

Material Skid Steer Spreader

MODEL: TMG-MSS10



- Please read the product manual completely before assembly
- Check against the parts list to make sure all parts are received
- Wear proper safety goggles or other protective gears while in assembly

Missing parts or questions on assembly?

Please call: 1-877-761-2819 or email: cs@tmgindustrial.com

Do not return the product to dealer, they are not equipped to handle your requests

CONTENTS

Safety Information	3
Safe Operation Needs A Qualified Operator.....	4
Importance of Safety.....	4
Operation	6
General Information.....	6
Pre-Operation Inspection	6
Attachment Inspection	7
Daily Inspection.....	7
Monthly Inspection	7
Attachment Identification.....	8
Attachment Installation	9
Entering The Operator’s Position	9
Leaving The Operator’s Position	9
Connecting the Attachment to the Machine	9
Connecting Hydraulic Hoses.....	10
Disconnecting Hydraulic Hoses	10
Disconnecting the Attachment from the Machine.....	11
Sidewalk Skirt Kit Installation.....	11
Installation	11
Operating The Attachment	12
Machine Requirements	12
Material Gate Adjustment.....	12
Operation.....	12
Maintenance	15
Lubrication	15
Cleaning The Attachment.....	16
Storage And Return To Service	16
Storage	16
Return to Service	17
Attachment Specifications	17
Sidewalk Skirt Kit Dimensions.....	17
Heavy Duty Spreader Dimensions	18
Performance	19
Diagram and Parts List	20

1. Safety Information

SAFETY ALERT SYMBOL

This SAFETY ALERT SYMBOL identifies important safety messages on the equipment and in the owner's manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

DANGER

The signal word DANGER on the machine and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

The signal word WARNING on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

The signal word WARNING on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

The signal word CAUTION on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

IMPORTANT

The signal word IMPORTANT identifies procedures which must be followed to avoid damage to the machine.

1.1 Safe Operation Needs A Qualified Operator

WARNING

AVOID SERIOUS INJURY OR DEATH

Operators must receive instructions before operating the machine. Untrained operators can cause serious injury or death.

For an operator to be qualified, he or she must not use drugs or alcoholic drinks which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine and the equipment.

AVOID SERIOUS INJURY OR DEATH

- Operators must receive instructions before operating the machine. Untrained operators can cause serious injury or death.
- For an operator to be qualified, he or she must not use drugs or alcoholic drinks which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine and the equipment.

1.2 Importance of Safety

Operating Safety

- Read and follow instructions in this manual and the machine's Operator's Manual before operating.
- This equipment is dangerous to persons unfamiliar with its operation.
- Check for overhead and / or underground lines before operating equipment (if applicable).
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.
- Check that the attachment is securely fastened to the machine.
- Make sure all the machine controls are in NEUTRAL before starting the machine.
- Operate the equipment only from the operator's position.
- Operate the equipment according to the Operator's Manual.
- When learning to operate the equipment, do it at a slow rate in an area clear of bystanders.
- Keep all bystanders away from the machine when loading or unloading is being done.
- DO NOT permit personnel to be in the work area when operating the equipment.
- The equipment must be used ONLY on approved machines.

- DO NOT modify the equipment in any way. Unauthorized modification may impair the function and / or safety and could affect the life of the equipment. Affect or void warranty too.
- DO NOT make any adjustments or repairs on the equipment while the machine is running.
- Keep shields and guards in place. Replace if damaged.
- DO NOT operate equipment in poor visibility conditions such as fog, darkness, or any conditions that limit clear visibility less than 300 feet (100 m) in front of and to the sides of the equipment.
- Never attempt to clear obstructions or objects from the heavy duty spreader while the machine is running.
- Escaping hydraulic fluid under pressure can have sufficient force to penetrate skin, causing serious injury. NEVER check for leaks by using any part of your body to feel for escaping fluid.
- DO NOT operate in a work area that has not been inspected for foreign debris and obstacles.
- Remove any foreign objects and clearly mark any objects that cannot be removed.
- Wear safety glasses, gloves, hearing protection and other protective clothing when required.
- The heavy duty spreader should not be used to handle materials other than which were specified as part of its design.
- Stop engine, remove ignition key and wait for all moving parts to stop before servicing, repairing, adjusting or loading.
- Before servicing, make sure the machine has cooled down. Machine components, hoses and fittings can get hot enough to cause serious injury.

Fire Prevention Safety

- Flammable debris (leaves, grass, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it can cause a fire hazard. Clean often to avoid this accumulation.
- The equipment's hydraulic motor compartment must be inspected every day and cleaned if necessary to prevent fire hazards and overheating.
- All fuels, most lubricants and some coolant mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

Transporting Safety

- Comply with state and local laws governing highway safety and movement of machinery on public roads.
- Check local laws for all highway lighting and marking requirements.
- Never allow riders on either machine or equipment.
- If transporting the attachment on a truck or trailer, make sure it is properly secured to the transport vehicle.

Hydraulic System

- Check hydraulic tubes, hoses and fittings for damage and leakage. Never use open flame or bare skin to check for leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps.

Tighten or replace any parts that show leakage.

- Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents

2. Operation

2.1 General Information

Pre-Operation Inspection

Before operating the Spreader for the first time and each time thereafter, use the following list as a guideline during equipment inspection.

WARNING

AVOID SERIOUS INJURY OR DEATH

- Disengage machine's auxiliary hydraulics, engage the machine's parking brake, stop the engine and make sure all rotating components are completely stopped before connecting, disconnecting, adjusting or cleaning equipment.
- Always keep shields and all guards in place when using the equipment.
- Disengage machine's auxiliary hydraulics for road travel.
- Keep hands, feet and clothing away from rotating parts.

