

COMMANDER

MULTI-PURPOSE BODIES

NNR- series Multi-Purpose Dump Body

OPERATION & SERVICE MANUAL

Manual Part No.: BON-013657



NNR Body shown with optional accessories



REV: 08/02/22

To ensure accuracy when ordering parts, provide the Model and Serial Numbers located on your equipment and in the back of this manual.

TABLE OF CONTENTS

Specifications		4
Safety		5 - 10
Hydraulics		11 - 12
Installation - Main Body		13 - 20
Body Props	13	
Cab Shield	14	
Observation Ladder	14 - 15	
Riser Kit	15 - 16	
Trunnion & Hoist Cylinder	16 - 20	
Installation - Accessories		21 - 30
Air Foil	21	
Fenders – Metal	22	
Fenders - Minimizer Poly	22	
Light Kits	22	
Mud Flaps	23	
Pre-Wet Poly Tank Kit	23 - 26	
Pre-Wet Pump Kit – Electric	26	
Pre-Wet Pump Kit – Hydraulic	26	
Rear Spill Pan	27	
Side Boards	28	
Tarp Kit	28	
Top Screen	29 - 30	
Operation		31 - 34
Service		35 - 39
Service Parts - Main Body		40 - 46
Tailgate	40	
Tailgate Latch	41	

Hoist Components	42
Decals & Covers	43
Grease Lines	44 - 45
Trunnion Hoist Kit (optional)	46
Service Parts - Accessories	47 - 63
Air Foil	47
Fenders – Metal	48
Fenders – Poly	49
Light Kits	49
Mud Flaps	49
Observation Ladder	50
Pre-Wet Poly Tank Kit	51 - 52
Pre-Wet Hose & Fitting Kit	53 - 55
Pre-Wet Pump Kit – Electric	55
Pre-Wet Pump Kit – Hydraulic	55
Pre-Wet Nozzle Kit – Receiver Style	56
Pre-Wet Nozzle Kit – Pedestal Style	57
Pre-Wet Nozzle Kit – Hopper Style	58
Rear Spill Pan	59
Side Boards	60 - 61
Tarp Kit	61
Top Screen	62
Mud Flap Brackets	63
Warranty	BACK COVER

Bonnell Industries Inc. reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used herein.

© 2006 Bonnell Industries, Inc.

SPECIFICATIONS

Body length & estimated operating weight	NNR-09	108"	
	NNR-10	120"	3,126 lbs
Operating weight includes dump body, tailgate, tailgate latch, hoist components, access covers & grease line kit.	NNR-11	132"	3,320 lbs
	NNR-12	144"	3,482 lbs
Operating weight does not include observation ladder, trunnion hoist cylinder, trunnion hoist cylinder mounting bracket & cab shield.	NNR-13	156"	3,676 lbs
	NNR-14	168"	3,931 lbs
	NNR-15	182"	4,160 lbs
	NNR-16	194"	4,323 lbs
Bulkhead height (from top of long sill)			50-1/2"
Inside body width			87"
Outside body width			96"
Sidewall height (from top of long sill)			40-1/2"
Tailgate height (from top of long sill)			49-1/2"
Tailgate type			double-acting, 6-panel
Tailgate latch mechanism			twin air cylinder, over-center latch
Hoist			double- acting (3) stage trunnion (09' – 14' models) double- acting (4) stage trunnion (15' – 16' models)

		<u>Sidewall</u>	<u>Tailgate</u>	<u>Heaped</u>
Capacities	NNR-09	6.3 yd ³	8.2 yd ³	9.6 yd ³
	NNR-10	7.1 yd ³	9.1 yd ³	10.7 yd ³
	NNR-11	8.0 yd ³	10.1 yd ³	11.9 yd ³
	NNR-12	8.8 yd ³	11.1 yd ³	13.1 yd ³
	NNR-13	9.6 yd ³	12.1 yd ³	14.4 yd ³
	NNR-14	10.4 yd ³	13.1 yd ³	15.6 yd ³
	NNR-15	11.3 yd ³	14.2 yd ³	16.8 yd ³
	NNR-16	12.1 yd ³	15.2 yd ³	18.0 yd ³

SAFETY

Read this manual before attempting to install or operate this equipment.



This symbol means **ALERT**. Any time you see this symbol, you are warned that your safety is in danger. Be careful!

SAFETY GUIDELINES TO FOLLOW

- Turn off all power including truck engine when servicing or installing equipment.
- Follow all recommended operating procedures.
- Follow a regular maintenance schedule so that the equipment is kept in good operating condition. Improper maintenance can lead to equipment failure during operation, making for unsafe conditions.
- Recognize and avoid hazardous situations during the installation, operation and service of this equipment.
- Pay attention to, and respect all safety decals. They are there to protect you from injury. Replacement safety decals are available from Bonnell Industries.

AVOID ACCIDENTS

Most accidents, wherever they occur, are caused by the failure of an individual to follow simple and fundamental safety rules or regulations. Most accidents can be prevented by recognizing the real cause of accidents and what precautions should be taken to avoid unsafe situations.

Regardless of the care used in the design and construction of this equipment, there are many situations that cannot be completely safeguarded against without interference to reasonable accessibility and efficient operation of the equipment.

A careful, knowledgeable operator is the best insurance against accidents. The complete observance of a simple safety rule can prevent injury:



Never attempt to clean, lubricate, or adjust a machine while it is in motion.

NATIONAL SAFETY COUNCIL

ALWAYS THINK SAFETY FIRST

The purpose of this manual is to inform you, the operator, with the necessary information to properly install, operate, and service this equipment. These instructions cannot replace the fundamental knowledge that a person must possess in order to safely operate this equipment. The person must be qualified and possess the mechanical skills to install and operate this equipment. Since the life of the equipment depends largely upon the care it is given, Bonnell Industries suggests that this manual be read and understood by those individuals that will be working with this equipment. If for any reason you do not understand these instructions, contact your authorized service center or Bonnell Industries at 815-284-3819. Through experience and following these instructions, an operator will develop a sufficient understanding of the care and safe operation of this equipment.

The need for safety cannot be stressed enough. Bonnell Industries urges you to make safety your top priority when operating this equipment.

Accidents can be avoided!

SAFETY PRECAUTIONS

The best safety device is a careful and knowledgeable operator!



This symbol means be **ALERT!** Your safety is involved! Read and understand all safety information before operating equipment.

Improper use of this equipment can result in serious injury or death. To reduce this risk, give complete and undivided attention to the job at hand. Always follow these safety precautions.

PREPARATION

- Know your controls.
- Read all instruction manuals pertaining to this equipment.
- Learn how to stop the equipment quickly in an emergency.
- Do not allow children or untrained adults to operate this equipment.
- Keep all bystanders a safe distance from this equipment while in operation.

SAFETY DURING OPERATION

- Observe settings on all equipment controls.
- Make sure all equipment is turned off before starting engine.
- Always check area around equipment for hidden hazards prior to engaging or operating controls.
- To avoid machine entanglement, always wear relatively tight and belted clothing when operating equipment.
- Stop, shut down and inspect equipment if unusual movement or sounds are observed. Repair damage before placing equipment back into service.
- Never operate equipment without all guards and shields properly installed.
- Disengage power and turn off equipment:
 - Before leaving operator position.
 - Before making any repairs or adjustments.
 - Before performing any service work.
 - When not in use.
- Take all possible precautions when leaving the equipment unattended:
 - Disengage hydraulic systems
 - Shut off engine
 - Set parking brake
 - Remove key

LIGHT BAR INSTALLATION (if furnished)

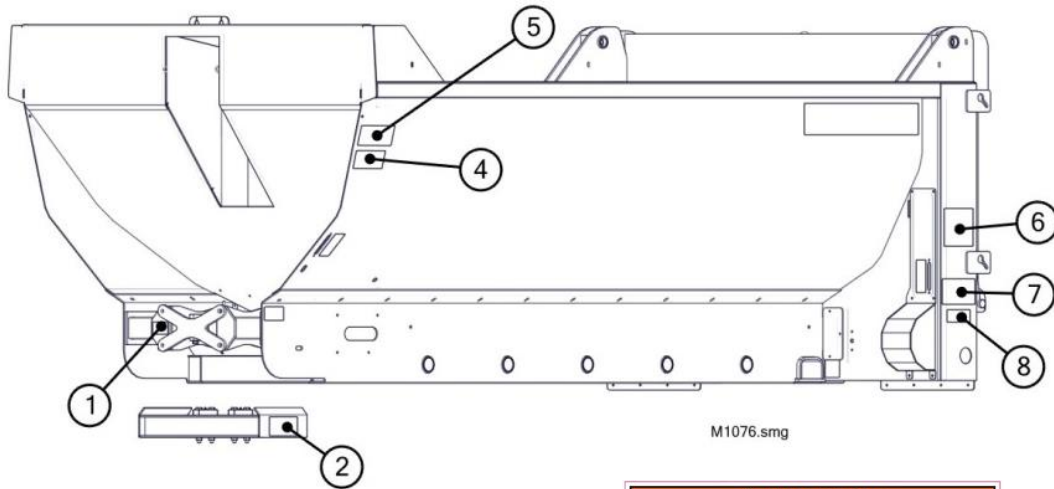
- Depending on the distance installed above ground, an auxiliary light bar may not meet federal lighting regulations. The lighting equipment installer is responsible for complying with all federal lighting regulations.
- Any additional wiring connections made to the truck chassis for “optional” lighting must be made in accordance with the vehicle manufacturer’s recommendations.

SAFETY DECALS

- It is the responsibility of the equipment owner to replace any safety decals that become unreadable through physical damage or deterioration.
- Replacement decals should be positioned in the same location as the damaged decals removed.
- Read and observe all **DANGER**, **WARNING** and **CAUTION** safety decals appearing on the equipment.
- If safety decals become damaged, call Bonnell Industries at 800-851-9664 for replacement labels.

SAFETY DECALS

Replace immediately if damaged or unreadable



M1076.smg



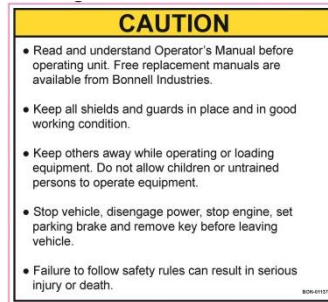
1: BON-012107



BON-011382



2: BON-011376



BON-011377



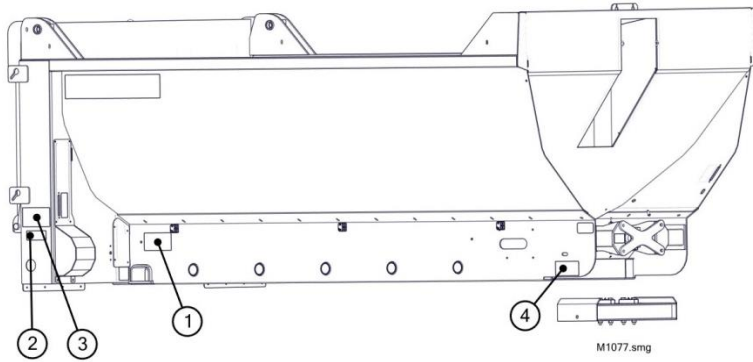
4: BON-011379



BON-011375



BON-011384



WARNING	
	HIGH PRESSURE OIL HAZARD Serious injury or death can occur
	<ul style="list-style-type: none"> • Check for leaks with cardboard; never use hands. • Before loosening fittings: lower load, release pressure, and be sure oil is cool. • Consult physician immediately if skin penetration occurs.
	BON-011375

1: BON-006442

WARNING	
	PINCH POINT HAZARD Serious injury or death can occur
	<ul style="list-style-type: none"> • Keep hands, feet and clothing away from moving parts. • Turn power off before servicing.
	BON-011384

BON-011384

WARNING	
	CRUSHING HAZARD Serious injury or death can occur
	<ul style="list-style-type: none"> • Stay clear while loading, unloading, raising, or lowering dump body.
	BON-011375

2: BON-011375

DANGER	
	CRUSHING HAZARD Serious injury or death will occur
	<ul style="list-style-type: none"> • Stay clear of a raised dump body. If service work is required, make sure the body prop is properly used. • Dump body must be empty when using body prop. • Return the body prop to its storage position after service work is completed. • Body must be completely lowered when unattended.
	BON-011376

BON011376

The safety information in this manual is denoted by the safety alert symbol:

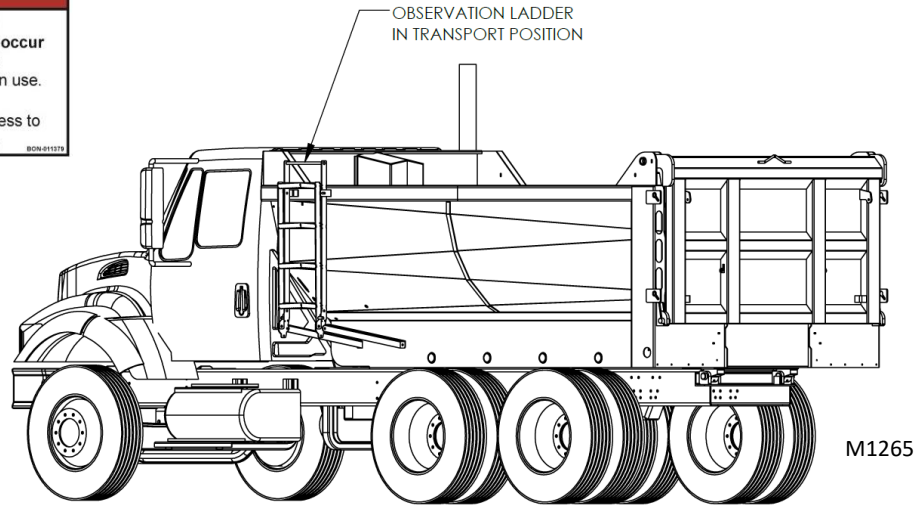


The level of risk is indicated by the following signal words:

DANGER	
DANGER – Immediate hazards that WILL result in severe injury or death if the warning is ignored.	
WARNING	
WARNING – Hazards or unsafe practices that COULD result in severe injury or death if the warning is ignored.	
CAUTION	NOTICE
CAUTION or NOTICE – Practices that could result in damage to equipment or property if information is ignored.	

OBSERVATION LADDER

When not in use, the observation ladder should be stored in the transport position.



HYDRAULICS

HYDRAULIC CARE

Hydraulic Oil IS032 **

Oil Filter 10 microns

Relief Valve Setting 2,200 psi

Oil Flow Material Spreader: 0–7 gpm

** Select a grade of oil that has good wear, oxidation and foam inhibitors.

- Hydraulic components need to be kept clean during assembly operations.
- Galvanized pipe and pipe fittings must not be used as flaking of galvanized material can cause internal damage to hydraulic components.
- A pipe joint sealant, compatible with hydraulic oil, must be applied to all threaded pipe fittings. Teflon tape is not recommended.
- Provide sufficient hose length to prevent hydraulic hose from kinking or stretching when raising and lowering the dump body.
- Hydraulic hoses need additional hose protection in areas where severe wear from vibration or hose movement occurs.
- Support long runs of hydraulic hoses with cable ties or clamps.
- Pressure and return lines, connected to the spinner, may be reversed for proper motor rotation.
- Hydraulic hose lines to the rear of the truck can be secured inside the truck frame or under the dump body floor.

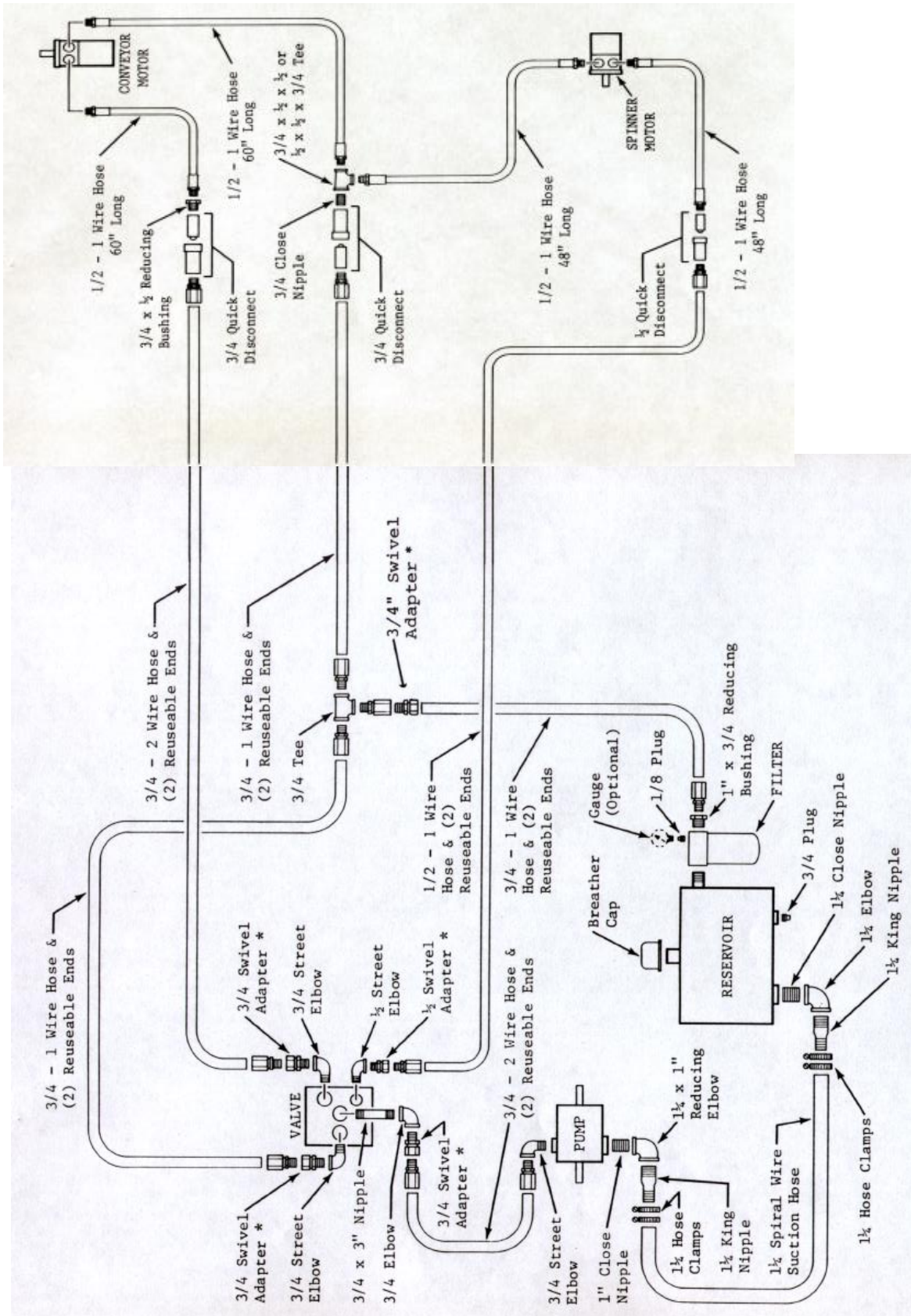
The hydraulics diagram on the following page is Bonnell Industries recommended hydraulic system.

Standard pump, valve, tank and hose kits make up the complete system.

This diagram may be used to install an entire system, or part of a system, depending upon kits supplied, and existing components on the host vehicle.

Alternate proven methods and components are acceptable to suit various host vehicle model requirements.

HYDRAULICS DIAGRAM



INSTALLATION – MAIN BODY

BODY PROPS

The body prop is designed and intended for use to support an empty truck body in the raised position to permit service work to be performed safely beneath a raised body. As a general rule, one prop will support a farm type body of 16' or less. With longer bodies, two props should be used, one on each side. The body prop kit comes in pairs, driver's side and curb side.

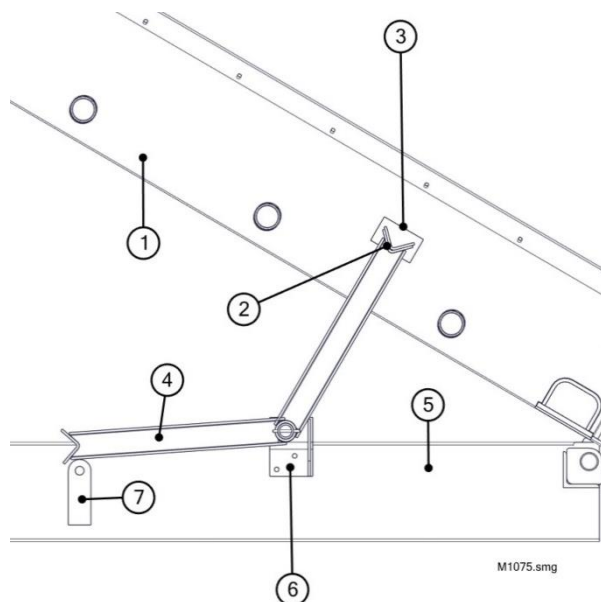
Refer to the drawing as shown below:

1. Raise body to desired height and brace it securely before beginning installation.
2. Assemble body prop arm to prop pivot mount with 1/4 x 3 roll pin. Position prop pivot mount against outside of truck just behind rear axle, allowing saddle end of prop arm to rest on top of front rear spring shackle as shown. Using prop pivot mount as a guide, mark location of holes on truck frame and drill. Fasten prop pivot mount to truck frame with 1/2 x 1-3/4 bolts, lock washers and nuts.
3. Raise prop arm to free standing position by allowing prop arm to rest against rear flange of prop pivot mount. Place long sill bracket in prop arm saddle. Position long sill bracket against the upper outside of body long sill in order to allow room for clearance when body is in the lowered position. Weld long sill bracket securely in place.
4. To operate Truck Body Prop, raise body to desired height, shut off all power, raise prop arm to free standing position. Lower body slowly until long sill bracket contacts prop arm saddle. **DO NOT POWER HOIST DOWN !!!!**
5. To place Truck Body Prop in storage position simply reverse the above procedure.

