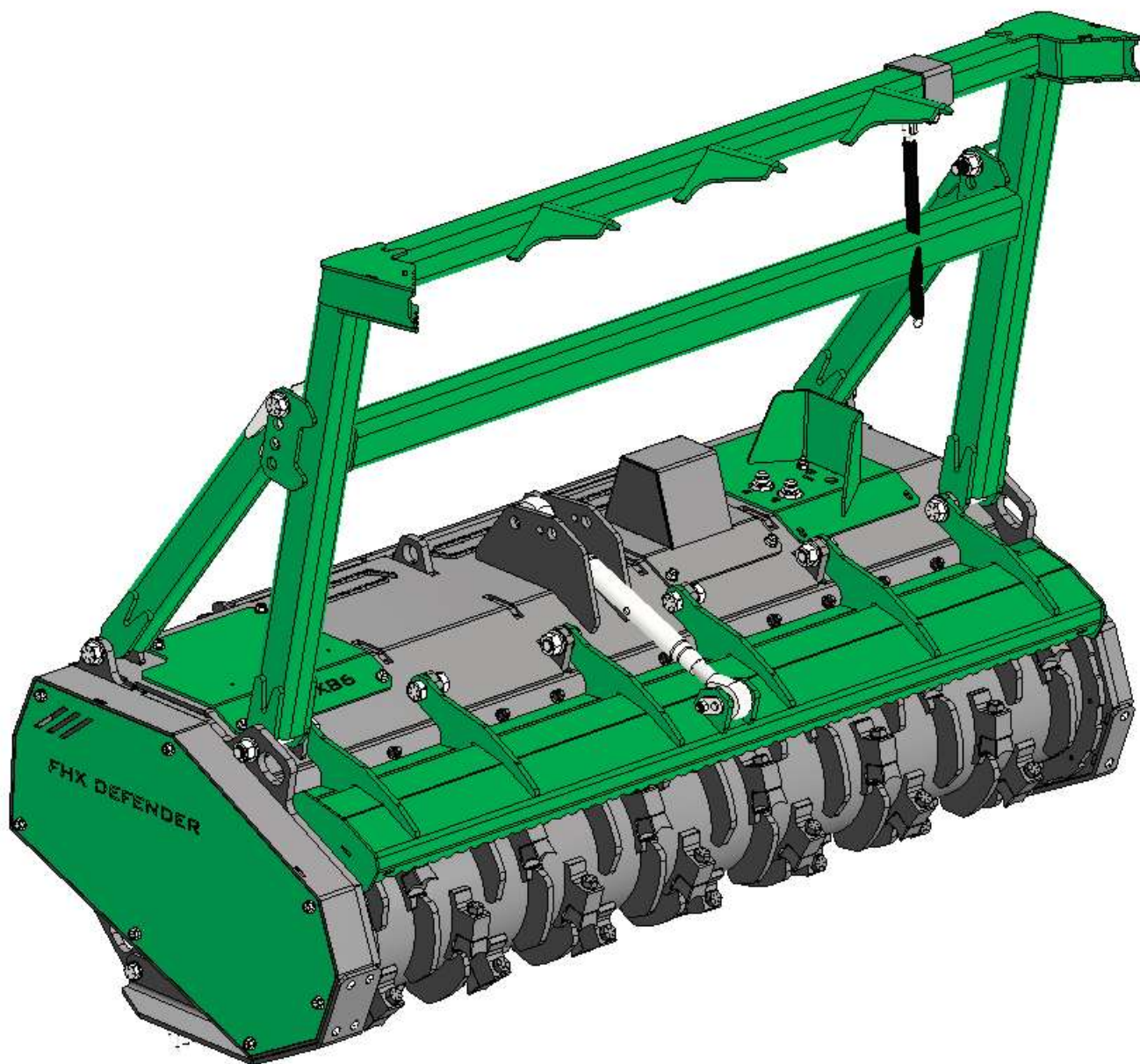


FHX-86 Defender Forestry Mulcher



**BRUSH
HOUND**



Power unit must be equipped with 1/2" LEXAN® glass (or equal) and falling object protection.

PO Box 220 | 2507 Tully Road | Hughson, CA 95326 | 800-426-5615

www.valleytoolmfg.com



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CALIFORNIA PROPOSITION 65



WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov.



ADVERTENCIA: Cáncer y Daño Reproductivo - www.65Warnings.ca.gov.

Thank You

Dear Customer,

We appreciate your purchase of a BrushHound attachment. The purpose of this manual is to familiarize you with the operation, adjustment, and maintenance of your new attachment. It was meticulously designed and constructed in accordance with the highest industry standards to provide you with years of dependable service. Before endeavoring to operate the machine, you must read this manual thoroughly and comprehend its operation. BrushHound reserves the right to make modifications to design and specifications, as well as additions and enhancements to its product, without incurring any obligation to retrofit previously manufactured items. If you ever require additional information, please contact your authorized dealer or customer service.



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ATTENTION

BrushHound designed this attachment with operator safety as one of its primary considerations. This attachment was designed with shielding, simple adjustments, and other safety features whenever practicable. Ensure that you and your employees read and comprehend this manual. Only responsible individuals who have been trained to operate in a secure manner and who have read and comprehend this manual should operate any machinery.

IMPORTANT TO PURCHASER

Customer Ownership Registration

Before accepting the equipment, verify the pre-delivery checklist thoroughly with the sales representative.

Ensure that you have a comprehensive understanding of the operation, adjustment, and safety principles outlined in this manual.

BrushHound Attachments is solely owned by Valley Tool and Manufacturing.

Have a farm or orchard? Own a tractor with PTO capabilities? For our full line of agricultural equipment visit: www.valleytoolmfg.com

Valley Tool & Mfg. warrants each product to be free of manufacturing defects for a period of twelve months (ninety days for rental units) from the date of delivery to the original user/owner, subject to the limitations stated in this policy.

This warranty does not apply to defects caused in whole or in part by unreasonable use while the product is in the user's possession, including but not limited to: failure to properly set up product; failure to provide reasonable and necessary maintenance; normal wear; routine tune-ups or adjustments; improper handling or accidents; operation at speed or load conditions contrary to published specifications; improper or insufficient lubrication; improper storage. This warranty also does not guarantee that the efficacy of every product will meet the purchaser's expectations.

Valley Tool & Mfg. shall not be liable for consequential damages of any kind, including, but not limited to, consequential labor costs or transportation charges associated with the replacement or repair of defective parts; lost time or expenses incurred as a result of said defects. Valley Tool & Mfg.'s total liability is limited to the purchase price of the product.

Valley Tool & Mfg. provides no warranty for trade accessories or any component or accessory of the product that was not manufactured by Valley Tool & Mfg., including any purchased components. These are subject to the respective manufacturer's warranties. If the product or any part of the product is modified or repaired in any manner not expressly authorized by Valley Tool & Mfg., or if closed components are disassembled prior to return, the warranty will be void. Closed components include gearboxes, hydraulic pumps, motors, cylinders, and actuators, among others.

Our obligation under the warranty is expressly limited, at our option, to the replacement or repair at Valley Tool & Mfg., of Hughson,

California, or at a service facility specified by us, of the defective part or parts as determined by inspection. We are not liable for unauthorized replacements or repairs. Warranty pre-approval is required. Authorized supplies will be sent to the dealer at no cost via UPS Ground. The duration of any implied or statutory warranties, such as warranties of merchantability or fitness for a particular purpose, is expressly limited to the duration of this written warranty. No one is authorized to make any other express or implied warranties on our behalf. This warranty cannot be extended, expanded, or altered unless authorized in writing by Valley Tool & Mfg. No warranty will be processed without a timely, signed "Product Registration"

The attachment owner is responsible for the travel time of mechanics and conveyance of the product to the authorized service dealer for warranty work.

The most reasonable and dealer-friendly return policy on the market is provided by Valley Tool & Mfg. The return policies for each of our brands are listed below. We accept returns within 30 days of the date of original shipment. Prior to return shipment, all returns must be approved by Valley Tool & Mfg, and a return authorization number must be issued. Returns must be in "like-new" condition and accompanied by all original factory packaging, including instruction manuals. If an item is received that is not in "like-new" condition or in its original packaging, additional fees will apply. After our staff has completed a thorough inspection of a return, refunds will be issued less shipping fees and any other potential damage fees. Please allow up to 30 business days for the processing of your account refund credit.

Please direct all return-related questions to sales@valleytoolmfg.com.

Safety

Failure to heed any of these warnings may result in personal injury or death.

A. Operational Safety

Before operating this machinery read the owner's manual thoroughly.

Do NOT operate this machine without proper training. It is the Owner's responsibility to ensure all Operators are properly trained in the appropriate language.

Power unit must be equipped with 1/2" LEXAN® glass (or equal) and falling object protection.

Use OSHA approved eye, ear and head protection to protect the Operator from flying debris and noise.

Avoid wearing loose clothing as it can inadvertently be drawn into moving parts. Never use drugs or alcohol before or during operation of this machine.

Only operate this machine when it is in good working order on an appropriate power unit that is in good working order, and with all guards and safety devices in place and functioning.

Be aware of the machine's weight and its effect on the stability of the power unit.

Use flashing warning lights when operating on highways, except when prohibited by law.

Always inspect area to be worked to ensure that the jobsite is free from obstacles and debris that could injure the operator or damage the machine.

Under no circumstances should the blades of this machine come into contact with the ground or should the machine be curled in such a way that the blades become visible to the operator.

Avoid running the machine along the ground in rocky areas as this could create dangerous discharge.

Keep bystanders and children clear of the work area during operation as debris can be discharged in a dangerous manner. The minimum safe distance from discharge is 300 ft.

Never allow children or other persons to ride on this machine.

Avoid operation that would allow hydraulic lines to be pinched or severed. In the event of a hydraulic leak, hydraulic fluid may have sufficient force to penetrate skin. Hydraulic injection injury requires immediate medical attention.

