

SCHMEISER DRAG SCRAPER

**MODEL SDS
HEAVY DUTY**



**MODEL SDSM
MEDIUM DUTY**



T. G. SCHMEISER Co., Inc.

OPERATION AND PARTS MANUAL

Version 1.00
March 2018

Read and understand the manual. This manual provides information and procedures to safely operate and maintain the Schmeiser Drag Scraper





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INTRODUCTION

Your Schmeiser Drag Scraper is designed to provide many years of dependable service. This manual has been prepared to instruct the user in the safe and efficient operation of this implement. Read and understand the manual thoroughly and follow all instructions carefully.

Engineered for Long Life

Our products are engineered to work in conjunction with other farm implements to help save time and money.

Serial Number Information

Record the serial number, model number, and date purchased in the space provided in the Serial Number Location section. Be sure to have this information whenever contacting the dealer to order parts or attachments for this implement.

Replacement Parts

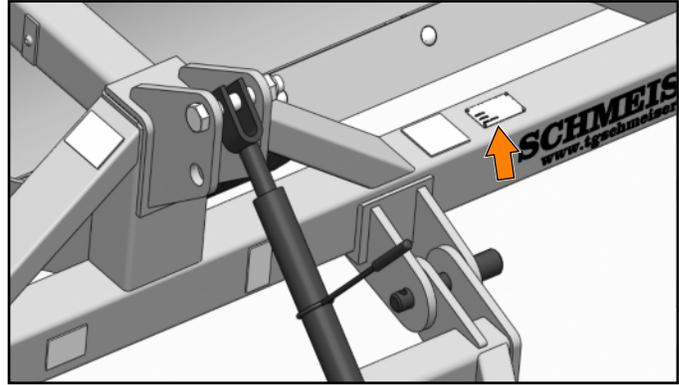
Should this implement require replacement parts, contact your local Schmeiser dealer. Always order genuine Schmeiser OEM replacement parts.

Warranty Information

It is important that the Warranty Card be completed and sent to Schmeiser. The warranty will not be valid until the information is on-file at Schmeiser. If information not contained in this manual is needed, contact your Schmeiser dealer.

Thank you for buying a Schmeiser Drag Scraper

Serial Number Location



Serial No. _____

Model No. _____

Purchase Date _____

Dealer Name _____

Factory Contact Information

For questions not answered in this manual, if additional copies are required, or the manual is damaged, please contact your local dealer or:

T. G. Schmeiser Co., Inc.
P.O. Box 1392
Selma, CA 93662

Phone: (559) 268-8128
Fax: (559) 268-3279
E-mail: sales@tgschmeiser.com
Web: www.tgschmeiser.com

Additional copies of this manual can also be downloaded at www.tgschmeiser.com.

Dealer Contact Information

For replacement decals, questions, or to order parts, contact your dealer:



SPECIFICATIONS

	ITEM NUMBER	WIDTH	WEIGHT	HP RANGE
HD MODELS	SDS08	8'	1580	65-85
	SDS10	10'	1690	75-100
	SDS12	12'	1860	90-110
	SDS14	14'	2000	100-130
MD MODELS	SDSM08	8'	1420	65-85
	SDSM10	10'	1550	75-100
	SDSM12	12'	1700	90-110
	SDSM14	14'	1875	100-130

STANDARD FEATURES

- Replaceable plastic wheel axle bushings.
- Replaceable / reversible wheel axle spindles
- Light Kit
- Jack Stand 2000 lbs. Capacity

HD MODEL FEATURES

- Easy to adjust Pull Frame to match tractor draw-bar height.
- Perfect Hitch with 40 degree articulation.
- Pull Frame folds up for quick transport set up.
- Easily converts to 3-Pt. Hitch model, CA II, CA II Quick-Hitch.

MD MODEL FEATURES

- Removable Perfect Hitch for easy hitch height adjustment.
- Bolt-on Pull Frame.

OPTIONS

- Wheel Axle with Tilt Leg (available with ratchet jack or hydraulic cylinder).
- Adjustable / Reversible Side Blades (slobber bits).
- GPS and Laser Stand

SAFETY

Carefully read and follow all safety precautions before operation. There are obvious and hidden potential hazards involved in the operation of this implement. Serious injury or death may occur unless care is taken to ensure the safety of both the operator and any other persons in the area. Avoid potential danger by taking extra time for thought and a more careful approach to the use of this implement.

Most work related accidents are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing potentially hazardous situations before an accident occurs. As you assemble, operate, or maintain the unit, you must be alert to potential hazards. You should also have the necessary training, skills, and tools to perform any assembly or maintenance procedures.

Improper operation and maintenance of this unit could result in a dangerous situation that could cause injury or death. T.G. Schmeiser cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this manual and on the product are, therefore, not all-inclusive. If a method of operation not specifically recommended by us is used, you must satisfy yourself that it is safe for you and for others. You should also ensure that the unit will not be damaged or be made unsafe by the methods that you choose.

The information, specifications, and illustrations in this manual are based on the information that was available at the time this material was written and are subject to change without notice.

Safety Alert Symbols



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.

This manual contains DANGERS, SAFETY INSTRUCTIONS, CAUTIONS, IMPORTANT NOTICES, and NOTES which must be followed to prevent the possibility of improper service, damage to the equipment, personal injury, or death. The following key words call the readers attention to potential hazards.

Hazards are identified by the "Safety Alert Symbol" and followed by a signal word such as "DANGER", "WARNING", or "CAUTION".

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.

WARNING

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

CAUTION

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

NOTICE

Indicates that equipment or property damage can result if instructions are not followed.

SAFETY INSTRUCTIONS

Safety instructions (or equivalent) signs indicate specific safety-related instructions or procedures.

Note: Contains additional information important to a procedure.

Safety Icons Nomenclature

This manual and the equipment has numerous safety icons.

These safety icons provide important operating instructions which alert you to potential personal injury hazards.

Personal Protection/Important Information

 READ THE MANUAL

 THINK SAFETY

 MAINTENANCE PROCEDURE

 WEIGHT RATING

 EYE PROTECTION

 HAND PROTECTION

 HEAD PROTECTION

 HEARING PROTECTION

 INSPECT EQUIPMENT

 OEM PARTS ONLY

 PLACE IN NEUTRAL

 PROTECTIVE SHOES

 REMOVE KEY

 DAMAGED HAZARD LABEL

 SLOW VEHICLE PLACARD

 SET PARKING BRAKE

 STOP ENGINE

 SUPPORT STAND USAGE

 USE PROPER TOOLS

 VISUALLY INSPECT

 USE ROPS

 USE CORRECT PARTS

Prohibited Actions

 DO NOT ALTER OR MODIFY

 DO NOT LEAVE OUT TOOLS

 DO NOT WELD

 NO ALCOHOL

 NO CHILDREN

 NO DRUGS

 NO PASSENGERS

 NO RIDERS

 NO BYSTANDERS

Hazard Avoidance

 BLOCK WHEELS

 CRUSHING HAZARD (body)

 CRUSHING HAZARD (foot)

 CRUSH HAZARD (rolling over)

 DEFECTIVE OR BROKEN PART

 FALLING HAZARD

 MAINTAIN SAFE DISTANCE

 OVERTURN HAZARD

 PINCH POINT HAZARD

 SAFETY ALERT SYMBOL

 SHARP OBJECT HAZARD

 ZERO PRESSURE

 COMPRESSED AIR HAZARD

 CRUSH HAZARD

 CRUSH HAZARD

 HIGH PRESSURE FLUID HAZARD

 HOT SURFACE HAZARD

 HEAVY OBJECT HAZARD

GENERAL SAFETY

WARNING



Read and Understand Manual

To prevent personal injury or even death, be sure you read and understand all of the instructions in this manual and other related OEM equipment manuals! This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations. Do not allow persons to operate or maintain this unit until they have read this manual and have developed a thorough understanding of the safety precautions and how it works.

This unit was designed for a specific application;

DO NOT modify or use this unit for any application other than that for which it was designed.

Units operated improperly or by untrained personnel can be dangerous!



Fall Hazard

Do not use this implement as a work platform. Do not stand on top of the unit at any time. Do not ride on the tractor or the implement or allow others to ride.



Crush Hazard (Rolling Over)

To prevent serious injury or death, before disconnecting, leaving the operator's seat, servicing, adjusting, repairing, or performing other work on the implement, ALWAYS:

1. Stop the tractor or towing vehicle.
2. Shut off the engine and remove the ignition key.
3. Set the brakes.
4. Make sure wheel cylinder transport lock is attached.
5. Relieve hydraulic fluid pressure.



Injury Hazard

Do not permit children to play on or around the unit.



Impaired Operator Hazard

Do not attempt to operate this unit under the influence of drugs or alcohol. Review the safety instructions with all users annually.



Pinch Point /Sharp Object Hazard

Do not place any body parts between moving and / or stationary parts. The weight of the implement will easily cause serious bodily injury.



To prevent injury, use a tractor equipped with a Roll Over Protective System (ROPS).

Visually Inspect



Visually inspect the unit for any loose bolts, worn parts, or cracked welds, and make necessary repairs before using the unit.

Personal Protection Equipment

When working around or operating this unit, wear appropriate personal protective equipment. This list includes but is not limited to:



- A hard hat
- Protective shoes with slip resistant soles
- Protective goggles, glasses, or face shield
- Heavy gloves and protective clothing
- Ear muffs or plugs



Use Properly Rated Tools

To prevent serious injury: Use sufficient tools, jacks, and hoists that have the capacity for the job.



NO PASSENGERS ALLOWED

Do not carry passengers anywhere on or in the tractor or implement.



Rolling Hazard

To prevent serious injury, lock the wheels when performing assembly, maintenance, repairs, or when preparing for storage.

ASSEMBLY SAFETY

WARNING



Crush Hazard

Use support blocks or safety stands rated to support the load when assembling the unit or performing maintenance. Never work under equipment supported by hydraulics. Hydraulics can drop equipment instantly if controls are actuated even when power to the hydraulics is shut off.



Trapped Air Hazard

When installing, replacing, or repairing hydraulic system cylinders or parts, make sure that the entire system is charged and free of air before resuming operations. Failure to bleed the system of all air can result in improper machine operation, causing severe injury.



TOWING SAFETY

WARNING

 **Unexpected Separation Hazard**
 If the safety chain does not have a current certification tag, do not use the unit until properly certified chains are installed. Substandard safety chains could allow the unit to separate from the tow vehicle, resulting in equipment damage and personal injury.

 **Loss of Control**
 A minimum of 20% of the combined tractor and equipment weight should be on the front wheels to ensure adequate stability during transport and operation. To avoid serious injury or death from a loss of control accident, maintain 20% weight on the front wheels. Add front end weight if necessary.

 Hitch and coupling on the towing vehicle must be rated equal to, or greater than, the unit's "gross vehicle weight rating" (GVWR).

SAFETY INSTRUCTIONS

 Towing the implement requires care! Both the implement and tow vehicle must be in good working condition. Securely attach the unit to the tow vehicle using a high strength, appropriately sized hitch pin with a mechanical retainer and attach the safety chain.

 Check the tires for tread wear, inflation pressure, and overall condition before towing the unit.

 Inspect the hitch and coupling for wear or damage. **DO NOT** tow the unit using a defective hitch or coupling!

 Make sure the lug nuts holding the wheels are tight (torque to specifications) and that none are missing.

 Do not allow anyone to stand between the tongue or hitch and the towing vehicle when backing up to the unit.

Operate the towing vehicle from the operator's seat only.

