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Introduction

Snow and ice, despite the beauty it may impart to a bleak winter landscape, poses the dual threat of inconvenience and danger. The environmental conditions associated with snow and ice, not to mention the health hazards and economic loss it may impose, seriously endanger thousands of lives annually. Business and industry suffer, and millions of snowbelt residents may affected by a single snowstorm.

Meyer Products LLC has published this manual to help you get the maximum performance from your Meyer spreader and familiarize you with the features designed for efficiency and safety; be sure you recognize and understand them. Follow recommended operation and maintenance instructions, so when the storm hits, your Meyer spreader will be ready and you will know how to spread like a pro.

DO NOT EQUIP ANY VEHICLE WITH A SPREADER WITHOUT CONSULTING VEHICLE MANUFACTURERS' RECOMMENDATIONS.

Vehicles equipped with Meyer spreaders installed may be so equipped as to meet vehicle manufacturers' specifications and recommended options for material spreading use. **Most vehicle manufacturers insist that vehicles which are to be used for ice control be equipped with certain options and accessories, and it is so stated in vehicle manufacturer specifications for snow plow application.**

WARNING: Deployment of an air bag while using a Meyer Spreader will not be covered under Meyer Products' warranty. We also recommend that, for optimum performance, vehicles used for ice control be equipped with:

- Four-Wheel Drive
- Minimum 60 Amp Alternator or larger
- Minimum 70 Amp Battery or larger (550 C.C.A.)
- Mud and Snow Tires
- Increased Radiator Cooling
- Automatic Transmission
- Power Brakes
- Power Steering

Under the continuing Meyer Product Improvement Plan, Meyer Products LLC reserves the right to change design details and construction without prior notice and without incurring any obligation.

EC Declaration of Conformity

EC DECLARATION OF CONFORMITY

The undersigned representing the manufacturer *and the authorized representative established within the community*

herewith declared that the Product: **Snow & Ice Equipment**

Model/Type ref.: *Steel Hopper Salt Spreader LPHPV*

is in conformity with the Essential requirements of the following EC Directives when subject to correct installation, maintenance and use conforming to its/their intended purpose, to the applicable regulations and standards, to our operation and maintenance manual.

2006/95/EC	EC Low Voltage Directive
2004/108/EC	EMC Directive
2006/42/EC	Machinery Directive

and that the Standards and/or technical specifications referenced below have been applied:

- BS EN 60204-1:2006 / IEC 60204-1:2005. Safety of machinery – Electrical equipment of machines-Part 1: General requirements.
- EN ISO 12100-1:2003:Safety of Machinery – Basic Concepts, General Principles of Design Part 1: Basic Terminology and Methodology
- EN ISO 12100-2:2003:Safety of Machinery – Basic Concepts, General Principles of Design Part 2: Technical principles
- EN 13021:2003+A1- Winter service machines - Safety requirements
- EN 61000-6-2: 2005. Generic standards – Immunity for Industrial Environments.
- EN 61000-6-4:2005. Generic emission standard, Part 2: Industrial environment.

Year of CE Marking: 2011

Manufacturer: *Authorized Representative in the community:*

Signature: Position: Product Manager Date: 8-1-2011 Place: Middlebury, VT, USA

Signature: Position: CFO Date: 8-1-11 Place: Echternach, LUXEMBOURG

OFFICIAL SEAL
DOMINIQUE SUE STRICHMAN
Notary Public - State of Illinois
My Commission Expires Jun 10, 2013

Safety Definitions

These safety alert decals are used to alert you of potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER Conveyor
This decal alerts all to the danger of serious personal injury or death while servicing or cleaning this equipment without first turning off or disconnecting all power sources.

DANGER Spinner
This decal alerts all to the danger of any person being near the spinner while it is turning where serious personal injury could result if struck by flying debris.

CAUTION
This decal cautions all to observe general safety procedures when operating, moving, storing, cleaning or servicing this equipment.

CAUTION Empty Hopper
This decal cautions all to only lift or move equipment when hopper is empty to prevent the risk of serious personal injury or property damage.

CAUTION Fork Length
This decal cautions all to make sure fork lift arms extend a minimum of 4"(10.2cm) past both brackets before lifting or moving equipment to prevent the risk of serious personal injury or property damage.

Safety Definitions & Warnings

SAFETY DEFINITIONS

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION Indicates an potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, will result in property damage.

1	DANGER	**NEVER** *stand or ride on the spreader. Failure to comply will result in death or serious injury.*
2	DANGER	*Keep hands, feet, and clothing away from power driven parts. Failure to comply will result in death or serious injury.*
3	DANGER	*Make sure spreader is completely shut off and all movement has stopped before attempting to clean, service or unclog. Failure to comply will result in death or serious injury.*
4	DANGER	*Never enter hopper while spreader is operating or capable of being operated. Failure to comply will result in death or serious injury.*
5	WARNING	**NEVER** *operate or service your spreader without first CAREFULLY reading the Owner's Manual. It is CRITICAL for your safety to ALWAYS obey EVERY warning in the manual and follow EVERY instruction EXPLICITY. Failure to comply could result in death or serious injury.*
6	WARNING	*Never leave operator's position without first completely turning off spreader, disengaging PTO, shutting off hydraulic valve and setting vehicle parking brake. Failure to comply will result in death or serious injury.*
7	WARNING	*Never operate spreader without all shields, guards, and safety decals in place. Failure to comply will result in death or serious injury.*
8	WARNING	*Spreader should only be operated by personnel trained in the safe use and transportation of this equipment.*
9	WARNING	*The spreader should NEVER be used for any other purpose other than spreading ice melting or traction products on streets, parking lots and driveways. Failure to comply will result in property damage, death or serious injury.*
10	WARNING	*Inspect spreader assembly and mounting components and fasteners for wear and damage before and after each use. Worn or damaged components or fasteners could allow spreader to break free from the transport vehicle. Failure to comply will result in death or serious injury.*
11	WARNING	*Transport vehicle must not be operated when overloaded. In all cases, the loaded vehicle weight, including the entire spreader system, all aftermarket accessories, driver, passenger, options, nominal fluid levels, and cargo must not exceed the front/rear Gross Axle Weight Rating (GAWR), and total Gross Vehicle Weight Rating (GVWR). These weights ratings are specified on the safety compliance certification label on the driver's side door opening. Failure to comply will result in death or serious injury.*
12	WARNING	*Spreader may tip over or fall. Spreader should be solidly supported when being mounted, dismounted, moved, or stored. Failure to comply will result in death or serious injury.*
13	WARNING	*Operator, bystanders and pets ahould be kept at least 50 feet away from spreader during operation. Failure to comply will result in death or serious injury.*
14	WARNING	**SAFETY PRECAUTIONS** *should be used when hydraulic system is operating or being serviced. Hydraulic fluid under pressure can cause a skin injection injury. If you are injured by hydraulic fluid, get medical attention immediately. Failure to comply will result in death or serious injury.*
15	WARNING	*Engine exhaust contains lethal fumes. Breathing these fumes, even in low concentrations, can cause death. Never operate engine in an enclosed area without venting the exhaust to the outside. Failure to comply will result in death or serious injury.*

Safety Definitions & Warnings

16	⚠ WARNING	*Gasoline is highly flammable and gasoline vapor is explosive. Never smoke while working on vehicle or spreader. Keep all open flames away from gasoline tank and lines. Wipe up any spilled gasoline immediately. Failure to comply will result in death or serious injury.*
17	⚠ WARNING	**NEVER** *operate the spreader gasoline engine without first CAREFULLY reading the Owner's Manual. It is CRITICAL for your safety to ALWAYS obey EVERY warning in the manual and follow EVERY instruction EXPLICITY. Failure to comply will result in death or serious injury.*
18	⚠ CAUTION	*A driver's first responsibility is the safe operation of the vehicle and spreader. The most important thing you can do to prevent a crash is to avoid distractions and pay attention to the road. Wait until it is safe to operate mobile communication equipment such as cell phones, two way radios, etc. Failure to comply will result in injury.*
19	⚠ CAUTION	*Vehicle must conform to all local, state, and national regulations regarding the use of reflective markings and flashing lights. Failure to comply will result in injury.*
20	⚠ CAUTION	*Batteries normally produce explosive gases which can cause personnel injury. Therefore, do not allow flames, sparks or lit tobacco to come near the battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation. Batteries contain sulfuric acid which burns skin, eyes, and clothing. Failure to comply will result in injury.*
21	CAUTION	*Never transport spreader with spinner in the raised position. Failure to comply will result in property damage.*
22	CAUTION	*Installation of a Swenson spreader may affect your new vehicle warranty. Before beginning spreader installation verify mounting method is acceptable to your vehicle manufacturer. Failure to comply will result in property damage.*
23	CAUTION	*Warranty does not apply to a Swenson spreader product which has been negligently or improperly assembled or installed. Failure to comply will result in property damage.*
24	CAUTION	**CAUTION:** *To avoid harm to vehicles electrical system always disconnect battery before beginning installation. DO NOT BURN holes or WELD vehicle frame. This may cause frame failure. Failure to comply will result in property damage.*
25	CAUTION	**CAUTION:** *To avoid harm to spreader electrical system always disconnect battery before beginning installation or service. Do not operate spreader with a missing, discharged or dead battery. Failure to comply will result in property damage.*
26	CAUTION	*The Meyer spreader electrical system contains several automotive style fuses. If a problem should occur and fuse replacement is necessary, the replacement fuse must be of the same type and amperage as the original. Installing a fuse with a higher rating can damage the system and could cause a fire. Failure to comply will result in property damage.*
27	CAUTION	*Spreader is not designed to be chassis mounted. Do not support spreader by body jacks alone. Spreader must be installed directly onto truck bed. Failure to comply will result in property damage.*

SAFETY DEFINITIONS

⚠

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

DANGER Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION Indicates an potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

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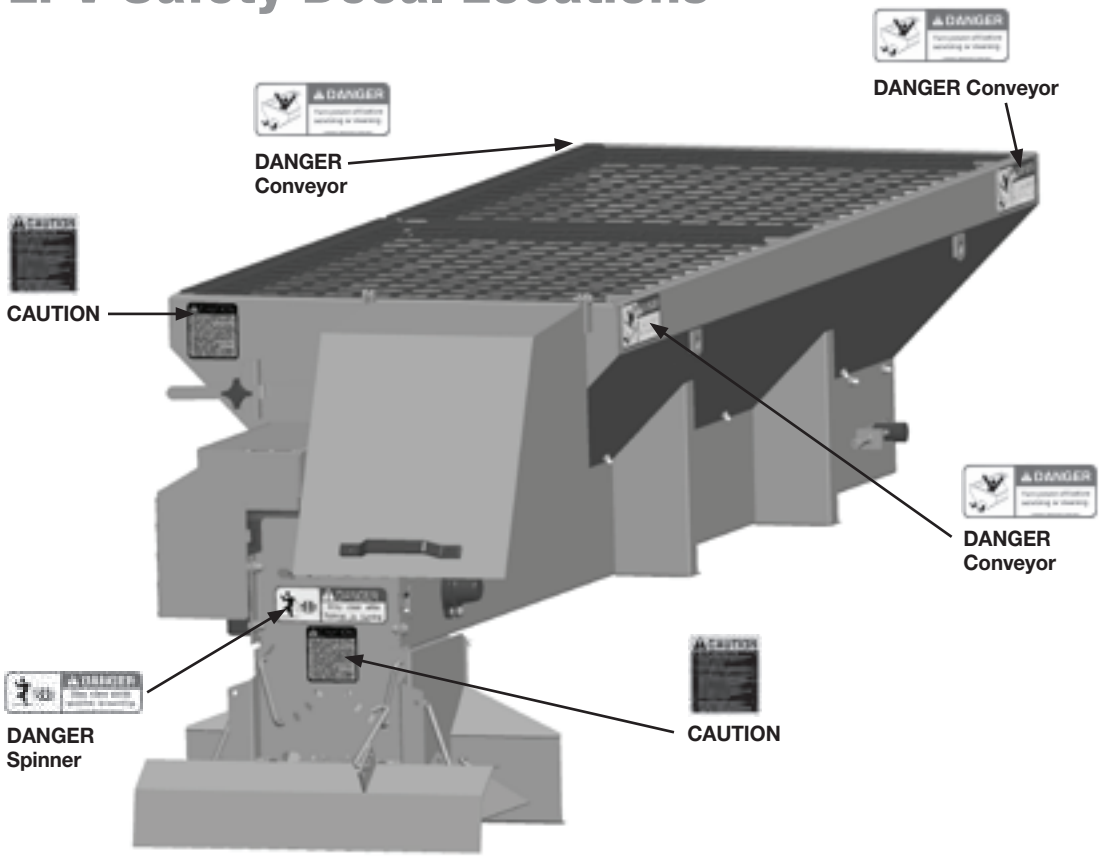
CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, will result in property damage.

Safety Decal Locations

These safety alert decals are used to alert you of potential personal injury hazards. Obey all safety messages that follow the symbol to avoid possible injury or death.

LPV Safety Decal Locations



DANGER Conveyor
Alerts all to the danger of serious personal injury or death while servicing or cleaning this equipment without first turning off or disconnecting all power sources.

DANGER Spinner
Alerts all to the danger of any person being near the spinner while it is turning where serious personal injury could result if struck by flying debris.

CAUTION
Cautions all to observe general safety procedures when operating, moving, storing, cleaning or servicing this equipment.

CAUTION Empty Hopper
Cautions all to only lift or move equipment when hopper is empty to prevent the risk of serious personal injury or property damage.

PV Safety Decal Locations

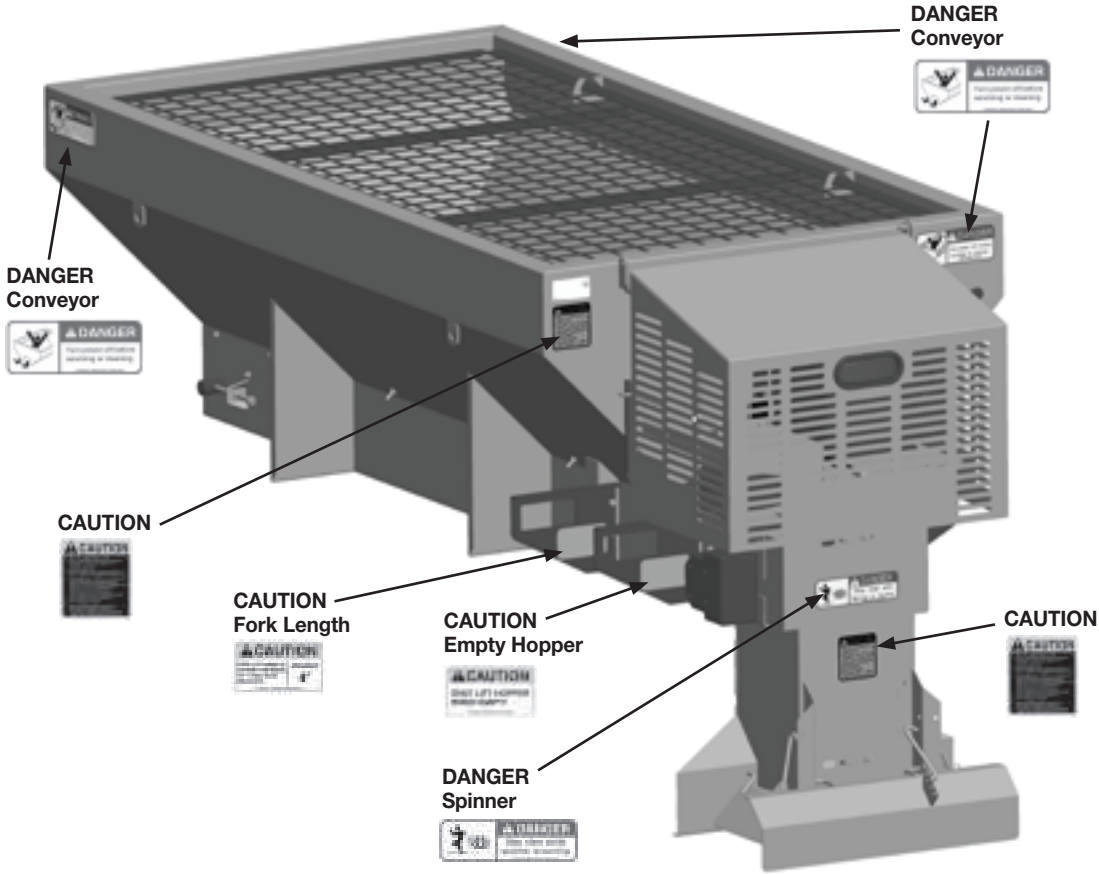
DANGER Conveyor decal alerts all to the danger of serious personal injury or death while servicing or cleaning this equipment without first turning off or disconnecting all power sources.

DANGER Spinner decal alerts all to the danger of any person being near the spinner while it is turning where serious personal injury could result if struck by flying debris.

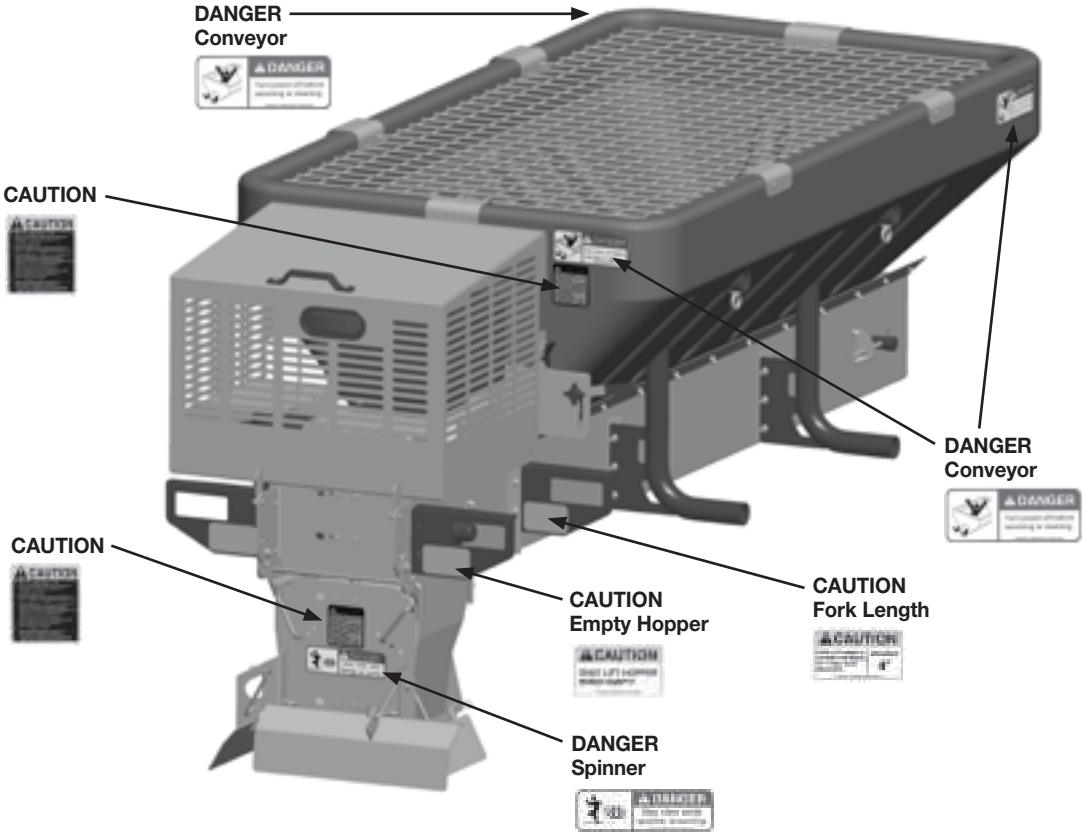
CAUTION decal cautions all to observe general safety procedures when operating, moving, storing, cleaning or servicing this equipment.

CAUTION Empty Hopper decal cautions all to only lift or move equipment when hopper is empty to prevent the risk of serious personal injury or property damage.

CAUTION Fork Length decal cautions all to make sure fork lift arms extend a minimum of 4" past both brackets fefore lifting or moving equipment to prevent the risk of serious personal injury or property damage.



