
BURKE ROAD TAMER 2000 PLOW

MAINTENANCE AND PARTS MANUAL



REVISION 1-A
July 2013

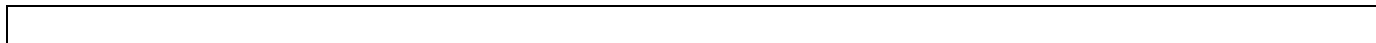


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SAFETY NOTES AND WARNINGS

NOTE: Appropriate maintenance methods and operation procedures are required for safe, reliable operation of the unit as well as for the safety of operators and servicing technicians.

This manual provides general and specific directions for the operation of the Road Tamer 2000 Plow.

AVOID ACCIDENTS

Most accidents, whether they occur in industry, on the farm, at home, or on the highway, are caused by the failure of some individual to follow simple and fundamental safety rules or precautions. For this reason, recognizing the real cause and doing something about it before the accident occurs can prevent most accidents.

Regardless of the care used in the design and construction of any type of equipment, there are many conditions that cannot be completely safe-guarded against without interfering with reasonable accessibility and efficient operation.

A careful operator is the best insurance against an accident. The complete observance of one simple rule would prevent many thousand serious injuries each year. That rule is:

NEVER ATTEMPT TO CLEAN, OIL, OR ADJUST A MACHINE WHILE IT IS IN MOTION.

NATIONAL SAFETY COUNCIL

We cannot anticipate every possible circumstance that might involve a potential hazard. Anyone deviating from the instructions provided must first establish that personal safety, system, and/or vehicle integrity is not compromised. Throughout this manual, Dangers, Warnings, Cautions, and Notes provide specific guidelines for the safe and proper operation and service of the equipment.

- **DANGER**: Indicates an imminently hazardous situation, which, if not avoided, **WILL** result in death or serious injury.
- **WARNING**: Indicates a potentially hazardous situation, which, if not avoided, **COULD** result death or serious injury.
- **CAUTION**: Indicates a potentially hazardous situation, which, if not avoided, **MAY** result in minor or moderate injury and property damage. It may also be used to alert against unsafe practices.
- **NOTE**: Highlights information that is beneficial while following a procedure or to avoid an unwanted situation.

This information is furnished to prevent damage to equipment and/or injury to personnel. Be fully aware of the dangers inherent to heavy equipment operation and snow removal.

ILLUSTRATIONS

For pictorial clarity, some illustrations in this manual may show shields, guards, or plates open or removed. Under no circumstance should this equipment be operated without these devices securely fastened in place.

PERSONAL SAFETY

- Keep clothing and limbs away from moving parts.

OPERATION SAFETY

WARNING

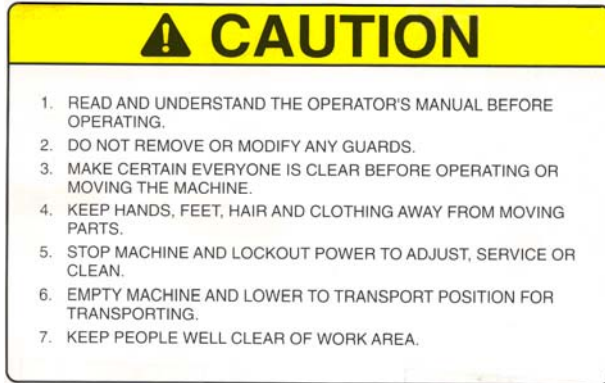
Equipment operated improperly or by untrained personnel can be dangerous. Familiarize yourself with the location and proper use of all controls. Inexperienced operators should receive instruction from someone familiar with the equipment before being allowed to operate the machine.

- Safety is dependent upon the awareness, concern, and prudence of those who operate or service the equipment. Never allow minors to operate any equipment.
- Read and understand all operating manuals pertaining to operation. It is your responsibility to read this manual and all publications associated with this equipment (engine manual, accessories, and attachments). If the operator cannot read English, it is the owner's responsibility to explain the material contained in this manual to them.
- Learn the proper use of the machine, the location and purpose of all the controls and gauges before you operate the equipment. Working with unfamiliar equipment can lead to accidents. Familiarize yourself with the driving and handling of the machine before actually plowing snow. Practice plowing in a non-congested area before on-the-job operations.
- Never allow anyone to operate or service the machine or its attachments without proper training and instructions; or while under the influence of alcohol or drugs. Never work on the machine with components running.
- Wear all the necessary protective clothing and personal safety devices to protect your head, eyes, ears, hands, and feet. Operate the machine only in daylight or in good artificial light.
- Inspect the area where the equipment will be used. Beware of overhead obstructions (low tree limbs, etc.) and underground obstacles. Enter a new area cautiously. Stay alert for hidden hazards.
- Never direct discharge of debris toward bystanders, nor allow anyone near the machine while in operation. The owner/operator can prevent and is responsible for injuries inflicted to themselves, bystanders, and damage to property.
- Never operate equipment that is not in perfect working order or is without decals, guards, shields, discharge deflectors, or other protective devices securely fastened in place.
- Never disconnect or bypass any switch.
- Carbon monoxide in the exhaust fumes can be fatal when inhaled. Never operate the engine without proper ventilation.
- Fuel is highly flammable, handle with care.
- Keep the engine clean. Allow the engine to cool before storing and always remove the ignition key.

- Always engage parking brake when leaving machine. Always disengage components when leaving the machine.
- Equipment must comply with the latest federal, state, and local requirements when driven or transported on public roads. Check to be certain all lights are functioning, i.e. turn signal, brake lights, head lights, flasher, etc. Check to be certain back up alarm is working.
- Never use your hands to search for oil leaks. Hydraulic fluid under pressure can penetrate the skin and cause serious injury.
- To prevent tipping or loss of control, do not start or stop suddenly; reduce speed when making sharp turns. Use caution when changing direction on slopes.
- Keep legs, arms and body inside the seating compartment while the vehicle is in motion. Always wear seat belts.
- Clean all glass areas (windows and mirrors) for better visibility. Remember to adjust mirrors when you switch seats.
- Never work under machinery without using approved safety supports.
- Use caution when removing objects such as wire, rope, cable, etc.
- Always use extreme caution when backing up.

SAFETY DECALS

For safety decals and information not included here refer to the appropriate Appendix or OEM vendor documentation.



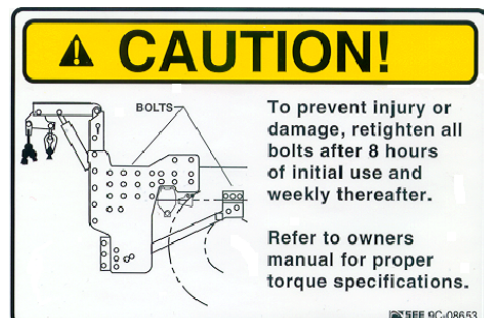
9C-09868



9C-08652



9C-08649



9C-08653



9C-08650



9C-08655



9C-08651

NOTE: If your safety decals are damaged or destroyed, please call us at (800)249-9788 or (608) 249-9788 and we will provide you with new decals at no charge to you. Use the 9C-XXX part number located in the lower right hand corner of decal or the 9C-XXX number located under the decal, on the left hand side, in this manual.

SERVICE

- Never attempt to clear obstructions or work in plow area while the unit is running. Always stop engine with ignition key off.
- Always disconnect battery when:
 - Installing new equipment
 - Connecting or disconnecting electrical components
 - Welding
- Do not use damaged or broken parts
- Use only authorized parts and components
- Do not use unapproved lubricants/fluids
- Cover all exposed openings when removing parts or hoses
- Do not attempt to remove or disassemble components under pressure (e.g. hydraulic system, engine)
- A variety of **CAUTION** and **WARNING** labels are located in the cab and on the machine. Operators and service technicians must heed these notices for personal safety and operation.

CAUTION

If a problem occurs, make repairs immediately. Do not continue to operate machine.

By following all instructions in this manual, you will prolong the life of your machine and maintain its maximum efficiency. Adjustments and maintenance should always be performed by a qualified technician. If additional information or service is needed, contact your authorized Burke Equipment dealer who is kept informed of the latest methods to service this equipment and can provide prompt and efficient service.

DRIVING SAFETY

Observe the following warning to insure maximum performance, avoid equipment damage, and prevent serious personal injury or death.

WARNING

Adding equipment to a vehicle will alter the handling and performance characteristics of the carrier vehicle. These changes may include, but are not limited to, steering, acceptable work and travel speeds, unit weight, center of gravity, fuel consumption, and vehicle wear and tear.

During the original installation, we may install or modify additional equipment to support the plow. Any subsequent removal, replacement, or alteration of the unit can result in unpredictable operating characteristics that the Original Equipment Manufacturers of record may not support.

- When working on this equipment for maintenance, adjustments, or hydraulic work, make sure equipment is lowered and resting on level ground.
- When equipment has to be raised to perform maintenance work, equipment such as blowers, plows, brooms, drive frames, etc. should be supported by a solid structure resting on level ground.
- When equipment is ready to be raised, lowered, or reversed, make sure to STAND CLEAR.
- It is the operator's responsibility to be familiar with the handling characteristics of the equipment and to discriminate between safe and unsafe practices based on these characteristics and on the environmental conditions at the time of operation.

UNITS INVOLVED IN ACCIDENTS

If a machine is involved in an accident, inspect, and repair it before putting it back into service.

- Replace or repair any damaged parts and components
- Ensure that moving parts are not binding or otherwise restricted
- Ensure that attaching hardware is properly fastened and tightened
- Repair any fluid leaks. Ensure that fluid levels are full

1. INTRODUCTION

The purpose of this manual is to provide the operator with the information necessary to safely operate this unit. We strongly recommend that personnel thoroughly familiarize themselves with the operation and maintenance information contained in this manual.

The plow is adjustable, providing three attack angle positions. The moldboard and trip-edge is designed to trigger upon contact with an obstacle, then reset to continue operations. The trip-edge mechanism features a 5/8" thick heavy-duty angle iron assembly with 5 large horizontal torsion springs. The moldboard trip mechanism features 4 heavy springs with the option of adding one or two more.

The moldboard is broke, instead of smooth rolled, to prevent snow and ice from sticking to plow. The plow is constructed of carbon steel with 8 solid welded ribs that provide moldboard support. The turn-table to moldboard pivot points are designed with rubber isolators that significantly reduce vibration on operator and equipment.

Dual double acting 4" cylinders reverse the plow for right or left-hand discharge. Rubber bushings at rod ends and rubber bumpers on turn-table eliminate all metal to metal contact when reversing the plow back and forth.

