

COMMANDER MULTI-PURPOSE BODIES

MCR- series Multi-Purpose Dump Body

OPERATION & SERVICE MANUAL

Manual Part No.: BON-013655



MCR Body shown with
optional accessories



REV: 07/29/22

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

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Warranty **Back Cover**

SPECIFICATIONS

Body length & estimated operating weight	MCR-09	108"	
	MCR-10	120"	3,929 lbs
	MCR-11	132"	4,162 lbs
	MCR-12	144"	4,381 lbs
	MCR-13	156"	4,619 lbs
	MCR-14	168"	4,927 lbs
	MCR-15	182"	5,203 lbs
	MCR-16	194"	5,431 lbs

Operating weight includes dump body, floor, conveyor chain, chain covers, tailgate, feed gate, tailgate latch, hoist components, access covers & grease line kit.

Operating weight does not include observation ladder, trunnion hoist cylinder, trunnion hoist cylinder mounting bracket & cab shield.

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.

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SPECIFICATIONS

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..... MCR-09	6.3 yd ³	8.2 yd ³	9.6 yd ³
MCR-10	7.1 yd ³	9.1 yd ³	10.7 yd ³
MCR-11	8.0 yd ³	10.1 yd ³	11.9 yd ³
MCR-12	8.8 yd ³	11.1 yd ³	13.1 yd ³
MCR-13	9.6 yd ³	12.1 yd ³	14.4 yd ³
MCR-14	10.4 yd ³	13.1 yd ³	15.6 yd ³
MCR-15	11.3 yd ³	14.2 yd ³	16.8 yd ³
MCR-16	12.1 yd ³	15.2 yd ³	18.0 yd

Standard Conveyor Chain	Type	667XH pintle
<i>(other chain configurations available upon request)</i>	Tensile strength	26,000 lbs
	Crossbar profile	1/2" x 1-1/2"
	Crossbar spacing	every-other link
	Chain width	30-1/2" c/c

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.

EQUIPMENT SAFETY – CHAIN CONVEYOR MODELS

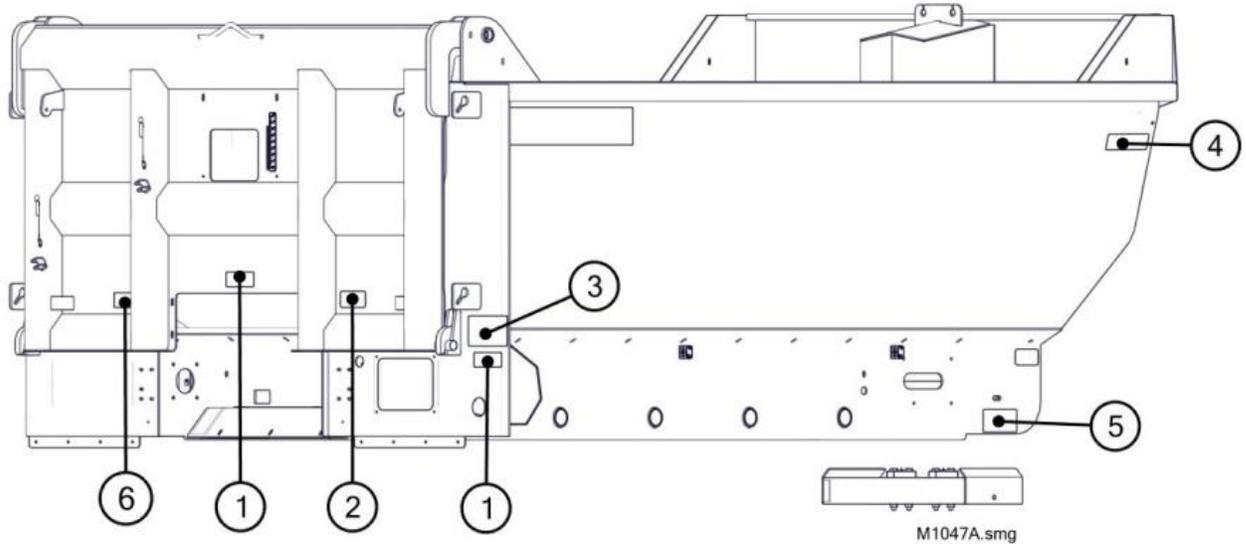
- When unloading aggregate material, it is necessary to remove the subfloor (if equipped) from the dump body. Compacted aggregate material that gets trapped near the conveyor chain can cause severe damage to the chain and chain drive mechanism.

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



1. BON-011384



4. BV2-001680



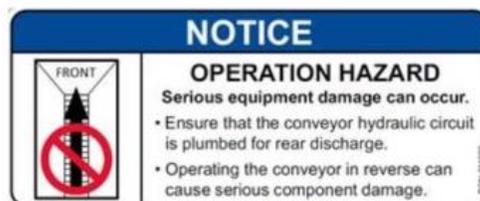
2. BON-013619



5. BON-011376

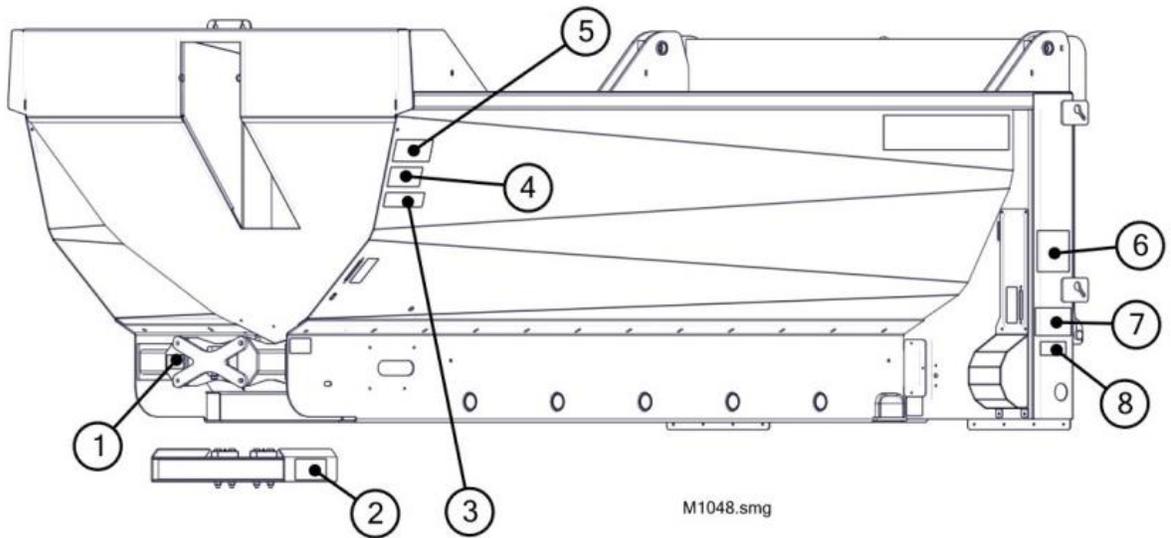


3. BON-011375



6. BON-011989

REV: 03/16/17



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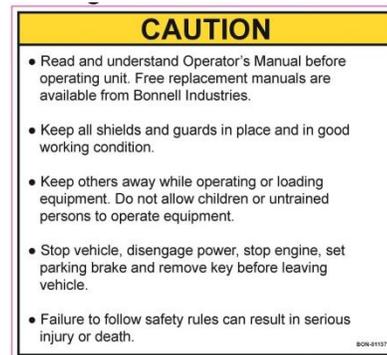
1: B0N-012107



5: B0N-011382



2: B0N-011376



6: B0N-011377



3: BV2-001680



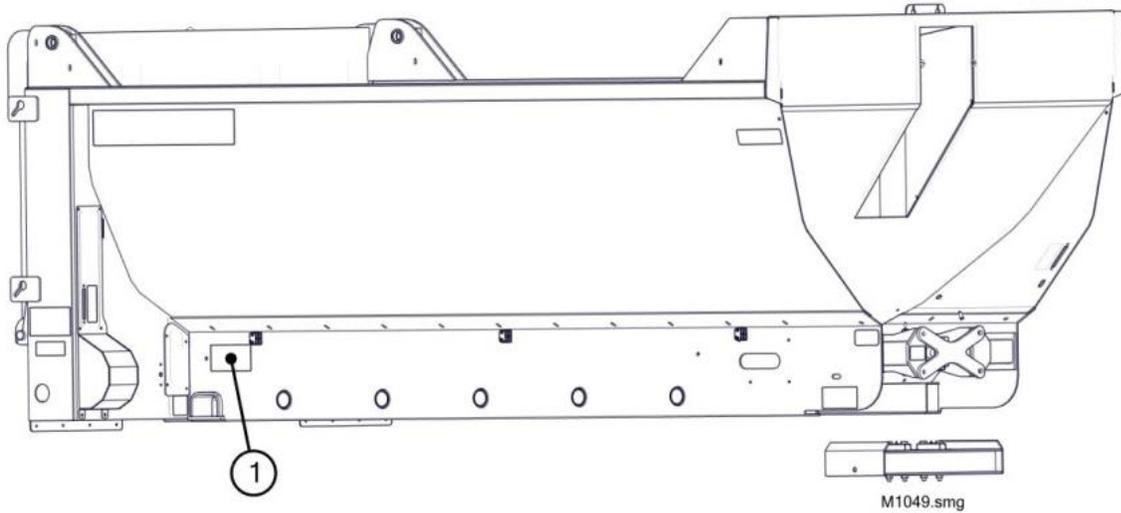
4: B0N-011379



7: B0N-011375



8: B0N-011384



	<p>WARNING</p> <p>HIGH PRESSURE OIL HAZARD Serious injury or death can occur</p> <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.
	<p><small>© 2011 Deere & Company</small></p>

1: BON-006442

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

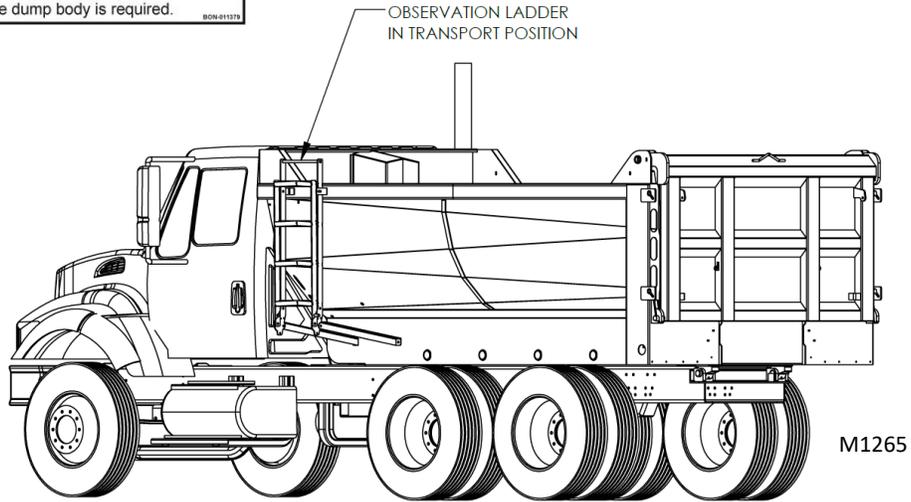


The level of risk is indicated by the following signal words:

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 micron

Relief Valve Setting 2,200 psi

Oil Flow Main Conveyor: 0-15 gpm

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 or conveyor motors, 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.

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.

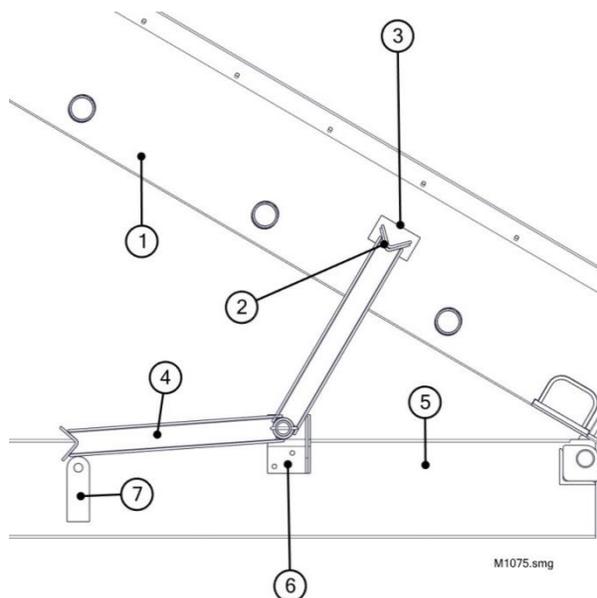
Refer to the drawing as shown below:

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.

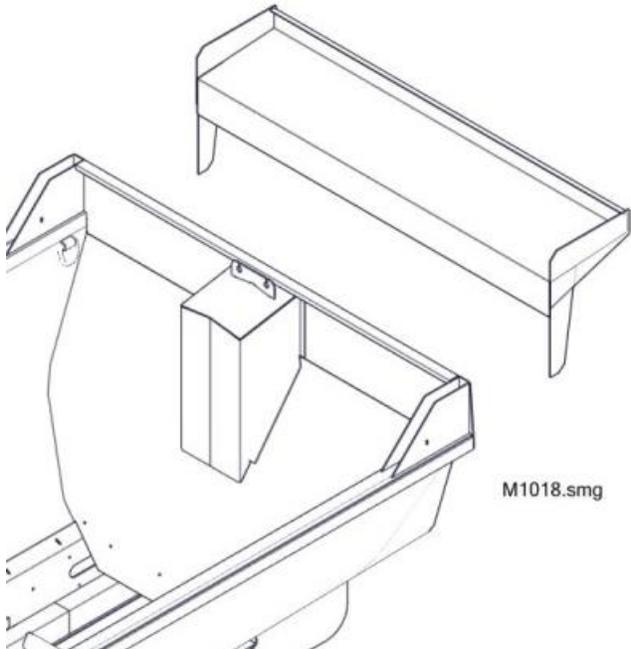
DANGER: DO NOT put the dump body into service unless equipped with properly installed body props. Failure to comply can result in severe injury or death when performing service work on a partially raised body.



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

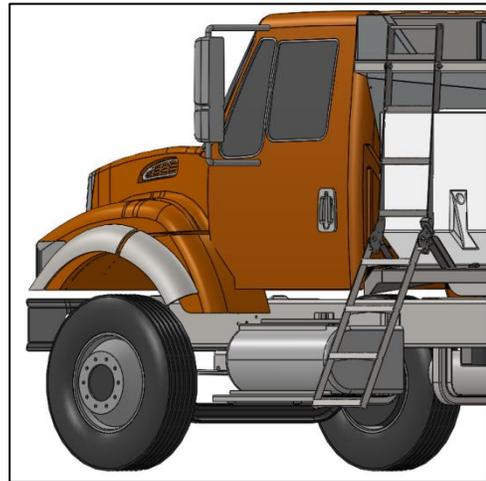
optional side-mounted tank bracket. If attached to the side wall of the dump body, additional cross bracing will be required to stabilize the observation ladder when in use.

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.



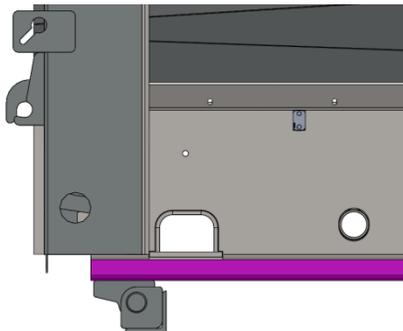
Body-mounted with cross bracing



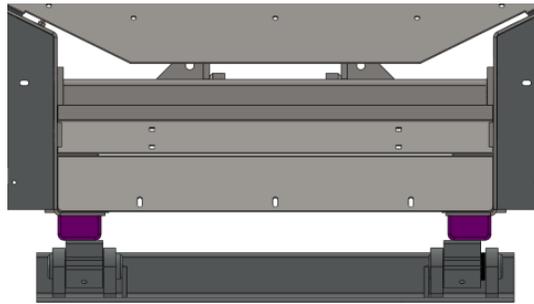
Tank bracket mounted

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.

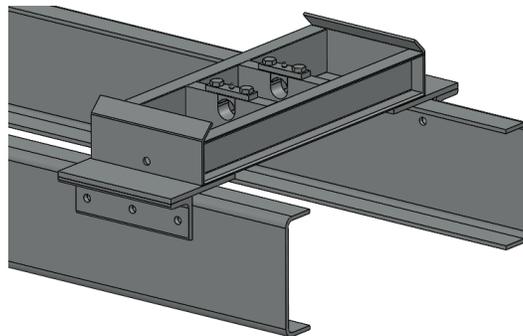
From a performance standpoint, having too much dump body overhang can affect the center of gravity of a raised body which may affect the weight distribution between the front and rear truck axles when dispersing material. The trunnion hoist cylinder used by Bonnell Industries is double-acting which assures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

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

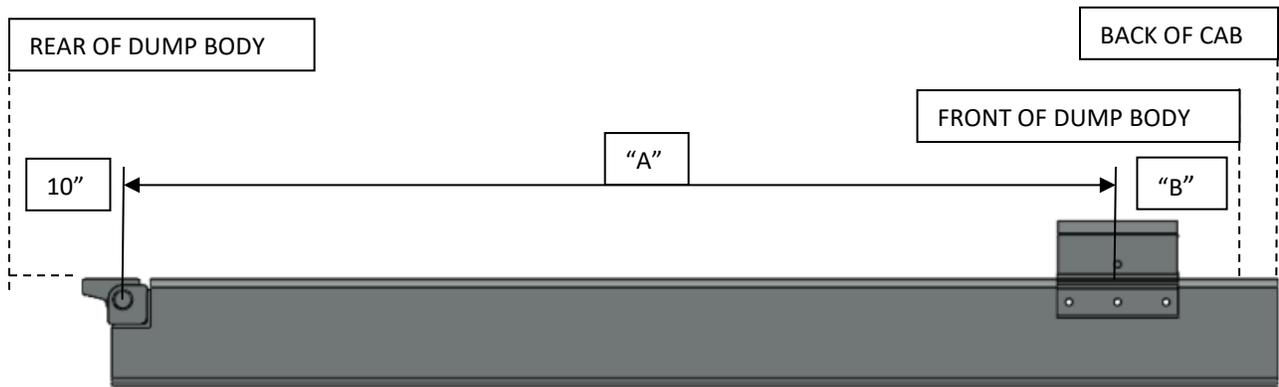


4. When preparing a dump body for installation on a truck, in general it is best to work from the rear of the truck to the front. Mark the position of the intended location of the rear hinge centerline. When determining this location, address interference issues with components (spring mounts, cross 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.
8. 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.

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.



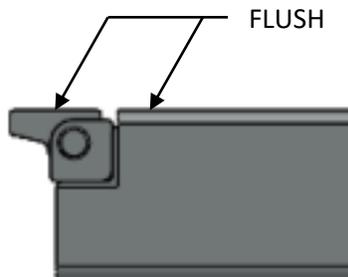
9. Once the truck body has been measured and verified that the dump body is of proper length, the next step is to mark and cut out the location where the truck rails will be shortened to. Make sure the truck rails are of equal length when done.



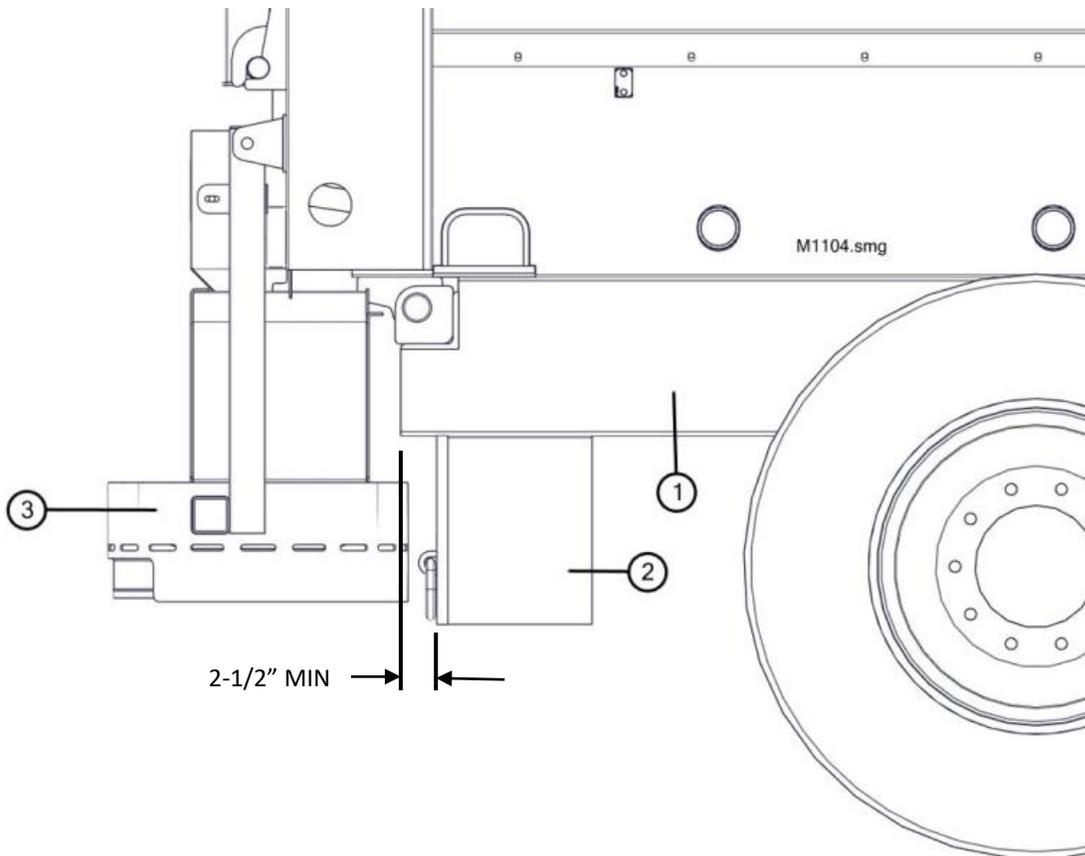
The following chart provides general dimensions as to the proper location of the rear hinge. These dimensions are based on a 10" body overhang. Actual mounting dimensions may vary.

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.



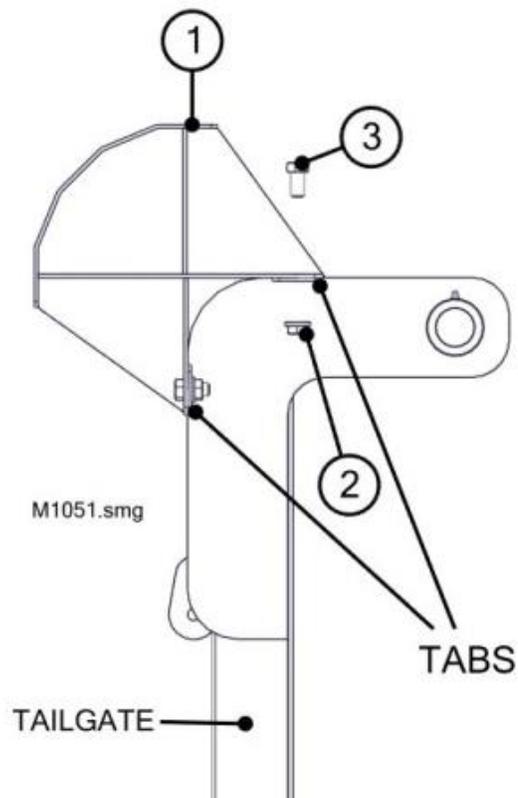
11. The bottom edge of the rear hinge will be welded to the 3/4" vertical hitch plate and 1/2" gussets used to structurally tie the rear of the truck hitch to the truck rails. When positioning the vertical hitch plate, be sure to set it back 2-1/2" minimum from the end of the truck rails. This will ensure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



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

INSTALLATION – ACCESSORIES

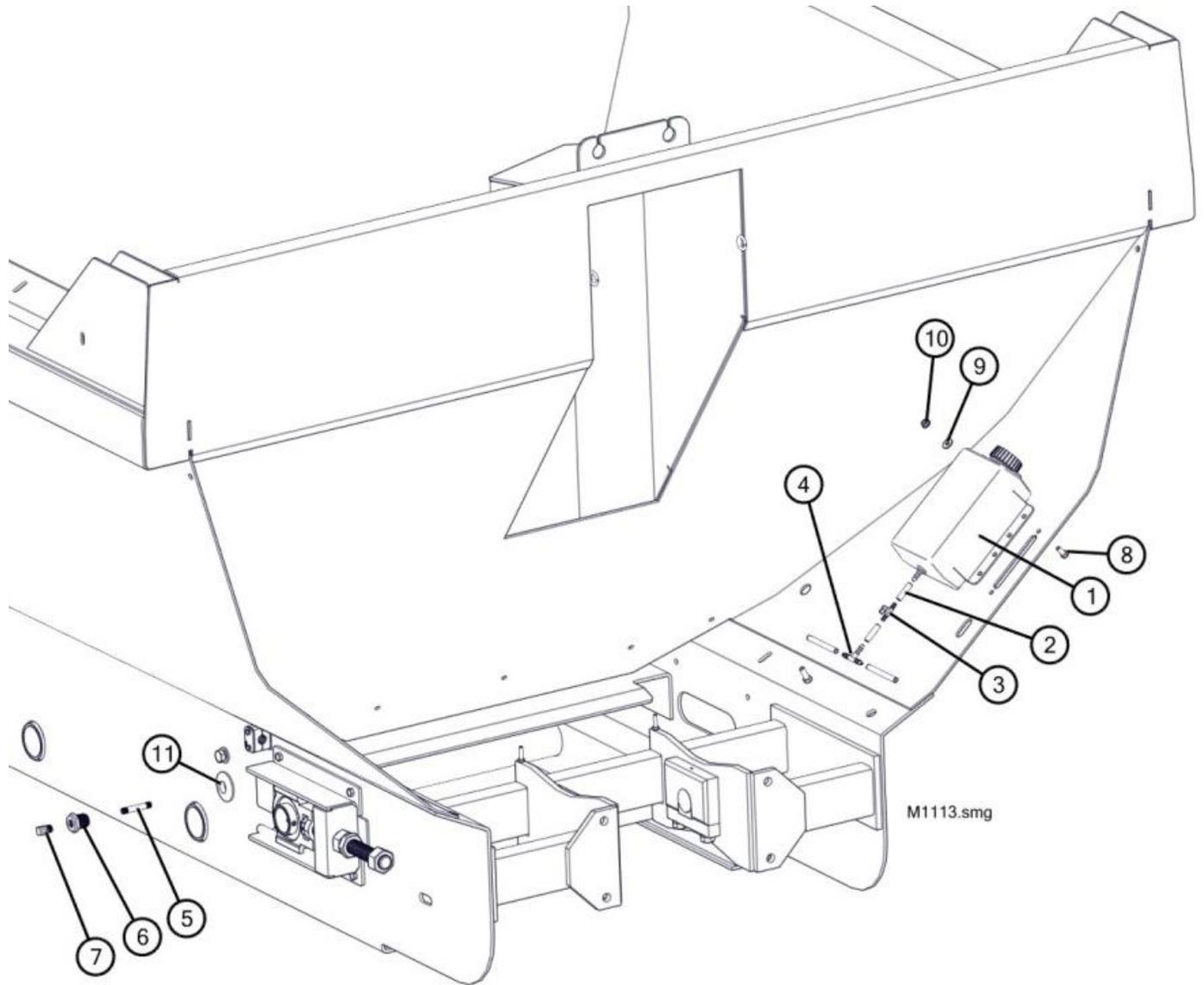
AIR FOIL



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.

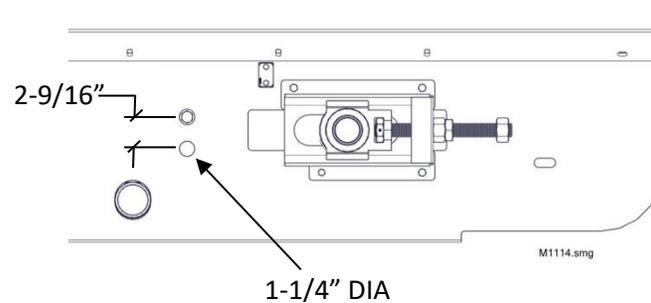
CHAIN OILER



REF	DESCRIPTION
1	OIL TANK - 4 QT POLY w/CAP
2	1/4" CLEAR TUBING
3	1/4" PVC BALL w/ BARBS
4	1/4" BARB TEE
5	PIPE NIPPLE - 1/8 NPT x 2-1/2"
6	PIPE BUSHING - 3/4" x 1/4" POLY
7	1/4" x 1/4" 90 DEG BARB EL
8	5/16-18 x 3/4" HEX BOLT SS
9	5/16 STD FLAT WASHER SS
10	5/16-18 SERRATED FLANGE LOCKNUT SS
11	WELD FLANGE - 3/4" PIPE FITTING

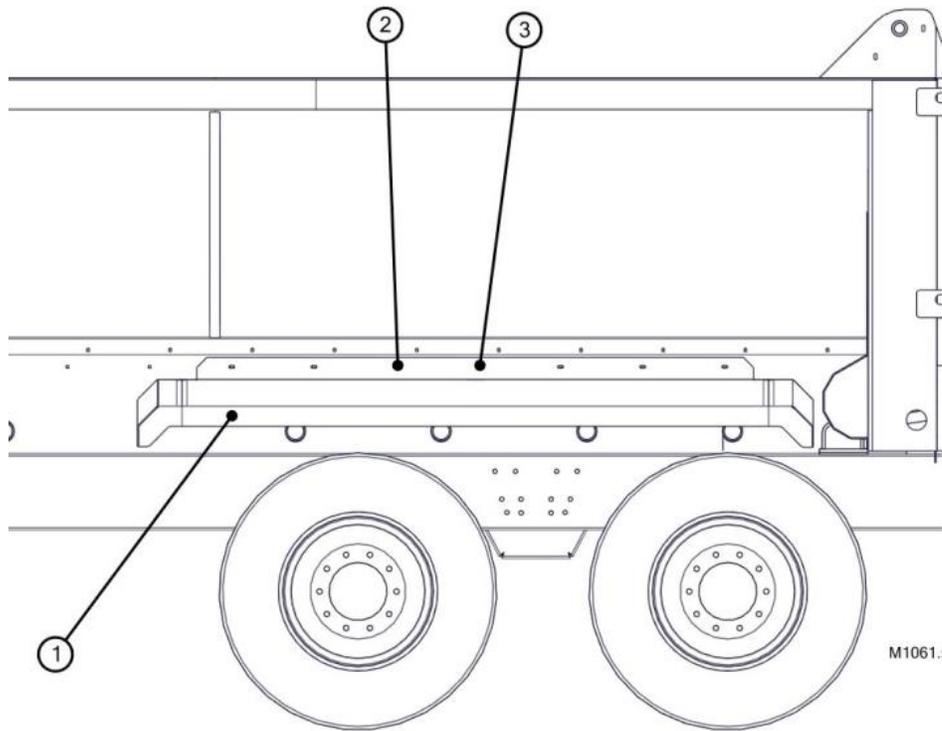
The manual chain oiler is useful in extending the life of a conveyor chain. Some welding is required to attach it to the dump body.

1. Weld the flanges (11) to the holes provided in the long sills. On older models, it may be necessary to add the 1-1/4" holes in the long sills at a distance of 2-9/16" below the floor pan mounting holes.



2. Place the oil tank (1) against the inside of the left sidewall in a location near the grease manifold. Be sure to provide sufficient access to the oil tank cap. Mark the location of the oil tank mounting holes. Drill four 3/8" diameter holes in the sidewall. If needed, repaint any bare surfaces.
3. Mount the oil tank and to the left sidewall with cap screws (8), flat washers (9) and serrated flange locknuts (10).
4. Assemble the pipe nipple (5), adapter (6) and 90° barb fitting (7) together before installing into the flange welded in step 1. The pipe nipple will be pressed into the poly adapter. When installed, the 90° barb fitting (7) will be facing forward.
5. Cut a short piece of tubing (2) and connect the ball valve (3) to the oil tank (1).
6. Starting at the 90° barb fitting (7) on the right side of the body, route the clear tubing along the grease lines that service the conveyor chain take-up bearings. At a suitable location, cut the clear tubing and install the barb tee (4).
7. Cut and connect a length of clear tubing from the 90° barb fitting (7) on the left side of the body to the barb tee (4).
8. Complete the installation by connecting a short section of tubing between the barb tee (4) and the ball valve (3).
9. Attach the oil lines to the grease lines in several places with the zip ties included in the kit.

FENDERS - metal



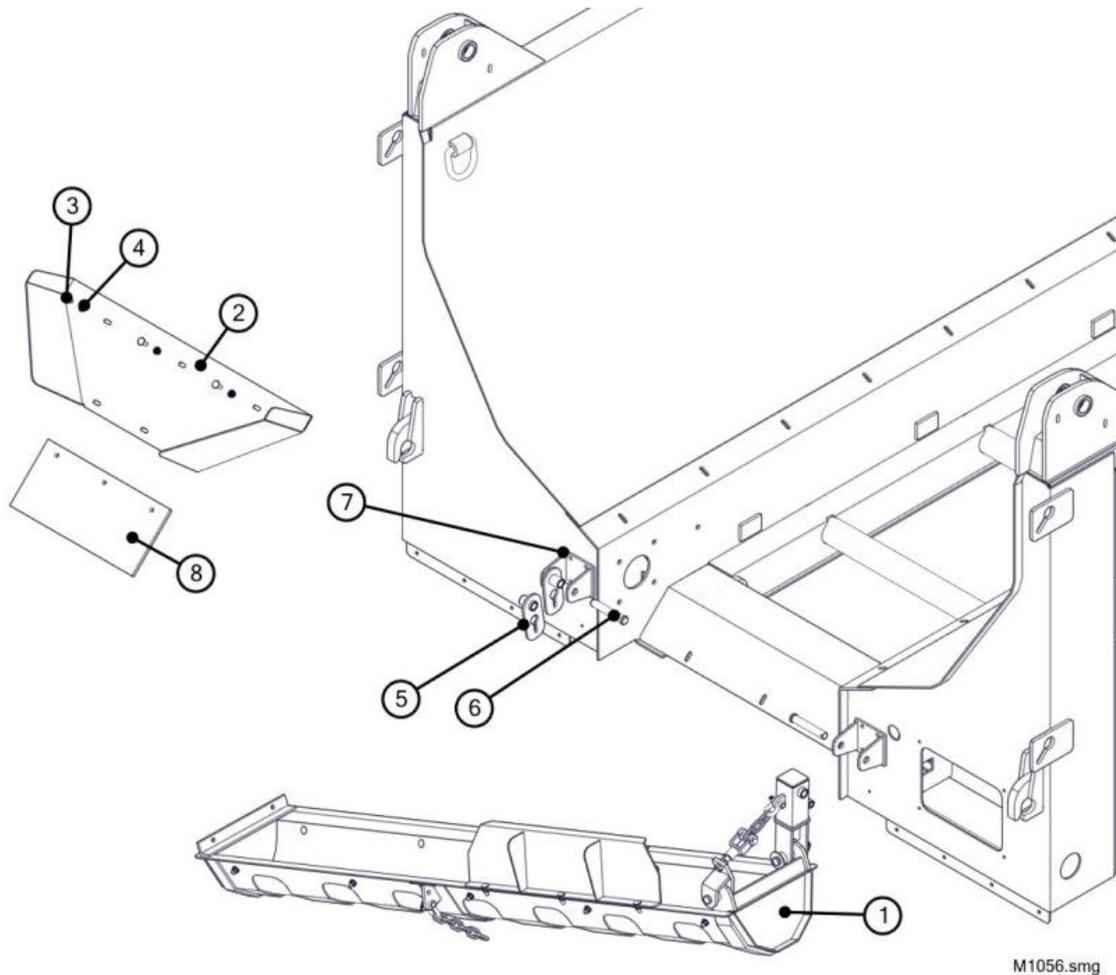
Ref	Description
1	FENDER - RT & LT
2	3/8-16 x 1-1/4 CARRIAGE BOLT SS
3	3/8-16 SERRATED FLANGE LOCKNUT SS

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.

GRAVEL CHUTE



Ref	Description
1	ASSY - GRAVEL CHUTE
2	DEFLECTOR
3	3/8-16 x 1 CARRIAGE BOLT SS
4	3/8-16 SERRATED FLANGE LOCKNUT
5	WA - GRAVEL CHUTE ADJUSTMENT LUG
6	CLEVIS PIN - 3/4 x 4-1/2
7	WA - SPREADER ATTACH BRACKET
8	FLAP - RUBBER, 3/8 x 18 x 8

1. The gravel chute mounts using the same mounting brackets as the rear material spreader. It can be installed to discharge material in either direction. These instructions pertain to a left side discharge.
2. Remove the rear material deflector from the dump body and replace it with the deflector (2) supplied in the gravel chute kit. Secure in place with carriage bolts (3) and serrated flange locknuts (4).
3. Install rubber flap (8) to the underside of the deflector (2) and secure with carriage bolts (3) and serrated flange locknuts (4).

4. Install the chain adjustment lugs (5) in the left mounting bracket (7) and secure with the clevis pin and safety pin supplied with the material spreader.
5. The gravel chute is supplied partially assembled by the factory. With the assistance of a helper, lift the gravel chute into position and secure to the right rear mounting bracket with the clevis pin and safety pin supplied with the material spreader.
6. Set the slope of the gravel chute by attaching the center chains at the appropriate height to the left adjustment lugs.
7. Finish the installation by tensioning the chain brace until the weight is evenly distributed between the gravel chute pivots. Tighten the hex nut to secure the chain assembly.

