SCHMEISER

PRECISION FINISHING SCRAPER

RIGID MODEL



FOLDING MODEL



T. G. SCHWEISER Co., Inc.

OPERATION AND PARTS MANUAL

Version 2.0 December 2021



Precision Finishing Scraper



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INTRODUCTION

Your Schmeiser Precision Finishing 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

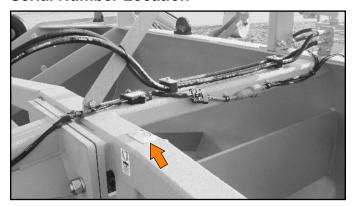
Should this implement require replacement parts, contact your local Schmeiser dealer. Always order genuine Schmeiser OEM replacement parts.

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 Precision Finishing 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: <u>www.tgschmeiser.com</u>

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	WORKING WIDTH	TRANSPORT WIDTH	WEIGHT	HP RANGE
	PFS12	12'	12'	6800	145-200
RIGID MODELS	PFS14	14'	14'	7000	170-230
65226	PFS16	16'	16'	7200	190-265
	PFS18	18'	18'	7400	215-300
	PFS20	20'	12'-4"	8500	240-330
FOLDING MODELS	PFS22	22'	12'-4"	8720	265-365
	PFS24	24'	12'-4"	8980	300-400

STANDARD FEATURES

- Replaceable tension wheel axle bushings.
- Tandem Walking Beams with 2-3/4" replaceable / reversible spindles.
- Safety Light Kit.
- Jack Stand 5000 lbs. Capacity.
- CA 4 Perfect Hitch with 40 degree articulation
- Adjustable hitch height.
- 31 X 13.5 Tires for units 12 ft. through 16 ft.
- 16.5 X 16 Tires for units 18 ft. through 24 ft.
- Lead Hoses and Tips are included.
- Reversible 5/8" Slobber Bits.

OPTIONS

- End Tow Transport available for 20 ft. through 24 ft. units.
- GPS and Laser Stands.
- Narrow Transport Rear Wheel Axle available for rigid units.
- Front Swivel Hitch.



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.

A 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 CHILDREN

NO ALCOHOL



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



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.
- 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.
- 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.

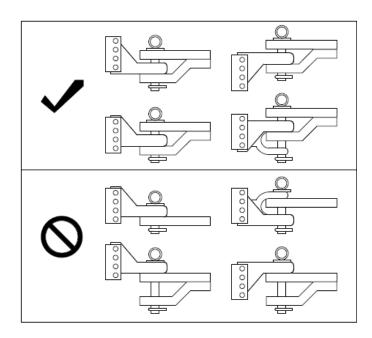
Unexpected Separation Hazard

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

- 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 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

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 Separation Hazard

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 nongreased 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		Bolt Torque S	Specifications	
Diameter	3 Radial Lines	Grade 5	6 Radial Lines	Grade 8
	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

me and Lag residue epeemeaneme			
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"	120



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.

$\overline{\mathbf{A}}$

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

A

WARNING

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.

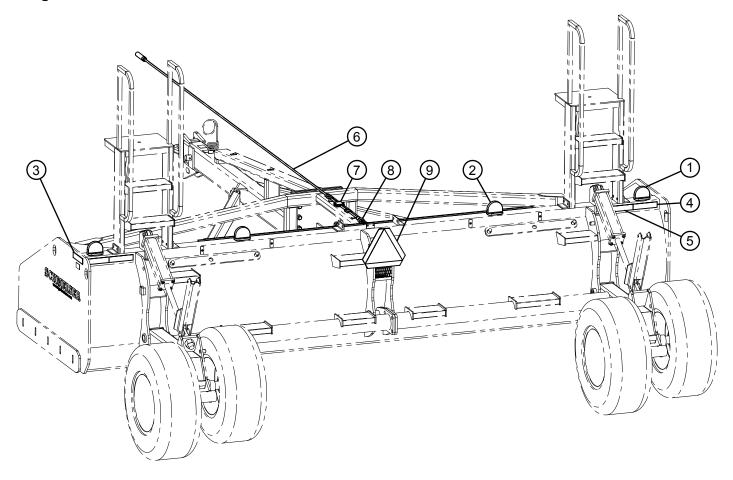
DISPOSAL OF EQUIPMENT AT END OF USEFUL LIFE

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

Rigid Units



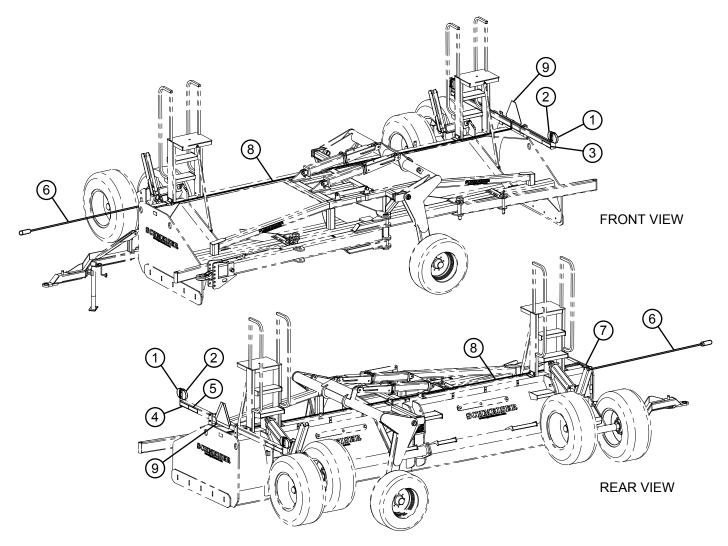
Wires with YELLOW tags on LH side.

Wires with GREEN tags on RH side.

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	4
4	D-2X9RR	Reflective Tape, Red	2
5	D-2X9FL	Fluorescent Tape, Orange	2
6	GLT-HF15	Front Harness, 15 Ft. Long	1
7	GLT-FCM	Flasher Control Module	1
8	GLT-HW1024	Rear Wishbone Harness 10 Ft24 Ft.	1
9	GMB-SMVSN	Slow Moving Vehicle Sign	1



Folding (End Tow) Units



Wires with YELLOW tags on LH side.

Wires with GREEN tags on RH side.

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-HW5050	Rear Wishbone Harness 50 Ft50 Ft.	1
9	GMB-SMVSN	Slow Moving Vehicle Sign	1