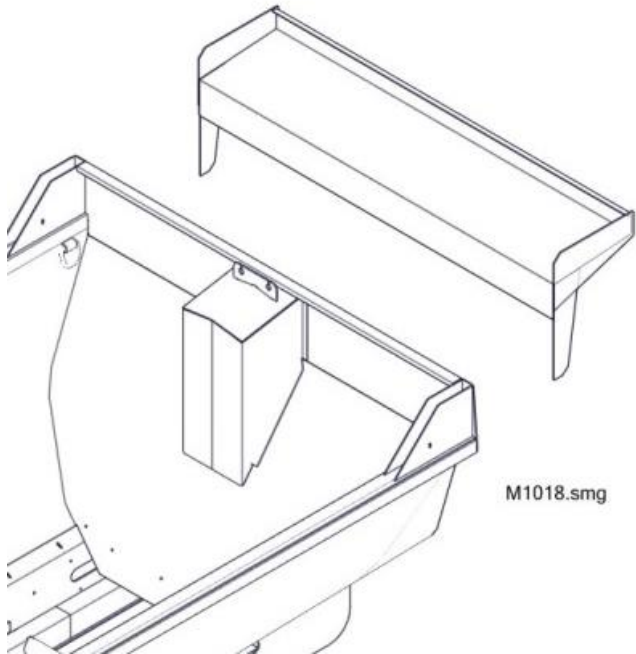
DANGER: DO NOT put the dump body into service unless equipped with properly installed body props. Failure to comply can result in severe injury or death when performing service work on a partially raised body.



Ref	Description
1	LONG SILL
2	SADDLE
3	BODY PROP BRACKET
4	PROP ARM (STORAGE POSITION)
5	TRUCK FRAME
6	PROP PIVOT MOUNT
7	SPRING SHACKLE



CAB SHIELD



Under most circumstances, a cab shield is included in the original dump body construction. Cab shields are custom made to the parameters of the cab and the owner's requirements regarding cab coverage and lighting requirements. In the event that a damaged cab shield needs replacement, contact Bonnell Industries for assistance. In most cases, it is more cost effective to make the repairs at the factory.

OBSERVATION LADDER

The observation ladder is designed to provide an operator with a quick means to view the contents of a dump body. It is not intended to stand on during operation, nor access into a dump body that is in operation. It is not intended for use to gain access to side fenders as a means of a "catwalk". Serious injury or death can result from the improper use of this accessory.



Normally, the observation ladder is mounted on the front left corner of the dump body. This provides quick access for the driver to observe the contents of the dump body. Other mounting locations are acceptable as long as they don't interfere with the operation of other peripheral equipment attached to the dump body. Always make sure the truck is properly parked and secured before leaving the operator area.

The observation ladder is equipped with mounting brackets that attach to the upper top rail area of the dump body. The lower section of the observation ladder is attached to either the long sill area or the

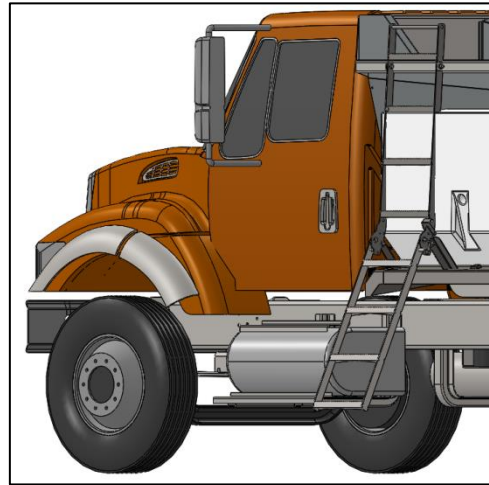
optional side-mounted tank bracket. If attached to the side wall of the dump body, additional cross bracing will be required to stabilize the observation ladder when in use.

Evaluate the area that the observation ladders will be mounted. Be aware of the distance that the observation ladder extends outward from the dump body, especially in the folded position. For operational safety purposes, the observation ladder must not protrude past the exterior rear view truck mirrors. Be aware of additional peripheral components on the dump body that might interfere with the location and functionality of the ladder.

Unfold the observation ladder to ensure that the bottom rung of the ladder is at an accessible height for the operator. Once the desired position is determined, mount the observation ladder to the body and reinforce with cross bracing. The observation ladder is to be stored in the folded position when the dump body is in operation.



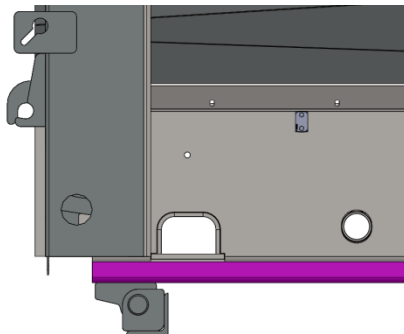
Body-mounted with cross bracing



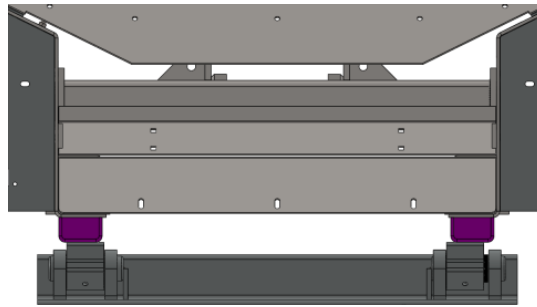
Tank bracket mounted

RISER KIT

A 2" body riser kit is available that provides additional clearance for peripheral components located near the long sill area. This includes tanks, fenders, wing posts, etc. Do **NOT** attempt to modify a dump body unless an AWS certified technician trained in this type of welding is making these modifications. If uncertain, contact Bonnell Industries for assistance regarding the proper installation of this accessory.



1. Note the current location of the hinge relative to the dump body. The upper hinge will be located in a similar position on the bottom edge of the riser.
2. Cut the upper hinge from the underside of the long sill. Grind all welded areas smooth.
3. Position the dump body side-to-side so that the dump body remains centered on the truck chassis rails with suitable weld joints in the rear hinge area.
4. Weld entire length of the risers to the bottom flange of the long sill. The weld joining the hinge to the riser will require multiple weld passes.
5. After the riser is welded in place, coat hinge and risers with undercoating. This will promote rust prevention by preventing moisture from getting inside the riser.



TRUNNION, REAR HINGE & HOIST CYLINDER

For non-factory installed trunnion cylinders, it is critical that all instructions be followed closely to ensure all hoist components are installed safely and correctly.

1. Installation of the rear hinge is critical. An incorrectly positioned hinge will cause the dump body to lift and perform poorly. If the rear hinge is not welded correctly to the dump body long sill, a weld failure in this region can lead to serious equipment damage and serious injury or death.

DO NOT ALLOW UN-QUALIFIED TECHNICIANS TO WELD THIS CRITICAL AREA.

2. Serious planning is required to ensure that the dump body is properly mounted on the truck rails. When doing the initial body layout, consider all peripheral objects that could interfere with the performance of the dump body. Peripheral objects include cab clearance, exhaust clearance, clearance from additional accessories, proximity of rear tires relative to back of the dump body, and dump body overhang from the rear pivot point.
3.
 - a. Cab Clearance: Under normal conditions, the clearance between the back of the cab and the front of the dump body is between 5"-10". This distance can vary with the upper cab shield coverage requirements, and peripheral accessories, such as toolboxes or pre-wet tanks that are mounted between the dump body and the rear of the cab. Measure the C/A or C/T of the truck as it was delivered and record this information in this manual for future reference.

TRUCK MODEL _____

C/A or C/T _____

- b. Exhaust Clearance: Normally an upper cab shield will have clearance provisions made in it to clear the truck exhaust system. It may however be necessary to alter the clearance between the dump body and rear of cab to ensure that no exhaust interference occurs in the lower section of the dump body.

- c. Additional Accessory Clearance: Mounting additional accessories behind the cab, such as pre-wet tanks or toolboxes, will require adjustment between the cab and the dump body. Measure the long sills and the C/A or C/T on the truck to ensure the truck rails can accommodate these accessories before making any permanent adjustments to the length of the truck rails.

- d. Rear Tire Clearance: The position of the rear drive tires relative to the dump body will determine the clearances for peripheral accessories like mud flaps and fenders. To be effective, mud flaps should be mounted 10"-12" behind the rear of the tire. Refer to the Fender Installation section for mounting instructions.

- e. Body Overhang: It is important to maintain a proper relationship between the rear hinge pivot and the amount the dump body extends rearward from that pivot point. In general, the overhang between the rear hinge pivot and the rear edge of the body should be a minimum of 10". On single axle trucks, it may be necessary to increase or decrease this distance to provide clearance for truck rail cross members and/or rear leaf spring mounting brackets. Pushing the dump body further rearward from the hinge pivot will allow the rear of the truck to get closer to the ground with the dump body in a raised position. Ground clearance for rear mounted peripheral attachments like material spreaders and spill pans could be affected.

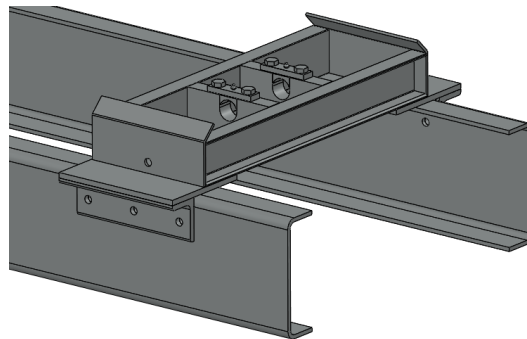
From a performance standpoint, having too much dump body overhang can affect the center of gravity of a raised body which may affect the weight distribution between the front and rear truck axles when dispersing material. The trunnion hoist cylinder used by Bonnell Industries is double-acting which assures it cannot get stuck in the fully raised position whereas a single-acting cylinder could.

NEVER ASSUME! MEASURE SEVERAL TIMES TO BE 100% SURE.



4. When preparing a dump body for installation on a truck, in general it is best to work from the rear of the truck to the front. Mark the position of the intended location of the rear hinge centerline. When determining this location, address interference issues with components (spring mounts, cross members, etc.) attached to the rear of the truck rail. Also take into consideration the location of accessories such as mud flaps and fenders.
5. Position the lower trunnion on the front of the truck rails based on the dimension "A" measurement listed on the chart.
6. Mark the location on the truck rail for dimension "B" which reflects the position of the front of the dump body. The remaining distance to the back of the cab represents the clearance between the back of the cab and the front of the box. If this clearance is less than 5", additional evaluation may be required.
7. A heavy-duty 1/2" steel plate structure has to be fabricated to support the lower trunnion bracket. This plate structure is welded to heavy-duty angle iron that in turn is bolted to the truck frame.

NOTE: Welding the trunnion directly to the flange section of the truck rail IS NOT allowed. All holes drilled into the truck rails to support the lower trunnion bracket must be located within the vertical zone of factory installed truck hardware. Failure to comply with this requirement can cause serious damage to the truck chassis and possible injury to the equipment operator or bystanders.



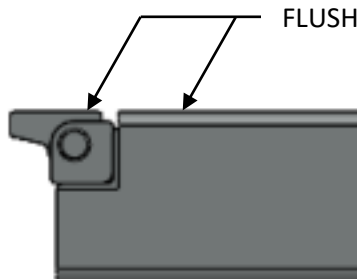
8. Once the truck body has been measured and verified that the dump body is of proper length, the next step is to mark and cut out the location where the truck rails will be shortened to. Make sure the truck rails are of equal length when done.
9. Inspect the truck chassis rails to determine the mounting hole locations and if there are any obstacles that need to be addressed or avoided. The trunnion mounting bolts should be evenly spaced across the width of the angle iron. Drill (3) 11/16" diameter holes through the angle iron and truck chassis. Secure the lower trunnion to the truck chassis rails with 5/8" grade 8 hardware.



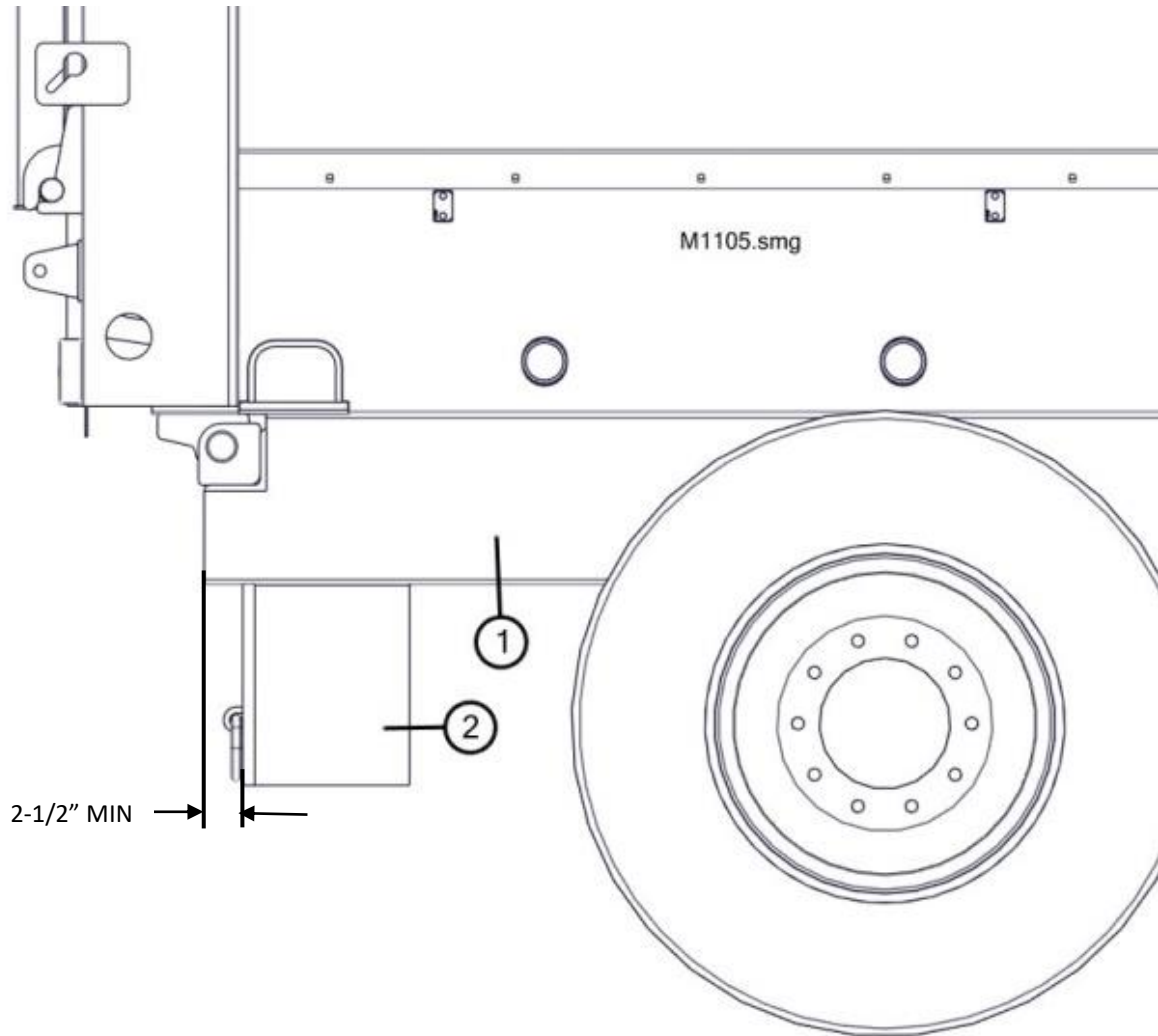
The following chart provides general dimensions as to the proper location of the rear hinge. These dimensions are based on a 10" body overhang. Actual mounting dimensions may vary.

16'	175-5/8"	8-3/8"
15'	163-5/8"	
14'	150-1/4"	7-3/4"
13'	138-1/4"	
12'	126-1/4"	7-1/4"
11'	114-3/4"	
10'	102-3/4"	
09'	90-3/4"	
BODY LENGTH	DIM "A"	DIM "B"

- The next step in the truck rail modification is to cut the notch profile into the truck rails which locate the rear hinge. Cut a 4" long by 5" high notch into the rear of each truck rail. When installed, the pivot block needs to be flush with the top of the truck rail. This ensures the body sits flush on the truck rails. Weld the rear hinge completely to the truck rail following AWS welding procedures.



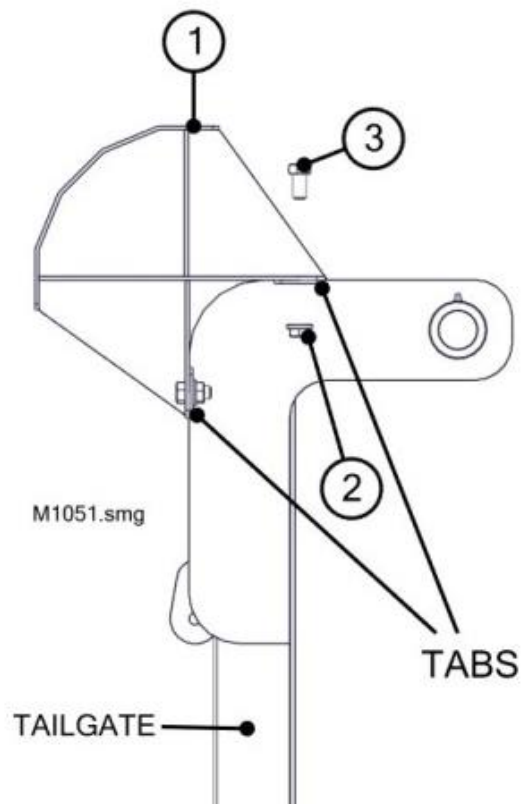
11. The bottom edge of the rear hinge will be welded to the 3/4" vertical hitch plate and 1/2" gussets used to structurally tie the rear of the truck hitch to the truck rails. When positioning the vertical hitch plate, be sure to set it back 2-1/2" minimum from the end of the truck rails. This will ensure adequate space for mounting peripheral attachments.



REF	DESCRIPTION
1	TRUCK RAILS
2	VERTICAL HITCH PLATE WITH SIDE GUSSETS

INSTALLATION – ACCESSORIES

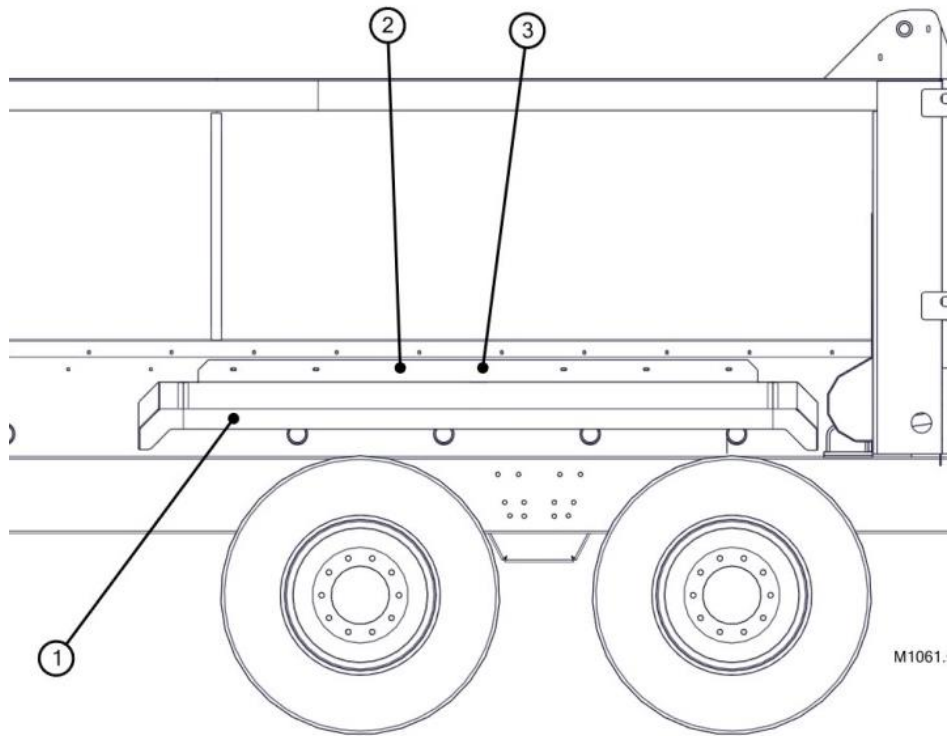
AIR FOIL



Ref	Description
1	AIRFOIL
2	1/2-13 SERRATED FLANGE LOCKNUT SS
3	1/2-13 x 1 HEX BOLT SS

1. Assemble the weld-on tabs to the air foil (1) as shown and secure with cap screws (3) and flange locknuts (2). Leave the hardware loose until final adjustments are made.
2. Align the air foil with the upper and rear sections of the tailgate hinges.
3. Weld the tabs to the tailgate hinges.
4. Tighten the mounting hardware.
5. Finish the installation by painting the welded areas on the tailgate hinges.

FENDERS - metal



Ref	Description
1	FENDER - RT & LT
2	3/8-16 x 1-1/4 CARRIAGE BOLT SS
3	3/8-16 SERRATED FLANGE LOCKNUT SS

1. Welded or bolt-on fenders are available in a variety of lengths. Review your application and determine if the fenders are intended to cover the back wheels only, or are to be full length. Though similar to the pre-wet tank brackets, the metal fenders do not have the features that are required to properly mount the pre-wet poly tanks.
2. The fender is to be mounted a minimum of 8" from the front of the corner post. On bolt-on models, this will coincide with a series of holes provided in the long sills.
3. For welded fenders, position the fenders vertically to a position that is 4" above the rear drive tires. This will provide tire clearance when the dump box is fully loaded.

FENDERS – Poly

Refer to the instructions provided in the poly fender kit for specific installation information.

