



Quick-N-Easy Shoulder Conditioner
Installation and Service Manual

REV 062921



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**When ordering parts, please refer to the
Serial number of your Bonnell Quick-N-Easy.**

They are on the back cover of this manual.

SAFETY FIRST

Please read this manual before attempting to install or operate this equipment.



The symbol at left means ALERT. Any time you see this symbol, you are being warned that your safety is in danger! Please be careful!

GUIDELINES TO FOLLOW:

1. Turn off all power including truck engine when servicing or installing equipment.
2. Follow all recommended operation procedures.
3. Follow a regular maintenance schedule so that your equipment is kept in good operating condition at all times. Improper maintenance can lead to failure during operation, which makes for unsafe conditions.
4. Recognize and avoid hazardous situations during the installation, operation, maintenance, and servicing of equipment.
5. Please pay attention to, and respect, safety decals. They are there to protect you from injury.

AVOID ACCIDENTS

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

Regardless of the care used in the design and construction of any type of equipment, there are many conditions that cannot be completely safeguarded 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

PLEASE, ALWAYS THINK SAFETY FIRST!

The purpose of this manual is to inform the person using the unit with the necessary information to properly install, operate, and maintain this unit. These instructions cannot replace the fundamental knowledge that a person must possess in order to safely and adequately operate this unit. The person must be qualified and possess the clear thinking necessary to install and operate this equipment. Since the life of any machine depends largely upon the care it is given, we suggest that this manual be read thoroughly and referred to regularly by anyone working on or around this unit. If for any reason you do not understand the instructions, please call your authorized service center or our office at (815) 284-3819. It has been our experience that by following these installation and maintenance instructions, and by observing the operation of this equipment, you will have sufficient understanding of how to troubleshoot and correct all normal problems that you may encounter during the life of the equipment.

THE NEED FOR SAFETY CANNOT BE STRESSED ENOUGH. WE URGE YOU TO MAKE SAFETY YOUR TOP PRIORITY WHEN OPERATING THIS UNIT OR ANY OTHER EQUIPMENT.

**ACCIDENTS HURT!
ACCIDENTS COST!
ACCIDENTS CAN BE AVOIDED!**

1. General Maintenance



CAUTION – THE FOLLOWING ITEMS MUST BE CHECKED EVERY 8 HOURS OF OPERATION

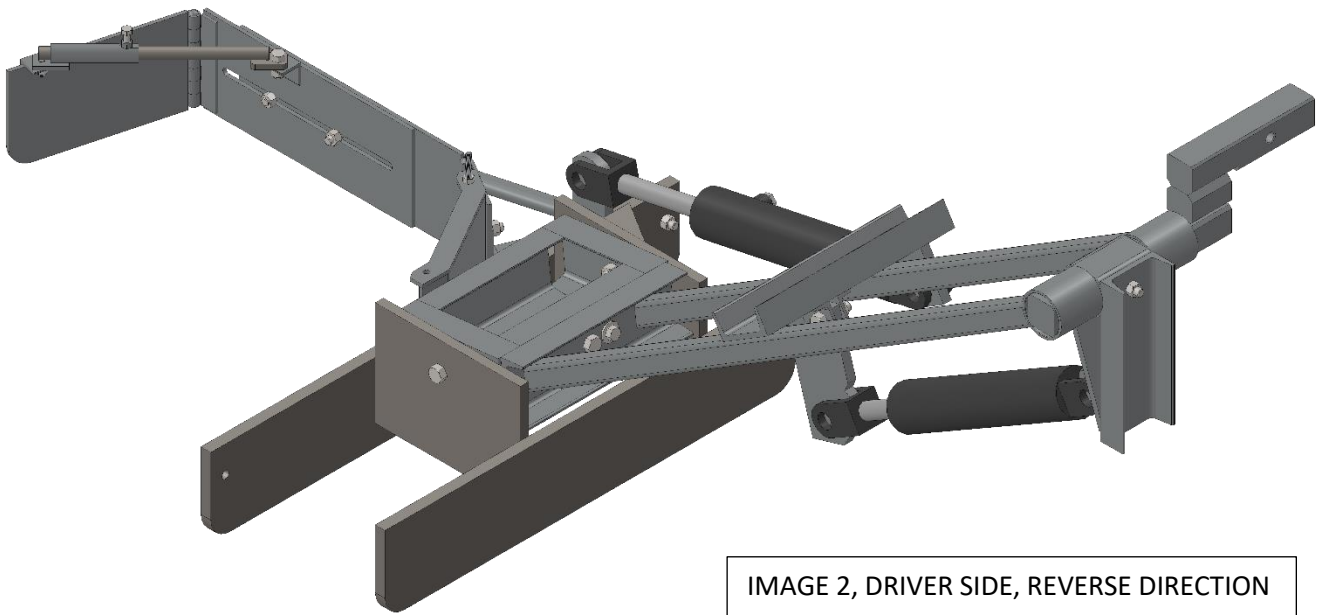
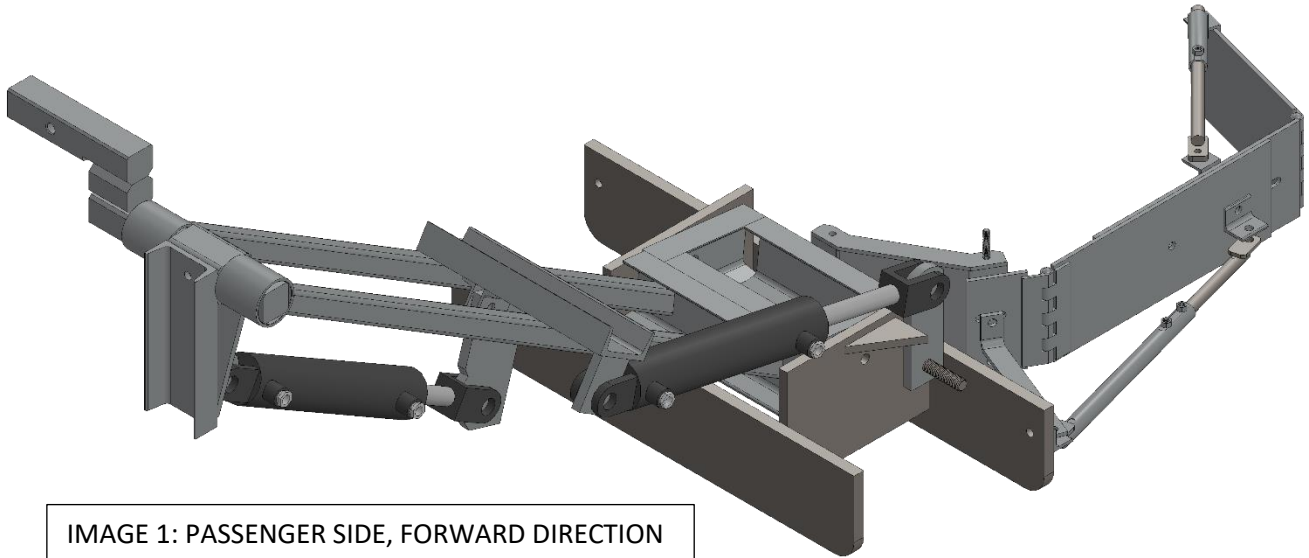
- Verify that all bolts and fasteners are tightened. Tighten any loose hardware.
- Perform a visual inspection of the unit for any damage like bent parts, cracked welds, etc.
- Inspect skid runners regularly for wear.