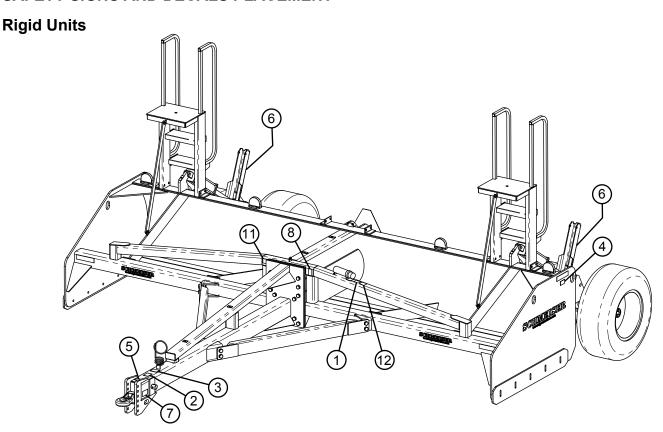
SAFETY SIGNS AND DECALS

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

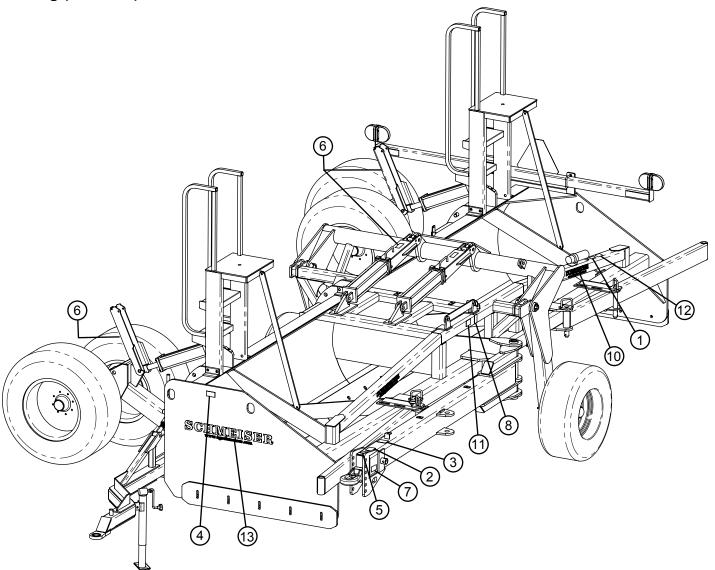


Item	Part Number	Description	Qty.
1	D48X038RTM	Read the Manual	1
2	D48X038CRR	Crush / Rollover Hazard	1
3	D48X064HPF	High Pressure Fluids	1
4	D28X048SCE	Sharp Object Hazard	2
5	D28X048PPT	Pinch Point	1
6	D28X048RBW	Transport Lockout	2
7	D76X040SGB	Transport Safety Chain	1

Item	Part Number	Description	Qty.
8	DFEMALOGO1	FEMA Decal	1
9	D16X026GRS	Grease Decal	4
10	D52X272BLK	Schmeiser 3-1/4" X 17"	2
11	D32X048RBC	Made in the USA	1
12	D48X48QR	Scan to Access Online Manual	1
13	D104608BLK	Schmeiser 6-1/2" x 38"	4



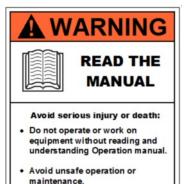
Folding (End Tow) Units



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	1
6	D28X048RBW	Transport Lockout	4
7	D76X040SGB	Transport Safety Chain	1
8	DFEMALOGO1	FEMA Decal	1
9	D16X026GRS	Grease Decal	4
10	D52X272BLK	Schmeiser 3-1/4" X 17"	2
11	D32X048RBC	Made in the USA	1
12	D48X48QR	Scan to Access Online Manual	1
13	D104608BLK	Schmeiser 6-1/2" x 38"	4



Safety Signs and Decals



If manual is lost, go to www.tgschmeiser.com and

1.

6.

13.

download a new manual.















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Fax (559) 268-3279



ASSEMBLY

WARNING

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

Straight Pull Models Assembly Procedure

- 1. Select a smooth, level area approximately 26 feet wide and 26 feet long.
- 2. Position main frame on the ground on wooden blocks and center in the area with the open bucket facing the direction that the machine is to be pulled.
- 3. Position and attach tongue to the main frame with (8) 1" x 3" NC Cap Screws and with lock washers and hex nuts.
- 4. Hoist and attach left brace and right brace with (4) 1" x 2-1/2" NC Cap Screws with lock washers and hex nuts on each side. See page 30 for reference.
- 5. Install (2) 4" x 16" Tie Rod Hydraulic Cylinders on the main bucket. Connect cap ends of the cylinders (bottom ends) to the cylinder anchors on the main bucket using cylinder lockout pins with cotter pins.
- 6. Using hoist, pick up right side portion of wheel axle, align cylinder anchor on the wheel axle with cylinder anchor on the main bucket. Connect wheel axle and main bucket using 2" pivot pins with 3/8" x 3-1/2" NC cap screw, lock washer, and hex nuts. Refer to page 33 for details.
- Using hoist, pick up left side portion of wheel axle, align adjustment bolt on the wheel axle with cylinder anchor on the main bucket. Connect wheel axle and main bucket using 2" pivot pins. Refer to page 33 for details.
- 8. Connect rod ends of the hydraulic cylinders to the flip lockout bars and wheel axle (right side -to the wheel axle cylinder anchor, left side - to the wheel axle adjustment bolt) using 1" x 5-1/2" Gr. 8 NC cap screws with nylon lock hex nuts.
- Attach walking beam assemblies to the wheel axle.
 Use 2" pivot pins. See drawing on page 34 for proper installation.
- 10. For units 16' and smaller, mount 13.5x13 tires to the spindles on the walking beams. Mount 16.5x16 tires

- for 18' and larger units. Ensure that valve stems are to the inside. Tighten all bolts securely.
- 11. Install main bucket blades using 5/8" x 2-1/4" NC Plow Bolts with lock washers and hex nuts. See page 32 for details.
- 12. **OPTIONAL**. Install adjustable side blades using 5/8" x 2-1/2" NC Cap Screws with flat washers, lock washers, and hex nuts. See page 32 for details.
- 13. OPTIONAL. Mount laser tower(s) to the main bucket using (4) 3/4" x 4" NC Cap Screws with lock washers and hex nuts for each tower. Refer to page 39 for details. Mount GPS tower to the main bucket using (4) 3/4" x 2" NC Cap Screws with lock washers and hex nuts.

NOTICE

Ensure that rear wheel axle center plates are NOT BOLTED TOGETHER for units with two towers!

End Tow Models Assembly Procedure

- 1. Select a smooth, level area approximately 30 feet wide and 30 feet long.
- Position main frame on the ground on wooden blocks and center in the area.
- 3. Position and attach tongue to the main frame with 2" hinge pin with 3/8" x 3" NC cap screw, lock washer, and hex nut.
- 4. Hoist and attach left brace and right brace to the main frame with 1-1/2" brace pins with cotter pins on each side. See page 31 for reference. Attach both braces to the tongue with 1-1/2" brace locking pins with 7/16" lynch pins.
- 5. Using hoist, pick up right side portion of wheel axle, align cylinder anchor on the wheel axle with cylinder anchor on the main bucket. Connect wheel axle leg to the main bucket using 2" pivot pin with 3/8" x 3-1/2" NC cap screw, lock washer, and hex nut (refer to page 33 for details).
- 6. Using hoist, pick up left side portion of wheel axle, align adjustment bolt on the wheel axle with cylinder anchor on the main bucket. Connect wheel axle leg to the main bucket using 2" pivot pin with 3/8" x 3-1/2" NC cap screw, lock washer, and hex nut (refer to page 33 for details).



- 7. Install (2) 4" x 16" tie rod hydraulic cylinders on the back of the main bucket. Connect cap ends of the cylinders (bottom ends) to the cylinder anchors on the main bucket using cylinder pins with cotter pins.
- 8. Connect rod ends of the hydraulic cylinders to the flip lockout bars and wheel axle (right side to the wheel axle cylinder anchor, left side to the wheel axle adjustment bolt) using 1" x 5-1/2" Gr.8 NC cap screws with nylon lock hex nuts.
- Attach walking beam assemblies to the wheel axle.
 Use 2" pivot pins. See drawing on page 34 for reference.
- Mount 16.5 x 16 tires to the spindles on the walking beams. Ensure that valve stems are to the inside. Tighten all bolts securely.
- 11. Install main bucket blades using 5/8" x 2-1/4" NC plow bolts with lock washers and hex nuts. See page 32 for details.
- 12. Install adjustable side blades using 5/8" x 2-1/2" NC cap screws with flat washers, lock washers, and hex nuts. See page 32 for details
- 13. Mount laser tower(s) to the main bucket using (4) 3/4" x 4" NC cap screws with lock washers and hex nuts for each tower. Refer to page 39 for details. Mount GPS tower to the main bucket using (4) 3/4" x 2" NC Cap Screws with lock washers and hex nuts.