- Fully clean the attachment. See "Cleaning The Attachment" on page 15.
- Lubricate the attachment per the schedule outline in the Maintenance Section. See "Lubrication" on page 14.
- Check the spreader mounting frame for damage or cracks.
- Check that all shields and guards are in place.
- Check all components on the spreader for wear and damage. Replace any parts that are worn or damaged.
- Check for damaged or missing safety decals. Replace if necessary.
- Inspect the machine's mounting frame. (See the machine's Operator's Manual for inspecting the mounting frame).

WARNING



Leaking fluids under pressure can enter the skin and cause serious injury or death. Immediate medical attention is required. Wear goggles. Use cardboard to check for leaks.

- Check condition of all hydraulic components for leaks. Repair as required.

NOTE: Do not operate with hydraulic leaks.

- Verify that the spreader is properly connected to the machine.

2.2 Attachment Inspection

Daily Inspection

NOTE: Inspect the attachment by performing a walk around daily before and after use. Use the following inspection checklist as a guideline.

Check the following items every 10 hours of operation:

- Verify that the spreader is properly connected to the machine.
- Check that all shields and guards are in place.
- Check hydraulic lines, connections and fittings for hydraulic oil leaks. Replace if necessary.
- Check for debris or material build up in the hopper. Clean if needed.
- Check that the material gates open and close and can be locked.
- Check that the spreader disc is not bent or damaged.
- Check that the spreader blades are not worn or damaged.

Repair or replace any worn or damaged parts.

Monthly Inspection

- Check the spreader mounting hardware for wear or damage. Inspect the pins and mount (on the attachment) for wear or damage.
- Check the auger, agitator wheel and agitator fingers for wear or damage.
- Check for loose bolts and tighten if necessary.
- Inspect the spreader for cracks, bends, or damage.
- Check for damaged or missing decals.
- Check for damaged or leaking hydraulic hoses or fittings.
- Lubricate as required.

Repair or replace any worn or damaged parts.



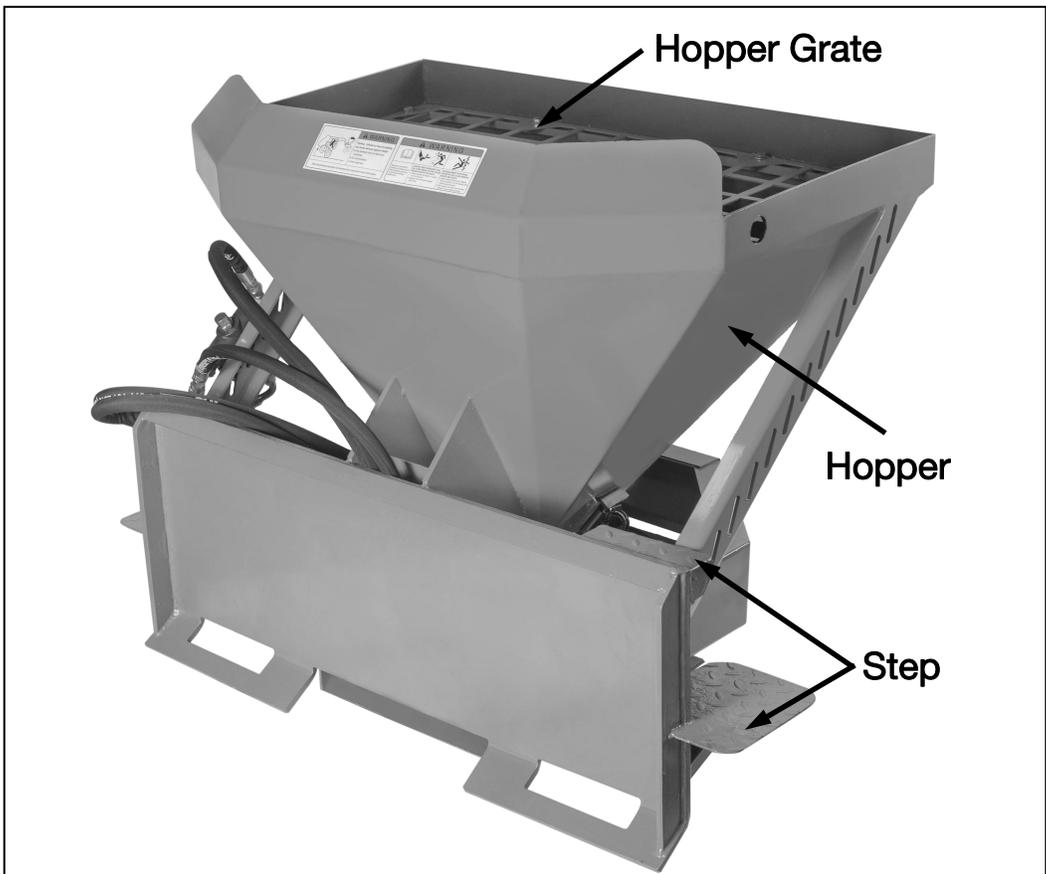
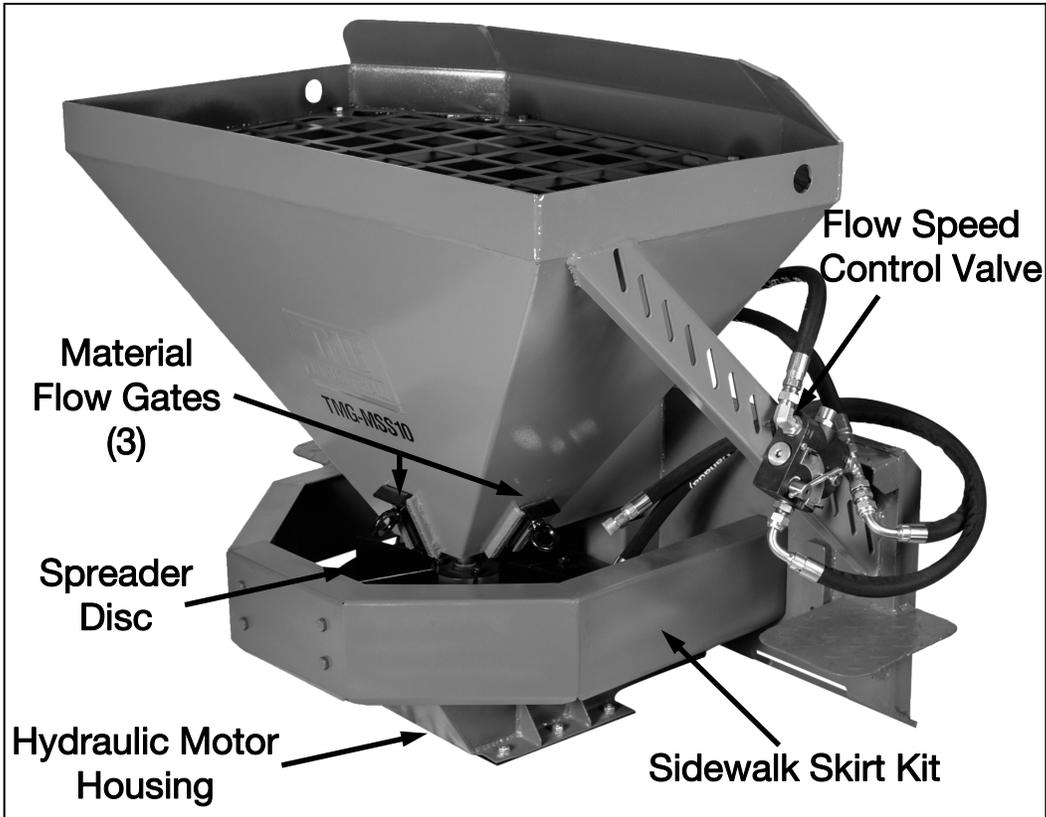
WARNING **AVOID SERIOUS INJURY OR DEATH**

