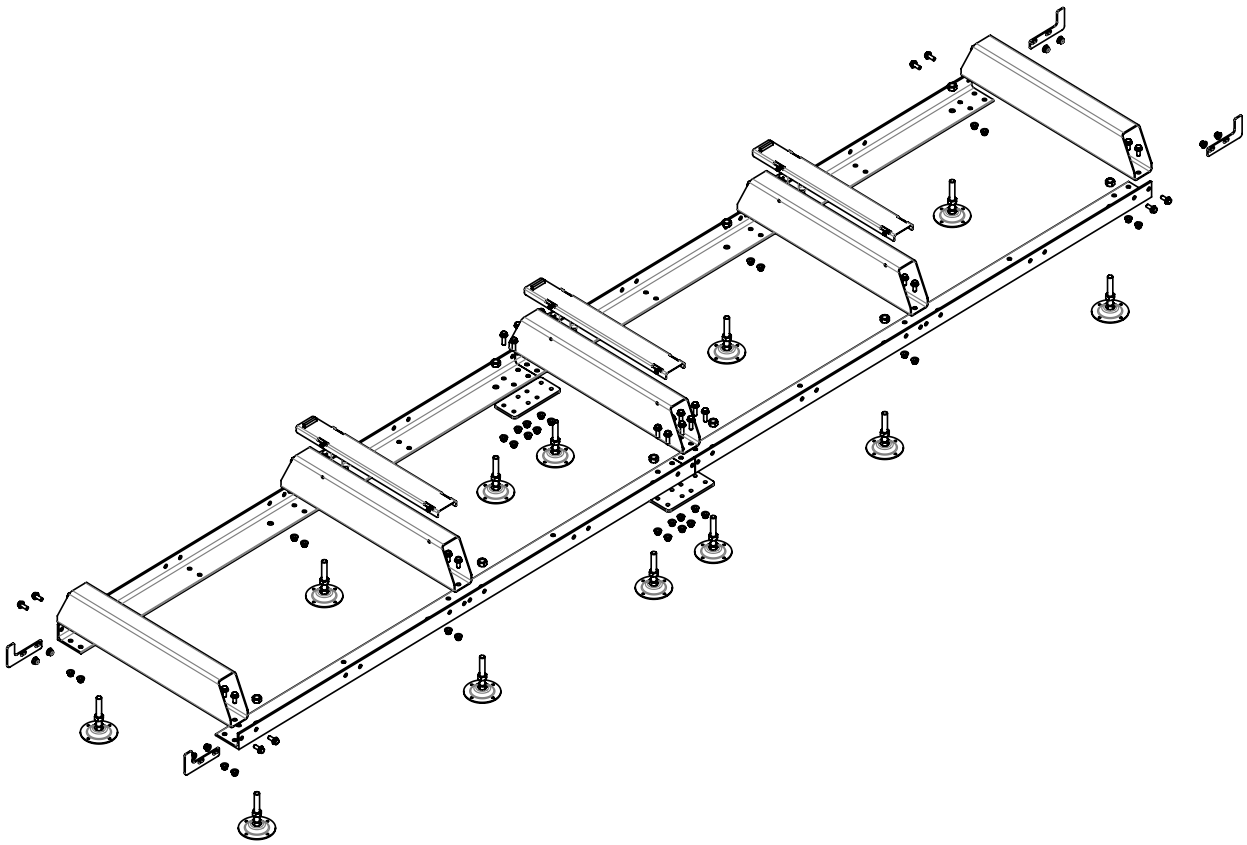
# 3. TRACK

Assemble the track system with the provided components and hardware listed in the table below. It is important to assemble and level the track on a firm foundation before tightening all of the hardware and it should ideally be a minimum of 4" (100 mm) off the ground. This will allow for easy cleanup of sawdust from under the tracks and height adjustment of the log supports.

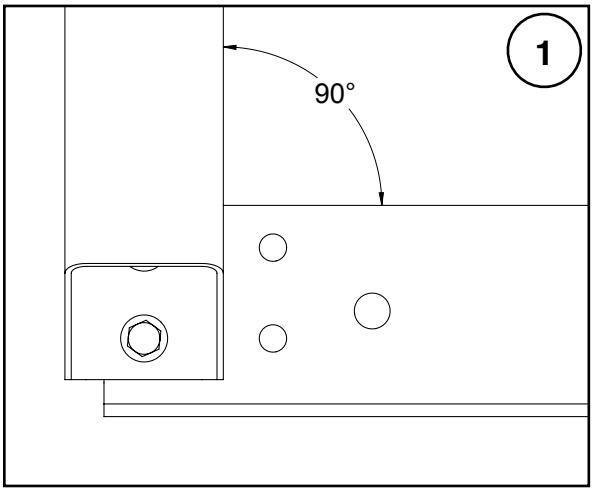
| | | | | | |
|---|---|---|---|---|---|
| 16x | M10 X 35 mm Flanged Hex Bolt |  | 4x | Track Rail |  |
| 28x | M10 X 25 mm Flanged Hex Bolt |  | 2x | Reinforcement Plate |  |
| 40x | M10 Flanged Lock Nut |  | 4x | Carriage Stop |  |
| 12x | M6 X 20 mm Button Head Screw |  | 2x | End Bunk |  |
| 12x | M6 Lock Nut |  | 2x | Mid Bunk |  |
| 12x | M6 Flat Washer |  | 1x | Centre Bunk* |  |
| | | | 3x | Bunk Cap |  |
| | | | 12x | Track Foot |  |

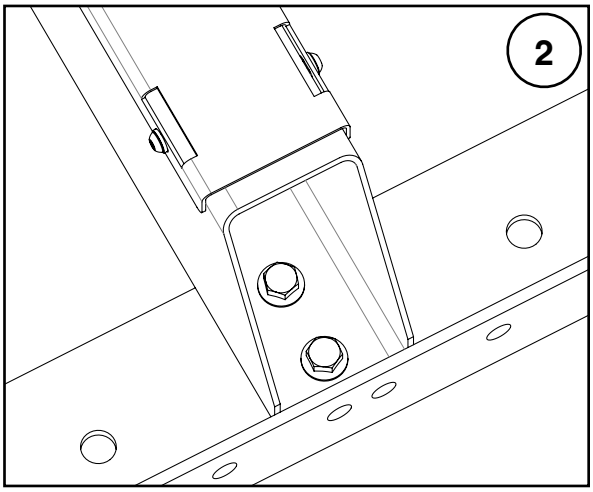
* Centre bunk incorporates four (4) mounting holes at each end

The track comes completely disassembled from the factory. Lay out all the components on a flat piece of level ground prior to assembly. See the ***TRACK*** exploded view for a more detailed part breakdown.

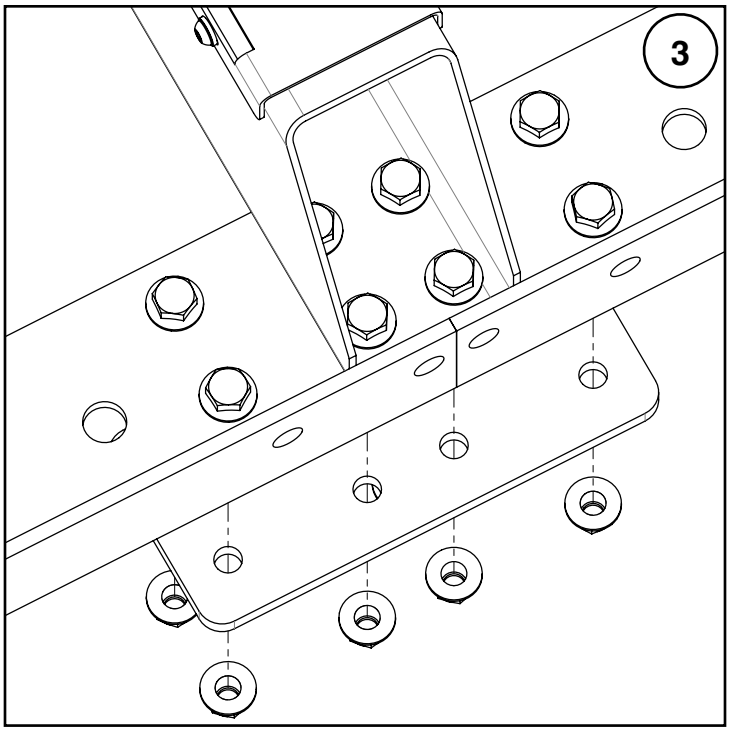


When assembling the log bunks to the rails, ensure that the two end bunks are square (90°) as shown in Figure 1. Note that the two (2) end bunks will not have stainless steel bunk caps attached. Use sixteen (16) M10 X 25 mm bolts at all end bunk and mid bunk locations (Figures 1 & 2).

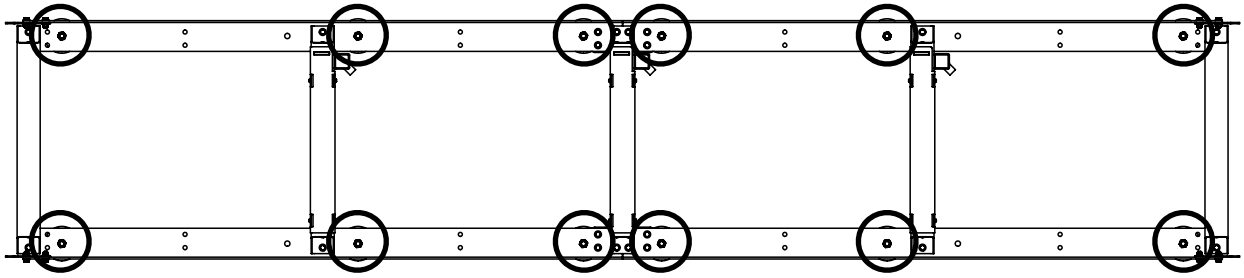


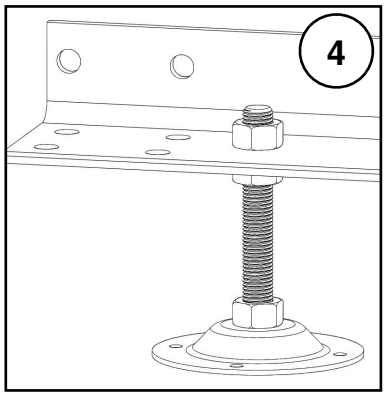



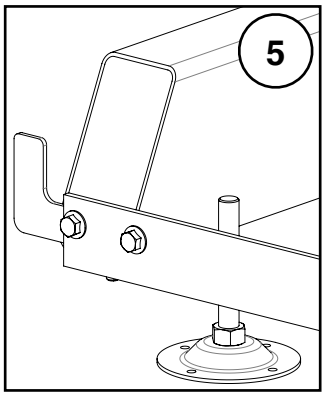

Use sixteen (16) M10 X 35 mm bolts to join the centre bunk and reinforcement plates to the rails at the rail joints (Figure 3).



Attach the twelve (12) levelling feet to the track at the locations shown below. The bolt can be turned to either raise or lower the foot to adjust the level of the track (Figure 4). If setting the track on wooden blocks, use wood screws in the four holes to secure each foot in place.

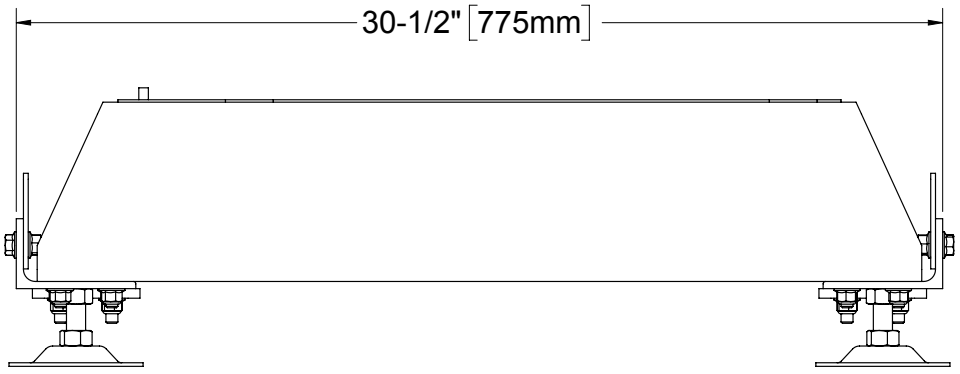




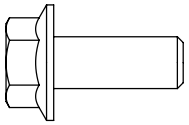
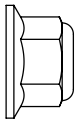

Assemble the four (4) carriage stops to the ends of the rails and tighten the bolts. Ensure carriage stops are assembled to the inside face of the rails, *not* the outside (Figure 5).

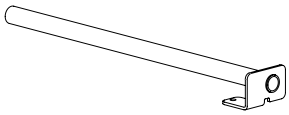
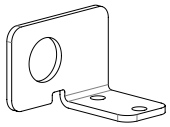
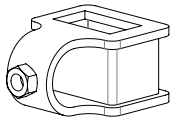
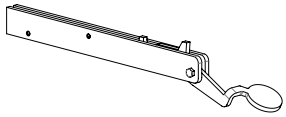
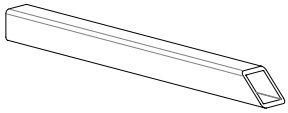
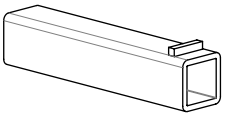
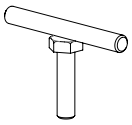
The assembled track should measure 30-½" (775 mm) wide when measuring from the outside faces of the rails.

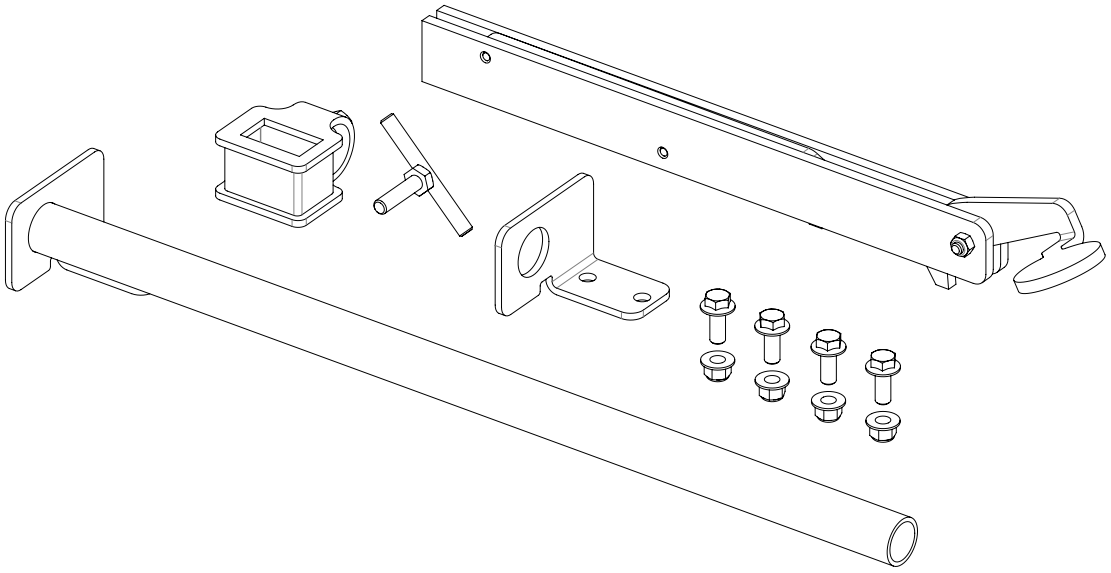


# 4. LOG CLAMP AND SUPPORTS

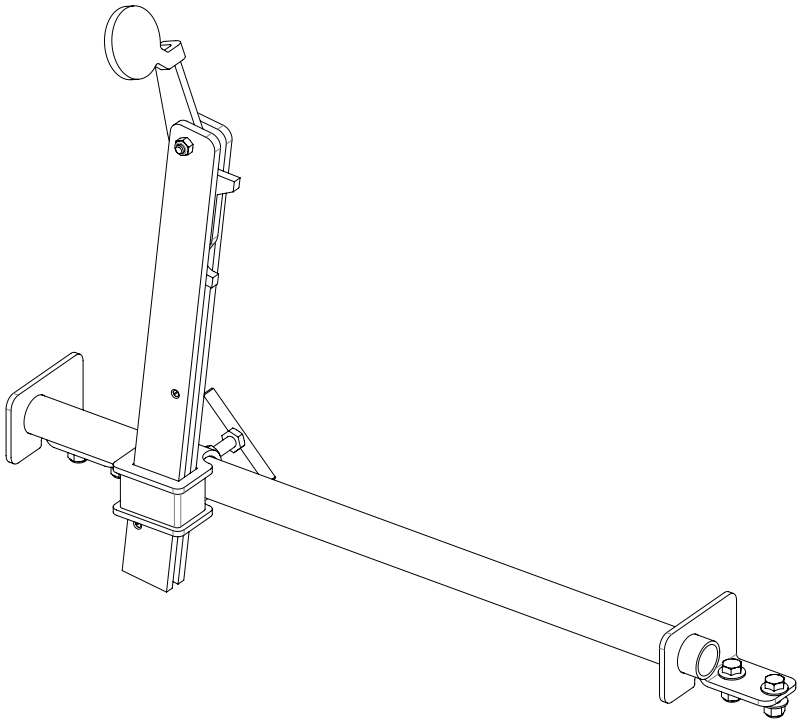
Assemble the log clamp components as shown below. Attach the completed assembly to the track using four (4) M10 X 25 mm bolts with lock nuts and tighten.

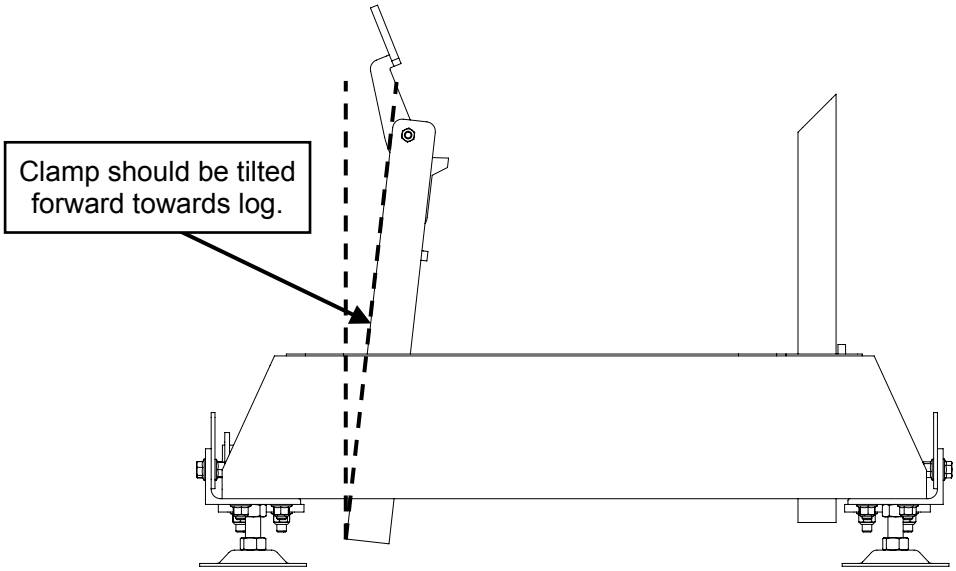
| | | |
|---|---|---|
| 4x | M10 X 25 mm Flanged Hex Bolt |  |
| 4x | M10 Flanged Lock Nut |  |

| | | |
|---|---|---|
| 1x | Log Clamp Shaft/Bracket Weldment |  |
| 1x | Log Clamp Bracket |  |
| 1x | Log Dog Receiver |  |
| 1x | Log Dog |  |
| 2x | Long Log Support |  |
| 2x | Short Log Support |  |
| 4x | T-Handle |  |

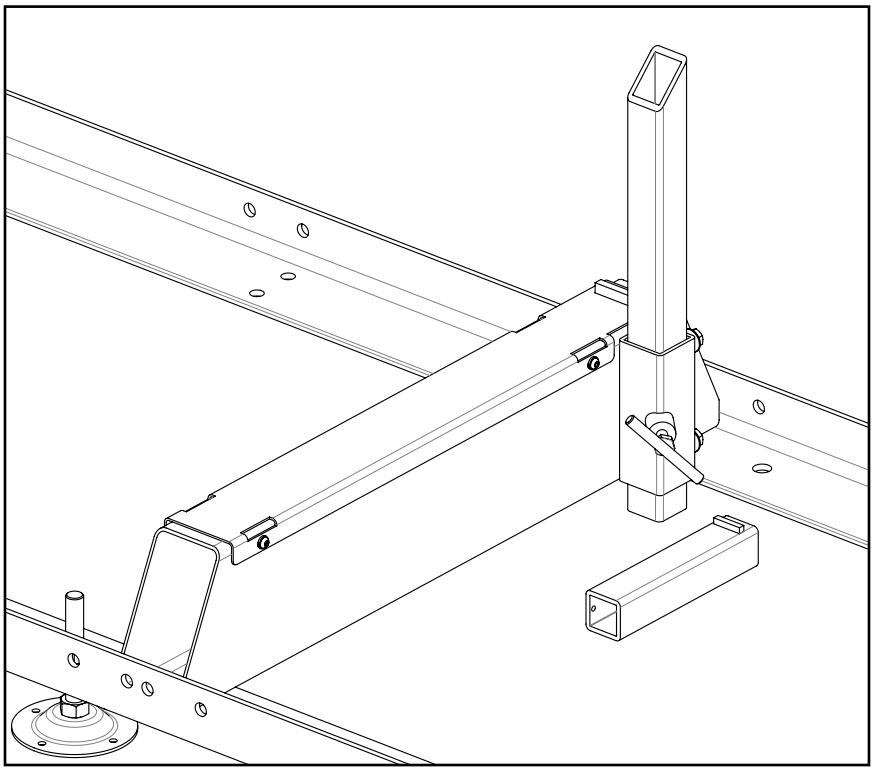


Attach log dog assembly to track as shown below with the four (4) nuts and bolts provided. Note that there are various locations along the track where this assembly can be bolted. Depending on how many track sections are being used, select a log clamp position that will secure the log firmly against the log supports.





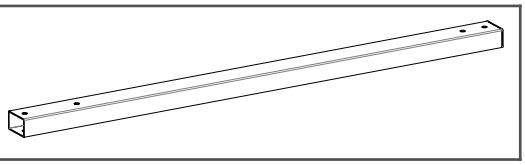

Insert log supports into track cross supports and secure with T-handles as shown in the picture below. The T-handle threads should be *coated with grease*. The sawmill includes two sets of log supports—a short set and a long set. The long set is ideal for large diameter logs while the shorter set is better suited for small logs and square cants.



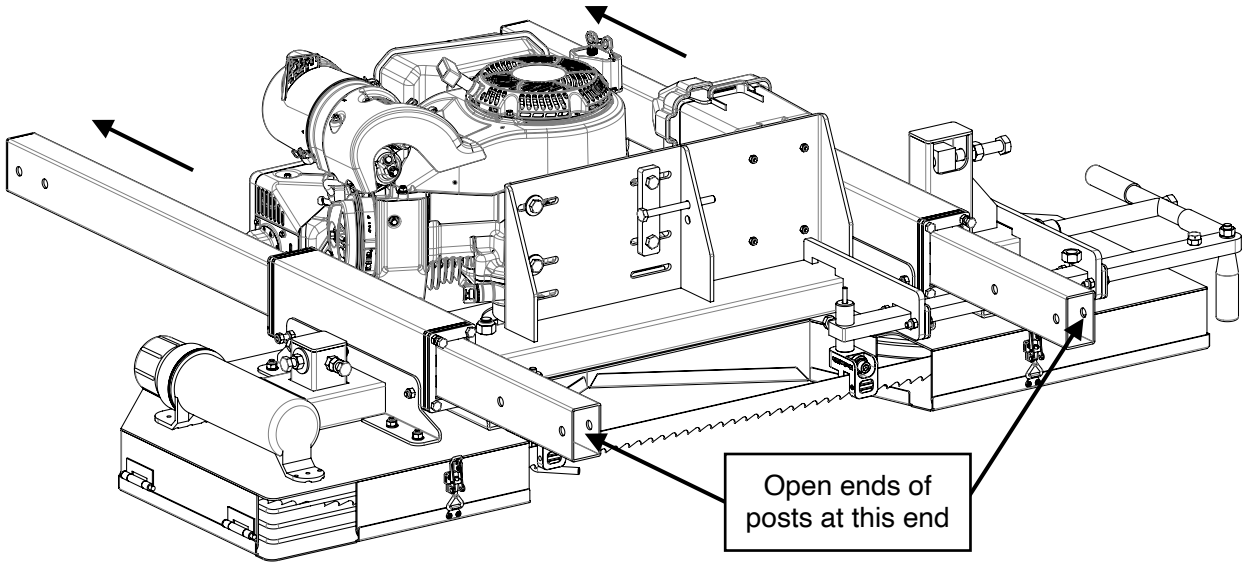
# 5. SAWMILL HEAD ASSEMBLY

The sawmill head assembly is built in multiple steps. Follow the sub-sections below using the parts table at the top of each sub-section to gather the necessary components for each step.

## FRONT POSTS

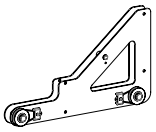
| | | |
|---|---|---|
| 2x | Front Post |  |

With the saw head resting approximately 6" (150 mm) above the ground, slide the two (2) front posts through the post sleeves with the open ends of the posts towards the bottom of the assembly and the capped ends towards the top.

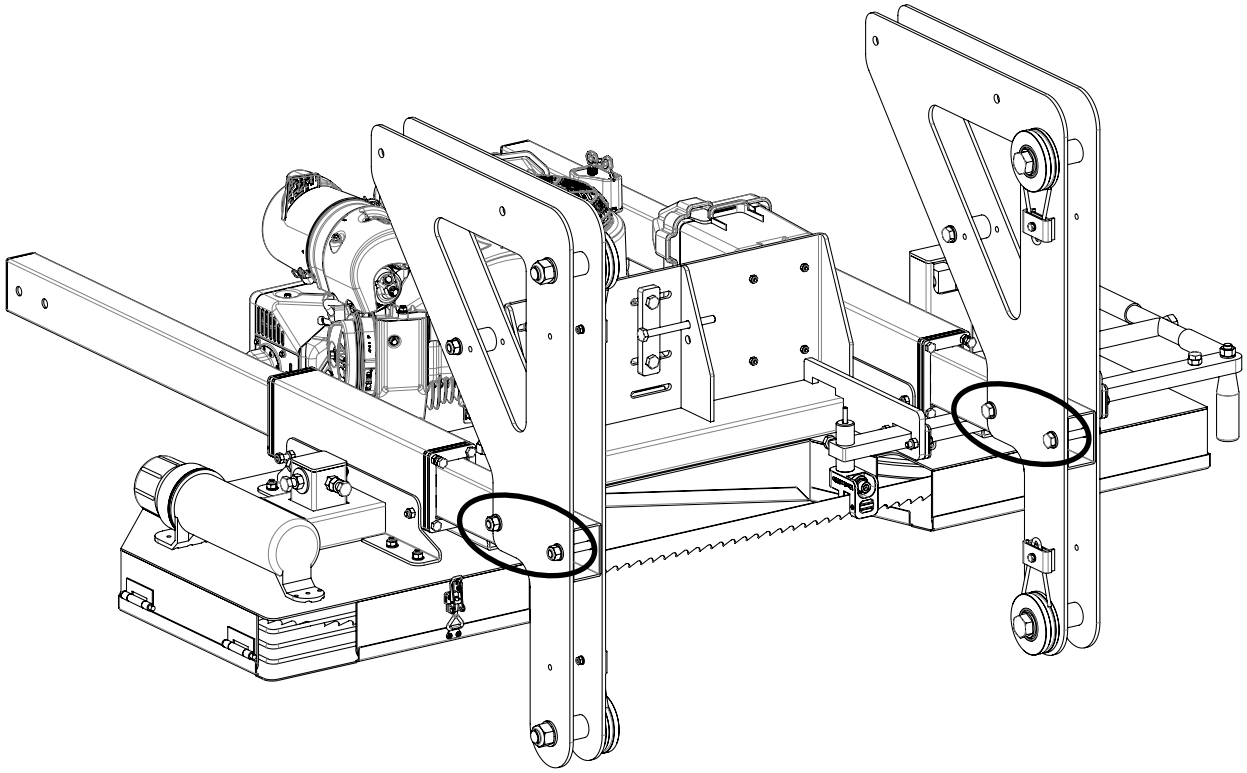


## CARRIAGE LEGS

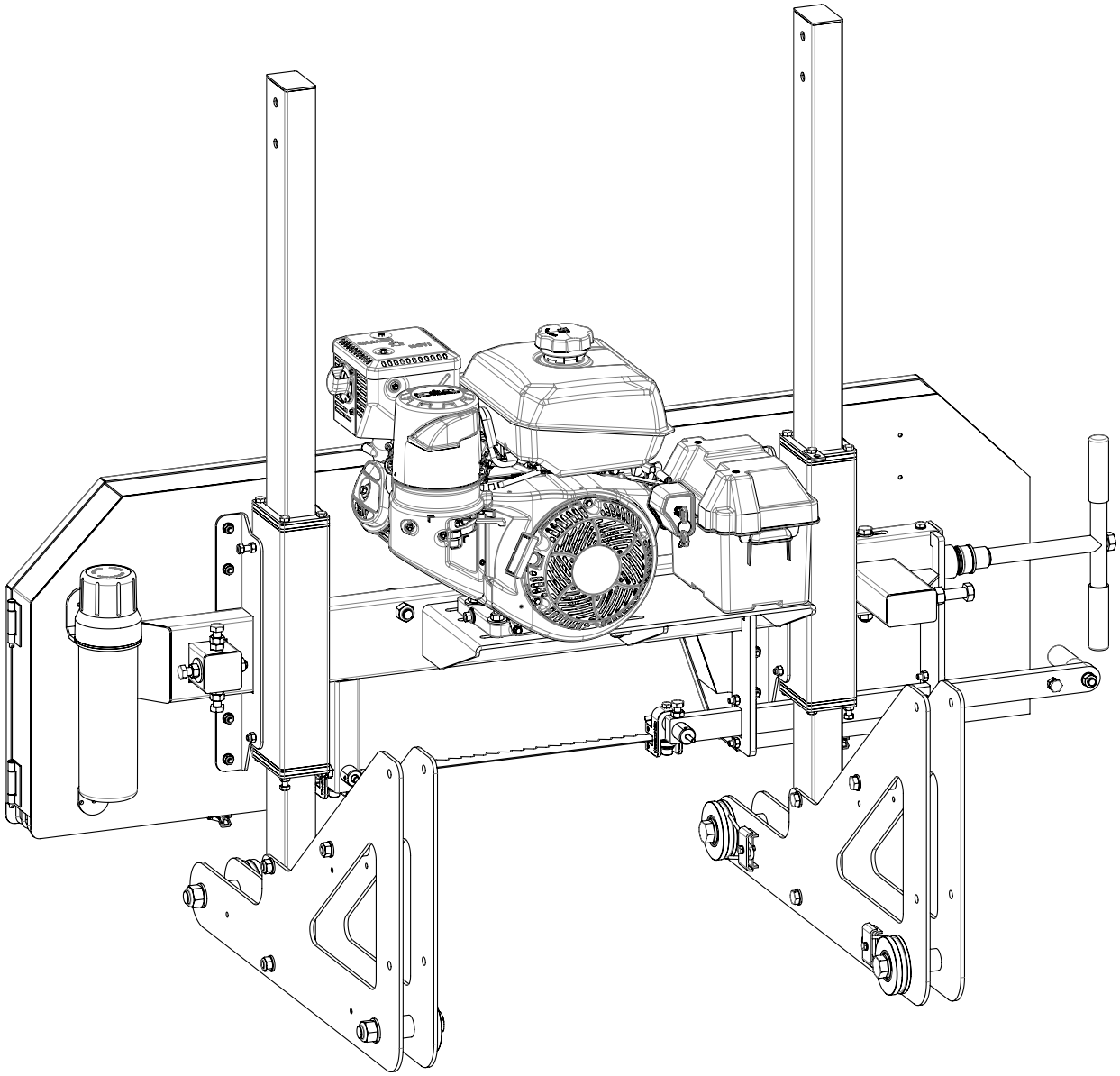
The carriage leg sub-assemblies come loosely assembled from the factory. Final tightening of these bolts will be done in a later step. See the ***CARRIAGE LEG, WHEEL, AND SWEEPER*** exploded view for a more detailed part breakdown.

| | | | | | |
|---|---|---|---|---|---|
| 4x | M12 X 80 mm Hex Bolt |  | 4x | M12 Flat Washer |  |
| 4x | M12 Lock Nut |  | 2x | Carriage Leg Sub-Assembly |  |

Using two (2) sockets/wrenches, attach the two (2) carriage leg sub-assemblies to the front posts with four (4) M12 X 80 mm bolts, flat washers, and lock nuts. Be sure the bolts point outward and the carriage wheels are positioned on the inside of the legs. Fully tighten these four (4) M12 bolts so that the plates are firmly attached to the posts. The posts should be pushed all the way up until the carriage leg plates contact the post sleeves.

