

Mini Pickup Broom

Operation and Maintenance Manual



Register your
WARRANTY
within 30 days
of purchase



888-376-7027 | BlueDiamondAttachments.com



Introduction: Owner Information

Thank you for your decision to purchase a Blue Diamond® Mini Pickup Broom. To ensure maximum performance of your equipment, it is mandatory that you thoroughly study the Operator's Manual and follow the recommendations. Proper operation and maintenance are essential to maximize equipment life and prevent personal injury.

Operate and maintain this equipment in a safe manner and in accordance with all applicable local, state, and federal codes, regulations and/or laws. Follow all on-product labeling and instructions.

Make sure that all personnel have read this Operator's Manual and thoroughly understand safe and correct operating, installation and maintenance procedures.

Blue Diamond® is continually working to improve its products. Blue Diamond® reserves the right to make any improvements or changes as deemed practical and possible without incurring any responsibility or obligation to make any changes or additions to equipment sold previously.

Although great care has been taken to ensure the accuracy of this publication, Blue Diamond® makes no warranty or guarantee of any kind, written or expressed, implied or otherwise with regard to the information contained within this manual. Blue Diamond® assumes no responsibility for any errors that may appear in this manual and shall not be liable under any circumstances for incidental, consequential or punitive damages in connection with, or arising from the use of this manual.

Keep this manual available for frequent reference. All new operators or owners must review the manual before using the equipment and annually thereafter. Contact your Blue Diamond® Attachments Dealer for assistance, information, or additional copies of the manual. Contact www.bluediamondattachments.com or call 888-376-7027 for a complete list of dealers in your area.

Serial Number Location:

Please record attachment information in the space provided for future reference.



Model Number: _____

Serial Number: _____

Dealer Name: _____

Dealer Number: _____

Date of Purchase: _____

The serial number plate is located on the right side near the mounting plate as shown above.

Always use your serial number when requesting information or when ordering parts.

NOTE: The directions left, right, front, and rear, as mentioned throughout this manual, are as viewed from the operator's position.

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1. Pre-Delivery Inspection Instructions

Use this checklist to verify safety, function, and readiness prior to delivery.

END USER'S NAME: _____

DATE: _____

ITEM NUMBER & DESCRIPTION: _____

SERIAL NO.: _____

HOST MACHINE MAKE/MODEL: _____

1.1 Safety & Documentation

- ☐ Operation and Maintenance Manual is included.
- ☐ Safety decals are present and legible.
- ☐ Model and serial number plate is present and intact.
- ☐ Verify required hydraulic flow range for customer's host machine.

1.2 Visual Inspection

- ☐ Unit is free of shipping damage, dents, cracked welds, etc.
- ☐ Verify motor and safety covers are in place and secure.
- ☐ Ensure drive system is correctly lubricated.
- ☐ Fasteners are properly torqued.

1.3 Hydraulic System & Operational Test

- ☐ Hydraulic hose routing is appropriate for application.

- ☐ Fittings are properly tightened; verify no leakage.
- ☐ Quick couplers are correct and clean.
- ☐ Smooth operation; no hydraulic leaks or excessive vibration of attachment.
- ☐ Verify attachment has been connected to the host machine that will be used for operation and tested.
- ☐ Verify the host machine's hydraulic flow with a flow meter.

1.4 Final Delivery

- ☐ Maintenance schedule located in Operation and Maintenance Manual has been reviewed.
- ☐ Grease type and intervals were provided.
- ☐ Wafer change procedure and maintenance safety have been explained.
- ☐ Register the attachment for warranty by following the instructions below:
 - ☐ Fill out this form and email it to warranty@bdatattachments.com

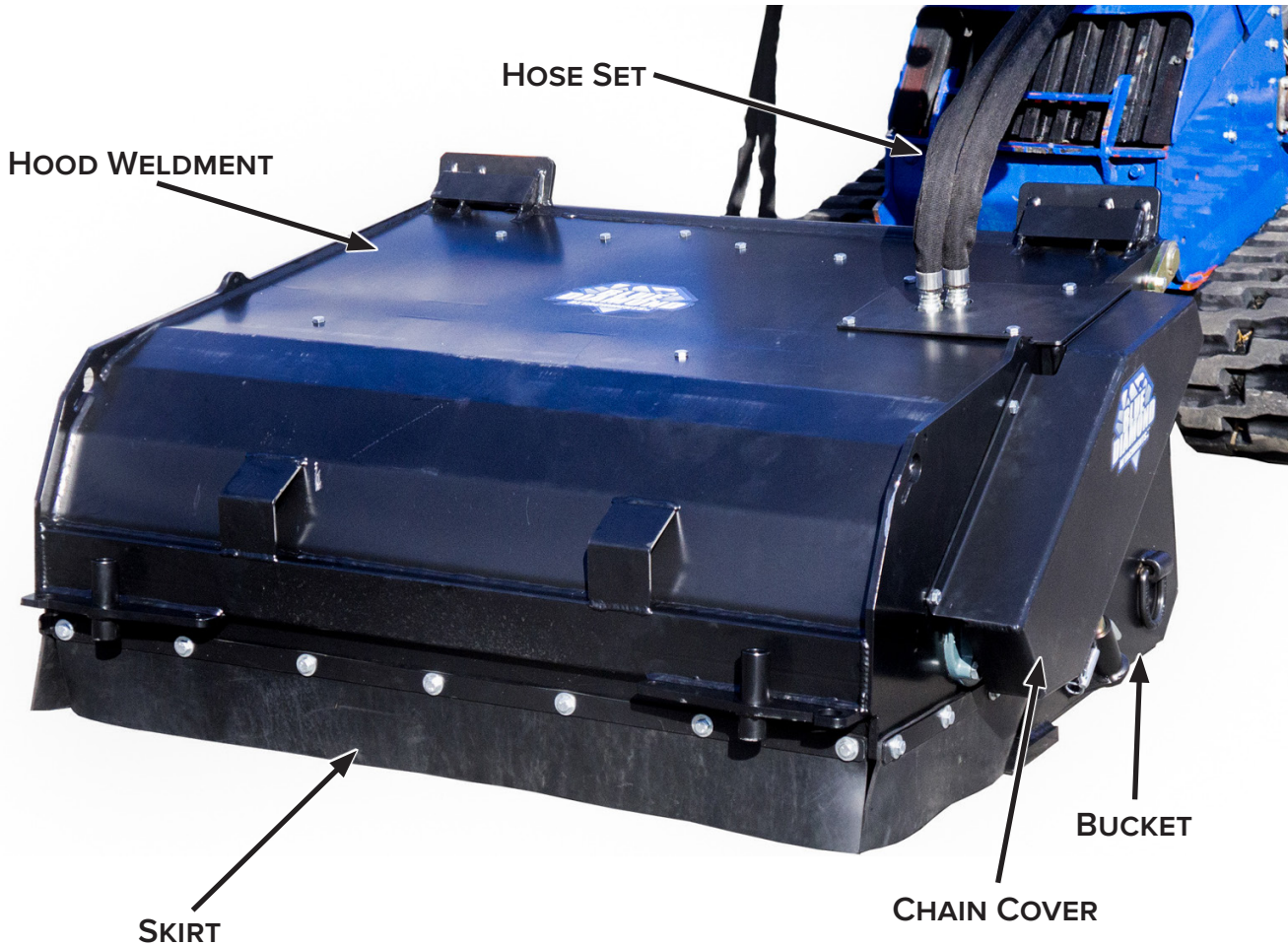
TECHNICIAN: _____

CUSTOMER: _____

DATE: _____

2. Introduction

2.1 Attachment Identification - Mini



2.2 About this Attachment

The Blue Diamond® Mini Pickup Broom delivers the same rugged performance as our full-size model, engineered specifically for mini skid steers and compact track loaders. Built for demanding cleanup jobs, this broom features durable 18" wafers that sweep material directly into the bucket – making it ideal for removing dirt, gravel, light snow, and jobsite debris with ease.

A reinforced hood and heavy-duty front bumper protect the bristles from impact, while greaseable bearings and pivot points extend the life of the attachment. Available in 42" and 54" widths, the Mini Pickup Broom is compatible with most mini skid steer mounts.

2.3 Attachment Model Numbers

MODEL NUMBER	WIDTH	HYDRAULIC FLOW
116810	42"	12 – 20 GPM
116812		8 – 12 GPM
116815*	48"	12 – 20 GPM
116817*		8 – 12 GPM
116820	54"	12 – 20 GPM
116822		8 – 12 GPM

*Discontinued.

NOTE: See "6.2 Main Components" on page 30 for additional mount options.

3. Safety

3.1 General Safety Information



SAFETY ALERT SYMBOL



This **SAFETY ALERT SYMBOL** identifies important safety messages on the equipment and in the owner's manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.



IMPORTANT



The signal word **IMPORTANT** identifies procedures which must be followed to avoid damage to the machine.



DANGER



The signal word **DANGER** on the machine and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING



The signal word **WARNING** on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION



The signal word **CAUTION** on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTE: Notes are used to indicate important information. This information may be repeated in other areas of the manual.

Terminology

Host Machine, Machine, Prime Mover:

- The Mini Pickup Broom can be attached to many different pieces of equipment; therefore, the terms “host machine”, “machine”, and “prime mover” will be used. Host machine, machine, and prime mover mean any vehicle, tractor, or skid steer providing power to the attachment.

Attachment, Implement, Equipment:

- The Mini Pickup Broom is the tool that is being attached to the host machine; therefore, the terms “attachment”, “implement”, and “equipment” will be used. The attachment, implement, and equipment mean any tool that is being used on any vehicle, tractor, or skid steer being used for different applications.

Operating Safety

- Read and follow instructions in this manual and the machine's Operator's Manual before operating.
- The manual must always remain with the machine. In case of loss or damage, request a new copy from your dealer or from Blue Diamond®.
- Strictly follow all rules prescribed by the safety pictograms/decals applied to the machine. Ensure that all safety pictograms/decals are legible. If pictograms/decals are worn, they must be replaced with new ones obtained from Blue Diamond® and placed in the position indicated by this manual.
- Before using the machine, make sure that all safety devices are installed and in good working condition. In case of damaged or missing shields, replace them immediately.
- It is absolutely forbidden to remove or alter safety devices and/or safety precautions
- Pay maximum attention to avoid any accidental contact with rotating parts of the machine.
- If the use of the machine is required at night or in conditions of reduced visibility, use the lighting system of the prime mover and an auxiliary lighting system if required.

3. Safety

3.2 Operators

Qualified Operators

The operator is a person who is suited to the work and is physically and psychologically able to withstand the demands connected with operating the equipment for its intended use. The operator must not allow anyone to approach the machine while it is working and must not allow external personnel to operate the machine or attachment.

The operator is to follow the given instructions in this manual and the machine operator's manual in order to obtain maximum performance, minimal fuel consumption, and maximum safety for himself and for others.

The operator is responsible for scrupulously observing all the instructions given in this manual.



DANGER



AVOID SERIOUS INJURY OR DEATH

Operators must receive instructions before operating the machine. Untrained operators can cause serious injury or death.

For an operator to be qualified, he or she must not use drugs or alcoholic drinks which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine and the equipment. For an operator to be qualified, he or she must have read and understood the instructions of this manual, he or she must make adequate preparation for the proper use of the machine, and he or she must hold a driving license.

In case of doubt regarding the use of the machine and/or the interpretation of this manual, the operator must contact either their dealer or Blue Diamond®.

Operator Training

- Check the rules and regulations at your location. The rules may include an employer's work safety requirements. Regulations may apply to local driving requirements or use of a Slow Moving Vehicle (SMV) emblem. Regulations may identify a hazard such as a utility line.
- It is the skill, care, common sense, and good judgment of the operator that will determine how efficiently and safely the job is performed.
- The new operator must start in an area without bystanders and use all the controls until he or she can operate the machine safely under all conditions of the work area.

Operator Safety

- Any use of the machine other than the intended use is a non-intended use and is considered to be unauthorized and dangerous. Blue Diamond® is not liable for any damage or injury resulting from non-intended use.
- Before starting, and during operation of the attachment, make sure there are no people or animals in the operation area; the machine can project material with risks of serious injury or death.
- During operation, adjustment, maintenance, repairing, or transportation of the machine, the operator must always use appropriate Personal Protective Equipment (PPE) including but not limited to safety glasses, working gloves, dust mask, safety helmet, and hearing protection.
- Do not operate the attachment or machine while wearing loose fitting clothing that can be entangled or caught in parts of the machine.
- Do not operate the implement when tired, not in good condition, or under the influence of alcohol or drugs.

3. Safety

3.3 Safety Guidelines

Operating Safety

- Read and follow instructions in this manual and the machine's Operator's Manual before operating.
- Under no circumstances should young children be allowed to work with this equipment.
- This equipment is dangerous to persons unfamiliar with its operation.
- Check for overhead and/or underground lines before operating equipment.
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.
- Check that the attachment is securely fastened to the machine.
- Make sure all the machine controls are in the NEUTRAL before starting the machine.
- Operate the equipment only from the operator's position.
- Operate the equipment according to the Operator's Manual.
- When learning to operate the equipment, do it at a slow rate in an area clear of bystanders.
- Do not permit personnel to be in the work area when operating the equipment.
- The equipment must be used ONLY on approved machines.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- Do not make any adjustments or repairs on the equipment while the machine is running.
- Keep shields and guards in place. Replace if damaged.
- DO NOT operate equipment in poor visibility conditions such as fog, darkness, or any conditions that limit clear visibility to less than 300 feet (100 m) in front of and to the sides of the equipment.
- When conditions make it necessary to slow ground speed, shift to a lower gear rather than reducing engine speed. The engine will maintain rated speed and keep the broom running at optimum cutting speed.
- The operator is responsible for the safety of all people in the vicinity of the operating area. If any person enters the operating area, the operator must immediately stop the machine and attachment.
- Make sure everyone on site is accounted for and their location is known.
- DO NOT operate in a work area that has not been inspected for foreign debris and obstacles.
- Remove any foreign objects and clearly mark any objects that cannot be removed.
- Know the capabilities of your equipment and practice its operation to become familiar with the controls, emergency shut down procedures, and the way it handles your machine.
- Wear safety glasses, gloves, hearing protection, and other protective clothing when required.

Machine Requirements and Capabilities

- The machine's operator's cab should be equipped with a thermoplastic polycarbonate or similar material front window, and similar protection on the sides of the operator's cab before operating the equipment.
- Keep bystanders clear of moving parts and the work area. Keep children away.
- Do not exceed 3,500 psi (241 bar) operating pressure.
- Use caution on slopes and near banks and ditches to prevent overturn.

3. Safety

3.3 Safety Guidelines Cont'd

Fire Prevention Safety

- Flammable debris (leaves, grass, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it can cause a fire hazard. Clean often to avoid this accumulation.
- The equipment's hydraulic motor compartment must be inspected every day and cleaned if necessary to prevent fire hazards and overheating.
- All fuels, most lubricants, and some coolant mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

Transporting Safety

- Comply with state and local laws governing highway safety and movement of machinery on public roads.
- Check local laws for all highway lighting and marking requirements.
- Always yield to oncoming traffic and move to the side of the road so any following traffic may pass.
- Never allow riders on either machine or equipment.
- If transporting the equipment on a truck or trailer, make sure the equipment is properly secured to the transport vehicle.

Hydraulic System

- Check hydraulic tubes, hoses, and fittings for damage and leakage. Never use open flame or bare skin to check for leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.
- Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents.

