QUICK ATTACH

Quick Xcavator™

Backhoe Attachment BH 780 Series

For

Skid Steer Loaders & Compact Tractors

Operation & Maintenance Manual

Read this Manual Before Use

TABLE OF CONTENTS

REFERENCE INFORMATION

Write the serial number for your attachment in the spaces below. Always refer to this serial number when calling for service or parts.

Serial Number…….._____

YOUR ATTACHMENTS DEALER

ADDRESS:

PHONE:

CONTACT:

NOTE: *Quick Attach Attachments LLC reserves the right to make improvements in design or changes in specifications at any time without notice and without incurring any obligations to install them on units previously sold.*

DO NOT use or perform maintenance on this machine until this manual has been read and understood. In addition, read the Operation and Maintenance Manual(s) pertaining to the attachment and the attachment carrier ("Loader").

The user is responsible for inspecting the machine daily, and for having parts repaired or replaced when continued use of the machine would cause damage, excessive wear to other parts or make the machine unsafe for continued operation.

If an operating procedure, tool device, maintenance or work method not specifically recommended is used; you must satisfy yourself that it is safe for you and others. You must also ensure that the attachment will not be damaged or made unsafe by the procedures you choose.

Quick Attach Attachments LLC cannot anticipate every possible circumstance that might involve potential hazard. The safety messages found in this manual and on the machine are therefore not all inclusive.

Throughout this manual, reference may be made to the left hand (LH) or right hand (RH) side. These terms are used as viewed from the operator's seat facing forward.

Call Before You Dig

1-888-258-0808

The signal words **CAUTION, WARNING,** or **DANGER** are used to indicate hazards

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

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

⚠ DANGER **Indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.**

The word **IMPORTANT** is used in the text when immediate damage will occur due to improper technique or operation.

The word **NOTE** is used to convey information that is out of context with the manual text; special information such as specifications, techniques, reference information, and other information of a supplementary nature.

SAFETY

Improper operation can cause serious injury or death.

Pre-operation

- This attachment is designed to be used for digging, trenching, and excavating. **NEVER** use this machine for any other purpose.
- Read the operators manual for the "Skid Steer Loader." **NEVER** allow untrained people to operate.
- Operating instructions must be given to everyone before operating this attachment and at least once a year thereafter in accordance with OSHA regulations.
- **NEVER** exceed the maximum recommended input power or speed specifications for the attachment. Over-powering or over-speeding the attachment may cause personal injury and/or machine damage.
- Keep all shields, guards, and covers in place.
- Do not modify equipment or add attachments that are not approved by Quick Attach Attachments LLC.
- Use adequate safety warning lights and devices as required by local regulations. Obey all local laws and regulations regarding machine operation on public property. Always call before you dig (1-888-258-0808). When you call, you will be directed to a location in your state/city for information about buried lines (electric, telephone, cable TV, water, sewer, gas, etc.).

Operation

- Always wear eye protection that meets ANSI z87.1.
- Engage drive and boom function lockout when using backhoe. If loader controls are not locked out when the backhoe is in use, movement of loader controls while backhoe is in operation may cause serious injury or death. **NEVER** try to operate the loader or backhoe unless in the correct seat. If loader is not equipped with a lockout system, a second operator is required.
- Keep people away from the loader and attachment when in use. This attachment lifts objects and has moving parts. **NEVER** lift a load directly over people – load could fall.
- Hydraulic connections may be hot after use. Use gloves if connecting or disconnecting after use.
- Check and be sure all operating controls are in neutral before starting the engine.

Operation (continued)

- **NEVER** exceed lift capacity (see page 50). Overloading can result in structural damage and unsafe operating conditions, such as tip-overs. Position backhoe so that load extends directly behind machine when lifting or placing heavy objects to avoid tipping.
- Do not dig under machine or stabilizers. A cave-in could cause the machine to fall into the excavation.
- To avoid electric shock or electrocution, NEVER operate the attachment near overhead power lines.
- **NEVER** operate near embankments or terrain that is so steep that rollover could occur.
- **NEVER** place hands near moving parts or clear debris while engine is running.
- **NEVER** lift people.

Avoid High Pressure Fluids Hazard

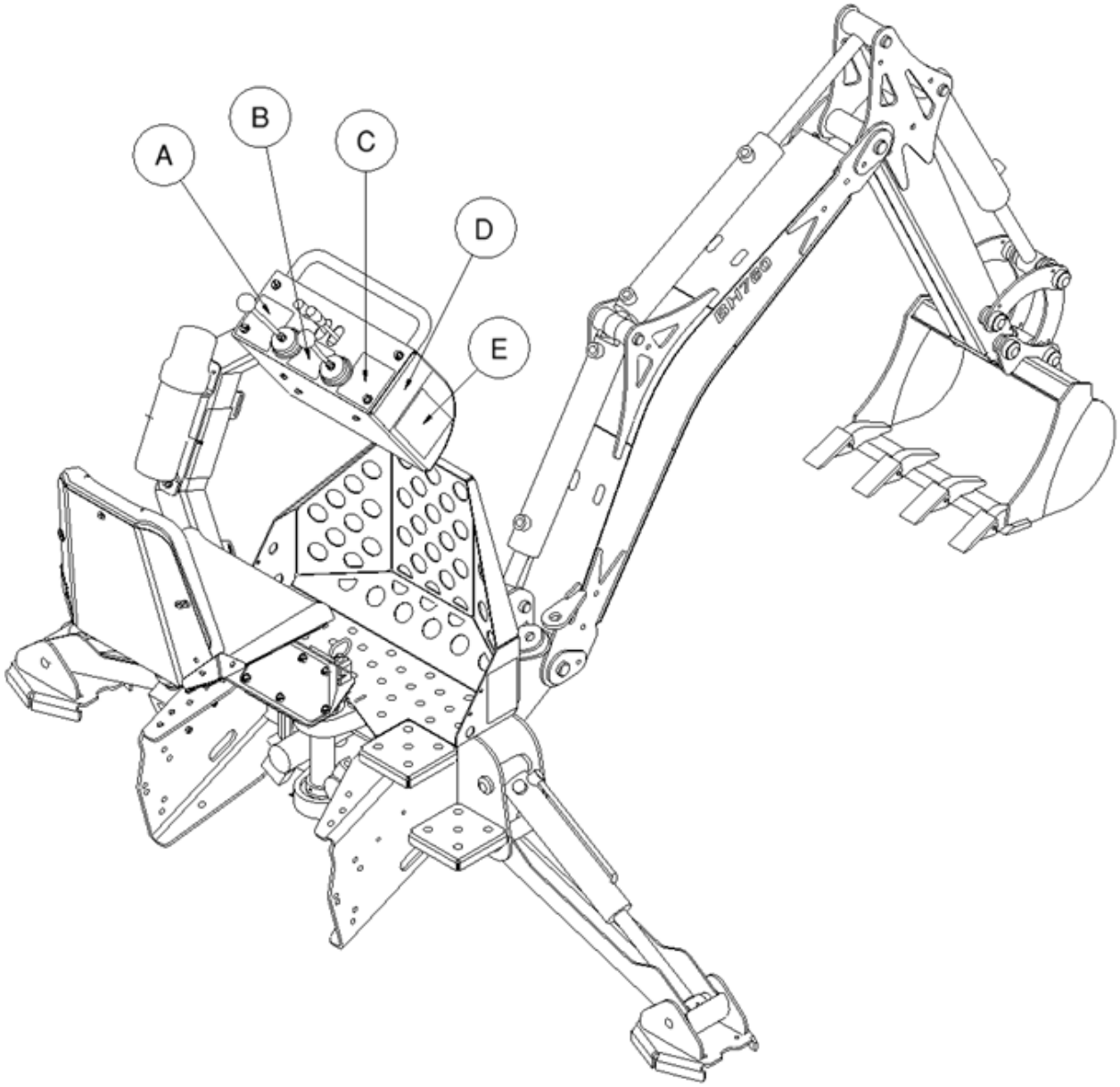
- Escaping fluid under pressure can penetrate the skin causing serious injury.
- Avoid the hazard by relieving the pressure before disconnecting hydraulic lines.
- Use a piece of paper or cardboard, NOT BODY PARTS, to check for suspected leaks. Wear protective gloves and safety glasses or goggles when servicing or performing maintenance on hydraulic systems.
- If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

Maintenance

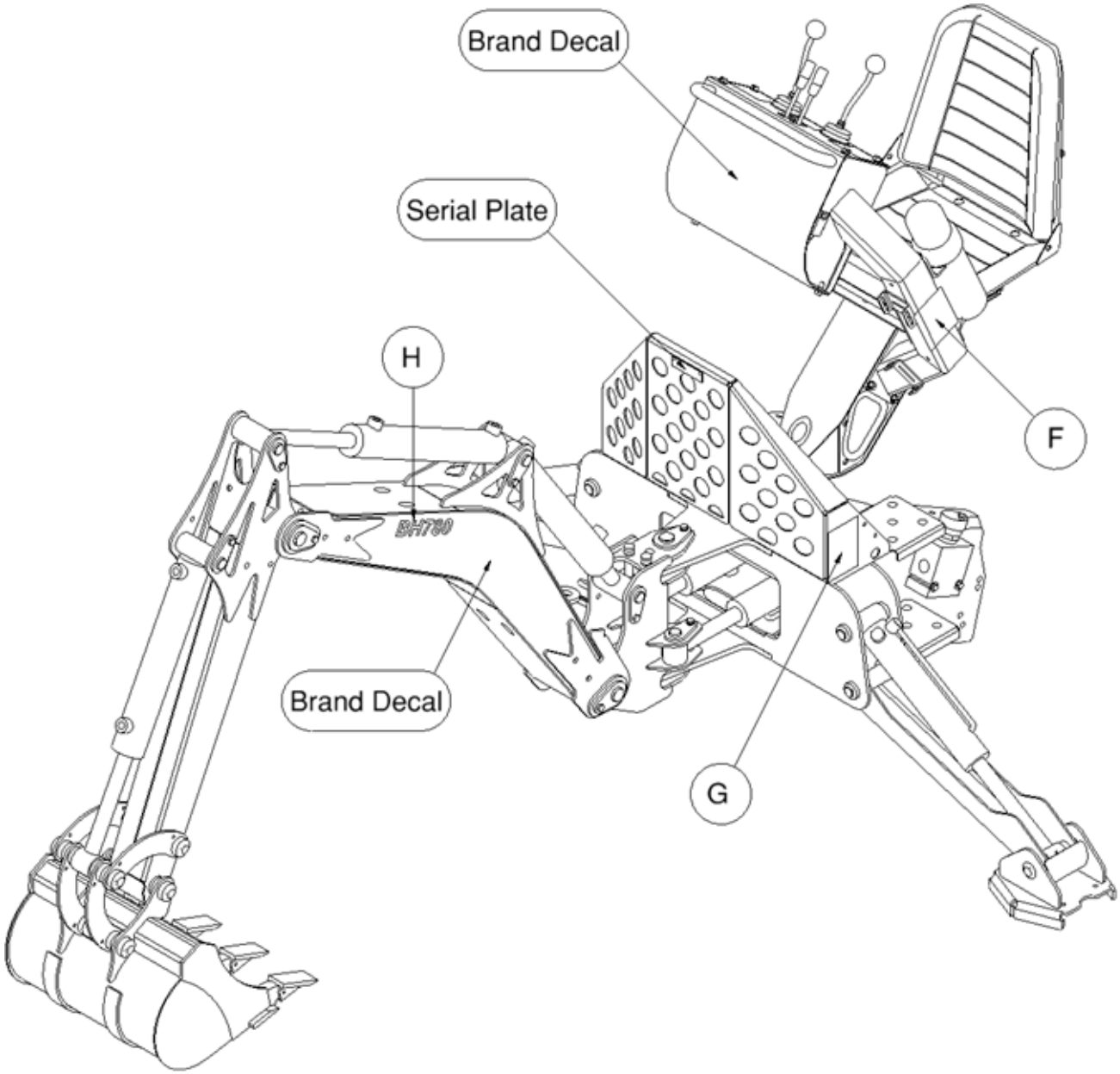
- **NEVER** make adjustments, lubricate, clean, or perform any service on the machine while it is in operation.
- Make sure the attachment is serviced on a daily basis. Improper maintenance can cause serious injury or death in addition to damage to the attachment and/or your equipment.
- Securely support attachment before working underneath.

SERIAL NUMBER AND SAFETY DECAL LOCATIONS

Serial Number Location:
It is important to refer to the serial number of the attachment when making repairs or ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use different procedures in doing a specific operation.

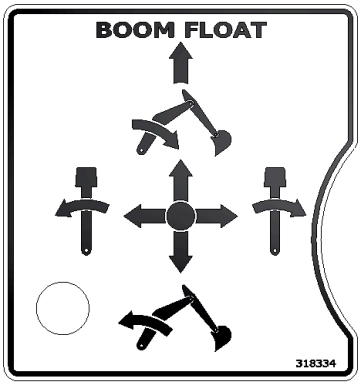


SERIAL NUMBER AND SAFETY DECAL LOCATIONS



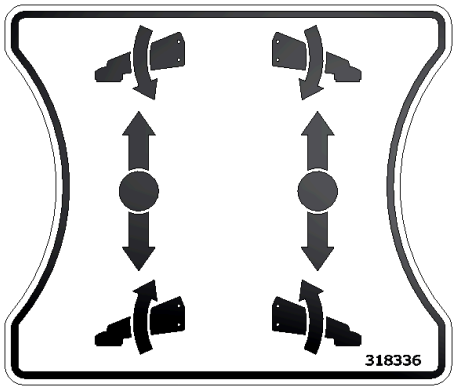
SERIAL NUMBER AND SAFETY DECAL LOCATIONS

A



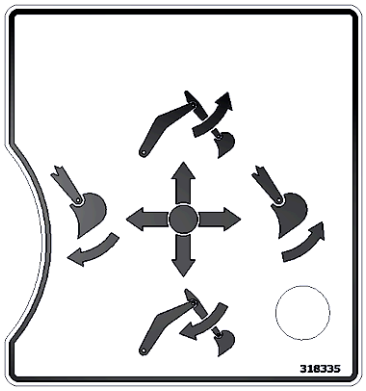
Part Number: 318334
Location: On control panel, left
Quantity: 1

B



Part Number: 318336
Location: On control panel, center
Quantity: 1

C



Part Number: 318335
Location: On control panel, right
Quantity: 1

D

Part Number: 320361
Location: On right side of control box
Quantity: 1

E

Part Number: 318333
Location: On right side of control box
Quantity: 1

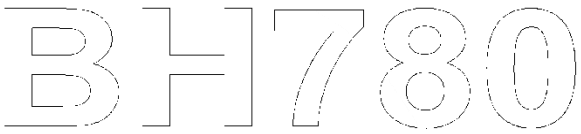
SERIAL NUMBER AND SAFETY DECAL LOCATIONS

Ⓕ 

Part Number: 200001
Location: On outside of control arm
Quantity: 1

Ⓖ 

Part Number: 203234
Location: On each side of main frame
Quantity: 2

Ⓗ 

Part Number: 318841
Location: On each side of dipper
Quantity: 2

Brand Decal
Location: On front of control box (Large)
On each side of dipper (Small)
Quantity: **1** (Large)
2 (Small)

Safety Decals Locations:
The locations of the safety decals are shown. If these decals are missing, damaged, or painted over they must be replaced. Call Quick Attach Attachments LLC (320-759-1551) for replacement decals.

MOUNTING INSTRUCTIONS

After the initial set-up assembly is completed, use the following procedure to mount the attachment to the loader for user operation.

⚠ WARNING Levers must be fully down and locked. Failure to secure wedges or pins can allow the attachment to come off and cause injury or death.

1. Prior to connecting the backhoe attachment to the skid steer loader, make sure the operator's seat is rotated off to the side and locked into place.

   IMPORTANT: For compact tractor mounting instructions, reference 4-Link Mount Frame Owner's Manual **(P/N 318881)** or Belly Mount Frame Owner's Manual **(P/N 318882)**.

2. Lift and hold the spring pin located at the base of the seat post to allow the seat to rotate freely.

3. Rotate the seat so that the control support arm is positioned away from the backhoe mounting plate.

4. Release the spring pin and allow the seat to lock into position.

MOUNTING INSTRUCTIONS

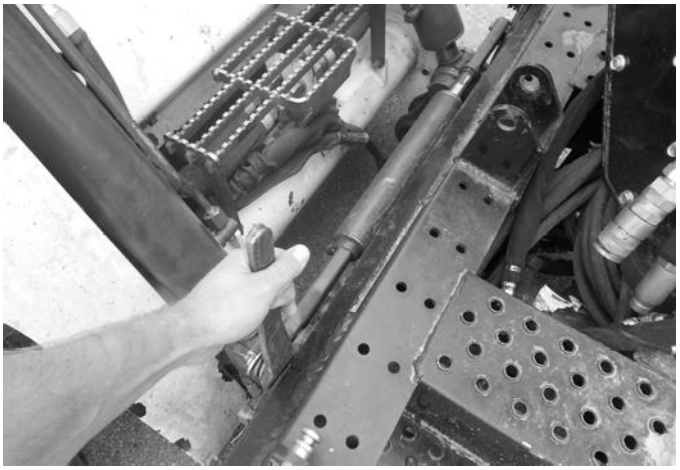
5. Use the step, safety treads, and grab handles to get on and off the loader and attachment.

6. Sitting in the loader's operator's seat, lower the seat bar (if so equipped) and fasten the seat belt.

7. Drive to the rear of the attachment. Put the loader quick attach coupler into the attachment mounting bracket.

8. Tilt the loader coupler backward a small amount until it is fully engaged in the attachment mounting bracket.

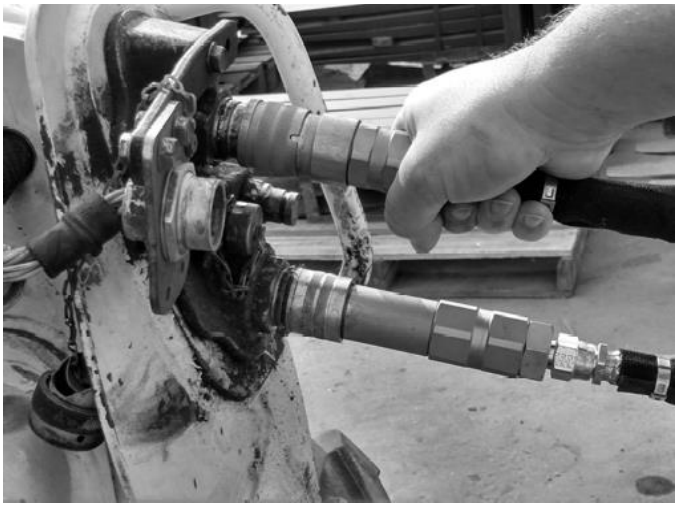
9. Stop the engine and engage the park brake.