Polyhawk Safety Decal Locations



DANGER Conveyor decal alerts all to the danger of serious personal injury or death while servicing or cleaning this equipment without first turning off or disconnecting all power sources.

DANGER Spinner decal alerts all to the danger of any person being near the spinner while it is turning where serious personal injury could result if struck by flying debris.

CAUTION decal cautions all to observe general safety procedures when operating, moving, storing, cleaning or servicing this equipment.

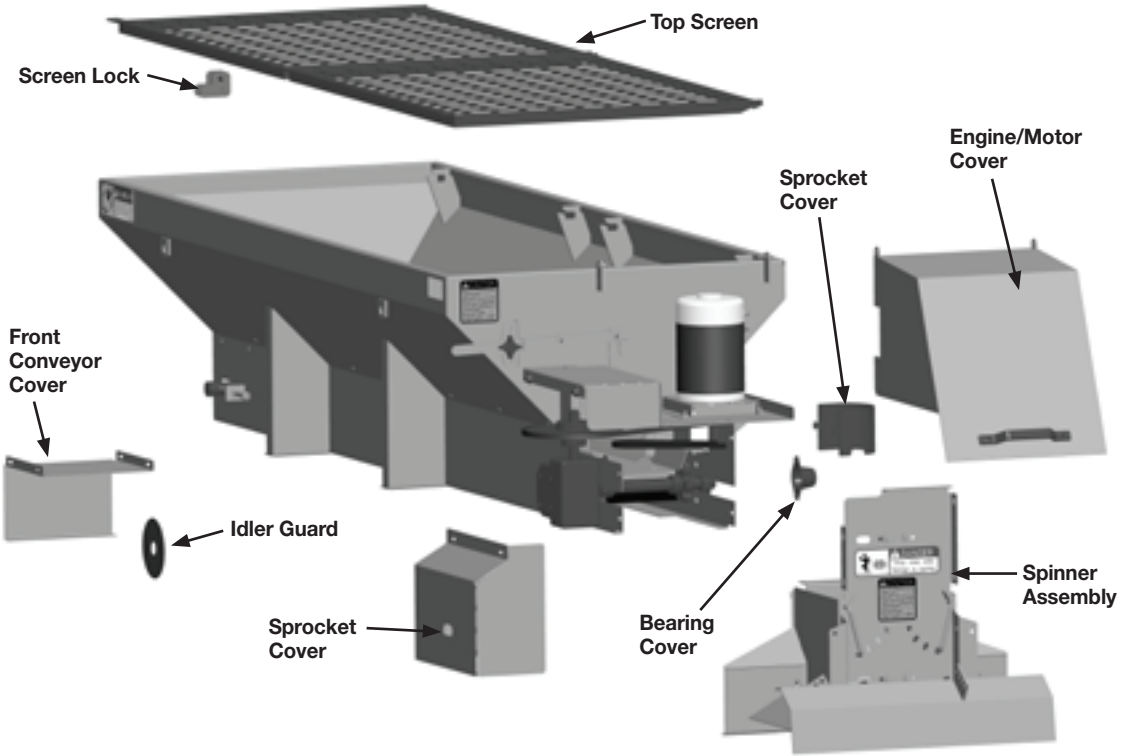
CAUTION Empty Hopper decal cautions all to only lift or move equipment when hopper is empty to prevent the risk of serious personal injury or property damage.

CAUTION Fork Length decal cautions all to make sure fork lift arms extend a minimum of 4" past both brackets fefore lifting or moving equipment to prevent the risk of serious personal injury or property damage.

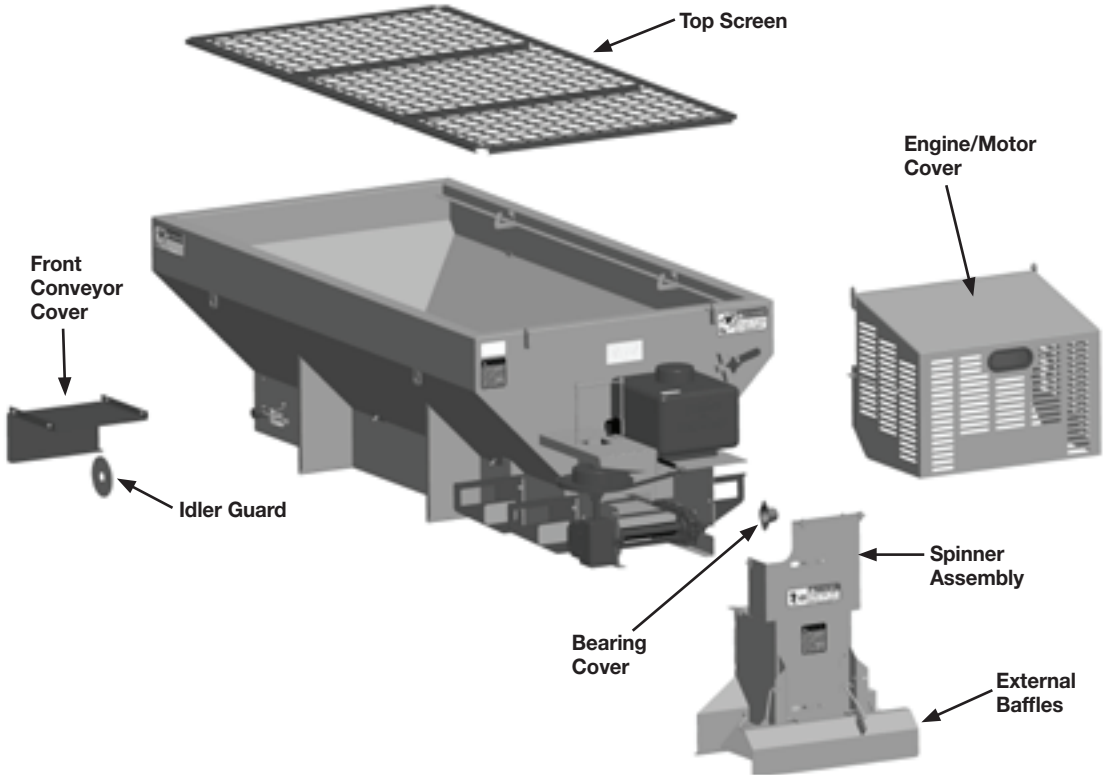
Safety Guards

To prevent serious personal injury of death all safety guards/covers must be securely fastened in proper location while equipment is operating or capable of being operated.

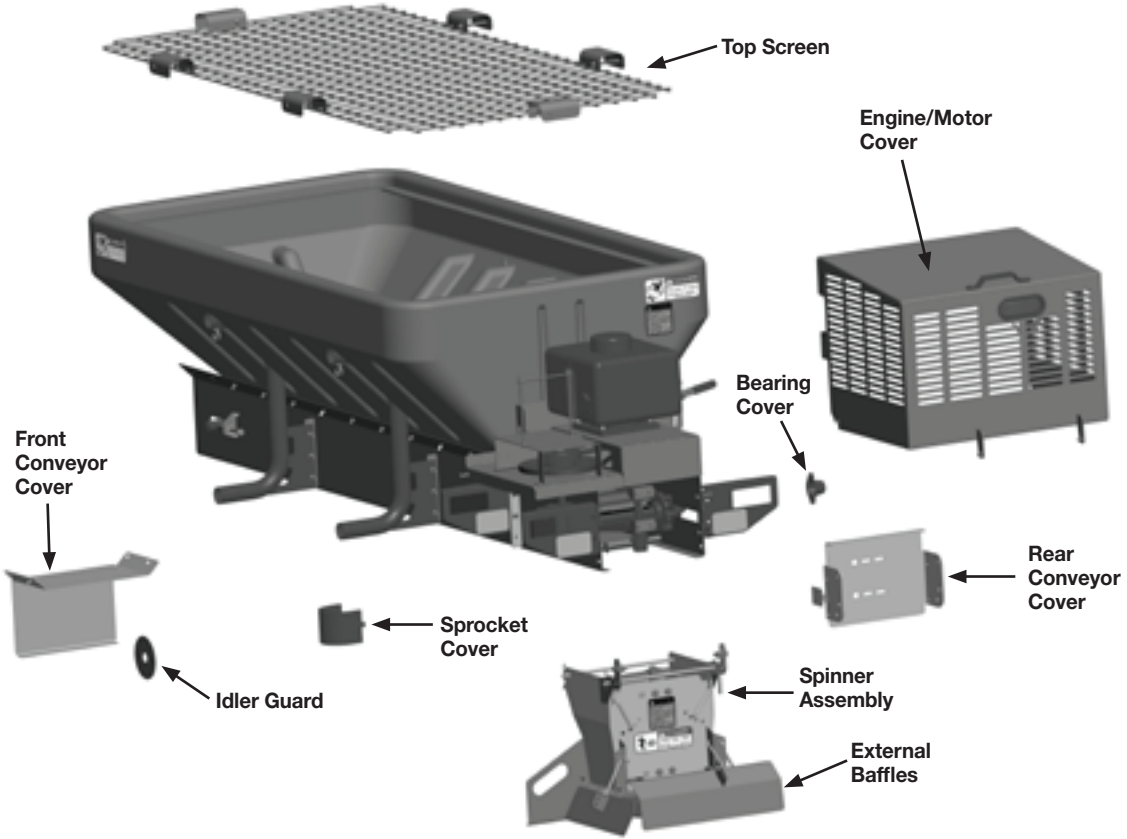
LPV Safety Guards



PV Safety Guards

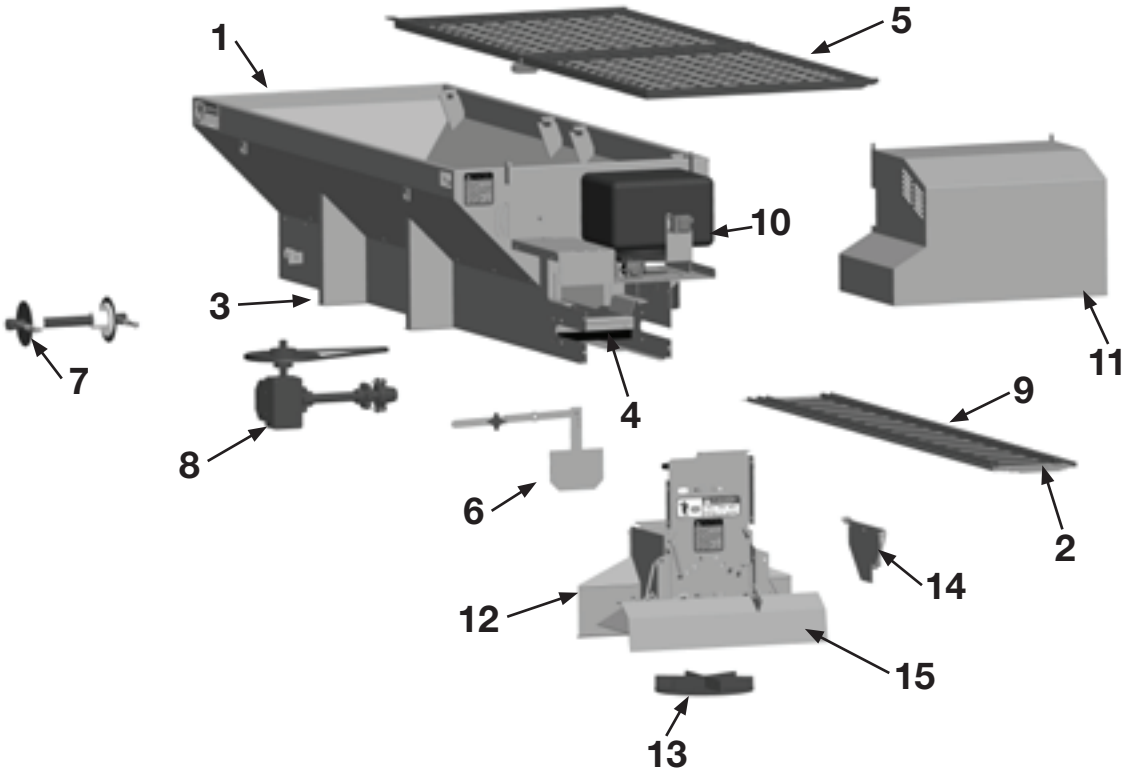


Polyhawk Safety Guards



GASOLINE ENGINE

LPV Component Identification



GASOLINE ENGINE

LPV Component Identification

1. Hopper – Steel hopper holds spreading material.

2. Conveyor Floor – Creates surface for drag chain to pickup material and move it towards the rear discharge.

3. Body Jacks – Supports the hopper and allows the spreader to be bolted to vehicle.

4. Chain Wiper – Cleans excess material from drag chain.

5. Top Screen – Breaks up large clumps of material and prevents foreign objects from entering hopper.

6. Feedgate – Regulates amount of material being discharged from the conveyor.

7. Idler Assembly – Applies tension to the drag chain.

8. Gearbox Assembly – 20:1 ratio gearbox receives power from the motor and moves drag chain.

9. Drag Chain – Is driven by the gearbox and moves material out of hopper to the spinner assembly.

10. Gasoline Engine – Supplies power to drive the conveyor and spinner.

11. Engine Shroud – Covers engine to keep out moisture and debris.

12. Spinner Assembly – Attaches to the rear of the spreader and distributes the spreading material onto road the surface.

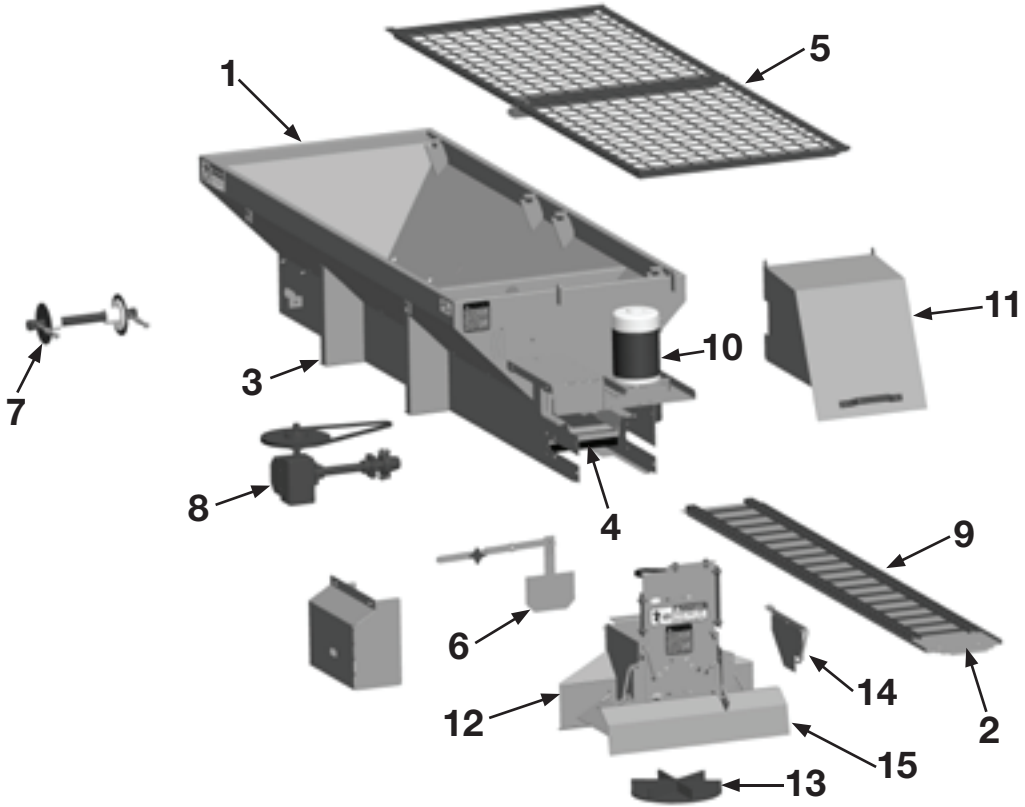
13. Spinner Disc – Rotates at a high RPM and throws material out of the spinner assembly.

14. Internal Baffles – Adjusts the direction of the spread pattern behind the vehicle.

15. External Baffles – Adjusts the width of the spread pattern behind the vehicle.

ELECTRIC

LPV Component Identification



ELECTRIC

LPV Component Identification

1. Hopper – Steel hopper holds spreading material.

2. Conveyor Floor – Creates surface for drag chain to pickup material and move it towards the rear discharge.

3. Body Jacks – Supports the hopper and allows the spreader to be bolted to vehicle.

4. Chain Wiper – Cleans excess material from drag chain.

5. Top Screen – Breaks up large clumps of material and prevents foreign objects from entering hopper.

6. Feedgate – Regulates amount of material being discharged from the conveyor.

7. Idler Assembly – Applies tension to the drag chain.

8. Gearbox Assembly – 20:1 ratio gearbox receives power from the motor and moves drag chain.

9. Drag Chain – Is driven by the gearbox and moves material out of hopper to the spinner assembly.

10. Electric Motor – Supplies power to drive the conveyor and spinner.

11. Motor Cover – Covers motor to keep out moisture and debris.

12. Spinner Assembly – Attaches to the rear of the spreader and distributes the spreading material onto road the surface.

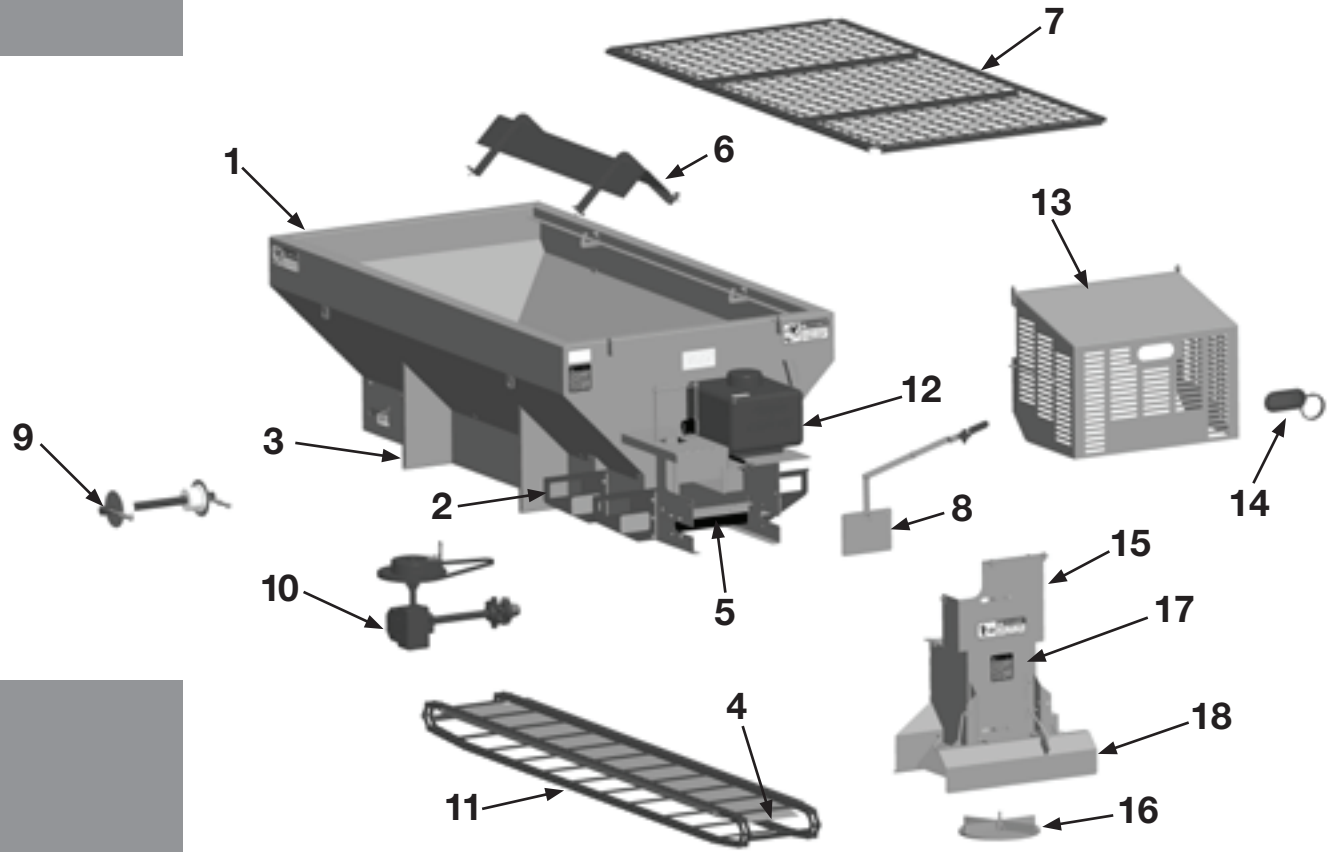
13. Spinner Disc – Rotates at a high RPM and throws material out of the spinner assembly.