 When transporting, remember the implement may be wider than your tractor and extreme care must be taken to allow for safe clearance.

 Be aware of physical surroundings and especially bystanders, particularly children, before moving the unit! This is particularly important with higher noise levels and quiet cabs, as you may not hear people shouting.

Never use independent braking with unit in tow as loss of control and/or upset of unit may result.

Always drive at a safe speed relative to local conditions, and ensure that your speed is low enough for an emergency stop to be safe and secure. Keep speed to a minimum.

Reduce speed prior to turns to avoid the risk of overturning.

Avoid sudden uphill turns on steep slopes.

Always keep the tractor or towing vehicle in gear to provide engine braking when going downhill. Do not coast.

Watch for overhead obstructions and side clearances while transporting.

Always operate equipment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the equipment when making turns, stopping, etc.

Safety Chain

SAFETY INSTRUCTIONS

 Make sure the safety chain from the unit is securely fastened to the tow vehicle.

Always follow state and local regulations regarding a safety chain when towing farm equipment on a public highway.

Do not use any device other than an approved safety chain. Only a safety chain (not an elastic or nylon/plastic tow strap) should be used to retain the connection between the tow vehicle and the unit in the event of separation of the primary attaching system.

Highway and Transport Operations

SAFETY INSTRUCTIONS



Do not exceed a towing speed of more than 20 mph (32 KPH) on a public roadway.

Tires supplied by the manufacturer are designed to operate NO MORE THAN 20 mph. Do not exceed the maximum speed or tire failure may occur.



When transporting the implement on public roads, use approved accessory lighting, flags, or other necessary warning devices to protect operators of other vehicles on the highway during daytime and nighttime transport. Various safety lights and devices are available from your dealer.



When towing the unit on public roads, use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem. Make sure the SMV placard is clearly visible to vehicles approaching from the rear.

Some localities prohibit the use of flashing amber lights. Local laws should be checked for all highway lighting and marking requirements.

Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Plan your route to avoid heavy traffic.

Be observant of bridge load restrictions. Do not cross bridges rated lower than the gross weight at which you are operating.

Make sure the wheel lift cylinder transport locks are installed, and the jack stand is in its storage position before transporting the unit.

When transporting the implement on rough or uneven surfaces, drive slowly to prevent bouncing and loss of contact of the front wheels and the ground.

OPERATION SAFETY



WARNING



Crush Hazard (Rolling Over)

Do not clean, lubricate, or make adjustments while the unit is moving.



Never allow inexperienced or untrained personnel to operate the implement or tractor without supervision.



Enter And Exit Tractor

To avoid being run over, do not enter or exit tractor when it is moving. Avoid serious injury or death, from contact with rotating tires, by entering or exiting tractor only when it is completely stopped.



Safe Distance

Keep all bystanders, especially children, away from the tractor and implement during operation.



Overturn Hazard

Pick the most level route possible when transporting across fields. Avoid the edges of ditches, gullies, or steep hillsides. Be especially careful when turning on slopes with the wheels down. Never turn uphill with the wheels down except at slow speed and a low rate of turn. Never transport or operate this machine on steep slopes.

SAFETY INSTRUCTIONS



Periodically clear the unit of brush, twigs, or other materials to prevent buildup of dry, combustible materials.



Visually check all fasteners for tightness or damage before and after operation. Repair immediately if required.

Tractor Requirements



WARNING



Tractor Owner/Operator Manual

Always refer to the tractor Operator's Manual to ensure compatibility and maximum safety. Be familiar with the location, settings, and function of the tractor controls before using this equipment.

SAFETY INSTRUCTIONS

Do not use a tractor of more than the recommended HP to prevent damaging implement components.

Tractor Safety Devices

If transporting or operating the tractor and implement near a public roadway, the tractor must be equipped with proper warning lighting and a Slow Moving Vehicle (SMV) emblem, which are clearly visible from the rear of the unit. Lights and a SMV emblem must be attached directly to the implement if the visibility of the tractor warning signals is obscured.

Never operate the tractor PTO with the PTO master shield missing or in the raised position.

ROPS and Seat Belt

The tractor must be equipped with a Roll Over Protective Structure (ROPS) (tractor cab or roll-bar) and seat belt to protect the operator from falling off the tractor, especially during a roll-over where the driver could be crushed and killed.

Only operate the tractor with the ROPS in the raised position and seat belt fastened.

⚠️ WARNING

  **Rollover Hazard**
To avoid serious injury or death from falling off tractor, equipment runover, rollover, or crushing:

- 1) Use ROPS equipped tractor.
- 2) Keep ROPS locked in the UP position.
- 3) Only operate the equipment when seated in the tractor seat.
- 4) Always fasten seat belt when operating the tractor and Implement.

Attaching to Tractor

Prior to Connecting Unit

Make sure the unit is resting on the ground or the transport lock is securely installed over the wheel cylinder rod before attaching the unit to the tractor.

Connecting to Tractor

⚠️ WARNING

   **Crush Hazard**
Use care when attaching the unit to the tractor. Never place any part of your body under the tongue or hitch assembly. Do not allow anyone to stand between moving tractor and implement during hook-up operations.

Unexpected Separation Hazard

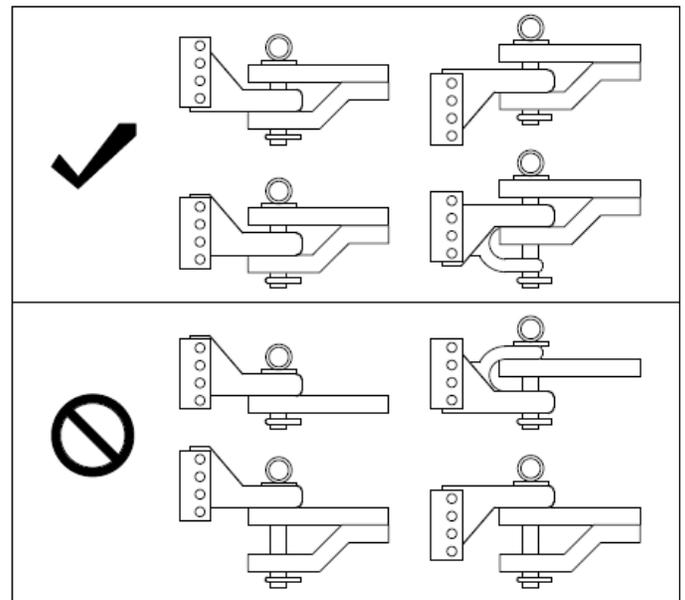


If towing the unit with a drawbar, use only a certified, hardened drawbar pin with a retainer clip. Do not use homemade pins, bolts, or any other type of retaining device. Always install the retainer clip, making sure the hitch and unit are securely fastened to the tow vehicle.

Using a pin not intended for this type of towing can result in unexpected separation of the unit from the tow vehicle, resulting in equipment damage and personal injury.

SAFETY INSTRUCTIONS

Connect implement hitch to the tractor properly.



Hydraulic Component Safety

⚠️ WARNING

 **High-Pressure Fluid Hazard**
Before applying pressure to the system, make sure all components are tight and that the hydraulic lines, hoses, fittings, and couplings are not damaged.

 **Hydraulic Pressure**
This unit operates with hydraulic pressures of 2500 to 3000 psi (170 to 205 bars).



WARNING



High-Pressure Fluids

1. Check or tighten all connections BEFORE pressurizing system.
2. Release all pressure before removing hoses and/or valves by:
 - a. Stopping engine.
 - b. Holding hydraulic control levers in float or neutral position.
3. DO NOT use your bare hand to check for potential leaks. Always use a board or cardboard when checking for a leak.



Escaping hydraulic fluid under pressure, even a pinhole size leak, can penetrate body tissue, causing serious injury and possible death. If fluid is injected into your skin, it must be treated immediately by a doctor familiar with this type of injury.



Wear proper hand and eye protection when searching for a high-pressure hydraulic leak.

Use a piece of wood or cardboard as a backstop instead of hands to identify and isolate a leak.

If injured by a concentrated high-pressure stream of hydraulic fluid, seek medical attention immediately. Without immediate medical treatment, serious infection or toxic reaction can develop if hydraulic fluid penetrates the surface of the skin.



Trapped Air Hazard

When installing, replacing, or repairing hydraulic system cylinders or parts, make sure that the entire system is charged and free of air before resuming operations. Failure to bleed the system of all air can result in improper machine operation, causing severe injury.



High-Pressure Separation Hazard

Replace any worn, cut, abraded, flattened, or crimped hoses.



Zero Pressure

Relieve pressure from the hydraulic system before servicing or disconnecting from the tractor.



High-Pressure Hazard

Do not make any temporary repairs to the hydraulic lines, fittings, or hoses using tape, clamps, or cement. The hydraulic system operates under extremely high pressure and temporary repairs may fail suddenly and create a hazardous/ dangerous situation.



CAUTION



Explosive Separation Hazard

Be sure all hydraulic pressure is relieved before disconnecting hydraulic lines or fittings between implement and the tractor hydraulic system.

NOTICE

Make sure components in the hydraulic system are kept clean and in good working condition.

MAINTENANCE SAFETY



WARNING



Use Properly Rated Tools

Use sufficient tools, jacks, and hoists that have the capacity for the job.



Crush Hazard

Use support blocks or safety stands rated to support the load when performing maintenance.

SAFETY INSTRUCTIONS

Follow all operating, maintenance, and safety instructions found in this manual.



Understand the service procedure before performing the work. Keep area clean and dry.



Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts.



Do not leave tools lying on the unit.



Do not modify unit or safety devices. Do not weld on the unit. Unauthorized modifications may impair its function and safety.

If equipment has been altered in any way from the original design, the manufacturer does not accept any liability for injury or warranty.



Never replace hex bolts with less than Grade 5 bolts unless otherwise specified. In locations where Grade 8 bolts are used, Grade 8 replacements are required.



Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore the unit to original specifications.

The manufacturer will not accept responsibility for damages as a result of the use of unapproved parts.

Tires Safety

⚠ WARNING



Explosive Separation Hazard

Do not attempt to mount a tire onto a wheel unless you have the proper equipment and experience to do the job. Failure to follow proper procedures when mounting a tire on a wheel can produce an explosive separation, which may result in serious injury or death.



Explosive Hazard

Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure, resulting in a tire explosion. Welding can structurally weaken or deform the wheel.



Flying Objects Hazard

Inflating or servicing tires can be dangerous. Whenever possible, trained personnel should be called to service and/or mount tires.

When inflating tires, use a clip-on chuck and extension hose. Always stand to the side of the tire when inflating, and NOT in front of or over the tire assembly. Make sure the tires are inflated evenly.

SAFETY INSTRUCTIONS



Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure.



Check tires for low pressure, cuts, bubbles, damaged rims, or missing lug bolts or nuts.



Keep wheel lug nuts or bolts tightened.



Always install replacement tires and wheels with appropriate capacity to meet or exceed the weight of the unit.

Bolt Torque Requirements

It is extremely important to apply and maintain proper torque on all bolts. Use a torque wrench to assure the proper amount of torque is being applied to the fastener.

Start all bolts or nuts by hand to prevent cross threading.

Torque figures indicated in the chart are used for non-greased or non-oiled threads unless otherwise specified. Therefore, do not grease or oil bolts or cap screws unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

The chart gives correct torque values for various bolts and cap screws. Tighten all bolts to the torques specified in the chart unless otherwise noted. Check tightness of bolts periodically, using the bolt torque chart as a guide. Always replace hardware with the same Grade bolt.