Before servicing the attachment:

- Always park on a flat level surface.
- Lower the attachment and place attachment flat on the ground.
- Place all controls in NEUTRAL.
- Engage the park brake.
- Wait for all moving parts to stop.
- Stop the engine and remove the key.

SEE MACHINE'S OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

2.3 Attachment Identification



2.4 Attachment Installation



! IMPORTANT

See the machine's Operator's Manual for detailed information on operating the loader.

Entering The Operator's Position

Use the attachment safety treads, handles and steps (on the machine) to enter the operator's position.

When in the operator's position, lower safety seat bar (if equipped), fasten the seat belt, start the engine and release the parking brake.

Leaving The Operator's Position

! WARNING

AVOID SERIOUS INJURY OR DEATH

Before servicing the attachment:

- Always park on a flat level surface.
- Lower the attachment and place attachment flat on the ground.
- Place all controls in NEUTRAL.
- Engage the park brake.
- Wait for all moving parts to stop.
- Stop the engine and remove the key.

! WARNING

CRUSH HAZARD

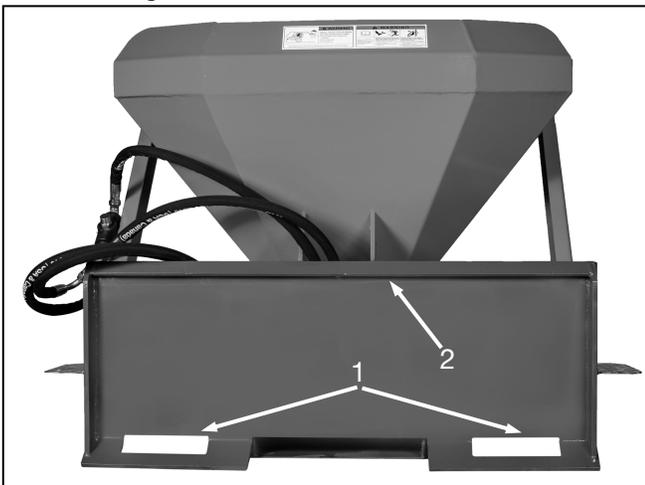


- Before moving the machine, look in all directions and make sure no bystanders, especially small children are in the work area. Do not allow anyone between the machine and attachment when approaching the attachment for connecting.
- Keep fingers and hands out of pinch points when connecting and disconnecting attachment.

Park the machine/attachment on a flat level surface.

Place all controls in neutral, engage the park brake, stop the engine and wait for all moving parts to stop. Leave the operator's position.

Connecting the Attachment to the Machine



Inspect the heavy duty spreader's mounting flange (1) and wedge mounts (2) [See left photo]. Inspect all welds on the heavy duty spreader for wear or damage each time the heavy duty spreader is removed from the machine.

Enter the operator's position. See "Entering The Operator's Position".

Drive the machine slowly forward, until the top edge of the machine's mounting plate is under the top flange of the attachment mounting frame.

Slowly tilt the machine's mounting plate back until the attachment mounting frame fully contacts the front of the machine's mounting plate.

Leave the operator's position. See "Leaving The Operator's Position" on page 10.

 **WARNING**
AVOID SERIOUS INJURY OR DEATH

The locking pins/wedges must extend through the holes in the attachment mounting frame. Failure to secure locking pins/wedges can allow attachment to come off.

SEE MACHINE'S OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

Engage attachment locking levers / wedges (See the machine's Operator's Manual for detailed information).

Connecting Hydraulic Hoses

 **IMPORTANT**

- **Thoroughly clean the quick couplers before making connections. Dirt can quickly damage the hydraulic system.**

Remove dirt or debris from the male and female couplers. Visually inspect the couplers for corroding, cracking, damage, or excessive wear. Replace as needed.