2. Installation

- The Quick-N-easy is designed to be installed into a two-inch receiver on the truck.
- The cylinders used have a 10" stroke, double acting, with a retracted length of 20-1/4".
- Hydraulic functions: two functions are needed to operate the Quick-N-Easy. If your truck is equipped with plow hydraulics, these can typically be utilized:
 - Raise and lower: this can be a single or double acting function. This is the inboard cylinder. Utilize your plow lift function, if equipped. If this function is single acting on the truck, install a breather on the live end of the cylinder.
 - Tilt/Shape: this must be a double acting function. This is the outboard cylinder. Utilize your plow angle function, if equipped.
- Electric Power Unit: Bonnell offers an electric power unit to power the Quick-N-Easy, if your truck does not have hydraulics. Order Part Number BON-006702. Includes power unit, wireless controller, and battery.
- Short Hose Kit: For plumbing the hydraulic hoses to your truck manifold, this kit may be helpful. Includes four 1/2" hoses and quick disconnects for easy removal. Order Part Number BON-003373.
- Due to the wide variety of trucks and spreader options, the material chute will be evaluated on a case by case basis.

3. Configurations

The advantage of the Quick-N-Easy is that it can be set up to be useable on the driver side or passenger side of the truck and in forward or reverse. To switch the Quick-N-Easy from the side to side, reverse the hitch on the frame. However, when you only switch the hitch the direction of the end scoop will also change.



To reverse the scoop direction.

1. Remove 4 bolts from angled weldment (green arrows, image 3).
2. Remove rear supports and angles. (blue arrows, image 3)
3. Loosen set screw (yellow arrow, image 3) and fold hinges to new position (image 4).

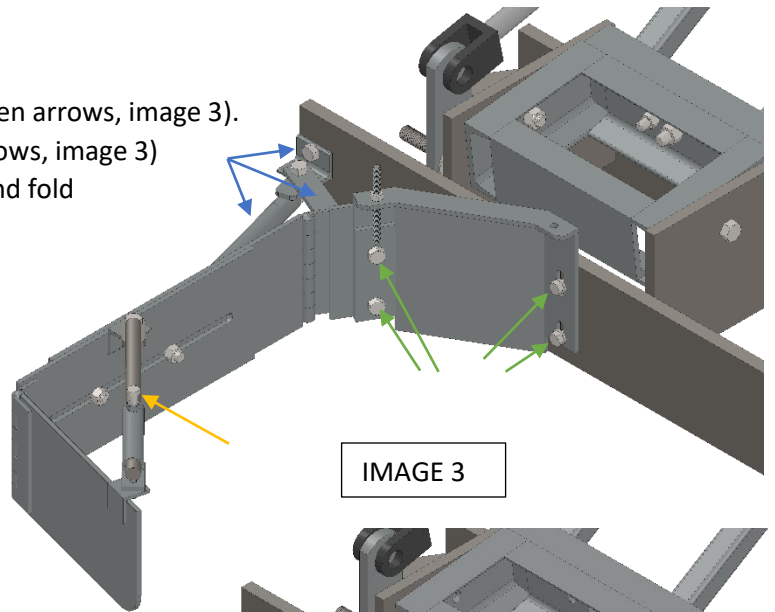


IMAGE 3

4. Reinstall green bolts.
5. Reinstall rear supports and angles.
6. Retighten yellow set screws

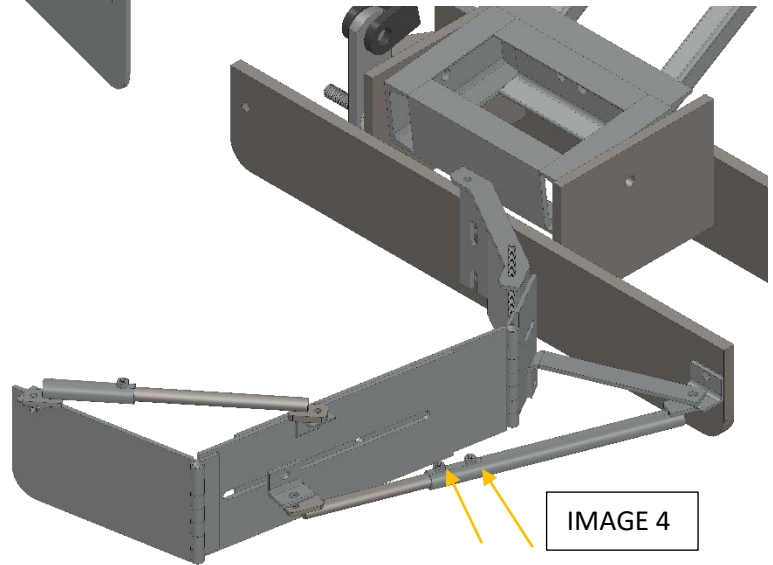


IMAGE 4

4. Scoop Adjustments

- The scoop can be adjusted to fit any shoulder profile. The height can be adjusted vertically by the slots (green arrow, image 5)
- The slope of the scoop can be tilted relative to the skid by using this slot (orange arrow, image 5)
- The width of the scoop can be adjusted by loosening two bolts and sliding the outer section in or out (blue arrows, image 5).
- The width can also be adjusted by using the top adjustable support (black arrow, image 5)