10. Secure the coupler locking mechanism that attaches the attachment to the loader.

11. Connect and tighten the tieback as explained in the Skid Loader Tieback Installation Owner's Manual **(P/N 318880)**.

MOUNTING INSTRUCTIONS



12. Connect the attachment hydraulic quick couplers to the loader hydraulic couplers.

    IMPORTANT: Wipe the ends of the hydraulic quick couplers (both lead and loader) with a rag to remove any possible contamination. Contamination can cause hydraulic components to fail and is not covered under warranty.

    IMPORTANT: Make sure the quick couplers are fully engaged. If the quick couplers do not fully engage, check to see that the couplers are the same size and brand. Do not force the quick couplers together.

    NOTE: See the loader's operator's manual for auxiliary hydraulic specifications and connection instructions.

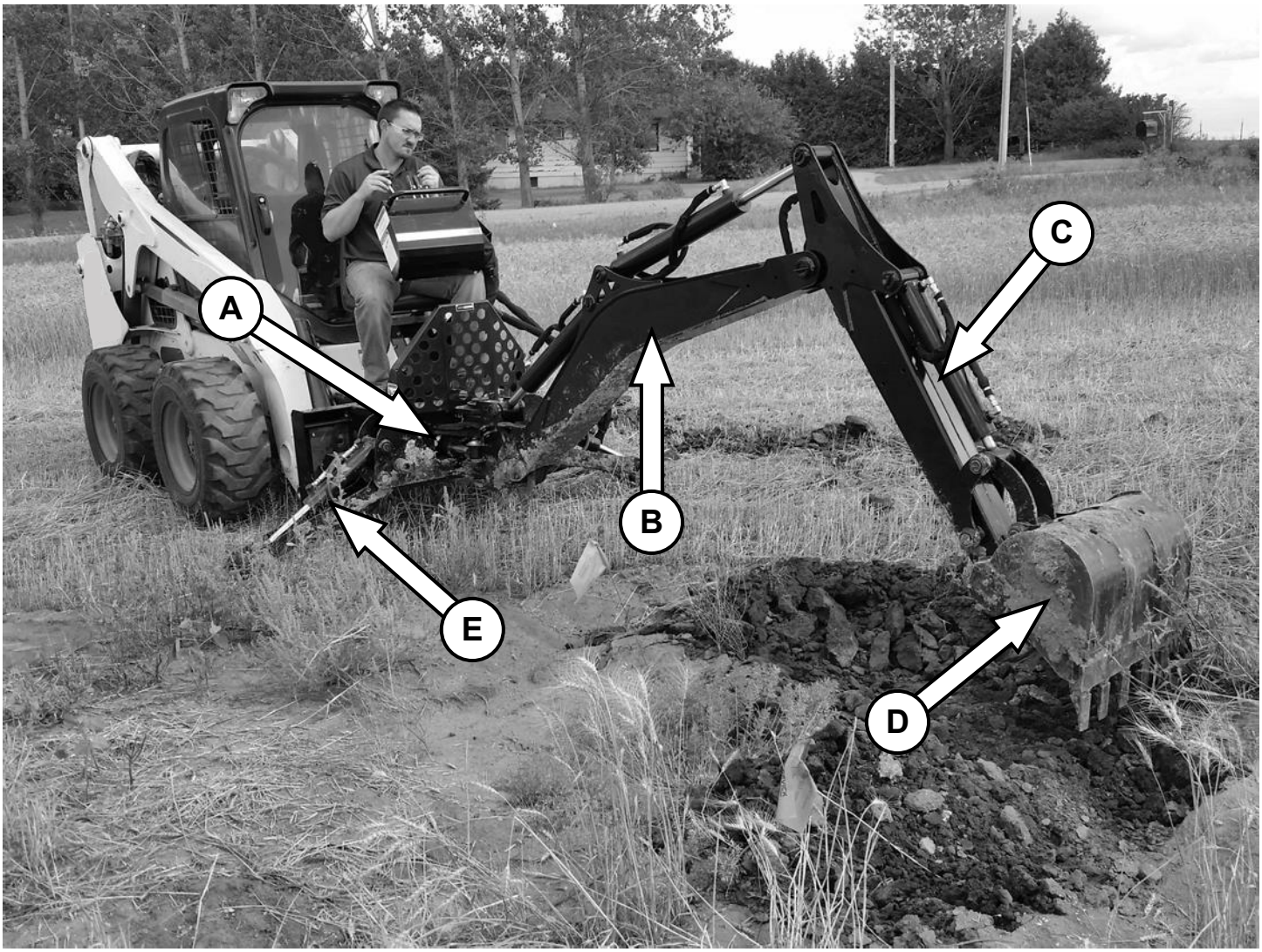
    NOTE: Attachment is shipped with 8FJX (3/4"-16 UNF Female JIC Swivel) fittings on the ends of the lead hoses.

13. Make sure the hoses are properly routed to fit your specific loader. If the hoses are not routed correctly, hoses may get pinched or rub on tires. Be sure to check the hose routing through the full range of intended motion of the attachment before operating it.

    More than one routing may be acceptable depending on the loader. Pick the routing that best suits your loader.

    IMPORTANT: Proper hose routing is the responsibility of the owner and/or operator. Pinched or stretched hoses are not covered under warranty.

Mounting is now complete and you are ready to use the attachment. Use the reverse order of the above instructions to dismount the attachment from the loader.



Machine Components:

A. Main Frame

B. Boom

C. Dipper

D. Bucket

E. Outriggers

F. Controls

OPERATING INSTRUCTIONS

Machine Break-in

Although there are no operational restrictions on the backhoe when used for the first time, it is recommended that the following mechanical items be checked after the first hour of operation.

- Check all nuts, bolts, and other fasteners. Tighten to the proper torque(s) if needed (see "Bolt Torque Information" on page 49 of this manual).
- Check that the bucket is in good condition and pinned securely to the dipper.
- Check the condition of all hydraulic lines, hoses, and fittings. Replace any that are damaged. Re-route any hoses that are rubbing, pinched, or stretched. Tighten any leaking fittings.
- Check the oil level in the hydraulic reservoir if so equipped. Add as required.
- Check that the boom and dipper are in good condition and all pinned joints are secure.

Pre-Operation Checklist

Before operating the backhoe attachment, the following items must be checked:

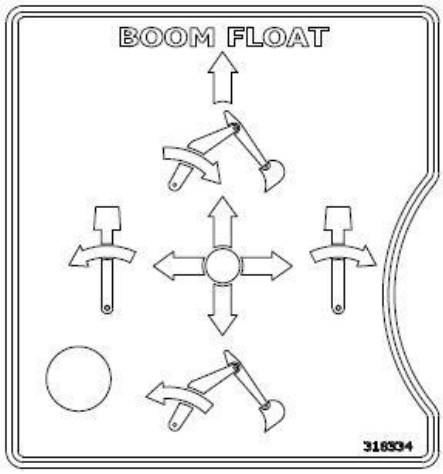
- Lubricate the attachment per the "Routine Maintenance" schedule on pages 25-26 of this manual.
- Use only with a loader or tractor ("carrier machine") of adequate power and weight to operate the attachment safely.
- Check that the attachment is properly secured to the carrier machine. Be sure retainers are used in all mounting pins and all mounting hardware is tightened to the proper torque.
- Check the oil level in the hydraulic reservoir, if so equipped. Add as required.
- Check the condition of all hydraulic lines, hoses, and fittings. Replace any that are damaged. Re-route any hoses that are rubbing, pinched, or stretched. Tighten any leaking fittings.
- Check the condition of the bucket teeth. Replace any teeth that are bent, chipped, broken, or missing.
- Check all moving parts for entangled material. Remove any entangled material.
- Install and secure all guards, doors, and covers.

OPERATING INSTRUCTIONS

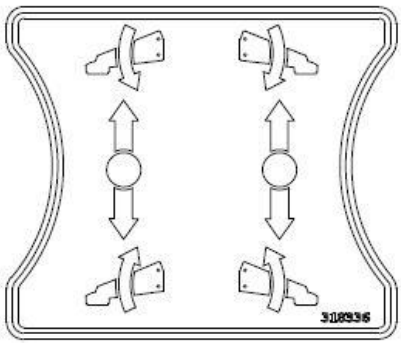
Controls:

All controls on the backhoe are mounted on top of the control support arm within easy reach of the operator while sitting in the backhoe seat. It is recommended that all operators review this section of the manual to familiarize themselves with the location and function of al attachment controls before operating.

⚠ WARNING Never operate the attachment controls from the ground. Operate only from the operator's seat on the attachment to prevent unexpected boom movement that can lead to crushing between frame members.

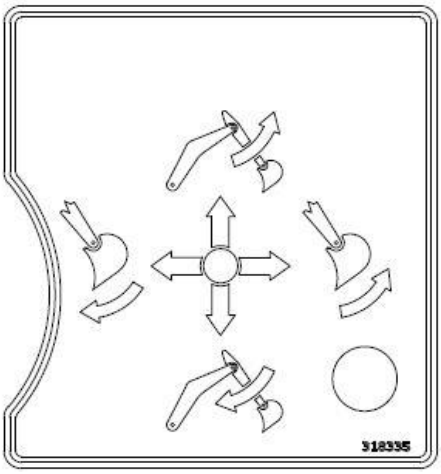


A – Left Lever



C – Left Center Lever

D – Right Center Lever



B – Right Lever

Hydraulic Valve Levers:

All hydraulic controls are mounted on the top of the control support arm. The two middle levers control the position of the stabilizers, and the outer joy sticks control the functions of the boom, dipper, and bucket.

C. Left Lever – Boom Position

This 5-position spring-loaded-to-neutral-center lever (joystick) with boom float detent controls the angular position of the boom. Move and hold the lever to the right to swing the boom to the right. Move and hold the lever to the left to swing the boom to the left. Push and hold the lever forward to tip the boom away from the frame. Pull and hold the lever back to pull the boom toward the frame. Release the lever and it will return to the center position and stop movement of the boom. Push the lever all the way forward into the detent position to allow the boom to float freely.

D. Right Lever – Dipper & Bucket Position

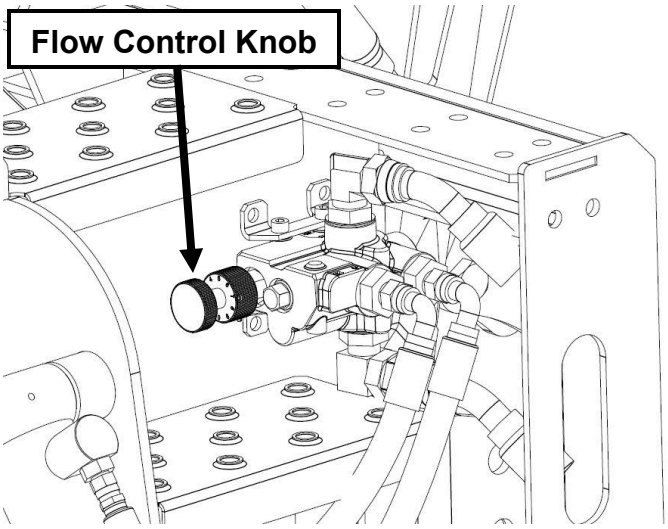
This 4-position spring-loaded-to-neutral-center lever (joystick) controls the position of the dipper and bucket. Move and hold the lever to the right to curl the bucket out away from the dipper. Move and hold the lever to the left to curl the bucket in towards the dipper. Push and hold the lever forward to raise the dipper. Pull and hold the lever back to lower the dipper. Release the lever and it will return to the center position and stop movement of the dipper and bucket.

A. Left Center Lever – Left Outrigger Position

This 2-position spring-loaded-to-neutral-center lever (joystick) controls the position of the left outrigger. With the lever in the centered position, the outrigger does not move. Push and hold the lever forward to lower the left outrigger to the desired position. Pull and hold the lever back to raise the left outrigger. Once the outrigger is in the desired position, release the lever and it will return to the center position and stop movement of the outrigger.

B. Right Center Lever – Right Outrigger Position

This 2-position spring-loaded-to-neutral-center lever (joystick) controls the position of the right outrigger. With the lever in the centered position, the outrigger does not move. Push and hold the lever forward to lower the right outrigger to the desired position. Pull and hold the lever back to raise the right outrigger. Once the outrigger is in the desired position, release the lever and it will return to the center position and stop movement of the outrigger.



Flow Control Valve:
The backhoe attachment comes standard with a flow control valve. The flow control valve is located on the left hand side of the main frame, just below the work platform. This valve adjusts the volume of oil that is allowed to flow through the main backhoe control valve.

Rotating the flow control knob clockwise will reduce the oil flow to the backhoe and slow down all functions of the attachment.

Rotating the flow control knob counter-clockwise will increase the oil flow to the backhoe and speed up all functions of the attachment.

NOTE: New operators should start with the backhoe functions set to a slower speed, and increase the speed as they become more proficient in the operation of the attachment.

Training:
Each operator must be trained in the proper operating procedures prior to being allowed to operate the attachment.

1. Review the control location, function, and movement directions.

2. Move the unit to a large, open area to allow the operator to become familiar with the control functions and attachment response.

3. Once a new operator is familiar and comfortable with the operation of the attachment, they may proceed with the work.

OPERATING INSTRUCTIONS

Job Site:
It is the responsibility of the operator to be thoroughly familiar with the work site prior to starting. Inspect the work site and make a plan to avoid any potential safety hazards or work complications during the job. Some items to be aware of include but are not limited to:

1. **Close or cramped work site:**
   Be sure that there is enough space and clearance for the carrier machine and attachment to be properly positioned for the job. Be sure that there is enough space for the attachment to dig, swing, and dump while working. If the working area is cramped, modify the work site to provide enough space.

   ⚠ WARNING Contact with adjacent or overhead obstructions, such as buildings, equipment, or terrain, can cause the operator to lose control of the attachment, resulting in serious injury or death.

   ⚠ WARNING To avoid serious injury or death from electrocution, do not operate the attachment near overhead power lines. Contact with electrical power lines can be fatal.

   ⚠ WARNING Contact with underground gas or electric utilities can cause serious injury or death. Call local utilities before you dig (1-888-258-0808).

2. **Working Layout:**
   Organize the work site to minimize the distance support equipment has to travel between digging and dumping. The shorter the travel distance the faster the dig / dump cycle will be, and the more work that can be done.

3. **Prevailing Wind:**
   Set up the work site so the prevailing winds will blow dust, dirt, straw, chaff, debris, snow, etc. away from air intakes for the engine and cooling system. This will result in less need to clean these systems, and more time can be spent working.

4. **Smooth the Surface:**
   A rough work surface will require slow speeds for support equipment while working. Smoothing the work surface prior to starting work will shorten the work cycle and result in higher productivity.

Machine Placement:
It is the responsibility of the operator to review the work site layout and determine how to best position the carrier machine and attachment. Items to consider include but are not limited to:

1. **Working Inside of a Building:**
   Always follow carrier machine's manufacturer instructions regarding machine operation inside of an enclosed space.

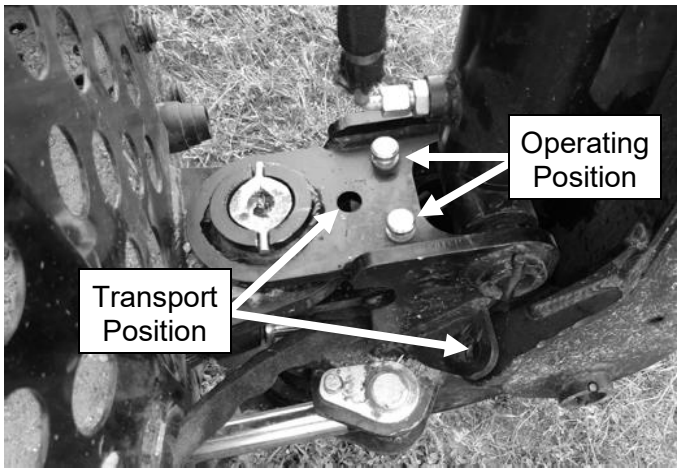
   ⚠ WARNING Gas and diesel engines produce carbon monoxide that can asphyxiate operators and bystanders if not supplied with fresh air. NEVER operate in an area without enough ventilation.

2. **Slopes:**
   Slopes have special placement requirements when positioning the carrier machine and attachment for the job. The attachment is designed to carry the operating loads when the frame is vertical. Normally this can be set by the outrigger extension length. Large blocks or planks can be placed under the low outrigger to assist in setting the frame angle.

   ⚠ WARNING Swing the boom up the slope when dumping the bucket to minimize the chance of tipping.

   ⚠ WARNING To avoid serious injury or death from tipping, always move a loaded bucket as low as possible.

OPERATING INSTRUCTIONS



Getting Started:

1. Remove all sticks, stones, roots, and wires from the working area before starting.

2. Be sure the attachment is securely connected to the loader and the tieback kit is installed properly.

3. Determine the best location to park the carrier machine and attachment. Set the carrier machine's park brake.

4. Exit the carrier machine and remove the transport lock pins from the base of the boom.

5. Reenter the carrier machine and turn on the auxiliary hydraulics in continuous flow mode. Engage the safety override to lock out drive and boom functions. Verify that the drive and boom functions are locked out before leaving the loader seat.

   If the loader is not equipped with a safety override to lock out the drive and boom functions, a second operator is required to sit in the loader seat. This operator **MUST NOT** activate any controls while another operator is in the backhoe seat.

   NOTE: Refer to loader's operator's manual for more information about lockout systems.

   NOTE: Hydraulic oil is only allowed to flow through the backhoe circuit in one direction. If the loader's engine loads up or the loader's hydraulic system goes over relief when the auxiliary hydraulics are engaged, the flow may need to be reversed. This can be accomplished by changing the flow direction in the cab of the carrier machine, if so equipped, or by switching the hydraulic quick couplers on the attachment's lead hoses.

6. Increase the carrier machine's engine speed to mid-throttle.

7. Exit the carrier machine and sit in the backhoe operator's seat.

8. Lift the seat lock pin and reposition the seat to the desired positon. Release the lock pin to lock the seat in pace, or twist the pin and lock it in the open position for free seat rotation.