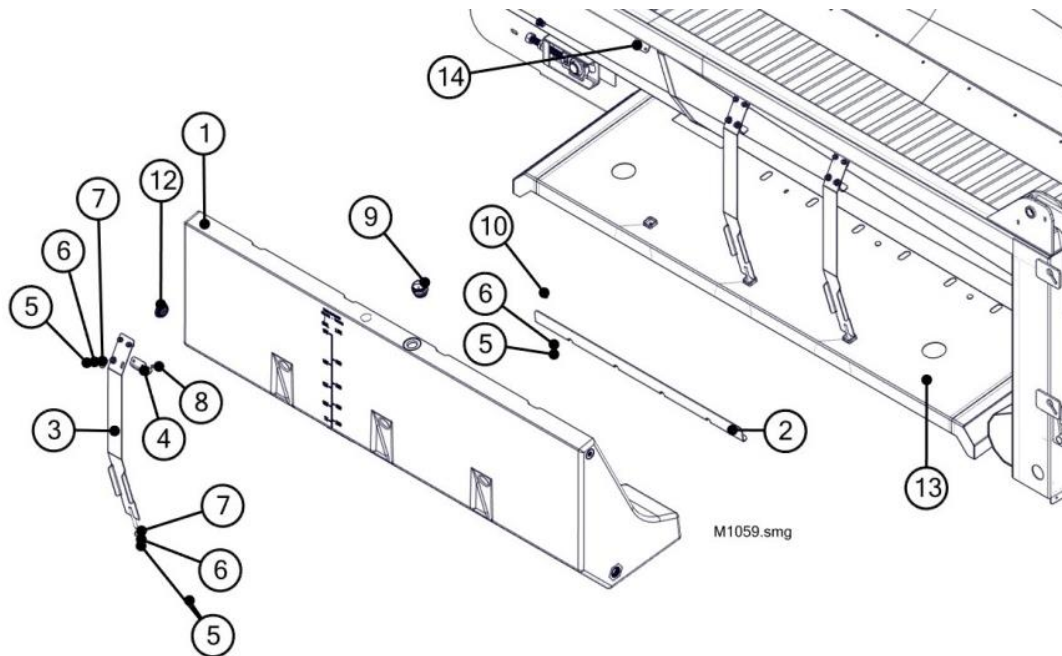
LIGHT KITS

Refer to the instructions provided in the light kit for specific installation information.

MUD FLAPS

Refer to the instructions provided in the mud flap kit for specific installation information.

PRE-WET POLY TANKS

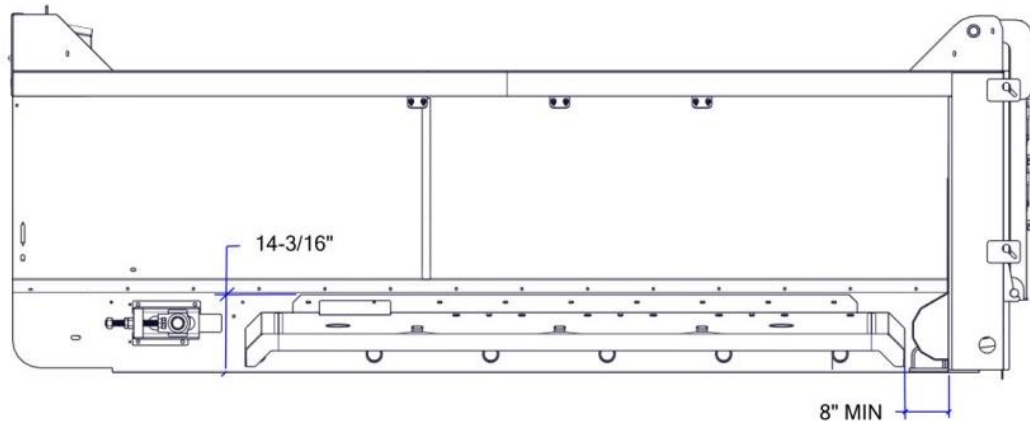


Ref	Description
1	PRE-WET POLY TANK
2	BACK STOP - MPB PREWET TANK
3	WA - MPB TANK STRAP
4	BRACKET - MPB UPPER TANK
5	1/2-13 HEX NUT SS
6	1/2 STD LOCKWASHER SS
7	1/2 STD FLAT WASHER SS
8	1/2-13 x 1-1/4 HEX BOLT SS
9	PREWET TANK COMBINATION VENT
10	1/2-13 x 1-1/2 CARRIAGE BOLT SS
11	PLUG 075 (NOT SHOWN)
12	BUNG PLUG - 2" NPT POLY
13	TANK BRACKET
14	UPPER STRAP MOUNT
15	3/8-16 x 1 CARRIAGE BOLT SS (not shown)
16	3/8-16 SERRATED FLANGE LOCKNUTS SS (not shown)

1. The tank bracket (13) can be either bolted or welded to the long sill area.
2. Bolted tank brackets: Align holes in the long sills and tank brackets (13) and secure with hex bolts (15) and serrated flange locknuts (16).
3. Welded tank brackets (if not provided by factory): Using the poly tank (1) as a template, position the tank brackets on the dump body. The rear of the tank bracket should be a minimum of 8" from the front of the corner post. This will provide adequate clearance for the tailgate trip arm mechanism and cover. On some models, pay attention to the position of the tank bracket relative

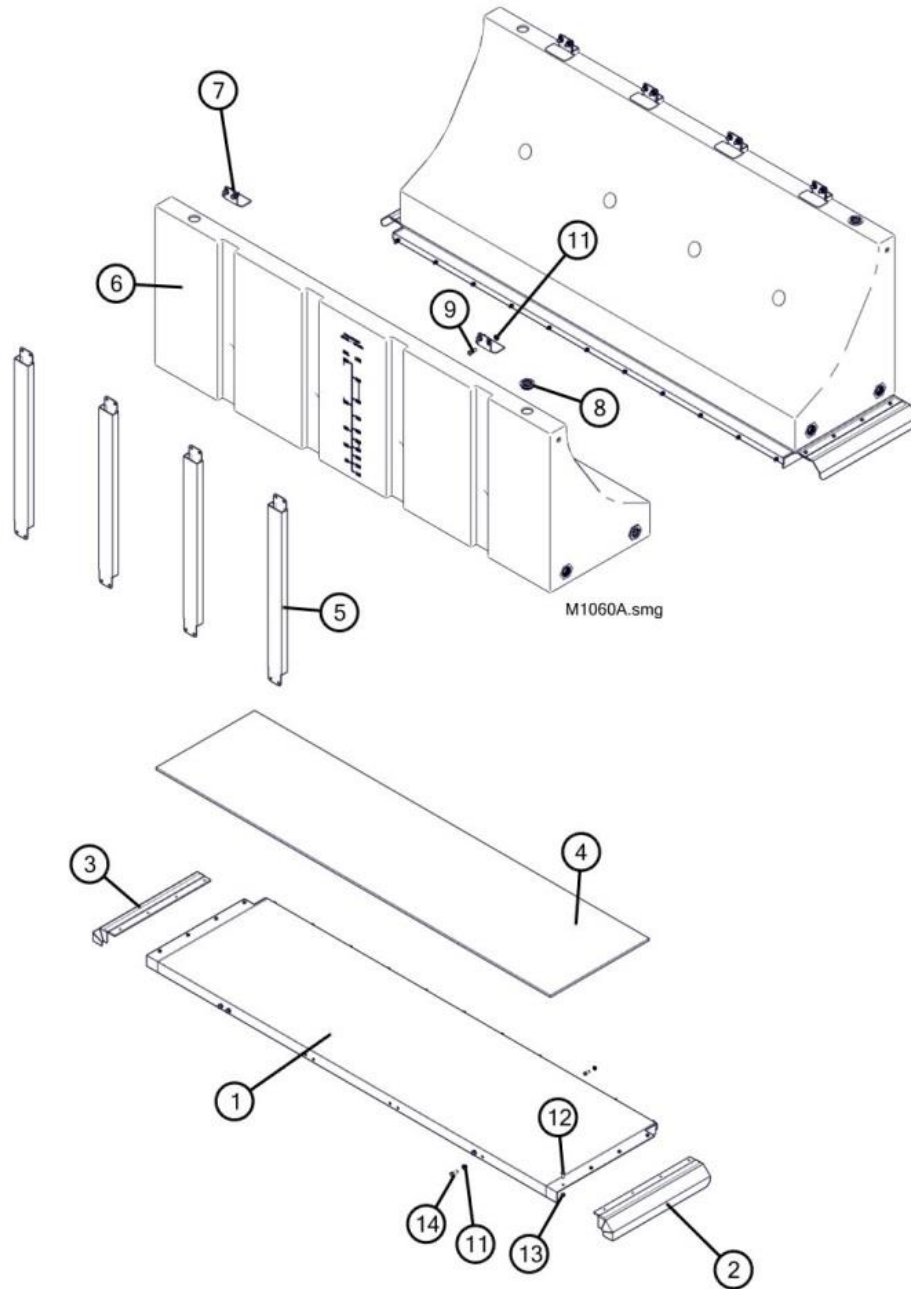
to the chain take-up mechanism. The notch in the tank bracket should be centered with the take-up mounting bracket. The tank bracket should be mounted vertically to provide a distance of 14-3/16" from the bottom of the long sill to the top of the tank bracket upper flange.

4. Make sure the peripheral components on the truck chassis do not interfere with the position of the tank brackets. Weld the tank brackets (13) securely to the main body long sill area.



5. Attach the backstop (2) to each tank bracket (13) with carriage bolts (10), lock washers (6) and hex nuts (5). Leave all mounting hardware loose until final tank adjustments are made.
6. Place a pre-wet tank (1) on each tank bracket (13). Note that there are ports on the underside of the poly tank that line up with the holes in the tank brackets.
7. Attach tank straps (3) to the upper mounts (14) and secure with hex bolts (8), lock washers (6) and hex nuts (5). Attach the lower end of tank strap to tank bracket mount and secure with flat washer (7), lock washer (6) and hex nuts (5).
8. If the upper tank mounts are supplied loose in the kit, use the assembled tank strap to position the upper mount against the underside of the top rail on the dump body. Once the straps are centered with the tank bracket lower mounts, weld upper mounts to top rail.
9. Be sure to draw each tank strap evenly against the pre-wet tank.
10. Attach the upper hold down bracket (4) to the tank strap and secure with hex bolts (8), flat washers (7), lock washers (6) and hex nut (5). Brackets should be snug against the top of the poly tanks in order to hold the tank in place.
11. Pull the back stop tight against the inside edge of the poly tank and tighten hardware.
12. Install the breather cap (9), upper plug (11) and lower plug (12) into the poly tank. The number of lower plugs will be dependent on the cross-fill configuration to be installed.
13. Refer to pre-wet pump kit instructions for specific plumbing instructions for this component.

HIGH-CAPACITY PRE-WET POLY TANK



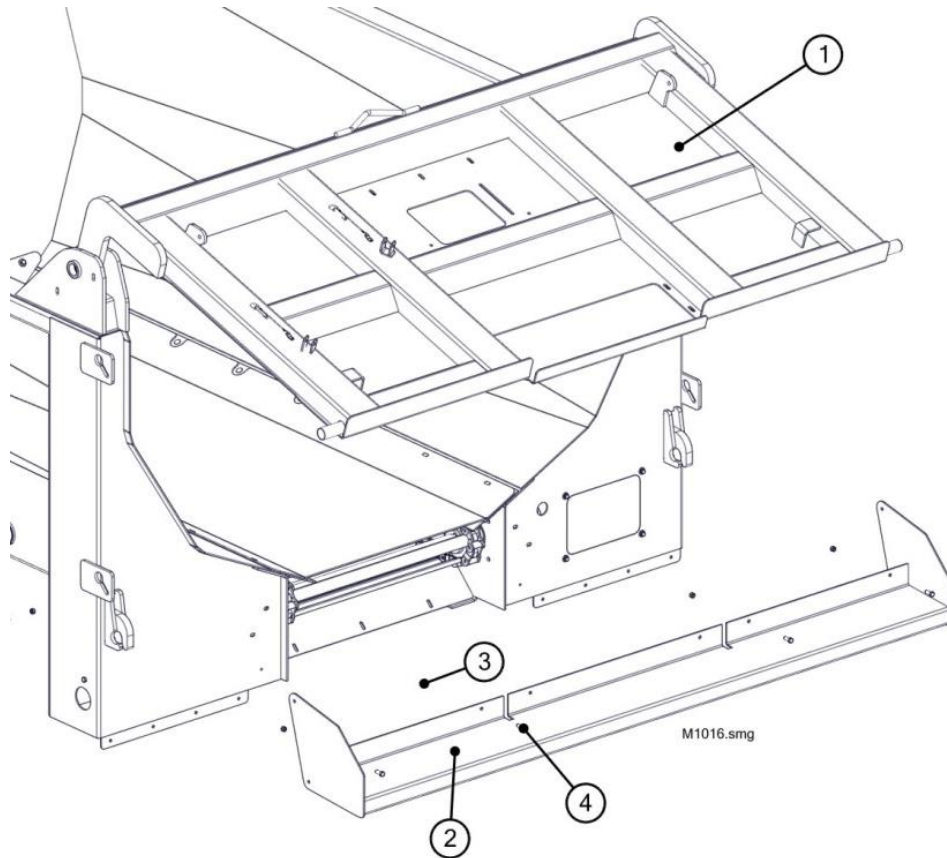
Ref	Description
1	MEGA TANK BRACKET
2	TANK BRACKET NOSE, LT
3	TANK BRACKET NOSE, RT
4	RUBBER MAT (optional)
5	MEGA TANK STRAP
6	268 GALLON MEGA TANK
7	MEGA TANK HOLDDOWN BRACKET
8	PLUG - 2 NPT
9	1/2-13 x 1-1/2 HEX BOLT SS
10	PLUG 075 (not shown)
11	1/2-13 SERRATED FLANGE LOCKNUT SS
12	3/8-16 x 1 HEX BOLT SS
13	3/8-16 SERRATED FLANGE LOCKNUT SS
14	1/2-13 x 1-1/4 HEX BOLT SS

1. Attach the nose pieces (2 & 3) to the tank bracket (1) with hex bolts (12) and serrated flange locknuts (13).
2. Align the tank bracket assembly (1) with the holes provided in the dump body long sills and secure with hex bolts (14) and serrated flange locknuts (11).
3. An optional rubber mat (4) is available if it is required to elevate the tank for cleanout purposes.
4. Position the poly tank (6) on the mounting bracket.
5. Secure the lower section of the vertical straps (5) to the tank bracket and secure with cap screws (14) and serrated flange locknuts (11). Leave all hardware loose until all final adjustments are made.
6. Secure the upper section of the vertical straps (5) and tank hold down brackets (7) to the top rail bracket and secure with cap screws (14) and serrated flange locknuts (11). Only the outer straps require a hold down bracket (7). Leave all hardware loose until all final adjustments are made.
7. There are a number of ports available for use with the pre-wet system. Determine which ports will be used and cap the rest with 3/4" and 2" NPT plugs (8 & 10).
8. Refer to pre-wet pump kit instructions for specific plumbing instructions to this component.

PRE-WET PUMP KIT – Electric or Hydraulic

Refer to the specific mounting instructions provided with the pre-wet pump kit for proper installation information.

SPILL PAN



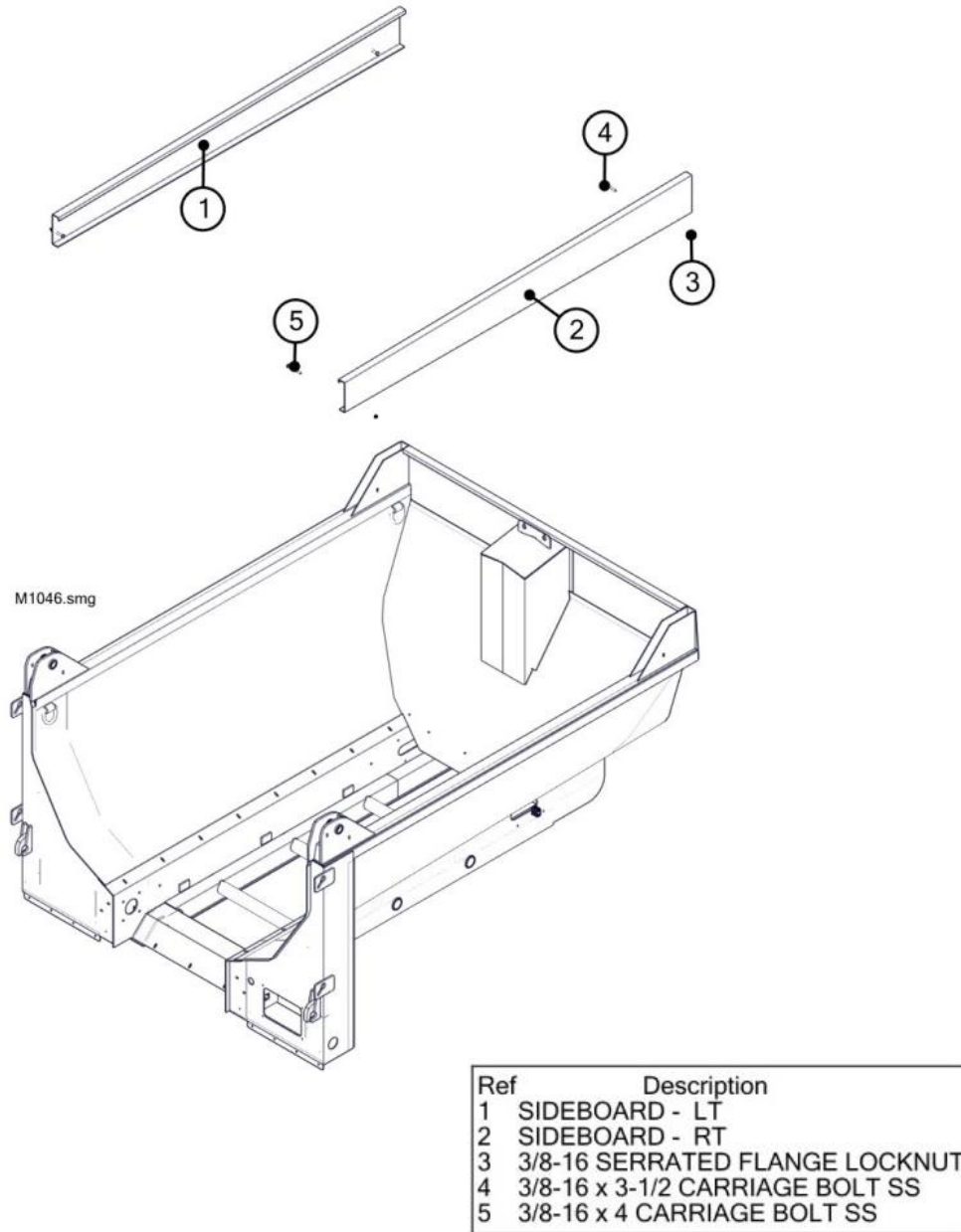
Ref	Description
1	TAILGATE
2	SPILL PAN
3	3/8-16 SERRATED FLANGE LOCKNUT SS
4	3/8-16 x 1 HEX BOLT SS

1. There are four lengths (8", 10", 12" & 14") of spill guards available. Evaluate the equipment that will be serviced by this dump body to determine which spill pan length is best suited to the application.
2. Position the spill pan (2) against the corner posts under the tailgate and mark the locations for the mounting hardware. Be sure that the position of the spill pan does not interfere with the motion of the tailgate (1). It may be necessary to cut scallops into the spill pan to provide relief from the bolts holding the access cover to the right corner post.
3. Remove the tailgate chains from the lower mounting brackets.
4. Using a prop that provides a safe work area, secure the tailgate in a raised position.
5. Drill 13/32 diameter holes into the corner posts.
6. Attach the spill pan (2) to the dump body with hex bolts (4) and hex flange locknuts (3).
7. Remove the tailgate prop and carefully lower the tailgate back to its operating position. Re-attach the tailgate chains.



Be careful ... Your personal safety is at stake.

SIDE BOARDS



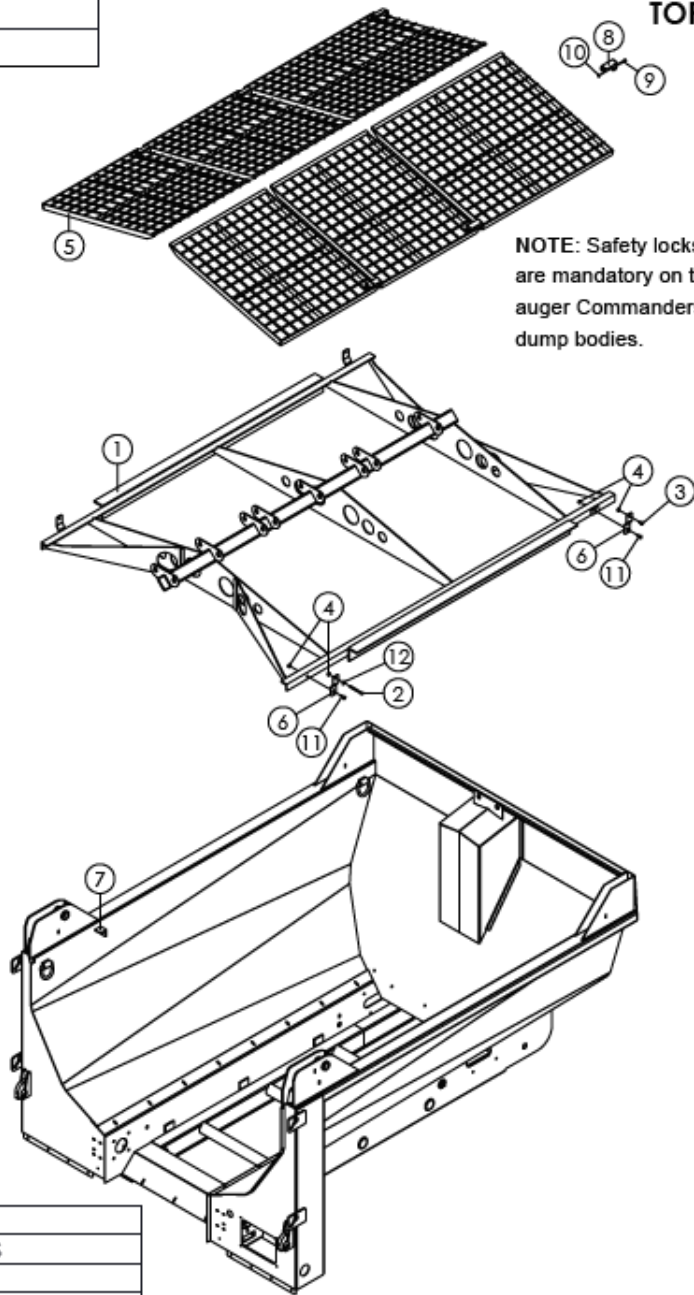
1. Wooden or metallic side boards (1 & 2) are available that increase the payload of the dump body while protecting the sides of the dump body from loading damage.
2. Position each side board into the front and rear dump body pockets.
3. Drill 13/32" diameter holes through the side boards.
4. Secure the side boards to the dump body with carriage bolts (4 & 5) and serrated flange locknuts (3).

TARP KIT

Refer to the mounting instructions provided with the tarp kit for proper installation.

FILE NAME	M1038
DWG NAME	M1038B

TOP SCREEN



NOTE: Safety locks (8) are mandatory on twin auger Commanderstyle dump bodies.