Be aware of the risks of equipment and grass fires. To mitigate those risks:

- Do not smoke or have an open flame in the work area.
- Do not operate in areas that have been freshly burned or are still burning.
- Do not allow clippings/debris to collect near hydraulic components or bearings.
- Avoid areas with high fire risk: dry grass, brush or trees.

Operation of this machine should be stopped immediately if the Operator's vision becomes obscured by the discharge of debris and dust. Also avoid operating this machine in unusually foggy or dusty conditions or at night.

Keep away from the machine until all the energy has dissipated. This includes the complete stopping of the drum's rotation as well as the dissipation of pressure in the hydraulic lines.

Wear gloves and eye protection and exercise care when handling blades as they can be sharp. Also be alert to worn or damaged surfaces that could have sharp edges.

In the event that a failure does occur during operation or if the machine begins to produce excessive noise or vibration, shut the machine down immediately and repair before continued use.

Disengage hydraulics, shut off engine and allow all movement to stop before leaving the operator's position to adjust, lubricate, clean or unclog the machine. Do not try to uncouple hydraulic hoses unless the pressure has adequately dissipated.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern and prudence and requires suitable training of personnel involved in the operation, transport, maintenance and storage of equipment.

Before working on or underneath the machine, place wheel chocks in front and back of power unit's tires or treads and under each end of the attachment to prevent accidental lowering of the machine. Also, remove the ignition key from the power unit and allow all movement to stop before beginning work.

B. Maintenance Safety

Before performing maintenance on this machine read the owner's manual thoroughly.

Maintenance should only be performed by properly trained individuals. It is the owner's responsibility to ensure all individuals involved in maintaining the machine are properly trained in the appropriate language.

Be sure to inspect all safety devices before each use. If safety devices are worn in such a way that they can no longer properly perform their guarding function contact your nearest BrushHound dealer for replacements.

Maintain all safety decals and make sure they are visible to the operator. If decals are worn, contact your nearest BrushHound dealer for replacements.

Basic Operation

ATTENTION

Review all safety information outlined in safety section of manual before proceeding with any operation of attachment.

A. Transport

1. Transporting on Power Unit

If the attachment is being transported on the Power Unit, disengage the auxiliary hydraulic circuit and position the attachment at a reasonable driving height and position to maximize Power Unit's balance. Wait for the drum to stop rotating before transport.

2. Transporting Attachment and Power Unit

If the Power Unit is being transported with the Attachment (e.g. transporting on a trailer between jobsites), follow the Power Unit manufacturer's recommendations for transport and be sure to comply with all local regulations.

B. Storage

1. Storage Between Jobs

- a. Clean the attachment thoroughly (see "Cleaning Your Attachment" section for specific cleaning instructions).
- b. Lubricate the attachment as recommended (see "Lubrication" section for lubrication details).
- c. Check wearable parts and replace as necessary so you will be ready to operate when necessary.
- d. Store in a clean, dry place.

2. Storage On Power Unit

When leaving the Attachment unattended while still attached to the Power Unit:

- a. Find a suitable, flat location to leave the Power Unit and Attachment.
- b. Disengage auxiliary hydraulic circuit and lower the Attachment all the way to the ground. Both the front and rear of the Attachment should be resting on the ground and positioned to avoid tipping when disconnected.
- c. Turn off Power Unit and remove ignition key. Wait for drum to completely stop rotating before leaving unattended.

ATTENTION

When you ordered your BrushHound attachment, it was custom matched to your power unit based on the details you provided. Although BrushHound attachments can fit various skid steers and track loaders, your attachment is specifically designed for your power unit and may not work with others. The hydraulic motor and pulleys were chosen to optimize performance for your hydraulic system. Only connect your attachment to power units with the same specifications as the one you provided. If you need to connect it to a different power unit, contact your nearest BrushHound dealer.

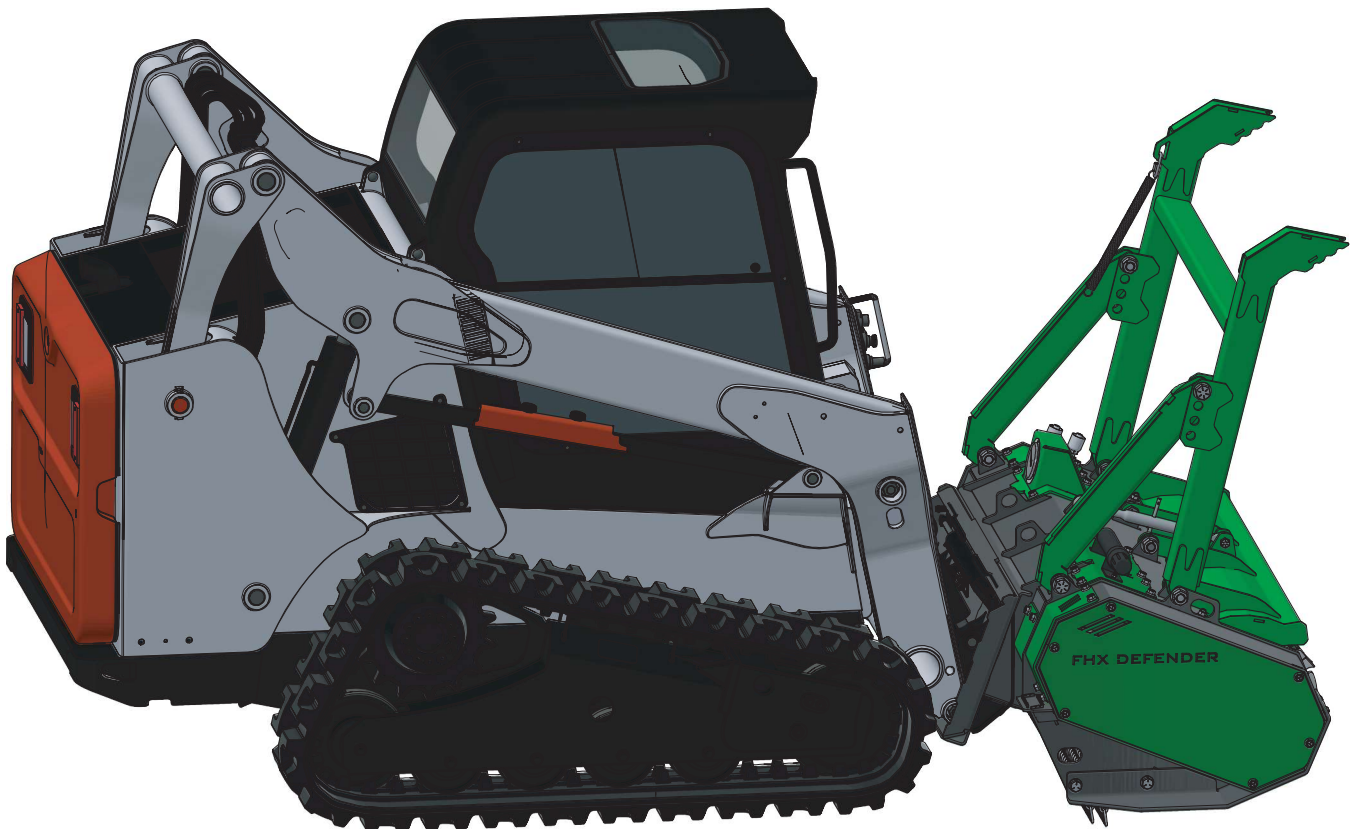
The individual handling your BrushHound attachment should have experience with safely attaching and detaching standard buckets from skid steers or track loaders. Always perform the attachment on flat ground, free from obstructions. Keep hands away from pinch points and blades to avoid injury, and make sure hoses are clear of the mounting plate during the process.

C. Attaching to Power Unit

1. Line the mount on the Power Unit up with the Universal Skid Steer Mount on the Attachment.
2. Lower the mount on the Power Unit and tilt forward so it can scoop up under the top lip of the Attachment's mounting plate.
3. Slowly move Power Unit forward until it taps against the mounting plates, lift up slightly to lock into the lip.
4. Check bottom portion of mount to ensure flush mounting between Power Unit and Attachment. Once flush, lower the locking mechanism on the Power Unit making sure it has fully engaged.
5. Connect hydraulic hoses to Power Unit.

D. Removal from Power Unit

1. Find a suitable, flat location to leave the Attachment where it will not fall over.
2. Make sure the auxiliary hydraulic circuit is off and lower the Attachment all the way to the ground. Both the front and rear of the Attachment should be resting on the ground.
3. Wait for drum to stop rotating and hydraulic system to depressurize before approaching Attachment.
4. Unlock the locking devices on the Power Unit's mount.
5. Tilt forward while reversing to clear attachment.