⚠ WARNING



Equipment Failure

The torque value for bolts and cap screws are identified by their head markings. Replacing higher "Grade" bolts (Grade 5) with lower Grade bolts will lead to equipment failure and can result in injury or death. Always use replacement bolts with the same Grade markings as the removed bolt.

Bolt Diameter	Bolt Torque Specifications			
	Grade 5		Grade 8	
	3 Radial Lines		6 Radial Lines	
	N·m	ft.lbs.	N·m	ft.lbs.
1/4"	12	9	17	12
5/16"	25	19	36	27
3/8"	45	33	63	45
7/16"	72	53	100	75
1/2"	110	80	155	115
9/16"	155	115	220	165
5/8"	215	158	305	220
3/4"	390	290	540	398
7/8"	570	420	880	650
1"	850	630	1320	970

Tire and Lug Torque Specifications

Tire Size	Ply Rating	Lug Size	Lug Torque (lb.ft.)
7.6 x 15	8 Ply	1/2"	80
9.5 x 15	8 Ply	1/2"	80
12.5 x 16	14 Ply	9/16"	70

Welding Repairs



Before performing any type of welding repair to the implement, contact T.G. Schmeiser Co., Inc. for approval. Repair welding must be done with care and with procedures that may be beyond the capabilities of the ordinary welder.



WARNING

Personal Injury Hazard



Repairs or modifications to the implement can result in serious injury or death should these repairs fail.

NOTICE

Anyone performing a welding repair should be certified in accordance to the American Welding Society (AWS) standards.

STORAGE SAFETY



WARNING



Hazard And Information Signs

Replace any missing or hard-to-read safety signs. Safety sign placement and part numbers can be found in the Nomenclature section of this manual.



Damaged Parts Hazard

Do not use this unit if it is in need of repair. If you believe the unit has a defect which could cause damage, injury, or death, you should immediately stop using the unit.

SAFETY INSTRUCTIONS



Store the implement in an area away from human activity.



Do not permit children to play on or around the stored unit at any time.



Block the wheels to prevent the implement from rolling.

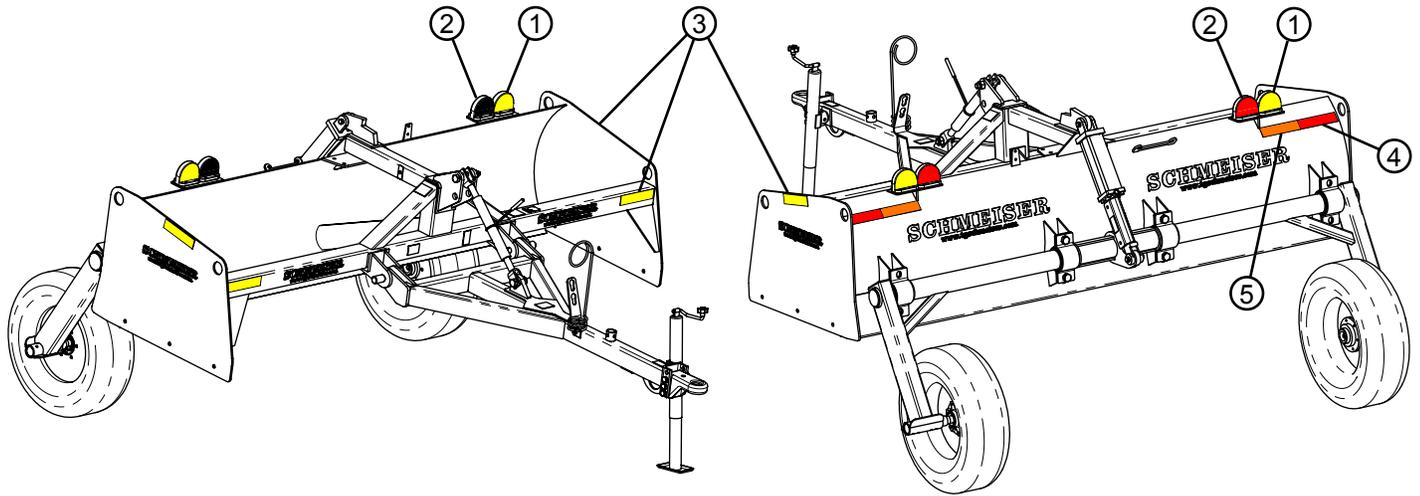


When using compressed air to clean implement, wear safety glasses.

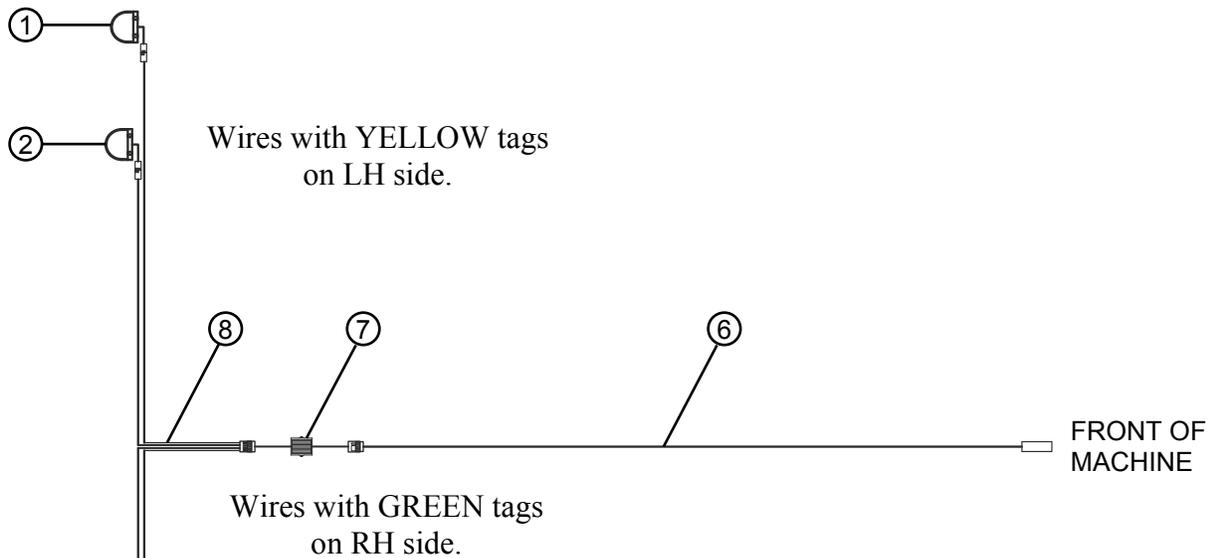
DISPOSAL OF EQUIPMENT AT END OF USEFUL LIFE

The T. G. Schmeiser implement has been designed for the specific purpose of conditioning the ground in agricultural applications. When this unit is no longer capable of doing its designed purpose, it should be dismantled and scrapped. Do not use any materials or components from this unit for any other purpose.

SAFETY MARKING AND LIGHTING



SAFETY LIGHTING WIRING DIAGRAM



Item	Part Number	Description	Q'ty
1	GLT-LSDY	Lamp, Surface Mount Double Yellow (Optional)	2
2	GLT-LSSR	Lamp, Surface Mount Single Red (Optional)	2
3	D-2X9RY	Reflective Tape, Yellow	8
4	D-2X9RR	Reflective Tape, Red	2
5	D-2X9FL	Fluorescent Tape, Orange	2
6	GLT-HF10	Front Harness, 10 Ft. Long	1
7	GLT-FCM	Flasher Control Module	1
8	GLT-HW1024	Rear Wishbone Harness 10 Ft.-24 Ft.	1

SAFETY SIGNS AND DECALS

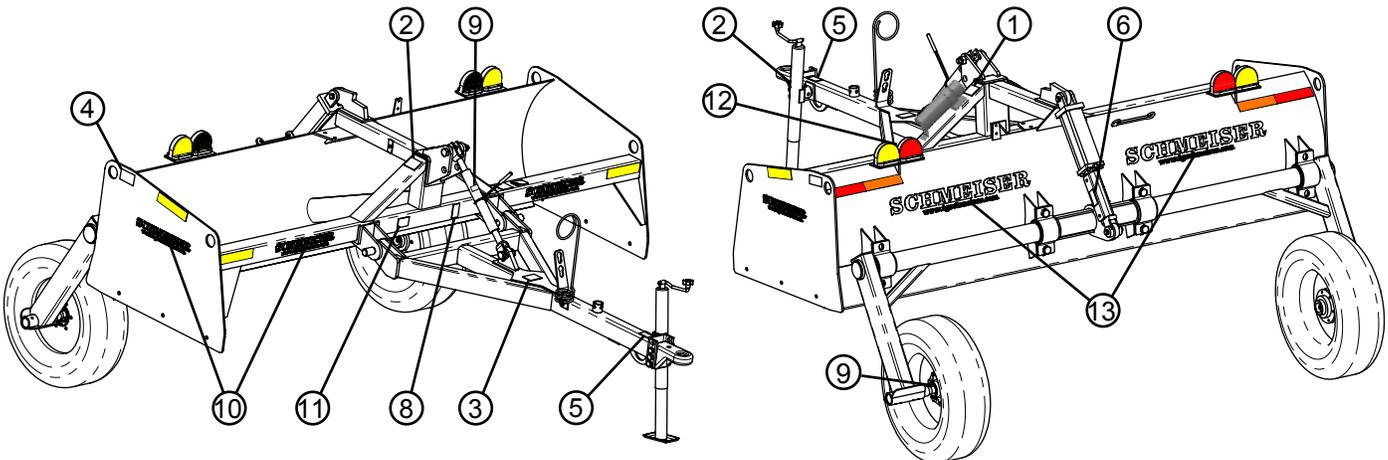
SAFETY INSTRUCTIONS

Follow all operating, maintenance, and safety Instructions found in this manual.

Replace all worn or damaged safety and instruction decals.

- It is the responsibility of the customer to know the marking requirements of the local highway authorities and to comply with the regulations.
- Keep safety signs clean and legible at all times. Replace safety signs that are missing or have become illegible.
- Do not paint over, remove, or deface any safety signs or instructional decals on your equipment. Observe all safety signs and follow the instructions on them.
- When parts that display a safety sign are replaced, the replacement part should display the same sign.
- Safety signs are available from your Distributor, Dealer Parts Department, or the factory.
- Use care when washing or cleaning the unit not to remove or damage the labels.