12	3/8 STANDARD FLAT WASHER SS
11	3/8-16 x 1-1/4" CARRIAGE BOLT SS
10	5/16-18 NYLON HEX LOCKNUT SS
9	5/16-18 x 1-1/2" HEX BOLT SS
8	TOP SCREEN RETAINING LINK
7	ANGLE - 2" x 2" x 3/8" x 2"
6	TOP SCREEN MOUNTING BRACKET
5	TOP SCREEN
4	3/8-16 SERRATED FLANGE LOCKNUT SS
3	3/8-16 x 1" CARRIAGE BOLT SS
2	3/8-16 x 1-1/4" CARRIAGE BOLT SS (MTR & NNR)
	3/8-16 x 4" HEX BOLT SS
1	TOP SCREEN FRAME
REF	DESCRIPTION

CONFIDENTIAL: THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, DISCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME, MODIFY THE DRAWING AND/OR INFORMATION CONTAINED HEREIN.



DIXON, ILLINOIS
PHONE: 800-851-9664

Installation of the top screen requires lifting devices capable of safely carrying the weight of the top screen during installation. Be extremely careful when installing raised components.

1. If installed, remove the side boards from the dump body.
2. Attach the top screen mounting brackets (6) to the top screen frame (1) with carriage bolts (11) and serrated flange locknuts (4). Make sure the offset in the mounting lugs is orientated as shown.
3. To stabilize the top screen frame during lifting, evenly chain each corner of the top screen frame.
4. Lift the top screen frame over the dump body. When lowered into place, the outer angle of the top screen frame will rest on the top of the upper body frame rails.
5. Attach the front top screen mounting lugs (6) to the dump body corner pockets with carriage bolts (3) and serrated flange locknuts (4). Attach the rear top screen mounting brackets (6) to the dump body corner pockets with hex bolts (2) and serrated flange locknuts (4). Leave hardware loose until all final adjustments are made.
6. Stops (7) are provided in the kit to help stabilize the top screen when in the raised position. Slide the top screen frame fore-and-aft until the top screen mounting brackets (6) are in a vertical position. Weld the stop blocks behind the outer mounting angle of the top screen frame as shown.
7. Finish the assembly by touching up any paint affected during welding.
8. Install the top screens (5) into the top screen frame. Because of dump body length differences, the sequence of three-foot and four-foot screen sections will vary.
9. Re-install the side boards to complete the assembly. Check that the top screens can open without interference with the side boards.

OPERATION

EQUIPMENT START-UP



DANGER

CAUTION	
<ul style="list-style-type: none">• Read and understand Operator's Manual before operating unit. Free replacement manuals are available from Bonnell Industries.• Keep all shields and guards in place and in good working condition.• Keep others away while operating or loading equipment. Do not allow children or untrained persons to operate equipment.• Stop vehicle, disengage power, stop engine, set parking brake and remove key before leaving vehicle.• Failure to follow safety rules can result in serious injury or death.	<small>BON-011377</small>

- When starting up new equipment, be sure bystanders are kept back a safe distance.
- Keep all shields and guards in place and in good working condition.
- Watch and listen for anything that may require shutting down the system.
- Equipment must be started up slowly, then brought up to operating speed.
- Watch and listen for anything abnormal that would indicate the equipment is not operating properly.
- Shut off equipment, set parking brake and turn off engine before performing any adjustments.
- Before performing service work on the spreading equipment, turn the spreader hydraulic control lever to the "OFF" position, disengage PTO, set parking brake and turn off engine.
- If the spreader is removed from the truck, or if the spreader is not in use, the spreader hydraulic control lever should be in the "OFF" position. If left in the "ON" position, excessive heat buildup can occur that could result in internal damage to the hydraulic valve and hose circuit.

HYDRAULIC INSPECTION

WARNING	
	PINCH POINT HAZARD Serious injury or death can occur <ul style="list-style-type: none">• Keep hands, feet and clothing away from moving parts.• Turn power off before servicing.

- Fill reservoir three-fourths full with approved ISO32 hydraulic oil. Be sure to **KEEP OIL CLEAN**.
- Start truck engine.
- Set the hydraulic valve ON-OFF lever to the OFF position.
- Position the spreader control knobs on valve in the closed position.
- Engage PTO and allow hydraulic oil to circulate several minutes to warm up to a normal operating temperature.
- Open both spreader control knobs to first position.
- Move control valve ON-OFF lever to the ON position.



DANGER

HIGH PRESSURE OIL HAZARD



- Have a helper carefully examine the material spreader to see if they are operating properly. Note that in the first control position, these components will be operating slowly. Material spreader spinner should be rotating CCW as viewed from above spinner.
- Increase the spreader control knobs settings and note the increased speed of the material spreader spinner.
- Turn spreader control knobs to the closed position.
- Move the control valve ON-OFF lever to the OFF position.
- Shut off truck engine.
- Check entire hydraulic system for leaks.
- Refill hydraulic reservoir to three-fourths full if needed.
- Hydraulic system is ready for service.

MATERIAL SPREADER PREPARATION

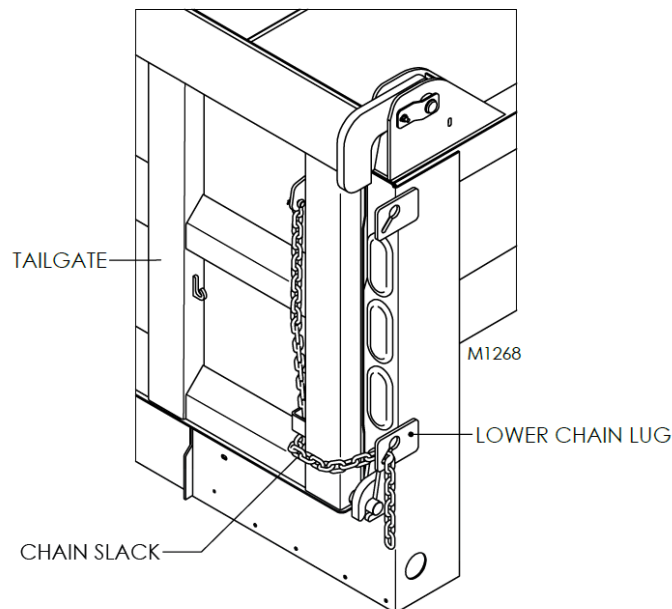
- Start the engine and allow the hydraulic oil to warm up by turning the spreader control knobs to the “OFF” position and moving the hydraulic control lever to the “ON” position.
- When oil is warmed up, turn the hydraulic control lever to the “OFF” position.
- Load material into the dump body.
- Using the chain provided, set the tailgate to an opening that prevents an open tailgate from contacting the rear of the spreader.
- Turn the hydraulic control lever to the “ON” position. Open the spreader knob to a mid-setting.
- Spread a small amount of material. Have a helper observe from a safe distance the concentration and trajectory of the material being dispersed.
- Move the hydraulic control lever to the “OFF” position, set parking brake, and turn off the engine.
- Without a live floor, volume of material spread utilizing an under-tailgate spreader is controlled by the cross-auger speed. During operation, in-cab control of the auger speed will provide the operator with a finer control of the material being discharged.
- Through observation, have the helper note the discharge trajectory created by the radial baffles located near the polyurethane spinner. Set the spinner control knob at the mid-range. Adjust the baffles as necessary to achieve the material spread pattern for the desired lane coverage.
- Rotating the center baffle clockwise will discharge the material to the left side of the material spreader.
- Rotating the center baffle counter-clockwise will discharge the material more to the right side of the material spreader.
- The material spreader can also be adjusted side-to-side. This will impact the speed that the material is propelled from the material spreader. Positioning the spinner disk to the right of center reduces the material speed. Moving the spinner disk to the left side of center increases the material speed.
- During operation, the operator will have finer control of the spinner from inside the cab.

- Once the desired spread pattern and material concentration is achieved, record the baffle positions.
- The material spreader and conveyor may be stopped at the same time, without changing valve settings, by moving the hydraulic control lever to the “OFF” position.



CHAINS FOR DOUBLE-ACTING TAILGATE

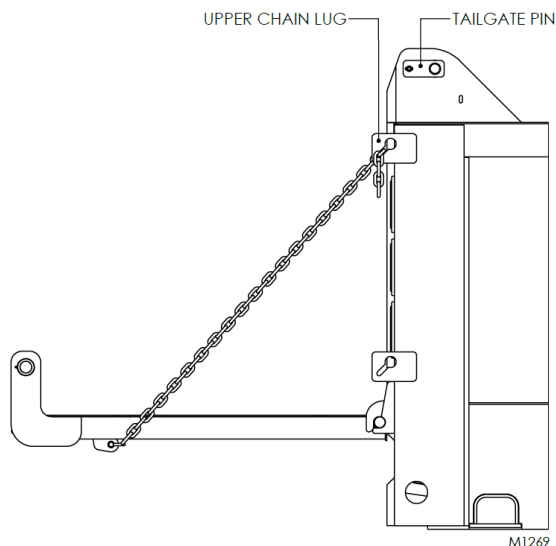
When spreading material, the tailgate should be configured with the tailgate hinge point at the top of the dump body. This will allow the tailgate to partially swing open at the bottom. The tailgate chains should be set to achieve the desired opening for spreading the material. Be sure not to provide too much chain slack that could interfere with the lower tailgate latches.



RAISED DUMP BODY SAFETY



- Be mindful of the terrain that the dump body will be exposed to while unloading. Sudden changes in the ground surface can cause the dump truck to become unstable.
- Irregularly shaped objects (tree stumps, concrete chunks, brush, etc.) can unload erratically. If additional tailgate clearance is needed, remove the tailgate hinge pins and lower the tailgate down and secure with chains that are repositioned to the upper chain mounts. Raise the dump body slowly until the load begins to discharge from the dump body.



During operation with the tailgate folded down, do not activate the tailgate latch mechanism. If unlatched, the tailgate will become dislodged from the rear of the dump body. This condition can cause damage to the dump body as well as possible injury or death to bystanders.

- When spreading finer aggregate material, start dumping the material with the box lowered so that some of the material is discharged before the box is raised. Slowly raise the dump box so that the material is allowed to slide to the back of the dump body for placement on the ground.
- When spreading de-icing material, do not travel with the dump box in the raised position. Instead, raise and lower the dump body periodically so that material is allowed to move to the rear of the dump body for placement on the ground.

SERVICE



DANGER



Serious injury can result from entanglement in an operating conveyor, a turning spinner or other operating equipment. Before performing service operations, park vehicle on a level surface. Set parking brake, shut off all power and turn off engine. Always replace shields and covers when service is complete.

HYDRAULIC TROUBLE SHOOTING CHART

Condition #1: Pump cavitation recognized by excessive noise

CAUSE	CORRECTION
Air entering system through suction lines	Check line from reservoir for possible leaks.
Suction line kinked, twisted or too long.	Install suction line as short and straight as possible.
Inadequate size suction line.	Increase suction line size.
Hydraulic oil too heavy.	Drain and replace with lower viscosity non-hydraulic oil.
Excessive pump speed. Normal pump speed is 1,200 – 1,500 rpm	Pump capacity is 16 gpm @ 1,000 rpm. Decrease PTO speed accordingly.

Condition #2: Slow operation of conveyor and/or spinner.

CAUSE	CORRECTION
Worn or defective pump.	Repair ** or replace pump.
Worn or defective motor.	Repair ** or replace motor
Pump cavitation	Refer to Condition #1.
Insufficient pump speed.	Pump capacity is 16 gpm @ 1,000 psi. Increase PTO speed accordingly.

Condition #3: Erratic operation of material spreader.

CAUSE	CORRECTION
Low oil level in reservoir.	Fill reservoir to three-fourths full.
Worn or defective motor.	Repair ** or replace motor
Dirty, worn or defective flow control valve.	Clean, repair ** or replace flow control valve.
Plugged filter.	Replace filter element and clean filter.
Relief valve setting too low.	Adjust relief valve to 1,500 psi.
Pump cavitation.	Refer to Condition #1.
Air vent on reservoir tank is blocked.	Clean and replace vent cap to admit atmospheric pressure inside tank.

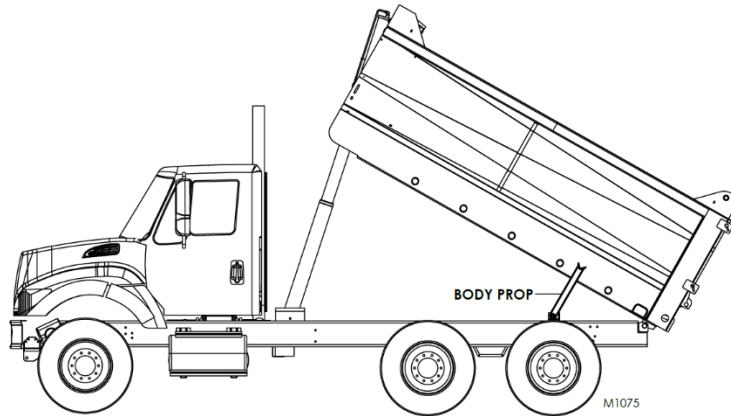
Condition #4: Spreader will not operate, or operates in wrong direction.

CAUSE	CORRECTION
Quick-disconnects are dirty or damaged causing incomplete connection.	Clean or replace, then properly connect quick-disconnects.
Hose connections are wrong causing motors to operate in wrong direction.	Refer to plumbing diagram for proper hose routings, and then reconnect. NOTE: It is normally easier to switch hose connections at the motor ports
Foreign material in valve compensator section.	Remove compensator section and clean.

** - Bonnell Industries warranty does not cover unauthorized disassembly of hydraulic pumps, motors, valves or electrical components.

BODY PROPS

Body props are designed and intended to support an empty raised dump body. This will permit service work to be performed safely. The body prop kit comes in pairs, driver's side and curb side.



DANGER

DO NOT put the dump body into service unless equipped with properly installed body props. Failure to comply can result in severe injury or death when performing service work on a partially raised body.

Be careful! Your safety is at stake.



⚠ DANGER	
	<p style="text-align: center;">CRUSHING HAZARD Serious injury or death will occur</p> <ul style="list-style-type: none">• Stay clear of a raised dump body. If service work is required, make sure the body prop is properly used.• Dump body must be empty when using body prop.• Return the body prop to its storage position after service work is completed.• Body must be completely lowered when unattended.

HYDRAULIC MAINTENANCE

- Maintain a three-fourths full hydraulic reservoir using a high grade, non-foaming hydraulic oil (see specifications chart)
- **KEEP HYDRAULIC OIL CLEAN!** Avoid getting contaminants in reservoir during filling.
- Replace hydraulic oil filter with a new cartridge at least twice a year or more often if necessary. When installed, filter condition gauge has a red zone indicating when the cartridge needs recharging.
- Clean exterior surfaces of hydraulic quick-disconnects before disconnecting.
- While disassembled, protect the hydraulic quick-disconnects from contamination.

TAILGATE TRIP ARM

- The tailgate is retained to the dump body utilizing pneumatic cylinders and twin over-center latch mechanisms that lock the tailgate in place. Over time, it may become necessary to adjust the linkages in the over-center latch mechanism to retain the proper locking action. Adjustment can be made to the length of the trip arm linkages, as well as the position of the stops located on the front of each corner posts. Be sure to adjust the over-center mechanisms equally so that a uniform locking action is obtained across the tailgate.

LUBRICATION

- There are (3) grease manifolds located on the conveyor chain dump body. These provide lubrication to the front trunnion hoist, rear tailgate latch rod and tailgate latch arms.
- Clean grease fittings before lubricating. In normal conditions, these grease points require periodic greasing every (15) hours of service. More frequent lubrication may be required during heavy use or harsh conditions.
- Do not allow grease to build up. Excess grease will trap contaminants and promote excessive wear.
- The grease fittings located on the tailgate hinge and rear body hinge need to be greased manually.

MATERIAL SPREADER MAINTENANCE

- Hosing down and cleaning the material spreader after each use, and repainting or oiling after each season will greatly prolong the spreader life.

STORAGE MAINTENANCE

- Dump body should be completely emptied after each use during severe cold weather to prevent material from freezing.

PNEUMATIC CYLINDERS

- Maintenance to the pneumatic cylinders that operate the tailgate trip mechanism is limited to seal replacement. Instructions regarding re-packing the seals in a pneumatic cylinder are included in the seal kit.

TRUNNION HOIST CYLINDER

- Under most conditions, it is strongly recommended to contact Bonnell Industries regarding the proper repair and maintenance of the trunnion hoist cylinder used in the multi-purpose body.

Unsuccessful attempts at performing maintenance on trunnion cylinders are dangerous, and can result in the loss of warranty.

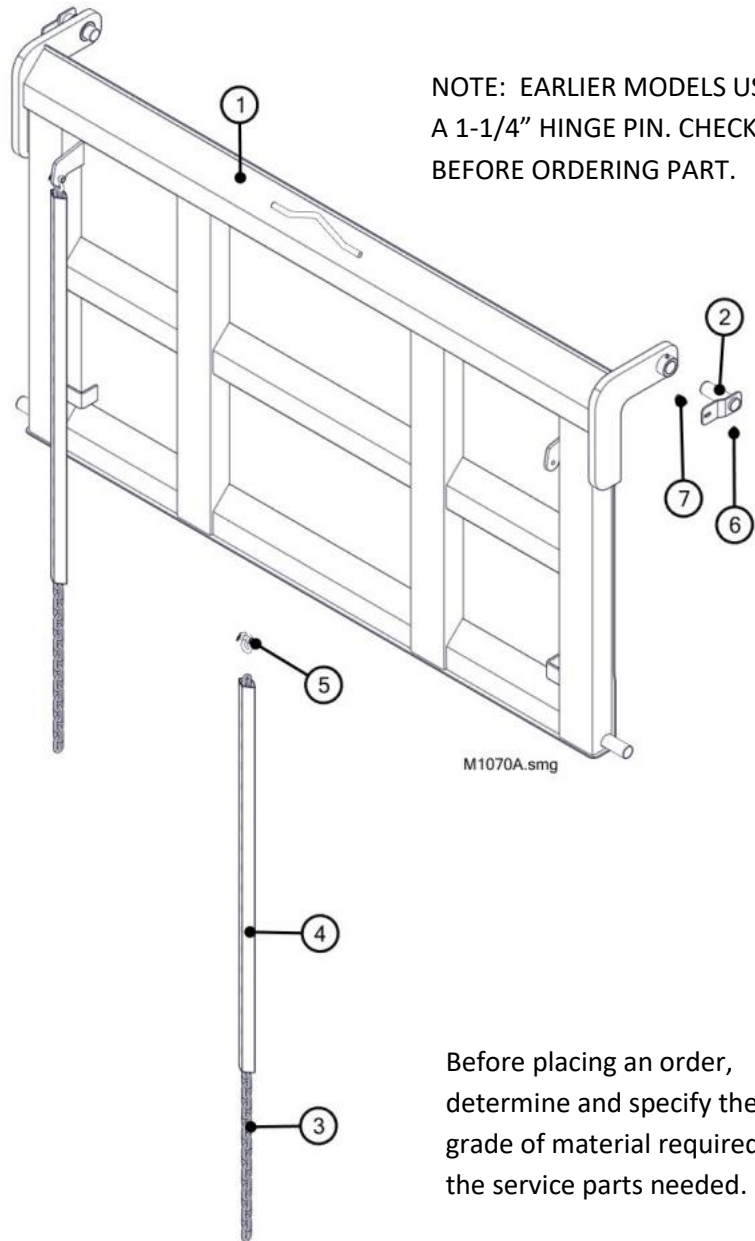
PRE-WET TANK PUMP

- Under most conditions, it is strongly recommended to contact Bonnell Industries regarding the proper repair and maintenance of pre-wet system electric or hydraulic pumps used in the multi-purpose body. Unsuccessful attempts at performing maintenance on pre-wet pump systems can result in the loss of warranty.

NOTES

SERVICE PARTS – MAIN BODY

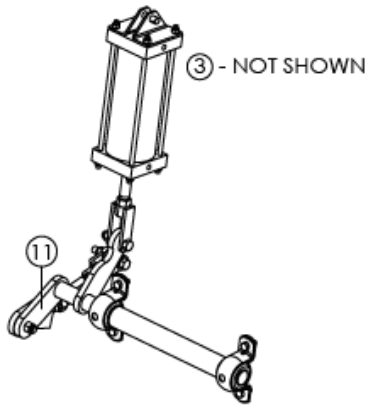
TAILGATE



Ref	Part No.	Qty	Description
1	BON-011799	1	WA - MTR/NNR TAILGATE
2	BON-011662	2	WA - MPB TAILGATE PIVOT PIN
3	BON-020289	2	CHAIN - 3/8 GRADE 70 x 55 LINKS
3	BON-020289SS	2	CHAIN - 3/8 GRADE 70 x 55 LINKS SS
4	BON-011373	2	NYLON CHAIN COVER - 52"
5	BON-000660.6	2	3/8" ANCHOR SHACKLE
5	BON-000660.6SS	2	3/8" ANCHOR SHACKLE SS
6	BV2-001650	2	3/8-16 SERRATED FLANGE LOCKNUT SS
7	BON-000285.5SS	2	3/8-16 x 1-1/4 CARRIAGE BOLT SS

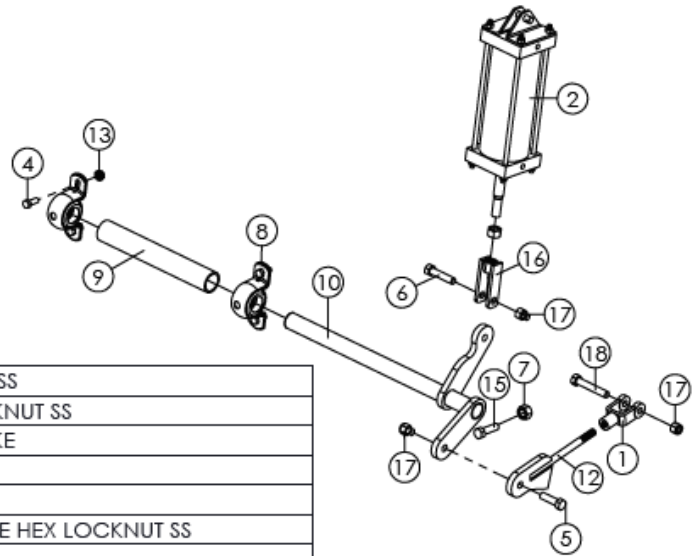
FILE NAME	M1031
DWG NAME	M1031 Rev: 03/22/21

TAILGATE LATCH COMPONENTS



NOTES:

1. To ensure correct repair parts, measure length of items #9-11 before placing order.
2. On trip arms #10-11 utilizing an encapsulated bronze bushing, order (2) BON-013877 cast iron bushings per side for replacement. This will require that the encapsulated bronze bushings be cut off and discarded.