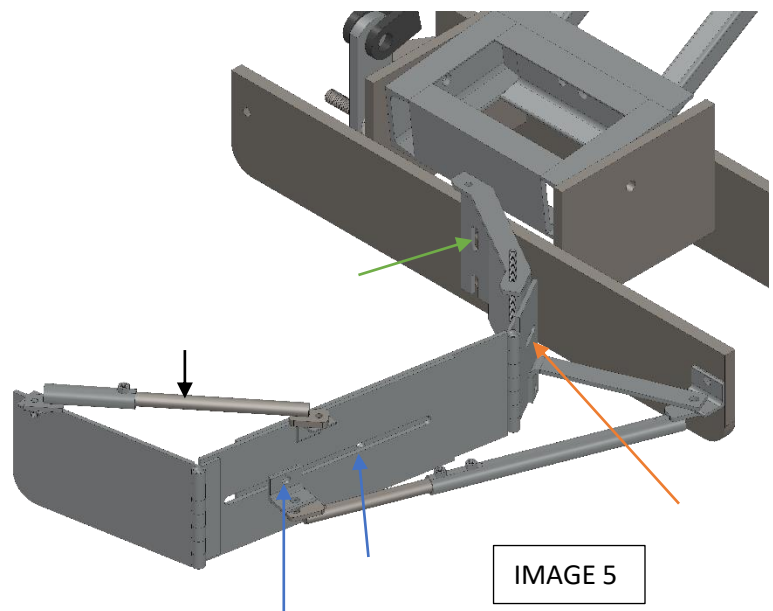


IMAGE 5

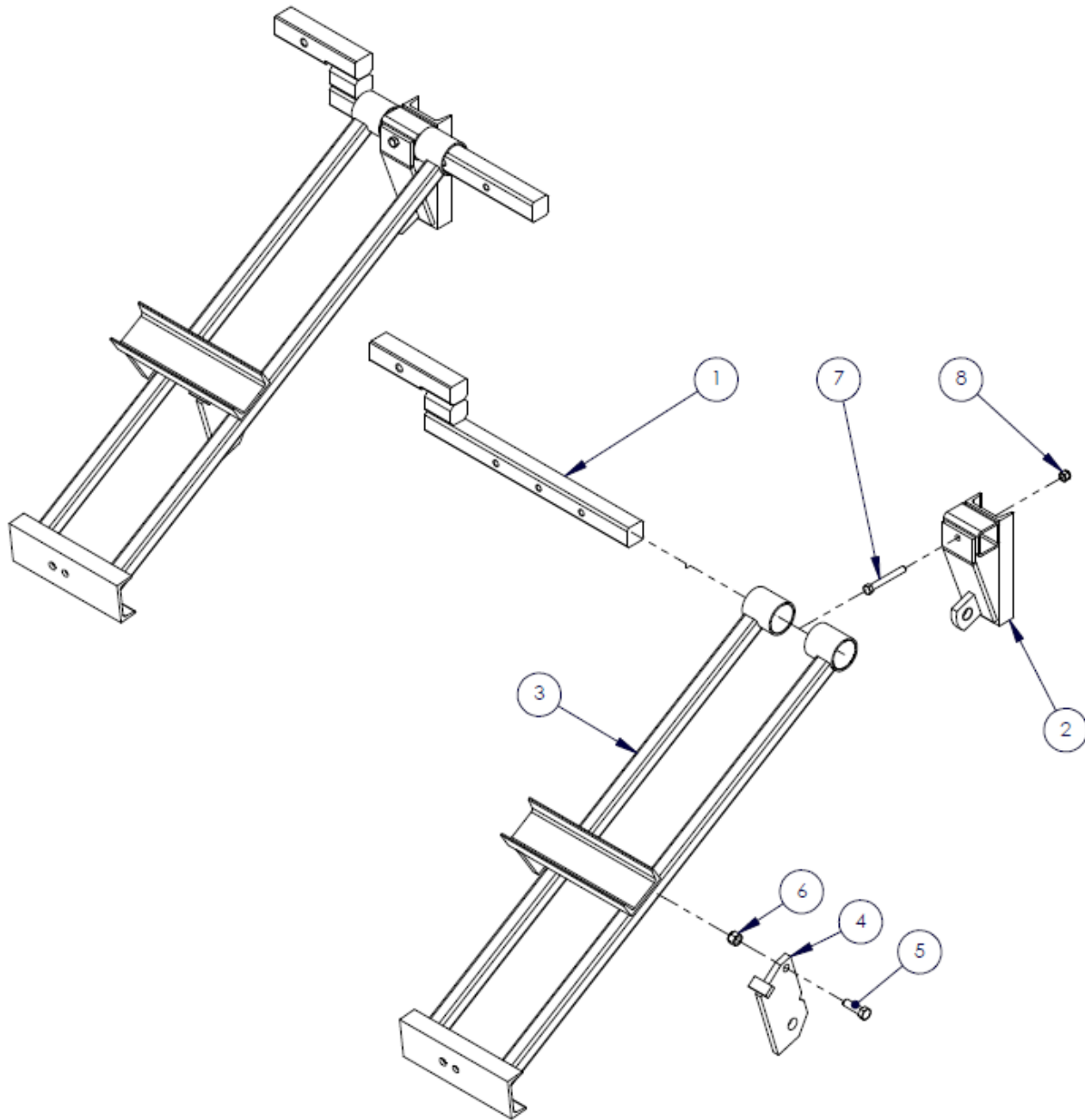
5. General Information

- Direction
 - It is the operators preference if the Quick-N-Easy is setup for operation in the forward/ reverse direction, and the driver or passenger side of the truck.
 - Market surveys have shown that several driver/ operators prefer operating with the Quick-N-Easy setup in the driver side, reverse direction. The reasons mentioned for their preference include, the driver side for the better visability from the driver side mirror. Reverse direction was chosen for the ease of controlling and guiding the Quick-N-Easy, they referred to the turning of a forklift for maneuvering the Quick-N-Easy.
- Safety
 - When using the Quick-N-Easy, it is recommended that a flagger or pilot vehicle is also used to alert the public and protect all workers and equipment.
 - The driver should always be aware of any obstacles that could strike the Quick-N-Easy.
 - The Quick-N-Easy should be used during the daylight hours.
 - Obey all traffic laws.
- Video
 - To see the Quick-N-Easy shoulder conditioner in action visit https://www.youtube.com/watch?v=UfYWmjc_mNI
 - The following QR can be scanned using a smartphone to directly view the video.