9. Lower the outriggers until the front of the loader lifts slightly off of the ground for maximum digging stability.

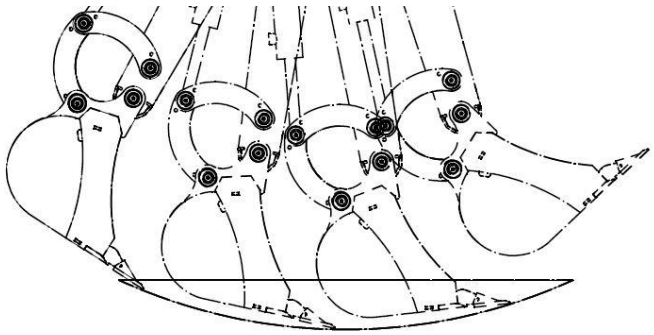
10. Ready to begin excavating.

Stopping Work and Parking:

1. Lower the dipper / bucket to the ground.
2. Place all controls in neutral.
3. If using a skid steer loader, lift the seat lock pin and reposition the seat to the side so the control support arm is away from the loader's cab. Release the pin to lock the seat in place.
4. Reenter the carrier machine cab and disengage the auxiliary hydraulic flow, reduce the engine speed, and turn off the engine.
5. Exit the carrier machine.

Stopping Work and Repositioning:

1. Raise the boom all the way up and center the boom swing so that the transport lock pins can be installed.
2. Curl the bucket in and swing the dipper in for transport.
3. Fully lift both outriggers for transport.
4. Place all controls in neutral.
5. If using a skid steer loader, lift the seat lock pin and reposition the seat to the side so the control support arm is away from the loader's cab.
6. Reenter the carrier machine and disengage the auxiliary hydraulic flow.
7. Reposition the carrier machine and attachment to the desired location, staying clear of any excavated areas on the jobsite.



Digging with the Dipper:

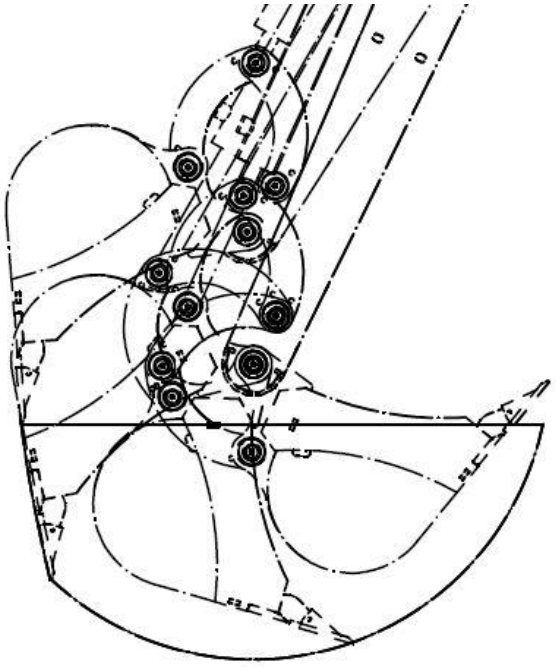
1. Set the bucket at the appropriate angle so that the bucket's heel does not hit the bottom of the excavation while scooping.

2. Set the dipper so the bucket teeth hit the ground approximately 2 feet ahead of the dipper pivot point.

3. Pull the dipper towards the backhoe so the bucket scoops through the soil until it is full.

4. Curl the buck in, lift the boom, and dump the bucket where desired.

5. Repeat the process by extending the bucket start point 3 to 6 inches farther from the dipper pivot point each time.



Digging with the Bucket:

1. Set the bucket so the bucket teeth are nearly vertical.

2. Use the boom to force the bucket into the ground and at the same time curl the bucket until it is full.

3. Lift the boom and dump the soil where desired.

4. Repeat the process by digging 3 to 6 inches deeper each time.

Trenching:

1. Park the carrier machine (see page 17) in line with the intended path of the trench in a position where the bucket can reach just beyond the starting point of the trench.

2. Digging with the dipper or digging with the bucket methods both work well for this application. (See page 19.)

3. Using the boom float for the bottom of the trench ensures that the floor of the trench is flat and mostly undisturbed.

4. Once the trench is near the desired depth, set the bucket flat on the floor of the trench.

5. Push the left lever forward into the detent position to allow the boom to float freely.

6. Pull and hold the right lever to curl the dipper towards the backhoe frame while adjusting the bucket angle slightly so that the floor of the trench is cut flat at the desired depth.

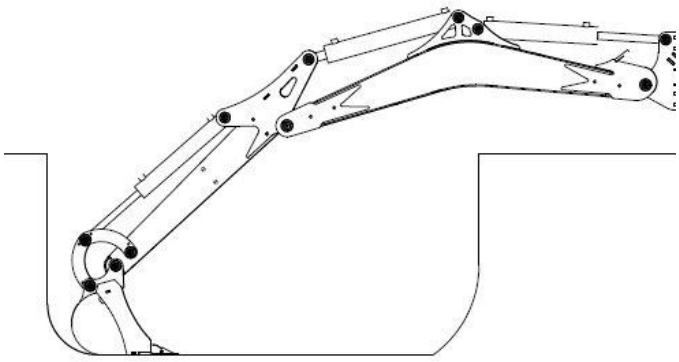
7. At the end of the floor cut, pull the left lever back to reengage the boom cylinder.

8. Curl the bucket and raise the boom to lift the unwanted soil out of the trench.

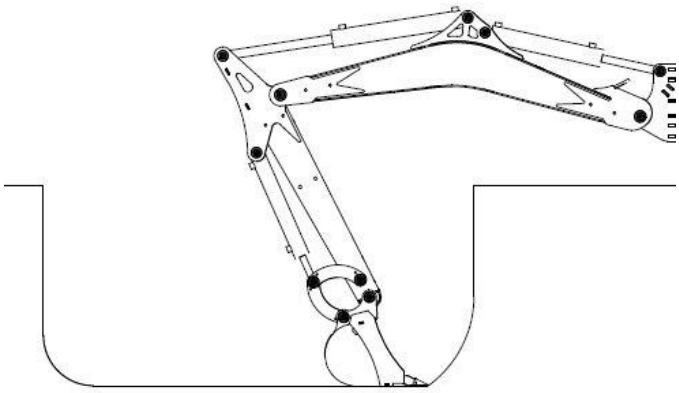
9. Once the trench has been cleaned out as desired, lift the boom up to the transport position.

10. Reposition the carrier machine in line with the intended path of the trench so that the bucket is still able to reach the floor of the previously dug portion of the trench.

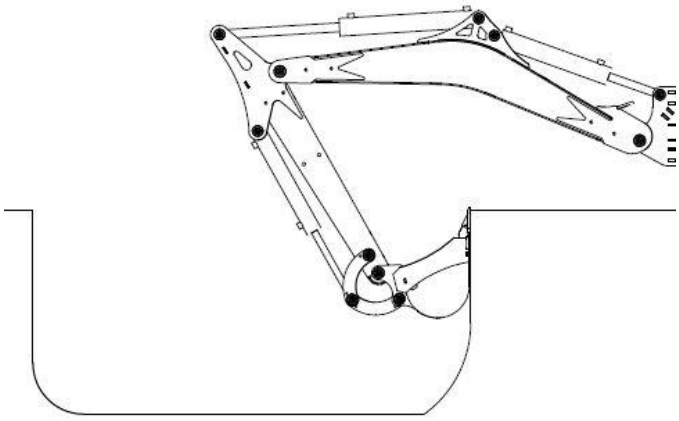
11. Repeat the process until the trench has been dug out to the desired length.



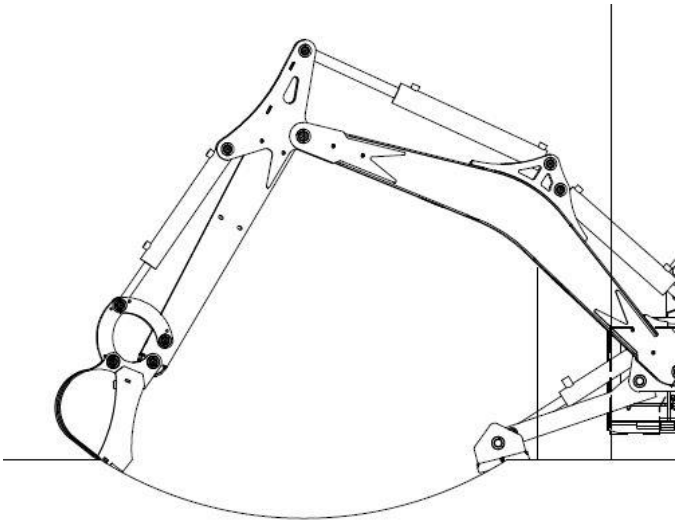
Bucket Flat on the Trench Floor



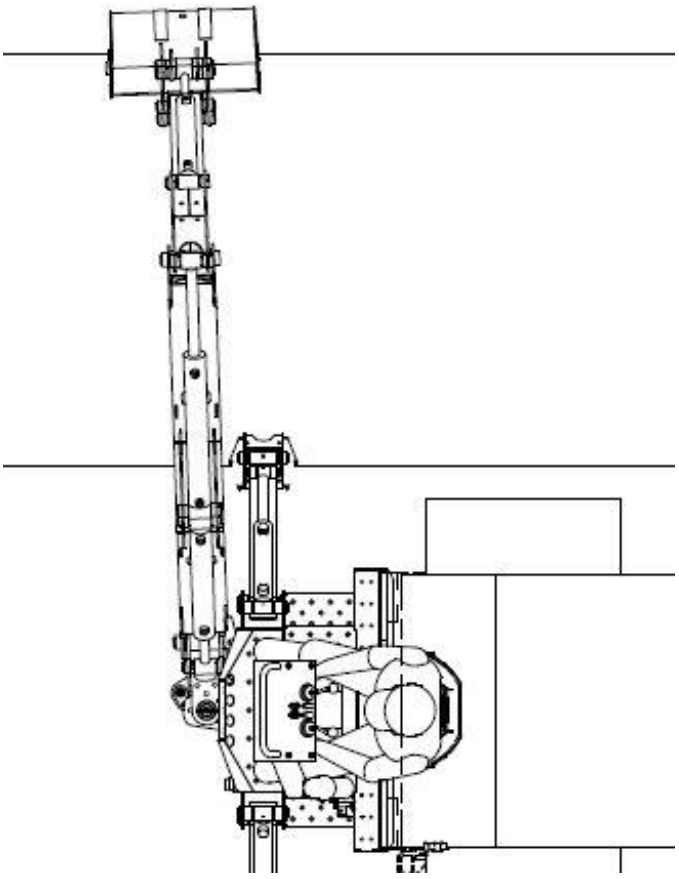
Reengage the Boom Cylinder



Curl and Lift the Unwanted Soil



Digging with the Dipper



Carrier Machine Parallel to the Ditch

Ditching:

NOTE: It is recommended to use a ditching bucket for cutting in ditch swales. A ditching bucket does not have teeth, only a welded on cutting edge.

1. Park the carrier machine (see page 17) parallel to the intended path of the ditch so that the bucket can reach just beyond the opposite side of the ditch.

2. Swing the boom all the way to the side where the intended ditch will be.

3. Digging with the dipper method works best for this application. (See page 19.)

4. Scoop the bucket full of soil, swing the boom all the way to the opposite side of the attachment, and dump the bucket out completely.

5. Continue scooping out soil until the desired swale profile is reached, then lift the boom to the transport position.

6. Reposition the carrier machine by moving forward / backward the approximate width of the bucket. Make sure the bucket can still reach just beyond the opposite side of the ditch.

7. Repeat the process until the ditch has been dug out to the desired profile and length.

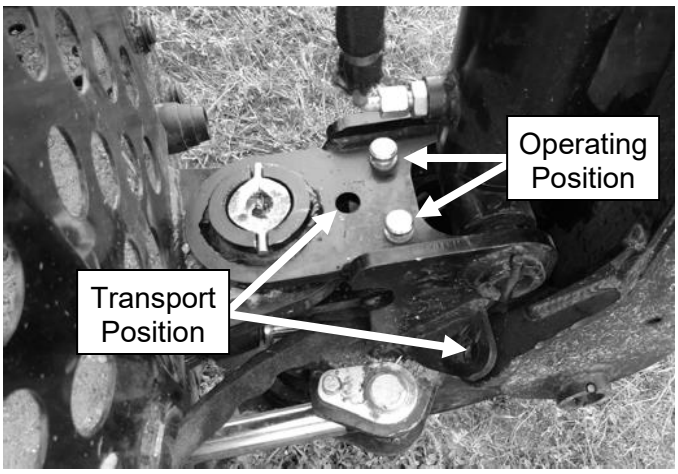
Excavating:

- Digging with the dipper or digging with the bucket methods both work well for this application to excavate holes.
- Be careful not to dig under the outriggers. Undermining the outriggers can cause the carrier machine to become unstable and fall into the hole.
- Dump the bucket so that excess soil is far enough away from the hole that the tailings do not fall back into the hole.
- Use a truck with low sides when dumping the bucket.

Lifting Loads:

- The backhoe can be used to lift and place lines, pipes, and other loads into trenches or excavations.
- Always position the carrier machine at right angles to the trench or excavation when moving loads.

TRANSPORTING INSTRUCTIONS



Transporting:
The backhoe attachment is designed to be moved easily between jobsites.

⚠ WARNING **At all times, when driving the carrier machine and equipment on a road or highway under 20 MPH, use flashing amber warning lights and a slow moving vehicle (SMV) emblem. Do not exceed 20 MPH transport speed. Reduce speed when turning and when driving over rough terrain.**

1. Be sure that the backhoe attachment is hitched securely to the carrier machine and all retaining pins are installed in the mounting pins.

2. Swing the boom so that it is centered with the backhoe frame.

3. Fully raise the boom, curl the bucket in, and curl the dipper in.

4. Install the transport lock pins in the transport positions in the base of the boom to secure the boom and swing functions of the attachment.

5. Keep to the right and yield the right-of-way to allow faster moving traffic to pass safely. Drive on the road shoulder, if permitted by law.

6. Make sure the SMV emblem and all lights and reflectors required by local highway and transport authorities are in place, are clean, and can be clearly seen by all overtaking and oncoming traffic.

7. During periods of limited visibility, use a pilot vehicle and extra lights on the machine.

8. Always use hazard flashers on the carrier machine when transporting unless prohibited by law.

STORAGE INSTRUCTIONS

Placing the Backhoe into Storage:
After the season's use, the backhoe attachment should be thoroughly inspected and prepared for storage. Repair or replace any worn or damaged components to prevent any unnecessary down time at the start of the next season. To help extend the life of the attachment, the following steps should be performed before storing the attachment for long periods of time:

- Thoroughly clean the backhoe attachment to remove all dirt, mud, debris, and residue.
- Inspect the bucket, dipper, and boom for damage or entangled material. Repair or replace any damaged or worn parts and remove any entangled material.
- Inspect the hydraulic system for worn, damaged, or loose hoses and fittings. Tighten any loose fittings. Repair or replace any damaged components.
- Check for loose or missing hardware. Tighten or replace as needed.
- Check for damaged or missing safety decals (see pages 5-8). Replace any such decals.
- Check paint for chips and scratches. Touch up any such areas to prevent rusting.
- Store the backhoe attachment in a dry, level area that is free of debris.
- Place blocks or planks under the backhoe attachment frame, outrigger feet, and bucket.
- Apply a coat of heavy grease to all exposed cylinder rods to prevent rusting.
- Lubricate all grease fittings (see pages 25-26). Make sure all grease cavities have been filled with grease to remove any water residue.

Removing the Backhoe from Storage:
Perform the following steps when removing the backhoe attachment from storage and preparing for operation:

- Remove all foreign objects and material from the backhoe attachment and work area.
- Check all hardware and make sure it is installed properly and tightened.
- Check all hydraulic hoses and fittings. Tighten if required.
- Lubricate all grease fittings (see pages 25-26).
- Remove grease from all cylinder rods.
- Repair or replace any damaged or worn parts.
- Replace any damaged or missing safety decals (see pages 5-8).

ROUTINE MAINTENANCE

⚠ WARNING Lower the attachment to rest flat on the ground, shut down the engine, relieve the hydraulic pressure to the attachment, set park brake, and wait for all motion to stop before leaving the operator's seat to perform service of any kind.

It is the operator's responsibility to make daily inspections of the attachment and machine carrier for damage, loose bolts, fluid leaks, or anything else that could cause a potential service or safety problem. Preventive maintenance is the easiest and least expensive type of maintenance.

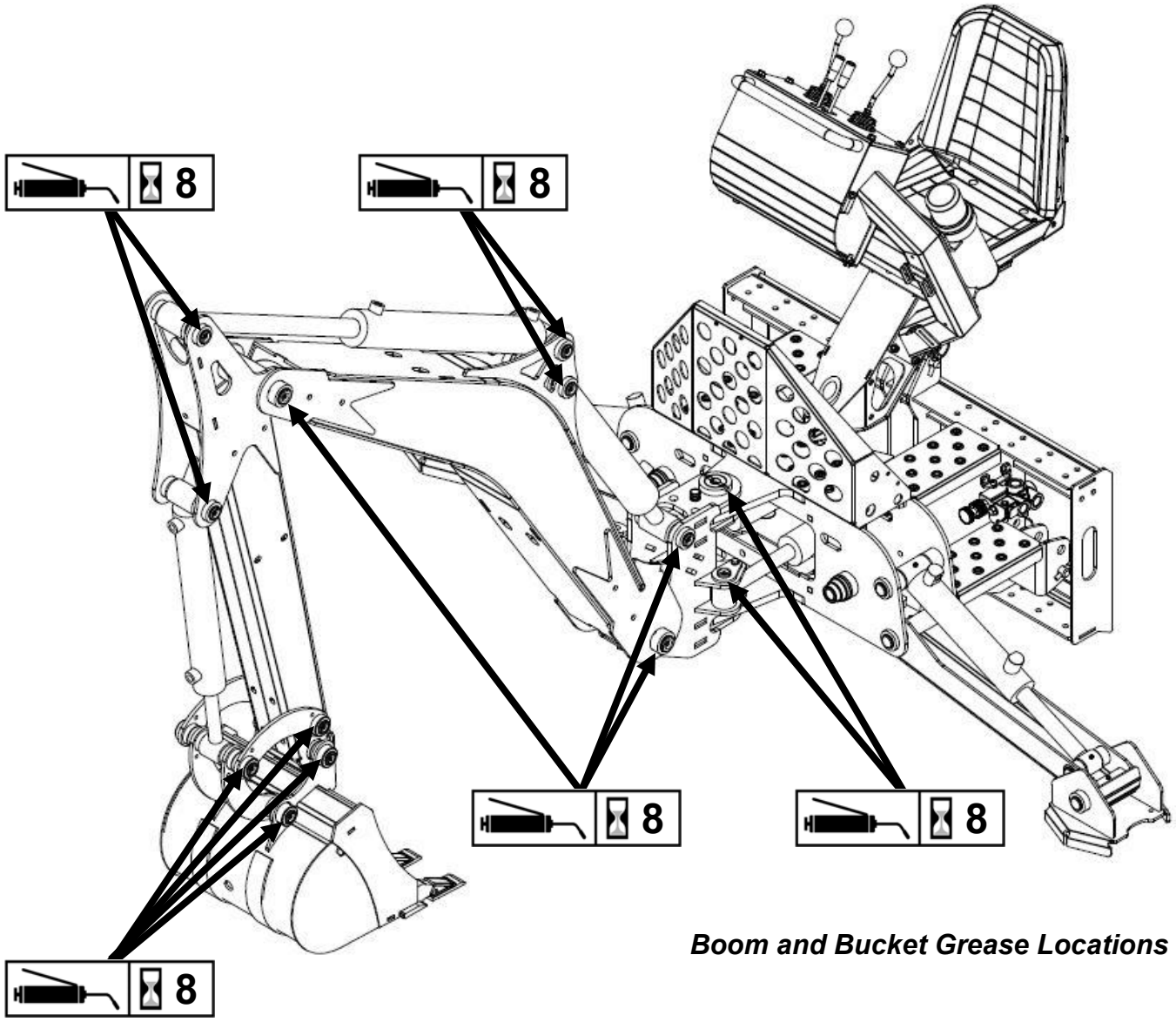
IMPORTANT: Bolts can loosen after initial usage. After the first hour of operation check all bolts.