Connect the attachment hydraulic hoses to the machine. Pull on each hose to verify full connection is made.

Disconnecting Hydraulic Hoses

 **WARNING**
AVOID BURNS

Hydraulic fluid, tubes, fittings and quick couplers can get hot during operation. Be careful when connecting and disconnecting hydraulic hoses.

Relieve auxiliary hydraulic pressure. (See the machine's Operator's Manual for correct procedure.)

Disconnect attachment hydraulic hoses from the machine.

Disconnecting the Attachment from the Machine

Relieve auxiliary hydraulic pressure. (See the machine's Operator's Manual for correct procedure.)

Park the machine and attachment on a flat level surface. Lower the attachment flat on the ground.

Leave the operator's position. See "Leaving The Operator's Position" on page 10.

Disconnect attachment hydraulic hoses from the machine.

Disengage locking pins/wedges. (See the machine's Operator's Manual for correct procedure.)

Enter the operator's position. See "Entering The Operator's Position" on page 10.

Slowly tilt the machine's mounting plate forward until the attachment mounting frame is free from the machine's mounting plate.

Drive the machine slowly backward, away from the attachment.

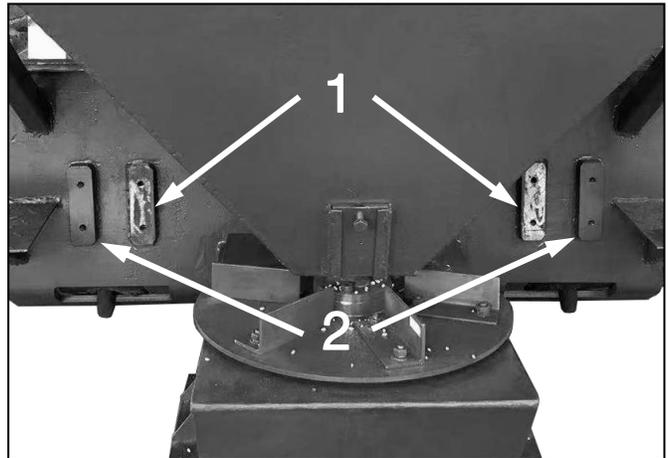
2.5 Sidewalk Skirt Kit Installation

WARNING

AVOID SERIOUS INJURY OR DEATH

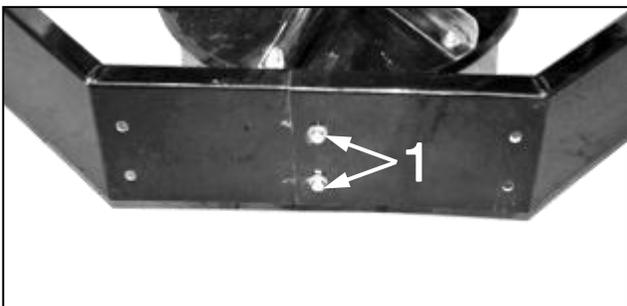
DO NOT work under the machine/attachment without the machine/attachment properly locked or blocked (see the machine operator manual for more information.)

Install the left and right sidewalk skirt deflectors on the inside pegs (1) for a 29 in. (737 mm) spread width, or the outside pegs (2) for a 37 in. (940 mm) spread width.



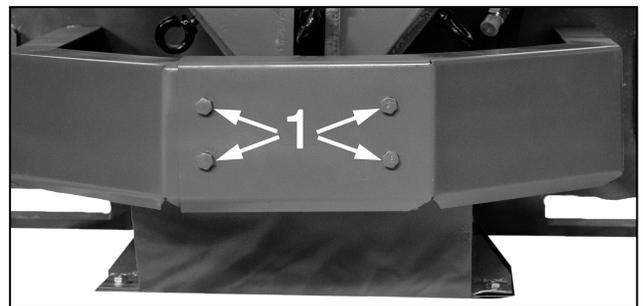
Outside Peg Installation

Install the two bolts (1) through both the left and right deflectors. Install and tighten the two nuts to 25 - 28 ft.-lb. (34 - 38 N•m) torque.



Inside Peg Installation

Install the four bolts (1) through both the left and right deflectors. Install and tighten the four nuts to 25 - 28 ft.-lb. (34 - 38 N•m) torque.



2.6 Operating The Attachment

Machine Requirements

Verify the machine's load capacity and that the machine is capable of carrying the spreader fully loaded. See the machine's operator's manual for proper specifications and ballast (if required) for operation of the spreader.

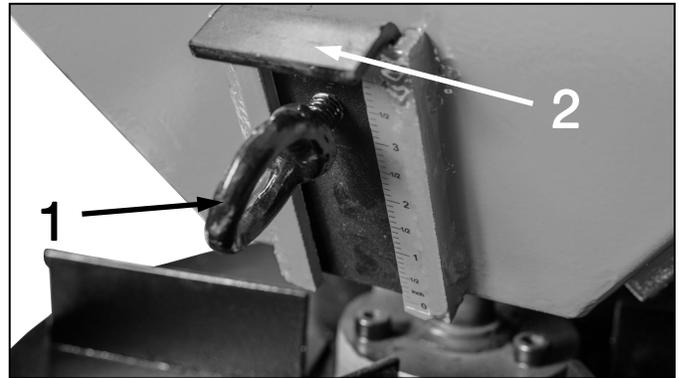
Material Gate Adjustment

The spreader has three material flow gates. Adjusting the gates will regulate the flow of material to the spreader disc and blades.

Loosen the gate retainer (1)

Slide the gate (2) up to allow material to flow out of hopper. When the gate opening is adjusted to desired height for material flow, lock the gate retainer (1).