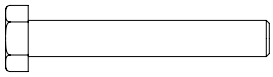
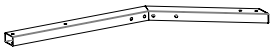
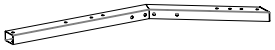


With the help of another person, stand the saw head upright.

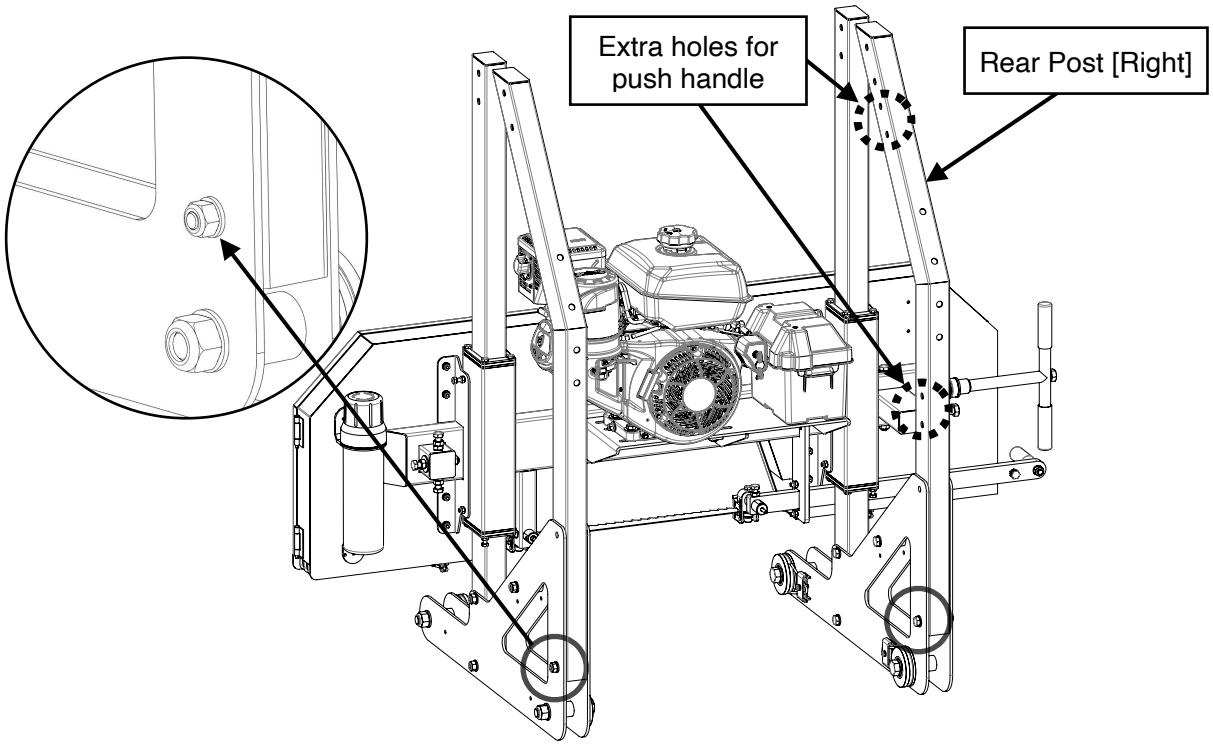


## REAR POSTS

Using two (2) sockets/wrenches, attach the rear posts between the carriage leg plates using only one (1) M12 X 80 mm bolt, flat washer, and lock nut per post. Be sure the rear post with the extra holes through the side is assembled on the right-side of the saw head. These extra holes are used to mount the push handle in a later step.

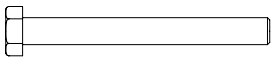
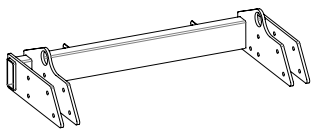
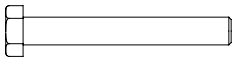
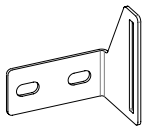
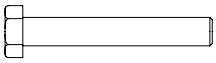
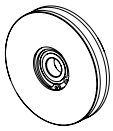
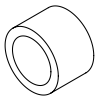
| | | | | | |
|---|---|---|---|---|---|
| 2x | M12 X 80 mm Hex Bolt |  | 1x | Rear Post [Left] |  |
| 2x | M12 Lock Nut |  | 1x | Rear Post [Right]* |  |
| 2x | M12 Flat Washer |  | | | |

*Right rear post contains four (4) extra holes for push handle assembly in later step.



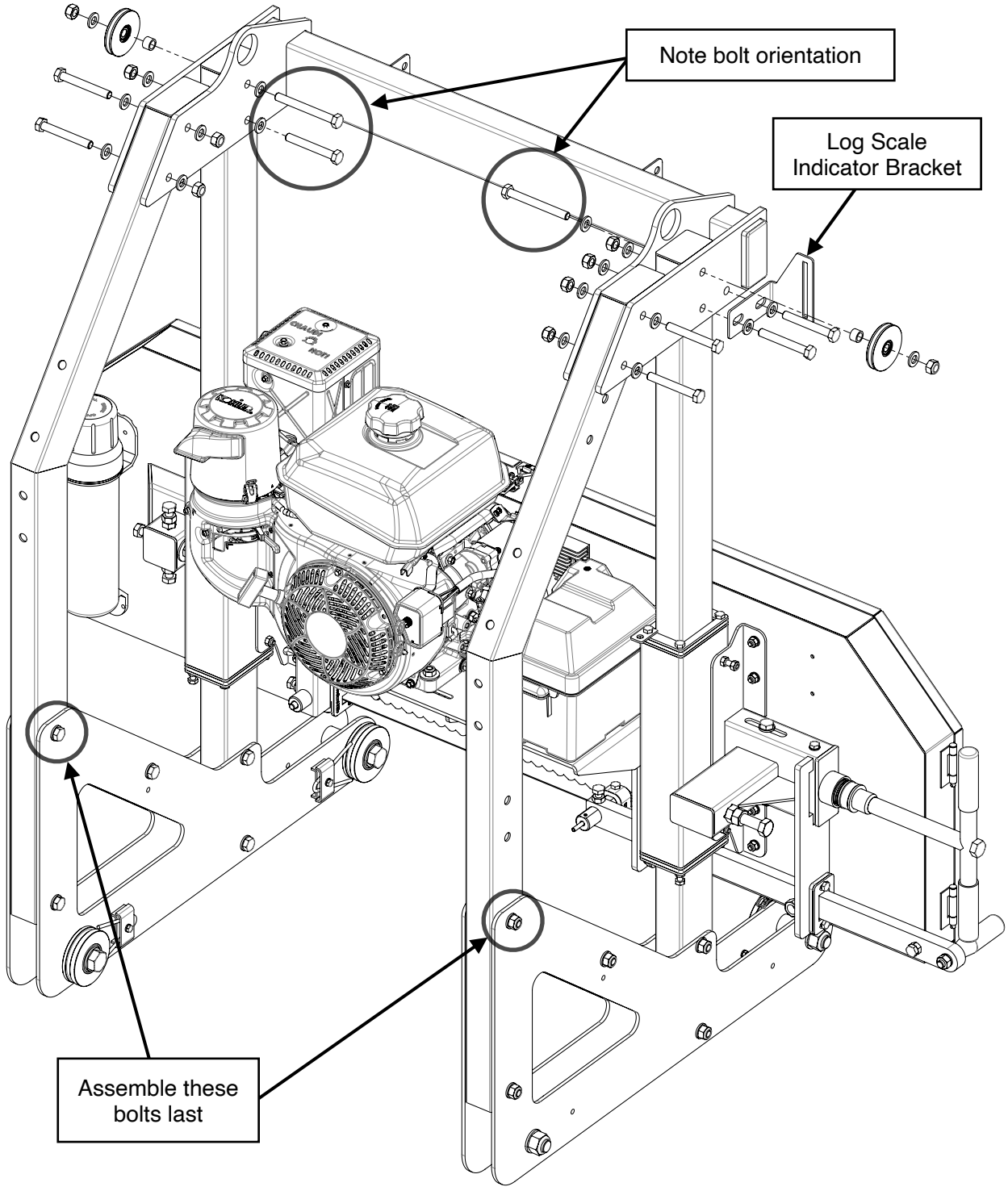
## CROSS BEAM

With the hardware listed below, assemble the cross beam to the carriage posts.

| | | | | | |
|---|---|---|---|---|---|
| 2x | M12 X 110 mm Hex Bolt |  | 1x | Cross Beam |  |
| 7x | M12 X 90 mm Hex Bolt |  | 1x | Log Scale Indicator Bracket |  |
| 2x | M12 X 80 mm Hex Bolt |  | 2x | Pulley |  |
| 11x | M12 Lock Nut |  | 2x | Spacer [12 mm Lg] |  |
| 22x | M12 Flat Washer |  | | | |

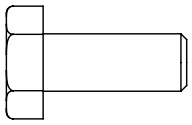
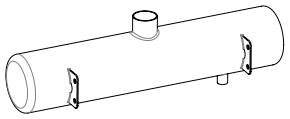
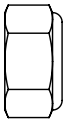
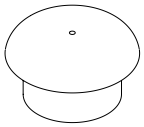
Using two (2) sockets/wrenches and the help of a second person, slide the cross beam over the carriage posts. Use seven (7) M12 X 90 mm bolts and two (2) M12 X 110 mm bolts (with pulleys and spacers) to fasten it in place. Be sure to install the log scale indicator bracket on the right-side behind the pulley. Also take note of the orientation of the two (2) M12 X 110 mm bolts with pulleys and one (1) of the M12 X 90 mm bolts—the bolts are installed pointing outward. Use an M12 flat washer under every bolt head and lock nut.

Finally, install two (2) M12 X 80 mm bolts at the top of each carriage leg. Do *not* fully tighten these bolts at this time.

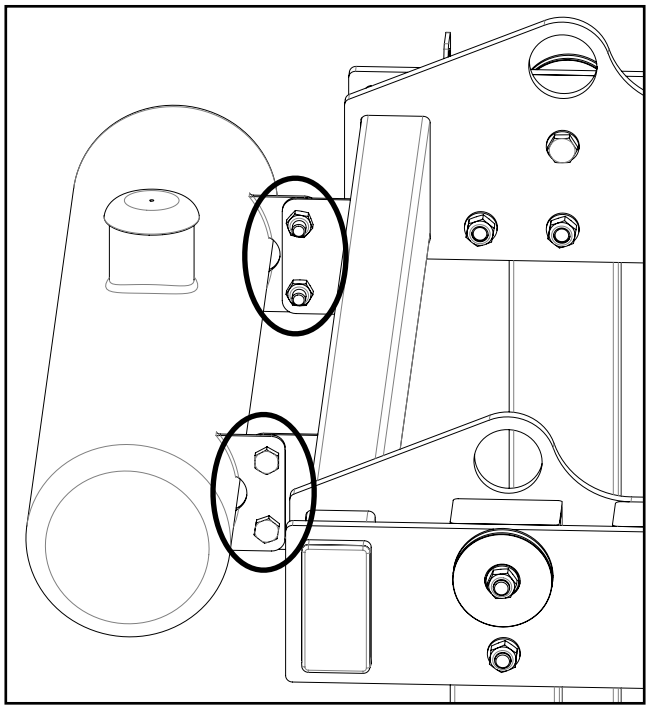

Note bolt orientation
Log Scale
Indicator Bracket
Assemble these
bolts last

## LUBRICATION TANK

With the hardware listed below, assemble the lubrication tank to the front of the cross beam.

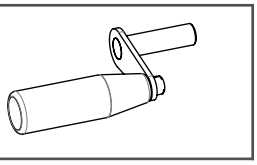
| | | | | | |
|---|---|---|---|---|---|
| 4x | M10 X 25 mm Hex Bolt |  | 1x | Lubrication Tank |  |
| 4x | M10 Lock Nut |  | 1x | Lubrication Tank Cap |  |

Using two (2) sockets/wrenches, assemble the lubrication tank to the cross beam with four (4) M10 X 25 mm bolts and lock nuts. Ensure the bolts point inward.

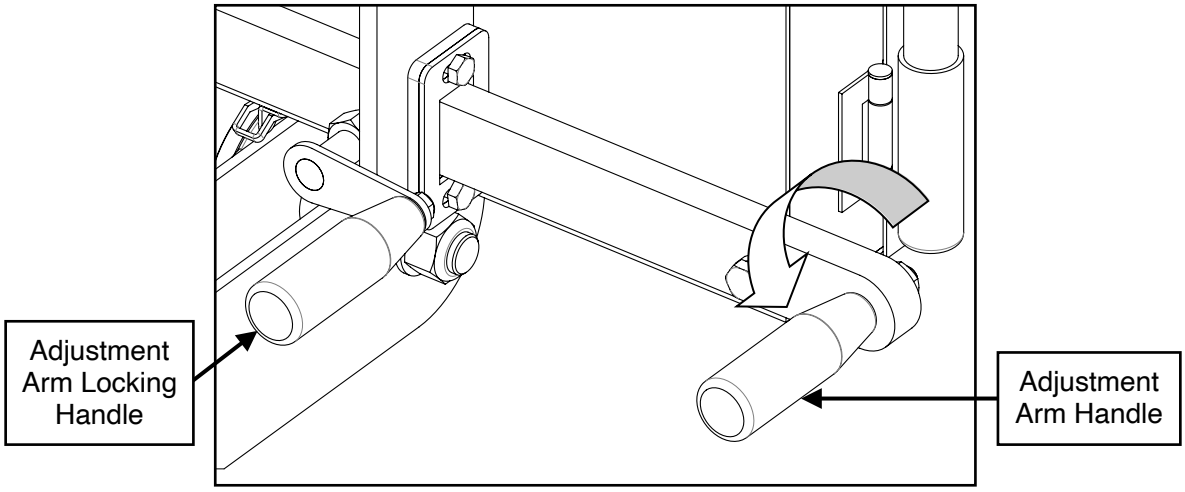


## BLADE GUIDE ADJUSTMENT ARM

Assemble the blade guide adjustment arm *locking handle* sub-assembly by threading it into the nut welded opposite the adjustment arm locking plates on the right-side of the saw head. No tools are required.

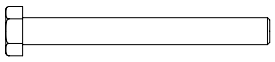
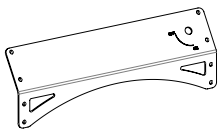
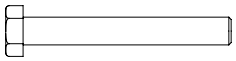
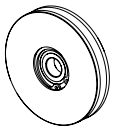
| | | |
|---|---|---|
| 1x | Blade Guide Adjustment Arm Locking Handle |  |

The blade guide adjustment arm *handle* is reversed to prevent damage during shipping. Unthread the M12 hex nut using a socket/wrench and flip the handle and all the hardware to the opposite side and re-tighten.

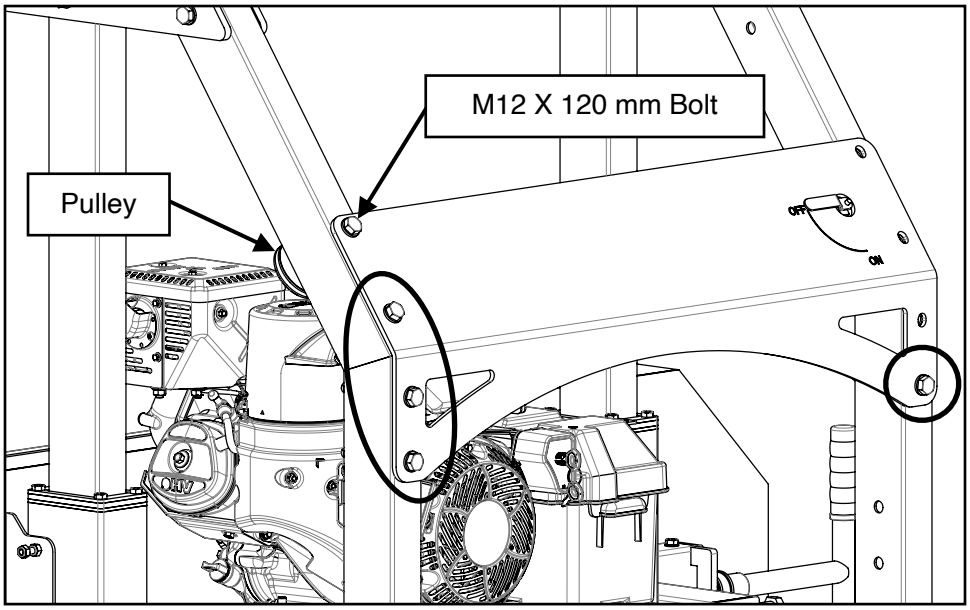


## DASHBOARD

With the hardware listed below, assemble the dashboard to the rear carriage posts.

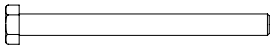
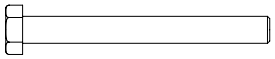
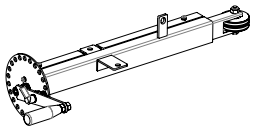
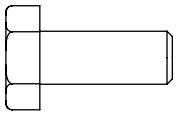
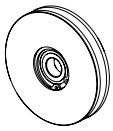
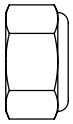
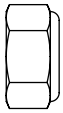
| | | | | | |
|---|---|---|---|---|---|
| 1x | M12 X 120 mm Hex Bolt |  | 1x | Dashboard |  |
| 4x | M12 X 110 mm Hex Bolt |  | 1x | Pulley |  |
| 5x | M12 Lock Nut |  | 1x | Spacer [5 mm Lg] |  |
| 10x | M12 Flat Washer |  | | | |

Using two (2) sockets/wrenches, assemble the dashboard to the rear carriage posts with four (4) M12 X 110 mm bolts and one (1) M12 X 120 mm bolt (with pulley and spacer) as illustrated in the picture below. Use an M12 flat washer under every bolt head and lock nut. Do *not* fully tighten these bolts at this time.

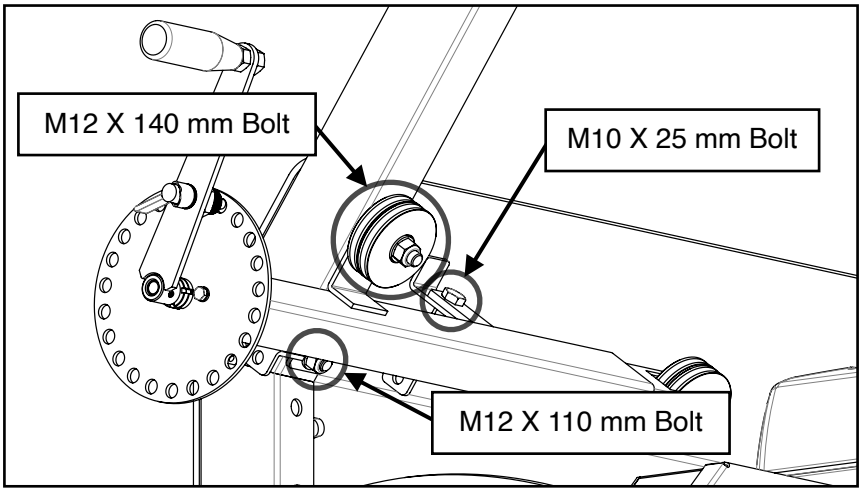


## LIFT MECHANISM

With the hardware listed below, assemble the lift mechanism to the carriage.

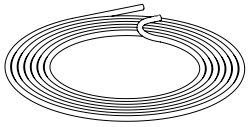
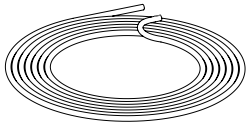
| | | | | | |
|---|---|---|---|---|---|
| 1x | M12 X 140 mm Hex Bolt |  | 4x | M12 Flat Washer |  |
| 1x | M12 X 120 mm Hex Bolt |  | 1x | Lift Mechanism Sub-Assembly |  |
| 1x | M10 X 25 mm Hex Bolt |  | 2x | Pulley |  |
| 2x | M12 Lock Nut |  | 2x | Spacer [5 mm Lg] |  |
| 1x | M10 Lock Nut |  | | | |

Using two (2) sockets/wrenches, attach the lift mechanism assembly to the underside of the rear carriage post with one (1) M12 X 140 mm bolt (including 2 pulleys and 2 spacers), and one (1) M12 X 110 mm bolt as illustrated below. Use an M12 flat washer under each bolt head and lock nut. Then fasten the centre tab to the inside of the dashboard using an M10 X 25 mm bolt and nut. Do *not* fully tighten these bolts at this time.



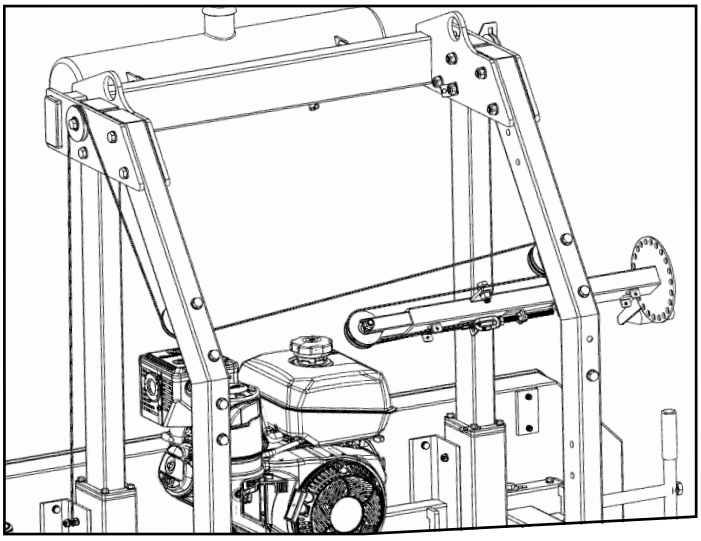
## LIFT CABLE ROUTING

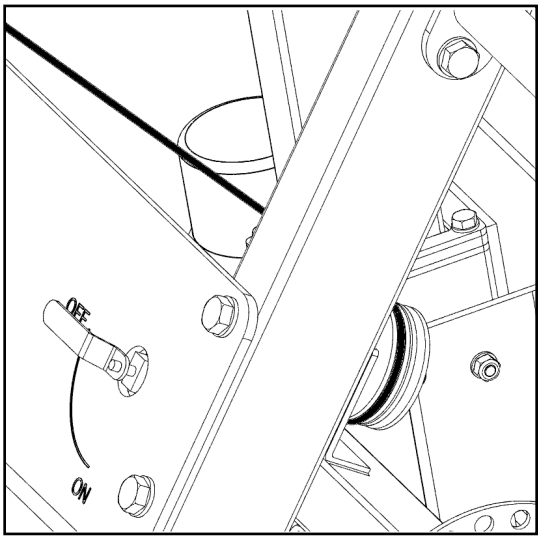
Route the lift cables listed below.

| | | | | | |
|---|---|---|---|---|---|
| 1x | Lift Cable A |  | 1x | Lift Cable B |  |

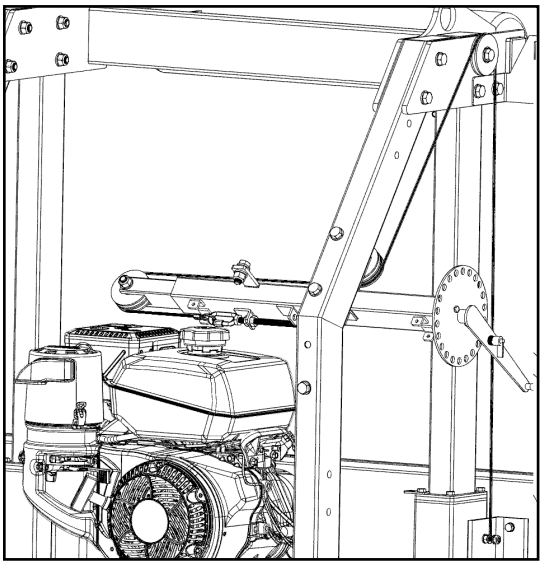
The wire rope lift cables come coiled and both are assembled at one end to the back beam post sleeves. The lengths are specific to each side so do not swap them.

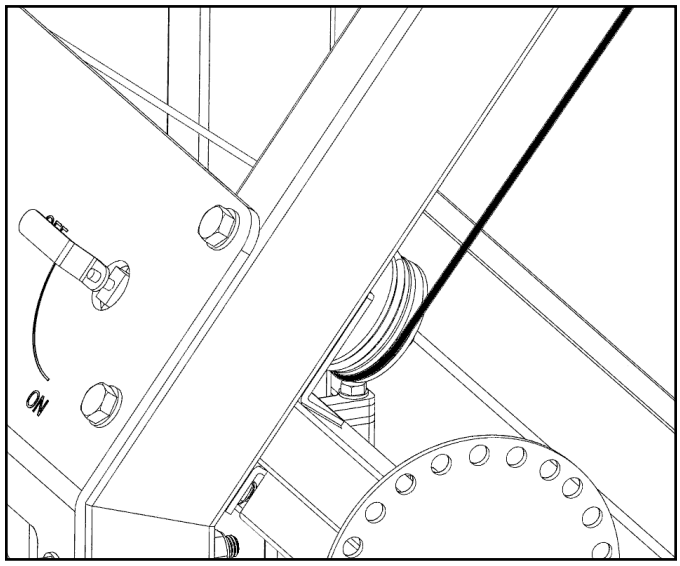
Route the lift cable B as shown below. [Dashboard removed from some views for clarity.]



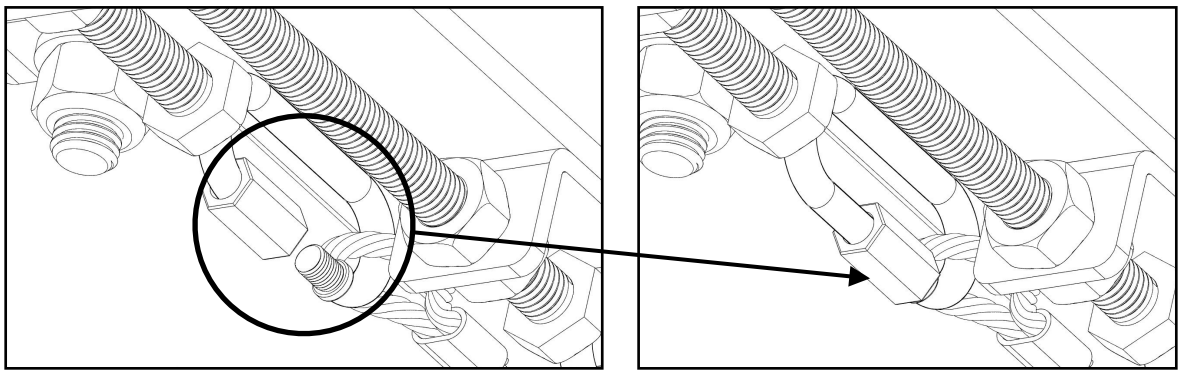


Route the lift cable A as shown below. [Dashboard removed from some views for clarity.]



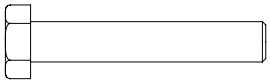
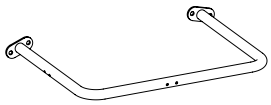
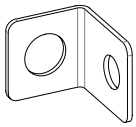



Be sure to securely tighten the oval chain link with a wrench after the cable loop ends have been attached.

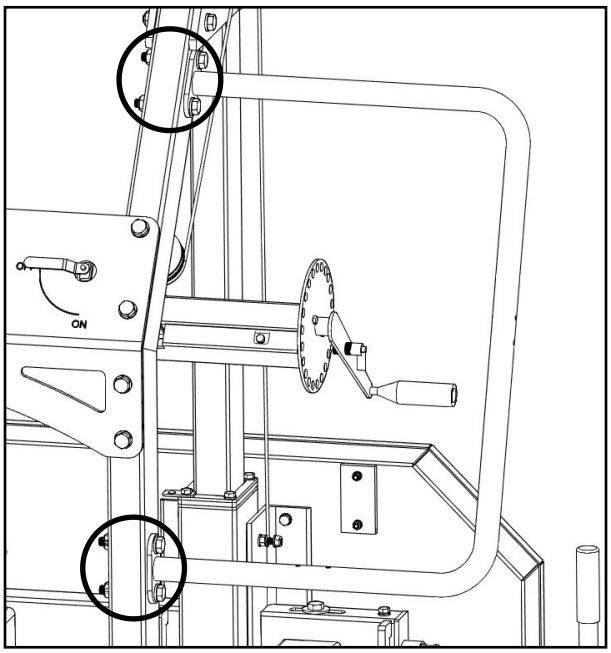


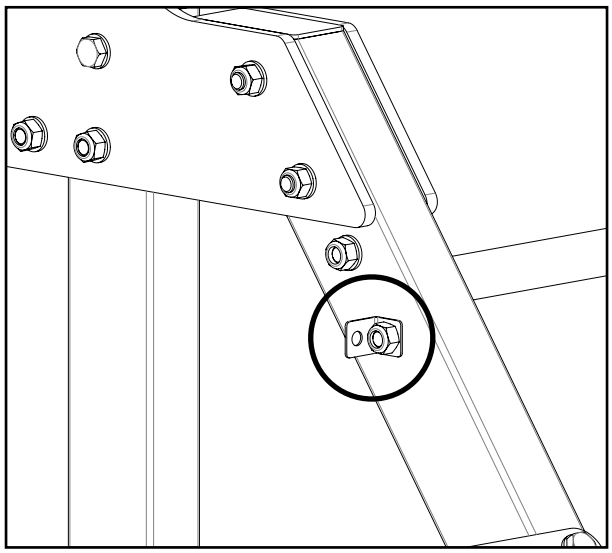
## PUSH HANDLE

With the hardware listed below, assemble the push handle to the right rear carriage leg.

| | | | | | |
|---|---|---|---|---|---|
| 4x | M12 X 70 mm Hex Bolt |  | 1x | Push Handle |  |
| 4x | M12 Lock Nut |  | 1x | Lubrication Hose Bracket |  |
| 3x | M12 Flat Washer |  | | | |

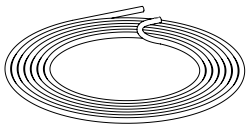
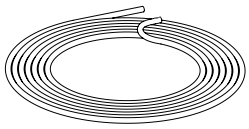
Attach the push handle to the side of the post using four (4) M12 X 70 mm bolts, three (3) M12 washers, and four (4) M12 lock nuts as shown below. Be sure to attach the nut to the water line bracket without a washer. Fully tighten these bolts.