Personal Protective Equipment



Proper Work Clothes: To help ensure your safety as a designated operator wear proper work clothes including tight fitting clothes, protective gloves, and shoes.



Hand Protection: To help ensure your safety as a designated operator wear protective gloves.



Protective Shoes: To help ensure your safety as a designated operator wear protective shoes.



Safety Helmet: To help ensure your safety as a designated operator wear a safety helmet.



Safety Helmet and Eye/Ear Protection: To help ensure your safety as a designated operator wear a safety helmet and eye/ear protection.

4. Operation

4.1 Pre–Operation Inspection

Before operating the Mini Pickup Broom for the first time and each time thereafter, use the following list as a guideline during equipment inspection.



WARNING



AVOID SERIOUS INJURY OR DEATH

- Disengage machine's auxiliary hydraulics, engage the machine's parking brake, stop the engine, and make sure all moving parts are completely stopped before connecting, disconnecting, adjusting, or cleaning equipment.
- Always keep shields and guards in place when using the equipment.
- Disengage machine's auxiliary hydraulics for road travel.
- Keep hands, feet, and clothing away from rotating parts.

- Inspect the attachment for shipping damage. If damage does exist, do not operate until the damaged parts have been replaced or repaired.
- Lubricate the attachment per the schedule outlined in the Maintenance section. See "5.1 Service Schedule" on page 17.
- Check the attachment mounting frame for damage or cracks.
- Check that all shields and guards are in place.
- Check for loose hardware (i.e. nuts, bolts, screws, etc.), and tighten them if necessary.
- Check all welds on the attachment for wear and damage each time the attachment is removed from the machine.
- Check for damaged or missing safety decals. Replace if necessary.
- Inspect the machine's mounting frame. (See the machine's Operator's Manual for inspecting the mounting frame.) Replace any parts that are damaged, bent, or missing. Keep all fasteners tight. Look for cracked welds.

- Verify that the attachment is properly connected to the machine.



WARNING



Leaking fluids under pressure can enter the skin and cause serious injury or death. Immediate medical attention is required.

Wear goggles. Use cardboard to check for leaks.

- Check the condition of all hydraulic components for leaks. Repair as required.

NOTE: Do not operate with hydraulic leaks.

- Check for wear and tear on pins, linkages, cutting edges and replace any damaged and/or excessively worn parts.
- Use only Blue Diamond® recommended replacement parts. Other parts may be substandard in fit and quality.
- Ensure any damage or excessively worn parts are replaced.
- Always wear safety goggles or glasses when inspecting equipment.
- If equipped with a water kit, remove dirt or debris from the strainer bowl and nozzles.

4. Operation

4.2 Machine Requirements



DANGER



FLYING DEBRIS OR OBJECTS WILL CAUSE SERIOUS INJURY OR DEATH

To protect the operator from any flying debris or objects, it is important that the machine's operator's cab should be equipped with a thermoplastic polycarbonate or similar material front windshield and similar protection on the sides of the operator's cab before operating the attachment.

Blue Diamond® recommends that the machine be equipped with a thermoplastic polycarbonate or similar material front windshield and similar protections on the side of the operator's cab.

Only use the Mini Pickup Broom on compatible host machines. Hydraulic flow must not exceed twelve gallons per minute (12 GPM) or forty-five liters per minute (45 L/min) if equipped with a 300cc motor or twenty gallons per minute (20 GPM) or seventy-five liters per minute (75 L/min) if equipped with a 215cc motor. Do not use high flow hydraulics when operating this attachment.



IMPORTANT



Do not use high flow hydraulics when operating the Mini Pickup Broom as this could result in serious damage.

The host machine's relief pressure must not exceed 3,500 psi (241 bar). Consult the host machine's Operator's Manual for hydraulic flow and pressure specifications.

See chart below for minimum lift capacity required for each Mini Pickup Broom model.

MODEL NUMBER	WIDTH	WEIGHT
116810	42"	584 lbs (265 kg)
116812		
116815	48"	655 lbs (297 kg)
116817		
116820	54"	705 lbs (320 kg)
116822		

4.3 Transporting the Attachment



CAUTION



The operator in charge of the transportation and installation of the attachment must be familiar with the following instructions.

Be sure to pay careful attention to the weight of the Mini Pickup Broom.

Disconnect the hydraulics and the wire harness (if applicable) from the host machine. See "Disconnecting Attachment From the Machine" on page 14.

Clear dirt, rocks, and any other debris from the Mini Pickup Broom.

Use a minimum of four (4) heavy duty ratchet straps or chains for the attachment's weight. See "7.1 Attachment Specifications" on page 43 for more information.

Hook the ratchet straps to designated anchor points. Do not drape straps over the hood weldment or motor cover as this can dent or crack the weldments.

Make sure the Mini Pickup Broom is secured prior to heading towards the next location.

4. Operation

4.4 Entering & Exiting the Prime Mover



See the machine's Operator's Manual for detailed information on operating the loader.

Entering the Operator's Position

Use the safety treads, handles, and steps on the attachment and machine to enter the operator's position. Always maintain three (3) points of contact.

When in the operator's position, face forward and grip the handles. Place both feet on the rear operator platform to engage the operator presence system, start the engine, and release the parking brake.

Leaving the Operator's Position



AVOID SERIOUS INJURY OR DEATH

- Always park on a flat, level surface.
- Lower lift arms and place attachment flat on the ground.
- Place all controls in **NEUTRAL**.
- Engage the parking brake.
- Stop the engine, and remove the key.
- Wait for all moving parts to stop.

SEE MACHINE'S OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

Park the machine/attachment on a flat, level surface.

Place all controls in neutral, engage the parking brake, stop the engine, and wait for all moving parts to stop. Leave the operator's position.

4.5 Attachment Installation

Connecting Attachment to the Machine



CRUSH HAZARD

- Before moving the machine, look in all directions and make sure no bystanders, especially small children are in the work area. Do not allow anyone between the machine and attachment when approaching the attachment for connecting.
- Keep fingers and hands out of pinch points when connecting and disconnecting the attachment.

Before connecting to the attachment, inspect the machine's mounting plate. (See the machine's Operator's Manual for inspecting the mounting frame.)

Enter the operator's position. See "Entering the Operator's Position" on page 12.

Drive the machine slowly forward until the top edge of the machine's mounting plate is under the top flange of the attachment mounting frame.

Slowly tilt the machine's mounting plate back until the attachment mounting frame fully contacts the front of the machine's mounting plate.

Engage attachment locking levers/wedges. (See the machine's Operator's Manual for detailed information.)

4. Operation

4.5 Attachment Installation Cont'd

Connecting Attachment to the Machine Cont'd



WARNING



AVOID SERIOUS INJURY OR DEATH

The locking pins/wedges must extend through the holes in the attachment mounting frame. Failure to secure locking pins/wedges can allow attachment to come off.

**SEE MACHINE'S OPERATOR'S MANUAL FOR
ADDITIONAL INFORMATION.**

Leave the operator's position. See "Leaving the Operator's Position" on page 12.

Connecting Hydraulic Hoses



IMPORTANT



Thoroughly clean the quick couplers before making connections. Dirt can quickly damage the hydraulic system.

Verify that all hydraulic couplings are compatible with the host machine.

Remove dirt or debris from the male and female couplers. Visually inspect the couplers for corroding, cracking, damage, or excessive wear. Replace as needed.

Connect the attachment hydraulic hoses to the machine. The hydraulic hoses must be connected in the following order: return hose then pressure hose.

For the hydraulic hoses, the return hose must be connected before the pressure hose.

Pull on each hose to verify full connection is made.

Connecting the Wire Harness

If the Mini Pickup Broom is not equipped with a water kit, a wire harness is not needed.

The water kit comes with a universal wire harness. If an OEM wire harness is desired, it can be ordered separately.

The universal wire harness from Blue Diamond® plugs into a 12-volt power socket, otherwise known as a cigarette lighter plug, which tends to be located within the cab of the host machine.

If using an OEM wire harness, it will typically plug into the same area as the hydraulic connections. See your host machine's Operator's Manual for additional information.

See "6.7 Water Kit Components" on page 38 for more information.

Disconnecting Hydraulic Hoses



WARNING



AVOID SERIOUS INJURY OR DEATH

Hydraulic fluid, tubes, fittings, and quick couplers can get hot during operation. Be careful when connecting and disconnecting hydraulic hoses.

Relieve auxiliary hydraulic pressure. (See the machine's Operator's Manual for correct procedure.)

Disconnect attachment hydraulic hoses from the machine. The hoses must be disconnected in the following order: pressure hose then return hose.

The pressure hose must be disconnected before the return hose.

4. Operation

4.5 Attachment Installation Cont'd

Disconnecting Attachment From the Machine

Relieve auxiliary hydraulic pressure. (See the machine's Operator's Manual for correct procedure.)

Park the machine and attachment on a flat, level surface. Lower the attachment flat on the ground.

Leave the operator's position. See "Leaving the Operator's Position" on page 12.

Disconnect attachment hydraulic hoses from the machine.

Disengage locking pins/wedges. (See the machine's Operator's Manual for correct procedure.)

Enter the operator's position. See "Entering the Operator's Position" on page 12.

Slowly tilt the machine's mounting plate forward until the attachment mounting frame is free from the machine's mounting plate.

Drive the machine slowly backward, away from the attachment.

4.6 Operating the Attachment



WARNING



THROWN OBJECTS OR ROTATING BLADES CAN CAUSE SERIOUS INJURY OR DEATH

- Clear work area of all debris, such as rope, wire, cable or other materials that can wrap around the broom core and broom wafers, causing entanglement and attachment damage.
- DO NOT operate Mini Pickup Broom in vicinity of bystanders, animals, or damageable property. Objects can be thrown more than several hundred feet.
- Keep all chains and shields installed. Repair or replace if damaged or missing.
- Check broom core, broom wafers, and mounting hardware. Replace if damaged. Never weld or modify.



WARNING



AVOID SERIOUS INJURY OR DEATH

Never operate the attachment with any guards removed, including the motor cover.



WARNING



AVOID SERIOUS INJURY OR DEATH

Never allow riders on the attachment.

1. Install the Mini Pickup Broom onto the host machine. (See "Connecting Attachment to the Machine" on page 12.)

4. Operation

4.6 Operating the Attachment Cont'd

2. Lower the broom until wafers can create a two – four inch (2 – 4”) wide sweeping pattern, the rubbers skirts are within a half inch (1/2”) of the ground, and the bolt-on edge is one inch (1”) above the ground.

Only the broom wafers should come in contact with the ground. Too much downpressure will cause premature wear on the bristles.

3. With the machine's engine RPM just above idle, engage the auxiliary hydraulic flow (see the host machine's Operator's Manual) so that the drum begins to slowly rotate.
4. Slowly raise the machine's engine RPM to the desired brush speed, maintaining a safe speed.

When sweeping forward, rotate the brush so material is pushed away from the loader and over the broom into the bucket [Figure 1].



IMPORTANT

DO NOT exceed 3,500 psi (241 bar) operating pressure and twelve gallons per minute (12 GPM) hydraulic flow if equipped with a 200cc motor or twenty gallons per minute (20 GPM) hydraulic flow if equipped with a 315cc motor. Doing so can result in serious damage.

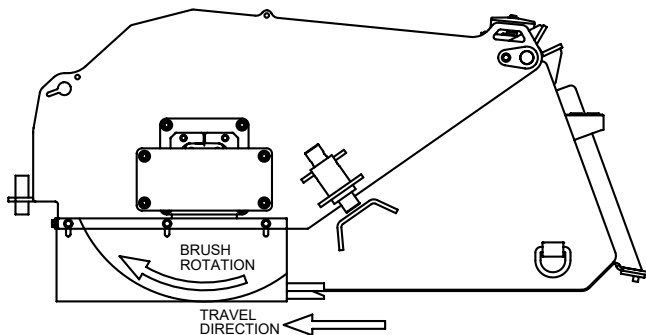


Figure 1

When sweeping backward, rotate the brush so material is pushed toward from the loader and under the broom into the bucket [Figure 2].

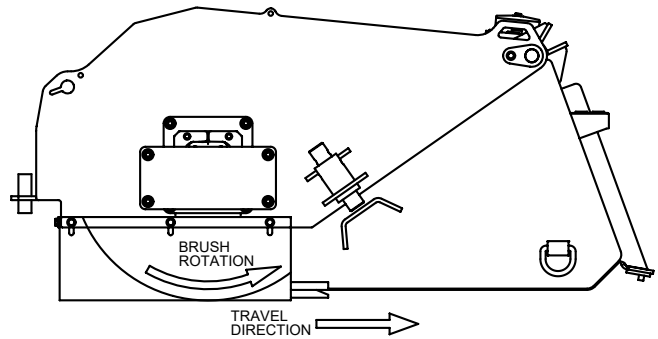


Figure 2

NOTE: Do not reverse sweeping direction without first disengaging the auxiliary hydraulic flow.

5. When the bucket is full, disengage the auxiliary hydraulic flow, raise the attachment above the ground and drive toward the dumping area.
6. Once in the dumping area, slowly raise the lift arms to the required dump height and tilt the Mini Pickup Broom forward to empty the bucket. Once empty, resume sweeping.

Water Kit (Optional)

Blue Diamond® offers a water kit that mounts onto the Mini Pickup Broom itself. The water kit dispenses water to control and minimize airborne dust and debris particles.

1. Install the water kit. [See “5.11 Water Kit Installation (Optional)” on page 24.]
2. Install the wire harness, either OEM or universal, onto the installed water kit. See “Connecting the Wire Harness” on page 13.
3. Engage the wire harness to engage the water pump, allowing water to flow out of the nozzles.
4. To turn off the water kit, disengage the wire harness.

4. Operation

4.7 Operating Tips

- To keep the attachment in optimal condition, always follow the maintenance schedule outlined in “5.1 Service Schedule” on page 17.
- Perform “4.1 Pre–Operation Inspection” on page 10 each time the attachment is operated.
- Slow down in heavy material. Allow time for the Mini Pickup Broom to sweep.
- Operate the Mini Pickup Broom from inside an enclosed cab or wear a dust mask and eye protection. Flying dust, rocks, and other debris can enter the lungs causing respiratory problems, enter the eyes, causing injury; or can become projectiles, causing injury to bystanders or animals.
- Avoid excessive downpressure.
- Avoid hitting solid objects with this attachment, as hitting solid objects will result in damage to the attachment or serious injury or death to the operator.
- Always operate the Mini Pickup Broom at the slowest rotating speed that will perform the job. This is to keep flying debris to a minimum.
- Avoid traveling at high speeds while operating the Mini Pickup Broom as this can result in sudden loss of control, leading to damaged equipment, damaged property, and injury to the operator or bystanders.
- Sweep areas when traffic is low.
- Do not sweep debris towards buildings, bystanders, people, etc. This can result in damage or injury.
- Make sure hydraulic hoses and wire harnesses are properly routed without twists to prevent damage, such as stretching, pinching, crushing, or kinking. A damaged hydraulic hose can burst and leak hydraulic fluid.
- Avoid exposure to dust containing crystalline silica particles. This dust can cause serious injury to the lungs (silicosis). Because crystalline silica is a basic components of sand and granite, many construction sites produce dust containing crystalline silica.
- Do not use this attachment to lift, carry, push, or tow other equipment or objects. This is not what this attachment is designed for. If an attachment is needed for lifting, carrying, pushing, or towing, contact your local Blue Diamond® dealer for other attachments to better fit this need.
- Do not use this attachment to lift the front or back of the host machine off the ground. Doing so will result in damage to the host machine and attachment. It can also result in serious injury or death to the operator and/or bystanders.
- Keep bystanders far away from the Mini Pickup Broom as it can throw debris when it is in operation. Shut off the broom’s rotating drum if any person enters the discharge area.