14. Internal Baffles – Adjusts the direction of the spread pattern behind the vehicle.

15. External Baffles – Adjusts the width of the spread pattern behind the vehicle.

GASOLINE ENGINE

PV Spreader Component Identification



GASOLINE ENGINE

PV Spreader Component Identification

1. Hopper – Steel hopper holds spreading material.

2. Forklift Brackets – Allows spreader to be lifted and moved with a forklift.

3. Body Jacks – Supports the hopper and allows for spreader to bolted to vehicle.

4. Conveyor Floor – Creates surface for drag chain to pickup material and move it towards the rear discharge.

5. Chain Wiper – Cleans excess material from drag chain.

6. Inverted Vee – Relieves weight of material on the drag chain and is also the spreader lifting location.

7. Top Screen – Breaks up large clumps of material and prevents foreign objects from entering hopper.

8. Feedgate – Regulates amount of material being discharged from the conveyor.

9. Idler Assembly – Applies tension to the drag chain.

10. Gearbox Assembly – 20:1 ratio gearbox receives power from the motor and moves drag chain.

11. Drag Chain – Is driven by the gearbox and moves material out of hopper to the spinner assembly.

12. Gasoline Engine – Supplies power to drive the conveyor and spinner.

13. Engine Shroud – Covers engine to keep out moisture and debris.

14. CHMSL – Complies with Federal Motor Vehicle Safety Standards.

15. Spinner Assembly – Attaches to the rear of the spreader and distributes the spreading material onto road the surface.

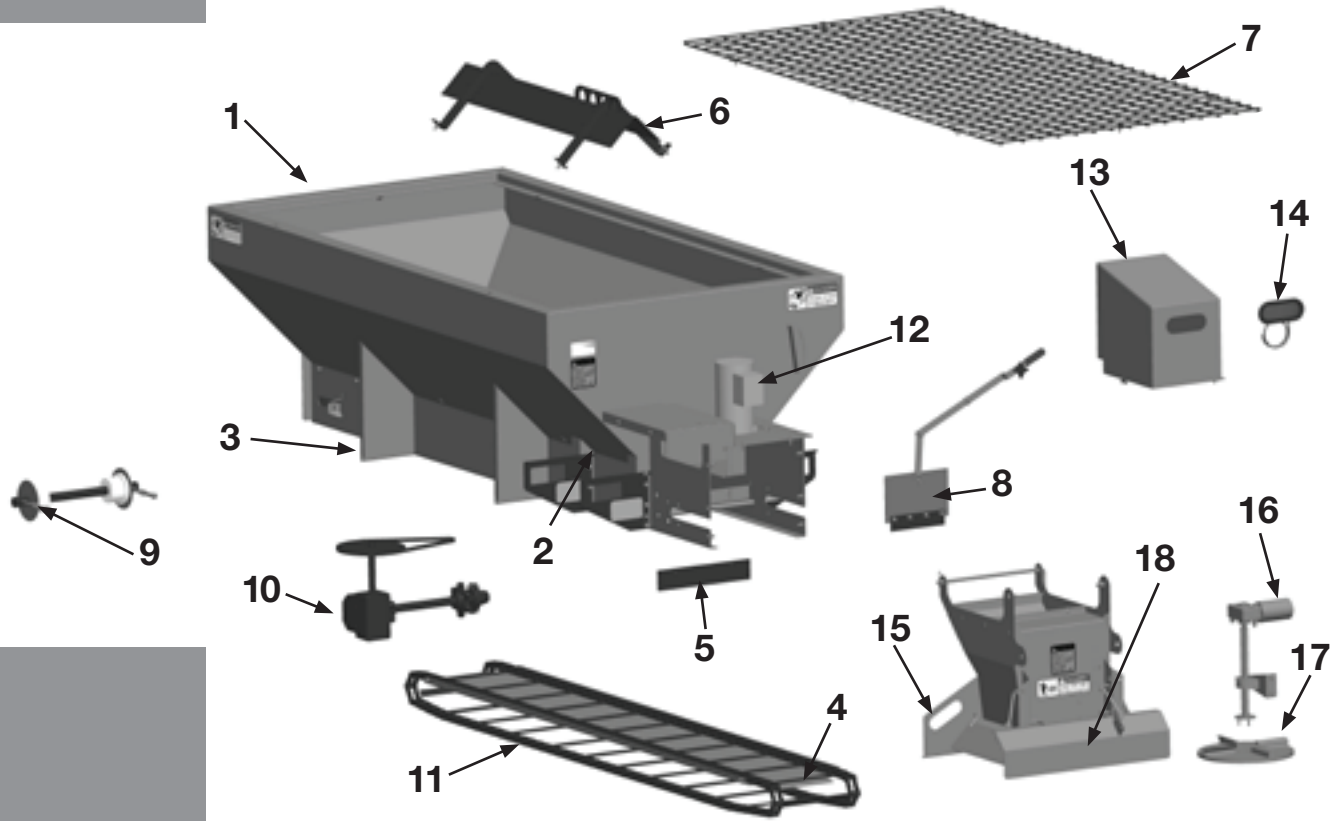
16. Spinner Disc – Rotates at a high RPM and throws material out of the spinner assembly.

17. Internal Baffles – Adjusts the direction of the spread pattern behind the vehicle.

18. External Baffles – Adjusts the width of the spread pattern behind the vehicle.

ELECTRIC

PV Spreader Component Identification



ELECTRIC

PV Spreader Component Identification

1. Hopper – Steel hopper holds spreading material.

2. Forklift Brackets – Allows spreader to be lifted and moved with a forklift.

3. Body Jacks – Supports the hopper and allows for spreader to bolted to vehicle.

4. Conveyor Floor – Creates surface for drag chain to pickup material and move it towards the rear discharge.

5. Chain Wiper – Cleans excess material from drag chain.

6. Inverted Vee – Relieves weight of material on the drag chain and is also the spreader lifting location.

7. Top Screen – Breaks up large clumps of material and prevents foreign objects from entering hopper.

8. Feedgate – Regulates amount of material being discharged from the conveyor.

9. Idler Assembly – Applies tension to the drag chain.

10. Gearbox Assembly – 20:1 ratio gearbox receives power from the motor and moves drag chain.

11. Drag Chain – Is driven by the gearbox and moves material out of hopper to the spinner assembly.

12. Conveyor Motor – Supplies power to drive the conveyor.

13. Motor Cover – Covers motor to keep out moisture and debris.

14. CHMSL – Complies with Federal Motor Vehicle Safety Standards.

15. Spinner Assembly – Attaches to the rear of the spreader and distributes the spreading material onto road the surface.

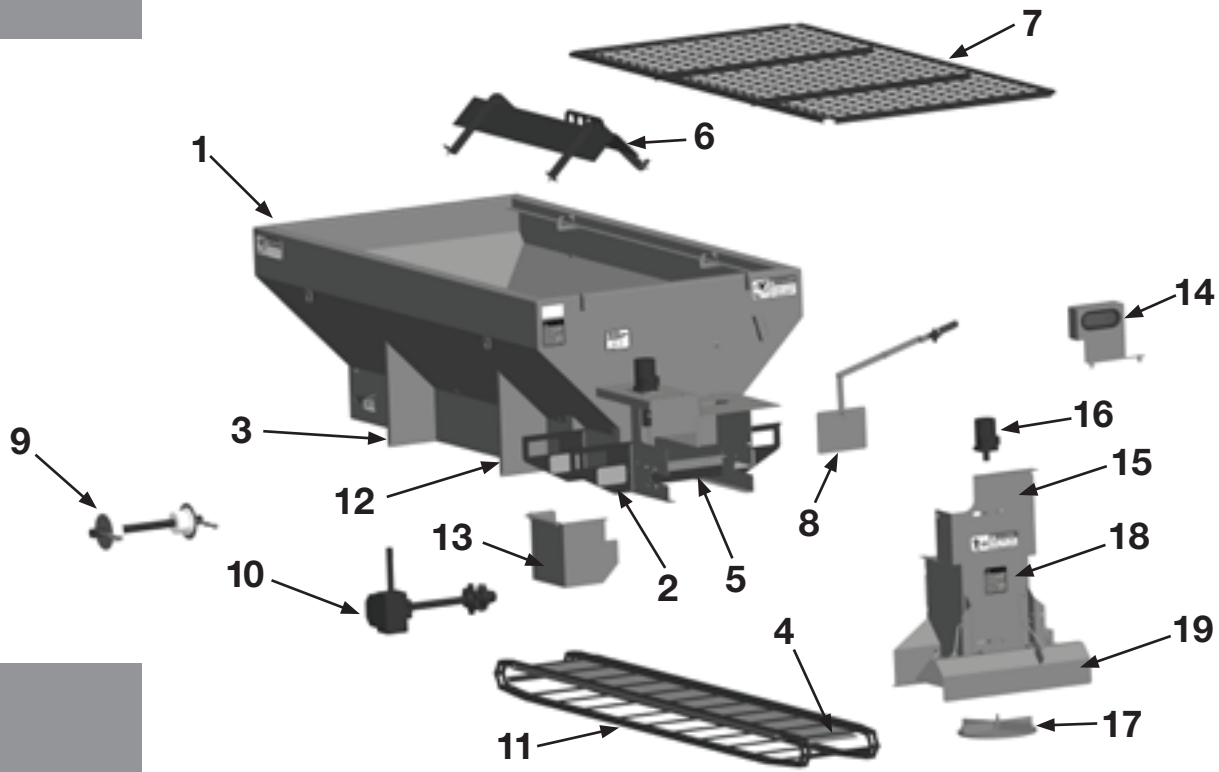
16. Spinner Motor – Supplies power to drive the spinner disc.

17. Spinner Disc – Rotates at a high RPM and throws material out of the spinner assembly.

18. External Baffles – Adjusts the width of the spread pattern behind the vehicle.

HYDRAULIC

PV Spreader Component Identification



HYDRAULIC

PV Spreader Component Identification

1. Hopper – Steel hopper holds spreading material.

2. Forklift Brackets – Allows spreader to be lifted and moved with a forklift.

3. Body Jacks – Supports the hopper and allows for spreader to bolted to vehicle.

4. Conveyor Floor – Creates surface for drag chain to pickup material and move it towards the rear discharge.

5. Chain Wiper – Cleans excess material from drag chain.

6. Inverted Vee – Relieves weight of material on the drag chain and is also the spreader lifting location.

7. Top Screen – Breaks up large clumps of material and prevents foreign objects from entering hopper.

8. Feedgate – Regulates amount of material being discharged from the conveyor.

9. Idler Assembly – Applies tension to the drag chain.

10. Gearbox Assembly – 20:1 ratio gearbox receives power from the motor and moves drag chain.

11. Drag Chain – Is driven by the gearbox and moves material out of hopper to the spinner assembly.

12. Conveyor Motor – Supplies power to drive the conveyor.

13. Shaft Guard – Safety guard that prevents access to the gearbox input shaft.

14. CHMSL – Complies with Federal Motor Vehicle Safety Standards.

15. Spinner Assembly – Attaches to the rear of the spreader and distributes the spreading material onto road the surface.

16. Spinner Motor – Supplies power to the spinner disc.

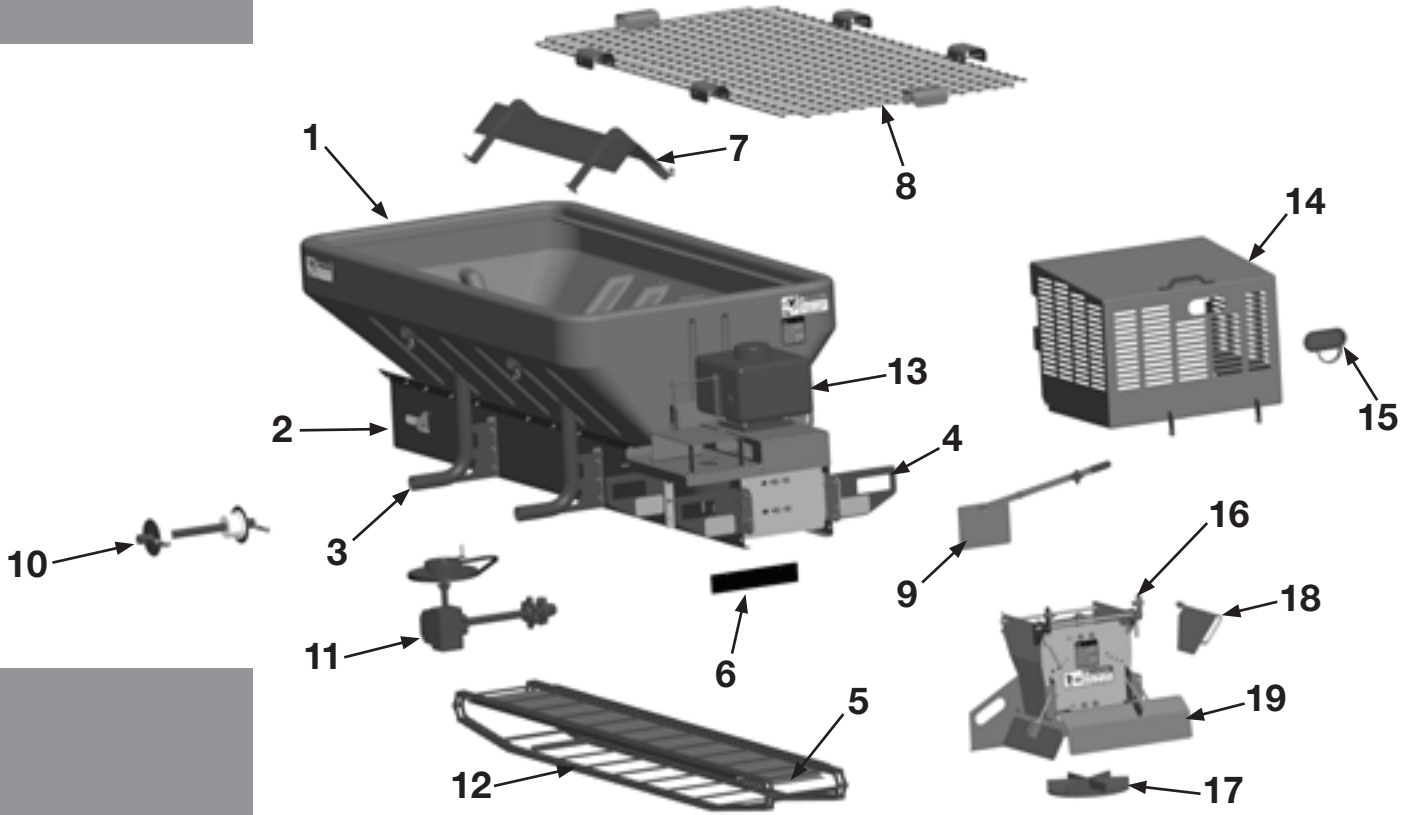
17. Spinner Disc – Rotates at a high RPM and throws material out of the spinner assembly.

18. Internal Baffles – Adjusts the direction of the spread pattern behind the vehicle.

19. External Baffles – Adjusts the width of the spread pattern behind the vehicle.

GAS ENGINE

Polyhawk Component Identification



GAS ENGINE

Polyhawk Component Identification

1. Hopper – Constructed from Polyethylene and holds spreading material.

2. Trough – Stainless steel trough houses drag chain and drive components, also supports hopper.

3. Body Jacks – Supports the hopper and trough, allows for spreader to be bolted to vehicle.

4. Forklift Brackets – Allows spreader to be moved or installed from the rear with a forklift.

5. Conveyor Floor – Creates surface for drag chain to pickup material and move it towards rear discharge

6. Chain Wiper – Cleans excess material from drag chain.

7. Inverted Vee – Relieves weight of material on the drag chain and is also the spreader lifting location.

8. Top Screen – Breaks up large clumps of material and prevents foreign objects form entering hopper.

9. Feedgate – Regulates amount of material being discharged from conveyor.

10. Idler Assembly – Applies tension to the drag chain.

11. Gearbox – 20:1 ratio gearbox received power from the motor and moves drag chain.

12. Drag Chain – Is driven by gearbox and moves material out of hopper to the spinner assembly.

13. Gasoline Engine – Supplies power to drive the conveyor and spinner.

14. Engine Shroud – Covers engine to keep out moisture and debris.

15. CHMSL – Complies with the Federal Motor Vehicle Safety Standards.

16. Spinner Assembly – Attaches to rear of spreader and distributes the spreading material onto road surface. CAUTION: DO NOT TRANSPORT SPREADER WITH SPINNER IN THE RAISED POSTION.

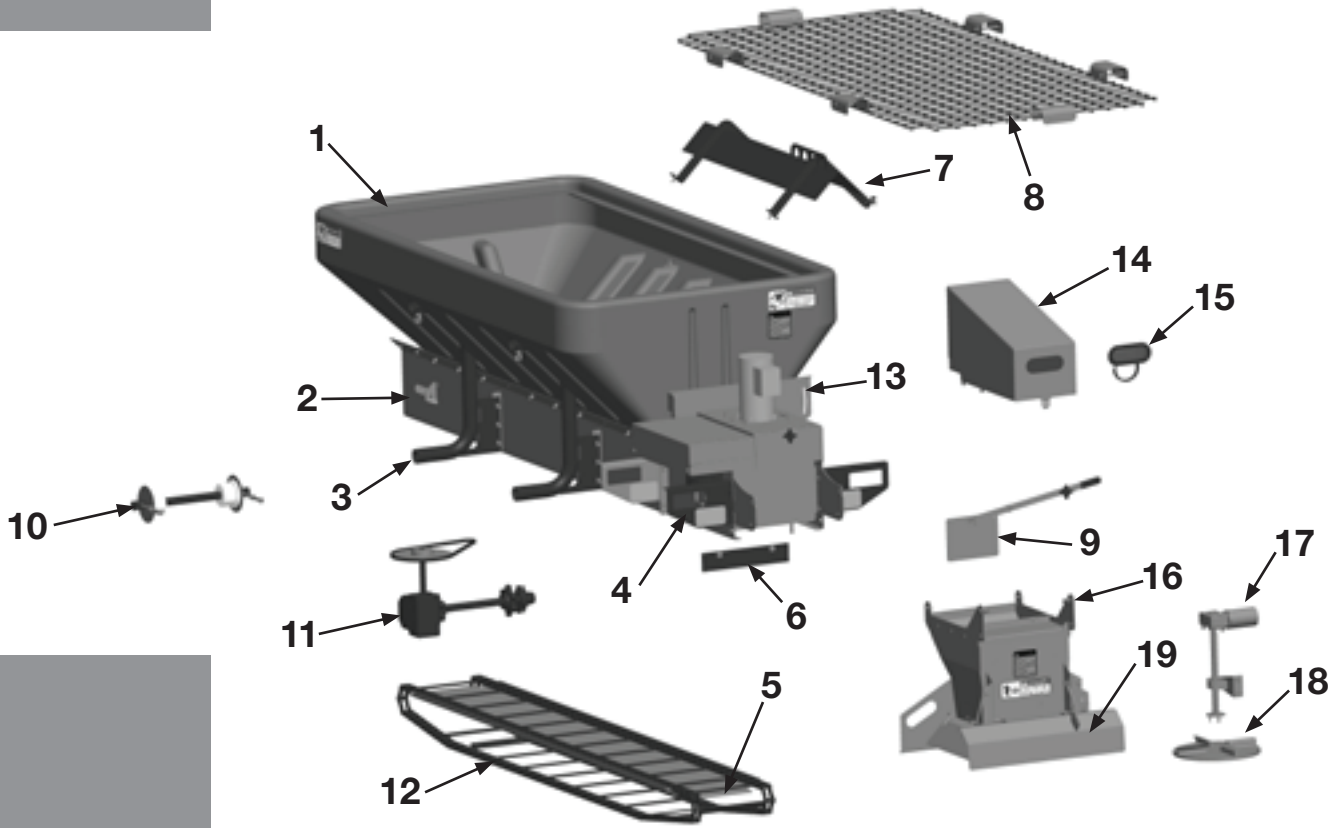
17. Spinner Disc – Rotates at a high RPM and throws material out of spinner assembly.