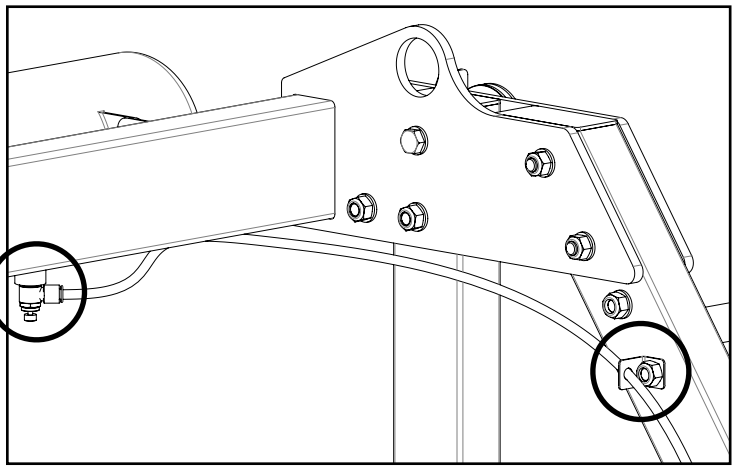



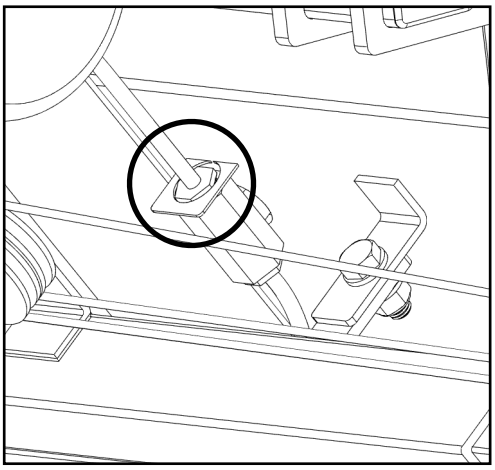
## LUBRICATION TUBING

Use the tubing listed in the table below to complete the routing for the lubrication system.

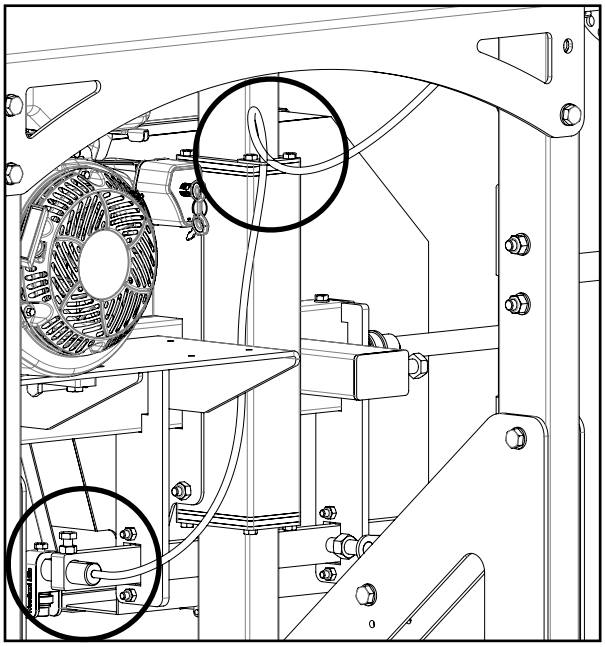
| | | | | | |
|---|---|---|---|---|---|
| 1x | Tubing: Tank-to-Valve |  | 1x | Tubing: Valve-to-Guide Block |  |

Insert the lubrication tube into the fitting on the tank by simultaneously pushing in the blue collar on the fitting as the tube is inserted. Once inserted, release the blue collar and the tube will be secure. Feed the tube through the bracket as shown below. Attach the other end to the water valve.

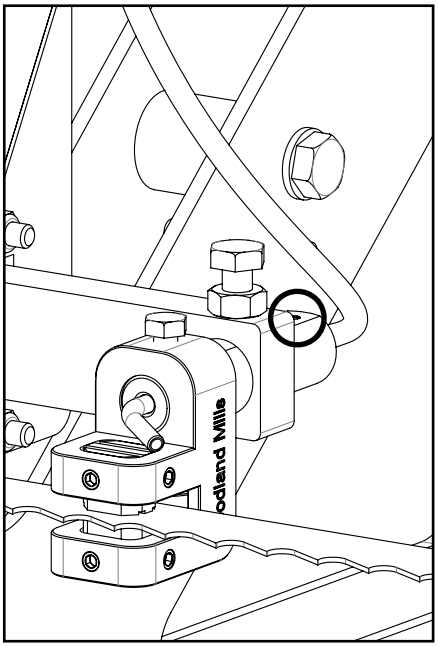




Attach the other lubrication tube to the valve on the dashboard and feed it through the water tube bracket located on the right post sleeve and fit it over the end of the copper tube on the guide block.

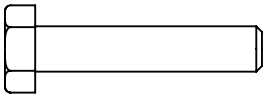
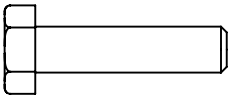
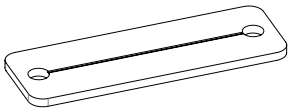
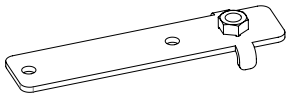
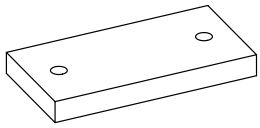


Insert the lubrication hose as shown below. Use a hex wrench to secure the copper end in position by tightening the set screw so that it lightly pinches the copper tube. Do not over-tighten or the end of the copper tube could be crushed.

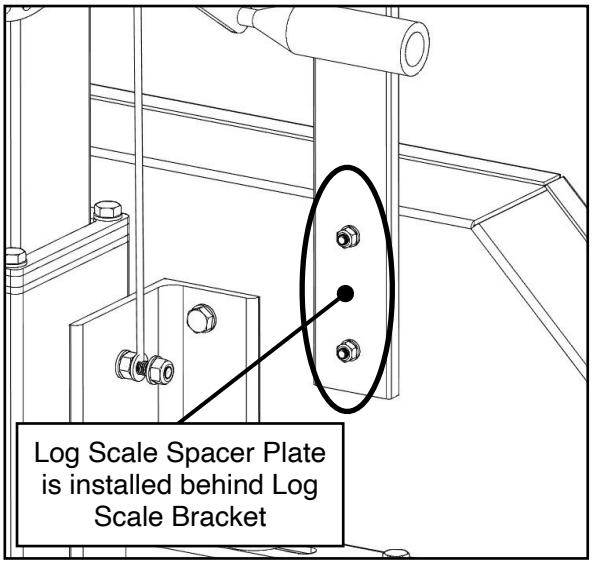


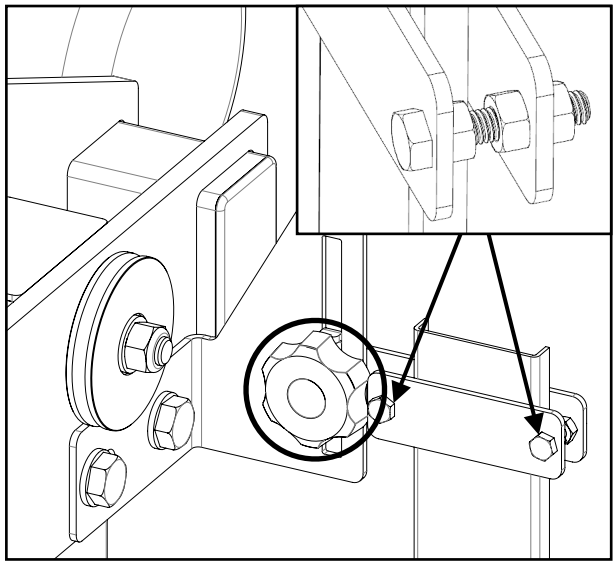
## LOG SCALE

With the hardware listed below, assemble the log scale components.

| | | | | | |
|---|---|---|---|---|---|
| 2x | M6 X 30 mm Hex Bolt |  | 1x | Log Scale Bracket |  |
| 2x | M6 X 25 mm Hex Bolt |  | 1x | Log Scale Indicator |  |
| 2x | M6 Lock Nut |  | 1x | Log Scale Rear Indicator Bracket |  |
| 6x | M6 Hex Nut |  | 1x | Log Scale Bracket Spacer Plate |  |

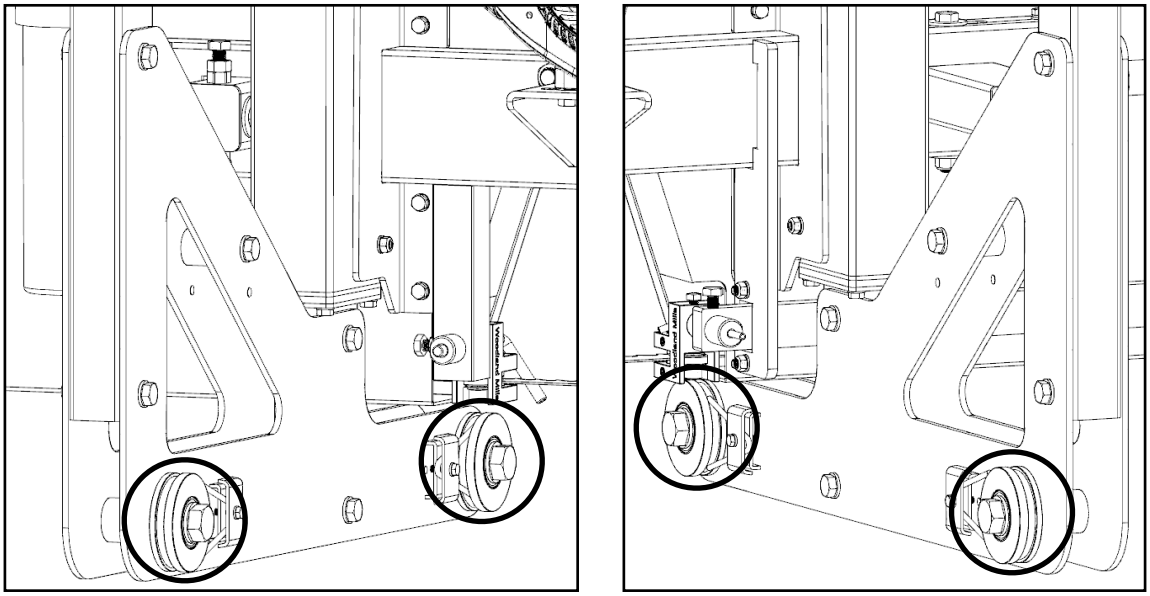
Using two (2) sockets/wrenches, bolt the log scale and spacer plate to the band wheel housing with two (2) M6 X 25 mm bolts and lock nuts as shown below. Attach the log scale rear indicator bracket to the log scale indicator bracket using the M8 threaded knob. Attach the log scale indicator to the log scale rear indicator bracket using two (2) M6 X 30 mm bolts and six (6) M6 nuts as shown below.



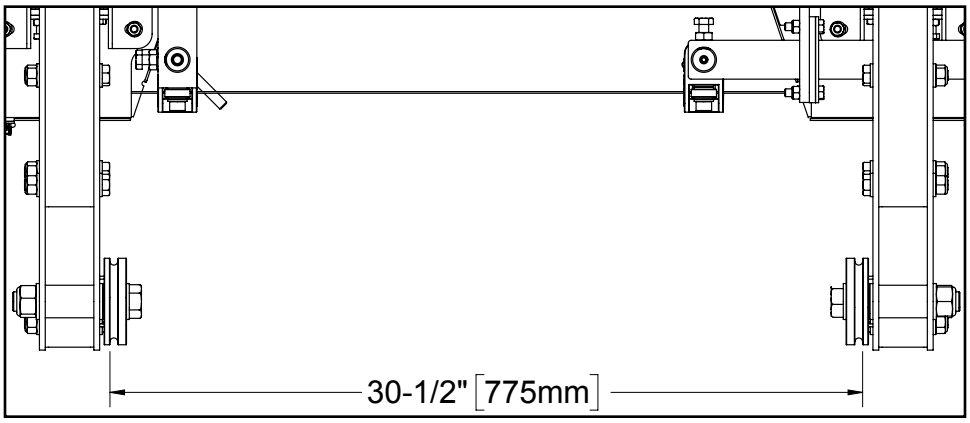
## TIGHTEN CARRIAGE WHEEL BOLTS

Using two (2) socket/wrenches, tighten the four (4) M20 X 120 mm bolts that fasten the wheels to the carriage leg plates.

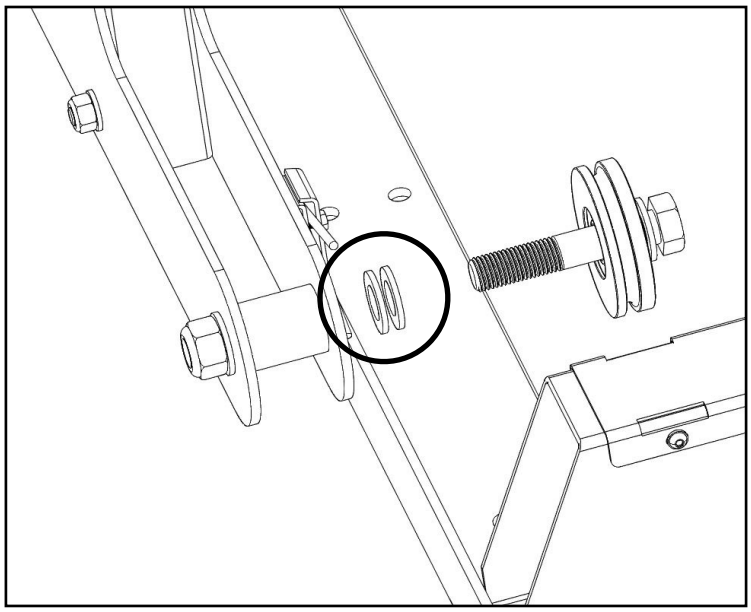


# 6. PLACING THE HEAD ON THE TRACK

Before placing the head on the track, the carriage wheel spacing can be set to ensure they will fit properly on the rails. Check the wheel spacing to ensure that a distance of 30.5" (775 mm) is measured from outside to outside of the wheel grooves as shown below.



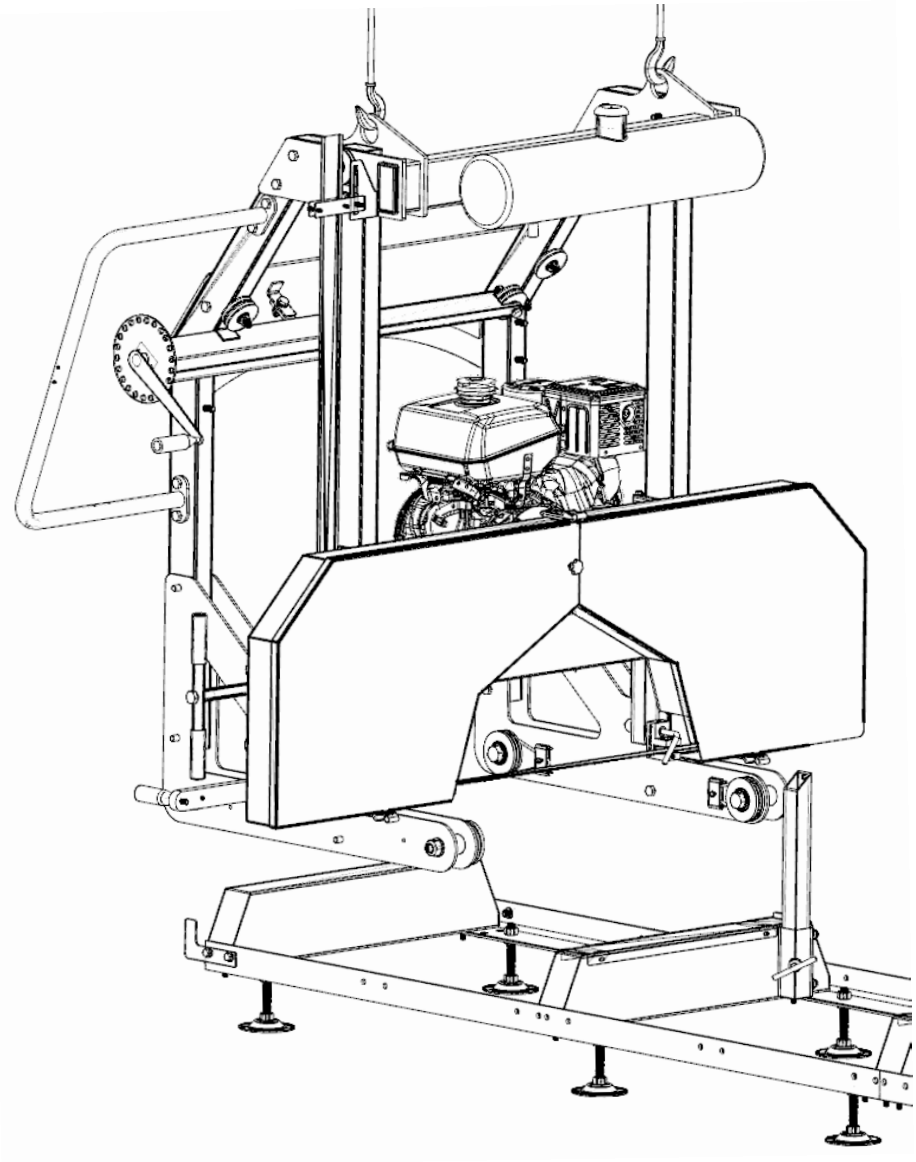

To adjust the width of the wheels, washers may be added or removed from each wheel to ensure a distance of 30.5" (775 mm) is achieved as shown below.



At this point, most of the sawmill head bolts should only be hand tight. They will be fully tightened when the head is on the track and has settled in to a true and square state. There are two methods in which the sawmill head can be lifted onto the track assembly:

## METHOD 1

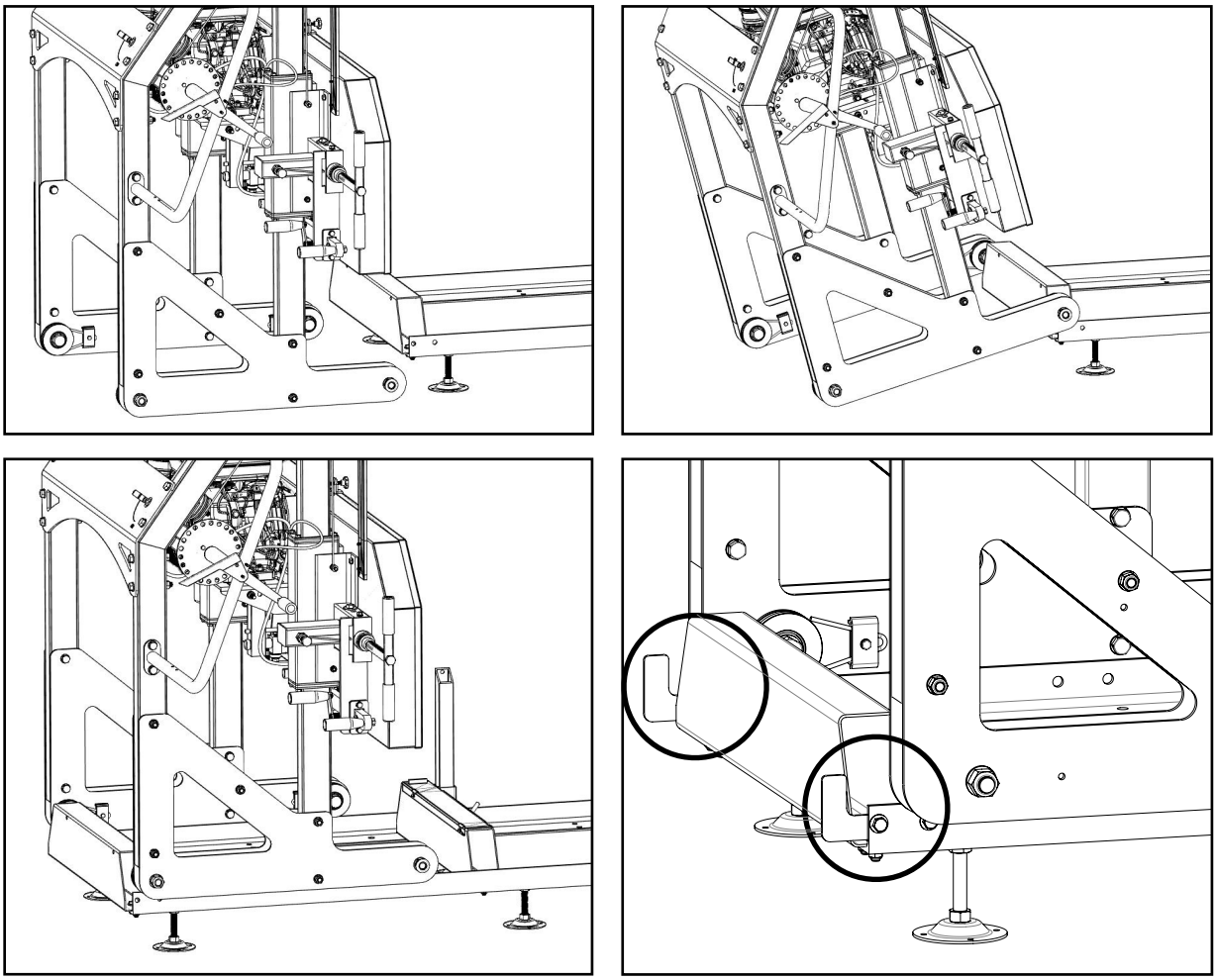
If a tractor or forklift is available, the head can be lifted onto the track with a lifting strap or chain with a minimum rating of 1000 lb. (450 kg). Attach the lifting strap/chain to the lifting hooks, raise the head up, and rest it on the track so that the grooves in the carriage wheels fit around the track rails. Two people are recommended for this procedure.



## METHOD 2

At least two people are required for this method. Start by removing the two (2) carriage stops from one end of the track. The head can be walked over to the track until positioned behind the track as shown below. Once in this position, tilt the head backwards so that the front two wheels are off the ground. Walk the head forward while the grooves in the two front carriage wheels ride along the track rails. Next, using at least two people, lift up on the back of the sawmill head and walk it forward until both rear carriage wheels are seated on the track.

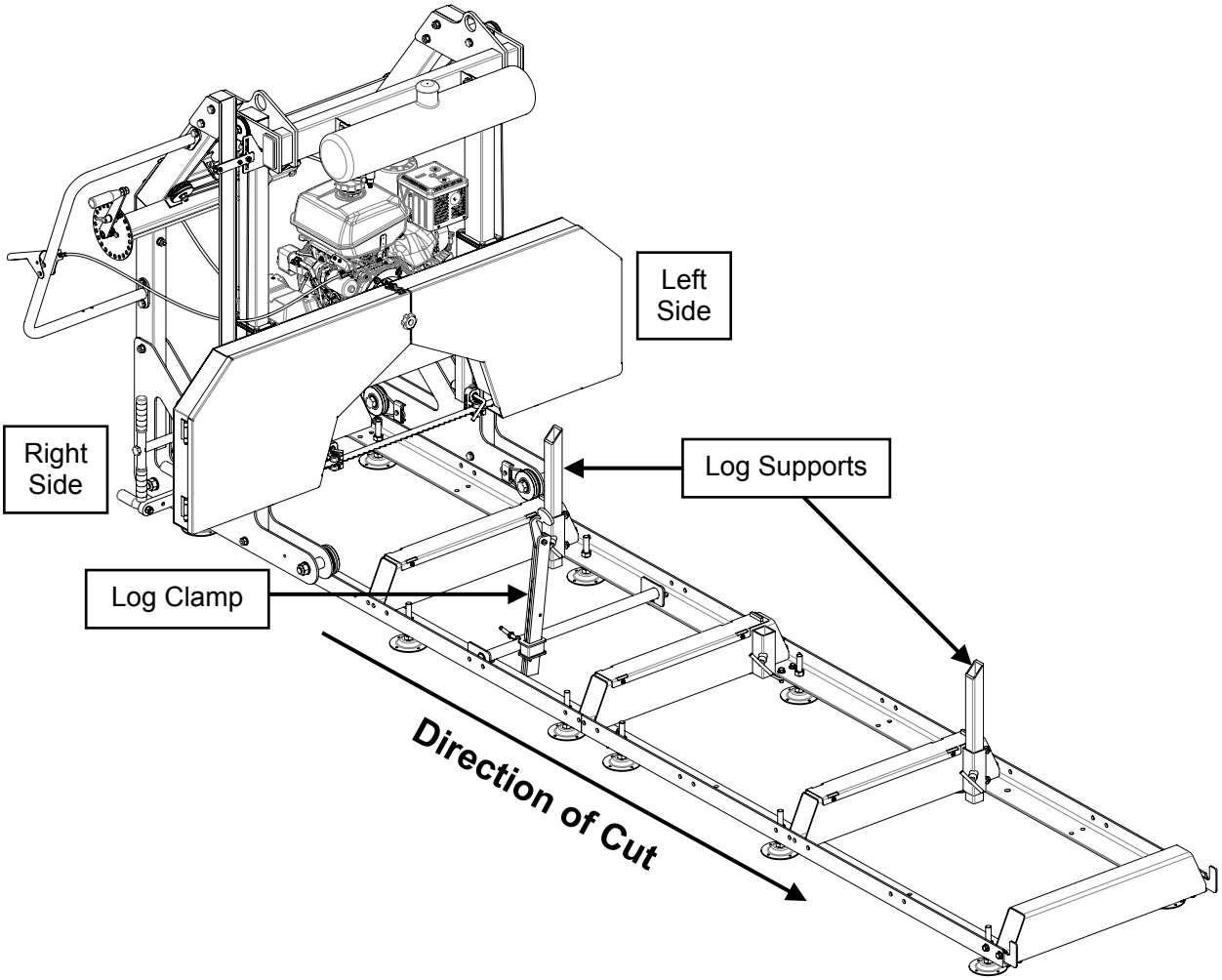
Finally, reattach the two (2) carriage stops to the track rails.



With the sawmill head assembly now resting on the track, tighten all of the bolts.

## DIRECTION OF CUT

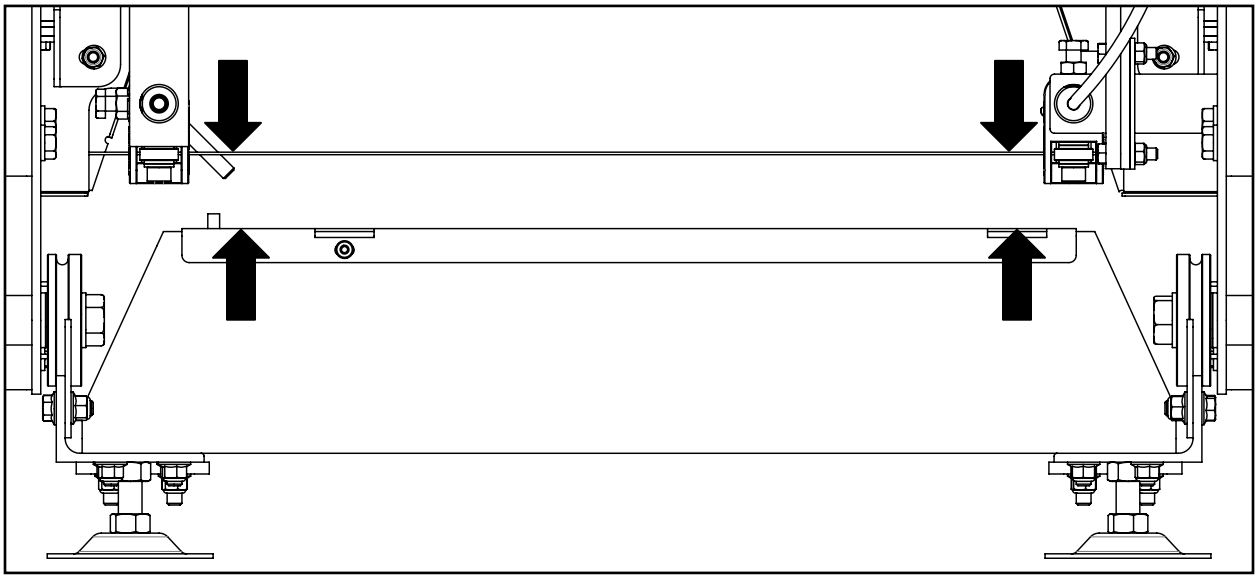
Always cut in the direction shown below. The log clamp will be to the right side of the log with the log supports on the left. Failure to cut in this direction can cause the log to come loose and possibly cause damage or injury.



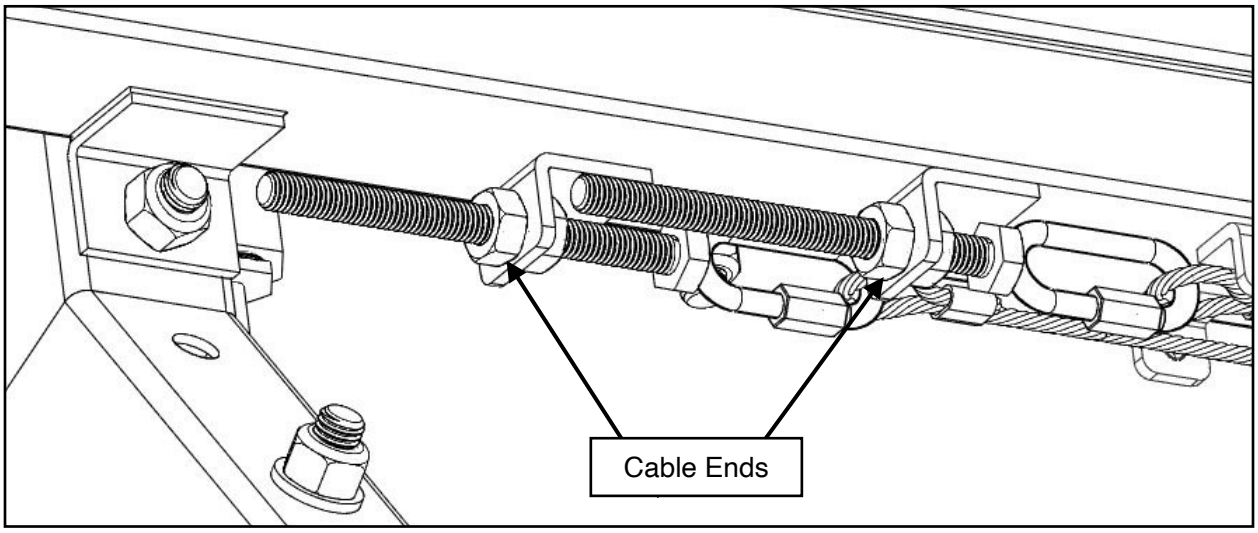

****Please follow the instructions in the ***SAWMILL SET-UP PROCEDURES*** section. Failure to do so may result in poor sawing performance, damage or injury.****

## LEVELLING THE SAWMILL HEAD ASSEMBLY

Using a tape measure, measure the distance from the blade to the top of the log bunk on both the left and right side. The distance should be equal. If the measurements are not equal, adjust the lift cable ends under the lift mechanism sub-assembly to either raise or lower one side.