5. Maintenance

5.1 Service Schedule

DESCRIPTION	SERVICE PROCEDURES					
	Check	Clean	Lube	Change	Adjust	Drain
Daily Maintenance (or every 8 hours)						
Hydraulic Fittings	•					
Hydraulic Hoses	•					
All Hardware	•					
Safety Decals	•					
Broom Wafers	•					
Strainer (if equipped)	•	•				
Nozzles (if equipped)	•	•				
Weekly Maintenance (or every 40 hours)						
All Hardware	•					
Frame (cracks, bends, or damage)	•					
Angle Vertical Point			•			
Right Side Bearing			•			
Monthly Maintenance						
Broom Wafers	•					
Frame (cracks, bends, or damage)	•					
Safety Decals	•					
All Hardware	•					
Hydraulic Fittings	•					
Hydraulic Hoses	•					
Motor Cover		•				

5. Maintenance

Proper and regular maintenance ensures a long life of the attachment, avoids failures, and saves time and repair costs.

Periodic inspections and maintenance operations described in this section must be performed by an operator in times and terms prescribed. Failure to comply with maintenance prescriptions can compromise the function and lifetime of the attachment, which will result in the warranty becoming void.

Repairs, maintenance, and modifications other than those mentioned in this manual should NOT be performed without consulting Blue Diamond® Product Support.

Wrong or inappropriate repairs or maintenance may generate abnormal operating conditions, equipment damage, and generate risks for the operator.



WARNING



AVOID SERIOUS INJURY OR DEATH

The following must always be performed prior to any adjustment being made:

- Always park on a flat, level surface.
- Lower lift arms, and place attachment flat on the ground.
- Place all controls in NEUTRAL.
- Engage the parking brake.
- Stop the engine, and remove the key.
- Wait for all moving parts to stop.

SEE MACHINE'S OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.



WARNING



AVOID SERIOUS INJURY OR DEATH

Before operating or serving the unit:

- Read and understand the machine's Operator's Manual.
- Follow the warnings and instructions in this manual when making repairs, adjustments, or servicing.
- Check for correct function after adjustments, repairs, or service.

UNTRAINED OPERATORS AND FAILURE TO FOLLOW INSTRUCTIONS CAN CAUSE SERIOUS INJURY OR DEATH.

5.2 Maintenance Safety



WARNING



AVOID SERIOUS INJURY OR DEATH

Hydraulic fluid, tubes, fittings, and quick couplers can get hot during operation. Be careful when connecting and disconnecting hydraulic hoses.

- Always keep the work area clean and dry.
- Always use personal protective equipment (PPE), such as eye, hand, and hearing protection when performing any service or maintenance.
- A fire extinguisher and first aid kit should be readily accessible when performing maintenance on the attachment and machine.
- Before working or doing maintenance on the attachment and machine, shut off the engine and remove the key. Make sure the host machine's wheels are blocked.
- Never work under the machine or attachment unless the machine or attachment is blocked or securely supported.
- Disconnect the battery (both terminals) before welding on any part of the machine. Failure to do so may cause damage to electrical components.

5. Maintenance

5.2 Maintenance Safety Cont'd

- When working around batteries, remember that all exposed metal parts are “live”. Never lay a metal object across the terminals because a spark, short circuit, explosion, or personal injury may result.
- Battery posts, terminals, and related accessories contain lead and lead components. Wash hands after handling.
- Always relieve hydraulic system pressure before repairing, adjusting, or disconnecting. Never search for leaks with your hands. See “Hydraulic System” on page 9 for additional information.
- When replacement parts are necessary, genuine factory replacement parts must be used to restore your equipment to original specifications. Blue Diamond® will not be responsible for injuries or damage caused by use of unapproved parts and/or accessories.
- When completing service or maintenance on this attachment, make sure all shields and guards are installed before operating the attachment.
- Check the attachment’s mounting hardware for wear or damage. Inspect the pins and mount on the attachment for wear or damage.
- Check for damaged or missing safety decals. Replace if necessary.
- Check the broom wafers for excessive wear or damage.
- Check hydraulic hoses and fittings for wear, damage, or leaks.
- Verify that the attachment is properly connected to the machine.
- Check that all shields and guards are in place.
- If the water kit is equipped, check the strainer bowl daily for dirt and debris. This debris can plug the nozzles.
- If the water kit is equipped, check the nozzles daily for debris. Remove and clean plugged nozzles.
- If the gutter brush is equipped, check the bristles for wear.

NOTE: Repair or replace any damaged parts.

NOTE: After initial use or repair/replacement of damaged parts, it is important to check the repaired/replaced parts for proper bolt torque and operation.

5.3 Daily Maintenance

Inspect the attachment by performing a walkaround daily before and after use. Use the following inspection checklist as a guideline.

Perform the following after every eight (8) hours of operation:

- Verify that the attachment is properly connected to the host machine.
- Check all components and hardware to ensure the equipment is secure and thoroughly tightened.
- Check the frame and all welds for cracks or damage.
- Check the mounting frame for proper operation and signs of damage or unusual wear.

5.4 Weekly Maintenance

Perform the following after every forty (40) hours of operation:

- Check all bolts, nuts, and other hardware for proper torque.
- Inspect the frame for cracks, bends, or damage.
- Lubricate the attachment. See “5.6 Lubrication” on page 20 for additional information.

5. Maintenance

5.5 Monthly Maintenance

Perform the following after every thirty (30) days of operation:

- Inspect the broom wafers for excessive wear.
- Check that all bolts are properly torqued.
- Check frame, shields, and guards. Repair if damaged, or replace if necessary.
- Check for damaged or missing decals. Replace if necessary.
- Check for damaged or leaking hydraulic hoses or fittings. Replace if necessary.
- Clean all dirt, leaves, grass, rocks, and other debris from the motor area and under covers.

5.6 Lubrication



IMPORTANT

Fluid, such as hydraulic fluid, coolants, grease, etc. must be disposed of in an environmentally safe manner. Some regulations require that certain spills and leaks on the ground must be cleaned in a specific manner. See local, state, and federal regulations for correct disposal.

Grease the following every forty (40) hours of operation or once a week, whichever occurs first. Always use an EP Lithium NLGL No. 2 grade grease, e.g. Mobilux EP2, when lubricating the attachment.

Hood Pivot Points

The broom hood pivot points are located on the back of the bucket towards the top (see Figure 3, Item 1). There is one (1) on each side.

Apply three – four (3 – 4) pumps of grease to each grease zerk.

Bearings

These are two bearings, one on each side of the Mini Pickup Broom (see Figure 3, Item 2), that need to be greased.

Apply three – four (3 – 4) pumps of grease to each bearing.

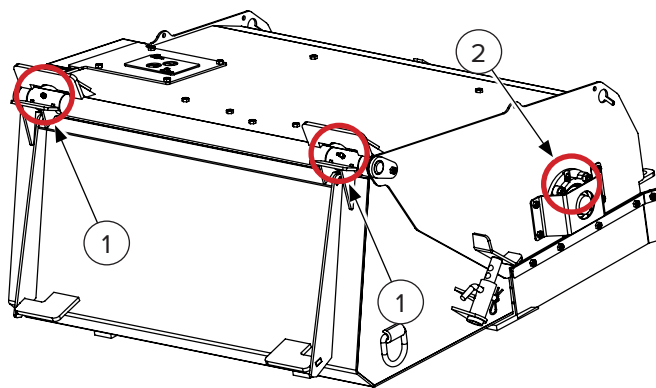


Figure 3

5.7 Broom Core

See “6.2 Main Components” on page 30 for parts diagrams.

1. Park the machine and attachment on a flat, level surface. Lower the attachment flat on the ground.
2. Leave the operator’s position. See “Leaving the Operator’s Position” on page 12.
3. Disconnect the attachment’s hydraulic hoses from the host machine.
4. Remove the chain cover [Figure 4, Item 1] and side rubber skirt retainers [Item 2].

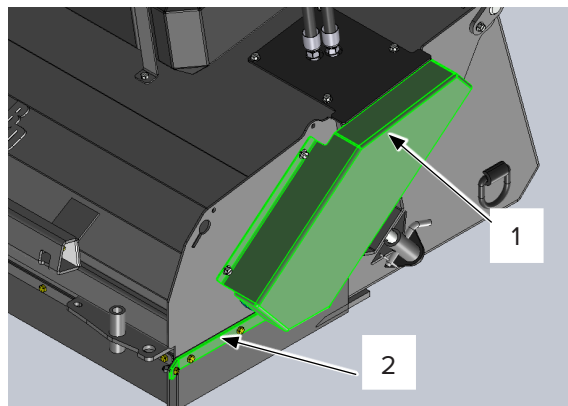


Figure 4

5. Maintenance

5.7 Broom Core Cont'd

5. Loosen the chain tensioner sprocket [Figure 5, Item 1], and remove the chain [Item 2].

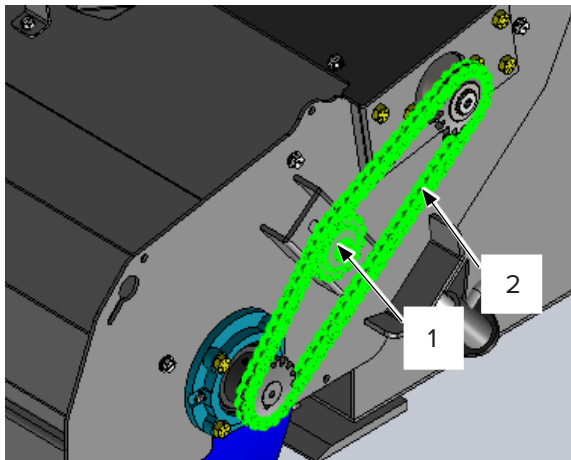


Figure 5

6. Remove the bearing guard [Figure 6, Item 1] on the right side, and remove the hardware from both bearings [Item 2].

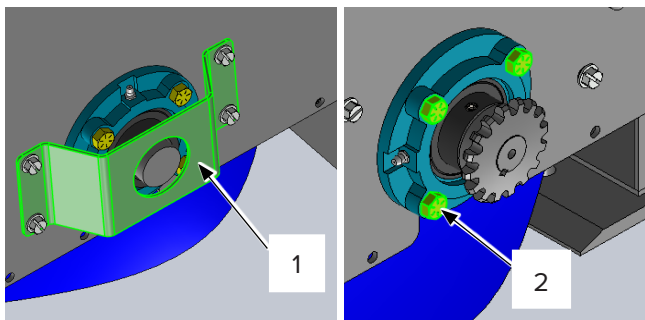


Figure 6

7. Using the host machine's arms or a hoist in combination with lifting straps, raise the broom housing off of the broom core.

A sprocket and bearing are attached to the broom core itself and may need removed.

NOTE: A pry bar may need to be used to remove the core from the bucket.

8. Roll the broom core away from the bucket.
- To reinstall the broom core onto the attachment, perform the above steps in reverse order.

5.8 Motor

See "6.4 Left Bearing, Chain, & Motor Components" on page 34 for parts diagrams.

To remove the broom motor from the attachment, perform the following:

1. Park the machine and attachment on a flat, level surface. Lower the attachment flat on the ground.
2. Leave the operator's position. See "Leaving the Operator's Position" on page 12.
3. Disconnect the attachment's hydraulic hoses from the host machine.
4. Remove the chain cover ["Figure 4" on page 20, Item 1].
5. Loosen the chain tensioner sprocket [Figure 5, Item 1], and remove the chain [Item 2].
6. Remove the drive sprocket [Figure 7, Item 1].

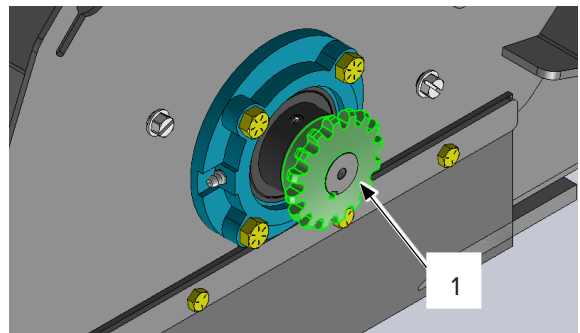


Figure 7

7. Remove the hoses [Figure 8, Item 1] and the motor cover plate [Item 2].

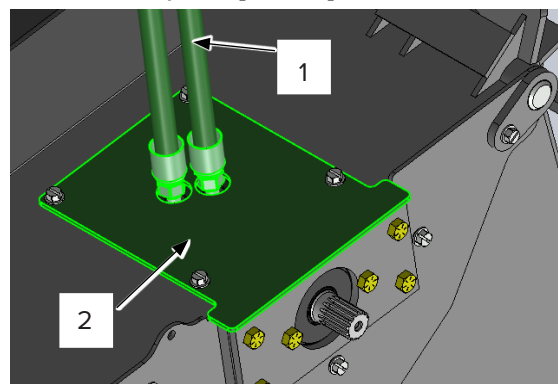


Figure 8

5. Maintenance

5.8 Motor Cont'd

8. Remove the motor mount plate [Figure 9, Item 1] and its hardware from the motor [Item 2].

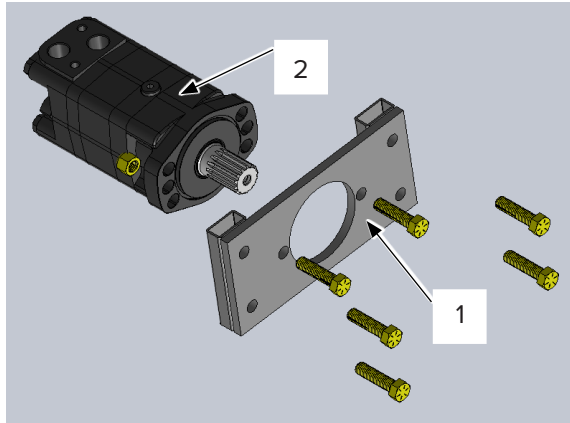


Figure 9

To reinstall the motor onto the attachment, perform the previous steps in reverse.

5.9 Bearings

See “6.4 Left Bearing, Chain, & Motor Components” on page 34 for parts diagrams.

To remove the bearing from the attachment, perform the following:

1. Park the machine and attachment on a flat, level surface. Lower the attachment flat on the ground.
2. Leave the operator's position. See “Leaving the Operator's Position” on page 12.
3. Disconnect the attachment's hydraulic hoses from the host machine.
4. Remove the chain cover [“Figure 4” on page 20, Item 1].
5. Loosen the chain tensioner sprocket [“Figure 5” on page 21, Item 1], and remove the chain [Item 2].
6. Remove the shaft sprocket [“Figure 7” on page 21, Item 1].
7. Remove the bearing guard on the right side [“Figure 6” on page 21, Item 1].
8. Remove the bearing hardware [“Figure 6” on page 21, Item 2].

9. Remove the bearings from each side of the drum.

To reinstall the bearings onto the attachment, perform the above steps in reverse.

5.10 Broom Wafer Replacement

Broom wafers need replaced as soon as a sweeping pattern of two – four inches (2 – 4”) (50 – 100 mm) can no longer be achieved when the Mini Pickup Broom's frame is one inch (1”) (25 mm) off the ground.