18. Internal Baffles – Adjusts the direction of the spread pattern behind the vehicle.

19. External Baffles – Adjusts the width of the spread pattern behind the vehicle.

ELECTRIC

Polyhawk Component Identification



ELECTRIC

Polyhawk Component Identification

1. Hopper – Constructed from Polyethylene and holds spreading material.

2. Trough – Stainless steel trough houses drag chain and drive components, also supports hopper.

3. Body Jacks – Supports the hopper and trough, allows for spreader to be bolted to vehicle.

4. Forklift Brackets – Allows spreader to be moved or installed from the rear with a forklift.

5. Conveyor Floor – Creates surface for drag chain to pickup material and move it towards rear discharge.

6. Chain Wiper – Cleans excess material from drag chain.

7. Inverted Vee – Relieves weight of material on the drag chain and is also the spreader lifting location.

8. Top Screen – Breaks up large clumps of material and prevents foreign objects form entering hopper.

9. Feedgate – Regulates amount of material being discharged from the conveyor.

10. Idler Assembly – Applies tension to the drag chain.

11. Gearbox Assembly – 20:1 ratio gearbox received power from the motor and moves drag chain.

12. Drag Chain – Is driven by gearbox and moves material out of hopper to the spinner assembly.

13. Conveyor Motor – Supplies power to drive the conveyor.

14. Motor Cover – Covers motor to keep out moisture and debris.

15. CHMSL – Complies with the Federal Motor Vehicle Safety Standards.

16. Spinner Assembly – Attaches to rear of spreader and distributes the spreading material onto road surface. CAUTION: DO NOT TRANSPORT SPREADER WITH SPINNER IN THE RAISED POSTION.

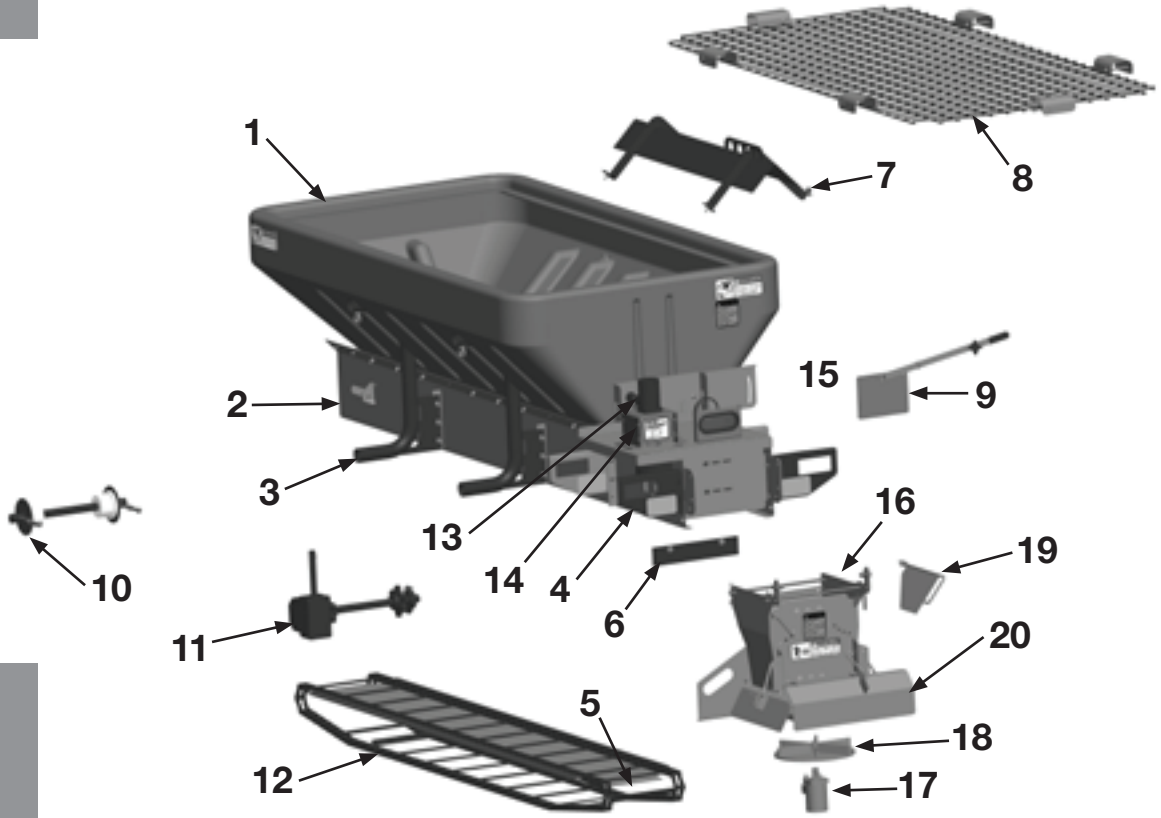
17. Spinner Motor – Supplies power to drive the spinner disc.

18. Spinner Disc – Rotates at a high RPM and throws material out of spinner assembly.

19. External Baffles – Adjusts the width of the spread pattern behind the vehicle.

HYDRAULIC

Polyhawk Component Identification



HYDRAULIC

Polyhawk Component Identification

1. Hopper – Constructed from Polyethylene and holds spreading material.

2. Trough – Stainless steel trough houses drag chain and drive components, also supports hopper.

3. Body Jacks – Supports the hopper and trough, allows for spreader to be bolted to vehicle.

4. Forklift Brackets – Allows spreader to be moved or installed from the rear with a forklift.

5. Conveyor Floor – Creates surface for drag chain to pickup material and move it towards rear discharge.

6. Chain Wiper – Cleans excess material from drag chain.

7. Inverted Vee – Relieves weight of material on the drag chain and is also the spreader lifting location.

8. Top Screen – Breaks up large clumps of material and prevents foreign objects from entering hopper.

9. Feedgate – Regulates amount of material being discharged from conveyor.

10. Idler Assembly – Applies tension to the drag chain.

11. Gearbox Assembly – 20:1 gear reduction receives power from engine and contains drive shaft which moves drag chain.

12. Drag Chain – Is driven by gearbox and moves material out of hopper to the spinner assembly.

13. Conveyor Motor – Supplies power to drive the conveyor.

14. Shaft Guard – Prevents access to the gearbox input shaft.

15. CHMSL – Complies with the Federal Motor Vehicle Safety Standards.

16. Spinner Assembly – Attaches to rear of spreader and distributes the spreading material onto road surface. CAUTION: DO NOT TRANSPORT SPREADER WITH SPINNER IN THE RAISED POSTION.

17. Spinner Motor – Supplies power to drive the spinner.

18. Spinner Disc – Rotates at a high RPM and throws material out of spinner assembly.

19. Internal Baffles – Adjusts the direction of the spread pattern behind the vehicle.

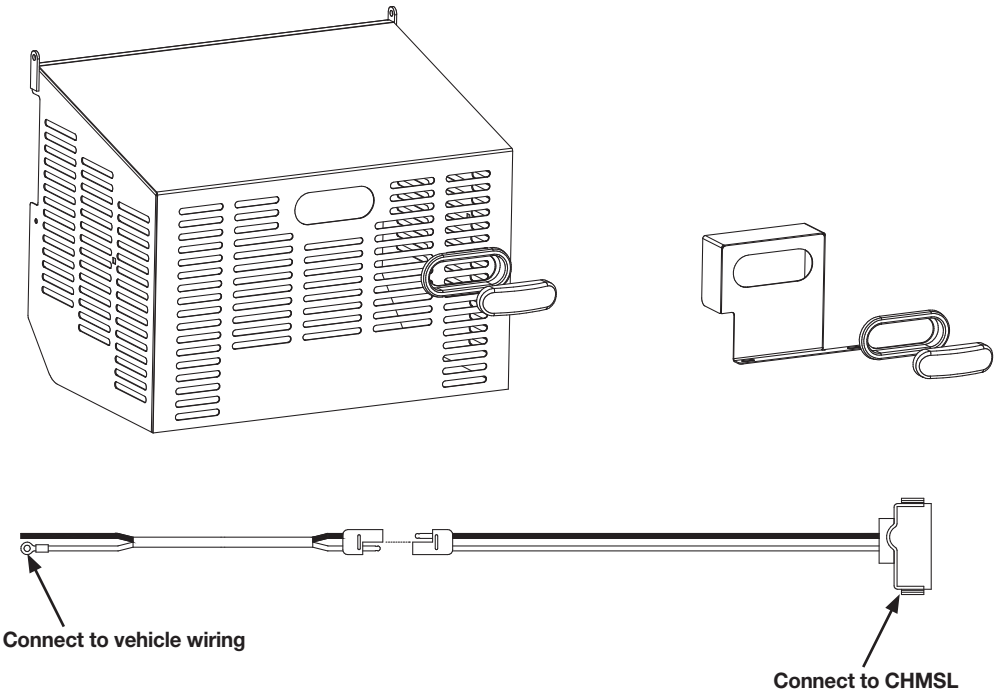
20. External Baffles – Adjusts the width of the spread pattern behind the vehicle.

Installation / Assembly Instructions

Center High Mount Stop Lamp Installation (CHMSL)

Center High Mount Stop Lamp

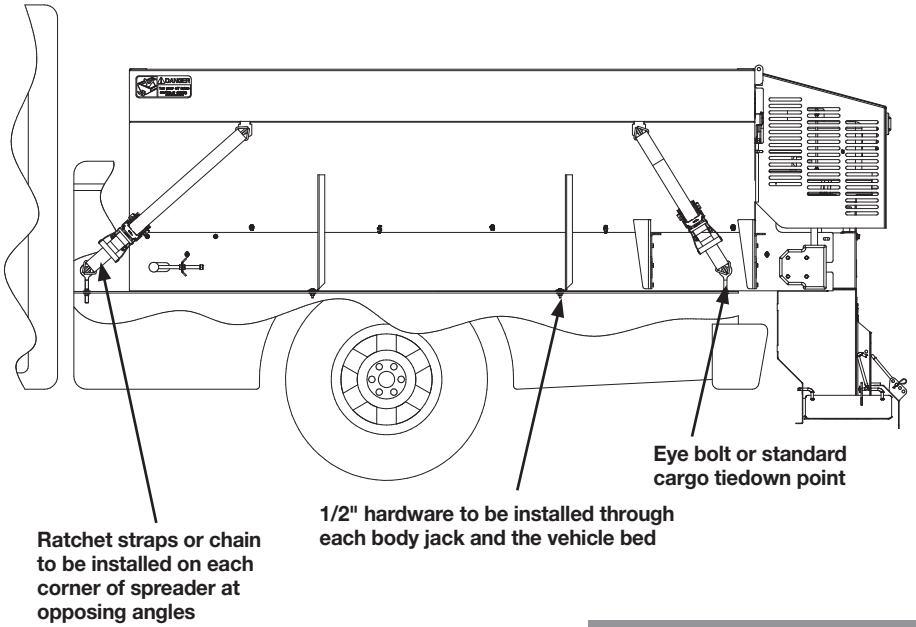
Federal Motor Vehicle Safety Standards require all trucks, buses, and multipurpose passenger vehicles manufactured on or after 5/1/1993, with a gross vehicle weight rating (GVWR) of 10,000 LBS. or less and an overall width less than 80” be equipped with a center high mount stop lamp (CHMSL). If the original vehicle CHMSL is obscured, an auxiliary CHMSL must be installed to bring the vehicle.



Installation / Assembly Instructions

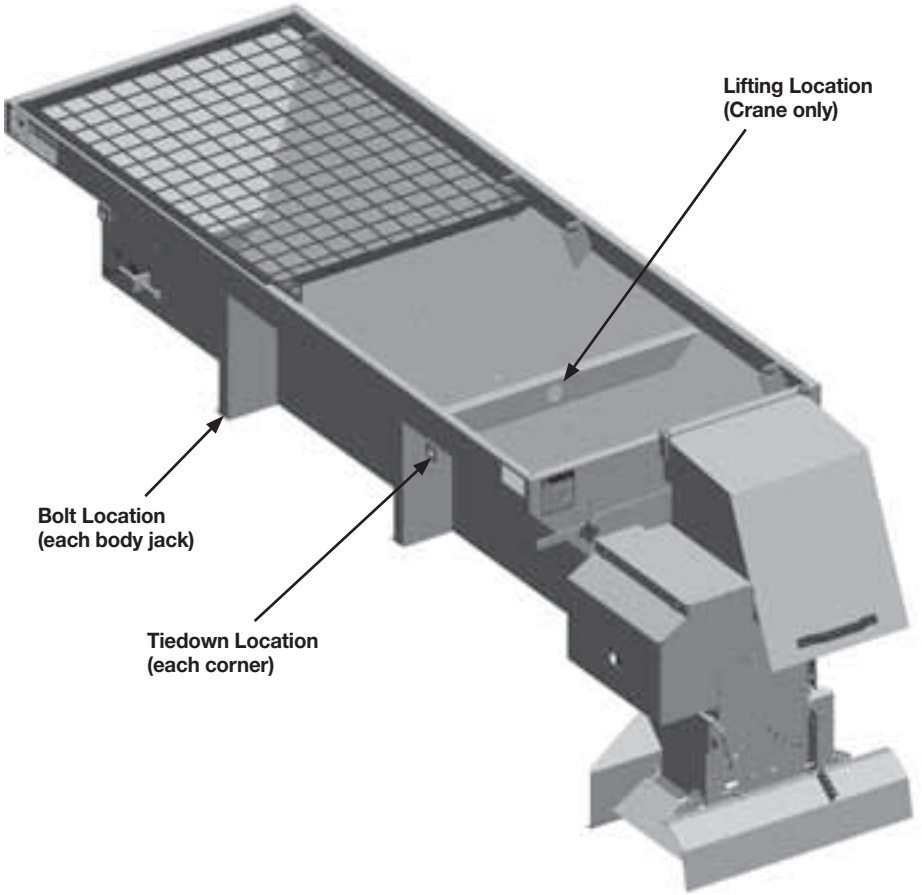
Spreader Mounting

SHOULD THERE BE SOME GENERAL INSTRUCTIONS HERE?



LPV Installation / Assembly Instructions

LIFTING & TIEDOWN LOCATIONS



LPV Installation / Assembly Instructions

The LPV series spreader can be mounted and stored as a single unit. The LPV series spreader will mount on most light and medium duty pickup trucks or utility vehicles.

Vehicle Preparation

1. Turn off vehicle engine, set parking brake, and remove keys.
2. Remove tailgate from vehicle.
3. Remove trailer hitch if equipped.

Spreader Preparation

1. Remove all loose items from inside of hopper such as the spinner assembly, controller, etc.
2. Top screen may be removed for access to internal lift point.
3. Make sure hopper is completely empty before attempting to lift or move spreader.

Lifting Spreader

All chains, hooks, and straps must be of an adequate weight rating to support entire spreader including any additional or optional equipment that may be installed. Never attempt to lift or move a spreader with material in the hopper.

1. Center Mounted Lift Hook: LPV series spreaders can be lifted with a crane or hoist by utilizing the hole on the lift channel located on the inside of the spreader hopper.

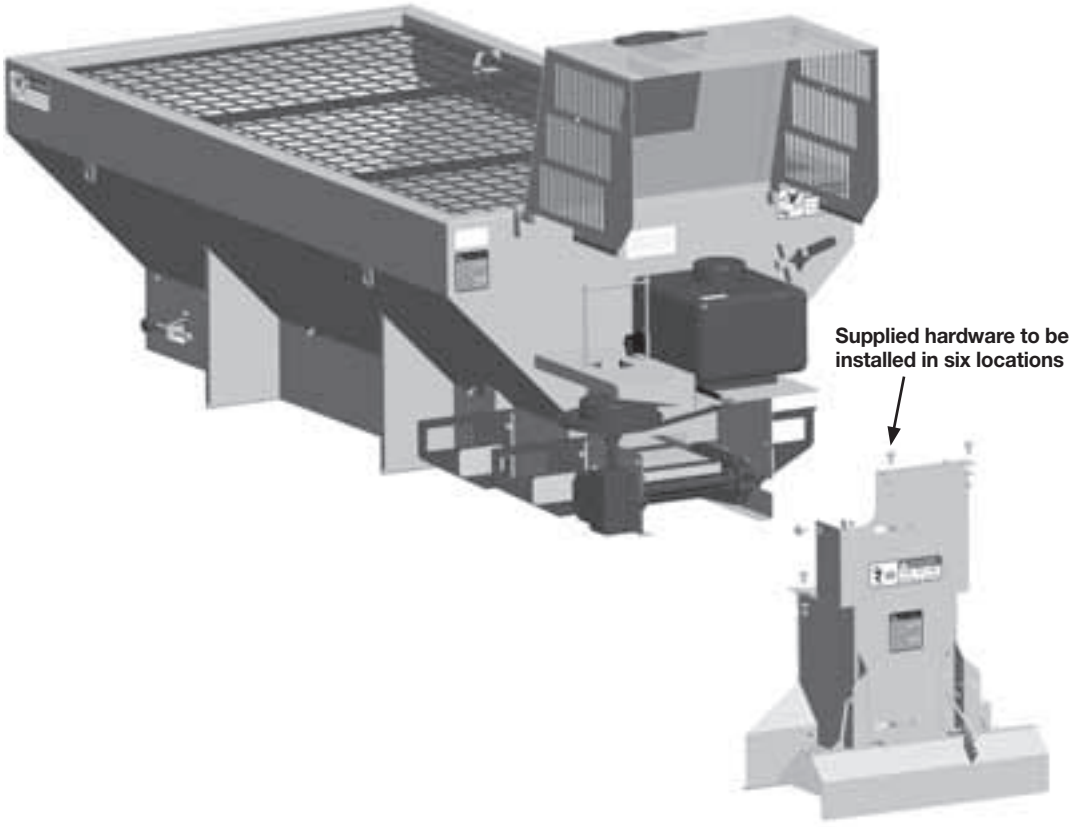
Spreader Installation

The LPV series spreader should be mounted directly on vehicle bed, spreader is not designed to be supported by body jacks alone or for chassis mount applications. Shipping skid is intended to be removed before mounting spreader. Verify mounting method is acceptable to vehicle manufacturer before attempting to mount spreader.

1. Place spreader directly onto bed of vehicle with discharge at the rear of the vehicle.
2. Spreader is designed sit directly on vehicle bed. Do not support spreader by body jacks alone. Spreader is not designed to be chassis mounted.
3. Attach spinner assembly to spreader. Make sure spreader cannot tip when spinner assembly is installed (see spinner assembly installation instructions).
4. Reposition spreader on vehicle bed, just short of the spinner assembly making contact with the rear most part of the bed, bumper, pintle hook, etc.
5. Bolt spreader to the vehicle using a minimum of four ½" grade 5 bolts and corresponding washers and lock nuts installed through the mounting hole located in each body jack.
6. Install one ratchet strap from each corner of vehicle bed to appropriate spreader tie down location. Straps should be installed at opposing angles to prevent spreader from sliding in vehicle bed.

LPV Installation / Assembly Instructions

SPINNER INSTALLATION



LPV Installation / Assembly Instructions

Spinner Assembly Installation

Spinner should be solidly supported during installation. Spinner assembly weighs over 50 lbs. (22.7 kg) and may require more than one person for safe installation.

1. Raise engine/motor shroud.
2. Slide spinner assembly into the spreader discharge. Flanges on spinner frame should be resting on the top of flange on longitudinals.
3. Bolt spinner assembly to spreader in four places using provided hardware.
4. Ensure lower sprocket on gearbox input shaft and spinner shaft sprocket are aligned, install roller chain between the two sprockets.
5. Connect ends of roller chain with supplied master link.
6. Adjust roller chain tension by loosening four spinner shaft mounting bolts and sliding spinner shaft away from the gearbox (towards passenger side of vehicle).
7. Make sure spinner shaft is aligned straight up and down before tightening spinner shaft mounting bolts.

