

Hay Spears All Models

Operation and Maintenance Manual



FOR SKID STEERS & TRACTORS



888-376-7027 | BlueDiamondAttachments.com

Register your
WARRANTY
within 30 days
of purchase



Introduction: Owner Information

Thank you for your decision to purchase a Blue Diamond® Hay Spear. 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 top right of the frame 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.

Revision Date: 09.10.2026

Blue Diamond® Attachments

Table of Contents

Introduction: Owner Information	2	7. Specifications	27
1. Pre-Delivery Inspection Instructions	4	7.1 Attachment Specifications for Single Spear	27
1.1 Safety & Documentation	4	7.2 Attachment Specifications for Double Bottom Spear	28
1.2 Visual Inspection	4	7.3 Attachment Specifications for Quad Bottom Spear ..	29
1.3 Operational Test	4	7.4 Attachment Specifications for Spear with Category	
2. Introduction	5	Mount	30
2.1 Attachment Identification	5	7.5 Torque Specifications – Imperial	31
2.2 About this Attachment	6	7.6 Torque Specifications – Metric	32
2.3 Attachment Model Numbers	6	Warranty Policies	34
3. Safety	7		
3.1 General Safety Information	7		
3.2 Operators	8		
3.3 Safety Guidelines	9		
4. Operation	11		
4.1 Pre-Operation Inspection	11		
4.2 Machine Requirements	11		
4.3 Transporting the Attachment	12		
4.4 Entering & Exiting the Prime Mover	12		
4.5 Attachment Installation	13		
4.6 Operating the Attachment	14		
4.7 Operating Tips	15		
5. Maintenance	16		
5.1 Service Schedule	16		
5.2 Maintenance Safety	17		
5.3 Daily Maintenance	17		
5.4 Spear Replacement	18		
5.5 Standard Duty Stabilizer Replacement	18		
5.6 Heavy Duty Stabilizer Replacement	18		
5.7 Back Rest Installation	19		
5.8 Cleaning the Attachment	19		
5.9 Spare Parts & Accessories	19		
5.10 Storage	20		
5.11 Troubleshooting	20		
6. Parts	21		
6.1 Single Spear with Standard Duty Stabilizers Compo-			
nents	21		
6.2 Single Spear with Heavy Duty Stabilizers Components			
22			
6.3 Double Bottom Spear Components	23		
6.4 Quad Bottom Spear Components	24		
6.5 Spear with Category I & II Mount Components	25		
6.6 Safety Decals	26		

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.

1.2 Visual Inspection

- ☐ Unit is free of shipping damage, dents, cracked welds, etc.
- ☐ Fasteners are properly torqued.

1.3 Operational Test

- ☐ Verify attachment has been connected to the host machine that will be used for operation and tested.

1.4 Final Delivery

- ☐ Maintenance schedule located in Operation and Maintenance Manual has been reviewed.
- ☐ Spear 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@battachments.com

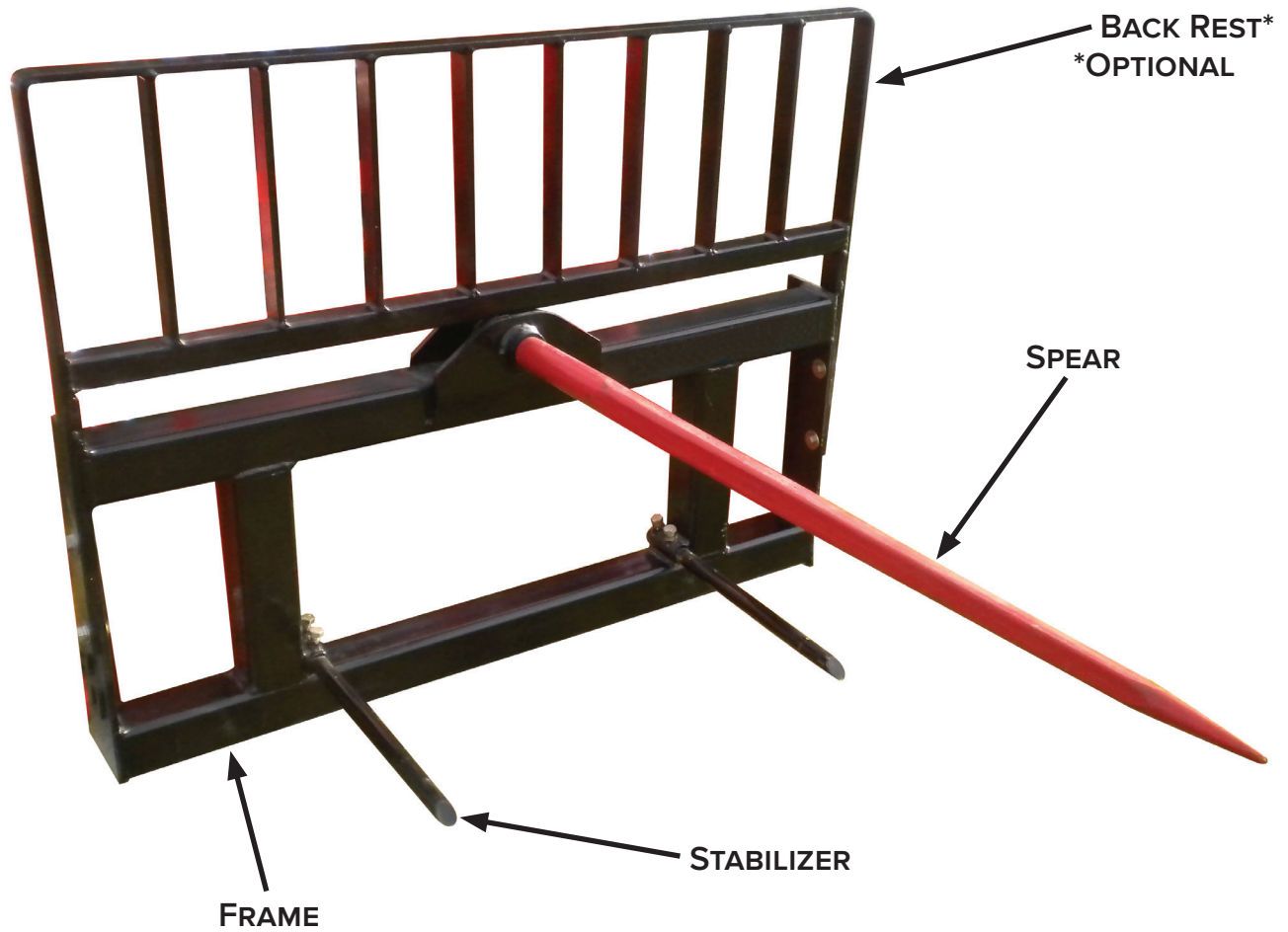
TECHNICIAN: _____

CUSTOMER: _____

DATE: _____

2. Introduction

2.1 Attachment Identification



2. Introduction

2.2 About this Attachment

Blue Diamond® offers a high quality yet compact line of hay spears. With a wide range of options, ranging from a single spear with stabilizers to a quad bottom, no job is too tough when it comes to moving heavy hay bales. The double bottom style can even be used as a set of pallet forks, making it a dual use attachment.