Basic Operation

ATTENTION

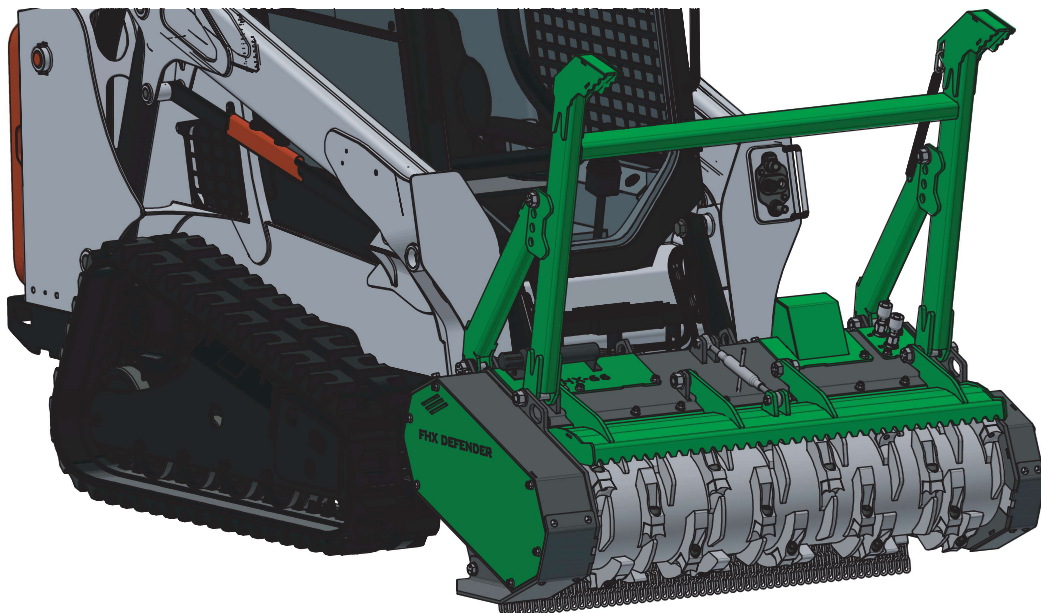
The operator using your BrushHound attachment should have proper training and wear appropriate safety gear. Before starting the power unit, ensure the attachment is correctly assembled and installed, including mount and hydraulic connections, and that all safety devices on both the power unit and attachment are functioning properly. Keep the work area clear of bystanders and children.

E. Starting Procedure

1. Check that the attachment is in the down position and that the blades are not in contact with ground. Start engine and set throttle to idle. Never engage the auxiliary hydraulic flow with the engine above idle speed.
2. With the engine at low RPM engage the auxiliary hydraulic flow.
3. Slowly bring the throttle up to maximum flow. If the Attachment produces excessive noise or vibration, disengage the auxiliary hydraulics and shut down the Power Unit immediately. Determine the cause of the problem and correct it before continuing with its operation.
4. Attachment is ready for operation.

E. Shut Down Procedure

1. Once the work is finished, disengage the auxiliary hydraulics and prepare the attachment for storage or transport (refer to the “Storage and Transport” section for proper storage instructions). Turn off the power unit, set the parking brake, and wait for the attachment to stop rotating. Allow the hydraulic circuits to release pressure back to the reservoir, as they can remain pressurized even when turned off. Only approach or let others approach the attachment when it's safe to do so.
2. Inspect the hydraulic motor, motor protection valve, and other areas visually for signs of excessive heat, debris build-up, or leaks. Avoid touching these areas with bare skin, as they can be extremely hot. Never check for hydraulic leaks with your hands, as the fluid pressure can pierce the skin, necessitating immediate medical attention. If you suspect a hydraulic leak, use a piece of cardboard or paper to check instead.

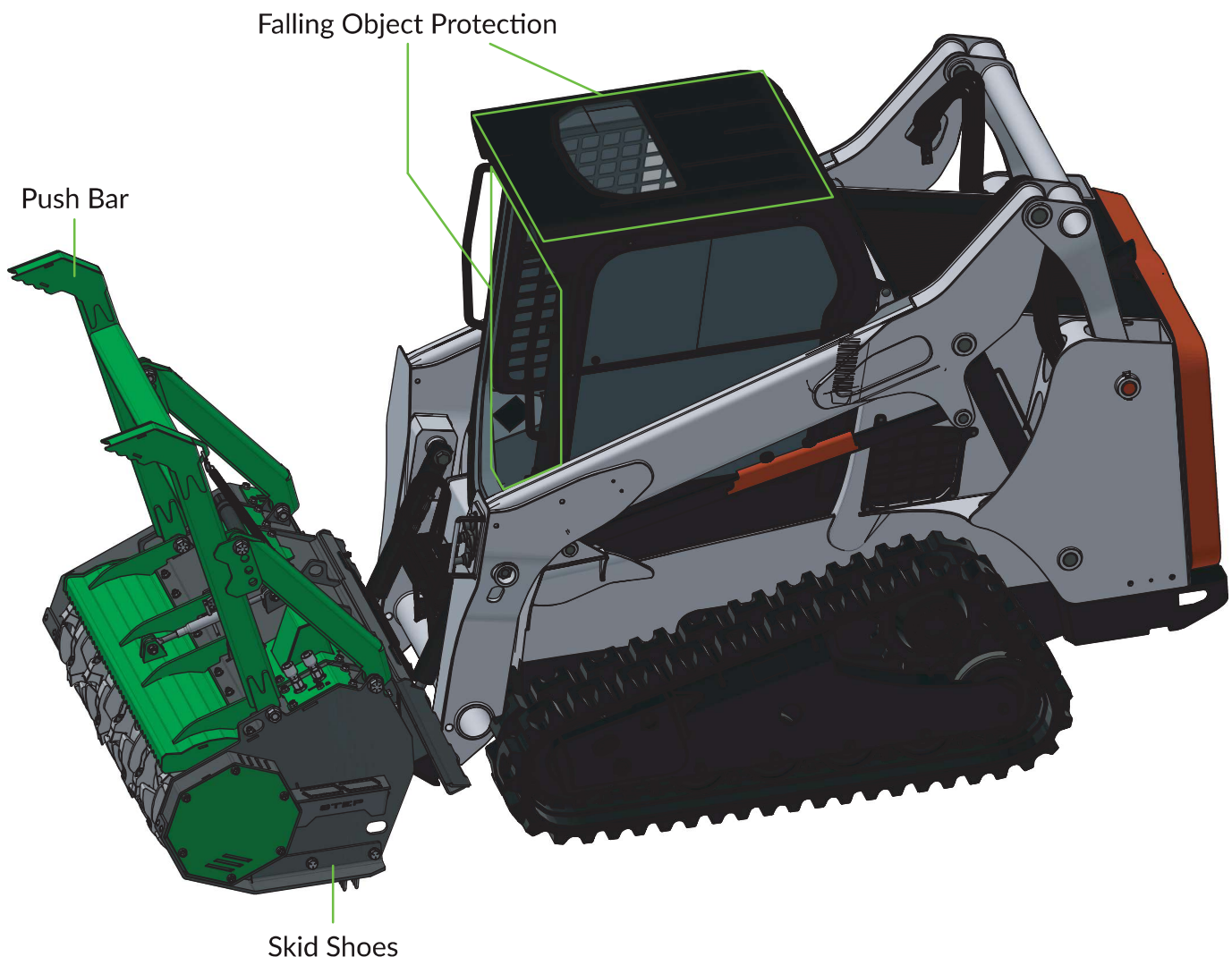


ATTENTION

Be reasonable in which trees you attempt to mulch, excessively large and tall trees could fall on or knock over your Power Unit.

F. Running Your Attachment

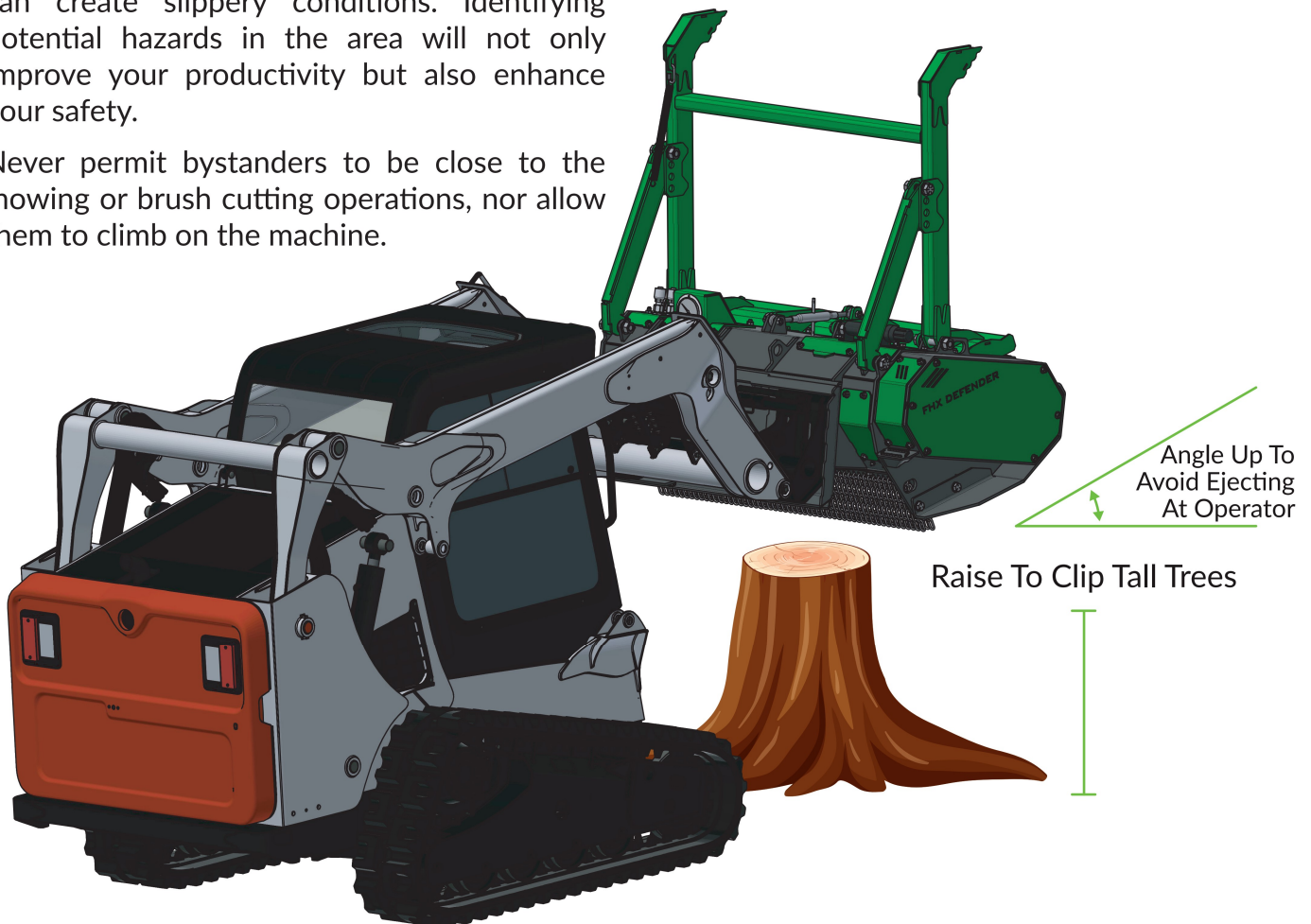
1. Level sides of the Attachment with the ground, making sure skid shoes are just above ground level. Skid shoes are designed to collide with uneven surfaces, not run along the ground.
2. Ground speed should range anywhere from 0-5 miles per hour. However, the operator should drive at a speed they are comfortable with given terrain and brush density.
3. Small trees can be driven into and knocked over with the push bar, allowing the Attachment to continue running along the ground. For larger trees, raise the Attachment into the air, making sure it is oriented such that the blades are not visible. Then clip off the upper part of the tree and slowly lower the attachment, mulching the remaining tree to the ground.