LUBRICATION

Lubrication Legend	Multipurpose spray lube	No. 2 Lithium base gun grease	Clean engine oil	50 Intervals at which lubrication is required

Use No. 2 lithium base gun grease when lubricating all the attachment grease fittings.

Grease all thirteen pivot pin zerks as identified after every **8 hours** of operation.



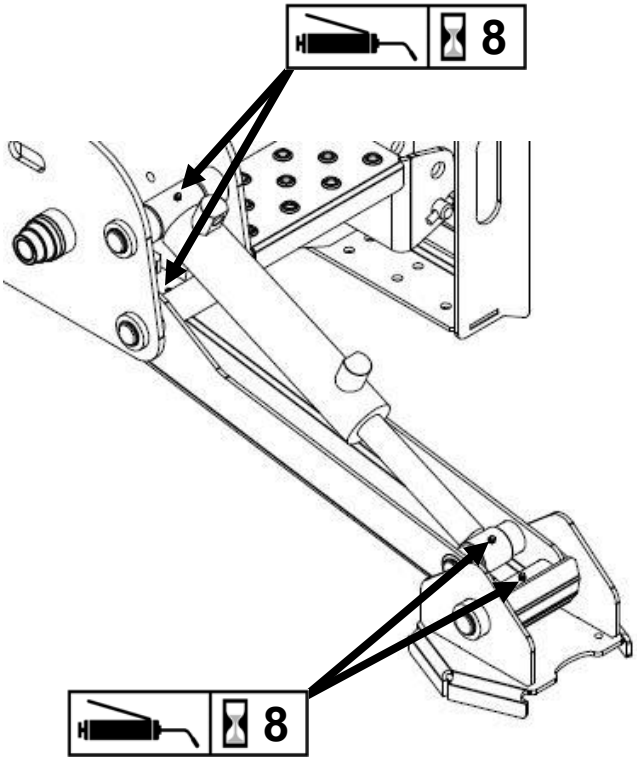
Boom and Bucket Grease Locations

ROUTINE MAINTENANCE

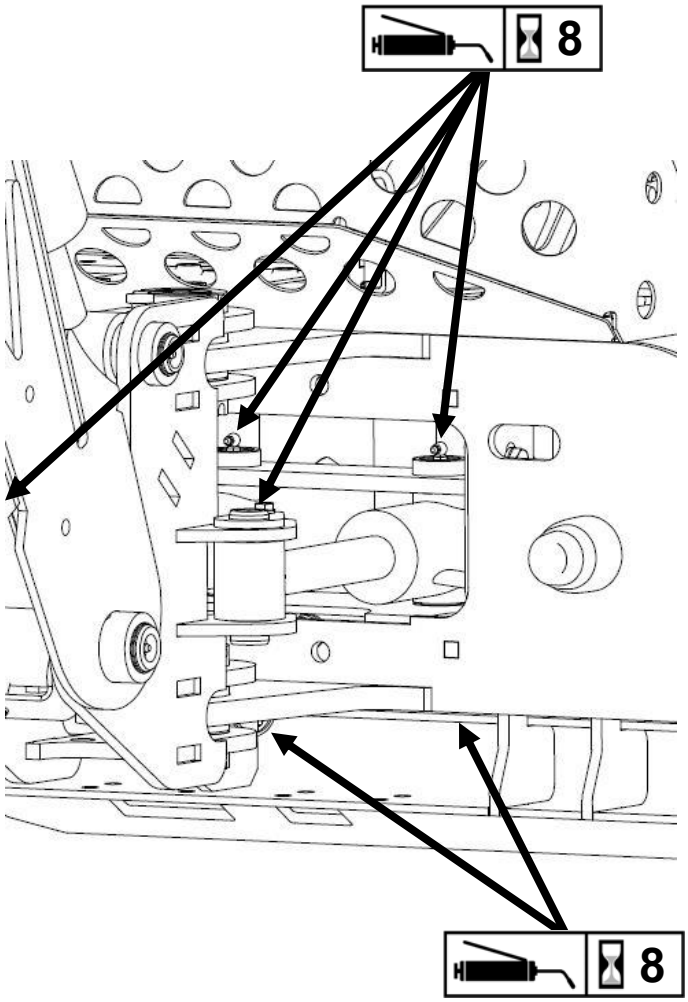
LUBRICATION (CONTINUED)

Lubrication Legend	Multipurpose spray lube	No. 2 Lithium base gun grease	Clean engine oil	50	Intervals at which lubrication is required

Grease all four pivot pin zerks on each outrigger and all six trunnion cylinder zerks as identified after every **8 hours** of operation.



Outrigger Grease Locations



Trunnion Grease Locations

BOLT TORQUE INFORMATION

Torque-Tension Relationships for SAE J429 Grade Bolts

Nominal Thread Size	SAE J429 Grade 2			SAE J429 Grade 5			SAE J429 Grade 8		
	Clamp Load (lbs)	Tightening Torque		Clamp Load (lbs)	Tightening Torque		Clamp Load (lbs)	Tightening Torque	
		K = .15	K = .20		K = .15	K = .20		K = .15	K = .20
Unified Coarse Thread Series									
1/4-20	1,300	49 in-lbs	65 in-lbs	2,000	75 in-lbs	100 in-lbs	2,850	107 in-lbs	143 in-lbs
5/16-18	2,150	101	134	3,350	157	210	4700	220	305
3/8-16	3,200	15 ft-lbs	20 ft-lbs	4,950	23 ft-lbs	31 ft-lbs	6,950	32.5 ft-lbs	44 ft-lbs
7/16-14	4,400	24	30	6,800	37	50	9,600	53	70
1/2-13	5,850	36.5	49	9,050	57	75	12,800	80	107
9/16-12	7,500	53	70	11,600	82	109	16,400	115	154
5/8-11	9,300	73	97	14,500	113	151	20,300	159	211
3/4-10	13,800	129	173	21,300	200	266	30,100	282	376
7/8-9	11,425	125	166	29,435	321	430	41,550	454	606
1-8	15,000	187.5	250	38,600	482.5	640	54,540	680	900
Unified Fine Thread Series									
1/4-28	1,500	55 in-lbs	75 in-lbs	2,300	85 in-lbs	115 in-lbs	3,250	120 in-lbs	163 in-lbs
5/16-24	2,400	112	150	3,700	173	230	5,200	245	325
3/8-24	3,600	17 ft-lbs	22.5 ft-lbs	5,600	26 ft-lbs	35 ft-lbs	7,900	37 ft-lbs	50 ft-lbs
7/16-20	4,900	27	36	7,550	42	55	10,700	59	78
1/2-20	6,600	41	55	10,200	64	85	14,400	90	120
9/16-18	8,400	59	79	13,000	92	122	18,300	129	172
5/8-18	10,600	83	110	16,300	128	170	23,000	180	240
3/4-16	15,400	144	193	23,800	223	298	33,600	315	420
7/8-14	12,610	138	184	32,480	355	473	45,855	500	668
1-12	16,410	205	273	42,270	528	704	59,670	745	995

Clamp load estimated as 75% of proof load for specified bolts.

Torque values for ¼ and 5/16 inch series are in inch-pounds. All other torque values are in foot-pounds.

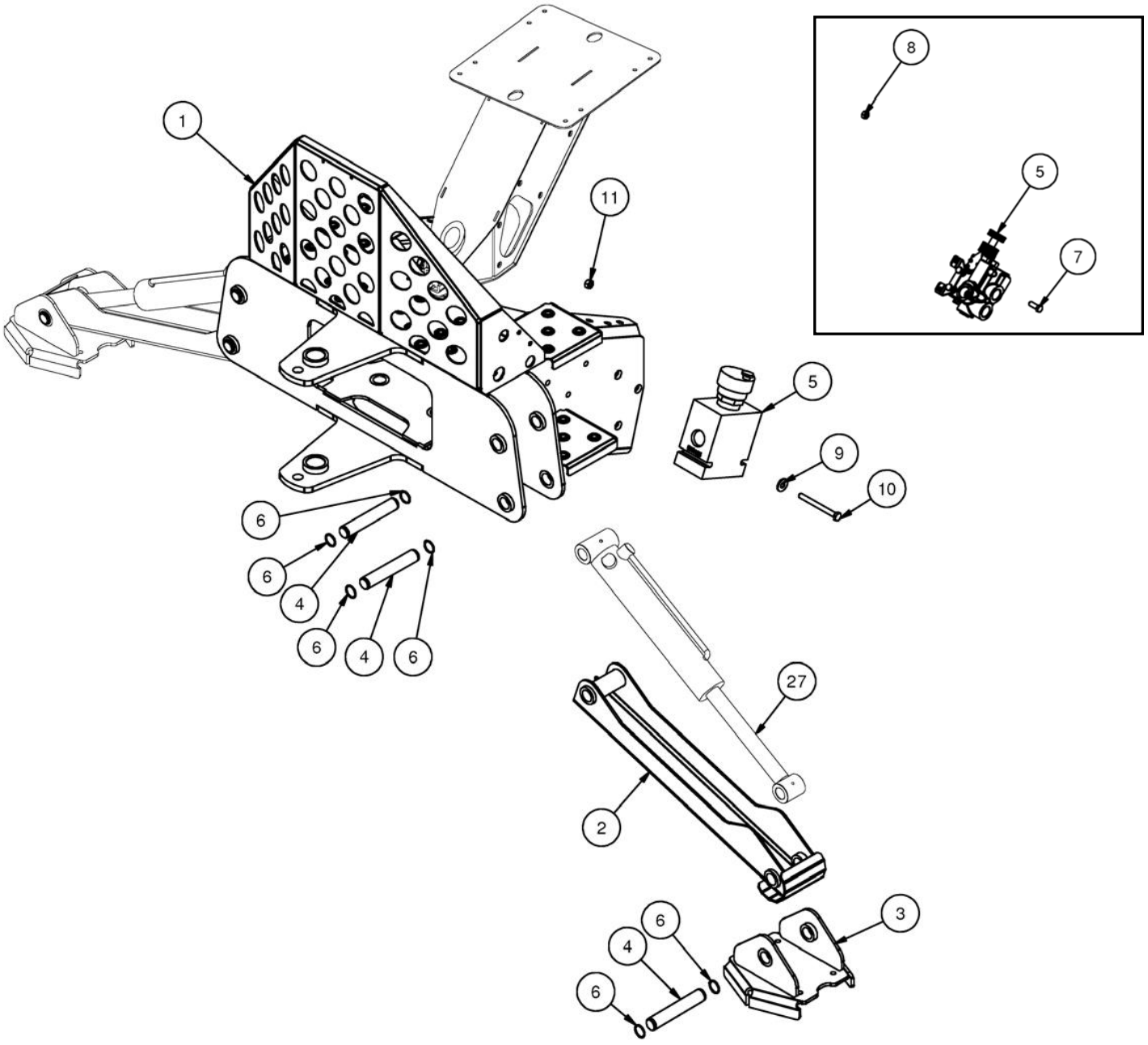
Torque values calculated from formula T = KDF

where: K=0.15 for “lubricated” conditions

K=0.20 for “dry” conditions

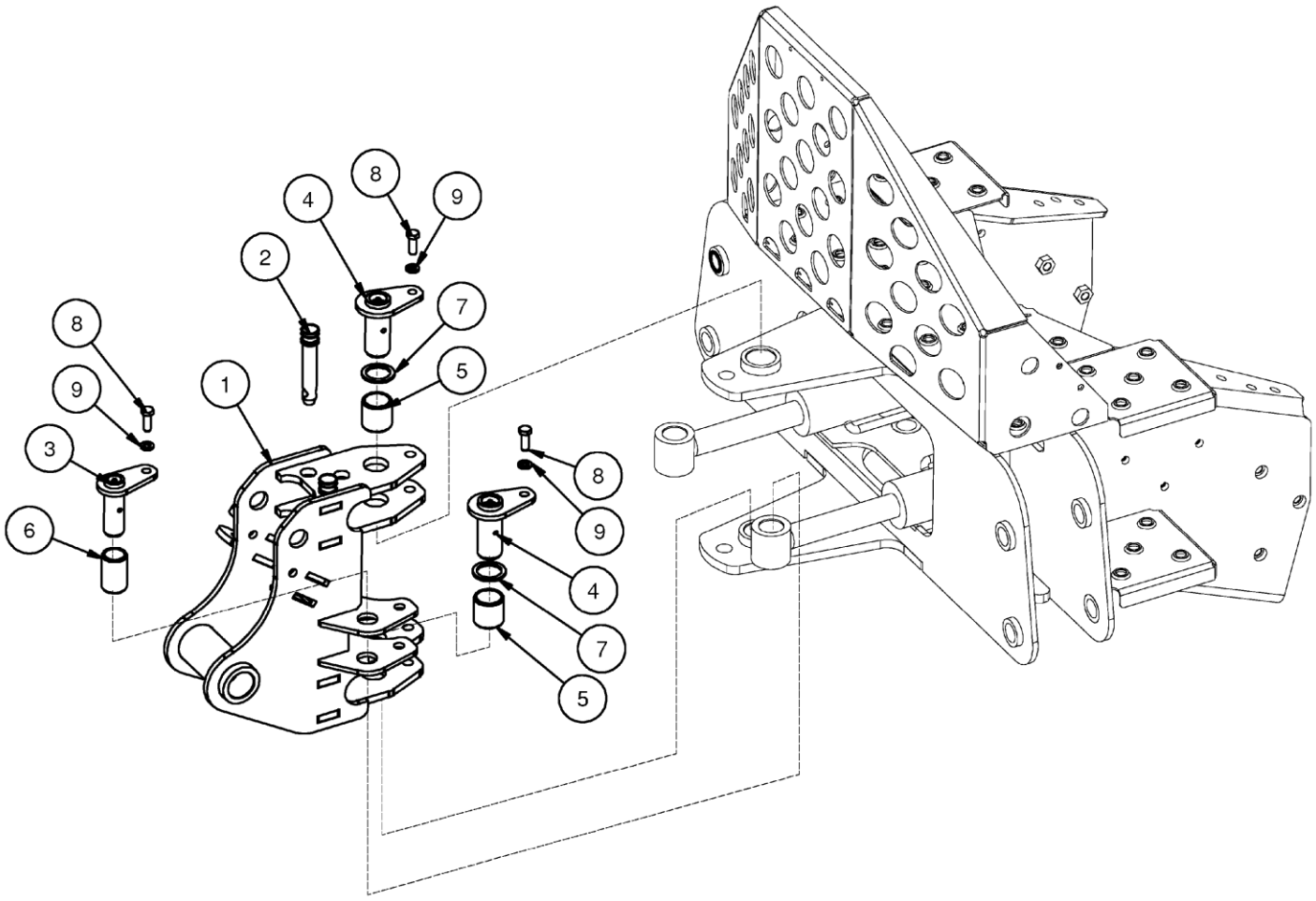
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	1	318700	FRAME MOUNT MINI BH W/A	
2	2	318706	ARM OUTRIGGER MINI BH W/A	
3	2	318707	FOOT OUTRIGGER MINI BH W/A	
4	6	318734	PIN 1 X 5.44 SNP RNG Z	
5	1	318895	VALVE ASSM ADJ FLOW CONT 0-250	REPLACED 318395
	1	318395	VALVE ASSM FLOW CONTROL ADJ	**OLD STYLE ONLY**
6	12	28279	RING SNAP EXT 1 X .042	
7	4	13105	BOLT HEX 3/8 X 1 NC GR 5	**OLD STYLE ONLY**
8	4	37212	NUT REV LOCK 3/8 NC	**OLD STYLE ONLY**
9	2	33006	WASHER FLAT	5/16”
10	2	13066	BOLT HEX	5/16 X 3-1/4 NC GR 5
11	2	37211	NUT REV LOCK	5/16 NC
27	2	318715	CYLINDER 2 X 10 B-B	OUTRIGGER CYLINDER