2.3 Attachment Model Numbers

MODEL NUMBER	SPEAR COUNT	SPEAR LENGTH
311003	1	36"
311006	1	48"
311007	1	48"
311008	1	48"
311009	2	36"
311010	2	48"
311011	2	48"
311012	2	48"
311040	2	48"
311045	4	48"
311050	4	48"
311060	4	48"
311405	1	49"
311410	1	49"

NOTE: See "6. Parts" on page 26 – 35 for mount options.

3. Safety

3.1 General Safety Information



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.



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



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.



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.



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 Hay Spear 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 Hay Spear 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 sharp 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 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 attachment has the ability to impale someone or something which can cause 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 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

- Keep bystanders clear of moving parts and the work area. Keep children away.
- Ensure the host machine is equipped with a Roll-Over Protective Structure (ROPS).
 - ROPS system provides protection for the machine operator in case of a rollover incident. This is achieved by strengthening the machine's potential for energy absorption. The aim of the ROPS system is to limit the destruction of the cab in case of a rollover accident and protect the operator.

3. Safety

3.3 Safety Guidelines Cont'd

Machine Requirements and Capabilities Cont'd

- A heavy load can cause instability of the host machine. Use extreme caution when traveling. Slow down for turns, and watch for uneven ground.
 - The host machine may need additional counterweights to counterbalance the weight of the hay bale.
- Do not exceed the 3,500 lb (1,588 kg) spear capacity.
- Use caution on slopes and near banks and ditches to prevent overturn.

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.
- 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.
- Always be sure the attachment is properly raised when transporting.
- 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.

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 Hay Spear 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.
- Check the host machine's arms and cylinders to make sure they are in good condition. See your host machine's Operator's manual for additional information.
- 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 the spears and stabilizers. 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.

4.2 Machine Requirements

Only use the Hay Spear on compatible host machine. The spear capacity should not exceed 3,500 pounds (1,588 kilograms).

Ensure the host machine is equipped with a Roll–Over Protective Structure (ROPS).

ROPS system provides protection for the machine operator in case of a rollover incident. This is achieved by strengthening the machine's potential for energy absorption. The aim of the ROPS system is to limit the destruction of the cab in case of a rollover accident and protect the operator.

4. Operation

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.

Disconnect the attachment from the host machine. If disconnecting the Hay Spear from a skid steer, see “Disconnecting Attachment From a Skid Steer–Type Mount” on page 13. If disconnecting the Hay Spear from a tractor, see “Disconnecting Attachment From Tractor–Type (Category I & II) Mounts” on page 14.

Clear dirt, rocks, and any other debris from the attachment.

Use a minimum of four (4) heavy duty ratchet straps or chains for the attachment’s weight. See “7.1 Attachment Specifications for Single Spear” on page 27 for more information.

Hook the ratchet straps to designated anchor points. Do not drape straps over the spear as this can cause damage.

Make sure the Hay Spear is secured prior to heading towards the next location.

4.4 Entering & Exiting the Prime Mover



IMPORTANT



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, secure the seatbelt, lower safety seat bar, start the engine, and release the parking brake.

Leaving the Operator’s Position



WARNING



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. Operation

4.5 Attachment Installation

Connecting Attachment to a Skid Steer–Type Mounts



WARNING



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.)



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.

Disconnecting Attachment From a Skid Steer–Type Mount

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.

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. Operation

4.5 Attachment Installation Cont'd

Connecting Attachment to Tractor-Type (Category I & II) Mounts



WARNING



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 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 tractor in reverse, aligning the rear lifting arms to the lower hitches of the attachment.

Engage the parking brake, turn off the engine, remove the ignition key, and leave the operator's position. See "Leaving the Operator's Position" on page 12.

Connect the lifting arms of the host machine to the lower hitches of the attachment. Install the pins and the relative safety split pins.

Connect the tractor's top link to the attachment top link plate by installing the pin and the safety split pin.

Disconnecting Attachment From Tractor-Type (Category I & II) Mounts

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

Engage the parking brake, turn off the engine, remove the ignition key, and leave the operator's position. See "Leaving the Operator's Position" on page 12.

Disconnect the tractor from the attachment's top link and the tractor from the lower hitches.

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

Drive the tractor forward to move away from the attachment.

4.6 Operating the Attachment



WARNING



AVOID SERIOUS INJURY OR DEATH

Never allow riders on the attachment.



WARNING



AVOID SERIOUS INJURY OR DEATH

DO NOT operate Hay Spear in vicinity of bystanders, animals, or damageable property. The spears & stabilizers are sharp and can impale people and objects.

1. Install the Hay Spear onto the host machine.
If installing on a skid steer-type mount, see "Connecting Attachment to a Skid Steer-Type Mounts" on page 13.
If installing on a tractor-type mount, see "Connecting Attachment to Tractor-Type (Category I & II) Mounts" on page 14.
2. Using the host machine's lift arms, adjust the attachment until the spear(s) are parallel to the center of the hay bale.

4. Operation

4.6 Operating the Attachment Cont'd

3. Drive the host machine forward (backward if using a Category I or II mount), pushing the spear(s) into the hay bale.

Make sure the spear(s) has entered the hay bale far enough so that the bale does not slide off the spear(s). If the bale droops forward when initially lifted, the spear(s) need inserted further into the bale.

4. Tilt the end of the spear(s) upwards and raise the attachment slightly off the ground when transporting hay bales. This will prevent the hay bale from sliding off the spear(s) while being moved.



IMPORTANT



DO NOT exceed 3,500 pound spear capacity when operating the attachment. Doing so can result in serious damage.



CAUTION



AVOID INJURY

Do not lift the loader arms too high when transporting hay bales as this could cause a rollover, resulting in minor or major injury.

5. After reaching the desired location, place the hay bale in the desired position. Slightly tilt the Hay Spear forward and then drive the host machine backwards (forwards for the Category I or II mount) away from the hay bale.

If stacking, make sure each hay bale is stable when stacked. Falling bales can roll or tumble.