Engine Driven LPV Spreaders

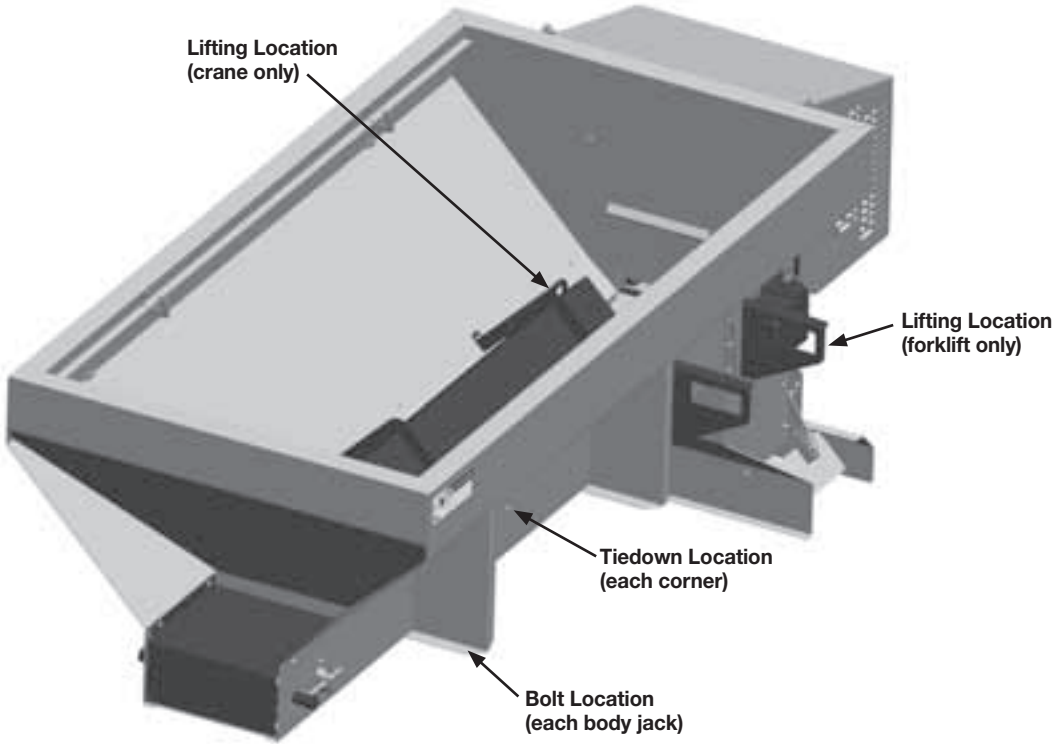
1. Connect spreader power and ground wires to the appropriate power and ground wires installed on vehicle.
2. **Caution:** Spreader may be shipped without engine oil, refer to engine manufacturer's instructions.
3. **Caution:** Spreader may be shipped without oil in the gear box. Fill gearbox to oil level plug with an EP 85 W 140 gear type lubricant.
4. Add fuel to engine fuel tank, refer to engine manufacturer's instructions.
5. Test run spreader.

Electric LPV Spreaders

1. Connect spreader wire harnesses to appropriate harnesses installed on vehicle.
2. Caution: Spreader may be shipped without oil in the gear box. Fill gearbox to oil level plug with an EP 85 W 140 gear type lubricant.
3. Test run spreader.

PV Installation / Assembly Instructions

LIFTING & TIEDOWN LOCATIONS



PV Installation / Assembly Instructions

The PV series spreader can be mounted and stored as a single unit. The PV series spreader will mount on most medium or heavy duty pickup trucks. PV series spreader can be mounted on 1 ton and larger trucks, but may require optional extended spinner.

Vehicle Preparation
Overloading vehicle can create dangerous stability and braking problems. Always consult and follow vehicle manufacturer's weight ratings and mounting instructions.

1. Turn off vehicle engine and set parking brake.
2. Remove tailgate from vehicle.
3. Remove trailer hitch if equipped.

Spreader Preparation

1. Remove all loose items from inside of hopper such as the spinner assembly, controller, etc.
2. Top screen may be removed for access to internal lift point.
3. Make sure hopper is completely empty before attempting to lift or move spreader.

Lifting Spreader
All chains, hooks, and straps must be of an adequate weight rating to support entire spreader including any additional or optional equipment that may be installed. Never attempt to lift or move a spreader with material in the hopper.

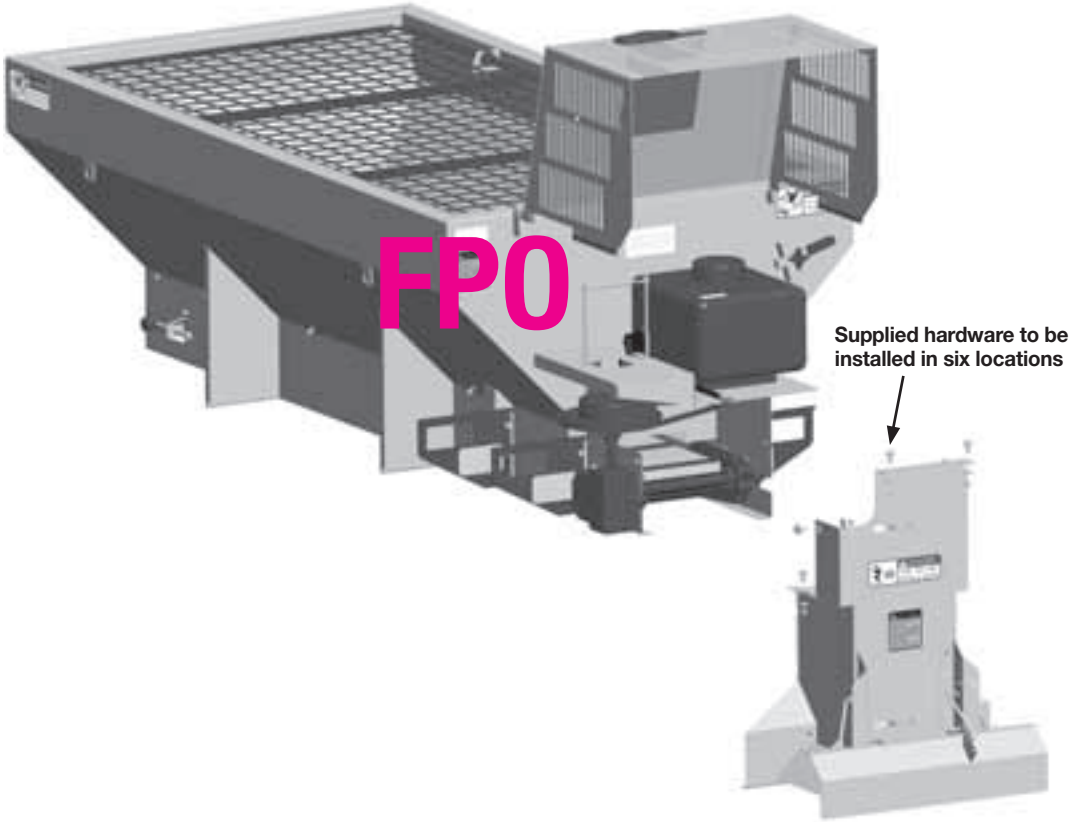
1. Center Mounted Lift Hook: PV series spreaders can be lifted with a crane or hoist by utilizing the center lift hook located on the inverted vee inside of spreader hopper.
2. Forklift brackets: PV series spreader can be lifted with a forklift by utilizing the rear forklift brackets. Extended forks are recommended for use with the forklift brackets. Verify forklift is of an adequate weight rating to prevent forklift from tipping while moving spreader.

Spreader Installation
The PV series spreader should be mounted directly on vehicle bed, spreader is not designed to be supported by body jacks alone or for chassis mount applications. Shipping skid is intended to be removed before mounting spreader. Verify mounting method is acceptable to vehicle manufacturer before attempting to mount spreader.

1. Place spreader directly onto bed of vehicle with discharge at the rear of the vehicle.
2. Spreader is designed sit directly on vehicle bed. Do not support spreader by body jacks alone. Spreader is not designed to be chassis mounted.
3. Attach spinner assembly to spreader. Make sure spreader cannot tip when spinner assembly is installed (see spinner assembly installation instructions).
4. Reposition spreader on vehicle bed, just short of the spinner assembly making contact with the rear most part of the bed, bumper, pintle hook, etc.
5. Bolt spreader to the vehicle using a minimum of four ½" grade 5 bolts and corresponding washers and lock nuts installed through the mounting hole located in each body jack.
6. Install one ratchet strap from each corner of vehicle bed to appropriate spreader tie down location. Straps should be installed at opposing angles to prevent spreader from sliding in vehicle bed.

PV Installation / Assembly Instructions

SPINNER INSTALLATION



PV Installation / Assembly Instructions

Spinner Assembly Installation

Spinner should be solidly supported during installation. Spinner assembly weighs over 50 lbs. (22.7kg) and may require more than one person for safe installation.

1. Raise engine/motor shroud.
2. Slide spinner assembly into the spreader discharge. Flanges on spinner frame should be resting on the top of flange on longitudinals.
3. Bolt spinner assembly to spreader in six places using provided hardware.
4. Ensure lower sprocket on gearbox input shaft and spinner shaft sprocket are aligned, install roller chain between the two sprockets.
5. Connect ends of roller chain with supplied master link.
6. Adjust roller chain tension by loosening four spinner shaft mounting bolts and sliding spinner shaft away from the gearbox (towards passenger side of vehicle).
7. Make sure spinner shaft is aligned straight up and down before tightening spinner shaft mounting bolts.

Engine Driven PV Spreaders

1. Install battery onto spreader and secure with provided battery hold down hardware. An automotive type battery with a minimum of 500 CCA is recommended.
2. **Caution:** Spreader may be shipped without engine oil, refer to engine manufacturer's instructions.
3. **Caution:** Spreader may be shipped without oil in the gear box. Fill gearbox to oil level plug with an EP 85 W 140 gear type lubricant.
4. Add fuel to engine fuel tank, refer to engine manufacturer's instructions.
5. Test run spreader.

Electric PV Spreaders

1. Connect spreader wire harnesses to appropriate harnesses installed on vehicle.
2. Caution: Spreader may be shipped without oil in the gear box. Fill gearbox to oil level plug with an EP 85 W 140 gear type lubricant.
3. Test run spreader.

Hydraulic PV Spreaders

Conveyor and spinner motors may be connected in series or parallel. Hoses may be reversed to obtain proper rotation. All controls, hoses, and couplers must conform to industry standard specifications and EN 982:1996.

1. Connect hydraulic hoses from vehicle to spreader conveyor and spinner motors.
2. Check vehicle hydraulic reservoir for proper fluid level.
3. **Caution:** Spreader may be shipped without oil in the gearbox. Fill gearbox to oil level plug with an EP 85 W 140 gear type lubricant.
4. Test run spreader.
5. Recheck vehicle hydraulic reservoir for proper fluid level.

Control and hydraulic system specifications

Hydraulic oil: Good grade of MS10W oil with wear, oxidation, and foam inhibitors

Oil Filter: 10 Micron element return line filter

Relief Valve Setting: 1500 PSI Maximum

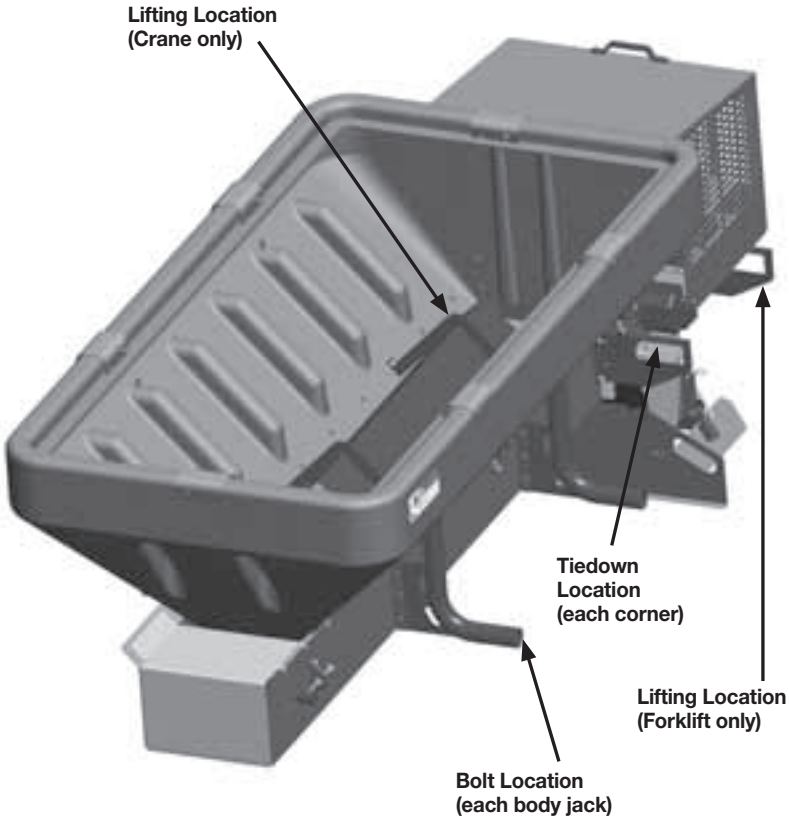
Oil Flow (single flow controller): 0-10 GPM

Oil Flow (dual flow controller): 0-7 GPM spinner / 0-15 GPM conveyor

Polyhawk Installation / Assembly Instructions

The Polyhawk series spreader can be mounted and stored as a single unit. The Polyhawk series spreader will mount on most medium or heavy duty pickup trucks. Polyhawk series spreaders can be mounted on 1-ton and larger trucks, but may require optional spinner extension.

LIFTING & TIEDOWN LOCATION



Polyhawk Installation / Assembly Instructions

Vehicle Preparation

Overloading vehicle can create dangerous stability and braking problems. Always consult and follow vehicle manufacturer's weight ratings and mounting instructions.

1. Turn off vehicle engine and set parking brake.

2. Remove tailgate from vehicle.

3. Remove trailer hitch if equipped.

Spreader Preparation

1. Remove all loose items from inside of hopper such as the spinner assembly, controller, etc.

2. Top screen may be removed to allow access to internal lift point.

3. Make sure hopper is completely empty before attempting to lift or move spreader.

Lifting Spreader

All chains, hooks, and straps must be of an adequate weight rating to support entire spreader including any additional or optional equipment that may be installed. Never attempt to lift or move a spreader with material in the hopper.

1. Center Mounted Lift Hook: Polyhawk series spreaders can be lifted with a crane or hoist by utilizing the center lift hook located on the inverted vee inside of spreader hopper.

2. Forklift brackets: Polyhawk series spreader can be lifted with a forklift by utilizing the rear forklift brackets. Extended forks are recommended for use with the forklift brackets. Verify forklift is of an adequate weight rating to prevent forklift from tipping while moving spreader.

Spreader Installation

The Polyhawk series spreader should be mounted directly on vehicle bed, spreader is not designed to be supported by body jacks alone or for chassis mount applications. Shipping skid is intended to be removed before mounting spreader. Verify mounting method is acceptable to vehicle manufacturer before attempting to mount spreader.

1. Place spreader directly onto bed of vehicle with discharge at the rear of the vehicle.

2. Spreader is designed sit directly on vehicle bed. Do not support spreader by body jacks alone. Spreader is not designed to be chassis mounted.

3. Make sure spreader cannot tip and lower spinner assembly. Spinner weighs over 50 lbs. and may require more than one person to safely raise / lower.

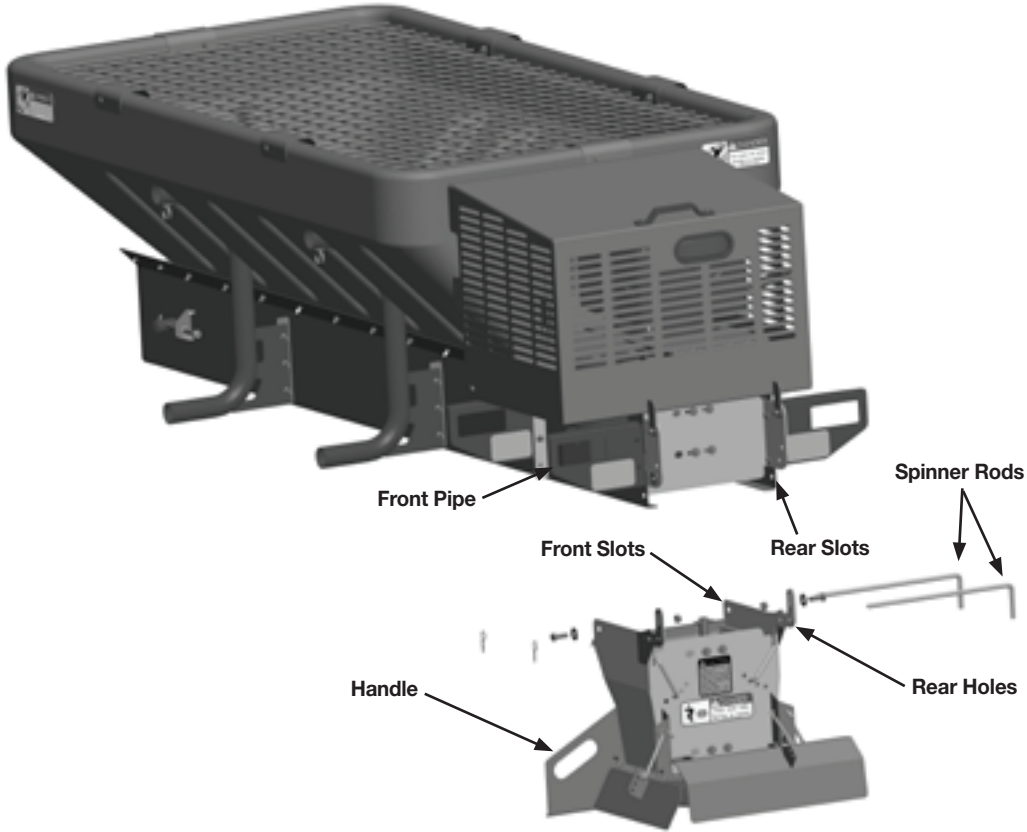
4. Reposition spreader on vehicle bed, just short of the spinner assembly making contact with the rear most part of the bed, bumper, pintle hook, etc.

5. Bolt spreader to the vehicle using a minimum of four 1/2" grade 5 bolts and corresponding washers and locknuts installed through the mounting hole located in each body jack.

6. Install one ratchet strap from each corner of vehicle bed to appropriate spreader tie down location. Straps should be installed at opposing angles to prevent spreader from sliding in vehicle bed.

Polyhawk Installation / Assembly Instructions

SPINNER INSTALLATION



Polyhawk Installation / Assembly Instructions

Spinner Assembly Installation

Spinner should be solidly supported during installation. Spinner assembly weighs over 50 lbs. (22.7kg) and may require more than one person for safe installation.

1. Raise engine/motor shroud.
2. Slide spinner assembly into the spreader discharge. Flanges on spinner frame should be resting on the top of flange on longitudinals.
3. Bolt spinner assembly to spreader in six places using provided hardware.
4. Ensure lower sprocket on gearbox input shaft and spinner shaft sprocket are aligned, install roller chain between the two sprockets.
5. Connect ends of roller chain with supplied master link.
6. Adjust roller chain tension by loosening four spinner shaft mounting bolts and sliding spinner shaft away from the gearbox (towards passenger side of vehicle).
7. Make sure spinner shaft is aligned straight up and down before tightening spinner shaft mounting bolts.

Engine Driven Polyhawk Spreaders

1. Install battery onto spreader and secure with provided battery hold down hardware. An automotive type battery with a minimum of 500 CCA is recommended.
2. **Caution:** Spreader may be shipped without engine oil, refer to engine manufacturer's instructions.
3. **Caution:** Spreader may be shipped without oil in the gearbox. Fill gearbox to oil level plug with EP 85 W 140 gear type lubricant.
4. Add fuel to engine fuel tank, refer to engine manufacturer's instructions.
5. Test run spreader.