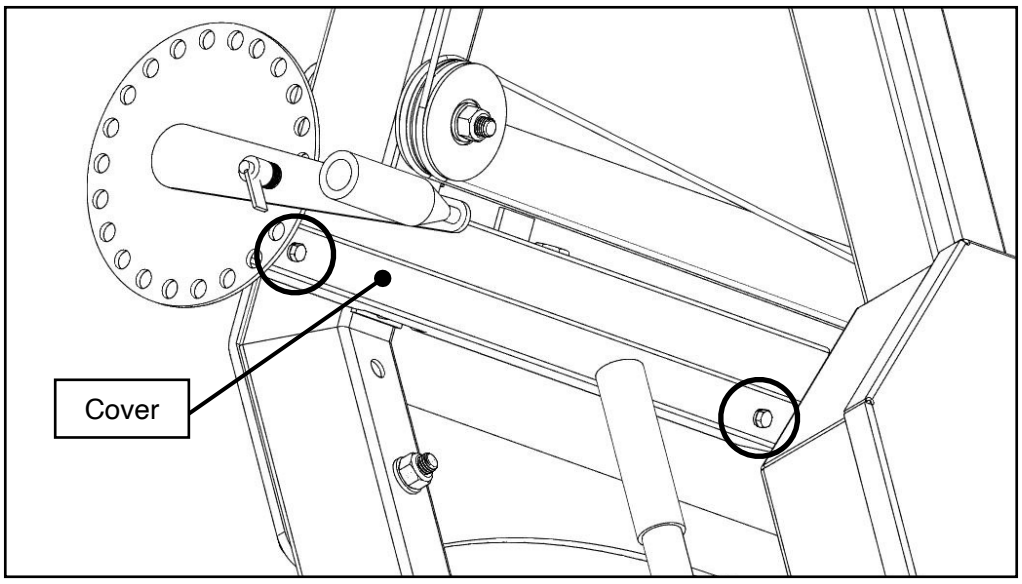


Using a wrench, turn the nut clockwise to raise one side of the sawmill head assembly, or counter-clockwise to lower it. Double-check the blade height as discussed in the previous step. Once the measurements are equal on both sides, tighten the corresponding jam nut to clamp it securely against tab.

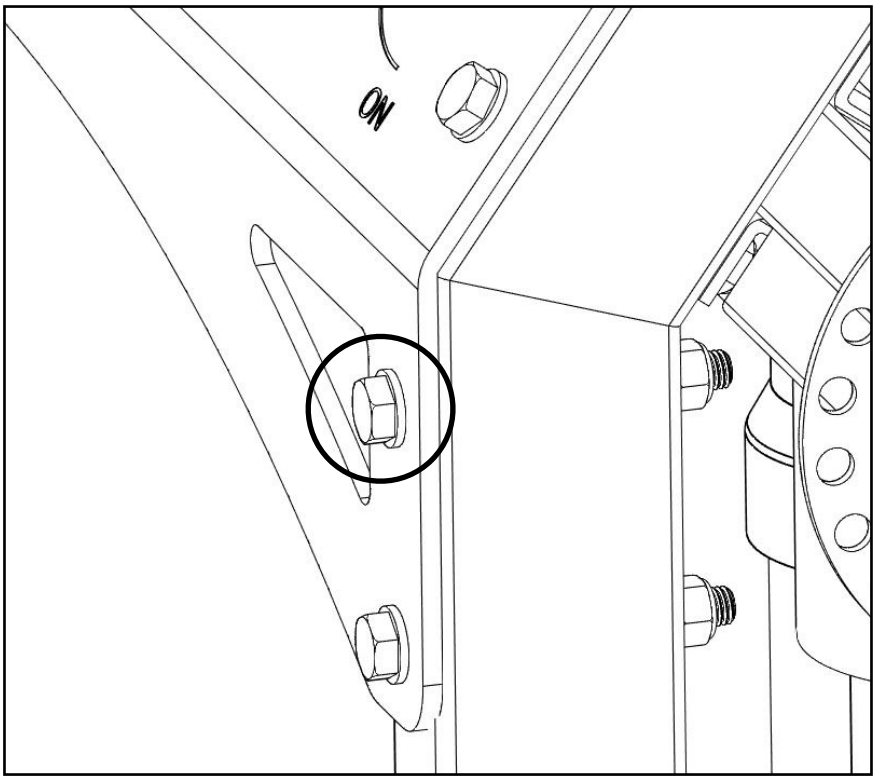


## LIFT MECHANISM COVER

Use a socket/wrench to install the cover with four (4) M6 X 12 mm bolts and flat washers (2 per side) to secure it in place.

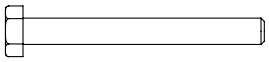
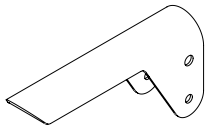
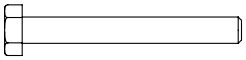
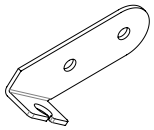
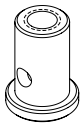
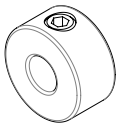
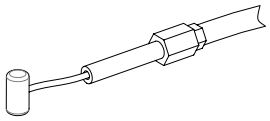



Install the final M12 X 110 mm bolt into the dashboard.



## THROTTLE HANDLE AND CABLE

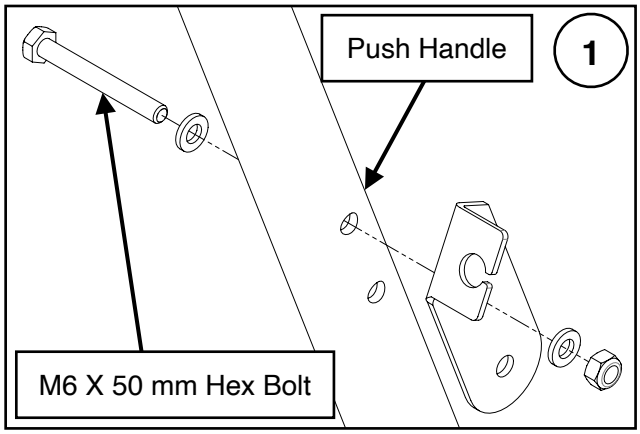
Use the hardware listed below to assemble the throttle handle and route the throttle cable.

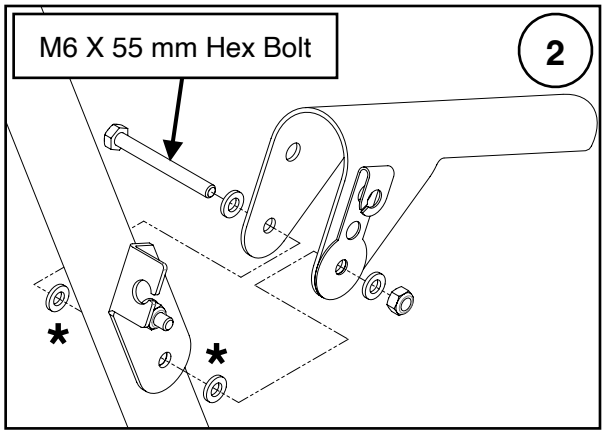
| | | | | | |
|---|---|---|---|---|---|
| 1x | M6 X 55 mm Hex Bolt |  | 1x | Throttle Handle |  |
| 1x | M6 X 50 mm Hex Bolt |  | 1x | Throttle Cable Bracket |  |
| 1x | M4 X 12 mm Phillips Pan Head Screw |  | 1x | Throttle Cable Barrel Clamp |  |
| 2x | M6 Lock Nut |  | 1x | Throttle Cable Stop Bushing |  |
| 6x | M6 Flat Washer |  | 1x | Throttle Cable |  |

Install the throttle handle (see next page) *prior* to routing the throttle cable and connecting it to the engine.

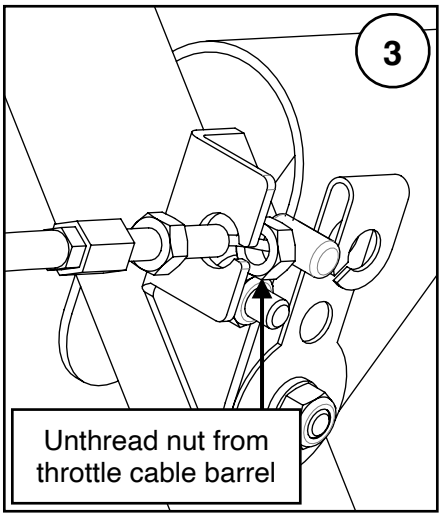
Assemble the *throttle cable bracket* to the *inside* of the push handle using one (1) M6 X 50 mm hex bolt, two (2) M6 flat washers, and one (1) M6 lock nut. Install the hardware through the *upper* hole in the push handle and bracket (**Figure 1**).

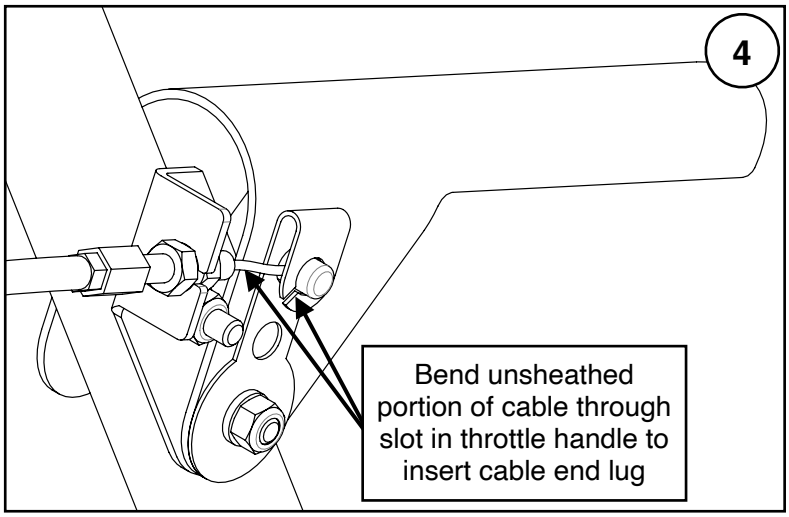
Next, assemble the throttle handle around the push handle and throttle cable bracket using one (1) M6 X 55 mm hex bolt, four (4) M6 flat washers, and one (1) M6 lock nut. Be sure there is a flat washer (marked with asterisks "*" below) between both of the inside faces of the throttle handle and the push handle/throttle cable bracket (**Figure 2**).



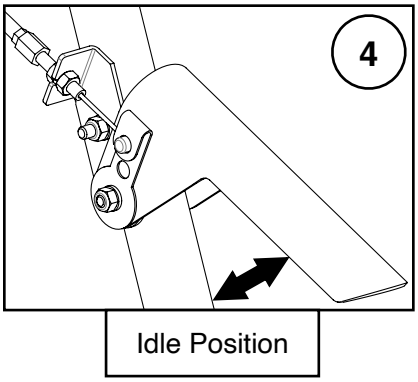



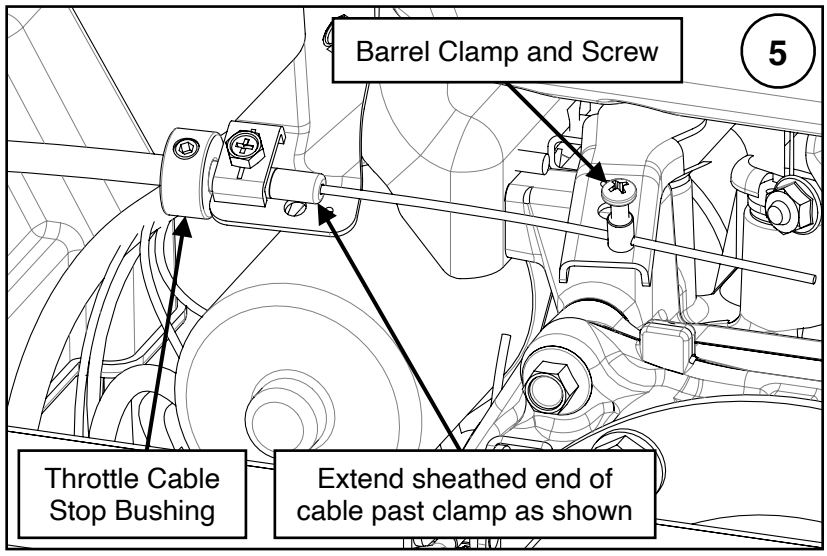

To attach the throttle cable, loosen the M6 hex nut closest to the end of the cable until it is free of the threaded barrel. Pass the unsheathed portion of the cable through the notch in the throttle cable bracket and slide the threaded barrel through the hole in the bracket's flange (**Figure 3**). Before re-tightening the nut, bend the unsheathed portion of the cable to feed it through the slot in the throttle handle, then insert the cable end lug into the hole in the handle (**Figure 4**). Finally, re-thread and tighten the loose nut against the flange in the throttle bracket to secure the cable.



With the throttle lever in the idle position (fully open), slide the *throttle cable stop bushing* over the end of the cable sheath and pull the cable tight at the engine. The sheathed end of the cable should extend past the clamp on the engine (see Figure 2). Next, pass the unsheathed end of the cable through the hole in the barrel clamp and tighten the M4 Phillips pan head screw to secure it in place. This will take the slack out of the cable.



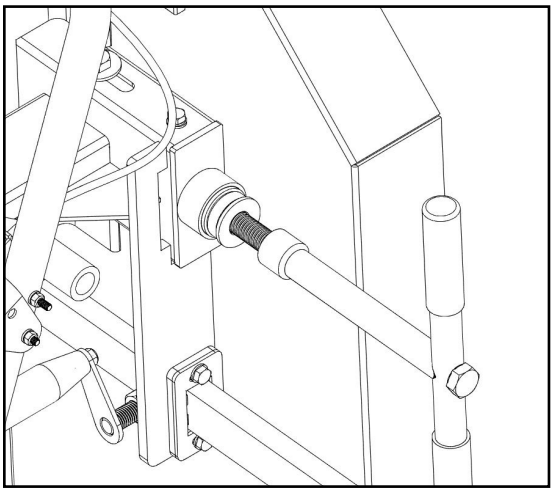



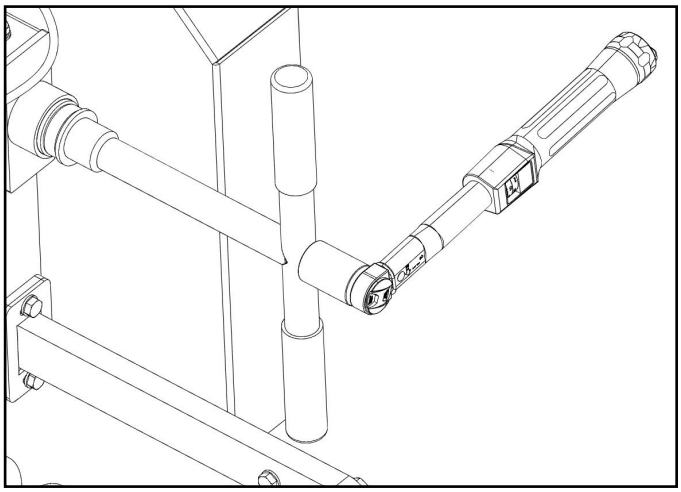

Finally, slide the throttle cable stop bushing along the cable sheath until it stops at the bracket on the engine. Secure it in place by tightening the set screw with a 3 mm hex key.

The assembled throttle handle and routed cable should now match the image below.

## GREASING THREADS

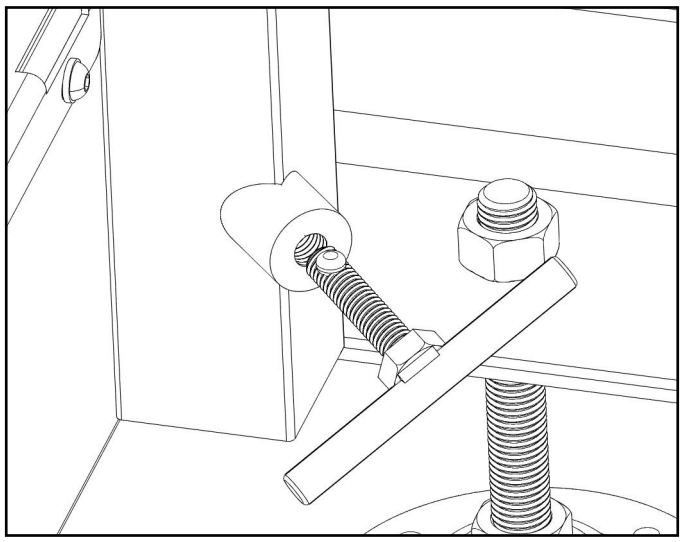
Add waterproof grease to the threads of the blade tension T-handle and to the mating washer face prior to use. Proper blade tension is achieved using a toque wrench with a 24 mm socket and torquing the T-handle to 25 ft•lb (34 N•m). See right-side image below.





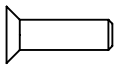
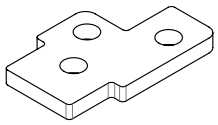
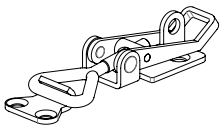
****Note: It is very important to take the tension off the blade by turning the T-handle in the counter-clockwise direction when the sawmill is not in use. Failure to do so will result in flat spots on the rubber belts. These flat spots will cause the mill to vibrate excessively during next use.****

Add grease to all T-handle threads on the sawmill: three (3) on the track bunks and one (1) on the log clamp assembly.

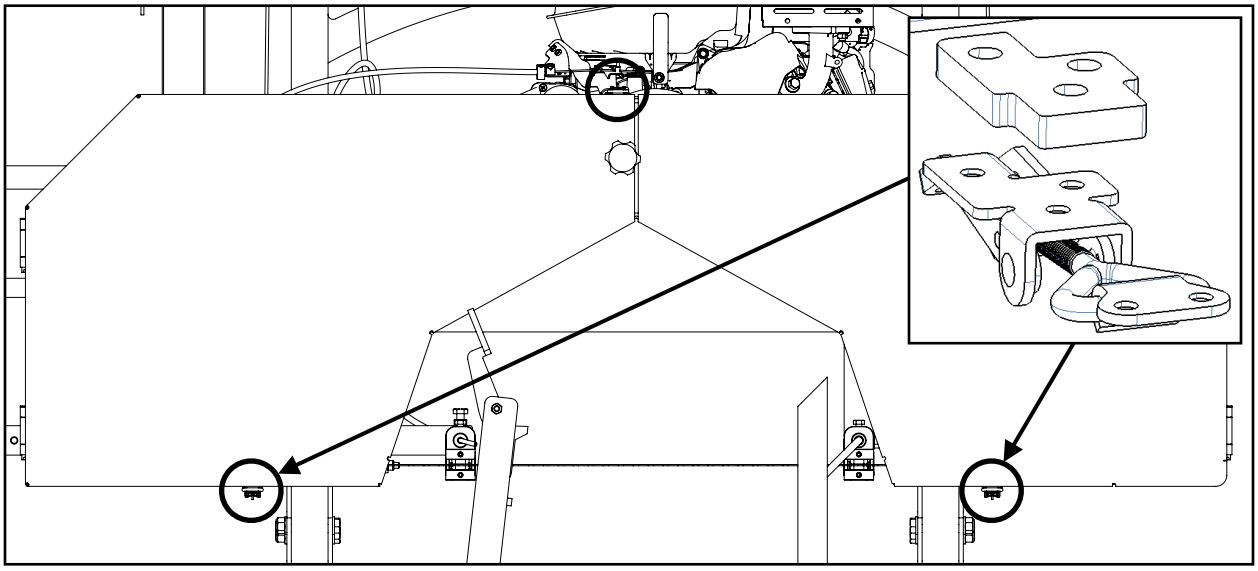


## BAND WHEEL DOOR LATCHES

Using the hardware listed below, assemble the three (3) band wheel door latches.

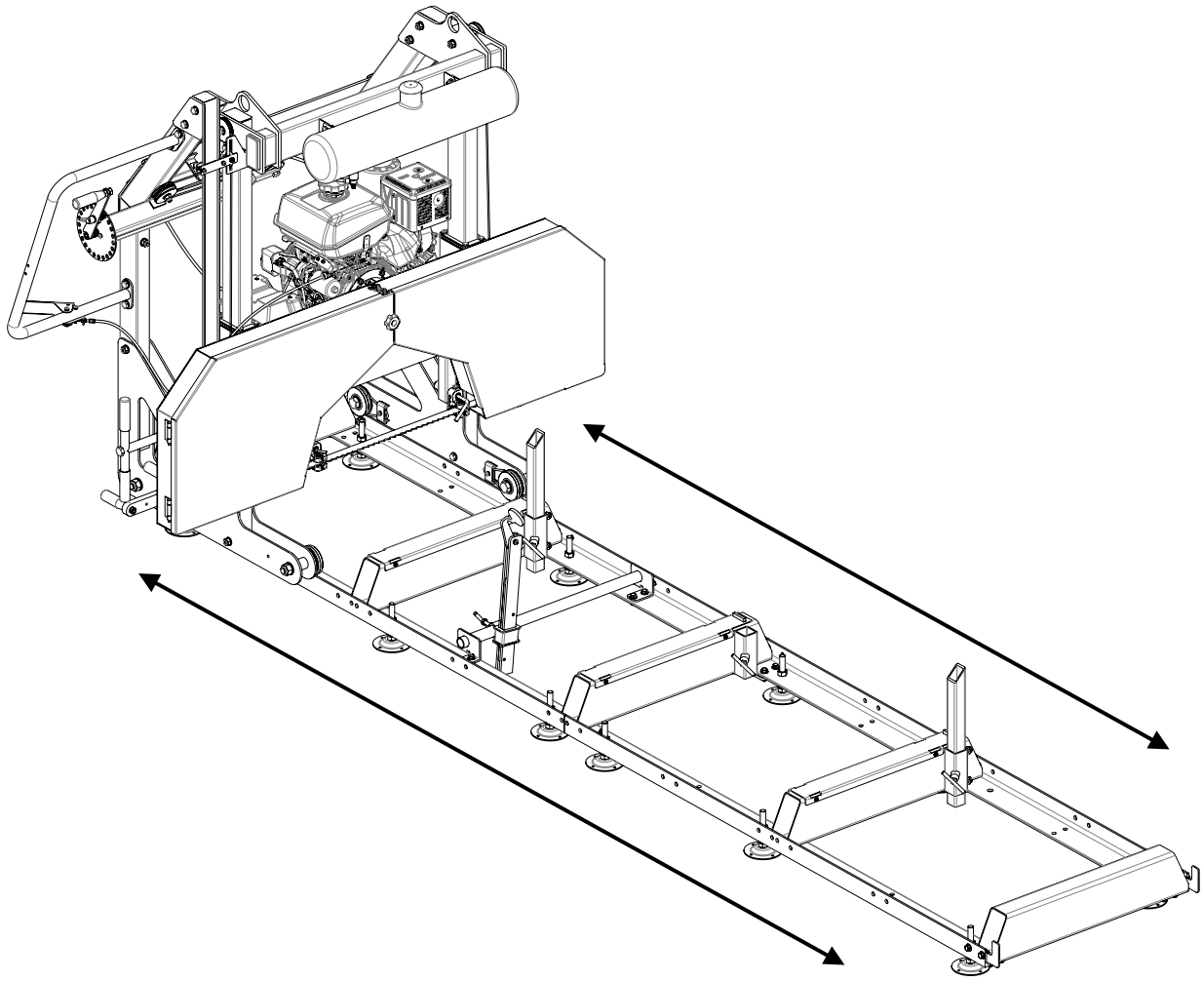
| | | | | | |
|---|---|---|---|---|---|
| 6x | M4 X 14 mm Phillips Flat Head Screw |  | 2x | Latch Spacer |  |
| 9x | M4 X 10 mm Phillips Flat Head Screw |  | 3x | Latch |  |
| 15x | M4 Lock Nut |  | | | |

Using a Phillips head screwdriver and a socket/wrench, install the upper latch using five (5) M4 X 10 mm Phillips flat head screws and M4 lock nuts. Install each of the bottom latches with a spacer, three (3) M4 X 14 mm Phillips flat head screws, two (2) M4 X 10 mm Phillips flat head screws, and five (5) M4 lock nuts. The longer screws pass through the three (3) holes in each of the spacers.



## ROLLING THE SAWMILL HEAD ASSEMBLY

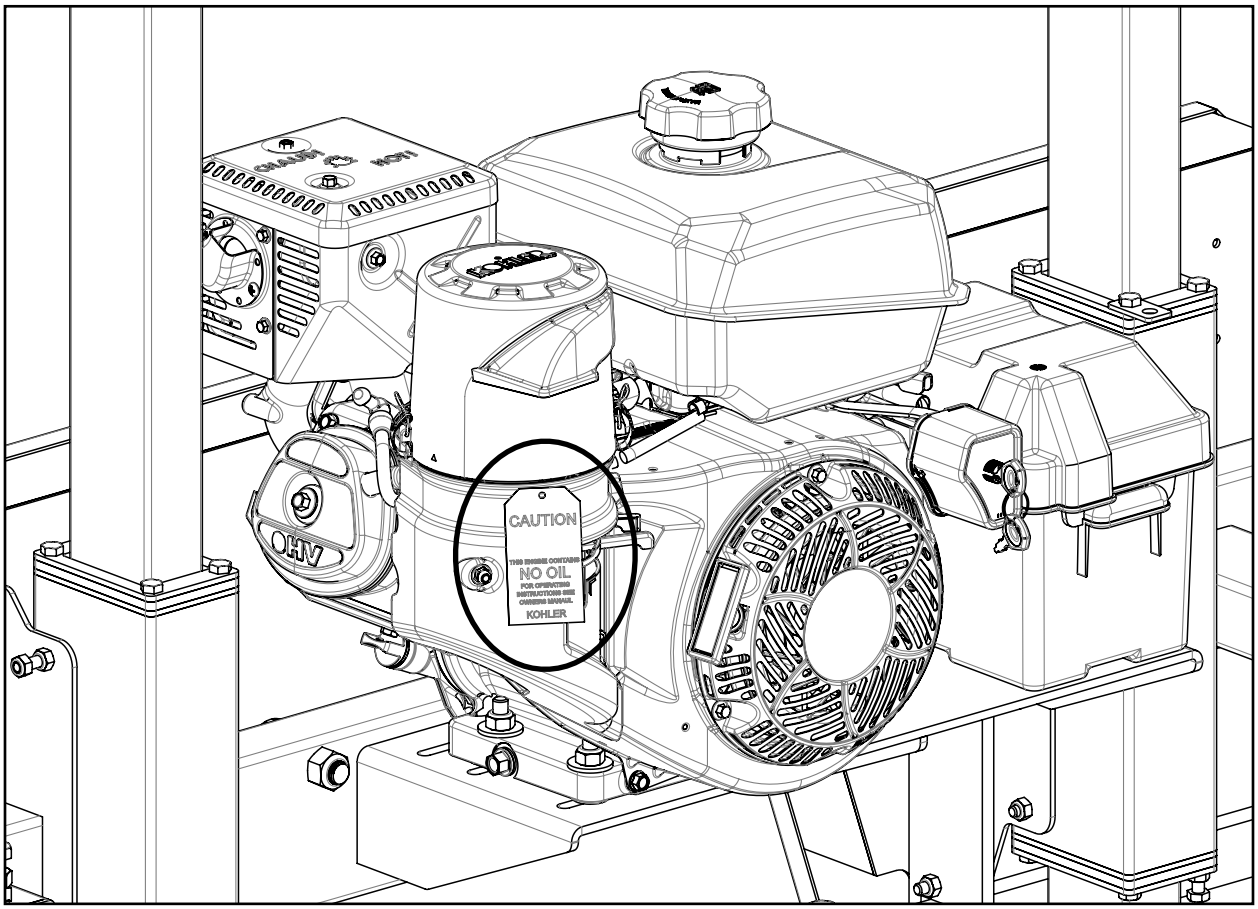
Roll the sawmill head assembly along the length of the track to ensure it moves freely. If it binds or feels tight, the carriage wheel spacing can be adjusted by adding or removing washers like was discussed at the ***beginning of this section***.



# 7. ENGINE & BATTERY

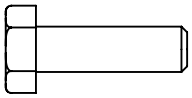
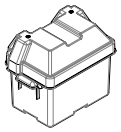
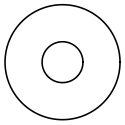
## ENGINE OIL

Refer to the engine manual before using your sawmill. Please note that the engine does not contain any gasoline or engine oil when it is shipped. Furthermore, the engine is equipped with an oil alert system, meaning that if the crankcase oil level is low or empty, the power is cut to the spark plug and it will not start.

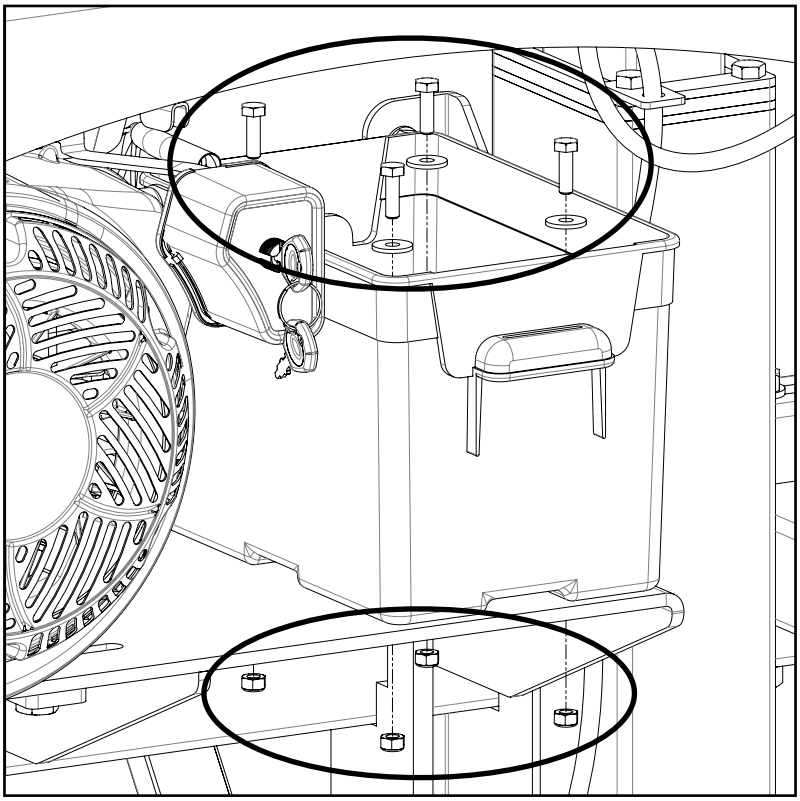


## BATTERY BOX

If not previously installed, assemble the battery box to the engine mount using the hardware listed in the table below.

| | | | | | |
|---|---|---|---|---|---|
| 4x | M6 X 20 mm Hex Bolt |  | 1x | Battery Box |  |
| 4x | M6 Lock Nut |  | | | |
| 4x | M6 X 18 mm Fender Washer |  | | | |

Using two (2) sockets/wrenches, install the battery box with four (4) M6 X 20 mm bolts, M6 fender washers, and M6 lock nuts as shown in the image below.