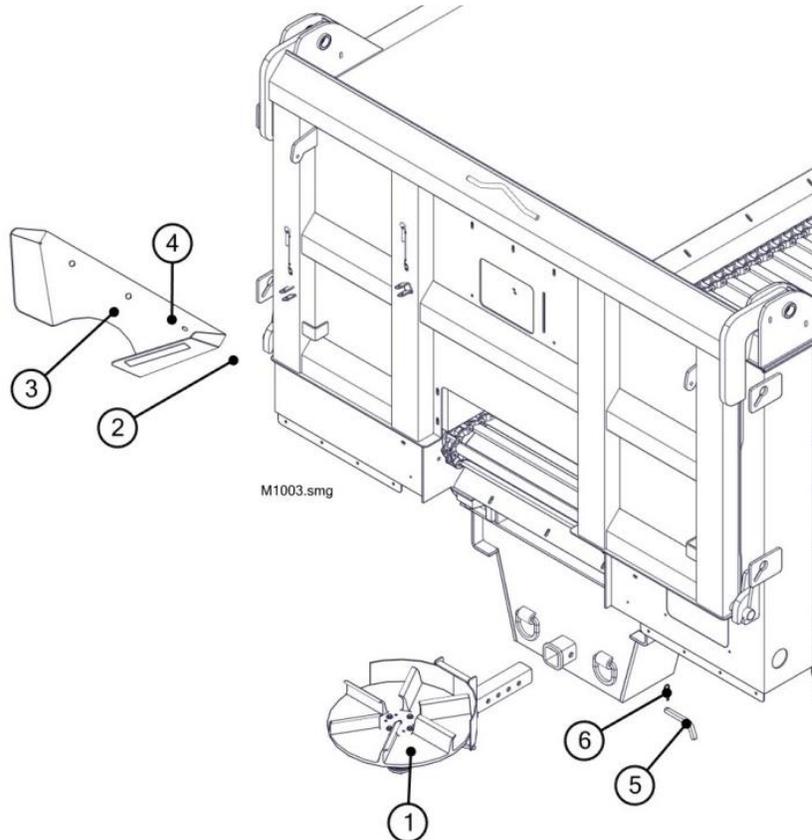
LIGHT KITS

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

MATERIAL SPREADERS

The Commander multi-purpose dump body has several types of material spreaders available for distributing de-icing material onto the roadway.

Receiver-style with bottom-mounted spinner motor

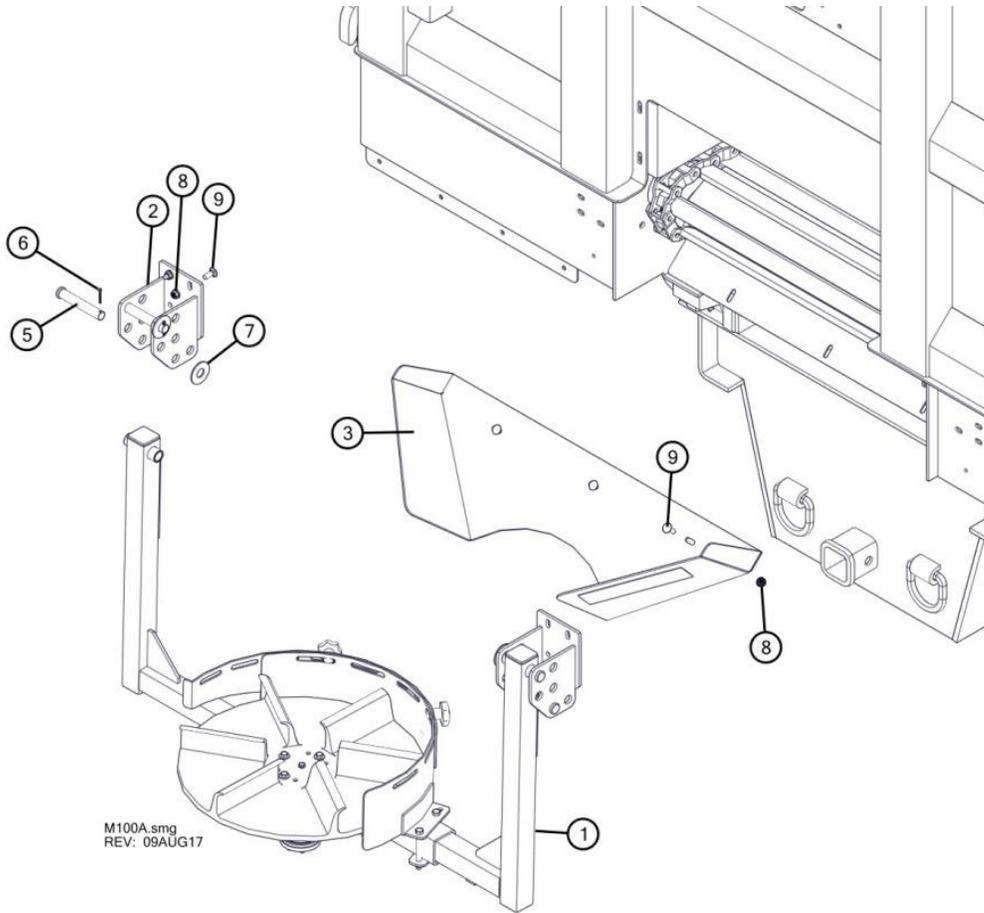


Ref	Description
1	RECEIVER-STYLE MATERIAL SPREADER
2	3/8-16 SERRATED FLANGE LOCKNUT SS
3	REAR DEFLECTOR
4	3/8-16 x 1 CARRIAGE BOLT SS
5	3/4 HITCH PIN
6	HAIR PIN COTTER

1. Attach the rear deflector (4) to the rear of the dump body with carriage bolts (4) and serrated flange hex locknuts (2). The rear deflector can be used with or without the optional subfloor installed.
2. Install the receiver-style material spreader (1) into the 2-1/2" hitch plate receiver with the hitch pin (5) and retainer (6) provided with the hitch. Select a pinning location that allows the material to drop toward the center of the spinner disk. There are no additional baffles to adjust that will provide finer control of the material trajectory.

- Hydraulic hoses, valve and fittings are not provided in the material spreader kit. Hydraulic flow to this circuit should not exceed 7 gpm. During operation, the spinner disk will turn CCW as viewed from above the spinner. When plumbing this circuit, be sure to include quick-disconnect couplers in the circuit so that the material spreader can be easily disconnected from the dump body when not in use.

Pedestal-style with bottom-mounted spinner motor



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REV: 09AUG17

Ref	Description
1	MATERIAL SPREADER
2	WA - SPEADER ATTACH BRACKET
3	DEFLECTOR
4	
5	CLEVIS PIN - 3/4 x 4-1/2
6	1/8 x 1 COTTER PIN
7	3/4 STD FLAST WASHER SS
8	3/8 SERRATED FLANGE LOCKNUT SS
9	3/8-16 x 1 CARRIAGE BOLT SS

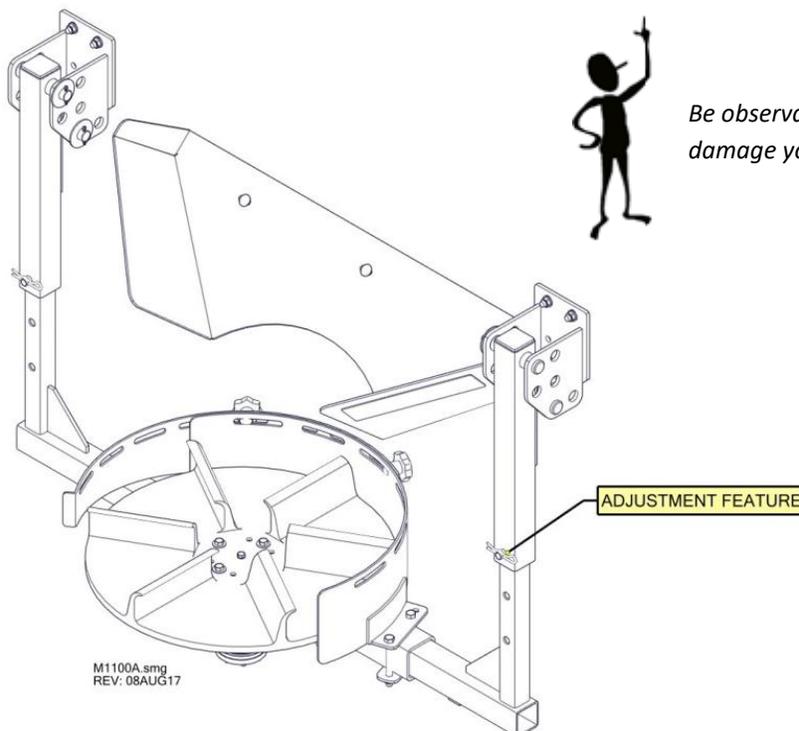
- Attach the deflector (3) to the rear of the dump body with carriage bolts (9) and serrated flange hex locknuts (8).
- Attach the material spreader attachment brackets (2) to the dump body rear corner posts with carriage bolts (9) and serrated flange hex locknuts (8).
- With the aid of a helper, attach the material spreader (1) to the mounting brackets with clevis pins (5), flat washers (7) and cotter pins (6). Mount the material spreader in any of the upper four

mounting holes in the attach bracket. Hole selection is dependent on providing the optimum clearance between the rear of the truck and the material spreader. Install a second clevis pin in the appropriate lower hole in the attach bracket. This pin will prevent the material spreader from swinging forward into the truck during operation.

4. The material spreader is designed to provide finer spread and trajectory capabilities. The entire material spreader can be adjusted side-to-side to alter the point where the material contacts the spinner disk. Also, a radial baffle that is located on the spinner shroud can be manually adjusted to influence the material trajectory as it comes off the spinner. When operated, the spinner disk should turn CCW as viewed from above the spinner.
5. Hydraulic hoses, valve and fittings are not provided in the material spreader kit. Hydraulic flow to this circuit should not exceed 7 gpm. During operation, the spinner disk will turn CCW as viewed from above the spinner. When plumbing this circuit, be sure to include quick-disconnect couplers in the circuit so that the material spreader can be easily disconnected from the dump body when not in use.

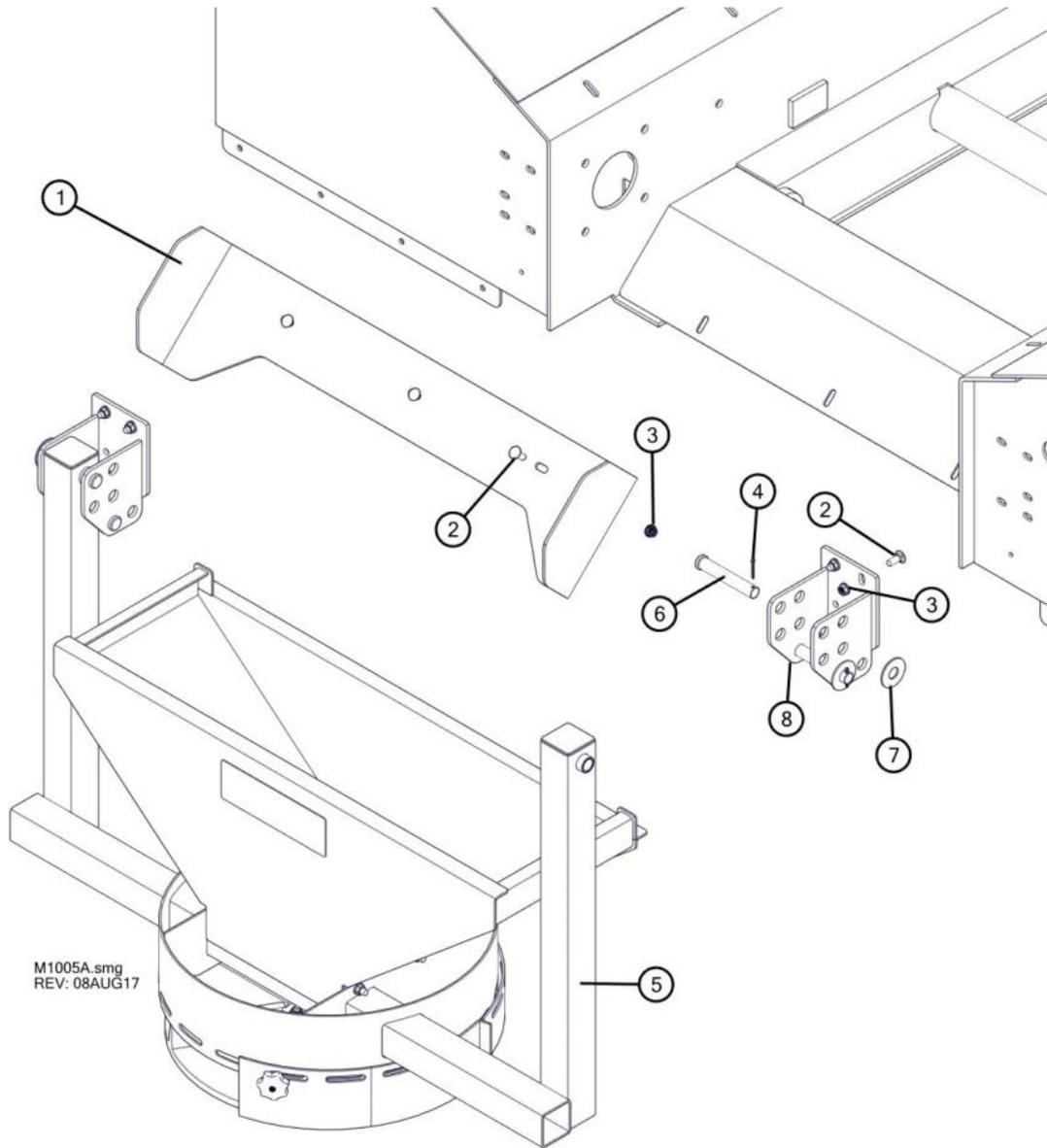
Adjustable pedestal-style with bottom-mounted spinner motor

1. The adjustable pedestal-style material spreader attaches to the rear of the dump body using the same procedure as the material spreader listed on page 29. Additionally, there is a vertical height adjustment feature that allows for multiple heights of the spinner body.
2. Before using the material spreader in the lowest operating position, raise the dump body slowly and verify that there are four inches of ground clearance under the material spreader with a fully raised dump body. This will ensure that no damage to the material spreader occurs when raising the dump body to unload any remaining contents. If there is insufficient ground clearance, reposition the material spreader to a higher mounting hole. Failure to perform this evaluation could cause significant damage to the material spreader and dump body.



Be observant to conditions that can damage your equipment.

Pedestal-style with top-mounted spinner motor and dump box

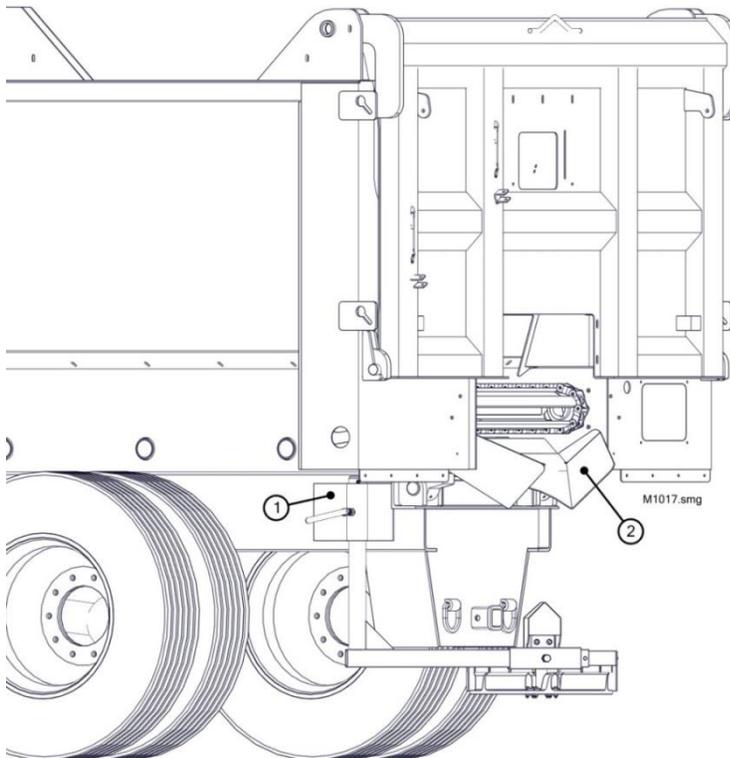


Ref	Description
1	WA - SPINNER BOX DEFLECTOR
2	3/8-16 x 1 CARRIAGE BOLT SS
3	3/8-16 SERRATED FLANGE LOCKNUT
4	1/8 x 1 COTTER PIN SS
5	MATERIAL SPREADER
6	PIN - CLEVIS, 3/4 x 4-1/2
7	3/4 STD FLAT WASHER SS
8	WA - ATTACH BRACKET

1. Attach the material deflector (1) to the rear of the dump body with carriage bolts (2) and serrated flange locknuts (3).
2. Attach the material spreader attachment brackets (8) to the dump body rear corner posts with carriage bolts (2) and serrated flange locknuts (3).

3. Before the material spreader can be mounted, it will be necessary to remove the dump box in order to gain access to the spinner motor hydraulic ports. The spinner hydraulic hoses will route through the lower frame tube. Make sure hoses are wrapped in a nylon cover to protect them from any sharp edges in the tube. Once hoses are installed, power the circuit to verify that the spinner disk rotates in a CCW direction as viewed from the top of the spinner. Re-assemble dump box with the fasteners previously removed.
4. With the assistance of a helper, attach the material spreader (5) to the mounting brackets with clevis pins (6), flat washers (7) and cotter pins (4). Mount the material spreader in any of the upper four mounting holes in the attach bracket. Hole selection is dependent on providing the optimum clearance between the rear of the truck and the material spreader. Install a second clevis pin in the appropriate lower hole in the attach bracket. This pin will prevent the material spreader from swinging forward into the truck during operation.
5. The material spreader is designed to provide finer material trajectory capabilities. Radial baffles located on the spinner shroud can be manually adjusted to influence the material trajectory as material comes off the spinner. During operation, the spinner disk will turn CCW as viewed from above the spinner.
6. Hydraulic hoses, valve and fittings are not provided in the material spreader kit. Hydraulic flow to this circuit should not exceed 7 gpm. When plumbing this circuit, be sure to include quick-disconnect couplers in the circuit so that the material spreader can be easily disconnected from the dump body when not in use.

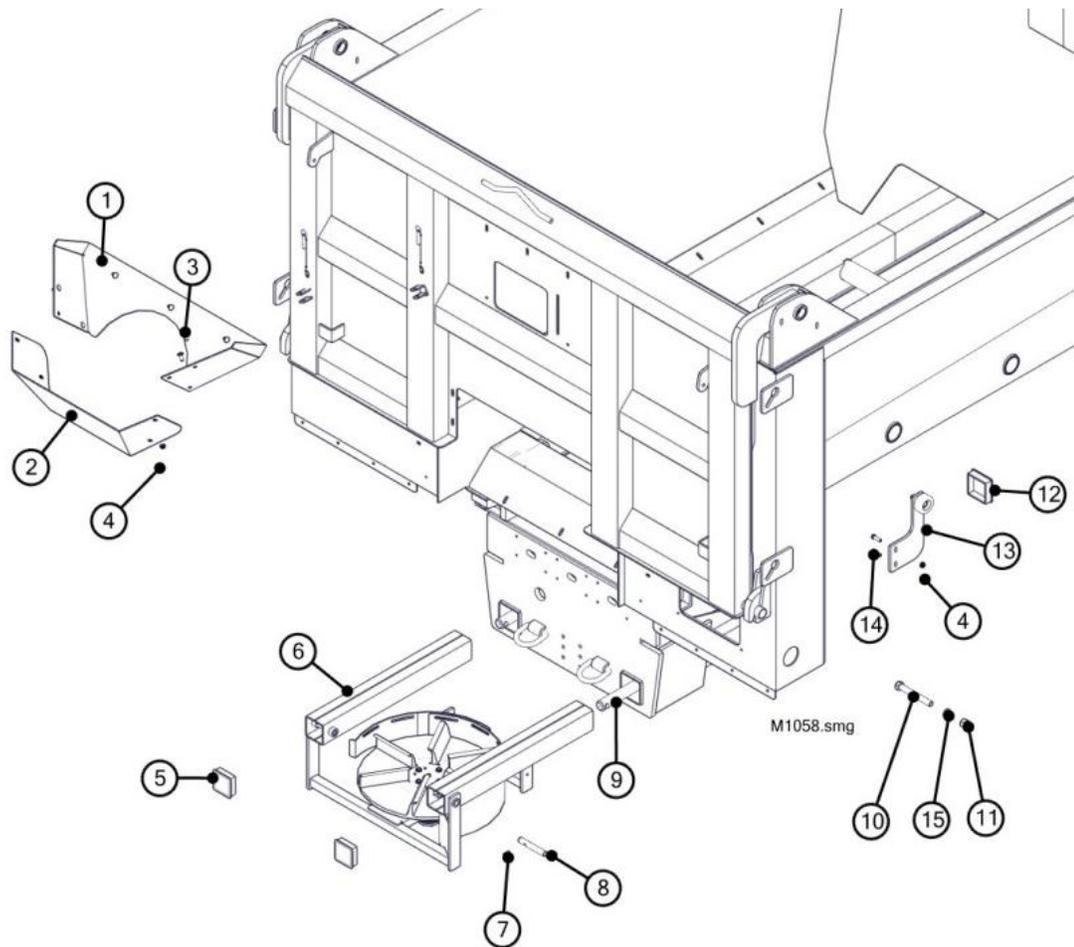
Single post pedestal-style with bottom-mounted spinner motor



Ref	Description
1	MATERIAL SPREADER
2	DEFLECTOR

1. Support the single-arm material spreader in place against the truck rail to determine a suitable vertical location for the mounting bracket. Be sure the position of the mounting plate allows the material spreader (1) to operate directly under the material deflector (2). Also evaluate the area above the mounting plate to ensure there is sufficient room to raise the material spreader vertically.
2. It may be necessary to modify the mounting plate to fit into an available space on the truck chassis. Using the plate as a template, mark the location of the mounting plate on the truck chassis.
3. If the mounting plate is to be welded, thoroughly clean and sand the area where the mounting plate will be attached.
4. Cover flammable components (tires, wiring, etc.) near the mounting plate during welding.
5. Weld the mounting plate to the truck rail.
6. Repaint the mounting plate and the truck rail.
7. If the plate is to be bolted on, be sure there is sufficient distance between the mounting holes and the flanges on the truck rails.
8. During operation, the material spreader will have both vertical and horizontal manual adjustment. With the use of a helper to observe spread patterns, spread a small amount of material to determine the optimum position for the material spreader.
9. The material spreader is designed to provide finer material trajectory capabilities. Vertical spreader height and spinner position relative to the deflector can be manually adjusted to influence the material trajectory as material comes off the spinner. During operation, the spinner disk will turn CCW as viewed from above the spinner.
10. Hydraulic hoses, valve and fittings are not provided in the material spreader kit. Hydraulic flow to this circuit should not exceed 7 gpm. When plumbing this circuit, be sure to include quick-disconnect couplers in the circuit so that the material spreader can be easily disconnected from the dump body when not in use.

Retractable receiver-mount with bottom-mounted spinner motor

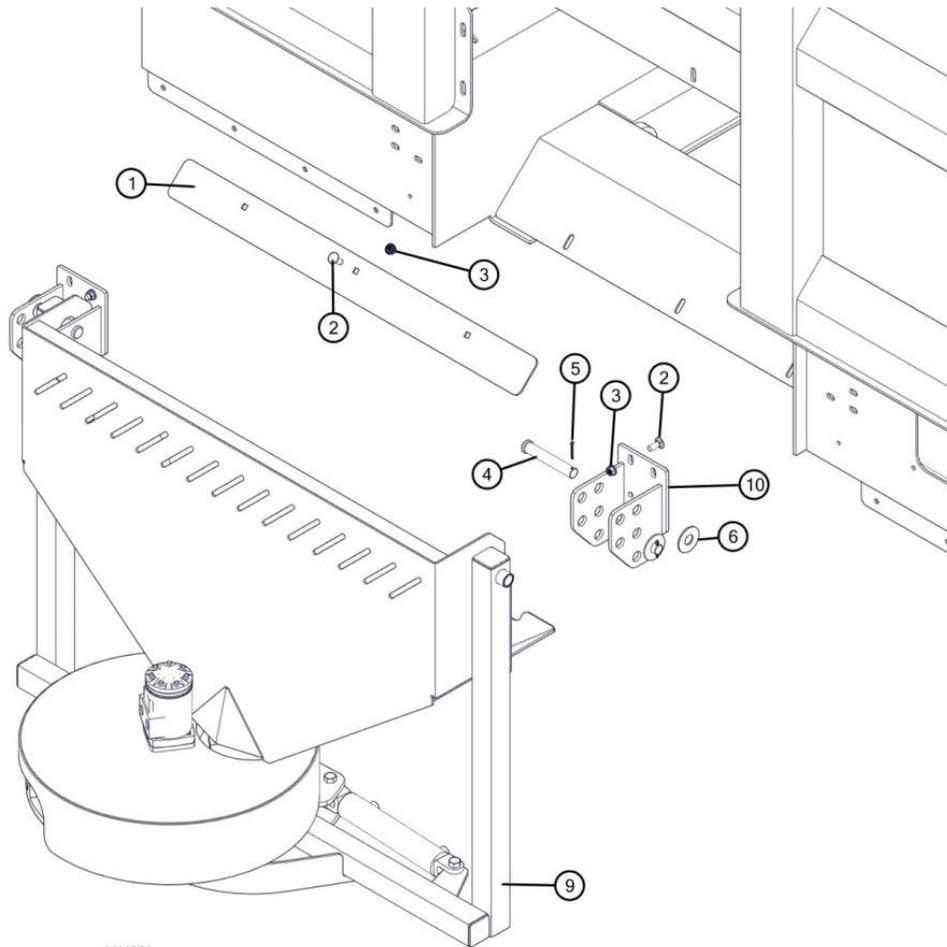


Ref	Description
1	SPREADER DEFLECTOR PAN
2	REAR DEFLECTOR
3	3/8-16 x 1 CARRIAGE BOLT SS
4	3/8-16 SERRATED FLANGE LOCKNUT SS
5	CAP - 3-1/2" SQ
6	RETRACTABLE MATERIAL SPREADER
7	ROLL PIN - 5/16 x 2 SS
8	CLEVIS PIN - 3/4 x 4-15/16
9	CYLINDER - HYDRAULIC, 2 x 20 x 1-1/4
10	3/4-10 x 6 HEX BOLT SS
11	3/4-10 HEX NUT SS
12	CAP - 4" SQ
13	REAR ROLLER ARM ASSY - RT & LT
14	3/8-16 x 1-1/4 HEX BOLT SS
15	3/4 STDLOCKWASHER SS

1. The material spreader is designed to retract under the rear hitch plate when not in use. The retracted position will provide additional access to the D-rings and pintle hitch.
2. This type of material spreader requires a special receiver-style rear hitch. Contact Bonnell Industries regarding the specific hitch plate requirement needed.

3. Connect the butt end of the hydraulic cylinders (9) to the hitch plate square tubes with hex bolts (10), lock washers (15) and hex nuts (11). Ports on the cylinders should be facing downwards.
4. Slide the material spreader (6) into the rear of hitch plate square tubes.
5. Connect the rod end of the hydraulic cylinders to the material spreader and secure with clevis pins (8) and roll pins (7).
6. Slide the right and left roller arm (13) into the tracks on the front of the hitch plate. Secure arms to material spreader with hex bolts (14) and serrated flange locknuts (4).
7. Drive the square caps (5) and (12) into the open ends of the square tubes.
8. Install the front deflector (1) to the dump body and secure with carriage bolts (3) and serrated flange locknuts (4). Deflector can be used with or without the optional subfloor.
9. Finish installation by securing the rear deflector (2) to the front deflector (3) with carriage bolts (3) and serrated flange locknuts (4)
10. The material spreader is designed to provide finer material trajectory capabilities. Fore and aft position of the spinner disk can be hydraulically adjusted to influence the material trajectory as material comes off the spinner. During operation, the spinner disk will turn CCW as viewed from above the spinner.
11. Hydraulic hoses, valve and fittings are not provided in the material spreader kit. Hydraulic flow to this circuit should not exceed 7 gpm. When plumbing this circuit, be sure to include quick-disconnect couplers in the circuit so that the material spreader can be easily disconnected from the dump body when not in use.

Bi-directional pedestal-style with top-mounted spinner motor



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Ref	Description
1	DEFLECTOR
2	3/8-16 x 1 CARRIAGE BOLT SS
3	3/8-16 SERRATED FLANGE LOCKNUT SS
4	PIN - CLEVIS, 3/4 x 4-1/2 SS
5	1/8 x 1 COTTER PIN SS
6	3/4 STANDARD FLAT WASHER SS
7	
8	
9	BI-DIRECTIONAL MATERIAL SPREADER
10	SPREADER ATTACH BRACKET

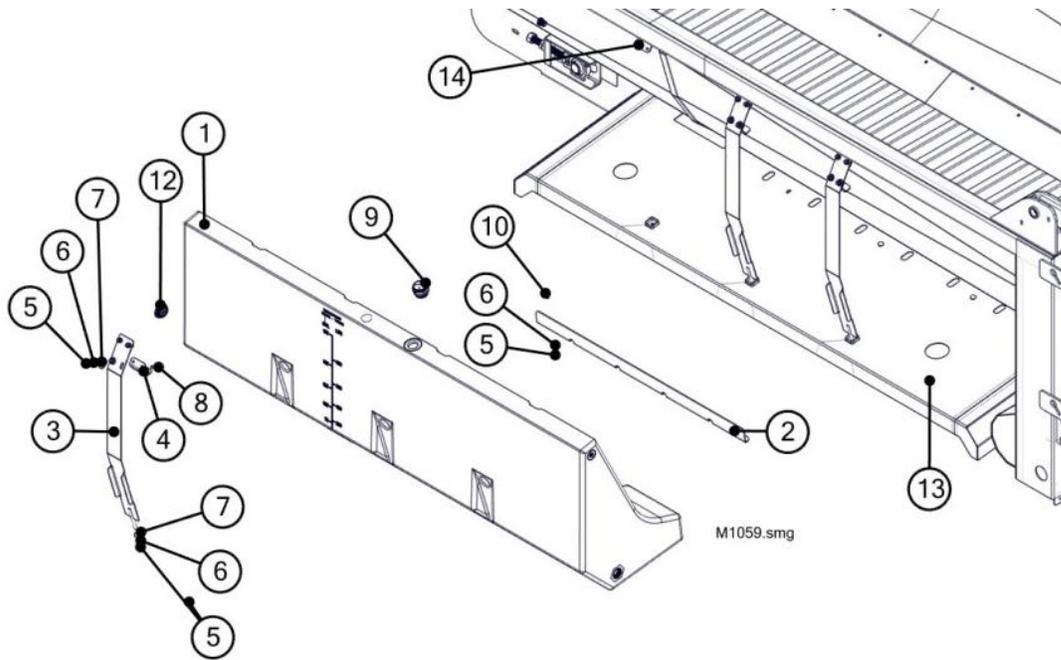
1. Attach the material deflector (1) to the rear of the dump body with carriage bolts (2) and serrated flange locknuts (3).
2. Attach the material spreader attachment brackets (10) to the dump body rear corner posts with carriage bolts (2) and serrated flange locknuts (3).
3. With the assistance of a helper, attach the material spreader (9) to the mounting brackets with clevis pins (4) washers (6) and cotter pins (5). Mount the material spreader in any of the upper four mounting holes in the attach bracket. Hole selection is dependent on providing the optimum clearance between the rear of the truck and the material spreader. Install a second clevis pin in the appropriate lower hole in the attach bracket. This pin will prevent the material spreader from swinging forward into the truck during operation.

4. The material spreader is designed to hydraulically rotate the spinner in order to influence the trajectory of the material being discharged. During operation, the spinner disk will turn CCW as viewed from above the spinner.
5. Hydraulic hoses, valve and fittings are not provided in the material spreader kit. Hydraulic flow to this circuit should not exceed 7 gpm. When plumbing this circuit, be sure to include quick-disconnect couplers in the circuit so that the material spreader can be easily disconnected from the dump body when not in use.

MUD FLAPS

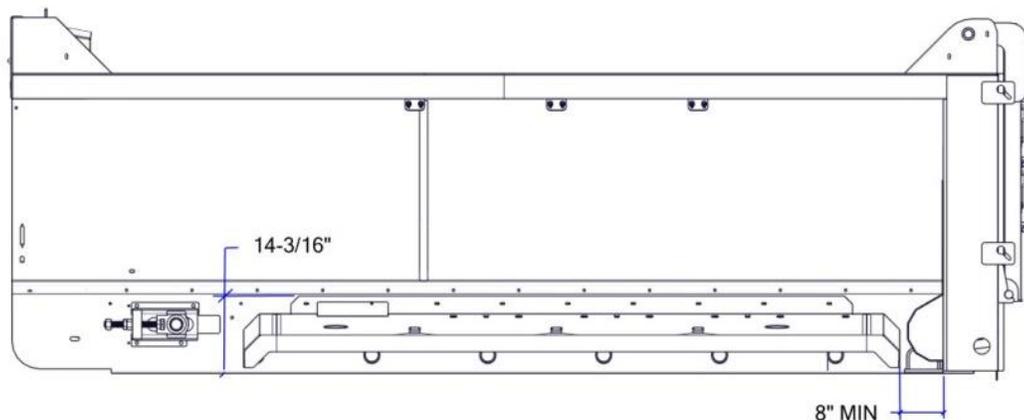
Refer to the instructions provided in the mud flap kit for specific installation information.

PRE-WET POLY TANKS



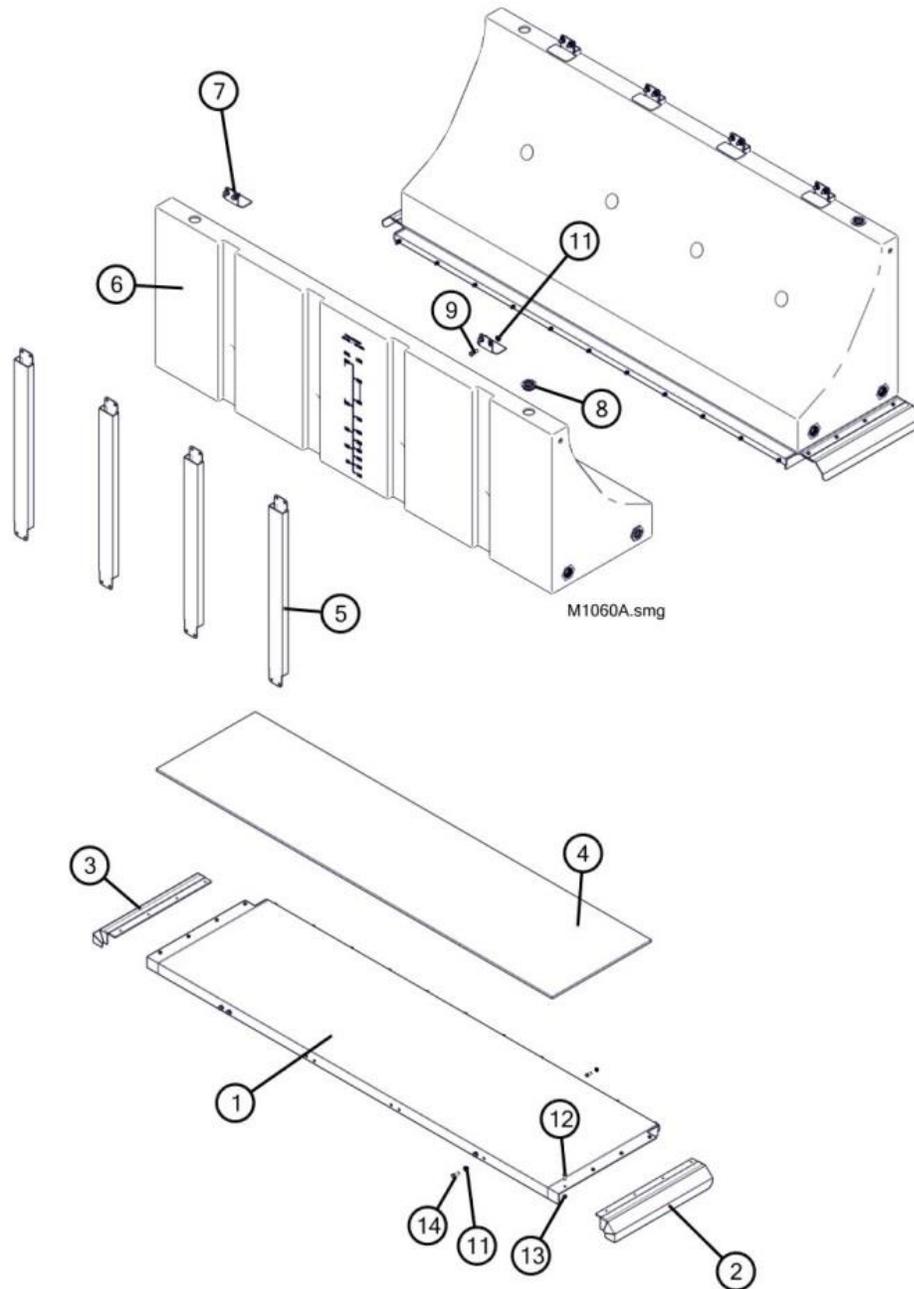
Ref	Description
1	PRE-WET POLY TANK
2	BACK STOP - MPB PREWET TANK
3	WA - MPB TANK STRAP
4	BRACKET - MPB UPPER TANK
5	1/2-13 HEX NUT SS
6	1/2 STD LOCKWASHER SS
7	1/2 STD FLAT WASHER SS
8	1/2-13 x 1-1/4 HEX BOLT SS
9	PREWET TANK COMBINATION VENT
10	1/2-13 x 1-1/2 CARRIAGE BOLT SS
11	PLUG 075 (NOT SHOWN)
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



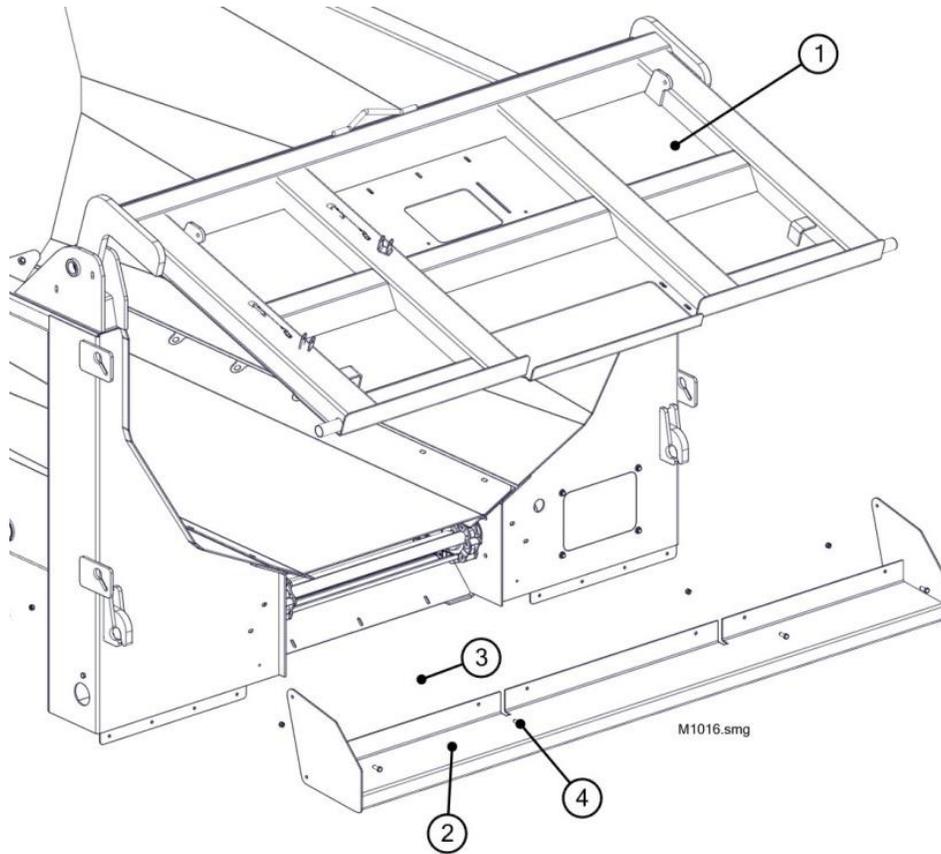
Ref	Description
1	MEGA TANK BRACKET
2	TANK BRACKET NOSE, LT
3	TANK BRACKET NOSE, RT
4	RUBBER MAT (optional)
5	MEGA TANK STRAP
6	268 GALLON MEGA TANK
7	MEGA TANK HOLDDOWN BRACKET
8	PLUG - 2 NPT
9	1/2-13 x 1-1/2 HEX BOLT SS
10	PLUG 075 (not shown)
11	1/2-13 SERRATED FLANGE LOCKNUT SS
12	3/8-16 x 1 HEX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



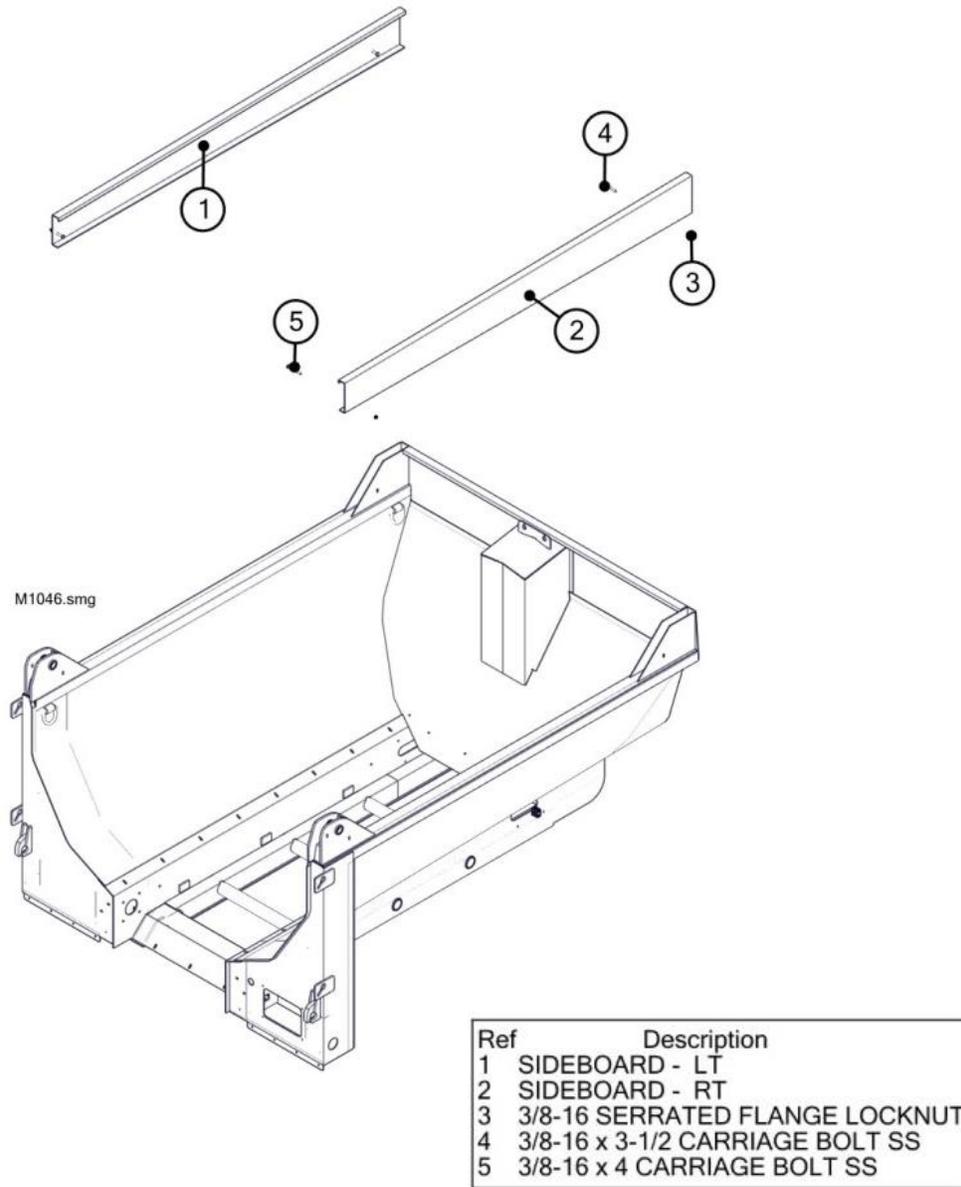
Ref	Description
1	TAILGATE
2	SPILL PAN
3	3/8-16 SERRATED FLANGE LOCKNUT SS
4	3/8-16 x 1 HEX BOLT SS

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.