NOTICE

Ensure that rear wheel axle center plates are NOT BOLTED TOGETHER for units with two towers!

End Tow Models Transport Option Assembly

- Using hoist, install transport wheel axle on top of the main bucket with jog facing direction in which machine will be pulled.
- Connect transport wheel axle and main frame pivot points on each side of the bucket using 2" pivot pins with 3/8" x 3" NC cap screws, lock washers and hex nuts. See illustration on page 36 for proper installations.
- 3. Install (2) 4" x 20" tie rod hydraulic cylinders on the main bucket. Connect cap ends of the cylinders (bottom ends) to the cylinder anchors on the main bucket using cylinder pins with cotter pins.
- 4. Connect rod ends of the hydraulic cylinders to the flip lockout bars and wheel axle cylinder anchors

- using 1" x 5-1/2" Gr.9 NC cap screws with nylon lock hex nuts (refer to page 36).
- 5. Mount highway tires to the removable spindles on the wheel axle. Tighten all bolts securely. Refer to page 36.
- Mount transport tongue to the R.H. side of the main frame behind the bucket using 1" x 7" NC cap screw with nylon lock hex nut. See page 38 for detailed instructions.
- 7. Connect turnbuckle assembly to the transport tongue using 1" x 3-3/4" pin with 7/16" lynch pin. Mount other side of the turnbuckle to the main frame bucket using 1" x 4-1/2" NC cap screw with nylon lock hex nut. Refer to page 38 for details.
- 8. Adjust turnbuckle to the desired hitch height.

Attaching to Tractor

- 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.

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

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.



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 21.				
		Make sure all hardware is properly installed and tightened. Refer to "Maintenance" on page 25.				
3	ST STORY GAS	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 25.				

OPERATION

A V

WARNING

Understand Safety Procedures!

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

Operating Instructions

- Make sure the Precision Finishing Scraper is properly attached to the tractor before beginning work. Inspect the condition of the cutting edges and the overall Precision Finishing 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 Precision Finishing Scraper.
- 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. Especially if the unit is equipped with laser towers.
- 5. Do not operate the Precision Finishing 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. Flip lockout bars open from the hydraulic cylinder rods.
- 8. Lower bucket to the desired depth.
- Proceed forward at a speed of 4-5 MPH. Ideal speed may vary depending on soil conditions, the Precision Finishing Scraper will immediately start shaving the surface and fill the bucket with material, cutting high



spots and filling low spots.

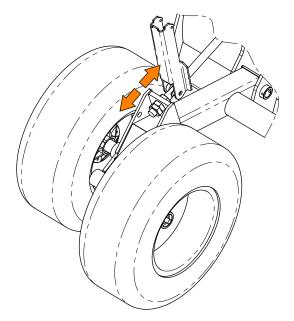
- 10. The Precision Finishing Scraper should run with the bucket between 1/2 and 3/4 full of material. Using tractor hydraulics, adjust bucket height accordingly.
- 11. Maximum bucket dumping height is 12".

Maximum cutting depth is 4" below grade.

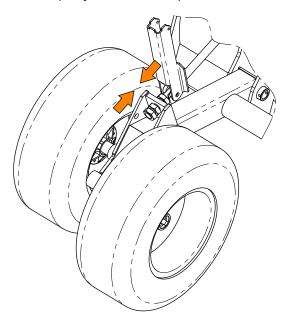
Adjusting Rear Wheel Legs

Finishing Scraper is equipped with two dual tire gauging rear wheel legs. They can act independently (if the finishing scraper is operated with two laser / GPS units) or they can be bolted together and move as one solid rear wheel axle (if operated with one laser / GPS unit).

- Before performing any adjustments, ensure that rear wheel legs are NOT bolted together in the middle. Unbolt them in case they are connected.
- 2. Lower the Finishing Scraper to the ground.
- 3. Check if both wheel legs are completely aligned and leveled with each other. Use bubble level and / or angle finder to check.
- 4. In case legs are not completely aligned, adjust position of LH side wheel leg using adjustment bolt.
- Unlock all hex jam nuts that secure the adjustment bolt in position and fine tune LH wheel leg up or down to align with RH wheel leg. Use wrench provided with the implement.



- 6. Keep checking alignment until both sides are perfectly leveled with each other.
- 7. Once both legs are completely aligned, secure all hex nuts to keep adjustment bolt in place.



Detaching From Tractor

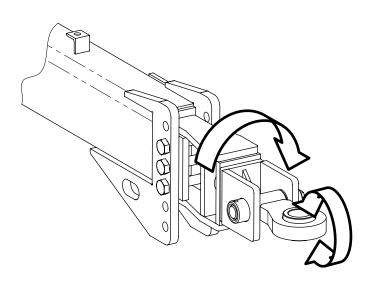
- Park the tractor, place the transmission in park or neutral, and apply the parking brake. Shut down the engine, relieve all hydraulic pressure, and remove the key before exiting the tractor.
- 2. Block the wheels to prevent movement.
- Remove the jack from its storage location and secure
 it to the 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.



Features and Options

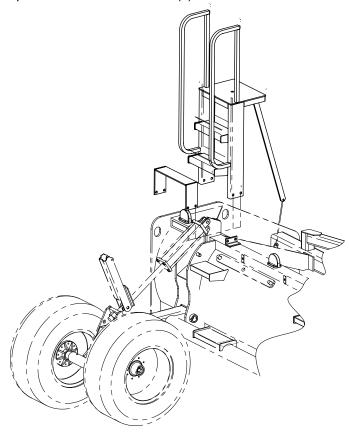
Front Swivel Hitch Option

Allows for rotation in two different directions



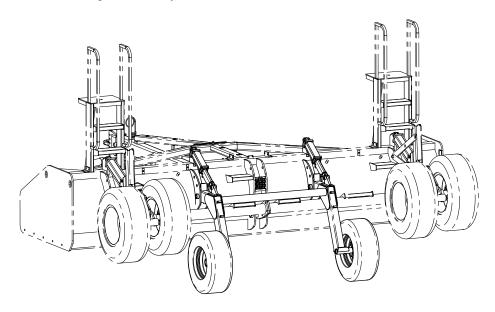
GPS / Laser Stand Option

All models come equipped with brackets to mount optional GPS or Laser stand(s).



Rear Transport Wheel Option

Allows to transport the Finishing Scraper on the narrower roads - for Rigid Units only. Tire to tire width is 6'-6".





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.

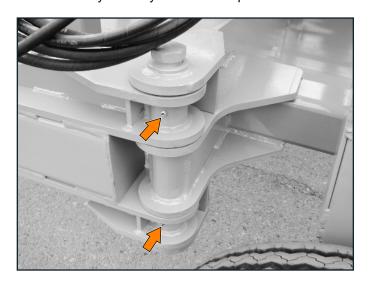
Wheel Hub Bearings

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



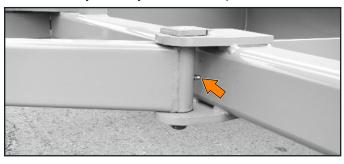
Pull Frame Hinge (Folding Models)

Grease weekly or every 40 hours of operation.