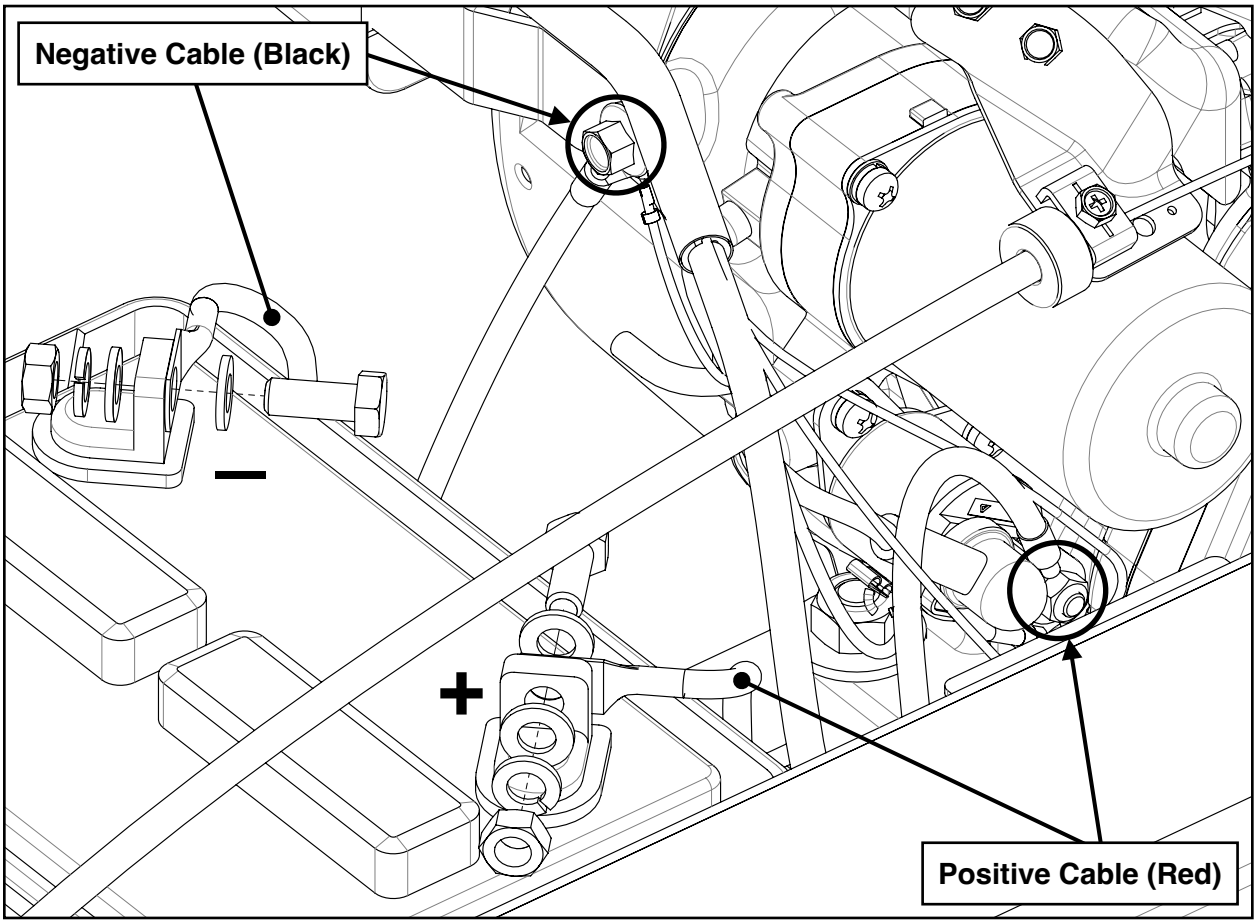
## BATTERY

The customer is required to purchase their own battery that meets the following specifications:

| SIZE | VOLTAGE | COLD CRANKING AMPS |
|---|---|---|
| **U1**<br>(20 L x 13 W x 18 H cm)<br>(7-⅞ L x 5-⅛ W x 7-⅛ H in) | **12 V** | **250** Min (**300+** Recommended) |

Position the battery inside the battery box with the terminal side towards the engine. Connect the black battery cable to the negative battery terminal and the red battery cable to the positive battery terminal using the M8 X 20 bolts, M8 flat washers, split-lock washers, and nuts.

****Be sure to double check your battery terminal positions as the negative and positive terminals may be the reverse of what is shown in the example below.****

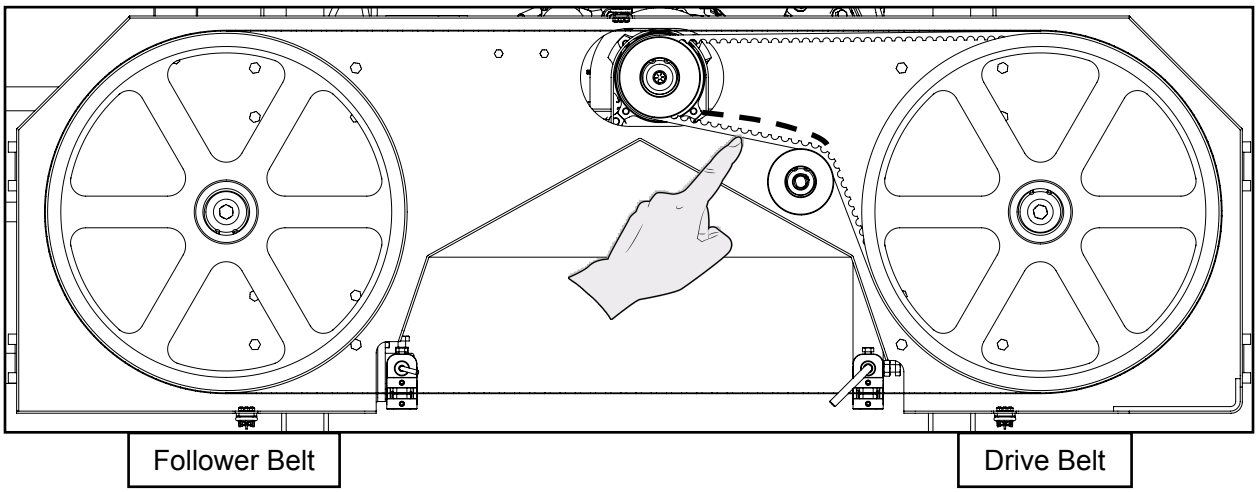


# SAWMILL SET-UP PROCEDURES

## BELT TENSION

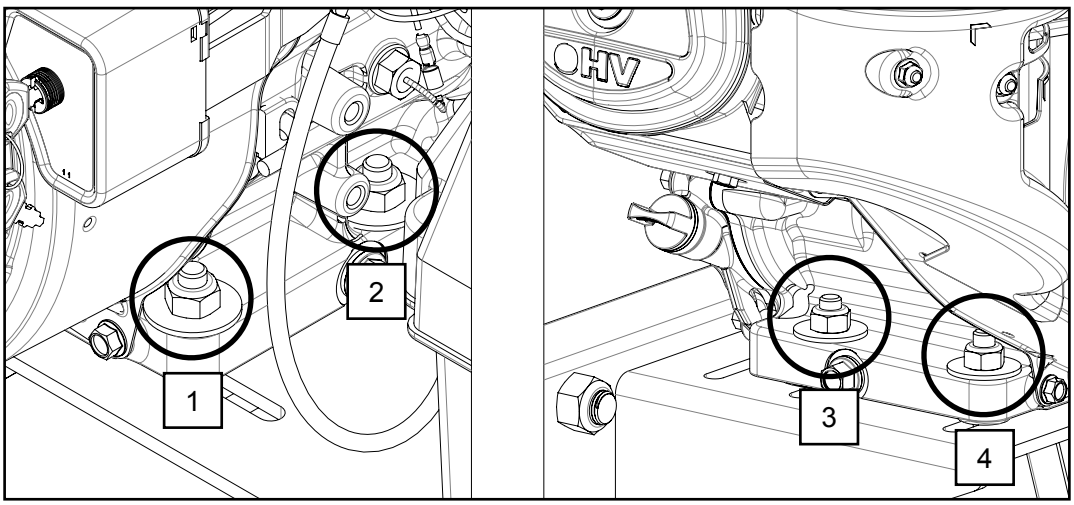
*Follower Belt*: Polyurethane belt that seats tightly in the band wheel V-groove. No adjustment is required for this belt.

*Drive Belt*: To check the belt tension, using your hand firmly try to deflect the belt up and down. There should be no more than ¼" (6 mm) of deflection. If the belt deflection exceeds this amount, it will need to be tightened as described below.



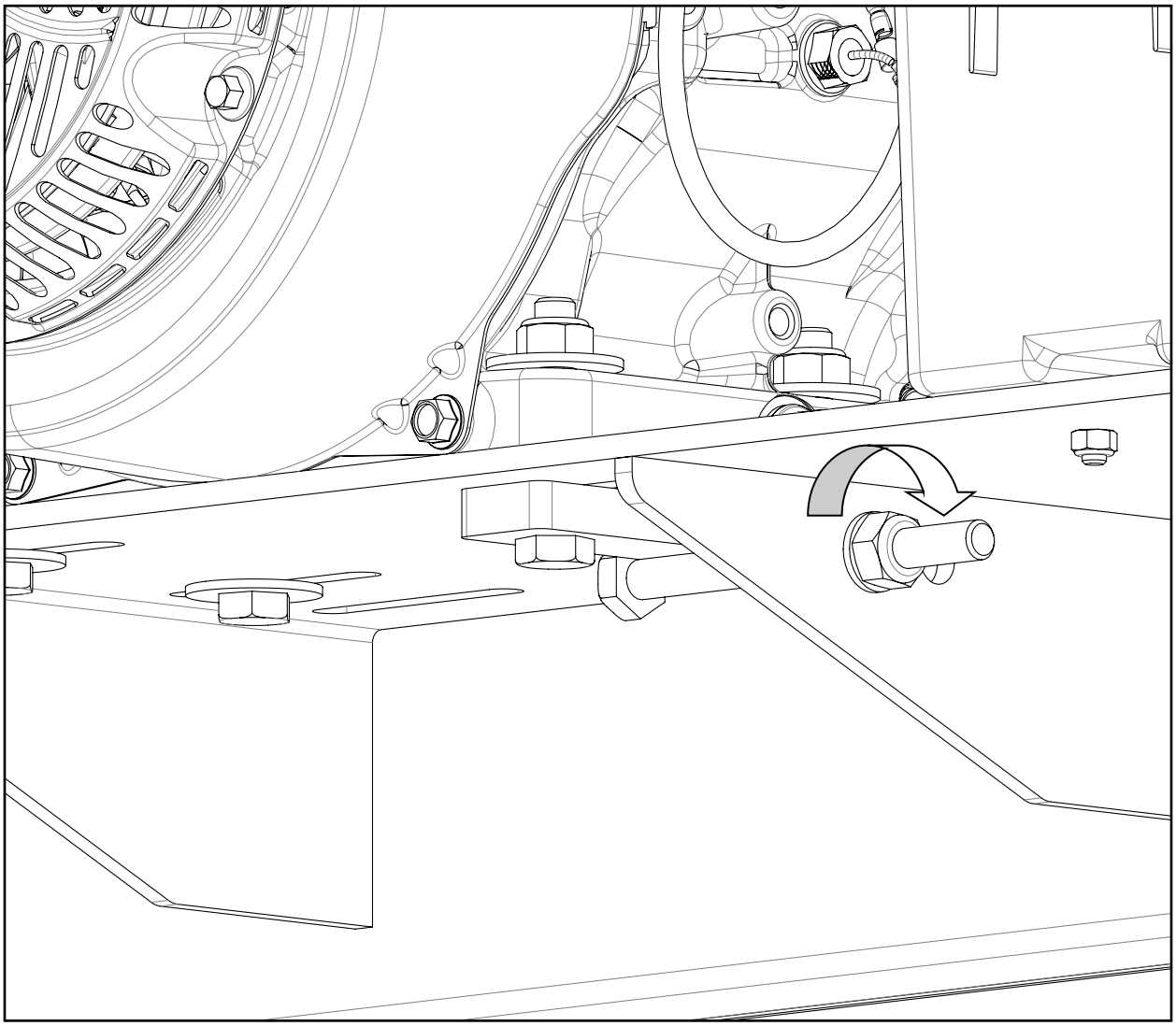

****Never attempt to adjust the belt tension with the engine running. As a safety precaution, remove the spark plug cap.****

To tighten the drive belt, start by loosening the four (4) bolts that secure the engine to the engine mount.



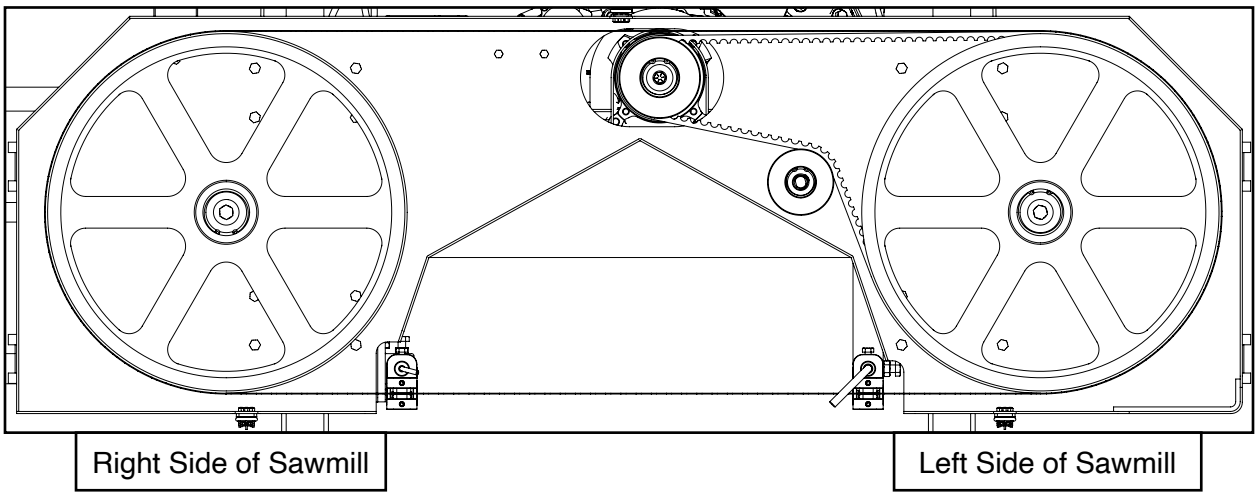
With the engine free to slide on the engine mounting plate, turn the nut on the horizontal stud in the clockwise direction. This will pull the engine towards the stud and apply more tension on the belt. Do this step incrementally while checking the belt for proper deflection. It is also important to ensure that the engine remains perpendicular to the drive belt. Over-tightening can cause the engine to twist on the mounting plate, resulting in belt alignment issues and premature wear. Once the desired belt tension is set, tighten the 4 engine bolts.

Alternatively, if the drive belt is too tight, the nut on the horizontal stud can be turned counter-clockwise.

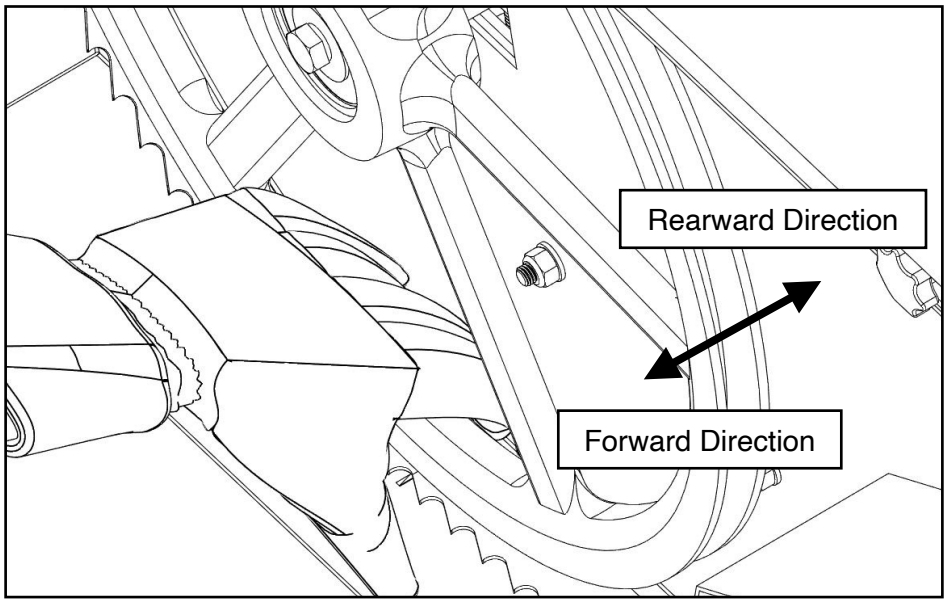


# BLADE TRACKING

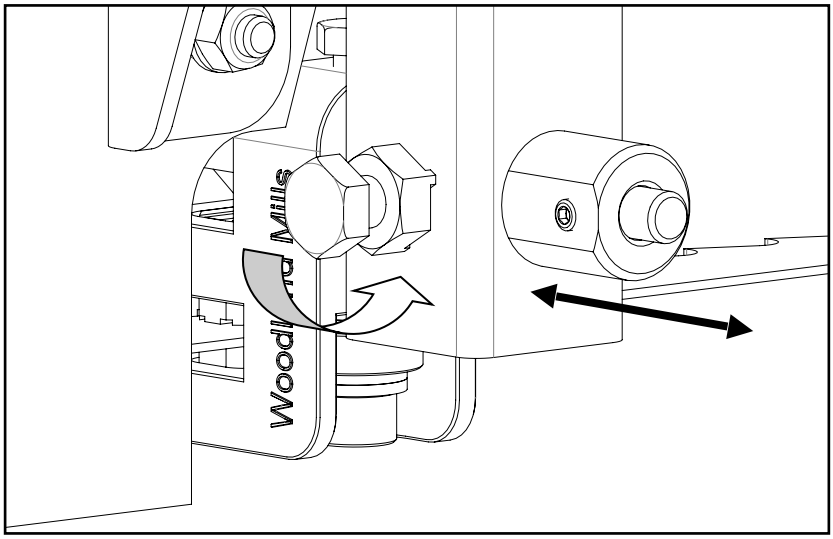
Never attempt to adjust the blade tracking with the engine running. As a safety precaution, remove the spark plug cap. It is also advised to wear gloves and safety glasses when working with the blade as it is extremely sharp.



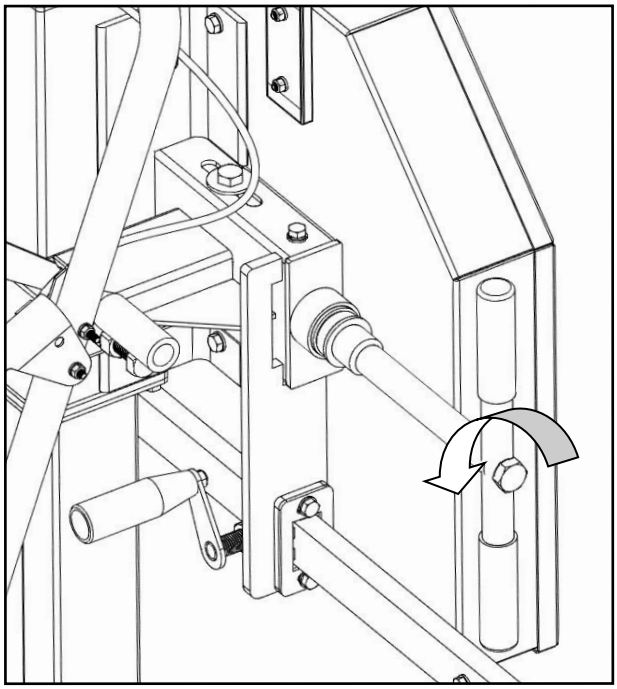

The blade should run with the same tooth to band wheel face distance on both sides: ⅜" (9 mm) is ideal. The back of the blade will be just proud of the back of the band wheel at this distance and is a quicker check than using a tape measure. If an adjustment on either side is required, the below steps detail this procedure.



Loosen the blade guide assembly bolt using a socket/wrench. The round shaft should now be free to slide rearward and out of the way. Perform this step on both blade guide assemblies. This ensures the guide bearings will not influence tracking of the blade whilst being adjusted.

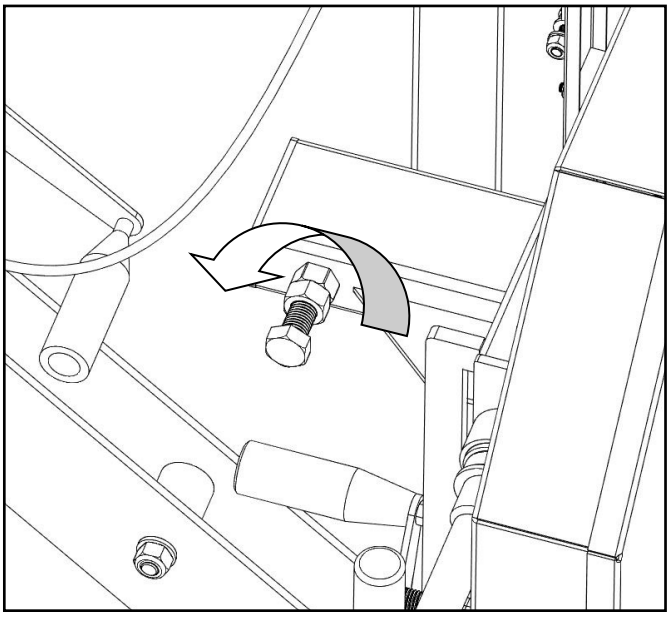


Take some tension off the blade by turning the T-handle in the counter-clockwise direction one full turn from its fully-tensioned position.

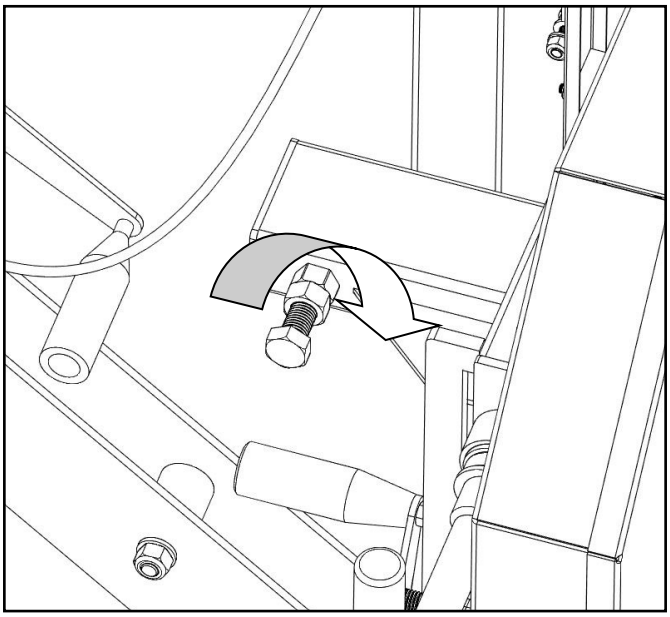


**Adjusting The Driven (Right-Hand) Side**

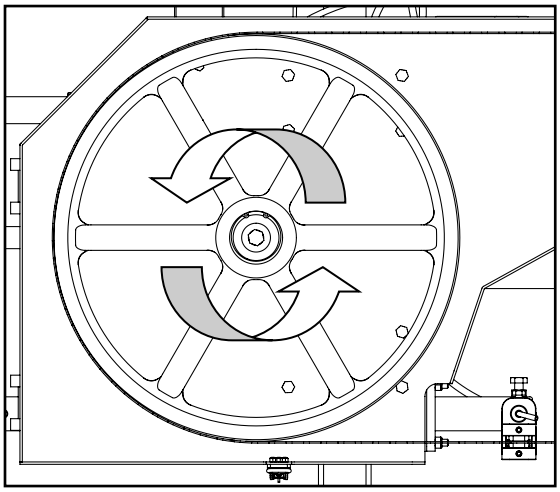
Loosen the tracking alignment locking nut with a 24 mm wrench or an adjustable wrench.

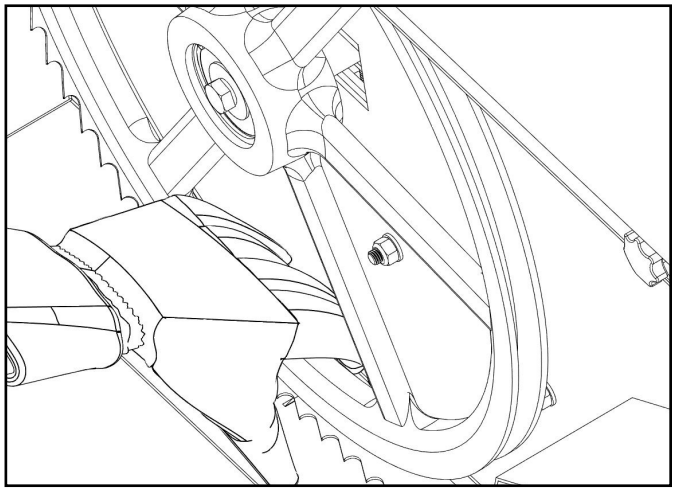


The alignment bolt can now be turned to change the angle of the band wheel and track the blade. To move the blade more rearward on the band wheel, turn this bolt clockwise. Alternatively, turning the bolt in the counter-clockwise direction will force the blade to run more forward on the band wheel. Turn the bolt ½ turn and re-tension the blade.

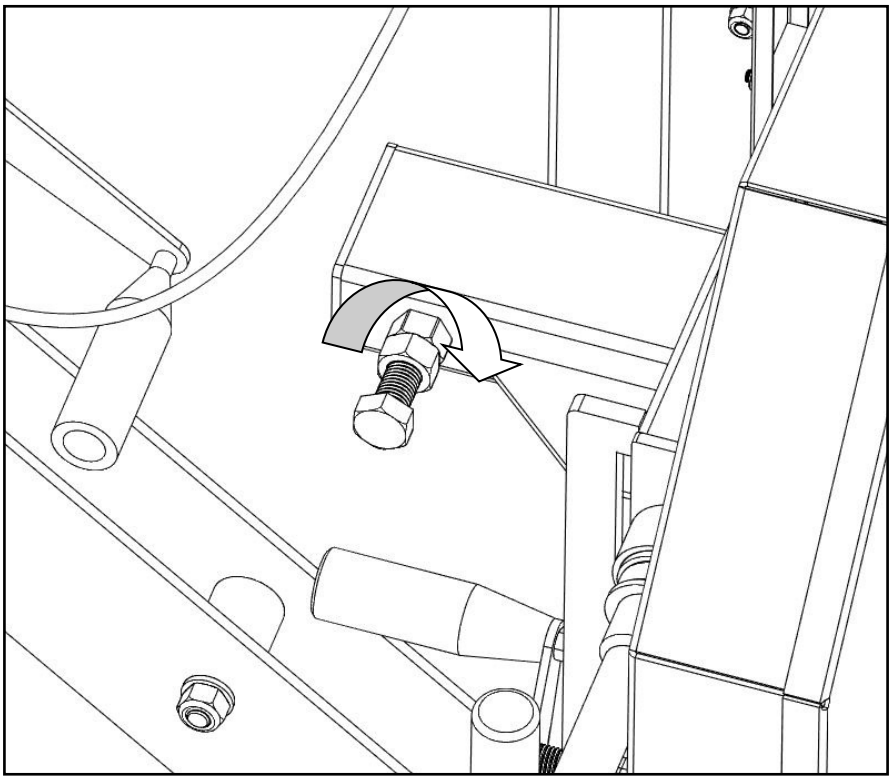


Tighten the blade tension back to 25 ft•lb (34 N•m). While wearing gloves, spin the band wheel with your hand and observe how the blade tracking has changed. Measure the distance again and repeat the above step to further compensate if required. The ideal measurement is ⅜" (9 mm) or check that the back of the blade is flush with the back of the band wheel.



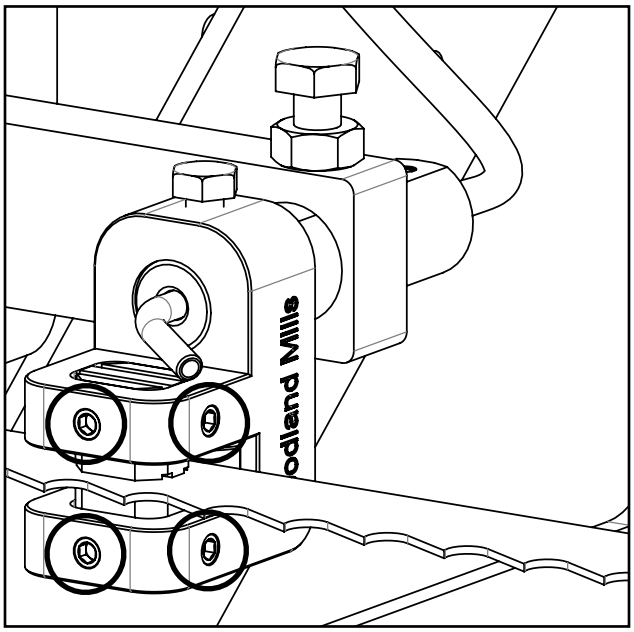


Once satisfied with the measurement, tighten the locking nut clockwise.

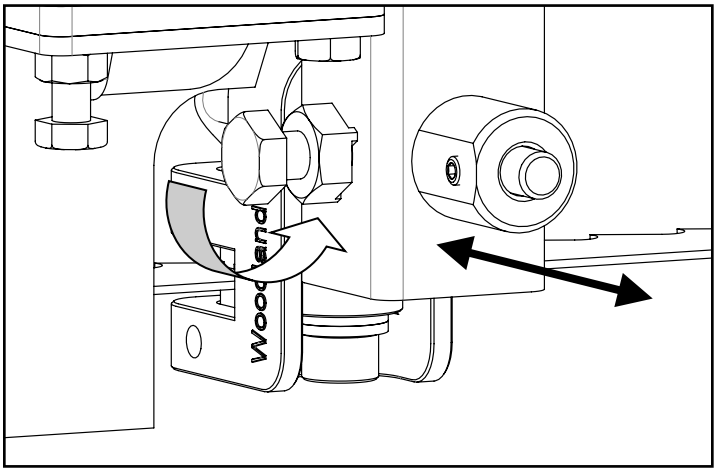


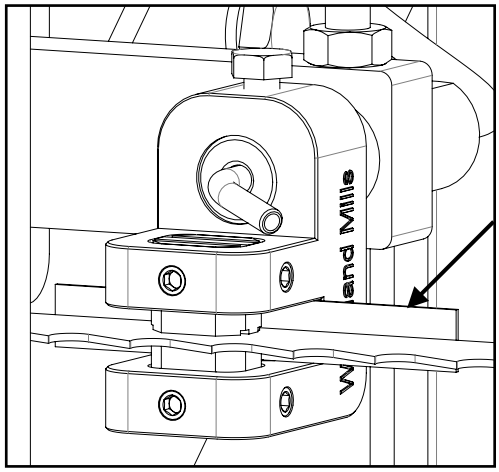
# BLADE GUIDE ADJUSTMENT

Never attempt to adjust the guide blocks or the guide bearing with the engine running. As a safety precaution, remove the spark plug cap. It is also advised to confirm that the blade is tracking properly before performing the steps below. Blade tracking is covered in the ***previous section***. Using a 4 mm hex key, loosen the blade guide blocks on both the left and right sides. They should be free to slide up and down.