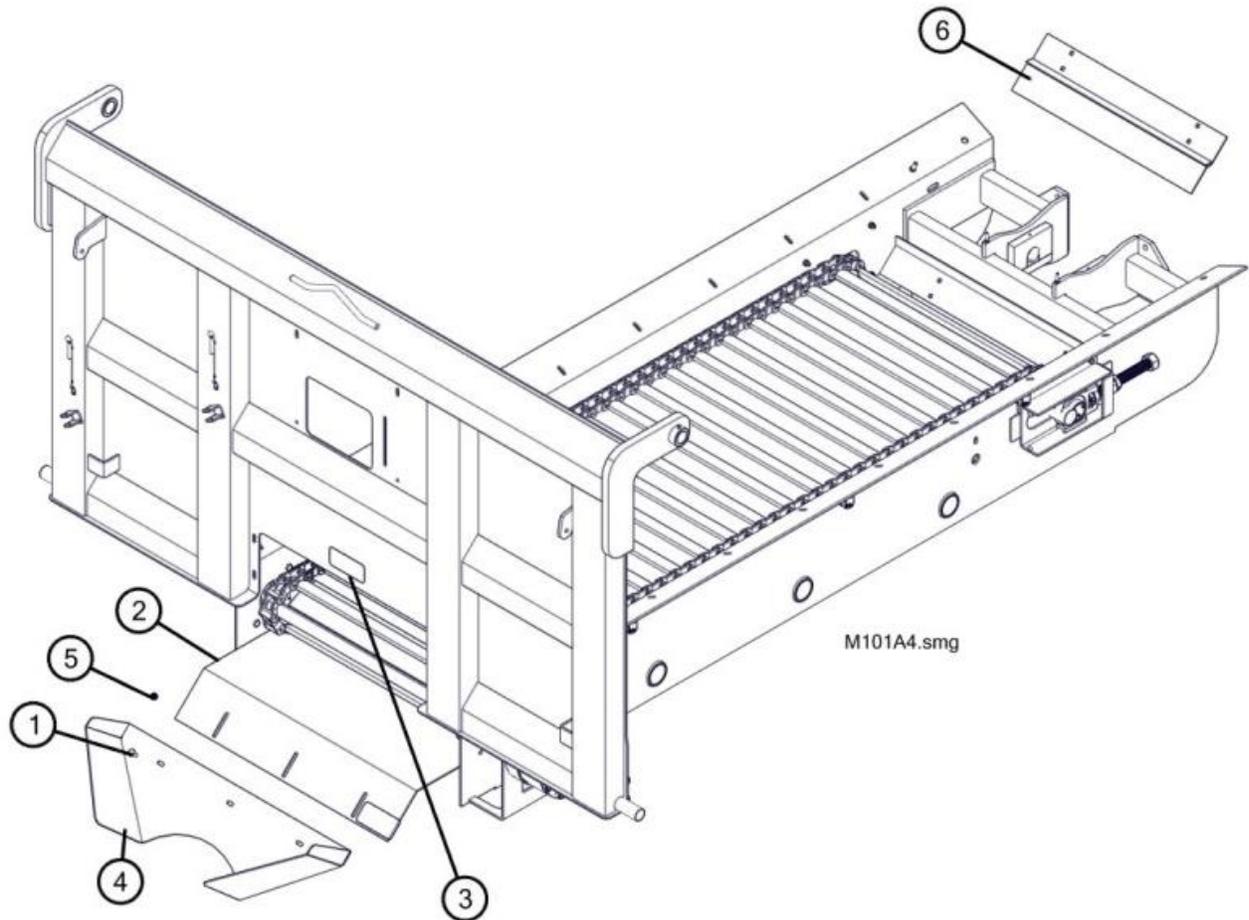
Be careful ... Your personal safety is at stake.

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).

DUMP BODY SUB FLOOR



Ref	Description
1	3/8-16 x 1 CARRIAGE BOLT
2	SUBFLOOR
3	DECAL - NOTICE
4	REAR DEFLECTOR
5	3/8-16 SERRATED FLANGE LOCKNUT
6	FRONT RETAINER

1. Attach the front retainer (6) to the underside of the front mounting plate with carriage bolts (1) and serrated flange locknuts (5).
2. Slide the subfloor (2) under the conveyor chain and secure to the rear of the body with carriage bolts (1) and serrated flange locknuts (5). Make sure the front of the subfloor is locked into the front retainer.
3. If used with an optional rear material spreader, align the rear deflector (4) to the top of the subfloor before attaching hardware.
4. Apply the safety decal (3) to the tailgate in an area near to the feed gate opening.

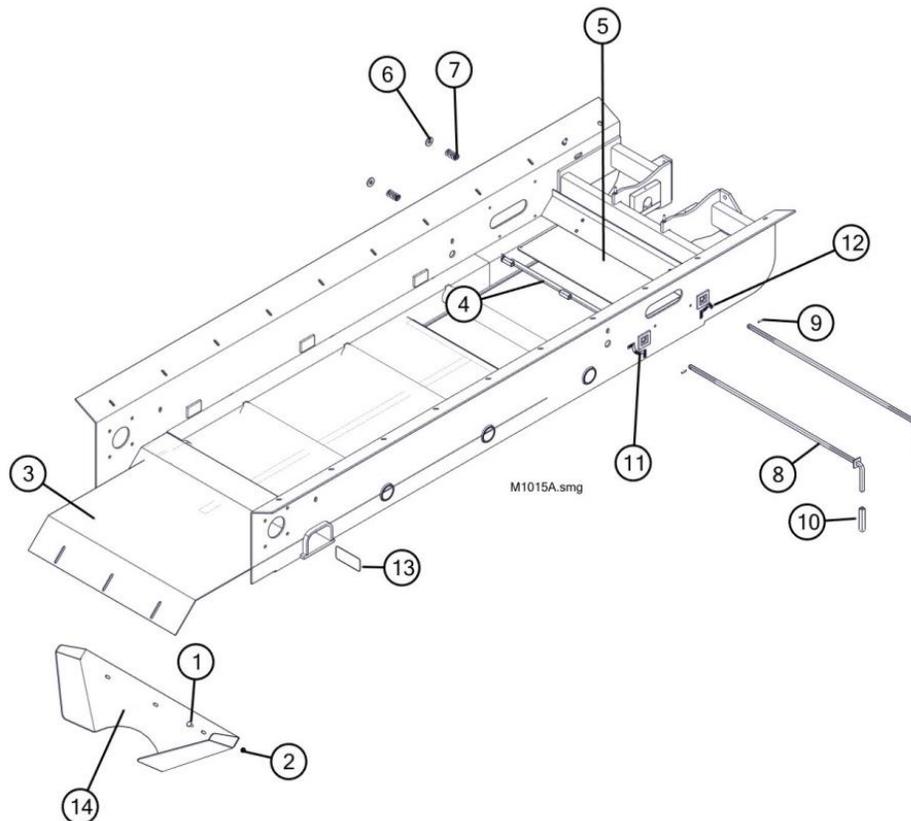


IMPORTANT

When unloading aggregate material, it is necessary to remove the subfloor from the dump body. Compacted aggregate material that gets trapped near the conveyor chain can cause severe damage to the chain and chain drive mechanism.

When unloading aggregate material, it is highly recommended to install the optional conveyor chain cover to protect the conveyor chain from damage. The conveyor chain is not intended to unload large aggregate material from the dump body. Aggregate material should be dumped using the rear tailgate and a raised dump body.

DUMP BODY SUB FLOOR WITH CLEANOUT DOOR



Ref	Description
1	3/8-16 x 1 CARRIAGE BOLT SS
2	3/8-16 SERRATED FLANGE LOCKNUT SS
3	SUBFLOOR
4	CLEANOUT DOOR RETAINER
5	CLEANOUT DOOR
6	WASHER - 17/32 SQ x 1-1/2 x 10 GA
7	SPRING - COMPRESSION
8	CLEANOUT DOOR LATCH ROD
9	3/16 x 1 ROLL PIN SS
10	HANDLE GRIP
11	DECAL - OPEN/CLOSED LT
12	DECAL - OPEN/CLOSED RT
13	DECAL - NOTICE, EQUIPMENT DAMAGE
14	DEFLECTOR

1. Position the locking bar (4) between the long sill longitudinals with the locking surface pointing forward as shown. Apply grease to each end of the rear handle (8) and slide it through the long sill body. On the opposite side of the long sill, place a compression spring (7) over the locking rod. Compress the spring and secure the locking rod to the long sill with a washer (6) and spring pin (9). Apply the cleanout door decal (11) to the long sill that reflects the open and closed position of the handle.
2. Position the cleanout door (5) between the long sill longitudinals as shown. Apply grease on each end of the front handle (8) and slide it through the long sill body. On the opposite side of the long sill, place a compression spring (7) over the locking rod. Compress the spring and secure the locking rod to the long sill with a washer (6) and spring pin (9). Apply the lock decal (12) to the long sill that reflects the locked and unlocked position of the handle.
3. Slide the subfloor (3) under the conveyor chain and secure to the rear of the body with carriage bolts (1) and serrated flange locknuts (2). If used with an optional rear material spreader, align the rear deflector (14) with the top of the subfloor before attaching hardware. Apply the safety decal (13) to the tailgate in an area near to the feed gate opening.

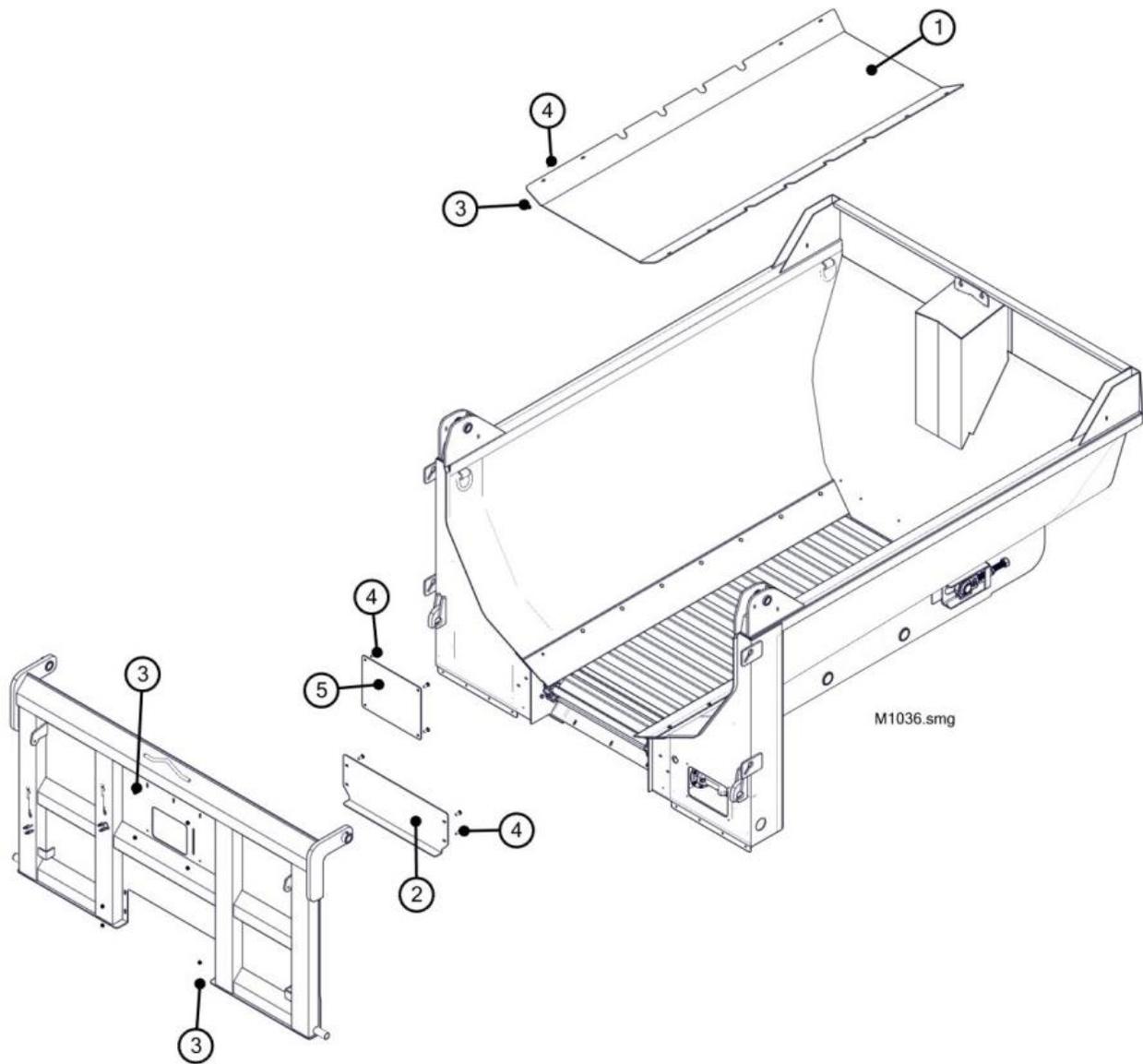


IMPORTANT

When unloading aggregate material, it is necessary to remove the subfloor from the dump body. Compacted aggregate material that gets trapped near the conveyor chain can cause severe damage to the chain and chain drive mechanism.

When unloading aggregate material, it is highly recommended to install the optional conveyor chain cover to protect the chain from damage. The conveyor chain is not intended to unload large aggregate material from the dump body. Aggregate material should be dumped using the rear tailgate and a raised dump body.

SUMMER COVER



Ref	Description
1	CONVEYOR COVER
2	COVER - LOWER SUMMER
3	3/8-16 SERRATED FLANGE LOCKNUT SS
4	3/8-16 x 1-1/4 CARRIAGE BOLT SS
5	COVER - UPPER SUMMER

1. Remove the entire rear feed gate assembly from the inside of the tailgate. Store it in a safe place until needed.
2. Using a secure prop, open and secure the tailgate in a position that allows the dump body to be serviced in a safe manner.
3. Remove the front four and the rear four carriage bolts that attach the chain covers to the long sill section of the dump body.

4. Slide the summer cover (1) into the dump body and secure with carriage bolts (3) and serrated flange locknuts (4).
5. Install the tailgate panels (2 & 5) to the inside of the tailgate and secure with carriage bolts (3) and serrated flange locknuts (4). Leave hardware loose until final fit-up has been verified.

NOTE: On a ratchet-style feed gate, only one panel is installed to the inside lower section of the tailgate.

6. Remove the safety prop and slowly lower the tailgate to its operational position. Check for any interference between the tailgate and the summer cover that might prevent the tailgate from latching properly. Once the position of the summer cover is verified, tighten all mounting hardware.



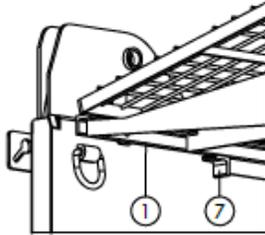
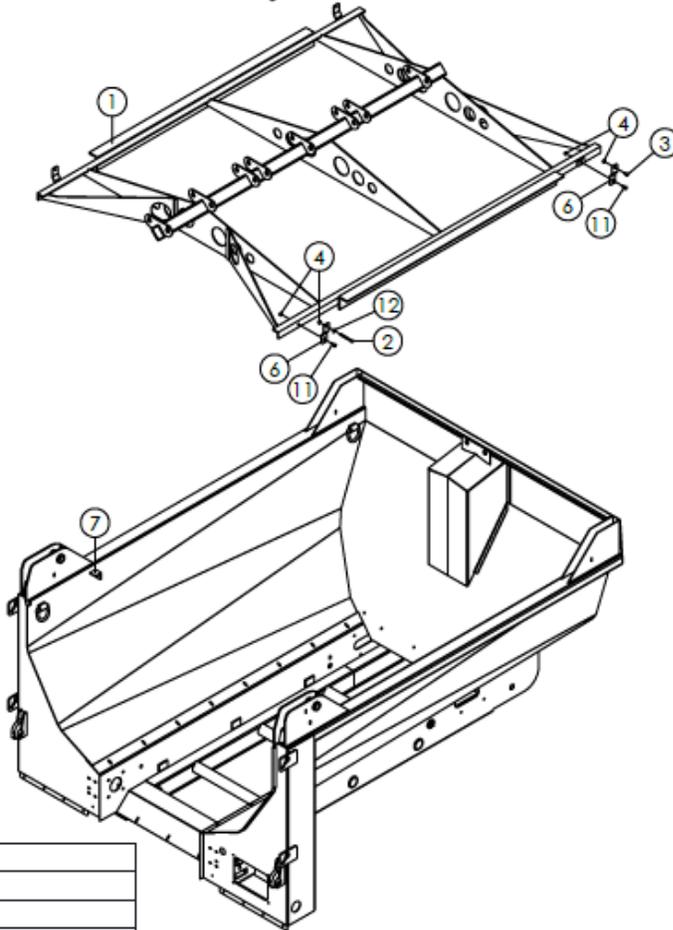
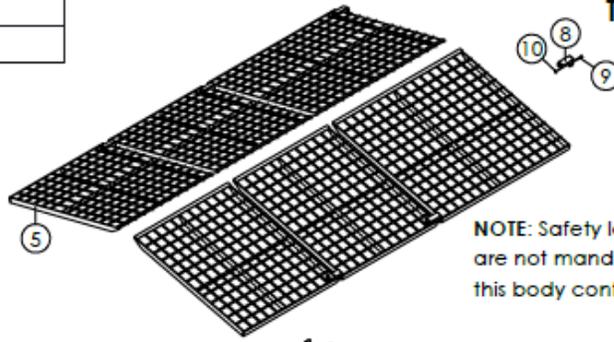
Be careful ... Your personal safety is at stake.

TARP KIT

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

FILE NAME	M1038
DWG NAME	M1038B

TOP SCREEN



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

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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

- 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.

BON-011377

- 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



- 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 conveyor and spinner 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 conveyor and spinner control knobs to first position.
- Move control valve ON-OFF lever to the ON position.



DANGER

HIGH PRESSURE OIL HAZARD



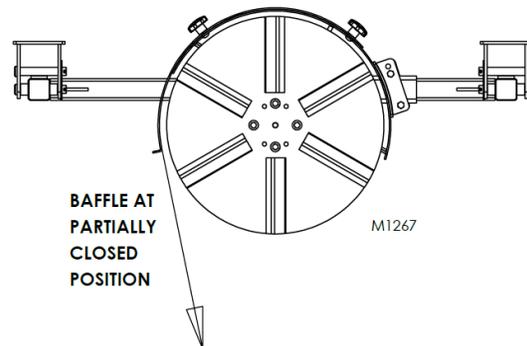
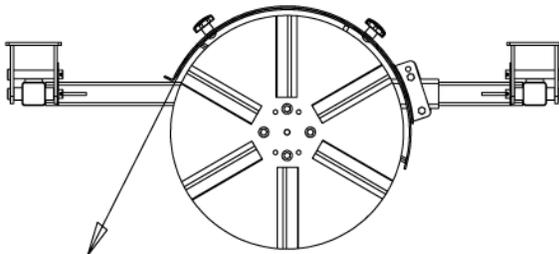
- Have a helper carefully examine the conveyor and material spreader to see if they are operating properly. Note that in the first control position, these components will be operating slowly. Material spreader spinner should be rotating CCW as viewed from above spinner. Conveyor (chain or auger) should be moving in the proper direction.
- Increase the conveyor and spinner control knobs settings and note the increased speed of the dump body and material spreader spinner.
- Turn conveyor and spinner 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 – REAR DISCHARGE MODELS

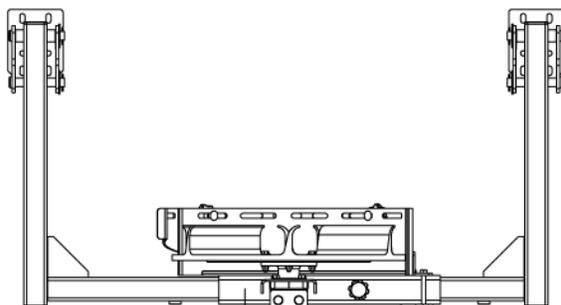
- Start the engine and allow the hydraulic oil to warm up by turning the conveyor and spinner control knobs to the “OFF” position and moving the hydraulic control lever to the “ON” position.
- When oil is warmed up, turn the hydraulic control lever to the “OFF” position.
- Load material into the dump body.
- Set the rear feed gate to an initial two-inch opening.
- Turn the hydraulic control lever to the “ON” position. Open the spinner and conveyor knobs 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.
- **Conveyor chain models:** Volume of material being spread by a conveyor is controlled through a combination of the feed gate opening and conveyor speed. Normally the feed gate will be operated with a one-to-two-inch opening. Adjust the feed gate opening to achieve the proper material discharge rate with the conveyor knob setting at mid-range. During operation, in-cab control of the conveyor 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.
- Fore-and-aft adjustment is obtained by which mounting holes are used in the material spreader mounting brackets. This feature is useful in obtaining an operating position that effectively captures the material being dropped from the dump body.
- 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 feed gate opening and 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.

BAFFLE AT FULL OPEN POSITION



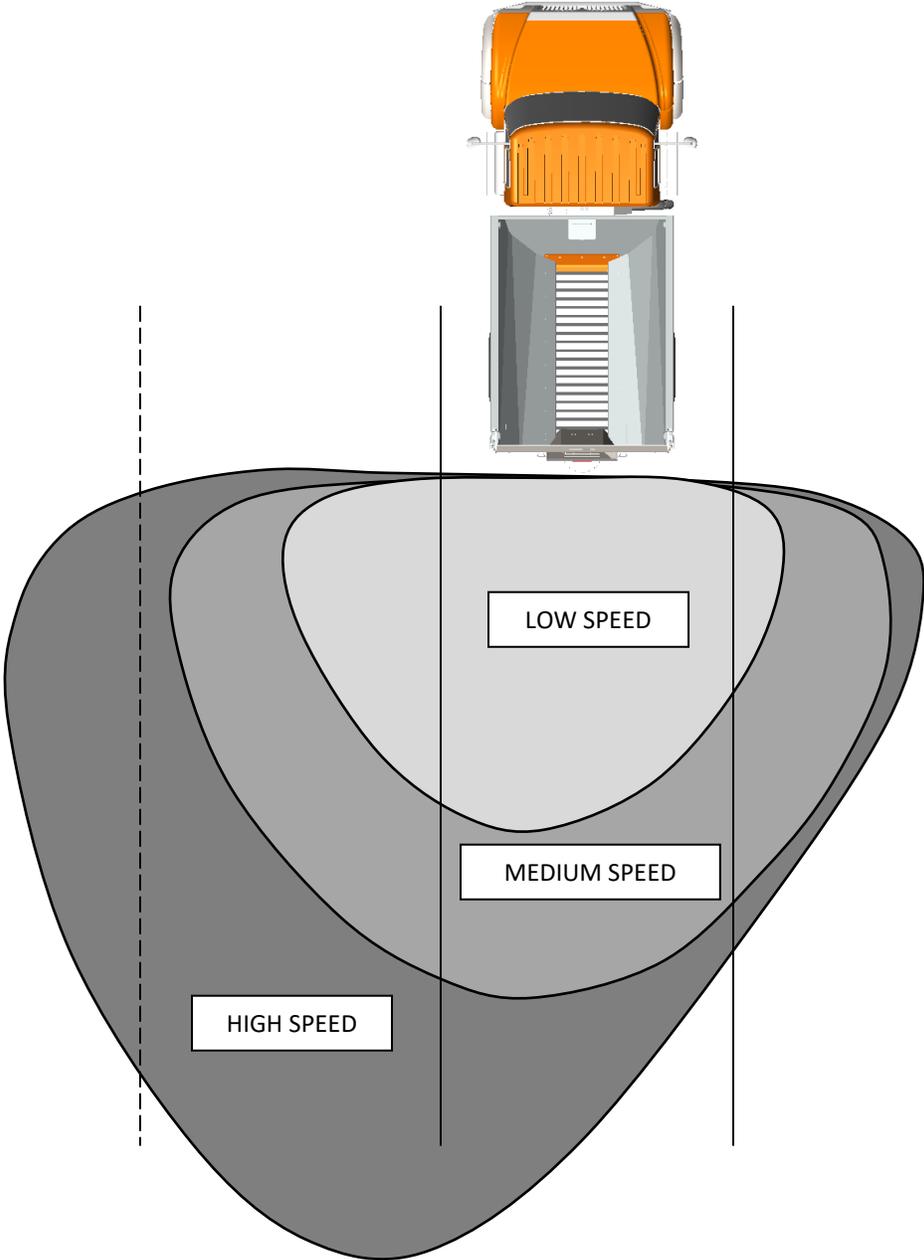
BAFFLE AT PARTIALLY CLOSED POSITION



HIGHER MATERIAL SPEED ← **SIDE-TO-SIDE ADJUSTMENT** → **LOWER MATERIAL SPEED**

! WARNING	
	THROWN OBJECT HAZARD
	Serious injury or death can occur • Stay clear while spinner is turning

SPREAD PATTERNS – REAR DISCHARGE MODELS

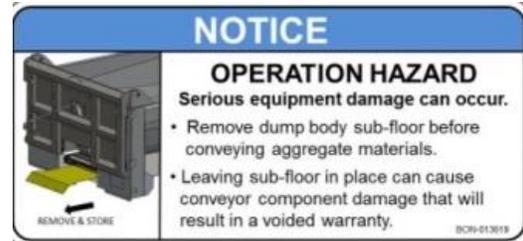


The final variable to the amount of material dispersed is truck speed. The following chart provides general guidelines in determining the truck's unloading rate. This information is useful in determining approximately how far a truck can operate before the need to return for reloading.

		MATERIAL DISPERSEMENT (tons/mile)					
		10	11	12	13	14	15
TRUCK SPEED (mph)	45	0.3	0.3	0.3	0.4	0.4	0.5
	40	0.3	0.4	0.4	0.5	0.5	0.5
	35	0.4	0.4	0.5	0.5	0.6	0.6
	30	0.4	0.5	0.5	0.6	0.6	0.7
	25	0.6	0.6	0.7	0.7	0.8	0.8
	20	0.7	0.8	0.8	0.9	1.0	1.0
	15	0.9	1.0	1.1	1.2	1.3	1.4
	10	1.4	1.5	1.7	1.8	1.9	2.1
	5	2.8	3.0	3.3	3.6	3.9	4.2
		10	11	12	13	14	15
		PUMP OUTPUT (gpm)					

UNLOADING AGGREGATE MATERIALS – CONVEYOR CHAIN MODELS

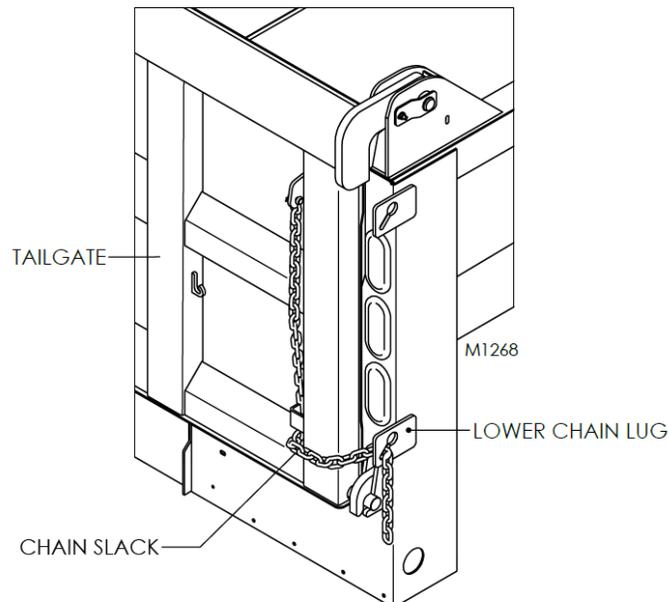
When unloading aggregate material, it is necessary to remove the subfloor from the dump body. Compacted aggregate material that gets trapped near the conveyor chain can cause severe damage to the chain and chain drive mechanism.



When unloading aggregate material, it is highly recommended to install the optional conveyor chain cover to protect the chain from damage. The conveyor chain is not intended to unload large aggregate material from the dump body. Aggregate material should be dumped using the rear tailgate and a raised dump body.

CHAINS FOR DOUBLE-ACTING TAILGATE

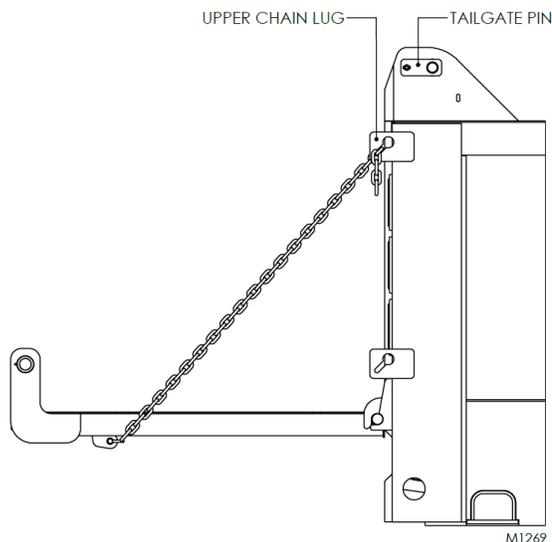
When spreading material, the tailgate should be configured with the tailgate hinge point at the top of the dump body. This will allow the tailgate to partially swing open at the bottom. The tailgate chains should be set to achieve the desired opening for spreading the material. Be sure not to provide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



RAISED DUMP BODY SAFETY

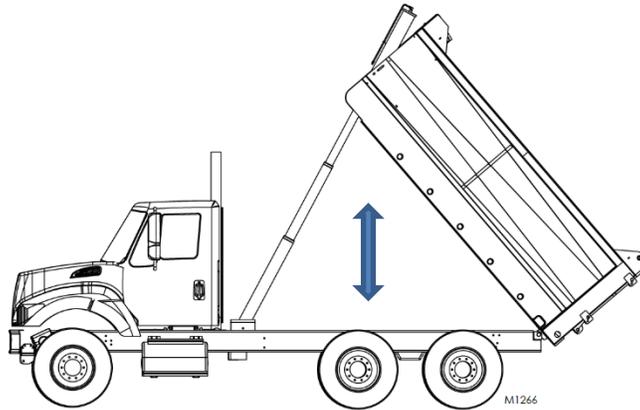


- Be mindful of the terrain that the dump body will be exposed to while unloading. Sudden changes in the ground surface can cause the dump truck to become unstable.
- Irregularly shaped objects (tree stumps, concrete chunks, brush, etc.) can unload erratically. If additional tailgate clearance is needed, 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.
- NNR applications: 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.

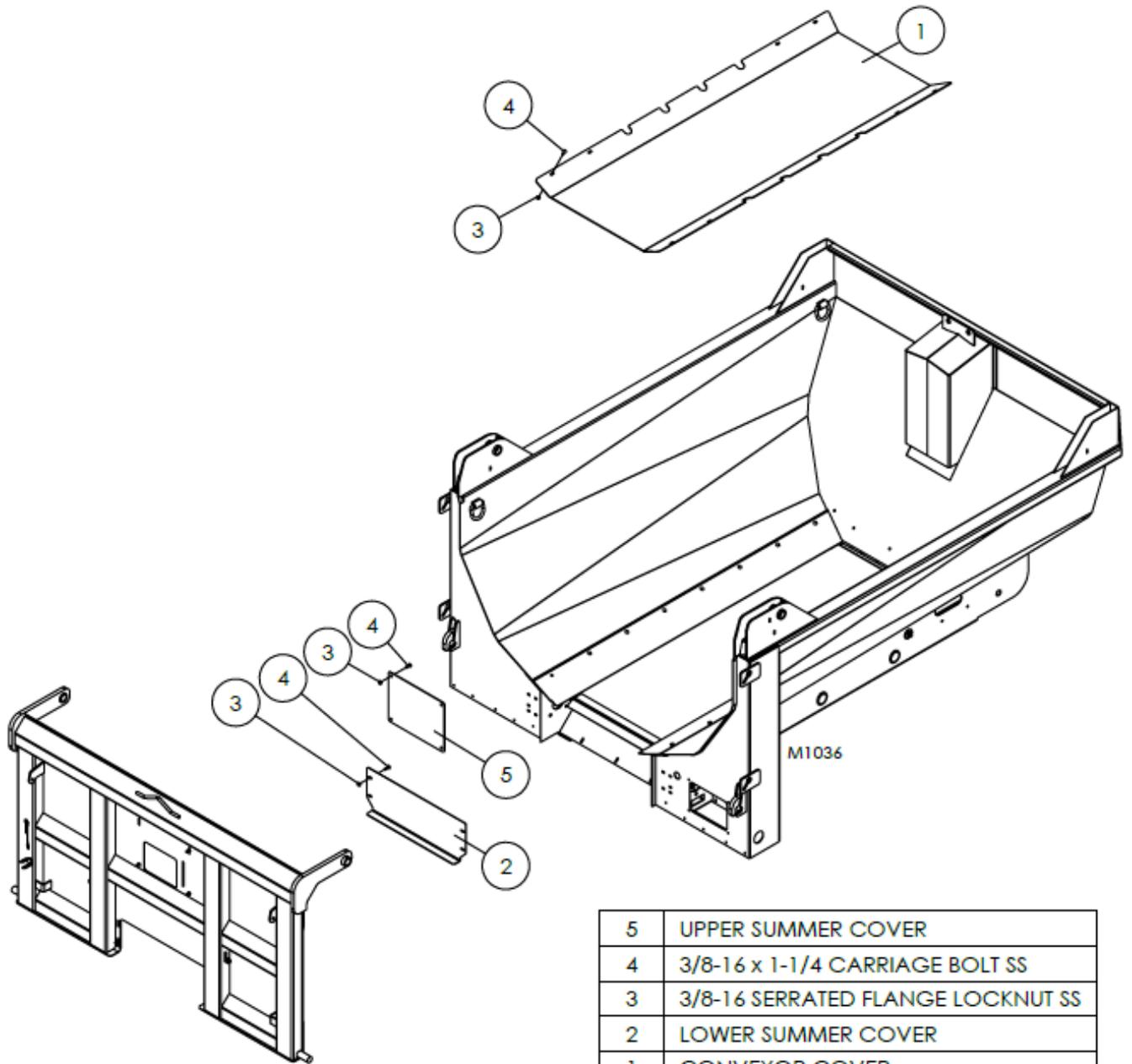


MCR SUMMER COVER INSTALLATION

- When installing the summer cover, it will be necessary to remove the entire feed gate from the tailgate. Find a suitable location to store the feed gate when not in use.
- Using a secure prop, open and secure the tailgate in a position that allows the dump body to be serviced in a safe manner.
- Remove the front four and rear four carriage bolts that attach the chain covers to the long sill section of the dump body.
- Install the upper panel (5) and lower panel (2) to the tailgate and secure with carriage bolts (4) and flange locknuts (3).
- Slide the summer cover (1) into the dump body and secure with carriage bolts (4) and serrated flange locknuts (3). Leave the hardware loose until final fit-up checks have been verified.
- Remove the safety prop and slowly lower the tailgate to its operational position. Check for any interference between the tailgate and the summer cover that might prevent the tailgate from latching properly. Once the position of the summer cover is determined, tighten all mounting hardware.



