

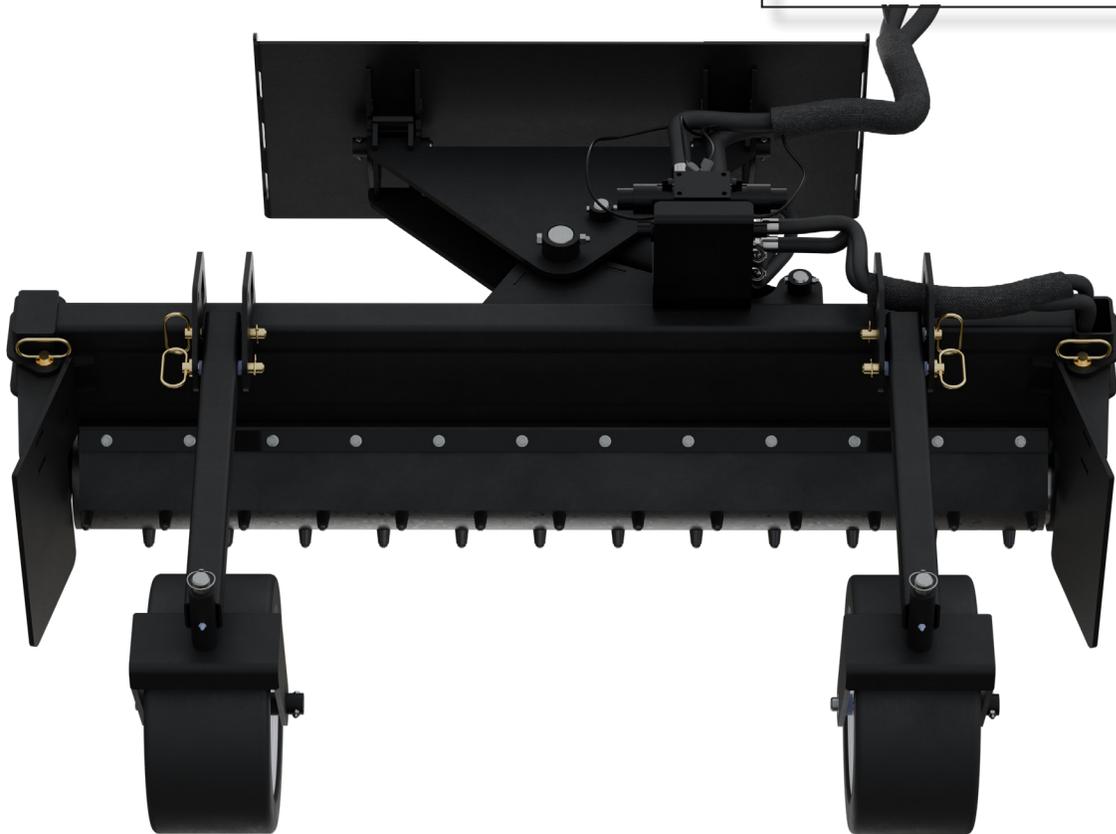
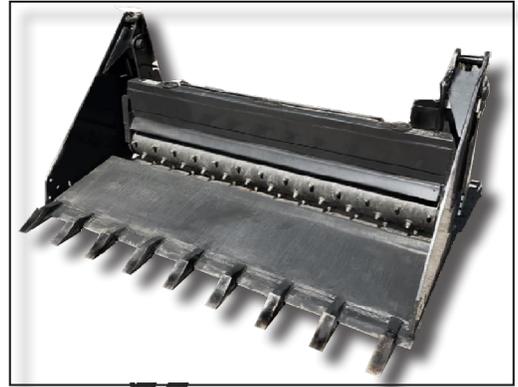


CID

POWER RAKES

ATTACHMENTS

OWNER'S MANUAL



**MULTI-PURPOSE
POWER RAKE**

**X-TREME
POWER RAKE**

JAN
2026

OPERATING INSTRUCTIONS | SAFETY RULES | MAINTENANCE PROCEDURES

REGISTER YOUR PRODUCT

CID

336-859-2002

MODEL

WEIGHT

PART

HP RANGE

SERIAL

HYDRAULIC PRESSURE

HYDRAULIC FLOW

WWW.CIDATTACHMENTS.COM

Please see the inside of the back cover for instructions of where to find your model and serial number.

WARNING

To prevent personal injury or even death, be sure you read and understand all the instructions in this manual and other related OEM equipment manuals! This attachment, if not used and maintained properly, can be dangerous to users unfamiliar with its operation. Do not allow operating, maintaining, adjusting, or cleaning of this attachment until the user has read this manual and has developed a thorough understanding of the safety precautions and functions of the unit. This attachment is designed for the purpose specified. DO NOT modify or use this attachment for any application other than that for which it was designed. Attachments maintained or operated improperly or by untrained personnel can be dangerous, exposing the user and/or bystanders to possible serious injury or death.

Purchase Date:

Dealer Name:

Address:

Phone Number:

WELCOME

Thank you for choosing CID. This attachment has been designed and manufactured to meet the needs of discerning users. We are committed to providing you with a heavy duty product that will provide years of satisfaction and safe operation.

This manual will provide instructions on how to safely operate and maintain this attachment. All users must read and understand this manual before operating this machine. Upon reading this manual, all users should sign the “Safety Acknowledgment Form” at the end of this manual.

Please record your model and dealer information on the inside front cover. You will be asked to provide this information when ordering parts or requesting service. If you need more information on this product, contact your local dealer or visit www.cidattachments.com.

Sincerely,
The CID Team



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IMPORTANT WARRANTY DISCLAIMERS

ATTENTION: If your attachment has control valves, cylinders, gearboxes, or motors and they are opened or disassembled, the **WARRANTY for that item WILL IMMEDIATELY BE VOIDED!**

HYDRAULIC FLUID STATEMENT: Check your machine's hydraulic level and add hydraulic fluid if necessary before each use. Inspect for leaks, and repair if necessary. **Always use your machine's manufacturer recommended hydraulic fluid in your machine!** Fluid must be clean and debris free. If damage occurs from debris in hydraulic fluid flowing from your machine to our attachment it will VOID the warranty on any cylinders, motors, couplers, manifolds &/or valves (relief, lock, selector, check and flow control) downline from that flow.



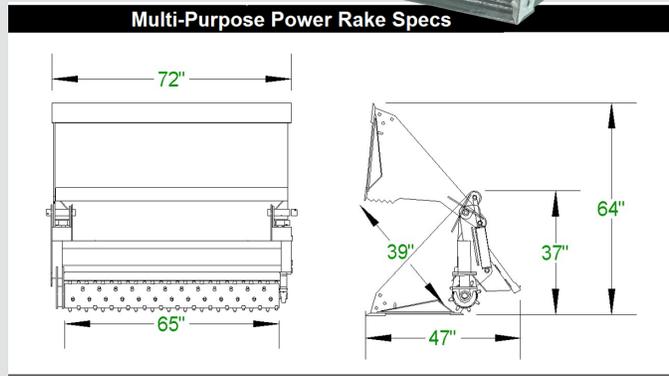
WARNING: This product can expose you to chemicals including benzene and mineral oils, which are known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

SECTION 2

POWER RAKE MODELS

MULTIPURPOSE POWER RAKE BUCKET

- Inset Direct Drive Motor
- Bi-Directional Drum
- Carbide Teeth on Drum
- Side cutters standard.
- Optional: Replaceable Teeth
- Optional: Bolt-On-Edge
- Available in 44", 72", 78", 84"
- Rated for 10-25 GPM

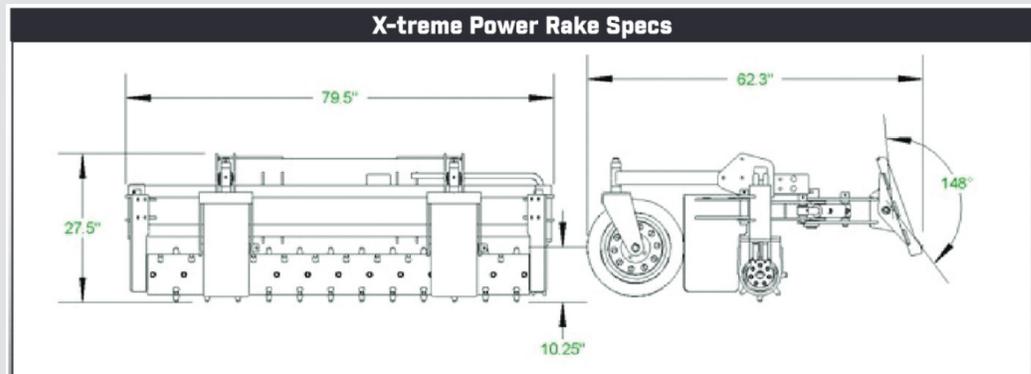


AVAILABLE AS
A MINI



X-TREME POWER RAKE

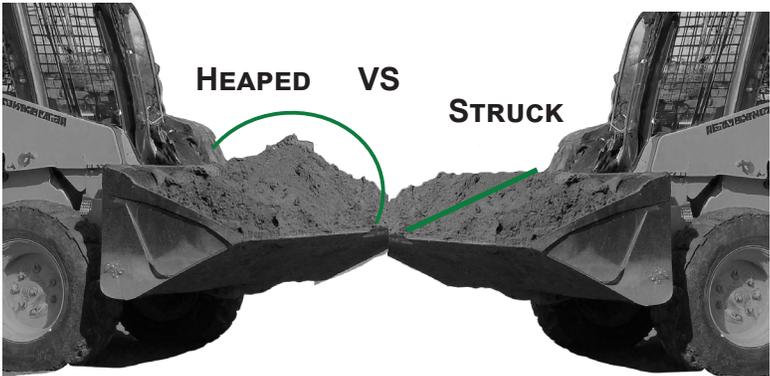
- Inset Direct Drive Motor
- Bi-directional drum
- Carbide Teeth on Drum
- Removable Side Plates
- Solid Foam-Filled Tires
- Hydraulic or Manual Angle
- Front/Back Debris Curtain
- Available in 36", 48", 60", 72", 90"
- Rated for 10-25 GPM



AVAILABLE AS
A MINI

DON'T OVERDO IT! CHECK YOUR BUCKET STRUCK CAPACITY!

To find the volume that your bucket can carry, scan the QR code below.



SECTION 3

SAFETY INFORMATION

The following terms may be used interchangeably throughout this manual.

Term	Alternate Terms Used
Power Rake	implement, attachment, product, rake, bucket
Machine	skid steer loader, tractor, loader, prime mover, host machine, skid steer
Operator	user, personnel

This **Power Rake** is designed and manufactured with safety in mind. However, improper use and operator error can result in death or serious injury. It is important that you read and fully understand the safety instructions and operating procedures presented in this manual before operating this power rake. Accident prevention is a combination of good judgment, common sense, awareness and proper training!



BEFORE YOU OPERATE THIS POWER RAKE:

KNOW how to safely operate your machine.

READ and UNDERSTAND the safety instructions and operating procedures contained in this manual.

ACKNOWLEDGE your understanding of all safety instructions presented in this manual by signing the “Safety Acknowledgment Form” at the end of this manual.

Although every effort has been made to ensure a safe product, every possible circumstance that could pose a potential hazard cannot be anticipated. The warnings presented in this manual and on this product, are therefore not all-inclusive.

In addition to the safety messages presented in this section, you must also read and understand the safety messages presented in the other sections of this manual.

This manual and the decals on this attachment use safety symbols, hazard labels, pictograms and color coded signal words to alert you to potential hazards that may cause severe injury or death if a safety instruction is ignored.



SAFETY ALERT SYMBOL - This symbol is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

HAZARD CLASSIFICATIONS

Hazards are identified by the “Safety Alert Symbol” and followed by the signal word “DANGER”, “WARNING”, or “CAUTION”.

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
This signal word is limited to the most extreme situations.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

Indicates a situation which may cause damage to equipment or property.
Messages are not related to personal injury.

Safety Instructions

Indicates specific safety-related instructions or procedures.

3.1 SAFETY SYMBOLS

Pictograms are graphic symbols meant to alert you of a potential hazard. Read and understand the hazard description for each of these symbols.

Pictogram	Description
	<p>PINCH HAZARD: Keep clear of machine and attachment to prevent death or serious injury from pinching of moving parts.</p>
	<p>FLYING DEBRIS HAZARD: ONLY operate this attachment using a machine that has a shatter proof cab to prevent death or serious injury from objects being thrown.</p>
	<p>OPERATING MANUAL: Operators must read and understand the safety instructions in the operating manual to prevent death or serious injury.</p>
	<p>EYE PROTECTION & CARDBOARD: Operators and Maintenance personnel must wear proper eye protection and use cardboard or wood to investigate hydraulic leaks to prevent death or serious injury from being injected with high pressure hydraulic fluid.</p>
	<p>HIGH PRESSURE FLUID INJECTION HAZARD: Operators and Maintenance personnel must not place fingers or hands directly over a hydraulic leak to prevent death or serious injury from being injected with high pressure hydraulic fluid.</p>
	<p>NO BYSTANDERS: DO NOT operate this attachment near bystanders. Bystanders must stay back at least 50 feet from the machine to prevent death or injury from objects being thrown.</p>
	<p>CRUSH HAZARD: DO NOT place any part of the body under the attachment or machine to prevent death or serious injury from being crushed .</p>
	<p>ENTANGLEMENT HAZARD: STAY BACK from machine while in use. Contact with rotating auger could kill or cause serious injuries.</p>

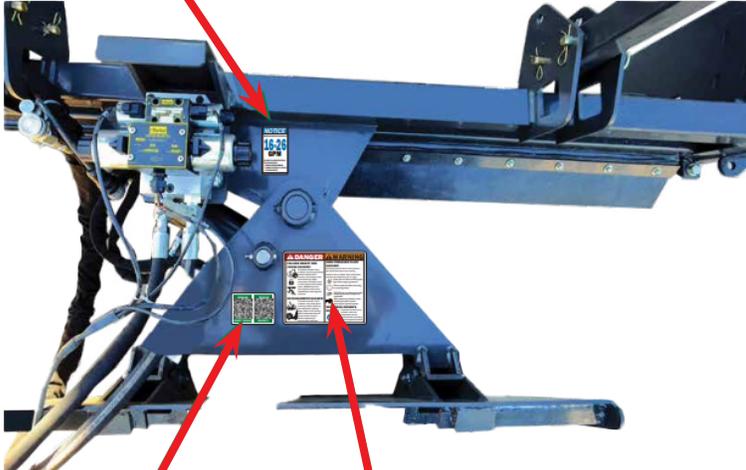
3.2 SAFETY DECALS

Safety warning decals are located on this machine near immediate areas of potential hazards. Operators must learn the meaning of each decal and know where to find the

decals on the machine.

3

X-TREME POWER RAKE



1

2



MULTI-PURPOSE POWER RAKE

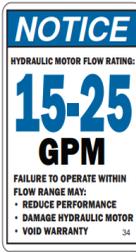
2

3

3.2 SAFETY DECALS

The safety decals affixed to this machine are to keep you safe. DO NOT ignore these decals.

Read and understand each decal's safety message. Follow these Safety Decal Instructions:

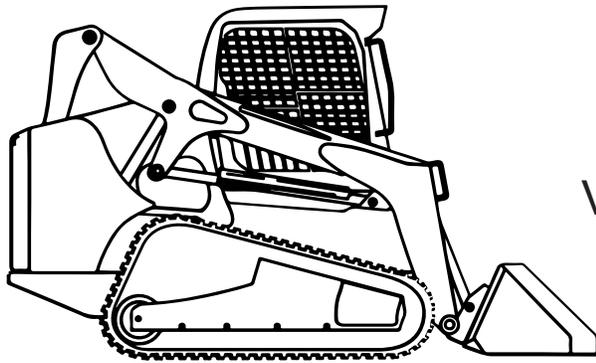
REF	DESCRIPTION	LABEL	QTY
1	OWNER'S MANUAL / WARRANTY		1
2	DANGER/WARNING COMBO		2
3	NOTICE: AUXILIARY HYDRAULIC FLOW NOT TO EXCEED NOTICE LABEL		1

**WHEN ORDERING, CHOOSE THE PROPER DECAL FOR YOUR MODEL*

CONTACT YOUR LOCAL DEALER TO ORDER REPLACEMENT DECALS

-  Decals must be kept clean and legible at all times.
-  Operators must inspect the attachment for safety decals.
-  Replace missing, worn or damaged decals immediately.
-  When using a hot pressure washer to clean this attachment make sure water jet is not too close to the decal as this may cause the decal to peel.
-  When replacing parts, be sure safety decals are in place prior to using the attachment.
-  Make sure metal surface is dry and free of dirt and grease before affixing decals to this attachment.

3.3 SKID STEER LOADER REQUIREMENTS



Tracked

VS.



Wheeled

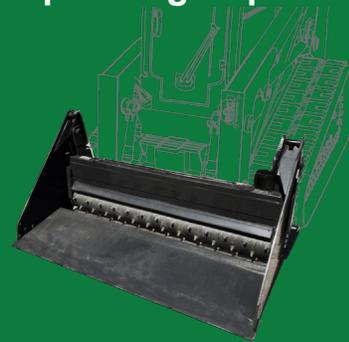
A Tracked Skid Steer or Compact Track Loader (CTL) will provide superior stability in this application.

! CAUTION

Make sure your machine is in good operating condition. Follow the operating instructions found in the operator's manual. Failure to do so could result in minor or serious injury.

Power Rakes should only be used on machines that meet the machine flow and have a proper Rated Operating Capacity (ROC).

Follow the operating instructions in your machine's operator manual.



3.4 PERSONAL PROTECTIVE EQUIPMENT (PPE)

All operators should wear hearing protection, safety glasses, hand protection and dust mask while operating this attachment.



3.5 GENERAL SAFETY INSTRUCTIONS



MAKE SURE YOU FOLLOW THE GENERAL SAFETY INSTRUCTIONS THAT RELATE TO THE OVERALL OPERATION AND MAINTENANCE OF THIS ATTACHMENT. IT IS IMPORTANT THAT YOU READ AND UNDERSTAND EACH OF THESE MESSAGES TO PREVENT SERIOUS INJURY OR DEATH.

- ! NEVER** use drugs or alcoholic beverages while operating or servicing this attachment.
- ! ALWAYS** operate this attachment during daylight or well-lit areas.
- ! We recommend** using a high strength clear protective door panel when using with this attachment.
- ! To prevent** the machine and attachment from rolling forward, stop the engine and set the parking brake when exiting the machine.
- ! Inspect** attachment for loose or missing hardware prior to using this machine.
- ! ALWAYS** watch for overhead power lines.
- ! DO NOT** place any part of your body under this attachment.
- ! NEVER** operate this attachment when bystanders are within 50 feet of your work area. Flying debris could cause serious injury or death.
- ! NEVER** position your body or limbs under an unsupported attachment.
- ! DO NOT** allow this attachment to contact buildings, utilities, large rocks or tree stumps or you may lose control of the machine.
- ! DO NOT** allow children to play on or around this attachment at any time. Store this attachment in an area not frequented by children.
- ! ALWAYS** wear the proper personal protection equipment while operating or servicing this attachment. **NEVER** operate or service this attachment with bare feet, sandals, or other light footwear.
- ! ALWAYS** wear work gloves when handling this attachment to protect your hands.
- ! ALWAYS** use eye protection while operating or servicing this attachment.
- ! DO NOT** operate this attachment during lightning or severe weather conditions.
- ! DO NOT** allow riders on the machine or on this attachment.
- ! ALWAYS** call 811, the “Digger’s Hotline” before digging to identify underground utilities to avoid an accident that could result in Death or Serious Injury to the operator.
- ! DO NOT** speed! Speed Kills! Keep your driving speed between 2 and 5 mph.
- ! NEVER** leave equipment unattended with the engine running, or with this attachment in a raised position.

3.6 FEDERAL LAWS & REGULATIONS

IMPORTANT FEDERAL LAWS AND REGULATIONS CONCERNING EMPLOYERS, EMPLOYEES, AND OPERATORS

This section is intended to explain in broad terms the concept and effect of the following federal laws and regulations. It is not intended as a legal interpretation of the laws and should not be considered as such.

U.S. PUBLIC LAW 91-596 (The Williams-Steiger Occupational Safety and Health Act of 1970) OSHA

This Act Seeks:

“ ... to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources...”

Sec. 5(a) Each Employer – DUTIES

(1) shall furnish to each of its employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to its employees.

(2) shall comply with occupational safety and health standards promulgated under this Act.

(b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this Act which are applicable to his or her own actions and conduct.

OSHA Regulations

Current OSHA regulations state in part: “At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all equipment with which the employee is, or will be involved.” These will include (but are not limited to) instructions to:

Keep all guards in place when the machine is in operation;

Permit no riders on equipment;

Stop engine, disconnect the power source, and wait for all machine movement to stop before servicing, adjusting, cleaning, or unclogging the equipment, except where the machine must be running to be properly serviced or maintained, in which case the employer shall instruct employees as to all steps and procedures which are necessary to safely service or maintain equipment.

Make sure no one is within 300 feet of machinery before starting the engine, engaging power, or operating the machine.