SAFETY SIGNS AND DECALS PLACEMENT



Item	Part Number	Description	Qty.
1	D48X038RTM	Read the Manual	1
2	D48X038CRR	Crush / Rollover Hazard	1
3	D48X064HPF	High Pressure Fluids	1
4	D28X048SCE	Sharp Object Hazard	2
5	D28X048PPT	Pinch Point	2
6	D28X048RBW	Transport Lockout	1
7	D76X040SGB	Transport Safety Chain	1
8	DFEMALOGO1	FEMA Decal	1
9	D16X026GRS	Grease Decal (HD models only)	1
10	D52X272BLK	Schmeiser 3-1/4" X 17"	4
11	D32X048RBC	Made in the USA	1
12	D48X48QR	Scan to Access Online Manual	1
13	D104608BLK	Schmeiser 6-1/2" x 38"	2

Safety Signs and Decals

1. **WARNING**
READ THE MANUAL
 Avoid serious injury or death:
 • Do not operate or work on equipment without reading and understanding Operation manual.
 • Avoid unsafe operation or maintenance.
 • If manual is lost, go to www.tgschmeiser.com and download a new manual.
 D48X038RTM

2. **WARNING**
CRUSH / ROLLOVER
 To avoid serious injury or death, before disconnecting implement:
 • Stop tractor engine.
 • Lower machine to the ground.
 • Place all controls in neutral.
 • Set parking brake.
 • Remove ignition key.
 • Lower and secure all safety stands.
 D48X038CRR

3. **WARNING**
HIGH PRESSURE FLUID HAZARD
 To prevent serious injury or death:
 • Check or tighten all connections BEFORE applying pressure.
 • Release pressure on system before repairing, or adjusting, or disconnecting.
 • Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
 D48X064HPF

4. **WARNING**
SHARP OBJECT HAZARD
 To prevent serious injury:
 • Do not place hands or feet under implement.
 • Maintain safe distance during operation.
 D28X048SCE

5. **WARNING**
PINCH POINT
 Crushing between two objects could cause serious injury:
 • Do not place hands or fingers near or between stationary and moving objects.
 D28X048PPT

8. **FEMA**
 FARM EQUIPMENT
 MANUFACTURERS
 ASSOCIATION

6. **WARNING**
TRANSPORT LOCKOUT
 TO PREVENT INJURY OR EQUIPMENT DAMAGE:
 • Remove lockout device before field operation
 • Replace lockout device before transport
 D28X048F8VW

7. **WARNING**
TRANSPORT SAFETY CHAIN
 To prevent accidental separation:
 Always connect safety chain when in transport
 D76X040SGB

9. **GREASE**

10. **SCHMEISER**
www.tgschmeiser.com
 D52X272BLK

11. **MADE IN THE USA**
T. G. SCHMEISER
 SELMA, CALIFORNIA
 D32X048

12. **SCAN TO ACCESS ONLINE PARTS MANUALS**
T. G. SCHMEISER CO., INC.
www.tgschmeiser.com
 D48X48QR

13. **SCHMEISER**
www.tgschmeiser.com
 D104608BLK

ASSEMBLY AND OPERATION



WARNING



Understand Safety Procedures!

Read and understand all safety procedures described in this manual before performing any work on or around the implement.

Attaching to the Tractor

- Pull Type Drag Scraper

1. Raise the jack stand until the tongue is at the height of the tractor drawbar.
2. Connect the hitch of the unit to the tractor. Attach the safety chain to the tractor's drawbar cage.

Note: If a drawbar pin is used, it should be an OEM certified pin and retainer clip. On Category 3 hitch use a 1-1/2" (38 mm) pin.

3. Raise the jack stand and rotate into its storage position.
4. Connect the hydraulic hoses to the proper ports on the tractor.

- 3-Pt. Drag Scraper (HD models only)

Detach Pull Frame from the HD Drag Scraper.

1. Shorten or remove the tractor drawbar to avoid interference when raising and lowering the Drag Scraper.
2. Remove the lynch pins and lift pins.
3. Board the tractor and start the engine. Position the tractor with the 3-point lift arms positioned at the same height and aligned with the Drag Scraper hitch pin holes.

Note: Set the 3-point lift control to "Position Control" so that the lift arms maintain a constant height when attaching the Drag Scraper. See the tractor Operator's Manual for correct settings when attaching 3-point equipment.

4. Turn off the tractor engine and dismount.
5. Insert the hitch pin through the lift arm and lug holes and install the lynch pin.
6. Walk around to the opposite side and repeat the procedure for the remaining lift arm and hitch pin.

7. Extend or retract the 3-point top link to align its end hole with the hole of the Drag Scraper's top link. Insert the top link hitch pin and insert the retaining pin into the hitch pin.
8. Return to the tractor and slowly raise the 3-point lift arms fully up and down to make sure the Drag Scraper does not make contact with the tractor tire, drawbar, or any other equipment on the tractor.
 - a. Move or remove the drawbar if it interferes with the implement.
9. Adjust any lower link check chains, guide blocks, or sway blocks to prevent the Drag Scraper from swaying side-to-side.

Initial Setup Checklist

Efficient and safe operation of the implement requires that every user read and understand the operational instructions and all related safety instructions outlined in this manual.

This checklist is provided for the user/owner. It is important for both personal safety and to maintain the mechanical condition of the implement that this checklist is followed.

Initial Setup Checklist (prior to using for the first time)	
Location	Task
	Make sure the Implement is properly attached to the tractor. Refer to "Attaching to Tractor" on page 18.
	Make sure all hardware is properly installed and tightened. Refer to "Maintenance" on page 19.
	Check the condition of the bolts and blades for wear, hydraulic hoses for leaks. Replace if necessary.
	Lubricate grease fittings. Refer to "Lubrication Points" on page 19.



Implement Break-In

Although there are no operational restrictions on the Implement when used for the first time, it is recommended that the following mechanical items be checked:

1. After 1/2 hour of operation:
 - a. Check all fasteners and tighten if necessary.
 - b. Make sure that blades are in good condition.
2. After 10 hours of operation:
 - a. Go to the normal servicing and maintenance schedule, as defined in the Maintenance Section.

Operating Instructions

1. Make sure the Drag Scraper is properly attached to the tractor before beginning work. Inspect the condition of the cutting edges and the overall Drag Scraper for potential problems or damage. Do not use the unit if it needs repairs of any type.
2. Clear the area of bystanders, especially small children. Make sure that you can clearly see and identify passersby, steep slopes, ditches, drop-offs, power lines, debris, and foreign objects. If you are unable to clearly see these type of items, discontinue operating the Drag Scraper.
3. Know the location of all underground cables, pipelines, and other hazards in the area. Also make certain that all irrigation heads, utility outlets, and other obstacles are properly marked.
4. Watch for low hanging limbs, power lines, and other overhead obstacles while you are operating. Use care to avoid hitting these items.
5. Do not operate the Drag Scraper, or drive the tractor into material that is burning, or areas that recently burnt and may contain hot spots. Tire damage can occur when driving over hot material. Oil and grease on the tractor and the implement could ignite resulting in equipment destruction.
6. Using the tractor's hydraulic controls, raise the bucket to remove the load from the wheel axle lockout bar.
7. Remove lockout bar from the hydraulic cylinder rod and secure to the storage bracket located behind the bucket using clevis pins provided.
8. Lower bucket to the desired depth.
 - A. On SDS models, adjust the ratchet to set the bottom of the bucket end plates level with the ground.
 - B. On SDSM models, move the front hitch plate to the corresponding hole so that the pull frame and bucket are level with the ground.
9. Proceed forward at a speed of 4-5 MPH. Ideal speed may vary depending on soil conditions, the Drag Scraper will immediately start shaving the surface and fill the bucket with material, cutting high spots and filling low spots.
10. The Drag Scraper should run with the bucket between 1/2 and 3/4 full of material. Using tractor hydraulics, adjust bucket height accordingly.
11. Maximum bucket dumping height is 24" for SDS models and 22" for SDSM models.

Maximum cutting depth is 4" below grade.

Detaching From Tractor

1. Park the tractor, place the transmission in park or neutral, and apply the parking brake. Shut down the engine, relieve all hydraulic pressure, and remove the key before exiting the tractor.
2. Block the wheels to prevent movement.
3. Remove the jack from its storage location and secure it to the hitch by fully inserting the locking pin through the jack and the hitch bracket. Use the jack to raise the hitch to the height needed to disconnect it from the drawbar.
4. Disconnect the hydraulic hoses from the tractor. Coil the hoses and store them on top of the implement.
5. Disconnect the hitch safety chain.
6. Remove the hitch pin and drive the tractor away from the implement.

If connected to tractor's 3-Point links:

1. Move the Drag Scraper to a level storage location. Park the tractor, place the transmission in park or neutral, and apply the parking brake. Lower the Drag Scraper, shut down the engine, and remove the key before exiting the tractor.

2. Make sure the Drag Scraper is resting securely on the ground or blocks before attempting to disconnect it from the tractor. Use extreme care to keep feet and hands from under the Drag Scraper and clear of any pinch points caused by the tractor hitch arms and Drag Scraper hitch pins.
3. Extend or retract the tractor 3-point hitch top link to remove tension on the top link hitch pin. When the pin is loose and easy to rotate, remove the pin from the Drag Scraper.
4. Disconnect the lift arms and drive the tractor away from the implement.

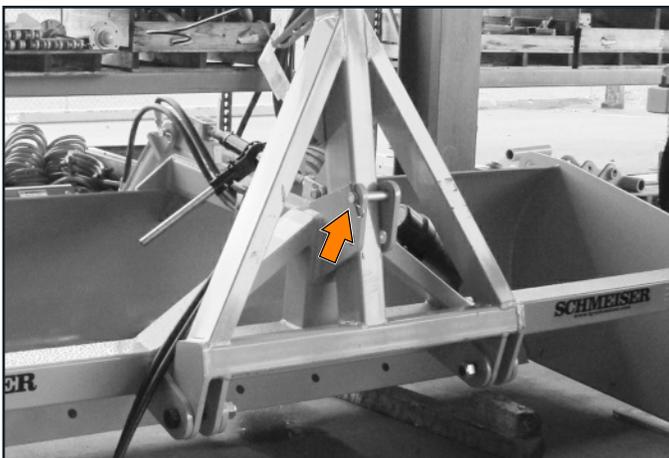
Features and Options

On SDS models, the pull frame can be flipped up for shipping.

1. Detach top of ratchet from top clevis



2. Flip pull frame up to rest between top clevis ears.
3. Install ratchet pin through clevis plates to secure pull frame in shipping position.



SDS models can be converted from pull type to 3-point CA II and CA II Quick-Hitch.

1. Remove ratchet.
2. Remove pull frame.
3. Remove wheel axle (If desired, leave wheel axle attached with cylinder retracted for added weight.)

Tilt Leg Option

If equipped with the tilt leg option, the left hand leg can be adjusted for grading.

1. Extend or retract ratchet (or hydraulic cylinder) to achieve desired grade.
2. Maximum height difference between the left and right hand sides of the bucket is 13-3/4".

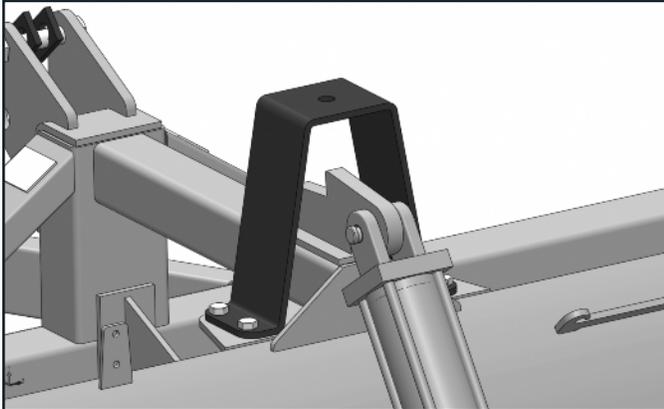


3. See the table below for slope angles:

Bucket Width, Ft.	Maximum Slope Angle, °
8	8
10	6.5
12	5.5
14	4.7

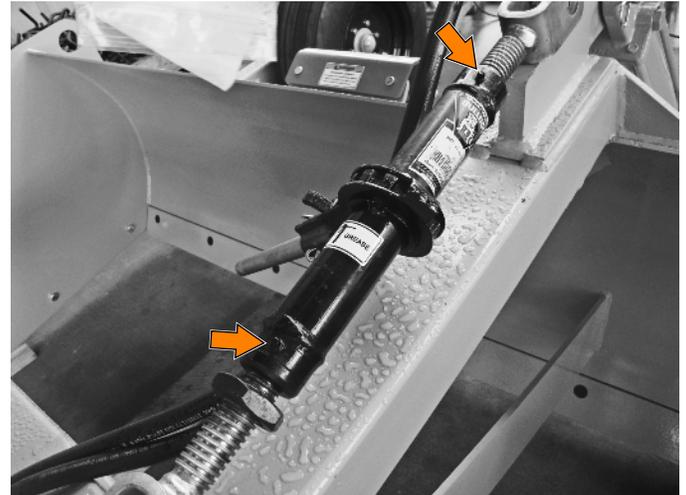
GPS / Laser Stand Option

All models come equipped with a base plate to mount an optional GPS / Laser stand.