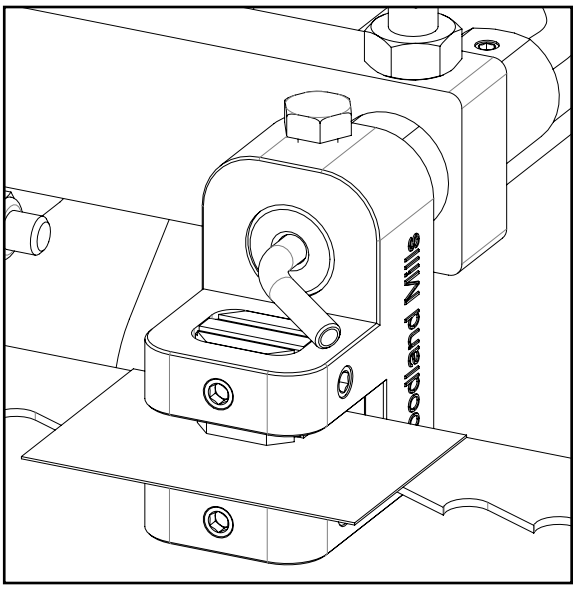


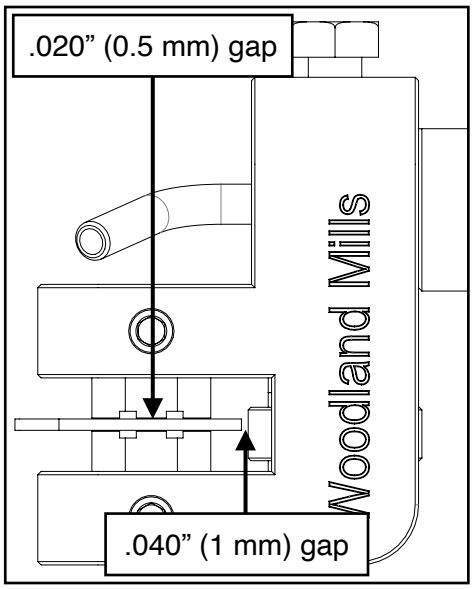
Loosen the blade guide assembly bolt using a socket/wrench. The round shaft should now be free to slide back and forth. Position it so that there is a thick paper-sized gap (.040" or 1 mm) between the bearing and the back of blade. Tighten the bolt against the flat on the shaft to secure the assembly back into position.



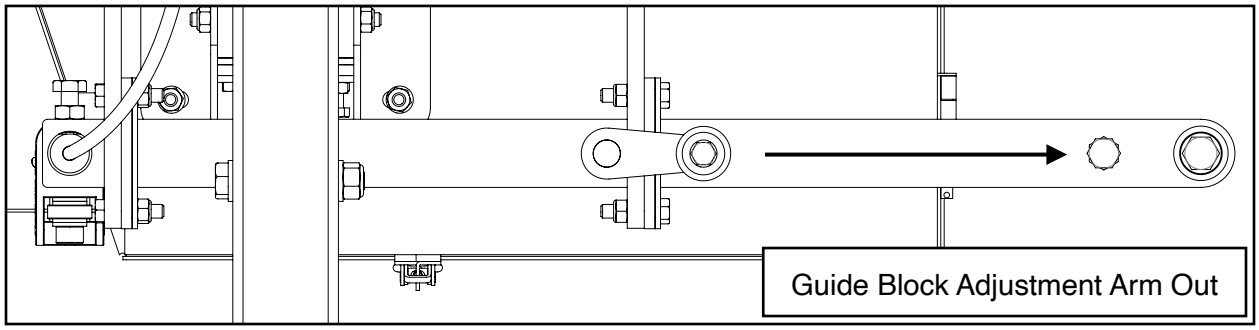


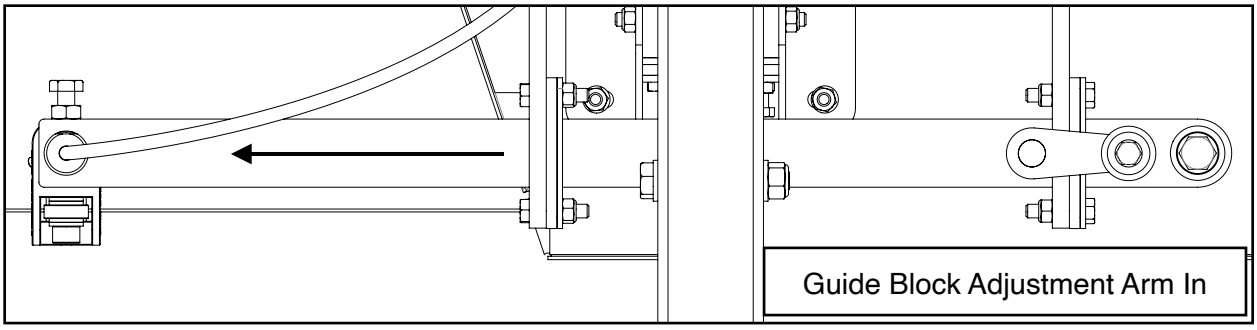
Using a feeler gauge or thick piece of paper (.020" / 0.5 mm), place it between the blade and both guide blocks and then tighten the set screws.



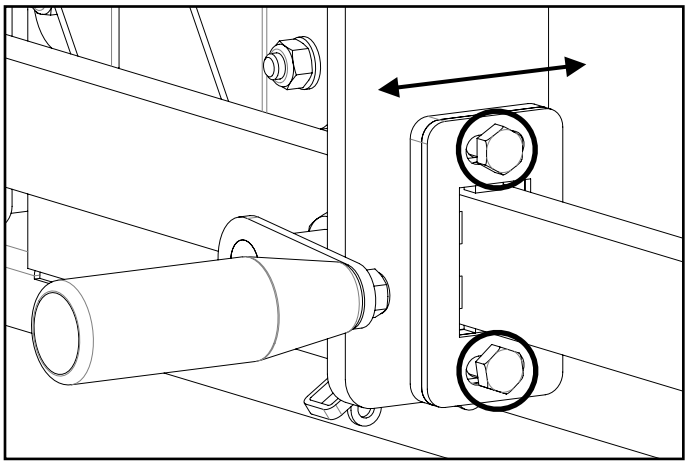



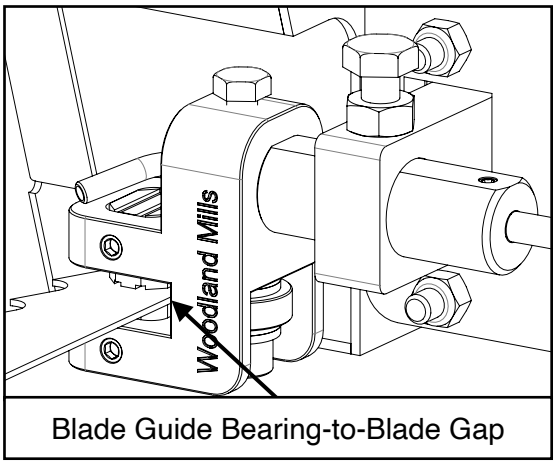

After the guide blocks and guide rollers are set, slide the adjustable blade guide in and out while noting the blade guide bearing-to-blade gap and the guide block-to-blade gap. If either of these gaps change while sliding the guide block adjustment arm, the guide angle can be adjusted via the steps on the next page.



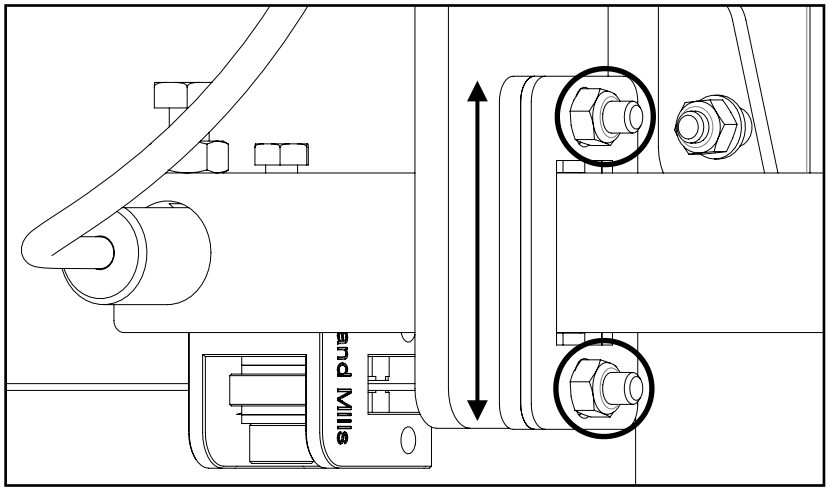
If the blade guide bearing-to-blade gap needs to be adjusted, loosen the bolts shown below and move the arm in or out to align it until it is parallel to the blade. Once the bearing is parallel to the blade through the entire movement of the guide block adjustment arm, the two bolts can be tightened again.

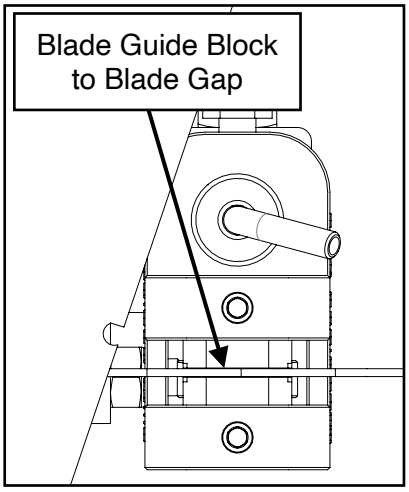





Blade Guide Bearing-to-Blade Gap

If the blade guide block-to-blade gap needs to be adjusted, loosen the bolts shown below and move the arm up or down until they are parallel to the blade. To check for parallelism, slide the guide block adjustment arm all the way out and all the way in, noting the blade guide block-to-blade gap. Once the blocks are parallel to the blade through the entire movement of the arm (sliding in and out), the two bolts can be tightened to lock the guide block adjustment arm in the proper alignment position.

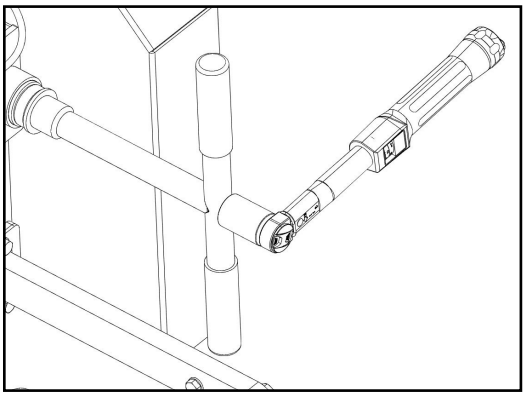


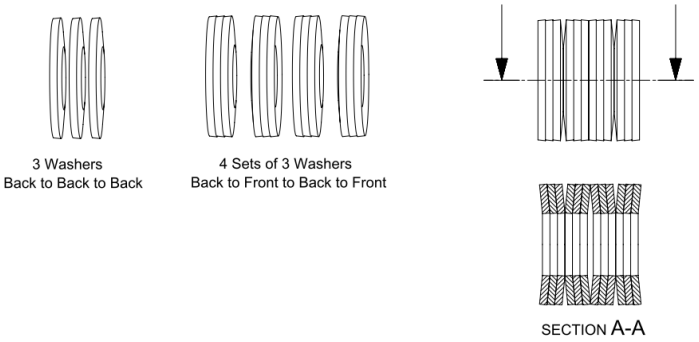



# SAWMILL MAINTENANCE

## BLADE TENSION

Proper blade tension is achieved using a torque wrench with a 24 mm socket to torque the T-handle to 25 ft•lb (34 N•m). Ensure the belleville washers are oriented and installed as shown in the picture below.

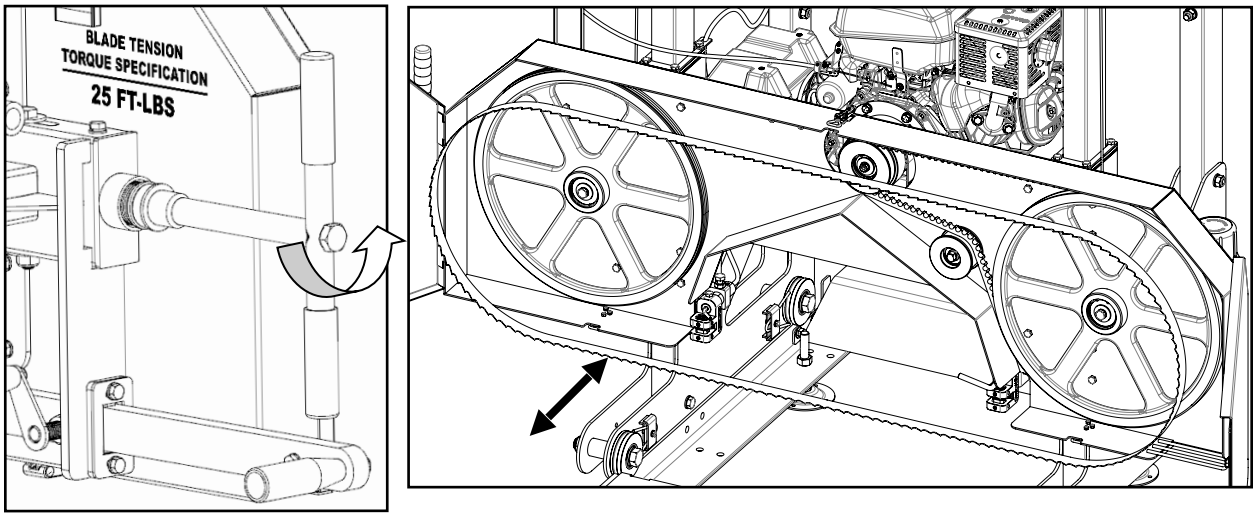





## CHANGING THE BLADE

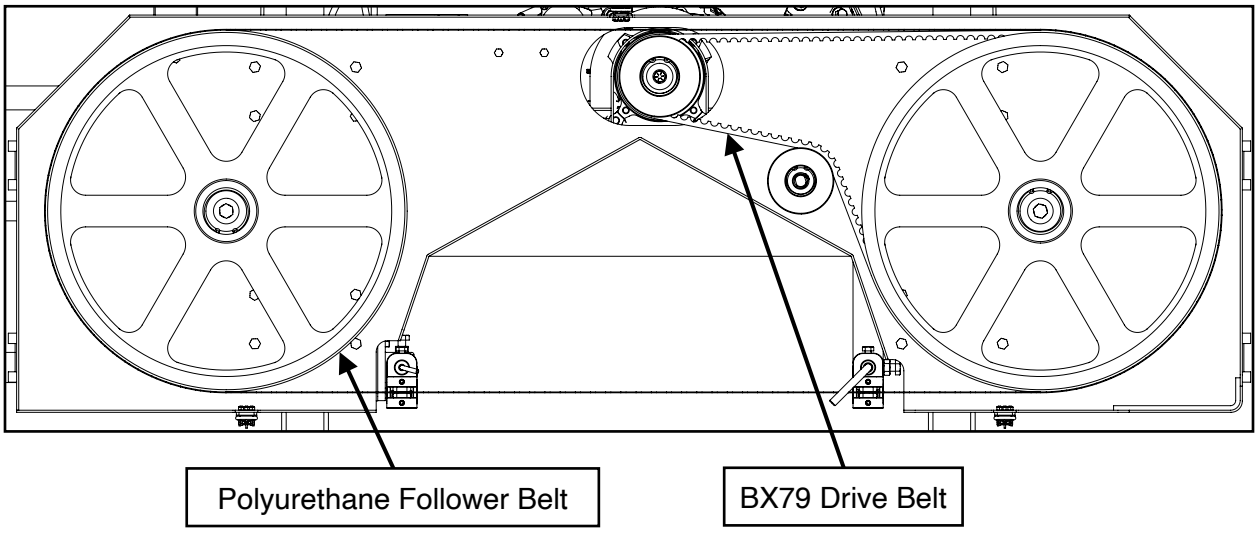
Never attempt to change the blade with the engine running. As a safety precaution, remove the spark plug cap. Gloves and safety glasses must be worn when changing the blade.

Remove the tension in the blade by turning the T-handle in the counter-clockwise direction and then open the blade guard cover. The blade should now be loose and free to pull straight out the front. The new blade can now be installed, guards closed and proper blade tension set.

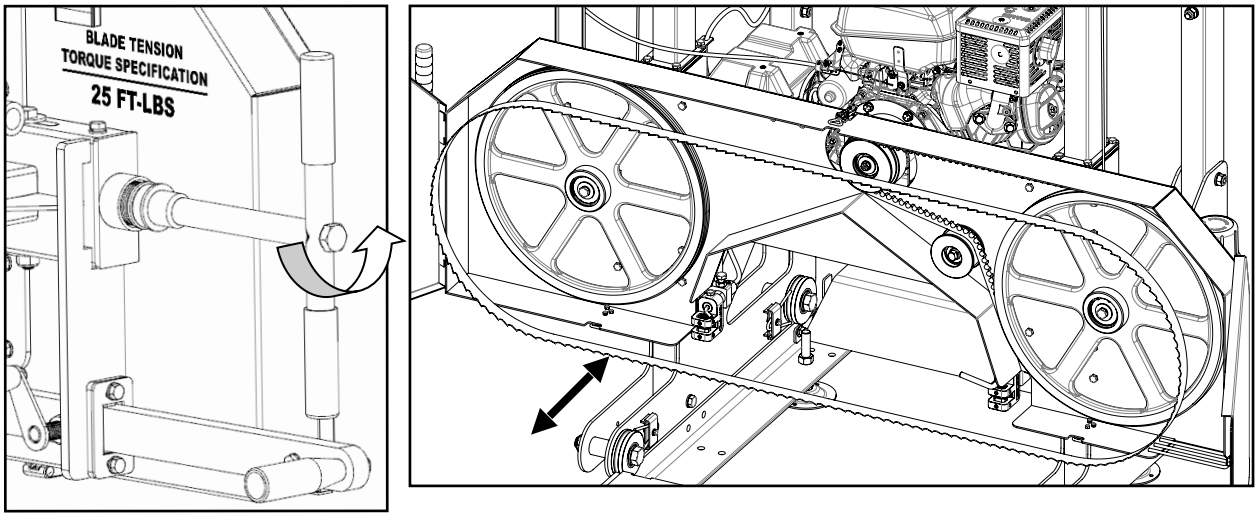


# REPLACING BELTS

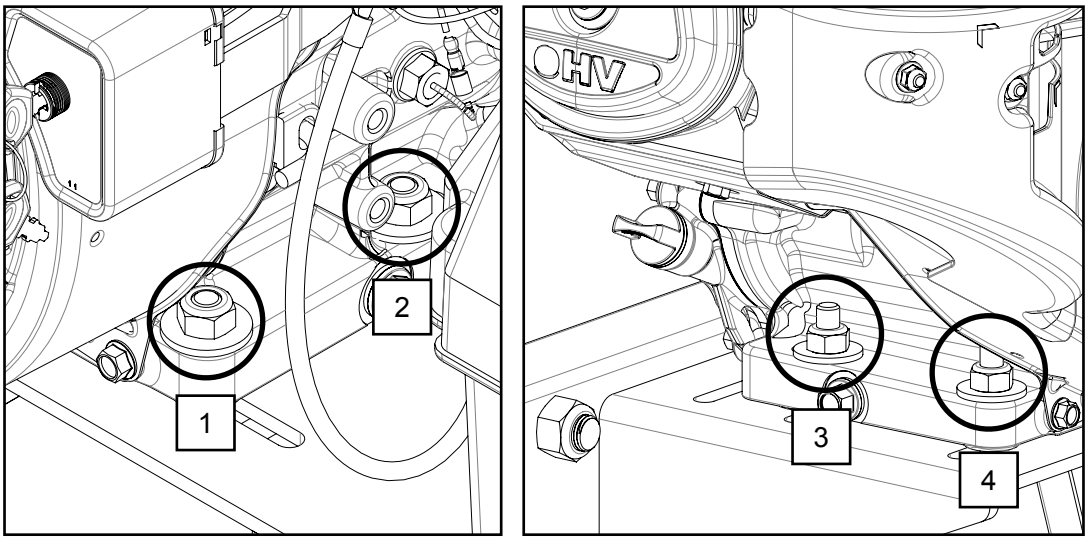
Never attempt to replace the belts with the engine running. As a safety precaution, remove the spark plug cap. Gloves and safety glasses must be worn when replacing the belts. There are two V-belts on the sawmill. It is recommended to to use a BX79 cogged belt for the drive side and a Woodland Mills polyurethane follower belt.

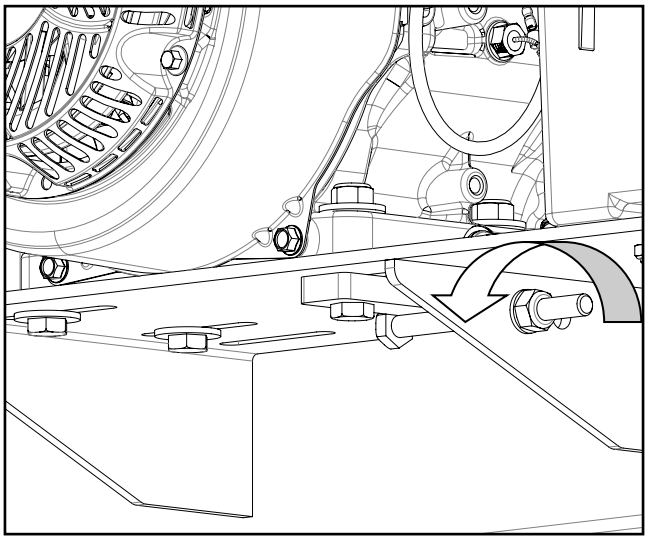



Remove the tension in the blade by turning the T-handle in the counter-clockwise direction and then open the blade guard cover. The blade should now be loose and free to pull straight out the front.



To change the drive side belt, loosen the four bolts that secure the engine to the engine mount using wrenches.



Now that the engine is free to slide on the engine mounting plate, turn the nut on the horizontal stud in the counter-clockwise direction. This will allow the engine to move and also take the tension off of the belt. The old belt can now be removed and the new belt installed. Tension the new belt and refer to the ***BELT TENSION*** instructions described in the ***SAWMILL SET-UP PROCEDURES*** section of the manual.

The follower belt is changed by prying it off and installing the new one with the aid of slotted screw drivers. The blade can now be re-installed, guards closed, and proper blade tension set.

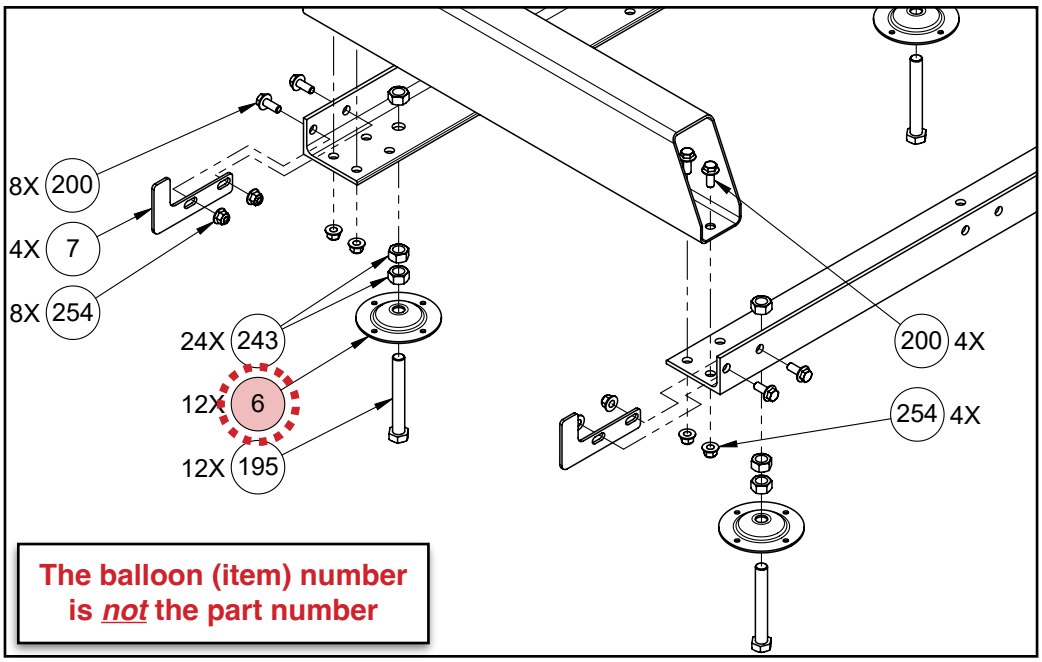
****Note that blade tracking is likely to change and need adjusting when new belts are installed. Refer to *BLADE TRACKING* for more information.****

# TROUBLESHOOTING

| Problem/Issue | Possible Causes | Resolution Options |
|---|---|---|
| Producing wavy cuts | 1. Inadequate blade tension.<br>2. Improper blade guide set up.<br>3. Improper blade tracking.<br>4. Sap build up on blade.<br>5. Dull blade.<br>6. Pushing mill too quickly. | 1. Tighten blade. Refer to page 62.<br>2. Gap between guide blocks and blade are incorrect. Refer to page 59.<br>3. Adjust blade tracking. Refer to page 55.<br>4. Install new blade. Refer to page 62. Always use blade lubricant.<br>5. Install new blade. Refer to page 62.<br>6. Slow feed rate down and push head slower through log. |
| Last board is tapered or narrow in middle | 1. Tracks are not level. | 1. Tracks need to be checked with level and adjusted to be square. They also need to be set up on firm, sturdy base so deflection does not occur from logs or sawmill head. |
| Blade dulls quickly | 1. Logs are not clean.<br>2. Foreign objects in log. | 1. Logs may contain dirt/sand causing blades to wear prematurely.<br>2. Tree may contain nails, staples, old fencing etc. |
| Blade comes off band wheels | 1. Inadequate blade tension.<br>2. Improper blade guide set up.<br>3. Improper blade tracking.<br>4. Belts are worn.<br>5. Dull blade.<br>6. Pushing mill too quickly. | 1. Tighten blade. Refer to page 62.<br>2. Gap between guide blocks and blade are incorrect. Refer to page 59.<br>3. Adjust blade tracking. Refer to page 55.<br>4. Install new belts. Refer to page 63.<br>5. Install new blade. Refer to page 62.<br>6. Slow feed rate down and push head slower through log. |
| Blades are breaking | 1. Too many blade sharpenings.<br>2. Inadequate blade tension.<br>3. Improper blade guide set up.<br>4. Improper blade tracking.<br>5. Pushing mill too quickly. | 1. Replace blade. Refer to page 62.<br>2. Binding between guide blocks when blade is too loose. Tighten blade. Refer to page 62.<br>3. Gap between guide blocks and blade are incorrect. Refer to page 59.<br>4. Adjust blade tracking. Refer to page 55.<br>5. Slow feed rate down and push head slower through log. |
| Blade is slowing down or stopping when milling | 1. Inadequate blade tension.<br>2. Improper drive belt tension.<br>3. Pushing mill too quickly. | 1. Tighten blade. Refer to page 62.<br>2. Belts are worn or too loose. Replace. Refer to page 63.<br>3. Slow feed rate down and push head slower through log. |
| Mill is not cutting or cutting very slowly | 1. Dull blade.<br>2. Blade is on backwards. | 1. Install new blade. Refer to page 62.<br>2. Remove blade and flip it inside out. The teeth should be facing in the direction of the log supports. |
| Mill is vibrating excessively | 1. Log is not clamped securely.<br>2. Belts are deformed.<br>3. Band wheel bearing issue.<br>4. Pushing mill too quickly.<br>5. Loose bolts. | 1. Ensure log is clamped firmly resting on log bunks and against log supports.<br>2. Belts may have flats in them from leaving blade tension tight when not in use. Replace them. Refer to page 63.<br>3. Inspect and replace the band wheel bearings if worn.<br>4. Slow feed rate down when milling.<br>5. Check all bolts to ensure they are tight. |

# REPLACEMENT PARTS ORDERING

When ordering replacement parts, first locate the balloon number(s) from the appropriate ***exploded assembly view*** as shown in the example below:




Next, turn to the ***Parts List*** section and locate the balloon number in the "**Item**" column:

## PARTS LIST

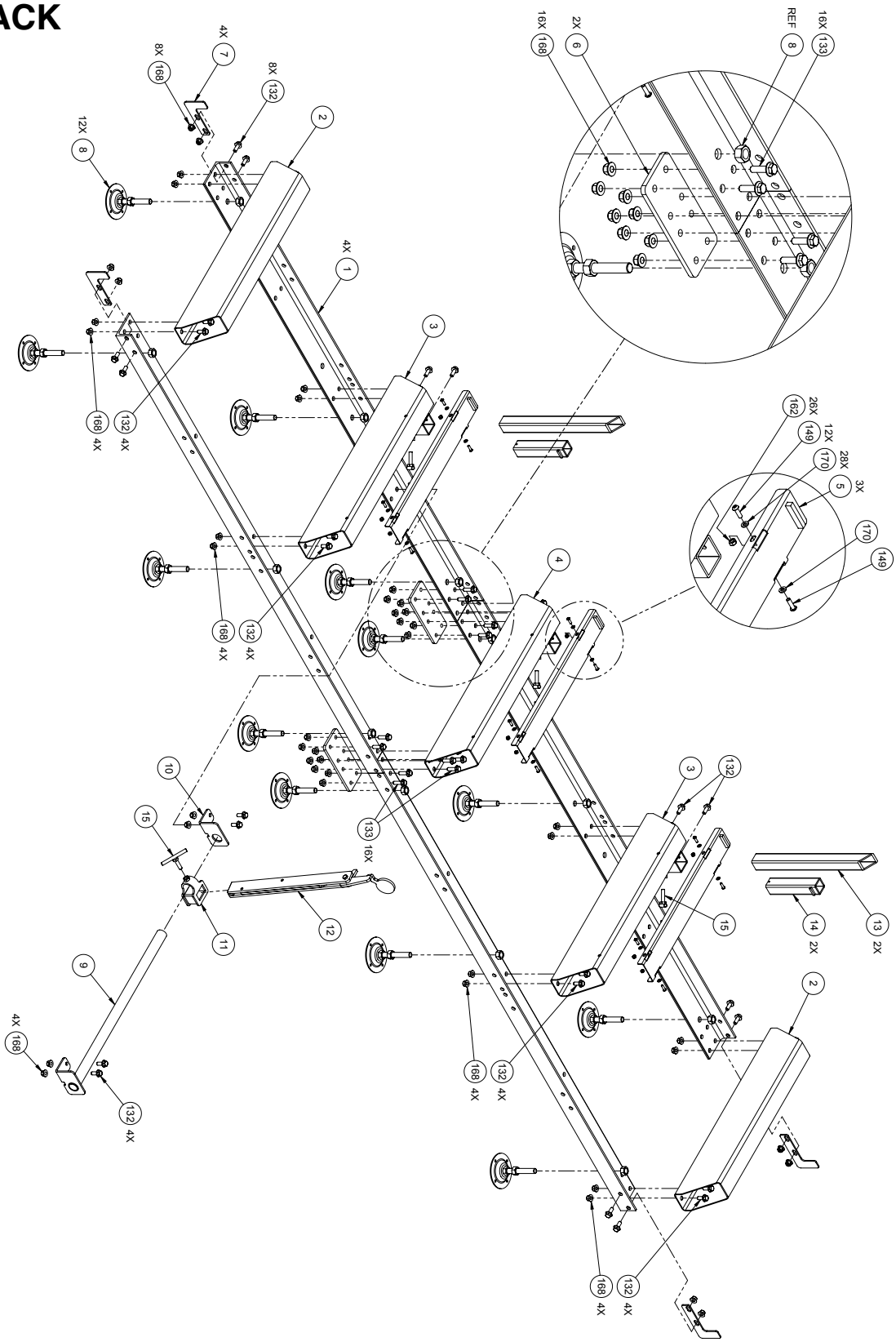
| Item | Quantity | | Part No. | Description |
|---|---|---|---|---|
| | 14 hp | 9.5 hp | | |
| 1 | 4 | 4 | 0001073 | TRACK RAIL, 58.5 mm TALL |
| 2 | 2 | 2 | 0001075 | LOG BUNK, END |
| 3 | 2 | 2 | 0001080 | LOG BUNK, MID |
| 4 | 1 | 1 | 0001084 | LOG BUNK, CENTER |
| 5 | 2 | 2 | 0001072 | REINFORCEMENT PLATE, 90 X 200 mm |
| 6 | 12 | 12 | 0001071 | LEVELLING FOOT BASE |
| 7 | 4 | 4 | 0001055 | CARRIAGE STOP |
| 8 | 1 | 1 | 0001062 | LOG CLAMP SHAFT AND BRACKET WELDMENT |

Record the part number (e.g. *0001071, HHB-MBM080FCJ, etc.*) in the "**Part No.**" column.