Electric Polyhawk Spreaders

1. Connect spreader wire harnesses to appropriate harnesses installed on vehicle.
2. Spreader may be shipped without oil in the gearbox. Fill gearbox to oil level plug with an EP W 140 gear type lubricant.
3. Test run spreader.

Hydraulic Polyhawk Spreaders

Conveyor and spinner motors may be connected in series or parallel. Hoses may be reversed to obtain proper rotation. All controls, hoses, and couplers must conform to industry standard specifications and EN 982:1996.

1. Connect hydraulic hoses from vehicle to spreader conveyor and spinner motors.
2. Check vehicle hydraulic reservoir for proper fluid level.
3. Spreader may be shipped without oil in the gearbox. Fill gearbox to oil level plug with EP W 140 gear type lubricant.
4. Test run spreader.
5. Recheck vehicle hydraulic reservoir for proper fluid level.

Control and hydraulic system specifications

Hydraulic oil: Good grade of MS10W oil with wear, oxidation, and foam inhibitors

Oil Filter: 10 Micron element return line filter

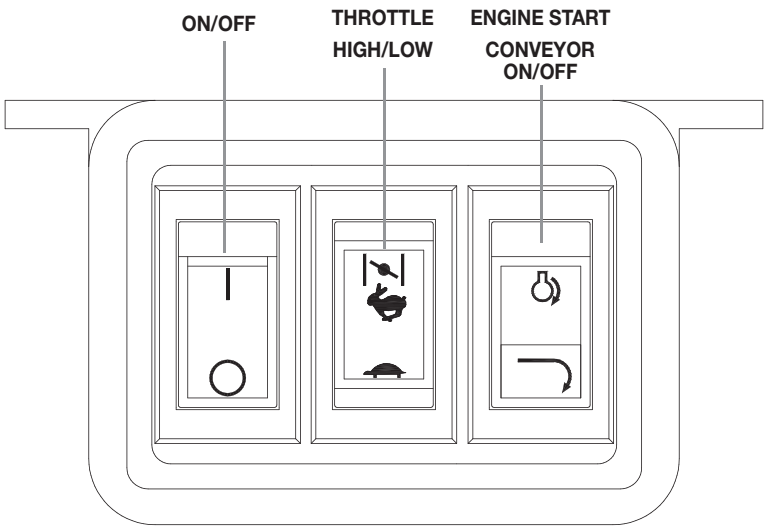
Relief Valve Setting: 1500 PSI Maximum

Oil Flow (single flow controller): 0-10 GPM

Oil Flow (dual flow controller): 0-7 GPM spinner / 0-15 GPM conveyor

Gasoline Engine Spreader Controller

The gasoline engine spreader controller is intended to control the following functions of the spreader: engine start/stop, engine choke, throttle increase/decrease, and clutch on/off. Control system is made up of the control panel, and harness. Controller is intended to be permanently mounted inside the cab of the vehicle.



OPERATION

Controller is not functional until the ON /OFF switch is switched to the "ON" position. Moving the ON/OFF switch to the "OFF" position will stop the engine and shut off power to the entire controller.

1. Move the ON/OFF switch up to the "ON" position.
2. Set engine throttle to choke by pressing and holding the THROTTLE BUTTON up for two seconds.
3. Press and hold the START/CONVEYOR button in the up position until the engine starts. Note: continuing to hold the START button after the engine starts will result in damage to the engine.
4. Once engine starts press the THROTTLE button down to remove the throttle from choke.
5. Press the THROTTLE button up or down until desired engine RPM is achieved.
6. Engage the electric clutch by pressing the START/CONVEYOR button down.
7. Disengage the electric clutch by moving the START/CONVEYOR switch to the middle position.
8. Engine can be shut off by moving the ON/OFF button down to the "OFF" Position.

Wireless Gasoline Engine Control System

The wireless gasoline engine controller is intended to control the start/stop, throttle increase/decrease, and electric clutch on/off functions. The control system consists of a transmitter and a receiver. The receiver is mounted on the spreader near the gasoline engine. The transmitter is intended to remain in the vehicle cab or with the operator.

OPERATION

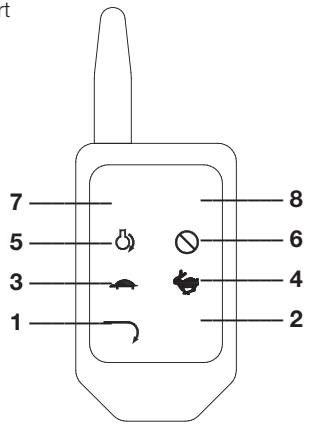
1. Set engine throttle to choke by pressing and holding the throttle INCREASE button for two seconds.
2. Press and hold engine START button until engine starts. Note: continuing to hold the engine start button after the engine starts will result in damage to the engine.
3. Once engine starts, press the throttle DECREASE button to remove throttle from the choke position.
4. Press the throttle INCREASE or throttle DECREASE button until desired engine RPM is achieved.
5. Engage electric clutch by pressing CONVEYOR button once.
6. Disengage electric clutch by pressing CONVEYOR button once.
7. Engine can be stopped by pressing and holding the ENGINE KILL button until engine stops. Note: pressing the engine kill button will also automatically disengage the electric clutch.

SPECIFICATIONS

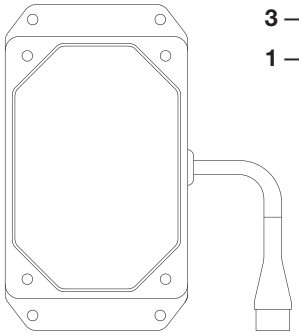
- 12 Volt
- Frequency 418 MHz US / 433 MHz Europe
- Transmitter battery: CR2032 Lithium Button Cell

BUTTON FUNCTIONS

1. Conveyor ON/OFF
2. Not Used
3. Throttle Down
4. Throttle Up
5. Engine Start
6. Engine Kill
7. Not Used
8. Not Used



Transmitter



Receiver

Dual Electric Variable Speed Controller

Dual Electric Variable Speed Controller allows each electric motor to be independently controlled. Controller consists of the following functions: on/off, dual variable speed control, and a blast feature.

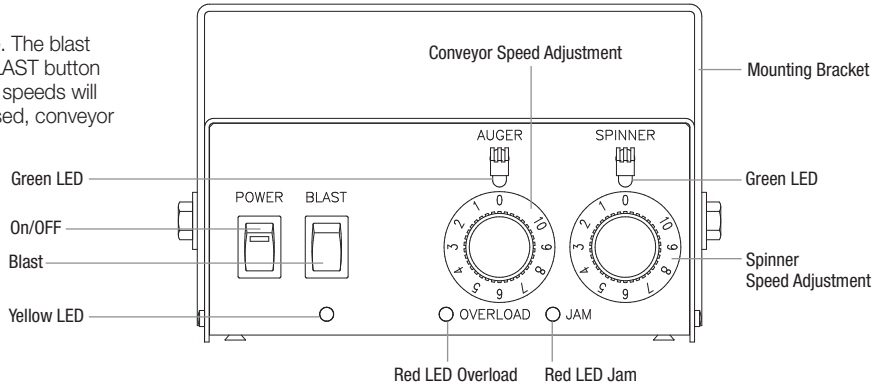
OPERATION When controller ON/OFF switch is in the “OFF” position, the controller has no functions and spreader will not operate. When ON/OFF switch is in the “ON” position, the controller functions are able to be used and spreader can operated. When controller is on green LED lights will illuminate over variable speed dials.

AUTO-BLAST FEATURE Each time the controller is turned on, the auto-blast feature will start automatically. The auto-blast feature will automatically increase the speed of both electric motors to setting “8” for three seconds. After three seconds the electric motor speeds will return to the speed as set on the dials. The auto-blast feature is intended to clear any material jams that may have occurred when transporting the spreader.

VARIABLE SPEED SETTINGS Controller is equipped with dual variable speed dials, one each for the conveyor and spinner electric motors. Variable speed dials have setting of 0 – 10 with setting 10 being full speed. NOTE: depending upon the weight of material on the conveyor or spinner, electric motors may not operate at lower dial settings.

BLAST FEATURE Controller is also equipped with a blast feature. The blast feature allows for momentary high output spreading. When the BLAST button is depressed, yellow LED will illuminate and conveyor and spinner speeds will automatically increase to setting “8”, when BLAST button is released, conveyor and spinner will return to speed set on variable speed dials.

JAM / OVERLOAD MODE Controller is equipped with a jam and overload feature. When amperage required by electric motors exceeds the safe level the controller will enter the overload function. The overload function will reduce the amperage to a safe level. Overload mode can be identified by the illumination of the red flashing LED marked OVERLOAD. If overload function is unable to clear obstruction, controller will enter the jam mode which will be indicated by the illumination of the red LED marked JAM. When controller enters the jam mode, all functions of the controller will stop to protect electrical system from damage. Once the obstruction is cleared the controller will need to be switched off and then back on to clear jam mode before operation can resume.



Wireless Electric Variable Speed Controller

The wireless electric variable speed controller is intended to control the speed of a single electric motor. Controller system consists of a transmitter and receiver. The receiver is mounted on the spreader near the electric motor. The transmitter is intended to remain in the vehicle cab or with the operator.

OPERATION Controller is not functional until turned on by pressing the ON button on the transmitter. Once controller is turned on then the operator can select any of the five available speeds.

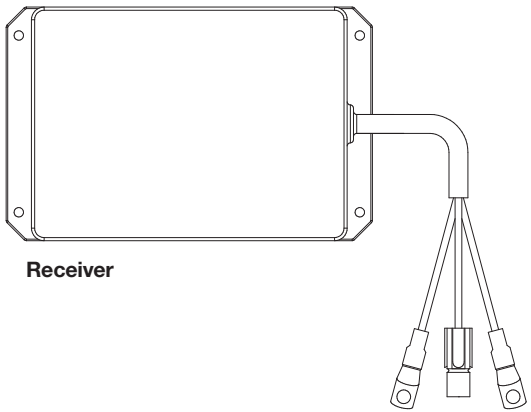
The controller blast feature is intended to override the current speed setting and operate the motor at full speed until deactivated. Blast feature can be deactivated at any-time and controller will return to previous speed setting.

By pressing the OFF button on the transmitter, controller and motor are both turned off and will not operate.

1. Press ON button to activate controller.
2. Press desired speed selection button.
3. The conveyor speed can be increased or decreased at anytime by pressing the appropriate speed selection button.
4. Press the BLAST button to activate the blast mode, press the BLAST button a second time to deactivate the blast mode.
5. Press the OFF button to stop spreader and shut off the controller.

SPECIFICATIONS

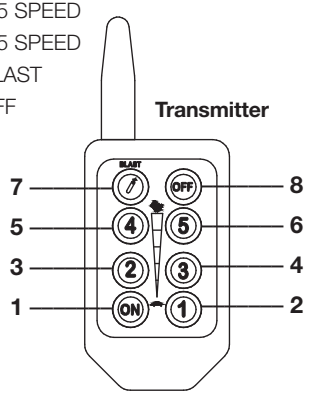
- 12 Volt
- Frequency 418 MHz US / 433 MHz Europe
- Transmitter battery: CR2032 Lithium Button Cell



Receiver

BUTTON FUNCTIONS

1. ON
2. 1/5 SPEED
3. 2/5 SPEED
4. 3/5 SPEED
5. 4/5 SPEED
6. 5/5 SPEED
7. BLAST
8. OFF



Programming Wireless Control System

Gasoline Engine Wireless Controller

Tools required: #1 Phillips screw driver, small diameter paperclip

Programming Hand Held Transmitter

1. On the backside of the hand held transmitter depress the ADD button using a small paper clip. When the ADD button is depressed a blue LED light will flash for approximately 15 seconds.

2. While the blue LED is flashing, firmly depress each of the eight buttons on the front of the hand held transmitter one at a time. There is no certain order to depress the buttons. When the blue LED stops flashing the transmitter has been programmed. NOTE: transmitter contains eight buttons but only five are marked. To program the transmitter correctly all eight buttons must be pressed one at a time before the blue LED stops flashing.

Programming Base Receiver Unit

1. Remove the (4) screws and cover from the base receiver unit located on the spreader near the engine.

2. Confirm the base receiver and spreader control cables are connected.

3. Install a charged 12V automotive type battery onto the spreader and connect to spreader battery cables.

4. Locate the LEARN button inside the base receiver unit and depress. When the LEARN button is depressed a red LED will flash for approximately 15 seconds.

5. While the red LED on the base receiver unit is flashing, press the CONVEYOR button once. When the red LED stops flashing the transmitter has been programmed to the base receiver unit.

6. Verify all spreader functions are operating correctly and replace base receiver cover. If programming was unsuccessful repeat programming procedure or see trouble shooting guide in this manual.

Variable Speed Electric Wireless Controller

Tools required: #1 Phillips screw driver, small diameter paperclip

Programming Hand Held Transmitter

1. On the backside of the hand held transmitter depress the ADD button using a small paper clip. When the ADD button is depressed a blue LED light will flash for approximately 15 seconds.

2. While the blue LED is flashing, firmly depress each of the eight buttons on the front of the hand held transmitter one at a time. There is no certain order to depress the buttons. When the blue LED stops flashing the transmitter has been programmed.

Programming Base Receiver Unit

1. Remove (4) screws and cover from base receiver unit located on spreader near the electric motor.

2. Confirm the receiver wires are securely connected to the electric motor.

3. Confirm the spreader and truck power harnesses are securely connected.

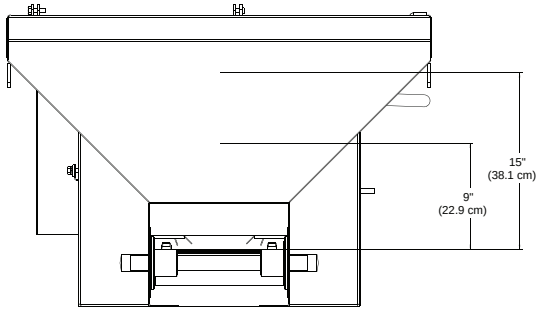
4. Locate the LEARN button inside the base receiver unit and depress. When the LEARN button is depressed a red LED will flash for approximately 15 seconds.

5. While the red LED on the base receiver unit is flashing, press the ON button once. When the red LED stops flashing the transmitter has been programmed to the base receiver unit.

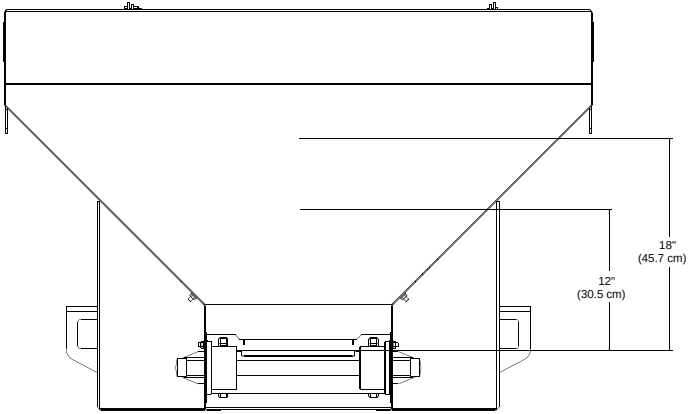
6. Verify all spreader functions are operating correctly and replace the base receiver cover. If programming was unsuccessful repeat programming procedure or see trouble shooting guide in this manual.

Vehicle Loading

LPV



PV / POLYHAWK



Determining Vehicle Payload

It is necessary to calculate the available material payload to prevent overloading the vehicle. Overloading the vehicle can create dangerous stability and braking problems. Always consult and follow vehicle manufacturer's weight ratings and mounting instructions.

1. Mount complete spreader and any optional equipment on vehicle.
2. Attach all additional equipment onto vehicle such as snow plow, hitch, etc that will be used when spreader is mounted on vehicle.
3. Fill fuel tanks.
4. With normal operator(s) inside of vehicle, weigh vehicle to obtain the Gross Vehicle Weight (GVW).
5. Obtain Gross Vehicle Weight Rating (GVWR), Front Gross Axle Weight Rating (FGAWR), and Rear Gross Axle Weight Rating (RGAWR) from the driver's door jam or from the vehicle manufacturer.
6. Subtract the GVW from the GVWR to obtain the available material payload.
7. Divide the payload by the material density (see Material Density Chart) to determine the maximum volume of material that can be carried by the vehicle.
8. Refer to Hopper Capacity Chart to determine the recommended level to fill hopper to obtain desired payload.
9. Load spreader with material to the calculated height.
10. Weigh vehicle to verify vehicle does not exceed GVWR, FGAWR, or RGAWR.
11. Repeat procedure for each type of spreading material to be used.

Vehicle Loading

Volume at Specified Height (Cu. Yds.)			
Spreader	Full	15”	9”
LPV 3’	0.30	0.22	0.09
LPV 4’	0.43	0.30	0.12
LPV 5’	0.56	0.38	0.16
LPV 6’	0.69	0.47	0.20
LPV 7’	0.82	0.55	0.23
LPV 8’	0.95	0.63	0.27
Spreader	Full	18”	12”
PV 5’	1.40	0.64	0.33
PV 6’	1.60	0.79	0.40
PV 7’	1.80	0.93	0.48
PV 8’	2.00	1.07	0.56
PV 9’	2.20	1.22	0.64
PV 10’	2.40	1.36	0.71
Polyhawk	2.00	0.92	0.47

Volume at Specified Height (M3)			
Spreader	Full	15”	9”
LPV 3’	0.23	0.17	0.07
LPV 4’	0.33	0.23	0.09
LPV 5’	0.43	0.29	0.12
LPV 6’	0.53	0.36	0.15
LPV 7’	0.63	0.42	0.18
LPV 8’	0.73	0.48	0.21
Spreader	Full	18”	12”
PV 5’	1.07	0.49	0.25
PV 6’	1.22	0.60	0.31
PV 7’	1.38	0.71	0.37
PV 8’	1.53	0.82	0.43
PV 9’	1.68	0.93	0.49
PV 10’	1.83	1.04	0.54
Polyhawk	1.53	0.70	0.36

Spreader Capacity

Material	Density	
	lbs. per cubic yard	kg per M3
Coarse Salt - Dry	2,052	932
Coarse Sand - Dry	2,700	1,227
Coarse Sand - Wet	3,240	1,472

Operating Instructions

Filling Hopper

The hopper should only be filled with clean, dry, free flowing salt, sand or salt/sand mix. Commercial bagged ice melt materials may be used. Spreader is not designed to spread ag lime, gravel, rock, cinders, or any other aggregate materials. Only fill the hopper with the top screen installed to prevent foreign objects or frozen clumps of material from entering the hopper and damaging the conveyor system. Do not leave unused material inside of hopper when not in use. Do not let material freeze inside of hopper.

Gearbox: Never apply torque to output shaft of gearbox. Gearbox is designed to only accept torque from the input shaft.

Engaging Conveyor: To prevent premature wear of the electric clutch, roller chain and v-belt, engine throttle speed should be lowered to idle before engaging electric clutch.

Electric Clutch: To achieve maximum torque, new electric clutches should be burnished prior to the first use. Refer to the maintenance section of this manual for clutch burnishing procedure.

Transporting Spreader: It is recommended to turn off the fuel to the engine when transporting spreader without the engine running.

Swing-up Spinner: Do not transport spreader with the spinner in the up position.

Regulating amount of material being spread
The amount of material being spread depends upon the conveyor speed and feed gate setting. A slower conveyor speed and lowering the feed gate will decrease the amount of material being spread. A faster conveyor speed and raising the feed gate will increase the amount of material being spread.

To adjust conveyor speed:
1. Gasoline Engine driven spreader: Increase conveyor speed by increasing engine speed, decrease conveyor speed by decreasing engine speed.
2. Electric Motor driven spreader: Increase conveyor speed by increasing electric motor speed, decrease conveyor speed by decreasing engine speed.
3. Hydraulic driven spreader: Increase conveyor speed by increasing oil flow to hydraulic motor, decrease conveyor speed by decreasing oil flow to the hydraulic motor.