Pull Frame Brace Hinge (Folding Models)

Grease weekly or every 40 hours of operation.

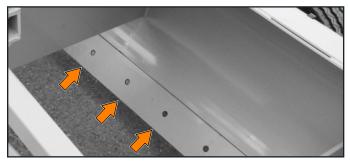


Ground Engaging Components

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

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. Left and right blades should be replaces at the same time.





Service Items

Tires

Check tire pressure and set to tire manufacturer's recommended specifications. Inspect the tires for wear and/or damage. Make sure the wheel lugs are tightened to the proper torque.



Hydraulic Hoses

Inspect all hydraulic hoses and fittings for leaks or signs of wear. Replace any that are overly worn or damaged.



MAINTENANCE SCHEDULE

Hours and Serviced By							
Before Each Use or Daily							
Ensure that all fasteners are tight, and all pins are secured in place.							
Inspect the frame for structural fractures.							
Make sure all warning decals are in place and legible.							
Check tires for proper pressure. Adjust if necessary.							
Check all blades for wear and damage. Replace if necessary.							
Every 50 Hours or Weekly							
Perform the Daily Maintenance schedule.							
Lubricate zerk fittings on ratchet (HD Drag Scraper) with a good general purpose grease.							
Every 1000 Hours or Annually							
Perform the Daily Maintenance schedule.							
Perform the Weekly Maintenance schedule.							
Lubricate zerk fittings on ratchet (HD Drag Scraper) with a good general purpose grease.							
Remove debris and clean the entire implement with compressed air or a pressure washer.							
Remove rust and apply a coat of paint to frame surfaces where the paint has been worn off or damaged.							



STORAGE

Storage Preparation

After Precision Finishing 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.
- 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.
- Lubricate all grease fittings on the frame members with a good general purpose lithium grease. Refer to "Lubrication Points" on page 25 for the location of the fittings.
- 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.
- 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

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

shorten the service life.

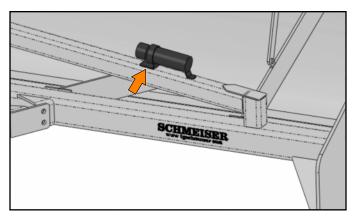
- 3. Disconnect all hydraulic hoses, and unhitch the implement from the tractor. Refer to "Detaching From Tractor" on page 23.
- 4. Store the implement with the transport wheels extended in the transport mode and the wheel support lock installed over the cylinder rod. Do not leave the tractor attached 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 brace.

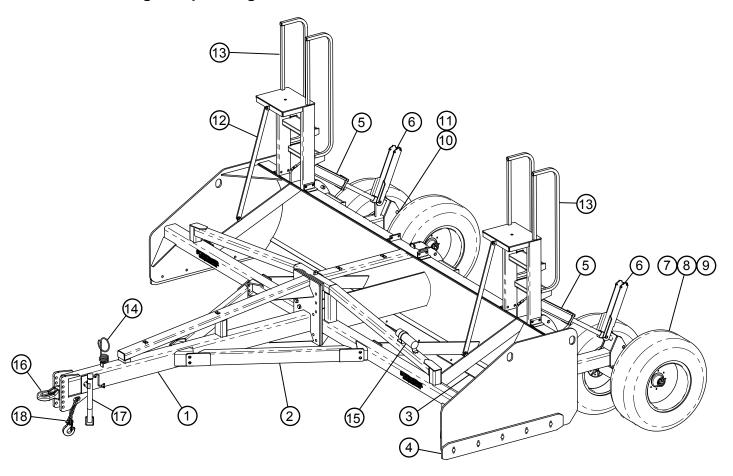


- 2. Perform any recommended maintenance that was not completed when the implement was put into storage.
- 3. Visually inspect the implement for wear or damage.
- 4. Check the tire pressure and set to the tire manufacturer's recommended specification. Inspect the tires for wear and/or damage.
- 5. Inspect 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 "Attaching to Tractor" on page 21. 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

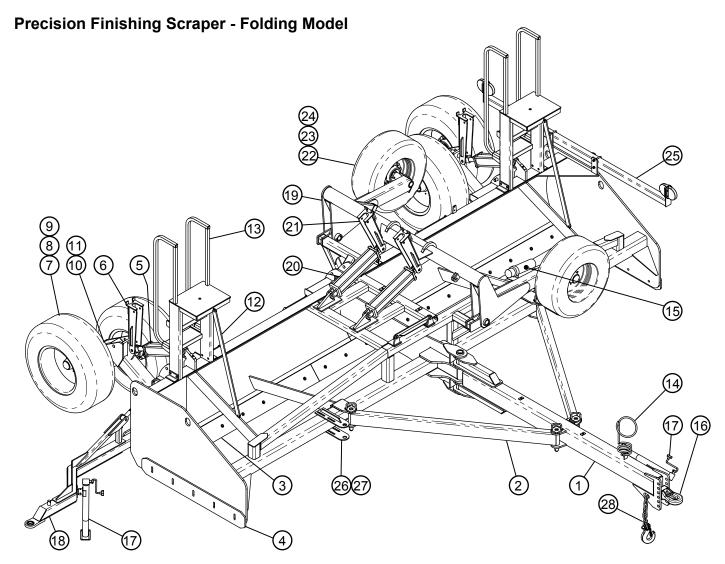
Precision Finishing Scraper - Rigid Model



Item	Part Number	Description	Qty.
1	SFS-00A200	Pull Frame Rigid	1
2	SFS-00A400	Pull Frame Brace Rigid	2
3	SFS-08A103	Finish Scraper Bucket Blade 8 ft.	varies
4	SFS-00A104	Finish Scraper Adj. Side Blade	2
5	GHC-40160T	4" X 16" Tie Rod Hyd. Cylinder	2
6	GWD-416LB1	4" X 16" Cylinder Lockout Bar	2
7	GWT-131310	31 X 13.5 Tire w/Wheel (12' - 16')	4
	GWT-161610	16.5 X 16 Tire w/Wheel (18' - Up)	4
8	GHB-8X8XHZ	8 on 8 XHVY Wheel Hub	4
9	SFS-00B600	2-3/4" Removable Spindle	4

Item	Part Number	Description	Qty.
10	SFS-00B800R	Wheel Axle Walking Beam	2
11	SFS-00B907WH	Walking Beam Pivot Pin	5
12	SFS-00A612	Laser Tower Support Brace (Option)	varies
13	SFS-00A600	Laser Tower (Option)	varies
14	91798A	Hose Holder Short	1
15	OMC1	Owner Manual Canister	1
16	GMB-HITCHCA4	Perfect Hitch CA 4	1
17	GJK-5KTW15	Jack Stand 5000# capacity	1
18	GMB-CH05CH	5/16" Safety Chain with Hook Gr.70	1