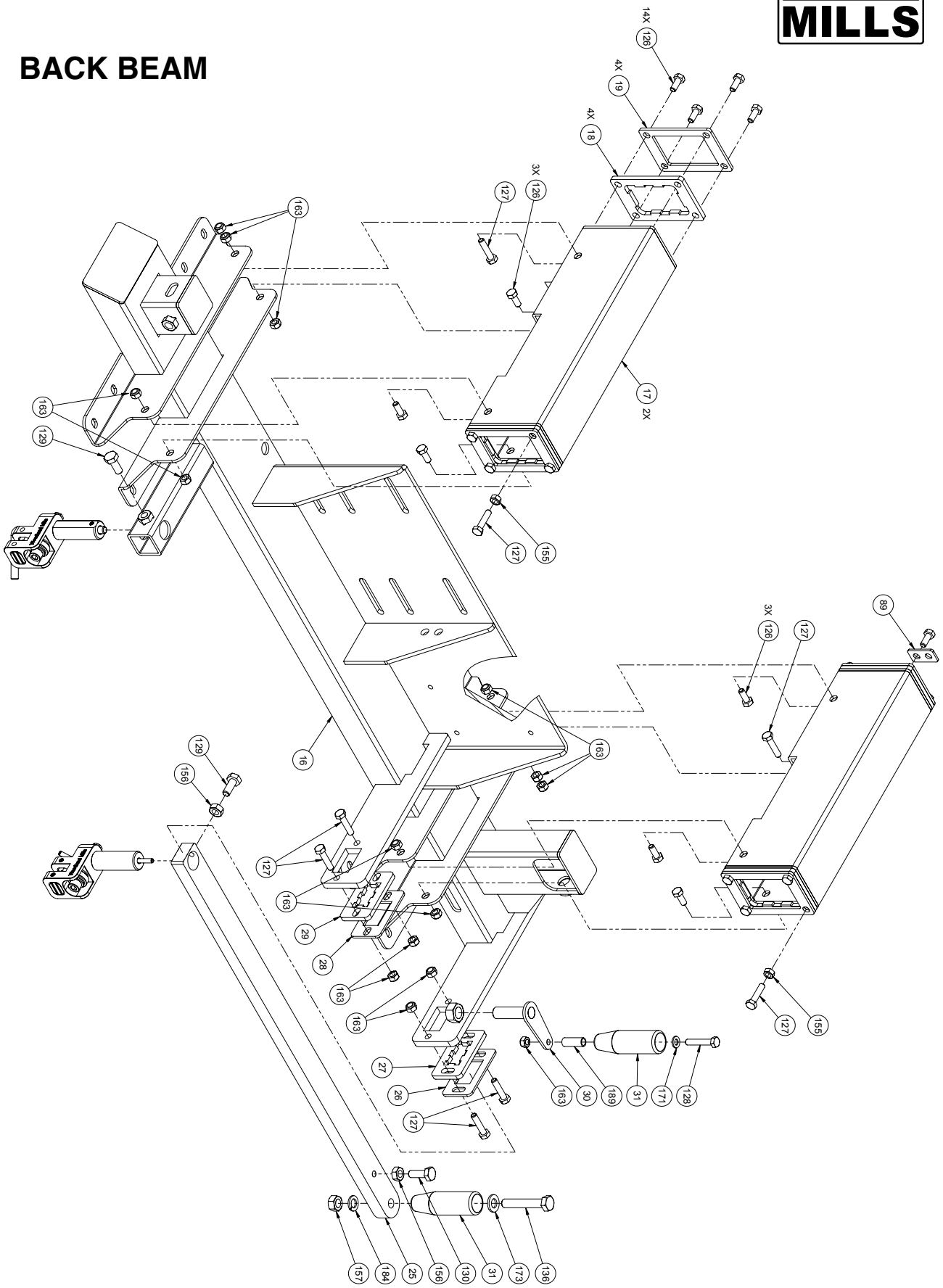
Contact Woodland Mills through the website (or via phone/email) and provide the list of part numbers, including quantities for each item.

# EXPLODED ASSEMBLY VIEWS

## TRACK



# BACK BEAM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4X
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3X
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17
2X
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155
89
3X
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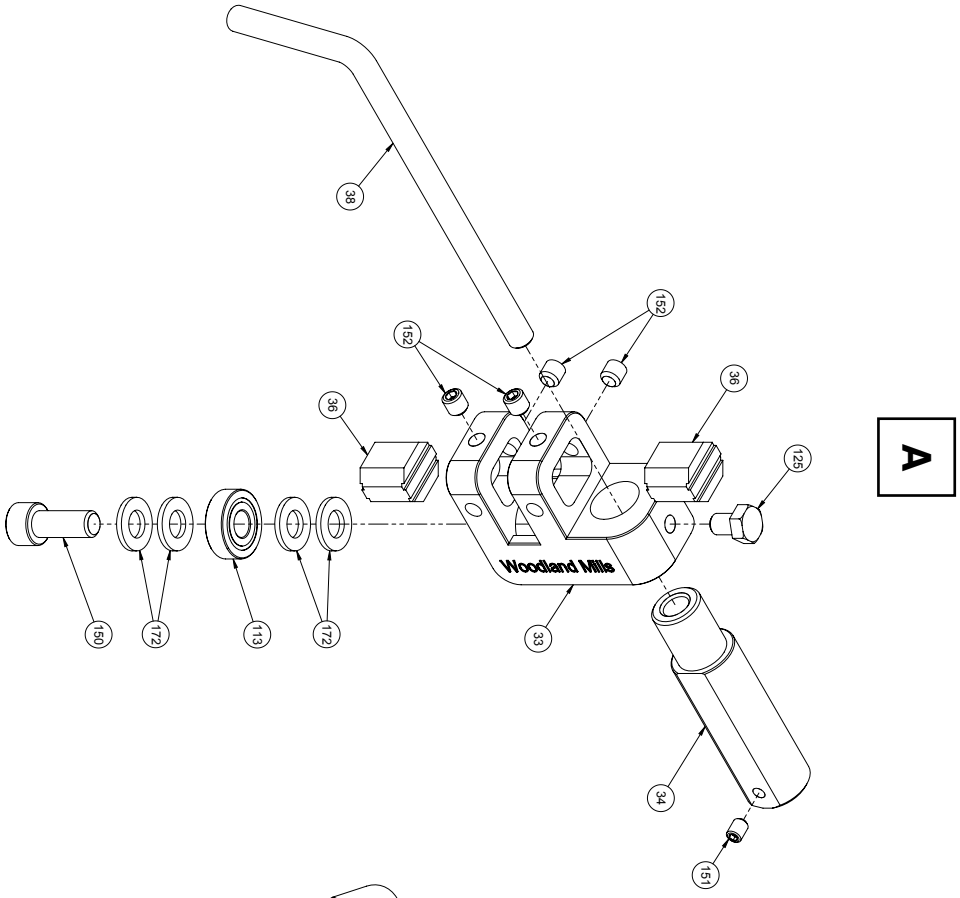
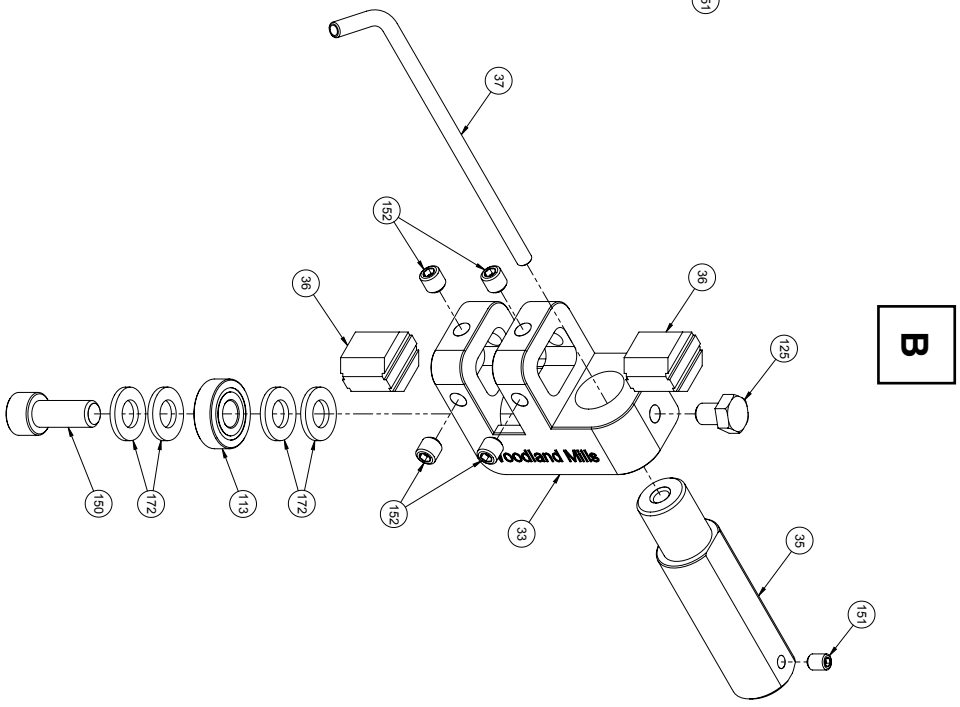
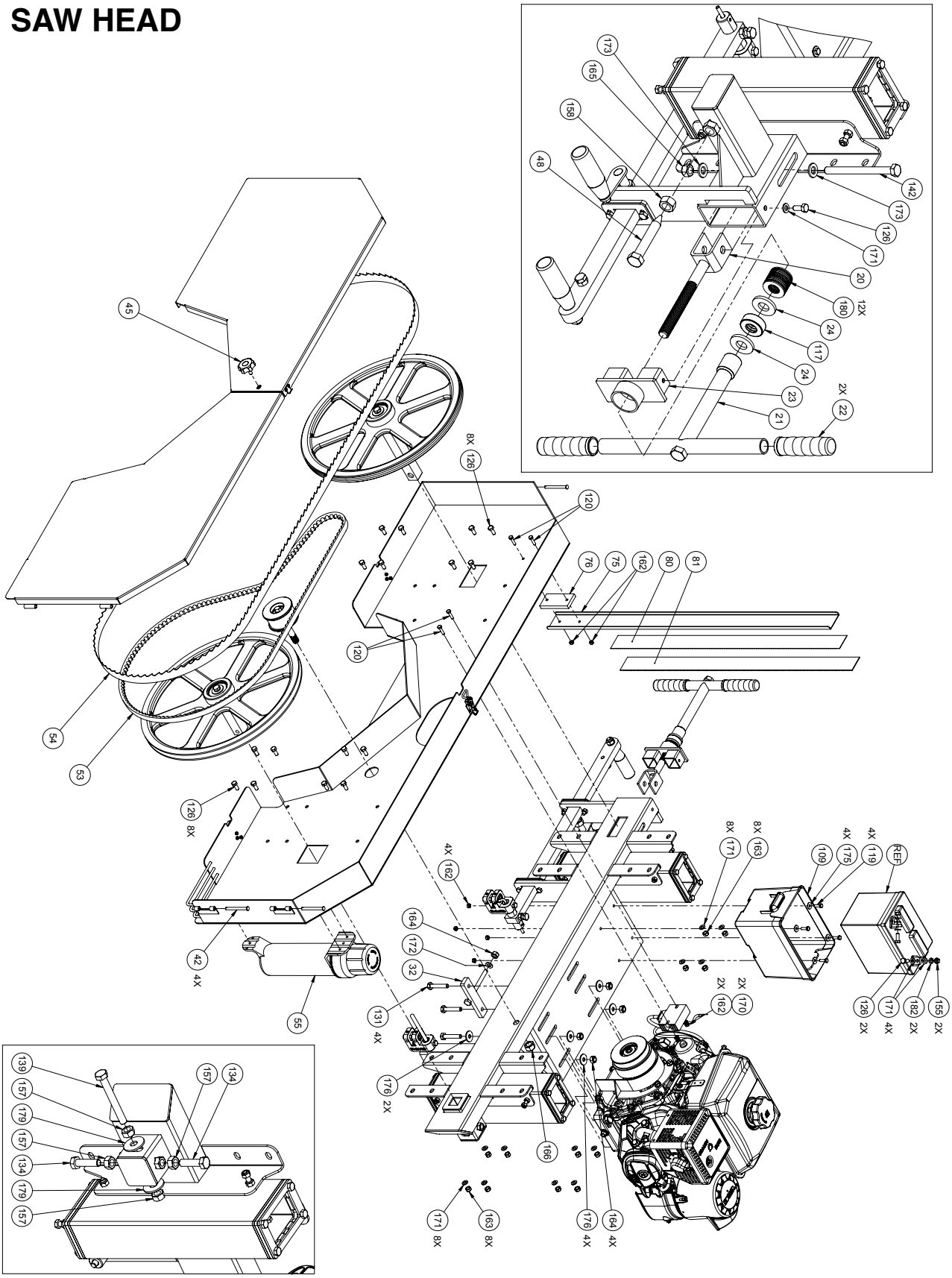
128
157
184
25
130
173
136

# GUIDE BLOCKS A & B



# SAW HEAD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2X
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8X
126
120
120
76
75
162
80
81
54
53
126
8X
4X
162
8X
171
8X
163
4X
175
4X
119
109
REF
164
172
32
42
4X
55
131
4X
2X
162
2X
170
126
2X
171
4X
182
2X
155
2X
176
2X
166
171
8X
163
8X
176
4X
164
4X
139
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179
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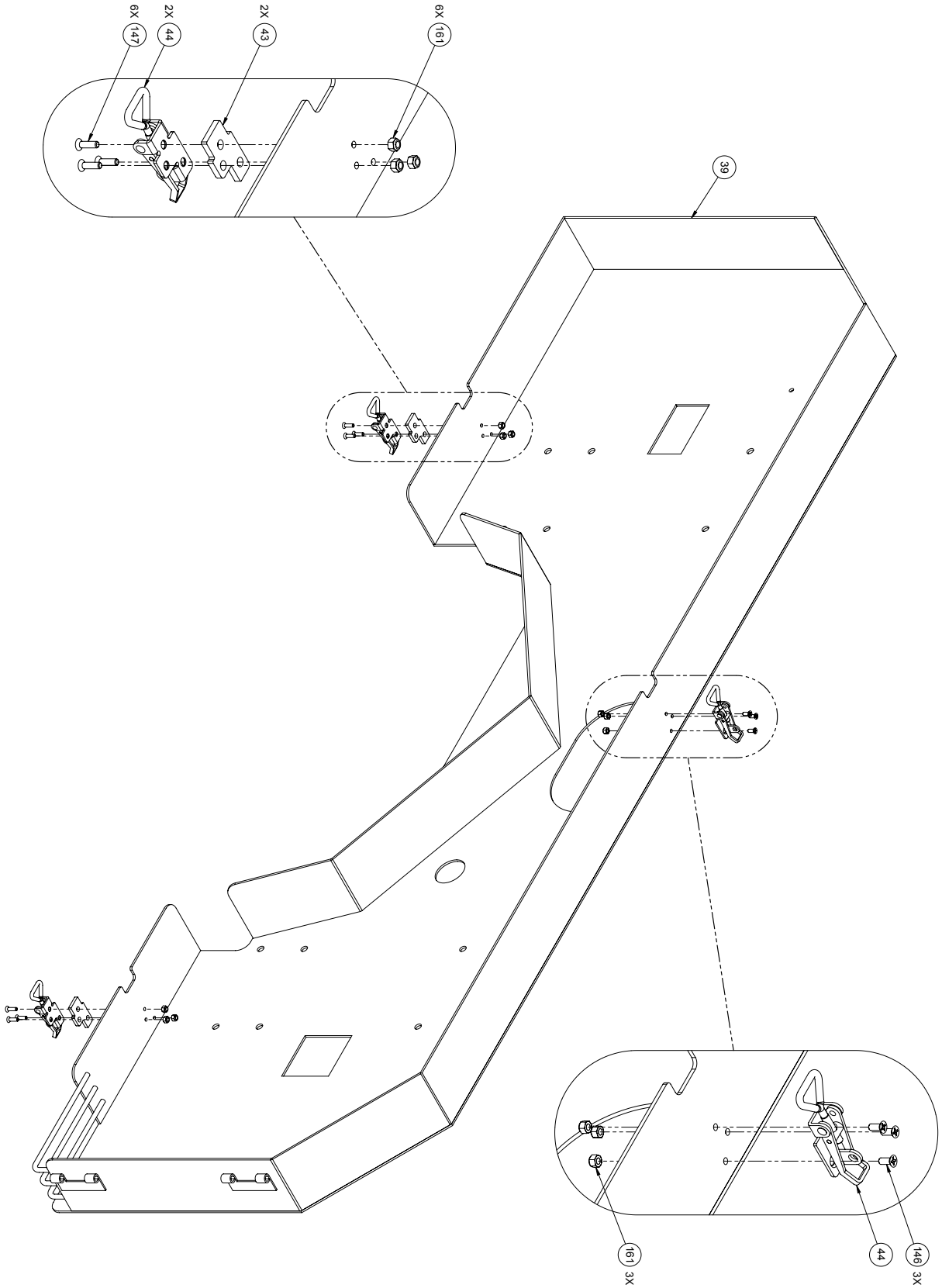
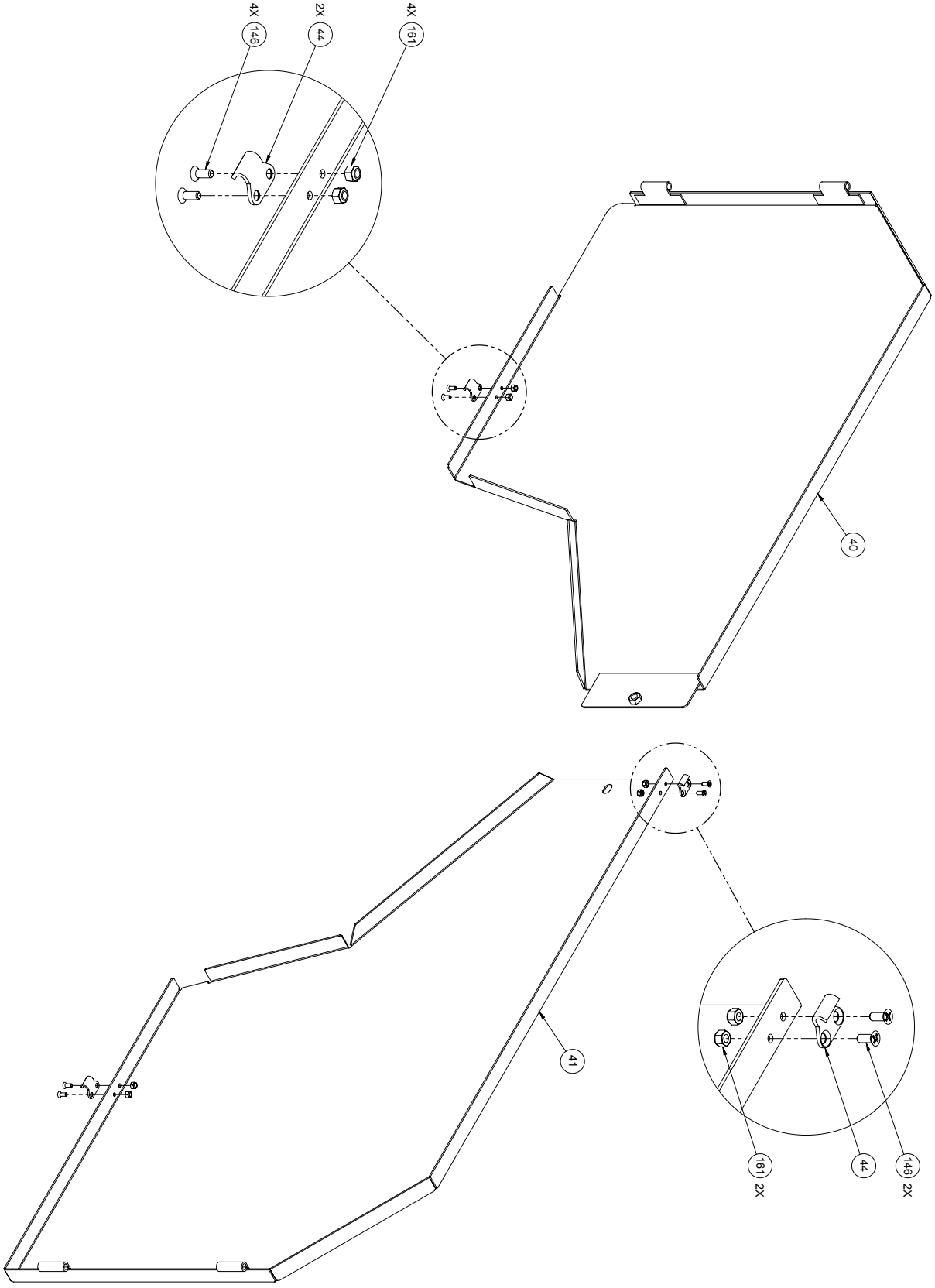
157
134