EMPLOYEE MACHINE OPERATING INSTRUCTIONS:

1. Securely fasten your seat belt if the machine has a ROPS.
2. Where possible, avoid operating the machine near ditches, embankments, and holes.
3. Reduce speed when turning, crossing slopes, and on rough, slick, or muddy surfaces.
4. Stay off slopes too steep for safe operation.
5. Watch where you are going, especially at row ends, on roads, and around trees.
6. Do not permit others to ride.
7. Operate the machine smoothly - no jerky turns, starts, or stops.
8. Hitch only to the drawbar and hitch points recommended by machine manufacturers.
9. When machine is stopped, set brakes securely and use park lock if available.

Child Labor Under 16 Years Old

Some regulations specify that no one under the age of 16 may operate power machinery. It is your responsibility to know what these regulations are in your own area or situation. (Refer to U.S. Dept. of Labor, Employment Standard Administration, Wage & Home Division, Child Labor Bulletin # 102).

SECTION 4

OPERATING PROCEDURES

Your attachment may arrive from the factory strapped to a wood pallet and requires no final assembly. Use a steel band cutting tool to remove the steel straps.

CAUTION

Shipping straps are under great tension, and could lash out uncontrollably when cut causing injuries to your body or bystanders. Keep bystanders away and wear safety glasses and gloves while removing the steel straps.

4.1 PRE-OPERATING CHECKLIST

Pre-Operating Checklist	
<input type="checkbox"/>	Power Rake is securely attached to the machine and pins are locked.
<input type="checkbox"/>	Hydraulic hoses are connected and locked to the host machine's hydraulic couplers with no signs of hydraulic fluid leaks present.
<input type="checkbox"/>	Power Rake is in working condition and securely attached to the machine and all bolts, nuts, and pins are tightened and secure.
<input type="checkbox"/>	Electrical harness is connected to the machine from the attachment. (if applicable)
<input type="checkbox"/>	Safety labels are present and legible.
<input type="checkbox"/>	No material, ropes, wire, etc. is obstructing the machine or drum.
<input type="checkbox"/>	The area of operation is clear of bystanders and any obstacles that could damage the equipment or injure the operator.
<input type="checkbox"/>	The operator is of good health and not under the influence of any mind altering substances or alcohol.
<input type="checkbox"/>	Check the machine's hydraulic fluid level and add fluid if necessary. <i>Please refer to our "Hydraulic Fluid and Oil Statement" on Page 5 for gear oil or hydraulic fluid instructions.</i>

4.2 HOW TO CONNECT POWER RAKE ATTACHMENT

GENERAL ATTACHMENT METHOD

Refer to your machine's manual for specific instructions on how to connect and disconnect your attachment. See figure 4.2c.

This attachment method refers specifically to skid steers. For all other attachment instructions, refer to the Original Equipment Manufacturer (OEM) for instructions.

1. Make sure the hydraulic lines are clear from the front side of the power rake's attachment plate and that the locking pins on the skid steer quick attach mechanism are in the unlocked position.
2. Drive the skid steer to the attachment plate and tilt the skid steer coupler forward and hook the top edge of the skid steer quick attach mechanism under the lip of the power rake's attachment plate. See figure 4.2a below.
3. Slowly raise and tilt back the skid steer mounting plate, moving upward until the power rake's attachment plate is flat against the skid steer quick attach mechanism. See figure 4.2a below.

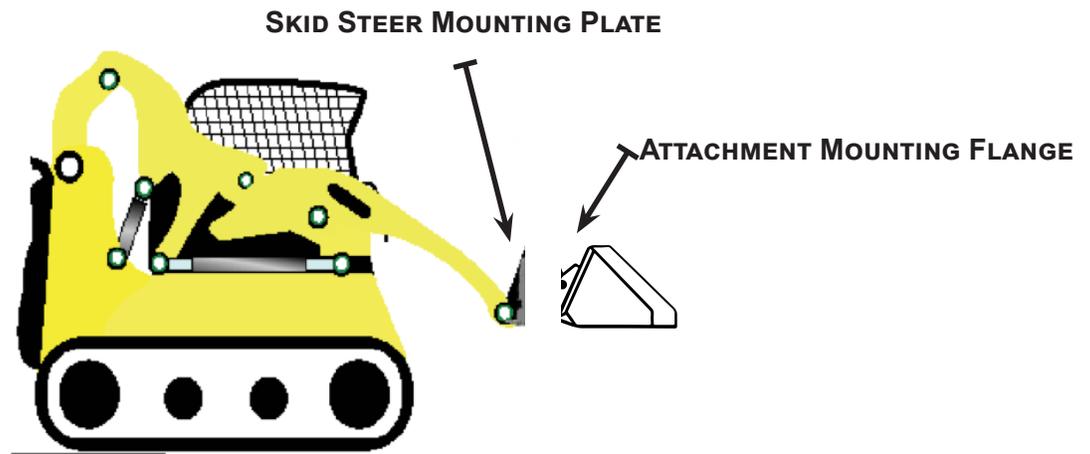


FIGURE 4.2A - SKID STEER MOUNTING PLATE TO ATTACHMENT MOUNTING FLANGE

4. Activate your skid steer's lever lock switch to engage and lock the pins into the flange slots of the power rake's attachment plate. If your skid steer does not have this switch, push the latch handles down until you can see the lock pins extend into the attachment flange as shown in Figure 4.2b below.

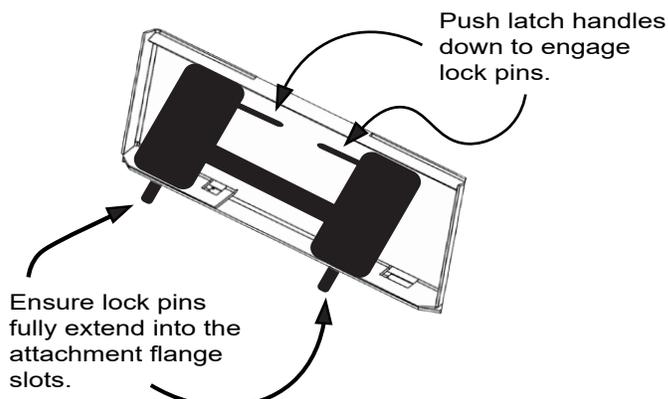


FIGURE 4.2B QUICK ATTACH COUPLER LOCKED TO ATTACHMENT PLATE



FIGURE 4.2C TRACTOR PIN ON HOOKUP

4.2 HOW TO CONNECT POWER RAKE ATTACHMENT CONT.

! WARNING

To avoid serious injury or death, ensure coupler pins fully extend through the slots on the attachment bracket and that levers are down in the locked position to prevent power rake from detaching from skid steer.

NOTICE

To keep contaminants from entering the hydraulic system, use a clean cloth to wipe away dirt and grease from the hydraulic couplers and cover with plastic or metal caps when not in use.

5. Connect the electrical harness (if applicable) and hydraulic hoses to the auxiliary supply couplers and machine side electrical harness.

NOTICE

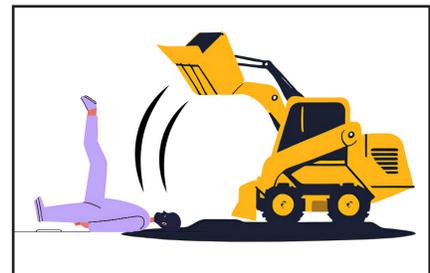
Check that hydraulic hoses are locked into the machine's couplers before moving attachment.

! CAUTION

ALWAYS visually inspect and verify that the coupler lock pins are fully engaged through the latch slots on the attachment plate.

! DANGER

NEVER enter the area underneath the coupler or any part of the attachment when it is in the raised position to avoid an accident that will result in Death or Serious Injury!



4.3 CONNECTING ELECTRICAL HARNESS

Connect the electrical attachment harness from the power rake to the electrical bulkhead connector mounted on the machine loader arm or using the universal harness connected to a 12V power source. A *universal, 7 pin, 8 pin, or 14 pin* wiring harness adapter is available to make this connection. NOTE: The manual power rake does not require an electrical harness.

POWER RAKE CONTROLS

Your power rake is designed to run off the machine's auxiliary hydraulic system, and is activated and deactivated by a control in the operator's cab. The height and tilt functions of your power rake are operated with the control handles or pedals in the cab.

Consult your machine operator's manual for instructions regarding these functions.

4.3 CONNECTING ELECTRICAL HARNESS CONT. ELECTRICAL DIAGRAMS



WIRE COLOR CODES FOR ELECTRICAL HARNESS PINOUTS

asv — 8 PIN

- A=BLACK (GROUND)
- B=ORANGE
- G=YELLOW
- C=BLUE
- D=RED

GEHL — 14 PIN

- B=BLACK
- C=ORANGE
- D=YELLOW
- E=RED
- F=BLUE

NEW HOLLAND — 14 PIN

- B=BLACK
- C=ORANGE (LEFT)
- D=YELLOW (RIGHT)
- E=BLUE (DOWN)
- F=RED (UP)

TAKEUCHI — 14 PIN

- B=BLACK
- E=YELLOW
- F=ORANGE
- C=RED
- D=BLUE

Kubota — 14 PIN

- B=BLACK (GROUND)
- C=RED
- D=BLUE
- G=YELLOW
- H=ORANGE
- E=MOMENTARY HOT
- F=MOMENTARY HOT

Bobcat — S MODELS 14 PIN

- B=BLACK
- E=ORANGE
- F=YELLOW
- G=BLUE
- H=RED

CAT — D MODELS 14 PIN

- B=BLACK
- F=BLUE
- E=RED
- J=MOMENTARY HOT
- K=MOMENTARY HOT
- C=YELLOW
- D=ORANGE

CASE — 14 PIN

- B=BLACK
- C=ORANGE
- D=YELLOW
- E=BLUE
- F=RED

KIOTI — 14 PIN

- B=BLACK (GROUND)
- C=RED (UP)
- D=BLUE (DOWN)
- G=ORANGE (LEFT)
- H=YELLOW (RIGHT)
- E=MOMENTARY HOT
- F=MOMENTARY HOT

JCB — 14 PIN

- B=BLACK
- C=RED
- D=BLUE
- E=YELLOW
- F=ORANGE

asv — 14 PIN

- C=RED
- D=BLUE
- E=ORANGE
- F=YELLOW
- B=BLACK

JOHN DEERE — G OR D MODELS 14 PIN

- A=BLACK
- C=RED
- D=BLUE
- E=YELLOW
- G=ORANGE

FIGURE 4.3A - ELECTRICAL DIAGRAM

4.3 CONNECTING ELECTRICAL HARNESS CONT.



FIGURE 4.3B TWO FUNCTION WIRING HARNESS



FIGURE 4.3C 7 PIN WIRING HARNESS

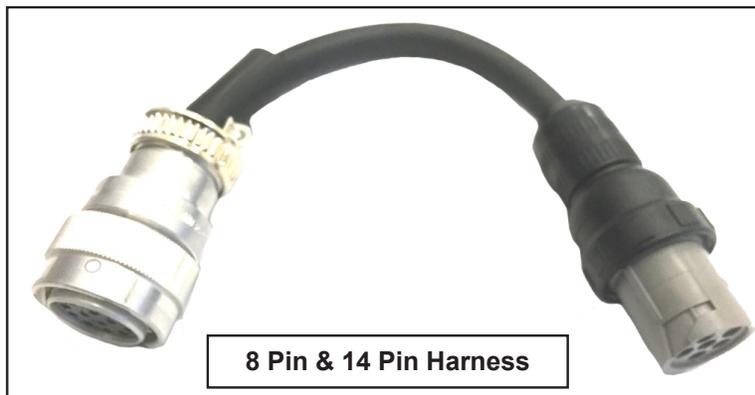
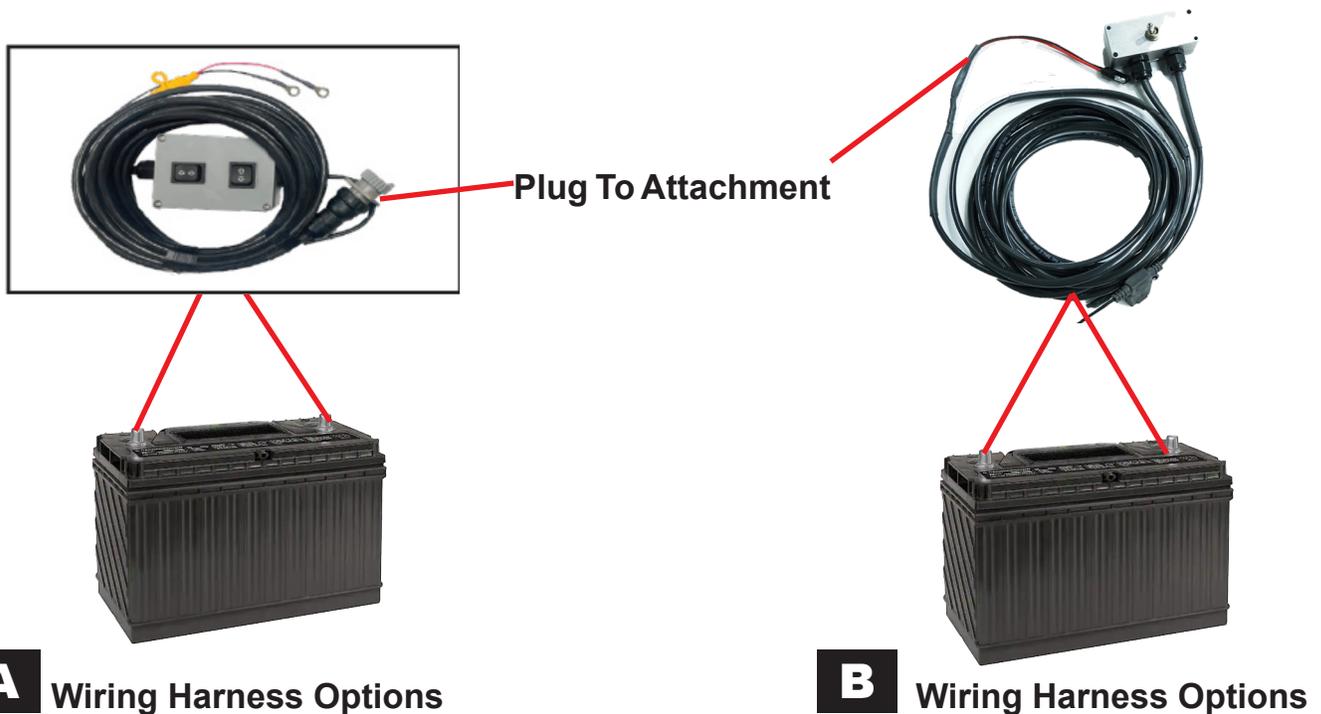


FIGURE 4.3D 8 & 14 PIN TO 5 PIN FOUR FUNCTION WIRING HARNESS

4.4 UNIVERSAL TWO OR FOUR ELECTRICAL INSTALLATION



A Wiring Harness Options

FIGURE 4.4A FOUR FUNCTION ATTACHMENT HARNESS

B Wiring Harness Options

FIGURE 4.4B UNIVERSAL TWO FUNCTION WIRING HARNESS

4.5 TWO OR FOUR FUNCTION UNIVERSAL CONTROLLER INSTALLATION

If your machine **does not** have an auxiliary electrical connector, you will use the universal controller as follows:

POWER RAKE: The four-function controller is used to control the hydraulic angling of the drum and the drum rotation (forward and reverse).

MULTI-PURPOSE POWER RAKE BUCKET: The two-function controller will be used to switch between cylinder and motor functions.

NOTICE

To prevent possible equipment damage, it is recommended that the universal controller is installed by a qualified technician who is familiar with your machine's electrical system.

TO INSTALL UNIVERSAL CONTROLLER:

1. Place the universal controller in the location where it will be operated and route the power source cable where the red wire with fuse can be connected to a 12V power source and the black wire connected to the ground. (12V socket adapters can be used as well.)

4.5 TWO OR FOUR FUNCTION UNIVERSAL CONTROLLER INSTALLATION CONT.

TO INSTALL UNIVERSAL CONTROLLER CONT:

2. Route the pin connector from the controller to a point near the hydraulic couplers and connect to the attachment via the 2 pin or 5 pin connector. *Note: Secure this cable using plastic cable ties where appropriate to keep cable from being snagged by tree branches or other debris.*
3. Check that the cable is free of tension when raising and lowering the machine arms.
4. Appropriately secure universal control box so that damage does not occur.

! WARNING

To avoid unwanted attachment movement that may result in serious injury, shut the machine off and avoid contact with the controller to prevent unexpected movement when exiting the machine.

4.6 POWER RAKE CONTROLS

To operate the power rake controls, the machine's auxiliary hydraulic system must be activated. To change drum rotation (UP/DN) or angle (LT/RT), you will use the machine's auxiliary controls or the universal controller. *Figure 4.6 A or B*



FIGURE 4.6A TYPICAL MACHINE AUXILIARY ELECTRIC CONTROLLER

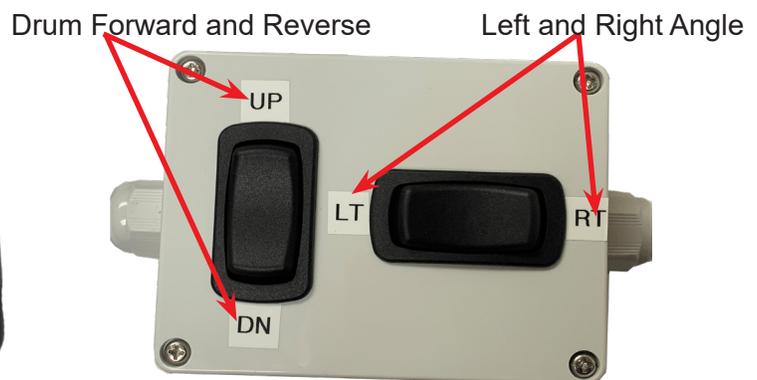


FIGURE 4.6B UNIVERSAL CONTROLLER

NOTE: When using the controls to angle the power rake, the drum speed may slow down. The power rake will resume its normal operating speed once the drum angle action has stopped.

4.6 POWER RAKE CONTROLS CONT.

NOTICE

Some machines have a “float” function on the lowering circuit which will allow the attachment to follow the contour of the ground being worked. See the machine’s operator manual for instructions.

Your power rake is designed to run off the machine’s auxiliary hydraulic system, and is activated and deactivated by a control in the operator’s cab. The height and tilt functions of your power rake are operated with the control handles or pedals in the cab. Consult your machine’s operator’s manual for instructions regarding these functions.

MANUAL POWER RAKE ANGLE CHANGE:

1. Raise the power rake 4 - 8” off the ground, then shut off the machine engine and exit the cab.
2. Remove the angle-lock pin located in the center of the power rake mounting bracket.
3. When the lock pin has been pulled, pivot the power rake head to the desired angle.
4. Re-insert pin to lock the power rake head in place. *See Figure 4.6C*



FIGURE 4.6C ANGLE CHANGE LOCKING PIN

4.7 MULTI-PURPOSE POWER RAKE BUCKET CONTROLS

HYDRAULIC FLOW

To operate the multi-purpose power rake bucket controls, the machine’s auxiliary hydraulic system must be activated. To change between drum and cylinder functions, you will use the machine’s auxiliary controls or the universal controller. Once the drum or cylinder function is selected, use the machine’s flow controls to open or close bucket cylinders or change drum rotation to forward or reverse.

Your multi-purpose power rake bucket is designed to run off the machine’s auxiliary hydraulic system, and is activated and deactivated by a control in the operator’s cab. The height and tilt functions of your multi-purpose power rake bucket are operated with the control handles or pedals in the cab. Consult your machine’s operator’s manual for instructions regarding these functions.



4.8 PREPPING FOR FIRST TIME USE



Please refer to our “Hydraulic Fluid and Oil Statement” on Page 5 for gear oil or hydraulic fluid instructions.



Verify that hydraulic hoses are securely locked to the machine hydraulic couplers before starting to use this attachment.

NOTICE

Before operating the attachment check the hydraulic fluid in the machine and add manufacturer recommended fluid if necessary.

Please refer to our “Hydraulic Fluid and Oil Statement” on Page 5 for gear oil or hydraulic fluid instructions.

1. After starting machine, lift attachment six (6) inches off the ground surface:
2. Set machine engine RPM to just above idle.
3. Switch on the auxiliary hydraulic circuit.
4. POWER RAKE: Run for 30 seconds gradually increasing throttle to full RPM to purge air from the system. Test the controls for proper movement completing a full left angle, full right angle (if applicable), drum forward and drum reverse, then switch off auxiliary hydraulic circuit.
5. MULTI-PURPOSE POWER RAKE BUCKET: Run drum both forward and reverse for 30 seconds gradually increasing throttle to full RPM, then switch to cylinder function, open and close bucket for several full cycles. Switch off auxiliary hydraulic circuit.
6. Lower the attachment to the ground, shut off machine engine.
7. Check the hydraulic fluid level in the machine, add manufacturer recommended fluid if necessary.
8. Inspect the attachment hydraulic hoses and fittings for noticeable leaks. Fix before continuing.

NOTICE

If drum excessively vibrates while increasing RPM's, switch off the auxiliary hydraulic circuit and investigate the cause. Refer to the Troubleshooting Chart in this manual.