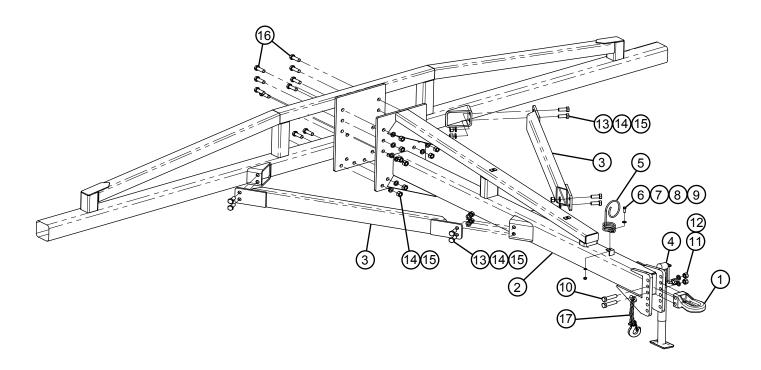
Item	Part Number	Description	Qty.
1	SFS-00A200	Pull Frame Rigid	1
2	SFS-00A400	Pull Frame Brace Rigid	2
3	SFS-08A103	Finish Scraper Bucket Blade 8 ft.	varies
4	SFS-00A104	Finish Scraper Adj. Side Blade	2
5	GHC-40160T	4" X 16" Tie Rod Hyd. Cylinder	2
6	GWD-416LB1	4" X 16" Cylinder Lockout Bar	2
7	GWT-131310	31 X 13.5 Tire w/Wheel (12' - 16')	4
	GWT-161610	16.5 X 16 Tire w/Wheel (18' - Up)	4
8	GHB-8X8XHZ	8 on 8 XHVY Wheel Hub	4
9	SFS-00B600	2-3/4" Removable Spindle	4
10	SFS-00B800R	Wheel Axle Walking Beam	2
11	SFS-00B907WH	Walking Beam Pivot Pin	5
12	SFS-00A612	Laser Tower Support Brace (Option)	varies
13	SFS-00A600	Laser Tower (Option)	varies

Item	Part Number	Description	Qty.
14	91798A	Hose Holder Short	1
15	OMC1	Owner Manual Canister	1
16	GMB-HITCHCA4	Perfect Hitch CA 4	1
17	GJK-5KTW15	Jack Stand 5000# capacity	1
18	SFS-00B700	Transport Tongue (End Tow)	1
19	SFS-00B300	Transport Wheel Axle (End Tow)	1
20	GHC-40200T	4" X 20" Tie Rod Hyd. Cylinder	2
21	GWD-420LB1	4" X 20" Cylinder Lockout Bar	2
22	GWT-75R16	215-75R17.5 Highway Tire	2
23	GHB-8X8HVY	8 on 8 Heavy Hub	2
24	SFS-00B307	2-1/8" Removable Spindle	2
25	SFS-00E000	Light Bar	1
26	SFS-00B138	Pull Frame and Braces Support	4
27	SFS-00B103	Brace Support Spacer	varies
28	GMB-CH05CH	5/16" Safety Chain with Hook Gr.70	1



PARTS DRAWINGS

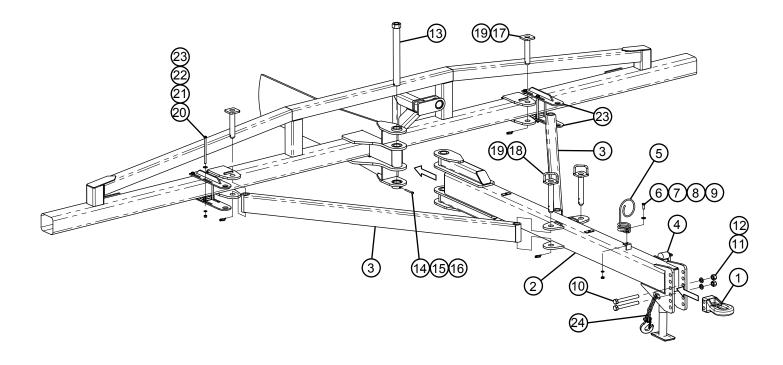
Finishing Scraper Pull Frame Assembly Rigid Units



Item	Part Number	Description	Qty.
1	GMB-HITCHCA4	CA 4 Perfect Hitch	1
2	SFS-00A200	Pull Frame	1
3	SFS-00A400	Pull Frame Brace	2
4	GJK-2KTW10	Jack Stand 2000 Lbs. Capacity	1
5	91798A	Hose Holder Short	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	CSNC516128	1" X 8" NC Gr.5 Cap Screw	3
11	LWASHER-16	1" Lock Washer	3
12	HXNUT-16NC	1" NC Hex Nut	3
13	CSNC516040	1" X 2-1/2" Gr.5 NC Cap Screw	8
14	LWASHER-16	1" Lock Washer	22
15	HXNUT-16NC	1" NC Hex Nut	22
16	CSNC516048	1" X 3" Gr.5 NC Cap Screw	14
17	GMB-CH05CH	5/16" Safety Chain with Hook Gr.70	1



Finishing Scraper Pull Frame Assembly Folding Units

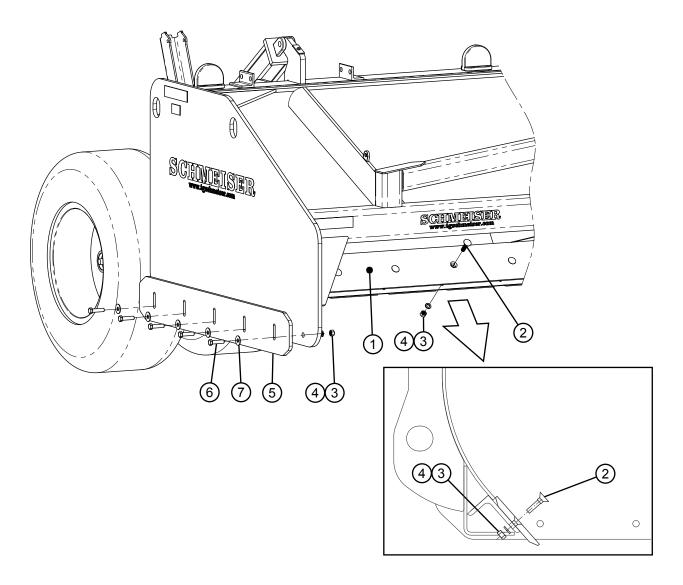


Item	Part Number	Description	Qty.
1	GMB-HITCHCA4	CA 4 Perfect Hitch	1
2	SFS-00B200	Pull Frame	1
3	SFS-00B400	Pull Frame Brace	2
4	GJK-2KTW10	Jack Stand 2000 Lbs. Capacity	1
5	91798A	Hose Holder Short	1
6	CSNC508024	1/2" X 1-1/2" NC Gr.5 Cap Screw	1
7	FWASHER-08	1/2" Flat Washer	1
8	LWASHER-08	1/2" Lock Washer	1
9	HXNUT-08NC	1/2" NC Hex Nut	1
10	CSNC516128	1" X 8" NC Gr.5 Cap Screw	3
11	LWASHER-16	1" Lock Washer	3

Item	Part Number	Description	Qty.
12	HXNUT-16NC	1" NC Hex Nut	3
13	SFS-00B901	Hinge Pin	1
14	CSNC507056	7/16" X 3-1/2" Gr.5 NC Cap Screw	1
15	HXNUT-07NC	7/161" NC Hex Nut	1
16	LWASHER-07	7/16" Lock Washer	1
17	SFS-00B905	Brace - Main Frame Pin	2
18	SFS-00B902	Brace Lock Pin - Red	2
19	GPN-040LYN	1/4" Lynch Pin	4
20	CSNC508128	1/2" X 8" Gr.5 NC Cap Screw	8
21	FWASHER-08	1/2" Flat Washer	8
22	LWASHER-08	1/2" Lock Washer	8
23	HXNUT-08NC	1/2" NC Hex Nut	8
24	GMB-CH05CH	5/16" Safety Chain with Hook Gr.70	1