2. SERVICE PROCEDURES

2.1 Initial Service Procedure

- Check bolts for tightness. Torque loose bolts to the limits set forth in the Torque Specification Chart listed in Table 3 on Page 15.
- Check that all pins are equipped with a keeper
- Adjust lifting or carrying devices for desired plow action
- Grease all fittings and exposed threads on adjusting screws
- Inspect all hydraulic hoses for possible chaffing or pinching
- Inspect all hydraulic fittings for signs of leakage
- Make sure both hydraulic quick coupler halves are free of contamination before coupling

NOTE: If a problem is discovered, make repairs immediately. Do not continue to operate machine.

2.2 Service Procedures After the First 4 Hours

- Check all bolts for tightness and replace as required
- Inspect all pins for loose or broken cotter pins

2.3 Service Procedure – 8 to 10 Hours

- Grease all adjusting screws and grease fittings
- Spray lubricant on all pivot points on the hitch
- Check all bolts for looseness or breakage and replace as required
- Inspect lift mechanism for wear
- Inspect hydraulic components for leaks or wear
- Check cutting edge for wear. Do not allow cutting edges to wear closer than 1/2 to 3/8 inches to the bottom of the trip-edge angle iron
- Check curb shoes for wear and replace if necessary

2.4 Annual Service Procedure

- Protect exposed cylinder rods with a thin film of grease during storage
- Cover all quick couplers with the appropriate plugs and caps
- Prime and paint all exposed metal surfaces
- Drain and flush hydraulic system, if so equipped, and clean the tank and filter screen
- Refill with high grade hydraulic oil
- Change the filter every 500 hours or annually, whichever comes first

3. MOUNTING INSTALLATION PROCEDURES

3.1 Preparation

Unpack and inspect the unit and all loose parts for any damage that might have occurred during shipping. If any damage is found, or any shortages noted, notify your dealer immediately.

Standard tools are required for installation and maintenance.

WARNING

Use only lifting devices that meet or exceed OSHA standards. Never lift equipment above personnel. Loads may shift or fall if improperly supported, causing injury.

3.2 Mounting Plow to Truck

3.2.1 Truck Requirements

The truck must have a minimum front axle capacity of 16,000 pounds to install the plow without a wing, 18,000 pounds with a wing.

3.2.2 Hydraulic Requirements

Maximum Pressure: 2,000 PSI

Maximum Pump Flow: 30 GPM

3.2.3 Mounting Drive Frame and Moldboard

- Place unit on a level surface with the plow in the bulldoze position. Make sure hydraulic cylinder is half extended so the drive frame mounts perpendicular to the plow.
- Raise oscillating beam side of drive frame until hitch mounting center reaches 15 inches. This drive height should be maintained to 15"±1.

NOTE: Cutting edge of plow must remain on level floor when raising oscillating beam.

- Drive truck into position. A second person should guide the operator to move slowly forward until the truck hitch is properly positioned with respect to oscillating beam of plow.

CAUTION

Never stand between truck and plow when vehicle is being moved into position.

- Connect plow drive frame to the truck hitch and secure accordingly.

CAUTION

Make sure plow is securely attached to the truck body. Periodically check hardware to make sure they are secure and re-tighten as required.

3.2.4 Installation Check

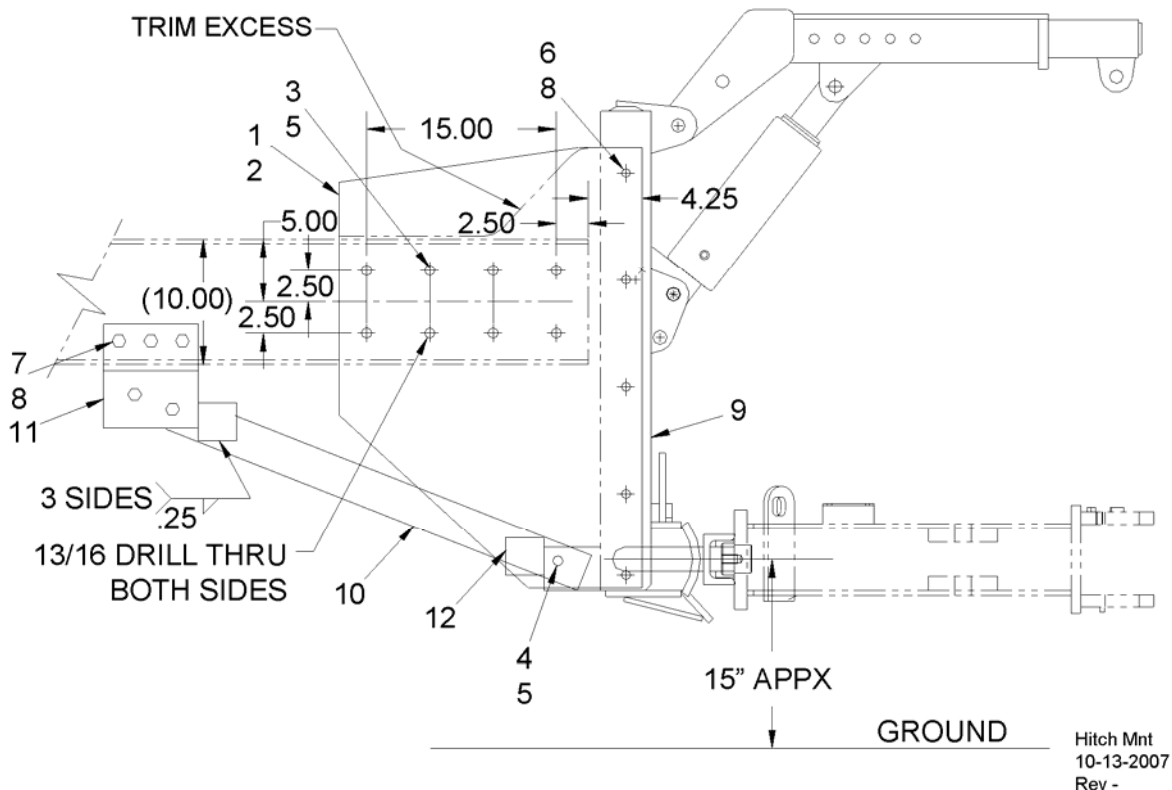
Check entire wing to be sure all fasteners are in place and hardware is properly tightened per the Torque Specification Chart listed in Table 3 on Page 15.

3.3 Truck Hitch Mounting

The height above ground is approximately 15 inches although it can vary depending on factors such as temperature, air pressure, and truck load.

NOTE: If wing is to be installed, please refer to the Burke DKJ Wing Operation Manual for special truck hitch installation instructions. Some wings require side plate modifications or special side plates.

Figure 1. Hitch Mounting



Item	Description	Qty	Notes
1	SIDE PLATE, LH	1	
2	SIDE PLATE, RH	1	
3	HAIR PIN	16	
4	3/4 X 2-1/2 CAP SCREWS	2	
5	3/4 X 2-1/4 CAP SCREWS	18	
6	3/4 LOCK NUTS	10	
7	5/8 X 2-1/2 CAP SCREWS	10	
8	5/8 X 2 CAP SCREWS	20	
9	5/8 LOCK NUTS	1	

10	HITCH ASSEMBLY	2	
11	CONNECTION ANGLES	2	
12	BRACKETS	4	

- Position Side Plates (Items 1 & 2) as shown in Figure 1 and mark hole locations.
- Trim Side Plates (Items 1 & 2) to fit and drill 13/16" holes through side plate and truck frame.
- Attach Side Plates (Items 1 & 2) loosely to truck using Cap Screws and Lock Nuts (Items 3 & 5).
- Attach Hitch (Item 9) to Side Plates (Items 1 & 2) using Cap Screws and Lock Nuts (Items 6 & 8). Tighten all hardware to the recommended torque listed in the Torque Specification Chart, Table 3 on Page 15.
- Attach Connection Angle (Item 10) to each side of Hitch (Item 9) with remaining Cap Screws and Lock Nuts (Items 4 & 5).
- Attach Brackets (Item 12) to Connection Angles (Item 11) using Cap Screws and Lock Nuts (Items 7 & 8).
- Mark six hole locations on truck frame, drill 11/16" holes, and attach Brackets (Item 12) to truck frame using remaining hardware.
- Weld two Brackets (Item 12) to each Connection Angle (Item 11) as shown in Figure 1.
- Paint parts to prevent rust formation.

3.4 Spring Replacement

- Lay plow, with plowing surface down, on a level surface and place supports under the cutting edge to hold springs at a good working height.
- Change one spring at a time so there is always tension against the cutting edge.

CAUTION

Make sure wing is properly braced and cannot fall before removing and/or replacing springs.

- Remove hardware from clamp blocks at both ends of spring to be removed and replace with a 5/8" x 6 inch bolt and flat washer.
- Loosen both bolts of the spring approximately five turns.
- Loosen each of the remaining four bolts holding the spring until the spring become loose.
- Clean and grease plow hinge and replace spring(s)
- Place clamp blocks back on plow, secure with hardware and tighten per the Torque Specification Chart listed in Table 3 on Page 15.

3.5 Spring Installation

- Remove springs following the procedures listed in Section 3.4.

NOTE: Clean out all threaded holes on the clamp blocks with a tap. Use an air nozzle to blow out the holes and apply anti-seize.

- Coat the underside of the moldboard angle next to the spring and the tang of the spring with grease to assist in spring installation.
- Place the tang of the spring into the drilled hole in the lower moldboard angle.
- Slide the spring rod through the spring until it is nestled in the clamp block.
- Place the top half of the clamp block over the right hand side of the rod and start the hardware into the clamp block.

NOTE: Make sure to apply anti-seize to the bolts.

- With an impact tool turn the bolts in as far as spring tension will allow.
- Place the top half of the clamp block over the left hand side of the rod and replace the hardware in the clamp block
- Re-tighten the bolts on the right hand side clamp block.

4. OPERATION

4.1 Raising and Lowering the Plow

- Pull the plow lift lever to raise the plow. When the lever is released, the valve will return to a neutral hold position and the plow will remain in that position.
- Push the plow lift lever to lower the plow. When the lever is released, the valve will return to a neutral hold position.

NOTE: Some lift cylinders have a detent or (float) position on the lower (down) position.

- Hold the lever in the down position until the plow has found its lowest level, then, release the lever. This allows the plow to properly follow the contour of the plowing surface.

NOTE: If the truck is equipped with a four-position, plow lift valve with a detent in the down position, the plow will naturally find its lowest level and follow the contour of the plowing surface.

CAUTION

Make sure plow will not drop instantly when lowering plow during snow plowing operation. The caster wheels might hang in a reversed position and a sudden drop will damage tires and hubs. A restrictor must be installed in the hydraulic line to the lift cylinder or the plow may lower too fast. Be sure the restriction to flow is in the down hydraulic circuit only.