18	BON-000112SS	-	1/2-13 x 2-3/4 HEX BOLT SS
17	BON-000321SS	-	1/2-13 NYLON HEX LOCKNUT SS
16	BON-020303	2	TAILGATE CYLINDER YOKE
15	BV2-001867	-	5/8-11 X 2 HEX BOLT SS
14			
13	BV2-001650	-	3/8-16 SERRATED FLANGE HEX LOCKNUT SS
12	BON-020233	2	OVER-CENTER LATCH
11	BON-011458SS	1	27-7/16" MPB TRIP ARM - RT SS (used on older models)
	BON-012997RSS	1	21" MPB TRIP ARM - RT SS (used on older models)
	BON-013981RSS	1	19-3/16" MPB TRIP ARM - RT SS (S/N 1138 & above)
10	BON-011457SS	1	27-7/16" MPB TRIP ARM - LT SS (used on older models)
	BON-012997LSS	1	21" MPB TRIP ARM - LT SS (used on older models)
	BON-013981LSS	1	19-3/16" MPB TRIP ARM - LT SS (S/N 1138 & above)
9	BON-011692	1	PVC TUBE - 19-3/4" (used on older models)
	BON-012898	2	PVC TUBE - 13-1/4" (used on older models)
	BON-013983	2	PVC TUBE - 11" (S/N 1138 & above)
8	BON-012164	4	BEARING - PILLOWBLOCK, 1-1/4" BRONZE (used on earlier models)
	BON-013877	4	BEARING - PILLOWBLOCK, 1-1/4" SPLIT CAST IRON (used on earlier models)
	BON-013982	4	BEARING - PILLOWBLOCK, 1-1/4" CAST IRON (S/N 1138 & above)
7	BON-000307SS	-	5/8-11 HEX NUT SS
6	BON-000110SS	-	1/2-13 x 2-1/4" HEX BOLT SS
5	BON-000108SS	-	1/2-13 x 3/4" HEX BOLT SS
4	BON-000058SS	-	3/8-16 x 1-1/4" HEX BOLT SS
3	AQ69-DOT-6 x 4	4	90° AIR LINE FITTING
2	APS-C-6089-PK	2	AIR TAILGATE KIT w/CLEVIS PINS
1	6071K19	2	1/2-20 CLEVIS YOKE
REF	PART NO.	QTY	DESCRIPTION

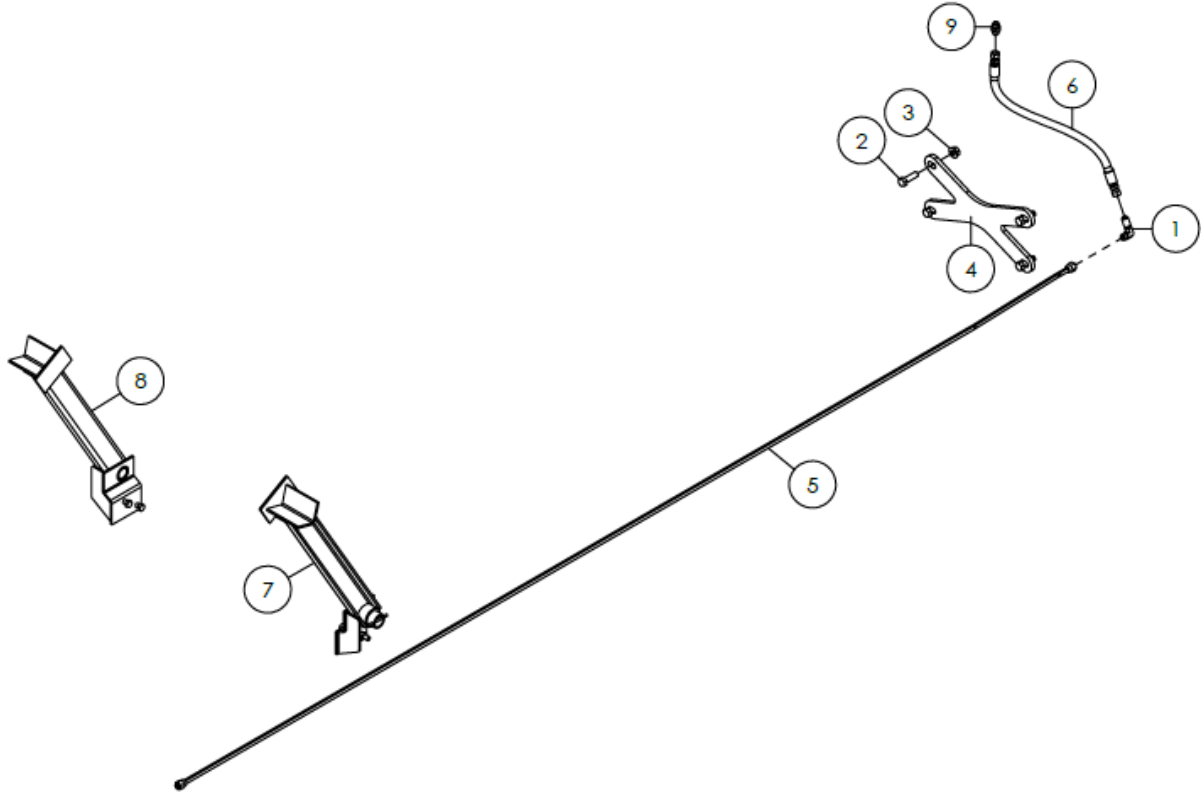
CONFIDENTIAL: THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, DISCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME, MODIFY THE DRAWING AND/OR INFORMATION CONTAINED HEREIN.



DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	M1011
DWG NAME	M1011

HOIST COMPONENTS



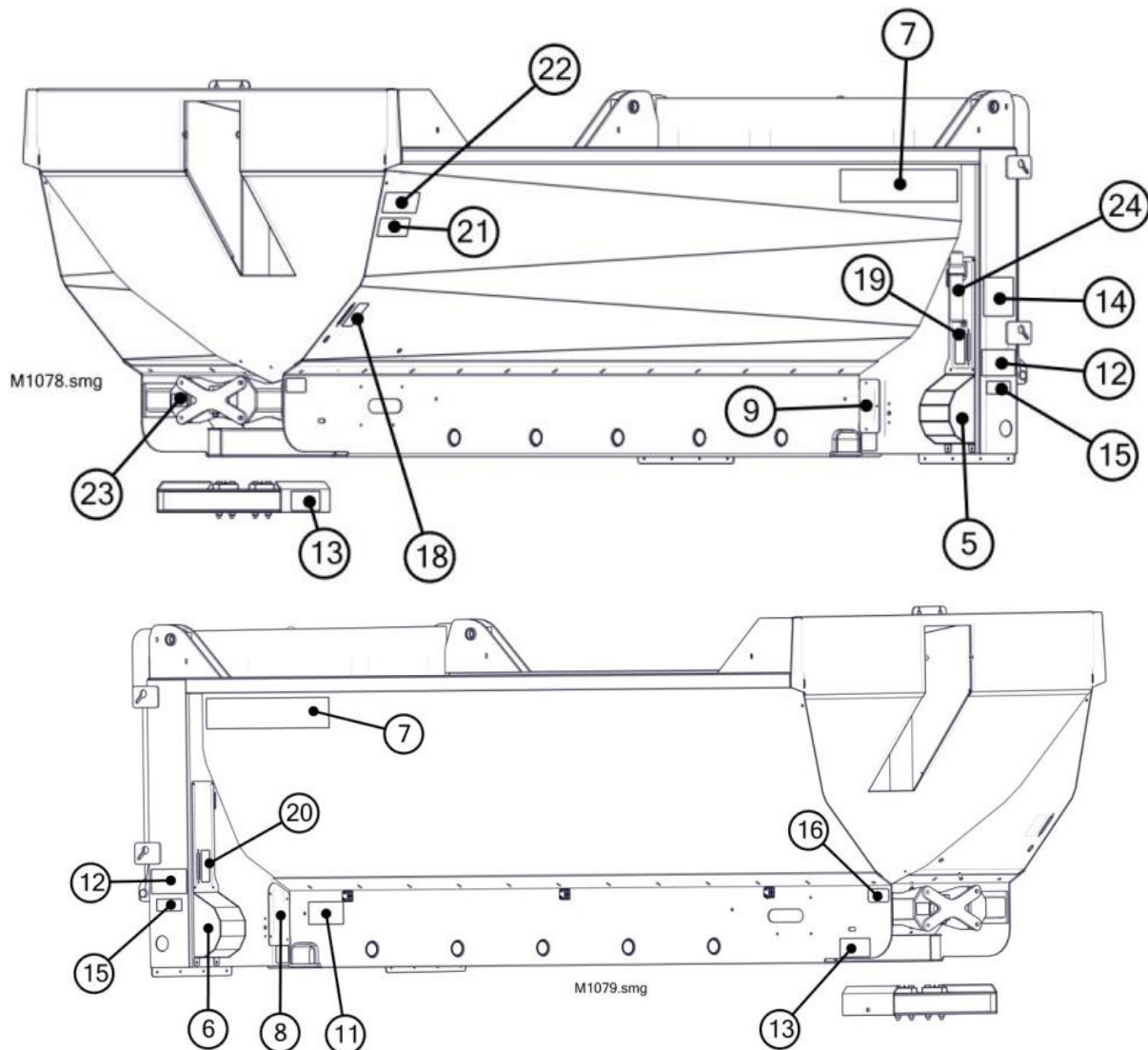
9	842FS 08	1	FITTING-HYD, MALE x MALE 37° FLARE (CS-series only)
8	BON-012854	1	COMMANDER BODY PROP, LH
7	BON-012853	1	COMMANDER BODY PROP, RH
6	BON-021267	1	HOSE-HYDRAULIC, 1/2 x 68" (G4-series only)
	BON-012638		HOSE-HYDRAULIC, 1/2 x 27" (CS-series only)
5	BON-012500-16	1	1/2 x 167-1/2" HYDRAULIC LINE SS (16' model)
	BON-012500-15		1/2 x 155-1/2" HYDRAULIC LINE SS (15' model)
	BON-012500-14		1/2 x 141-1/2" HYDRAULIC LINE SS (14' model)
	BON-012500-13		1/2 x 129-1/2" HYDRAULIC LINE SS (13' model)
	BON-012500-12		1/2 x 117-1/2" HYDRAULIC LINE SS (12' model)
	BON-012500-11		1/2 x 105-1/2" HYDRAULIC LINE SS (11' model)
	BON-012500-10		1/2 x 93-1/2" HYDRAULIC LINE SS (10' model)
BON-012500-09	1/2 x 81-1/2" HYDRAULIC LINE SS (9' model)		
4	BON-012106	1	MPB TRUNNION BRACKET (15'-16' models)
	BON-012105		MPB TRUNNION BRACKET (12'-14' models)
	BON-012104		MPB TRUNNION BRACKET (9'-11' models)
3	BONB-000307F	3	5/8-11 HEX FLANGE LOCKNUT
2	BON-000153	4	5/8-11 x 2 HEX BOLT GR8
1	2701-08-08LN	1	1/2 90° JIC BULKHEAD w/LOCKNUT
REF	PART NO.	QTY	DESCRIPTION

CONFIDENTIAL: THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, DISCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME, MODIFY THE DRAWING AND/OR INFORMATION CONTAINED HEREIN.

BONNELL INDUSTRIES INC
TRUCK & ROAD EQUIPMENT

DIXON, ILLINOIS
PHONE: 800-851-9664

DECALS & COVERS

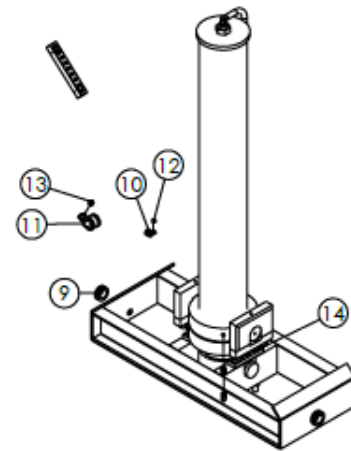
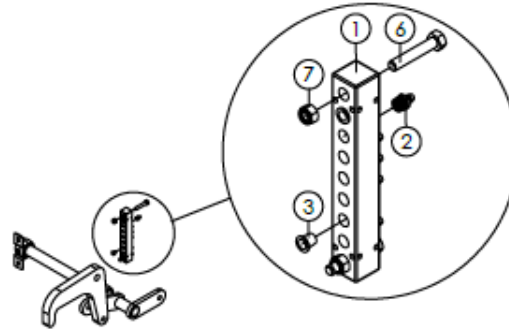


Ref	Part No.	Qty	Description
1	BON-000028SS	A/R	5/16-18 x 3/4 HEX BOLT SS
2	BON-000302SS	A/R	5/16-18 HEX NUT SS
3	BON-000337SS	A/R	5/16 STD FLAT WASHER SS
4	BON-000351SS	A/R	5/16 MED SPLIT LOCKWASHER SS
5	BON-011898LSS	1	WA - ACCESS COVER, LT SS
6	BON-011898RSS	1	WA - ACCESS COVER, RT SS
7	BON-011936	2	DECAL - COMMANDER MODEL
8	BON-012928SS	1	COVER - RT FRONT CORNERPOST SS
9	BON-012937SS	1	COVER - LT FRONT CORNERPOST SS
10	BON-013508SS	1	ACCESS PANEL - MCR RT CORNERPOST SS
11	BON-006442	1	DECAL - WARNING, HIGH PRESSURE FLUID
12	BON-011375	2	DECAL - WARNING, CRUSH
13	BON-011376	2	DECAL - WARNING, CRUSHING HAZARD
14	BON-011377	1	DECAL - CAUTION, READ & UNDERSTAND
15	BON-011384	1	DECAL - WARNING, PINCH POINT
16	BV-1358	1	DECAL - LUBRICATION
17			
18	BON-011354	1	DECAL - FRONT MANIFOLD, LT
19	BON-011355	1	DECAL - REAR MANIFOLD, LT
20	BON-011356	1	DECAL - REAR MANIFOLD, RT
21	BON-011379	1	DECAL - DANGER, FALL HAZARD
22	BON-011382	1	DECAL - DANGER, ROLLOVER CRUSHING
23	BON-012107	1	DECAL - WARNING, TRUNNION BRACKET
24	BON-000950	1	MANUAL CANNISTER, SMALL
25	BON-013656	1	MANUAL - NNR OPERATION (NOT SHOWN)
26	BON-013657	1	MANUAL - NNR OPERATION & SERVICE (NOT SHOWN)
27	BON-000320SS	A/R	5/16-18 HEX LOCKNUT SS (NOT SHOWN)

Before placing an order, determine and specify the grade of material required for the service parts needed.

FILE NAME	M1072
DWG NAME	M1072 (Rev 07/09/20)

GREASE LINE FITTINGS



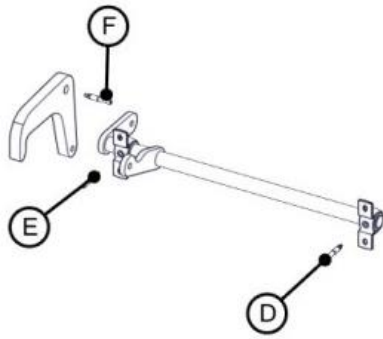
14	BV2-003159	2	1/8 NPT PIPE FITTING - 90° FEMALE x MALE ELBOW
13	BON-000319SS	1	3/8-16 NYLON HEX LOCKNUT
12	BON-000318SS	2	1/4-20 NYLON HEX LOCKNUT SS
11	WAY-25716	1	CABLE CLAMP - 1"
10	WAY-25110	2	CABLE CLAMP - 5/8"
9	BON-012467	2	GROMMET
8			
7	BON-000320SS	6	5/16-18 NYLON HEX LOCKNUT SS
6	BON-000033SS	6	5/16-18 x 1-3/4" HEX BOLT SS
5			
4			
3	4491K41	18	1/8 PLASTIC CAP
2	BON-000652	12	GREASE FITTING - STRAIGHT, 1/8 NPT
1	MI-72012-KA	3	GREASE MANIFOLD, 9 PORT
REF	PART NO.	QTY	DESCRIPTION

CONFIDENTIAL: THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, DISCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME, MODIFY THE DRAWING AND/OR INFORMATION CONTAINED HEREIN.

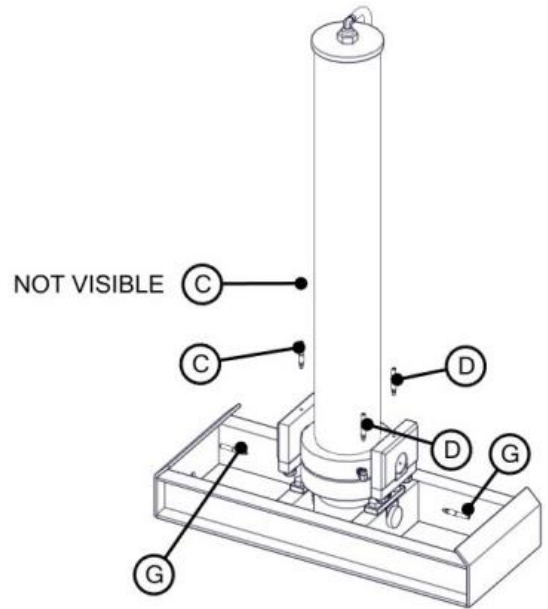
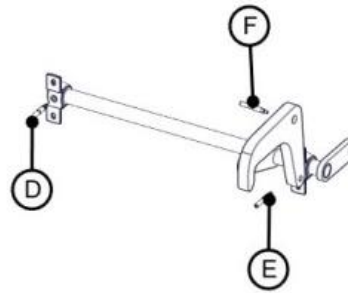


DIXON, ILLINOIS
PHONE: 800-851-9664

GREASE LINES



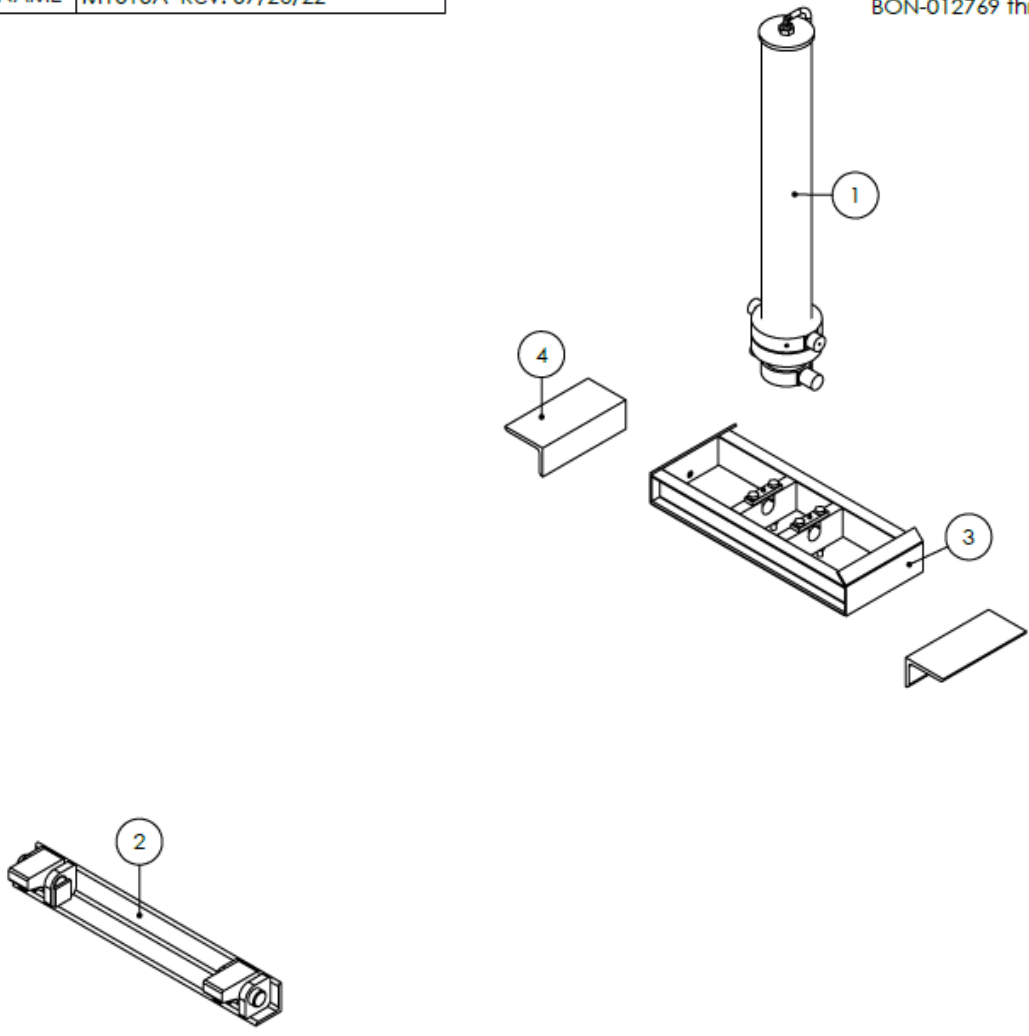
M1073.smg



Ref	Part No	Qty	Description
A			
B			
C	BV2-002407	2	GREASE EXTENSION HOSE - 48"
D	BV2-002405	4	GREASE EXTENSION HOSE - 60"
E	BV2-002406	2	GREASE EXTENSION HOSE - 36"
F	BV2-002404	2	GREASE EXTENSIONHOSE - 12"
G	BV2-002414	2	GREASE EXTENSION HOSE - 168" (9' model)
G	BV2-002415	2	GREASE EXTENSION HOSE - 180" (10' model)
G	BV2-002416	2	GREASE EXTENSION HOSE - 192" (11' model)
G	BV2-002417	2	GREASE EXTENSION HOSE - 204" (12' model)
G	BV2-002418	2	GREASE EXTENSION HOSE - 216" (13' model)
G	BV2-002419	2	GREASE EXTENSION HOSE - 228" (14' model)
G	BV2-002420	2	GREASE EXTENSION HOSE - 240" (15' model)
G	BV2-002421	2	GREASE EXTENSION HOSE - 252" (16' model)