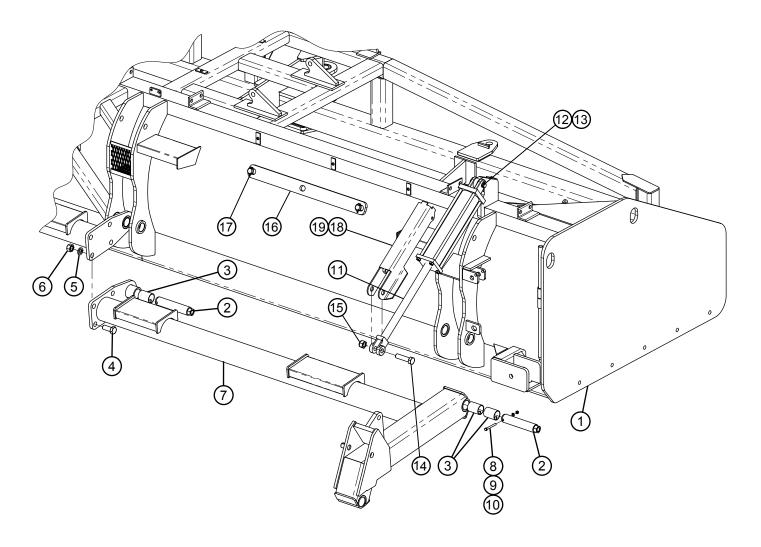
Finishing Scraper Bucket Blades Assembly (All Units)



Item	Part Number	Description	Qty.
1	PFS-BK7512	12 Ft. Bucket Blade Kit (includes fasteners)	1
	PFS-BK7514	14 Ft. Bucket Blade Kit (includes fasteners)	1
	PFS-BK7516	16 Ft. Bucket Blade Kit (includes fasteners)	1
	PFS-BK7518	18 Ft. Bucket Blade Kit (includes fasteners)	1
	PFS-BK7520	20 Ft. Bucket Blade Kit (includes fasteners)	1
	PFS-BK7522	22 Ft. Bucket Blade Kit (includes fasteners)	1
	PFS-BK7524	24 Ft. Bucket Blade Kit (includes fasteners)	1
2	PBNC-10036	5/8" X 2-1/4" NC Plow Bolt	varies
3	LWASHER-10	5/8" Lock Washer	varies
4	HXNUT-10NC	5/8" NC Hex Nut	varies
5	SFS-00A104	Adjustable Side Blade	2
6	CSNC510040	5/8" X 2-1/2" NC Gr.5 Cap Screw	10
7	FWASHER-10	5/8" Flat Washer	10



Finishing Scraper Rear Wheel Axle Assembly (All Units)

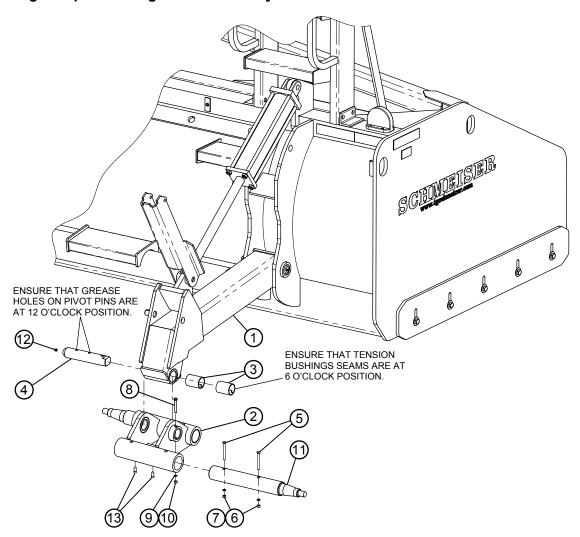


Item	Part Number	Description	Qty.
1		Main Bucket	1
2	SFS-00B907WH	Walking Beam Pivot Pin	5
3	GBH-36X48TX	2-1/4" O.D. Tension Bushing	10
4	CSNC516040	1" X 3" NC Hex Cap Screw	4
5	LWASHER-16	1" Lock Washer	4
6	HXNUT-16NC	1" NC Hex Nut	4
7	SFS-00A300	Rear Wheel Axle (specify size)	1
8	CSNC506056	3/8" X 3-1/2" NC Hex Cap Screw	5
9	LWASHER-06	3/8" Lock Washer	5

Item	Part Number	Description	Qty.
10	HXNUT-06NC	3/8" NC Hex Nut	5
11	GHC-40160T	4" X 16" Tie Rod Hydraulic Cylinder	2
12	GPN-1664HC	1" X 4" Cylinder Pin	2
13	GPN-03CLIP	5/32" Hair Pin Clip	4
14	CSNC816088	1" X 5-1/2" Gr.8 NC Cap Screw	2
15	NYNUT-16NC	1" NC Nylon Lock Hex Nut	2
16	SFS-00A703	Wheel Axle Cylinder Lockout Plate	2
17	GPN-070LYN	7/16" Lynch Pin	4
18	GWD-416LB1	4" X 16" Cylinder Lockout Bar	2
19	GPN-08068H	Wheel Axle Lockout Lock Pin	2



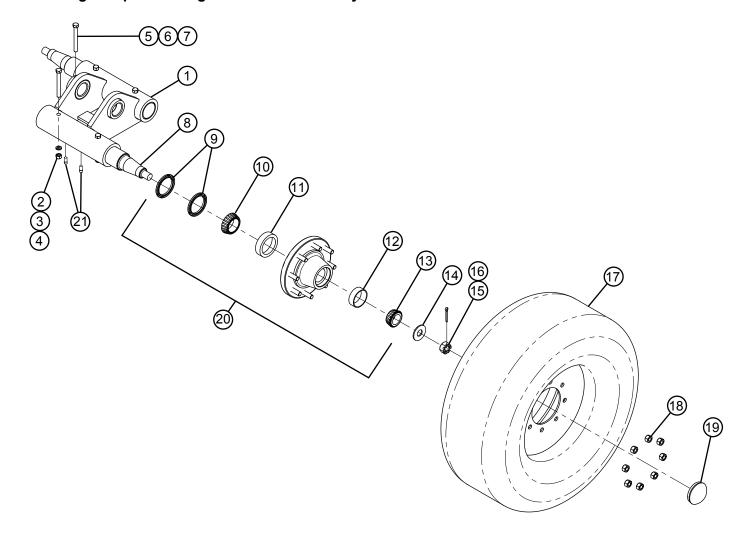
Finishing Scraper Walking Beam Assembly - All Units



Item	Part Number	Description	Qty.
1	SFS-00A300	Rear Wheel Axle (specify size)	1
2	SFS-00B800R	Walking Beam RH	2
3	GBH-36X48TX	2-1/4" O.D. Tension Bushing	10
4	SFS-00B907WH	Walking Beam Pivot Pin	5
5	CSNC509072	9/16" X 4-1/2" NC Hex Cap Screw	8
6	LWASHER-09	9/16" Lock Washer	8
7	HXNUT-09NC	9/16" NC Hex Nut	8
8	CSNC507056	7/16" X 3-1/2" NC Hex Cap Screw	5
9	LWASHER-07	7/16" Lock Washer	5
10	HXNUT-07NC	7/16" NC Hex Nut	5
11	SFS-00B600	2-3/4" Removable Spindle	4
12	GMB-ZERKTH	Threaded Grease Zerk	5
13	SSNCS08X16	1/2" X 1" Square Head Set Screw	8