4.2 Reversing the Plow

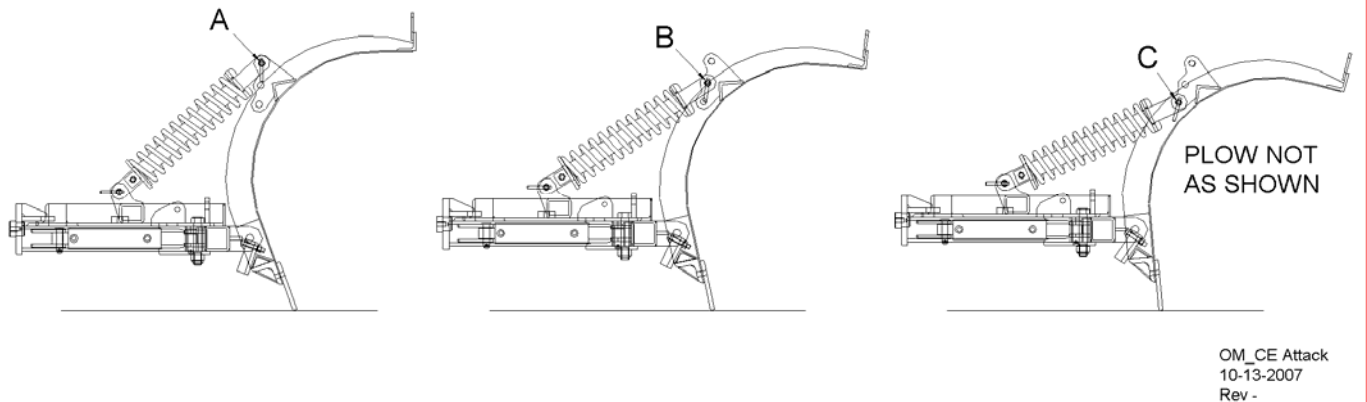
- Lower the plow until the cutting edge is on level ground. The two hydraulic hoses coming out of the valve on the drive frame must be connected to the hydraulic circuit of the truck.
- Install male and female quick couplers on the plow hoses and connect to the truck quick couplers.

NOTE: Connect the plow quick couplers to each other before storing to prevent dirt from entering the hydraulic system.

- Reverse the plow a dozen times to make sure air is removed from the hydraulic system. The plow will shift back to the neutral hold position when the lever is released.

4.3 Cutting Edge Attack Angle

Figure 2. Cutting Edge Attack Angle



CAUTION

Make sure truck engine is shut off and auxiliary brakes are engaged before adjusting cutting edge attack angles.

- Change the cutting edge angle by positioning the brace or spring in the A, B, or C holes as shown in Figure 2.

Hole A provides the greatest angle, while hole C provides the least.

A smaller angle is preferred when the plow is working in areas with high obstructions. The plow will trip easier as the cutting edge will travel at a lesser angle to clear an obstacle.

CAUTION

Make sure plow is secured to a crane and cannot fall backwards or forwards before disconnecting spring and adjusting cutting edge angle (attack angle) when the plow, drive frame, and truck are connected.

5. CLEAN UP AND STORAGE

5.1 Clean Up

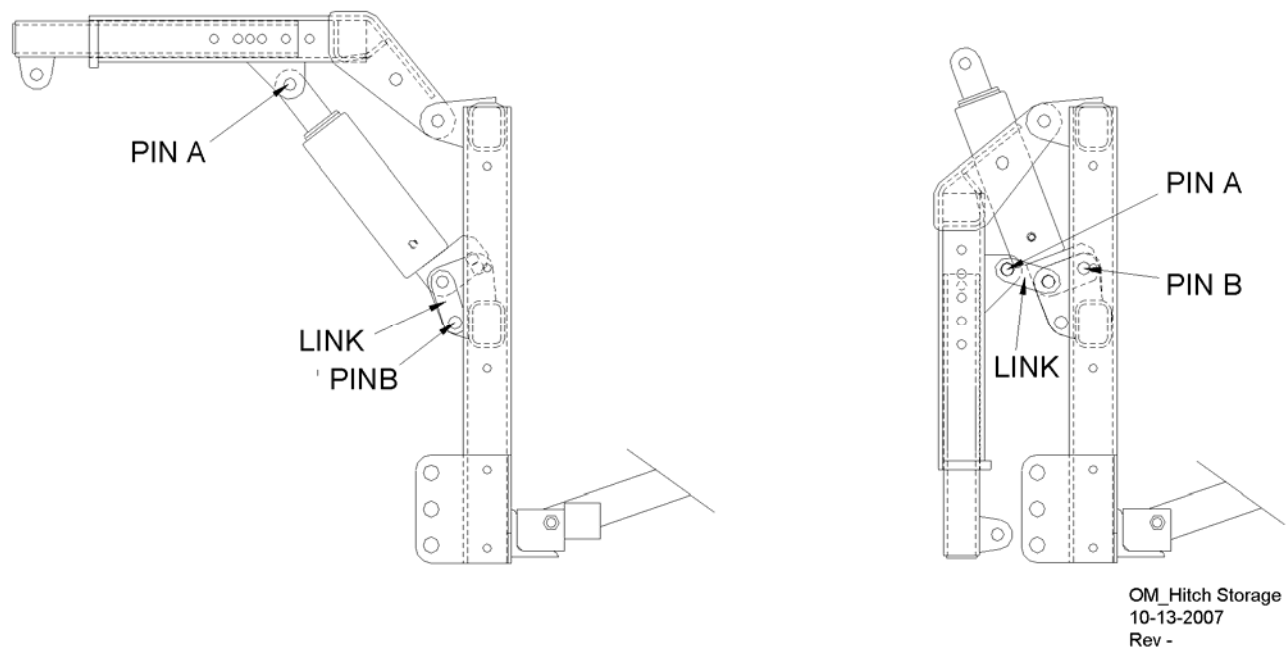
For maintaining minimum maintenance operations, hose the unit down under pressure to free all sticky and frozen material.

It is important that the hitch be thoroughly cleaned at the end of each operating season. All service procedures listed in this section should be closely followed.

5.2 Storage

5.2.1 Storing the Hitch

Figure 3. Storing the Hitch



- Fully retract lift cylinder and remove Pin A from lift arm.
- Raise the lift arm and rotate the cylinder up to the hitch.
- Lower lift arm to the storage position as shown in Figure 3.
- Secure with Link and Pin A and secure the cylinder in the storage position using Pin B.

CAUTION

Make sure the lift arm is supported before removing Pin A, otherwise, the lift arm will drop when the pin is removed, causing damage or injury.

Plug the hydraulic system to prevent dirt from entering the hydraulic system.

Store the plow off of the ground, if possible.

6. FLUIDS, LUBRICANTS, & MAINTENANCE

CAUTION

The use of unapproved lubricants/fluids may cause serious damage and may void warranty.

Table 1. Fluids and Lubricants

Description	Fluid	Qty
Plow Hinge	Extreme Pressure Grease	AR
Hitch Lift Cylinder, DA	Extreme Pressure Grease	AR
Hitch Lift Arm	Extreme Pressure Grease	AR

6.2 - Parts and Accessories for Burke Road Tamer 2000 Plow

Table 2 provides a list of parts on the RT2K that are either wear items or popular accessories.

Table 2. Popular Maintenance/Replacement Parts

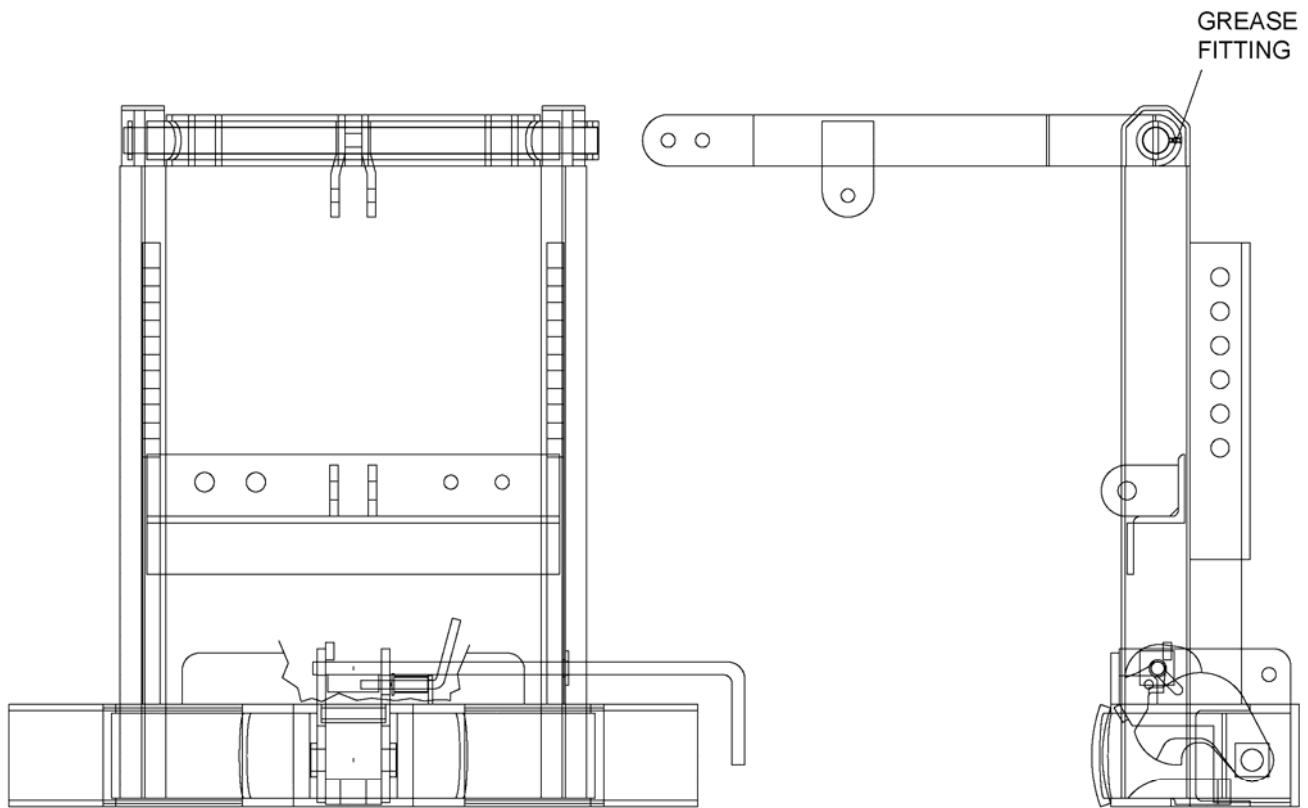
	Part Number	Description	Where Used	Qty
	101-032	24" Plow Marker - Burke Style		
	101-033	28" Plow Marker - Burke Style		
	101-034	36" Plow Marker - Burke Style		