Ratchet Jack (HD models only)

Grease once per season.



MAINTENANCE

WARNING



Understand Safety Procedures!

Read and understand all safety procedures described in this manual before performing any work on or around the implement.

Lubrication Points

Add grease to the locations shown.

Wheel Hub Bearings

Grease once per season – inspect bearings and races for wear and replace if necessary.

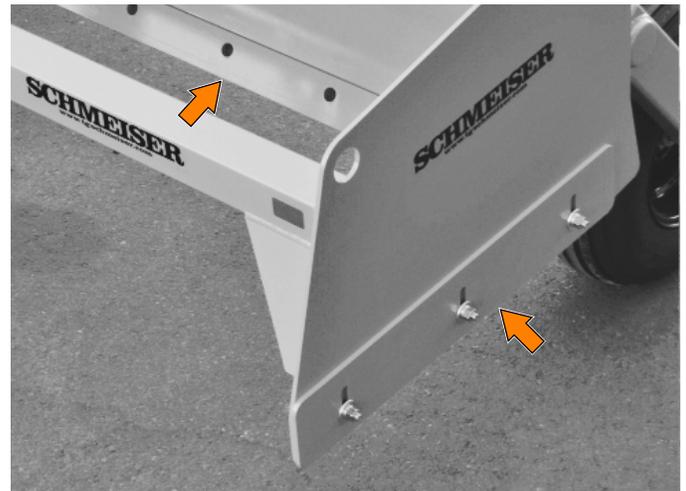


Ground Engaging Components

Ground engaging components are subject to abrasion and wear. Excessively worn components will require replacement.

Bucket Blade

Replace blade if it's excessively worn or damaged.



Adjustable Side Blades (Optional)

The slotted mounting holes provide 2" of adjustment, which may be used to compensate for wear. Blades can be removed, turned over, and reattached to present a fresh edge. Replace the blades when both sides are worn out.

STORAGE

Storage Preparation

After Drag Scraper field work is completed for a season, perform the following maintenance procedures before storing the implement.

1. Check all bolted connections. Ensure that the fasteners are tight, and all retaining pins are secured in place with appropriate retaining clips.
2. Check the tire pressure and set to the tire manufacturer's recommended specification. Inspect the tires for wear and/or damage. Make sure the wheel lugs are properly tightened. Refer to "Tire and Lug Torque Specifications" on page 13.
3. Inspect the frame for structure fractures and inspect the blades for wear or damage.
4. Check hubs for signs of seal damage or excessive wear.
5. Inspect all the hydraulic hoses and fittings for leaks or signs of wear.
6. Make sure all the warning decals are in place and legible. Replace any worn decals as needed.
7. Remove debris and clean the entire implement with compressed air or low pressure water.
8. Lubricate all grease fittings on the frame members with a good general purpose lithium grease. Refer to "Lubrication Points" on page 19 for the location of the fittings.
9. Add grease to the fittings on the transport wheel bearing hubs with a good quality wheel bearing grease. Fill each cavity just until resistance is felt. Do not force grease past the seals.
10. Apply a thin layer of grease or rust preventative to all exposed metal surfaces of the cylinder rods.
11. To help prevent corrosion, remove rust and apply a coat of paint to frame surfaces where paint has been worn off or damaged.

Placing in storage

1. Raise the implement, place jack stand in the transport mode, and install the transport lock on hydraulic cylinder.
2. Move the Drag Scraper to a storage area with a firm and level base to prevent it from tipping or sinking into the ground. Always store the Drag Scraper in a dry, protected location. Leaving this implement unprotected will shorten the service life.

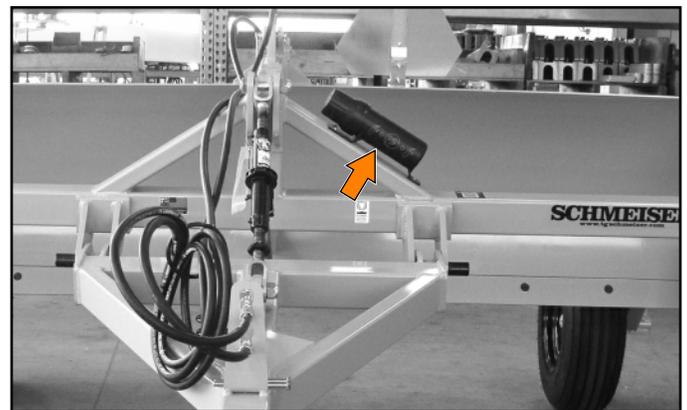
3. Disconnect all hydraulic hoses, and unhitch the implement from the tractor. Refer to "Detaching From Tractor" on page 19.
4. Store the implement with the transport wheels extended in the transport mode and the wheel support lock installed over the cylinder rod. Do not leave the tractor attached to the implement while in storage.

Removing From Storage

Each season, perform the following inspection and maintenance before using the unit.

1. Read the operator's manual to review all safety, operational, and maintenance procedures.

Note: Store the operator's manual in the document storage canister located on the main frame.



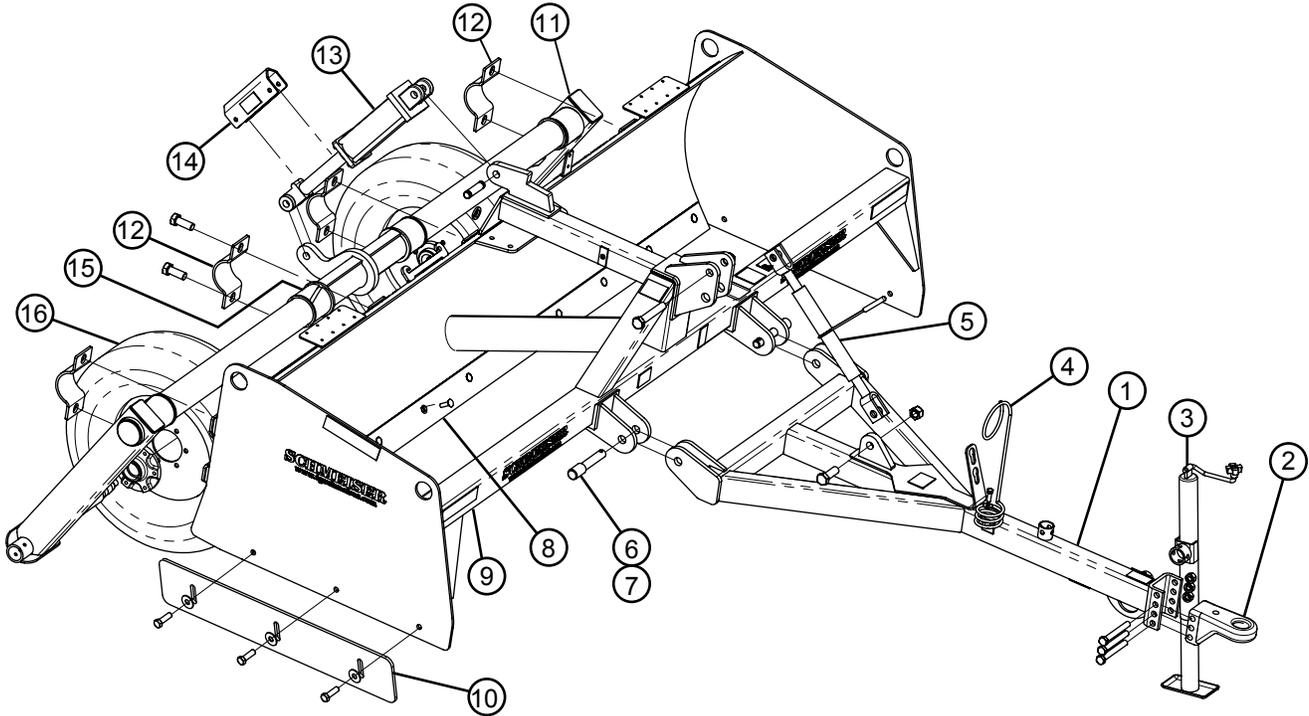
2. Perform any recommended maintenance that was not completed when the implement was put into storage.
3. Visually inspect the implement for wear or damage.
4. Check the tire pressure and set to the tire manufacturer's recommended specification. Inspect the tires for wear and/or damage.
5. Inspect all the hydraulic hoses and fittings for leaks and signs of wear or damage.
6. Make sure all the warning decals are in place and legible. Replace any damaged or missing decals.
7. Hitch the implement to a tractor and connect all hydraulic hoses. Refer to "Connecting to Tractor" on page 18. Place the implement in an area clear of overhead obstructions or power lines. Cycle the hydraulic system circuit to engage hydraulic cylinder, verify proper operation, and check for leaks.

COMPONENT NOMENCLATURE

Ordering Parts

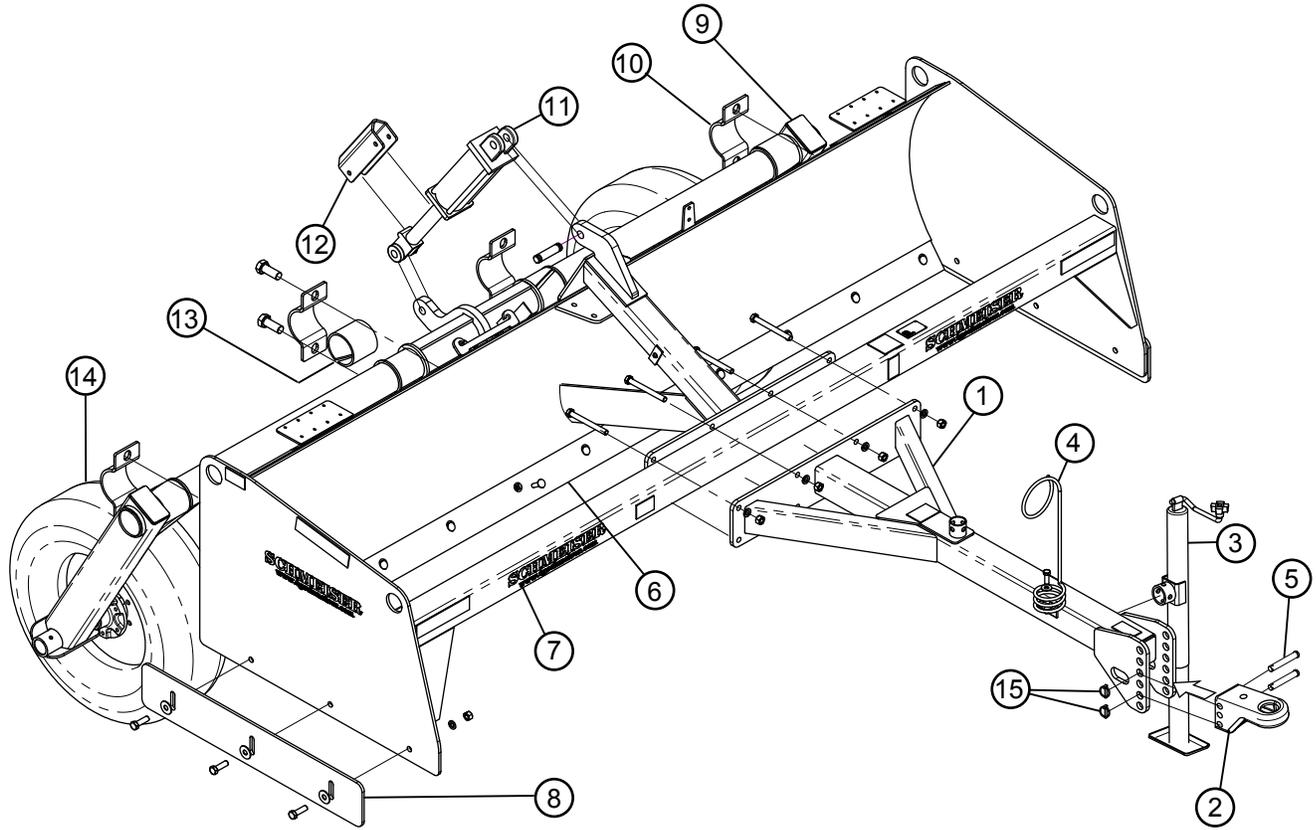
We manufacture a quality product that requires very little maintenance or repair. However, should a part break or become damaged, our knowledgeable staff can make sure you receive the part(s) to put your unit back into operation.