Finishing Scraper Walking Beam Hub Assembly - All Units

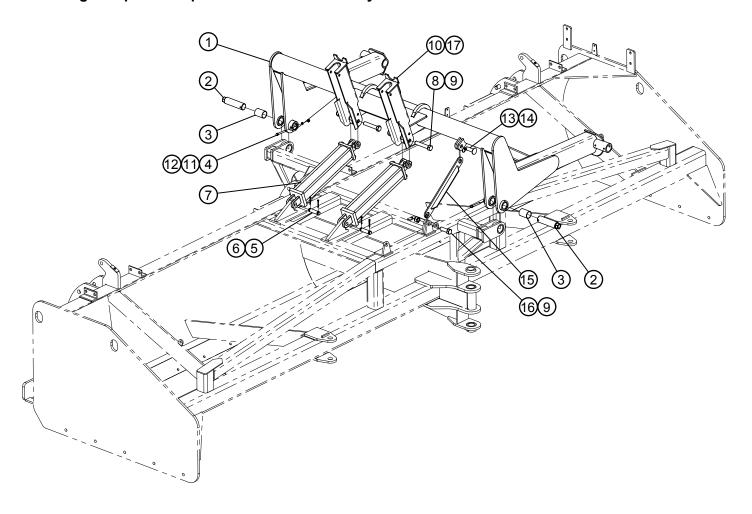


Item	Part Number	Description	Qty per Hub
1	SFS-00B800R	Walking Beam RH	1
2	CSNC509072	9/16" X 4-1/2" NC Cap Screw	2
3	LWASHER-09	9/16" Lock Washer	2
4	HXNUT-09NC	9/16" NC Hex Nut	2
5	CSNC507056	7/16" X 3-1/2" NC Cap Screw	1
6	LWASHER-07	7/16" Lock Washer	1
7	HXNUT-07NC	7/16" NC Hex Nut	1
8	SFS-00B600	2-3/4" Removable Spindle	1
9	GHB-8XXGSL	Grease Seal	2
10	GHB-8XXICN	Inner Brng Cone 8 X 8 XHVY Hub	1

Item	Part Number	Description	Qty per Hub
11	GHB-8XXIRC	Inner Brng Cup 8 X 8 XHVY Hub	1
12	GHB-8XXORC	Outer Brng Cup 8 X 8 XHVY Hub	1
13	GHB-8XXOCN	Outer Brng Cone 8 X 8 XHVY Hub	1
14	GSP-16SPWA	1" Spindle Flat Washer	1
15	GSP-16CANT	1" Spindle Castle Nut	1
16	GPN-03X32C	3/16" X 2" Cotter Pin	1
17	SFS-00B902	Brace Lock Pin - Red	1
18	WHN-10NFWN	Hub Lug Nuts, 5/8" NF	8
19	GHB-8XXCAP	Hub Cap for 8 X 8 XHVY Hub	1
20	GHB-8X8XHZ	8 X 8 XHVY Hub Assembly Compl.	1
21	SSNCS08X16	1/2" X 1" NC Sq. Head Set Screw	2



Finishing Scraper Transport Wheel Axle Assembly - End Tow Models

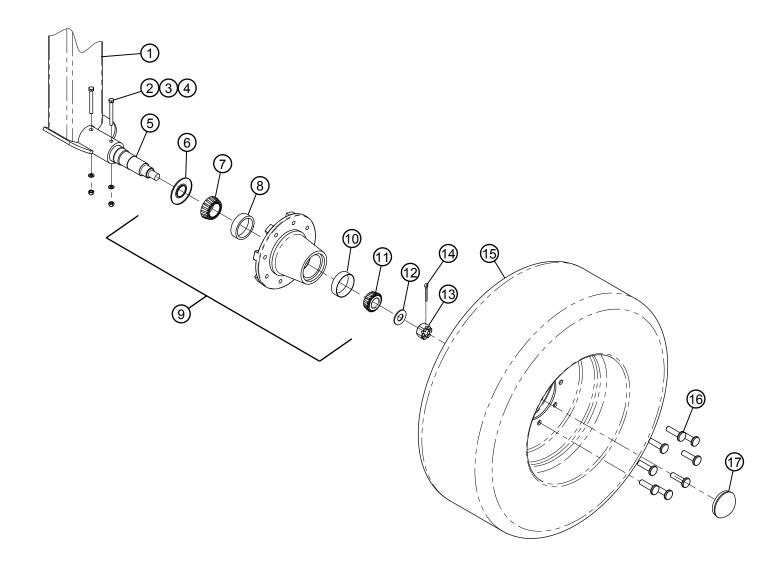


Item	Part Number	Description	Qty.
1	SFS-00B300	Transport Axle	1
2	SFS-00B316	Pivot Pin	2
3	GBR-3236G48	2-1/4" O.D. Self-Lubricating Bushing	2
4	CSNC506056	3/8" X 3-1/2" NC Hex Cap Screw	2
5	GPN-03CLIP	5/32" Hair Pin Clip	4
6	GPN-1664HC	1" X 4" Cylinder Pin	2
7	GHC-40200T	4" X 20" Tie Rod Hydraulic Cylinder	2
8	CSNC816088	1" X 5-1/2" Gr.8 NC Hex Cap Screw	2

Item	Part Number	Description	Qty.
9	NYNUT-16NC	1" NC Nylon Lock Hex Nut	2
10	GWD-420LB1	Lockout Bar for 4" X 20" Hyd. Cyl.	2
11	LWASHER-06	3/8" Lock Washer	4
12	HXNUT-06NC	3/8" NC Hex Nut	4
13	GPN-16X048	1" X 3" Clevis Pin	1
14	GPN-040LYN	1/4" Lynch Pin	1
15	SGB-00F300	Wheel Axle Lockout	1
16	CSNC516048	1" X 3" NC Cap Screw	1
17	GPN-08068H	Wheel Axle Lockout Lock Pin	2



Finishing Scraper Transport Wheel Axle Hub and Spindle Assembly - End Tow Models

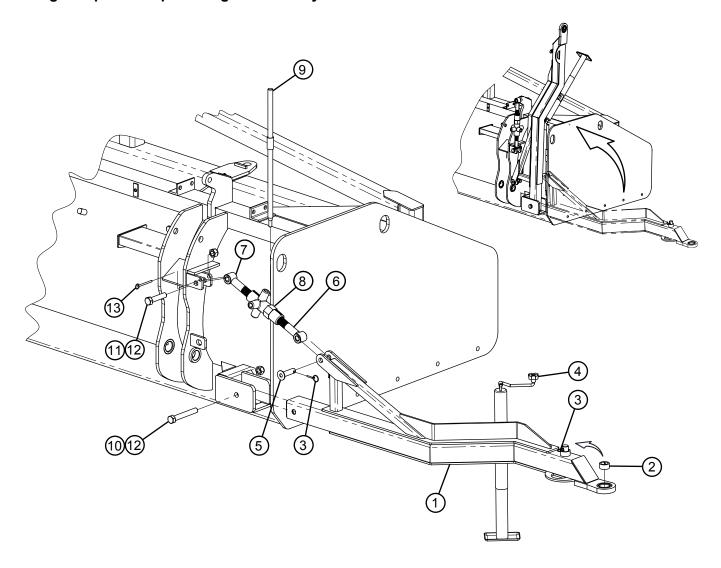


Item	Part Number	Description	Qty.
1	SFS-00B300	Transport Wheel Axle	1
2	CSNC507056	7/16" X 3-1/2" NC Cap Screw	4
3	LWASHER-07	7/16" Lock Washer	4
4	HXNUT-07NC	7/16" NC Hex Nut	4
5	SFS-00B307	2-1/8" Removable Spindle	2
6	GHB-8X8GSL	Grease Seal for 8 on 8 Heavy Hub	2
7	GHB-8X8ICN	Inner Bearing Cone 8 on 8 HVY Hub	2
8	GHB-8X8IRC	Inner Race for 8 on 8 Heavy Hub	2
9	GHB-8X8HVY	8 on 8 Hub, Complete (includes items 6-11, 17)	2