WARNING

To avoid serious injury by hydraulic fluid injection into your skin, never use your hand or other body parts to locate a hydraulic leak. Detect leaks with a piece of wood or cardboard.

4.9 LEARNING YOUR ATTACHMENT

CAUTION

USE CAUTION when operating on un-level ground surfaces. A machine roll over could result in Minor or Serious Injury. ALWAYS wear your seat belt when operating this attachment. If applicable

4.9 LEARNING YOUR ATTACHMENT CONT.

1. Before using this attachment, make sure you are knowledgeable and comfortable with the operation of the auxiliary hydraulic control as outlined in previous sections of this manual and in the machine's operator's manual.
2. When operating this attachment, set the machine throttle at a speed that will produce the required flow. If the machine is equipped with a foot throttle, use it to control engine speed and power being delivered to the attachment. Refer to your machine manual or call your local machine dealer for additional help if necessary.
3. Learn what the attachment looks like in a level position when you are seated in the machine. This will help you when operating the attachment.
4. The correct ground speed while using this attachment depends on the application and ground condition and can be monitored by sight, sound, and feel.
5. Note that if the machine engine is bogging down because of load on the attachment, it will be necessary to decrease the load until the machine's power can overcome the material load on the attachment.

4.10 BEFORE USING YOUR ATTACHMENT

! DANGER

ALWAYS contact 811, the "Digger's Hotline" to identify underground utilities to avoid an accident that could result in Death or Serious Injury!

! WARNING

EXPOSURE to crystalline silica dust along with other hazardous dusts may cause serious or fatal respiratory disease. It is recommended to use dust suppression, dust collection and if necessary personal protective equipment during the operation of any attachment that may cause a high level of dust.

1. Inspect the area to be worked and make sure it is free of any utilities, rocks, fence posts, or any other objects that you do not want to move.
2. Determine a safe and efficient pattern before the start of the job.



DANGER

ALWAYS contact 811, the “Digger’s Hotline” to identify underground utilities to avoid an accident that could result in Death or Serious Injury!



ALWAYS be aware of your surroundings and pay attention to obstacles and terrain around you.

DANGER

To prevent death from electrocution, NEVER operate this attachment near electrical wires or cables.

You must notify utility companies of your intent to dig or trench by calling 811 or making an online request with your state’s 811 center a few days prior to digging or trenching. Visit: <https://call811.com/811-In-Your-State> to connect to your state’s 811 center.



**Know what's below.
Call before you dig.**

4.12 STARTING & STOPPING THE POWER RAKE

HYDRAULIC FLOW REQUIREMENTS

When operating the power rake, set the machine RPM to a speed that will produce the required flow. Your machine dealer can measure the flow available on your machine and recommend a flow setting that is compatible with this attachment

NOTICE

DO NOT exceed the designed flow rate of 10-25 GPM when operating your power rake.

STARTING THE POWER RAKE

! WARNING

To avoid serious injury or death from thrown objects and flying debris, ensure no bystanders are within 50 feet of the work area before starting the Power Rake.

1. Complete steps 1-5 in Section 4.2.
2. Set machine engine RPM to slightly above idle.
3. Raise the rake 6" (inches) above the ground.
4. Activate machine's auxiliary hydraulic circuit.
5. Slowly increase the machine engine to full throttle. Ensure Power Rake is running smoothly.

NOTICE

DO NOT engage the auxiliary hydraulic circuit with engine at full throttle or damage to the drum unit can occur!

STOPPING THE POWER RAKE

1. Raise the Power Rake slightly and set machine engine RPM to idle.
2. Switch off the auxiliary hydraulic flow to the Power Rake.

4.13 POWER RAKE RETAINING WINGS

FUNCTIONS

1. Retains dirt in front or rear of the roller (drum) to allow rocks and other debris to be sifted.
2. Pushes dirt along the path of travel filling in low spots.
3. Wings are removable and can be stored flipped up or can be used in the forward or rearward positions.

4.13 POWER RAKE RETAINING WINGS CONT.

If dirt needs to be retained while the machine is traveling in reverse, then the retaining wings should be installed on the opposite sides according to *Figure 4.13*.

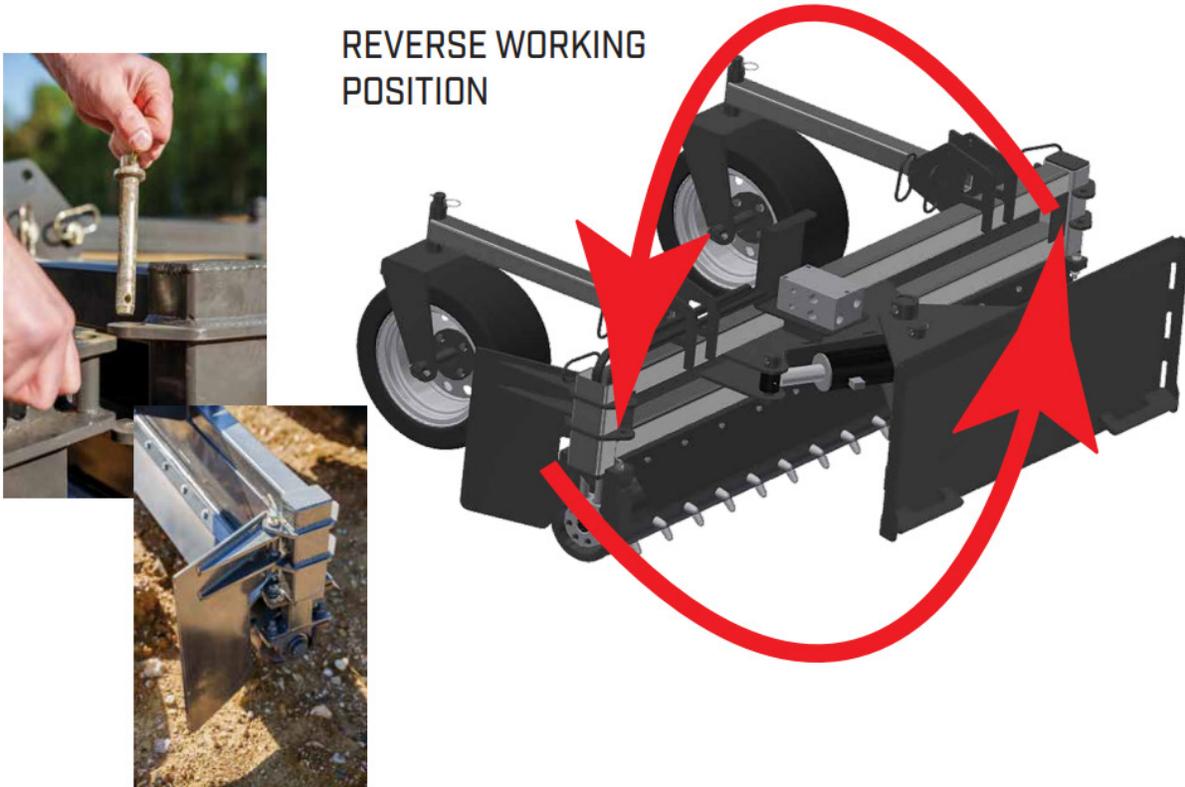


FIGURE 4.13 RETAINING WINGS

NOTICE

Extremely rough and hard surface areas can damage the wings especially if contact with solid objects occur.

4.14 POWER RAKE LEVELING WHEELS

FUNCTIONS

1. Working Position: The leveling wheels are designed to allow the power rake to maintain a level floating position. See *Figure 4.14*
2. Storage Position: The leveling wheels can be set to the upright position for easier storage and transportation. See *Figure 4.14*

4.14 POWER RAKE LEVELING WHEELS CONT.

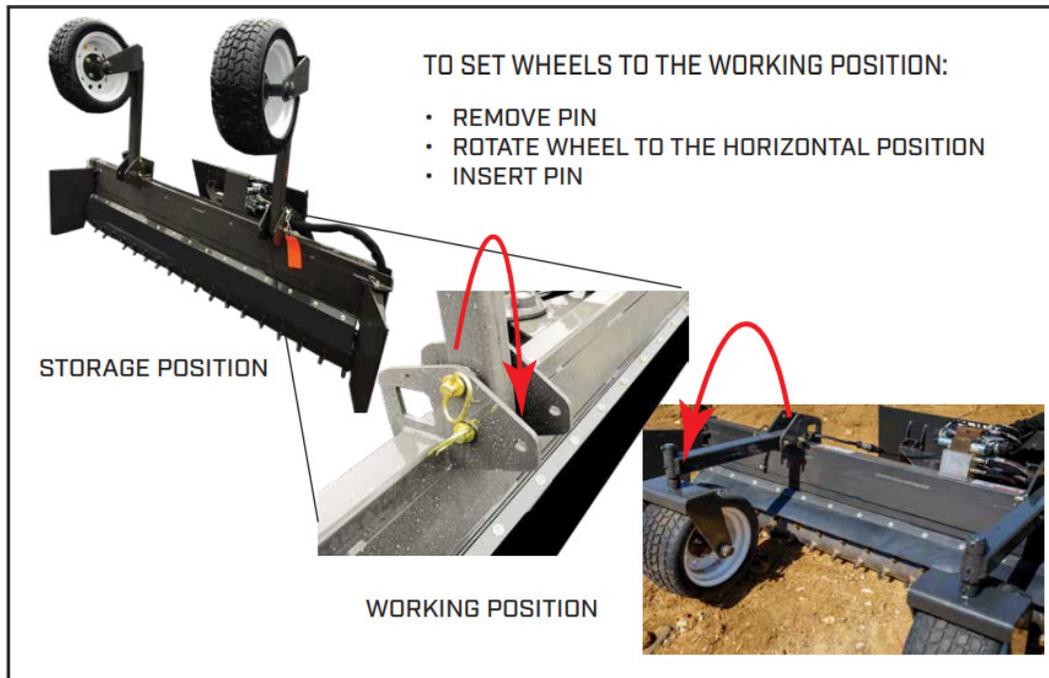


FIGURE 4.14 LEVELING WHEELS

4.15 REMOVING DRUM DEBRIS

! WARNING

Material such as rope, wire, roots, plastic etc. may wrap around the drum. **STOP IMMEDIATELY** and remove foreign material. A spinning drum can throw material causing injury to the operator and bystander. Material that wraps around the drum may cause premature wear and/or damage to power rake, multi-purpose power rake bucket or machine.

! DANGER

To Prevent Serious injury or death, do not use blocking of any material that could suddenly collapse.

To REMOVE WRAPPED OR STUCK MATERIAL:

1. Place your host machine on a level surface and place in park, engaging the parking brake.
2. Lower the power rake onto preplaced blocking that will support the frame so that the drum teeth are not in contact with the ground.
3. Shut off your host machine's engine, and relieve all pressure in the hydraulic lines.
4. Disconnect the hydraulic lines from your host machine and connect the two ends to each other to allow the drum to rotate freely.
5. Remove the material from the drum while allowing it to rotate manually.
6. Reconnect the hydraulic lines to your host machine.

PREPARING SEED BEDS

1. **STAKEOUT** the desired location of the seed bed and **MARK** each corner using marking paint and wooden grade stakes.
2. Carefully **INSPECT** the work area for any hazards or utilities. **REMOVE** objects that could damage the attachment such as metal piping, fence materials, cables and large rocks.
3. **CUT** grass that is taller than 6 inches and **REMOVE** the cut grass before using the attachment. Tall grass can wrap and bind around the drum reducing machine performance.
4. **POWER RAKE: BREAKUP** areas with hard soil by tilting back the Power Rake until the leveling wheels lift from the ground and the rotating drum contacts the surface. Note: Leveling wheels may also be removed or placed in the up position. If the machine starts to “bog” down or stall out, slow travel speed to decrease load on drum. The retaining wings should be in the flipped up position during this process. Multiple passes may be necessary to ensure hardened soil has been pulverized.
5. **MULTI-PURPOSE POWER RAKE BUCKET: BREAKUP** areas with hard soil by opening the front bucket to ensure the drum contacts the ground. If the machine starts to bog down, slow travel speed to maintain steady drum rotation. Multiple passes may be necessary to ensure hardened soil has been pulverized.

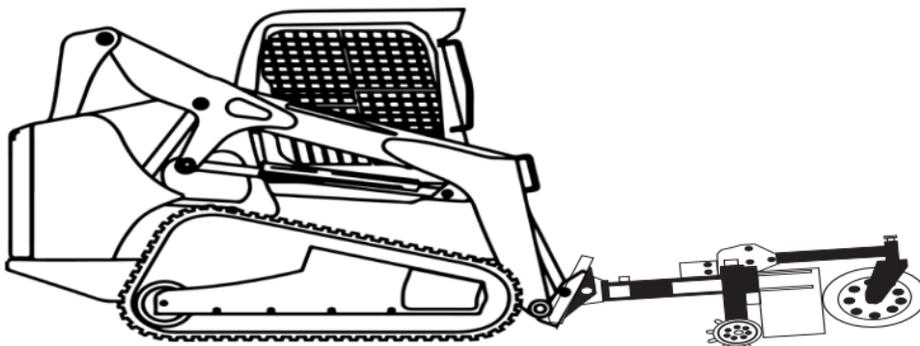


4.17 OPERATING GUIDELINES

1. ALWAYS inspect the work area before starting the job. Locate and mark any utilities, steel posts, rocks or any other objects that could be damaged or could damage this attachment during operation.
2. NEVER assume the work area is safe and skip the inspection before start of operation.
3. Operate at a safe slow-paced speed that will allow you to watch the area ahead and behind the attachment and machine.
4. VERIFY that your back-up alarm is working properly to warn others when you are in reverse, but NEVER think that the alarm replaces your responsibility to visually check what is behind you.
5. Attachment control is the most important element to getting a good steady work flow. Overloading the attachment will only result in spinning the tracks or tires and will make unwanted ruts.
6. The Power Rake should be set to operate level. Adjust the leveling wheel height to the drum using your machine controls.
7. For best results any “green material” in the work area should be dry.
8. To thatch grass areas, lower the leveling wheels and tilt the rake forward so that the teeth on the drum are barely grazing the surface.
9. POWER RAKE: Use a loader bucket to remove large windrow piles.
10. NEVER engage the auxiliary hydraulics at full engine rpm.
11. When the power rake is operated at an angle, the machine will want to continue to veer in the direction of the angle. The operator must make adjustment with the machine controls to keep a straight line of travel.
12. Maintain sufficient RPM by slowing your travel speed to avoid stalling the rotating drum.
13. Operating the power rake in reverse will remove the machine tracks.

4.18 HOW TO DISCONNECT ATTACHMENT

1. Turn off auxiliary hydraulic circuit; relieve hydraulic pressure.
2. Park machine on a flat and level surface then lower attachment to the ground.
3. Set parking brake and disengage lock pins using the lock lever switch (if applicable).
4. Turn off machine engine.
5. Disconnect hydraulic hoses and electrical harness connector. (If applicable.)
6. Pull latch handles to disengage lock pins.
7. Re-enter cab and start machine engine.
8. Tilt mounting coupler forward until QuickAttach Coupler is free from mounting bracket.
9. Drive machine backward to clear attachment.



SECTION 5

MAINTENANCE PROCEDURES

The maintenance procedures described in this manual should only be carried out by qualified mechanics who have been trained to repair this attachment.

Some procedures require special tools and skills to complete. **DO NOT** attempt to repair or perform service work on this attachment unless you have the skills and tools to do so. Contact your local dealer for maintenance and repair services.

! WARNING Only use genuine Original Equipment Manufacturer (OEM) replacement parts on this attachment. We will not be liable for any damages or injuries caused by the use of after market use parts on this attachment.

NOTICE

Improper maintenance or modifications to the design or performance of this attachment will void the warranty. **ONLY** use genuine replacement parts on this attachment.

Safety Instructions

Obey the following safety instructions when servicing or repairing this attachment.

- ! Wear proper Personal Protective Equipment (PPE) while working on this attachment, which may include safety glasses, hard hats, steel toe boots, gloves, etc.**
- ! If servicing is performed while the power rake is attached to the machine, turn engine off, set parking brake and chock wheels to prevent machine from moving.**
- ! Ensure all jack stands, lifts and hoists are in good working condition and have the rated load capacity to support the load.**
- ! Only perform service work in a well-lit area.**
- ! Allow the attachment to cool down before servicing this attachment.**
- ! NEVER work under an unsupported attachment**

5.1 MAINTENANCE SCHEDULE.

WELDING REPAIRS

Welding on attachments must be performed by certified welders who have requested and obtained written approval from an authorized representative of the manufacturer before welding begins.

All authorized welding repairs must be performed by qualified welders in accordance to the American Welding Society (AWS) standards. Welding procedures performed by unqualified welders may deem the attachment unsafe to operate and **VOID THE WARRANTY!**

This attachment will provide years of dependable service if routine maintenance procedures are performed. The maintenance tasks listed below are based on normal operating conditions. More frequent maintenance may be necessary with intense use or when operating in adverse environmental conditions.

MAINTENANCE TASK	BEFORE EACH USE	WEEKLY	YEARLY
<p>Check host machine's hydraulic fluid level. Add manufacturer recommended fluid as necessary.</p> <p><i>Please refer to our "Hydraulic Fluid and Oil Statement" on Page 5 for gear oil or hydraulic fluid instructions.</i></p>	X		
<p>Check that all fasteners (nuts, bolts, washers, pins, keepers) are in place. Tighten as necessary.</p>	X		
<p>Inspect and replace any worn, torn, or missing safety decals.</p>	X		
<p>Inspect hydraulic hoses and connectors for damage or leakage. Repair or replace hydraulic items as necessary.</p>	X		
<p>Lubricate all grease points with #2 Lithium grease.</p>	X		
<p>Wash power rake attachment</p>	X		
<p>Check the condition of drum & teeth.</p>	X		
<p>Check power rake for major scratches & dings. Sand and repaint these areas to prevent rust damage.</p> <p>*Contact the manufacturer for approved OEM paint for your attachment.</p>			X

5.2 CUTTING EDGE REMOVAL & REPLACEMENT

! DANGER

NEVER enter the area underneath the coupler or any part of the attachment when it is in the raised position to avoid an accident that will result in Death or Serious Injury!

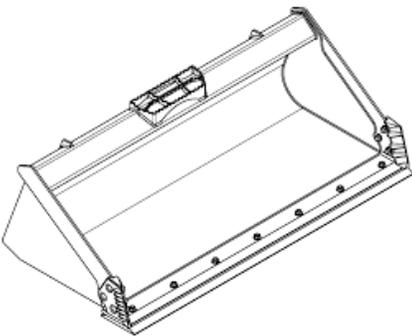
! WARNING

Hazardous dust can be generated if painted surfaces are heated or welded and could result in Death or Serious Injury. Remove paint before welding and always make repairs in a well-ventilated area and wear an approved respirator.

Bolt-on cutting edge replacement can be completed safely with proper torque values applied.

Weld-on cutting edge replacement is not a task for most machinery operators and should be referred to a welding shop that possesses the proper equipment, knowledge, and experience.

Replacement cutting edges are available from the manufacturer.



Attaching the Cutting Edge to your existing power rake bucket is a simple process that requires the use of the appropriate bolts and nuts, then torquing to the correct specifications as listed on page 37.

Contact your dealer for help with specific problems.

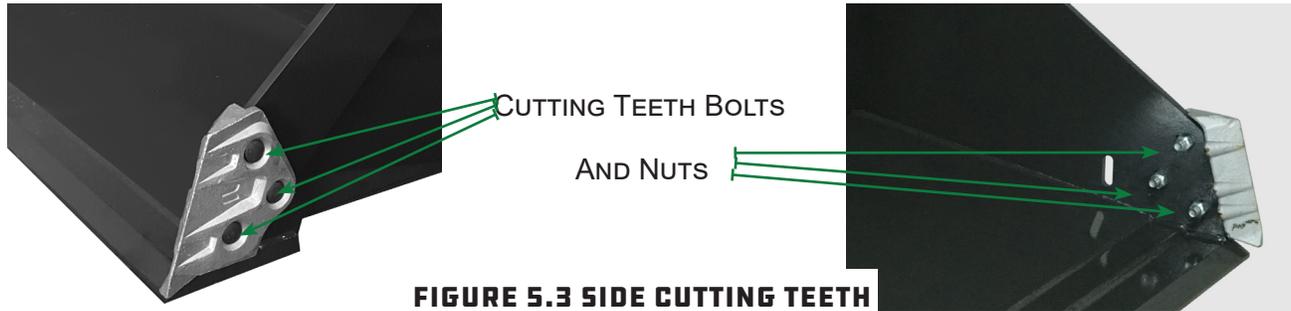
! CAUTION

Cutting edges can be very heavy and could cause Minor or Serious Injury if mishandled. ALWAYS wear protective gloves and footwear.

5.3 SIDE CUTTING TEETH REMOVAL AND REPLACEMENT

! CAUTION

Side cutting teeth can be very heavy and could cause Minor or Serious Injury if mishandled. ALWAYS wear protective gloves and footwear.



Carefully remove the **3- 5/8” Plow Bolts, flat washer, and nuts** per side that hold the cutting teeth in place. Replace the cutting teeth, rebolt and torque to specifications.



5.4 TOOTH REMOVAL AND REPLACEMENT

1. Remove the retaining pin that holds that tooth onto the shank.
2. Remove worn tooth.
3. Put new tooth in place and place retaining pin in hole to secure the tooth.