FILE NAME	M1010
DWG NAME	M1010A Rev: 07/26/22

TRUNNION HOIST LIT
BON-012769 thru BON-012776



4	BON-012368	2	MOUNTING ANGLE (15'-16' models)
	BON-012361		MOUNTING ANGLE (9'-14' models)
3	BON-012366	1	LOWER TRUNNION FRAME (15'-16' models)
	BON-012364		LOWER TRUNNION FRAME (12'-14' models)
	BON-012362		LOWER TRUNNION FRAME (9'-11' models)
2	BON-012895	1	REAR HINGE BLOCK ASSY
1	BON-020516	1	CYLINDER-HYDRAULIC, G4 150-5.7-4 DA (16' models)
	BON-020515		CYLINDER-HYDRAULIC, G4 140-5.7-4 DA (15' models)
	BON-020514		CYLINDER-HYDRAULIC, G4 130-5-3 DA (14' models)
	BON-020513		CYLINDER-HYDRAULIC, G4 120-5-3 DA (13' models)
	BON-020512		CYLINDER-HYDRAULIC, G4 110-5-3 DA (12' models)
	BON-020511		CYLINDER-HYDRAULIC, G4 100-4.25-3 DA (11' models)
	BON-020510		CYLINDER-HYDRAULIC, G4 90-4.25-3 DA (9-10' models)
REF	PART NO.	QTY	DESCRIPTION

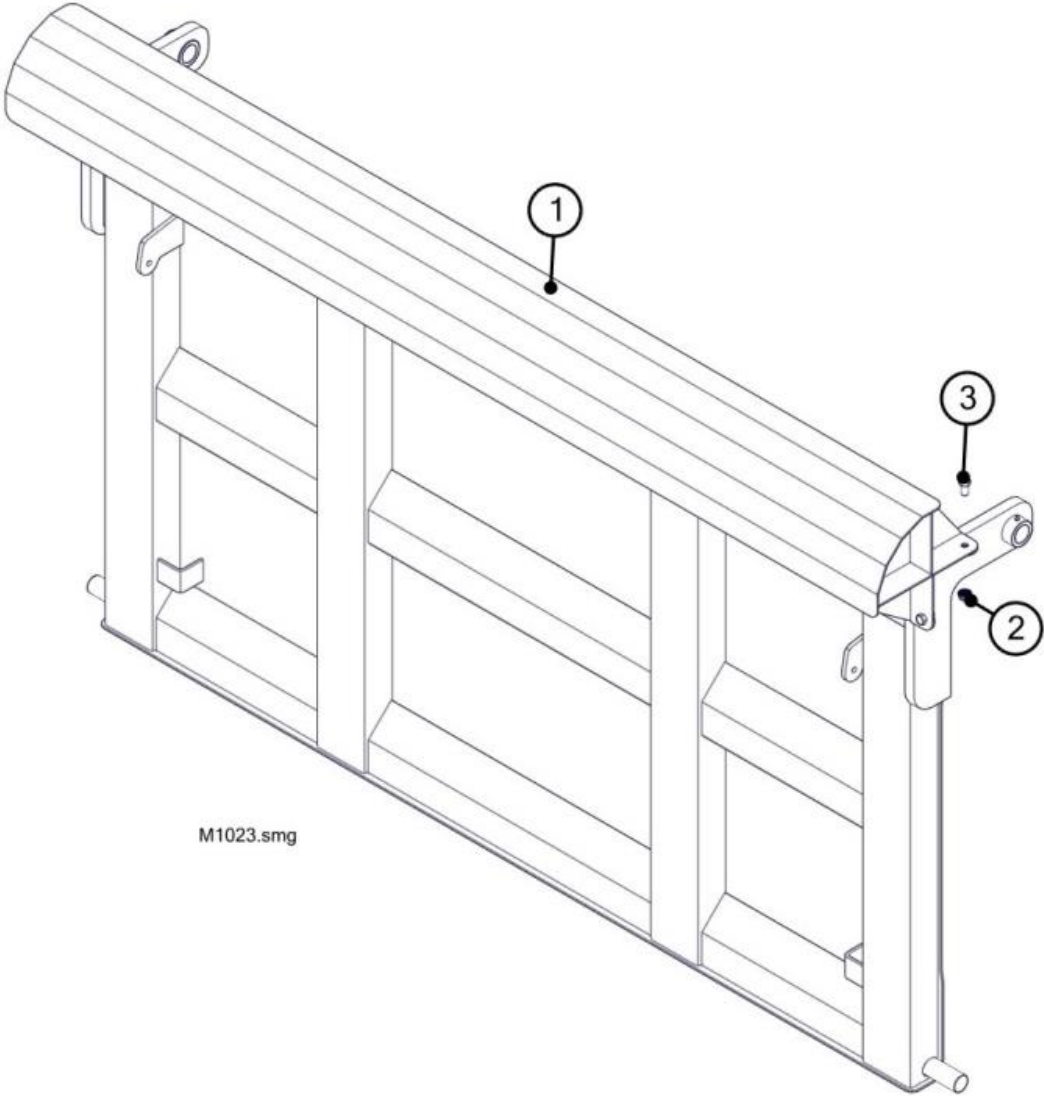
CONFIDENTIAL: THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, DISCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME, MODIFY THE DRAWING AND/OR INFORMATION CONTAINED HEREIN.



DIXON, ILLINOIS
PHONE: 800-851-9664

SERVICE PARTS - ACCESSORIES

AIR FOIL

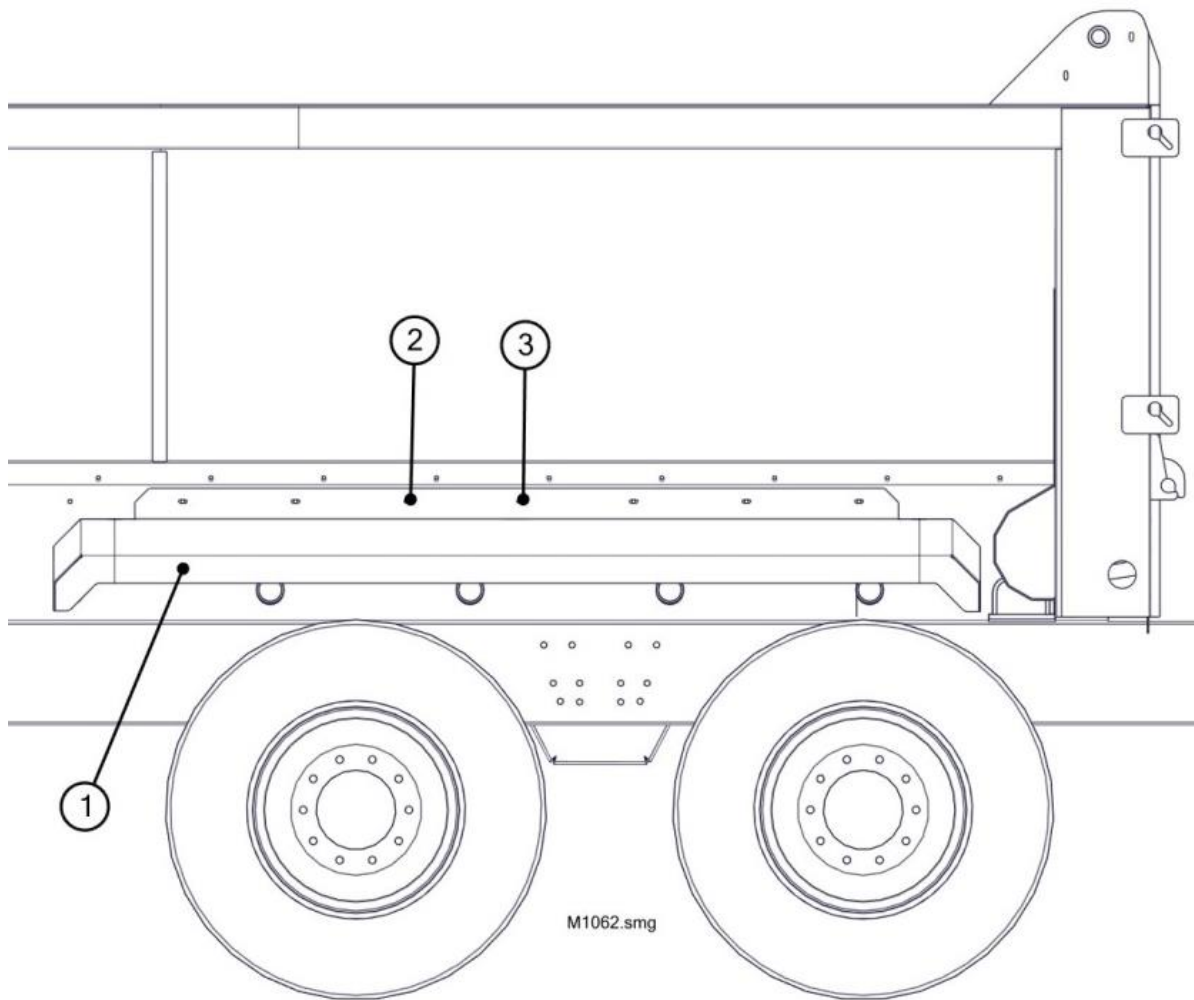


M1023.smg

Before placing an order, determine and specify the grade of material required for the service parts needed.

Ref	Part No.	Qty	Description
1	BON-012850	1	AIRFOIL
2	BV2-001653	4	1/2-13 SERRATED FLANGE LOCKNUT SS
3	BON-000105SS	4	1/2-13 x 1 HEX BOLT SS

METAL FENDERS, single & tandem axle



Before placing an order, determine and specify the grade of material required for the service parts needed.

Ref	Part No.	Qty	Description
1	BON-013435	2	SINGLE AXLE FENDER
1	BON-013436L	1	TANDEM AXLE FENDER - LT
1	BON-013436R	1	TANDEM AXLE FENDER - RT
1	BON-013439L	1	9' BODY FENDER - LT
1	BON-013439R	1	9' BODY FENDER - RT
1	BON-013440L	1	10' BODY FENDER - LT
1	BON-013440R	1	10' BODY FENDER - RT
1	BON-013441L	1	11' BODY FENDER - LT
1	BON-013441R	1	11' BODY FENDER - RT
1	BON-013442L	1	12' BODY FENDER - LT
1	BON-013442R	1	12' BODY FENDER - RT
1	BON-013443L	1	13' BODY FENDER - LT
1	BON-013443R	1	13' BODY FENDER - RT
1	BON-013444L	1	14' BODY FENDER - LT
1	BON-013444R	1	14' BODY FENDER - RT
1	BON-013445L	1	15' BODY FENDER - LT
1	BON-013445R	1	15' BODY FENDER - RT
1	BON-013446L	1	16' BODY FENDER - LT
1	BON-013446R	1	16' BODY FENDER - RT
2	BON-000285.5SS	A/R	3/8-16 x 1-1/4 CARRIAGE BOLT SS
3	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS

POLY FENDERS, single and tandem axle

Contact Bonnell Industries Service Department for available poly fender service components.

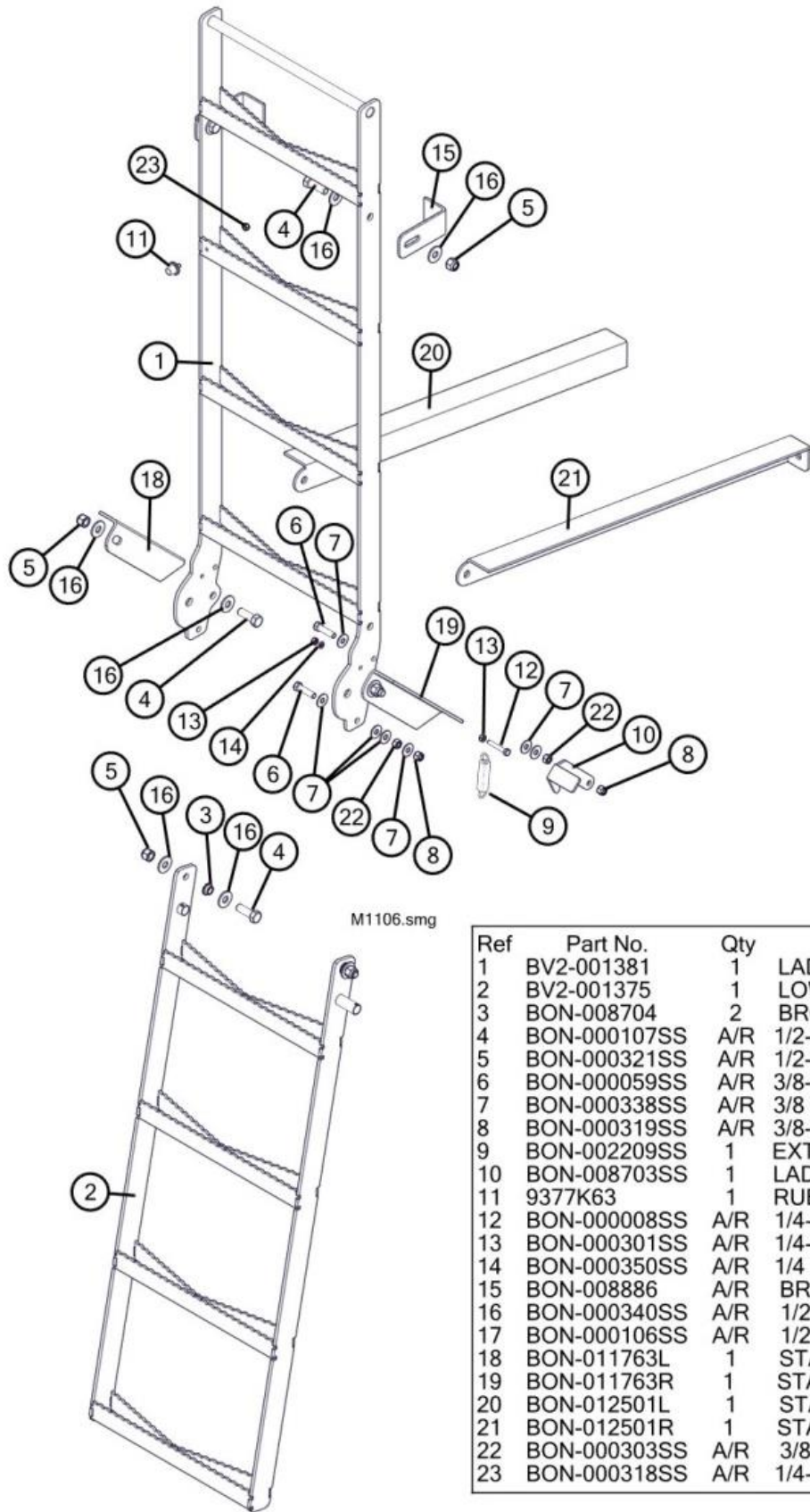
LIGHT KITS

Contact Bonnell Industries Service Department for available light kit service components.

MUD FLAPS

Contact Bonnell Industries Service Department for available mud flap service components.

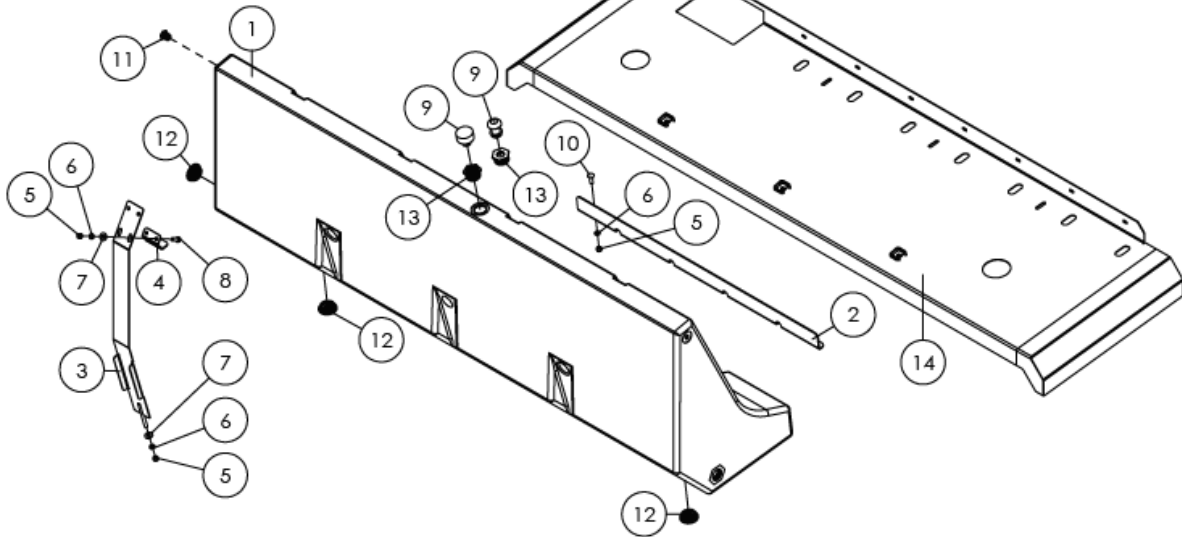
OBSERVATION LADDER



Ref	Part No.	Qty	Description
1	BV2-001381	1	LADDER UPPER SECTION
2	BV2-001375	1	LOWER LADDER SECTION
3	BON-008704	2	BRONZE BUSHING, 1/2 ID
4	BON-000107SS	A/R	1/2-13 x 1-1/2 HEX BOLT SS
5	BON-000321SS	A/R	1/2-13 NYLON LOCKNUT SS
6	BON-000059SS	A/R	3/8-16 x 1-1/2 HEX BOLT SS
7	BON-000338SS	A/R	3/8 STANDARD FLAT WASHER SS
8	BON-000319SS	A/R	3/8-16 NYLON LOCKNUT SS
9	BON-002209SS	1	EXTENSION SPRING
10	BON-008703SS	1	LADDER LATCH
11	9377K63	1	RUBBER BUMPER STOP
12	BON-000008SS	A/R	1/4-20 x 1-3/4 HEX BOLT SS
13	BON-000301SS	A/R	1/4-20 HEX NUT SS
14	BON-000350SS	A/R	1/4 LOCKWASHER SS
15	BON-008886	A/R	BRACKET
16	BON-000340SS	A/R	1/2 STANDARD FLAT WASHER SS
17	BON-000106SS	A/R	1/2-13 x 1-1/4 HEX BOLT SS
18	BON-011763L	1	STANDOFF - LT
19	BON-011763R	1	STANDOFF - RT
20	BON-012501L	1	STANDOFF - LT
21	BON-012501R	1	STANDOFF - RT
22	BON-000303SS	A/R	3/8-16 HEX NUT SS
23	BON-000318SS	A/R	1/4-20 NYLON LOCKNUT SS

FILE NAME	M1012
DWG NAME	M1012 Rev: 03/12/21

**PRE-WET POLY TANK KIT
& TANK BRACKETS**



REF #14

16'					BON-012782L	BON-012782R
15'	BON-013420L	BON-013420R	BON-012780L	BON-012780R	BON-012784L	BON-012784R
14'					BON-012783L	BON-012783R
13'					BON-012782L	BON-012782R
12'	BON-013422L	BON-013422R	BON-013432L	BON-013432R	BON-012782L	BON-012782R
11'	BON-013421L	BON-013421L	BON-012781L	BON-012781R	N/A	N/A
10'	BON-013420L	BON-013420R	BON-012780L	BON-012780R	N/A	N/A
09'	BON-012779L	BON-012779R	N/A	N/A	N/A	N/A
BODY LENGTH	125 GALLON LEFT	125 GALLON RIGHT	150 GALLON LEFT	150 GALLON RIGHT	190 GALLON LEFT	190 GALLON RIGHT

13	RB 200-100	2	2" x 1" POLY PIPE REDUCING BUSHING
12	BSS-001246	A/R	BUNG PLUG - 2" NPT POLY
11	PLUG 075	2	3/4 POLY PIPE PLUG
10	BON-000261.5SS	A/R	1/2-13 x 1-1/2 CARRIAGE BOLT SS
9	BSS-001366	2	BREATHER - 1" NYLON FILTER
8	BON-000106SS	A/R	1/2-13 x 1-1/4 HEX BOLT SS
7	BON-000340SS	A/R	1/2 STANDARD FLAT WASHER CC
6	BON-000354SS	A/R	1/2 STANDARD LOCKWASHER SS
5	BON-000305SS	A/R	1/2-13 HEX NUT SS
4	BON-011649	A/R	BRACKET - MPB UPPER TANK
3	BON-011641	A/R	WA - MPB TANK STRAP
2	BON-012890	2	BACK STOP - MPB PREWET TANK
-	BON-013087	-	DECAL - 190 GALLON FILL MARKS (optional)
1	BON-011607	2	TANK - 104", 190 GALLON, POLY
-	BON-013086	-	DECAL - 150 GALLON FILL MARKS (optional)
1	BON-011606	2	TANK - 84", 150 GALLON, POLY
-	BON-013085	-	DECAL - 125 GALLON FILL MARKS (optional)
1	BON-011605	2	TANK - 70", 125 GALLON, POLY
REF	PART NO.	QTY	DESCRIPTION

Before placing an order, determine and specify the grade of material required for the service parts needed.