Basic Operation

G. Basic Guidelines

1. Your attachment operates most efficiently when the knives are sharp and rotating at full RPM. The recommended shaft speed for your specific unit can be found on the Serial Number plate, typically ranging between 1700-2200 RPM.
2. Before starting your job, inspect the work area and remove any hidden hazards, such as large rocks, utility lines, fencing, and concealed debris like broken glass or bottles. Projected debris may pose risks to operators, pedestrians, livestock, or cause property damage, so it is crucial to ensure the area is clear prior to commencing work.
3. During your work area inspection, watch for bees, fire ants, poison ivy, or poison oak. Additionally, be mindful of unsuitable working conditions, like overly saturated grounds that can create slippery conditions. Identifying potential hazards in the area will not only improve your productivity but also enhance your safety.
4. Never permit bystanders to be close to the mowing or brush cutting operations, nor allow them to climb on the machine.
5. Overloading or “lugging down” the cutter can significantly reduce its cutting capacity and cause an increase in hydraulic oil temperature. Pay attention to the cutter drum speed, and lift it out of the cut until maximum speed is regained before resuming the operation.
6. Avoid using this attachment as a bucket for digging up roots or spreading piles of dirt. Such misuse can cause damage that is not covered by your warranty, and repairs may be costly. With proper care, the weldment’s design is durable enough to last for decades.
7. Do not operate the attachment unless the safety guards are securely fastened in place.
8. Abuse may be indicated by drum damage or premature knife failure. To prevent abuse, always reduce the cutting load before the cutter drum speed drops significantly.



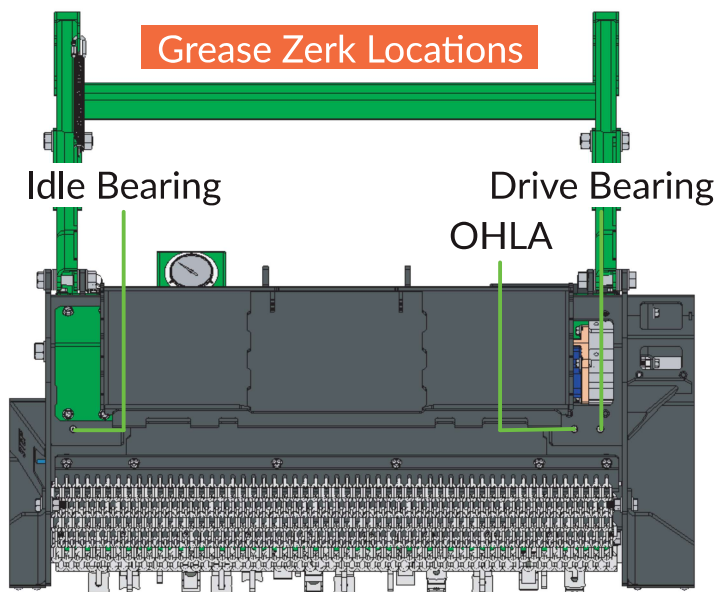
Adjustments & Maintenance

ATTENTION

Before proceeding with any adjustments or maintenance, review all safety information provided in the safety section of the manual to ensure proper procedures are followed.

A. Lubrication

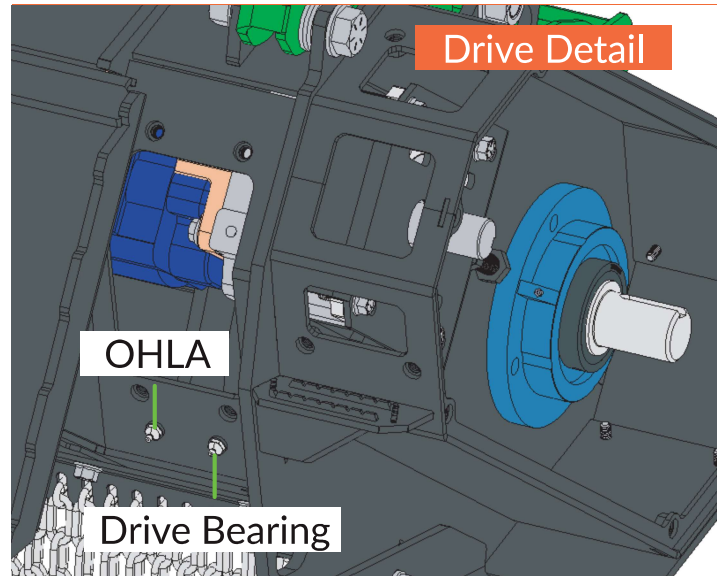
The FHX Series includes three lubrication points, identified by grease fittings. Use only BrushHound-approved grease or a compatible grease with similar specifications and EP additives. BrushHound recommends Mobilith SHC 100 Grease for all three FHX grease points. Over-greasing seals and bearings may cause damage; if grease escapes from the bearings' seals, this suggests excessive greasing. Expelled black grease with a burnt smell could indicate a history of over-greasing.



1. Cutter Drum Bearings

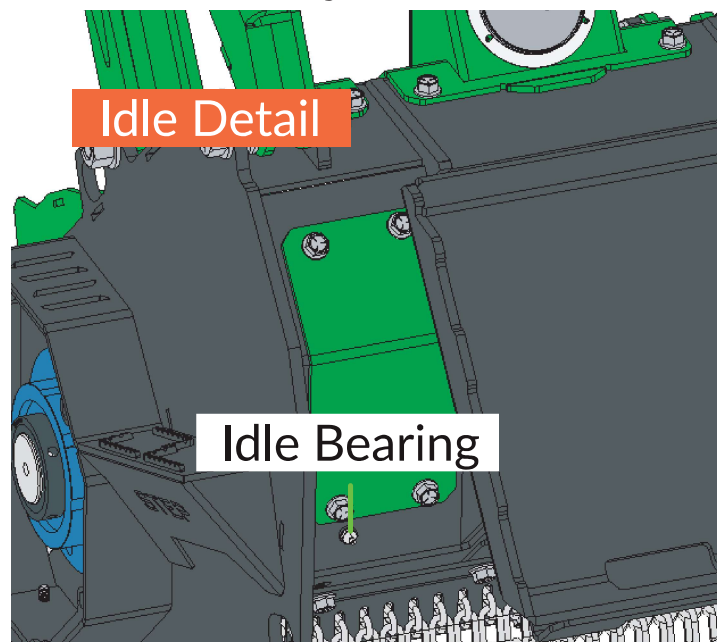
The cutter drum features double row spherical bearings and high-speed Teflon seals at both ends, protected by bolt-on covers. These bearings have a grease fitting and are prepacked with premium grease from the factory. Greasing intervals depend on operating conditions; under normal use, the main bearings need 10 grease gun pumps every 50 hours of operation.

If bearings are frequently exposed to wet conditions, more frequent greasing may be necessary. Do not use Molybdenum grease.



2. Overhung Load Adapter

Inside the motor compartment, the Overhung Load Adapter (OHLA) is mounted on the sidewall. It has a grease line extending to the FHX's rear and comes pre-filled with high-quality grease. The greasing interval for the OHLA is 10 pumps every 300 hours, meaning grease should be applied after every fourth cutter drum bearing session.



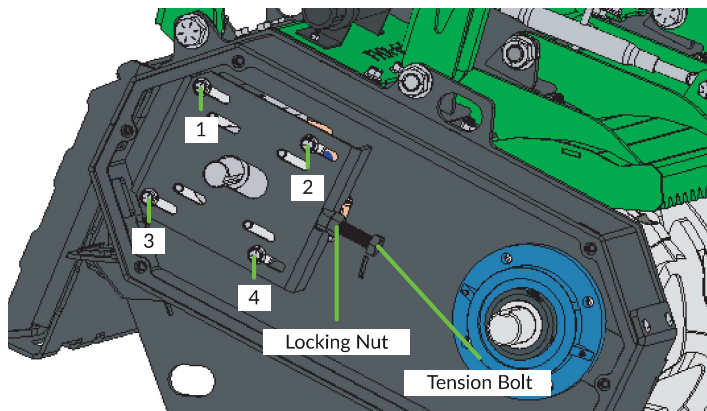
Adjustments & Maintenance

B. Wearable Component Maintenance

1. Rubber Drive Belt

The drive belt is located behind the pulley housing cover on the drive side of the attachment. With a lifespan exceeding 1,000 hours, it's important to regularly inspect the belt for excessive wear. If it appears thin or torn, replace the belt. Furthermore, replace the belt each time the cutter drum is removed.

Drive Belt Tension - To adjust the drive belt tension, start by removing the drive side pulley cover and the motor guard cover, providing access to the overhung load adapter mounting plate. Next, loosen bolts 1-4 and the locking nut. Tighten the tension bolt to increase the drive belt tension. Once complete, tighten the locking nut and bolts 1-4.