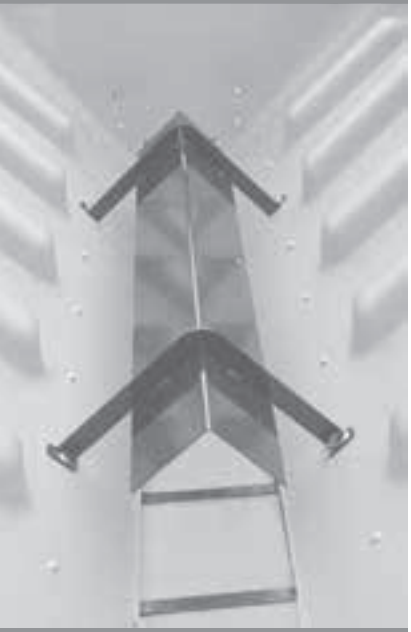
Adjusting Feed Gate:
1. Loosen adjusting knob.
2. Raise or lower handle until feedgate is at desired height.
3. Firmly tighten adjusting knob.

Regulating the spread pattern
The spread pattern is the width and direction of material spread. The width of the spread pattern can be regulated by increasing or decreasing the spinner disc speed. The direction of the spread pattern can be regulated by adjusting the internal and external baffles on the spinner assembly.

Noise & Vibration Reduction

To reduce the amount of noise and vibration produced by the spreader:

1. Keep all mechanical fasteners and guards tight and in their proper location.
2. Periodically clean built-up material from spinner disc.
3. Keep drag chain and roller chains properly adjusted and lubricated.
4. Keep all bearings properly lubricated.
5. Decrease gasoline engine RPM before engaging clutch.
6. Use optional hopper vibrator only as needed.
7. Only spread clean material free of debris such as rocks, wood, asphalt, etc.
8. Maintain engine exhaust system per engine manufacturer's recommendations.



Operating Instructions

Adjusting spread pattern width:

1. Gasoline engine driven spreader: Increase spread pattern width by increasing the engine speed. Decrease the spread pattern width by decreasing the engine speed.
2. Electric driven spreader (single motor): Increase spread pattern width by increasing electric motor speed. Decrease the spread pattern width by decreasing the electric motor speed.
3. Electric driven spreader (dual motor): Increase spread pattern width by increasing electric spinner motor speed. Decrease spread pattern width by decreasing the electric spinner motor speed.
4. Hydraulic driven spreader: Increase spread pattern width by increasing oil flow to spinner hydraulic motor. Decrease spread pattern width by decreasing oil flow to spinner hydraulic motor.

DESIRED SPREAD PATTERN	BAFFLE SETTING	
	INTERNAL	EXTERNAL
LEFT & RIGHT	LH UP	LH UP
		CENTER UP
	RH UP	RH UP
LEFT	LH UP	LH UP
		CENTER UP
	RH DOWN	RH DOWN
RIGHT	LH DOWN	LH DOWN
		CENTER UP
	RH UP	RH UP
CENTER WINDROW	LH DOWN	LH DOWN
		CENTER DOWN
	RH DOWN	RH DOWN

Adjusting the spread pattern direction:
The spread pattern direction can be regulated by adjusting the internal and external spinner baffles on the spinner assembly.

Adjusting the internal spinner baffles:

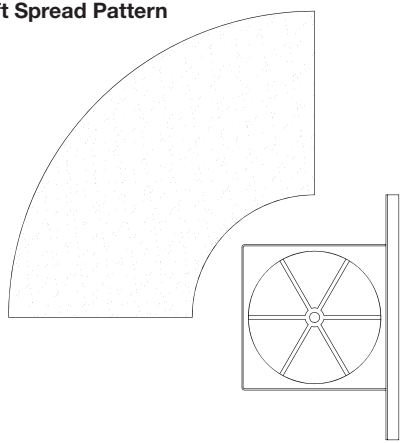
1. To adjust the internal spinner baffles, pull out the baffle handle until disengaged from the slot.
2. Rotate handle to desired setting.
3. Release handle allowing it to engage the slot.

Adjusting external spinner baffles:

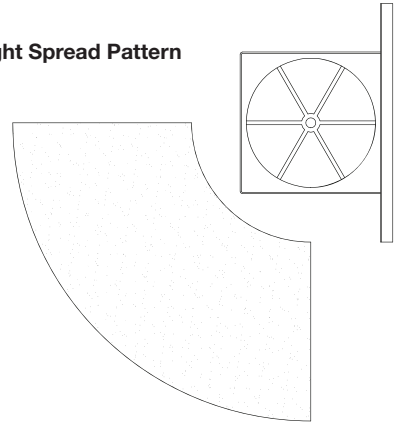
1. Remove hair pin from link bar.
2. Disengage link bar from spinner baffle.
3. Raise or lower spinner baffle to desired position.
4. Insert link bar into desired hole on spinner baffle.
5. Insert hair pin into link bar.

Operating Instructions

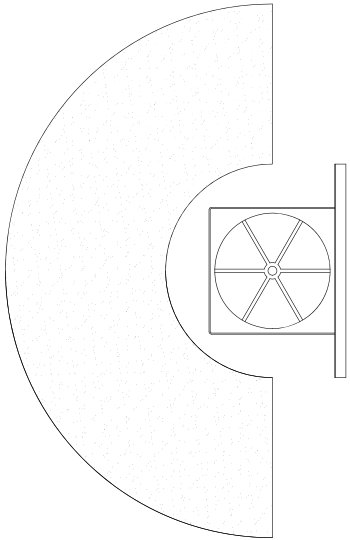
Left Spread Pattern



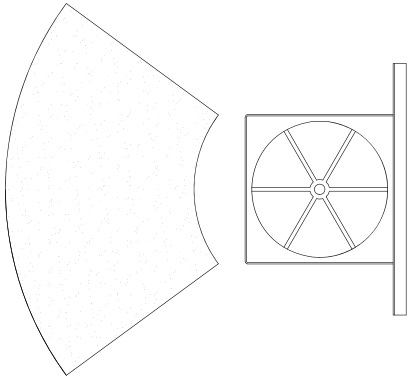
Right Spread Pattern



Left & Right Pattern

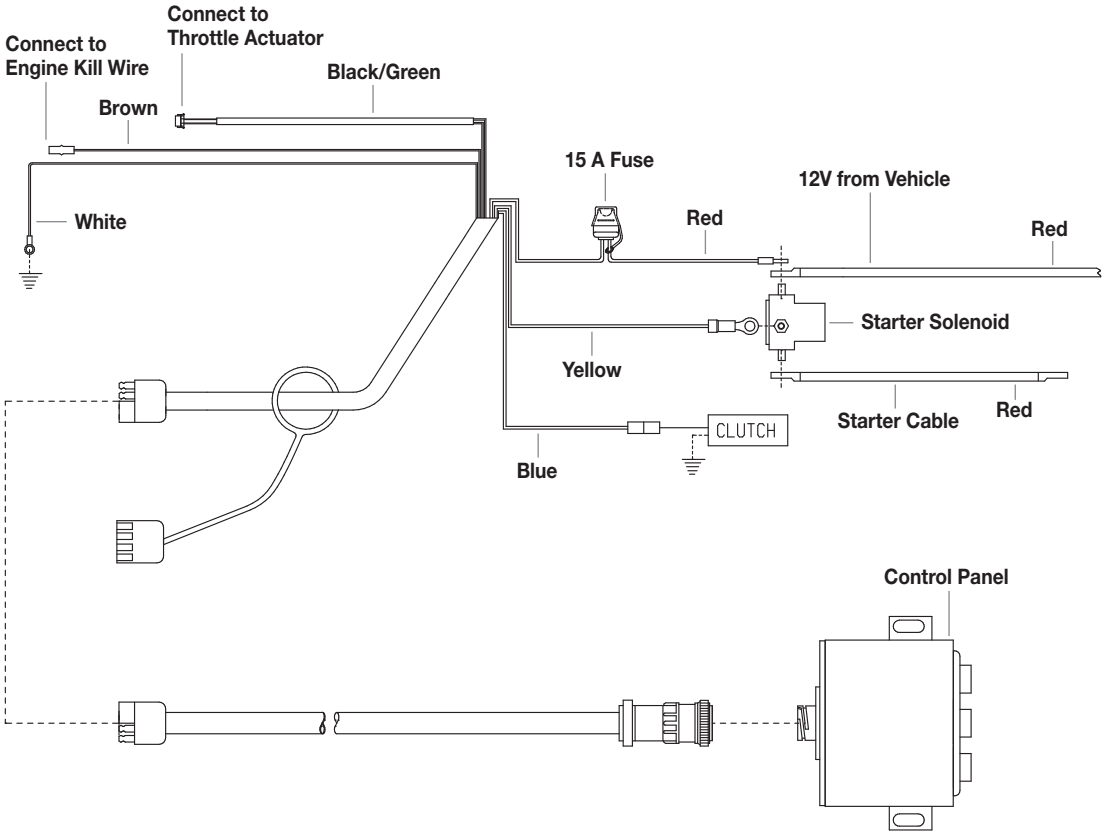


WindRow Spread Pattern

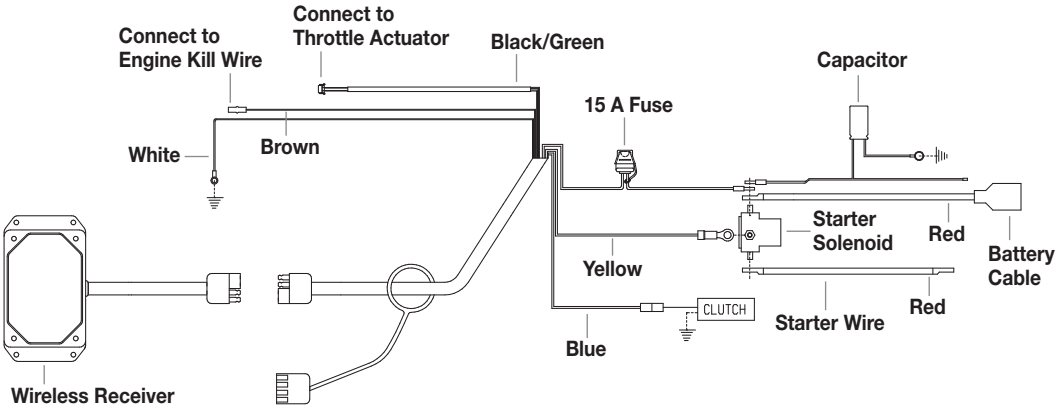


Electrical & Hydraulic Schematics

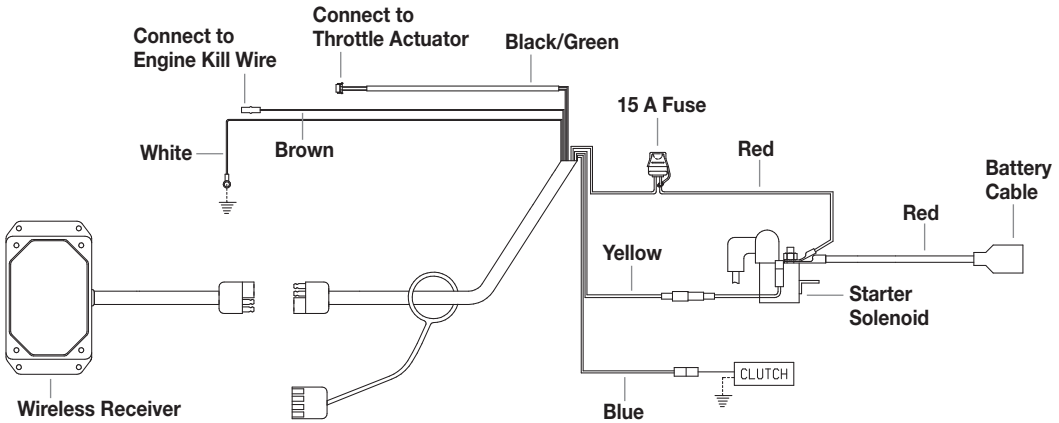
Wiring schematic for spreaders with Briggs & Stratton engine and wired controller.



Electrical & Hydraulic Schematics



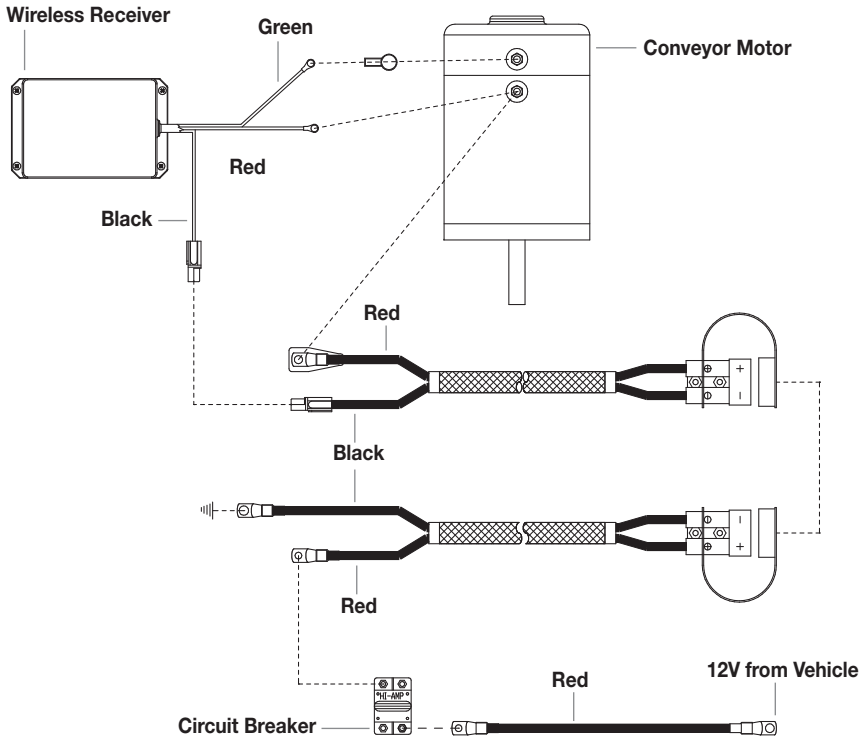
Wiring schematic for spreaders with Briggs & Stratton engine and wireless controller.



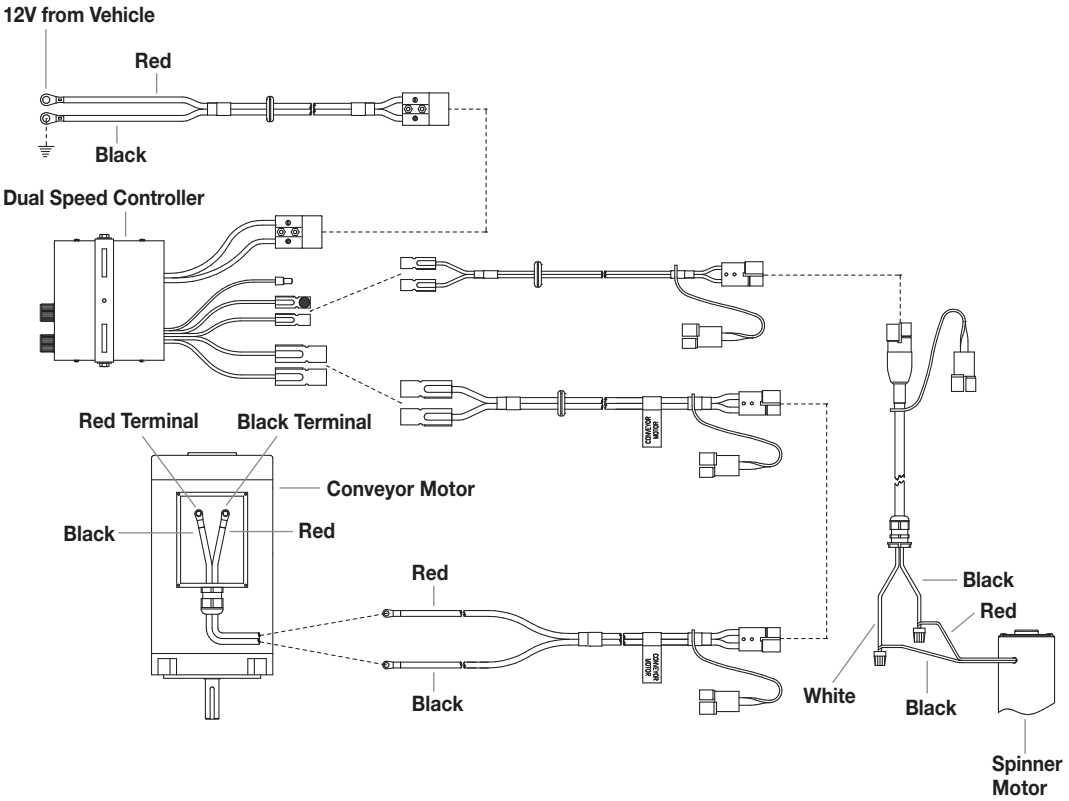
Wiring schematic for spreaders with Honda engine and wireless controller.

Electrical & Hydraulic Schematics

Wiring schematic for electric spreaders with wireless variable speed controllers.



Electrical & Hydraulic Schematics

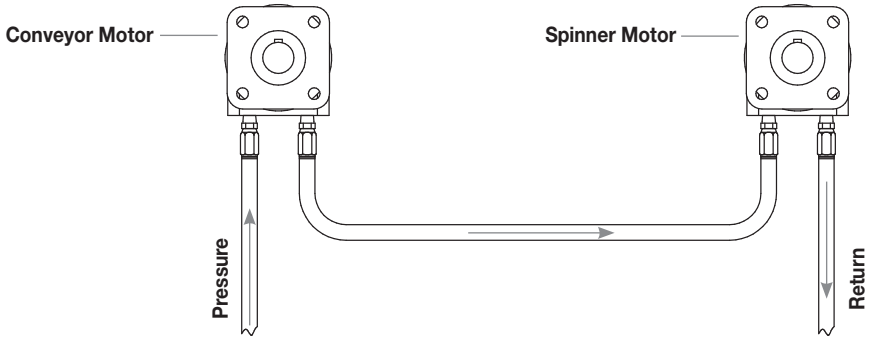


Wiring schematic for electric spreaders with dual variable speed controllers.

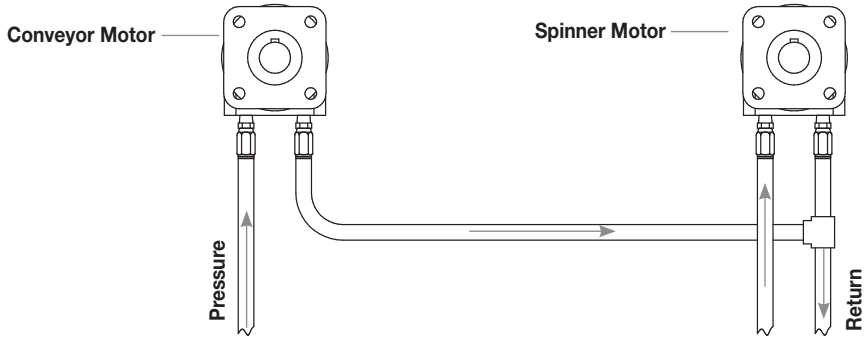
Electrical & Hydraulic Schematics

Plumbing schematic
for hydraulic spreaders.

Single flow controller plumbing



Dual flow controller plumbing



Maintenance

Regular maintenance is the key to your Meyer Spreader operating efficiently and trouble free. Meyer Products LLC recommends this maintenance information for regular service. Sustained heavy operation may call for more frequent service. Material spreading subjects a vehicle to exceptionally rugged use. As a result, it is very important to inspect and bring the spreader and vehicle up to maximum operating conditions. Inspection should be made of both the vehicle and spreader prior to the winter season and each use.

Pre-Season Maintenance

Scheduled vehicle maintenance should be performed as recommended by the manufacturer.

Vehicle Maintenance
Don't forget that in addition to keeping equipment in order:

1. Keep windshield wipers, heaters and lights working.
2. Use emergency flashing lights for increased visibility and safety.
3. Equip vehicle with tire chains when necessary.
4. Provide operators with protective clothing and gloves for handling ice melting chemicals.