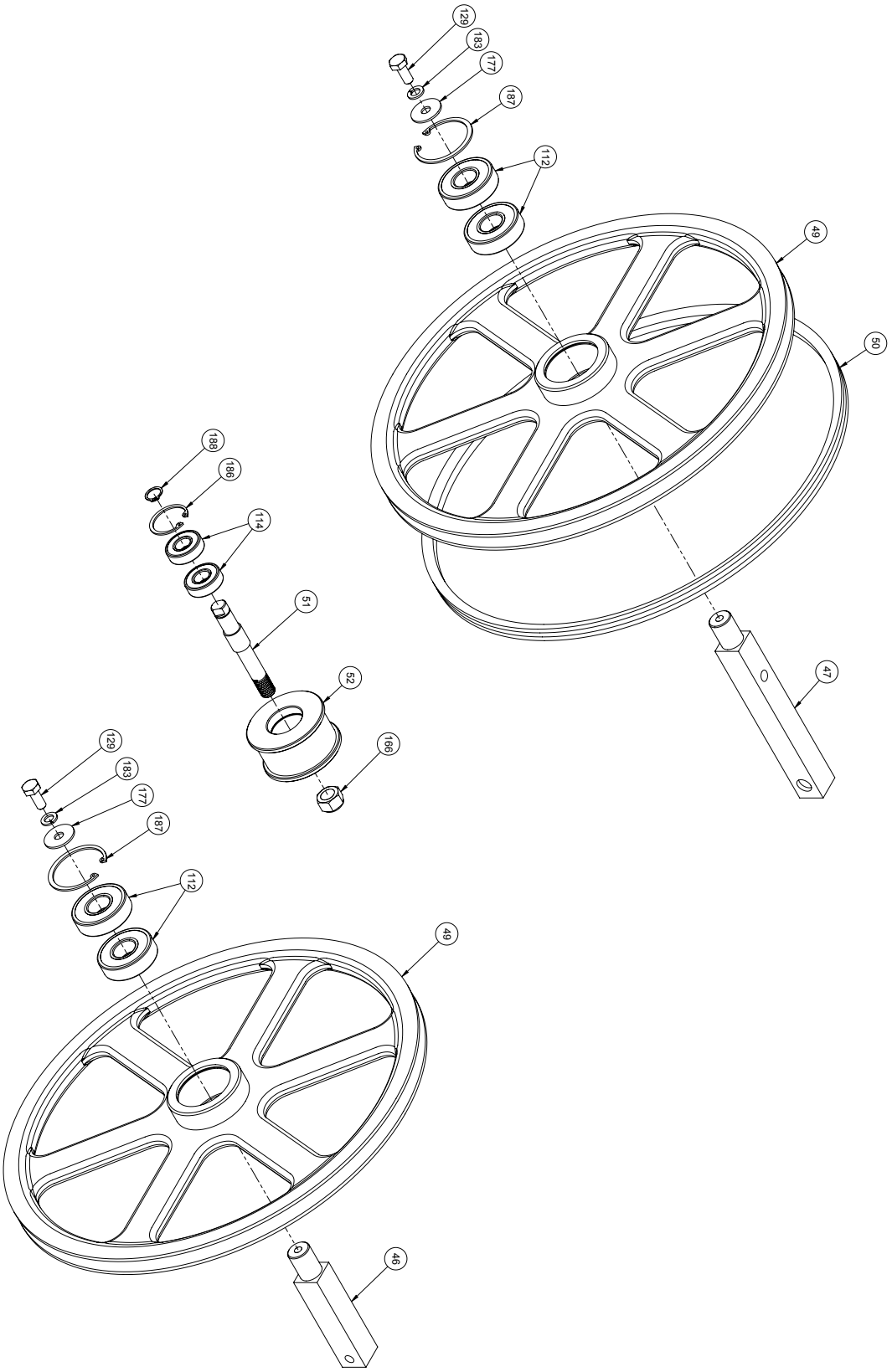
# BAND WHEEL HOUSING



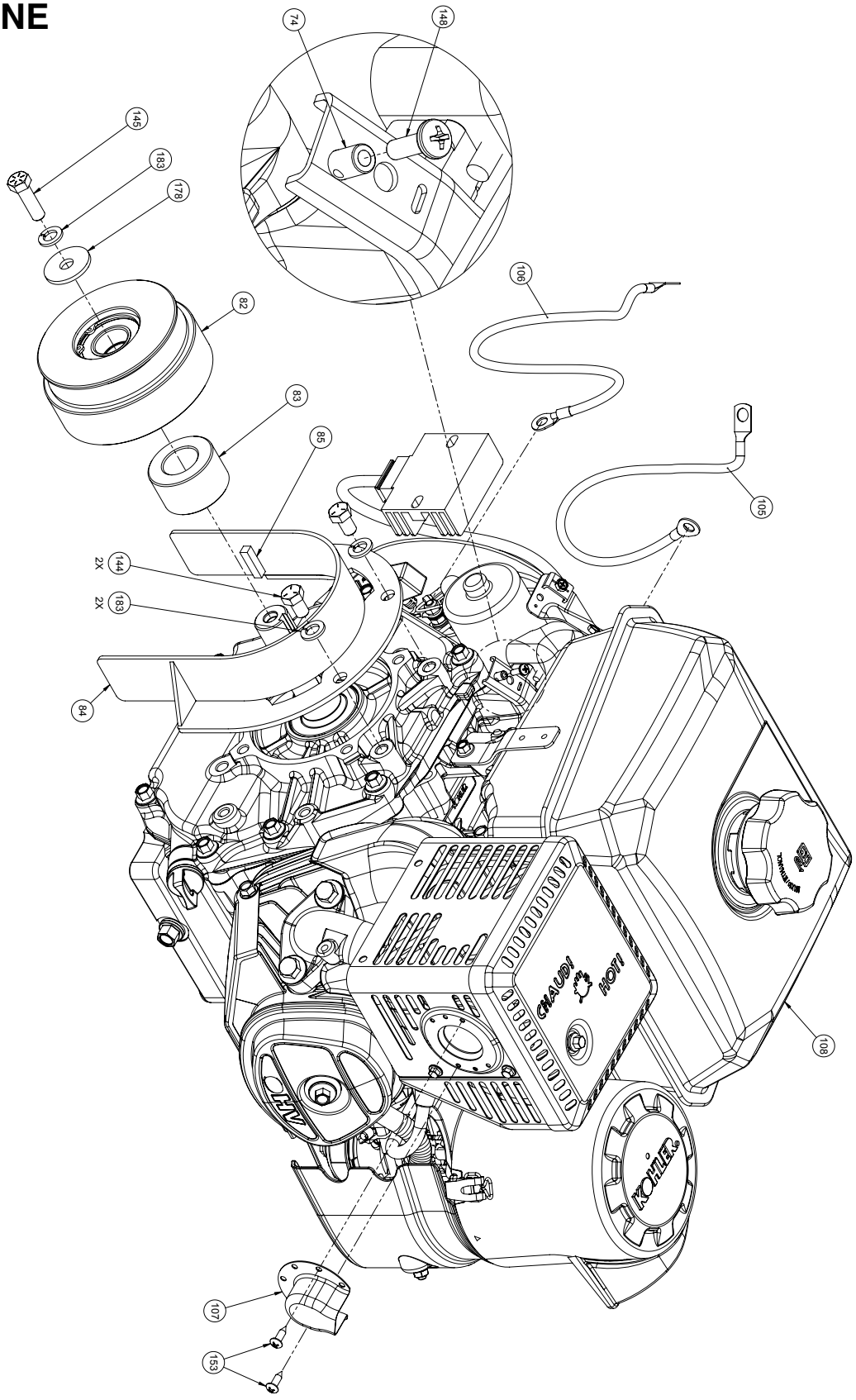
# BAND WHEEL HOUSING DOORS



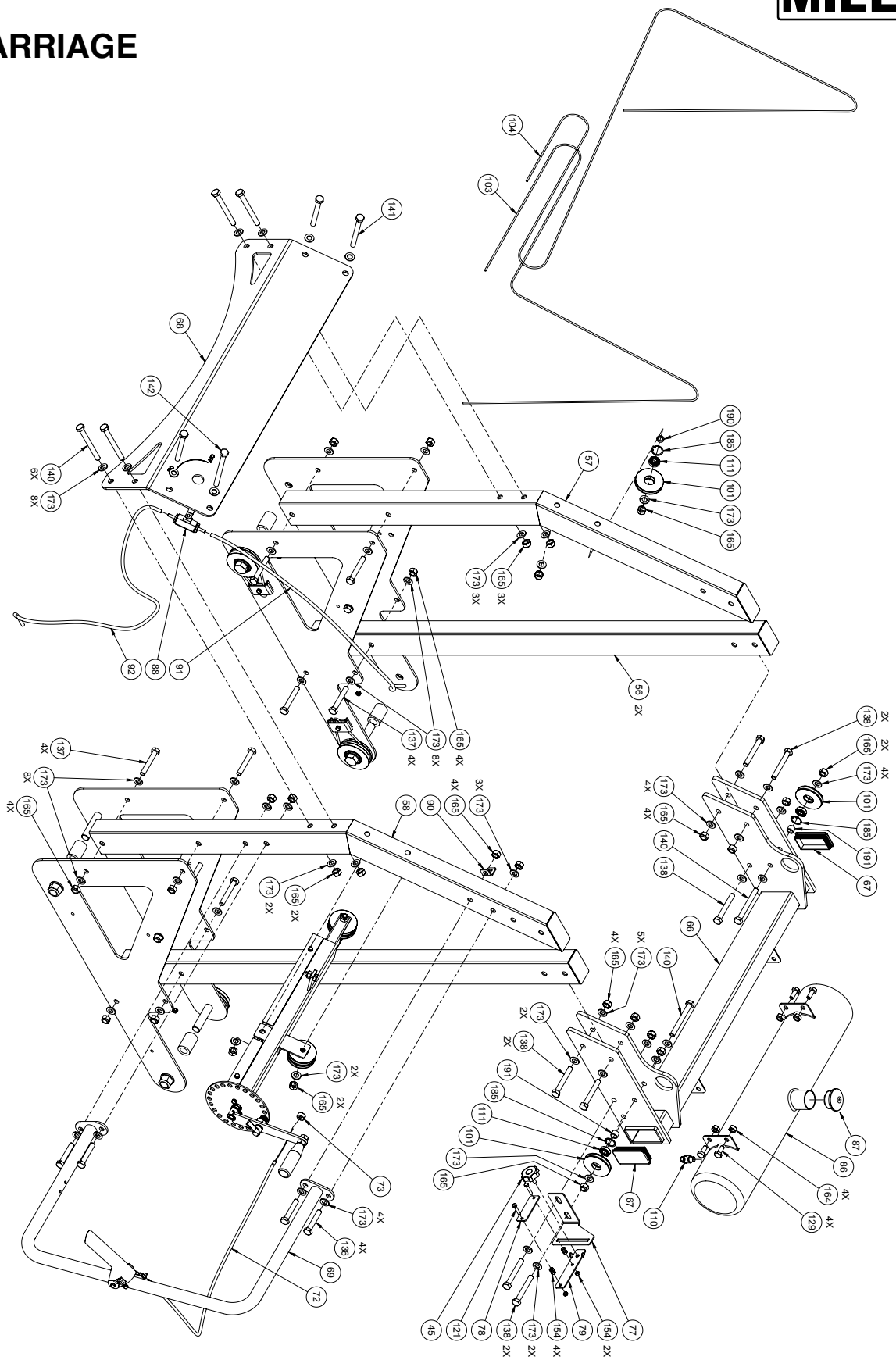
# BAND WHEELS AND IDLER



# ENGINE



# CARRIAGE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56 2X
137 4X
173 8X
165 4X
137 4X
173 8X
165 4X
58
90
165 4X
173 3X
173 2X
165 2X
138 2X
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101
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67
173 4X
165 4X
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66
165 4X
173 5X
140
173 2X
138 2X
191
185
111
101
173
165
67
110
87
86
164 4X
129 4X
173 2X
165 2X
73
173 4X
136 4X
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72
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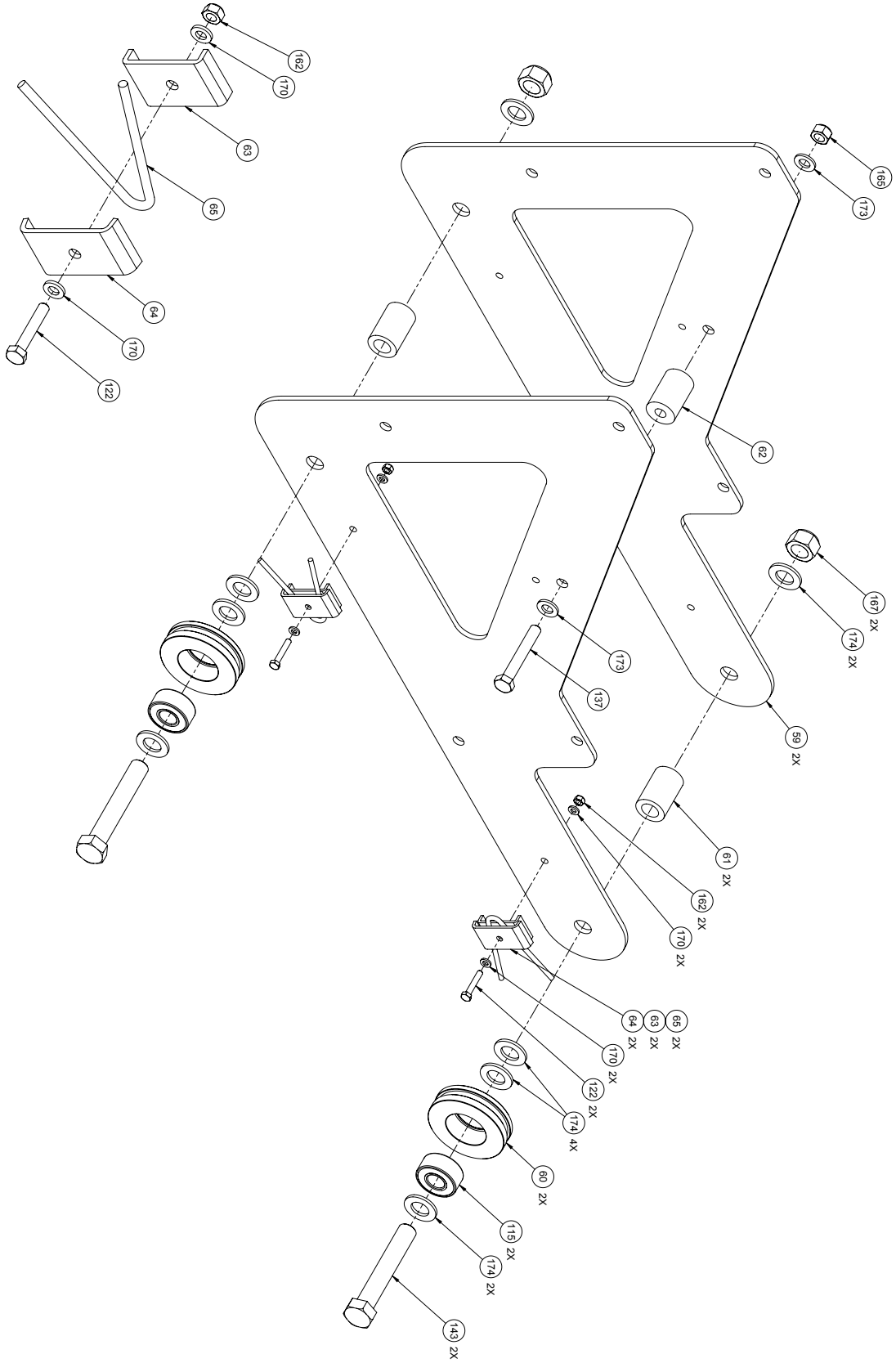
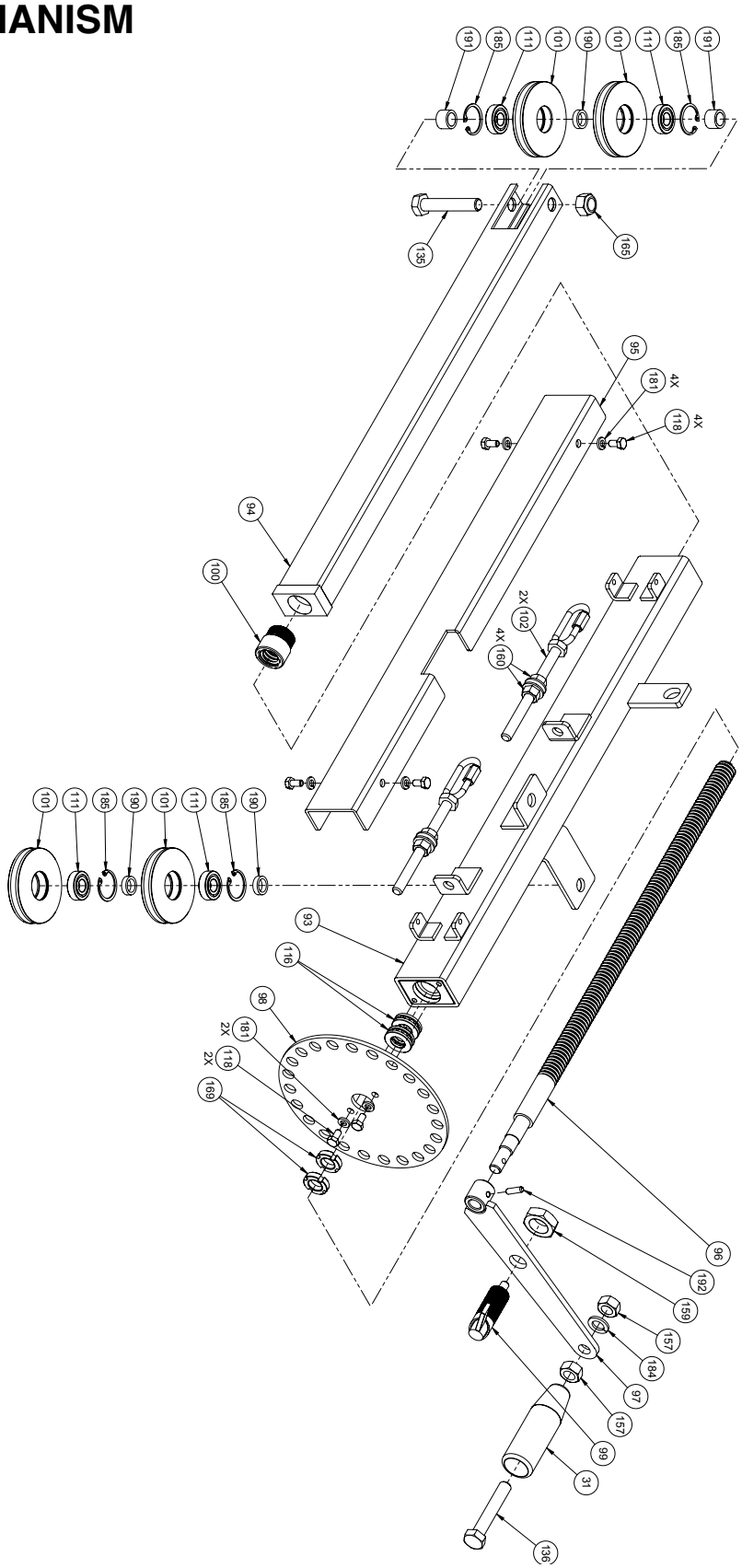
121
78
138 2X
173 2X
154 4X
79
154 2X
77

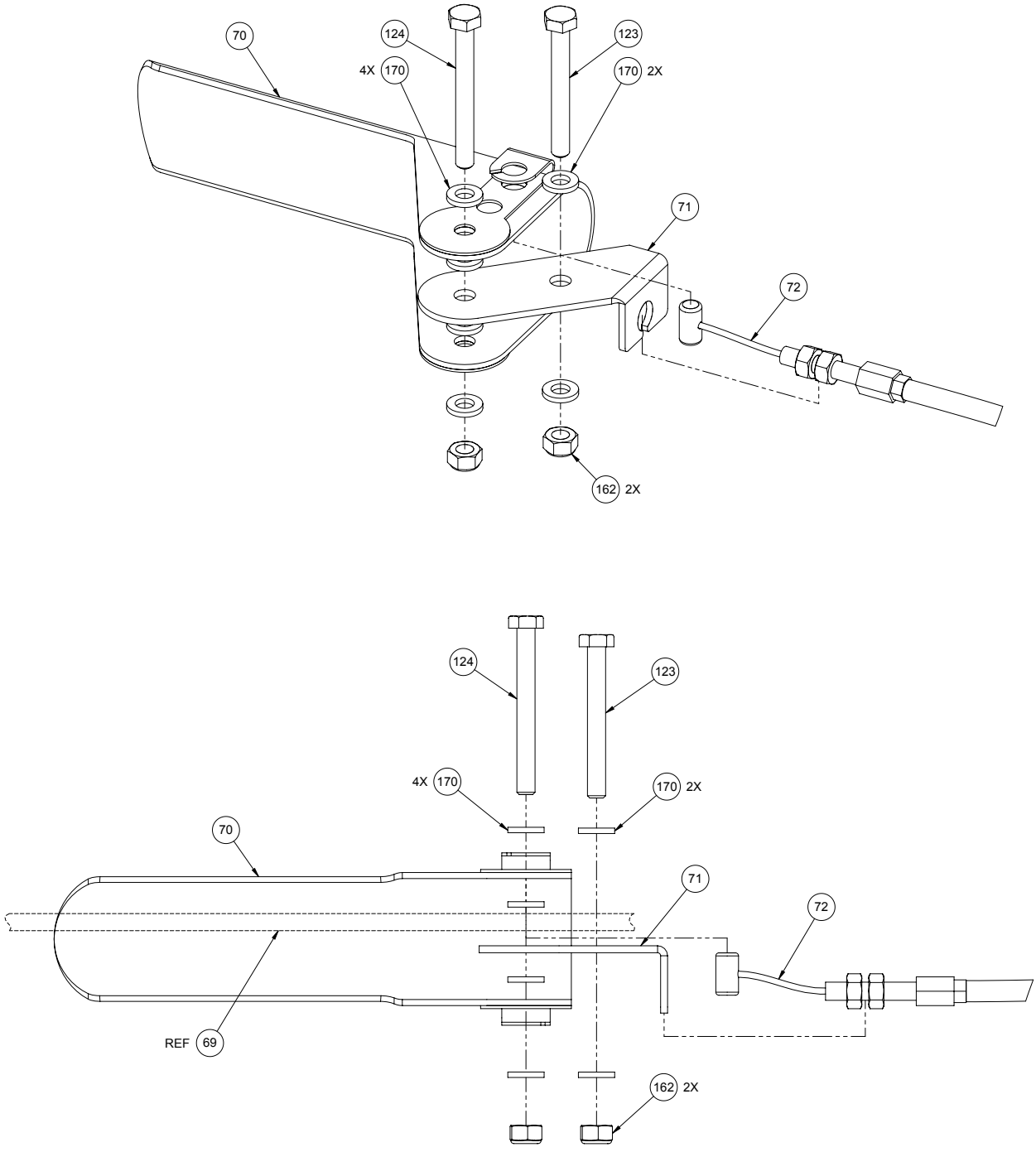
# CARRIAGE LEG, WHEEL, AND SWEEPER



# LIFT MECHANISM



# THROTTLE HANDLE



# PARTS LIST

| Item | Qty | Part No. | Description |
|---|---|---|---|
| 1 | 4 | 0001073 | TRACK RAIL |
| 2 | 2 | 0001075 | LOG BUNK, END |
| 3 | 2 | 0001080 | LOG BUNK, MID |
| 4 | 1 | 0001084 | LOG BUNK, CENTER |
| 5 | 3 | 0001213 | LOG BUNK CAP |
| 6 | 2 | 0001072 | REINFORCEMENT PLATE |
| 7 | 4 | 0001055 | CARRIAGE STOP |
| 8 | 12 | 0001070 | LEVELLING FOOT |
| 9 | 1 | 0001062 | LOG CLAMP SHAFT AND BRACKET WELDMENT |
| 10 | 1 | 0001069 | LOG CLAMP SHAFT BRACKET |
| 11 | 1 | 0001061 | LOG CLAMP RECEIVER |
| 12 | 1 | 0001211 | LOG CLAMP |
| 13 | 2 | 0001056 | LOG SUPPORT, LONG |
| 14 | 2 | 0001465 | LOG SUPPORT, SHORT |
| 15 | 4 | 0001059 | T-HANDLE |
| 16 | 1 | 0001642 | BACK BEAM |
| 17 | 2 | 0001645 | POST SLEEVE |
| 18 | 4 | 0001411 | POST SLEEVE NYLON BUSHING |
| 19 | 4 | 0001410 | POST SLEEVE LOCKING PLATE |
| 20 | 1 | 0001025 | TENSION BAR |
| 21 | 1 | 0001029 | TENSION HANDLE |
| 22 | 2 | 0001030 | TENSION HANDLE GRIP |
| 23 | 1 | 0001034 | SPRING WASHER HOLDER |
| 24 | 2 | 0001046 | FLAT WASHER, CUSTOM, 42 OD X 20 ID X 5 mm THK |
| 25 | 1 | 0001425 | BLADE GUIDE ADJUSTMENT ARM |
| 26 | 1 | 0001427 | BLADE GUIDE ADJUSTMENT ARM LOCKING PLATE, HORIZONTAL |
| 27 | 1 | 0001428 | BLADE GUIDE ADJUSTMENT ARM NYLON BUSHING, HORIZONTAL |
| 28 | 1 | 0001437 | BLADE GUIDE ADJUSTMENT ARM LOCKING PLATE, VERTICAL |
| 29 | 1 | 0001438 | BLADE GUIDE ADJUSTMENT ARM NYLON BUSHING, VERTICAL |
| 30 | 1 | 0001426 | BLADE GUIDE ADJUSTMENT ARM LOCKING HANDLE |
| 31 | 3 | 0001085 | PLASTIC HANDLE |
| 32 | 1 | 0001218 | ENGINE TENSION PLATE |
| 33 | 2 | 0001093 | GUIDE BLOCK HOLDER |
| 34 | 1 | 0001096 | GUIDE BLOCK HOLDER SHAFT A |
| 35 | 1 | 0001091 | GUIDE BLOCK HOLDER SHAFT B |
| 36 | 4 | 0001090 | GUIDE BLOCK |
| 37 | 1 | 0001092 | DRIP NOZZLE |
| 38 | 1 | 0001095 | SAW BLADE STOPPER |
| 39 | 1 | 0001635 | BAND WHEEL HOUSING ASSEMBLY |
| 40 | 1 | 0001637 | BAND WHEEL DOOR ASSEMBLY, LEFT |
| 41 | 1 | 0001639 | BAND WHEEL DOOR ASSEMBLY, RIGHT |
| 42 | 4 | 0001097 | HINGE PIN |
| 43 | 2 | 0001001 | DOOR LATCH SPACER |
| 44 | 3 | 0001656 | ADJUSTABLE DRAW LATCH, PADLOCKABLE |
| 45 | 2 | 0001659 | KNOB, MULTI-LOBE, 48 mm OD, M8 X 1.25, 17 mm LG |
| 46 | 1 | 0001104 | DRIVE SHAFT |
| 47 | 1 | 0001108 | FOLLOWER SHAFT |
| 48 | 1 | 0001782 | BLADE TRACKING ADJUSTMENT BOLT, M16 X 2, 100 mm LG, TAPERED |

| Item | Qty | Part No. | Description |
|---|---|---|---|
| 49 | 2 | 0001105 | BAND WHEEL, 19 in |
| 50 | 1 | 0001107 | BELT, FOLLOWER |
| 51 | 1 | 0001045 | IDLER PULLEY SHAFT |
| 52 | 1 | 0001047 | IDLER PULLEY |
| 53 | 1 | 0001431 | V-BELT, COGGED, BX79 |
| 54 | 1 | 0001123 | SAW BLADE, 1-1/4 WD X 144 LG X .042 in THK |
| 55 | 1 | 0001655 | MANUAL TUBE |
| 56 | 2 | 0001416 | FRONT POST |
| 57 | 1 | 0001414 | BACK POST, LEFT |
| 58 | 1 | 0001415 | BACK POST, RIGHT |
| 59 | 4 | 0001417 | CARRIAGE SIDE PLATE |
| 60 | 4 | 0001037 | CARRIAGE WHEEL |
| 61 | 4 | 0001101 | SPACER, 33.5 OD X 20 ID X 50 mm LG |
| 62 | 2 | 0001113 | SPACER, 33.5 OD X 13 ID X 50 mm LG |
| 63 | 4 | 0001019 | WHEEL SWEEP BRACKET |
| 64 | 4 | 0001017 | WHEEL SWEEP HOLDER |
| 65 | 4 | 0001018 | WHEEL SWEEPER |
| 66 | 1 | 0001643 | CROSS BEAM |
| 67 | 2 | 0001661 | PLASTIC END CAP, RECT, 100 X 50 mm |
| 68 | 1 | 0001644 | DASHBOARD |
| 69 | 1 | 0001420 | PUSH HANDLE |
| 70 | 1 | 0001021 | THROTTLE HANDLE |
| 71 | 1 | 0001024 | THROTTLE CABLE BRACKET |
| 72 | 1 | 0001646 | THROTTLE CABLE |
| 73 | 1 | 0001111 | THROTTLE CABLE STOP |
| 74 | 1 | 0001112 | THROTTLE CABLE BARREL END CLAMP |
| 75 | 1 | 0001429 | SCALE BRACKET |
| 76 | 1 | 0001038 | SCALE BRACKET SPACER PLATE |
| 77 | 1 | 0001042 | INDICATOR BRACKET |
| 78 | 1 | 0001041 | SCALE INDICATOR |
| 79 | 1 | 0001044 | SCALE BRACKET |
| 80 | 1 | 0001215 | MAGNETIC SCALE, 30 in, YELLOW |
| 81 | 1 | 0001836 | MAGNETIC SCALE, 30 in, WHITE |
| 82 | 1 | 0001824 | CLUTCH ASSEMBLY, 1 in [25.4 mm] BORE, 108 mm DIA PULLEY |
| 83 | 1 | 0001217 | CLUTCH SPACER |
| 84 | 1 | 0001814 | CLUTCH HOUSING GUARD W/ SIDE FLANGES |
| 85 | 1 | 0001137 | PARALLEL KEY, 1/4 X 1/4 X 1 in LG |
| 86 | 1 | 0001430 | LUBRICANT TANK, 13 L [3.4 gal] |
| 87 | 1 | 0001132 | TANK CAP |
| 88 | 1 | 0001658 | VALVE, ON/OFF, M20 X M20, 6 mm TUBE FTG |
| 89 | 1 | 0001020 | WATER TUBE BRACKET, FLAT |
| 90 | 1 | 0001433 | WATER TUBE BRACKET, BENT |
| 91 | 1 | 0001222 | LUBRICANT LINE, VALVE-TO-TANK |
| 92 | 1 | 0001647 | LUBRICANT LINE, VALVE-TO-BLADE |
| 93 | 1 | 0001421 | LIFT MECHANISM HOUSING |
| 94 | 1 | 0001422 | LIFT MECHANISM EXTENSION ARM |
| 95 | 1 | 0001423 | LIFT MECHANISM COVER |
| 96 | 1 | 0001424 | LIFT MECHANISM THREADED SHAFT |
| 97 | 1 | 0001086 | CRANK HANDLE ARM |
| 98 | 1 | 0001039 | CRANK HANDLE INDEX PLATE |
| 99 | 1 | 0001657 | INDEX PLUNGER, M20 X 1.5 |

| Item | Qty | Part No. | Description |
|---|---|---|---|
| 100 | 1 | 0001048 | BRASS NUT, TR20X4 |
| 101 | 7 | 0001099 | CABLE PULLEY |
| 102 | 2 | 0001100 | CABLE HOOK |
| 103 | 1 | 0001648 | LIFT CABLE A, 4 mm DIA |
| 104 | 1 | 0001649 | LIFT CABLE B, 4 mm DIA |
| 105 | 1 | 0001650 | BATTERY CABLE, NEGATIVE (BLACK), 6 AWG |
| 106 | 1 | 0001651 | BATTERY CABLE, POSITIVE (RED), 6 AWG |
| 107 | 1 | 0001136 | EXHAUST REDIRECT |
| 108 | 1 | CH440-3031 | ENGINE, KOHLER COMMAND PRO HORIZONTAL, 14 hp, ELECTRIC START |
| 109 | 1 | 730-34 | BATTERY BOX, U1 BATTERY SIZE |
| 110 | 1 | SLS-03-8 | FLOW CONTROL NEEDLE VALVE |
| 111 | 7 | 6001-2RS | BALL BEARING, SEALED, 6001-2RS, 12 mm BORE, 28 mm OD, 8 mm WD |
| 112 | 4 | 6305-2RS | BALL BEARING, SEALED, 6305-2RS, 25 mm BORE, 62 mm OD, 17 mm WD |
| 113 | 2 | 6000-2RS | BALL BEARING, DOUBLE SEALED, 6000-2RS, 10 mm BORE, 26 mm OD, 8 mm WD |
| 114 | 2 | 6203-2RS | BALL BEARING, DOUBLE SEALED, 6203-2RS, 17 mm BORE, 40 mm OD, 12 mm WD |
| 115 | 4 | 5204-2RS | BALL BEARING, ANG-CONT, SEALED, 5204-2RS, 20 mm BORE, 47 mm OD, 20.6 mm WD |
| 116 | 2 | 51102 | THRUST BEARING, SINGLE DIR, 51102, 15 mm BORE, 28 mm OD |
| 117 | 1 | 51204 | THRUST BEARING, SINGLE DIR, 51204, 20 mm BORE, 41.5 mm OD W/ HSG |
| 118 | 6 | HDW | HEX BOLT, M6 X 1, 12 mm LG |
| 119 | 4 | HDW | HEX BOLT, M6 X 1, 20 mm LG |
| 120 | 4 | HDW | HEX BOLT, M6 X 1, 25 mm LG |
| 121 | 2 | HDW | HEX BOLT, M6 X 1, 30 mm LG |
| 122 | 4 | HDW | HEX BOLT, M6 X 1, 35 mm LG |
| 123 | 1 | HDW | HEX BOLT, M6 X 1, 50 mm LG |
| 124 | 1 | HDW | HEX BOLT, M6 X 1, 55 mm LG, 18 mm LG THD |
| 125 | 2 | HDW | HEX BOLT, M8 X 1.25, 12 mm LG |
| 126 | 39 | HDW | HEX BOLT, M8 X 1.25, 20 mm LG |
| 127 | 8 | HDW | HEX BOLT, M8 X 1.25, 35 mm LG |
| 128 | 1 | HDW | HEX BOLT, M8 X 1.25, 45 mm LG |
| 129 | 9 | HDW | HEX BOLT, M10 X 1.5, 25 mm LG |
| 130 | 1 | HDW | HEX BOLT, M10 X 1.5, 30 mm LG |
| 131 | 4 | HDW | HEX BOLT, M10 X 1.5, 55 mm LG, 26 mm LG THD |
| 132 | 32 | HDW | HEX BOLT, FLANGED, M10 X 1.5, 25 mm LG |
| 133 | 8 | HDW | HEX BOLT, FLANGED, M10 X 1.5, 35 mm LG |
| 134 | 2 | HDW | HEX BOLT, M12 X 1.75, 45 mm LG |
| 135 | 1 | HDW | HEX BOLT, M12 X 1.75, 65 mm LG, 30 mm LG THD |
| 136 | 6 | HDW | HEX BOLT, M12 X 1.75, 70 mm LG, 30 mm LG THD |
| 137 | 10 | HDW | HEX BOLT, M12 X 1.75, 80 mm LG, 30 mm LG THD |
| 138 | 7 | HDW | HEX BOLT, M12 X 1.75, 90 mm LG, 30 mm LG THD |
| 139 | 1 | HDW | HEX BOLT, M12 X 1.75, 100 mm LG, 30 mm LG THD |
| 140 | 8 | HDW | HEX BOLT, M12 X 1.75, 110 mm LG |
| 141 | 1 | HDW | HEX BOLT, M12 X 1.75, 120 mm LG, 30 mm LG THD |
| 142 | 2 | HDW | HEX BOLT, M12 X 1.75, 140 mm LG, 30 mm LG THD |
| 143 | 4 | HDW | HEX BOLT, M20 X 2.5, 120 mm LG, 46 mm LG THD |
| 144 | 2 | HDW | HEX BOLT, 3/8-16, 5/8 in LG |
| 145 | 1 | HDW | HEX BOLT, 3/8-24, 1-1/4 in LG |
| 146 | 9 | HDW | SCREW, PFH, M4 X 0.7, 10 mm LG |
| 147 | 6 | HDW | SCREW, PFH, M4 X 0.7, 14 mm LG |
| 148 | 1 | HDW | SCREW, PPH, M4 X 0.7, 12 mm LG |
| 149 | 12 | HDW | BUTTON HEAD SCREW, M6 X 1, 20 mm LG |
| 150 | 2 | HDW | SHCS, M10 X 1.5, 25 mm LG |

| Item | Qty | Part No. | Description |
|---|---|---|---|
| 151 | 2 | HDW | SET SCREW, FLAT TIP, M6 X 1, 8 mm LG |
| 152 | 8 | HDW | SET SCREW, FLAT TIP, M8 X 1.25, 8 mm LG |
| 153 | 2 | HDW | SELF-TAPPING SCREW, PPH, #10, 5/8 in LG |
| 154 | 6 | HDW | HEX NUT, M6 X 1 |
| 155 | 4 | HDW | HEX NUT, M8 X 1.25 |
| 156 | 2 | HDW | HEX NUT, M10 X 1.5 |
| 157 | 7 | HDW | HEX NUT, M12 X 1.75 |
| 158 | 1 | HDW | HEX NUT, M16 X 2 |
| 159 | 1 | HDW | HEX NUT, THIN, M20 X 1.5 |
| 160 | 4 | HDW | HEX NUT, FLANGED, M10 X 1.5 |
| 161 | 15 | HDW | LOCK NUT, M4 X 0.7 |
| 162 | 26 | HDW | LOCK NUT, M6 X 1 |
| 163 | 31 | HDW | LOCK NUT, M8 X 1.25 |
| 164 | 10 | HDW | LOCK NUT, M10 X 1.5 |
| 165 | 33 | HDW | LOCK NUT, M12 X 1.75 |
| 166 | 1 | HDW | LOCK NUT, M16 X 2 |
| 167 | 4 | HDW | LOCK NUT, M20 X 2.5 |
| 168 | 44 | HDW | LOCK NUT, FLANGED, M10 X 1.5 |
| 169 | 2 | HDW | SLOTTED NUT, ROUND, M14 X 1.5 |
| 170 | 28 | HDW | FLAT WASHER, M6 |
| 171 | 22 | HDW | FLAT WASHER, M8 |
| 172 | 9 | HDW | FLAT WASHER, M10 |
| 173 | 64 | HDW | FLAT WASHER, M12 |
| 174 | 16 | HDW | FLAT WASHER, M20 |
| 175 | 4 | HDW | FENDER WASHER, M6, 18 mm OD |
| 176 | 6 | HDW | FENDER WASHER, M10, 30 mm OD |
| 177 | 2 | HDW | FENDER WASHER, M10, 34 mm OD |
| 178 | 1 | HDW | FENDER WASHER, M10, 35 mm OD |
| 179 | 2 | HDW | FENDER WASHER, M12, 37 mm OD |
| 180 | 12 | HDW | BELLEVILLE WASHER, 20.4 ID, 40 OD, 2.5 THK, 3.45 mm HGT |
| 181 | 6 | HDW | SPLIT LOCK WASHER, M6 |
| 182 | 2 | HDW | SPLIT LOCK WASHER, M8 |
| 183 | 5 | HDW | SPLIT LOCK WASHER, M10 |
| 184 | 2 | HDW | SPLIT LOCK WASHER, M12 |
| 185 | 7 | HDW | RETAINING RING, INTERNAL, 28 mm BORE (29.4 mm GROOVE) |
| 186 | 1 | HDW | RETAINING RING, INTERNAL, 40 mm BORE (42.5 mm GROOVE) |
| 187 | 2 | HDW | RETAINING RING, INTERNAL, 62 mm BORE (65 mm GROOVE) |
| 188 | 1 | HDW | RETAINING RING, EXTERNAL, 17 mm SHAFT (16.2 mm GROOVE) |
| 189 | 1 | HDW | SPACER, 9 ID X 12 OD X 32 mm LG |
| 190 | 4 | HDW | SPACER, 13 ID X 18 OD X 5 mm LG |
| 191 | 4 | HDW | SPACER, 13 ID X 18 OD X 12 mm LG |
| 192 | 1 | HDW | SPRING PIN, SLOTTED, 5 mm DIA X 20 mm LG |

# NOTES

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