The following table lists all the tools needed to completely replace the broom wafers from start to finish.

TOOLS NEEDED	
✓	1/2" Socket & Wrench
✓	9/16" Socket & Wrench
✓	1 1/8" Socket & Wrench
✓	1/2" Impact Drive
✓	3/8" Drive Ratchet
✓	1/2" Drive Ratchet
✓	2 Lifting Straps
✓	Allen Wrenches for Set Screws
✓	Pry Bar
✓	Stand for Broom Assembly

Removal

1. Park the machine and attachment on a flat, level surface. Lower the attachment flat on the ground.
2. Leave the operator's position. See “Leaving the Operator's Position” on page 12.
3. Disconnect the attachment's hydraulic hoses from the host machine.
4. Remove the side rubber skirt retainers.
5. Remove the chain cover [“Figure 4” on page 20, Item 1].

5. Maintenance

5.10 Broom Wafer Replacement Cont'd

Removal Cont'd

6. Loosen the chain tensioner sprocket ["Figure 5" on page 21, Item 1], and remove the chain [Item 2].
7. Remove the bearing guard on the right side ["Figure 6" on page 21, Item 1].
8. Remove the bearing hardware ["Figure 6" on page 21, Item 2].
9. Using the host machine's arms or a hoist in combination with lifting straps, raise the broom housing off of the broom core.

A sprocket and bearing are attached to the broom core itself and may need removed.

NOTE: A pry bar may need to be used to remove the core from the bucket.

10. Roll the broom core away from the bucket.
11. Loosen the set screws [Figure 10, Item 1], and remove the sprocket [Item 2] and the bearing [Item 3].

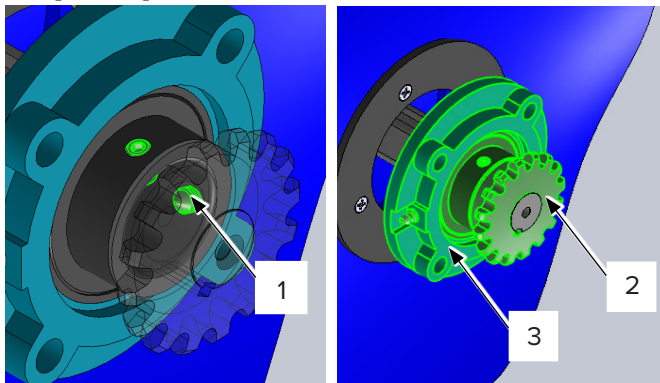


Figure 10

12. Remove the end retainer from one broom end [Figure 14, Item 1].

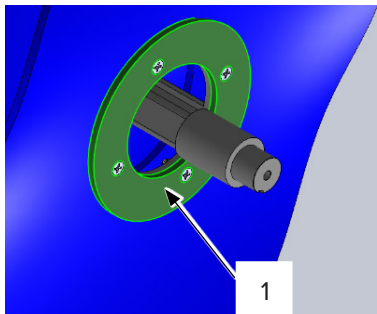


Figure 14

Replacement

1. Using a hoist or loader with lift straps attached to the drum, stand the broom drum vertical with the installed end retainer on the bottom.
2. Install a new wafer by making sure the two (2) pins hug one of the drum's bar. See Figure 11.

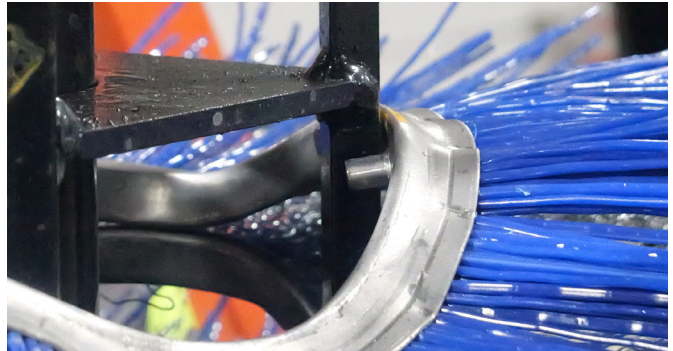


Figure 11

3. Install additional wafers with the convolutions (waves) opposing each other to expand the broom [Figure 12].

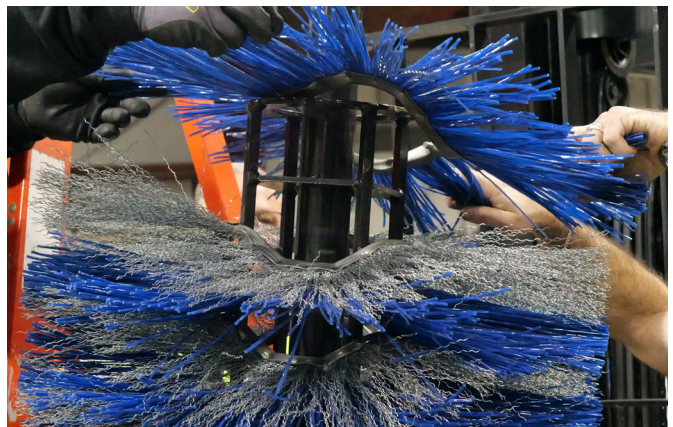


Figure 12

4. After installing the last wafer, reinstall the end retainer plate. Carefully lay the core on its side [Figure 13].

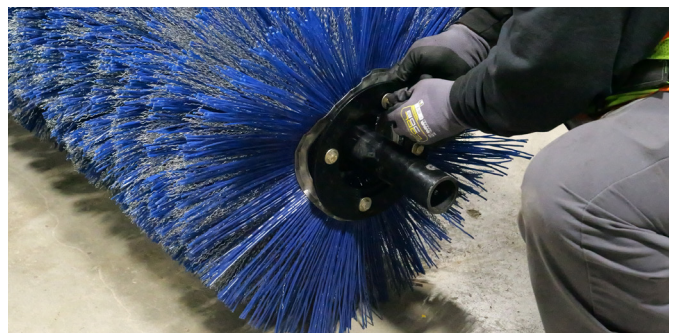


Figure 13

5. Maintenance

5.10 Broom Wafer Replacement Cont'd

Replacement Cont'd

- Using a hoist or loader, raise the broom core from the ground, and insert it into the broom frame.

NOTE: Make sure the broom core is loaded with the splined end lined up with the motor splines.

- Reinstall the bearing, bearing guard, chain, chain cover, motor subassembly (if removed), and motor guard plate.
- Be sure everything is properly torqued. Refer to “7.2 Torque Specifications – Imperial” on page 45.

5.11 Water Kit Installation (Optional)

Water kits are sold separately from the Mini Pickup Broom. A universal wire harness is included with the purchase of the water kit.

See “6.7 Water Kit Components” on page 38 and “6.8 Spray Bar Components” on page 40 for diagrams.

- Install the pump mount bracket (216673) to the top of the hood weldment using four (4) of the bolts provided (299423).
- Install the water pump (216540) to the pump mount bracket (216673) using four (4) bolts (299418) and eight (8) washers (299715), and secure with four (4) nuts (299615).
- Crimp the connector pins onto the pump's wires.
- Push the connector pins into the Deutsch connector (298115), black on “1” and red on “2”. Pull on the wire to test that they are securely connected.
- Insert the green connector piece into the Deutsch connector.
- Secure the water tank (216850) to the hood weldment using the two (2) tank straps (216852).

- Thread both fittings (216851 & 216658) onto the water tank, and attach the cap (216651).
- Thread the filter fitting (216660) onto the water pump.
- Thread the filter (216542) and the remaining fitting (216658) into the pump inlet. Ensure the direction of flow through the filter is towards the pump.
- Connect the water pump fitting (216662) to the water pump.
- Attach one end of a section of the 1/2” inner diameter hose (216688) to the pump's fitting (216662). Attach the other end of the hose to the tank's fitting (216658). Secure with hose crimps (216691).
- Attach one end of another section of the 1/2” inner diameter hose (216688) to the water pump fitting (216658).
- Loop the long hose around the right side of the hood weldment. Secure in place with zip ties.
- Every broom model will have only two (2) water nozzles that use a 90 degree fitting for each end of the water hose. These are placed at each end of the spray bar weldment. To assemble these, perform the following:
 - Place the water nozzle strainer (216320) inside the water nozzle fitting (216315).
 - Place a water nozzle (216306) on top of the water nozzle strainer (216320).
 - While carefully holding the partially assembled water nozzle together, insert it through the nozzle holder plate inside the spray bar weldment.
 - To secure the internal pieces inside the water nozzle fitting (216315) and to secure the assembled water nozzle to the spray bar weldment, thread the plastic retainer nut (216693) onto the water nozzle fitting (216315). The assembled nozzle should be pointing downwards.

5. Maintenance

5.11 Water Kit Installation (Optional) Cont'd

5. Repeat the above steps for the second water nozzle that use a 90 degree fitting, 216315.
15. Attach one section of the 3/8" inner diameter hose (216690) to one of the assembled nozzles.
16. Insert one end of the 3-way barbed tee fitting (216694) into the 3/8" inner diameter hose (216690) that is attached to the assembled nozzle. Secure with a hose crimp (216691).
17. Repeat steps 15 and 16 for the other assembled nozzle.
18. Loosely attach the assembled spray bar weldment to under the front of the hood weldment using two (2) bolts (299423) and securing with two (2) nuts (299625).
19. Attach the loose end of the 1/2" inner diameter hose (216688) to top of the 3-way barbed tee fitting (216694). Secure with a hose crimp (216691).
20. Tighten the zip ties securing the hose to the hood weldment.
21. Tighten the hardware holding the spray bar weldment to the Mini Pickup Broom.
22. Insert the grommet (216538) into the pump cover (255458). Secure the pump cover to the water pump mount bracket (216673) using three (3) bolts (299423).
23. Connect the wire harness (200010) to the Deutsch connector (298115).
24. See "Water Kit (Optional)" on page 15 for instructions on how to operate the water kit.

5.12 Cleaning the Attachment

To maintain safety and quality performance, it is best to clean the Mini Pickup Broom after each use.

To clean the attachment, perform the following:

1. Park the machine and attachment on a flat, level surface. Lower the attachment flat on the ground.
2. Leave the operator's position. See "Leaving the Operator's Position" on page 12.
3. Disconnect the attachment hydraulic hoses from the host machine.
4. Lower the support feet.
5. Enter the operator's position. See "Entering the Operator's Position" on page 12.
6. Start the engine and fully lower the machine's lift arms while tilting the Mini Pickup Broom until the attachment is level.
7. Use water or air pressure to clean debris from the Mini Pickup Broom's frame and shields.

Be careful when removing any obstructions that are wrapped around the broom core or broom wafers.

5. Maintenance

5.13 Spare Parts & Accessories

To maintain safety, performance, and product reliability, Blue Diamond® recommends the use of genuine Blue Diamond® replacement parts for all repairs and service.

Genuine Blue Diamond® parts are specifically designed and tested for your attachment. These components include critical items, such as hydraulic motors, cylinders, and structural weldments.

Use of non-genuine parts for components identified as Blue Diamond® OEM may affect product performance and could void applicable warranty coverage.

To obtain replacement parts, contact Blue Diamond® Product Support with the following information:

- Type of attachment
- Serial number
- Part number and/or description of part(s) needed
- Quantity of part(s) needed

5.14 Storage

Storing the Attachment

Sometimes it may be necessary to store your Mini Pickup Broom for an extended period of time. Below is a list of items to perform before storage.

- Make sure the hydraulic hose couplers are capped, plugged, or connected to each other.
- Thoroughly wash the attachment before storing it for long periods.
- Lubricate the attachment.
- Check for loose hardware, missing guards, or damaged parts.
- Check for damaged or missing decals. Replace if necessary.
- Replace worn or damaged parts.
- Place the attachment flat on the ground in a dry, protected shelter.

NOTE: In muddy conditions or to prevent the attachment from freezing to the ground, put the attachment on planks or blocks before removing the attachment from the machine.

Return to Service

After the Mini Pickup Broom has been in storage, it is necessary to follow a list of items to return the attachment to service.

- Lubricate the attachment.
- Connect and operate the attachment and check for correct function.
- Check for leaks. Repair as needed.

5. Maintenance

5.15 Troubleshooting

PROBLEM	CAUSE	SOLUTION
Broom bogs down or loses power.	Debris or foreign material stuck under the hood weldment	Remove excess foreign material from under the broom hood.
	Bearing failure	Repair or replace bearings. (To diagnose, shut off the auxiliary hydraulics to the attachment, and then slowly rotate and listen for bearing noise.)
	Broom speed too slow or ground speed too fast	Increase RPMs, and reduce ground speed.
	Auxiliary hydraulics flow too slow or machine RPM's not high enough	Look for hydraulic leaks and repair. Ensure proper hydraulic flow setting and RPM for host machine.
Broom becomes uneven or bristles wear unevenly.	Bristles repeatedly collide with solid objects, i.e. pipes, rocks, etc.	Clear the sweeping area of solid objects, and flag those that cannot be removed. Lift the broom to clear exposed solid objects.
Hydraulic fluid level decreases during operation.	Hydraulic motor leak or leak in the host machine's hydraulic system	Investigate and repair the leaks.
Bristles do not rotate, rotates slowly, or stalls easily when contacting the ground.	Auxiliary hydraulic hoses not connected or quick couplers not fully or properly connected	Ensure all hydraulic connections are properly secured.
	Auxiliary hydraulics not engaged	Engage auxiliary hydraulics.
	Air in hydraulic lines	Cycle auxiliary hydraulics several times to remove air from the line.
	Obstructed or damaged hydraulic hoses	Replace obstructed or damaged hose.
	Worn or damaged host machine's hydraulic pump or attachment's motor	Repair or replace the host machine's hydraulic pump or the attachment's motor.
	Low hydraulic fluid in the host machine	Check the host machine's hydraulic fluid level and add fluid if needed. Check for leaks and repair.
	Motor shaft and/or splined hub(s) on broom core damaged	Disassemble the broom core from the attachment, and inspect the motor shaft and splined hub(s). Repair or replace damaged components.
Excessive vibration and/or attachment jumps over the ground.	Excessive debris wrapped around the broom core.	Remove debris and clean the bristle/core. Increase the bristle/core speed if turning slow.
	Broom core RPM or travel speed too fast	Decrease broom core RPM if turning too fast and/or decrease travel speed.
	Worn, damaged, or bent broom core.	Replace broom core.
	Missing, loose, damaged, or unbalance broom core	Replace the broom wafers on the broom core to restore balance to the broom core.
	Bearing failure.	Repair or replace bearing.
Cutting edge and bottom of bucket worn.	Constant excessive downpressure	Slightly raise the broom when sweeping. The bottom of the bucket should not be fully dragging against the ground. Replace the worn cutting edge. The bucket may need replaced too, depending on the extent of damage.