Vehicle Electrical System
For maximum efficiency, the vehicle supporting the spreader must be properly serviced. The system should consist of at least a 70 amp/hr battery and a 60 amp alternator. Be sure to check regularly:

1. Battery terminals to assure they're tight and free of corrosion.
2. Electrical connections, to assure they're tight and corrosion free.
3. Battery must be in top operating condition.
4. Alternator and regulator, to assure maximum electrical output.

Vehicle Hydraulic System
To prevent any issues with the vehicle hydraulic system, be sure to perform the following prior to the winter season:

1. Flush and refill hydraulic reservoir. Replace hydraulic oil filter.
2. Inspect hydraulic pump, motors, hoses, and couplers for damage or leaks.
3. Refer to hydraulic pump manufacturers maintenance recommendations.

Spreader
Prior to the start of the winter season the pre-season maintenance should be performed to ensure the spreader operates reliably. Follow the maintenance schedule for service recommendations. Don't forget to also do the following:

1. Verify spreader is securely attached to vehicle.
2. Inspect Spreader for loose, missing, or damaged parts, guards, or hardware.
3. Repaint any rusty parts.
4. Ensure moving parts are free and not corroded.
5. Test run spreader before filling with material.

Maintenance

General Maintenance

Inspection: Before and after each use, spreader should be inspected for loose, missing, or damaged mounting hardware, parts, or safety guards. Spreader should also be inspected to ensure it is securely attached to vehicle.

Cleaning: Empty all material from spreader after each snow or ice event. Wash entire spreader with soap and warm water paying special attention to the conveyor drag chain. Do not clean spreader with any corrosive chemicals or products that contain chlorides or ammonium. Any commercially available salt neutralizer may be applied.

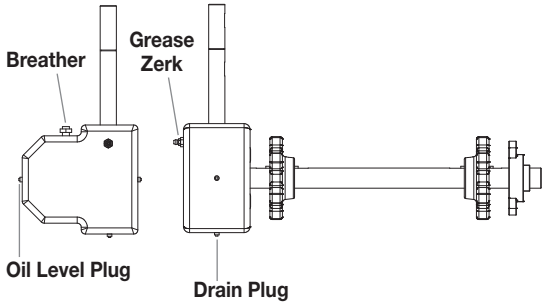
Adjusting Drag Chain Tension: Loosen rear jam nut on take-up bolt and tighten take-up bolt until drag chain is properly tensioned. Drag chain is properly tensioned when the distance between the centerline of the front idler and point where chain contacts flange of longitudinal is between 8 – 20" (20.3 – 50.8cm). Both sides of drag chain must be adjusted evenly.

Adjusting V-belt/ Roller Chain Tension: Loosen the gasoline engine or electric motor mounting bolts and slide motor away from gearbox (towards passenger side of vehicle) until proper tension is achieved. Tighten motor mounting bolts to hold motor in position. V-belt or roller chain should have between 1/4"– 5/16" (.6 cm –.8 cm) deflection midway between the sprockets.

Adjusting Spinner Roller Chain: Loosen four spinner shaft or spinner drive shaft (Polyhawk models only) mounting bolts and slide shaft away from gearbox (towards passenger side of vehicle) until proper tension is achieved and shaft is straight up and down, then tighten shaft mounting bolts to hold shaft in position. Roller chain should have between 1/4" – 5/16" deflection midway between sprockets. To prevent roller chain failure, both sprockets must be realigned. For Polyhawk models spinner shaft may need to be aligned with the spinner drive shaft after adjusting roller chain tension.

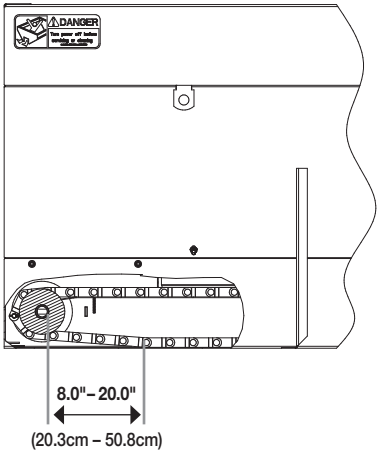
Gearbox Oil Level: Check the gearbox oil level every 10 hours of operation or monthly. Gearbox should be filled until oil reaches oil level plug. Oil should be flushed prior to start of season and replaced with an EP 85 W 140 gear type lubricant.

Gearbox Maintenance



Electrical System: Electrical system should be inspected for loose connections and corrosion every 10 hours of operation or weekly. Dielectric grease should be applied to all electrical connections.

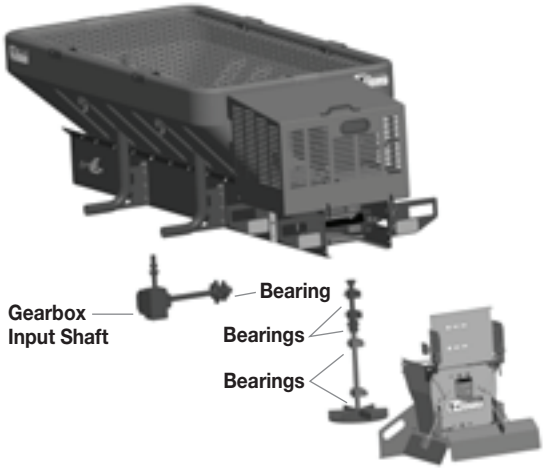
Drag Chain Tension Adjustment



Maintenance

Lubrication: After every 10 hours of operation or weekly, lubricate drag chain and roller chains with any commercial chain lubricant or a mixture of 75% motor oil & 25% diesel fuel. After every 10 hours of operation or weekly, lubricate drive shaft, spinner drive shaft and spinner shaft bearings with high quality chassis grease. After every 40 hours of operation or monthly, lubricate gearbox input shaft bearing with high quality chassis grease. **CAUTION:** over greasing gearbox input shaft bearing will result in damage to the gearbox input shaft seal.

Lubrication



Wireless Remote Transmitter Battery Replacement: Wireless controller transmitter battery should be replaced before the start of each season. It is also recommended to keep a spare battery with the vehicle. Wireless transmitter requires a standard CR2032 lithium button cell battery.

1. Gently press and slide off the battery cover from the wireless transmitter.
2. Remove the battery by sliding it out from underneath the retainer. Do not attempt to remove the battery by lifting it up from the retainer.
3. Install new battery by sliding it under the retainer. Battery must be installed with the positive (+) symbol visible.

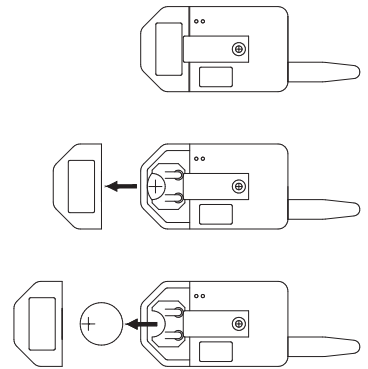
Electric Clutch: The electric clutch on new spreaders and replacement clutches should be burnished before use to achieve maximum torque. The clutch burnishing procedure is as follows:

1. Idle Engine
2. Engage clutch for 10 seconds
3. Disengage clutch for 10 seconds
4. Repeat steps 2 & 3, 20–50 times to achieve maximum clutch torque.

At the end of the winter season remove the electric clutch, add a coat of light oil to each mating half and store indoors to prevent corrosion. Prior to start of next season, oil should be removed and clutch should be reassembled onto spreader.

Gasoline Engine: Follow engine manufacturer's maintenance recommendations.

Transmitter Battery Replacement



Maintenance

Post Season Maintenance

At the end of the winter season, perform the post-season maintenance as listed in the maintenance service schedule to prevent costly repairs at the start of the next season. Also don't forget to:

1. Empty and thoroughly wash entire spreader with warm soap and water.
2. Spreader may be treated with any commercial salt neutralizer.
3. Lubricate drag chain, roller chains, and bearings.
4. Remove, clean, and store electric clutch.
5. Oil or paint any rusty parts or surfaces.

Maintenance Service Schedule

MAINTENANCE TASK TO BE COMPLETED	Pre-Season	Daily	10 Hours or Weekly	40 Hours or Monthly	Post-Season
Inspect spreader for loose, missing, or damaged parts or hardware	X	X			X
Verify spreader is securely attached to vehicle	X	X			
Inspect electrical connections and apply dielectric grease to connections	X		X		X
Adjust drag chain tension & chain wiper position	X			X	
Check gearbox oil level	X		X		
Inspect & clean gearbox breather	X		X		
Grease gearbox input shaft bearing	X			X	X
Flush and refill gearbox oil	X				
Lubricate drag chain	X		X		X
Adjust v-belt & roller chain tension	X			X	
Lubricate roller chain	X		X		X
Grease idler, drive shaft, and spinner shaft bearings	X		X		X
Oil or paint rusty surfaces	X				X
Replace wireless remote transmitter battery	X				
Clutch maintenance	X				X
Check Hydraulic Fluid Level	X	X			
Replace hydraulic filter	X			X	
Flush and refill hydraulic reservoir	X				
Engine Maintenance	*As required per engine manufacturer*				

Troubleshooting Guide

General Troubleshooting

Condition	Possible Cause	Correction
Conveyor will not operate	Hydraulic system not operating properly	See hydraulic troubleshooting
	Variable speed controller not functioning properly	See variable speed controller troubleshooting
	Wireless controller not functioning properly	See wireless controller troubleshooting
	Electric clutch not engaged	Engage clutch
	Conveyor jammed by a foreign object, or frozen material	Inspect conveyor for obstruction and remove
	Damaged gearbox	Inspect and repair gearbox
	Electric clutch not operating properly	See electric clutch troubleshooting
	Loose or damaged v-belt or roller chain	Adjust or replace v-belt or roller chain
	Loose or damaged drag chain	Adjust or replace drag chain
	Worn drive sprockets	Replace drive sprockets
	Shaft keys missing from sprockets or gearbox	Inspect for missing keys and replace
Conveyor operates erratically	Shaft keys missing from sprockets or gearbox	Inspect for missing keys and replace
	Hydraulic system not operating properly	Refer to hydraulic system troubleshooting chart
	Loose or damaged v-belt	Adjust or replace v-belt
	Electric clutch not operating properly	See electric clutch troubleshooting
	Loose or damaged drag chain	Adjust or replace drag
	Worn drive sprockets	Replace drive sprockets

Troubleshooting Guide

General Troubleshooting

Condition	Possible Cause	Correction
Noisy operation	Loose or damaged drag chain	Adjust or replace drag chain
	Drag chain needs lubrication	Lubricate drag chain
	Foreign object in conveyor	Remove object
	Faulty bearing	Replace bearing
	Spinner disc unbalanced	Remove material from spinner disc
	Drag chain contacting conveyor frame	Ensure drag chain is centered in conveyor
Material not exiting discharge chute	Conveyor discharge clogged	Clear material from discharge
	Material bridging inside hopper	Use free flowing material
	Feed gate closed	Open feed gate
	Inverted Vee not installed	Install inverted Vee
Material leaking from conveyor	Drag chain not properly adjusted	Adjust drag chain tension
	Chain wiper not properly adjusted	Adjust chain wiper position
	Material too fine	Use coarser material
Spinner disc not turning	Loose or damaged roller chain	Adjust or replace roller chain
	Spinner disc jammed	Clear jam from spinner disc
	Electric clutch not engaged	Engage clutch
	Sprocket key missing	Inspect and replace key

Troubleshooting Guide

Wireless Controller Troubleshooting

Condition	Possible Cause	Correction
Controller does not function	Receiver has no power	See “receiver has no power” troubleshooting
	Transmitter is not programmed to the receiver	See programming instructions
	Transmitter is defective	See transmitter troubleshooting
	Receiver is defective	See receiver troubleshooting
Receiver has no power	Receiver harness is not connected	Connect harness to spreader control cable
	Spreader battery is dead or discharged	Charge or replace spreader battery
	Fuse is blown	Replace fuse in spreader control cable
	Spreader control cable ground (white wire) is loose or corroded	Clean and tighten connection
	Receiver is defective	See receiver troubleshooting
Controller operates erratically	Receiver harness connection is loose or corroded	Clean and reconnect harness
	Spreader control cable ground (white wire) is loose or corroded	Clean and tighten connection
	Corresponding spreader component is defective	Replace corresponding spreader component
	Transmitter is not properly programmed to the receiver	See programming instructions
	Transmitter is defective	See transmitter troubleshooting
	Receiver is defective	See receiver troubleshooting

Troubleshooting Guide

Wireless Controller Troubleshooting

Condition	Possible Cause	Correction
Transmitter does not function	Transmitter is not programmed to the receiver	See programming instructions
	Transmitter battery is dead or not installed correctly	See transmitter battery replacement instructions
	Distance between transmitter and receiver is greater than 200' (61m)	Reduce distance between transmitter and receiver
	Transmitter signal is being obstructed	Move transmitter to a different location
	Receiver is defective	See receiver troubleshooting
	Transmitter buttons are not being fully depressed	Fully depress transmitter buttons
	Multiple transmitters are being operated in the same area	Transmitters can only be operated one at a time within the same area
Receiver does not function	Transmitter is defective	See transmitter troubleshooting
	Transmitter is not programmed to the receiver	See programming instructions
	Receiver is defective	Replace receiver
	Receiver has no power	See "receiver has no power" troubleshooting
	Corresponding spreader component is defective	Replace corresponding spreader component
Wireless Controller Notes	If red LED inside of receiver fails to light when the LEAR button is depressed, receiver has failed and will need to be replaced.	
	Multiple transmitters may be programmed to one receiver, but only one transmitter can be operated within the same air space at one time.	
	The wireless controller is a rugged unit. Generally any issue can be resolved simply by reprogramming the transmitter to the receiver. ALWAYS attempt to reprogram the wireless controller before replacing any components.	

Troubleshooting Guide

Variable Speed Controller Troubleshooting

Condition	Possible Cause	Correction
Controller has no power	Controller not turned ON	Move on/off switch to on
	Power supply harness connections loose or corroded	Clean and tighten power supply harness connections
	Controller internal fuse blown	Replace internal fuse
Controller has power but conveyor does not operate	Conveyor harness is not connected to controller	Connect conveyor harness to controller
	Conveyor harness connection at rear bumper is loose or corroded	Clean and reconnect conveyor harness connection
	Conveyor harness connections at electric motor are loose or corroded	Clean and tighten conveyor harness connections
	Conveyor speed setting is set too low	Adjust conveyor speed to a higher setting
	Controller internal fuse blown	Replace fuse
	Conveyor harness damaged	Replace conveyor harness
Controller has power but spinner does not operate	Spinner harness is not connected to controller	Connect spinner harness to controller
	Spinner harness connection at rear bumper is loose or corroded	Clean and reconnect spinner harness connection
	Spinner harness connections at electric motor are loose or corroded	Tighten or replace spinner harness wire nuts
	Spinner speed setting is set too low	Adjust Spinner speed to a higher setting
	Controller internal fuse blown	Replace fuse
	Spinner harness damaged	Replace spinner harness
Conveyor operates erratically	Loose or corroded conveyor harness connections	Clean and tighten harness connections
	Conveyor speed setting is set too low	Adjust conveyor speed to a higher setting
	Defective electric motor	Replace electric motor
	Conveyor harness damaged	Replace conveyor harness

Troubleshooting Guide

Variable Speed Controller Troubleshooting

Condition	Possible Cause	Correction
Spinner operates erratically	Loose or corroded spinner harness connections	Clean and tighten harness connections
	Spinner speed setting is set too low	Adjust spinner speed to a higher setting
	Defective electric motor	Replace electric motor
	Spinner harness damaged	Replace spinner harness

Electric Clutch Troubleshooting

Condition	Possible Cause	Correction
Clutch will not engage	Damaged clutch	Replace clutch
	Fuse blown	Replace fuse
	Loose wire connection or ground	Repair and clean loose connection
	Wireless controller not functioning properly	See wireless controller troubleshooting
	V-belt slipping	Adjust or replace v-belt
	Shaft keys missing from sprocket or gearbox	Inspect for missing keys and replace
Clutch operates erratically	Shaft keys missing from sprocket or gearbox	Inspect for missing keys and replace
	Clutch worn or damaged	Replace clutch
	Loose wire connection or ground	Repair and clean loose connection
Clutch will not disengage	Foreign object in clutch	Remove clutch and clean
	Wireless controller not functioning properly	See wireless controller troubleshooting

Troubleshooting Guide

Hydraulic Troubleshooting

Condition	Possible Cause	Correction
Pump cavitation recognized by excessive noise	Air entering system through suction line	Check line from reservoir for possible leaks
	Suction line kinked, twisted, or too long	Install suction as short and straight as possible
	Inadequate suction line size	Increase suction line size
	Oil too heavy	Drain and replace with lower viscosity non-detergent oil
	Excessive pump speed	Decrease PTO speed accordingly
Slow operation of conveyor and or spinner motor	Worn or defective pump	Repair or replace pump
	Worn or defective motor	Repair or replace motor
	Pump cavitation	Refer to pump section
	Insufficient pump speed	Increase PTO RPM accordingly
Erratic operation of conveyor and or spinner motor	Low oil	Fill reservoir to 3/4 full
	Worn or defective motor	Repair or replace motor
	Dirty, worn or defective control valve	Clean, repair, or replace flow control
	Plugged filter	Replace filter element
	Relief valve setting too low	Adjust relief valve to 1500 PSI
	Pump cavitation	Refer to pump section
	Reservoir air vent blocked	Clean or replace vent
Conveyor and or spinner motor will not operate	Quick disconnects are dirty, damaged or improperly connected	Clean, replace or properly connect
	Hose connections wrong	Reconnect hoses
	Foreign material in valve compensator	Remove compensator and clean
	On/off lever on flow control in the off position	Move lever to on position
	Flow control set too low	Adjust control to a higher setting

Meyer® One Year Spreader Warranty

Meyer offers a complete line of spreaders for any application and vehicle size. Go to www.MeyerProducts.com for more information.

Meyer Products warrants to the original purchaser only that it will repair, or at the sole option of Meyer Products replace any part of this Meyer Spreader or Spreader accessory which proves to be defective in workmanship or material under normal use for its intended purpose, that being spreading material, for a period of one year from the date of delivery. This warranty is not transferable or assignable. The original purchasers sole and exclusive remedy against Meyer Products and Meyer Products sole obligation for any and all claims, whether for breach of contract, warranty, tort (including negligence) or otherwise shall be limited to providing, through its authorized Distributor/Sub-Distributor network, all labor and/or parts necessary to correct such defects free of charge. Any cost incurred in returning the product to the Distributor/Sub-Distributor is the responsibility of the consumer. The gasoline engine used in the Insert Hopper Spreaders is covered by its own warranty as provided by the engine manufacturer. A copy of this warranty is included with the engine.

Warranty Service
In order to obtain service under this warranty, the original purchaser must return the claimed defective part to the Distributor/Sub-Distributor from whom the product was purchased or to any authorized Meyer Distributor/Sub-Distributor, transportation and freight charges prepaid. Only Meyer Distributors/Sub-Distributors are authorized to perform the obligations under these warranties. For the address and telephone number of the Distributor/Sub-Distributor nearest you, check the telephone directory or you may write to Meyer Products at the address below.

General
It is the responsibility of the original purchaser to establish the warranty period by verifying the original delivery date. A bill of sale, cancelled check or some other appropriate payment record may be kept for that purpose. It is recommended, but not required, that the consumer verify by immediately returning the attached Warranty Registration Card. No person is authorized to change this warranty or to create any warranty other than that set forth herein. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Exclusions
This warranty does not cover paint or expendable spreader parts such as pins, spreader fins and other normal wear items. Meyer Products shall not be liable for any special, indirect or consequential damages arising hereunder, or for damages resulting from lack of necessary maintenance, from misuse, abuse, acts of god, alteration of a Meyer Spreader or part, or from use of parts or hydraulic fluid not supplied by Meyer Products. Use of the Meyer Spreader for any purpose other than spreading the recommended materials is one example of an abuse and misuse of the product.

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Notes


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