NOTICE: Make sure retaining pin is fully seated retaining both sides of the tooth flanges. See *Figure 5.4*

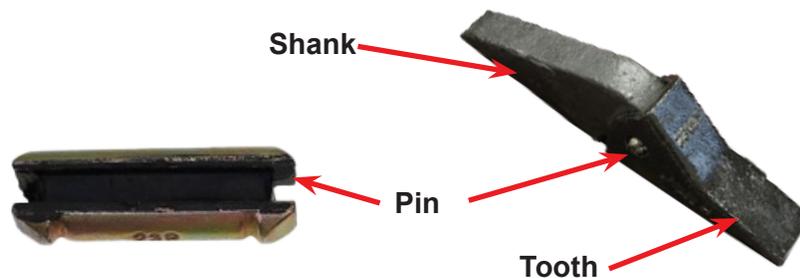


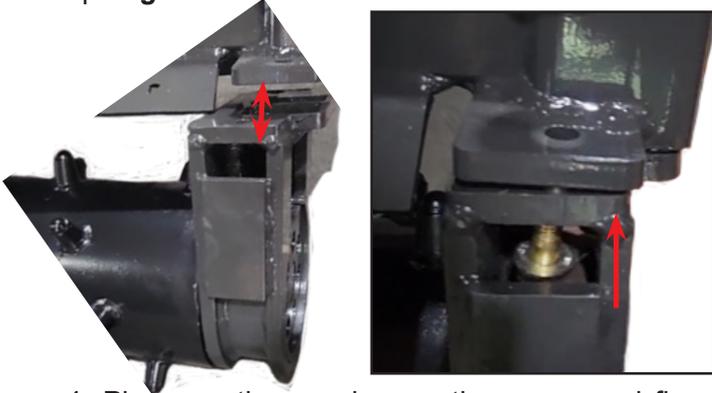
FIGURE 5.4 TOOTH & PIN

5.5 DRUM REPLACEMENT

1. With the attachment elevated by a lift sling, roll the drum into place.
2. Put the bearing on first and slide all the way onto the shaft before tightening set screw. **Figure 5.5A**



3. Align the holes on the motor end of the drum first and insert one 1/2" bolt and washer from the bottom up. **Figure 5.5B**



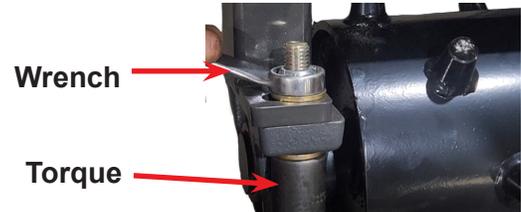
4. Place another washer on the screw and finger tighten the locknut.
5. Insert the second 1/2" bolt on washer on the second side from the bottom up.
6. Place another washer on the screw and finger tighten the locknut.
7. Moving to the bearing side of the drum, lift into place and insert 5/8" bolt and washer from the bottom up. **Figure 5.5C**



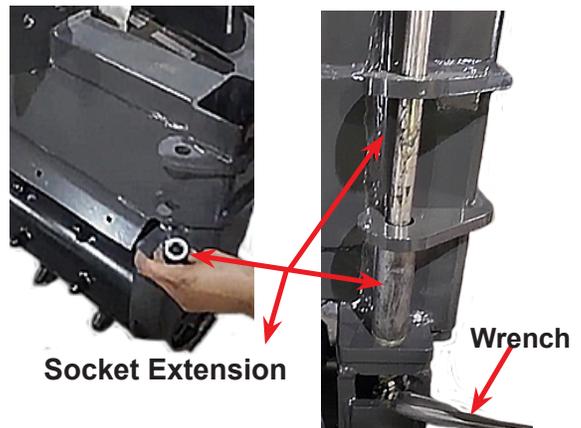
8. Place another washer on the screw and finger tighten the locknut. **Figure 5.5D**



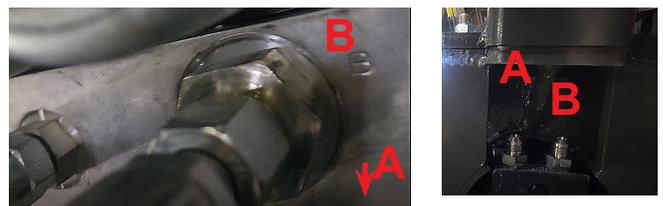
9. Repeat process with the remaining bolt.
10. Lift Attachment and place on a lift rated for the weight capacity.
11. Align edges of attachment and drum.
12. Beginning on the bearing side, use a 5/8" wrench on the locknut and torque the bolt to the value shown in the torque table. **Figure 5.5E**



13. Repeat on the second bolt.
14. Moving to the motor side of the drum, use a socket extension to pass down through the screw holes with the socket bit on the locknut. **Figure 5.5F**

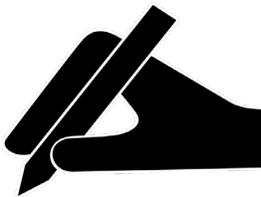


15. Using the wrench, access the bolt from the side, and hold the bolt while you torque the locknut to the value shown in the torque table.
16. Repeat until the bolts on both sides are aligned and torqued.
17. Feed the hydraulic lines through the steel tubing and reattach, tightening the fittings with a wrench. **Figure 5.5G**



18. Check with a piece of cardboard to make sure there are no leaks before using.
19. When operating for the first time after assembly, make sure to repeat Section 4.8 *Prepping For First Time Use*.
NOTE: To remove the drum, follow the instructions backwards.

5.6 MAINTENANCE LOG INSTRUCTIONS



MAINTENANCE LOG



Use the log sheets on at the end of this manual to document all routine maintenance and repair services performed on this attachment.

10. MAINTENANCE

MAINTENANCE LOG

DESCRIPTION OF MAINTENANCE/REPAIR	SERVED BY:	DATE:
<i>Replace Putter Blades</i>	<i>Joe Smith</i>	<i>01/24/24</i>
<i>Inspect Hydraulic Plumbing</i>	<i>Joe Smith</i>	<i>02/25/24</i>
<i>Change Oil in Bearing Housing</i>	<i>Joe Smith</i>	<i>04/24/24</i>

5.7 STORAGE TIPS

	<p>Ensure attachment is free of water, debris, dirt and excess grease.</p>
	<p>Store your attachment in a dry shed or garage.</p>
	<p>When storing your attachment for the season, cover with a weather proof tarp to protect it from the elements and to prevent water pooling that could freeze or corrode and cause damage to the attachment.</p>

5.8 TORQUE SPECIFICATION TABLE AND INSTRUCTIONS

BOLT TORQUE INSTRUCTIONS

1. Apply and maintain proper torque on all bolts.
2. Torque values are based on lubricated values. **Do not grease or oil bolts.**
3. Wipe bolts clean and use Loctite 635 or equivalent before tightening bolts. May need curing activator.
4. Use a torque wrench to assure the proper amount of torque is being applied to the bolt.
5. **MUST CURE 72 HOURS BEFORE USE TO PREVENT LOOSENING OF BOLTS.**

TORQUE VALUES

SAE GRADE 8

	DRY	LUBRICATED
	lb.-ft.	lb.-ft.
1/4"	12	9
5/16"	24	18
3/8"	45	35
1/2"	110	80
3/4"	380	280
7/8"	600	450
1"	910	680
1 1/4"	1820	1360
1 1/2"	3162	2688

5.9 TORQUE EQUIPMENT REQUIREMENTS

TOOLS & EQUIPMENT REQUIREMENTS

To complete the maintenance procedures described in this section, you may need the following

tools:

- 1/2 inch drive breaker bar
- 3/4 inch impact socket
- 1/2 inch impact socket
- Tapping Hammer
- 1/2 inch drive torque wrench
- Nylon pry bar set
- Safety stands
- **Loctite 635 or Equivalent-MUST CURE 72 HRS**
- Lifting device (overhead crane hoist, forklift)



NOTE:

When removing bolts with Loctite, it will be necessary to apply localized heat of at least 250 degrees Celsius or to 482 degrees Fahrenheit to loosen bolts.

LOCTITE 635 TECHNICAL SPECIFICATIONS FOR BONDING, CURING, REMOVAL AND INSTALLATION CAN BE FOUND HERE:

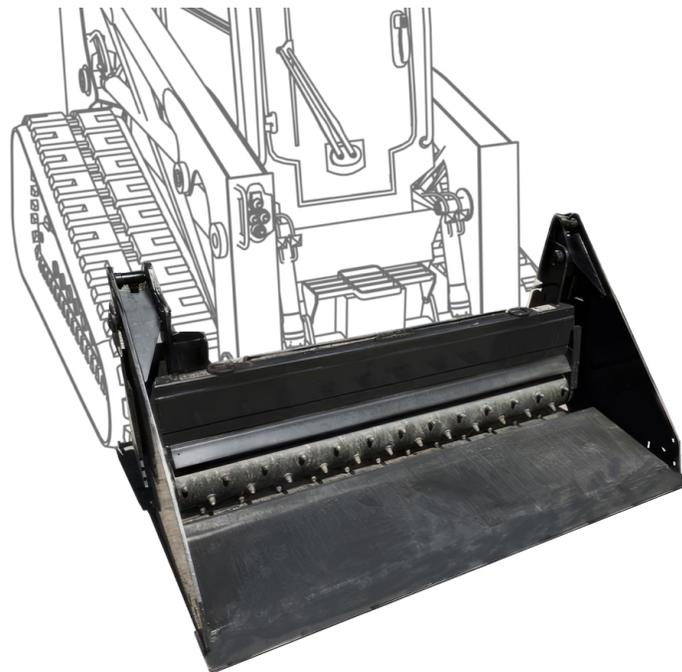
<https://next.henkel-adhesives.com/>

SECTION 6

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
Drum does not rotate, rotates slowly, or stalls easily when contacting the ground.	<ol style="list-style-type: none"> 1. Electrical harness or auxiliary hydraulic hoses not connected or quick disconnects not fully or properly connected. 2. Auxiliary hydraulics not engaged. 3. Air in hydraulic lines. 4. Obstruction in hydraulic lines. 5. Obstruction between drum and material bar. 6. Relief valve setting on machine not properly adjusted. 7. Worn, damaged, insufficient, or inadequate hydraulic pump or attachment motor. 8. Low hydraulic fluid in machine. 9. Motor shaft and/or splined hub on drum damaged. 	<ol style="list-style-type: none"> 1. Ensure all electrical and hydraulic connections are secured. 2. Turn on Auxiliary Hydraulics 3. Cycle machine auxiliary system several times to remove air from line. 4. Replace obstructed or damaged line. 5. Reverse drum to clear obstruction or follow procedures outlined on page 28. 6. Have machine dealer set relief valve at correct pressure. 7. Repair or replace machine hydraulic pump or attachment motor. 8. Check the machine hydraulic fluid level and add fluid. 9. Disassemble drum from attachment and inspect motor shaft and splined hub. Repair or replace damaged components.
Hydraulic Fluid leaks	<ol style="list-style-type: none"> 1. Worn or damaged seal(s). 2. Loose and/or damaged hoses. 3. Loose and/or damaged connections. 	<ol style="list-style-type: none"> 1. Replace leaking seal(s). 2. Replace damaged hoses and/or secure loose hoses. 3. Replace damaged hose connections and/or tighten loose fittings.
Operating depth insufficient.	<ol style="list-style-type: none"> 1. Wheels are too low. 2. Drum RPM too slow or travel speed too fast. 3. Build up of dirt or debris on drum. 	<ol style="list-style-type: none"> 1. Raise wheels by tilting attachment rearward or raise wheels to an upright storage position. 2. Increase machine hydraulic flow to motor within GPM rating or decrease travel speed 3. Clean drum as per instructions on page 28.
Too much dirt going into the windrow or dirt going over the top of the side plates.	<ol style="list-style-type: none"> 1. Operating depth too low. 2. Operating speed too fast. 3. Wheels set too high or in an upright position. 	<ol style="list-style-type: none"> 1. Raise drum to appropriate operating depth. 2. Reduce travel speed. 3. Lower wheels by tilting attachment forward or lower wheels to working position.
Cylinder moves very slowly	<ol style="list-style-type: none"> 1. Restricted hose. 2. Auxiliary hydraulic system not operating properly on host machine 3. Cylinder seals by-passing. 	<ol style="list-style-type: none"> 1. Check for damaged hydraulic hose between machine & cylinders. If damaged, replace. 2. Investigate and have repaired. 3. Replace cylinder and/or seals.
Pins could be prematurely wearing.	<ol style="list-style-type: none"> 1. Not greasing pins frequently enough. 2. Pins have contacted solid objects (rocks, steel pipes, etc.) 	<ol style="list-style-type: none"> 1. Grease pins before each use & repeat every 8 hours while using. 2. Clear cutting area of solid objects before hitting them, or raise the height to clear exposed rock surfaces.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Drum balling up with soil.	<ol style="list-style-type: none"> 1. Soil too wet. 2. Working in clay soil. 	<ol style="list-style-type: none"> 1. Wait until soil dries. 2. Reduce operating depth.
Excessive vibration and/or machine jumps over ground.	<ol style="list-style-type: none"> 1. Excessive debris wrapped on drum. 2. Drum RPM or travel speed not correct. 3. Hard soil condition. 4. Worn, damaged or bent drum. 	<ol style="list-style-type: none"> 1. Remove debris and clean drum. Increase drum speed if turning slow. 2. Increase drum RPM if turning too slowly and/or decrease travel speed. 3. Loosen soil using bucket or other methods. Apply water to soften soil. 4. Replace drum.
Excessive bucket or drum tooth breakage	<ol style="list-style-type: none"> 1. Operator is dropping rotating drum rapidly into hard ground or solid objects. 2. Hitting or prying solid objects such as large rocks, etc. 	<ol style="list-style-type: none"> 1. Avoid sudden drop of rotating drum into solid objects and excessively hard ground. 2. Check work area before operating. Avoid solid objects.
Power Rake angle cylinder will not extend or retract.	<ol style="list-style-type: none"> 1. Electrical failure such as a broken wire or connections not fully secured. 2. Hydraulic system not activated. 	<ol style="list-style-type: none"> 1. Repair or replace broken wire(s) and ensure electrical connections are fully secured and making contact. 2. Engage drum drive motor before attempting to move angle cylinder.



! DANGER

ONLY service the power rake on stable, even terrain. NEVER park on sloped terrain to avoid being struck & killed or seriously injured by the unexpected rolling or movement of the skid steer.

SECTION 7

PARTS INFORMATION

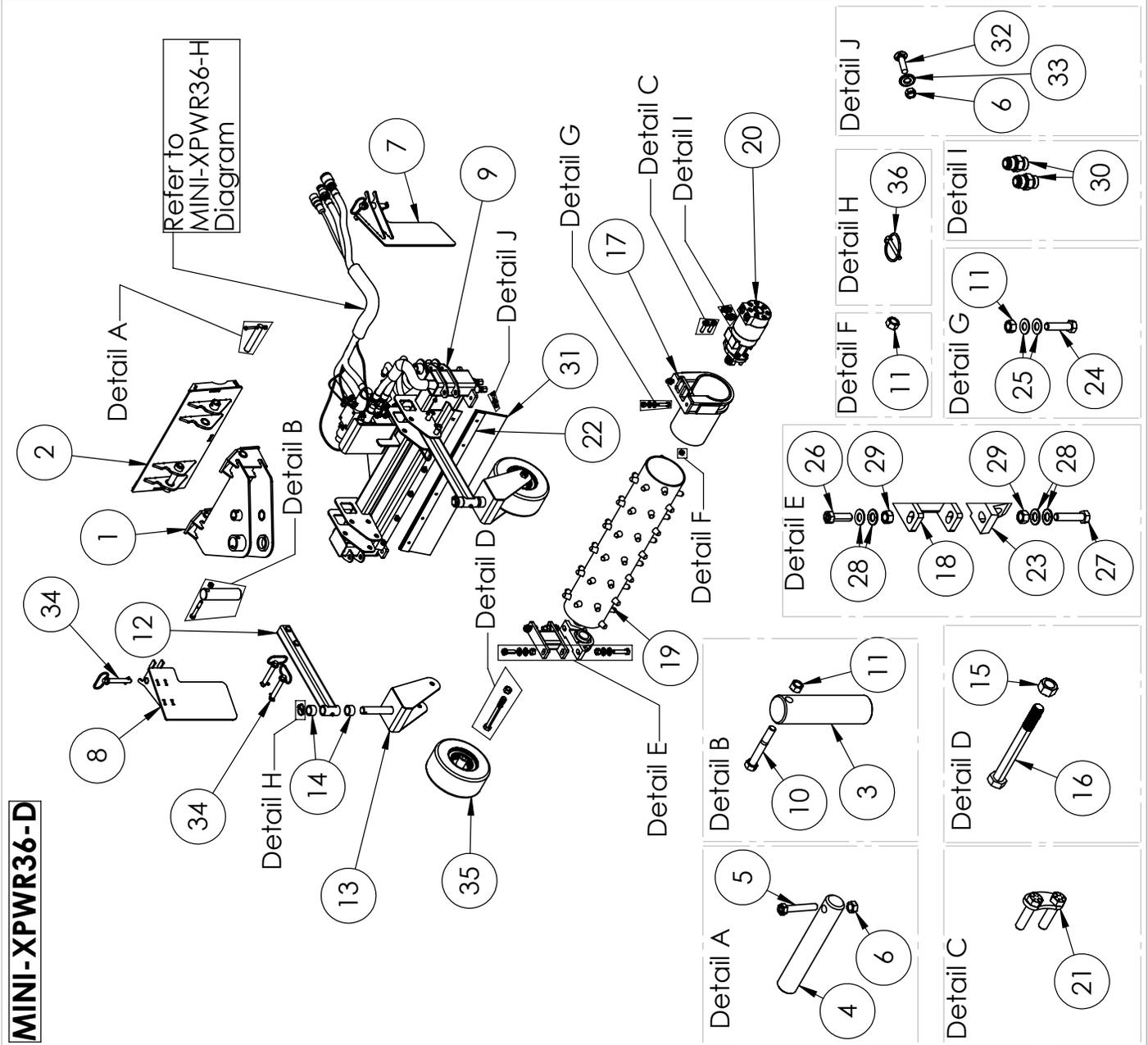
Factory OEM parts specifically designed for your attachment are readily available.