WARNING



AVOID SERIOUS INJURY OR DEATH

Be sure to stack hay bales away from overhead wires.

4.7 Operating Tips

- To keep the attachment in optimal condition, always follow the maintenance schedule outlined in “5.1 Service Schedule” on page 16.
- Perform “4.1 Pre–Operation Inspection” on page 11 each time the attachment is operated.
- Do not handle bales that exceed the 3,500 pound (1,588 kg) spear capacity.
- Always make sure the Hay Spear fully enters the hay bale. If the bale is not properly punctured, all of the bale’s weight is on the far end of the spear, which can result in damage to the attachment.
- Slowly carry the hay bale as low to the ground as possible.
- Smoothly operate the host machine’s lift arm controls. Avoid jerky operation if possible.
- When handling round bales on a slope, always approach the hay bale with the front of the attachment facing upwards parallel with the incline.
- In cold weather, a hay bale can be frozen to the ground. Beware when trying to lift these hay bales as the added force of trying to remove them from the ground may exceed the capacity of the Hay Spear, which can result in damage.
- Hay bales with a soft center will tend to droop after being lifted by a single spear. Place the spear in a lower position. This will allow for more lifting height and lessen the load on the stabilizer spears, if equipped.
- Never use the host machine to stop a rolling bale.
- Avoid holes, ditches, and obstructions, which may cause the host machine to become unstable.
- Never allow any person to walk or work under a raised attachment.

5. Maintenance

5.1 Service Schedule

DESCRIPTION	SERVICE PROCEDURES					
	Check	Clean	Lube	Change	Adjust	Drain
Daily Maintenance (or every 8 hours)						
Spear(s)	•					
Frame	•					
Safety Decals	•					
All Hardware	•					
Linkage Pins if using a Category I or II Mount	•					

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.

5. Maintenance

5.2 Maintenance Safety



WARNING



AVOID SERIOUS INJURY OR DEATH

Before operating or servicing 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.

- Periodically tighten all nuts, bolts, and screws, and check that all pins are properly installed to ensure the unit is in safe condition.
- When completing a maintenance or service function, make sure all safety shields and devices are installed on the host machine prior to servicing the attachment.
- Always use two (2) people to handle heavy components during assembly, installation, removal, or movement of the attachment itself.
- Check that all safety decals are properly installed and legible.
- Good maintenance is the responsibility of the operator. Poor maintenance will lead to a shorter life cycle of the attachment.
- Never work under the machine or attachment unless the machine or attachment is blocked or securely supported.
- 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.

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.
- 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 spear for damage, such as bends or cracks.
- Verify that the attachment is properly connected to the machine.
- Check that all shields and guards are in place.

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. Maintenance

5.4 Spear Replacement

Removal

1. Park the machine and attachment on a flat, level surface. Lower the attachment flat on the ground.
2. Disconnect the attachment from the host machine. See “Disconnecting Attachment From a Skid Steer–Type Mount” on page 13 or “Disconnecting Attachment From Tractor–Type (Category I & II) Mounts” on page 14.
3. Leave the operator’s position. See “Leaving the Operator’s Position” on page 12.
4. Remove the nut (211035) from the back of the hay spear.
5. Slide the hay spear out of the frame.
6. Repeat steps 4 – 5 for additional spears (if equipped).

Replacement

1. Insert the new spear into the frame.
2. Secure the spear using the nut (211035). Be sure the tapered side of the nut is inserted INTO the frame. This allows the spear to be securely fastened to the frame.
3. Repeat steps 1 – 2 for additional spears (if equipped).

5.5 Standard Duty Stabilizer Replacement

Removal

1. Park the machine and attachment on a flat, level surface. Lower the attachment flat on the ground.
2. Disconnect the attachment from the host machine. See “Disconnecting Attachment From a Skid Steer–Type Mount” on page 13 or “Disconnecting Attachment From Tractor–Type (Category I & II) Mounts” on page 14.
3. Leave the operator’s position. See “Leaving the Operator’s Position” on page 12.
4. Remove the two (2) bolts (299431) from each stabilizer.

5. Remove each stabilizer from the stabilizer tube weldment.

Replacement

1. Slide the new stabilizer into the stabilizer tube weldment.
2. Loosely insert the two (2) bolts (299431) into the stabilizer.
3. Alternate tightening the bolts until proper torque is reached.
4. Repeat this process for the second stabilizer.

5.6 Heavy Duty Stabilizer Replacement

Removal

1. Park the machine and attachment on a flat, level surface. Lower the attachment flat on the ground.
2. Disconnect the attachment from the host machine. See “Disconnecting Attachment From a Skid Steer–Type Mount” on page 13 or “Disconnecting Attachment From Tractor–Type (Category I & II) Mounts” on page 14.
3. Leave the operator’s position. See “Leaving the Operator’s Position” on page 12.
4. Remove the bolt, washer, and nut from each stabilizer.
5. Remove each stabilizer from the stabilizer tube weldment.

Replacement

1. Slide the new stabilizer into the stabilizer weldment tube.
2. Slide the bolt through the stabilizer tube weldment and stabilizer. The end of the bolt should exit out the other side of the stabilizer tube weldment.
3. Slide a washer onto the end of the bolt, and secure with the nut. Tighten the nut until proper torque is reached.
4. Repeat this process for the second stabilizer.

5. Maintenance

5.7 Back Rest Installation

The back rest can be sold separately and can only be installed on compatible Blue Diamond® Hay Spears.

Depending on the frame, holes for the back rest are pre-drilled into the frame. If there are no pre-drilled holes for the back rest, perform the following. If there are pre-drilled holes in the frame, skip these steps 1 – 7.

1. Park the machine and attachment on a flat, level surface. Lower the attachment flat on the ground.
2. Disconnect the attachment from the host machine. See “Disconnecting Attachment From a Skid Steer–Type Mount” on page 13 or “Disconnecting Attachment From Tractor–Type (Category I & II) Mounts” on page 14.
3. Leave the operator’s position. See “Leaving the Operator’s Position” on page 12.
4. Lift the back rest onto the frame of the Hay Spear.
5. While holding the back rest in place, a second person can use a paint marker to mark the holes where the hardware will fit onto the back rest. There should be two (2) placements on each side.
6. Remove the back rest from the Hay Spear.
7. Drill holes in the frame appropriate to the size of the hardware.
8. Place the back rest back onto the frame.
9. Insert two (2) bolts (211015) on one side of the frame.
10. Place two (2) nuts (299655) onto the bolts, and loosely tighten them as flexibility is needed to ensure the other side can be secured.
11. Repeat step 9 to the other side of the back rest.
12. Once all four (4) nuts and bolts have been loosely tightened, alternate tightening all nuts until proper torque is reached.