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6. Parts

6.1 Wear Parts

Broom Wafer Kits

PART NUMBER	DESCRIPTION	42" QTY	48" QTY	54" QTY
216842-KIT-42	Broom Wafer Kit – 6 3/8" x 18" Poly Convuluted for 42" Models	1	—	—
216842-KIT-48	Broom Wafer Kit – 6 3/8" x 18" Poly Convuluted for 48" Models	—	1	—
216842-KIT-54	Broom Wafer Kit – 6 3/8" x 18" Poly Convuluted for 54" Models	—	—	1

Water Kits – Comes with a Universal Wire Harness

PART NUMBER	DESCRIPTION	42" QTY	48" QTY	54" QTY
316565	Water Kit for 42" Models	1	—	—
316567	Water Kit for 48" Models	—	1	—
316569	Water Kit for 54" Models	—	—	1
216316-KIT	90 Degree Fitting Water Sprayer Tip Assembly	2	2	2

Bolt-On Edge Kits

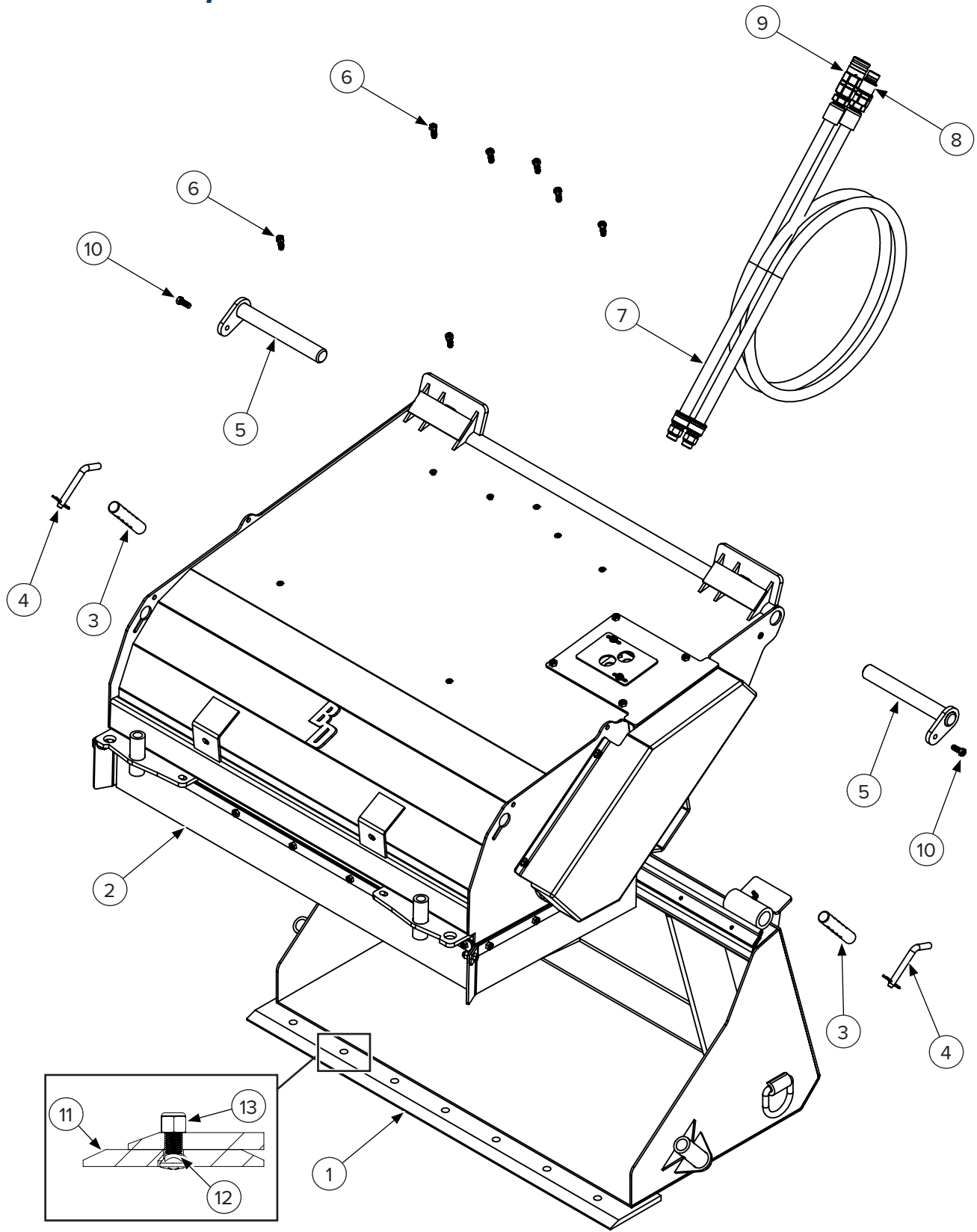
PART NUMBER	DESCRIPTION	42" QTY	48" QTY	54" QTY
309106	Bolt-On Edge Kit for 42" Models (Includes Hardware)	1	—	—
309109	Bolt-On Edge Kit for 48" Models (Includes Hardware)	—	1	—
309112	Bolt-On Edge Kit for 54" Models (Includes Hardware)	—	—	1

Broom Skirt Kits

PART NUMBER	DESCRIPTION	42" QTY	48" QTY	54" QTY
216818-42-KIT	Skirt Kit for 42" Models (Skirts Only)	1	—	—
216818-48-KIT	Skirt Kit for 48" Models (Skirts Only)	—	1	—
216818-54-KIT	Skirt Kit for 54" Models (Skirts Only)	—	—	1

6. Parts

6.2 Main Components



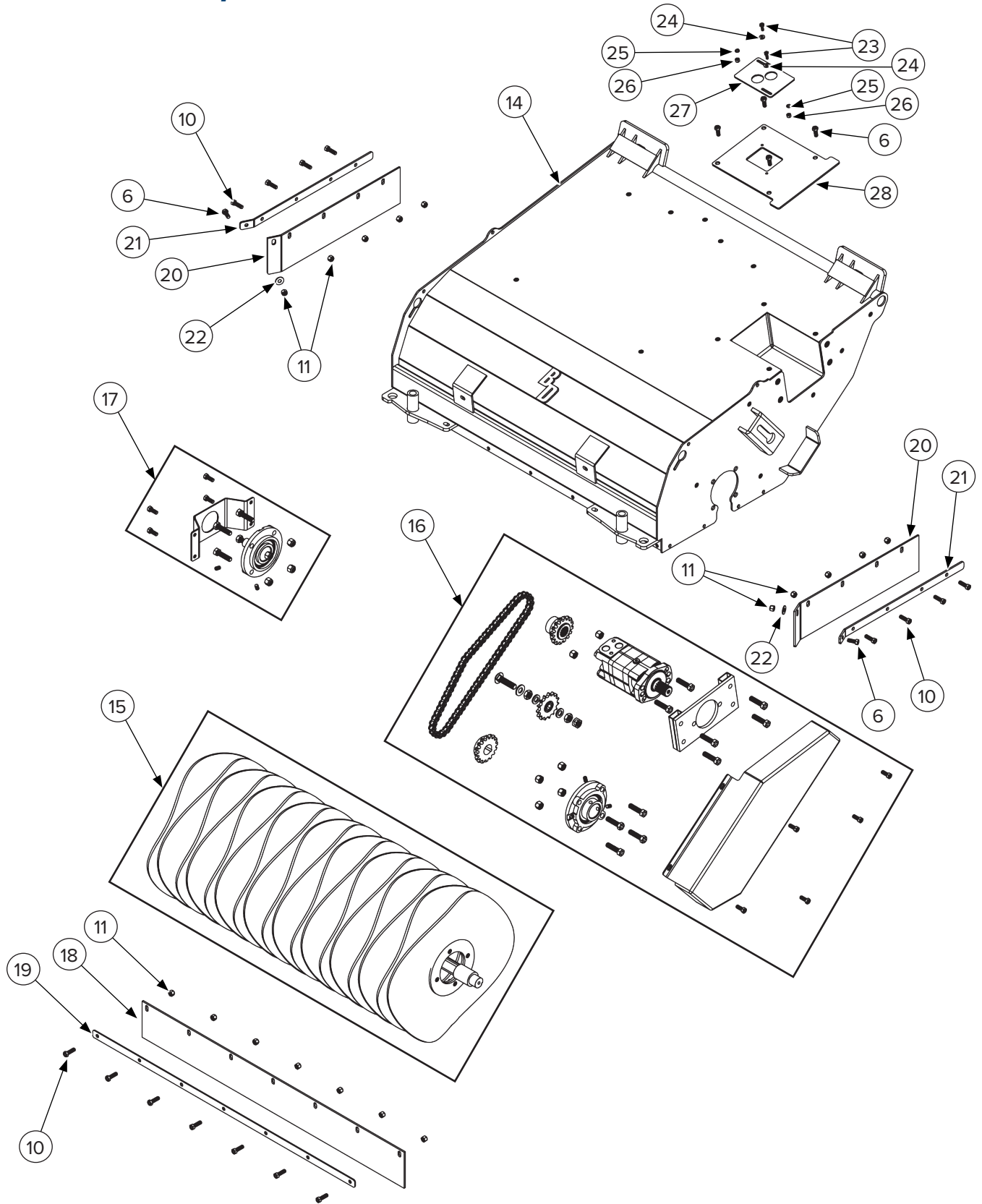
6. Parts

6.2 Main Components Cont'd

ITEM	PART NUMBER	DESCRIPTION	42" QTY	48" QTY	54" QTY
1	216800-25-42	42" Bucket with Mini Universal Skid Steer Mount	1	—	—
	216800-26-42	42" Bucket with Bobcat MT Mount	1	—	—
	216800-35-42	42" Bucket with Avant Mount	1	—	—
	216800-25-48	48" Bucket with Mini Universal Skid Steer Mount	—	1	—
	216800-26-48	48" Bucket with Bobcat MT Mount	—	1	—
	216800-35-48	48" Bucket with Avant Mount	—	1	—
	216800-25-54	54" Bucket with Mini Universal Skid Steer Mount	—	—	1
	216800-26-54	54" Bucket with Bobcat MT Mount	—	—	1
	216800-35-54	54" Bucket with Avant Mount	—	—	1
2	See 6.3 Hood Components	Hood Assembly	1	1	1
3	216840	Pivot Stop Pin	2	2	2
4	216573	Bent Pull Clevis Pin	2	2	2
5	216465	Main Hood Pivot Pin	2	2	2
6	299423	3/8"—16 x 1" Hex Head Bolt Grade 8	7	7	7
7	216860	Machine Hose Set, 78" Overall Length	1	1	1
8	224012	Male Coupler, Flat Face Straight 1/2" Body Female #12 O-Ring Boss	1	1	1
9	224011	Female Coupler, Flat Face Straight 1/2" Body Female #12 O-Ring Boss	1	1	1
10	299426	3/8"—16 x 1 1/4" Hex Head Bolt Grade 8	2	2	2
11	109106	42" Bolt-On Edge	1	—	—
	109109	48" Bolt-On Edge	—	1	—
	109112	54" Bolt-On Edge	—	—	1
12	109176	5/8"—11 x 2" Plow Bolt Grade 8	7	8	9
13	109177	5/8"—11 Stover Lock Nut Class C	7	8	9

6. Parts

6.3 Hood Components



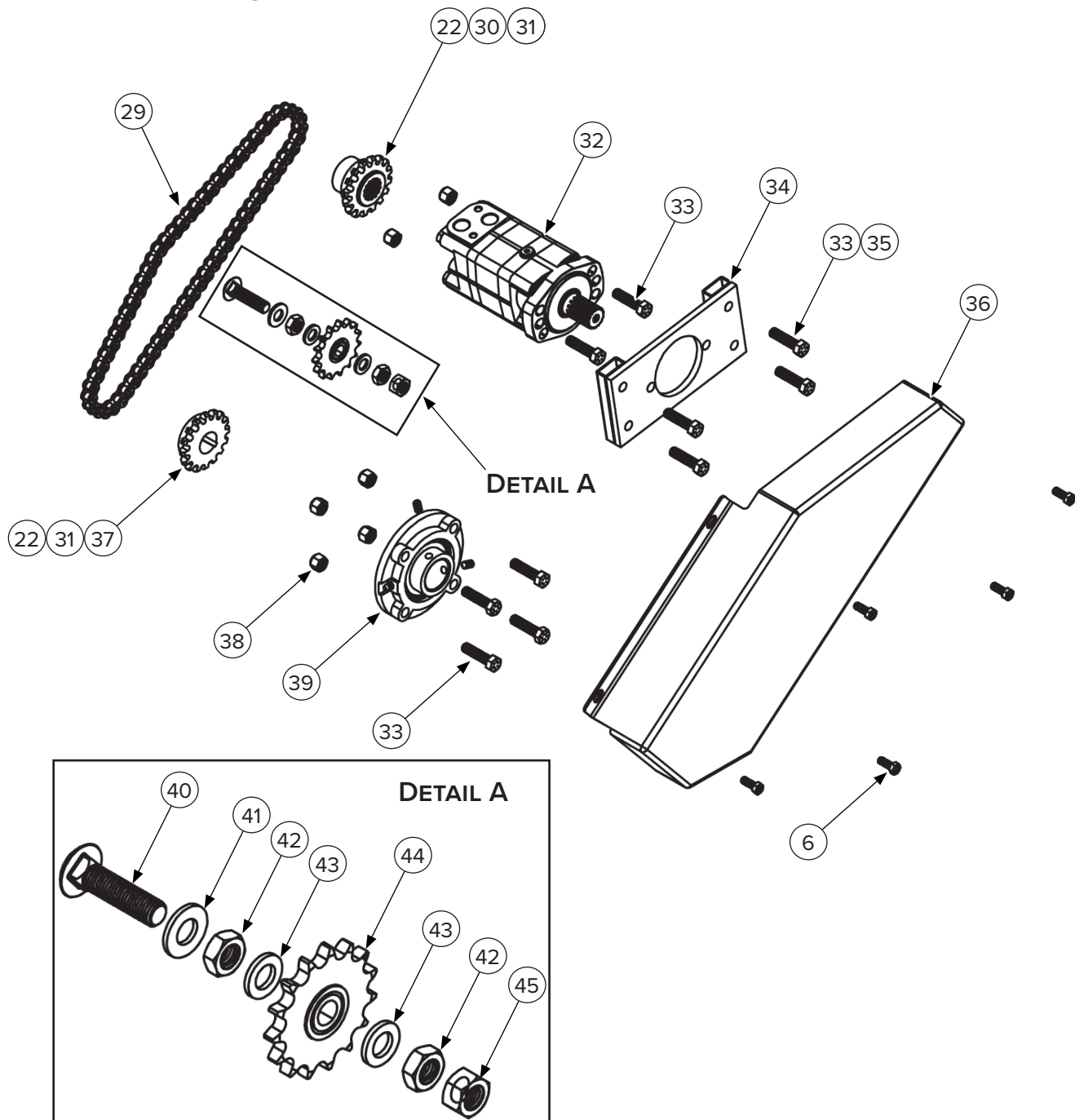
6. Parts

6.3 Hood Components Cont'd

ITEM	PART NUMBER	DESCRIPTION	42" QTY	48" QTY	54" QTY
6	299423	3/8"–16 x 1" Hex Head Bolt Grade 8	6	6	6
10	299426	3/8"–16 x 1 1/4" Hex Head Bolt Grade 8 for Revision 002	15	17	19
	299428	3/8"–16 x 1 1/2" Hex Head Bolt Grade 8 for Revision 001	15	17	19
11	299625	3/8"–16 Hex Nylock Nut Grade 8	17	20	22
14	216802-42	42" Hood Weldment	1	—	—
	216802-48	48" Hood Weldment	—	1	—
	216802-54	54" Hood Weldment	—	—	1
15	See 6.6 Drum Shaft Components	Drum Shaft Assembly	1	1	1
16	See 6.4 Left Bearing, Chain, & Motor Components	Left Bearing, Chain, & Motor Components Assembly	1	1	1
17	See 6.5 Right Side Bearing Components	Right Side Bearing Assembly	1	1	1
18	216818-42	42" Front Skirt	1	—	—
	216818-48	48" Front Skirt	—	1	—
	216818-54	54" Front Skirt	—	—	1
19	216816-42	42" Front Skirt Retainer	1	—	—
	216816-48	48" Front Skirt Retainer	—	1	—
	216816-54	54" Front Skirt Retainer	—	—	1
20	216822	Side Skirt	1	1	1
21	216819	Side Skirt Retainer	1	1	1
22	216495	3/8" Washer	2	2	2
23	299413	1/4"–20 x 3/4" Hex Head Bolt Grade 8	2	2	2
24	299715	1/4" Flat Washer Grade 8	2	2	2
25	299810	1/4" Lock Washer Grade 8	2	2	2
26	299615	1/4"–20 Hex Nylock Nut Grade 8	2	2	2
27	216841	Top Motor Cover Plate for Revision 002 Only	1	1	1
28	216839	Bottom Motor Cover Plate for Revision 002	1	1	1
	216838	Motor Cover Plate for Revision 001			