For hassle free service and to ensure you receive the correct parts for your attachment,
please provide your dealer with the following information:

Model Number	
Serial Number	
GPM Requirements	
Date of Owners Manual (Bottom Left Corner of Cover Page)	
Parts Diagram Page Number	
Part Description	
Reference #	
Quantity Desired	
Ship To Information	
Bill To / Payment Information	

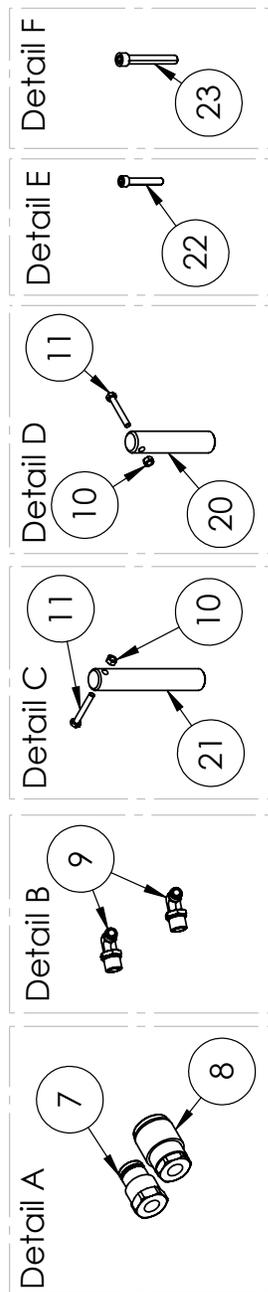
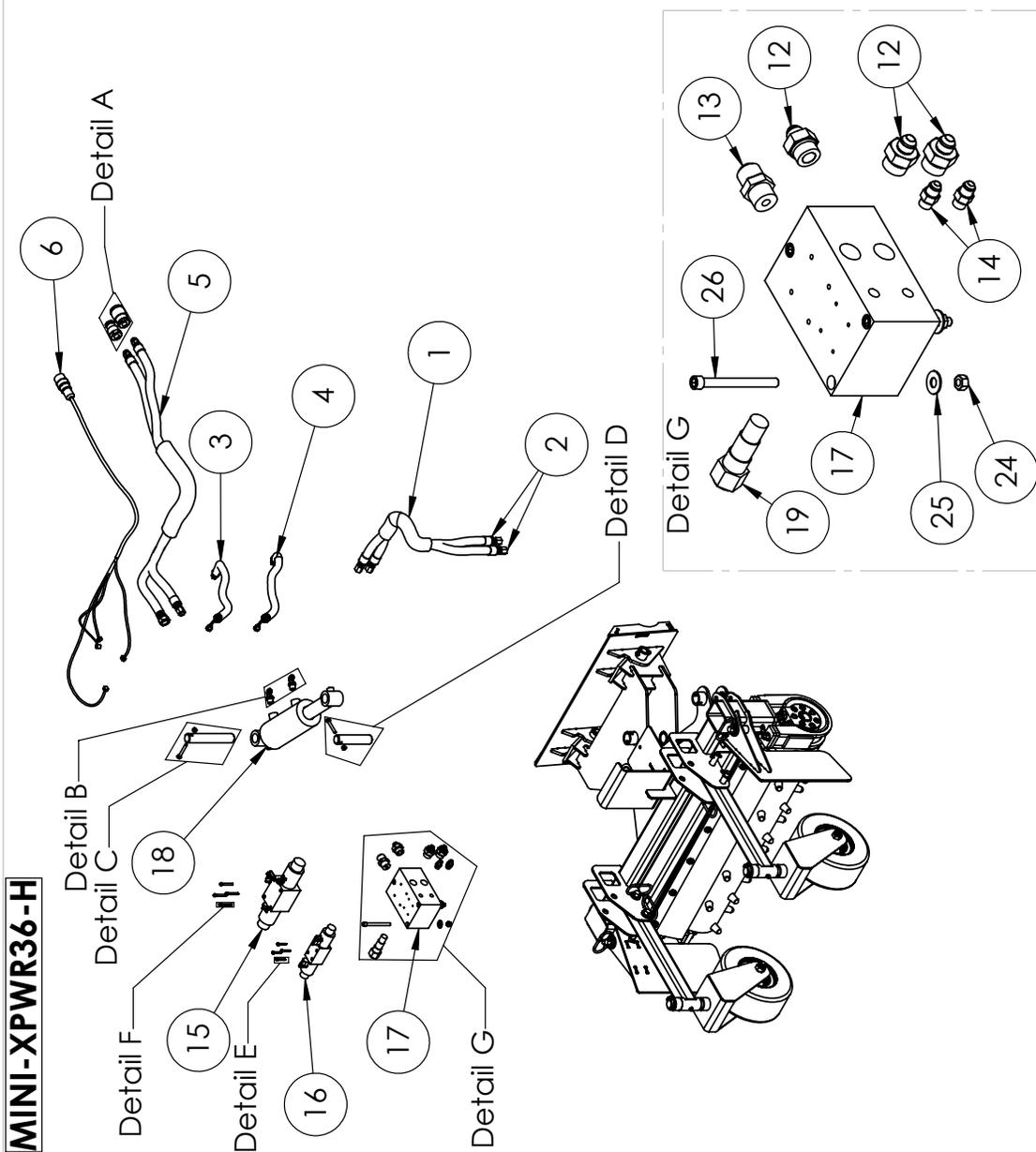
7.1 36" MINI X-TREME POWER RAKE PARTS DIAGRAM

ITEM	Part #	DESCRIPTION	QTY.
1	81100726	Middle Triangle Weldment	1
2	81100716	Hookup Weldment	1
3	20200176	2" D X 7.5" L Pin	1
4	20200186	1" D X 6" L Pin	2
5	11200086	5/16"-18 X 2 Hex Bolt GR 8	2
6	11200106	5/16"-18 Lock Nut GR C	10
7	81100736	Left Deflector Weldment	1
8	81100746	Right Deflector Weldment	1
9	81100786	Frame Weldment	1
10	11200476	1/2"-13 X 3 1/2" Hex Bolt GR 8	1
11	11200446	1/2"-13 Lock Nut GR C	7
12	81100766	Wheel Arm Weldment	2
13	81100776	Wheel Holder Weldment	2
14	70400016	1 3/4" OD X 1 1/4" ID Bushing	4
15	11200216	3/4"-10 Lock Nut GR C	2
16	11201426	3/4"-10 X 7" Hex Bolt GR 8	2
17	81400156	Motor Cradle Weldment	1
18	81400146	Bearing Bolt on Weldment	1
19	51100096	Drum Weldment 36"	1
20	40100186	Motor	1
21	81400176	Bolt Holder Weldment	2
22	90200076	Rubber Retaining Strip	1
23	11100046	Bearing	1
24	11200156	1/2"-13 X 2" Hex Bolt GR 8	2
25	11200306	1/2" SAE Flat Washer GR 8 Z/YEL	4
26	11200986	5/8"-11 X 2" Hex Bolt GR 8	2
27	11200976	5/8"-11 X 2 3/4" Hex Bolt GR 8	2
28	11200196	5/8" SAE Flat Washer GR 8	8
29	11200366	5/8"-11 Lock Nut GR C	4
30	41000196	1/2" - 5/8" Motor Fitting	2
31	90200086	Rubber Deflector	1
32	11200856	5/16" X 1 1/4" Carriage Bolt	6
33	11200256	5/16" USS Flat Washer GR 8	6
34	11201206	3/4" X 4 1/4" Hitch Pin	6
35	71100026	Wheel Assembly	2
36	11200686	1/4" Lynch Pin	2



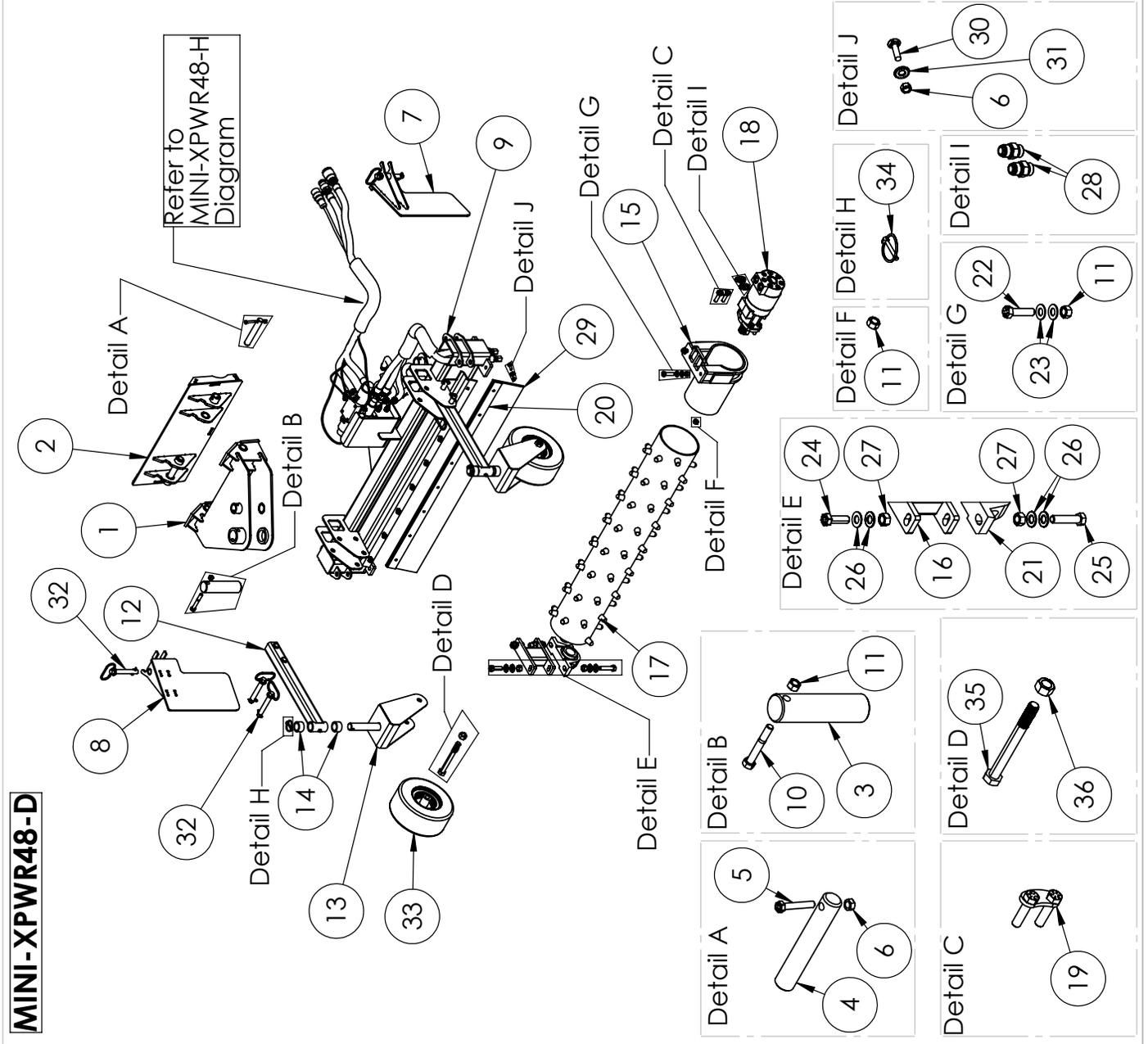
7.2 36" MINI X-TREME POWER RAKE HYDRAULICS DIAGRAM

ITEM	Part #	DESCRIPTION	QTY.
1	52800266	1/2" X 25" L Hose Sleeve	1
2	51900166	1/2" D X 30" L Hose	2
3	51700646	1/4" D X 20" L Hose	1
4	51700656	1/4" D X 16" L Hose	1
5	53000096	1/2" D X 6' L Machine Hose Kit	1
6	40700016	Wiring Harness	1
7	41000106	1/2" Flat Coupler M - Changeable	1
8	41000116	1/2" Flat Coupler FE - Changeable	1
9	41000036	3/8" - 1/2" 90° Fitting	2
10	11200106	5/16"-18 Lock Nut GR C	10
11	11200096	5/16"-18 X 2 1/4" Hex Bolt GR 8	2
12	41000206	1/2" to 3/4" Straight Fitting	3
13	41000386	Flow Control	1
14	41000136	3/8" to 3/8" Straight Fitting	2
15	40600106	Large Valve	1
16	40600026	Small Valve	1
17	40600096	Manifold	1
18	40000056	3.5" B X 4" S Cylinder	1
19	40600086	Cartridge Valve	1
20	10300026	1.25" D X 5.625" L Pin	1
21	20200036	1.25" D X 7.5" L Pin	1
22	11201186	#10-24 X 1 1/4" L Socket Head Bolt	4
23	11201196	1/4"-20 X 1 3/4" L Socket Head Bolt	4
24	11200136	3/8"-16 Lock Nut GR C	3
25	11200146	3/8" USS Flat Washer GR 8	3
26	11201176	3/8"-16 X 4" L Socket Head Bolt	3



7.3 48" MINI X-TREME POWER RAKE PARTS DIAGRAM

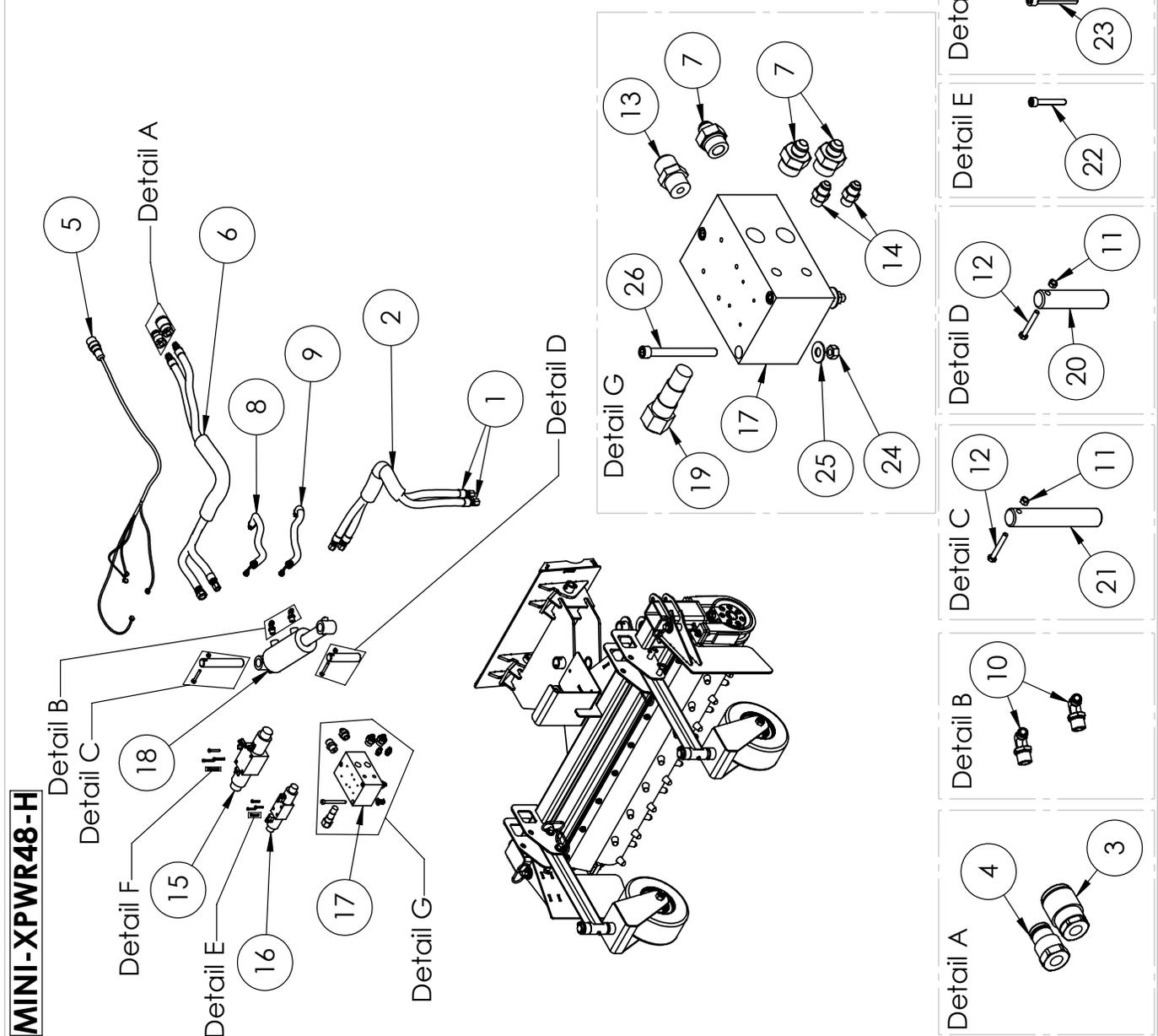
ITEM	Part #	DESCRIPTION	QTY.
1	81100726	Middle Triangle Weldment	1
2	81100716	Hookup Weldment	1
3	20200176	2" D X 7.5" L Pin	1
4	20200186	1" D X 6" L Pin	2
5	11200086	5/16"-18 X 2 Hex Bolt GR 8	2
6	11200106	5/16"-18 Lock Nut GR C	12
7	81100736	Left Deflector Weldment	1
8	81100746	Right Deflector Weldment	1
9	81100756	Frame Weldment	1
10	11200476	1/2"-13 X 3 1/2" Hex Bolt GR 8	1
11	11200446	1/2"-13 Lock Nut GR C	7
12	81100766	Wheel Arm Weldment	2
13	81100776	Wheel Holder Weldment	2
14	70400016	1 3/4" OD X 1 1/4" ID Bushing	4
15	81400156	Motor Cradle Weldment	1
16	81400146	Bearing Bolt on Weldment	1
17	51100086	Drum Weldment 48"	1
18	40100186	Motor	1
19	81400176	Bolt Holder Weldment	2
20	90200056	Rubber Retaining Strip	1
21	11100046	Bearing	1
22	11200156	1/2"-13 X 2" Hex Bolt GR 8	2
23	11200306	1/2" SAE Flat Washer GR 8 Z/YEL	4
24	11200986	5/8" -11 X 2" Hex Bolt GR 8	2
25	11200976	5/8"-11 X 2 3/4" Hex Bolt GR 8	2
26	11200196	5/8" SAE Flat Washer GR 8	8
27	11200366	5/8"-11 Lock Nut GR C	4
28	41000196	1/2" - 5/8" Motor Fitting	2
29	90200066	Rubber Deflector	1
30	11200856	5/16" X 1 1/4" Carriage Bolt	8
31	11200256	5/16" USS Flat Washer GR 8	8
32	11201206	3/4" X 4 1/4" Hitch Pin	6
33	71100026	Wheel Assembly	2
34	11200686	1/4" Lynch Pin	2
35	11201426	3/4"-10 X 7" Hex Bolt GR 8	2
36	11200216	3/4"-10 Lock Nut GR C	2



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7.4 48" MINI-X-TREME POWER RAKE HYDRAULICS DIAGRAM

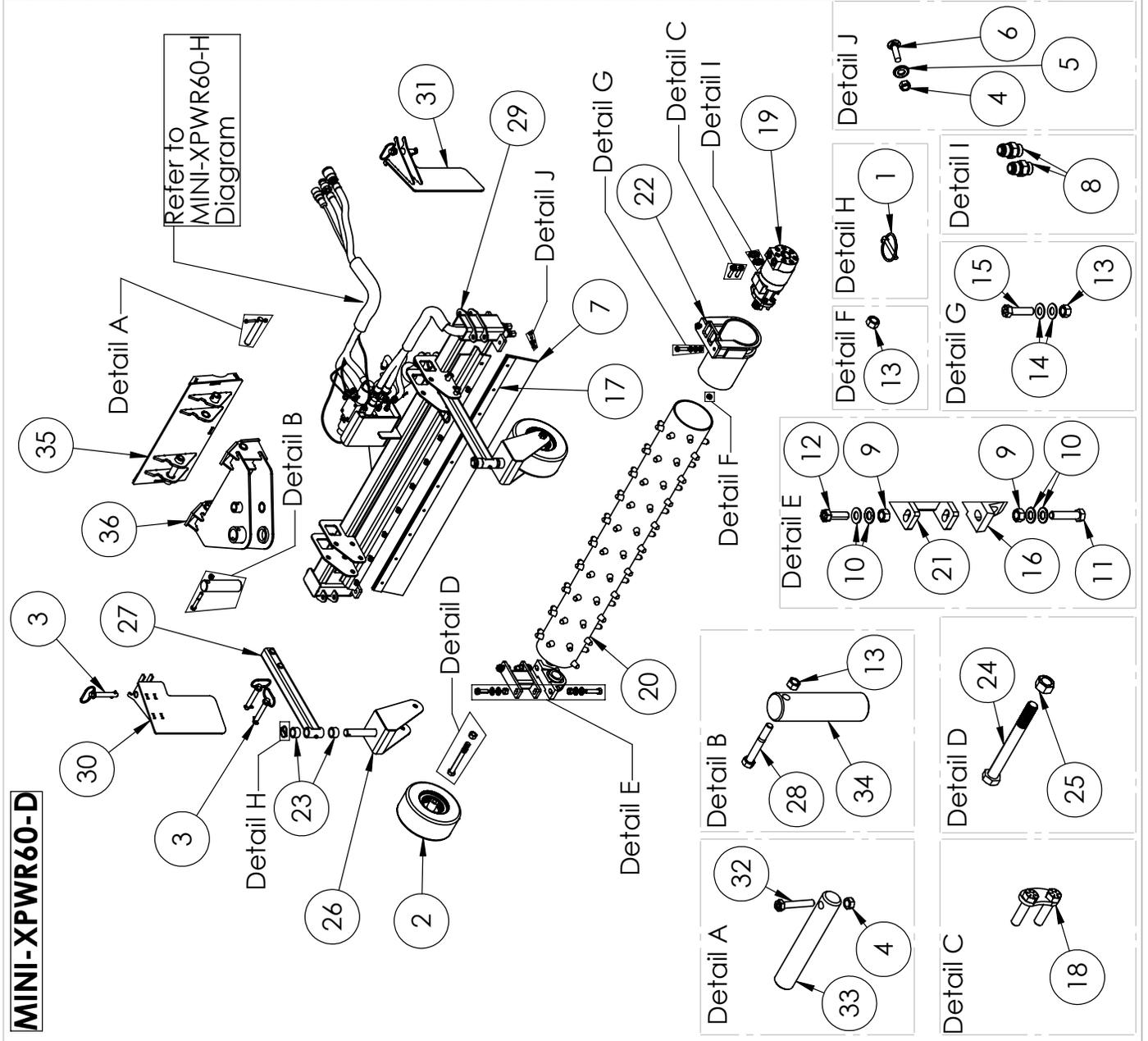
ITEM	Part #	DESCRIPTION	QTY.
1	52800076	1/2" D X 35" L Hose	2
2	52800256	1/2" X 30in L Hose Sleeve	1
3	41000116	1/2" Flat Coupler FE - Changeable	1
4	41000106	1/2" Flat Coupler M - Changeable	1
5	40700016	Wiring Harness	1
6	53000096	1/2" D X 6' L Machine Hose Kit	1
7	41000206	1/2" to 3/4" Straight Fitting	3
8	51700646	1/4" D X 20" L Hose	1
9	51700656	1/4" D X 16" L Hose	1
10	41000036	3/8" - 1/2" 90° Fitting	2
11	11200106	5/16"-18 Lock Nut GR C	12
12	11200096	5/16"-18 X 2 1/4" Hex Bolt GR 8	2
13	41000386	Flow Control	1
14	41000136	3/8" to 3/8" Straight Fitting	2
15	40600106	Large Valve	1
16	40600026	Small Valve	1
17	40600096	Manifold	1
18	40000056	3.5" B X 4" S Cylinder	1
19	40600086	Cartridge Valve	1
20	10300026	1.25" D X 5.625" L Pin	1
21	20200036	1.25" D X 7.5" L Pin	1
22	11201186	#10-24 X 1 1/4" L Socket Head Bolt	4
23	11201196	1/4-20 X 1 3/4" L Socket Head Bolt	4
24	11200136	3/8"-16 Lock Nut GR C	3
25	11200146	3/8" USS Flat Washer GR 8	3
26	11201176	3/8-16 X 4" L Socket Head Bolt	3