6. Parts Breakdowns

FILE NAME	QUICK N EASY	REV.	DESCRIPTION	DATE	INITIALS
DWG NAME	MOUNT AND CARRIER	-	ORIGINAL		



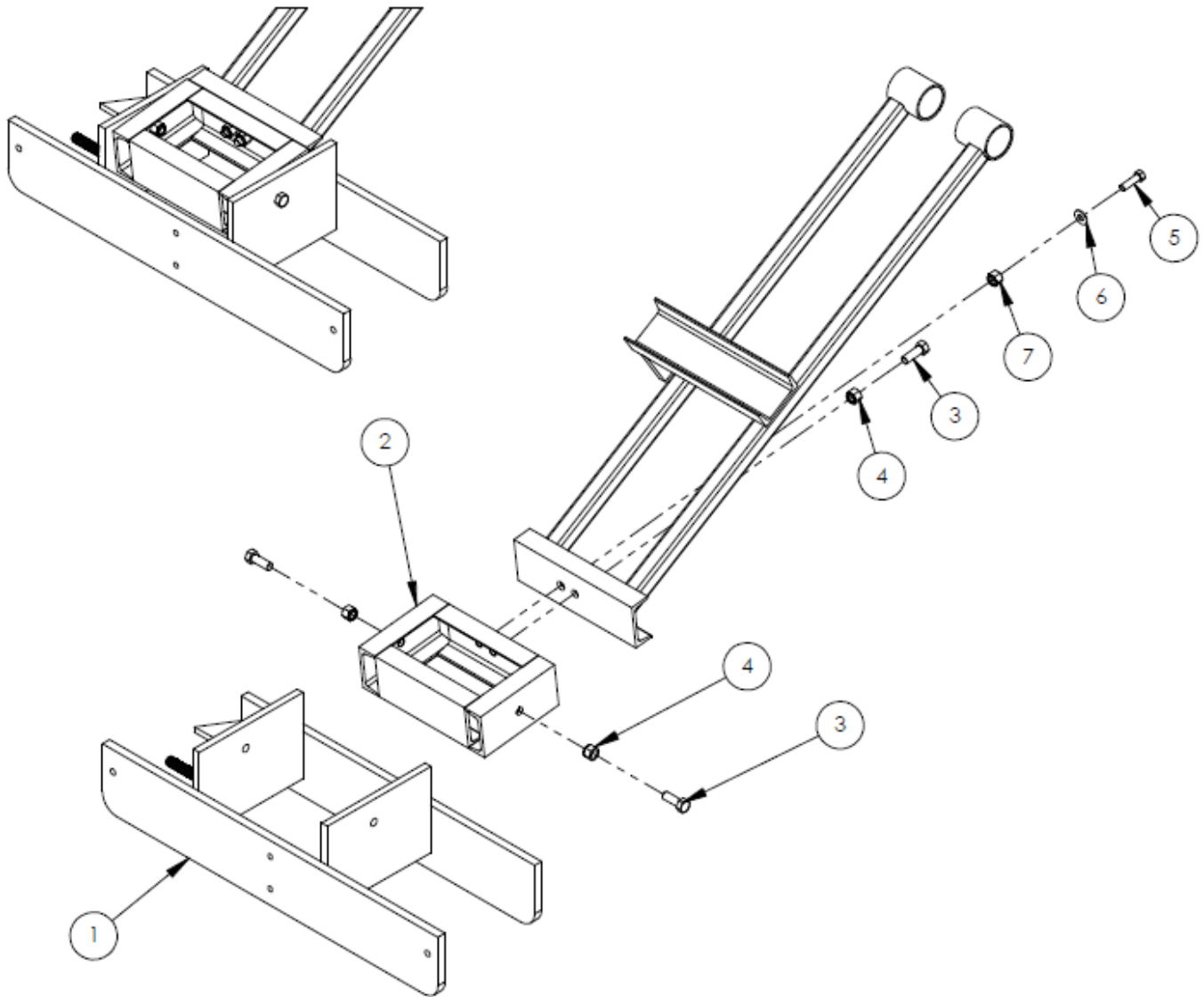
1	1	QE-3018	HITCH RECEIVER MOUNT, WELDMENT
2	1	QE-3025	CYLINDER MOUNT, WELDMENT
3	1	QE-3023	MOUNTING FRAME, WELDMENT
4	1	QE-3016	CYLINDER MOUNT, HINGED, WELDMENT
5	1	BON-000153	5/8-11 X 2" BOLT
6	1	BON-000322	5/8"-11TPI HEX LOCK NUT NYLON INSERT
7	1	BON-000117	1/2-13 X 4" BOLT
8	1	BON-000321	1/2"-13TPI HEX LOCK NUT NYLON INSERT
ITEM	QTY	PART NUMBER	DESCRIPTION

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DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	QUICK N EASY	REV.	DESCRIPTION	DATE	INITIALS
DWG NAME	FLOATING AND SKID	-	ORIGINAL		