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



5	UPPER SUMMER COVER
4	3/8-16 x 1-1/4 CARRIAGE BOLT SS
3	3/8-16 SERRATED FLANGE LOCKNUT SS
2	LOWER SUMMER COVER
1	CONVEYOR COVER
REF	DESCRIPTION

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 conveyor and/or spinner.

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.

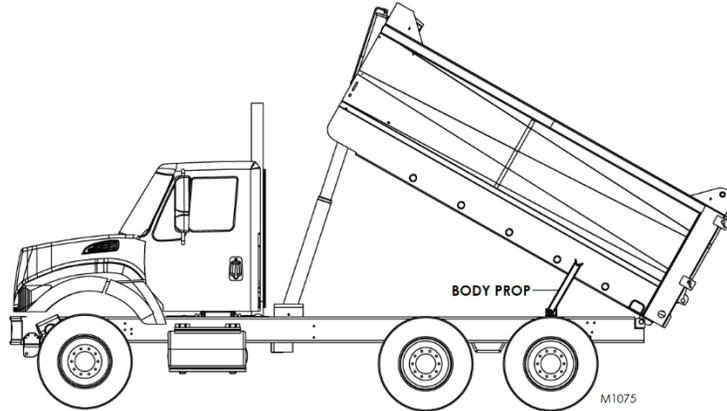
Condition #4: Conveyor and/or spinner will not operate, or operates in wrong direction.

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.



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.

GEARBOX MAINTENANCE

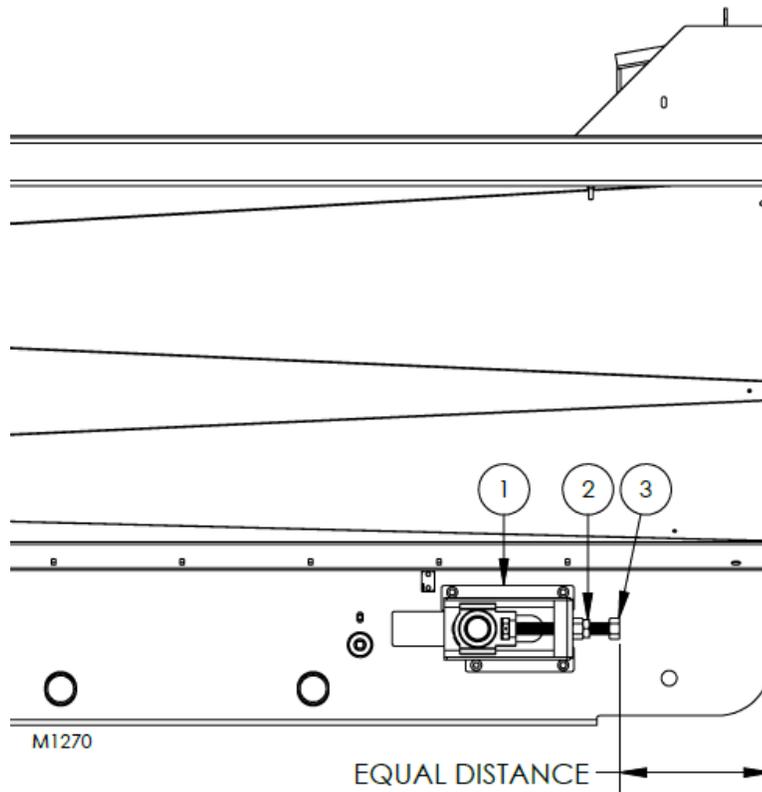
- The planetary gearbox should be checked periodically for the proper lubrication level. There are three ports on the main body of the gearbox. Locate the one that is the nearest to the centerline of the gearbox. Remove the plug to detect if there is sufficient gear lube present. On an annual basis, it is recommended that the gearbox be drained and refilled with 24 ounces of SAE 90 gear lube. **DO NOT** overfill the gearbox as seal damage may occur. Operating the dump body in heavy use or harsh conditions may require the gear lube be changed more frequently.

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, tailgate latch arms and front conveyor bearings.
- 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.

CONVEYOR CHAIN ADJUSTMENT & LUBRICATION MAINTENANCE

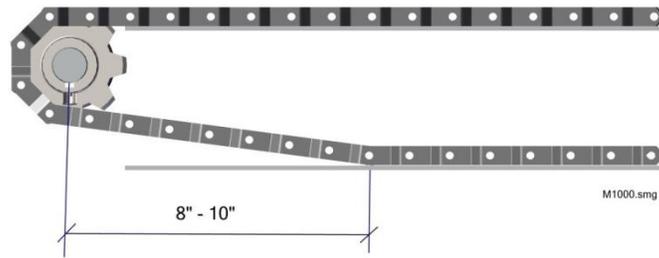
- Under normal operating conditions, a carbon steel conveyor chain will last (4) seasons. The life expectancy of the chain is dependent on total hours of use, how well the chain is maintained, how much power is supplied to the chain through the hydraulics system and the type of materials and environment the chain is subjected to.
- Over its life, the conveyor chain will continue to stretch to the point where the excess slack can cause the conveyor chain to move erratically or jump off the drive sprocket.
- Drag chain slack should be adjusted periodically to maintain the proper chain tension. A coating of grease on the take-up bearing adjustment rod is recommended for easier chain adjustment.



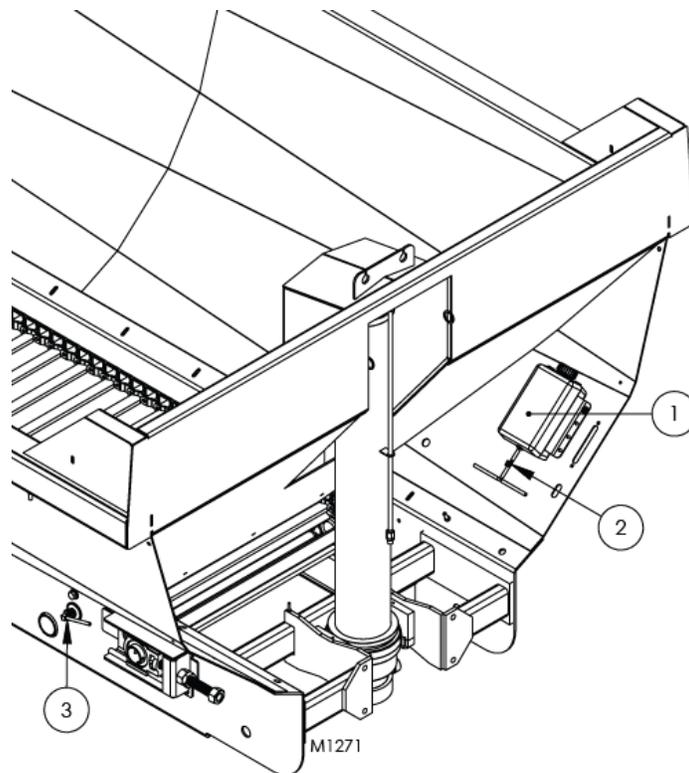
3	1 1/8-7 ADJUSTMENT BOLT
2	1 1/8-7 JAM NUT
1	CHAIN TAKE-UP
REF	DESCRIPTION

To adjust chain tension:

- Loosen the jam nut (2) on each side of the dump body. Using a ratchet and 1-11/16 socket, tighten each adjustment bolt (3) equally alternating side-to-side. Maintain the same distance between the adjustment bolt and the front of the long sills.
- For proper operation, the conveyor chain must have some slack in the chain. Distance between the center line of the front sprocket and the point where the conveyor chain makes contact with the underbody floor should be in the 8" – 10" range.
- Tighten jam nuts (2) to maintain the chain tension.



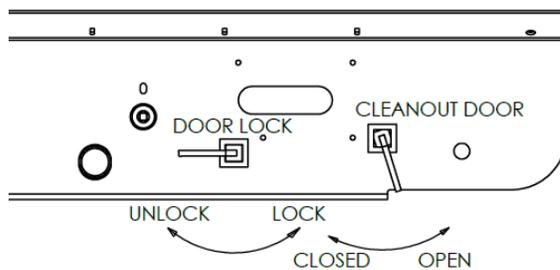
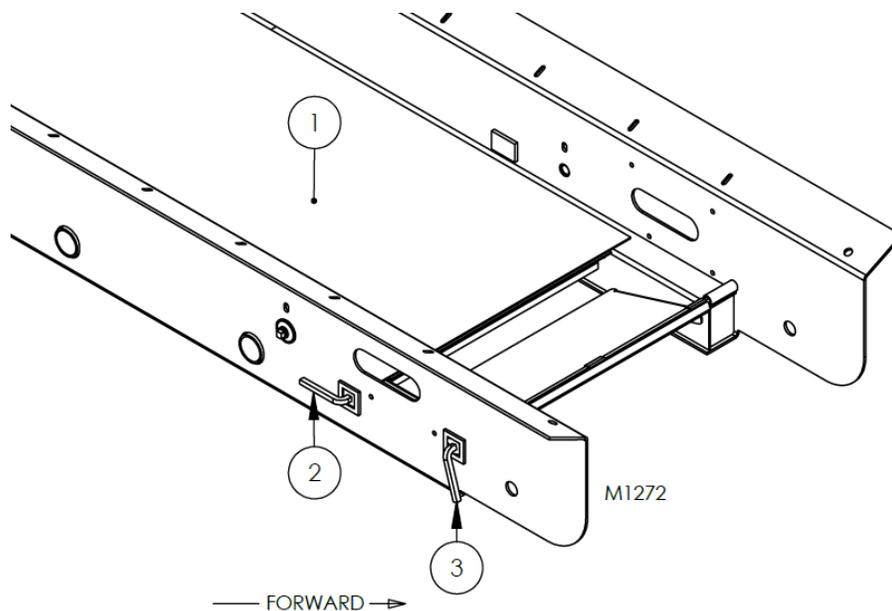
- Once the take-up bearing has used up all of its allowable adjustment, two to four links will need to be removed from each side of the conveyor chain. This will extend the life of the conveyor chain and restore the usable adjustment range of the take-up bearing.
- An optional four-quart chain oiler is available that utilizes a gravity-feed system to manually lubricate each side of the conveyor chain. This option is useful in extending the life of the conveyor chain. A light oil such as 5W20 is recommended for this application.



3	OIL LINE ENTRY POINT
2	1/4" PVC BALL VALVE
1	OIL TANK - 4 QUART POLY
REF	DESCRIPTION

CLEANOUT DOOR OPERATION

- The Commander MCR body is available with an optional subfloor (1) and cleanout door (3) that unloads material that is dragged forward underneath the dump body chain. The material will collect until the operator opens the cleanout door to allow the collected material to drop between the truck rails and onto the ground. This feature enhances the life of the truck chassis from the deteriorating effects of deicing material.
- To unlock the cleanout door, pull the left lever out, then rotate the lock lever clockwise to release the cleanout door.
- To dump the cleanout door, pull the right lever out, then rotate the cleanout door lever counter-clockwise to release the door.
- Return the lock lever and cleanout door lever to their locked position before commencing operation.



3	CLEANOUT DOOR
2	CLEANOUT DOOR LOCK
1	SUBFLOOR
REF	DESCRIPTION

NOTICE

OPERATION HAZARD

Serious equipment damage can occur.

- Remove dump body sub-floor before conveying aggregate materials.
- Leaving sub-floor in place can cause conveyor component damage that will result in a voided warranty.



REMOVE & STORE

BCH-013015

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.

MOTOR REPAIR

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

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

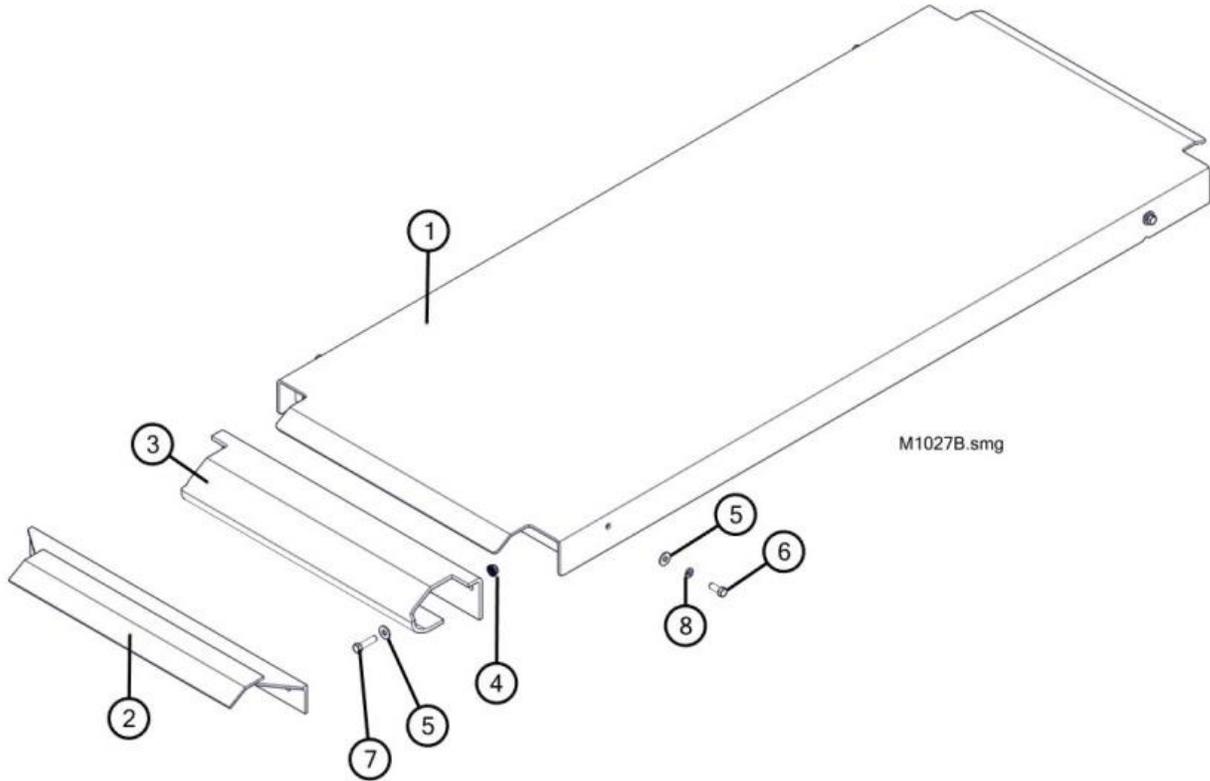
- Under most conditions, it is strongly recommended to contact Bonnell Industries regarding the proper repair and maintenance of the trunnion hoist cylinder used in the multi-purpose body. Unsuccessful attempts at performing maintenance on trunnion cylinders are dangerous, and can result in the loss 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.

SERVICE PARTS – MAIN BODY

FLOOR & NOSE PIECE



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

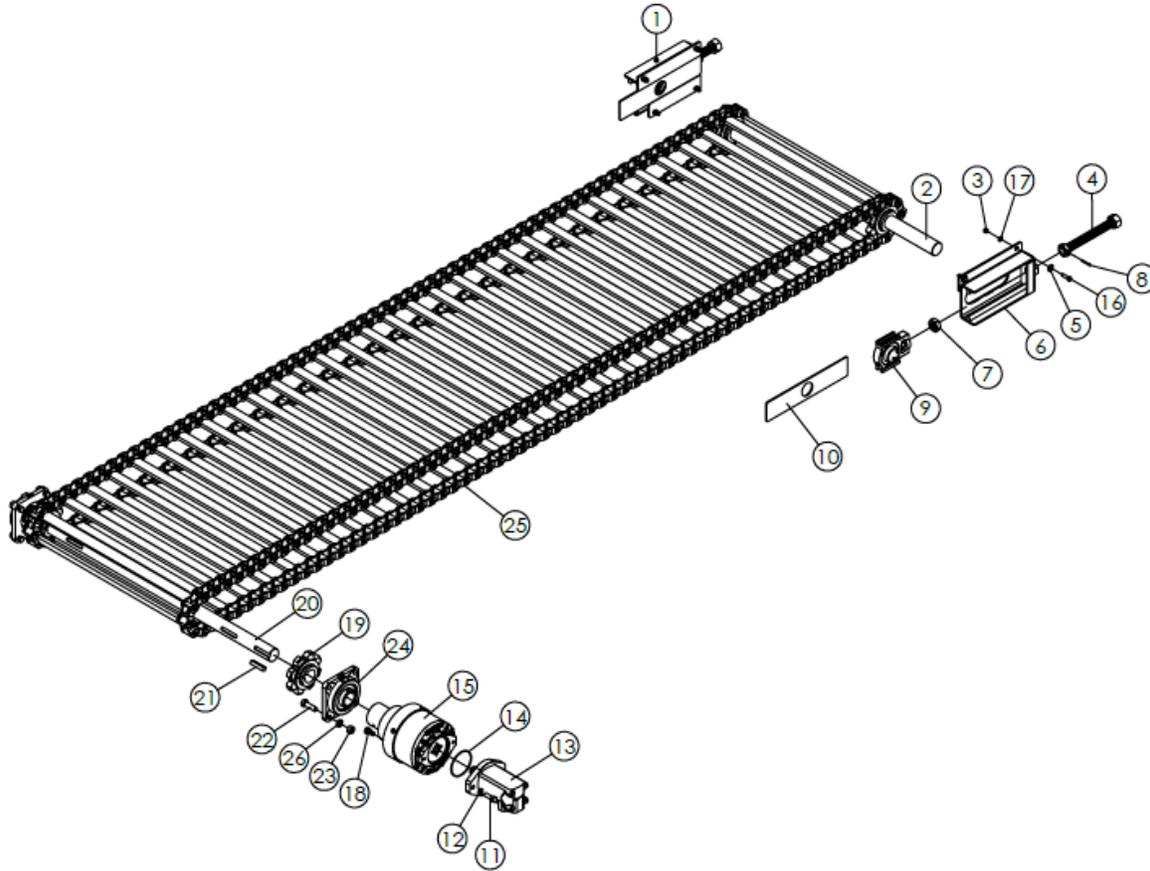
8	BON-000354SS	A/R	1/2 STANDARD LOCKWASHER SS
7	BON-000109SS	A/R	1/2-13 x 2 HEX BOLT SS
6	BON-000107SS	A/R	1/2-13 x 1-1/2 HEX BOLT SS
5	BON-000340SS	A/R	1/2 STANDARD FLAT WASHER SS
4	BV2-001653	A/R	1/2-13 SERRATED FLANGE LOCKNUT SS
3	BON-012402 **	1	REAR RUBBER WIPER FLAP
2	BON-020503 *	1	NOSE PIECE
1	BON-012496	1	16' CONVEYOR FLOOR
	BON-012495		15' CONVEYOR FLOOR
	BON-012494		14' CONVEYOR FLOOR
	BON-012493		13' CONVEYOR FLOOR
	BON-012492		12' CONVEYOR FLOOR
	BON-012491		11' CONVEYOR FLOOR
	BON-012490		10' CONVEYOR FLOOR
	BON-012489		09' CONVEYOR FLOOR
REF	PART NO.	QTY	DESCRIPTION

* - Used on earlier models, S/N 1099 and prior.

** - Not required with belt-over conveyor chains.

FILE NAME	M1028
DWG NAME	M1028 Rev: 03/22/21

CONVEYOR CHAIN & DRIVE COMPONENTS



14	9452K191	1	O-RING, 1/8 DIA x 3.734 ID
13	BON-012908	-	60 PULSE SENSOR (motor service part)
13	BON-012855	1	MOTOR - 7.97 CU IN W/SPEED SENSOR (optional)
13	BON-020502	1	MOTOR - 7.97 CU IN
12	BON-000354SS	-	1/2 MED SPLIT LOCKWASHER SS
11	BON-000107SS	-	1/2-13 x 1-1/2 HEX BOLT SS
10	BON-013291	2	3/16 x 3-1/4 x 16 POLY GUARD
9	BON-013793	2	TAKEUP BEARING
8	BON-012407SS	-	3/8 x 1-5/8 ROLL PIN SS
7	BON-000332SS	-	1 1/8-7 HEX NUT SS
6	BON-012398SS	1	CHAIN TAKEUP BRACKET - SS (no poly guard)
6	BON-013296RS3	1	CHAIN TAKEUP BRACKET - RT SS (1/2" mtg holes)
6	BON-013469RS3	1	CHAIN TAKEUP BRACKET - RT SS (3/8" mtg holes)
5	BON-000338SS	-	3/8 STANDARD FLAT WASHER SS
4	BON-012399SS	2	BEARING SLIDE ADJUSTMENT SCREW SS
3	BON-000303SS	-	3/8-16 HEX NUT SS
2	BON-020248	1	IDLER SHAFT - 2" DIA x 42-1/2"
1	BON-012398SS	1	CHAIN TAKEUP BRACKET - SS (no poly guard)
1	BON-013296LS3	1	CHAIN TAKEUP BRACKET - LT SS (1/2" mtg holes)
1	BON-013469LS3	1	CHAIN TAKEUP BRACKET - LT SS (3/8" mtg holes)
REF	PART NO.	QTY	DESCRIPTION

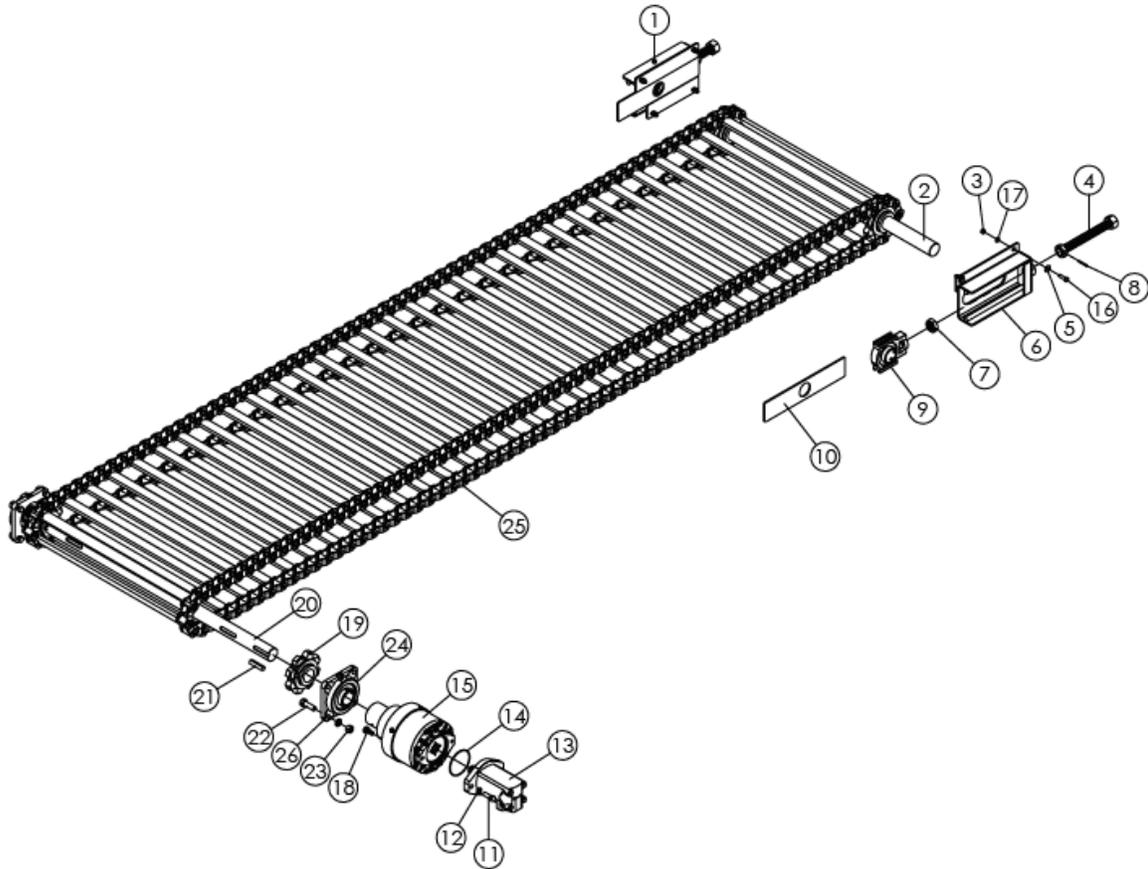
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BONNELL
INDUSTRIES INC
TRUCK & ROAD EQUIPMENT

DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	m1028
DWG NAME	M1028 (cont)

CONVEYOR CHAIN & DRIVE COMPONENTS



26	BON-000356SS	-	5/8 LOCKWASHER SS
25B	BON-013986SS	-	667XH REPLACEMENT CROSSBAR w/PINS SS
	BON-013986	-	667XH REPLACEMENT CROSSBAR w/PINS
25A	BON-013985SS	-	667XH REPLACEMENT LINK w/PINS SS
	BON-013985	-	667XH REPLACEMENT LINK w/PINS
25	SEE CHART	1	CONVEYOR CHAIN
24	BV2-001704	2	BEARING - 2" SPHERICAL
23	BON-000307SS	-	5/8-11 HEX NUT SS
22	BV2-001867	-	5/8-11 x 2" HEX BOLT SS
21	BV2-001876	5	1/2 SQ x 2-1/2" KEY
20	BON-013979	1	DRIVE SHAFT - 2" DIA x 44-1/8" (S/N 1138 & above)
20	BON-020247	1	DRIVE SHAFT - 2"DIA x 41-5/16" (S/N 1137 & below)
19	BV2-001877	4	SPROCKET - 8T, 2" BORE
18	BON-013968	-	1/2-13 x 3/4 SHOULDER BOLT
17	BON-000352SS	-	3/8 MED SPLIT LOCKWASHER SS
16	BON-000058SS	-	3/8-16 x 1-1/4" HEX BOLT SS
15	CTIM 14-00-044-010	-	OUTPUT SLEEVE OIL SEAL (gearbox service part)
15	AUBG 617169	-	OUTPUT SLEEVE (gearbox service part)
15	BON-020501	1	PLANETARY GEARBOX - 25.53:1
REF	PART NO.	QTY	DESCRIPTION

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DIXON, ILLINOIS
PHONE: 800-851-9664

MCR-SERIES CARBON STEEL CONVEYOR CHAINS

FEATURES:

- 667XH carbon steel pintle chain
- 1/2" x 1-1/2" carbon steel crossbars
- Crossbars spaced every-other link
- Standard configuration for MCR-series dump body

PART NO	MODEL	NO. of LINKS	NO. of CROSSBARS
BON-012449	MCR09	74	37
BON-012450	MCR10	86	43
BON-012451	MCR11	96	48
BON-012452	MCR12	106	53
BON-012453	MCR13	118	59
BON-012454	MCR14	128	64
BON-012455	MCR15	138	69
BON-012456	MCR16	150	75

FEATURES:

- 667XH carbon steel pintle chain
- 1/2" x 1-1/2" carbon steel crossbars
- Crossbars spaced every-other link
- 3/8" x 27" wide, #220, 2-ply cold belt

PART NO	MODEL	NO. of LINKS	NO. of CROSSBARS
BON-013299	MCR09	74	37
BON-013300	MCR10	86	43
BON-013301	MCR11	96	48
BON-013302	MCR12	106	53
BON-013303	MCR13	118	59
BON-013304	MCR14	128	64
BON-013305	MCR15	138	69
BON-013306	MCR16	150	75

BON-013308	ALL	LACING CABLE
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FEATURES:

- 667XH carbon steel pintle chain
- 1/2" x 1-1/2" carbon steel crossbars
- Crossbars spaced every link

PART NO	MODEL	NO. of LINKS	NO. of CROSSBARS
BON-012509	MCR09	74	74
BON-012510	MCR10	86	86
BON-012511	MCR11	96	96
BON-012512	MCR12	106	106
BON-012513	MCR13	118	118
BON-012514	MCR14	128	128
BON-012515	MCR15	138	138
BON-012516	MCR16	150	150

FEATURES:

- 667XH carbon steel pintle chain
- 1/2" x 1-1/2" carbon steel crossbars
- Crossbars spaced every-other link
- 3/8" x 27" wide, #220, 2-ply hot belt, 350° rating

PART NO	MODEL	NO. of LINKS	NO. of CROSSBARS
BON-012459	MCR09	74	37
BON-012460	MCR10	86	43
BON-012461	MCR11	96	48
BON-012462	MCR12	106	53
BON-012463	MCR13	118	59
BON-012464	MCR14	128	64
BON-012465	MCR15	138	69
BON-012466	MCR16	150	75

BON-013308	ALL	LACING CABLE
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MCR-SERIES STAINLESS STEEL CONVEYOR CHAINS

FEATURES:

- 667XH stainless steel pintle chain
- 1/2" x 1-1/2" carbon steel crossbars
- Crossbars spaced every-other link

PART NO	MODEL	NO. of LINKS	NO. of CROSSBARS
BON-012449SC	MCR09	74	37
BON-012450SC	MCR10	86	43
BON-012451SC	MCR11	96	48
BON-012452SC	MCR12	106	53
BON-012453SC	MCR13	118	59
BON-012454SC	MCR14	128	64
BON-012455SC	MCR15	138	69
BON-012456SC	MCR16	150	75

FEATURES:

- 667XH stainless steel pintle chain
- 1/2" x 1-1/2" carbon steel crossbars
- Crossbars spaced every link

PART NO	MODEL	NO. of LINKS	NO. of CROSSBARS
BON-012509SC	MCR09	74	74
BON-012510SC	MCR10	86	86
BON-012511SC	MCR11	96	96
BON-012512SC	MCR12	106	106
BON-012513SC	MCR13	118	118
BON-012514SC	MCR14	128	128
BON-012515SC	MCR15	138	138
BON-012516SC	MCR16	150	150

FEATURES:

- 667XH stainless steel pintle chain
- 1/2" x 1-1/2" stainless steel crossbars
- Crossbars spaced every-other link

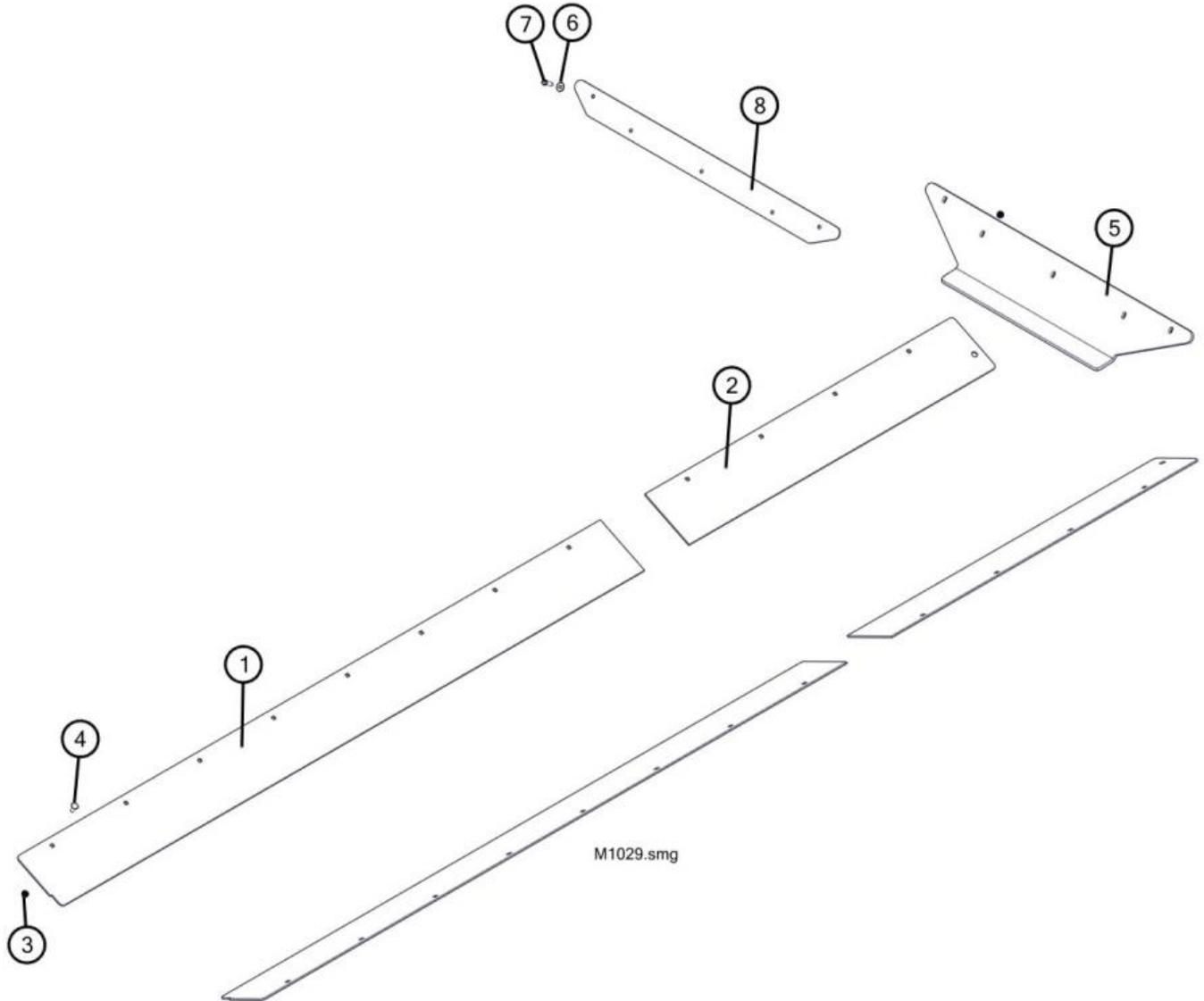
PART NO	MODEL	NO. of LINKS	NO. of CROSSBARS
BON-012449SS	MCR09	74	37
BON-012450SS	MCR10	86	43
BON-012451SS	MCR11	96	48
BON-012452SS	MCR12	106	53
BON-012453SS	MCR13	118	59
BON-012454SS	MCR14	128	64
BON-012455SS	MCR15	138	69
BON-012456SS	MCR16	150	75

FEATURES:

- 667XH stainless steel pintle chain
- 1/2" x 1-1/2" stainless steel crossbars
- Crossbars spaced every link

PART NO	MODEL	NO. of LINKS	NO. of CROSSBARS
BON-012509SS	MCR09	74	74
BON-012510SS	MCR10	86	86
BON-012511SS	MCR11	96	96
BON-012512SS	MCR12	106	106
BON-012513SS	MCR13	118	118
BON-012514SS	MCR14	128	128
BON-012515SS	MCR15	138	138
BON-012516SS	MCR16	150	150

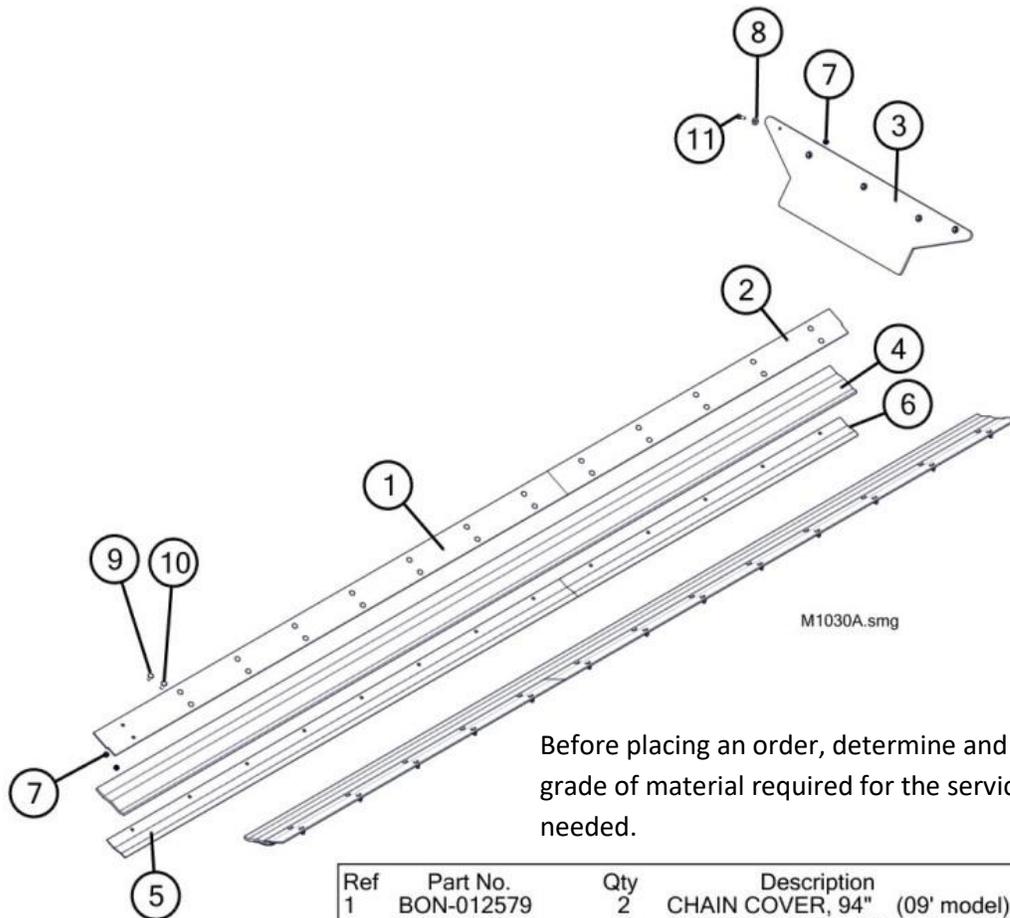
CONVEYOR CHAIN COVERS



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

Ref	Part No.	Qty	Description
1	BON-011438	2	CHAIN COVER - 95" (14 - 16' models only)
2	BON-012519	2	CHAIN COVER - 85" (09' model)
2	BON-012520	2	CHAIN COVER - 97" (10' model)
2	BON-012521	2	CHAIN COVER - 109" (11' model)
2	BON-012522	2	CHAIN COVER - 121" (12' model)
2	BON-012523	2	CHAIN COVER - 133" (13' model)
2	BON-011436	2	CHAIN COVER - 50" (14' model)
2	BON-011437	2	CHAIN COVER - 62" (15' model)
2	BON-011572	2	CHAIN COVER - 74" (16' model)
3	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
4	BON-000279F	A/R	3/8-16 x 1 CARRIAGE BOLT SS
5	BON-011038	1	BOLT-ON RUBBER FLAP
6	BON-000338SS	A/R	3/8 USS FLAT WASHER SS
7	BON-000058SS	A/R	3/8-16 x 1-1/4 HEX BOLT SS
8	BON-013757	1	STIFFENER - MCR FRONT FLAP