101-079/BT0098	Illuminated 28" Plow/Wing Marker - Burke Style
101-064/BT0064A	Burke Plow Marker Tube Mount
113-200/BT0102	Burke Plow Marker Replacement Flex Hose
080-007/B1144001	Seal Kit - Plow Lift and Plow Reversing Cylinders
210-053/EP2024-16	Bushing - Brass Sleeve Bushing in Plow Reversing Cyl. (2 per Cyl.)
122-057/B4000	Bumper, Rubber A-Frame RT2K Plow
210-052/NOSEKIT	Plow A-Frame Nose Rebuild Kit
210-073/	A-Frame Weld-In Repair Bushing 3"OD x 2.25"ID x 4.13"L
210-074/	Turn-Table Weld-In Repair Bushing 3"OD x 2.25"ID x 3"L
210-070/2P-15557	Plow King Bolt Pivot Bushing 2.25"OD x 1.6"ID x 7.75"L
093-008/JAX120	Plow Grease - Spray Can
210-068/	Plow King Bolt w/ Castle Nut and Locking Bolt
210-069/	Plow King Bolt Top Washer
210-071/	Plow King Bolt Bottom Washer
083-646/72N8-8F	Coupler, Poppet - 1/2" Male Nipple
083-641/72C8-8F	Coupler, Poppet - 1/2" Female Coupler
210-054/	Hitch 'Dog Lock Pin' Kit (4 piece kit)
113-031/	Snow Deflector / Flap - Burke Logo 12" x 12'
101-031/BT117-65	Bushing, Table to Moldboard Pivot & Moldboard Trip Posts
061-113/	HYD. FILTER, In-Tank / Drop in Element - Burke Custom Tanks

6.2 Grease Point

6.2.1 Hitch Grease Point

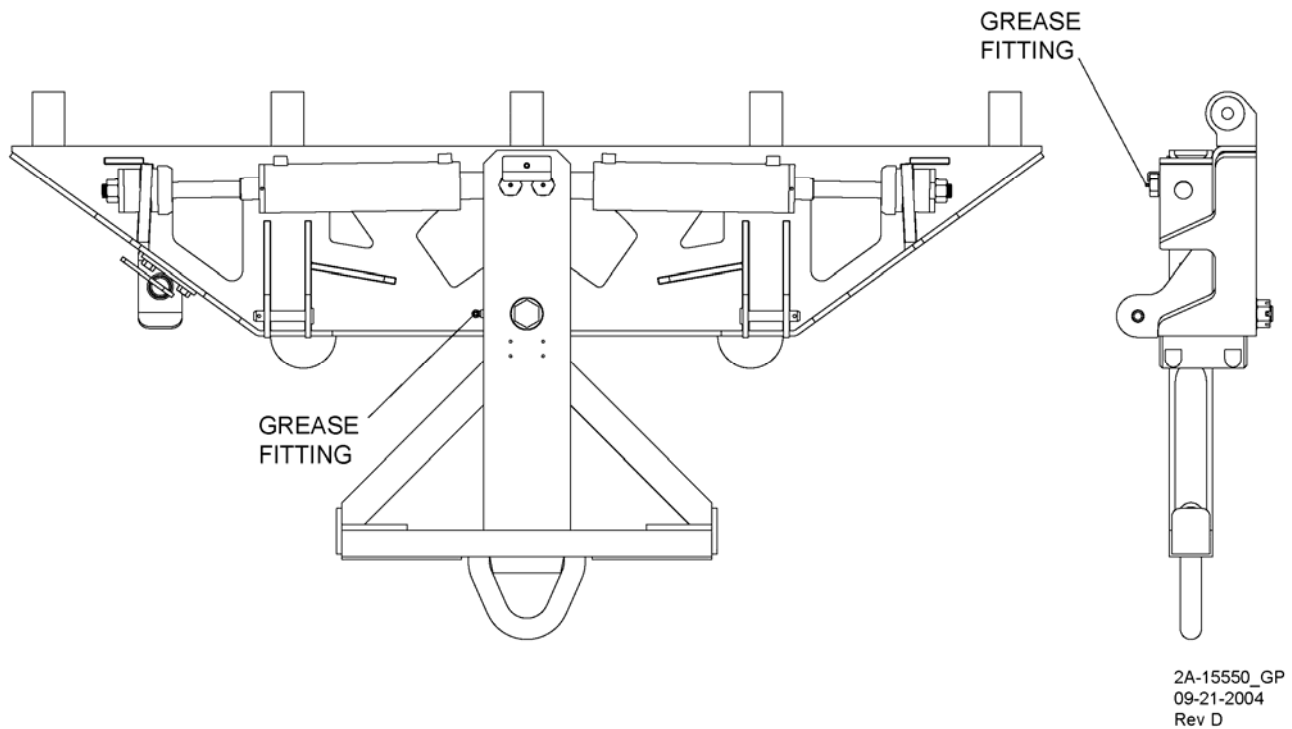
Figure 4. Hitch Grease Point



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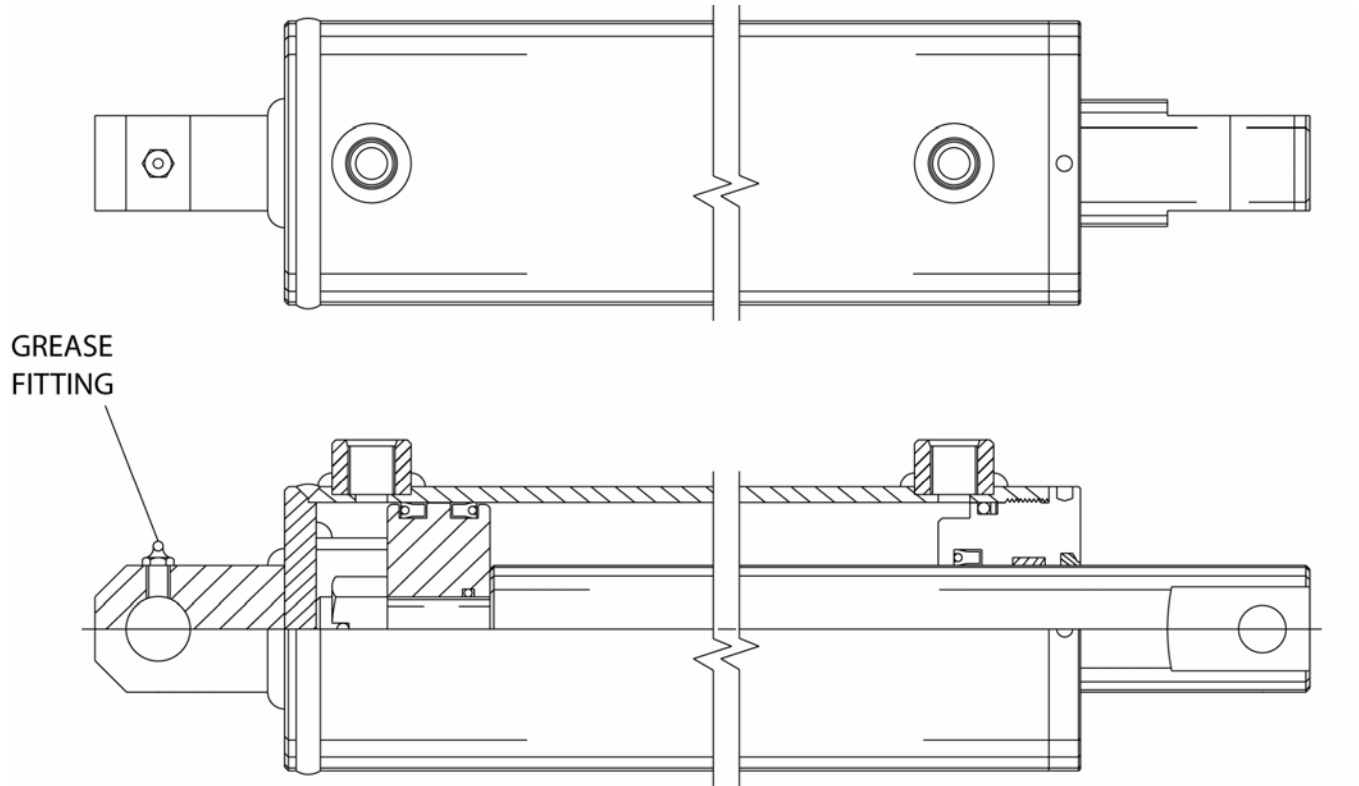
6.2.2 Reversing Frame/Turn-Table Grease Point

Figure 5. Reversing Frame/Turn-Table Grease Point



6.2.3 Plow Lift Cylinder Grease Point

Figure 6. Plow Lift Cylinder Grease Point



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7. PARTS

HOW TO USE THIS MANUAL

The documentation for the Road Tamer 2000 Plow is organized by Volume, Section, Figure (or Subsection), and Page. Below is a brief description:

Volume	Section	Description
1 – Maintenance Manual	1	Introduction
	2	Service Procedures
	3	Mounting and Installation Procedures
	4	Operation
	5	Clean Up and Storage
	6	Fluids/Lubrication
2 – Parts Manual	7	Parts
	Introduction	How to Use This Manual, Abbreviations, and General Information

PAGE NUMBER

Each section in the manual is numbered separately from the rest of the manual. The model number, page number, and revision of the manual are located on the lower center of the page in the footer.

LOCATING MATERIAL IN THIS MANUAL

Go to the section that contains the information required. Each section has a detailed table of contents on the first page. Find the specific subject and page in the table of contents.

HOW TO USE THIS ILLUSTRATED PARTS CATALOG

This Illustrated Parts Catalog has been prepared as a detailed parts guide for the Road Tamer 2000 Plow. The information in this manual is presented two-fold, maintenance information listed first followed by parts illustration.

Replaceable items and/or kits for the unit are detailed on illustrations throughout this manual. The item numbers on the illustration are keyed to each accompanying parts list. The purpose of the item numbers is to provide complete identification, but should not be used for procurement purposes.

NOTES:

Do not use damaged or broken parts. Use only authorized parts and components.

Use at a minimum, Grade 8 attaching hardware except where noted. For installation safety, substitution of lower grade hardware is NOT recommended or approved.