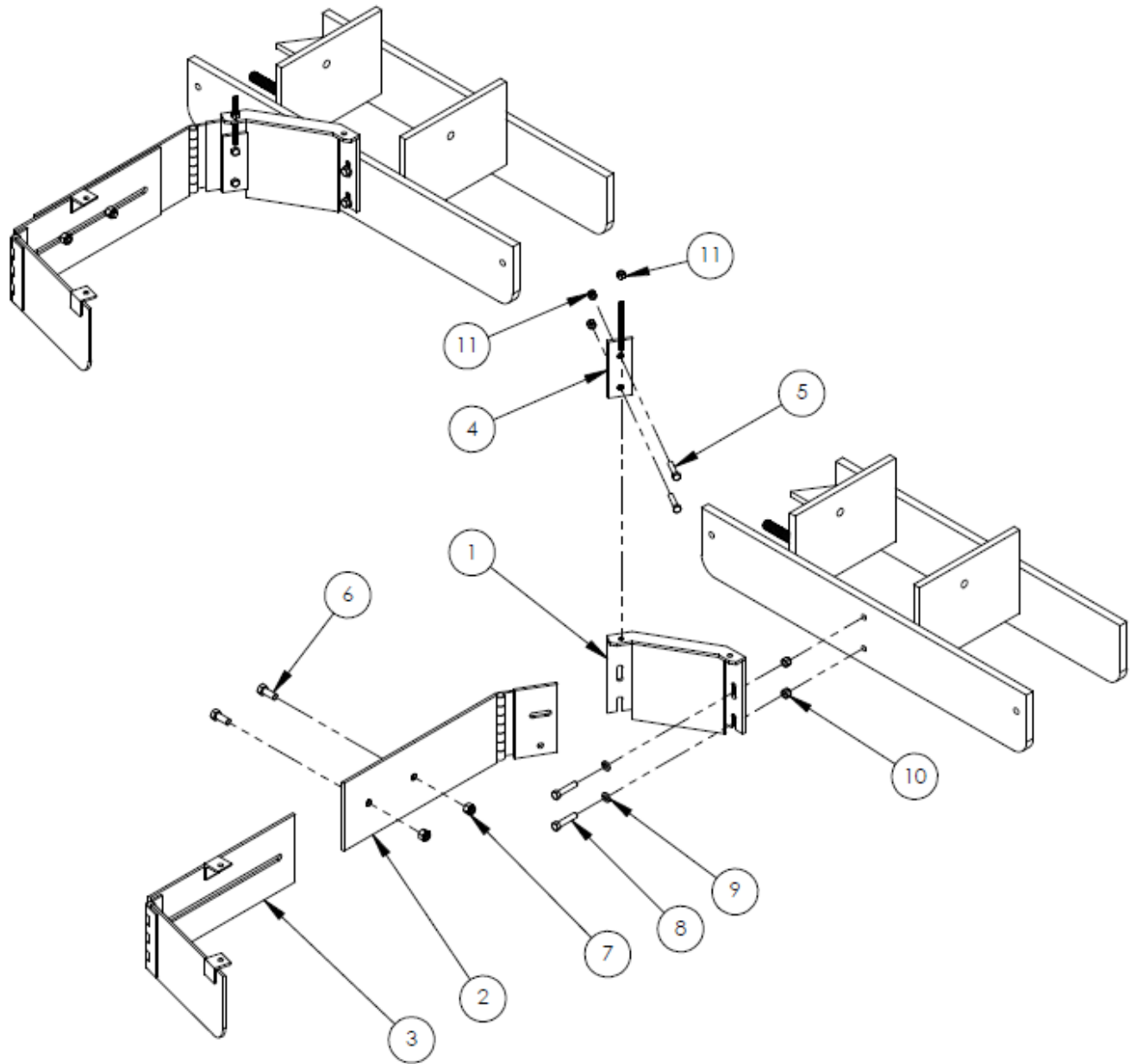
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1	1	QE-3011	SKID UNIT, WELDMENT
2	1	QE-3010	PIVOT BOX, WELDMENT
3	3	BON-000152	5/8-11 X 1-3/4" BOLT
4	2	BON-000322	5/8"-11TPI HEX LOCK NUT NYLON INSERT
5	1	BON-000108	1/2-13 x 1-3/4" BOLT
6	1	BON-000340	FLAT WASHER, 1/2
7	1	BON-000321	1/2"-13TPI HEX LOCK NUT NYLON INSERT
ITEM	QTY	PART NUMBER	DESCRIPTION

FILE NAME	QUICK N EASY	REV.	DESCRIPTION	DATE	INITIALS
DWG NAME	SCOOP	-	ORIGINAL		



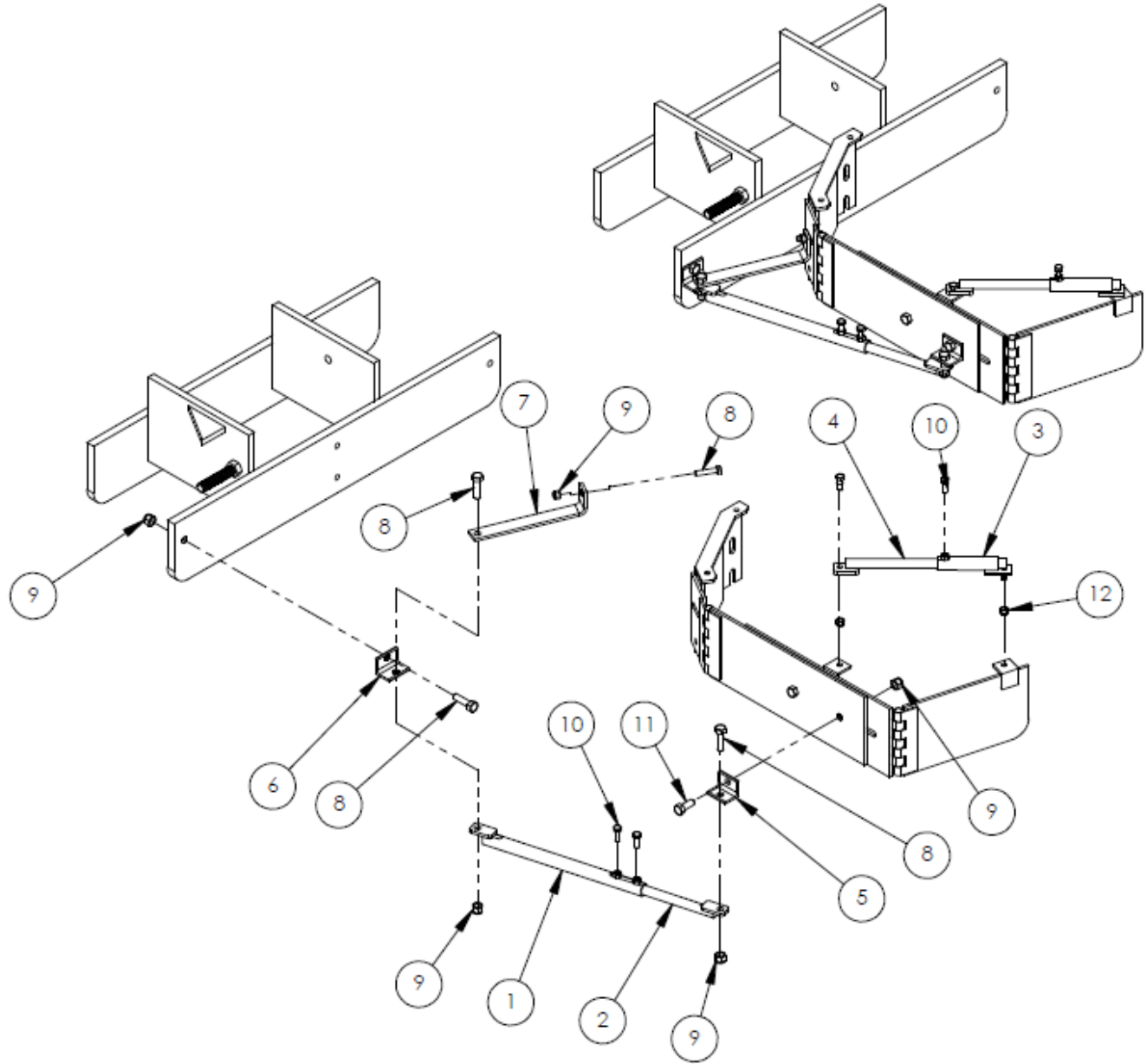
1	1	QE-3012	SUPPORT, SPREADER HEAD
2	1	QE-3008	SPREADER, INNER, HINGED
3	1	QE-3009	SPREADER, OUTER, HINGED
4	1	QE-3014	BRKT, ADJUSTER, HEIGHT
5	2	BON-000060	3/8-16 x 1-3/4" BOLT
6	2	BON-000106	1/2-13 x 1-1/4" BOLT
7	2	BON-000321	1/2"-13TPI HEX LOCK NUT NYLON INSERT
8	2	BON-000088	7/16-14 x 2" BOLT
9	2	BON-000353	LOCK WASHER, 7/16
10	2	BON-000320.5	7/16"-14TPI HEX LOCKNUT NYLON INSERT
11	3	BON-000319	3/8"-16TPI HEX LOCK NUT NYLON INSERT
ITEM	QTY	PART NUMBER	DESCRIPTION