5.8 Cleaning the Attachment

To maintain safety and quality performance, it is best to clean the Hay Spear after each use.

To clean the attachment, perform the following:

13. Park the machine and attachment on a flat, level surface. Lower the attachment flat on the ground.
14. Leave the operator’s position. See “Leaving the Operator’s Position” on page 12.
15. Use water or air pressure to clean debris from the Hay Spear’s frame and spear(s).

Be careful when removing any obstructions that are wrapped around the frame or spear(s).

5.9 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. Maintenance

5.10 Storage

Storing the Attachment

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

- Thoroughly wash the attachment before storing it for long periods.
- Check for loose hardware 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 Hay Spear has been in storage, it is necessary to follow a list of items to return the attachment to service.

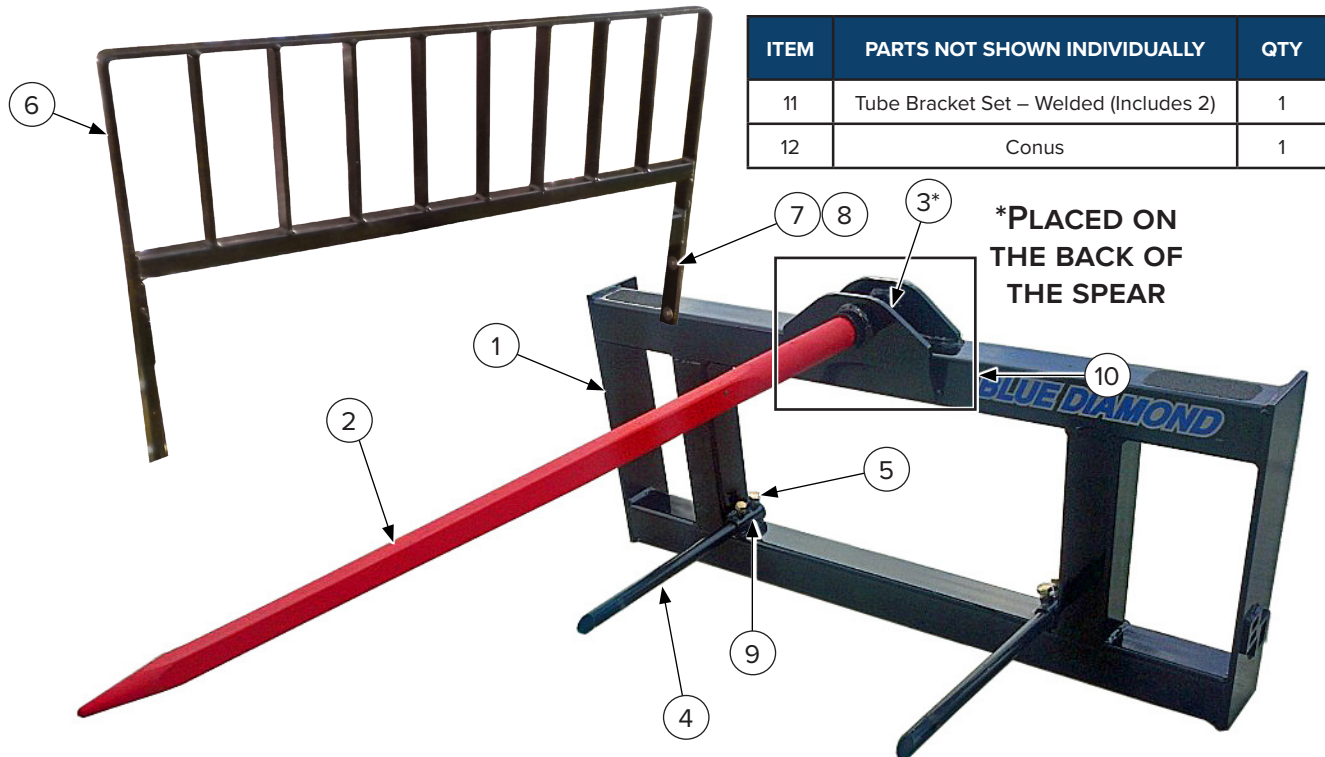
- Lubricate the attachment.
- Connect and operate the attachment, and check for correct function.
- Check for leaks. Repair as needed.

5.11 Troubleshooting

PROBLEM	CAUSE	SOLUTION
Spear(s) do not easily enter or exit the hay bale.	Dull spear(s)	Check the sharpness of the spear(s). If the spear(s) are dull, replace the spear(s).
	Bent or broken spear(s)	Replace the spear(s). For future use, avoid hitting the ground, lifting bales heavier than the spear capacity, or lifting frozen or unusually dense bales.
	Spear(s) caught on twine/net	Back straight out of the hay bale.
Hay bale does not sit evenly on the spear(s) and can roll or slide off the attachment.	Spear lengths uneven	Replace the uneven spear(s).
	Spear(s) not centered inside hay bale	Be sure to impale the hay bale in the center, and tilt the attachment slightly upwards.
	Bent or broken spear(s)	Replace the spear(s). For future use, avoid hitting the ground, lifting bales heavier than the spear capacity, or lifting frozen or unusually dense bales.
	Bent mounting frame, causing the spears to sit unevenly.	Replace the frame. For future use, avoid hitting the ground, lifting bales heavier than the spear capacity, or lifting frozen or unusually dense bales.
	Stabilizers bent or missing	Replace the stabilizers. For future use, avoid any sideways force, making sure the attachment is level when entering the bale, avoid backing out of a bale at an angle, and avoid hitting the ground or other obstructions.