Table 3. Torque Specification Chart

SAE Grade 8 Bolts			
Course Thread	Max. Torque Dry (lbs-ft)	Fine Thread	Max. Torque Dry (lbs-ft)
5/16	25	5/16	25
3/8	45	3/8	50
7/16	70	7/16	80
1/2	110	1/2	120
9/16	150	9/16	170
5/8	220	5/8	240
3/4	380	3/4	420
7/8	600	7/8	660
1.00	900	1.00	1,000
1-1/8	1,280	1-1/8	1,440
1-1/4	1,820	1-1/4	2,000
1-3/8	2,380	1-3/8	2,720
1-1/2	3,160	1-1/2	3,560

BOLT HEAD IDENTIFICATION



This manual uses the indented parts structure. In the descriptive column, the relationship of items covered is shown by the degree of indentation of each item. In the example below, the hitch assembly is listed with one indentation. The hitch weldment, lift arm, and hinge pin are indented under the hitch assembly to indicate that these are sub components of the hitch assembly. Ordering the hitch assembly would automatically include the hitch weldment, lift arm, and hinge pin. Components listed with the same indentation must be ordered separately.

Item	Part Number	Description	Qty	Notes
	4A-07420	HITCH ASSEMBLY	1	
1	4W-07440	• HITCH WELDMENT	1	
2	4W-07416	• LIFT ARM	1	
3	4W-07419	• HINGE PIN, LIFT ARM	1	

- **Item** – Identifies part from illustration
- **Part Number** – Part number to be used for procurement
- **Description** – Part name and relationship to assembly
- **Quantity** – Gives quantity required for assembly (see notes about attaching hardware)
- **Notes** – Directs user to additional information when ordering

There are three distinct types of figure designations in this manual: *Installations* identify assemblies and components related by application such as attaching hardware. These items must be individually ordered; there is no single part number that includes all parts shown. *Assemblies* are part listings that are inclusive of all parts described. When the main assembly is ordered, the sub components are included as part of the order. The third type of figure is a *Listing* that contains similar but unrelated parts. Each part must be ordered separately.

NOTE: If a component is damaged, make repairs immediately. Do not continue to operate machine.

ACRONYMS AND ABBREVIATIONS

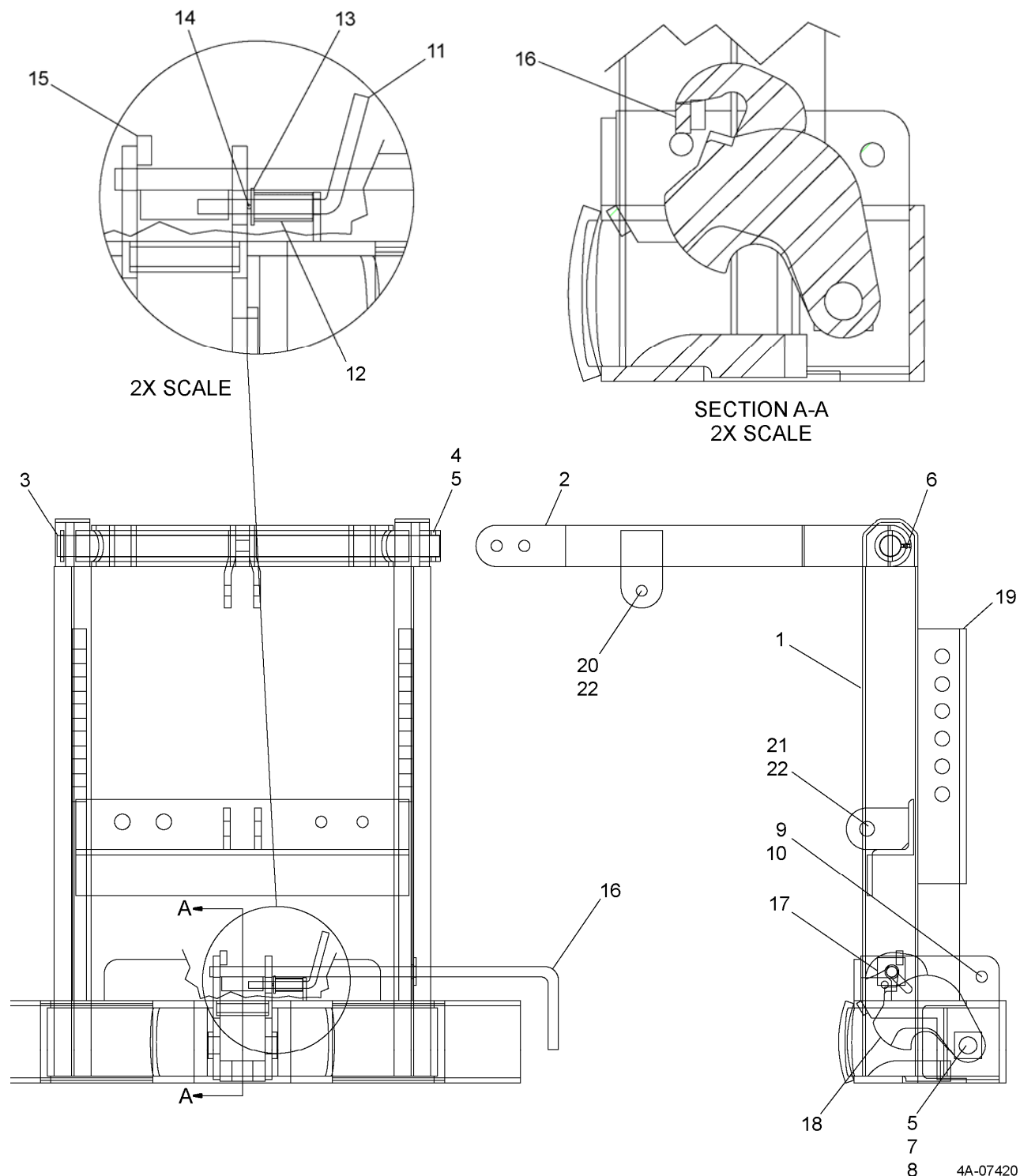
The following is a list of terms and abbreviations that may appear in description and drawing nomenclature.

AC	Alternating Current
AR	As Required
ALT	Alternate
AMP	Ampere
ASSY or ASSM	Assembly
AUX	Auxiliary
AWG	American Wire Gauge
CM	Centimeter
CYL	Cylinder
DA	Double Action
DC	Direct Current
DIA	Diameter
EA	Each
FHMS	Flat Head Machine Screw
FLG HD	Flange Head
GA	Gage
GND	Ground (electrical)
GPM	Gallons Per Minute
HHCS	Hex Head Cap Screw
HHMS	Hex Head Machine Screw
HYD	Hydraulic
ID	Inside Diameter
KG	Kilograms
LG	Long
LH	Left Hand
MAX	Maximum
MISC	Miscellaneous
MM	Millimeter
NP	Non Procurable
NPT	National Pipe Thread
OBS	Obsolete
OD	Outside Diameter
OEM	Original Equipment Manufacturer
PHMS	Pan Head Machine Screw
PLCS	Places
POLY	Polyethylene
PSI	Pounds per Square Inch
PSIA	Pounds per Square Inch Absolute
PSIG	Pounds per Square Inch Gauge
QTY	Quantity
RH	Right Hand
RPM	Revolutions Per Minute
SA	Single Action

SHCS	Socket Head Cap Screw
SHSS	Socket Head Set Screw
TYP	Typical
WELD'T or WLDMNT	Weldment

8. HITCH ASSEMBLY

Figure 7. Hitch Assembly



4A-07420
05-12-2004
Rev D

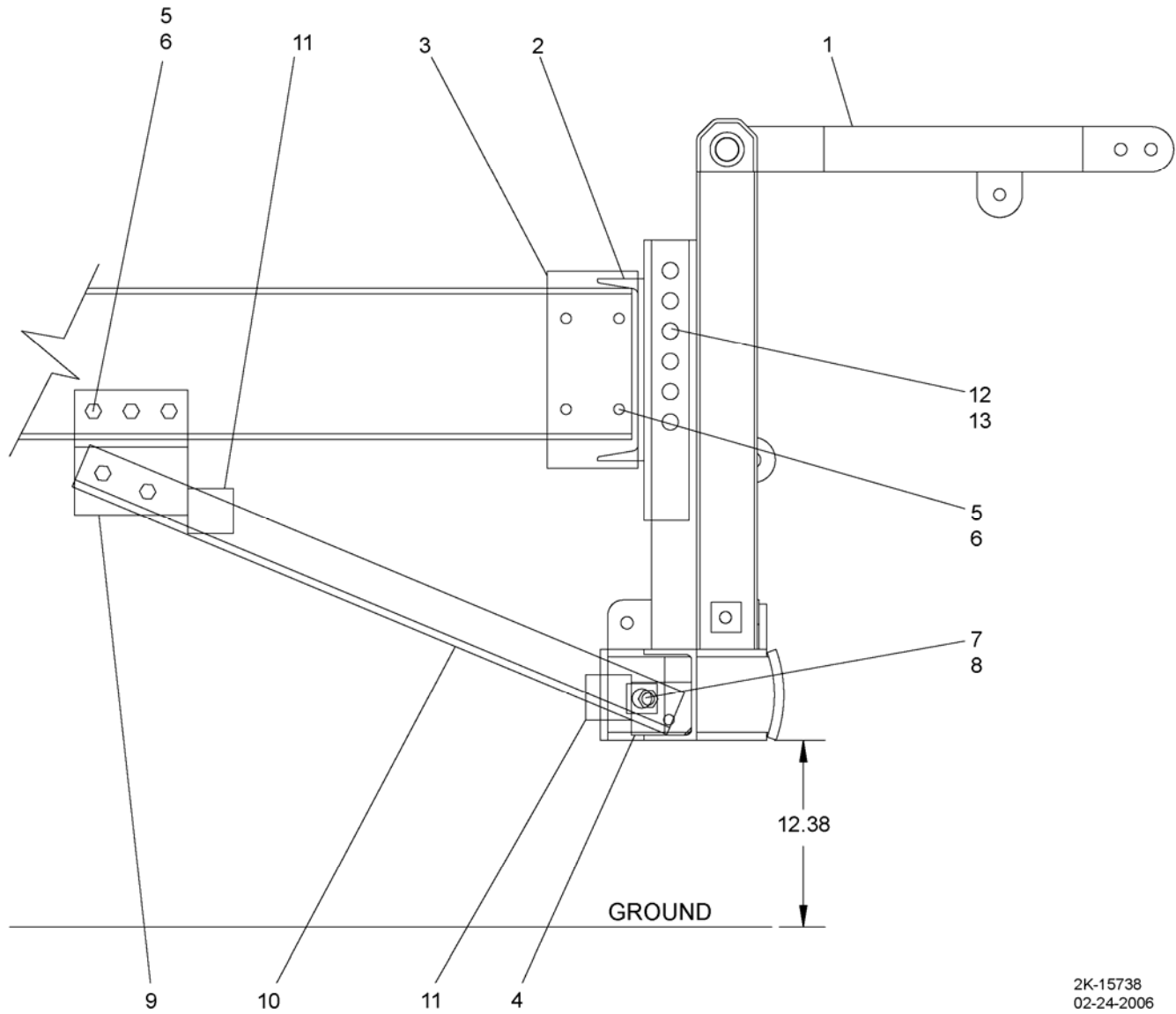
Item	Part Number	Description	Qty	Notes
	4A-07420	HITCH ASSEMBLY	1	
1	4W-07440	• HITCH WELDMENT	1	
2	4W-07416	• LIFT ARM	1	
3	4W-07419	• HINGE PIN, LIFT ARM	1	
4	9C-00188	• HHCS, 1/4" NC X 2-3/4" LG	1	
5	9C-10469	• NUT, LOCK 1/4" NC RAMCO	2	
6	9C-01085	• GREASE ZERK, 1/4-28	2	
7	4P-07441	• PIN, 1-1/4 DIA X 6 LG	1	
8	9C-00184	• HHCS, 1/4" NC X 1-3/4" LG	1	
9	9C-10292	• PIN, 3/4 DIA X 5" LG	1	
10	9C-02597	• COTTER PIN, 5/32 X 1-1/2" LG	1	
11	4P-07442	• LOCK PIN	1	
12	9C-10291	• SPRING	1	
13	9C-00159	• WASHER, FLAT 1/2"	1	
14	9C-00562	• COTTER PIN, 1/8 X 1-1/2" LG	1	
15	8P-00966-010	• SQUARE, 1/2" X 1" LG	1	
16	4W-07444	• LATCH HANDLE WELDMENT	1	
17	4P-07437	• DOUBLER PLATE	1	
18	4W-07447	• LATCH WELDMENT (DOG)	1	
19	4P-07451	• MOUNTING BAR	2	1.
20	2P-01552	• PIN, 3/4 DIA X 3-3/4" LG	1	
21	4P-06579	• PIN, 1 DIA X 3-1/2" LG	1	
22	9C-00576	• COTTER PIN, 1/4 X 2" LG	2	