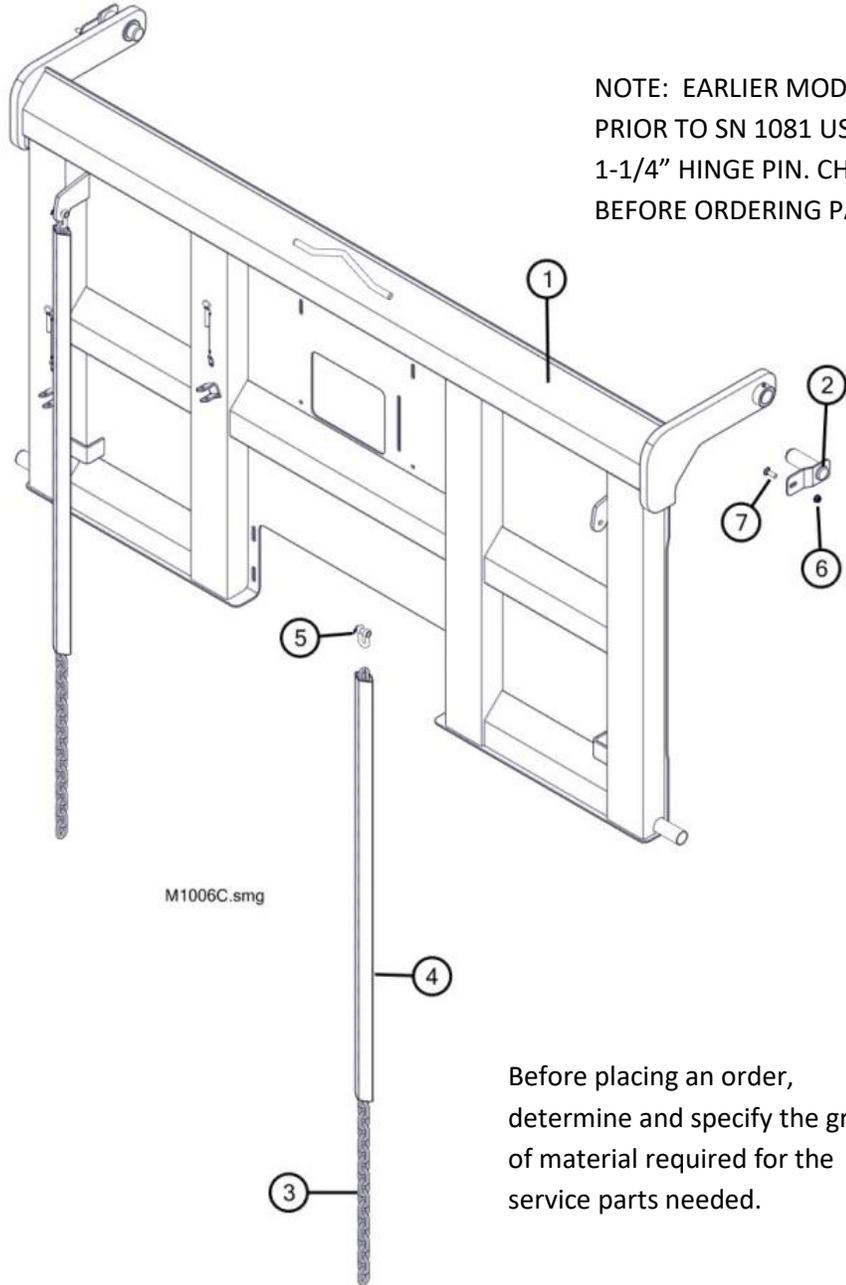
BELT-OVER CONVEYOR CHAIN COVERS (optional)



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

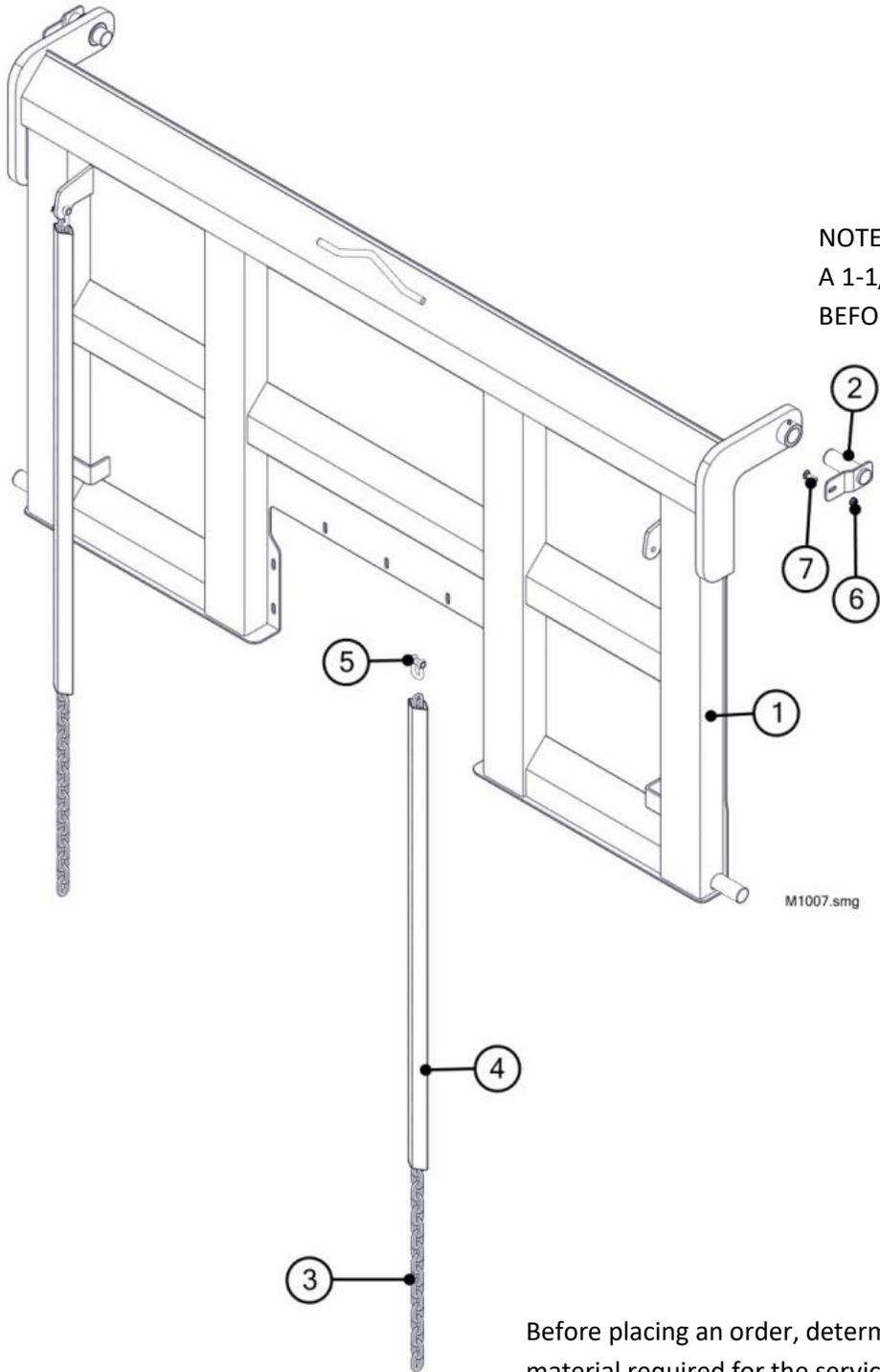
Ref	Part No.	Qty	Description
1	BON-012579	2	CHAIN COVER, 94" (09' model)
1	BON-012580	2	CHAIN COVER, 106" (10' model)
1	BON-012581	2	CHAIN COVER, 118" (11' model)
1	BON-012582	2	CHAIN COVER, 130" (12' model)
1	BON-012583	2	CHAIN COVER, 142" (13' model)
1	BON-012584	2	CHAIN COVER, 59" (14' model)
1	BON-012585	2	CHAIN COVER, 71" (15' model)
1	BON-012586	2	CHAIN COVER, 83" (16' model)
2	BON-011805	2	CHAIN COVER, 95" (14-16' models)
3	BON-011038	1	BOLT-ON RUBBER FLAP
4	BON-012599	2	93-1/2" RUBBER BELTING (09' model)
4	BON-012600	2	105-1/2" RUBBER BELTING (10' model)
4	BON-012601	2	117-1/2" RUBBER BELTING (11' model)
4	BON-012602	2	129-1/2" RUBBER BELTING (12' model)
4	BON-012603	2	141-1/2" RUBBER BELTING (13' model)
4	BON-012604	2	153-1/2" RUBBER BELTING (14' model)
4	BON-012605	2	165-1/2" RUBBER BELTING (15' model)
4	BON-012606	2	177-1/2" RUBBER BELTING (16' model)
5	BON-012589	2	LOWER REINFORCEMENT, 93-1/2" (09' model)
5	BON-012590	2	LOWER REINFORCEMENT, 105-1/2" (10' model)
5	BON-012591	2	LOWER REINFORCEMENT, 117-1/2" (11' model)
5	BON-012592	2	LOWER REINFORCEMENT, 129-1/2" (12' model)
5	BON-012593	2	LOWER REINFORCEMENT, 141-1/2" (13' model)
5	BON-012594	2	LOWER REINFORCEMENT, 57-1/2" (14' model)
5	BON-012595	2	LOWER REINFORCEMENT, 69-1/2" (15' model)
5	BON-012596	2	LOWER REINFORCEMENT, 81-1/2" (16' model)
6	BON-011806	2	LOWER REINFORCEMENT, 93-1/2" (14'-16' models)
7	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT
8	BON-000338SS	A/R	3/8 USS FLAT WASHER SS
9	BON-000279SS	A/R	3/8-16 x 1 CARRIAGE BOLT SS
10	BON-000285.5SS	A/R	3/8-16 x 1-1/4 CARRIAGE BOLT SS
11	BON-000058SS	5	3/8-16 x 1-1/4 HEX BOLT SS

TAILGATE - Screw Jack



Ref	Part No.	Qty	Description
1	BON-012127	1	MCR SCREW JACK TAILGATE (S/N 1081 and Above)
1	BON-011798	1	MCR SCREW JACK TAILGATE (S/N 1080 and Prior)
2	BON-011662	2	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-000660.6 SS	2	3/8" ANCHOR SHACKLE SS
6	BV2-001650	2	3/8-16 SERRATED FLANGE LOCKNUT SS
7	BON-000285.5 SS	2	3/8-16 x 1-1/4 CARRIAGE BOLT SS

TAILGATE - Ratchet-style (optional)



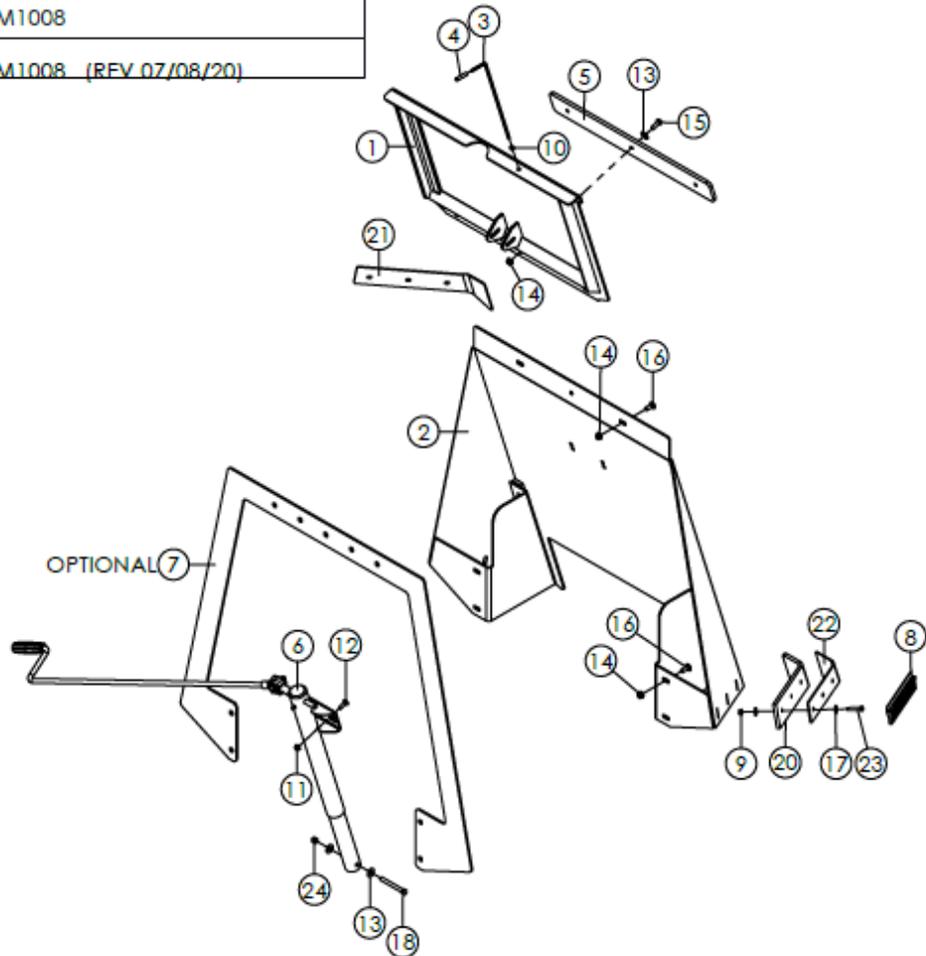
NOTE: EARLIER MODELS USED
A 1-1/4" HINGE PIN. CHECK
BEFORE ORDERING PART.

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

Ref	Part No.	Qty	Description
1	BON-11797	1	WA - MCR RATCHET TAILGATE
2	BON-011662	2	WA - MPB TAILGATE PIN
3	BON-020289	2	CHAIN - 3/8 GRADE 70 x 55 LINKS
4	BON011373	2	NYLON CHAIN COVER - 52"
5	BON-000660.6	2	3/8 ANCHOR SHACKLE
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	M1008
DWG NAME	M1008 (REV 07/08/20)

FEEDGATE
Screw jack model



24	BON-000319SS	1	3/8-16 NYLON HEX LOCKNUT SS
23	BON-000032SS	8	5/16-18 x 1-1/2 HEX BOLT SS
22	BON-013891RSS	1	FEEDGATE CLAMP STRIP, RT (SN 1078 & ABOVE)
21	BON-013891LSS	1	FEEDGATE CLAMP STRIP, LT (SN 1078 & ABOVE)
20	BON-013889	2	GUARD - FEEDGATE SIDE (S/N 1078 & ABOVE)
19			
18	BON-000067SS	1	3/8-16 x 3-1/2 HEX BOLT SS
17	BON-000337SS	16	5/16 STANDARD FLAT WASHER SS
16	BON-000279SS	7	3/8-16 x 1" CARRIAGE BOLT SS
15	BON-000057SS	3	3/8-16 x 1" HEX BOLT SS
14	BV2-001650	10	3/8-16 SERRATED FLANGE LOCKNUT SS
13	BON-000338SS	5	3/8 STANDARD FLAT WASHER SS
12	BON-000277.5 SS	4	5/16-18 x 1" CARRIAGE BOLT SS
11	BV2-001651	4	5/16-18 SERRATED FLANGE HEX LOCKNUT SS
10	BON-000301SS	2	1/4-20 HEX NUT SS
9	BON-000320SS	8	5/16-18 NYLON HEX LOCKNUT SS
8	BON-011818	2	BRUSH HEAD, 1-3/8" x 11-5/8" (S/N 1077 & BELOW)
7	BON-012628	1	SEAL - MCR FEEDGATE (OPTIONAL)
6	BV2-001058	1	GATE JACK ASSY w/LH CRANK
5	BON-013298	1	GUARD - 3/8" x 3" x 25" RUBBER
4	BON-012537	1	GRIP - 1/4" DIA x 1-1/2"
3	BON-012418S3	1	GAUGE ROD SS
2	BON-011808	1	SLIDE GATE FRAME
1	BON-011807	1	SLIDE GATE
REF	PART NO.	QTY	DESCRIPTION

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

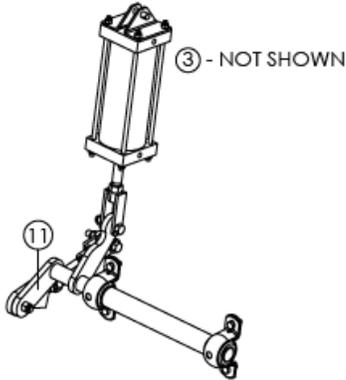
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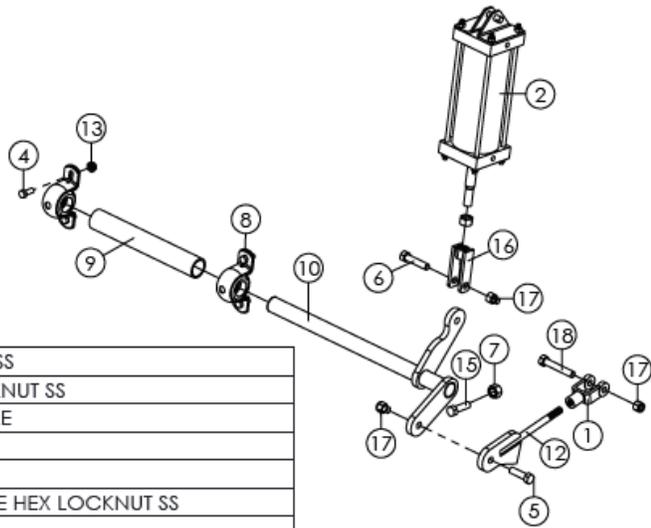
FILE NAME	M1031
DWG NAME	M1031 Rev: 03/22/21

TAILGATE LATCH COMPONENTS



NOTES:

- To ensure correct repair parts, measure length of items #9-11 before placing order.
- 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	2	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

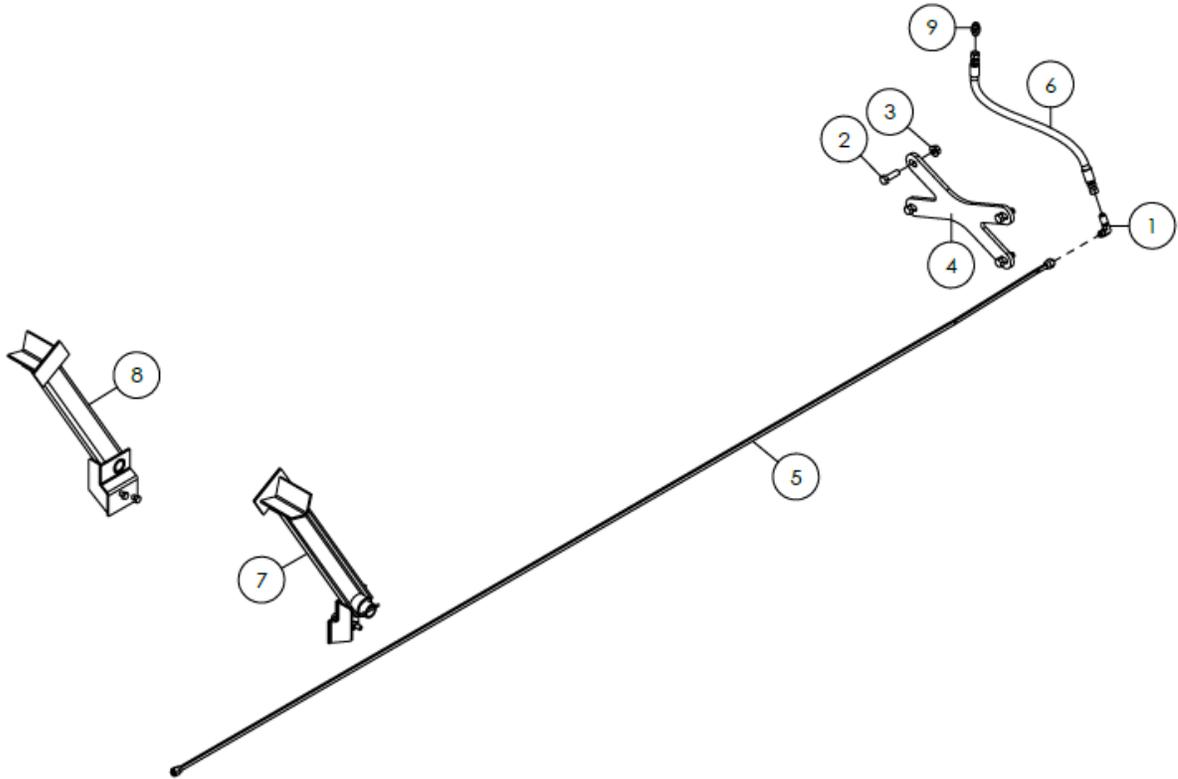
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FILE NAME	M1011
DWG NAME	M1011

HOIST COMPONENTS



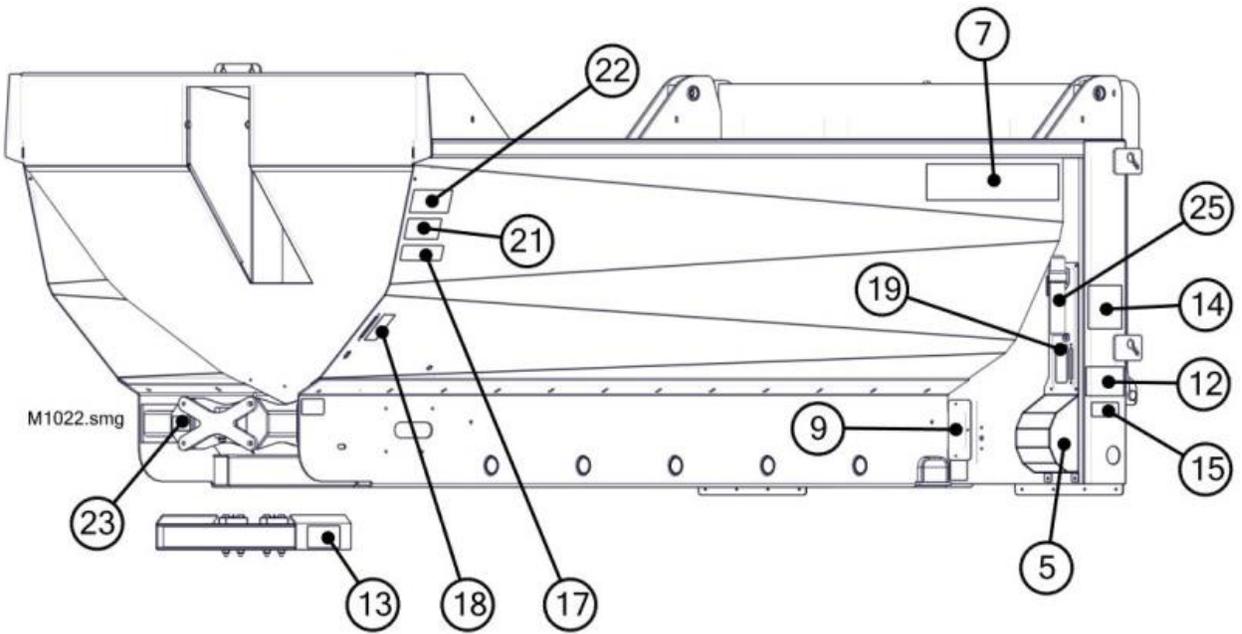
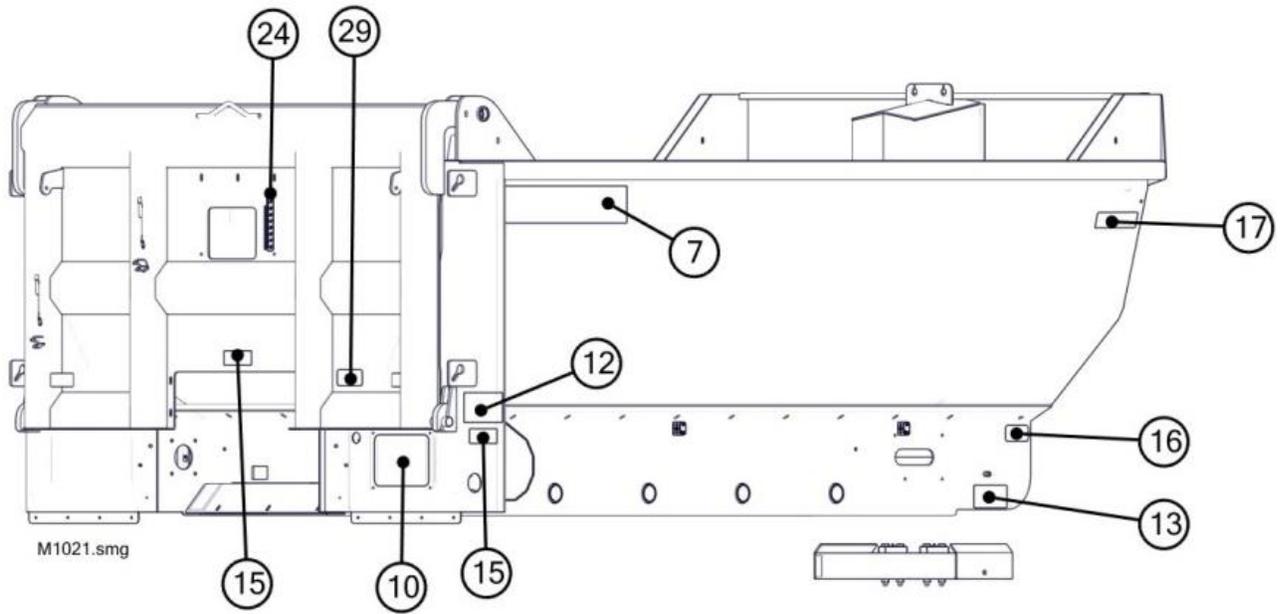
9	842FS 08	1	FITTING-HYD, MALE x MALE 37° FLARE (CS-series only)
8	BON-012854	1	COMMANDER BODY PROP, LH
7	BON-012853	1	COMMANDER BODY PROP, RH
6	BON-021267	1	HOSE-HYDRAULIC, 1/2 x 68" (G4-series only)
	BON-012638		HOSE-HYDRAULIC, 1/2 x 27" (CS-series only)
5	BON-012500-16	1	1/2 x 167-1/2" HYDRAULIC LINE 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)
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

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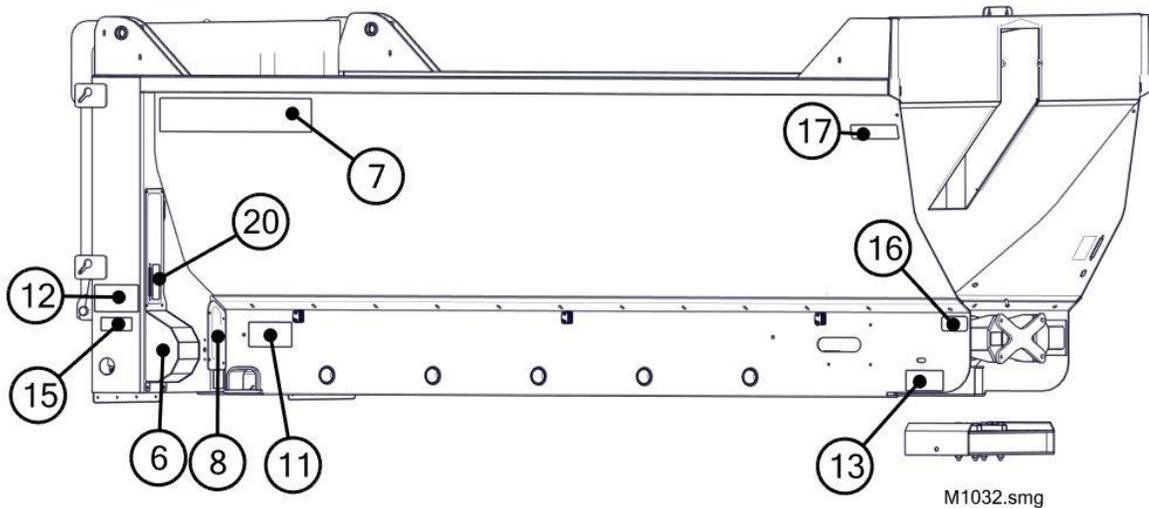


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DECALS & COVERS



DECALS & COVERS

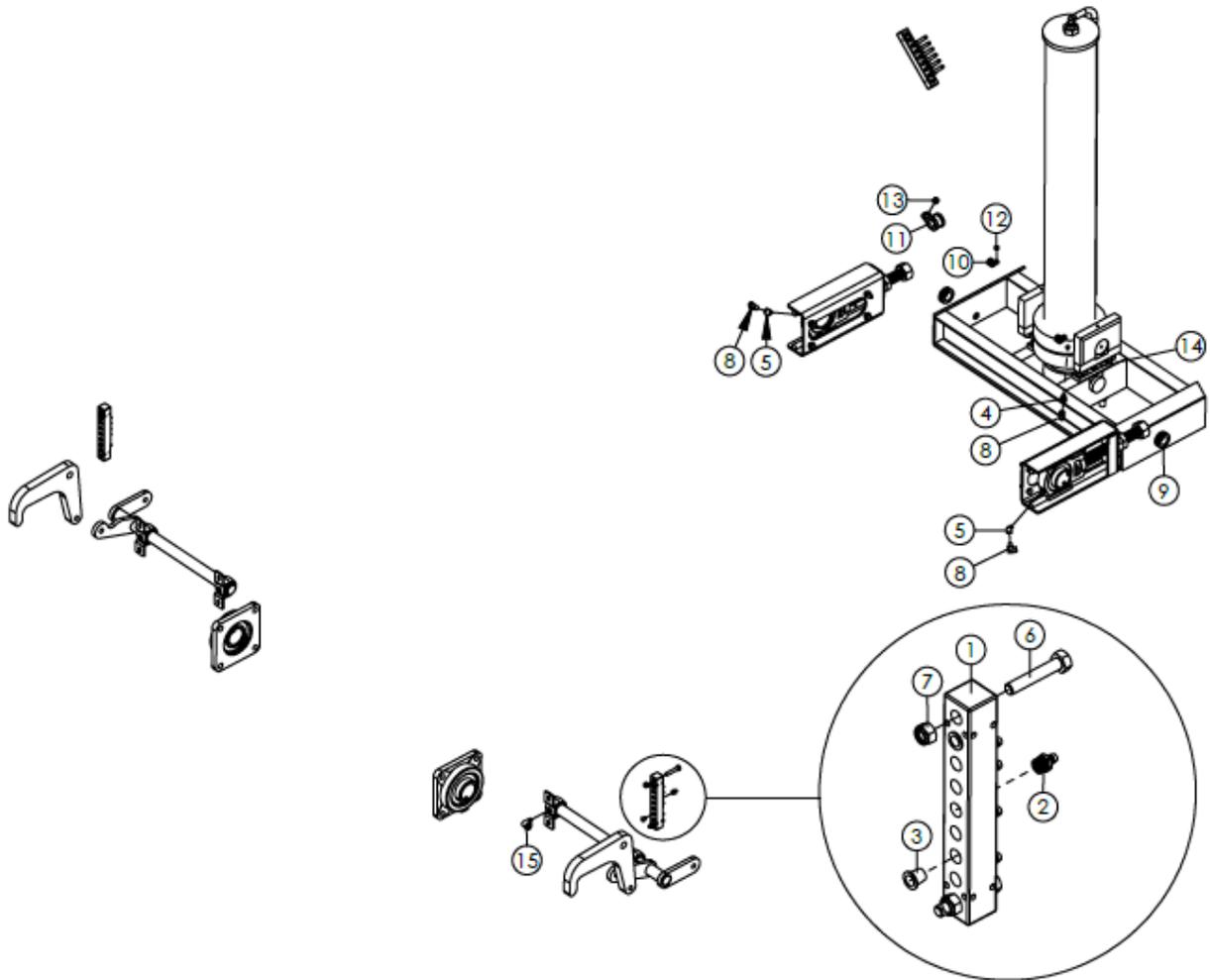


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Ref	Part No.	Qty	Description
1	BON-000028SS	A/R	5/16-18 x 3/4 HEX BOLT SS
2	BON-000302SS	A/R	5/16-18 HEX NUT SS
3	BON-000337SS	A/R	5/16 STD FLAT WASHER SS
4	BON-000351SS	A/R	5/16 MED SPLIT LOCKWASHER SS
5	BON-011898LSS	1	WA - ACCESS COVER, LT SS
6	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 - 13-3/4" LONG (USED ON EARLIER MODELS)
10	BON-013262SS	1	ACCESS PANEL - 12-3/4" LONG
11	BON-006442	1	DECAL - WARNING, HIGH PRESSURE FLUID
12	BON-011375	2	DECAL - WARNING, CRUSH
13	BON-011376	2	DECAL - DANGER, 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	BV2-001680	2	DECAL - DANGER, ENTANGLEMENT HAZARD
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 - WARNING, ROLLOVER CRUSHING
23	BON-012107	1	DECAL - WARNING, TRUNNION BRACKET
24	BON-012427	1	DECAL - SLIDE GATE HEIGHT GAUGE (MCR ONLY)
25	BON-000950	1	MANUAL CANNISTER, SMALL
26	BON-013649	1	MANUAL - MCR OPERATION (NOT SHOWN)
27	BON-013655	1	MANUAL - MCR OPERATION & SERVICE (NOT SHOWN)
28	BON-000320SS	A/R	5/16-18 HEX LOCKNUT SS (NOT SHOWN)
29	BON-013619	1	DECAL - NOTICE, OPERATION HAZARD (MCR ONLY)

FILE NAME	M1033
DWG NAME	M1033 Rev: 07/09/20

GREASE LINE FITTINGS



15	BON-000407	1	PIPE FITTING - 1/8 NPT x 90°
14	BV2-003159	2	1/8 NPT FITTING - 90° FEM x MALE ELBOW
13	BON-000319SS	1	3/8-16 CENTER LOCK LOCKNUT SS
12	BON-000318SS	2	1/4-20 NYLON HEX LOCKNUT SS
11	WAY-25716	1	CABLE CLAMP - 3/4"
10	WAY-25110	2	CABLE CLAMP - 5/8"
9	BON-012467	2	GROMMET
8	5502-02-02	4	1/8 NPTM STREET ELBOW
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	50785K81	2	FITTING -1/8 NPT, 45° FEMALE x MALE ELBOW
4	60SA 02x02	2	MALE PIPE x FEMALE PIPE SWIVEL, 1/8 NPT
3	4491K41	10	1/8 PLASTIC PLUG
2	BON-000652	16	GREASE FITTING - STRAIGHT, 1/8 NPT
1	MI-72012-KA	3	GREASE MANIFOLD, 9 PORT
REF	PART NO.	QTY	DESCRIPTION