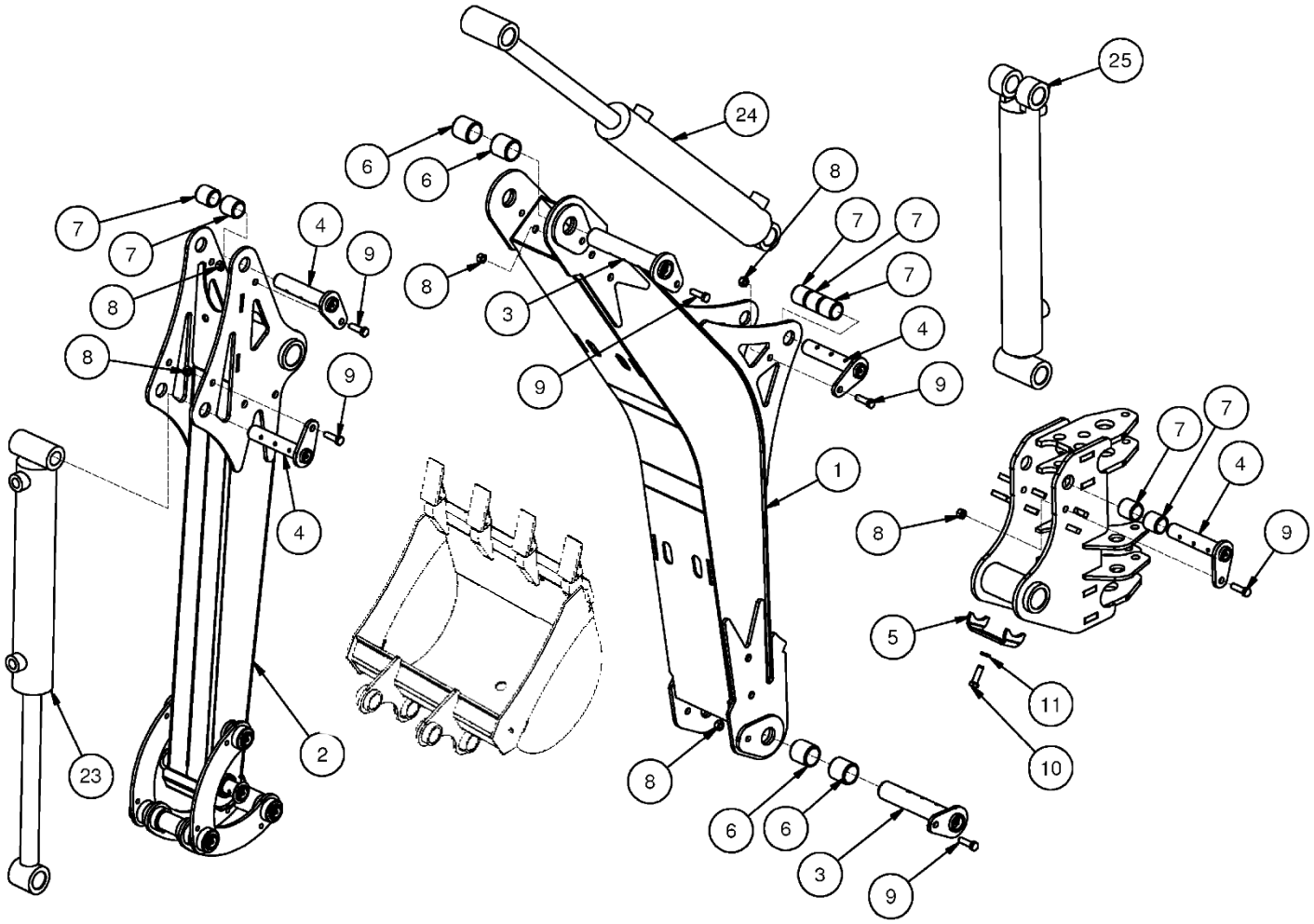
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	1	318701	FRAME BOOM SWIVEL MINI BH W/A	
2	2	104397	PIN 3-PT CAT1 TOP 3/4 X 2-3/4	
3	2	318729	PIN 1 X 2.75 GRS W/A Z	
4	2	318727	PIN 1.25 X 2.75 GRS W/A Z	
5	2	317895	BUSH SPRING 1.5 X 1.25 X 1.5	
6	2	318749	BUSH SPRING 1.25 X 1 X 2	
7	2	318724	WASHER THRUST 1.25 X .13	
8	4	13105	BOLT HEX	3/8 X 1 NC GR 5
9	4	103880	WASHER LOCK	3/8"



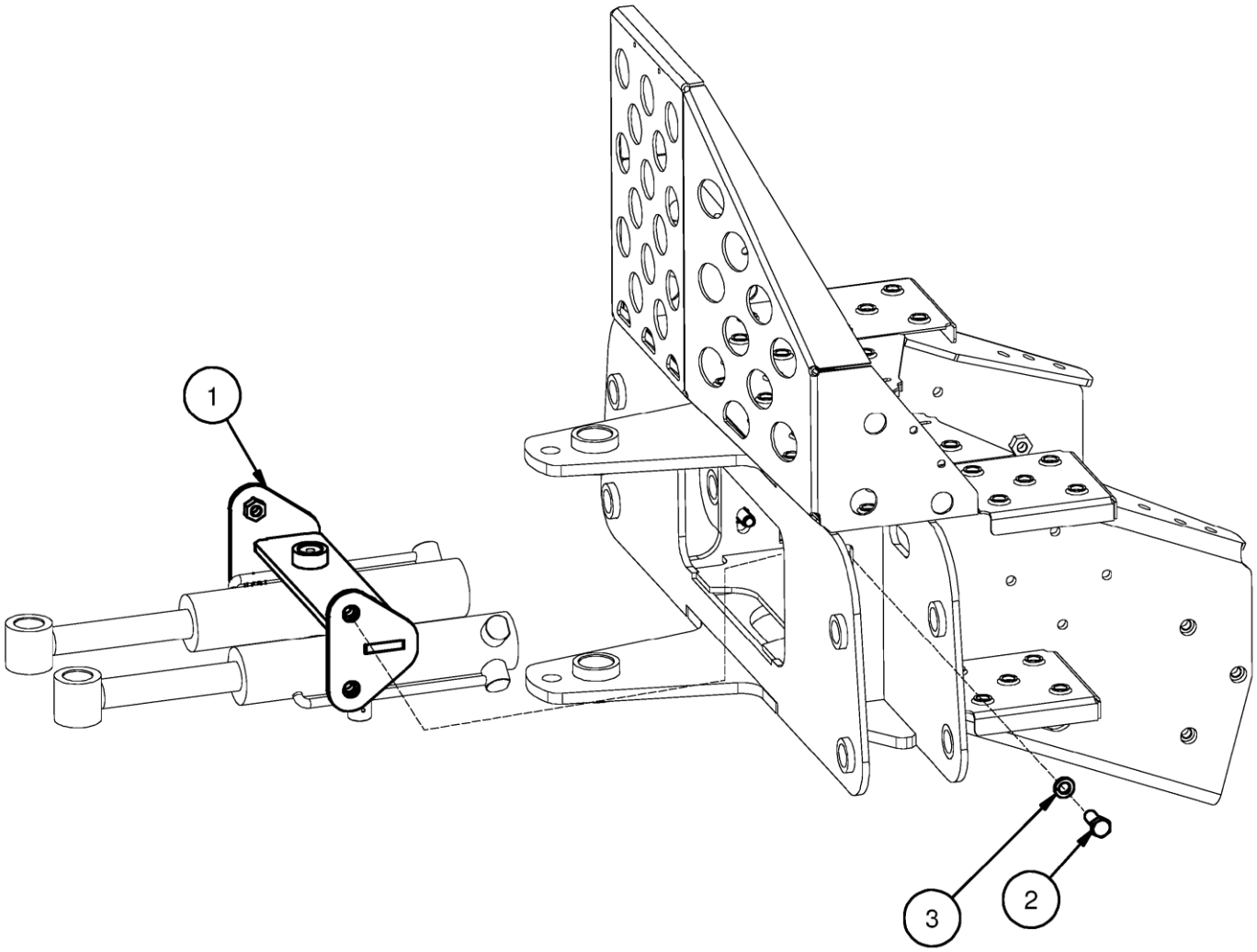
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	1	318702	FRAME BOOM MINI BH W/A	
2	1	318703	FRAME DIPPER MINI BH W/A	
3	2	318733	PIN 1.25 X 6.75 GRS W/A Z	
4	4	318731	PIN 1 X 4.88 GRS W/A Z	
5	1	318837	BRKT CLAMP HOSES MINI PNT	(UNPAINTED 318836)
6	4	317895	BUSH SPRING 1.5 X 1.25 X 1.5	
7	7	318748	BUSH SPRING 1.25 X 1 X 1.25	
8	6	37212	NUT REV LOCK	3/8 NC
9	6	13107	BOLT HEX	3/8 X 1-1/4 NC GR 5
10	1	15107	BOLT HEX	3/8 X 1-1/4 NC GR 8
11	1	103880	WASHER LOCK	3/8"



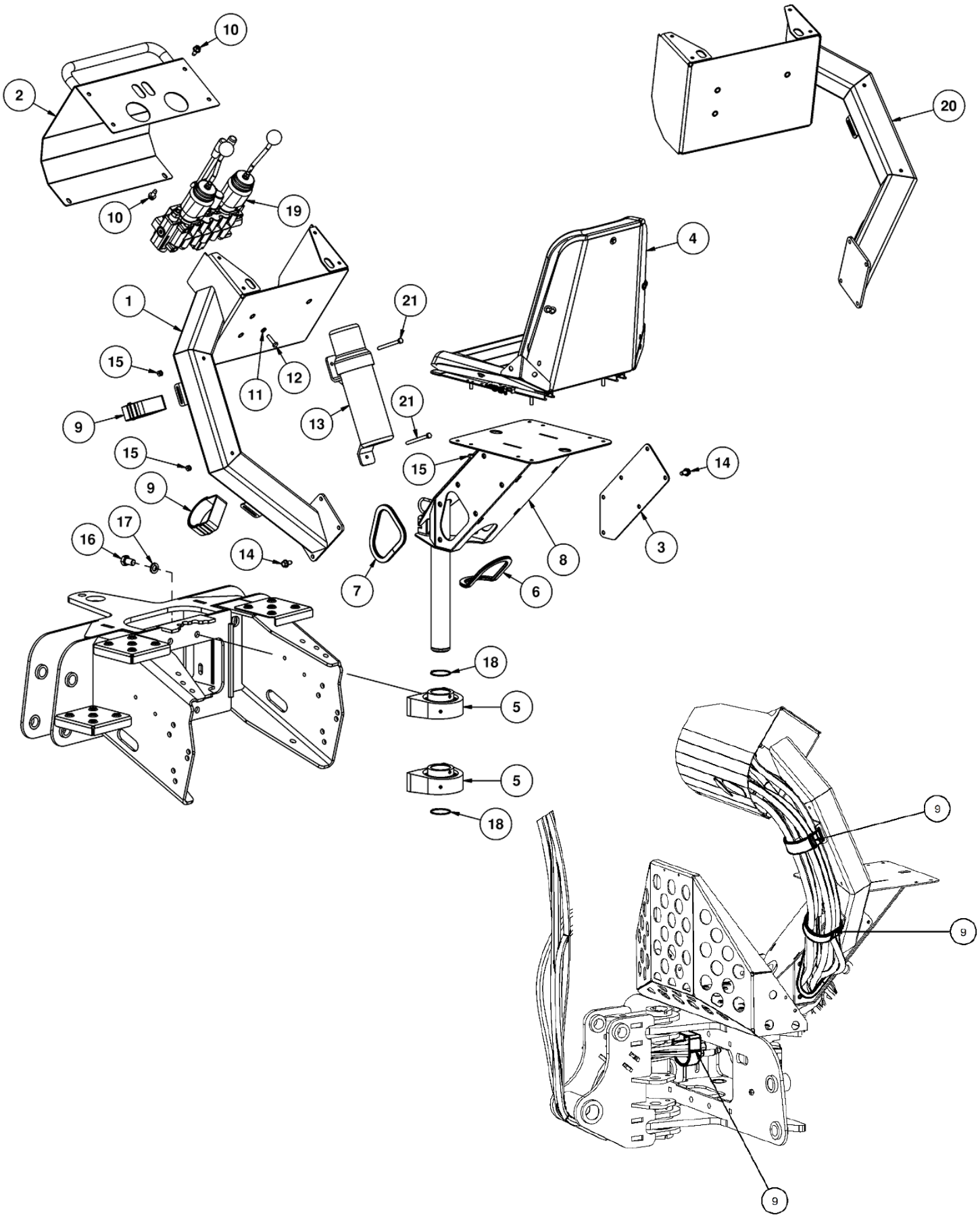
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	1	318705	BRACE CYLINDERS MINI BH W/A	
2	4	13207	BOLT HEX	1/2 X 1-1/4 NC GR 5
3	4	33626	WASHER LOCK	1/2"



PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	1	318882	SUBFRAME SUPPORT VALVE LH LG W/A	S/N 1173818+
	1	317908	SUBFRAME SUPPORT VALVE LH W/A	S/N UP TO 1173817
2	1	318884	SHIELD BH VALVE LG W/A	S/N 1173818+
	1	317915	SHIELD BH VALVE W/A	S/N UP TO 1173817
3	1	317965	PLATE COVER PAINTED	(UNPAINTED 317964)
4	1	317945	SEAT BACKHOE	
5	2	314817	BRG 2 PLW BLK	
6	1	317988	TRIM LOCK HOLE 16.88	
7	1	317987	TRIM LOCK HOLE 15.38	
8	1	317907	SUBFRAME OPERATOR SEAT W/A	
9	3	318304	VELCRO 1.5 X 3.8 ID	
10	6	32467	BOLT THREAD CUTTING FLANGED	3/8 X 3/4 NC
11	3	33620	WASHER LOCK	5/16"
12	3	13057	BOLT HEX	5/16 X 1-1/4 NC GR 5
13	1	320847	HOLDER MANUAL CANISTER	
14	10	19929	BOLT FLANGED	3/8 X 3/4 NC FLG GR 5
15	6	37211	NUT REV LOCK	5/16 NC
16	2	13305	BOLT HEX	5/8 X 1 NC GR 5
17	2	33630	WASHER LOCK	5/8"
18	2	313333	RING SNAP EXT 2 X .063	
19	1	317919	VALVE ASSM BACKHOE 6-SPOOL	
20	1	318883	SUBFRAME SUPPORT VALVE RH LG W/A	**OPT RH PKG (S/N 1173818+)**
	1	317909	SUBEFRAME SUPPORT VALVE RH W/A	**OPT RH PKG (S/N UP TO 1173817)**
21	2	13067	BOLT HEX	5/16 X 3-1/2 NC GR5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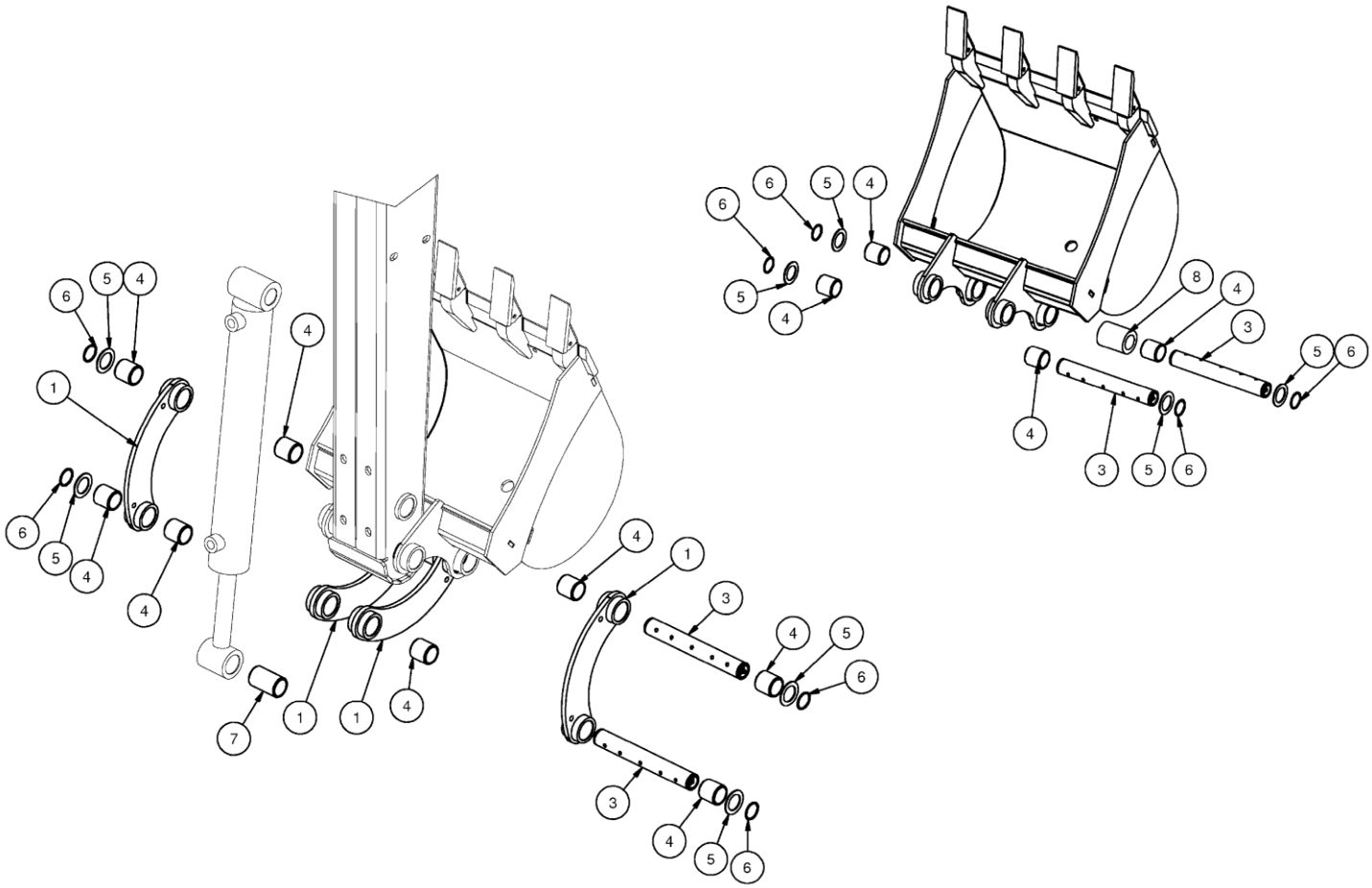
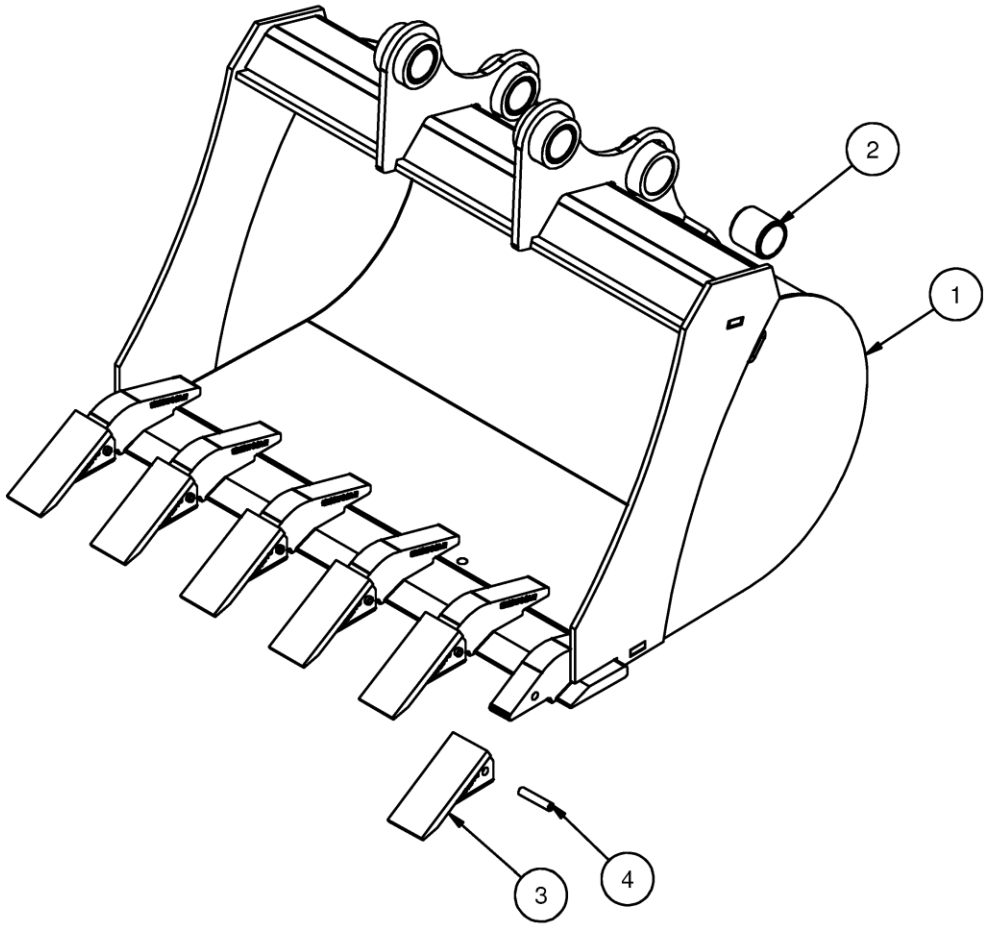
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	4	318704	LINK DIPPER MINI W/A	
3	4	318725	PIN 1 X 7.25 SNP RNG GRS	
4	12	318748	BUSH SPRING 1.25 X 1 X 1.25	
5	8	33444	WASHER MB 1 18GA NARROW	
6	8	28279	RING SNAP EXT 1 X .042	
7	1	3188749	BUSH SPRING 1.25 X 1 X 2	
8	1	318717	BUSH 1.63 X 1.02 X 2 PAINTED	(UNPAINTED P/N 318716)