Heavy Duty Drag Scraper SDS



Item	Part Number	Description	Qty.
1	SDS-00B000	Pull Frame (see page 26 for details)	1
2	GMB-HITCHCA3	CA 3 Perfect Hitch	1
3	GJK-2KTW10	Jack Stand 2000 Lbs. Capacity	1
4	GHD-HHOLD1	Hose Holder	1
5	GJK-RATCHJ	Ratchet Jack NC Thread	1
6	GPN-24CA02	CA 2 Pull Pin	2
7	GPN-070LYN	7/16" Lynch Pin	2
8	-----	Bucket Blade (see page 28 for details)	1
9	SDS-00A000	Main Frame Bucket (specify size)	1
10	SLP-BKS	Adjustable Side Blades Kit (Optional)	1 pair
11	SDS-00C000	Wheel Axle (specify size)	1
12	PTU-00B300	Wheel Axle Bearing Clamp	4
13	GHC-35100T	3-1/2" X 10" Hydraulic Cylinder	1
14	GWD-310LB1	Cylinder Lockout Bar	1
15	PTU-00P012	Wheel Axle Bearing	4
16	GWT-951508	9.5 X 15 8 Ply Tire with Wheel	2

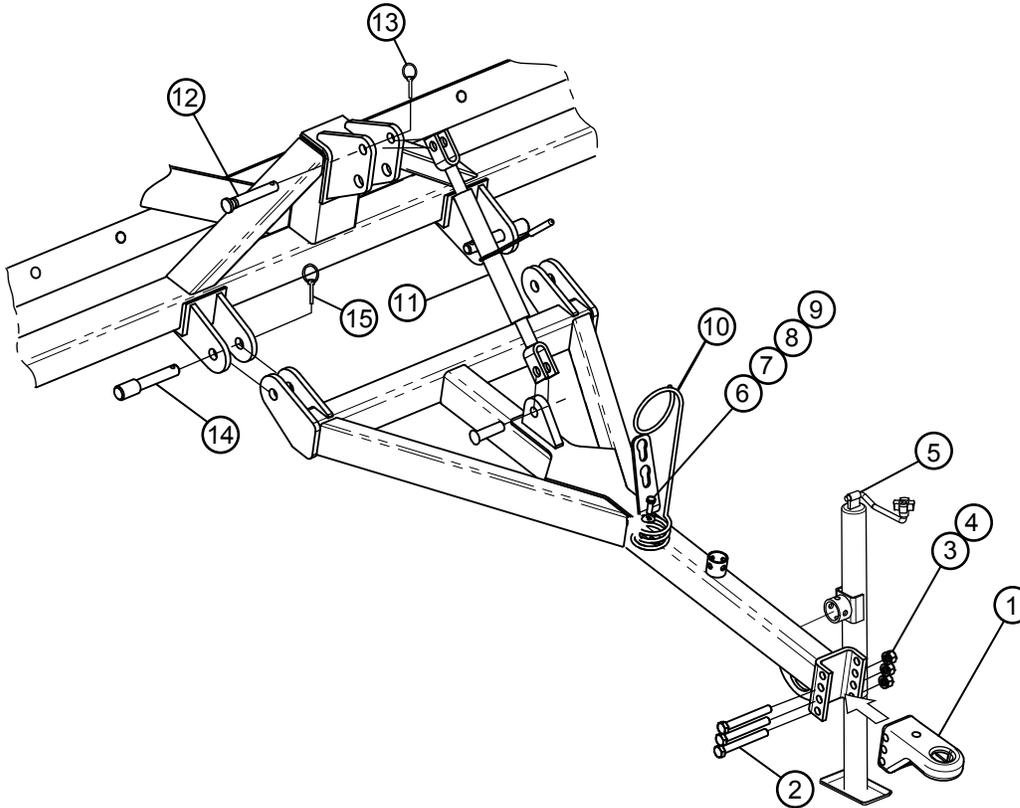
Medium Duty Drag Scraper SDSM



Item	Part Number	Description	Qty.
1	SDS-00B100	MD Pull Frame (see page 27 for details)	1
2	GMB-HITCHCA3	CA 3 Perfect Hitch	1
3	GJK-2KTW10	Jack Stand 2000 Lbs. Capacity	1
4	GHD-HHOLD1	Hose Holder	1
5	GPN-12X080	3/4" X 5" Hitch Pin	2
6	-----	Bucket Blade (see page 28 for details)	1
7	SDS-00A100	MD Main Frame Bucket (specify size)	1
8	SLP-BKS	Adjustable Side Blades Kit (Optional)	1 pair
9	SDS-00C000	Wheel Axle (specify size)	1
10	PTU-00B300	Wheel Axle Bearing Clamp	4
11	GHC-35100T	3-1/2" X 10" Hydraulic Cylinder	1
12	GWD-310LB1	Cylinder Lockout Bar	1
13	PTU-00P012	Wheel Axle Bearing	4
14	GWT-951508	9.5 X 15 8 Ply Tire with Wheel	2
15	GPN-070LYN	7/16" Lynch Pin	2