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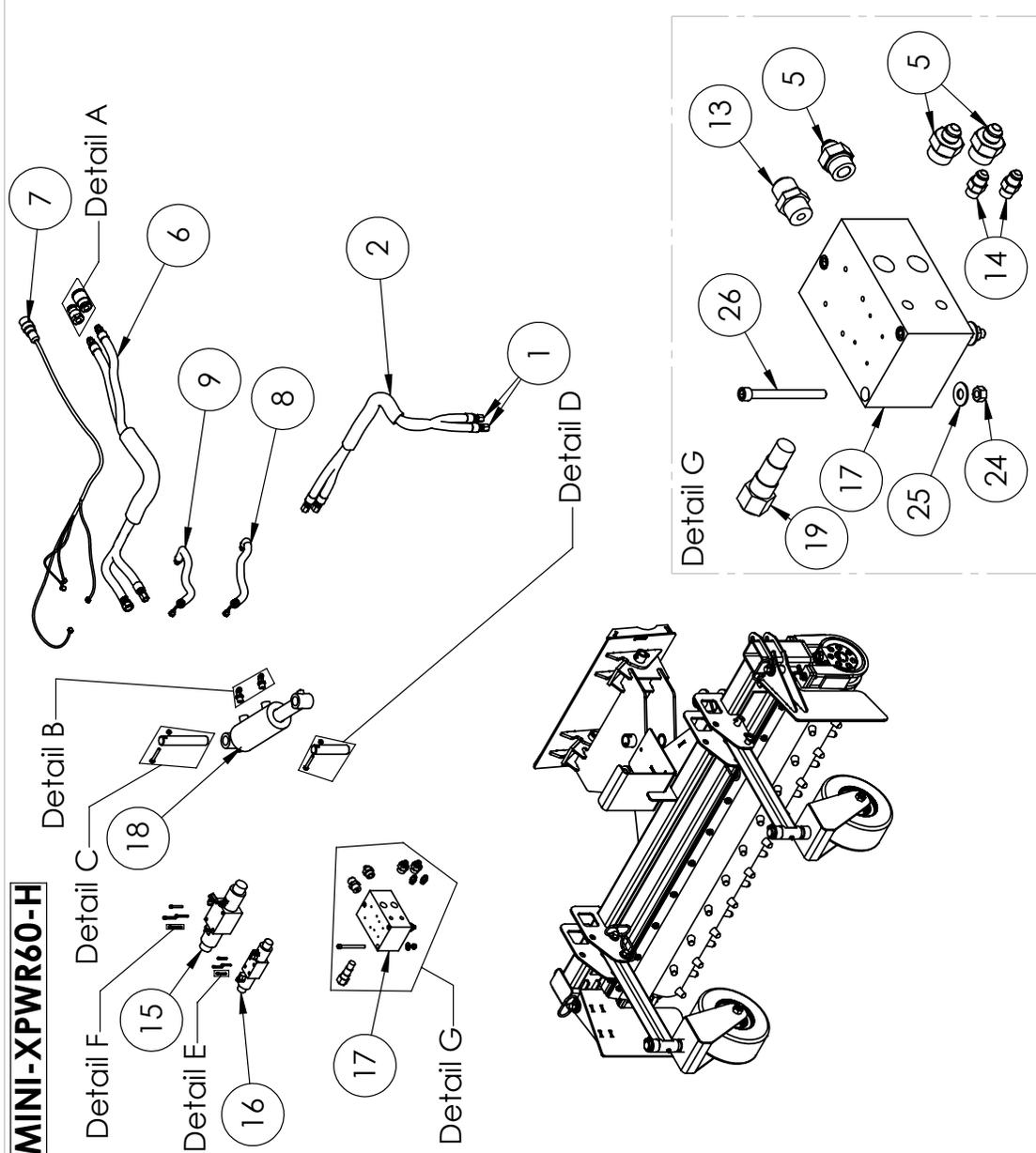
7.5 60" MINI X-TREME POWER RAKE PARTS DIAGRAM

ITEM	Part #	DESCRIPTION	QTY.
1	11200686	1/4" Lynch Pin	2
2	71100026	Wheel Assembly	2
3	11201206	3/4" X 4 1/4" Hitch Pin	6
4	11200106	5/16"-18 Lock Nut GR C	14
5	11200256	5/16" USS Flat Washer GR 8	10
6	11200856	5/16" X 1 1/4" Carriage Bolt	10
7	90200106	Rubber Deflector	1
8	41000196	1/2" - 5/8" Motor Fitting	2
9	11200366	5/8"-11 Lock Nut GR C	4
10	11200196	5/8" SAE Flat Washer GR 8	8
11	11200976	5/8"-11 X 2 3/4" Hex Bolt GR 8	2
12	11200986	5/8"-11 X 2" Hex Bolt GR8	2
13	11200446	1/2"-13 Lock Nut GR C	7
14	11200306	1/2" SAE Flat Washer GR 8 Z/YEL	4
15	11200156	1/2"-13 X 2" Hex Bolt GR 8	2
16	11100046	Bearing	1
17	90200096	Rubber Retaining Strip	1
18	81400176	Bolt Holder Weldment	2
19	40100186	Motor	1
20	51100106	Drum Weldment 60"	1
21	81400146	Bearing Bolt on Weldment	1
22	81400156	Motor Cradle Weldment	1
23	70400016	1 3/4" OD X 1 1/4" ID Bushing	4
24	11201426	3/4"-10 X 7" Hex Bolt GR 8	2
25	11200216	3/4"-10 Lock Nut GR C	2
26	81100776	Wheel Holder Weldment	2
27	81100766	Wheel Arm Weldment	2
28	11200476	1/2"-13 X 3 1/2" Hex Bolt GR 8	1
29	81100816	Frame Weldment	1
30	81100746	Right Deflector Weldment	1
31	81100736	Left Deflector Weldment	1
32	11200086	5/16"-18 X 2 Hex Bolt GR 8	2
33	20200186	1" D X 6" L Pin	2
34	20200176	2" D X 7.5" L Pin	1
35	81100716	Hookup Weldment	1
36	81100726	Middle Triangle Weldment	1

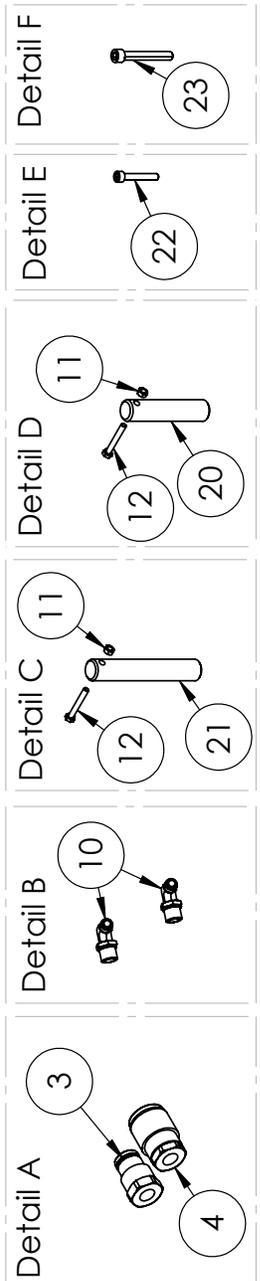


7.6 60" MINI X-TREME POWER RAKE HYDRAULICS DIAGRAM

ITEM	Part #	DESCRIPTION	QTY.
1	51900176	1/2" D X 42" L Hose	2
2	52500056	1/2" X 37" L Hose Sleeve	1
3	41000106	1/2" Flat Coupler M - Changeable	1
4	41000116	1/2" Flat Coupler FE - Changeable	1
5	41000206	1/2" to 3/4" Straight Fitting	3
6	53000096	1/2" D X 6' L Machine Hose Kit	1
7	40700016	Wiring Harness	1
8	51700656	1/4" D X 16" L Hose	1
9	51700646	1/4" D X 20" L Hose	1
10	41000036	3/8" - 1/2" 90° Fitting	2
11	11200106	5/16"-18 Lock Nut GR C	14
12	11200096	5/16"-18 X 2 1/4" Hex Bolt GR 8	2
13	41000386	Flow Control	1
14	41000136	3/8" to 3/8" Straight Fitting	2
15	40600106	Large Valve	1
16	40600026	Small Valve	1
17	40600096	Manifold	1
18	40000056	3.5" B X 4" S Cylinder	1
19	40600086	Cartridge Valve	1
20	10300026	1.25" D X 5.625" L Pin	1
21	20200036	1.25" D X 7.5" L Pin	1
22	11201186	#10-24 X 1 1/4" L Socket Head Bolt	4
23	11201196	1/4-20 X 1 3/4" L Socket Head Bolt	4
24	11200136	3/8"-16 Lock Nut GR C	3
25	11200146	3/8" USS Flat Washer GR 8	3
26	11201176	3/8-16 X 4" L Socket Head Bolt	3

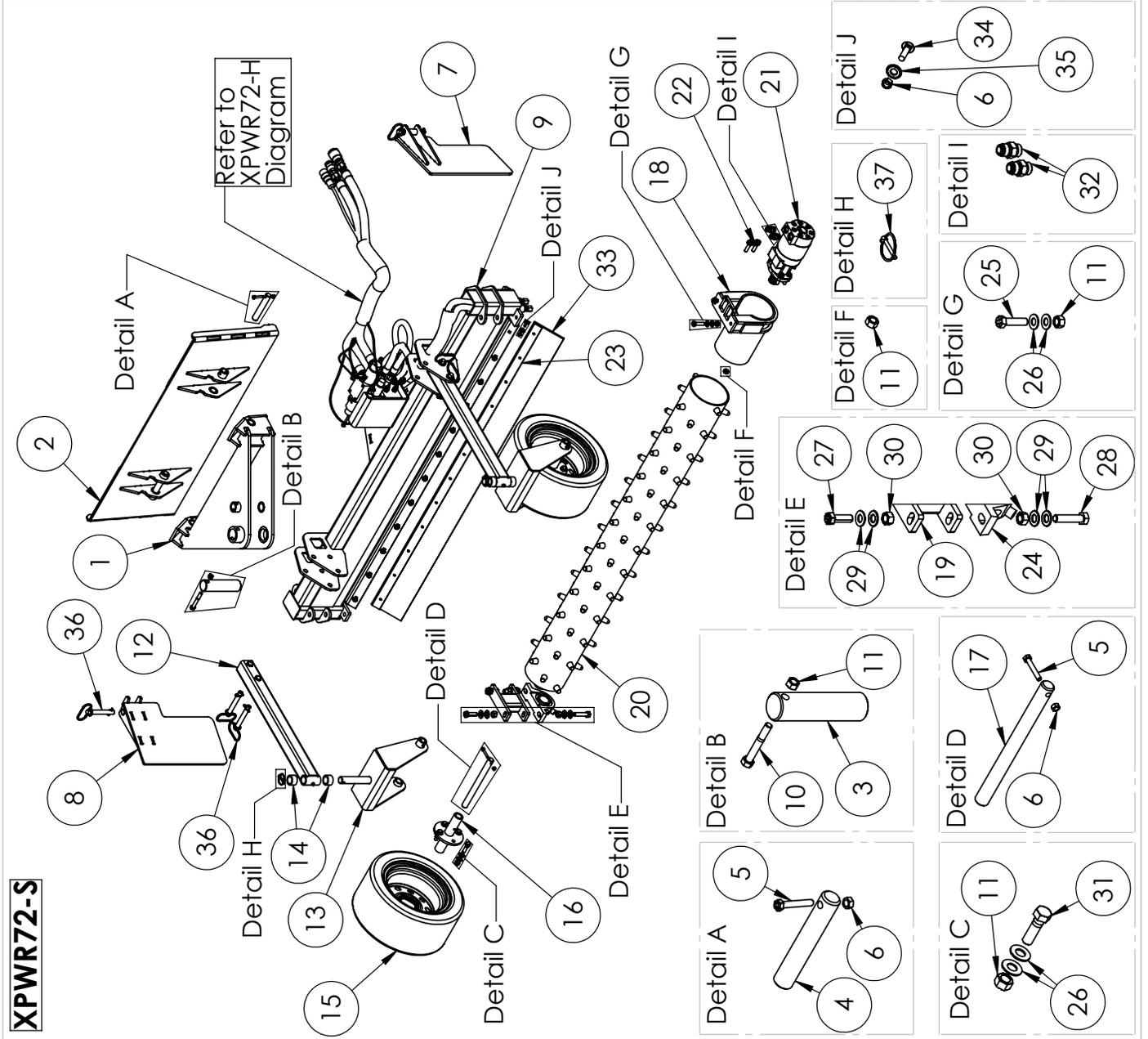


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7.7 72" X-TREME POWER RAKE PARTS DIAGRAM

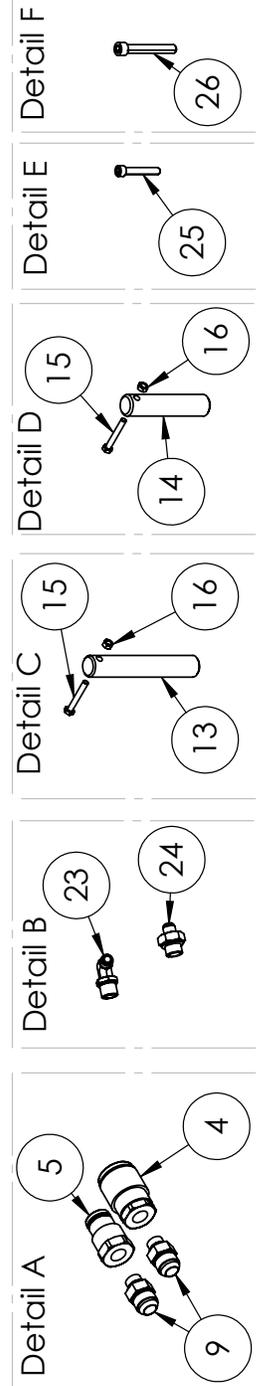
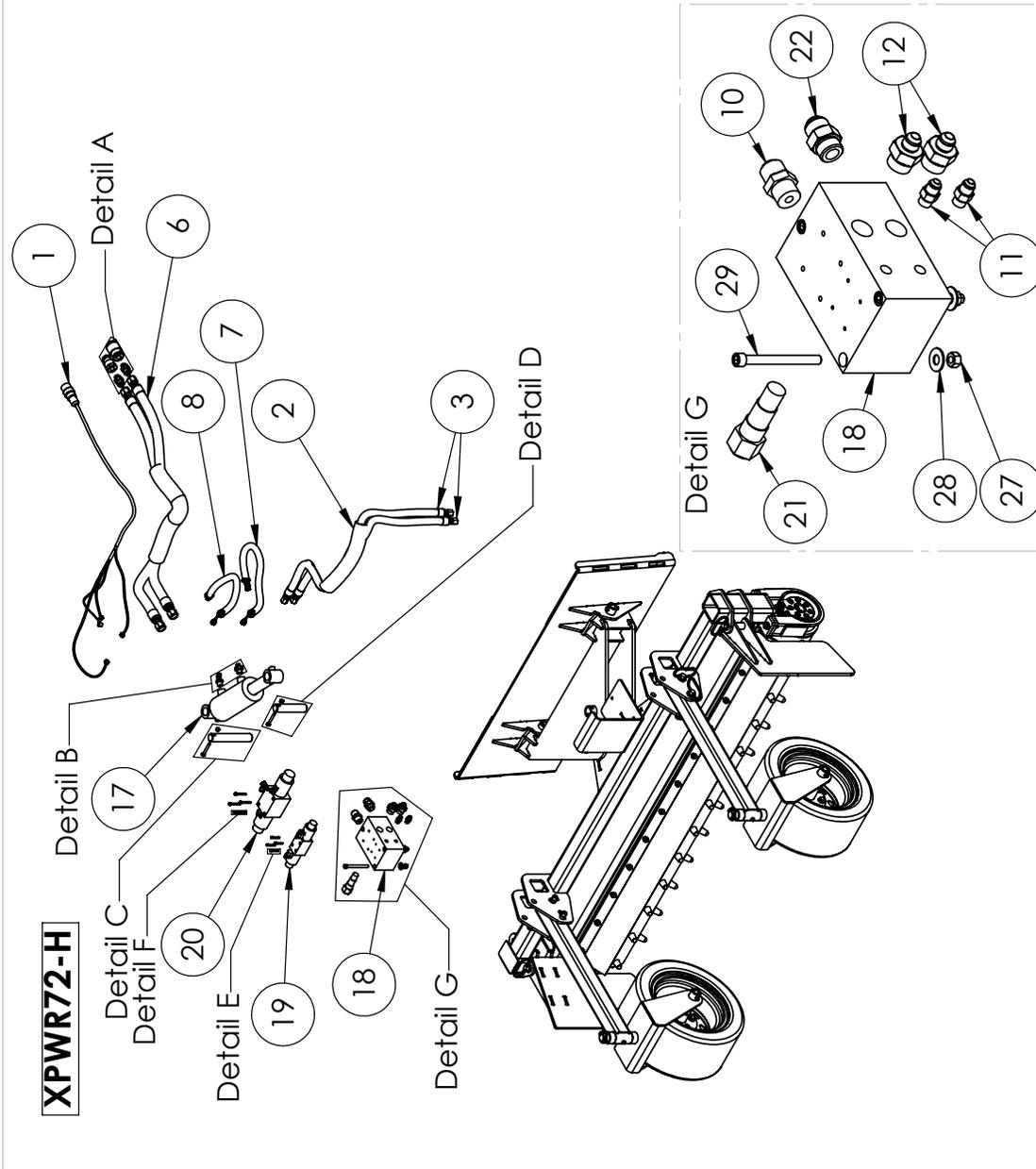
ITEM	Part #	DESCRIPTION	QTY.
1	81100266	Pivot Weldment	1
2	81100276	Hookup Weldment	1
3	20200176	2" D X 7.5" L Pin	1
4	20200186	1" D X 6" L Pin	2
5	11200086	5/16"-18 X 2 Hex Bolt GR 8	4
6	11200106	5/16"-18 Lock Nut GR C	30
7	81100286	Left Deflector Weldment	1
8	81100296	Right Deflector Weldment	1
9	81100306	Frame Weldment	1
10	11200476	1/2"-13 X 3 1/2" Hex Bolt GR 8	1
11	11200446	1/2"-13 Lock Nut GR C	15
12	81100316	Wheel Arm Weldment	2
13	81100326	Wheel Holder Weldment	2
14	70400016	1 3/4" OD X 1 1/4" ID Bushing	4
15	71100016	Wheel	2
16	81100336	Wheel Hub Weldment	2
17	20200246	1" D X 11 5/8" L Pin	2
18	81400156	Motor Cradle Weldment	1
19	81400146	Bearing Bolt on Weldment	1
20	51100026	Drum Weldment	1
21	40100186	Motor	1
22	81400176	Bolt Holder Weldment	2
23	90200026	Rubber Retaining Strip	2
24	11100046	Bearing	1
25	11200156	1/2"-13 X 2" Hex Bolt GR 8	2
26	11200306	1/2" SAE Flat Washer GR 8 Z/YEL	20
27	11200986	5/8" -11 X 2" Hex Bolt GR 8	2
28	11200976	5/8"-11 X 2 3/4" Hex Bolt GR 8	2
29	11200196	5/8" SAE Flat Washer GR 8	8
30	11200366	5/8"-11 Lock Nut GR C	4
31	11200786	1/2"-12 x 1 3/4" Hex Bolt GR 8	8
32	41000196	1/2" - 5/8" Motor Fitting	2
33	41400026	Rubber Deflector	2
34	11200856	5/16" X 1 1/4" Carriage Bolt	24
35	11200256	5/16"-18 USS Flat Washer GR 8	24
36	11201206	3/4" X 4 1/4" Hitch Pin	6
37	11200686	1/4" Lynch Pin	2