Repeat gate adjustment on all material flow gates.



IMPORTANT

All material flow gates must be adjusted evenly for a uniform spread pattern.

Operation

1. Loading the Spreader

The spreader hopper can be loaded manually.

NOTE: If the spreader has a sidewalk skirt kit installed, it is recommended to load the spreader manually or remove the sidewalk skirt kit to prevent damage to the sidewalk skirt.

Raise the machines lift arms and tilt the heavy duty spreader forward. Drive the machine forward into the material

While moving forward tilt the heavy duty spreader back and lower the lift arms, filling the heavy duty spreader hopper



2. Loading the Heavy Duty Spreader

DANGER

Always shut off power source to spreader prior to removing material or debris.

WARNING

AVOID SERIOUS INJURY OR DEATH

Wear safety glass at all times. The operator/ machine may throw material at a high velocity spinning of material and ejecting material into/onto operator/bystander.

WARNING

AVOID SERIOUS INJURY OR DEATH

Spreading material that contains rocks larger than 3/8 in. Diameter may result in damage to the spreader.

WARNING

AVOID SERIOUS INJURY OR DEATH

Material like rocks and debris can be lodged between the material gates and spreader disc/blades. If you continued to run the machine in the jamming/stalling conditions damage to the material gates, spreader disc or blades may occur.

Raise the spreader to a minimum of 20 in. (508 mm) off the ground and adjust the spreader level to the ground. With the machine's engine RPM just above idle, and while moving forward engage the auxiliary hydraulic flow (see the machine's operator's manual) to the spreader.

Increase or decrease the machine's engine RPM to adjust the spread pattern to desired coverage. See "Performance" on page 10 for approximate spread pattern.

NOTE: When spreading has been completed, always empty the hopper of material.

NOTE: Thoroughly wash, clean and dry the spreader after each use or when changing material types being applied.

WARNING

AVOID SERIOUS INJURY OR DEATH

Before servicing the attachment:

- Always park on a flat level surface.
- Lower the attachment and place attachment flat on the ground.
- Place all controls in NEUTRAL.
- Engage the park brake.
- Wait for all moving parts to stop.
- Stop the engine and remove the key.

**SEE MACHINE'S OPERATOR'S MANUAL FOR
ADDITIONAL INFORMATION.**

3. Stopping the Spreader

Decrease the machine's engine RPM, allow the spreader to slow down, disengage the auxiliary hydraulic flow.

4. Operating the Spreader with the Sidewalk Skirt Kit

To install the sidewalk skirt kit, see "Sidewalk Skirt Kit Installation" on page 11.

The sidewalk skirt kit is recommended for spreading material on sidewalks or when a narrow spread pattern is required.

Raise the spreader to a minimum of 20 in. (500 mm) off the ground and adjust the spreader level to the ground.

NOTE: See "Sidewalk Skirt Kit Dimensions" on page 17 for spread widths with the sidewalk skirt kit installed.



Maintenance

1. Lubrication

DANGER

AVOID SERIOUS INJURY OR DEATH

Before servicing the Spreader:

- Lower the spreader and place the spreader on flat, level surface.
- Engage parking brake, stop engine, remove the key and exit the machine.
- Disconnect attachment hydraulic hoses.

WARNING

AVOID SERIOUS INJURY OR DEATH

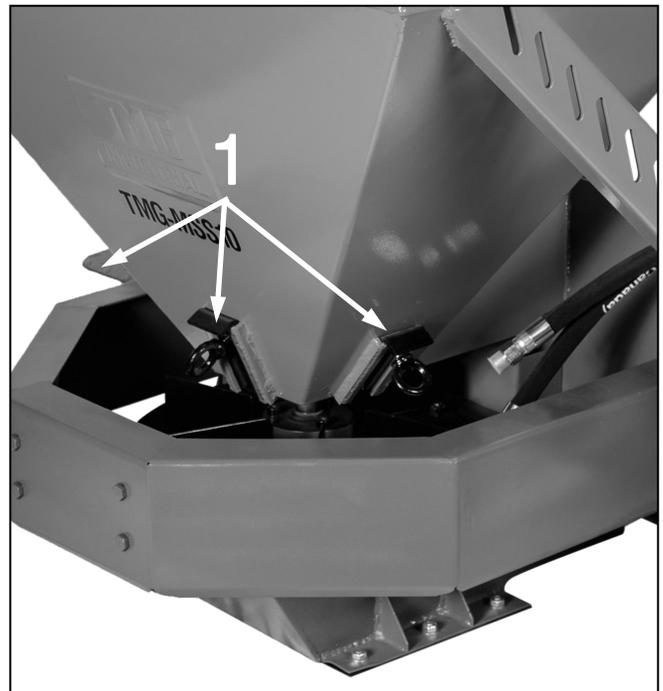
DO NOT work under the machine / attachment without the machine / attachment properly locked or blocked (see the machine operator manual for more information.)

IMPORTANT

Fluid such as hydraulic fluid, coolants, grease, etc. must be disposed of in an environmentally safe manner. Some regulations require that certain spills and leaks on the ground must be cleaned in a specific manner. See local, state and federal regulations for the correct disposal.

NOTE: Clean off grease fittings before greasing.

Lubricate the three material flow gate slides (1) with a coat of vegetable oil. Every 40 hours.



2. Cleaning the attachment

Wash down equipment, clean all debris from machine.



DANGER

AVOID SERIOUS INJURY OR DEATH

Before servicing the Heavy Duty Spreader:

- Lower the heavy duty spreader and place the heavy duty spreader on flat, level surface.
- Engage parking brake, stop engine, remove the key and exit the machine.
- Disconnect attachment hydraulic hoses.



IMPORTANT

Rotor wrapping may cause damage to bearings or bearing seals by jamming/cutting causing premature wear and damage.