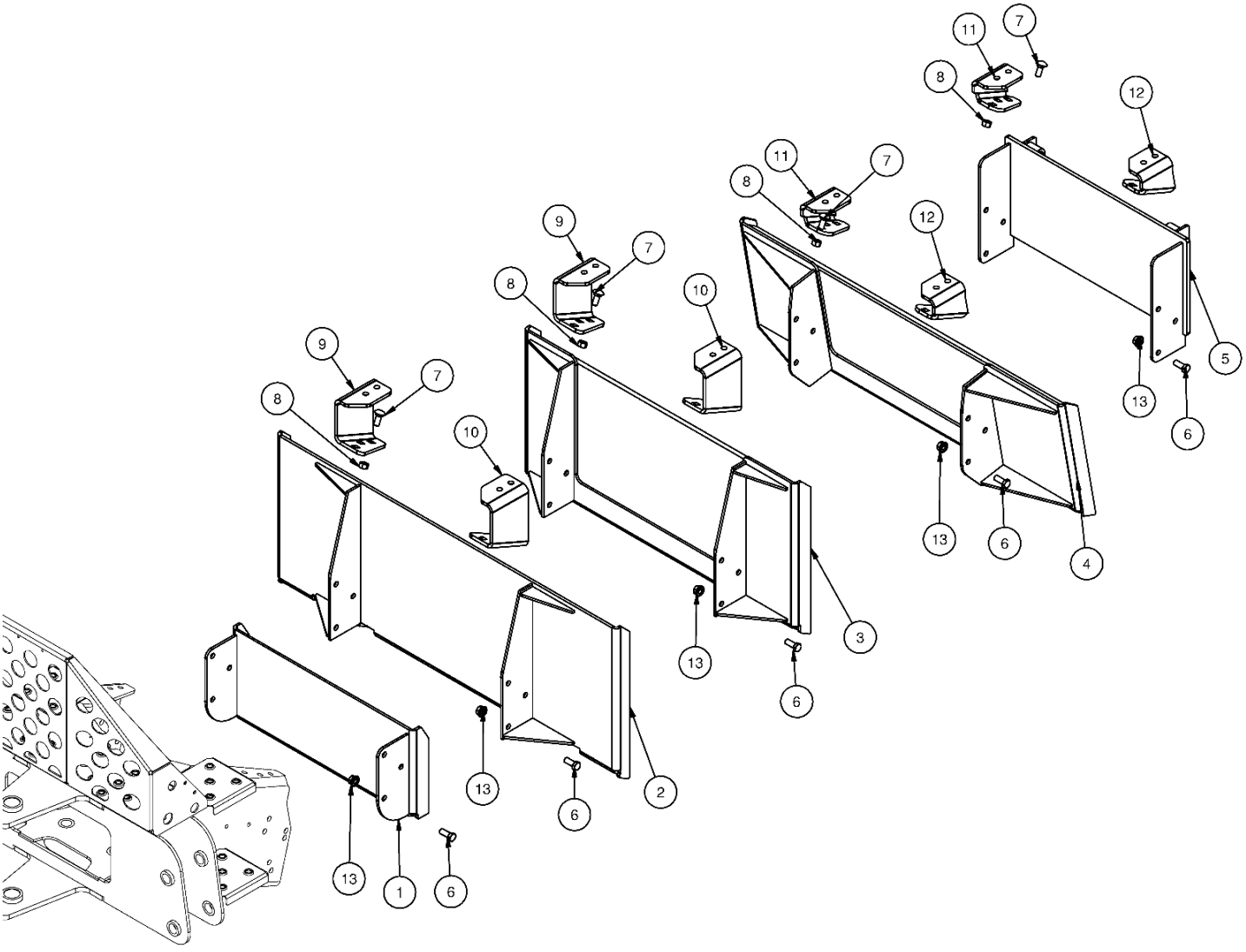
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	1	318708	BUCKET MINI BH 9 W/A	
	1	318709	BUCKET MINI BH 12 W/A	
	1	318710	BUCKET MINI BH 15 W/A	
	1	318735	BUCKET MINI BH 18 W/A	
	1	318888	BUCKET MINI BH DITCHING 18 W/A	(NO TEETH)
2	4	318748	BUSH SPRING 1.25 X 1 X 1.25	
3	3	400518	TOOTH BUCKET MINI	9" & 12" BUCKETS
	4	400518	TOOTH BUCKET MINI	15" & 18" BUCKETS
4	3	400519	PIN TOOTH MINI	9" & 12" BUCKETS
	4	400519	PIN TOOTH MINI	15" & 18" BUCKETS



PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	1	400000	MOUNT FRAME TORO MINI W/A	**TORO MINI MNT PKG 318720**
2	1	300283	MOUNT FRAME UNIV MINI W/A	**UNIV MINI MNT PKG 318820**
3	1	400002	MOUNT FRAME BC MINI W/A	**BOBCAT MNT PKG 318722**
4	1	400001	MOUNT FRAME ASV MINI W/A	**ASV MNT PKG 318721**
5	1	330622	MOUNT FRAME AVANT MINI W/A	**MINI AVANT PKG 318818**
6	6	15207	BOLT HEX	1/2 X 1-1/4 NC GR 8
7	6	200066	BOLT CARRIAGE 1/2 X 1-1/4 NC GR 5	**ASV/BC/UNV/AVANT MNT PKG**
8	6	37214	NUT REV LOCK 1/2 NC	**ASV/BC/UNV/AVANT MNT PKG**
9	1	318745	BRKT MNT BC MINI RH PNT	**UNIV & BC MNT PKG**
10	1	318747	BRKT MNT BC MINI LH PNT	**UNIV & BC MNT PKG**
11	1	318741	BRKT MNT ASV MINI RH PNT	**ASV & AVANT MNT PKG**
12	1	318743	BRKT MNT ASV MINI LH PNT	**ASV & AVANT MNT PKG**
13	6	167011	NUT FLG TOP LOCK 1/2 NC GR 8 YZ	**ASV/BC/TORO/UNIV ONLY**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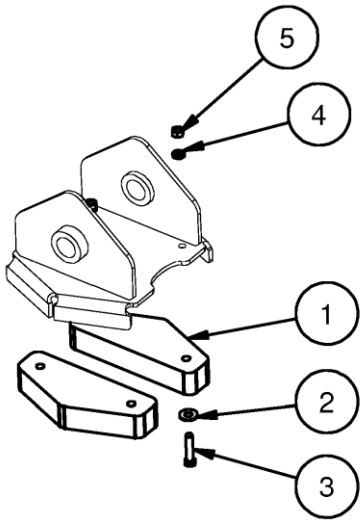
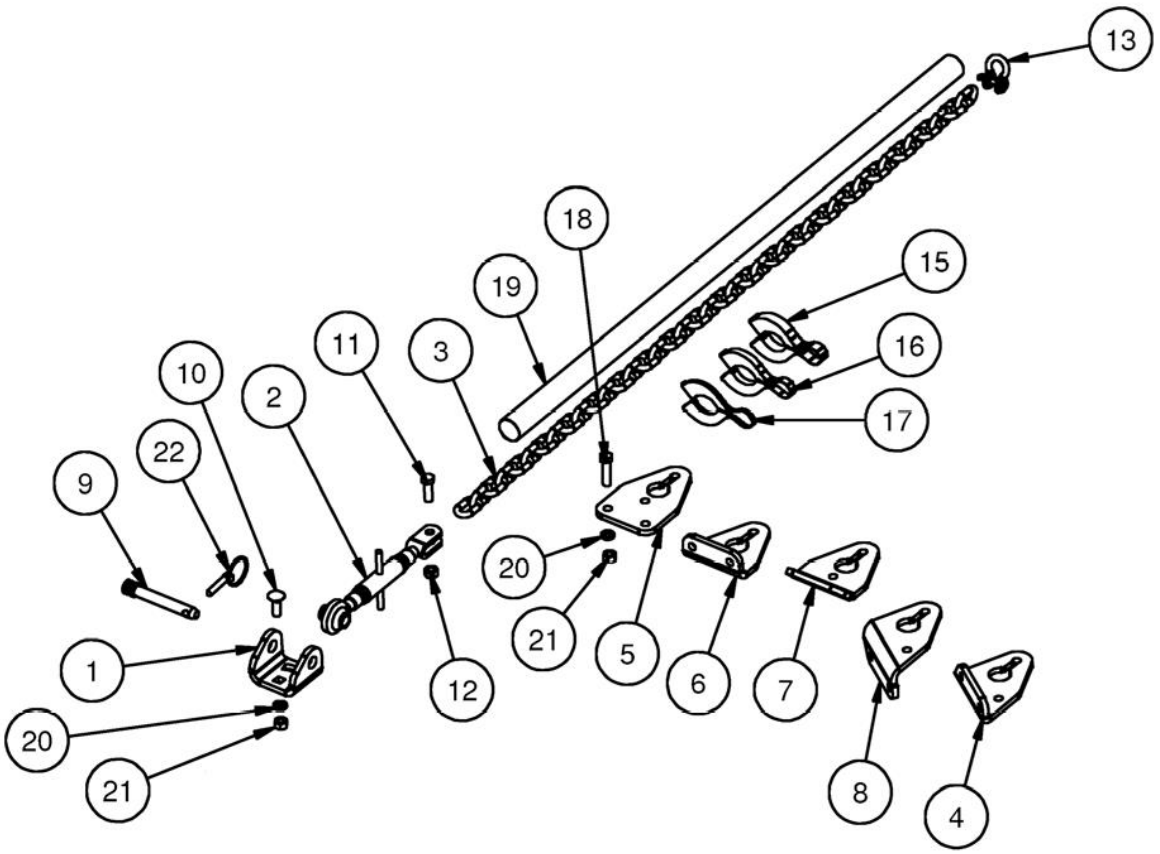
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	4	317986	RUBBER PAD OUTRIGGER	**OPT STREET PAD PKG**
2	8	33008	WASHER FLAT 3/8"	**OPT STREET PAD PKG**
3	8	13110	BOLT HEX 3/8 X 1-3/4 NC GR 5	**OPT STREET PAD PKG**
4	8	103880	WASHER LOCK 3/8	**OPT STREET PAD PKG**
5	8	36306	NUT FULL HEX 3/8 NC GR 5	**OPT STREET PAD PKG**



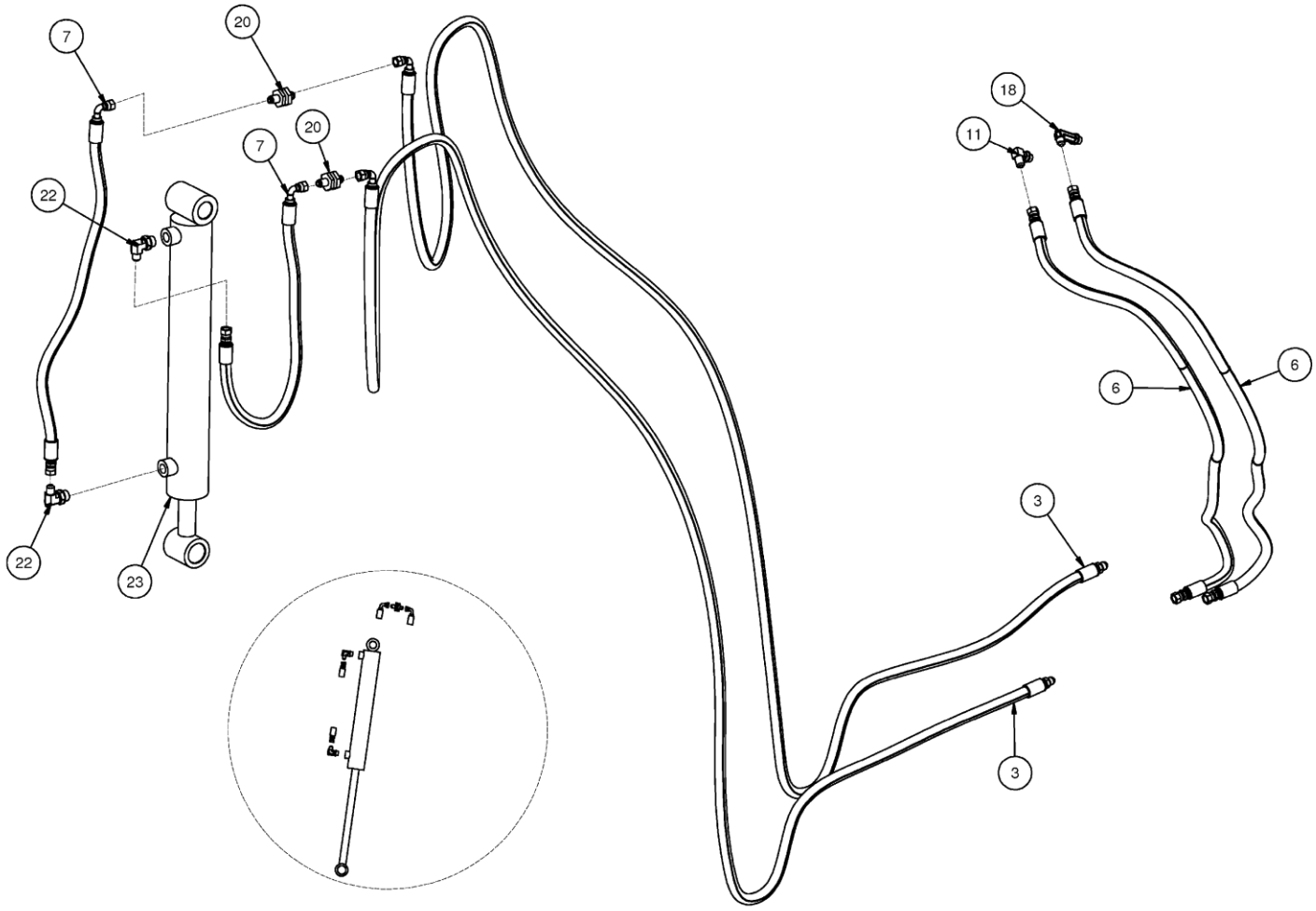
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	2	318326	BRKT MNT TB PNT (UNPNT 318325)	**OPT TIE BACK UNV PKG**
2	2	318718	LINK ADJ 10.32-14.32 ZINC	**OPT TIE BACK UNV PKG**
3	2	318345	CHAIN LINK 3/8 X 48 LINKS	**OPT TIE BACK UNV PKG**
4	1	318355	BRKT TIE BACK LH PNT (UNPNT 318354)	**OPT TIE BACK UNV PKG**
5	2	318349	PLATE TIE BACK PNT (UNPNT 318348)	**OPT TIE BACK UNV PKG**
6	2	318351	BRKT TIE BACK 90 PNT (UNPNT 318350)	**OPT TIE BACK UNV PKG**
7	2	318353	BRKT TIE BACK 45 PNT (UNPNT 318352)	**OPT TIE BACK UNV PKG**
8	1	318357	BRKT TIE BACK RH PNT (UNPNT 318356)	**OPT TIE BACK UNV PKG**
9	2	300460	PIN 3-PT CAT1 TOP 3/4 X 3-7/8	**OPT TIE BACK UNV PKG**
10	4	200012	BOLT CARR 1/2 X 1-1/2 NC GR 5	**OPT TIE BACK UNV PKG**
11	2	15209	BOLT 1/2 X 1-1/2 NC GR 8 YZ	**OPT TIE BACK UNV PKG**
12	2	37214	NUT REV LOCK 1/2 NC	**OPT TIE BACK UNV PKG**
13	2	400463	SHACKLE CLEVIS PIN 3/8"	**OPT TIE BACK UNV PKG**
15	2	318398	COLLAR STOP CYL - 3/4"	**OPT TIE BACK UNV PKG**
16	2	318397	COLLAR STOP CYL - 1/2"	**OPT TIE BACK UNV PKG**
17	2	318396	COLLAR STOP CYL - 1/4"	**OPT TIE BACK UNV PKG**
18	6	15211	BOLT HEX 1/2 X 2 NC GR8 YZ	**OPT TIE BACK UNV PKG**
19	2	318346	SLEEVING 1.57 OD X 48	**OPT TIE BACK UNV PKG**
20	10	33626	WASHER LOCK 1/2	**OPT TIE BACK UNV PKG**
21	10	36110	NUT HEX FULL 1/2 NC	**OPT TIE BACK UNV PKG**
22	2	104432	PIN LYNCH 7/16 X 1-3/4	**OPT TIE BACK UNV PKG**