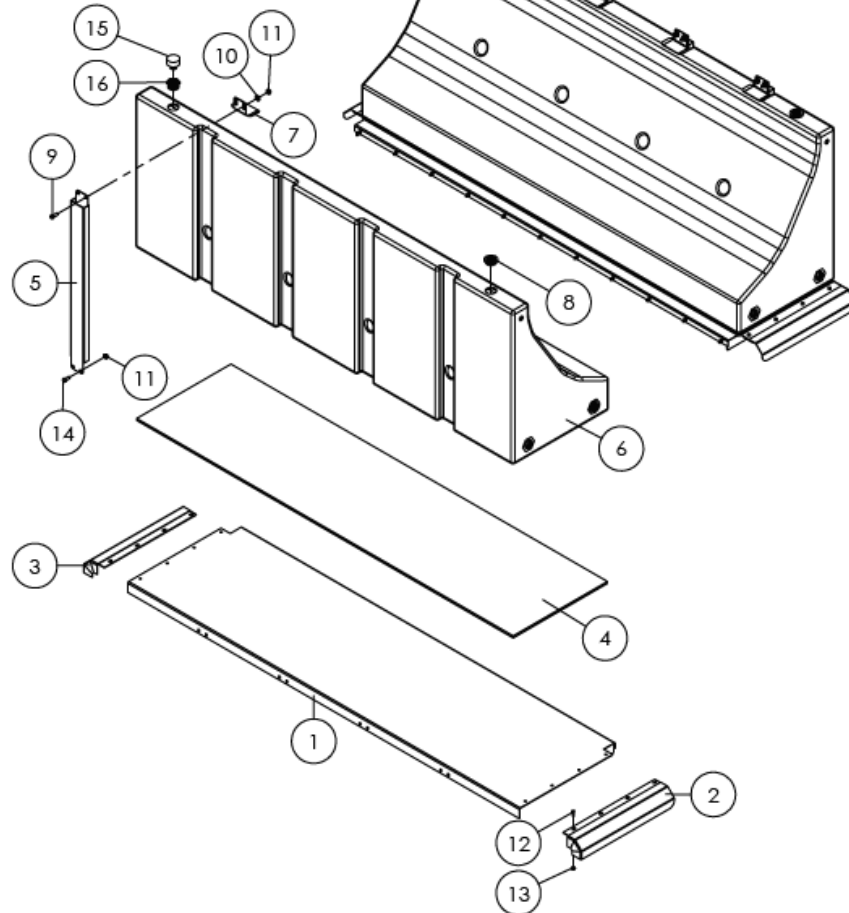
CONFIDENTIAL: THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, DISCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME MODIFY THE DRAWING AND/OR INFORMATION CONTAINED HEREIN.



DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	M1013
DWG NAME	M1013 Rev: 03/15/21

HIGH CAPACITY PRE-WET POLY TANK KIT & TANK BRACKETS



16	RB 200-100	2	2" x 1" POLY PIPE REDUCING BUSHING
15	BSS-001366	2	BREATHER - 1" NYLON FILTER
14	BON-000106SS	A/R	1/2-13 x 1-1/4 HEX BOLT SS
13	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
12	BON-000057SS	A/R	3/8-16 x 1 HEX BOLT SS
11	BV2-001653	A/R	1/2-13 SERRATED FLANGE LOCKNUT SS
10	BON-000340SS	A/R	1/2 STANDARD FLAT WASHER SS
9	BON-000107SS	A/R	1/2-13 x 1-1/2 HEX BOLT SS
8	BSS-001246	A/R	PLUG - 2" NPT
7	BON-012517	8	MEGA TANK HOLDDOWN BRACKET
-	BON-013088	A/R	DECAL - 268 GAL TANK FILL MARK (optional)
6	BON-011620	2	268 GALLON MEGA TANK
5	BON-012014	8	MEGA TANK BRACKET (S/N 1057 & below)
	BON-013726	8	MEGA TANK BRACKET (S/N 1058 & above)
4	BON-011693	2	RUBBER MAT (optional)
3	BON-012527R	2	TANK BRACKET NOSE, RT
2	BON-012527L	2	TANK BRACKET NOSE, LT
	BON-012013	2	MEGA TANK BRACKET (S/N 1057 & below)
1	BON-013725	2	MEGA TANK BRACKET (S/N 1058 & above)
REF	PART NO.	QTY	DESCRIPTION

Before placing an order, determine and specify the grade of material required for the service parts needed.

CONFIDENTIAL: THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, DISCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME, MODIFY THE DRAWING AND/OR INFORMATION CONTAINED HEREIN.

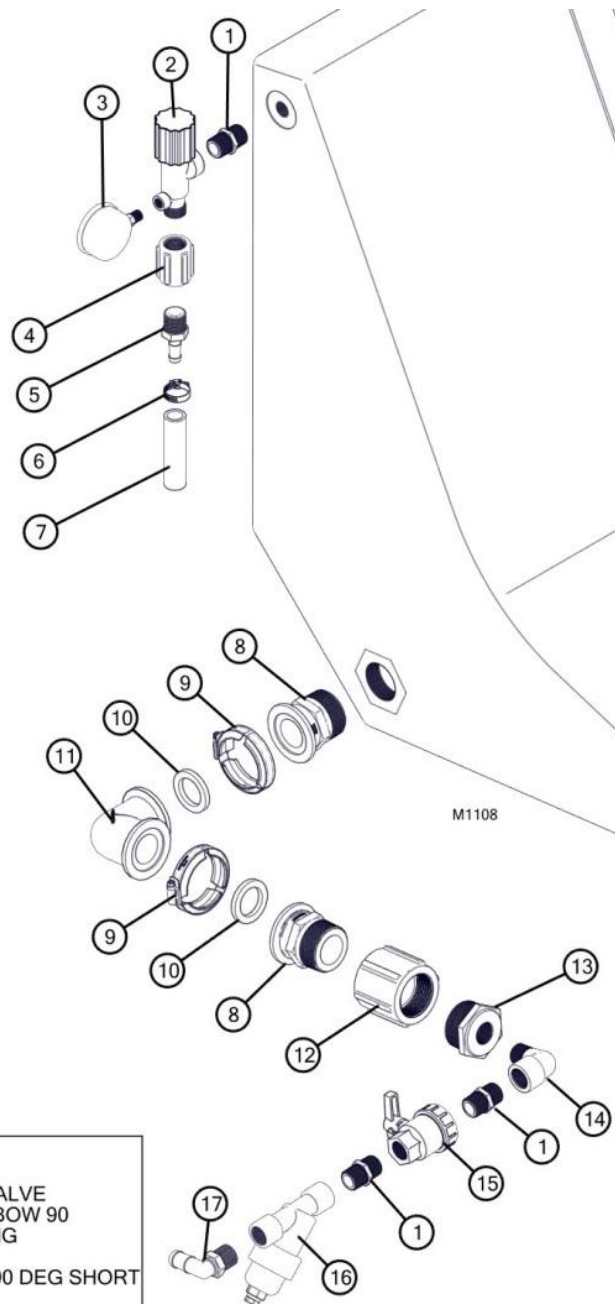
BONNELL INDUSTRIES INC
TRUCK & ROAD EQUIPMENT

DIXON, ILLINOIS
PHONE: 800-851-9664

PRE-WET HOSE & FITTING KIT

125 – 190 Gallon models shown.

268 Gallon model similar.

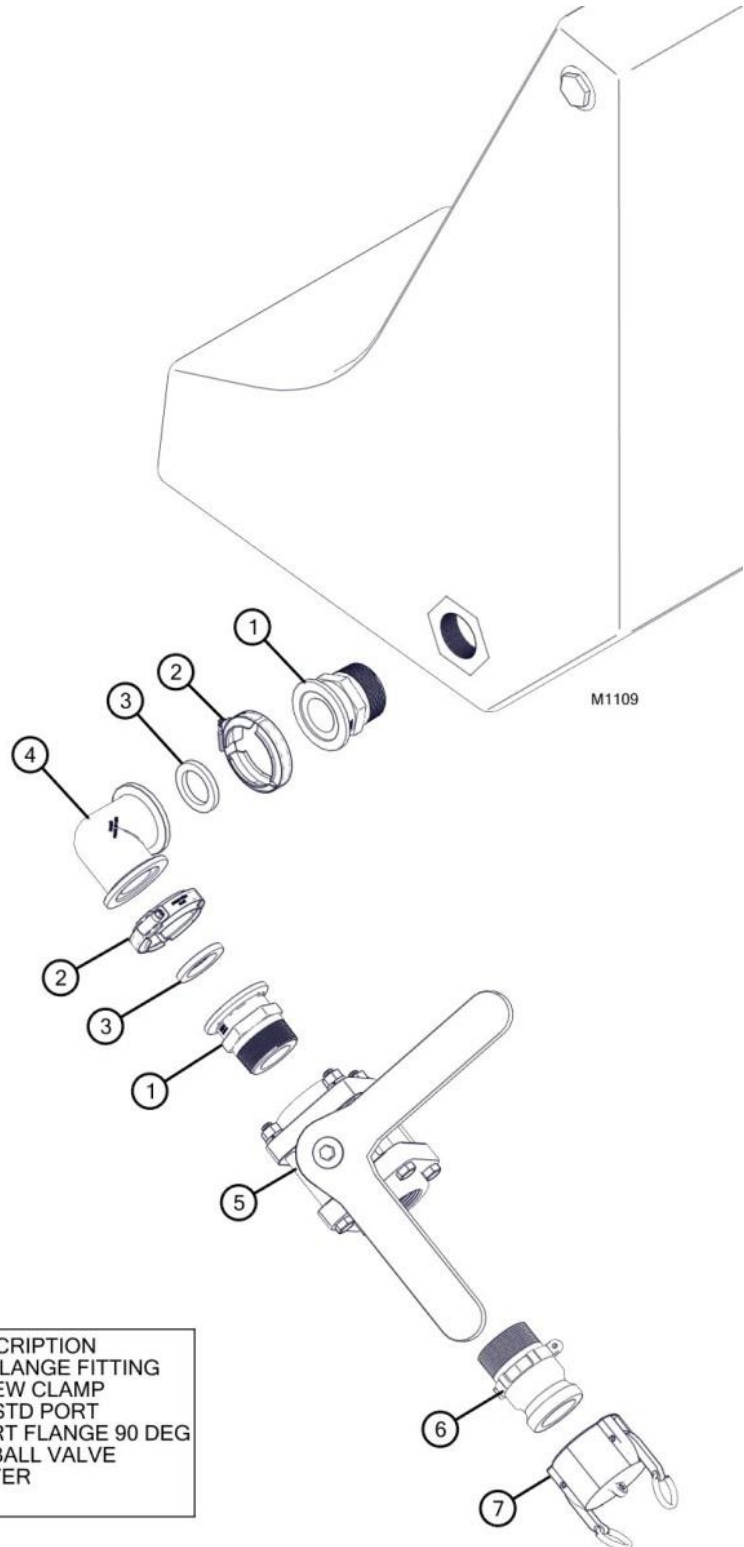


17	HB-075-90	1	3/4" 90 DEG HOSE BARB
16	LS075 80	1	3/4" 80 MESH STRAINER
15	UV075FP	1	3/4" SINGLE UNION POLY VALVE
14	SL075-90	1	3/4" POLY PIPE STREET ELBOW 90
13	RB200-075	1	2" x 3/4" POLY PIPE BUSHING
12	CPLG200	1	2" POLY PIPE COUPLING
11	M200CPG90SH	2	2" x 2" STD PORT FLANGE 90 DEG SHORT
10	150G	8	GASKET 200 STD PORT
09	FC200	8	2" WORM SCREW CLAMP 200 SERIES
08	M200MPT	8	2" PIPE TO 2" FLANGE FITTING
07	LDS1005X001	A/R	HOSE - 3/4", NYLON BRAIDED
06	VEL-022310	2	#10 HOSE CLAMP
05	HB075/50	1	HOSE BARB - 1/2" x 3/4" NPT
04	CPLG075	1	COUPLING - 3/4" NPT
03	LDS1060X001	1	GUAGE, 0-60 PSI, 1/4" NPT
02	LDS1076X001	1	PRESSURE RELIEF VALVE, 3/4" NPT
01	NIP075-SH	3	3/4" SHORT POLY NIPPLE

PRE-WET HOSE & FITTING KIT

125 – 190 Gallon models shown.

268 Gallon model similar.



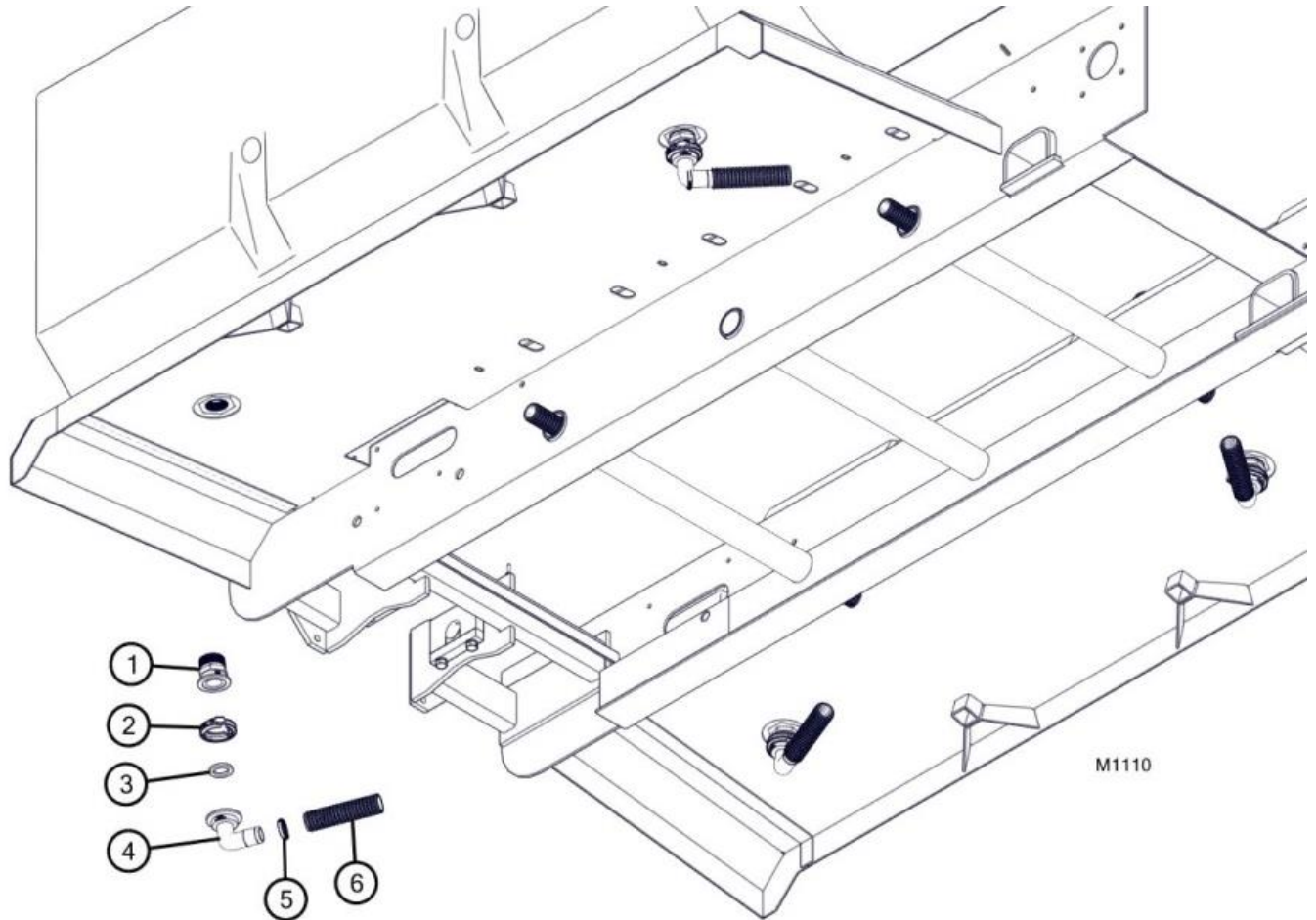
REF	PART NO.	QTY	DESCRIPTION
1	M200MPT	2	2" PIPE TO 2" FLANGE FITTING
2	FC200	2	2" WORM SCREW CLAMP
3	150G	2	GASKET - 200 STD PORT
4	M200CPG90SH	1	2" x 2" STD PORT FLANGE 90 DEG
5	V204FP	1	2" FULL PORT BALL VALVE
6	200F	1	2" MALE ADAPTER
7	200 CAP	1	2" CAP

REV: 07Oct17

PRE-WET HOSE & FITTING KIT

125 – 190 Gallon models shown.

268 Gallon model similar.



REF	PART NO.	QTY	DESCRIPTION
1	M200MPT	4	2" PIPE TO 2" FLANGE FITTING
2	FC200	4	2" WORM SCREW CLAMP 200 SERIES
3	150G	4	GASKET - 200 STD PORT
4	M200150BR90	4	2" FULL PORT FLANGE x 1-1/2" HOSE BARB 90 DEG ELBOW
5	HC150	4	HOSE CLAMP, 1.86"-2.17"
6	390-150	20'	1-1/2" SUCTION DISCHARGE HOSE

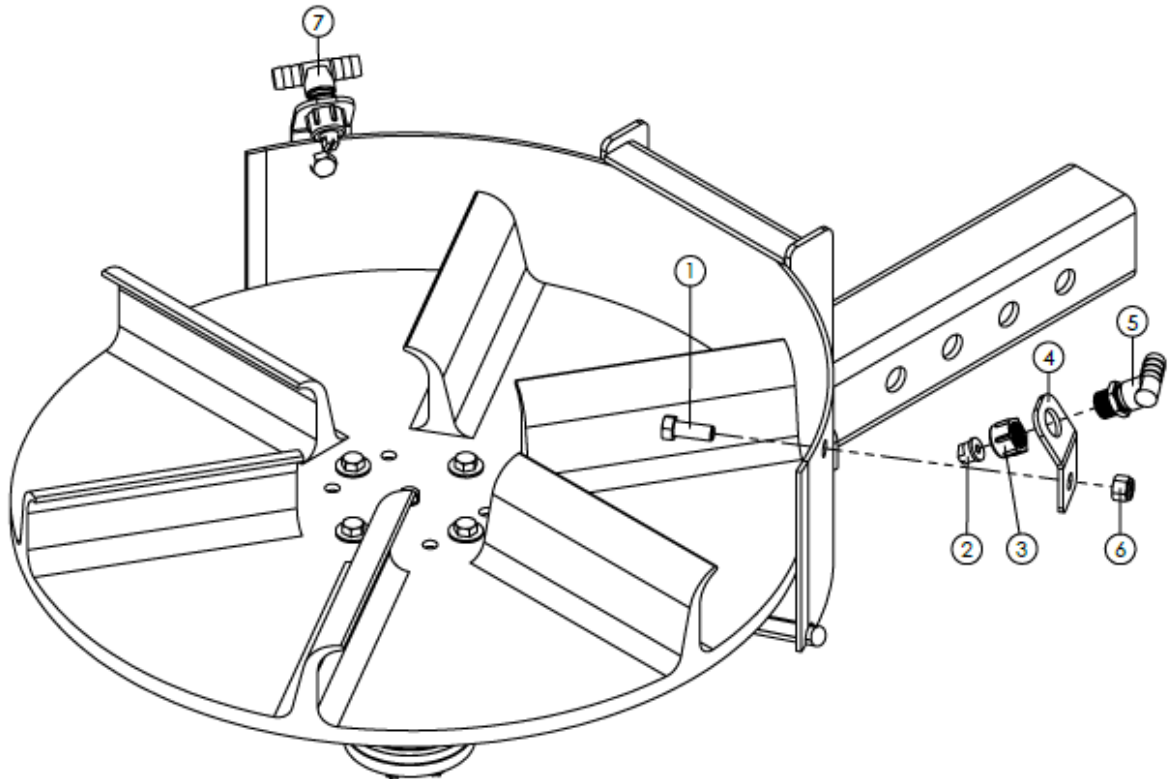
PRE-WET PUMP KIT - electric or hydraulic

Contact Bonnell Industries Service Department for available pre-wet electric and hydraulic service components.

FILE NAME	M1202
DWG NAME	M1202

PRE-WET NOZZLE KIT

REF: BON-013116



7	BSS-001057	1	1/2 TEE BRASS BARB FITTING TO 1/2 NOZZLE THREAD
6	BON-000319SS	2	3/8-16 NYLON HEX LOCK NUT SS
5	BSS-001058	1	1/2 90° BRASS MALE BARB TO 1/2 NOZZLE THREAD
4	BON-012257SS	2	BRACKET - COMMANDER NOZZLE
3	BSS-001056	2	NOZZLE NUT
2	LDS1072X001	2	FORCE, BRASS TIP
1	BON-000057SS	2	3/8-16 x 1" HEX BOLT
REF	PART NO.	QTY	DESCRIPTION

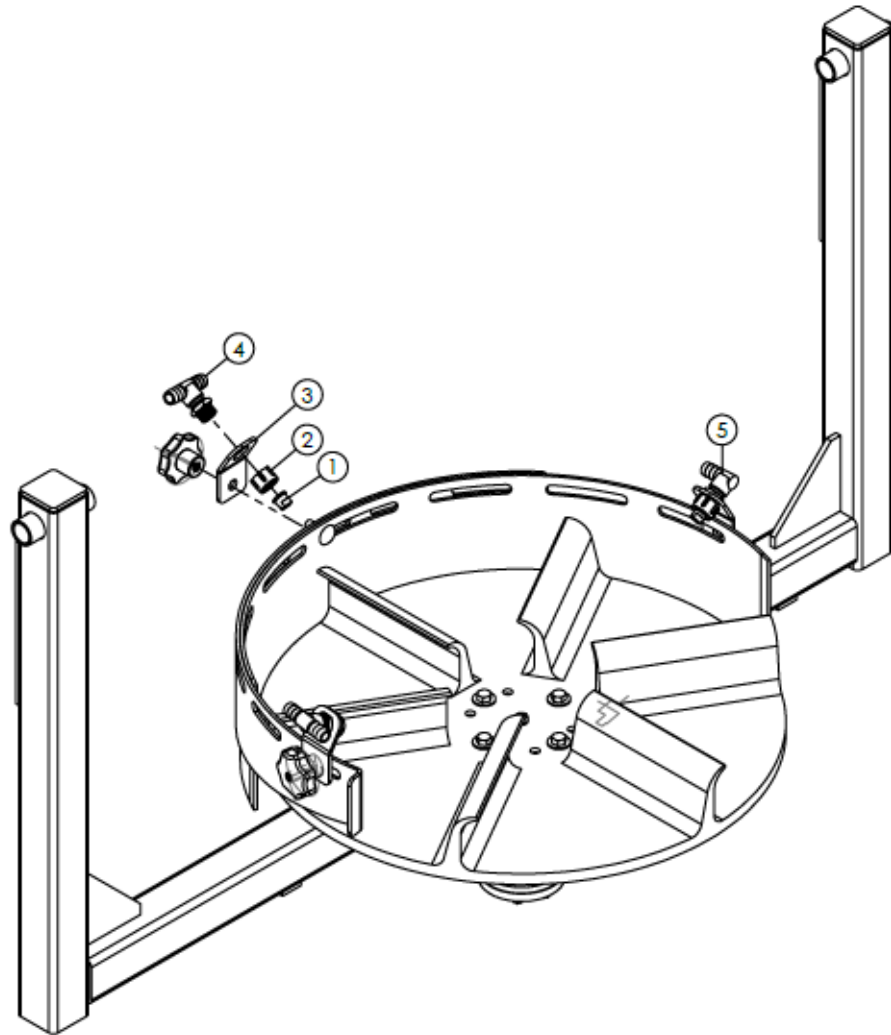
CONFIDENTIAL: THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, DISCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME, MODIFY THE DRAWING AND/OR INFORMATION CONTAINED HEREIN.