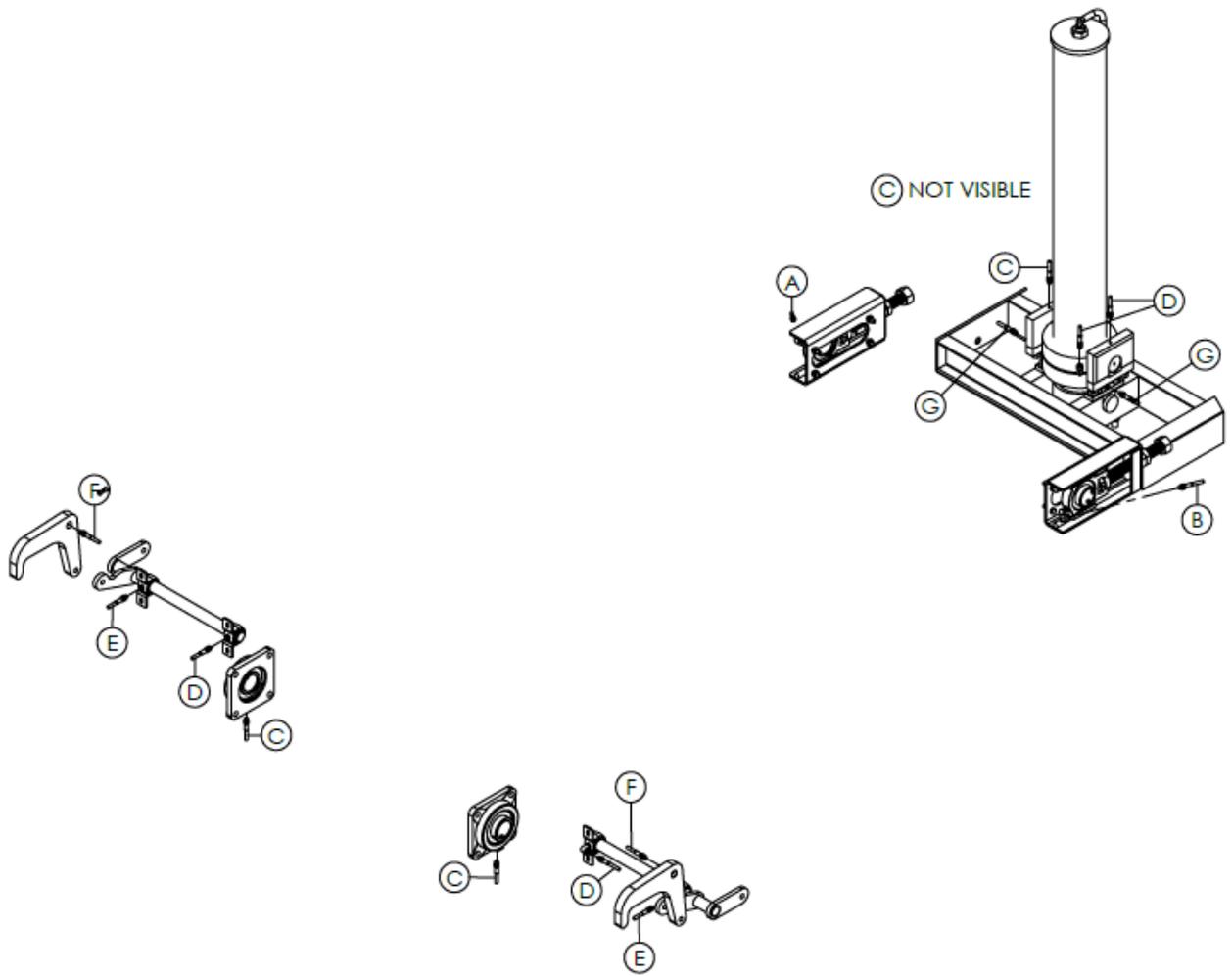
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FILE NAME	M1041
DWG NAME	M1041A Rev: 07/18/19

GREASE LINES



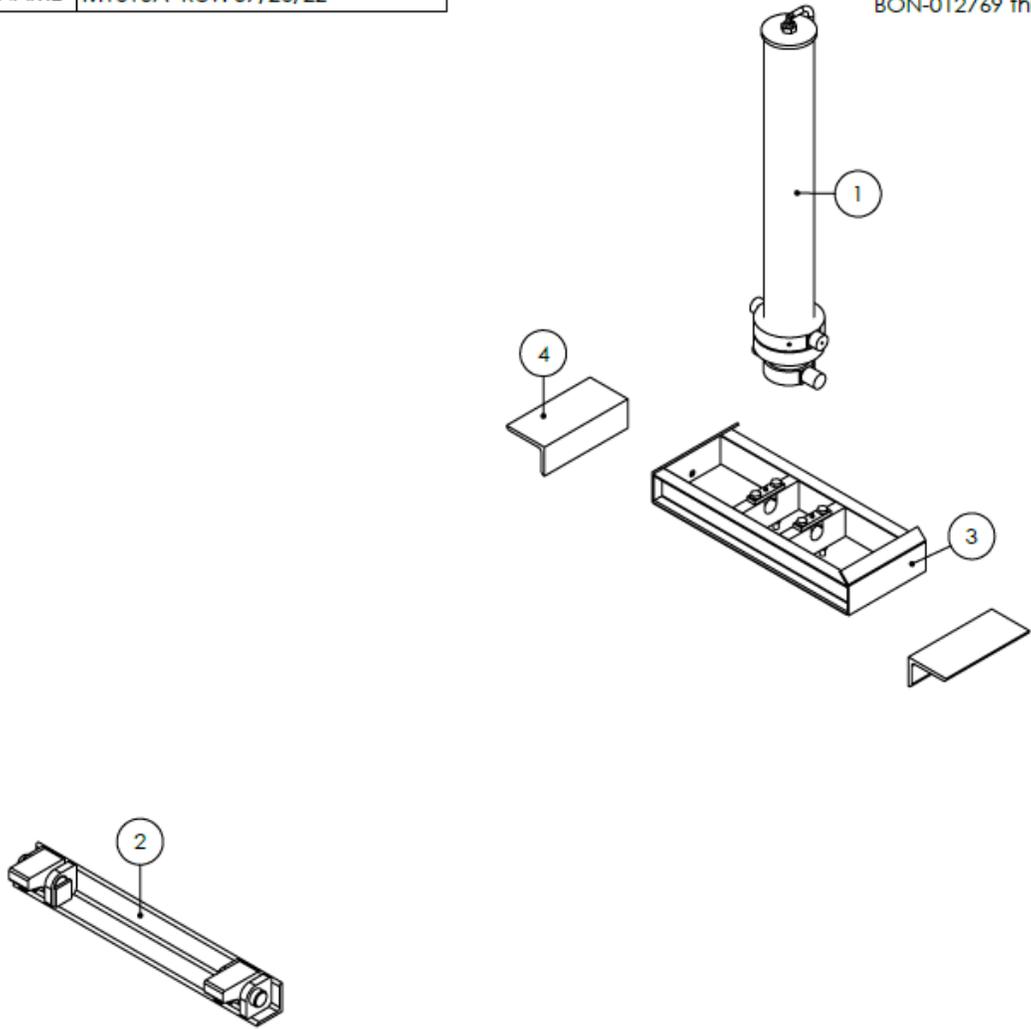
G	BV2-002451	2	GREASE EXTENSION HOSE - 252" (16' model)
	BV2-002420		GREASE EXTENSION HOSE - 240" (15' model)
	BV2-002419		GREASE EXTENSION HOSE - 228" (14' model)
	BV2-002418		GREASE EXTENSION HOSE - 216" (13' model)
	BV2-002417		GREASE EXTENSION HOSE - 204" (12' model)
	BV2-002416		GREASE EXTENSION HOSE - 192" (11' model)
	BV2-002415		GREASE EXTENSION HOSE - 180" (10' model)
	BV2-002414		GREASE EXTENSION HOSE - 168" (09' model)
F	BV2-002404	2	GREASE EXTENSION HOSE - 12"
E	BV2-002406	2	GREASE EXTENSION HOSE - 36"
D	BV2-002405	4	GREASE EXTENSION HOSE - 60"
C	BV2-002407	4	GREASE EXTENSION HOSE - 48"
B	BV2-002408	1	GREASE EXTENSION HOSE - 96"
A	BV2-002430	1	GREASE EXTENSION HOSE - 72"
REF	PART NO.	QTY	DESCRIPTION

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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

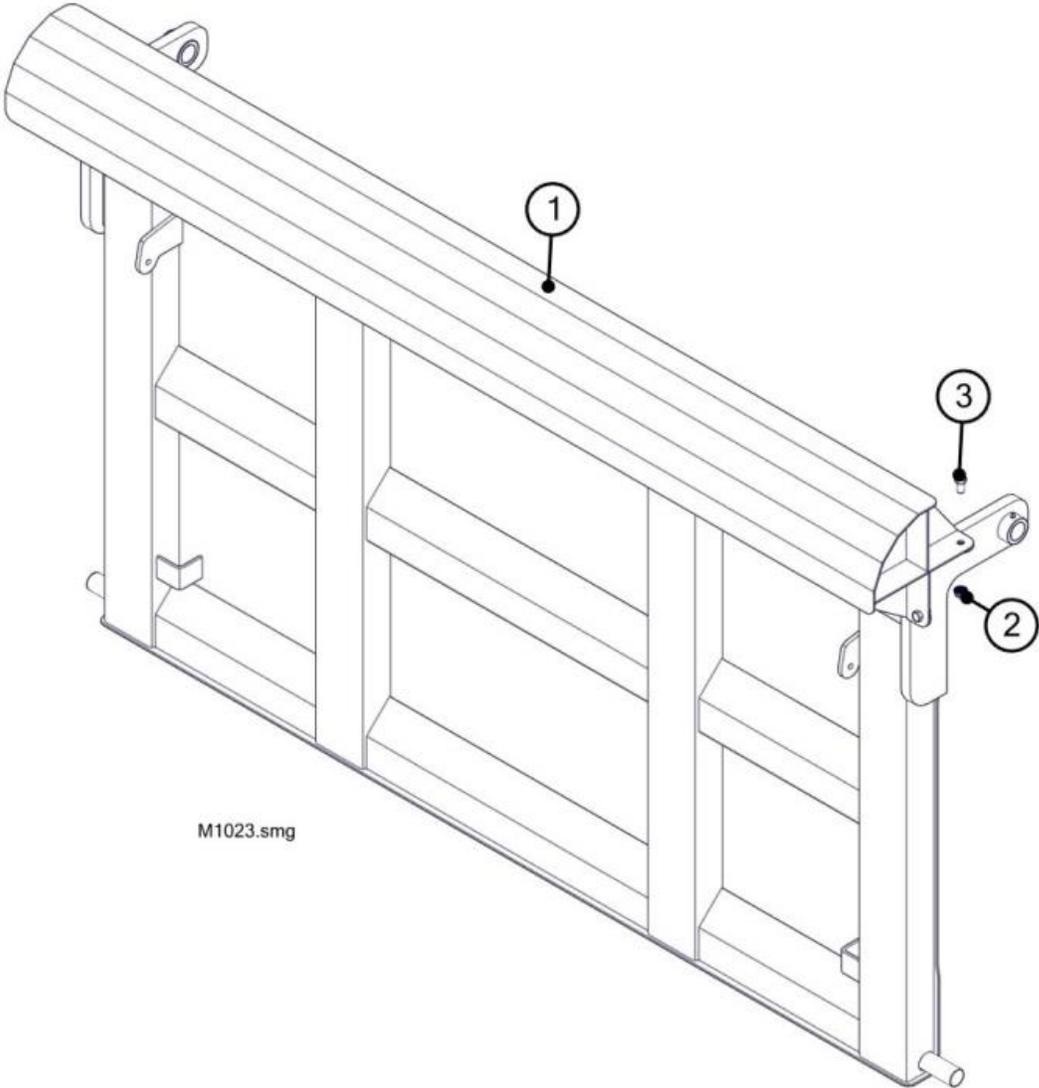
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SERVICE PARTS - ACCESSORIES

AIR FOIL



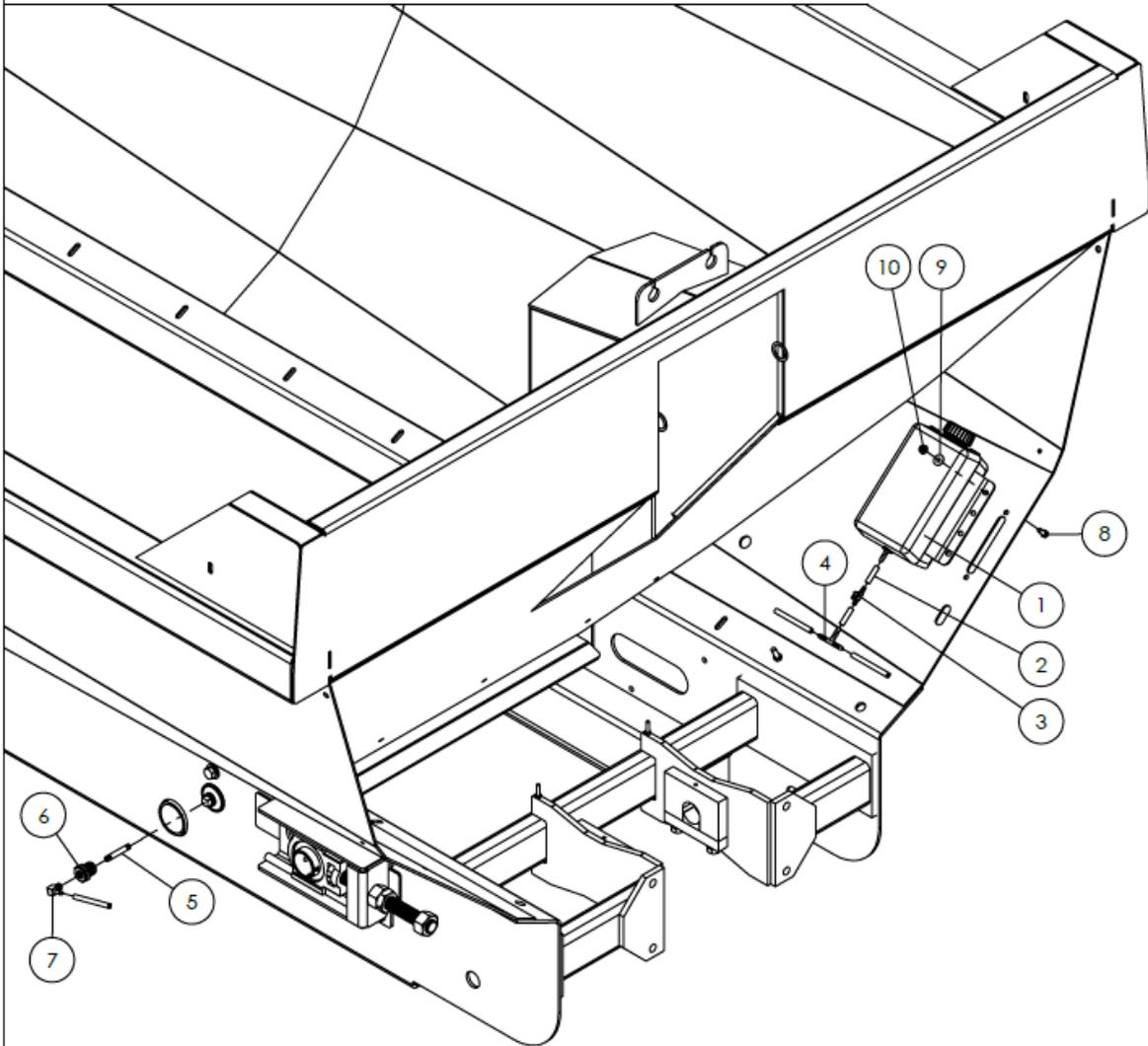
M1023.smg

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

FILE NAME	M1112
DWG NAME	M1112 Rev: 03/15/21

CHAIN OILER
BON-011420



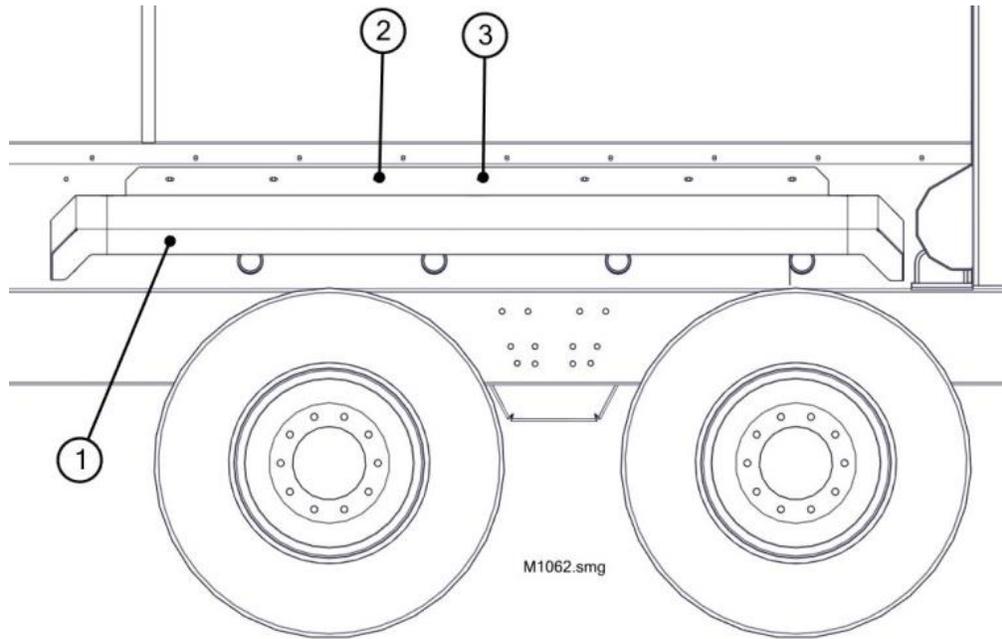
10	BV2-001651	4	5/16-18 SERRATED FLANGE LOCKNUT SS
9	BON-000337SS	4	5/16 STANDARD FLAT WASHER SS
8	BON-000028SS	4	5/16-18 x 3/4" HEX BOLT SS
7	LV-1441	2	1/4" x 1/4" 90° BARB EL
6	RB 075-025	2	PIPE BUSHING - 3/4" x 1/4" POLY
5	BON-000488-2.5	2	PIPE NIPPLE - 1/8 NPT x 2-1/2"
4	BV2-001068	1	1/4" BARB TEE
3	BV2-002398	1	1/4" PVC BALL w/BARBS
2	BV2-001067	A/R	1/4" CLEAR TUBING
1	BV2-002390	1	OIL TANK - 4 QT POLY w/CAP
REF	PART NO.	QTY	DESCRIPTION

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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.

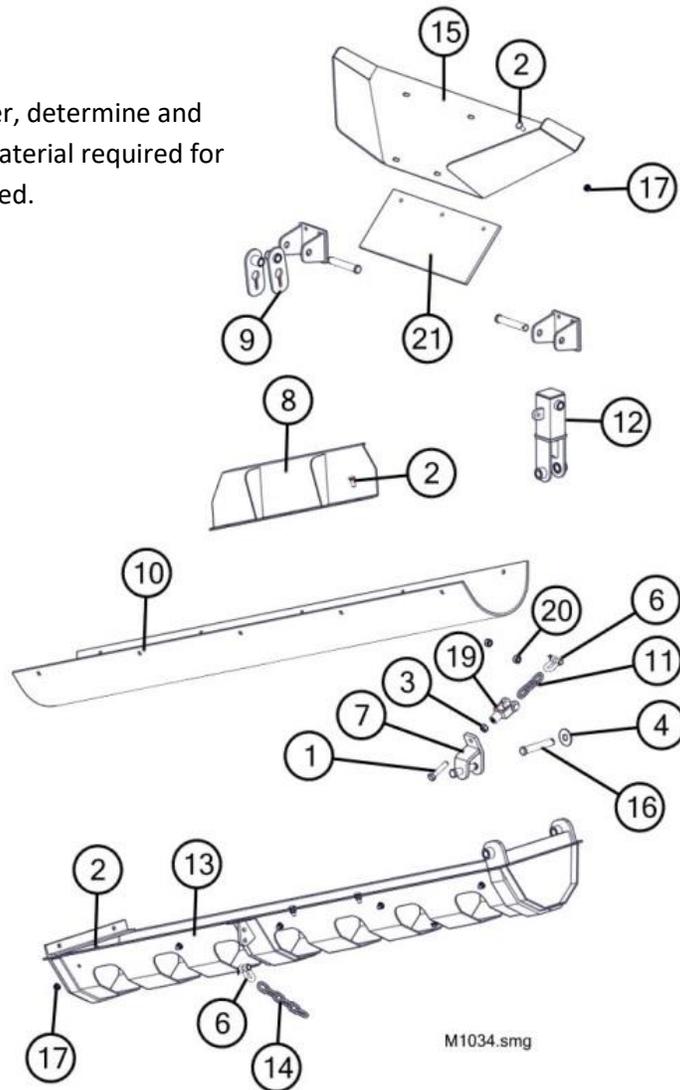
LIGHT KITS

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

GRAVEL CHUTE

BON-013620

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

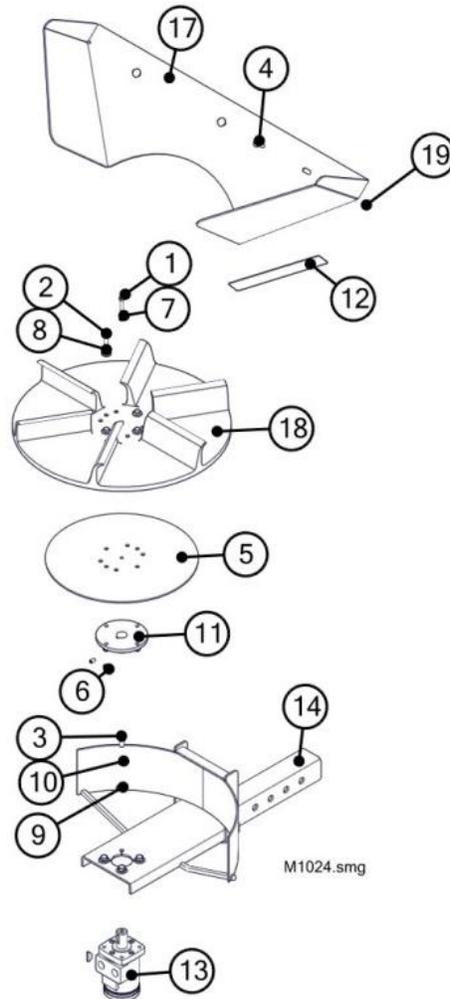


Ref	Part No.	Qty	Description
1	BON-000111FTSS	A/R	1/2-20 x 2-1/2 FULL THREAD HEX BOLT SS
2	BON-000279SS	A/R	3/8-16 x 1 CARRIAGE BOLT SS
3	BON-000305.1SS	A/R	1/2-20 HEX NUT SS
4	BON-000342SS	A/R	3/4 STD FLAT WASHER SS
5	BON-000401	A/R	HAIR PIN - 0.148 DIA x 3
6	BON-000660.6	3	3/8 ANCHOR SHACKLE
7	BON-013605	1	WA - GRAVEL CHUTE CHAIN LUG
8	BON-013607	1	WA - GRAVEL CHUTE BACK GUARD
9	BON-013608	2	WA - GRAVEL CHUTE ADJUSTMENT LUG
10	BON-013609	1	LINER - INNER GRAVEL CHUTE, POLY
11	BON-013611	1	CHAIN - 1/4 GRADE 40, 3 LINKS
12	BON-013612	1	WA - GRAVEL CHUTE PIVOT MOUNT
13	BON-013621	1	WA - COMMANDER GRAVEL CHUTE
14	BON-013622	2	CHAIN - 1/4 GRADE 40, 36 LINKS
15	BON-013623	1	DEFLECTOR - MPB GRAVEL CHUTE
16	BON-020321SS	1	CLEVIS PIN - 3/4 DIA x 4-1/2 SS
17	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
18	WES-93063K	1	PIN - CLEVIS, 3/4 DIA x 3-1/4
19	6071K19	1	FORGED CLEVIS ROD END
20	BON-013645SS	2	SPACER - PIPE, 1/2 SCHD80 x 13/32 SS
21	BON-013624	1	FLAP - RUBBER, 3/8 x 18 x 8

MATERIAL SPREADER

BON-011048

Receiver-style, bottom mounted spinner motor

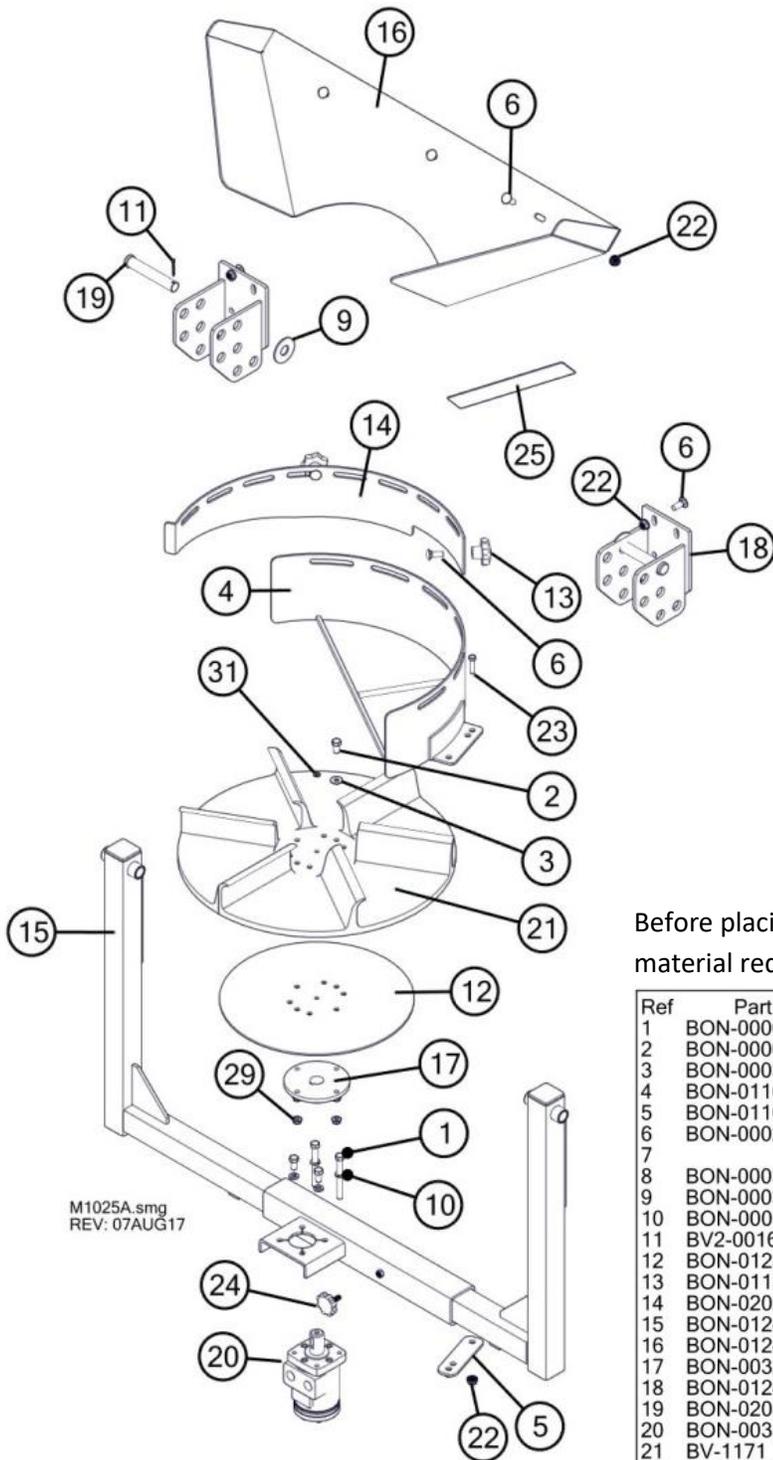


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Ref	Part No.	Qty	Description
1	BON-000006SS	A/R	1/4-20 x 1-1/4 HEX BOLT SS
2	BON-000032SS	A/R	5/16-18 x 1-1/2 HEX BOLT SS
3	BON-000055SS	A/R	3/8-16 x 3/4 HEX BOLT SS
4	BON-000279SS	A/R	3/8-16 x 1 CARRIAGE BOLT SS
5	BON-012838SS	1	DISK - 14" DIA x 10 GA SS
6	BON-000320SS	A/R	5/16-18 HEX NYLON LOCKNUT SS
7	BON-000336SS	A/R	1/4 STD FLAT WASHER SS
8	BON-000337SS	A/R	5/16 STD FLAT WASHER SS
9	BON-000338SS	A/R	3/8 STD FLAT WASHER SS
10	BON-000352SS	A/R	3/8 STD LOCKWASHER SS
11	BON-003298	1	SPINNER MOTOR HUB
12	BON-003300.3	1	DECAL - DANGER, THROWN OBJECT
13	BON-003308N	1	MOTOR - HYDRAULIC, 2.8 CI
14	BON-011049SS	1	WA - MPB RECEIVER-TYPE SPREADER SS
15			
16			
17	BON-012498	1	DEFLECTOR - STD SPREADER
18	BV-1171	1	SPINNER DISK - 20" POLY
19	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS

MATERIAL SPREADER

BON-011645



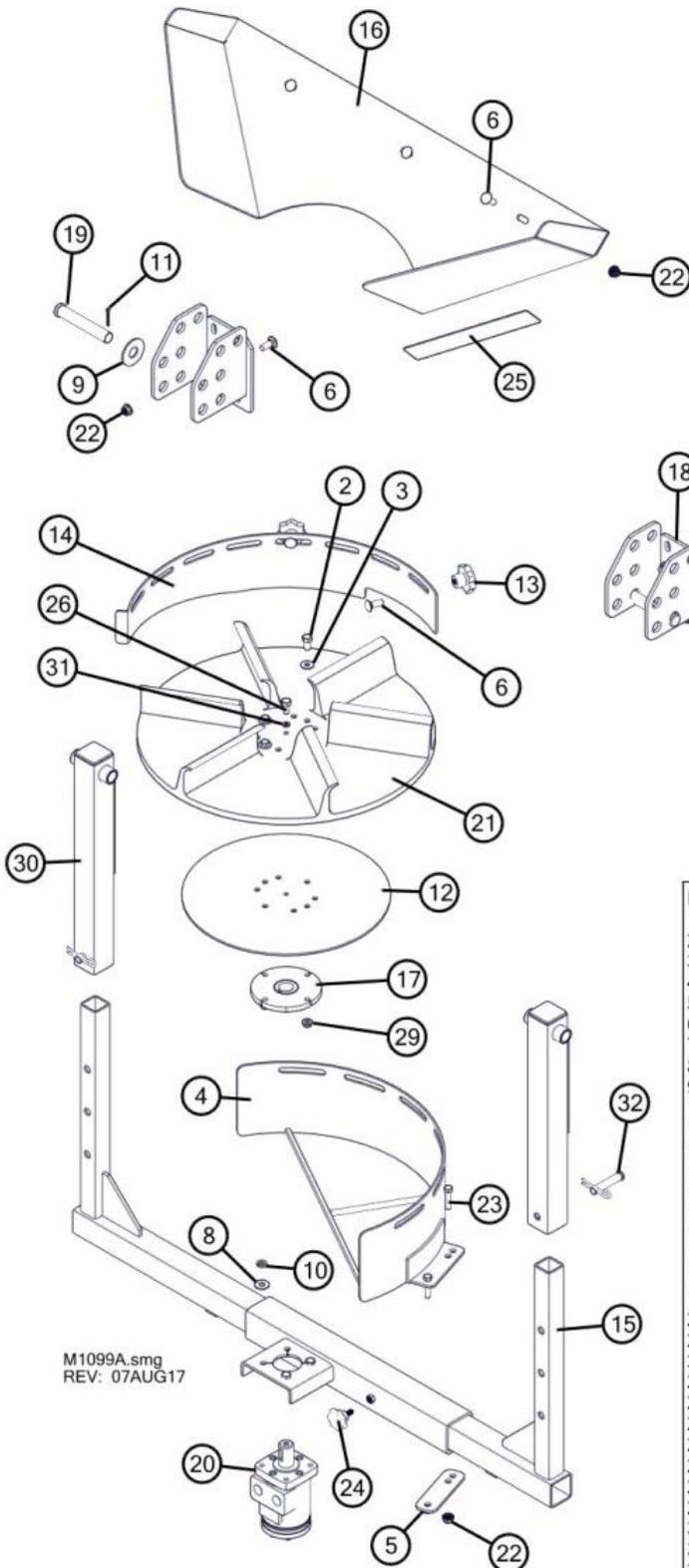
Before placing an order, determine and specify the grade of material required for the service parts needed.

Ref	Part No.	Qty	Description
1	BON-000055SS	A/R	3/8-16 x 3/4 HEX BOLT SS
2	BON-000032SS	A/R	5/16-18 x 1-1/2 HEX BOLT SS
3	BON-000337SS	A/R	5/16 STD FLAT WASHER SS
4	BON-011042	1	WA - SPREADER BAFFLE
5	BON-011043	1	STRAP - 7 GA x 1-1/2 x 5
6	BON-000279SS	A/R	3/8-16 x 1 CARRIAGE BOLT SS
7			
8	BON-000338SS	A/R	3/8 STD FLAT WASHER SS
9	BON-000342SS	A/R	3/4 STD FLAT WASHER SS
10	BON-000352SS	A/R	3/8 STD LOCKWASHER SS
11	BV2-001660	A/R	1/8 x 1 COTTER PIN SS
12	BON-012838SS	1	DISK - 14" DIA x 10 GA SS
13	BON-011317	2	KNOB - 3/8-16 FEMALE
14	BON-020251	1	SPREADER GATE - TAPERED
15	BON-012488	1	WA - MPB SPREADER FRAME
16	BON-012498	1	WA - SPREADER DEFLECTOR PAN
17	BON-003298	1	SPINNER MOTOR HUB
18	BON-012497	2	WA - SPREADER ATTACHMENT BRACKET
19	BON-020321SS	4	CLEVIS PIN - 3/4 x 4-1/2 SS
20	BON-003308N	1	MOTOR - HYDRAULIC, 2.8 CI
21	BV-1171	1	SPINNER DISK - 20" POLY
22	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
23	BON-000069SS	A/R	3/8-16 x 4 HEX BOLT SS
24	LV-1156	1	CONTROL STD FRICTION KNOB
25	BON-003300.3	1	DECAL - DANGER, THROWN OBJECT HAZARD
26			
27			
28			
29	BON-000320SS	A/R	5/16-18 HEX LOCKNUT SS
30			
31	BON-000336SS	A/R	1/4 STD FLAT WASHER SS

MATERIAL SPREADER

BON-011971

Adjustable pedestal-style, bottom mounted spinner motor



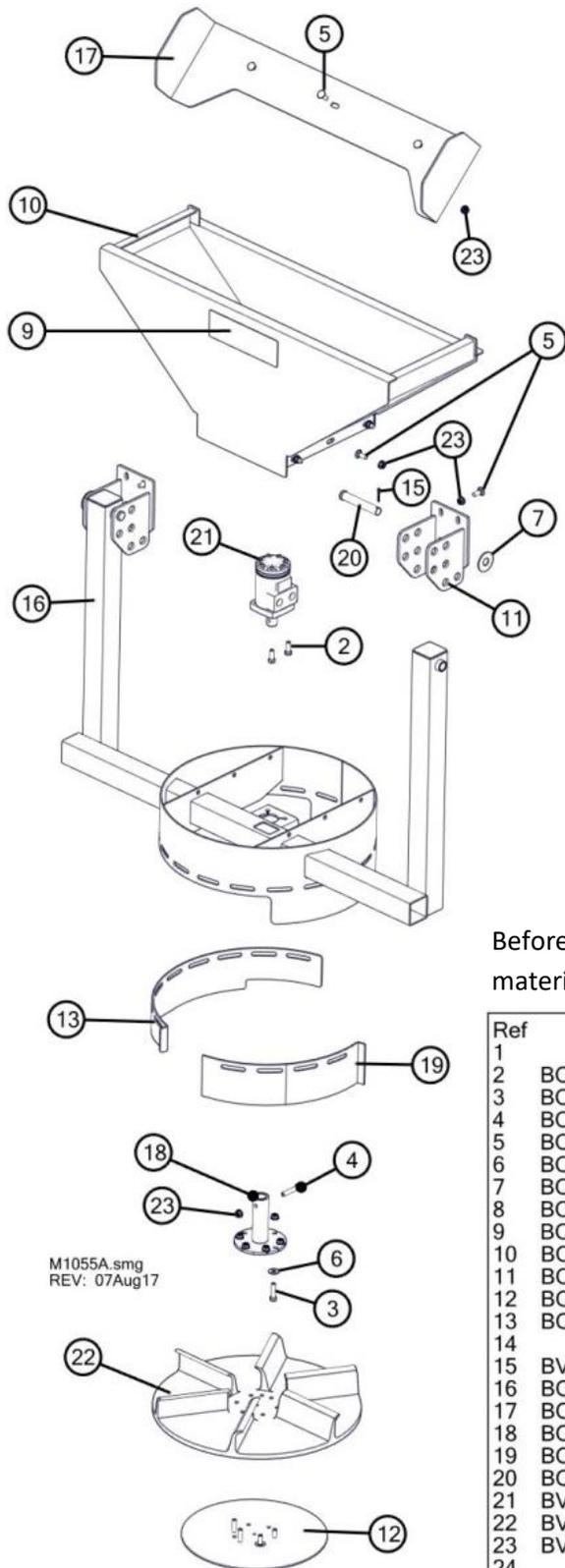
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REV: 07AUG17

Ref	Part No.	Qty	Description
1	BON-000055SS	A/R	3/8-16 x 3/4 HEX BOLT SS
2	BON-000032SS	A/R	5/16-18 x 1-1/2 HEX BOLT SS
3	BON-000337SS	A/R	5/16 STD FLAT WASHER SS
4	BON-011042	1	WA - SPREADER BAFFLE
5	BON-011043	1	STRAP - 7 GA x 1-1/2 x 5
6	BON-000279SS	A/R	3/8-16 x 1 CARRIAGE BOLT SS
7			
8	BON-000338SS	A/R	3/8 STD FLAT WASHER SS
9	BON-000342SS	A/R	3/4 STD FLAT WASHER SS
10	BON-000352SS	A/R	3/8 STD LOCKWASHER SS
11	BV2-001660	A/R	1/8 x 1 COTTER PIN SS
12	BON-012838SS	1	DISK - 14" DIA x 10 GA SS
13	BON-011317	2	KNOB - 3/8-16 FEMALE
14	BON-020251	1	SPREADER GATE - TAPERED
15	BON-011972	1	WA - MPB TELESCOPING SPREADER FRAME
16	BON-012498	1	WA - SPREADER DEFLECTOR PAN
17	BON-003298	1	SPINNER MOTOR HUB
18	BON-012497	2	WA - SPREADER ATTACHMENT BRACKET
19	BON-020321SS	4	CLEVIS PIN - 3/4 x 4-1/2 SS
20	BON-003308N	1	MOTOR - HYDRAULIC, 2.8 CI
21	BV-1171	1	SPINNER DISK - 20" POLY
22	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
23	BON-000067SS	A/R	3/8-16 x 3-1/2 HEX BOLT SS
24	LV-1156	1	CONTROL STD FRICTION KNOB
25	BON-003300.3	1	DECAL - DANGER, THROWN OBJECT HAZARD
26	BON-000006SS	A/R	1/4-20 x 1-1/4 HEX BOLT SS
27			
28			
29	BON-000320SS	A/R	5/16-18 HEX LOCKNUT SS
30	BON-011973	2	WA - UPPER TELESCOPING ARM
31	BON-000336SS	A/R	1/4 STD FLAT WASHER SS
32	BON-011979SS	2	PIN - CLEVIS, 1/2" x 2-1/4" SS

MATERIAL SPREADER

BON-020261

Pedestal-style, top mounted spinner motor



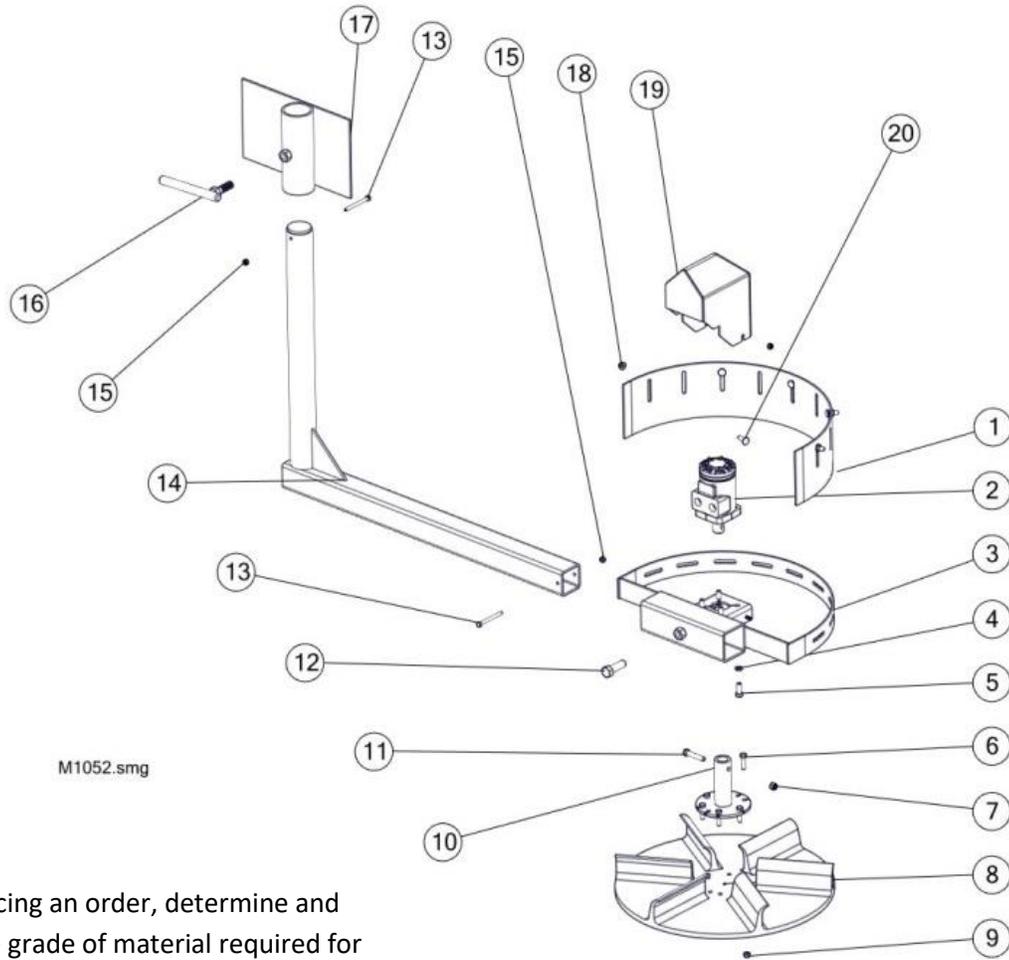
Before placing an order, determine and specify the grade of material required for the service parts needed.