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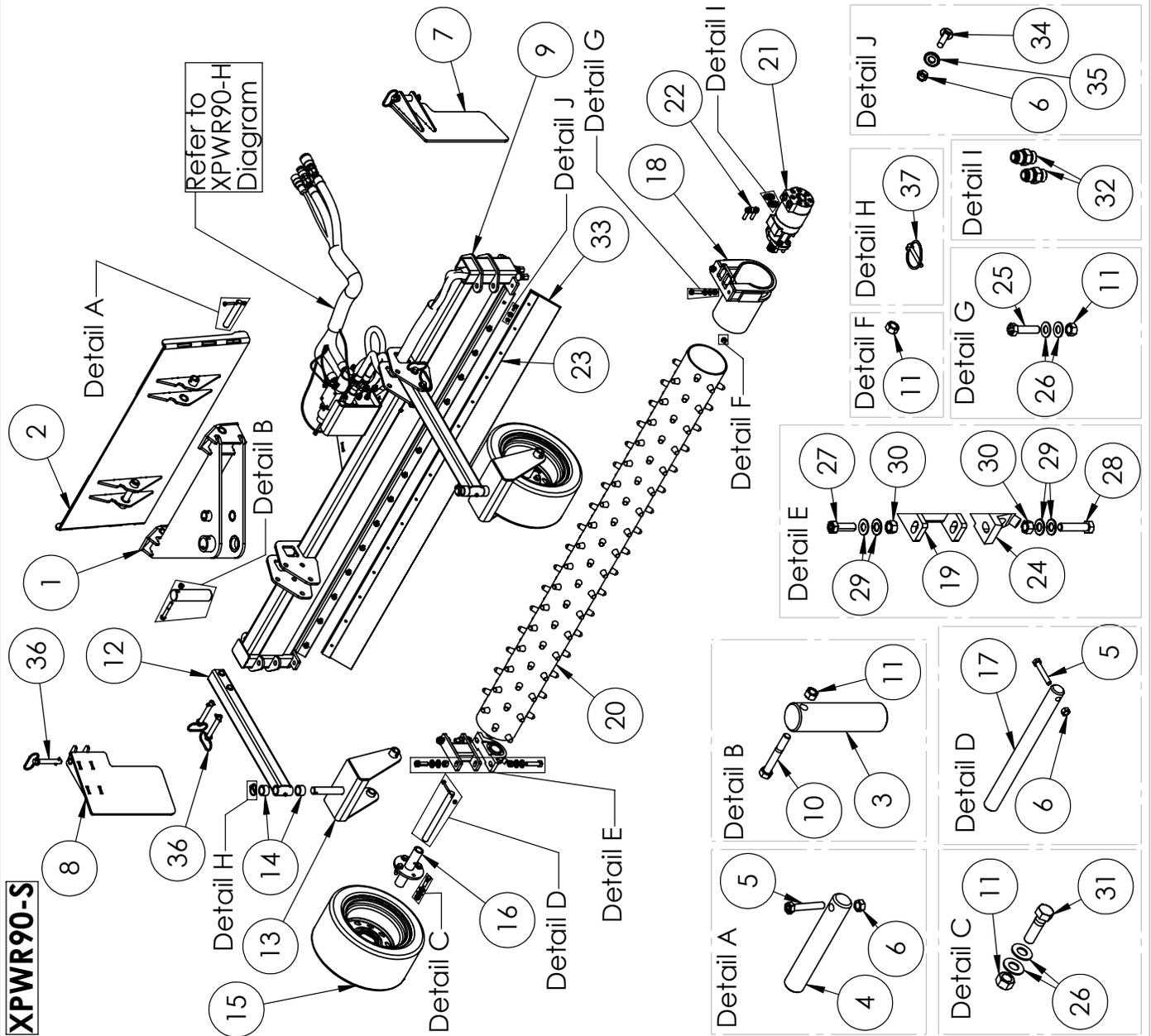
7.8 72" X-TREME POWER RAKE HYDRAULICS PARTS DIAGRAM

ITEM	Part #	DESCRIPTION	QTY.
1	40700016	Wiring Harness	1
2	52500056	1/2" X 37" L Hose Sleeve	1
3	51900046	1/2" D X 43in Hose	2
4	41000116	1/2" Flat Coupler FE - Changeable	1
5	41000106	1/2" Flat Coupler M - Changeable	1
6	51500016	3/4" D X 6ft L Machine Hose Kit	1
7	51700366	1/4" D X 18" L Hose	1
8	51700376	1/4" D X 22in L Hose	1
9	41000096	3/4" - 1/2" Straight Fitting	2
10	41000386	Flow Control	1
11	41000136	3/8" to 3/8" Straight Fitting	2
12	41000206	1/2" to 3/4" Straight Fitting	2
13	20200036	1.25" D X 7.5" L Pin	1
14	10300026	1.25" D X 5.625" L Pin	1
15	11200096	5/16"-18 X 2 1/4" Hex Bolt GR 8	2
16	11200106	5/16"-18 Lock Nut GR C	30
17	40000056	3.5" B X 4" S Cylinder	1
18	40600096	Manifold	1
19	40600026	Small Valve	1
20	40600106	Large Valve	1
21	40600086	Cartridge Valve	1
22	41000046	3/4" Straight Fitting	1
23	41000036	3/8" - 1/2" 90° Fitting	1
24	41000066	3/8" - 1/2" Straight Fitting	1
25	11201186	#10-24 X 1 1/4" L Socket Head Bolt	4
26	11201196	1/4-20 X 1 3/4" L Socket Head Bolt	4
27	11200136	3/8"-16 Lock Nut GR C	3
28	11200146	3/8" USS Flat Washer GR 8	3
29	11201176	3/8-16 X 4" L Socket Head Bolt	3



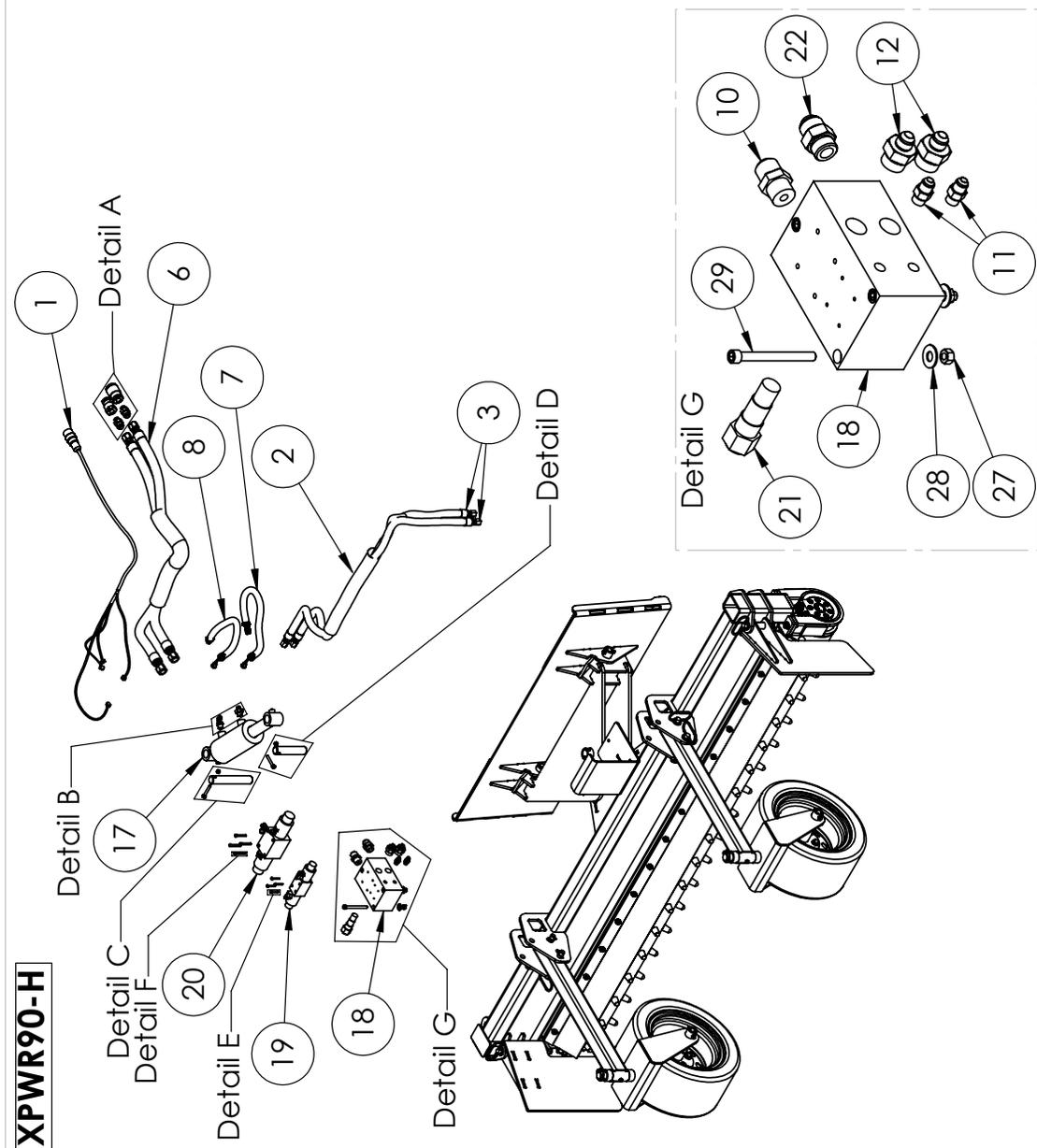
7.9 90" X-TREME POWER RAKE PARTS DIAGRAM

ITEM	Part #	DESCRIPTION	QTY.
1	81100266	Pivot Weldment	1
2	81100276	Hookup Weldment	1
3	20200176	2" D X 7.5" L Pin	1
4	20200186	1" D X 6" L Pin	2
5	11200086	5/16"-18 X 2 Hex Bolt GR 8	4
6	11200106	5/16"-18 Lock Nut GR C	36
7	81100286	Left Deflector Weldment	1
8	81100296	Right Deflector Weldment	1
9	81100356	Frame Weldment	1
10	11200476	1/2"-13 X 3 1/2" Hex Bolt GR 8	1
11	11200446	1/2"-13 Lock Nut GR C	15
12	81100316	Wheel Arm Weldment	2
13	81100326	Wheel Holder Weldment	2
14	70400016	1 3/4" OD X 1 1/4" ID Bushing	4
15	71100016	Wheel	2
16	81100336	Wheel Hub Weldment	2
17	20200246	1" D X 11 5/8" L Pin	2
18	81400156	Motor Cradle Weldment	1
19	81400146	Bearing Bolt on Weldment	1
20	51100036	Drum Weldment	1
21	40100186	Motor	1
22	81400176	Bolt Holder Weldment	2
23	90200036	Rubber Retaining Strip	2
24	11100046	Bearing	1
25	11200156	1/2"-13 X 2" Hex Bolt GR 8	2
26	11200306	1/2" SAE Flat Washer GR 8 Z/YEL	20
27	11200986	5/8" -11 X 2" Hex Bolt GR 8	2
28	11200976	5/8"-11 X 2 3/4" Hex Bolt GR 8	2
29	11200196	5/8" SAE Flat Washer GR 8	8
30	11200366	5/8"-11 Lock Nut GR C	4
31	11200786	1/2"-12 x 1 3/4" Hex Bolt GR 8	8
32	41000196	1/2" - 5/8" Motor Fitting	2
33	41400036	Rubber Deflector	2
34	11200856	5/16" X 1 1/4" Carriage Bolt	30
35	11200256	5/16" USS Flat Washer GR 8	30
36	11201206	3/4" X 4 1/4" Hitch Pin	6
37	11200686	1/4" Lynch Pin	2

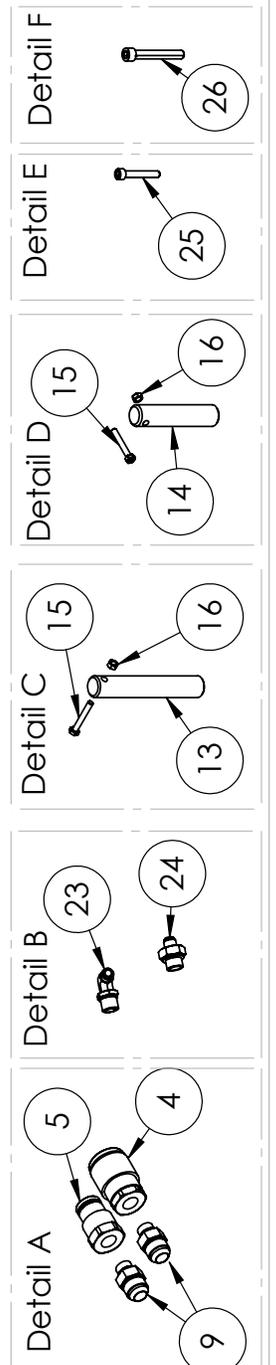


7.10 90" X-TREME POWER RAKE HYDRAULICS PARTS DIAGRAM

ITEM	Part #	DESCRIPTION	QTY.
1	40700016	Wiring Harness	1
2	52500066	1/2" X 44" L Hose Sleeve	1
3	51900056	1/2" D X 50" L Hose	2
4	41000116	1/2" Flat Coupler FE - Changeable	1
5	41000106	1/2" Flat Coupler M - Changeable	1
6	51500016	3/4" D X 6ft L Machine Hose Kit	1
7	51700366	1/4" D X 18" L Hose	1
8	51700376	1/4" D X 22in L Hose	1
9	41000096	3/4" - 1/2" Straight Fitting	2
10	41000386	Flow Control	1
11	41000136	3/8" to 3/8" Straight Fitting	2
12	41000206	1/2" to 3/4" Straight Fitting	2
13	20200036	1.25" D X 7.5" L Pin	1
14	10300026	1.25" D X 5.625" L Pin	1
15	11200096	5/16"-18 X 2 1/4" Hex Bolt GR 8	2
16	11200106	5/16"-18 Lock Nut GR C	36
17	40000056	3.5" B X 4" S Cylinder	1
18	40600096	Manifold	1
19	40600026	Small Valve	1
20	40600106	Large Valve	1
21	40600086	Cartridge Valve	1
22	41000046	3/4" Straight Fitting	1
23	41000036	3/8" - 1/2" 90° Fitting	1
24	41000066	3/8" - 1/2" Straight Fitting	1
25	11201186	#10-24 X 1 1/4" L Socket Head Bolt	4
26	11201196	1/4-20 X 1 3/4" L Socket Head Bolt	4
27	11200136	3/8"-16 Lock Nut GR C	3
28	11200146	3/8" USS Flat Washer GR 8	3
29	11201176	3/8-16 X 4" L Socket Head Bolt	3

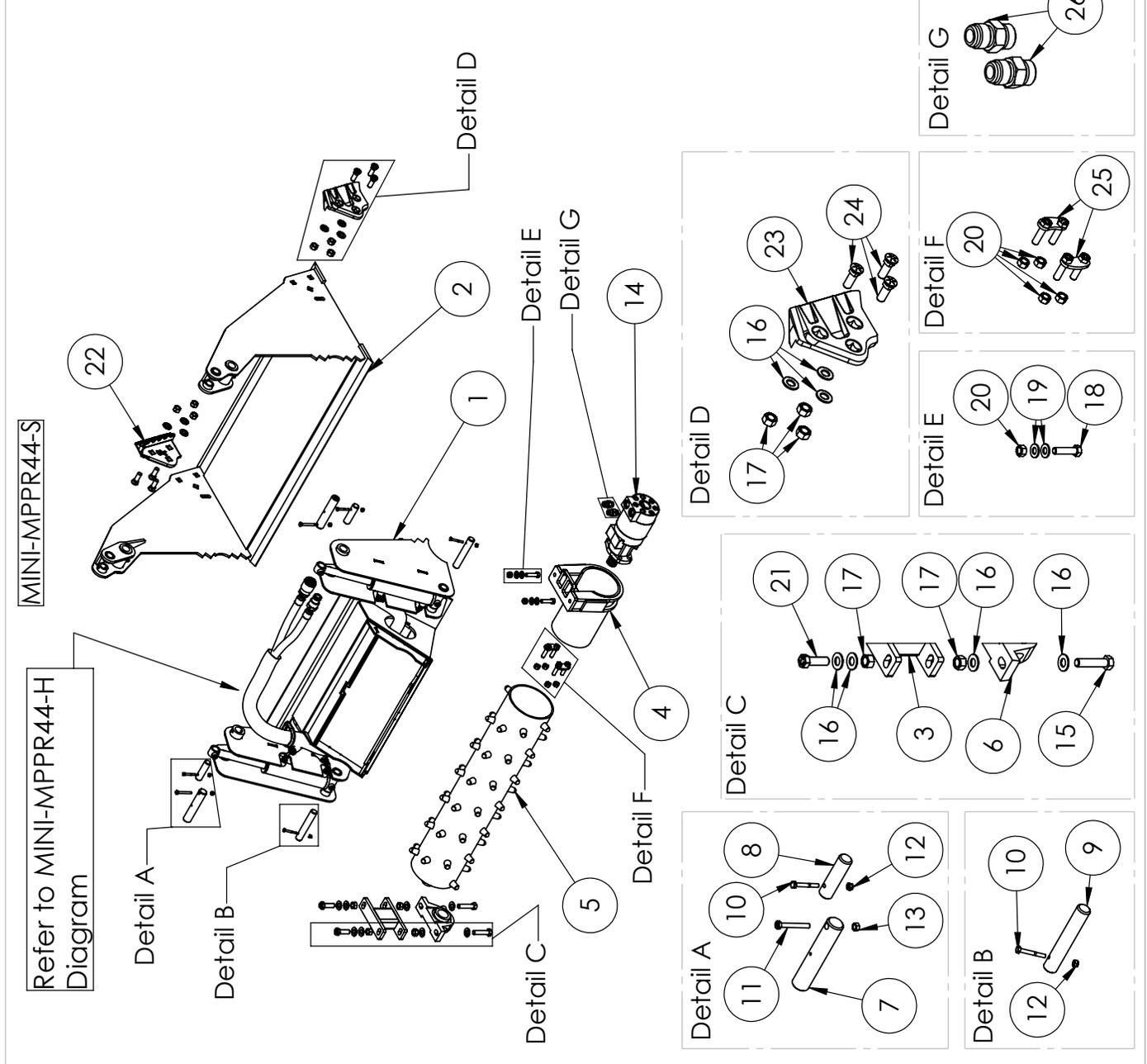


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7.11 44" MULTI-PURPOSE POWER RAKE BUCKET PARTS DIAGRAM

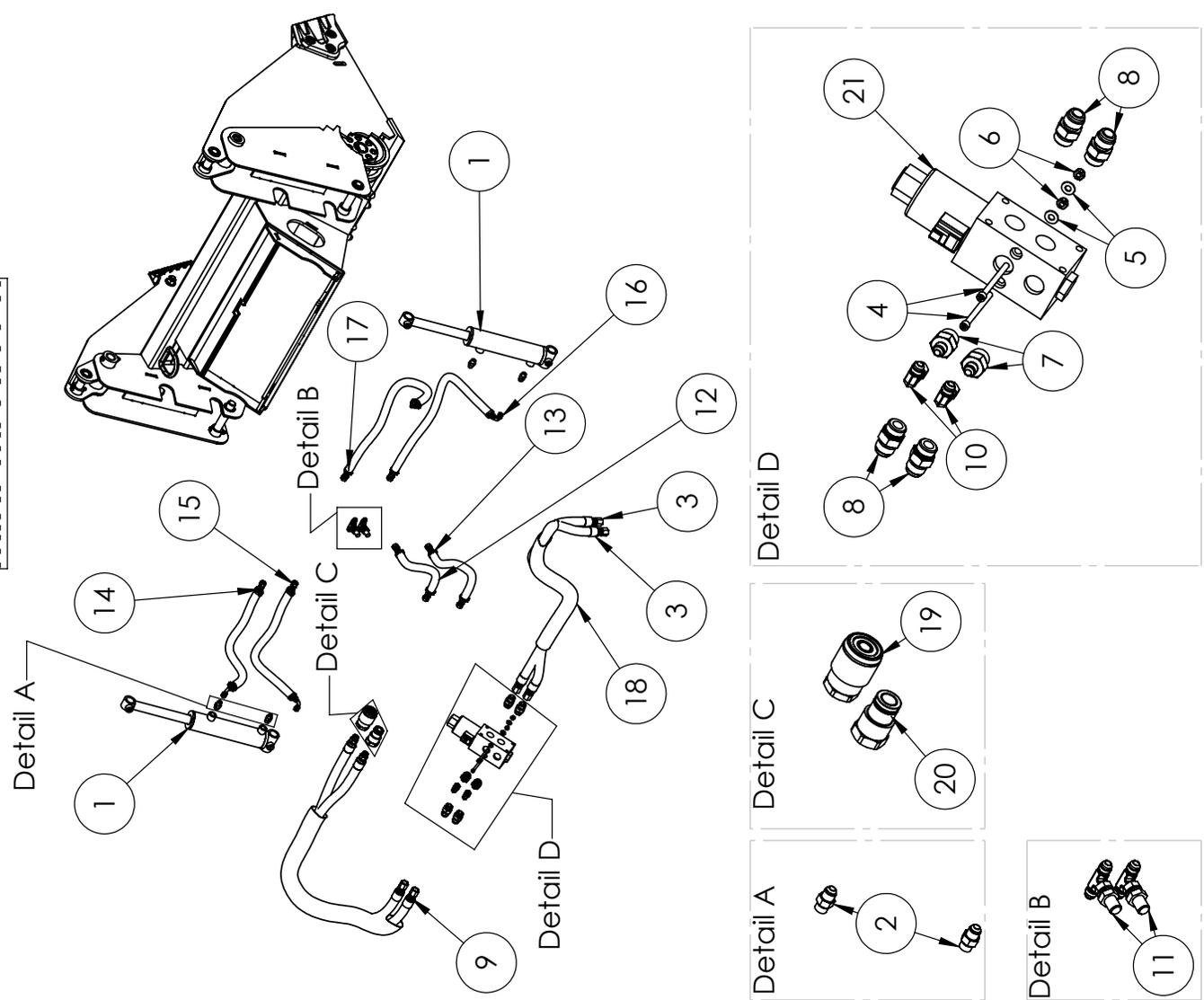
ITEM	Part #	DESCRIPTION	QTY.
1	81400126	Back Frame 44" Weldment	1
2	81400136	Bucket Weldment 44"	1
3	81400146	Bearing Bolt on Weldment	1
4	81400156	Motor Cradle Weldment	1
5	81400166	Drum Weldment 44"	1
6	11100046	Bearing	1
7	20200216	1.25" D X 6.25" L Pin	2
8	20200196	1" D X 3.625" L Pin	2
9	20200206	1" D X 6" L Pin	2
10	11200346	1/4"-20 x 2" Hex Bolt GR 8	4
11	11200556	5/16"-18 X 2.5" Hex Bolt GR 8	2
12	11200076	1/4"-20 Lock Nut GR C	6
13	11200106	5/16"-18 Lock Nut GR C	2
14	40100186	Motor	1
15	11200976	5/8"-11 X 2 3/4" Hex Bolt GR 8	2
16	11200196	5/8" SAE Flat Washer GR 8	14
17	11200366	5/8"-11 Lock Nut GR C	10
18	11200156	1/2"-13 X 2" Hex Bolt GR 8	2
19	11200406	1/2" USS Flat Washer GR 8	4
20	11200446	1/2"-13 Lock Nut GR C	6
21	11200986	5/8"-11 X 2" Hex Bolt GR 8	2
22	10500046	Side Cutter Left	1
23	10500056	Side Cutter Right	1
24	11200316	5/8"-11 X 2" PLOW BOLT GR 8	6
25	81400176	Bolt Holder Weldment	2
26	41000196	1/2" - 5/8" Motor Fitting	6