BONNELL
INDUSTRIES INC
TRUCK & ROAD EQUIPMENT

DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	M1203
DWG NAME	M1203

PRE-WET NOZZLE KIT
REF: BON-013117 & BON-013118



5	BSS-001058	1	1/2 90° BRASS MALE BARB TO 1/2 NOZZLE THREAD
4	BSS-001057	1 or 2	1/2 TEE BRASS BARB FITTING TO 1/2 NOZZLE THREAD
3	BON-012257SS	2 or 3	BRACKET - COMMANDER NOZZLE
2	BSS-001056	2 or 3	NOZZLE NUT
1	LDS1072X001	2 or 3	FORCE, BRASS TIP
REF	PART NO.	QTY	DESCRIPTION

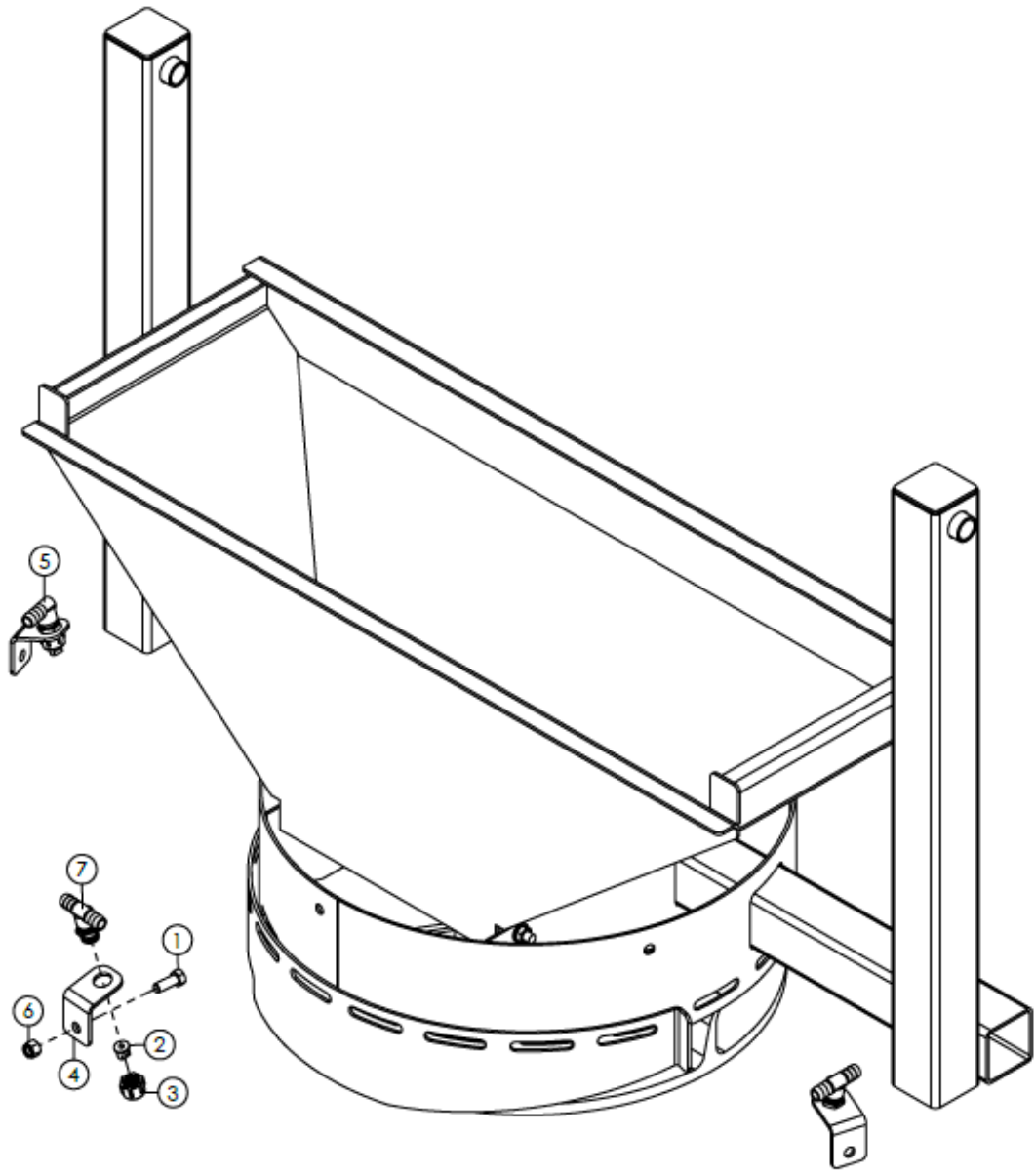
CONFIDENTIAL: THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, DISCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME, MODIFY THE DRAWING AND/OR INFORMATION CONTAINED HEREIN.

BONNELL
INDUSTRIES INC
TRUCK & ROAD EQUIPMENT

DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	M1204
DWG NAME	M1204

PRE-WET NOZZLE KIT
REF: BON-013107 & BON-013114



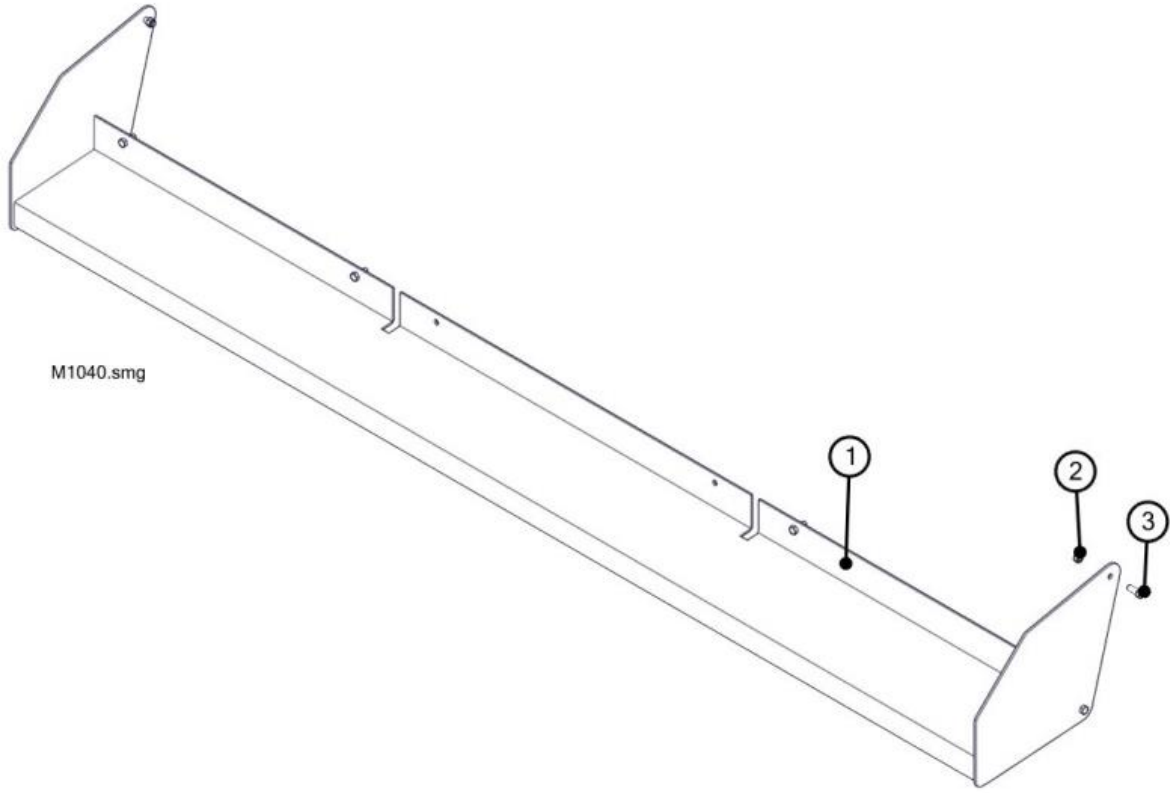
7	BSS-001057	1 or 2	1/2 TEE BRASS BARB FITTING TO 1/2 NOZZLE THREAD
6	BON-000319SS	2 or 3	3/8-16 NYLON HEX LOCK NUT SS
5	BSS-001058	1	1/2 90° BRASS MALE BARB TO 1/2 NOZZLE THREAD
4	BON-012258SS	2 or 3	BRACKET - COMMANDER NOZZLE
3	BSS-001056	2 or 3	NOZZLE NUT
2	LDS1072X001	2 or 3	FORCE, BRASS TIP
1	BON-000057SS	2 or 3	3/8-16 x 1" HEX BOLT
REF	PART NO.	QTY	DESCRIPTION

CONFIDENTIAL: THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, DISCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME, MODIFY THE DRAWING AND/OR INFORMATION CONTAINED HEREIN.



DIXON, ILLINOIS
PHONE: 800-851-9664

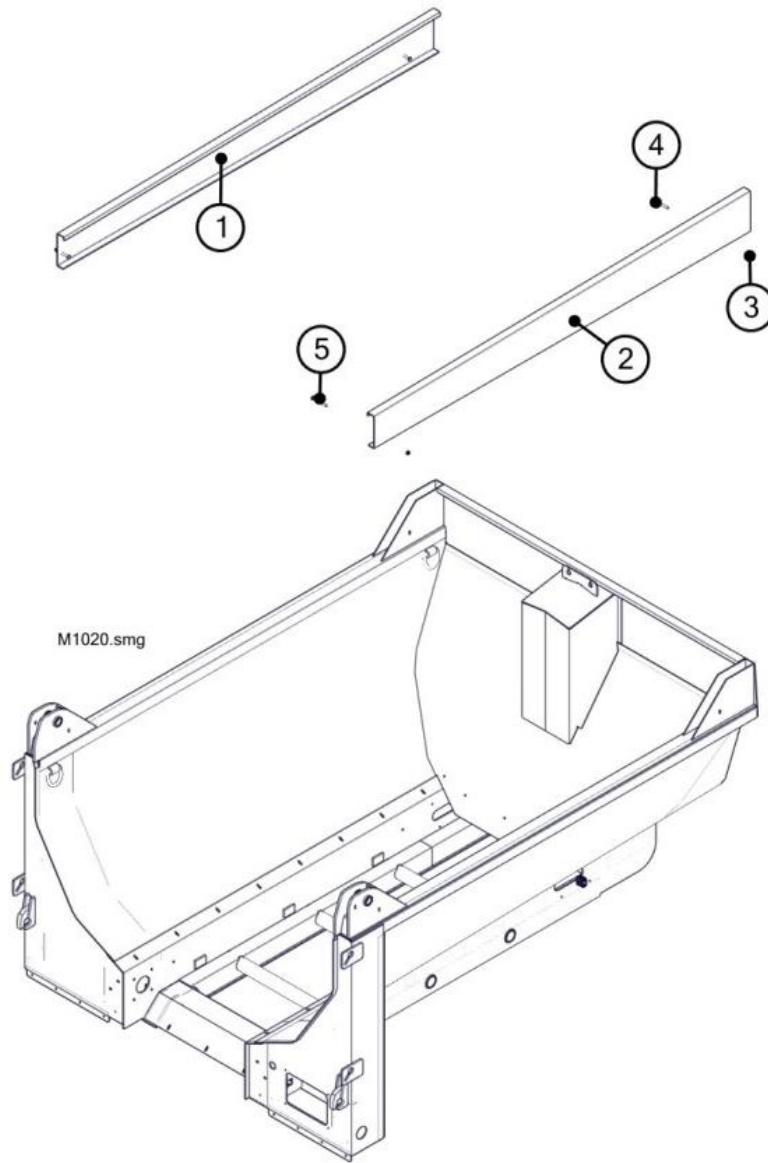
REAR SPILL PAN



Before placing an order, determine and specify the grade of material required for the service parts needed.

Ref	Part No.	Qty	Description
1	BON-013108	1	WA - 8" SPILL PAN
1	BON-013109	1	WA - 10" SPILL PAN
1	BON-013110	1	WA - 12" SPILL PAN
1	BON-013111	1	WA - 14" SPILL PAN
2	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
3	BON-000058SS	A/R	3/8-16 x 1-1/4 HEX BOLT SS

SIDE BOARDS - metal



Before placing an order, determine and specify the grade of material required for the service parts needed.

Ref	Part No.	Qty	Description
1	BON-012199L	1	SIDEBOARD - MPB09 METAL, LT
1	BON-012200L	1	SIDEBOARD - MPB10 METAL, LT
1	BON-012201L	1	SIDEBOARD - MPB11 METAL, LT
1	BON-012202L	1	SIDEBOARD - MPB12 METAL, LT
1	BON-012203L	1	SIDEBOARD - MPB13 METAL, LT
1	BON-012204L	1	SIDEBOARD - MPB14 METAL, LT
1	BON-012205L	1	SIDEBOARD - MPB15 METAL, LT
1	BON-012206L	1	SIDEBOARD - MPB16 METAL, LT
2	BON-012199R	1	SIDEBOARD - MPB09 METAL, RT
2	BON-012200R	1	SIDEBOARD - MPB10 METAL, RT
2	BON-012201R	1	SIDEBOARD - MPB11 METAL, RT
2	BON-012202R	1	SIDEBOARD - MPB12 METAL, RT
2	BON-012203R	1	SIDEBOARD - MPB13 METAL, RT
2	BON-012204R	1	SIDEBOARD - MPB14 METAL, RT
2	BON-012205R	1	SIDEBOARD - MPB15 METAL, RT
2	BON-012206R	1	SIDEBOARD - MPB16 METAL, RT
3	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
4	BON-000284SS	A/R	3/8-16 x 3-1/2 CARRIAGE BOLT SS
5	BON-000285SS	A/R	3/8-16 x 4 CARRIAGE BOLT SS

SIDE BOARDS - wood

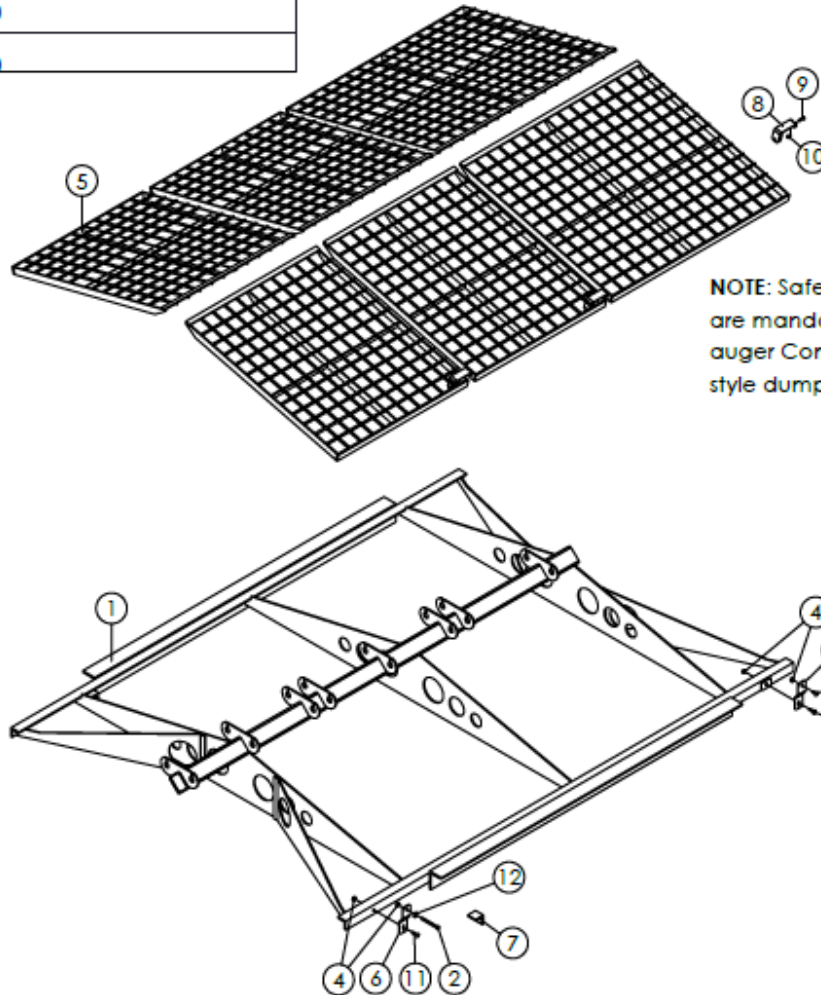
Contact Bonnell Industries Service Department for pricing on available side board service parts.

TARP KIT

Contact Bonnell Industries Service Department for available tarp service components.

FILE NAME	M1200
DWG NAME	M1200

TOP SCREEN



NOTE: Safety locks (8) are mandatory on twin auger Commander-style dump bodies.

12	BON-000338SS	2	3/8" STANDARD FLAT WASHER SS (MCR & MCF models)
11	BON-000285.5SS	4	3/8-16 x 1-1/4" CARRIAGE BOLT SS
10	BON-000320SS	A/R	5/16-18 NYLON HEX LOCKNUT SS
9	BON-000032SS	A/R	5/16-18 x 1-1/2" HEX BOLT SS
8	BV2-002385SS	A/R	BVA SAFETY BRACKET SS
7	BON-012298	2	ANGLE - 2" x 2" x 3/8" x 2" LONG
6	BON-012297SS	4	BRACKET - TOP SCREEN MOUNTING
5	BV2-001829	A/R	48" TOP SCREEN
	BV2-001828		36" TOP SCREEN
4	BV2-001650	8	3/8-16 SERRATED FLANGE LOCKNUT SS
3	BON-000279SS	2	3/8-16 x 1" CARRIAGE BOLT SS
2	BON-000285.5SS	2	3/8-16 x 1-1/4" CARRIAGE BOLT SS (MTR & NNR models)
	BON-000069SS		3/8-16 x 4" HEX BOLT SS (MCR & MCF models)
1	BON-020716	1	16' TOP SCREEN FRAME
	BON-020715		15' TOP SCREEN FRAME
	BON-020714		14' TOP SCREEN FRAME
	BON-020713		13' TOP SCREEN FRAME
	BON-020712		12' TOP SCREEN FRAME
	BON-020711		11' TOP SCREEN FRAME
	BON-020710		10' TOP SCREEN FRAME
	BON-020709		09' TOP SCREEN FRAME
REF	PART NO.	QTY	DESCRIPTION

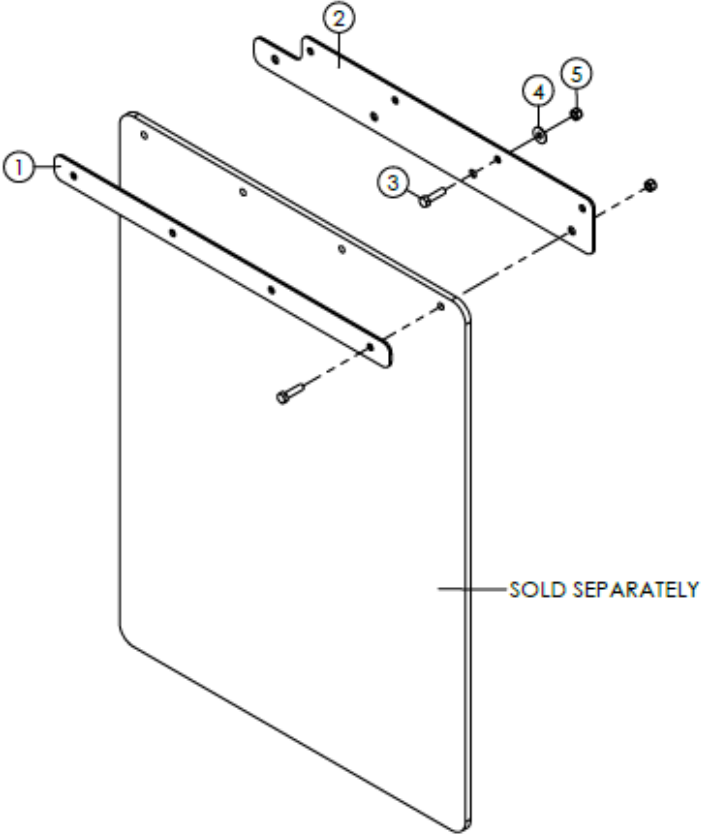
CONFIDENTIAL - THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, ENCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME, MODIFY THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN.



DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	M1201
DWG NAME	M1201

MUD FLAP BRACKETS



CONFIDENTIAL: THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN IS AND REMAINS THE SOLE PROPERTY OF, AND IS PROPRIETARY TO, BONNELL INDUSTRIES, INC. THIS DRAWING AND/OR INFORMATION SHALL BE KEPT CONFIDENTIAL AND MAY NOT BE REPRODUCED, COPIED, MODIFIED, DISCLOSED, TRANSFERRED, OR MADE AVAILABLE TO OTHERS, EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF BONNELL INDUSTRIES, INC. IT IS LOANED IN CONFIDENCE FOR MUTUAL ASSISTANCE PURPOSES ONLY. BONNELL INDUSTRIES, INC. MAY AT ANY TIME, MODIFY THIS DRAWING AND/OR INFORMATION CONTAINED HEREIN.

5	BON-000320SS	16	5/16-18 NYLON HEX LOCKNUT SS
4	BON-000337SS	16	5/16 STANDARD FLAT WASHER SS
3	BON-000031SS	16	5/16-18 x 1-1/4" HEX BOLT SS
2	BON-020357SS	2	BRACKET - COMMANDER MUD FLAP
1	BON-008755SS	2	MUD FLAP MOUNTING BRACKET 24" SS
REF	PART NO.	QTY	DESCRIPTION



DIXON, ILLINOIS
PHONE: 800-851-9664

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 Bonnells, 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 Bonnells Industries, Inc. will not be accepted. This warranty is exclusive and in lieu of all other warranties whether expressed or implied. Bonnells 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 Bonnells 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 Bonnells 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 Bonnells Industries, Inc.

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

Bonnells 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 Bonnells 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 Bonnells Indu:
located at 1385 Franklin Grove Rd.,
in the city of Dixon, Illinois, U.S.A.

Before placing an order,
determine and specify the
grade of material required
for the service parts needed.

MADE IN THE USA 