WARNING

AVOID SERIOUS INJURY OR DEATH

Securely block up the attachment before working underneath.



WARNING

Rotor Wrapping

Debris such as rope, wire, roots, plastic etc. may wrap around rotor. **STOP MEDIATELY** and remove foreign material. Spinning of rotor and throwing of material may cause harm to operator/bystander!

3. Storage And Return To Service

Storage

After the seasons use or when the spreader will not be in use for a period of time, thoroughly wash the machine and make sure all material or debris is removed.

- Make sure all covers, guards and shields are installed.
- Inspect all components and hardware to ensure everything is secure and thoroughly tightened.
- Inspect the frame and all welds for cracks or damage.
- Inspect the hydraulic components and hoses for wear, damage or leaks.
- Lubricate the material flow gate slides, agitator and spreader disc with a coat of vegetable oil.
- Inspect the safety decals for wear or damage.
- Place the spreader in a dry protected shelter.

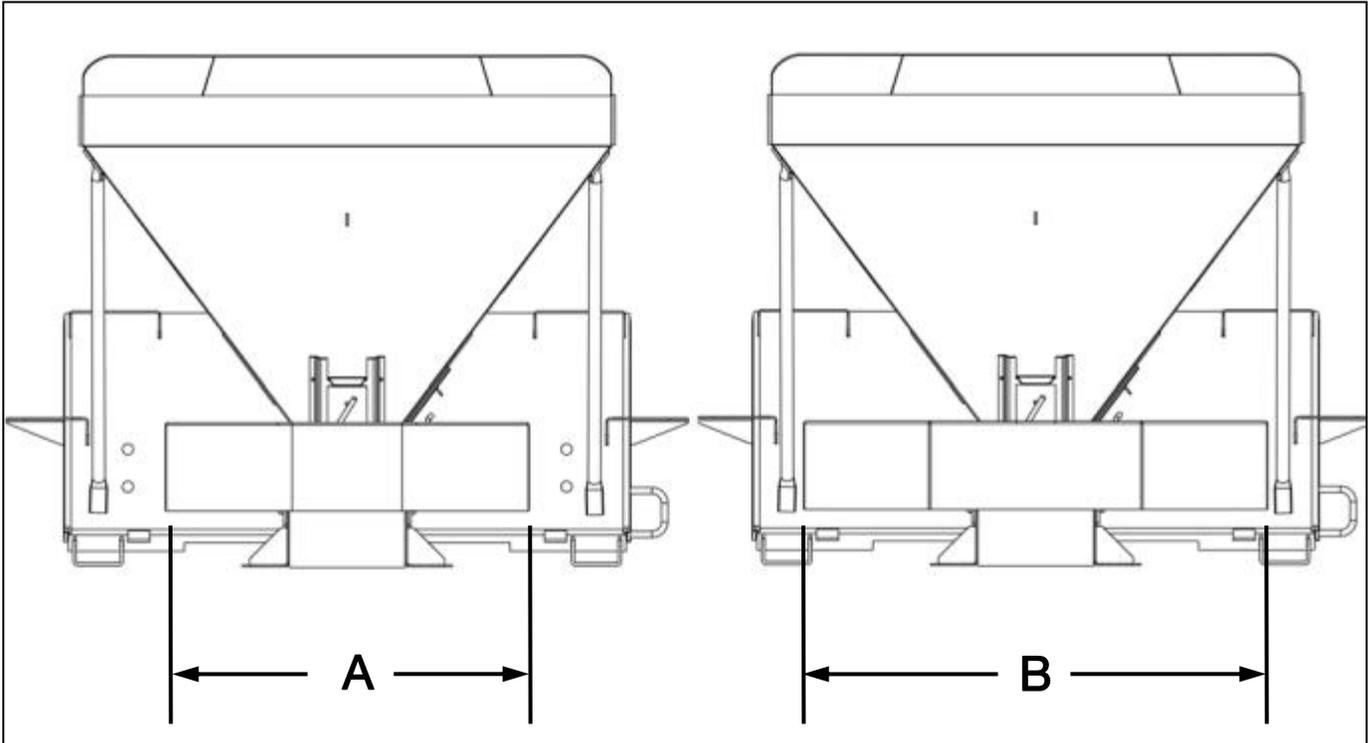
NOTE: Replace any damaged parts, components, decals or reflectors.

Return to Service

- Inspect the machines safety decals for damage.
- Make sure all covers, guards and shields are in place.
- Make sure there is no debris in the hopper or on spreader disc.
- Lubricate the material flow gate slides, agitator and spreader disc with a coat of vegetable oil.
- Make sure all material gates are open and close and can be locked in place.
- Operate the machine and check for any oil leaks.