6. Parts

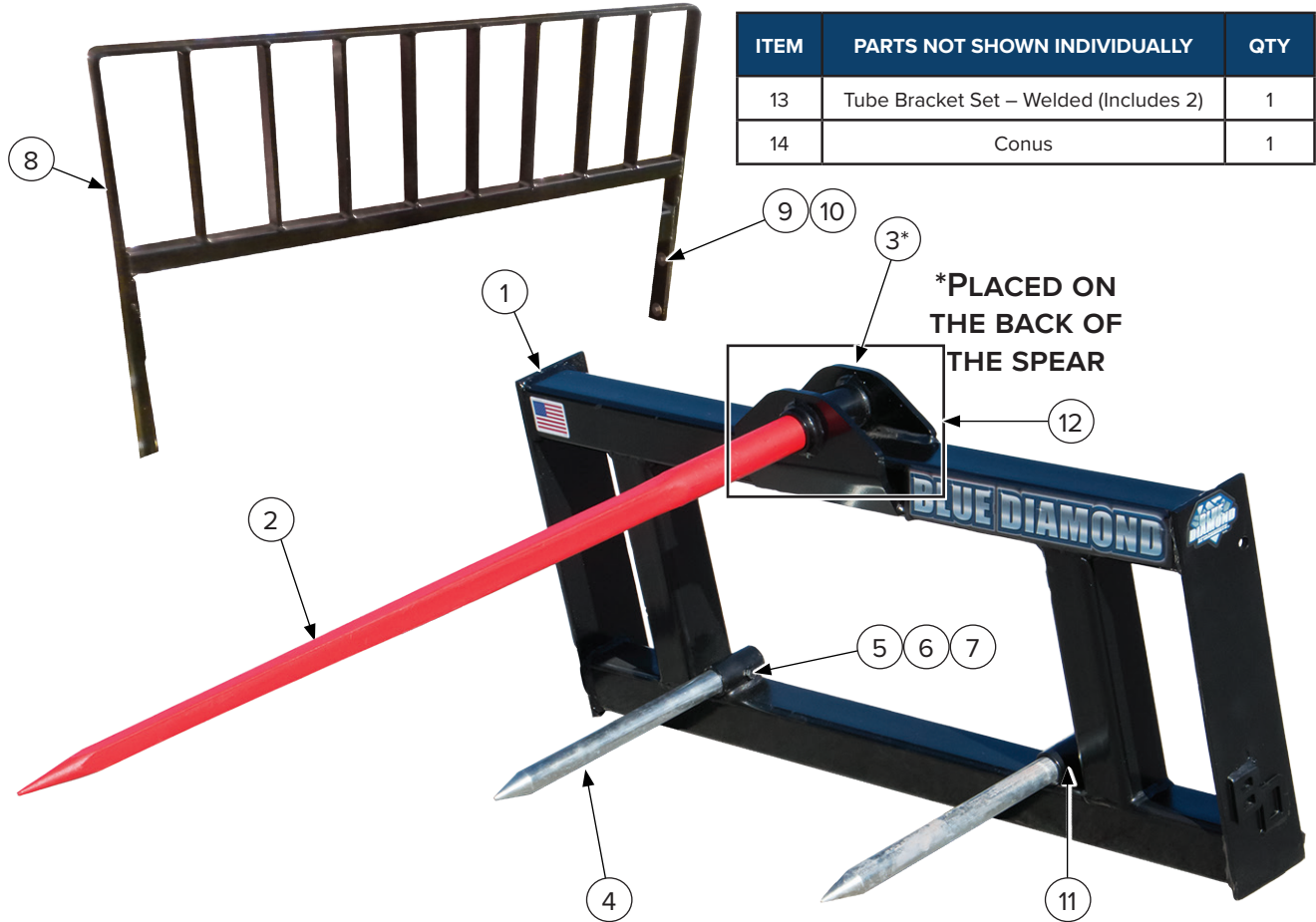
6.1 Single Spear with Standard Duty Stabilizers Components



ITEM	PART NUMBER	DESCRIPTION	QTY
1	111045	Frame with Universal Skid Steer Mount & Standard Duty Removable Stabilizers	1
	111045-12	Frame with Kubota 1292 & Standard Duty Removable Stabilizers	
	111045-14	Frame with John Deere 400/500 Mount & Standard Duty Removable Stabilizers	
	111045-15	Frame with John Deere 600/700 Mount & Standard Duty Removable Stabilizers	
	111045-16	Frame with Euro Ag Mount & Standard Duty Removable Stabilizers	
	111045-17	Frame with Massey 1060 Mount & Standard Duty Removable Stabilizers	
	111045-18	Frame with Bush Hog Mount & Standard Duty Removable Stabilizers	
	111045-25	Frame with Mini Universal Skid Steer Mount & Standard Duty Removable Stabilizers	
	111045-26	Frame with Bobcat MT Mount & Standard Duty Removable Stabilizers	
2	211030	36" Spear	1
	211025	49" Spear	
3	211035	Nut for Spear	1
4	211007	Standard Duty Removable Stabilizer	2
5	299431	1/2"–13 x 1" Hex Head Bolt Grade 8	4
6	111065	Rack	1
7	211015	1/2"–13 x 1 1/2" Hex Head Bolt Grade 8	4
8	299655	1/2"–13 Stover Locknut Class C	4
9	211005	Stabilizer Holder Weldment	2
10	211001	Tube Bracket Set with Tine Sleeve – Welded	1
11	211000	Tube Bracket Set – Welded (Includes 2)	1
12	211026	Conus	1

6. Parts

6.2 Single Spear with Heavy Duty Stabilizers Components



ITEM	PART NUMBER	DESCRIPTION	QTY
1	111047	Frame with Universal Skid Steer Mount & Heavy Duty Removable Stabilizers	1
	111047-14	Frame with John Deere 400/500 Mount & Heavy Duty Removable Stabilizers	
	111047-16	Frame with Euro Ag Mount & Heavy Duty Removable Stabilizers	
2	211030	36" Spear	1
	211025	49" Spear	
3	211035	Nut for Spear	1
4	211009	Heavy Duty Removable Stabilizer	2
5	—	M8 x 1.25 mm x 55 mm Hex Head Bolt	2
6	299051	M8 x 1.6 mm x 16 mm Flat Washer	2
7	—	M8 x 1.25 Hex Nut	2
8	111065	Rack	1
9	211015	1/2"–13 x 1 1/2" Hex Head Bolt Grade 8	4
10	299655	1/2"–13 Stover Locknut Class C	4
11	211005	Stabilizer Holder Weldment	2
12	211001	Tube Bracket Set with Tine Sleeve – Welded	1
13	211000	Tube Bracket Set – Welded (Includes 2)	1
14	211026	Conus	1