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FILE NAME	QUICK N EASY	REV.	DESCRIPTION	DATE	INITIALS
DWG NAME	SCOOP SUPPORTS	-	ORIGINAL		



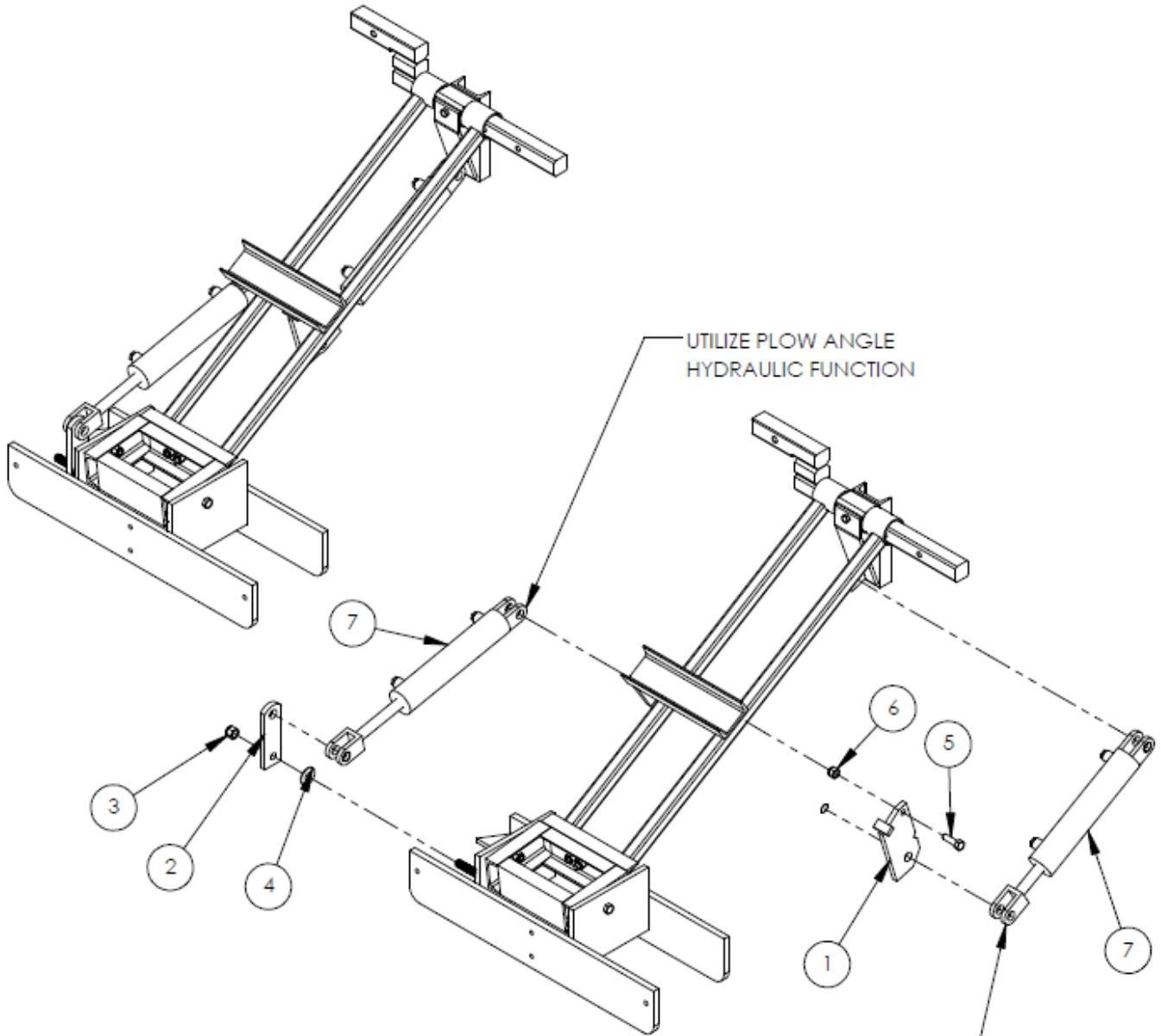
1	1	QE-3003	TUBE, ADJUSTMENT, INNER
2	1	QE-3005	ROD, ADJUSTMENT, INNER PLATE
3	1	QE-3004	ADJUSTER, TUBE, OUTER PLATE
4	1	QE-3006	ROD, ADJUSTER, OUTER PLATE
5	1	QE-4013	ANGLE, MNT, INNER
6	1	QE-4021	ANGLE, INNER ADJUSTMENT
7	1	QE-4054	BRACKET, SUPPORT, SPREADER
8	4	BON-000108	1/2-13 x 1-3/4" BOLT
9	5	BON-000321	1/2"-13TPI HEX LOCK NUT NYLON INSERT
10	4	BON-000057	3/8-16 X 1" BOLT
11	1	BON-000106	1/2-13 x 1-1/4" BOLT
12	2	BON-000319	3/8"-16TPI HEX LOCK NUT NYLON INSERT
ITEM	QTY	PART NUMBER	DESCRIPTION