6. Parts

6.4 Left Bearing, Chain, & Motor Components



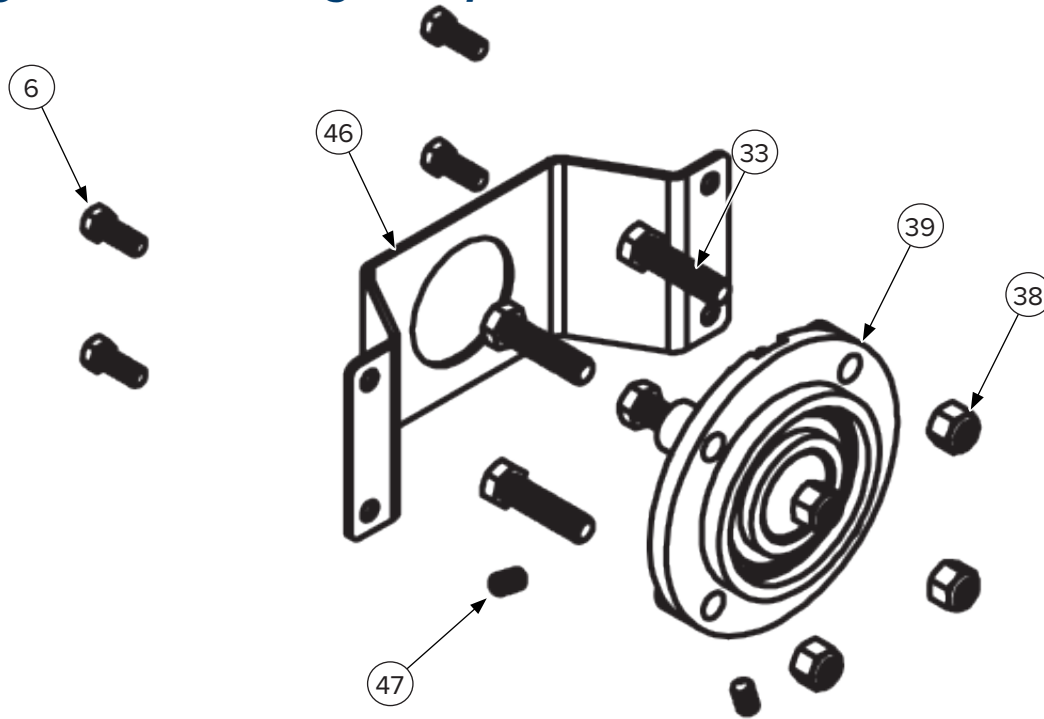
6. Parts

6.4 Left Bearing, Chain, & Motor Components Cont'd

ITEM	PART NUMBER	DESCRIPTION	42" QTY	48" QTY	54" QTY
6	299423	1/2"–13 x 2" Hex Head Bolt Grade 8 for Revision 002	5	5	5
	299428	3/8"–16 x 1 1/2" Hex Head Bolt Grade 8 for Revision 001			
22	216495	3/8" Washer	4	4	4
29	216874	Chain	1	1	1
30	216871	Sprocket for Motor Splined 1 1/4 14 Tooth	1	1	1
31	299428	3/8"–16 x 1 1/2" Hex Head Bolt Grade 8	4	4	4
32	216826	200cc Motor	1	1	1
	216425	315cc Motor			
33	299433	1/2"–13 x 2" Hex Head Bolt Grade 8 for Revision 002	10	10	10
	299433-2.25	1/2"–13 x 2 1/4" Hex Head Bolt Grade 8 for Revision 001			
34	216832	Motor Mount Plate	1	1	1
35	299730	1/2" Flat Wide Washer	2	2	2
36	216836	Chain Cover	1	1	1
37	216873	Sprocket for Drum	1	1	1
38	299618	1/2"–13 Hex Nylock Nut Grade 8	4	4	4
39	216872	Shaft Bearing for Drum	1	1	1
40	299479	3/4"–10 x 6" Hex Head Bolt Grade 8 for Revision 002	1	1	1
	220827	5/8"–11 x 2" Carriage Bolt Grade 8 for Revision 001	1	1	1
41	216877	Spacer Washer for Tensioner Idler Sprocket	1	1	1
42	299621	5/8"–11 Jam Nut Grade 8 for Revision 002	2	2	2
	299627	5/8"–11 Hex Nylock Nut Grade 8 for Revision 001	2	2	2
43	299013	2 mm x M10 x 20 mm Washer Class 8.8	2	2	2
44	216876	Chain Tensioner Idler Sprocket	1	1	1
45	299575	5/8"–11 Hex Nut Grade 8	1	1	1

6. Parts

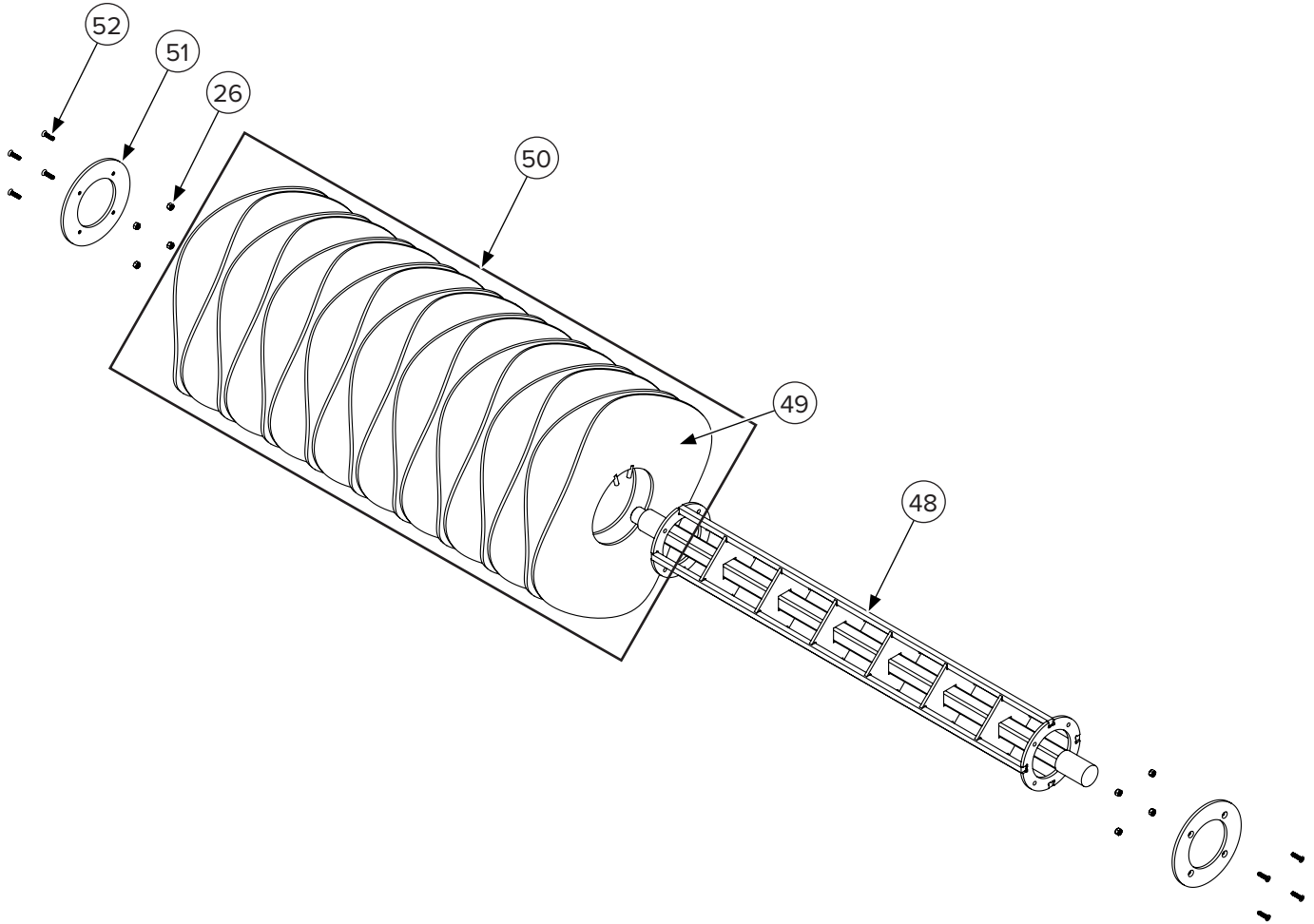
6.5 Right Side Bearing Components



ITEM	PART NUMBER	DESCRIPTION	42" QTY	48" QTY	54" QTY
6	299423	3/8"–16 x 1" Hex Head Bolt Grade 8 for Revision 002	4	4	4
	299428	3/8"–16 x 1 1/2" Hex Head Bolt Grade 8 for Revision 001			
33	299433	1/2"–13 x 2" Hex Head Bolt Grade 8 for Revision 002	4	4	4
	299433-2.25	1/2"–13 x 2 1/4" Hex Head Bolt Grade 8 for Revision 001			
38	299618	1/2"–13 Hex Nylock Nut Grade 8	4	4	4
39	216872	Drum Shaft Bearing	1	1	1
46	216834	Bearing Cover Plate	1	1	1
47	299512	3/8"–16 x 3/4" Set Screw	4	4	4

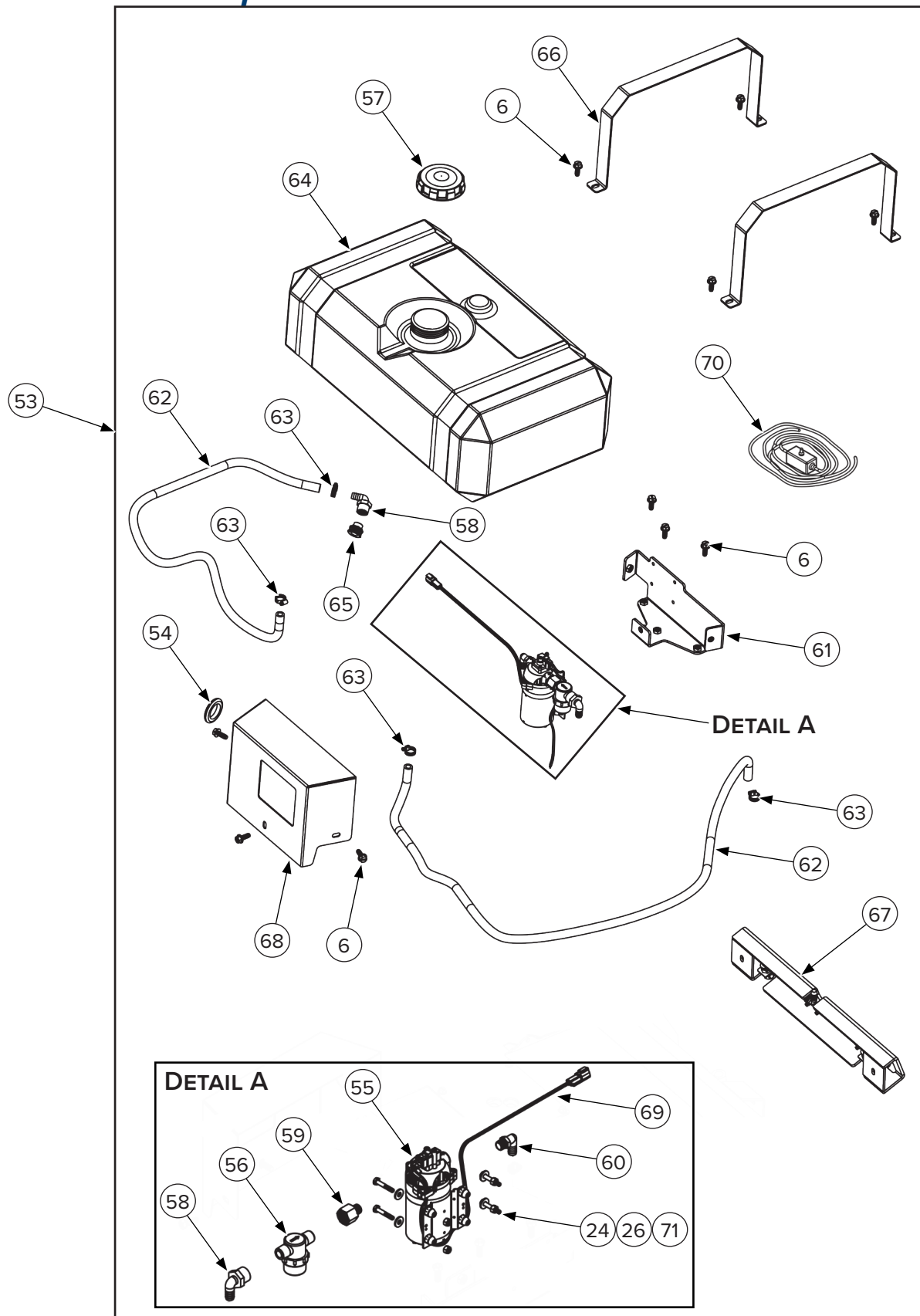
6. Parts

6.6 Drum Shaft Components



ITEM	PART NUMBER	DESCRIPTION	42" QTY	48" QTY	54" QTY
26	299615	1/4"–20 Hex Nylock Nut Grade 8	8	8	8
48	216805-42	42" Drum Shaft Weldment	1	—	—
	216805-48	48" Drum Shaft Weldment	—	1	—
	216805-54	54" Drum Shaft Weldment	—	—	1
49	216842	6 3/8" x 18" Poly Convuluted Broom Wafer	18	20	23
50	See 6.1 Wear Parts	Broom Wafer Kit for Complete Replacement	1	1	1
51	216878	End Retainer Ring	2	2	2
52	299820	1/4"–20 x 1" Flat Head Screw	8	8	8