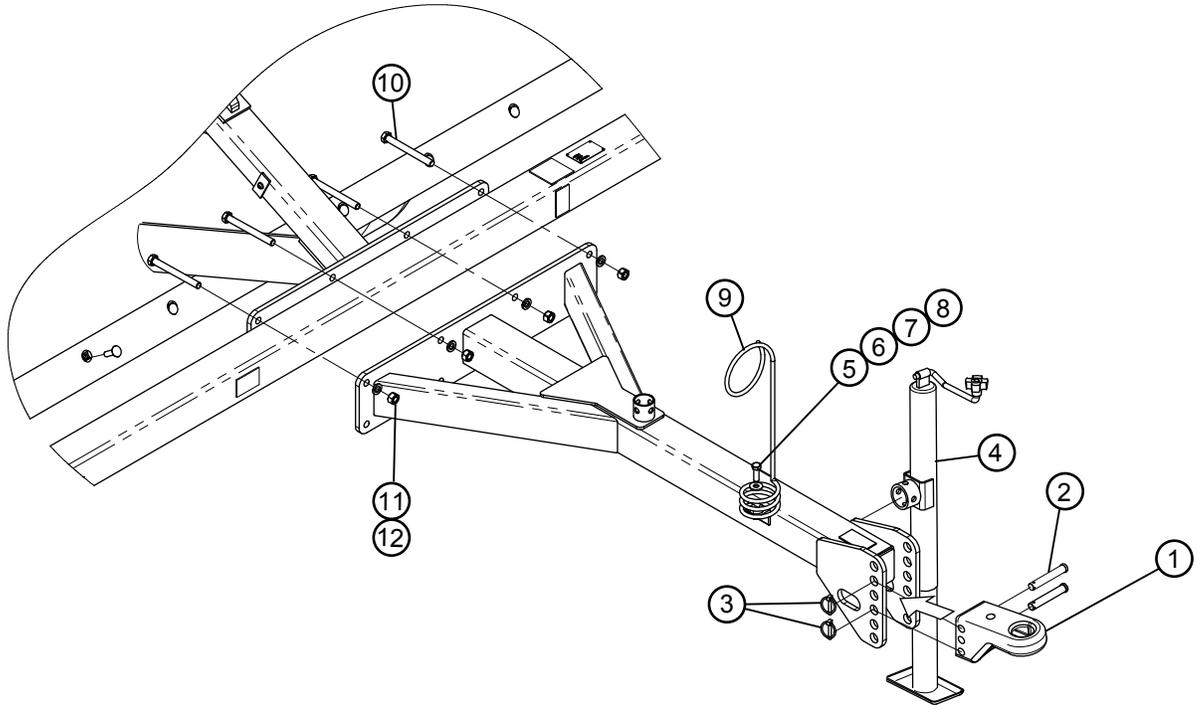
PARTS DRAWINGS

Drag Scraper Pull Frame Assembly Heavy Duty SDS



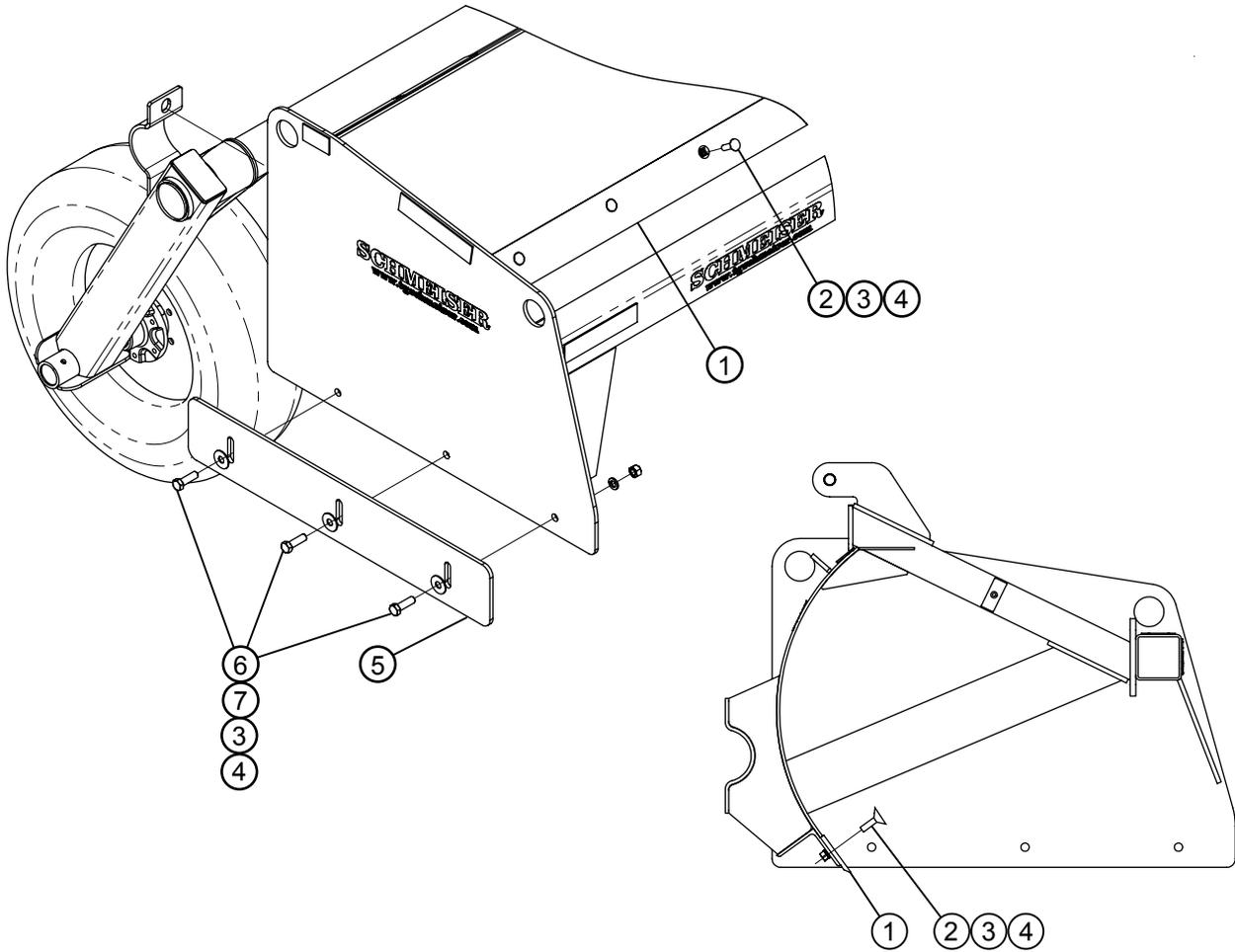
Item	Part Number	Description	Qty.
1	GMB-HITCHCA3	CA 3 Perfect Hitch	1
2	CSNC512096	3/4" X 6" NC Gr.5 Cap Screw	3
3	LWASHER-12	3/4" Lock Washer	3
4	HXNUT-12NC	3/4" NC Hex Nut	3
5	GJK-2KTW10	Jack Stand 2000 Lbs. Capacity	1
6	CSNC508024	1/2" X 1-1/2" NC Gr.5 Cap Screw	1
7	FWASHER-08	1/2" Flat Washer	1
8	LWASHER-08	1/2" Lock Washer	1
9	HXNUT-08NC	1/2" NC Hex Nut	1
10	GHD-HHOLD1	Hose Holder	1
11	GJK-RATCHJHD	Ratchet Jack ACME Thread	1
12	216177	1" X 5" Clevis Pin	1
13	GPN-040LYN	1/4" Lynch Pin	1
14	GPN-24CA02	CA 2 Pull Pin	2
15	GPN-070LYN	7/16" Lynch Pin	2

Drag Scraper Pull Frame Assembly Medium Duty SDSM



Item	Part Number	Description	Qty.
1	GMB-HITCHCA3	CA3 Perfect Hitch	1
2	GDP-12X080	3/4" X 5" Hitch Pin	2
3	GPN-070LYN	7/16" Lynch Pin	2
4	GJK-2KTW10	Jack Stand 2000 Lbs. Capacity (Optional)	1
5	CSNC508024	1/2" X 1-1/2" NC Gr.5 Cap Screw	1
6	FWASHER-08	1/2" Flat Washer	1
7	LWASHER-08	1/2" Lock Washer	1
8	HXNUT-08NC	1/2" NC Hex Nut	1
9	GHD-HHOLD1	Hose Holder	1
10	CSNC510096	5/8" X 6" Gr.5 NC Cap Screw	8
11	LWASHER-10	5/8" Lock Washer	8
12	HXNUT-10NC	5/8" Hex Nut	8

Drag Scraper Bucket Blades Assembly

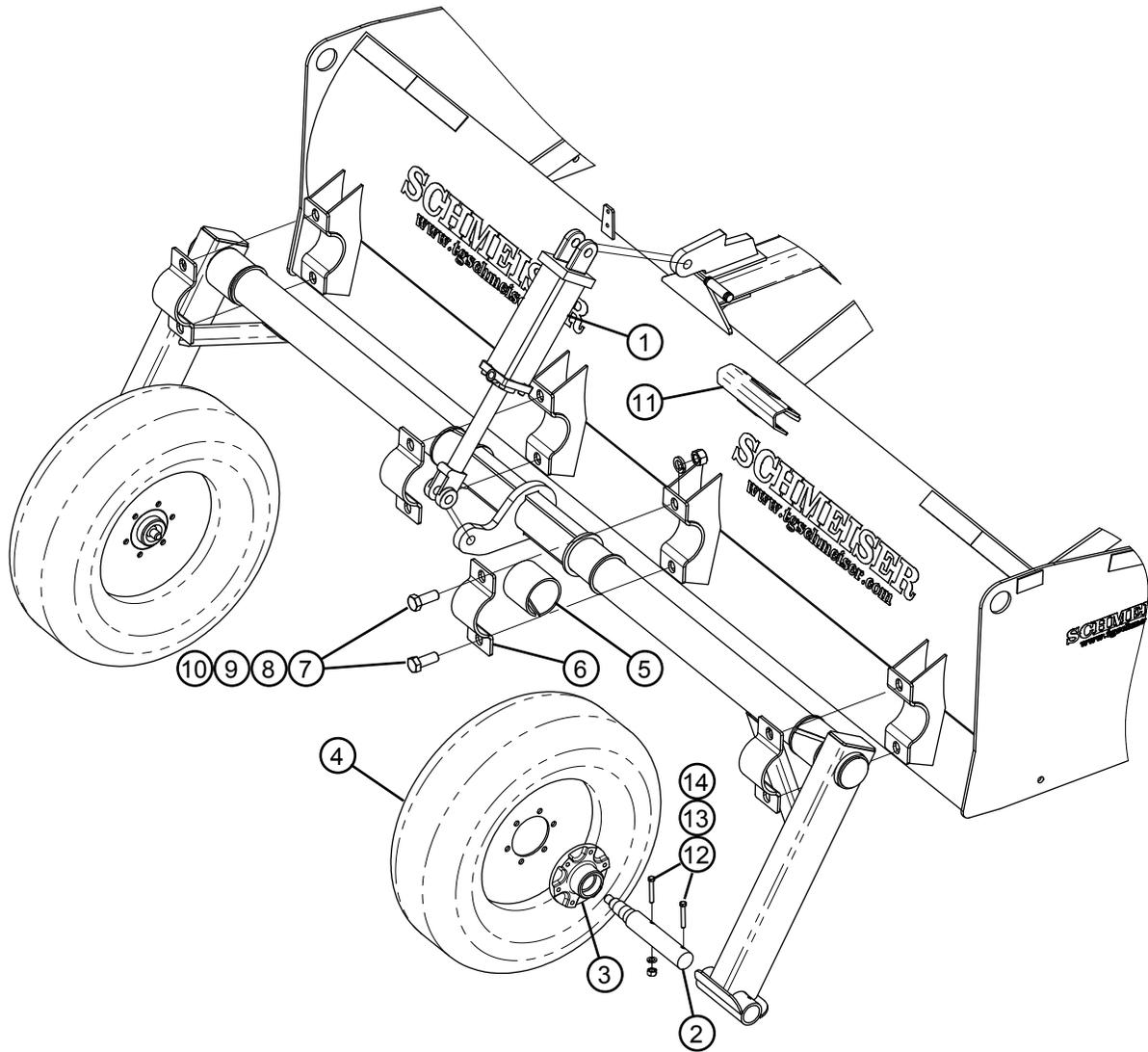


Item	Part Number	Description	Qty.
1	SLP-BK3808	8 Ft. Bucket Blade Kit (includes fasteners)	1
	SLP-BK3810	10 Ft. Bucket Blade Kit (includes fasteners)	1
	SLP-BK3812	12 Ft. Bucket Blade Kit (includes fasteners)	1
	SLP-BK3814	14 Ft. Bucket Blade Kit (includes fasteners)	1
2	PBNC-10028	5/8" X 1-3/4" NC Plow Bolt	varies
3	LWASHER-10	5/8" Lock Washer	varies
4	HXNUT-10NC	5/8" NC Hex Nut	varies
5	SLP-00L204	Adjustable Side Blade (Optional)	2
6	CSNC510028	5/8" X 1-3/4" NC Gr.5 Cap Screw	6
7	FWASHER-10	5/8" Flat Washer	6

SLP-BKS

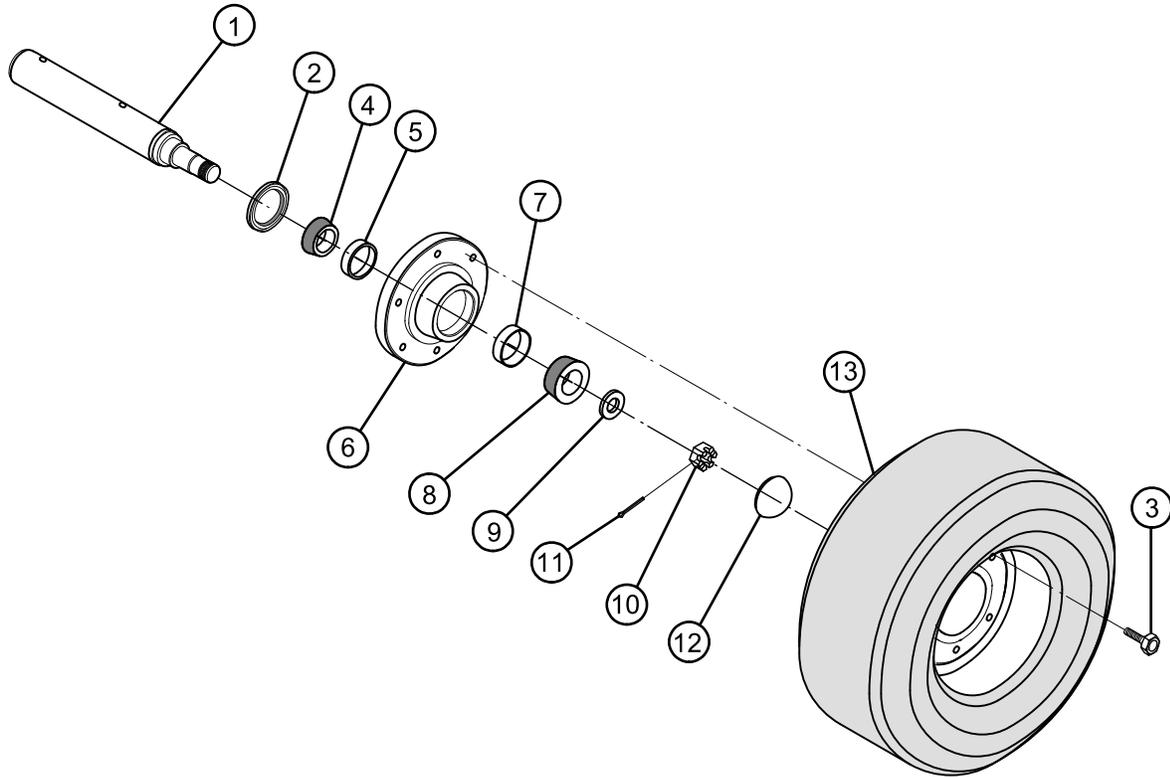
Side Blades Kit (Optional) - includes items 3, 4, 5, 6, and 7.