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FILE NAME	QUICK N EASY	REV.	DESCRIPTION	DATE	INITIALS
DWG NAME	CYLINDERS	-	ORIGINAL		



BON-003373 -SHORT HOSE KIT
CAN BE USED TO CONNECT
CYLINDERS TO TRUCK HYDRAULICS

UTILIZE FLOW ANGLE
HYDRAULIC FUNCTION

UTILIZE FLOW UP/DOWN HYDRAULIC FUNCTION
CAN OPERATE SINGLE ACTING FUNCTION

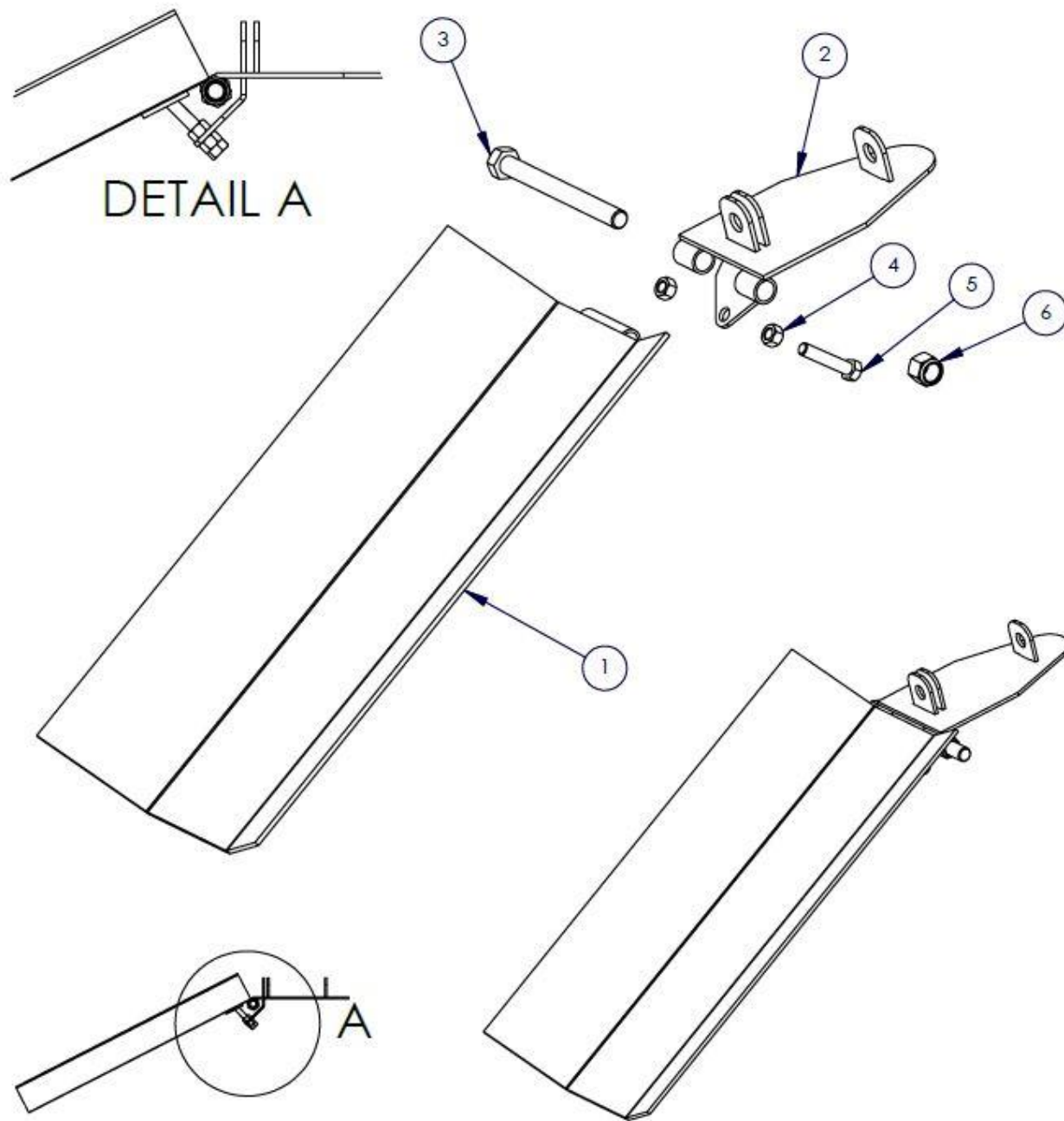
1	1	QE-3016	CYLINDER MOUNT, HINGED, WELDMENT
2	1	QE-4045	CYLINDER MOUNT, ROTATING
3	1	BON-000323	3/4"-10 TPI HEX LOCK NUT NYLON INSERT
4	1	BON-000342	FLAT WASHER, 3/4
5	1	BON-000153	5/8-11 X 2" BOLT
6	1	BON-000322	5/8"-11TPI HEX LOCK NUT NYLON INSERT
7	2	LV-1112W	CYLINDER, 2-1/2" BORE X 10" STROKE, WELD
8	4	PMC-19040005	CLEVIS PIN, 1" X 2-1/8" WL
9	1	PMC-PMBHF3	BREATHER CAP 1/2" PIPE
ITEM	QTY	PART NUMBER	DESCRIPTION

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BONNELL
INDUSTRIES INC
TRUCK & ROAD EQUIPMENT

DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	QE-3028	REV.		DESCRIPTION	DATE	INITIALS
DWG NAME	QE-3028	-		ORIGINAL		