NOTE:

1. Cable tie to hitch

8.1 Hitch Mounting Kit

Figure 8. Hitch Mounting Kit



2K-15738
02-24-2006
Rev -

Item	Part Number	Description	Qty	Notes
	2K-15738	MOUNTING KIT, HITCH	1	
1	4A-07420	• HITCH ASSEMBLY	REF	1.
2	4P-07860	• CHANNEL	1	
3	4P-07861	• SIDE PLATE	2	
4	4P-06153	• LOWER EAR PLATE	2	
5	9C-00262	• HHCS-5/8 NC X 2.00 LG, GR8	10	
6	9C-00645	• NUT, NYLOCK 5/8 NC	10	
7	9C-00284	• HHCS-3/4 NC X 2-1/4 LG, GR8	2	
8	110312A	• LOCKNUT, FLANGED, 3/4 NC	2	
9	4P-00027	• CONNECTION BRACKET	2	
10	4P-01101-005	• CONNECTION ANGLE	2	
11	8P-00622-005	• BRACE BLOCK	4	
12	9C-00322	• HHCS-1.00 NC X 3-1/2 LG, GR8	6	
13	9C-00650	• NUT, NYLOCK 1.00 NC	6	

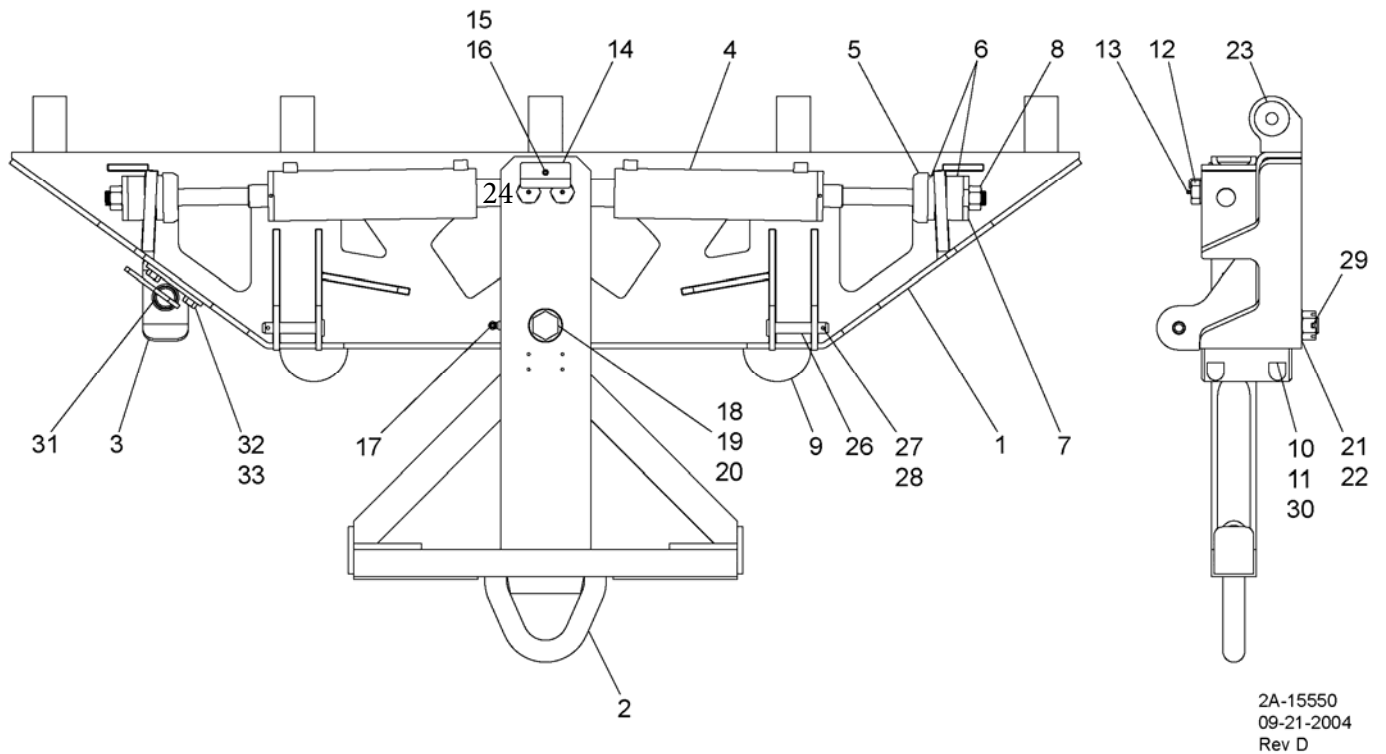
NOTE:

1. See Figure 7 on Page 19 for parts breakdown.

9. REVERSING FRAME ASSEMBLY

9.1 Reversing Frame Assembly

Figure 9. Reversing Frame Assembly



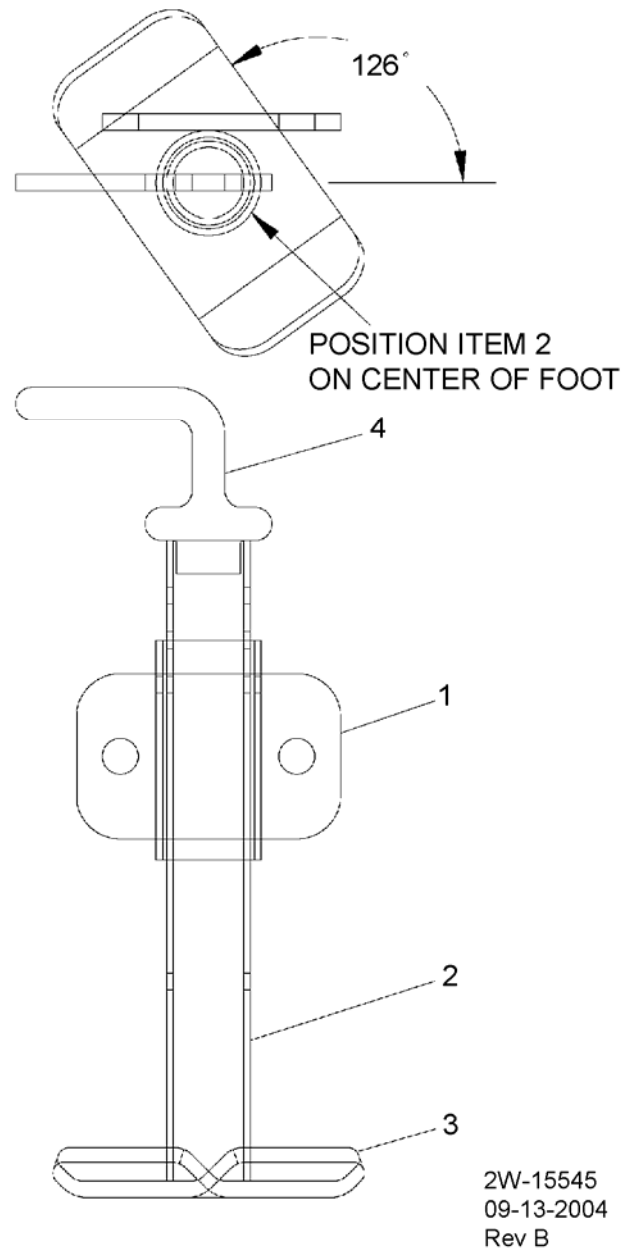
Item	Part Number	Description	Qty	Notes
	2A-15550	REVERSING FRAME ASSEMBLY	1	
1	2W-15535	• THRUST FRAME WELDMENT (TABLE)	1	
2	2W-15490	• A-FRAME WELDMENT	1	
3	2SM10-OIMP	• JACK STAND	1	
4	081-012	• CYLINDER DA, 4" X 13" (140419)	2	
5	2P-15561	• BUSHING MOUNT	2	
6	210-055	• BUSHING, REV. CYL (43001067)	4	
7	2P-15562	• WASHER	2	
8	9C-10471	• LOCKNUT, 1-1/4 NF	2	
9	122-057	• BUMPER HEAVY DUTY, B4000	2	
10	9C-00242	• HHCS, 1/2 NC X 2-1/2	8	
11	9C-00643	• NUT, NYLOCK 1/2 NC	8	
12	210-062	• CYLINDER PIN	2	
13	9C-01085	• GREASE ZERK, 1/4-28 STRAIGHT	2	
14	2P-15544	• FORMED PLATE	1	
15	9C-00208-Z	• HHCS, 3/8 NC X 1 ZP	1	
16	9C-00135	• LOCKWASHER, 3/8	1	
17	9C-01086	• GREASE ZERK, 1/8 NPT STRAIGHT	1	
18	2P-15560	• PIVOT BOLT	1	
19	2P-15558	• WASHER	1	
20	2P-15557	• PIVOT BUSHING	1	
21	2P-15559	• WASHER	1	
22	9C-00737	• NUT, CASTLE 1-1/2 NC	1	
23	101-031	• BUSHING, TABLE (43001065)	5	
24	210-053	• BUSHING, REV CYL (EP2024-16)	—	
25	—	• —	—	
26	2P-15487	• PIN, 1 DIA X 5-1/4	2	
27	9C-00576	• COTTER PIN, 1/4 X 2	2	
28	9C-04862	• WASHER, 1"	2	
29	9C-00578	• COTTER PIN, 1/4 X 3	1	
30	9C-00159	• FLAT WASHER, 1/2"	8	
31	9C-09929	• SAFETY SNAP PIN, 3/8 X 3	1	
32	9C-00283	• HHCS, 3/4" NC X 2" LG	2	
33	9C-00647	• NUT, NYLOCK 3/4" NC	2	