Drag Scraper Wheel Axle Assembly



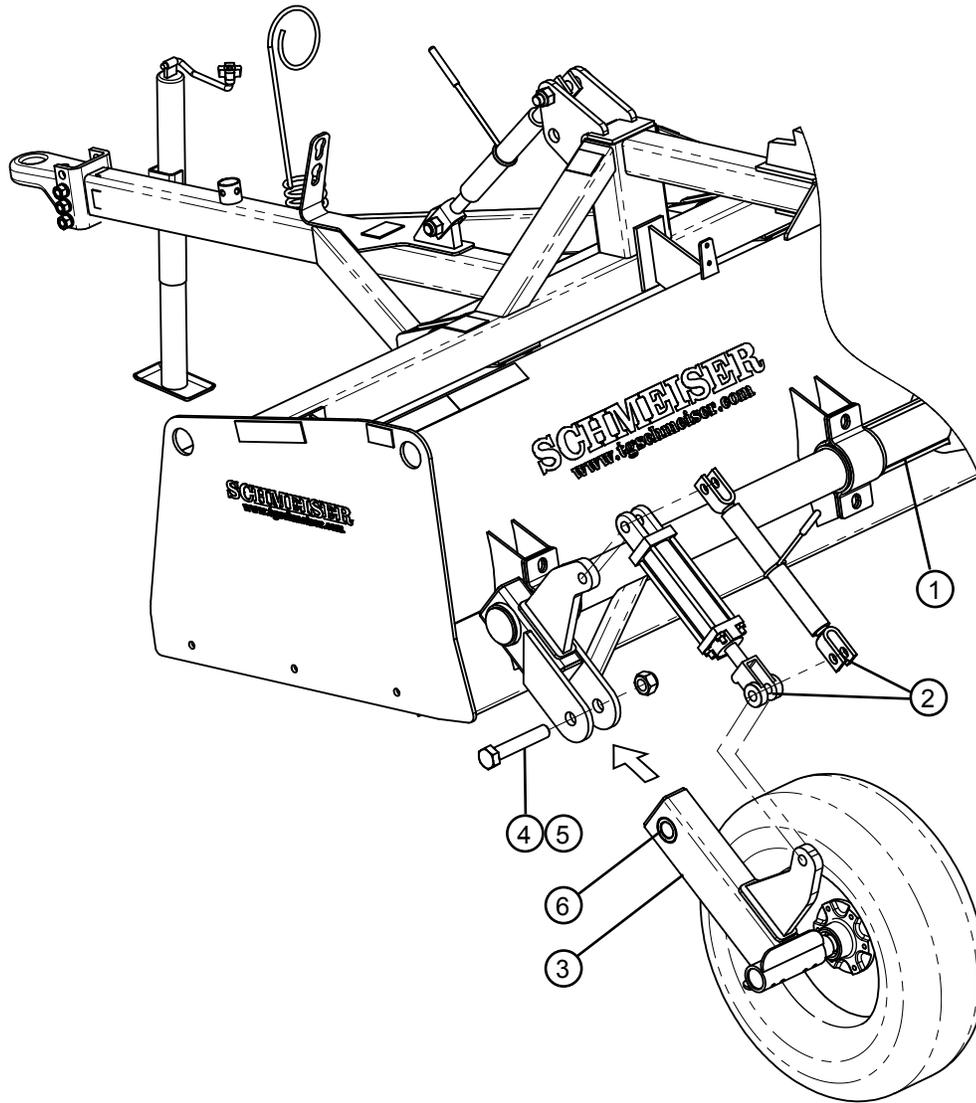
Item	Part Number	Description	Qty.
1	GHC-35100T	3-1/2" X 10" Tie Rod Hydraulic Cylinder	1
2	HT3-00C200	2" X 14" Removable Spindle	2
3	GHB-6X6STD	6 On 6 Standard Hub Assembly	2
4	GWT-951508	9.5 X 15 8 Ply Tire with Wheel Assembly	2
5	PTU-00P012	Wheel Axle Bearing UHMW	4
6	PTU-00B300	Wheel Axle Bearing Clamp	4
7	CSNC516040	1" X 1-1/2" NC Gr.5 Cap Screw	8
8	FWASHER-16	1" Flat Washer	8
9	LWASHER-16	1" Lock Washer	8
10	HXNUT-16NC	1" NC Hex Nut	8
11	GWD-310LB1	Transport Lockout Bar	1
12	CSNC507056	7/16" X 3-1/2" NC Gr. 5 Cap Screw	4
13	LWASHER-07	7/16" Lock Washer	4
14	HXNUT-07NC	7/16" NC Hex Nut	4

Drag Scraper Wheel Axle Hub Assembly



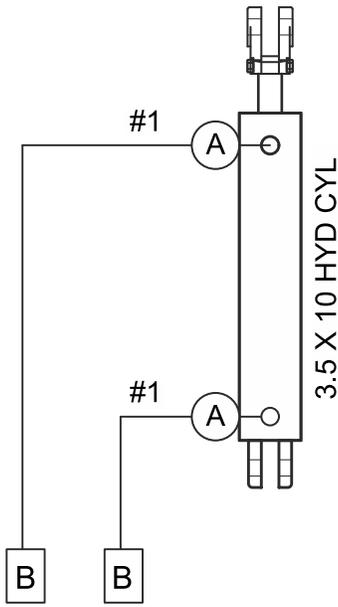
Item	Part Number	Description	Qty. Per Wheel Axle
1	HT3-00C200	2" X 14" Removable Spindle	2
2	GHB-6X6GSL	Grease Seal	2
3	WHB-08X016	1/2" X 1" UNF Wheel Bolts for 6 on 6 Std. Hub	12
4	GHB-6X6ICN	Inner Bearing Cone for 6 on 6 Std. Hub	2
5	GHB-6X6IRC	Inner Bearing Cup for 6 on 6 Std. Hub	2
6	GHB-6X6STD	Standard 6 on 6 Hub Complete (Includes items 2, 3, 4, 5, 7, 8, and 12)	2
7	GHB-6X6ORC	Outer Bearing Cup for 6 on 6 Std. Hub	2
8	GHB-6X6OCN	Outer Bearing Cone for 6 on 6 Std. Hub	2
9	GSP-14SPWA	Spindle Washer	2
10	GSP-14CANT	Spindle Castle Nut	2
11	GPN-03X032C	3/16" X 2" Cotter Pin	2
12	GHB-6X6CAP	Hub Cap	2
13	GWT-951508	9.5 X 15 8 Ply Wheel with Tire Assembly	2

Drag Scraper Wheel Axle with Tilt Leg Option



Item	Part Number	Description	Qty. Per Wheel Axle
1	SDS-00D100	Wheel Axle with Tilt Leg Option	1
2	GJK-RATCHJHD	Ratchet Jack HD	1
	GHC-25080T	2-1/2" X 8" Tie Rod Hydraulic Cylinder (Optional)	1
3	SDS-00D200	Tilt Leg	1
4	CSNC820112	1-1/4" X 7" NC Gr. 8 Cap Screw	1
5	NYNUT-20NC	1-1/4" NC Nylon Lock Hex Nut	1
6	GBR-2024G48	1-1/4" X 1-1/2" Self-Lubricating Bushing	1
	SDS-D	Tilt Leg Axle Upgrade with Ratchet Jack (Includes items 1 through 6 with Ratchet)	
	SDS-DH	Tilt Leg Axle Upgrade Hydraulic (Includes items 1 through 6 with Hyd. Cylinder)	

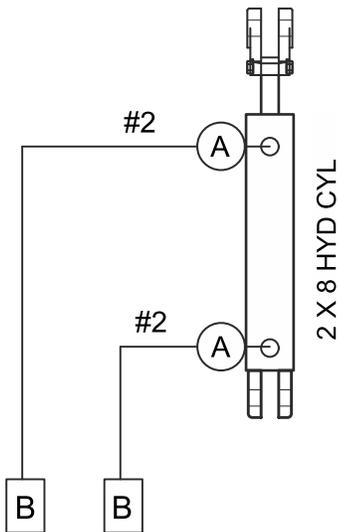
HYDRAULIC DIAGRAMS



FRONT

Wheel Axle Hydraulic Cylinder Diagram

#	Part Number	Description	Qty.
Hydraulic Cylinder			
	GHC-35100T	3.5" x 10" Tie Rod Hydraulic Cylinder	1
Hydraulic Hoses			
# 1	H1548MP8FJX	1/2" x 154" MP-FJX Hose	2
Hydraulic Fittings			
A	FMBMJ9088	MB - MJ 90 Elbow	2
B	FFP08000PT	FP Pioneer Tip	2



FRONT

Tilt Leg Hydraulic Cylinder Diagram (Optional)

#	Part Number	Description	Qty.
Hydraulic Cylinder			
	GHC-25080T	2.5" x 8" Tie Rod Hydraulic Cylinder	1
Hydraulic Hoses			
# 2	H2608MP8MP	1/2" x 260" MP-FJX Hose	2
Hydraulic Fittings			
A	FMBMJ9088	MB - MJ 90 Elbow	2
B	FFP08000PT	FP Pioneer Tip	2



LIMITED WARRANTY STATEMENT

T.G. Schmeiser Co., Inc.

P.O. Box 1392 – Selma, CA 93662

Phone (559) 268-8128 Fax (559) 268-3279

T. G. Schmeiser Co., Inc. warrants each new Schmeiser® product to be free from defects in material and workmanship. This warranty is applicable only for the normal service life expectancy of the product or components, not to exceed twelve (12) consecutive months from the date of delivery of the new Schmeiser product to the original purchaser.

Genuine T. G. Schmeiser Co., Inc. replacement parts and components will be warranted for 90 days from date of purchase, or the remainder of the original equipment warranty period, whichever is longer.

Under no circumstances will it cover any merchandise or components thereof, which, in the opinion of the company, has been subjected to misuse, unauthorized modifications, alteration, an accident or if repairs have been made with parts other than those obtainable through T. G. Schmeiser Co., Inc.

The Company in no way warrants engines, batteries, cylinders, tires or other trade accessories since these items are warranted separately by their respective manufacturer. Expendable components such as points, shanks, blades, rings, bearings, teeth, and the like are excluded from this warranty.

Our obligation under this warranty shall be limited to repairing or replacing, free of charge to the original purchaser, any part that, in our judgment, shall show evidence of such defect, provided further that such part shall be returned within thirty (30) days from date of failure to T. G. Schmeiser Co., Inc., routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.

This warranty shall not be interpreted to render T. G. Schmeiser Co., Inc. liable for injury or damages of any kind or nature to person or property. This warranty does not extend to the loss of crops, loss because of delay in harvesting, or any expense or loss incurred for labor, substitute machinery, rental or for any other reason.

Except as set forth above, T. G. Schmeiser Co., Inc. shall have no obligation or liability of any kind on account of any of its equipment and shall not be liable for special or consequential damages. T. G. Schmeiser Co., Inc. makes no other warranty, expressed or implied, and, specifically, T. G. Schmeiser Co., Inc. disclaims any implied warranty or merchantability or fitness for a particular purpose. Some states or provinces do not permit limitations or exclusions of implied warranties or incidental or consequential damages, so the limitations or exclusion in this warranty may not apply.

This warranty is subject to any existing conditions of supply, which may directly affect our ability to obtain materials or manufacture replacement parts.

T. G. Schmeiser Co., Inc. reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligation to owners of units previously sold.

No one is authorized to alter, modify or enlarge this warranty nor the exclusion, limitations and reservations.

**WARRANTY VOID IF NOT REGISTERED
WITHIN 30 DAYS OF PURCHASE DATE**



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