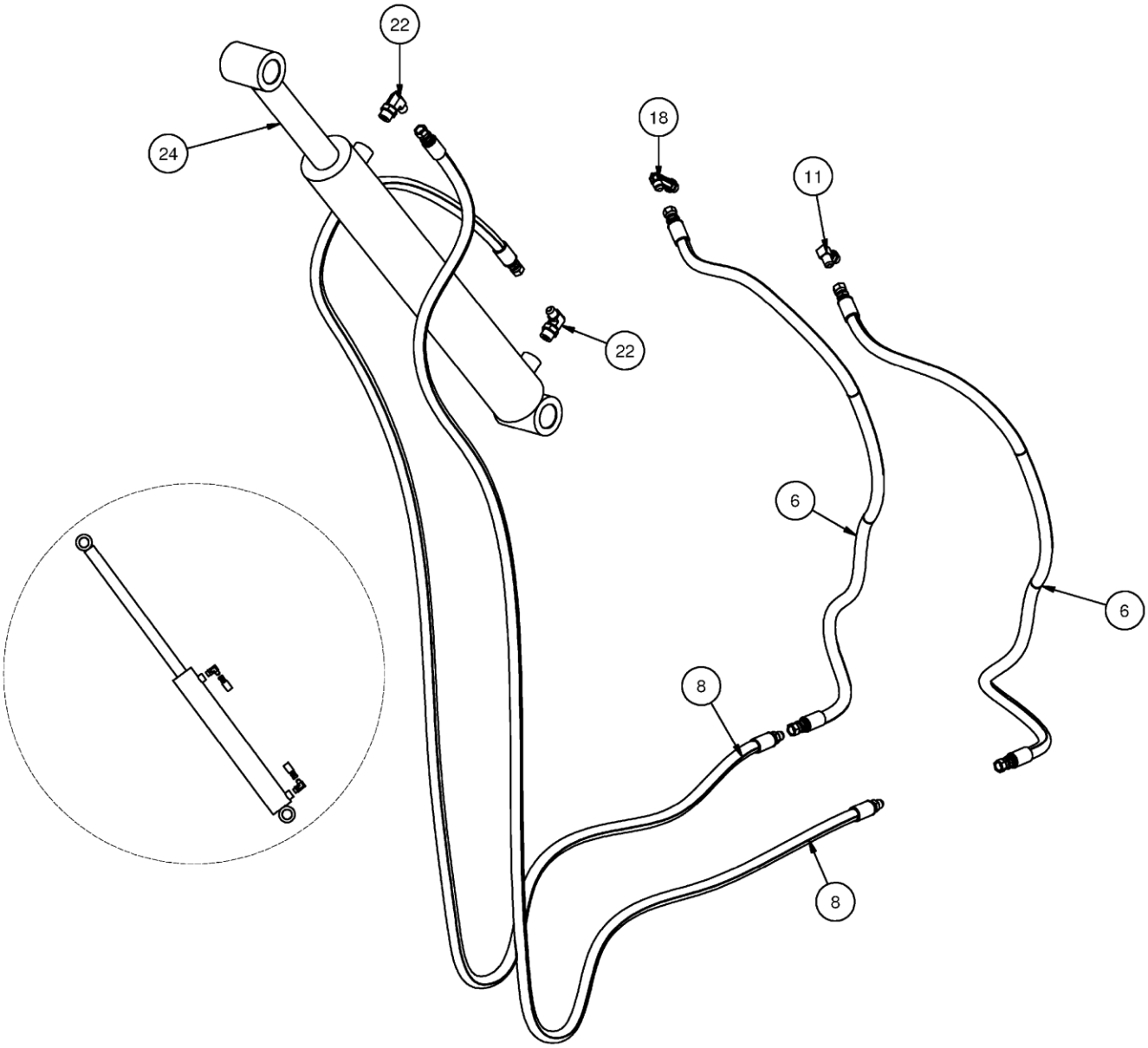
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
3	2	318812	HOSE 1/4 X 120 4MJ-4FJX90	SWING TO BUCKET
6	2	318815	HOSE 1/4 X 60 4FJX-4FJX	VALVE TO SWING
7	2	318816	HOSE 1/4 X 22 4FJX-4FJX90	BOOM/DIP/SWING/BUCKET
11	1	202044	ADPT ELB 6MB-4MJ-90	
18	1	318806	ADPT ELB 6MB-4MJ-90LL	
20	2	318807	ADPT STR 4MJ-4MJ BULKHEAD	
22	2	320353	ADPT ELB 8MB-4MJ-90	
23	1	318711	CYLINDER 2.25 X 13 B-B	BUCKET CYLINDER



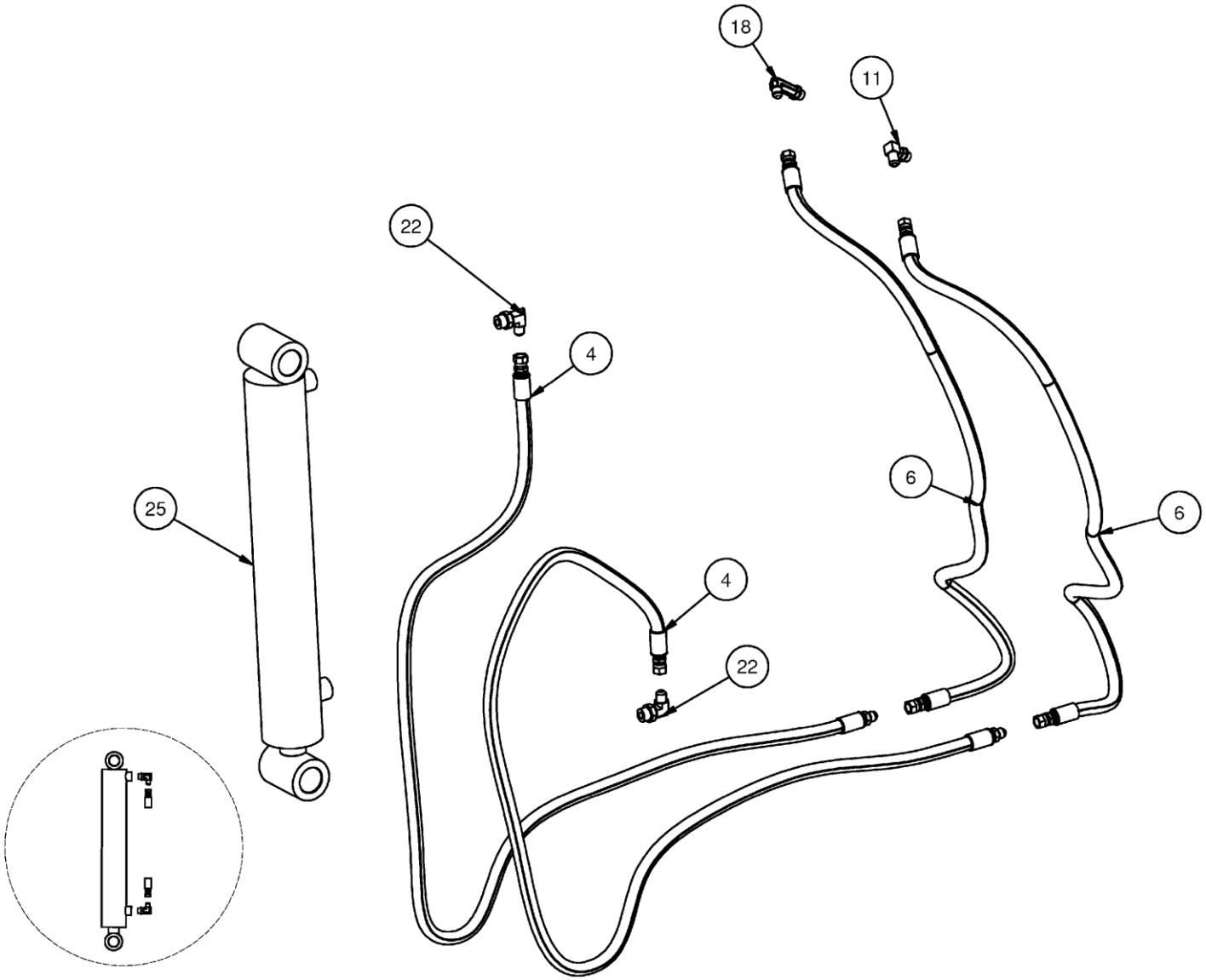
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
6	2	318315	HOSE 1/4 X 60 4FJX-4FJX	VALVE TO SWING
8	2	318854	HOSE 1/4 X 88 4MJ-4FJX	SWING TO DIPPER
11	1	202044	ADPT ELB 6MB-4MJ-90	
18	1	318806	ADPT ELB 6MB-4MJ-90LL	
22	2	320353	ADPT ELB 8MB-4MJ-90	
24	1	318712	CYLINDER 2.25 X 15 B-B1	DIPPER CYLINDER



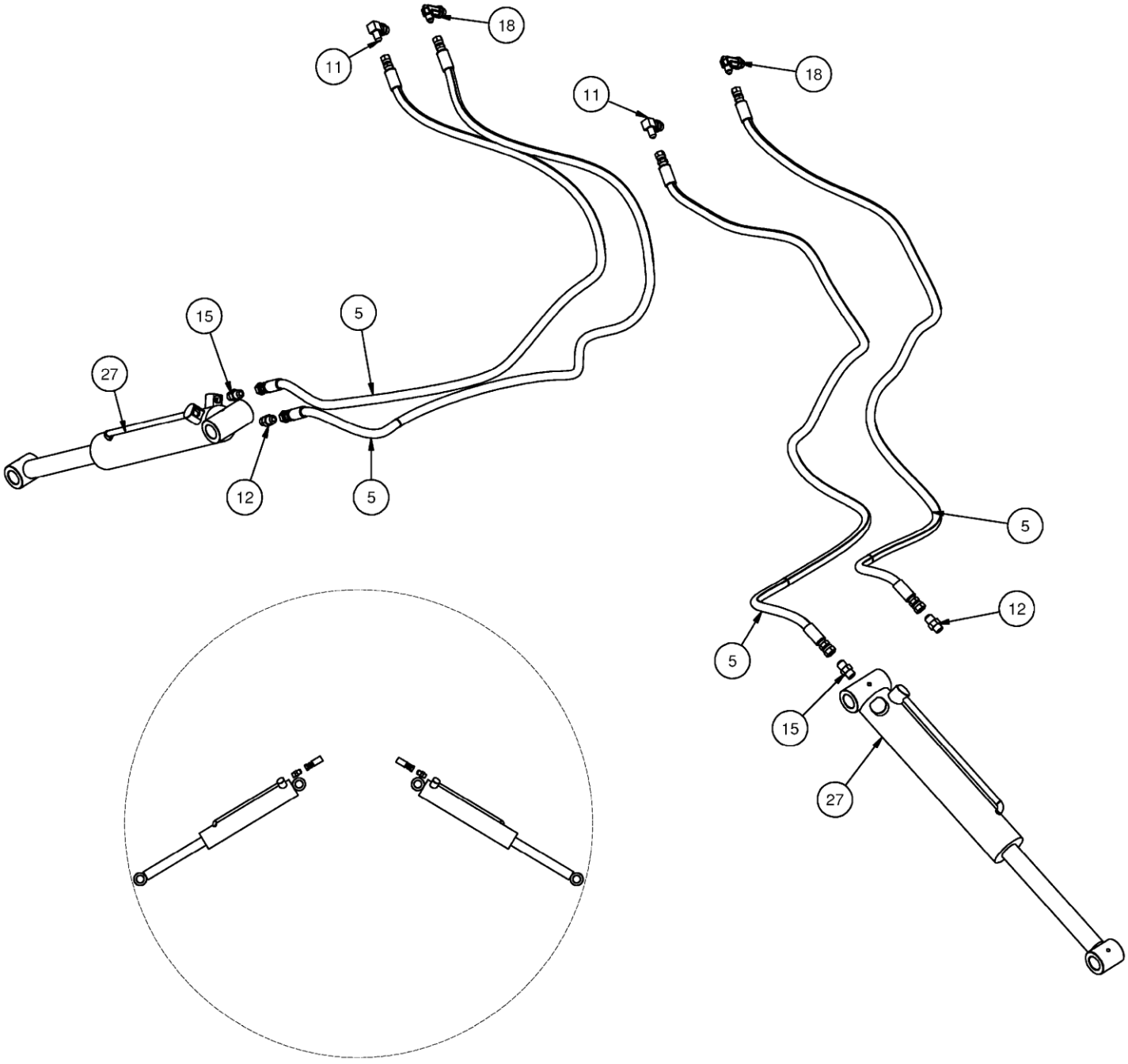
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
4	2	318813	HOSE 1/4 X 66 4MJ-4FJX	SWING TO BOOM
6	2	318815	HOSE 1/4 X 60 4FJX-4FJX	VALVE TO SWING
11	1	202044	ADPT ELB 6MB-4MJ-90	
18	1	318806	ADPT ELB 6MB-4MJ-90LL	
22	2	320353	ADPT ELB 8MB-4MJ-90	
25	1	318713	CYLINDER 2.25 X 15 B-B2	BOOM CYLINDER



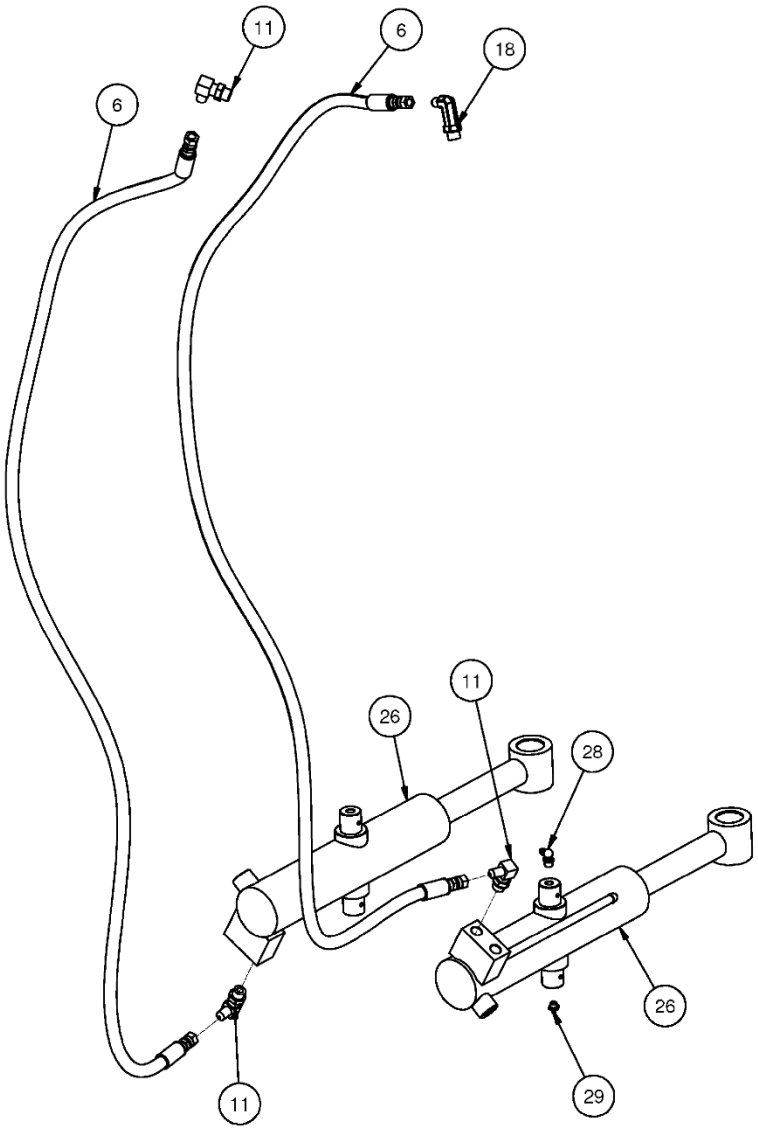
PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
5	4	318814	HOSE 1/4 X 80 4FJX-4FJX90	VALVE TO OUTRIGGERS
11	2	202044	ADPT EB 6MB-4MJ90	
12	2	311673	ADPT STR 6MB-6MJ	
15	2	300657	ADPT STR 6MB-6MJ ORFICE .06	
18	2	318806	ADPT ELB 6MB-4MJ90LL	
27	2	318715	CYLINDER 2 X 10 B-B	OUTRIGGER CYLINDER

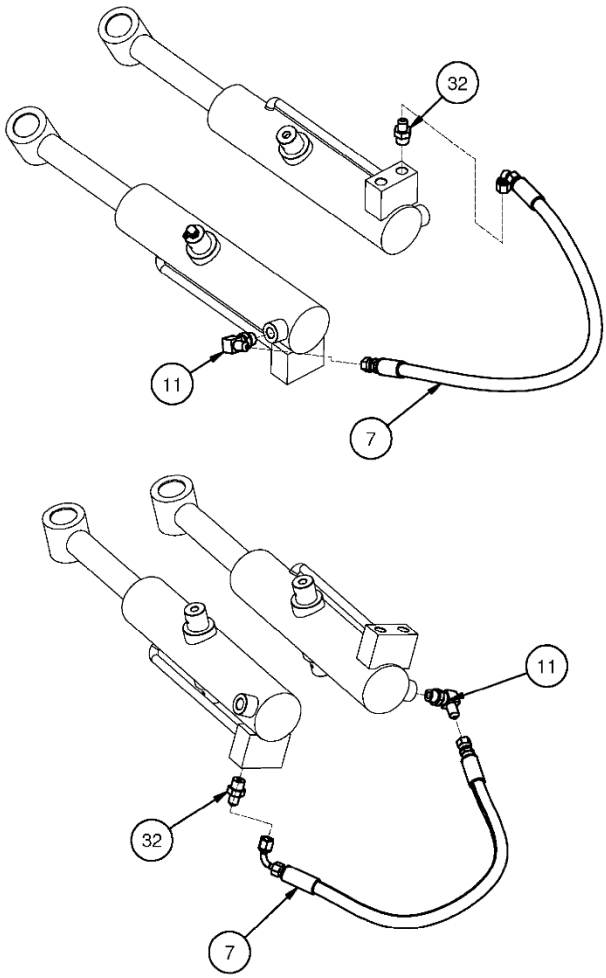


PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
6	2	318815	HOSE 1/4 X 60 4FJX-4FJX	VALVE TO SWING
7	2	318816	HOSE 1/4 X 22 4FJX-4FJX90	BOOM/DIP/SWING/BUCKET
11	5	202044	ADPT ELB 6MB-4MJ-90	
18	1	318806	ADPT ELB 6MB-4MJ-90 LL	
26	2	318714	CYLINDER 2 X 8 B-T	SWING CYLINDER
28	2	60104	ZERK GREASE 1/8 NPT 90	
29	2	60102	ZERK GREASE 1/8 NPT STR	
32	2	201521	ADPT STR 6MB-4MJ	