6. Parts

6.3 Double Bottom Spear Components

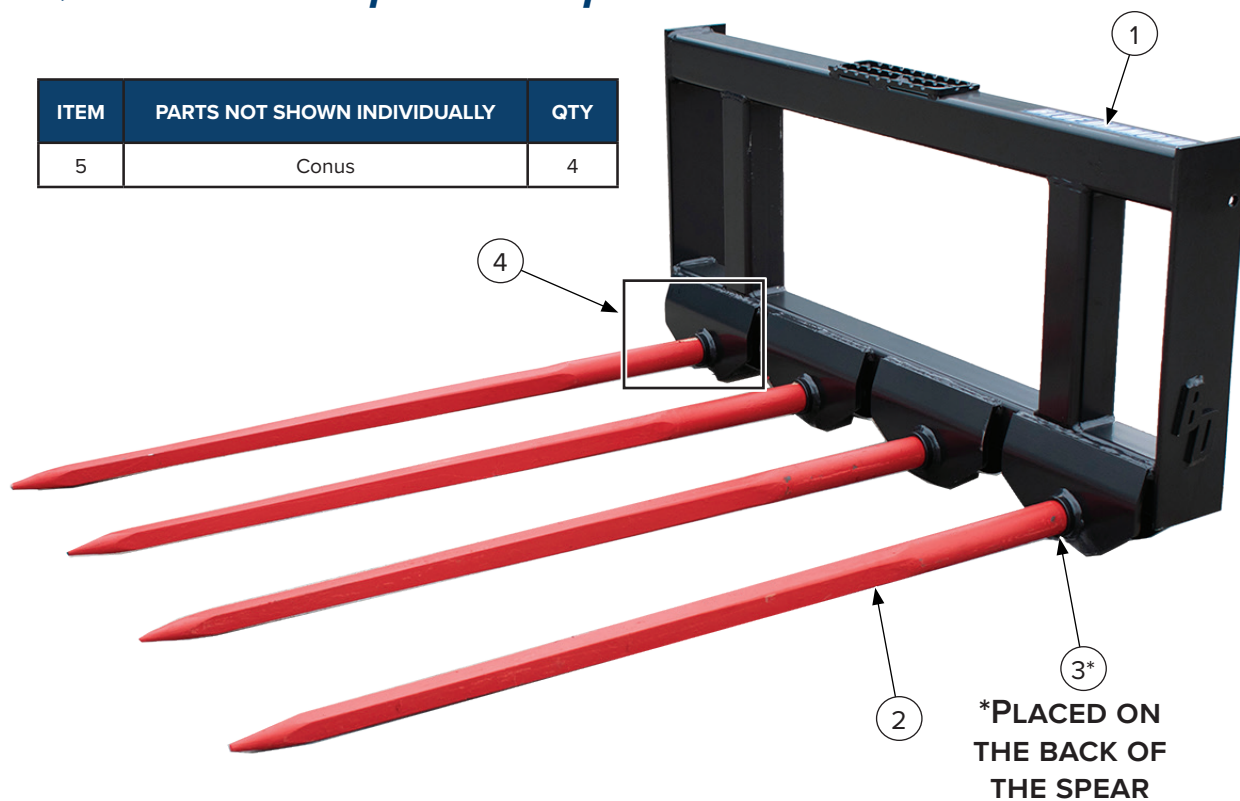


ITEM	PART NUMBER	DESCRIPTION	QTY
1	111052	Frame with Universal Skid Steer Mount	1
	111052-01	Frame with CAT IT/420 Mount	
	111052-11	Frame with Kubota 1066 MT	
	111052-14	Frame with John Deere 400/500 Mount	
	111052-16	Frame with Euro Ag Mount	
2	211030	36" Spear	2
	211025	49" Spear	
3	211035	Nut for Spear	2
4	111065	Rack	1
5	211015	1/2"-13 x 1 1/2" Hex Head Bolt Grade 8	4
6	299655	1/2"-13 Stover Locknut Class C	4
7	211002	Tube Bracket Weldment	2
8	211026	Conus	2

6. Parts

6.4 Quad Bottom Spear Components

ITEM	PARTS NOT SHOWN INDIVIDUALLY	QTY
5	Conus	4



ITEM	PART NUMBER	DESCRIPTION	45" QTY	60" QTY	75" QTY
1	111063	45" Frame with Universal Skid Steer Mount	1	—	—
	111063-14	45" Frame with John Deere 400/500 Mount	1	—	—
	111063-16	45" Frame with Euro Ag Mount	1	—	—
	111064	60" Frame with Universal Skid Steer Mount	—	1	—
	111064-16	60" Frame with Euro Ag Mount	—	1	—
	111066	75" Frame with Universal Skid Steer Mount	—	—	1
	111066-16	75" Frame with Euro Ag Mount	—	—	1
2	211025	49" Spear	4	4	4
3	211035	Nut for Spear	4	4	4
4	211002	Tube Bracket Weldment	4	4	4
5	211026	Conus	4	4	4