Ref	Part No.	Qty	Description
1			
2	BON-000057SS	A/R	3/8-16 x 1 HEX BOLT SS
3	BON-000058SS	A/R	3/8-16 x 1-1/4 HEX BOLT SS
4	BON-000061SS	A/R	3/8-16 x 2 BOLT SS
5	BON-000279SS	A/R	3/8-16 x 1 CARRIAGE BOLT SS
6	BON-000338SS	A/R	3/8 STD FLAT WASHER SS
7	BON-000342SS	A/R	3/4 STD FLAT WASHER SS
8	BON-000352SS	A/R	3/8 STD LOCKWASHER SS
9	BON-003300.3	1	DECAL - WARNING, THROWN OBJECT
10	BON-011386	1	WA - SPREADER DUMP BOX
11	BON-012497	2	WA - ATTACH BRACKET
12	BON-012838SS	1	DISK - 14" DIA x 10 GA SS
13	BON-020251	1	SPREADER GATE - LONG
14			
15	BV2-001660	A/R	1/8 x 1 COTTER PIN SS
16	BON-020275	1	WA - SPREADER BODY
17	BON-020277	1	WA - SPINNER BOX DEFLECTOR
18	BON-020278	1	WA - SPINNER DRIVE HUB
19	BON-020284	1	SPREADER GATE - SHORT
20	BON-020321SS	4	PIN - CLEVIS, 3/4 x 4-1/2 SS
21	BV-1163	1	MOTOR - HYDRAULIC 2.8 CI
22	BV-1171	1	SPINNER DISK - 20" POLY
23	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
24			

MATERIAL SPREADER

BV2-002580

Retractable pedestal-style, top mounted spinner motor



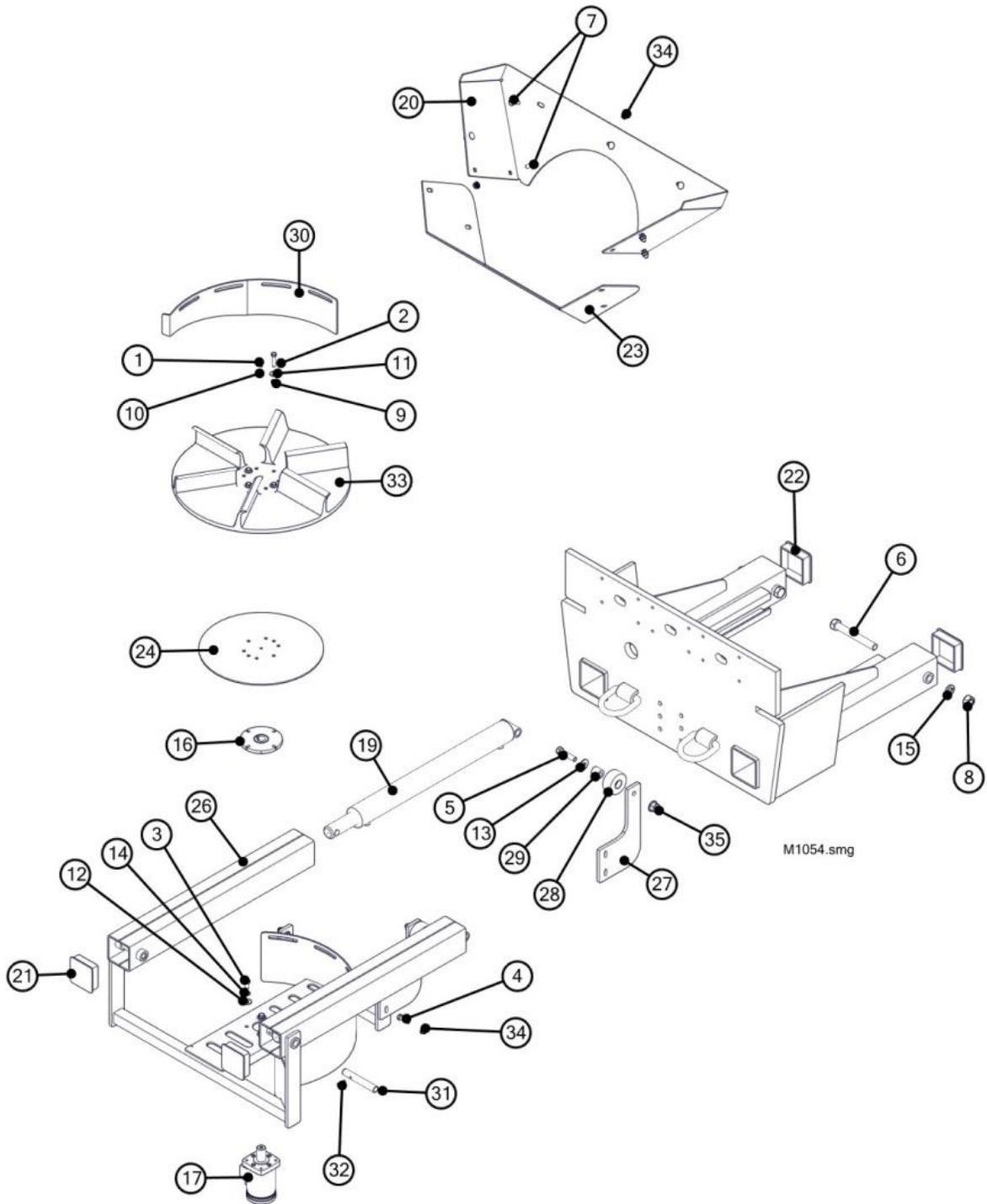
Before placing an order, determine and specify the grade of material required for the service parts needed.

BOM ID	Qty	PartNo (config)	Description (config)
1	1	BV2-002576	POST MOUNTED SPINNER ASSEMBLY, SKIRT SHROUD
2	1	BV-1163	MOTOR-HYDRAULIC
3	1	BV2-002575	POST MOUNTED SPINNER ASSEMBLY, SPINNER BRACKET
4	4	BON-000352SS	STAINLESS LOCK WASHER, 3/8
5	4	BON-000057SS	3/8-16 X 1" BOLT SS
6	6	BON-000031SS	5/16-18 X 1-1/4" BOLT SS
7	1	BON-000319SS	NYLON INSERT LOCKNUT, STAINLESS 3/8-16 UNC
8	1	BV-1171	SPINNER DISC, 20 INCH POLYURETHANE
9	6	BON-000320SS	NYLON INSERT LOCKNUT, STAINLESS 5/16-18 UNC
10	1	BV2-002582	POST MOUNTED SPINNER ASSEMBLY, SPINNER HUB
11	1	BON-000061SS	3/8-16 X 2" BOLT SS
12	1	BV2-001867	5/8-11 X 2" BOLT SS
13	2	BON-000013SS	1/4"-20 X 3" BOLT SS
14	1	BV2-002577	POST MOUNTED SPINNER ASSEMBLY, POST BRACKET
15	4	BON-000318SS	NYLON INSERT LOCKNUT, STAINLESS 1/4-20 UNC
16	1	BV2-002579	POST MOUNTED SPINNER ASSEMBLY, VERTICAL SET SCREW
17	1	BV2-002578	POST MOUNTED SPINNER ASSEMBLY, FRAME BRACKET
18	5	BV2-001651	5/16-18 SERRIATED FLANGE LOCK NUT
19	1	BV2-002581	POST MOUNTED SPINNER ASSEMBLY, MOTOR SHROUD
20	5	BON-000277.5SS	5/18-18TPI X 1" LONG SS BOLT

MATERIAL SPREADER

BON-012867

Retractable receiver-style, bottom mounted spinner motor



MATERIAL SPREADER

Retractable receiver-style, bottom mounted spinner motor

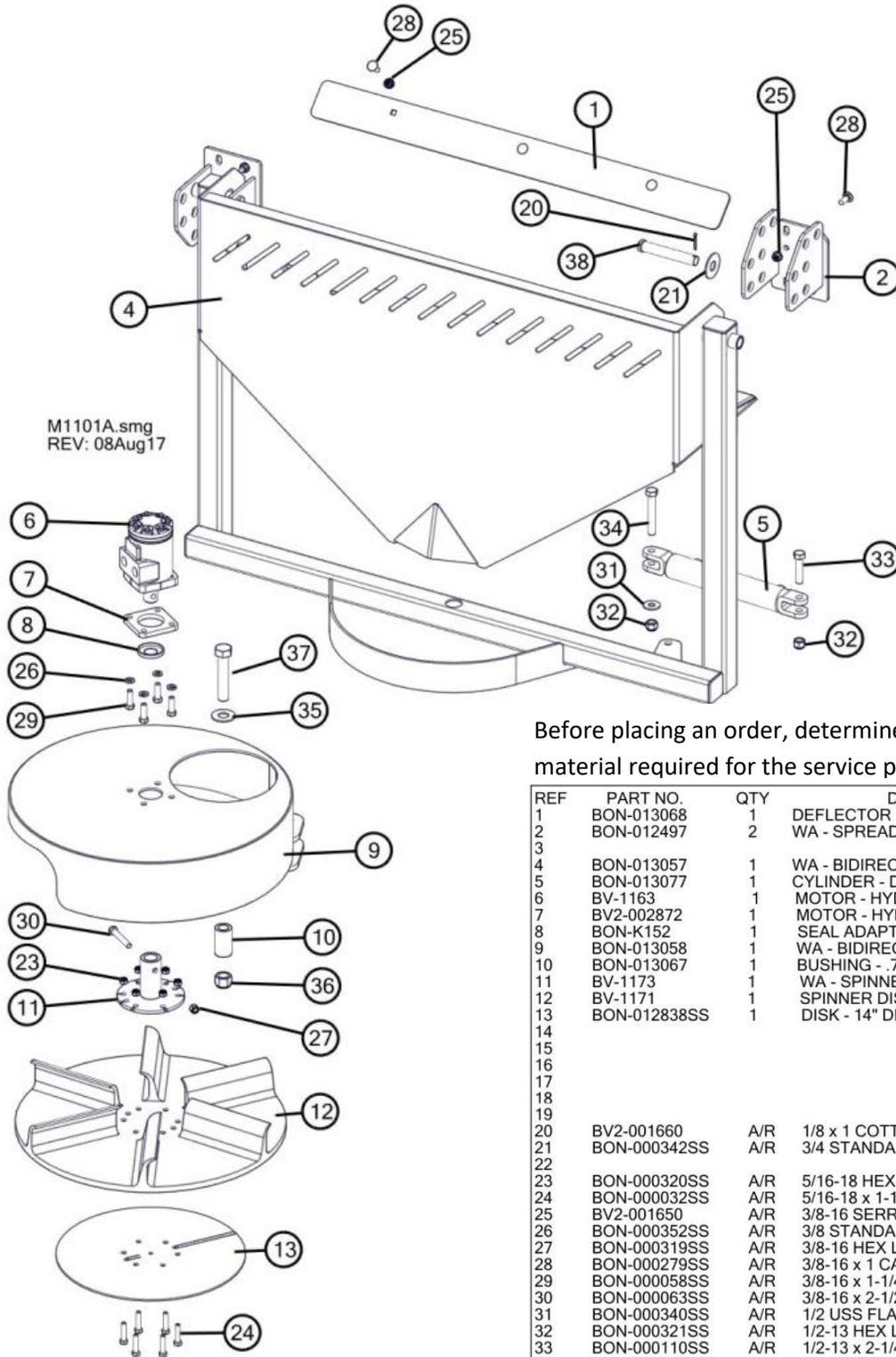
Before placing an order, determine and specify the grade of material required for the service parts needed.

Ref	Part No.	Qty	Description
1	BON-000005SS	A/R	1/4-20 x 1 HEX BOLT SS
2	BON-000032SS	A/R	5/16-18 x 1-1/2 HEX BOLT SS
3	BON-000055SS	A/R	3/8-16 x 3/4 HEX BOLT SS
4	BON-000058SS	A/R	3/8-16 x 1-1/4 HEX BOLT SS
5	BON-000110SS	A/R	1/2-13 x 2-1/4 HEX BOLT SS
6	BON-000194SS	A/R	3/4-10 x 6 HEX BOLT SS
7	BON-000279SS	A/R	3/8-16 x 1 CARRIAGE BOLT SS
8	BON-000308SS	A/R	3/4-10 HEX NUT SS
9	BON-000320SS	A/R	5/16-18 HEX LOCKNUT SS
10	BON-000336SS	A/R	1/4 STD FLAT WASHER SS
11	BON-000337SS	A/R	5/16 STD FLAT WASHER SS
12	BON-000338SS	A/R	3/8 STD FLAT WASHER SS
13	BON-000340SS	A/R	1/2 STD FLAT WASHER SS
14	BON-000352SS	A/R	3/8 STD LOCKWASHER SS
15	BON-000357SS	A/R	3/4 STD LOCKWASHER SS
16	BON-003298	1	SPINNER MOTOR HUB
17	BON-003308N	1	MOTOR - HYDRAULIC, 2.8 CI
18	BON-011317	2	KNOB - 3/8-16 FEMALE
19	BON-012387	2	CYLINDER - 2 x 20 x 1-1/4
20	BON-011058	1	WA - SPREADER DEFLECTOR PAN
21	BON-012535	2	CAP - 3-1/2" SQ END
22	BON-012536	2	CAP - 4" SQ END
23	BON-012547	1	DEFLECTOR
24	BON-012838SS	1	DISK - 14" DIA x 10 GA SS
25			
26	BON-012889	1	WA - SPREADER FRAME
27	BON-012891	2	LINK - 3/8 x 6 x 11-1/8
28	BON-012892S3	2	ROLLER - 2-5/8 x 1-1/4
29	BON-012893	2	BUSHING - BRONZE, 1/2 x 1 x 1
30	BON-012894	1	BAFFLE - ADJUSTABLE SPINNER
31	BON-012896SS	2	PIN - CLEVIS, 3/4 x 4-15/16
32	BON-012897SS	2	PIN - ROLL, 5/16 x 2 SS
33	BV-1171	1	SPINNER DISK - 20" POLY
34	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
35	BV2-001653	A/R	1/2-13 SERRATED FLANGE LOCKNUT SS

MATERIAL SPREADER

BON-013048

Bi-directional pedestal-style, top mounted spinner motor



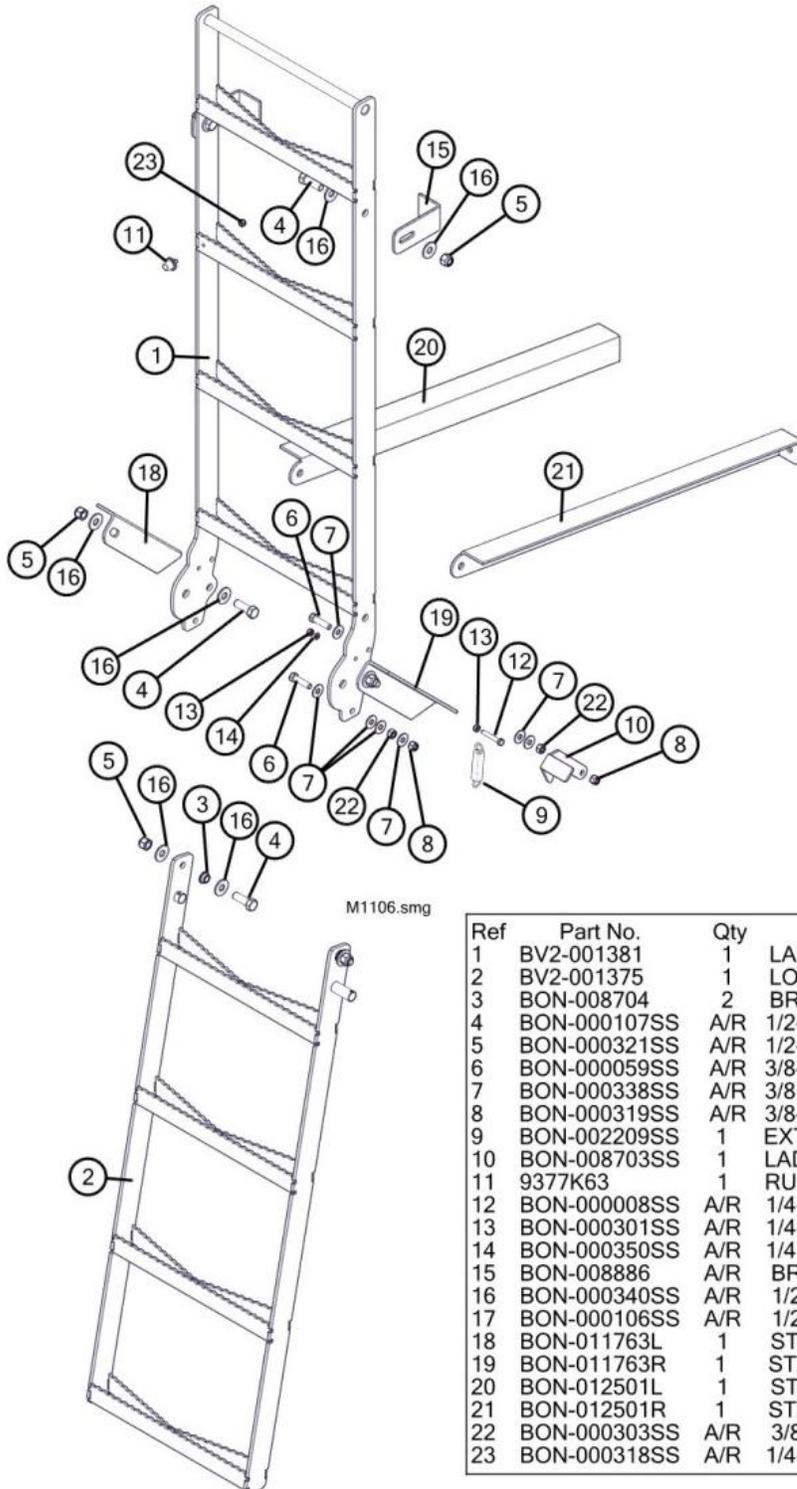
Before placing an order, determine and specify the grade of material required for the service parts needed.

REF	PART NO.	QTY	DESCRIPTION
1	BON-013068	1	DEFLECTOR
2	BON-012497	2	WA - SPREADER ATTACH BRACKET
3			
4	BON-013057	1	WA - BIDIRECTIONAL MATERIAL SPREADER FRAME
5	BON-013077	1	CYLINDER - DA HYDRUALIC, 1-1/2 BORE X 6"
6	BV-1163	1	MOTOR - HYDRAULIC, 2.8 CID
7	BV2-002872	1	MOTOR - HYDRAULIC SEAL SAVER PLATE
8	BON-K152	1	SEAL ADAPTER - K152
9	BON-013058	1	WA - BIDIRECTIONAL SPINNER HOUSING
10	BON-013067	1	BUSHING - .766 x 1-1/4 X 2-1/4
11	BV-1173	1	WA - SPINNER HUB
12	BV-1171	1	SPINNER DISK - 20" POLYURETHANE
13	BON-012838SS	1	DISK - 14" DIA x 10 GA SS
14			
15			
16			
17			
18			
19			
20	BV2-001660	A/R	1/8 x 1 COTTER PIN SS
21	BON-000342SS	A/R	3/4 STANDARD FLAT WASHER SS
22			
23	BON-000320SS	A/R	5/16-18 HEX LOCKNUT NYLON SS
24	BON-000032SS	A/R	5/16-18 x 1-1/2 HEX BOLT SS
25	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
26	BON-000352SS	A/R	3/8 STANDARD LOCKWASHER SS
27	BON-000319SS	A/R	3/8-16 HEX LOCKNUT NYLON SS
28	BON-000279SS	A/R	3/8-16 x 1 CARRIAGE BOLT SS
29	BON-000058SS	A/R	3/8-16 x 1-1/4 HEX BOLT SS
30	BON-000063SS	A/R	3/8-16 x 2-1/2 HEX BOLT SS
31	BON-000340SS	A/R	1/2 USS FLAT WASHER SS
32	BON-000321SS	A/R	1/2-13 HEX LOCKNUT NYLON SS
33	BON-000110SS	A/R	1/2-13 x 2-1/4 HEX BOLT SS
34	BON-000114SS	A/R	1/2-13 x 3-1/2 HEX BOLT SS
35	BON-000342.1SS	A/R	3/4 x 1-3/4 FLAT WASHER SS
36	BON-000323SS	A/R	3/4-10 HEX LOCKNUT NYLON SS
37	BON-000190SS	A/R	3/4-10 x 4 HEX BOLT SS
38	BON-020321SS	4	PIN - CLEVIS, 3/4 x 4-1/2 SS

MUD FLAPS

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

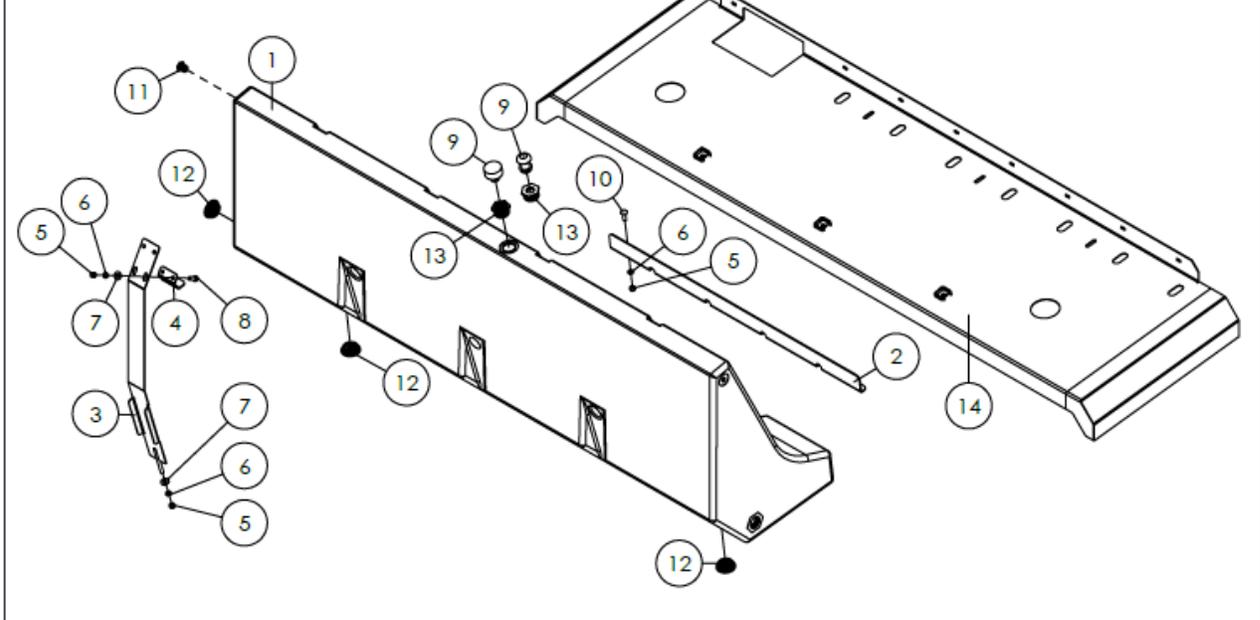
OBSERVATION LADDER



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

BODY LENGTH	125 GALLON LEFT	125 GALLON RIGHT	150 GALLON LEFT	150 GALLON RIGHT	190 GALLON LEFT	190 GALLON RIGHT
16'					BON-012782L	BON-012782R
15'	BON-013420L	BON-013420R	BON-012780L	BON-012780R	BON-012784L	BON-012784R
14'					BON-012783L	BON-012783R
13'						
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

REF	PART NO.	QTY	DESCRIPTION
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

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

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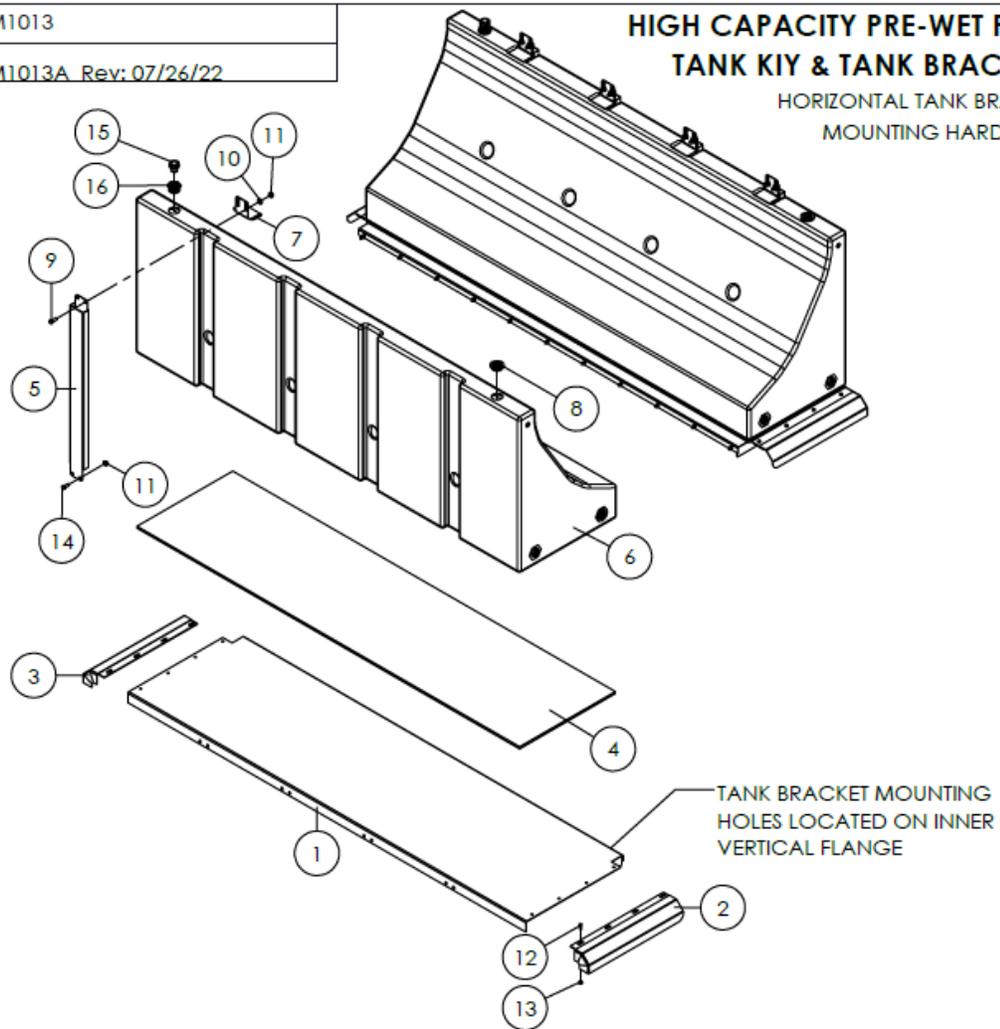


DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	M1013
DWG NAME	M1013A Rev: 07/26/22

HIGH CAPACITY PRE-WET POLY TANK KIY & TANK BRACKETS

HORIZONTAL TANK BRACKET MOUNTING HARDWARE



TANK BRACKET MOUNTING HOLES LOCATED ON INNER VERTICAL FLANGE

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
1	BON-012013	2	MEGA TANK BRACKET (S/N 1057 & below)
	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.

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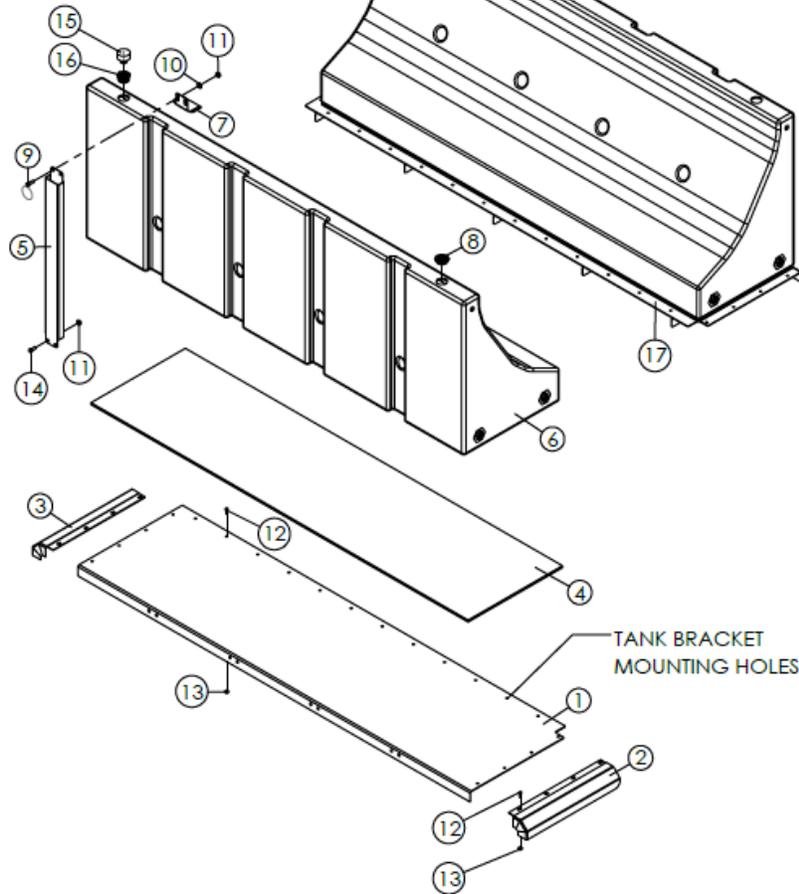
BONNELL INDUSTRIES INC
TRUCK & ROAD EQUIPMENT

DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	M1214
DWG NAME	M1214

HIGH CAPACITY PRE-WET POLY TANK KIY & TANK BRACKETS

VERTICAL TANK BRACKET MOUNTING
HARDWARE



17	BON-020825L	1	MEGA TANK BRACKET,LT
16	RB 200-100	2	2" x 1" POLY PIPE REDUCING BUSHING
15	BSS-001366	2	BREATHING FILTER - 1" NYLON
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-013726	8	MEGA TANK BRACKET
4	BON-011693	2	RUBBER MAT (optional)
3	BON-012527R	2	TANK BRACKET NOSE, RT
2	BON-012527L	2	TANK BRACKET NOSE, LT
1	BON-020825R	1	MEGA TANK BRACKET, RT
REF	PART NO.	QTY	DESCRIPTION

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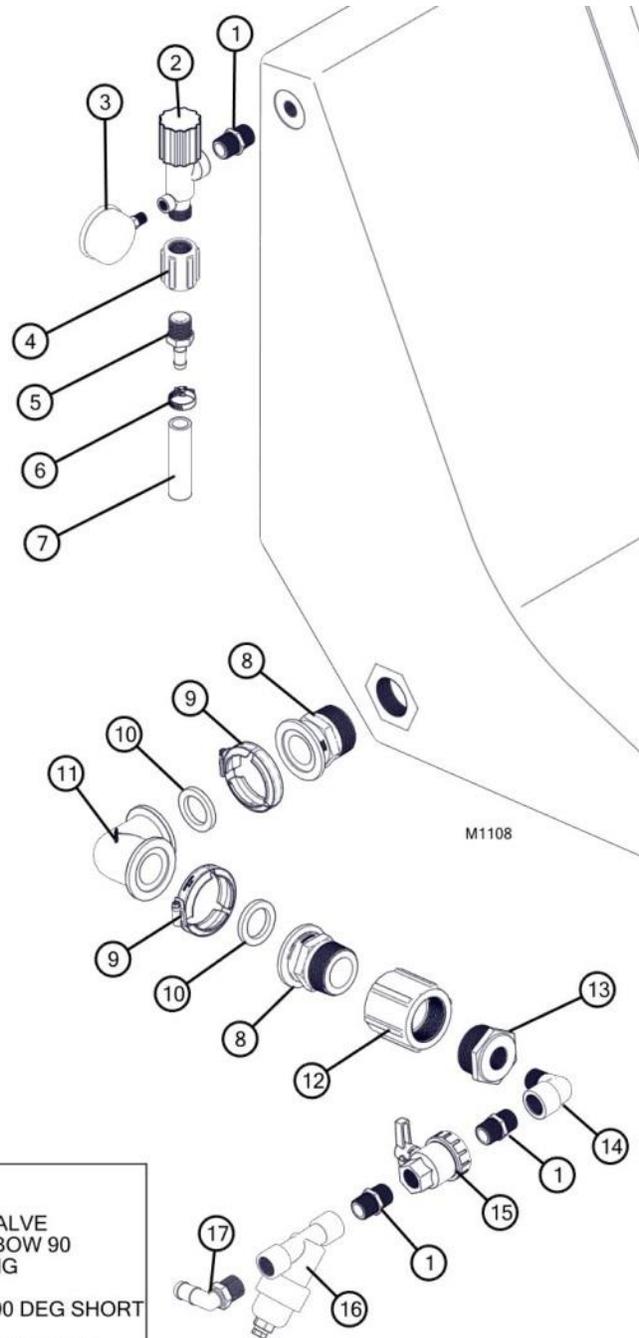


DIXON, ILLINOIS
PHONE: 800-851-9664

PRE-WET HOSE & FITTING KIT

125 – 190 Gallon models shown.

268 Gallon model similar.

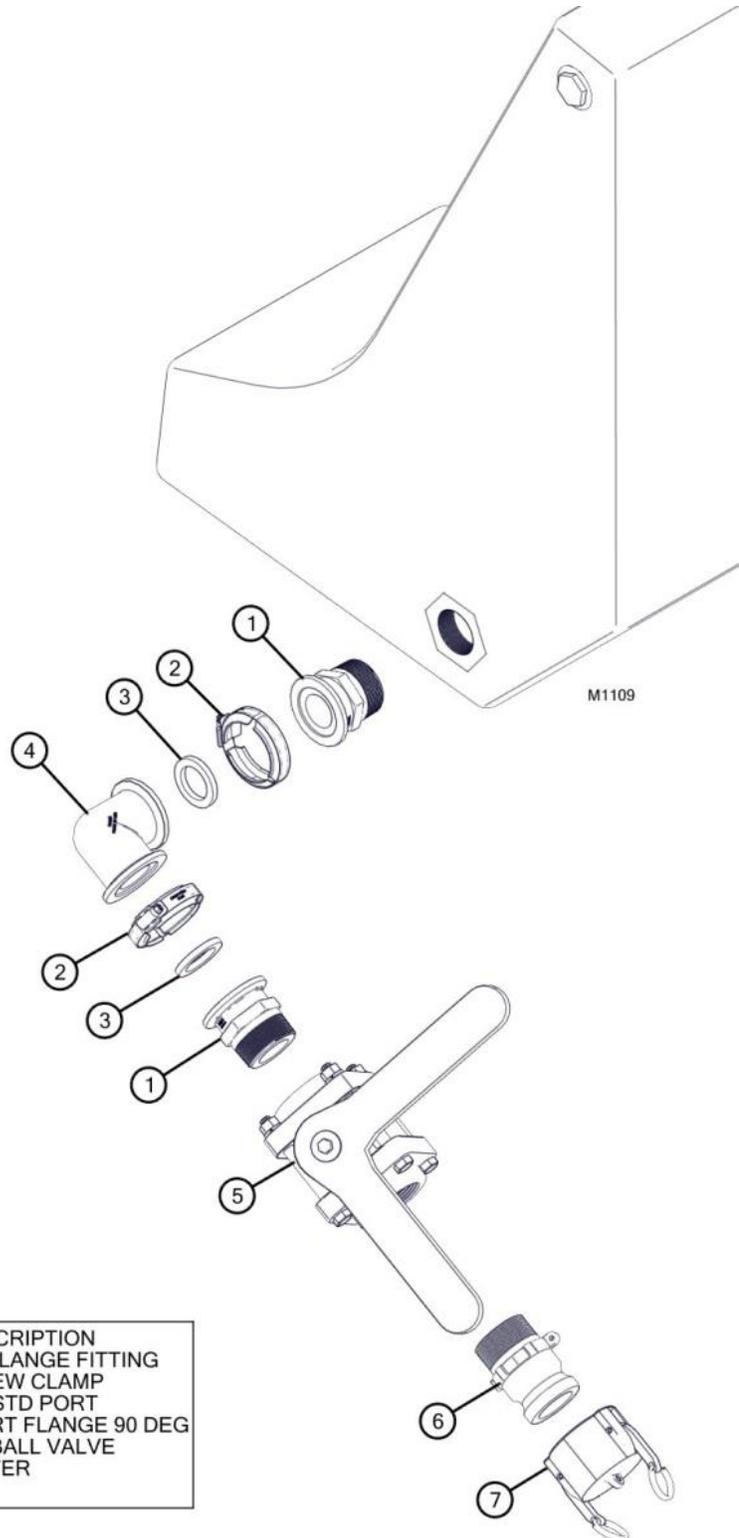


17	HB-075-90	1	3/4" 90 DEG HOSE BARB
16	LS075 80	1	3/4" 80 MESH STRAINER
15	UV075FP	1	3/4" SINGLE UNION POLY VALVE
14	SL075-90	1	3/4" POLY PIPE STREET ELBOW 90
13	RB200-075	1	2" x 3/4" POLY PIPE BUSHING
12	CPLG200	1	2" POLY PIPE COUPLING
11	M200CPG90SH	2	2" x 2" STD PORT FLANGE 90 DEG SHORT
10	150G	8	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.