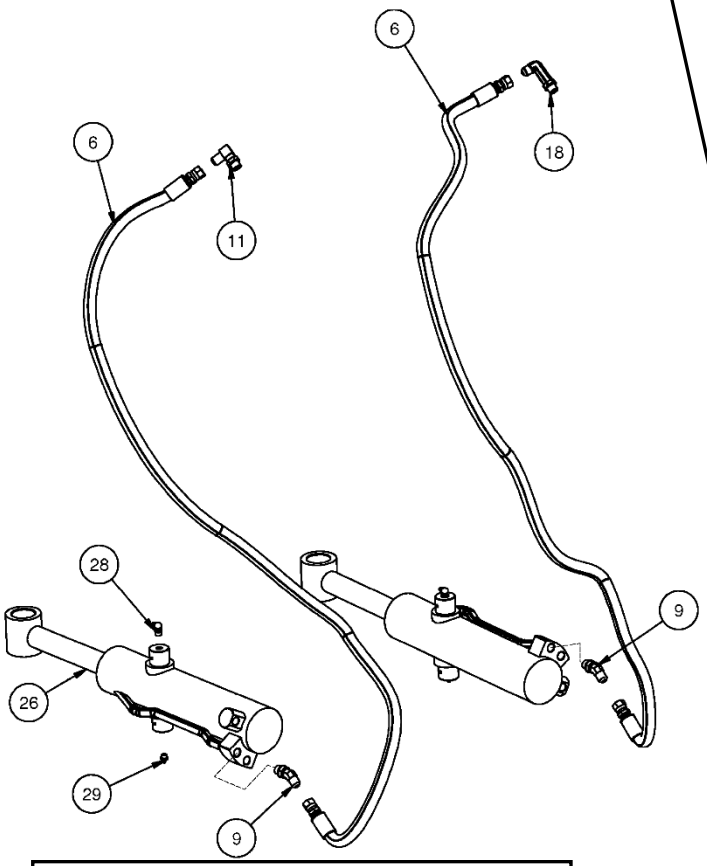
NEW STYLE WITH PORTS PERPENDICULAR TO CYL AXIS

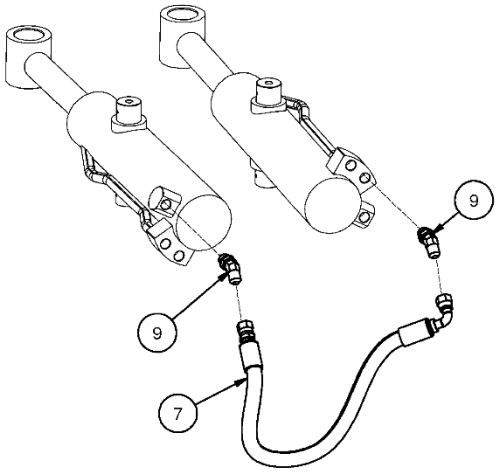


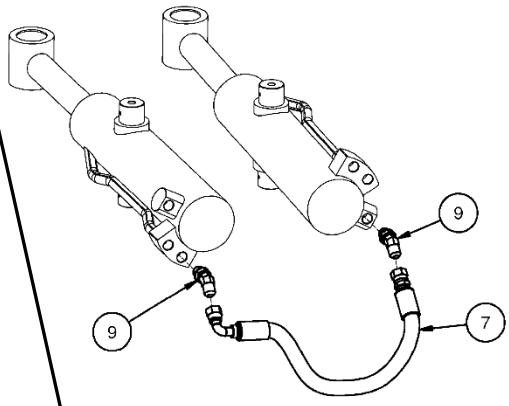
PARTS INFORMATION

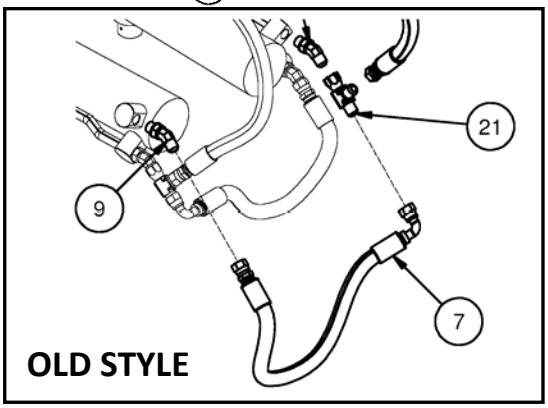
ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
6	2	318815	HOSE 1/4 X 60 4FJX-4FJX	VALVE TO SWING
7	2	318816	HOSE 1/4 X 22 4FJX-4FJX90	BOOM/DIP/SWING/BUCKET
9	6	320213	ADPT ELB 6MB-4MJ-45	**OBSOLETE OLD STYLE ONLY**
11	1	202044	ADPT ELB 6MB-4MJ-90	
18	1	318806	ADPT ELB 6MB-4MJ-90 LL	
21	2	318817	ADPT TEE 4MJ-4FJX-4MJ	**OBSOLETE**
26	2	318714	CYLINDER 2 X 8 B-T	**SWING CYL (OLD STYLE SHOWN)**
28	2	60104	ZERK GREASE 1/8 NPT 90	
29	2	60102	ZERK GREASE 1/8 NPT STR	

OLD STYLE WITH PORTS IN-LINE WITH CYL AXIS



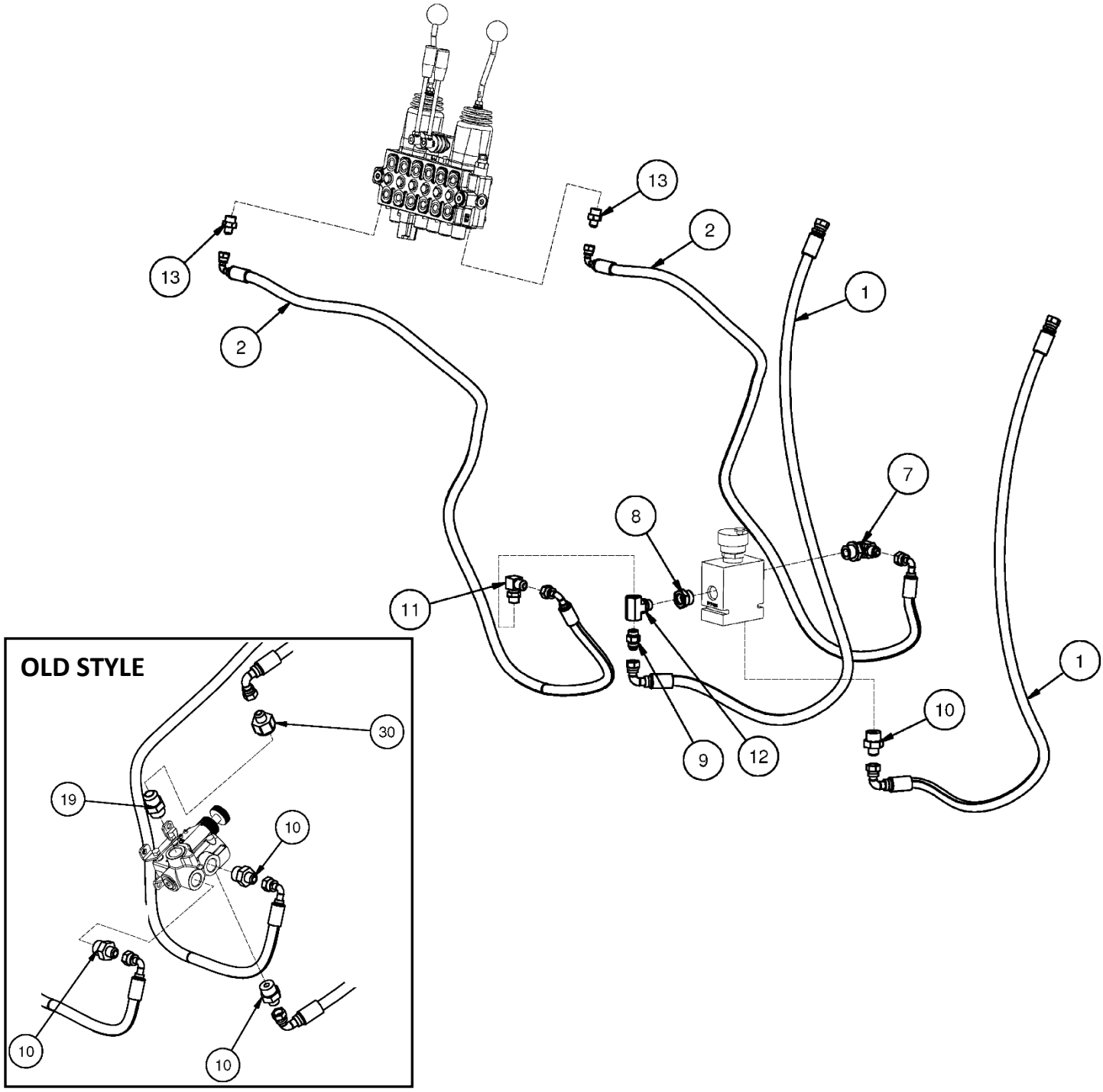






PARTS INFORMATION

ITEM	QTY	PART NO.	DESCRIPTION	STOCK NO.
1	2	318808	HOSE 3/8 X 60 8FJX-8FJX90	LEAD/RETURN
2	2	318811	HOSE 3/8 X 90 6FJX90-8FJX90	VALVE LEAD/RETURN
8	1	318897	ADPT BUSH 12MB-8FB	
9	1	318896	ADPT STR 8MB-8MJ CHECK	
10	1	201524	ADPT STR 12MB-8MJ	
11	1	202037	ADPT ELB 8MB-8MJ-90	
12	1	318898	ADPT TEE 8FB-8FB-8MB	
13	2	201925	ADPT STR 8MB-6MJ	
19	1	313141	ADPT STR 12MB-12MJ CHECK	**OLD STYLE ONLY**
30	1	300708	ADPT STR 12FJ-8MJ	**OLD STYLE ONLY**

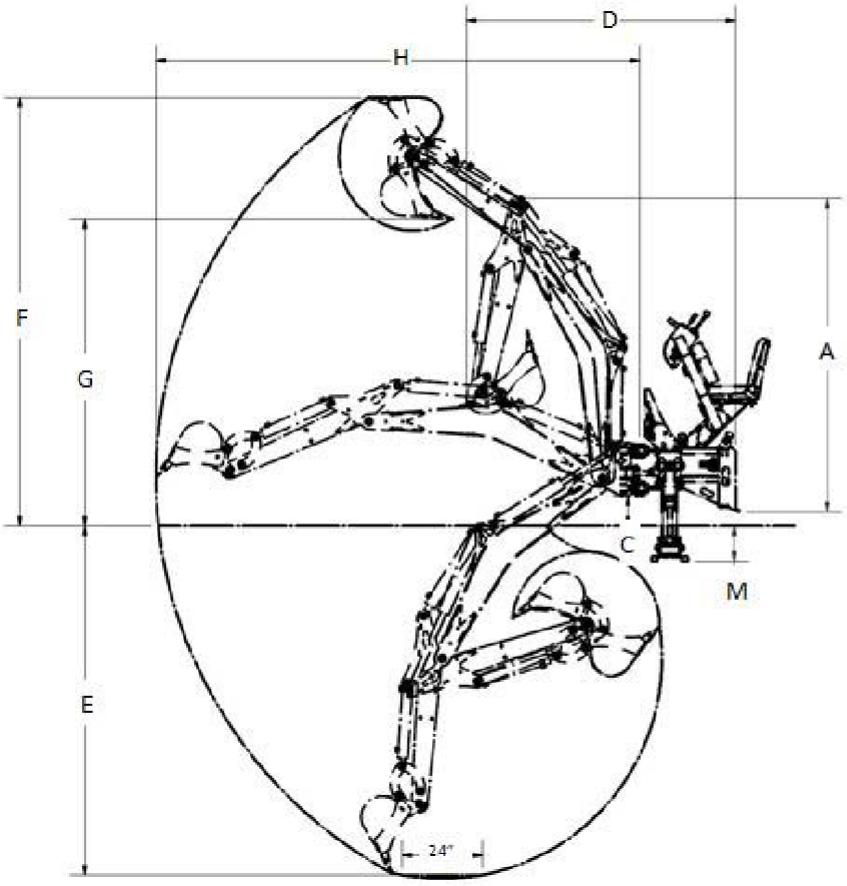


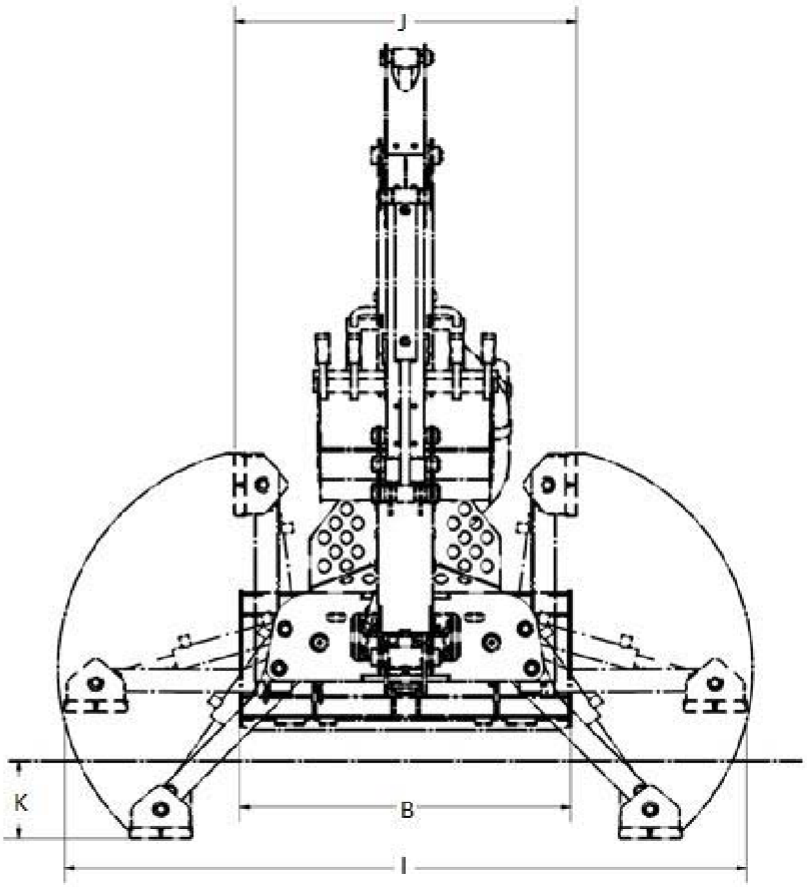
GENERAL SPECIFICATIONS

Model		**BH 780**	**BH 1080**
Transport Height	A	68”	93”
Transport Width	B	36”	45”
Ground Clearance	C	7.5”	9.5”
Transport Length	D	64”	81”
Digging Depth (2 ft Flat Bottom)	E	78”	108”
Overall Operating Height	F	91”	128”
Loading Height (Bucket at 60 Degrees)	G	61”	89”
Reach from Swing Post	H	104”	145”
Stabilizer Width (Spread)	I	81”	90”
Stabilizer Width (Transport)	J	36”	41”
Stabilizer Below Grade	K	10”	12”
Bucket Rotation		180°	
Swing Arc		180°	
Operating Weight		675 lbs.	1200 lbs.
Operating Pressure		2250 psi	
Dipper Stick Digging Force SAE*		1890 lbs.	3560 lbs.
Bucket Digging Force SAE*		3450 lbs.	4055 lbs.
Boom Lift Capacity		515 lbs.	795 lbs.
Hydraulic Volume Reg.		5-7 GPM	
Main Boom & Dipper Cyl Dia.		2.25”	3.0”
All Other Cyl Dia.		2.0”	2.5”
Bucket Sizes Available		9, 12, 15, 18	9, 12, 15, 18, 24, 24D

All dimensions are in INCHES.

GENERAL SPECIFICATIONS





NOTES

NOTES

LIMITED WARRANTY

Quick Attach Attachments LLC warrants each new machine manufactured by us to be free from defects in material and workmanship for a period of twenty-four (24) months from date of delivery to the original purchaser.

Our obligation under this warranty is to replace free of charge, at our factory or Direct Outlet locations, any part proven defective within the stated warranty time limit.

All parts must be returned freight prepaid and adequately packaged to prevent damage in transit.

This warranty does not cover:

1. New products which have been operated in excess of rated capacities or negligence
2. Misuse, abuse, accidents or damage due to improperly routed hoses
3. Machines which have been altered, modified or repaired in any manner not authorized by our company
4. Previously owned equipment
5. Any ground engaging tools in which natural wear is involved, i.e. tooth tips, cutting teeth, etc
6. Normal maintenance
7. Fork tines
8. Hydraulic motors that have been disassembled in any manner

In no event will the Sales Representative, Direct Outlet, Quick Attach Attachments LLC, or any other company affiliated with it or them be liable for incidental or consequential damages or injuries, including but not limited to the loss of profit, rental or substitute equipment or other commercial loss. Purchaser's sole and exclusive remedy being as provided here in above.

Quick Attach Attachments LLC must receive immediate notification of defect and no allowance will be made for repairs without our consent or approval.

This warranty is in lieu of all other warranties, express or implied by law or otherwise, and there is no warranty of merchantability or fitness purpose.

No agent, employee, or representative of Quick Attach Attachments LLC has any authority to bind Quick Attach Attachments LLC to any warranty except as specifically set forth herein. Any of these limitations excluded by local law shall be deemed deleted from this warranty; all other terms apply.

This warranty may not be enlarged or modified in any manner except in writing signed by an executive officer of Quick Attach Attachments LLC to improve its products whenever it is possible and practical to do so. Quick Attach Attachments LLC reserves the right to make changes and or add improvements at any time without incurring any obligation to make such changes or add such improvements to products previously sold.

Quick Attach Attachments LLC
P.O. Box 128 Alexandria, MN 56308
Phone (320) 759-1551 Fax (320) 759-1590

MN. USA

QUICKATTACH

AMERICAN INNOVATION

SINCE 1948

P/N 318879
Quick Attach Attachments LLC

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