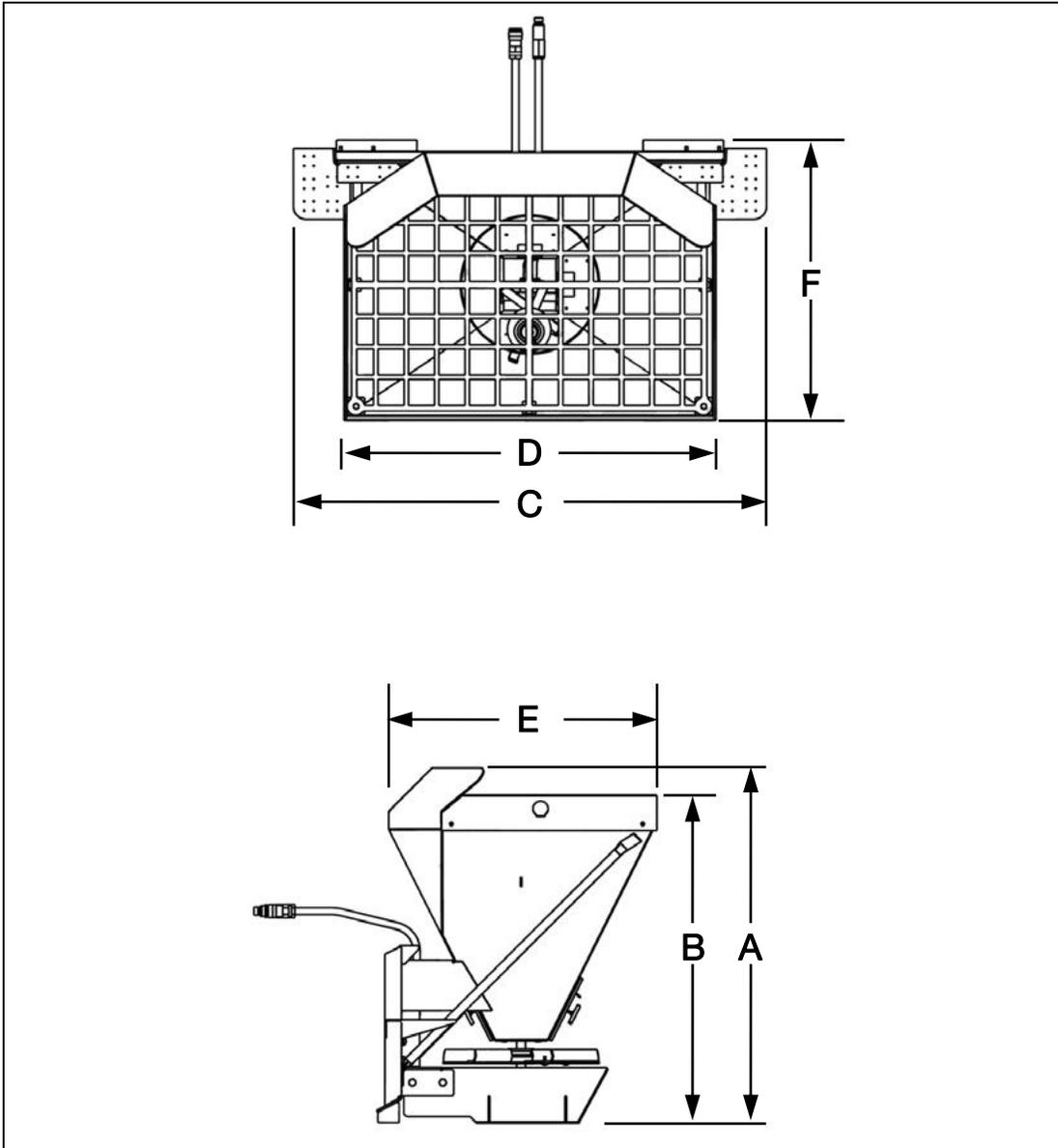
Attachment Specifications

1. Sidewalk Skirt Kit Dimensions



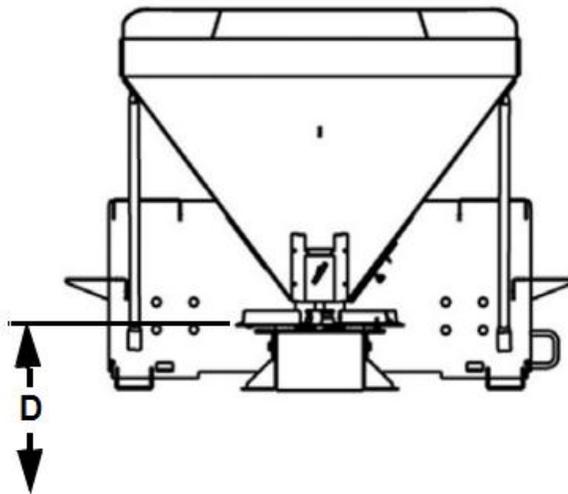
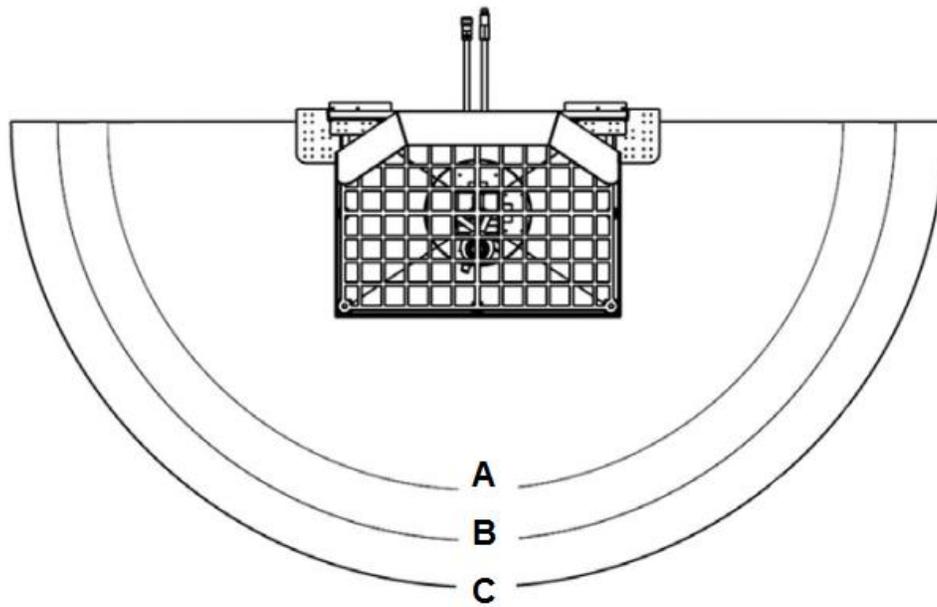
DESCRIPTION	SPREAD RADIUS
Spreader width with sidewalk kit on inside pegs(A)	29"
Spreader width with sidewalk kit on outside pegs(B)	37"