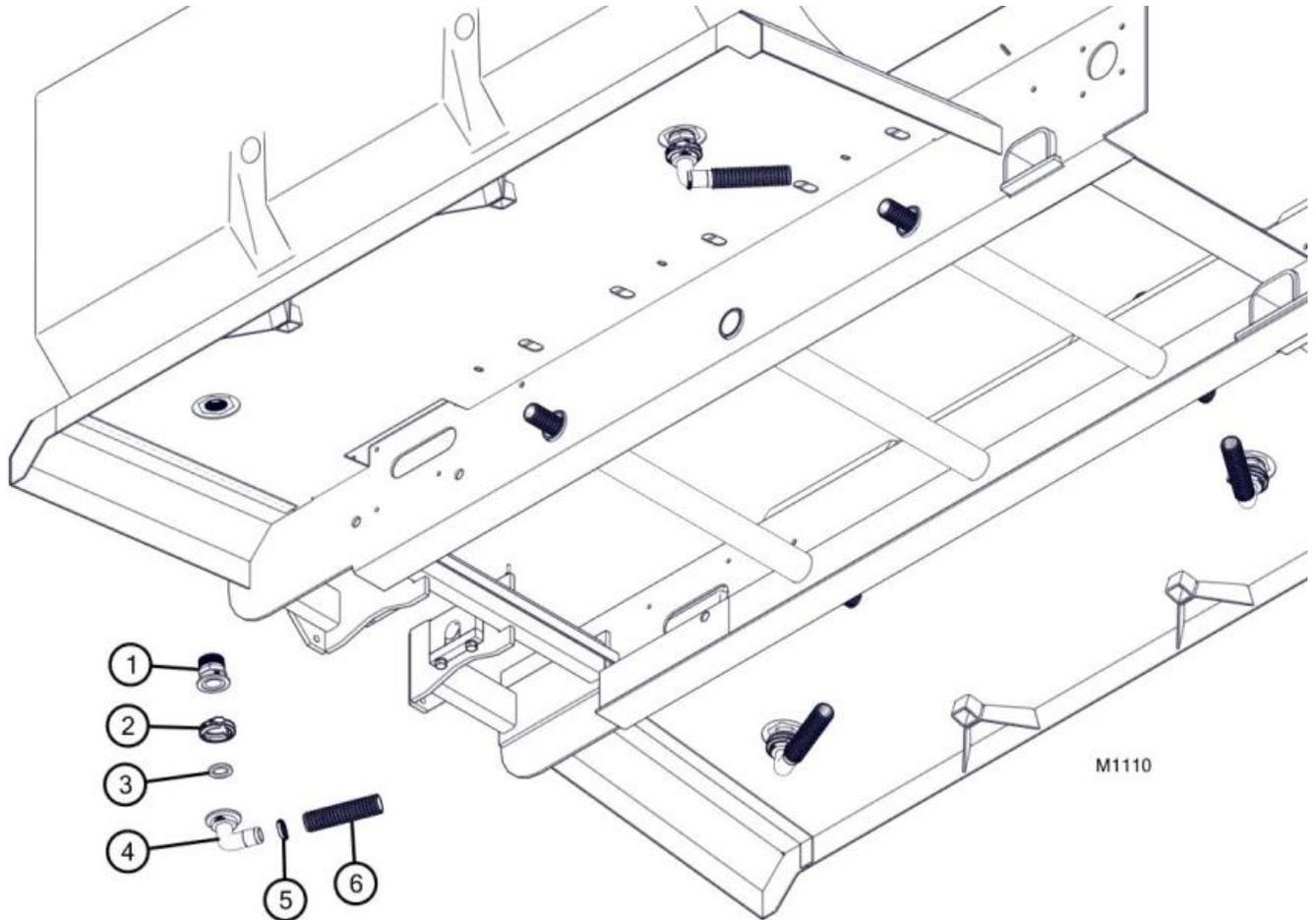


REF	PART NO.	QTY	DESCRIPTION
1	M200MPT	2	2" PIPE TO 2" FLANGE FITTING
2	FC200	2	2" WORM SCREW CLAMP
3	150G	2	GASKET - 200 STD PORT
4	M200CPG90SH	1	2" x 2" STD PORT FLANGE 90 DEG
5	V204FP	1	2" FULL PORT BALL VALVE
6	200F	1	2" MALE ADAPTER
7	200 CAP	1	2" CAP

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

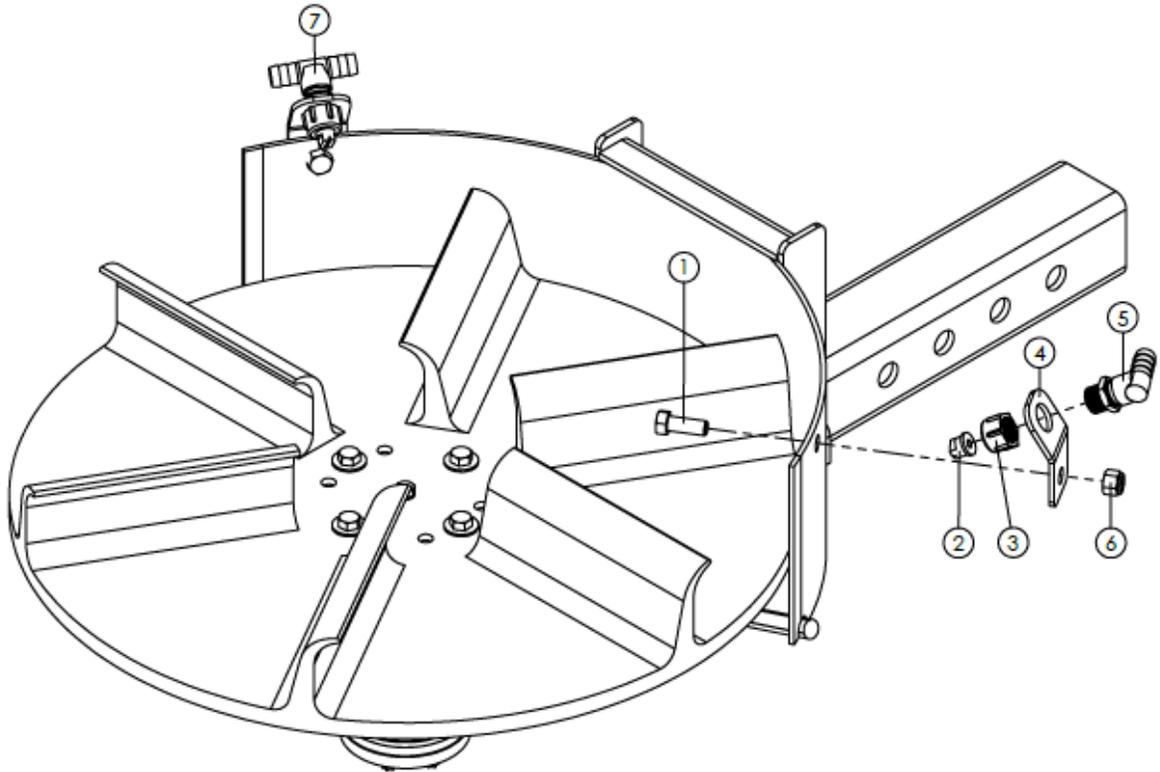
PRE-WET PUMP KIT - electric or hydraulic

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

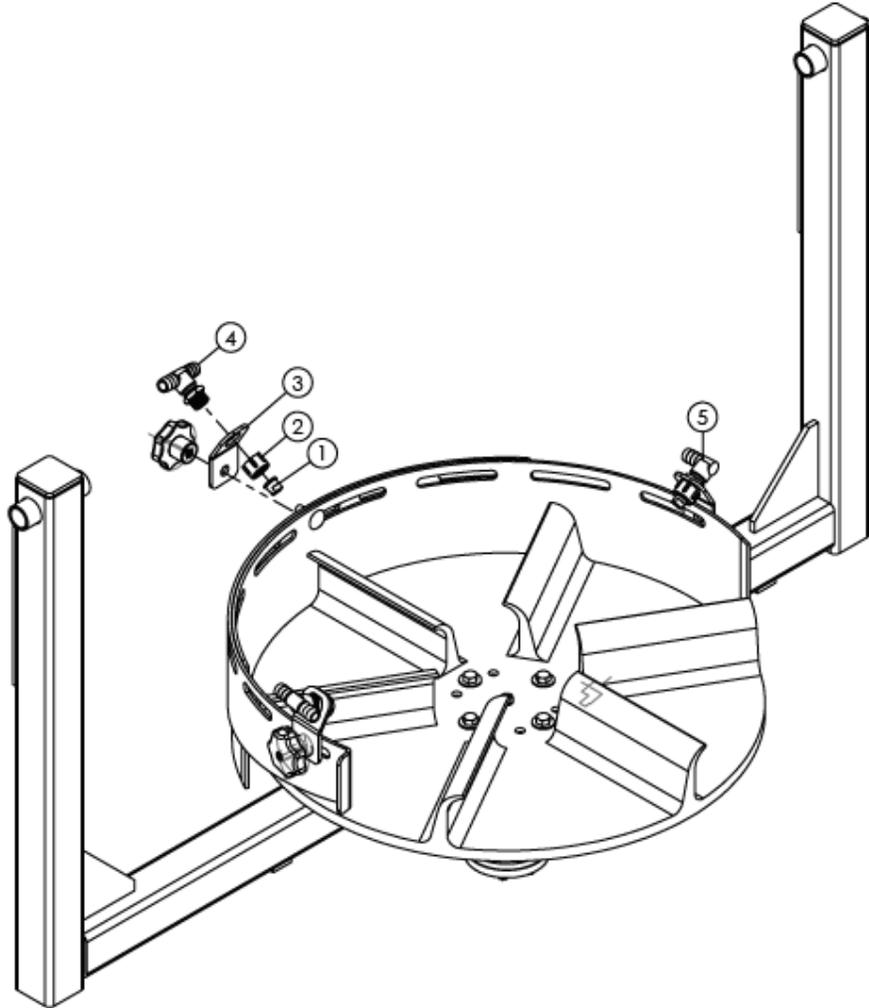
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DIXON, ILLINOIS
PHONE: 800-851-9664

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

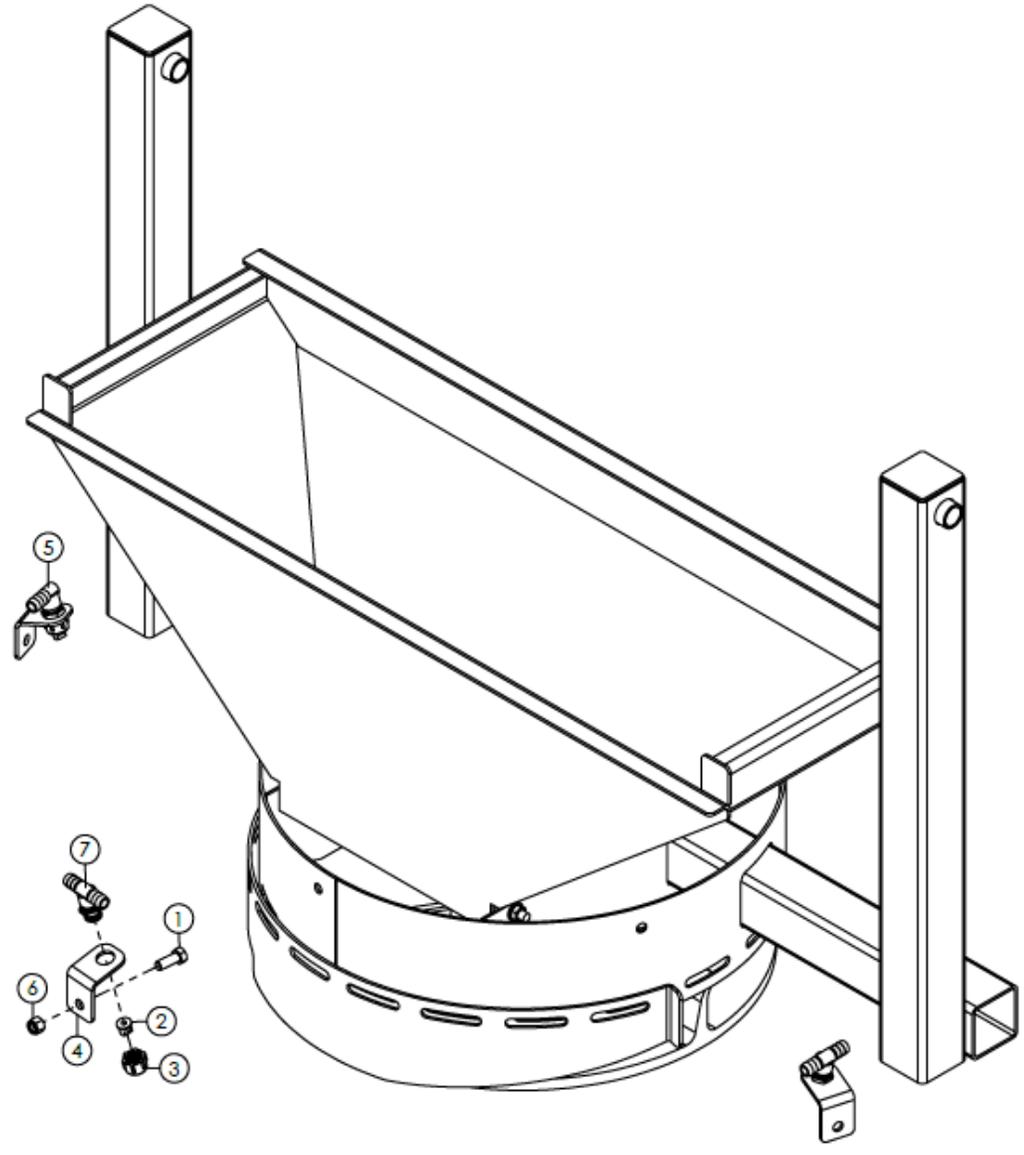
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DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	M1204
DWG NAME	M1204

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



REF	PART NO.	QTY	DESCRIPTION
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

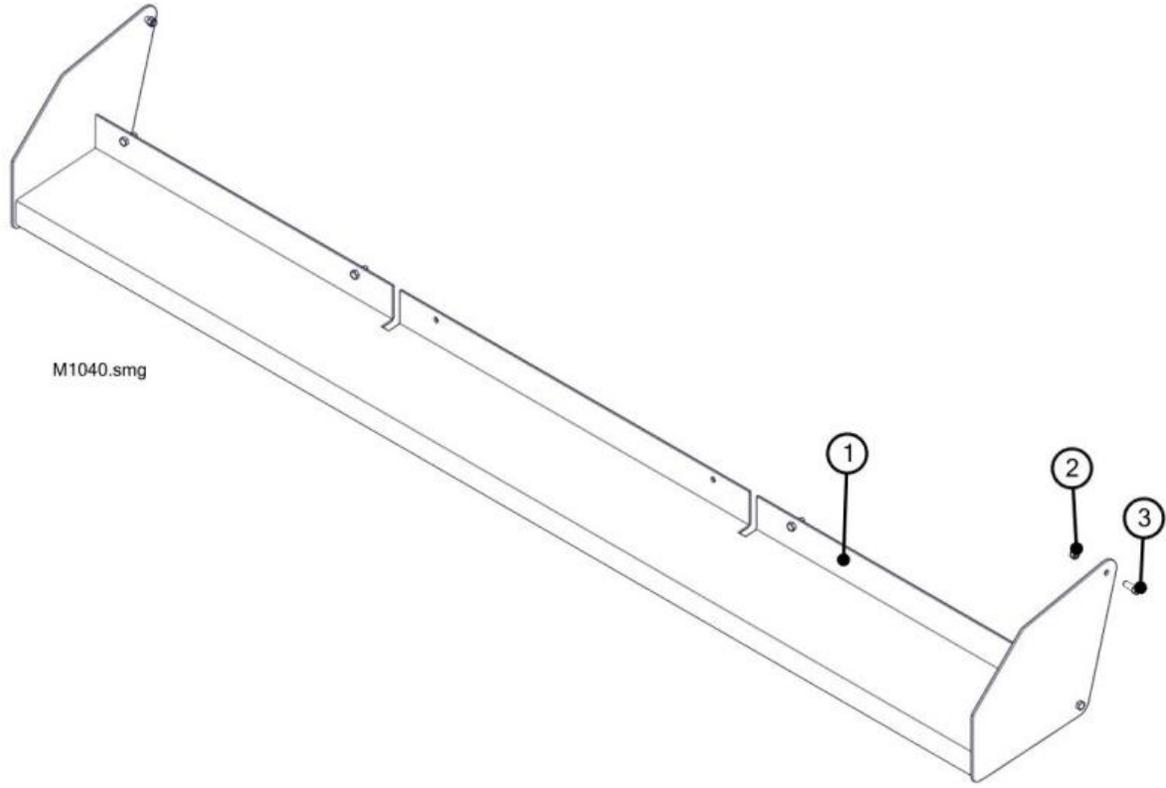
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REAR SPILL PAN

BON-013108 thru BON-013111

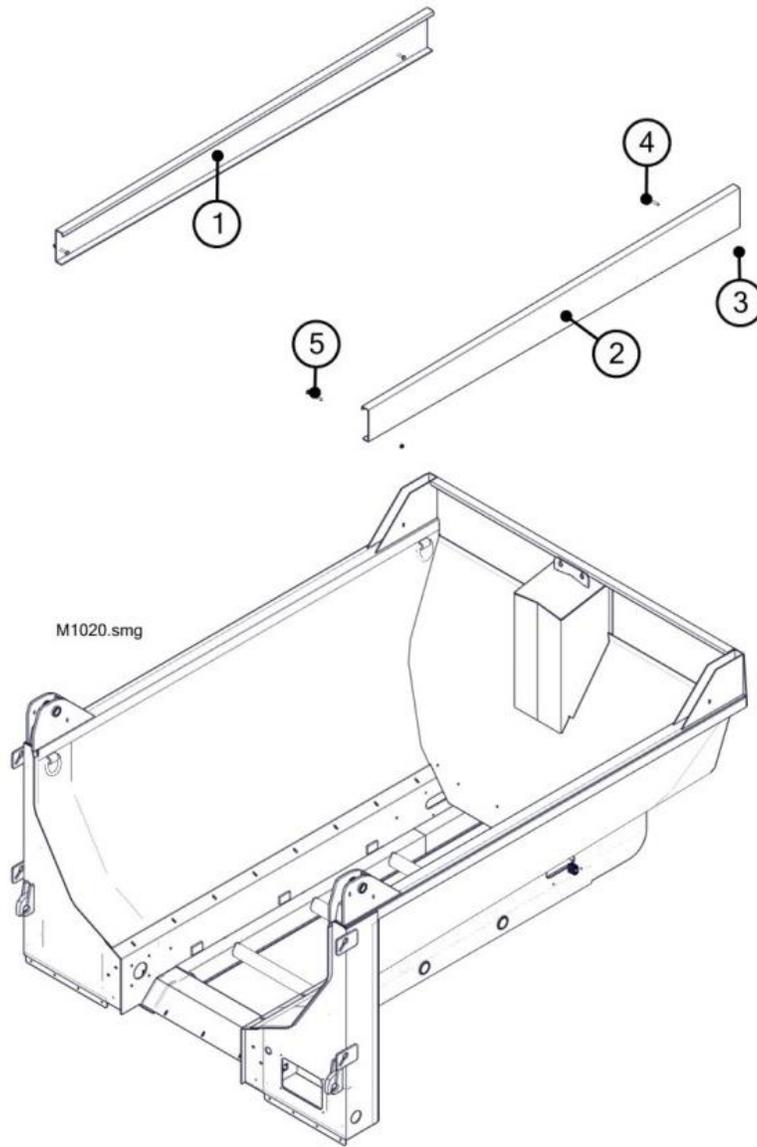


Before placing an order, determine and specify the grade of material required for the service parts needed.

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

BON-012189 thru BON-012196



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

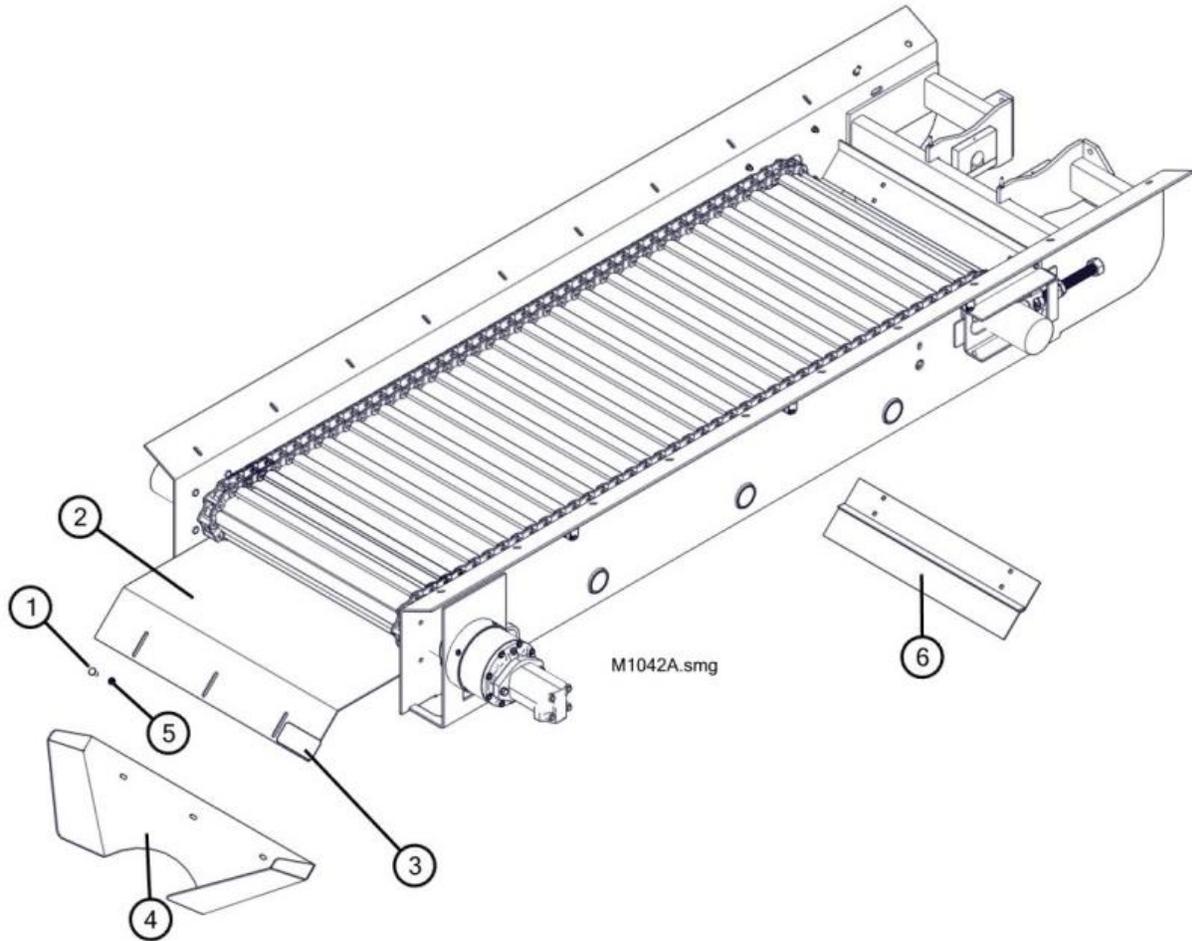
Ref	Part No.	Qty	Description
1	BON-012199L	1	SIDEBOARD - MPB09 METAL, LT
1	BON-012200L	1	SIDEBOARD - MPB10 METAL, LT
1	BON-012201L	1	SIDEBOARD - MPB11 METAL, LT
1	BON-012202L	1	SIDEBOARD - MPB12 METAL, LT
1	BON-012203L	1	SIDEBOARD - MPB13 METAL, LT
1	BON-012204L	1	SIDEBOARD - MPB14 METAL, LT
1	BON-012205L	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.

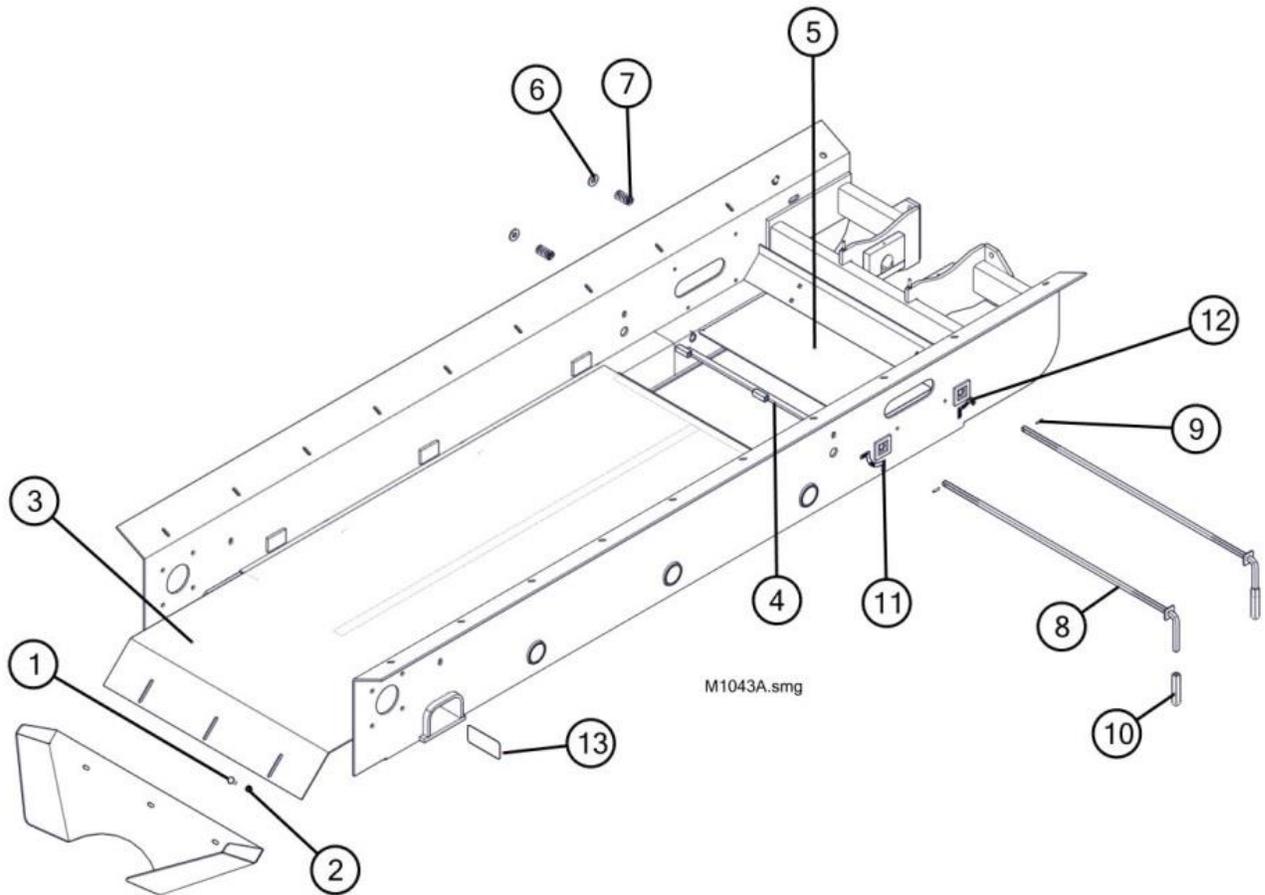
SUB-FLOOR

BON-013089 thru BON-013096



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

Ref	Part No.	Qty	Description
1	BON-000279SS	A/R	3/8-16 x 1 CARRIAGE BOLT SS
2	BON-012719	1	SUBFLOOR - MCR09
2	BON-012720	1	SUBFLOOR - MCR10
2	BON-012721	1	SUBFLOOR - MCR11
2	BON-012722	1	SUBFLOOR - MCR12
2	BON-012723	1	SUBFLOOR - MCR13
2	BON-012724	1	SUBFLOOR - MCR14
2	BON-012725	1	SUBFLOOR - MCR15
2	BON-012726	1	SUBFLOOR - MCR16
3	BON-013619	2	DECAL - NOTICE
4	-----		REAR DIVERTER
5	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
6	BON-012505	1	FRONT RETAINER

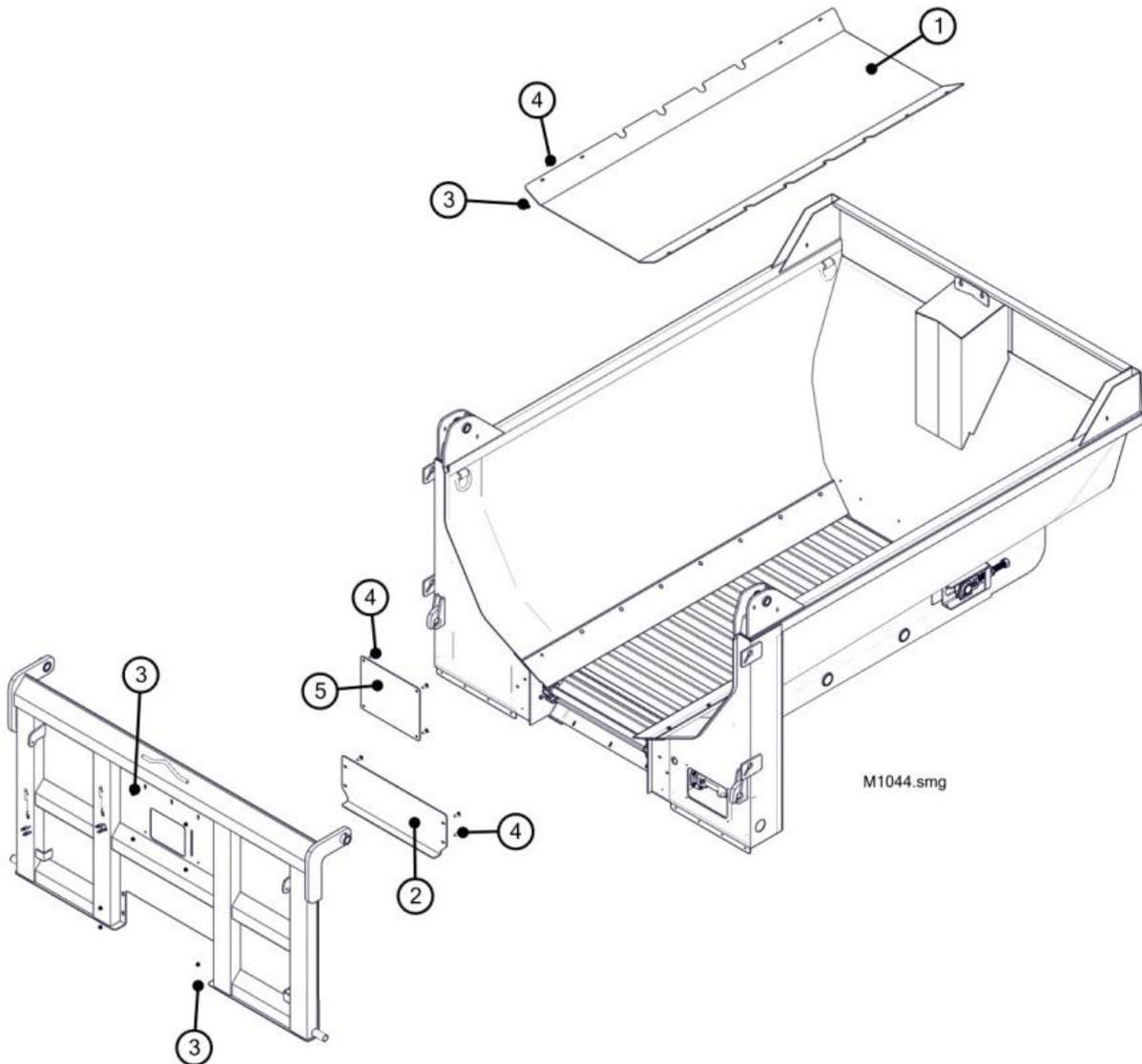


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Ref	Part No.	Qty	Description
1	BON-000279SS	A/R	3/8-16 x 1 CARRIAGE BOLT SS
2	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
3	BON-012679	1	MCR09 SUBFLOOR
3	BON-012680	1	MCR10 SUBFLOOR
3	BON-012681	1	MCR11 SUBFLOOR
3	BON-012682	1	MCR12 SUBFLOOR
3	BON-012683	1	MCR13 SUBFLOOR
3	BON-012684	1	MCR14 SUBFLOOR
3	BON-012685	1	MCR15 SUBFLOOR
3	BON-012686	1	MCR16 SUBFLOOR
4	BON-012503SS	1	CLEANOUT DOOR RETAINER
5	BON-012502SS	1	CLEANOUT DOOR
6	BON-012506SS	2	WASHER - 17/32 SQ x 1-1/2 x 10 GA SS
7	LC-135M-1-S	2	SPRING - COMPRESSION
8	BON-012504SS	2	CLEANOUT DOOR LATCH ROD SS
9	BV2-002355SS	2	3/16 x 1 ROLL PIN SS
10	BON-012852	2	HANDLE GRIP
11	BON-011178	1	DECAL - OPEN/CLOSED LT
12	BON-011179	1	DECAL - OPEN/CLOSED RT
13	BON-013619	1	DECAL - NOTICE, EQUIPMENT DAMAGE

SUMMER COVER

BON-02609 thru BON-012616



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

Ref	Part No.	Qty	Description
1	BON-012569	1	MCR09 CONVEYOR COVER
1	BON-012570	1	MCR10 CONVEYOR COVER
1	BON-012571	1	MCR11 CONVEYOR COVER
1	BON-012572	1	MCR12 CONVEYOR COVER
1	BON-012573	1	MCR13 CONVEYOR COVER
1	BON-012574	1	MCR14 CONVEYOR COVER
1	BON-012575	1	MCR15 CONVEYOR COVER
1	BON-012576	1	MCR16 CONVEYOR COVER
2	BON-011679	1	COVER - LOWER SUMMER (SCREW JACK-STYLE)
2	BON-020280	1	COVER - LOWER SUMMER (RATCHET-STYLE)
3	BV2-001650	A/R	3/8-16 SERRATED FLANGE LOCKNUT SS
4	BON-000285.5SS	A/R	3/8-16 x 1-1/4 CARRIAGE BOLT SS
5	BON-011678	1	COVER - UPPER SUMMER (SCREW JACK-STYLE ONLY)

TARP KIT

Contact Bonnell Industries Service Department for available tarp service components.

FILE NAME	M1200		TOP SCREEN
DWG NAME	M1200		

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

REF	PART NO.	QTY	DESCRIPTION
12	BON-000338SS	2	3/8" STANDARD FLAT WASHER SS (MCR & MCF models)
11	BON-000285.SSS	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.SSS	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

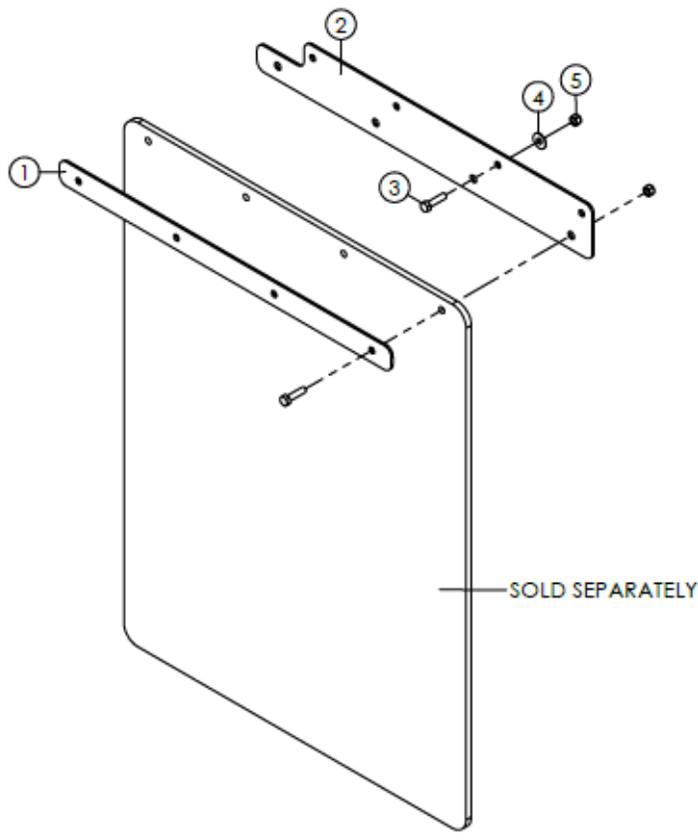
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BONNELL INDUSTRIES INC
TRUCK & ROAD EQUIPMENT
DIXON, ILLINOIS
PHONE: 800-851-9664

FILE NAME	M1201
DWG NAME	M1201

MUD FLAP BRACKETS



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

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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 Industries, Inc.,
located at 1385 Franklin Grove Rd.,
in the city of Dixon, Illinois, U.S.A.

MADE IN THE USA 