2. Hydraulic Hoses

Regularly inspecting the hydraulic hoses inside the motor guards is crucial. Though they are positioned to minimize wear from contact with metal surfaces, heavy vibration may cause them to shift. Check for signs of excessive wear during routine maintenance to ensure optimal functioning.

3. Bearings

Bearing failure can result in excessive vibration, noise, or even the complete seizing of the cutter drum. Signs of impending bearing failure may be subtle and hard to identify without the

right diagnostic tools. As a preventive measure, it is recommended to replace bearings every 1500-2000 hours of operation, depending on the environment and equipment usage.

4. Safety Guards

Safety guards are crucial for protecting the operator, bystanders, and surrounding property. They must never be removed during operation. Make sure each safety guard is in good condition and able to perform its protective function. Replace any worn or rust-damaged guards to ensure safety. To prolong the guards' lifespan, clean them regularly and maintain their paint, which helps shield them from the elements.

5. Cutter Drum Door

The cutter drum door can be adjusted using the adjustable top link. It's essential to never operate the attachment without the cutter drum door in place, as it provides safety during operation.

6. Safety Decals

Safety decals are vital for informing the operator and bystanders about potential hazards associated with the machine. Always ensure that these decals are easily visible and unobstructed. If they become faded or worn, replace them to maintain clear communication of safety warnings.

C. Knife Maintenance

The FHX Series is engineered for forestry mulching, making it crucial to maintain sharp knives for optimal cutting efficiency. The standard cutting tool is equipped with a hardened steel knife, featuring multiple cutting surfaces for sharpening, rotation, or replacement when needed (some models offer an upgraded multi-surface carbide blade that can be rotated or replaced). Ensuring the knives are sharp and well-maintained guarantees top performance for your forestry mulching projects.

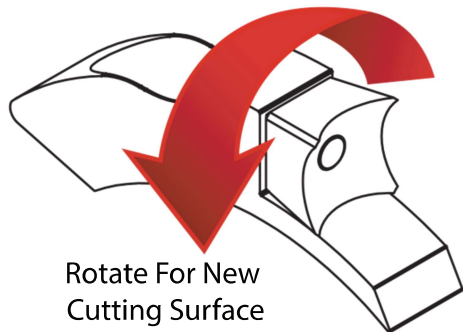
Adjustments & Maintenance

1. Rotating

The standard knife provided features 4 cutting surfaces, permitting up to 3 rotations in the field where replacement parts or sharpening equipment may be unavailable.

To rotate the knife:

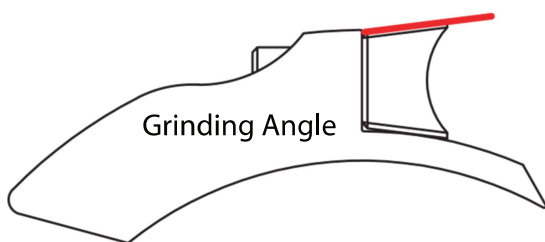
1. Loosen the retention bolt
2. First rotation 180°, second rotation 90°, and third rotation at 180°. (See diagram)
3. Retighten to 320 ft-lbs with a grade 8 bolt.



Take note that the limiter on the knife holder prevents the sharp corner from being centered; this is intentional, as the U-shaped surface is the cutting portion, not the corner.

4. Sharpening

To sharpen the knives in the holder, use a grinder. Align the grinder with the flat V-shaped side and surface the outer edge of the knife. (See diagram)



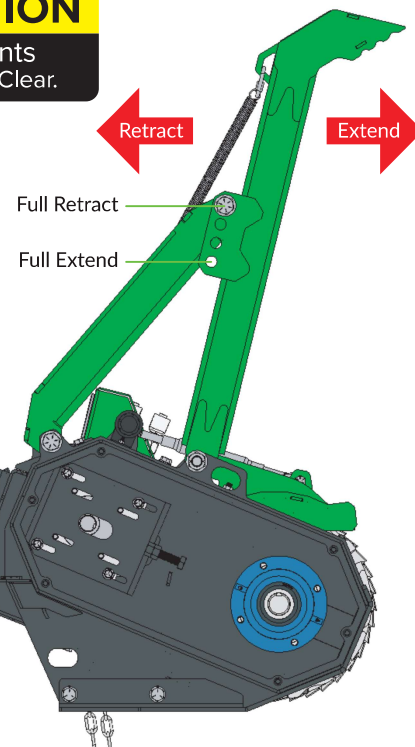
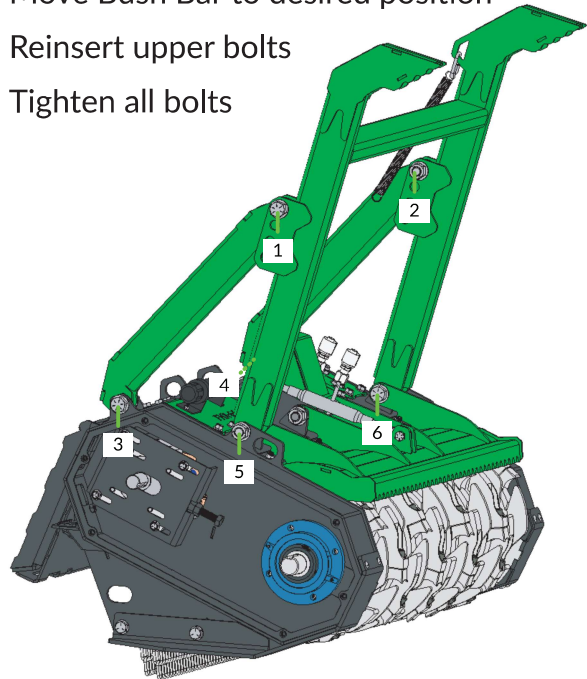
5. Replacing

The last option is replacement. Remove the knife by unbolting it and replace it with a new one, tightening to 320 ft-lbs using a grade 8 bolt.

D. Bush Bar Adjustment

The process is as follows:

1. Loosen 6 bolts in Bush Bar (Bumper) Assembly
2. Remove upper bolts
3. Move Bush Bar to desired position
4. Reinsert upper bolts
5. Tighten all bolts



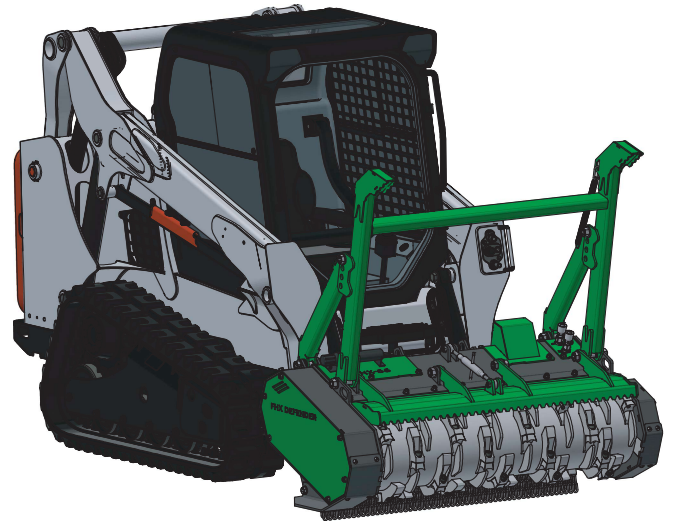
Adjustments & Maintenance

E. Cleaning Your Attachment

Cleaning your Attachment regularly will help prolong the life of both the paint and the safety decals as well as minimize the risk of unintentional fire.

1. Check for excessive grease in the bearing areas, cleaning off any excess found.
2. Clear debris from the hydraulic hose area, bearing area or any other area that may experience excessive heat.
3. Clean the inside and top of the Attachment with a pressure washer, removing any accumulated mud, grass or other debris. Keep in mind that mud build up on the cutter drum can cause imbalance.
4. Touch up paint where needed as this will help prevent your Attachment from rusting.

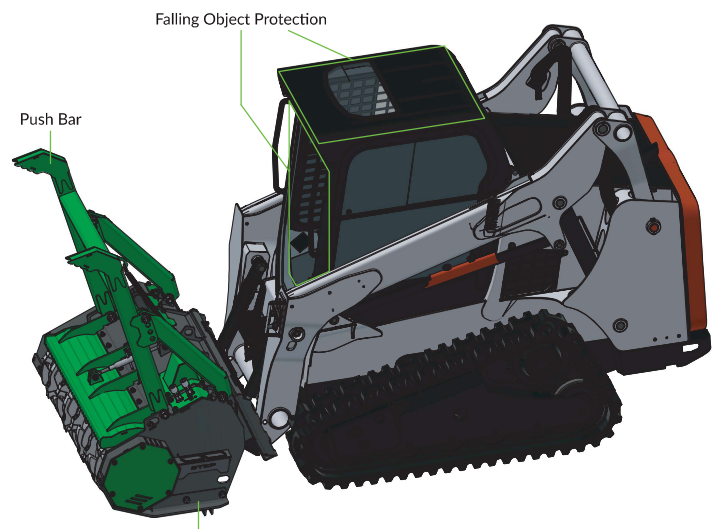
4. Return Line - The return line should connect the out port side motor port to the relief port of the MPV.
5. Pressure Out (return line out) - Connect to the return side of your Power Unit's hydraulic circuit.