NOTE:

1. See Figure 10 on Page 25 for parts breakdown.
2. See Figure 14 on Page 30 for parts breakdown.

9.2 Jack Stand

Figure 10. Jack Stand

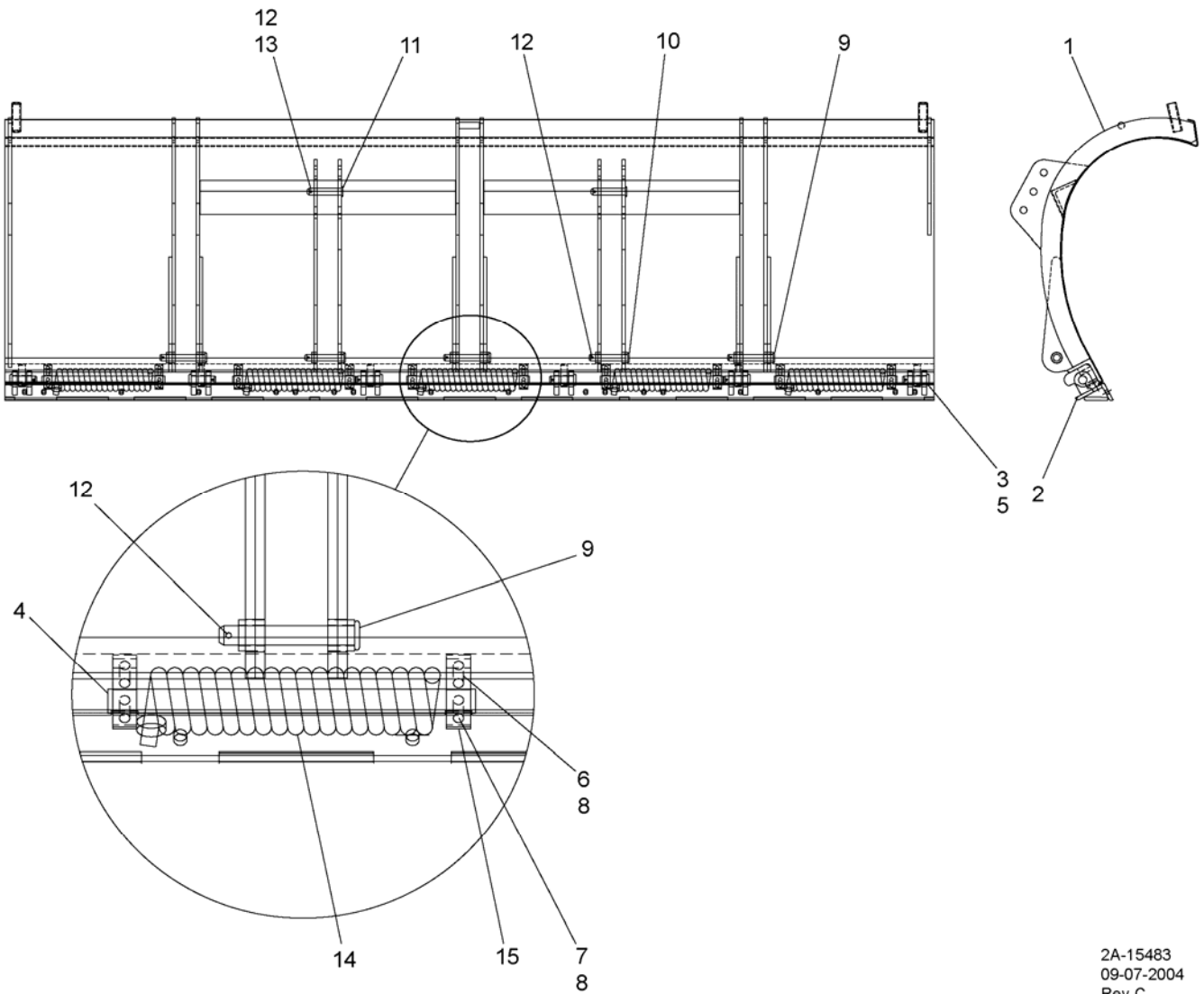


Item	Part Number	Description	Qty	Notes
	2SM10-0IMP	JACK STAND	1	

10. MOLDBOARD ASSEMBLIES

10.1 Moldboard Assembly, 12FT

Figure 11. Moldboard Assembly, 12FT



2A-15483
09-07-2004
Rev C

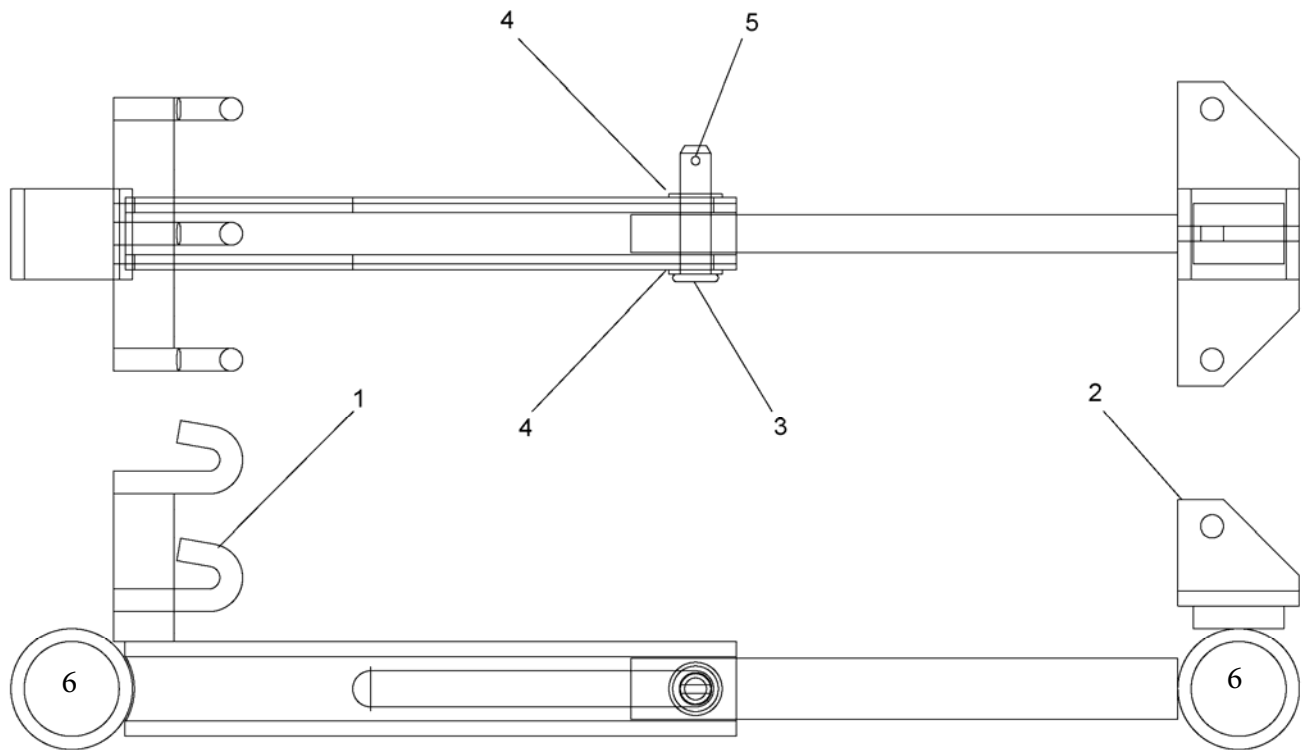
Item	Part Number	Description	Qty	Notes
			1	
	2A-15484	MOLDBOARD ASSEMBLY, 4211		
	2A-15483	MOLDBOARD ASSEMBLY, 4212		
	2A-15482	MOLDBOARD ASSEMBLY, 4811		
	2A-15481	MOLDBOARD ASSEMBLY, 4812		
1			1	
	2W-15437	• 4211 MOLDBOARD WELDMENT		
	2W-15438	• 4212 MOLDBOARD WELDMENT		
	2W-15453	• 4811 MOLDBOARD WELDMENT		
	2W-15454	• 4812 MOLDBOARD WELDMENT		
2	2W-15466	• TRIP EDGE WELDMENT, 11'	1	
	2W-15462	• TRIP EDGE WELDMENT, 12'		
3	2P-15472	• PIN, 1 DIA-1/4 X 3-3/4	AR	
4	4P-01074-012	• ROUND CR, 1-1/4" DIA X19" LG	AR	
5	9C-00577	• COTTER PIN, 1/4 X 2-1/2	AR	
6	9C-00266	• HHCS 5/8-11 UNC X 3 LG	AR	
7	9C-06607	• SHCS 5/8-11 UNC X 2 LG	AR	
8	9C-00139	• LOCKWASHER, 5/8"	AR	
9	2P-15485	• PIN, 1 DIA X 7	3	
10	2P-15486	• PIN, 1 DIA X 6	2	
11	2P-15487	• PIN, 1 DIA X 5-1/4	2	
12	9C-00576	• COTTER PIN, 1/4 X 2	7	
13	9C-04862	• WASHER, 1"	2	
14	124-226	• TORSION SPRING (14797-A)	AR	
15	2P-15407-02	• SPRING CLAMP BLOCK	AR	
16	2P-02038-02	• CUTTING EDGE	1	1.

NOTE:

1. At Burke Truck, we offer Solid Through Hardened Blades, Carbide Blade Sections, Sheilded Carbides, Underbody Scraper Carbides, Burke Bushing Blades, Flexible Carbide/Rubber Blades, 1.5" x 10" Solid Rubber Cutting Edge. Call for current pricing.