6. Parts

6.5 Spear with Category I & II Mount Components

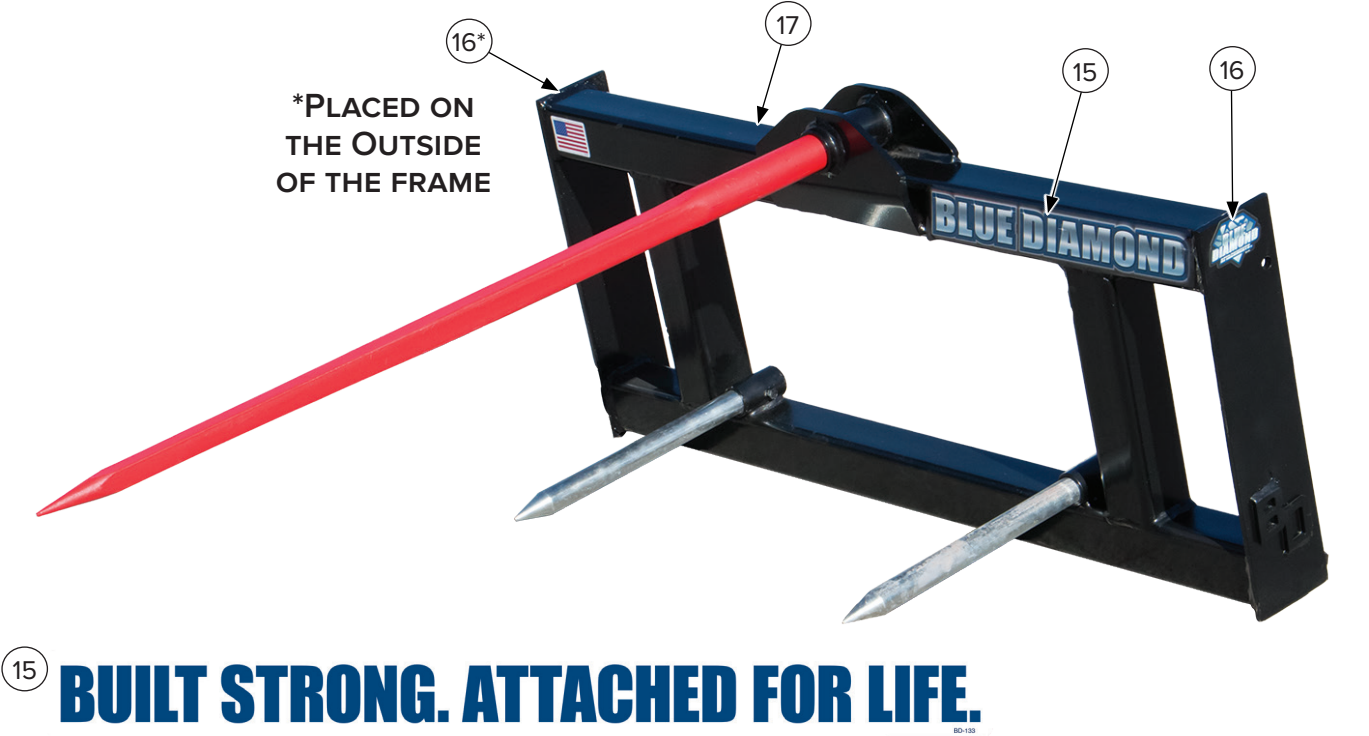


ITEM	PARTS NOT SHOWN INDIVIDUALLY	QTY
6	Top Hitch Pin	1
7	Lower Hitch Pin for Category I	2
	Lower Hitch Pin for Category II	

ITEM	PART NUMBER	DESCRIPTION	CAT I QTY	CAT II QTY
1	411005	Frame with 3-Point Hitch Category I	1	—
	411008	Frame with 3-Point Hitch Category II	—	1
2	211025	49" Spear	1	1
3	211035	Nut for Spear	1	1
4	211007	Standard Duty Removable Stabilizer	2	2
5	299431	1/2"-13 x 1" Hex Head Bolt Grade 8	4	4
6	202210	Top Hitch Pin with 1" x 4.5" Linch Pin	1	1
7	511001	Lower Hitch Pin for Category I	2	—
	511002	Lower Hitch Pin for Category II	—	2

6. Parts

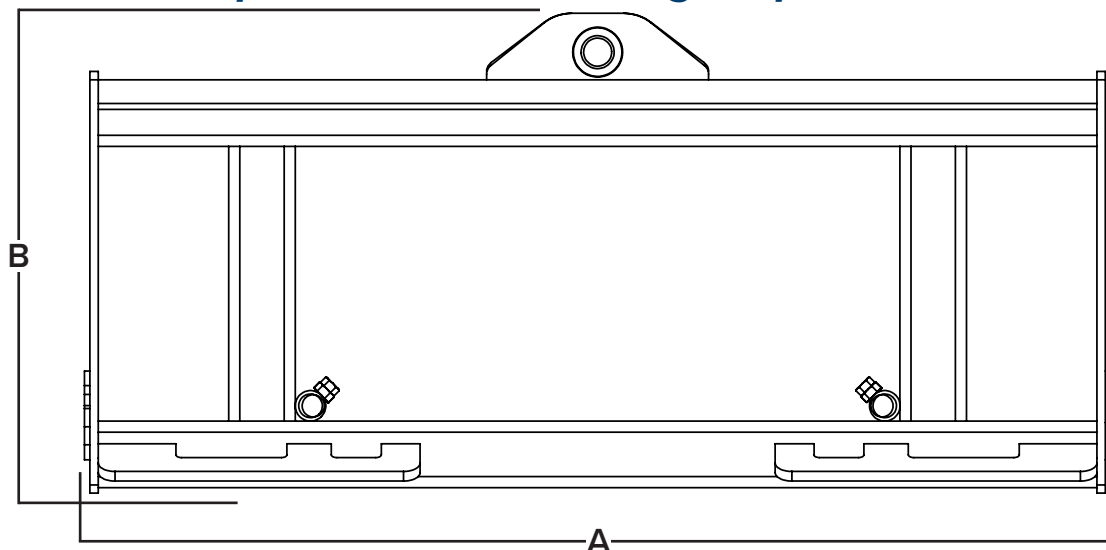
6.6 Safety Decals



ITEM	PART NUMBER	DESCRIPTION	QTY
15	BD-056	2.0" x 12.0" Decal, Blue Diamond	1
16	BD-060	2.4375" x 3.375" Decal, Blue Diamond Attachments	2
17	BD-092	1.5" x 2.0" Decal, Warranty Registration QR	1

7. Specifications

7.1 Attachment Specifications for Single Spear



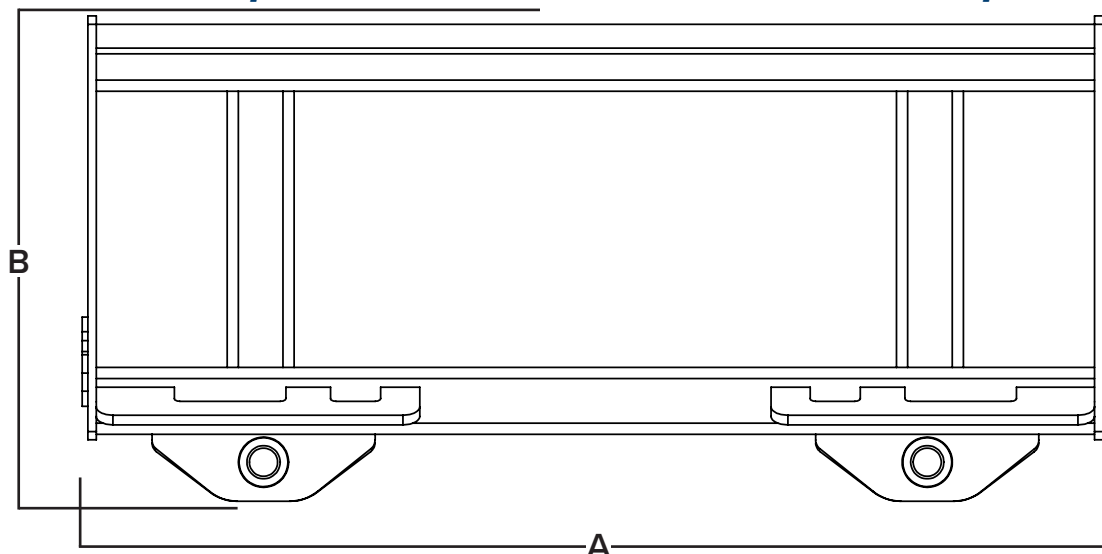
DESCRIPTION	311003	311006	311007	311008
Width (A)	45 3/4 in. (1,162 mm)	45 1/2 in. (1,155 mm)		45 3/4 in. (1,162 mm)
Length without Spear	7 in. (179 mm)			
Height (B)	22 in. (559 mm)			
Maximum Spear Lifting Capacity	3,500 lbs (1,588 kg)			
Maximum Horsepower	115 HP			
Number of Spears	1 with 2 Heavy Duty Stabilizers	1 with 2 Standard Duty Stabilizers		1 with 2 Heavy Duty Stabilizers
Spear Length	36 in. (914 mm)	48 in. (1,219 mm)		
Back Rest Optional	Yes			
Weight*	154 lbs (70 kg)	165 lbs (75 kg)	204 lbs (93 kg)	165 lbs (75 kg)

NOTE: Length is only applicable to the frame.