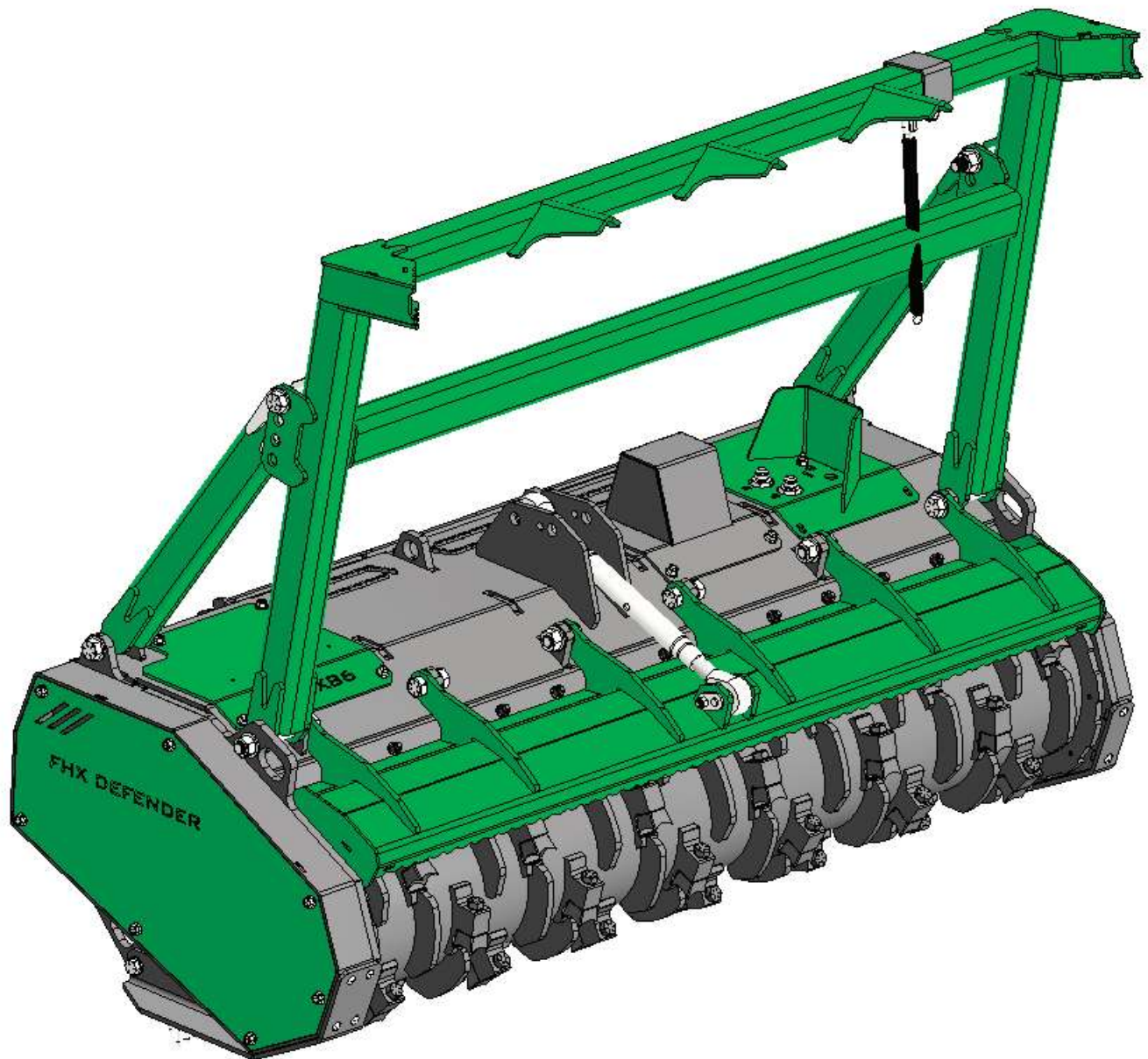
E. Hydraulic Maintenance

Before performing any maintenance on the hydraulics of the Attachment, ensure that circuit is depressurized. If you believe that there is a hydraulic leak, do not search for a leak with your hands, rather use cardboard or a piece of paper to search for the leak. The hydraulic circuit should be connected as follows:

1. Pressure In - This attaches to your Power Unit's high pressure line. On some units it may be necessary to switch the male and female quick connectors depending on the Power Unit's configuration.
2. Motor Protection Valve (MPV) - The MPV protects the motor from pressure surges that would damage the motor's internal seals by means of a pressure relief valve.
3. Supply Line - As the drum is only capable of cutting when spinning in one direction, the supply line should always run from the pressure port of the MPV to the in port side of the motor.

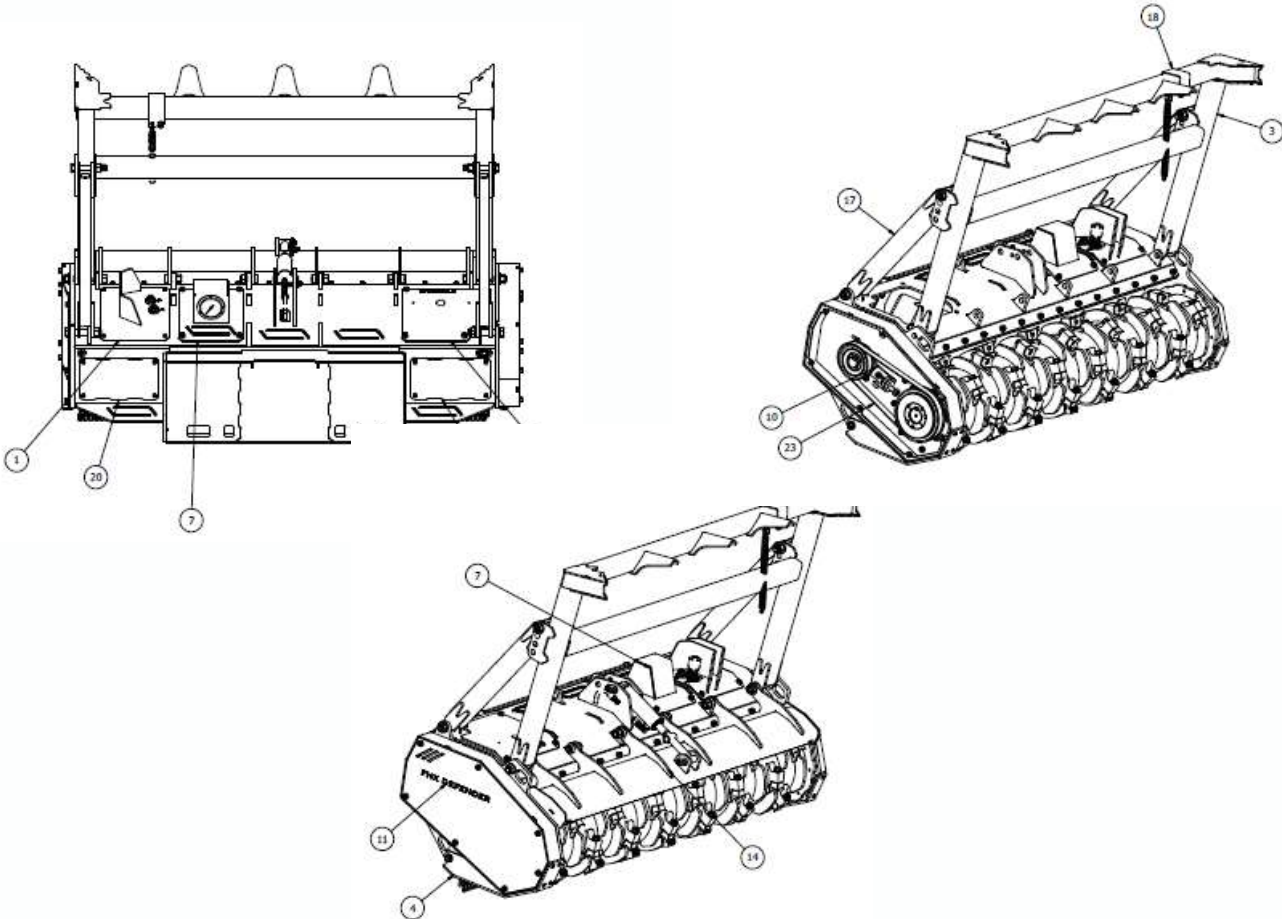


FHX-86 Defender Forestry Mulcher Parts Book



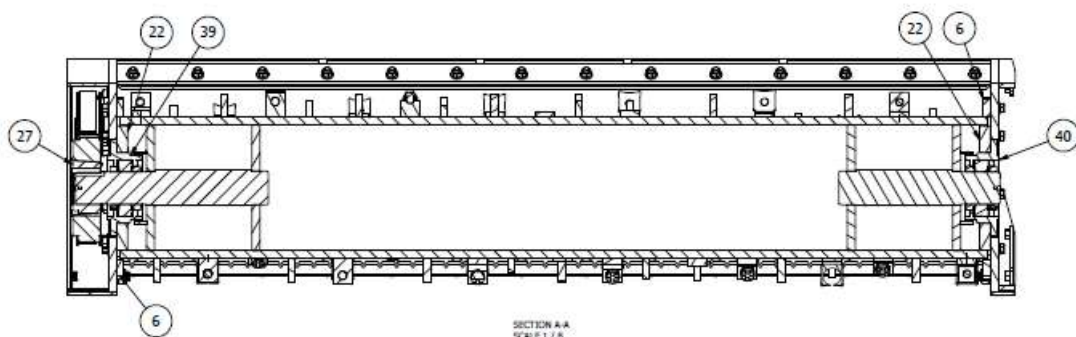
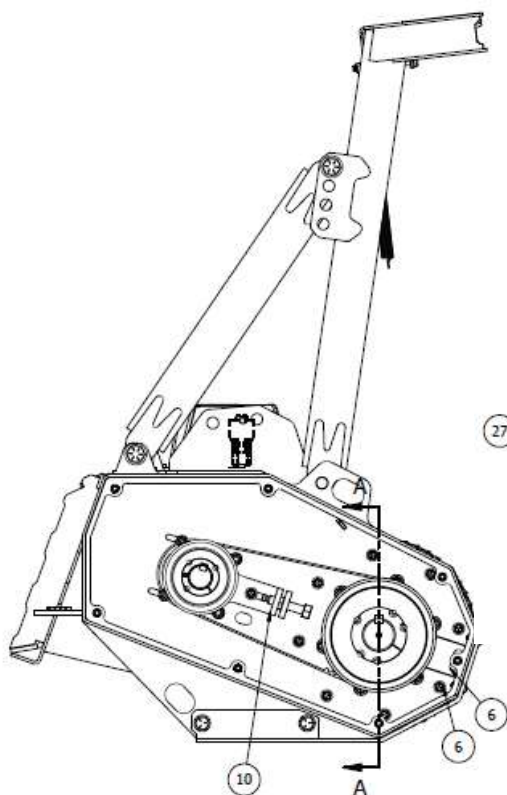
Parts Diagram: 1