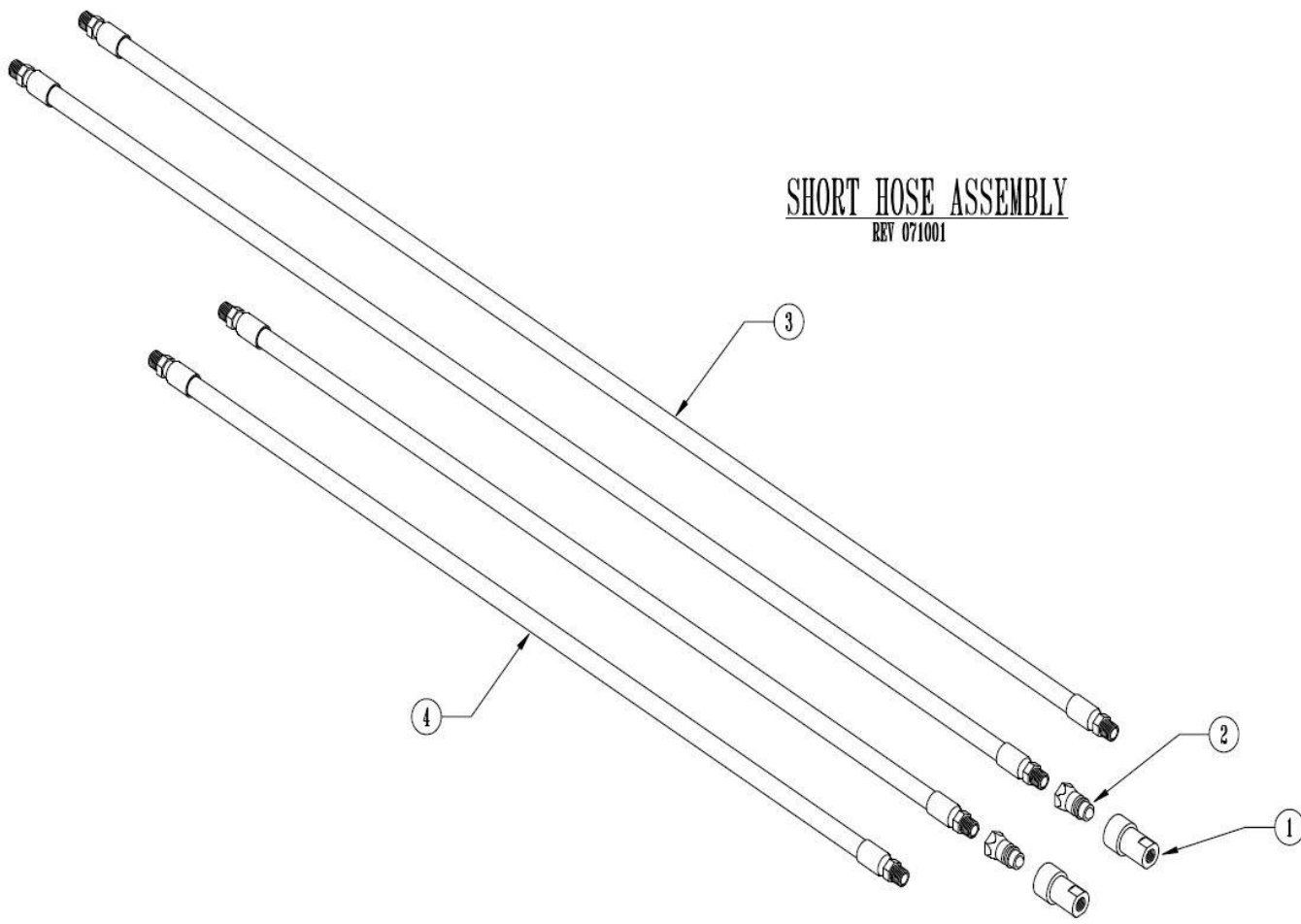
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6	1	BON-000323	3/4" NYLOCK HEX NUT
5	1	BON-000111	1/2" BOLT X 2-1/2" GR8
4	2	BON-000305	1/2" HEX NUT
3	1	BON-000198	3/4" X 8" HEX BOLT
2	1	QE-3027	BERM CHUTE HOOK UP
1	1	QE-3026	BERM CHUTE- CHUTE
ITEM	QTY	PART NUMBER	DESCRIPTION

SHORT HOSE ASSEMBLY
REV 071001



SHORT HOSE KIT

ITEM #	PART #	QTY. NEEDED	DESCRIPTION
1-4	BON-003373	1	COMPLETE SHORT HOSE KIT
1-2	PHD-4000-4P	2	1/2" QUICK DISCONNECT ASSEMBLY
1	PHD-4050-4P	2	1/2" QUICK DISCONNECT FEMALE
2	PHD-4010-4P	2	1/2" QUICK DISCONNECT MALE
3	BON-003373-1	2	1/2" I.D. X 68" LONG HOSE
4	BON-001924	2	1/2" I.D. X 48" LONG HOSE



WARRANTY

Issued: January 1, 1998

Bonnell Industries, Inc. warrants to the original purchaser that if any part of the product proves to be defective in workmanship or material within one year of the date of original installation and is returned to us freight prepaid within 30 days after such defect is discovered and notification thereof is provided Bonnell, we will either replace or repair the defective part (our option). This warranty does not apply to damage resulting from neglect, misuse, accident or improper installation or maintenance. Charges for field service, labor, or other expenses not previously authorized and approved in writing by Bonnell Industries, Inc. will not be accepted. This warranty is exclusive and in lieu of all other warranties whether expressed or implied. Bonnell Industries, Inc. neither assumes nor authorizes anyone to assume for it any other obligation or liability in connection with this warranty, and will not be liable for consequential damages. This warranty applies only to products made and/or supplied by Bonnell Industries, Inc. and does not apply to other products not made or supplied by us and to which our products may be attaches, such as trucks. We accept no responsibility for damages to such other products, even if our product is alleged to have contributed to the damage of the other product.

Hydraulic, electrical, or other components furnished by other manufacturers and used with our products are warranted by that manufacturer and not by Bonnell Industries, Inc. the manufacturer's own warranty will apply to these parts. Hydraulic or electrical components are not to be disassembled without the express written permission of Bonnell Industries, Inc.

All defective parts returned from an end user must include the unit model, serial number, date installed, and dealer from whom purchased.

Bonnell Industries, Inc. reserves the right to make changes or improvements to its products without incurring any liability or obligation and without being required to make corresponding changes or improvements to products manufactured or sold prior to those changes or improvements.

The Bonnell Industries, Inc. Warranty Policy is subject to change without notice.

Product Information

When ordering parts, please refer to the information below.

INSTALLATION DATE:

Certificate of Origin

This product was manufactured at Bonnell Industries, Inc.,
located at 1385 Franklin Grove Rd.,
in the city of Dixon, Illinois, U.S.A.

MADE IN THE USA 