7.12 44" MULTI-PURPOSE POWER RAKE BUCKET HYDRAULIC PARTS DIAGRAM

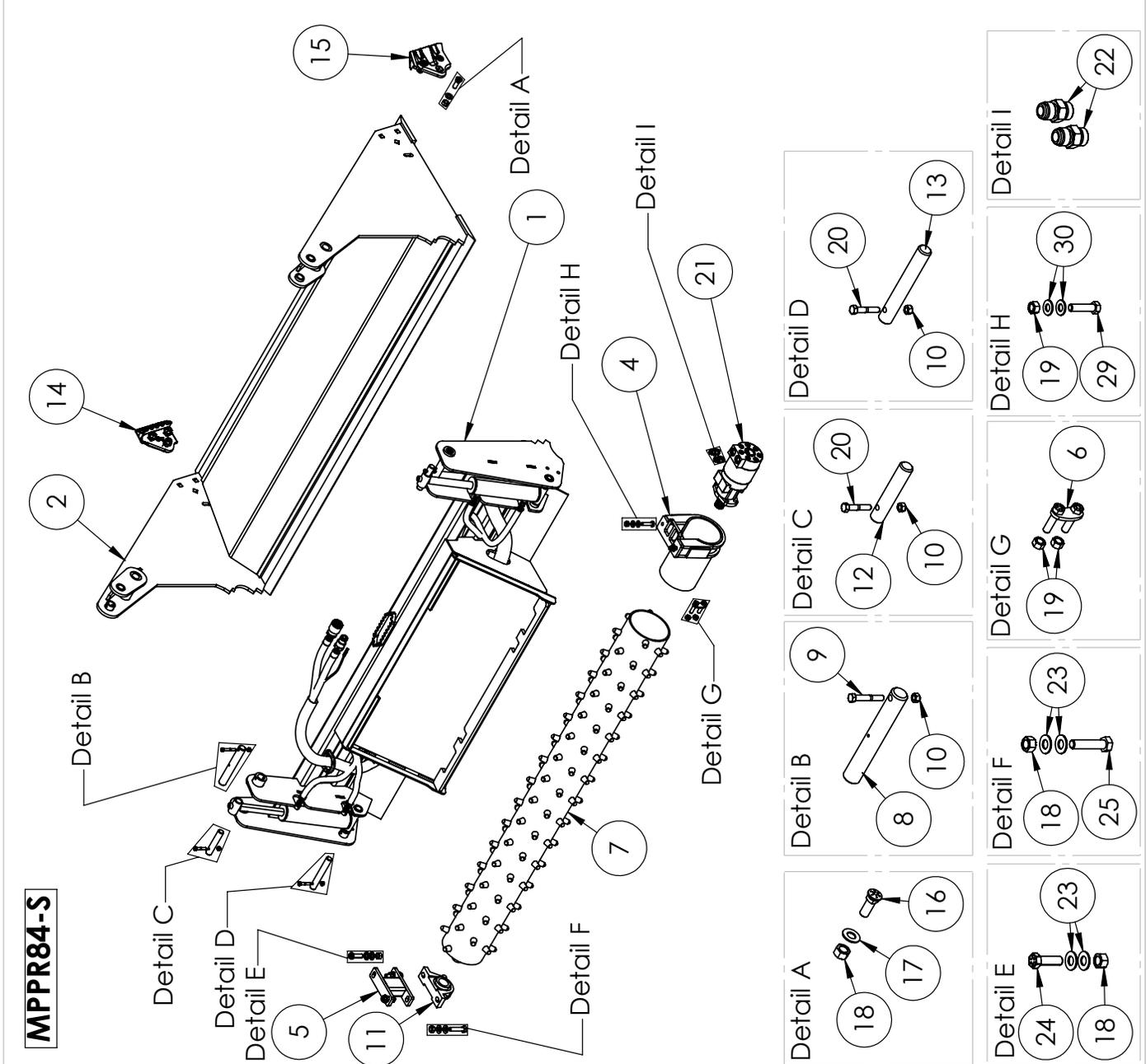
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ITEM	Part #	DESCRIPTION	QTY.
1	4000086	2" B X 6" Cylinder	2
2	41000136	3/8" to 3/8" Straight Fitting	4
3	52800076	1/2" D X 35" L Hose	2
4	11200826	1/4"-20 X 3" Socket Bolt	2
5	11200066	1/4" SAE Flat Washer GR 8	2
6	11200076	1/4"-20 Lock Nut GR C	6
7	41000296	3/8" to 5/8" Straight Fitting	2
8	41000196	1/2" - 5/8" Motor Fitting	6
9	53000056	1/2" D X 6' L Machine Hose Kit	1
10	41000176	3/8" - 3/8" 90° Fitting	2
11	41000166	3/8" Tee Fitting	2
12	52800086	1/4" D X 7" L Hose	1
13	52800096	1/4" D X 8" L Hose	1
14	52800106	1/4" D X 14" L Hose	1
15	52800116	1/4" D X 18" L Hose	1
16	52800126	1/4" D X 26" L Hose	1
17	52800136	1/4" D X 22" L Hose	1
18	52800146	1/2" Twinsleeve 28" L	1
19	41000116	1/2" Flat Coupler FE - Changeable	1
20	41000106	1/2" Flat Coupler M - Changeable	1
21	40600076	Selector Valve	1



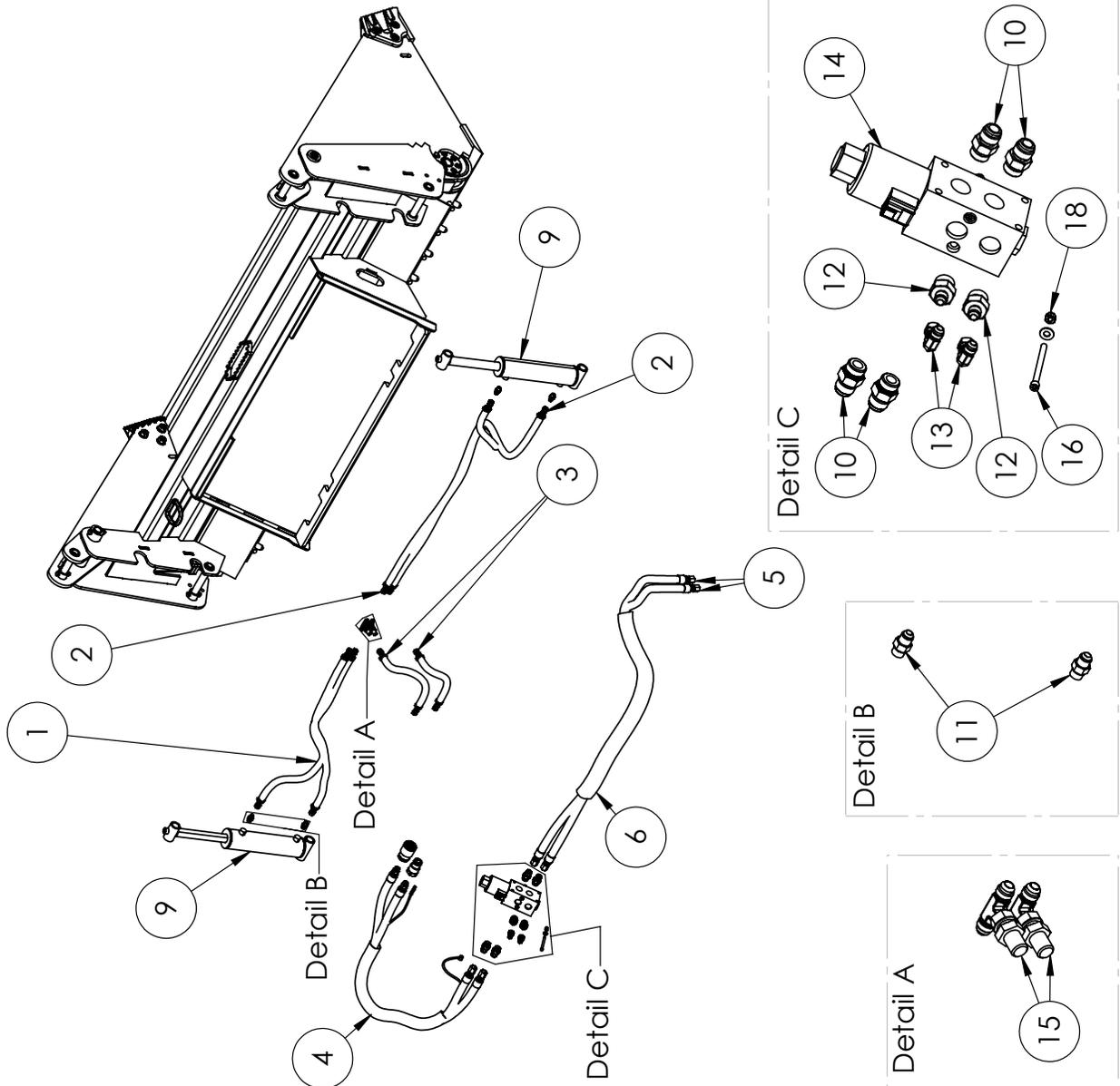
7.13 84" MULTI-PURPOSE POWER RAKE BUCKET PARTS DIAGRAM

ITEM	Part #	DESCRIPTION	QTY.
1	81400476	Back Frame Weldment	1
2	81400486	Bucket Weldment	1
3	40000126	2.5" B X 8" S Cylinder	2
4	81400156	Motor Cradle Weldment	1
5	81400146	Bearing Bolt on Weldment	1
6	81400176	Bolt Holder Weldment	2
7	51100076	Drum Weldment	1
8	20200406	1.25" D X 8.25" L Pin	2
9	11200126	3/8"-16 X 2 1/2" Hex Bolt GR 8	2
10	11200136	3/8"-16 Lock Nut GR C	6
11	11100046	Bearing	1
12	20200456	1" D X 5.25" L Pin	2
13	20200466	1" D X 7" L Pin	2
14	10500046	Side Cutter Left	1
15	10500056	Side Cutter Right	1
16	11200316	5/8"-11 X 2" PLOW BOLT GR 8	6
17	11201236	5/8" USS Flat Washer GR 8	6
18	11200366	5/8"-11 Lock Nut GR C	10
19	11200446	1/2"-13 Lock Nut GR C	6
20	11200436	3/8"-16 X 2" Hex Bolt GR 8	4
21	40100186	Motor	1
22	41000196	1/2" - 5/8" Motor Fitting	6
23	11200196	5/8" SAE Flat Washer GR 8	8
24	11200986	5/8" -11 X 2" Hex Bolt GR 8	2
25	11200976	5/8"-11 X 2 3/4" Hex Bolt GR 8	2
26	11200826	1/4"-20 X 3" Socket Bolt	2
27	11200066	1/4" SAE Lock Washer GR 8	2
28	11200076	1/4"-20 Lock Nut GR C	2
29	11200156	1/2"-13 X 2" Hex Bolt GR 8	2
30	11200406	1/2" USS Flat Washer GR 8	4



7.14 84" MULTI-PURPOSE POWER RAKE BUCKET HYDRAULICS PARTS DIAGRAM

ITEM	Part #	DESCRIPTION	QTY.
1	51700496	1/4" D X 33" L Hose	2
2	51700606	1/4" D X 54" L Hose	2
3	51700616	1/4" D X 10" L Hose	2
4	53000056	1/2" D X 6' L Machine Hose Kit	1
5	52800246	1/2" D X 60" L Hose	2
6	52500096	1/2" Twin Sleeve 50" L	1
7	41000106	1/2" Flat Coupler M - Changeable	1
8	41000116	1/2" Flat Coupler FE - Changeable	1
9	40000126	2.5" B X 8" S Cylinder	2
10	41000196	1/2" - 5/8" Motor Fitting	6
11	41000136	3/8" to 3/8" Straight Fitting	4
12	41000296	3/8" to 5/8" Straight Fitting	2
13	41000176	3/8" - 3/8" 90° Fitting	2
14	40600076	Selector Valve	1
15	41000166	3/8" Tee Fitting	2
16	11200826	1/4"-20 X 3" Socket Bolt	2
17	11200066	1/4" SAE Lock Washer GR 8	2
18	11200076	1/4"-20 Lock Nut GR C	2



MPPR84-H

SECTION 8

WARRANTY INFORMATION

LIMITED WARRANTY

Construction Implements Depot, Inc. (CID) products are warranted to be free from defects in workmanship or materials for a period of 12 months from the initial sale.

WARRANTY EXCLUSIONS

This warranty does not cover normal wear items, including but not limited to: bearings, hoses, blade holders, ground engaging parts such as teeth, blades, cutting edges, pilot bits, auger teeth and broom bristles. This warranty does not cover maintenance, service or adjustments. This warranty does not cover damage due to improper application or installation, misuse, negligence, accidents or improper maintenance. Please note: Any modification or customization made to your attachment may void its warranty. This warranty is void if any components have been disassembled, i.e., pumps, gear boxes or motors or the attachment has been used without the case drain attached (if applicable). Be sure to follow all recommended Horsepower and GPM requirements as outlined in product specifications, in order to prevent the warranty from being void. This warranty is contingent upon the use of approved BRAND parts exclusively. Any use of non-approved parts may result in voiding the warranty. Please be advised that the warranty does not cover refurbished attachments. Specially modified attachments built by the manufacturer to meet your needs shall not be warranted by CID, Inc.

REPAIRS UNDER WARRANTY

Any repairs, including welding, on attachments must be performed by certified repair technicians who have requested and obtained written approval from an authorized representative of CID before repairs begin. If you are completing the repair, you must also have prior written approval to prevent the warranty from being voided.

WARRANTY STATEMENT

Our obligation under this Limited Warranty shall be solely limited to repairing or replacing any part (see non-covered items above) that, according to our judgment, show evidence of a defect in quality of workmanship or materials for the stated 12 month warranty period. All defective parts must be routed directly to CID, Inc. with

8.0 WARRANTY INFORMATION CONT.

freight or delivery charges to be prepaid. This limited warranty shall not be interpreted to render CID, Inc. liable for any injury or damage to persons, businesses or property of any kind nor expenses or losses incurred for labor, supplies, substitute machinery rental or for any other reason. Repair or replacement parts are subject to the supply conditions at the time of repair or replacements, which may directly affect our ability to obtain material and/or replacement parts. CID, Inc. reserves the right to make improvements in design or changes in specifications at any time without incurring any obligations to owners of previously purchased products. No one but CID, Inc. is allowed to alter, modify or enlarge this warranty nor the exclusions, limitations and reservation at any time. CID, Inc. products are warranted to be free from defects in workmanship or materials for a period of 12 months from the initial sale.

Purchaser and Manufacturer hereby (a) submit to the non-exclusive jurisdiction of the courts of competent jurisdiction in North Carolina and Davidson County in which this company resides for resolution of any dispute concerning this Limited Warranty or the rights or obligations of Purchaser and/or Manufacturer; (b) agree that any litigation in connection with this Limited Warranty shall be venued in North Carolina and Davidson County in which the company resides and (c) waive any objection they may have as to any such action or proceeding brought in such court that such court is an inconvenient forum. Nothing herein shall limit the right of Purchaser or Manufacturer (or the right of any permitted successor or assign of either) to bring proceedings against the other in the courts of any other jurisdiction wherein any assets of such other party may be located.

8.1 WARRANTY RETURN AUTHORIZATION POLICY

WARRANTY RETURN AUTHORIZATION POLICY:

If repairs are required, a Return Material Authorization (RMA) number must be obtained for the defective part as well as proof of purchase. RMA and services are rendered by CID only. Any responsibility of shipping costs on any item returned for repair is at the discretion of CID, Inc.

All returned parts must have the following:

1. A legible RMA number written on the outside of the package.
2. Warranty Claim Form (online)
3. The defective part.

RMA numbers are only valid for 30 days from the date of issue. All shipped replacement parts will require a Parts Order (PO) number from the original CID, Inc dealer. Repairs not covered by the warranty, will be charged for parts and labor at the current pricing rate. Should you have any problems with your attachment, please follow the instructions listed on the following page.

8.2 WARRANTY PROCEDURE

WARRANTY RETURN AUTHORIZATION PROCEDURE:

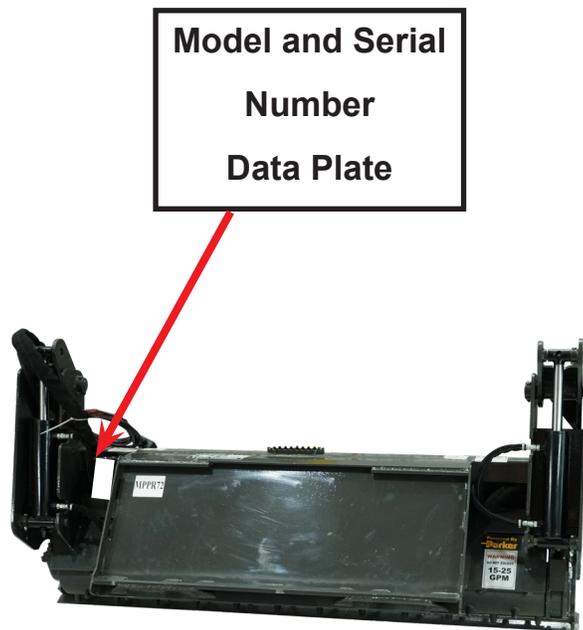
1. Call the Warranty Department at (336) 859-2002 EXT 215. You will need to provide the model and serial number of the defective item(s) (see Appendix for where to find this information), a description of the problem, and have photographs available.
2. Upon a warranted issue, visit www.cidattachments.com, click on the warranty tab, and fill in the warranty information on the Warranty Claim Form. CID, Inc will retain a Return Material Authorization (RMA) number of the defective part. If all the information above is completed CID, Inc will issue a RMA number via email.
3. Once you have an approved RMA number, a shipping label will be provided with CID's address and instructions for returning the defective part. **Appropriate RMA's/PO's will be invoiced and payment received while the evaluation process is being completed to prevent delays in your normal business operations. In the event the defective part(s) is un-warranted and repairs are not covered by the warranty, the customer will be invoiced for any additional parts and labor at the current pricing rate. If the part is deemed under warranty, a credit of the invoice will be issued.**
4. CID will ship a replacement part to the provided location or customer with a RMA identifier of some kind. **The customer is responsible for initial shipping charges until evaluation of the part has been completed.** If the part failure is covered by the warranty, the customer will be reimbursed for any paid shipping charges. In the event, the part is not covered by the warranty, the customer is responsible for return shipping.
5. Once the defective part is warranted by CID, the customer will be issued a credit and the PO number will no longer be active.
6. In the event CID decides that the attachment needs to be returned to them for repair, CID will make arrangements for pickup and return. Repairs will be performed by CID qualified technicians. Non-warranted issues will be discussed, and repairs will be performed upon the owner's agreement and receipt of payment for parts and labor.

APPENDIX A FINDING YOUR MODEL AND SERIAL NUMBER

The Model and Serial numbers will be in one place and will either be etched into the attachment or on a Data Plate.

Instructions: Stand at the back of the attachment facing the attachment mounting bracket and look in the following locations:

1) Back- top left area



PLEASE NOTE: The Model and Serial number may be etched or on a Data Plate.

Disclaimer: Any critical changes made to this manual by individuals outside the manufacturer's authorized personnel are doing so at their own risk. The manufacturer cannot be held legally responsible for any consequences, damages, or liabilities resulting from such modifications. It is advised to adhere strictly to the original manual provided by the manufacturer for optimal performance, safety, and reliability.

TRUSTED ATTACHMENTS



EST.

CID

2003

INDUSTRIAL QUALITY



**CONSTRUCTION IMPLEMENT DEPOT
DENTON-USA, LLC
1248 N. MAIN ST
DENTON, NC 27239**

www.CIDATTACHMENTS.com

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