ITEM	DESCRIPTION	PART NUMBER	QTY
1	ASY COVER WITH MANIFOLD MOUNT FHX86	09207	1
2	DRUM ASY FHX86	08808	1
3	ASY BUSH BAR WELDMENT 1 FHX86	08812	1
4	ASY SKID SHOE RH FHX86	08871	1
5	ASY SKID SHOE LH FHX86	08874	1
6	ASY OHLA SAE C	08881	1
7	ASY TOP COVER WITH GUAGE	08896	1
8	ASY MPV MOUNT TO GAURD FHX86	08898	1
9	ASY CHAIN GUARD 1/4IN DOUBLEROW	08922	1
10	ASY PUSHRING WITH TAB	08929	1
11	ASY PULLEY COVER WITH HARDWARE	08940	1
12	ASY IDLE BEARING COVER WITH HARDWARE	08941	1
13	ASY UPR MTR CVR WITH HARDWARE	08942	1
14	ASY EJECTOR GUARD WITH HARDWARE	08943	1
15	ASY MVA85 MOTOR WITH FITTINGS	08949	1
16	ASY YD BLOCK MPV AND CYL CTL	08962	1
17	ASY BUSH BAR LINK WITH HADWARE	08989	2
18	ASY BRACKET AND SPRING HANGER BUSH BAR MTG	09188	1



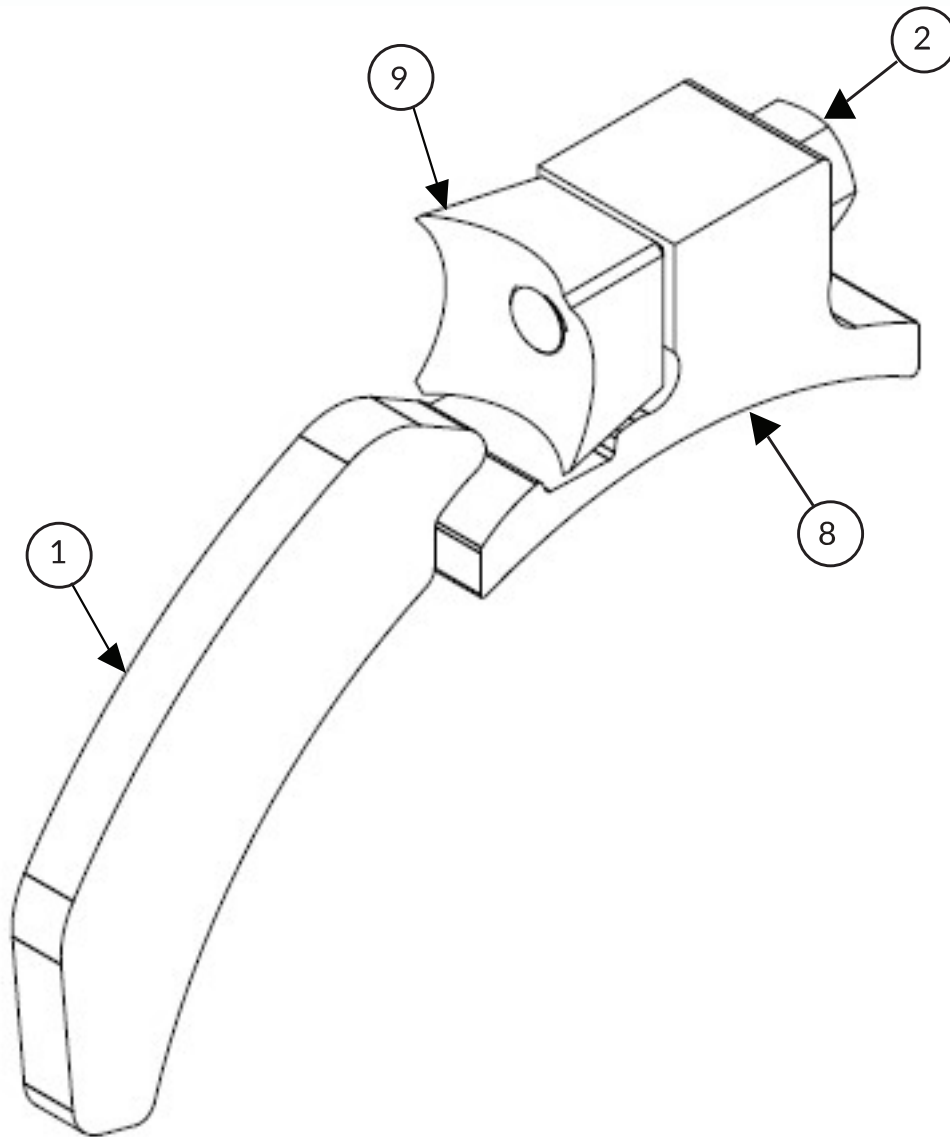
Parts Diagram: 2

ITEM	DESCRIPTION	PART NUMBER	QTY
20	COVER REAR UPR ACS FHX86	08864	2
21	COVER REAR ACCESS FHX86	08865	2
22	WIRE GUARD HOUSED BEARING MTG	08847	2
23	BELT POLYCHAIN FOR FHX	FHX-1568	1
30	DECAL READ BEFORE OPERATING 4X6	DC-22-	1
31	DECAL ROTATING CUTTER DRUM 1.75 X 10	DC-222	2
32	DECAL WARNING LEXAN WINDOWS 3X5	DC-224	1
33	DECAL WARNING OVERHEAD OPERATION 3X5	DC-226	1
34	DC-232 TIE DOWN POINT	DC-232	4
35	DC-234 GREASE 50 HOURS	DC-234	2
36	DC-242 INSPECT KNIVES TORQUE	DC-242	1
37	DECAL FHX86 BRANDING	DC-258	2
38	DC-260 MANUAL INSIDE	DC-260	1
39	BEARING SPHR 2 15/16 HELD	CD-2901	1
40	BEARING SPHR 2 15/16 EXPANSION	CD-2902	1
41	BRUSHHOUND DECAL	DC-114	2



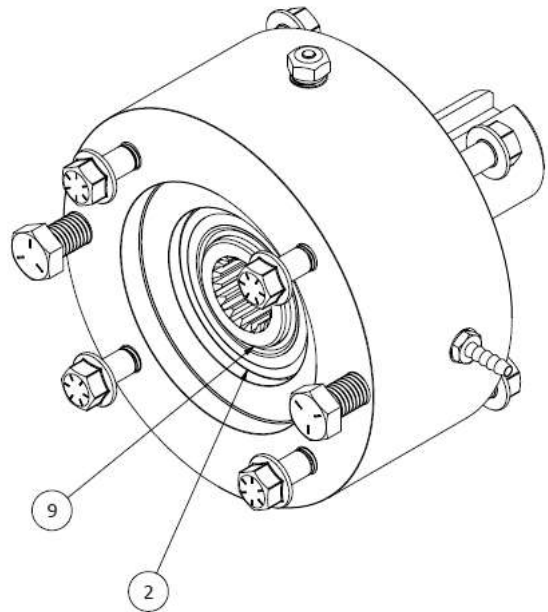
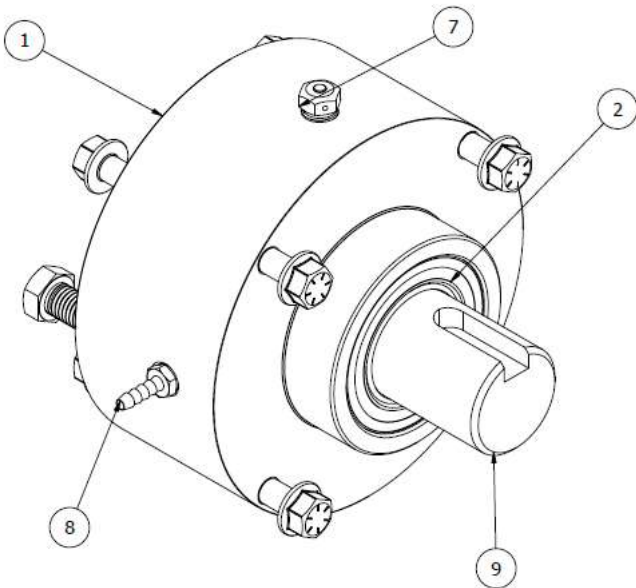
Parts Diagram: 3

ITEM	DESCRIPTION	PART NUMBER	QTY
1	BITE LIMITER FHX 12.75 ID LONG	08559	1
2	HHCS 3/4-16 X 3.0 GR8 YLZN	91257A877	1
3	LOCK WASHER 3/4IN BELVILLE	93501A036	1
5	PLANER KNIFE	QT3000 PLN	0
6	CARBIDE KNIFE	QT3000 CAR	0
8	TOOL HOLDER 12IN PIPE 2IN QUADCO	08841	1
9	QUADCO KNIFE	QT3000	1
10	HAMMER KNIFE	QT3000 HAM	0