2. Spreader Dimensions



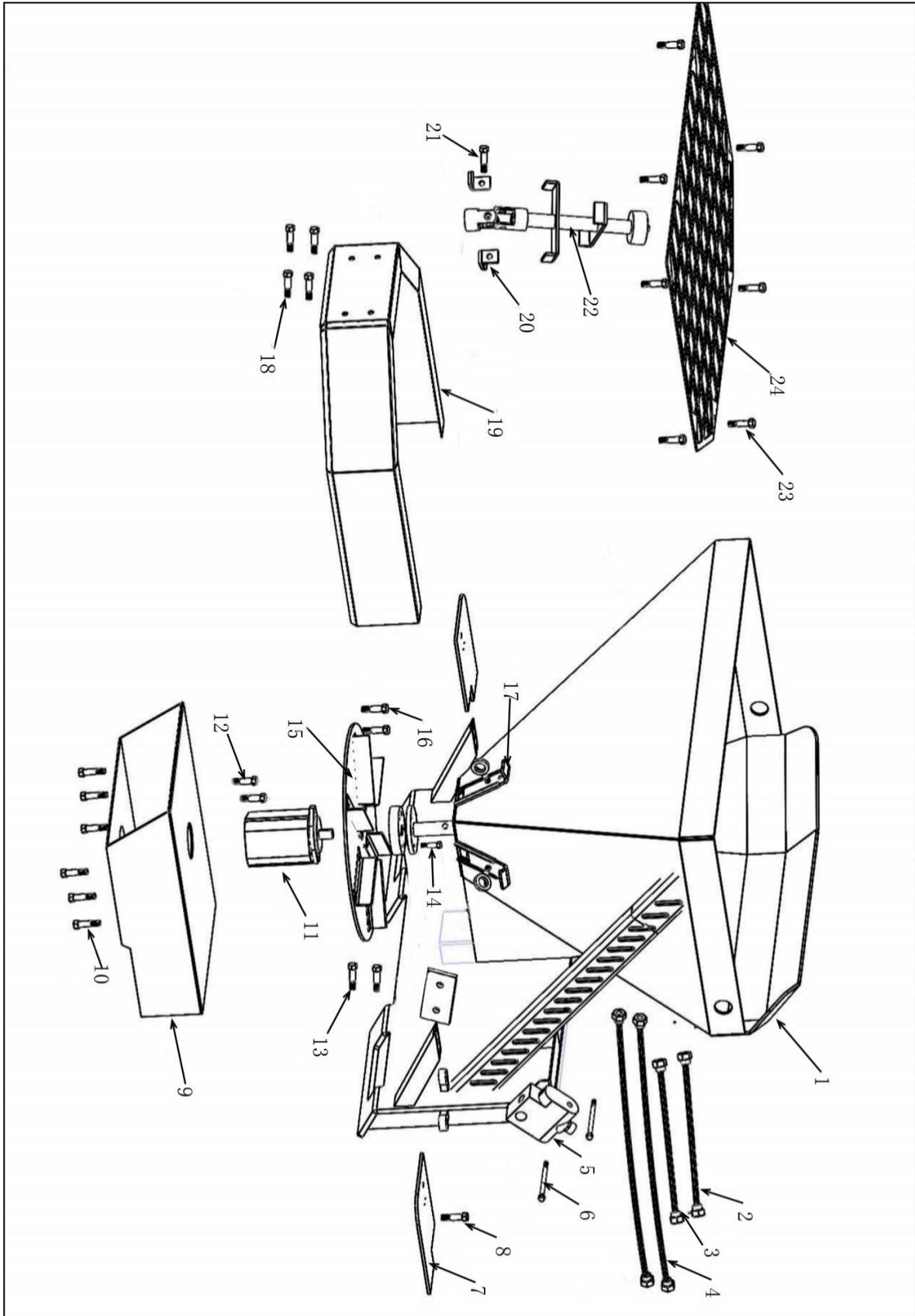
DESCRIPTION	SPREADER
Overall Height(A)	41"
Hopper Height(B)	38"
Overall Width(C)	54"
Hopper Width(D)	43"
Hopper Length(E)	30"
Overall Length(F)	32"
Overall Weight(empty)	490 lb.

3. Performance



DESCRIPTION	SPREAD RADIUS
Engine Speed at 300 RPM (A)	16 ft
Engine Speed at 450 RPM (B)	21 ft
Engine Speed at 600 RPM (C)	26 ft
Distance Between Ground and Spreader (D)	20"
Hopper capacity	10cu.ft

DIAGRAM AND PARTS LIST



PARTS LIST

P/N	Description	Qty	P/N	Description	Qty
1	Hopper	1	13	Bolt and nut,M14*30	4
2	Hydraulic hoses 1/2 NPT fitting, 1.3m	1	14	Bolt and nut,M10*25	3
3	Hydraulic hoses 1/2 NPT fitting, 1.4m	1	15	Spreader disc	1
4	Hydraulic hoses 1/2 NPT fitting, 1.5m	2	16	Bolt and nut,M10*20	12
5	Flow speed control valve	1	17	Material flow gate	3
6	Bolt and nut,M6*70	2	18	Bolt and nut,M12*20	4
7	Step	2	19	Sidewalk skirt kit	1
8	Bolt and nut,M12*15	2	20	Auger shaft	2
9	Hydraulic motor housing	1	21	Bolt and nut,M10*60	1
10	Bolt and nut,M10*15	6	22	Agitator	1
11	Hydraulic motor	1	23	Bolt and nut,M10*15	7
12	Bolt and nut,M10*30	2	24	Protective grate	1