*Weight can vary depending on the mount being used.

7. Specifications

7.2 Attachment Specifications for Double Bottom Spear



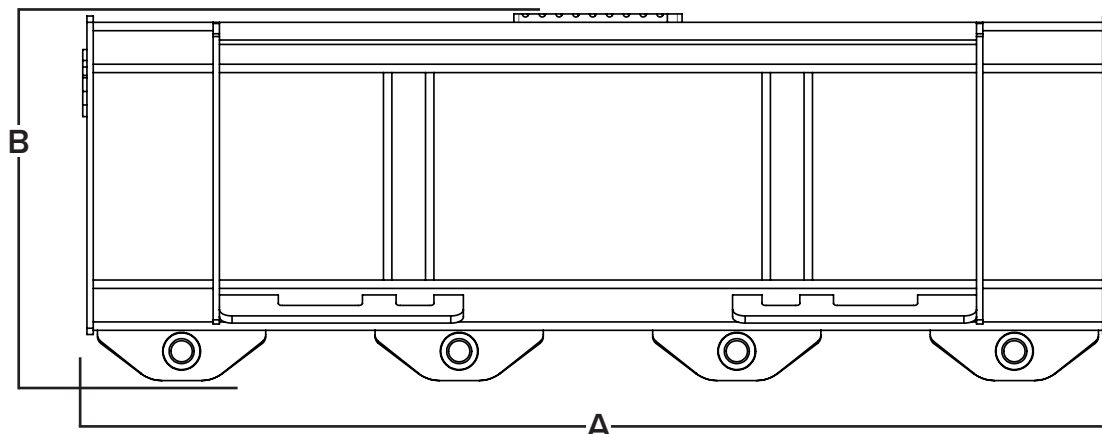
DESCRIPTION	311009	311010	311011	311012
Width (A)	45 1/2 in. (1,155 mm)			
Length without Spear	7 in. (179 mm)			
Height (B)	20 in. (508 mm)			
Maximum Spear Lifting Capacity	3,500 lbs (1,588 kg)			
Maximum Horsepower	115 HP			
Number of Spears	2			
Spear Length	36 in. (914 mm)	48 in. (1,219 mm)		36 in. (914 mm)
Back Rest Optional	Yes			
Weight*	180 lbs (82 kg)	190 lbs (86 kg)	218 lbs (99 kg)	210 lbs (95 kg)

NOTE: Length is only applicable to the frame.

*Weight can vary depending on the mount being used.

7. Specifications

7.3 Attachment Specifications for Quad Bottom Spear



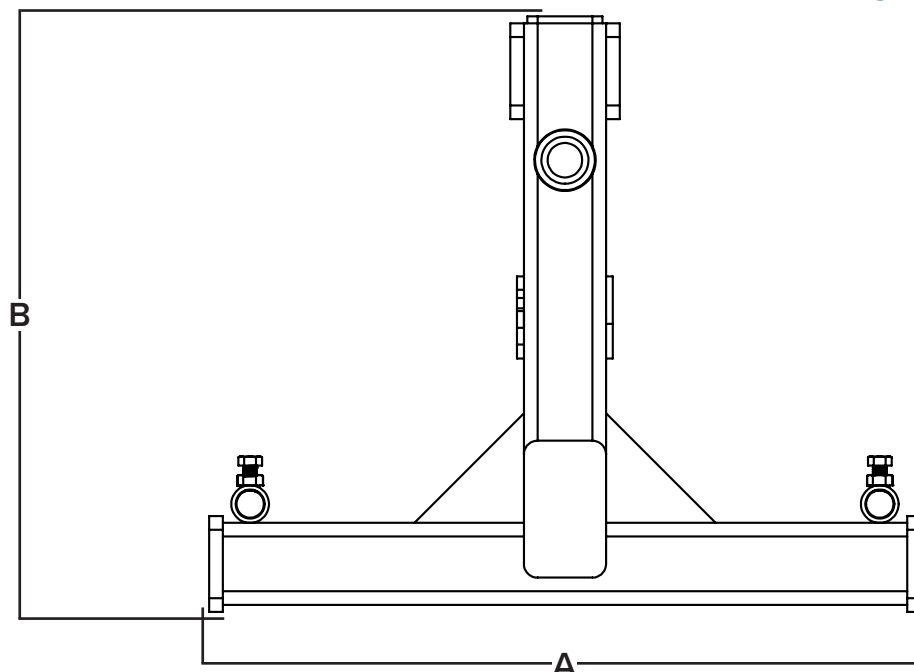
DESCRIPTION	311045	311050	311060
Width (A)	45 3/4 in. (1,162 mm)	60 3/4 in. (1,543 mm)	75 in. (1,905 mm)
Length without Spear	7 in. (179 mm)		
Height (B)	21 3/4 in. (552 mm)		
Maximum Spear Lifting Capacity	3,500 lbs (1,588 kg)		
Maximum Horsepower	115 HP		
Number of Spears	4		
Spear Length	48 in. (1,219 mm)		
Back Rest Optional	No		
Weight*	262 lbs (119 kg)	280 lbs (127 kg)	304 lbs (138 kg)

NOTE: Length is only applicable to the frame.

*Weight can vary depending on the mount being used.

7. Specifications

7.4 Attachment Specifications for Spear with Category Mount



DESCRIPTION	311405	311408
Width (A)	27 in. (686 mm)	32 in. (813 mm)
Length without Spear	6 in. (152 mm)	7 in. (179 mm)
Height (B)	22 in. (559 mm)	28 in. (711 mm)
Maximum Spear Lifting Capacity	3,500 lbs (1,588 kg)	
Maximum Horsepower	80 HP	
Number of Spears	1 with 2 Standard Duty Stabilizers	
Spear Length	48 in. (1,219 mm)	
Mount Option	Category I	Category II
Back Rest Optional	No	
Weight*	81 lbs (37 kg)	90 lbs (41 kg)

NOTE: Length is only applicable to the frame.

*Weight can vary depending on the mount being used.

7. Specifications

7.5 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

7.6 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

**This page intentionally
left blank**



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

Blue Diamond® Attachments
4512 Anderson Road, Knoxville, TN 37918
888-376-7027