6.7 Water Kit Components



6. Parts

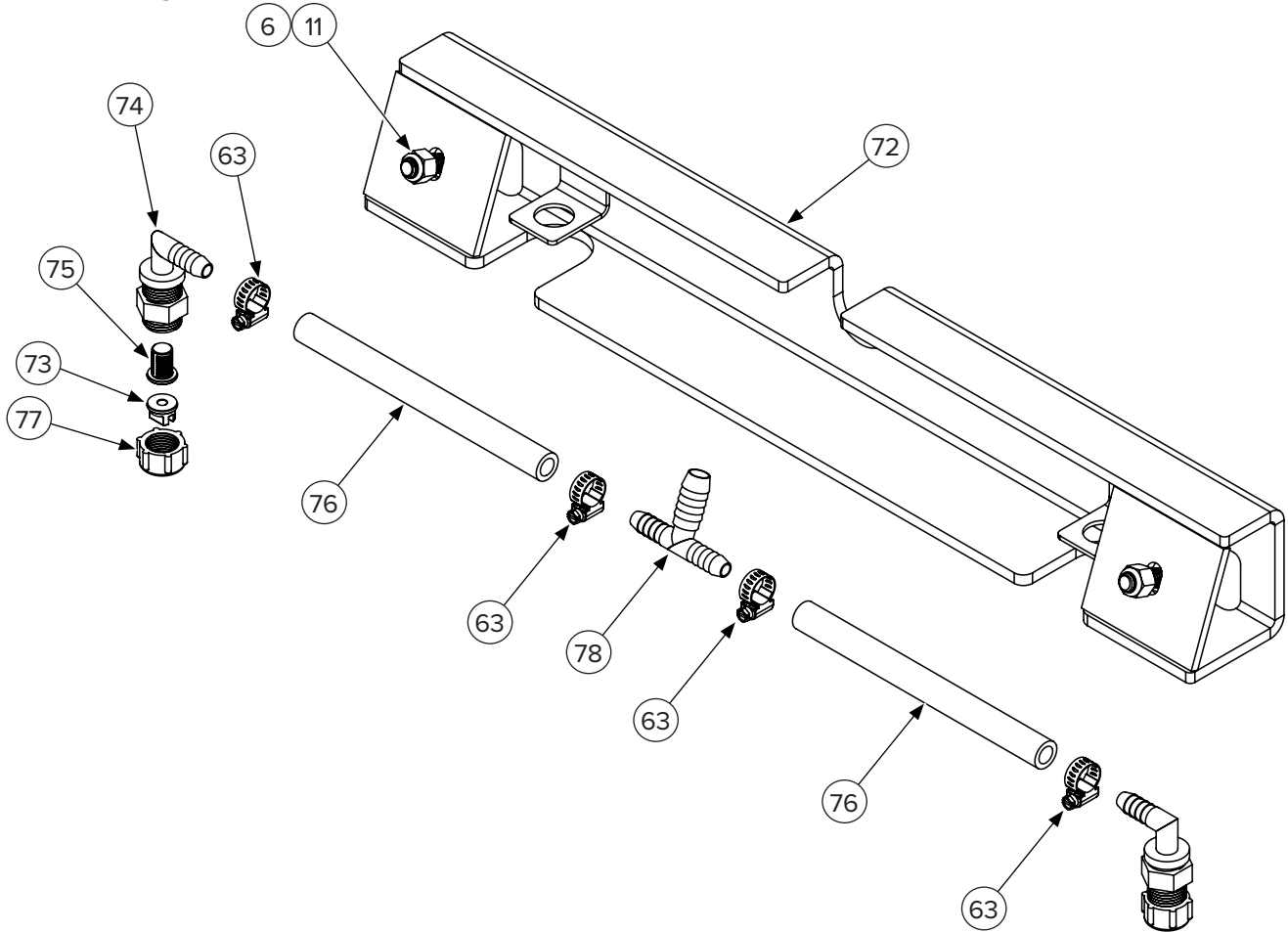
6.7 Water Kit Components Cont'd

ITEM	PART NUMBER	DESCRIPTION	42" QTY	48" QTY	54" QTY
6	299423*	3/8"–16 x 1" Hex Head Bolt Grade 8	5	5	5
24	299715	1/4" Flat Washer Grade 8	4	4	4
26	299615	1/4"–20 Hex Nylock Nut Grade 8	4	4	4
53	See 6.1 Wear Parts	Water Kit Assembly	1	1	1
54	216538	Grommet for Pump Cover	1	1	1
55	216540	Pump	1	1	1
56	216542	Strainer for Water Tank	1	1	1
57	216651	Cap for Water Tank	1	1	1
58	216658	1/2" FNPT to 1/2" Barbed Pump Filter to Hose Fitting	2	2	2
59	216660	3/8" MNPT to 1/2" FNPT Water Pump to Filter Brass Fitting	1	1	1
60	216662	90 Degree Fitting	1	1	1
61	216673	Mount Bracket for Pump	1	1	1
62	216688	1/2" ID Hose	11	12	12
63	216691	Hose Crimp	4	4	4
64	216850	16 Gallon Water Tank	1	1	1
65	216851	1/2" MNPT Fitting for Water Tank Outlet	1	1	1
66	216852	Strap for Water Tank	2	2	2
67	See 6.8 Spray Bar Components	Spray Bar Assembly	1	1	1
68	255458	Pump Cover	1	1	1
69	298115	Electrical Plug Deutsch DT2 Receptacle	1	1	1
70	200010	Universal Wire Harness with Control Switch & 12V Plug	1	1	1
71	299418	1/4"–20 x 1 1/2" Hex Head Bolt Grade 8	4	4	4

*Some 299423 are already provided. They are bolted into the hood weldment.

6. Parts

6.8 Spray Bar Components



ITEM	PART NUMBER	DESCRIPTION	42" QTY	48" QTY	54" QTY
6	299423	3/8"—16 x 1" Hex Head Bolt Grade 8	2	2	2
11	299625	3/8"—16 Hex Nylock Nut Grade 8	2	2	2
63	216691	Hose Crimp	4	4	4
72	216854	42" Spray Bar Weldment	1	—	—
	216856	48" Spray Bar Weldment	—	1	—
	216585	54" Spray Bar Weldment	—	—	1
73	216306	110 Degree Water Nozzle	2	2	2
74	216315	Elbow Water Nozzle with Jam Nut	2	2	2
75	216320	Strainer for Water Nozzle	2	2	2
76	216690	3/8" ID Hose	2	2	2
77	216693	Retainer Nut for Water Nozzle	2	2	2
78	216694	1/2" x 3/8" x 3/8" 3-Way Barbed Tee Fitting	1	1	1

6. Parts

6.9 Safety Decals

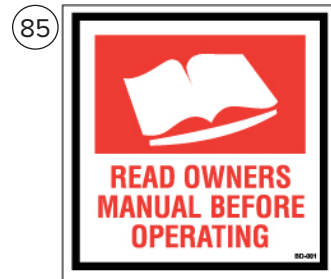
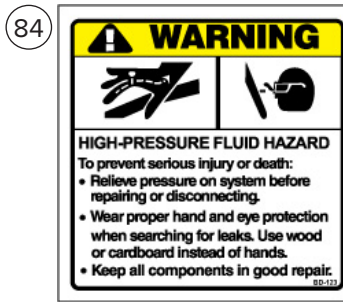


6. Parts

6.9 Safety Decals Cont'd

79 BUILT STRONG. ATTACHED FOR LIFE.

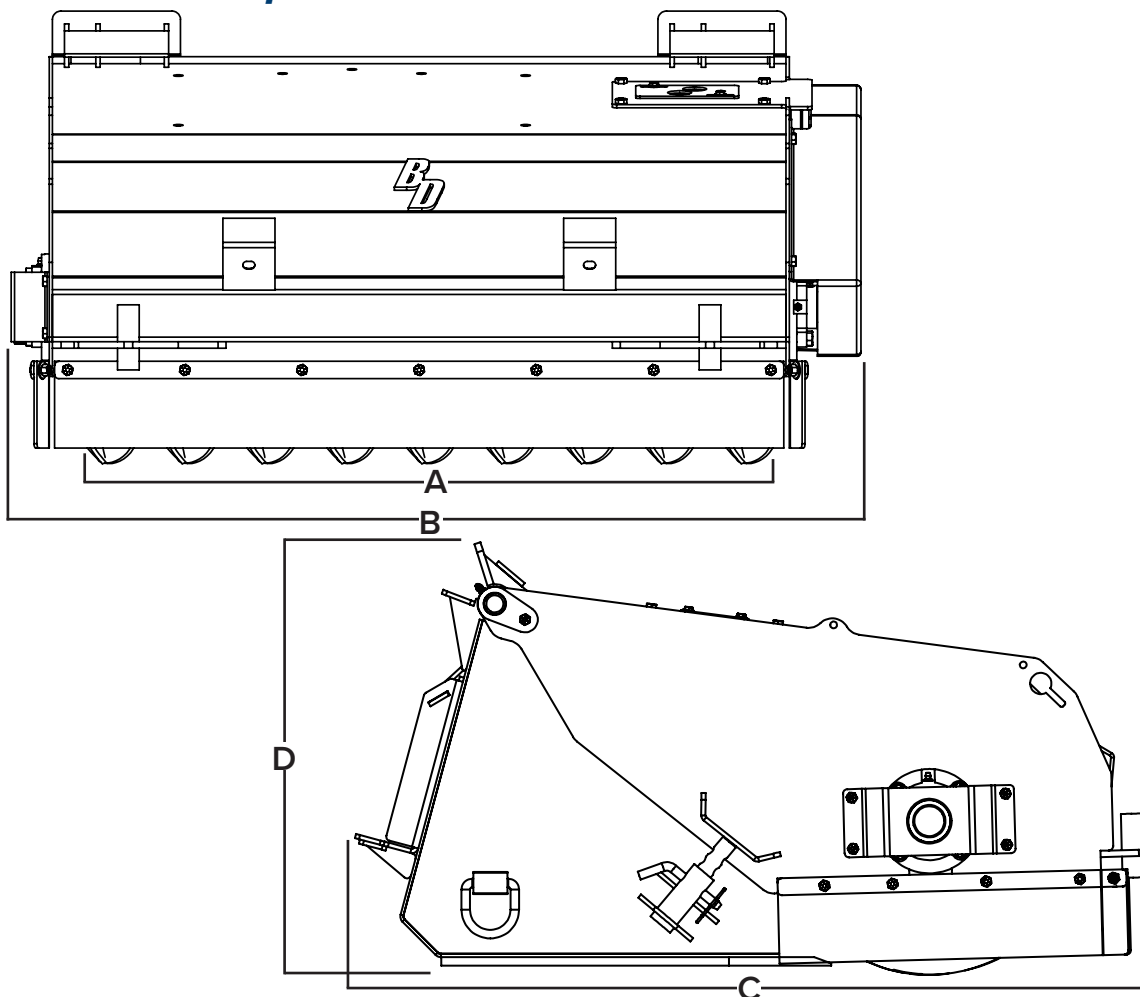
BD-133



ITEM	PART NUMBER	DESCRIPTION	QTY
79	BD-133	2" Tall Decal, Tag Line Single Line	1
80	BD-057	2.9" x 17.364" Decal, Blue Diamond	1
81	BD-092	1.5" x 2.0" Decal, Warranty Registration QR	1
82	BD-112	12.18" x 9.47" Decal, Blue Diamond Attachments	1
83	BD-060	2.4375" x 3.375" Decal, Blue Diamond Attachments	2
84	BD-123	3.0" x 3.0" Decal, High Pressure Fluid Hazard	1
85	BD-001	3.0" x 3.0" Decal, Read Owners Manual	1
86	BD-087	Decal, Grease Drive Every 250 Hours	1

7. Specifications

7.1 Attachment Specifications



DESCRIPTION	116810	116812	116815
Working Width (A)	42 in. (1,066 mm)	42 in. (1,066 mm)	48 in. (1,219 mm)
Overall Width (B)	49 in. (1,244 mm)	49 in. (1,244 mm)	55 in. (1,397 mm)
Length (C)	46 1/2 in. (1,181 mm)		
Height (D)	24 7/8 in. (632 mm)		
Motor Size	315cc	200cc	315cc
Required Hydraulic Flow	12 – 20 GPM (45 – 75 L/min)	8 – 12 GPM (30 – 45 L/min)	12 – 20 GPM (45 – 75 L/min)
Number of Wafers	18	18	20
Maximum Recommended Horsepower	50 HP		
Maximum Pressure	3,500 psi (241 bar)		
Weight*	584 lbs (265 kg)	584 lbs (265 kg)	655 lbs (297 kg)

*Weight can vary, depending on the mount.

7. Specifications

7.1 Attachment Specifications Cont'd

DESCRIPTION	116817	116820	116822
Working Width (A)	48 in. (1,219 mm)	54 in. (1,371 mm)	54 in. (1,371 mm)
Overall Width (B)	55 in. (1,397 mm)	61 in. (1,549 mm)	61 in. (1,549 mm)
Length (C)	46 1/2 in. (1,181 mm)		
Height (D)	24 7/8 in. (632 mm)		
Motor Size	200cc	315cc	200cc
Required Hydraulic Flow (GPM)	8 – 12 GPM (30 – 45 L/min)	12 – 20 GPM (45 – 75 L/min)	8 – 12 GPM (30 – 45 L/min)
Number of Wafers	20	23	23
Maximum Recommended Horsepower	50 HP		
Maximum Pressure	3,500 psi (241 bar)		
Weight*	655 lbs (297 kg))	705 lbs (320 kg)	705 lbs (320 kg)

*Weight can vary, depending on the mount.

7. Specifications

7.2 Torque Specifications – Imperial

Standard Hardware and Lock Nuts

BOLT TYPE	SAE GRADE 5		SAE GRADE 8		LOCK NUTS			
Nominal Size	Plated or Unplated Silver	Plated W/ ZnCr Gold	Plated or Unplated Silver	Plated W/ ZnCr Gold	Plated or Unplated Silver	Plated W/ ZnCr Gold	W/ Grade 5 Bolt	W/ Grade 8 Bolt
1/4	4.6 lbf•ft	6.0 lbf•ft	7.2 lbf•ft	9.3 lbf•ft	10.0 lbf•ft	13.1 lbf•ft	5.1 lbf•ft	7.2 lbf•ft
	6.2 N•m	8.1 N•m	9.7 N•m	12.6 N•m	13.6 N•m	17.7 N•m	6.9 N•m	9.8 N•m
5/16	9.6 lbf•ft	12.5 lbf•ft	14.8 lbf•ft	19.2 lbf•ft	20.7 lbf•ft	27.3 lbf•ft	10.3 lbf•ft	14.8 lbf•ft
	13 N•m	17 N•m	20 N•m	26 N•m	28 N•m	37 N•m	14 N•m	20 N•m
3/8	17 lbf•ft	22 lbf•ft	26 lbf•ft	34 lbf•ft	37 lbf•ft	48 lbf•ft	19 lbf•ft	26 lbf•ft
	23 N•m	30 N•m	35 N•m	46 N•m	50 N•m	65 N•m	26 N•m	35 N•m
7/16	27 lbf•ft	35 lbf•ft	42 lbf•ft	54 lbf•ft	59 lbf•ft	77 lbf•ft	30 lbf•ft	42 lbf•ft
	37 N•m	47 N•m	57 N•m	73 N•m	80 N•m	104 N•m	41 N•m	57 N•m
1/2	42 lbf•ft	54 lbf•ft	64 lbf•ft	83 lbf•ft	91 lbf•ft	117 lbf•ft	45 lbf•ft	65 lbf•ft
	57 N•m	73 N•m	87 N•m	113 N•m	123 N•m	159 N•m	61 N•m	88 N•m
9/16	60 lbf•ft	77 lbf•ft	92 lbf•ft	120 lbf•ft	130 lbf•ft	169 lbf•ft	65 lbf•ft	92 lbf•ft
	81 N•m	104 N•m	125 N•m	163 N•m	176 N•m	229 N•m	88 N•m	125 N•m
5/8	83 lbf•ft	107 lbf•ft	128 lbf•ft	165 lbf•ft	180 lbf•ft	233 lbf•ft	90 lbf•ft	127 lbf•ft
	112 N•m	145 N•m	174 N•m	224 N•m	244 N•m	316 N•m	122 N•m	172 N•m
3/4	146 lbf•ft	189 lbf•ft	226 lbf•ft	293 lbf•ft	319 lbf•ft	413 lbf•ft	160 lbf•ft	226 lbf•ft
	198 N•m	256 N•m	306 N•m	397 N•m	432 N•m	560 N•m	217 N•m	306 N•m
7/8	142 lbf•ft	183 lbf•ft	365 lbf•ft	473 lbf•ft	515 lbf•ft	667 lbf•ft	258 lbf•ft	364 lbf•ft
	193 N•m	248 N•m	495 N•m	641 N•m	698 N•m	904 N•m	350 N•m	494 N•m
1	213 lbf•ft	275 lbf•ft	547 lbf•ft	708 lbf•ft	773 lbf•ft	1000 lbf•ft	386 lbf•ft	545 lbf•ft
	289 N•m	373 N•m	742 N•m	960 N•m	1048 N•m	1356 N•m	523 N•m	739 N•m