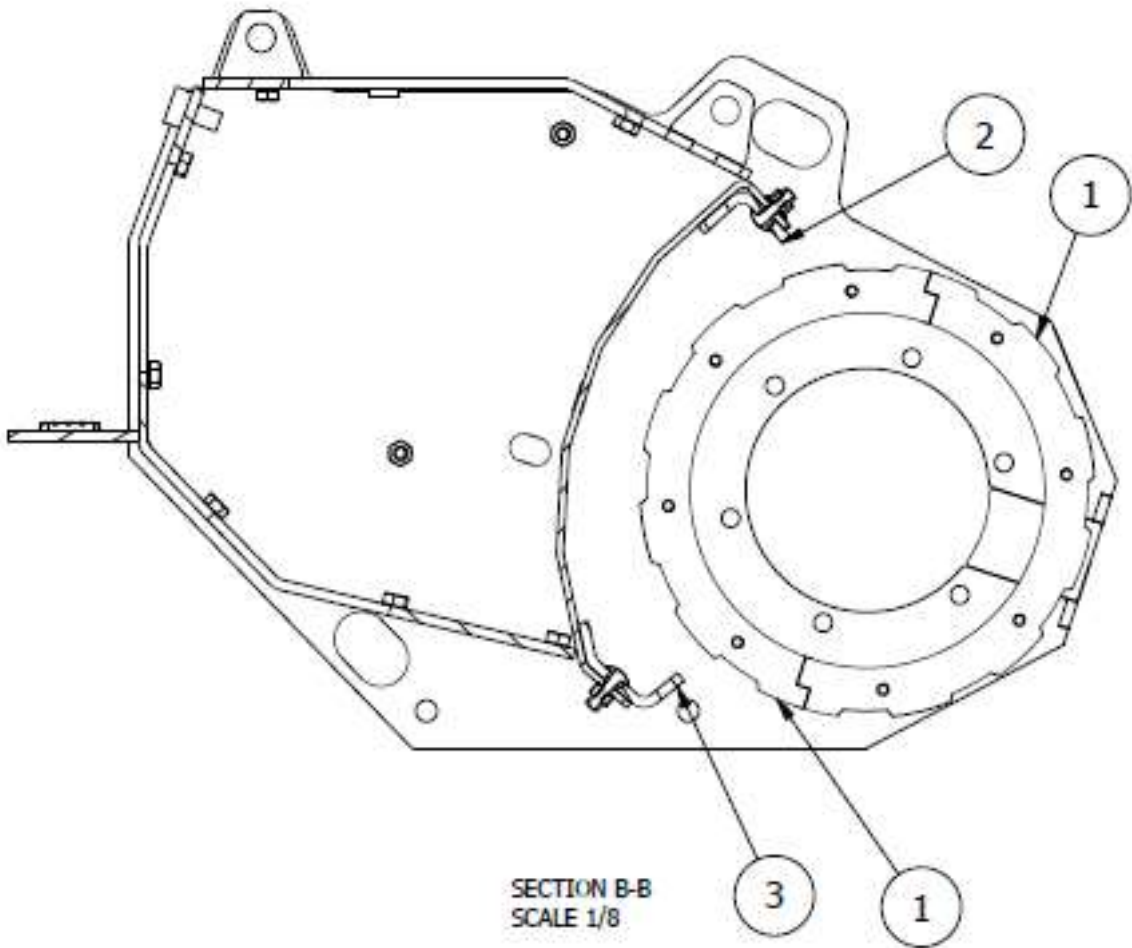
Parts Diagram: 4

ITEM	DESCRIPTION	PART NUMBER	QTY
1	BODY 8IN ROUND OHLA	08925	1
2	SHAFT SEAL 55 X 8 DOUBLE LIP	55X90X0 HMSA10 V	2
3	BEARING TAPERED ROLER	3301	2
4	FHCS 1/ 2 - 13 X 2.0 GR8 YLZN	90602A235	8
5	SPIRAL RING FOR 90 MM BORE	92248A780	1
6	HHCS 5/8-11 X 1.75 GR5	92865A800	2
7	BREATHER GEARBOX VENT 3/8 NPT	BP-2731	1
8	HOSE FITTING, PUSH LOCK STRAIGHT	HY-2430	1
9	STUB SHAFT OHLA 1.5 17T 12/24 DP	08880	1



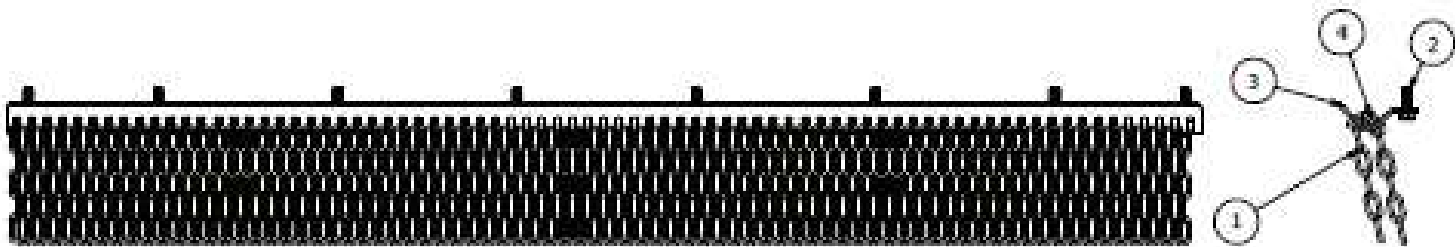
Parts Diagram: 5

ITEM	DESCRIPTION	PART NUMBER	QTY
1	ASY WIRE GUARD FOR 12 IN SCH40 PIPE	08900	2
2	RECUTTER UPPER FHX86 EJECTOR	08816	1
3	LOWER RECUTTER FHX86	08918	1



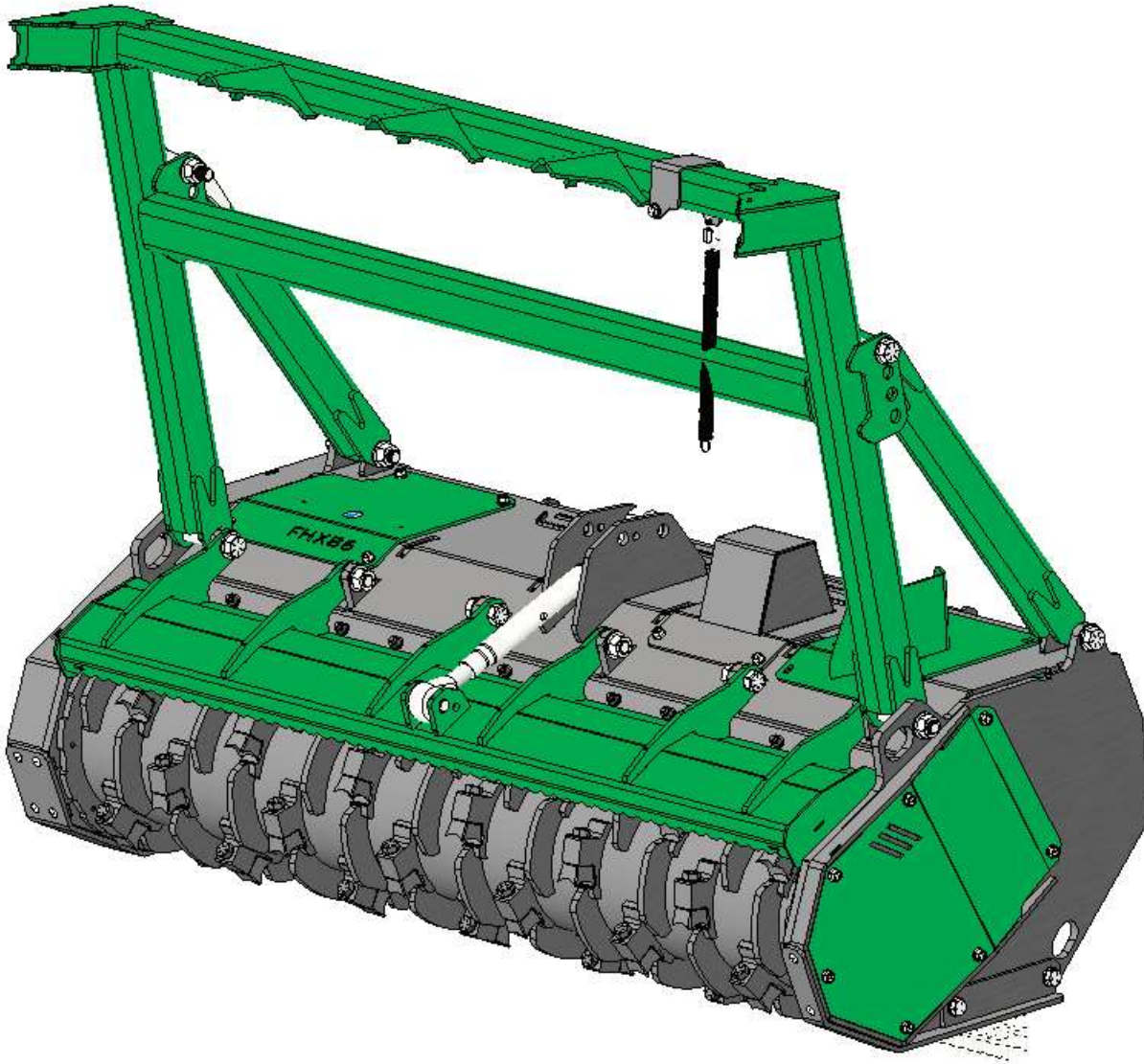
Parts Diagram: 6

ITEM	DESCRIPTION	PART NUMBER	QTY
1	ASY 6 LINK CHAIN 1/4IN G60	RB-100	76
2	FHCS 1 / 2-13 X 1.50 GR5 CL ZN	90129A128	8
3	CHAIN HANGER DOUBLEROW FHX86	08923	1
4	HANGER ROD CHAIN GUARD FHX86	08924	1



REVISION: FHX86-250129

FHX-86 DEFENDER OWNER'S MANUAL



VALLEY TOOL

MANUFACTURING COMPANY

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