10.2 Trip Spring Assembly

Figure 12. Trip Spring Assembly



2A-15291
07-29-2004
Rev -

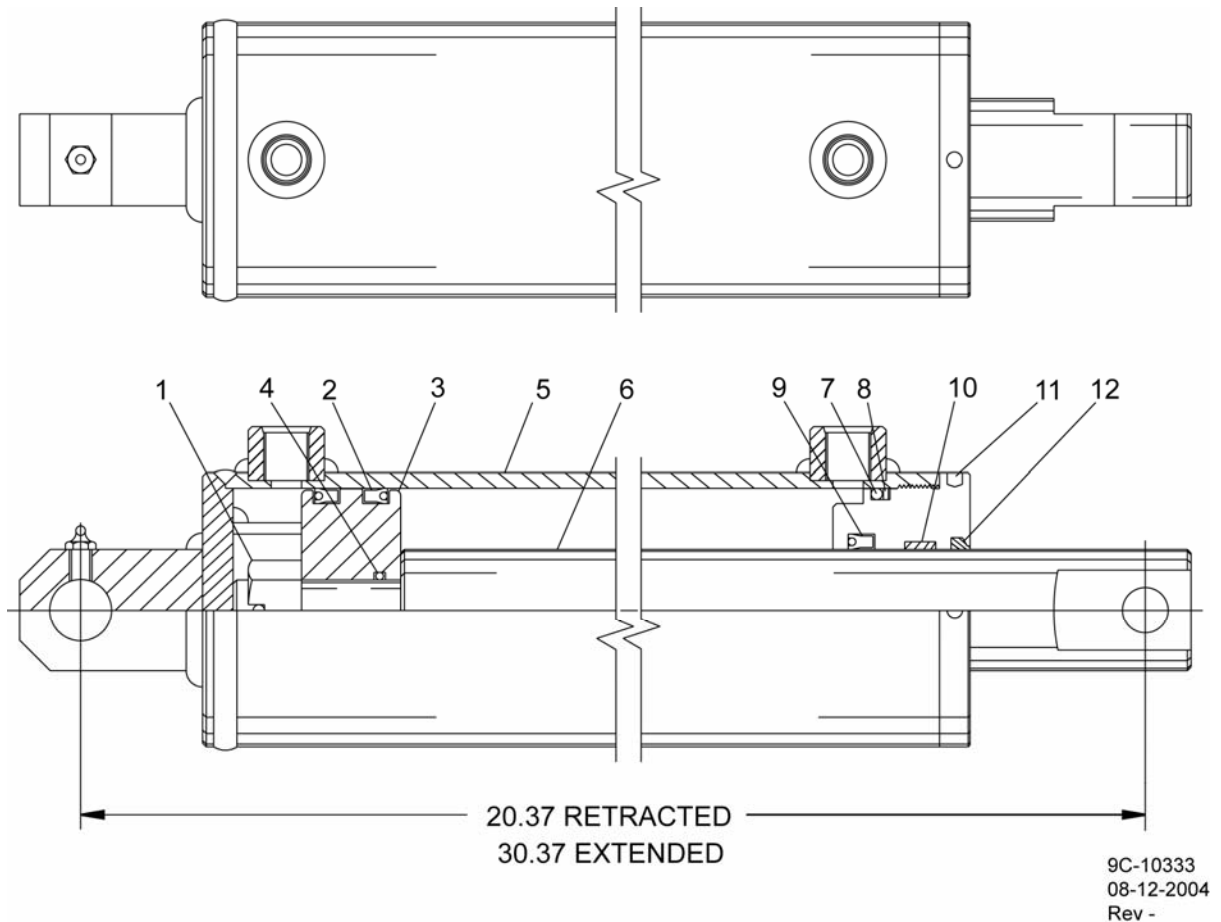
Item	Part Number	Description	Qty	Notes
	2A-15291	TRIP SPRING ASSEMBLY	1	
1	2W-15292	• SLIDE WELDMENT, OUTER	1	
2	2W-15296	• SLIDE WELDMENT, INNER	1	
3	2P-15290	• PIN, 1 DIA X 4-1/4 LG	1	
4	9C-10322	• WASHER, 1" TYPE B - N SERIES	2	
5	9C-00576	• COTTER PIN, 1/4 X 2 LG	1	

6 101-031/BT117-65 BUSHING, MOLDBOARD TRIP POSTS

11. CYLINDERS

11.1 Double Acting Plow Lift Cylinder

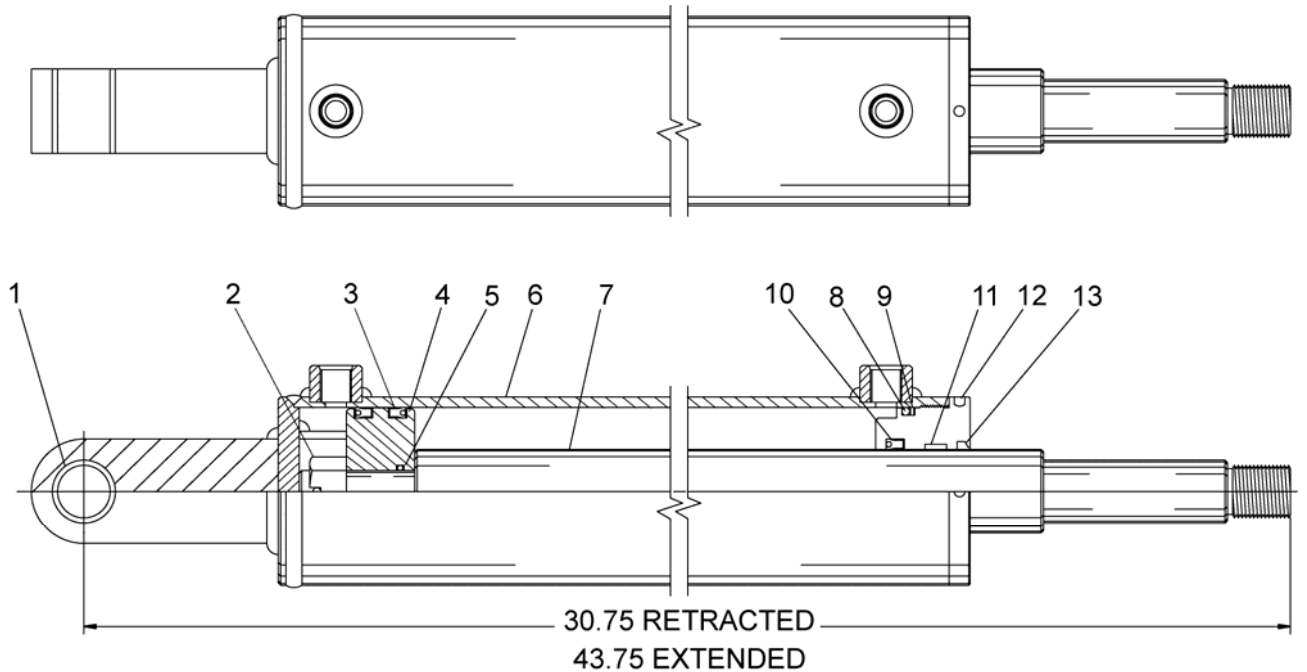
Figure 13. DA Plow Lift Cylinder, 4" Bore X 10" Stroke



Item	Part Number	Description	Qty	Notes
	081-014	CYLINDER, PLOW LIFT 4" X 10" DA (140424)	1	
1	23103	• CASTLE NUT	1	
2	21350	• POLYPAK	2	
3	22410	• PISTON (ALUM)	1	
4	18214	• O'RING	1	
5	—	• JACKET ASSEMBLY	1	
6	—	• PISTON ROD	1	
7	18342	• O'RING	1	
8	39342	• BACKUP WASHER	1	
9	21204	• POLYPAK, TYPE B	1	
10	30225	• WEAR RING	1	
11	14440	• HEADSTOCK	1	
12	12200	• ROD WIPER	1	

11.2 Double Acting Plow Reversing Cylinder

Figure 14. DA Reverse Cylinder, 4" Bore x 13" Stroke

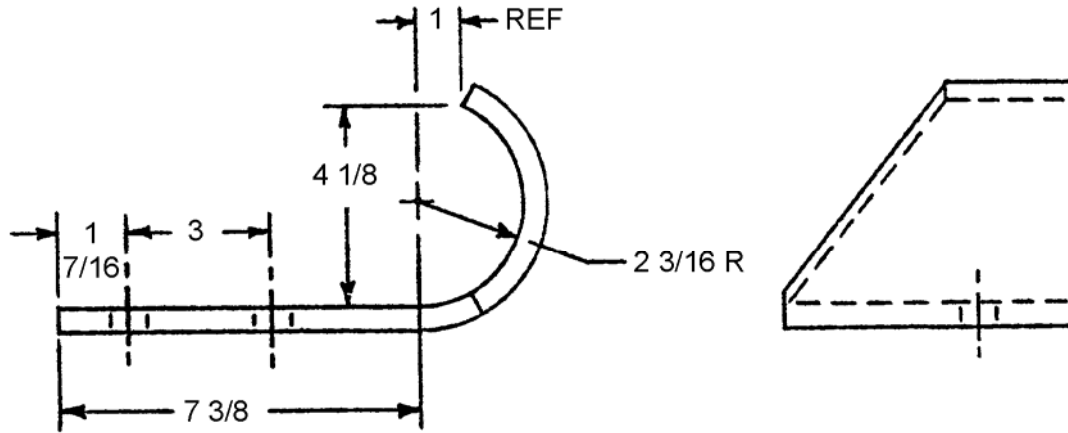


9C-10334
06-23-2004
Rev -

Item	Part Number	Description	Qty	Notes
	081-012	CYLINDER, PLOW REV. 4" X 13" DA (140419)	1	
1	210-053	• BRONZE BUSHING (EP2024-16)	1	
2	23103	• CASTLE NUT	1	
3	21350	• POLYPAK	2	
4	22410	• PISTON (ALUM)	1	
5	18214	• O'RING	1	
6	—	• JACKET ASSEMBLY	1	
7	—	• PISTON ROD	1	
8	18342	• O'RING	1	
9	39342	• BACKUP WASHER	1	
10	21204	• POLYPAK, TYPE B	1	
11	30225	• WEAR RING	1	
12	14440	• HEADSTOCK	1	
13	12200	• ROD WIPER	1	

12. CURB BUMPER

Figure 15. Curb Bumper, LH and RH



FORMED VIEW - RH SHOWN

9C-02787
02-03-1983
Rev-

Item	Part Number	Description	Qty	Notes
—	CALL	CURB BUMPER, RH (1/2", 5/8", 3/4")	1	
—	CALL	CURB BUMPER, LH (1/2", 5/8", 3/4")	1	