7. Specifications

7.3 Torque Specifications – Metric

Standard Hardware and Lock Nuts

BOLT TYPE	CLASS 4.8		CLASS 8.8 OR 9.8		CLASS 10.9		CLASS 12.9	
Size	Lubricated	Dry	Lubricated	Dry	Lubricated	Dry	Lubricated	Dry
M6	4.8 N•m	6 N•m	9 N•m	11 N•m	13 N•m	17 N•m	15 N•m	19 N•m
	3.5 lbf•ft	4.5 lbf•ft	6.5 lbf•ft	8.5 lbf•ft	9.5 lbf•ft	12 lbf•ft	11.5 lbf•ft	14.5 lbf•ft
M8	12 N•m	15 N•m	22 N•m	28 N•m	32 N•m	40 N•m	37 N•m	47 N•m
	8.5 lbf•ft	11 lbf•ft	16 lbf•ft	20 lbf•ft	24 lbf•ft	30 lbf•ft	28 lbf•ft	35 lbf•ft
M10	23 N•m	29 N•m	43 N•m	55 N•m	63 N•m	80 N•m	75 N•m	95 N•m
	17 lbf•ft	21 lbf•ft	32 lbf•ft	40 lbf•ft	47 lbf•ft	60 lbf•ft	55 lbf•ft	70 lbf•ft
M12	40 N•m	50 N•m	75 N•m	95 N•m	110 N•m	140 N•m	130 N•m	165 N•m
	29 lbf•ft	37 lbf•ft	55 lbf•ft	70 lbf•ft	80 lbf•ft	105 lbf•ft	95 lbf•ft	120 lbf•ft
M14	63 N•m	80 N•m	120 N•m	150 N•m	175 N•m	225 N•m	205 N•m	260 N•m
	47 lbf•ft	60 lbf•ft	88 lbf•ft	110 lbf•ft	130 lbf•ft	165 lbf•ft	150 lbf•ft	190 lbf•ft
M16	135 N•m	175 N•m	260 N•m	330 N•m	375 N•m	475 N•m	440 N•m	560 N•m
	100 lbf•ft	125 lbf•ft	195 lbf•ft	250 lbf•ft	275 lbf•ft	350 lbf•ft	325 lbf•ft	410 lbf•ft
M18	135 N•m	175 N•m	260 N•m	330 N•m	375 N•m	475 N•m	440 N•m	560 N•m
	100 lbf•ft	125 lbf•ft	195 lbf•ft	250 lbf•ft	275 lbf•ft	350 lbf•ft	325 lbf•ft	410 lbf•ft
M20	190 N•m	240 N•m	375 N•m	475 N•m	530 N•m	675 N•m	625 N•m	800 N•m
	140 lbf•ft	180 lbf•ft	275 lbf•ft	350 lbf•ft	400 lbf•ft	500 lbf•ft	460 lbf•ft	580 lbf•ft
M22	260 N•m	330 N•m	510 N•m	650 N•m	725 N•m	925 N•m	850 N•m	1075 N•m
	190 lbf•ft	250 lbf•ft	375 lbf•ft	475 lbf•ft	540 lbf•ft	675 lbf•ft	625 lbf•ft	800 lbf•ft
M24	330 N•m	425 N•m	650 N•m	825 N•m	925 N•m	1150 N•m	1075 N•m	1350 N•m
	250 lbf•ft	310 lbf•ft	475 lbf•ft	600 lbf•ft	675 lbf•ft	850 lbf•ft	800 lbf•ft	1000 lbf•ft
M27	490 N•m	625 N•m	950 N•m	1200 N•m	1350 N•m	1700 N•m	1600 N•m	2000 N•m
	360 lbf•ft	450 lbf•ft	700 lbf•ft	875 lbf•ft	1000 lbf•ft	1250 lbf•ft	1150 lbf•ft	1500 lbf•ft
M30	675 N•m	850 N•m	1300 N•m	1650 N•m	1850 N•m	2300 N•m	2150 N•m	2700 N•m
	490 lbf•ft	625 lbf•ft	950 lbf•ft	1200 lbf•ft	1350 lbf•ft	1700 lbf•ft	1600 lbf•ft	2000 lbf•ft
M33	900 N•m	1150 N•m	1750 N•m	2200 N•m	2500 N•m	3150 N•m	2900 N•m	3700 N•m
	675 lbf•ft	850 lbf•ft	1300 lbf•ft	1650 lbf•ft	1850 lbf•ft	2350 lbf•ft	2150 lbf•ft	2750 lbf•ft
M36	1150 N•m	1450 N•m	2250 N•m	2850 N•m	3200 N•m	4050 N•m	3750 N•m	4750 N•m
	850 lbf•ft	1075 lbf•ft	1650 lbf•ft	2100 lbf•ft	2350 lbf•ft	3000 lbf•ft	2750 lbf•ft	3500 lbf•ft

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Warranty Policies

OUR WARRANTY PROMISE

At Blue Diamond® Attachments, we stand by our products. Our warranty ensures you can depend on our attachments for your toughest jobs. We are committed to your satisfaction and peace of mind, offering reliable support for continued productivity.

MANUFACTURER'S LIMITED WARRANTY

BLUE DIAMOND® ATTACHMENTS, LLC ("BDA"), a manufacturer of quality attachments, warrants new BDA products and/or attachments at the time of delivery to the original purchaser, to be free from the defects in material and workmanship when properly set up and operated in accordance with the recommendations set forth by BDA.

BDA's liability for any defect with respect to accepted goods shall be limited to repairing the goods at a BDA designated location or at an authorized dealer location, or replacing them, as BDA shall elect. The above shall be in accordance with BDA warranty adjustment policies.

WARRANTY TERM

BDA's warranty obligation is subject to the following terms, whichever occurs first:

- The warranty terminates twelve (12) months after the date of delivery of the attachment from the dealer to the end user (original purchaser); or
- The warranty terminates thirty-six (36) months after the date of BDA's invoice to the dealer, regardless of whether the attachment has been sold to an end user.

For the purposes of this warranty, "delivery" means the date on which the authorized dealer delivers the attachment to the end user.

WARRANTY ELIGIBILITY AND REGISTRATION

BDA warrants its products to the original purchaser only. Warranty coverage is not transferable.

Product registration is strongly encouraged and assists BDA in processing warranty claims efficiently. Registration may be completed at any time prior to filing a warranty claim at bluediamondattachments.com/warranty-registration. If registration has not been completed at the time a claim is filed, BDA may request a valid bill of sale or other proof of original purchase to verify eligibility.

This warranty shall not apply to any machine or attachment which has been repaired or altered in any way outside the BDA factory or an authorized BDA dealership in any way so as to, in BDA's judgment, affect its stability or reliability, nor which has been subject to misuse, negligence, or accident beyond the company-recommended machine rated capacity.

USED AND SECONDARY MARKET EQUIPMENT

Attachments sold through used equipment channels, dealer-to-dealer transactions, auctions, or any source other than the original authorized sale to an end user do not carry BDA warranty coverage unless BDA has explicitly granted warranty coverage for that specific attachment by serial number in writing. No implied warranty coverage applies to used or secondary market purchases.



Warranty Policies Cont'd

HOW TO SUBMIT A WARRANTY CLAIM

At Blue Diamond® Attachments, streamlining your warranty claim is a priority. Contact the Product Support Team at the first sign of equipment issues for efficient management of your claim.

SUBMITTING A WARRANTY CLAIM ONLINE

To file a warranty claim, complete the online form at www.bluediamondattachments.com/warranty-claim. Before starting, gather the information below to ensure your claim can be processed without delay:

- Contact and shipping information, including your name, company, phone, email, and billing and shipping addresses.
- Attachment details, including the model number, attachment type, attachment name, and serial number.
- Purchase information, including the purchase invoice date, invoice number, and the name and city of the selling dealer.
- Failure information, including the failure date, the host machine make and model, and a description of the issue.
- Photos of the failure, including detailed images of the failed component and overall images showing the condition of the attachment.

When completing the form, provide a clear response in each of the following fields:

- Complaint, describing what is not functioning correctly.
- Cause, describing what you believe led to the failure.
- Correction, describing any corrective action taken or proposed.
- Key Part, providing the part number of the components that caused the failure.

Upload all supporting photos, accept the warranty policies, and click Submit. A member of the BDA Product Support Team will follow up to advise on next steps. Do not perform any repairs or disassembly until your claim has been reviewed and approved by BDA.

GENERAL CLAIM TERMS

A claim must be filed with BDA and approved before any work is performed.

BDA will advise on repairs and applicable parts exchanges.

Submit detailed photos of the issue and images of overall condition of the attachment to warranty@bdattachments.com. Photos are required for processing.

Tampering with the failed part may void the warranty.

This warranty does not include freight or delivery charges incurred when returning machinery for servicing. Dealer mileage, service calls, and pickup and delivery charges are the customer's responsibility and will not be paid by BDA.

BDA covers standard Less-Than-Truckload (LTL) freight and UPS ground shipping on warranty parts and attachments sent from the factory to the dealer or end user. Next Day Air (NDA) or any other special freight services are not covered under warranty but can be arranged at the dealer and/or end user's expense.

Labor, where covered, is typically credited to your account at \$105 per hour. When more than four (4) hours are needed for repair, BDA requires an estimate before work is performed.

Coverage of travel time, host machine service and repairs, diagnostics, and business downtime are neither expressed or implied.



Warranty Policies Cont'd

EXCLUSIONS OF WARRANTY

Except as otherwise expressly stated herein, BDA makes no representation or warranty of any kind, expressed or implied, AND MAKES NO WARRANTY OF MERCHANTABILITY IN RESPECT TO ITS MACHINERY AND/OR ATTACHMENTS OR THAT THEY ARE FIT FOR ANY PARTICULAR PURPOSE.

BDA shall not be liable for incidental or consequential damages for any breach of warranty, including but not limited to inconvenience, rental of replacement equipment, loss of profits, or other commercial loss. Upon purchase, the buyer assumes all liability for personal injury and property damage resulting from handling, possession, or use of goods by the buyer.

No agent, employee, or representative of BDA has any authority to bind BDA to any affirmation, representation, or warranty concerning its machinery and/or attachments except as specifically set forth herein.

PLEASE NOTE: Replacing genuine OEM parts with aftermarket parts may void the warranty.

HOSES, COUPLERS, HOSE ROUTING, AND CONNECTIONS

BDA supplies attachments with hoses that are universal in length, but hose configuration may vary by machine manufacturer. BDA cannot guarantee that the hose length will be correct on every machine or for every routing.

It is the responsibility of the end user to adjust hose length to fit their specific machine and to ensure that hose routing does not result in hoses becoming tangled, caught, pinched, crushed, or run over during operation.

- It is the end user's responsibility to ensure that hose routing clears pinch points and allows the attachment to move properly.
- BDA will not cover hose or coupler damage due to poor hose routing. Hose extenders and hose keeps are available at additional cost.

BDA supplies most attachments with standard size quick couplers; some attachments may have couplers sold separately. Coupler configuration varies by machine manufacturer, and BDA cannot guarantee that the standard coupler will be correct for every application. Coupler changes can be made before the attachment leaves the BDA facility if noted on the sales order. BDA is not responsible for coupler compatibility after the attachment has left the facility unless a specific configuration was requested at the time of order.

HYDRAULIC MOTORS

Do not disassemble any hydraulic motor. Disassembly of the motor voids the warranty.

BDA products equipped with hydraulic motors or gearbox assemblies carry a one (1) year warranty on parts and labor. A warranty claim must be submitted and reviewed by an authorized BDA representative before any action is taken.

Under no circumstances should a hydraulic motor or gearbox be disassembled by the customer. Disassembled units cannot be returned to the original manufacturer and will void the warranty. BDA will replace motors or gearboxes found to be defective under warranty. There are no user-serviceable internal parts in these components while under warranty.

CYLINDERS

Defective cylinders are covered for one (1) year. Disassembly of the cylinder will void the cylinder warranty. In any event of cylinder issue or failure, submit a warranty claim prior to disassembly or repair. Cylinders under warranty are exchanged if found to be defective. For a cylinder claim to be granted, the defective cylinder must be returned to BDA.



Warranty Policies Cont'd

FREIGHT DAMAGE AND CONCEALED FREIGHT DAMAGE

Blue Diamond® Attachments, LLC ("BDA") is not responsible for damage that occurs during shipment once the product has been released to the carrier. It is the responsibility of the receiving dealer or end user ("Receiver") to inspect all shipments immediately upon delivery, regardless of shipping method, including small package carriers (e.g. UPS, FedEx) and Less-Than-Truckload (LTL) freight.

VISIBLE FREIGHT DAMAGE

All shipments must be inspected at the time of delivery prior to signing the Bill of Lading (BOL) or delivery receipt. Any visible damage, shortage, or indication of mishandling must be clearly noted on the BOL or delivery receipt at the time of delivery and acknowledged by the carrier. The Receiver must retain a copy of the signed BOL with damage notation and submit clear photographic evidence of the damage and packing to BDA.

If the BOL or delivery receipt is signed without notation of damage or shortage, the shipment will be deemed received in good condition. No freight damage claim may be made in such cases, and responsibility for any damage rests solely with the Receiver.

CONCEALED FREIGHT DAMAGE

Concealed damage is damage that is not reasonably apparent at the time of delivery and is discovered only after unpacking. The Receiver must notify BDA of any concealed damage within five (5) business days of receipt. Notification must include written notice and clear photographic documentation of the damage and all original packaging materials.

Failure to notify BDA and provide required documentation within five (5) business days will result in the concealed damage being deemed the responsibility of the Receiver, and BDA will have no obligation or liability for such damage.

GENERAL CONDITIONS

- All original packaging must be retained until any freight damage claim is resolved.
- BDA reserves the right to request additional documentation or inspection as required by the carrier.
- Freight damage claims are separate from and not covered under BDA's product warranty.
- BDA's determination regarding freight damage claims shall be final.

WARRANTY MAY BE VOIDED IF ATTACHMENT IS ALTERED IN ANY WAY.

This warranty policy supersedes any previous documents.

For the most current information, visit bluediamondattachments.com/warranty-policies.

NOTE: Blue Diamond® Attachments is a trademark of BLUE DIAMOND® ATTACHMENTS, LLC.



QUALITY | DEPENDABILITY | INTEGRITY

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