Item	Part Number	Description	Qty.
10	GHB-8X8ORC	Outer Bearing Race 8 on 8 HVY Hub	2
11	GHB-8X8OCN	Outer Bearing Cone 8 on 8 HVY Hub	2
12	GSP-14SPWA	7/8" Spindle Flat Washer	2
13	GSP-14CANT	7/8" Spindle Castle Nut	2
14	GPN-04X40C	1/4" X 2-1/2" Cotter Pin	2
15	GWT-75R16	Highway Tire	2
16	WHB-09X018	Wheel Bolts for 8 on 8 HVY Hu	2
17	GHB-8X8CAP	Dust Cap for 8 on 8 Heavy Hub	2



Finishing Scraper Transport Tongue Assembly - End Tow Models

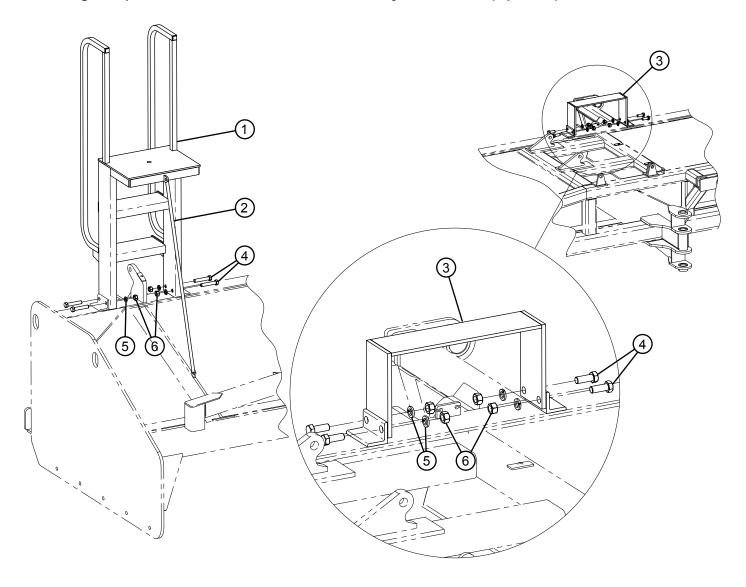


Item	Part Number	Description	Qty.
1	SFS-00B700	Transport Tongue	1
2	GBH-32X32T	2" O.D. Tension Bushing	0.5
3	GPN-070LYN	7/16" Lynch Pin	2
4	GJK-5KTW15	5000# Cap. Jack Stand	1
5	SFS-00B726	1" X 3-3/4" Pin	1
6	SFS-00B724	Bottom Turnbuckle Rod R.H.	1

Item	Part Number	Description	Qty.
7	SFS-00B725	Top Turnbuckle Rod L.H.	1
8	GTB-00A002	1-1/2" ACME Turnbuckle Body	1
9	SFS-00B728	Turnbuckle Adjustment Rod	1
10	CSNC516112	1" X 7" Gr.5 NC Cap Screw	1
11	CSNC516072	1" X 4-1/2" Gr.5 NC Cap Screw	1
12	NYNUT-16NC	1" NC Nylon Lock Hex Nut	2
13	GPN-0856SL	1/2" X 3-1/2" Hitch Pin	1



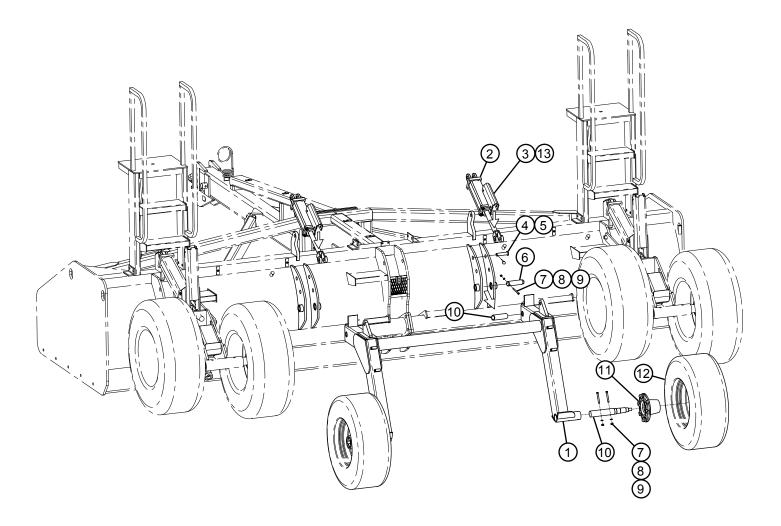
Finishing Scraper Laser Tower / GPS Stand Assembly - All Models (Optional)



Item	Part Number	Description	Qty.
1	SFS-00A600	Laser Tower	1 or 2
2	SFS-00A612	Laser Tower Support Brace	1 / Laser Tower
3	PFS-GPS	GPS Stand	1 or 2
4	CSNC512064	3/4" X 4" NC Cap Screw	4 / Laser Tower
	CSNC512032	3/4" X 2" NC Cap Screw	4 / GPS Stand
5	LWASHER-12	3/4" Lock Washer	4 / Tower (Stand)
6	HXNUT-12NC	3/4" NC Hex Nut	4 / Tower (Stand)



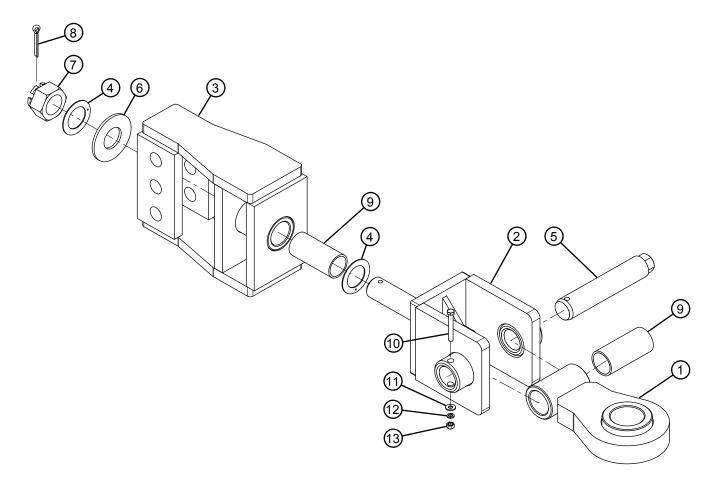
Finishing Scraper Rear Narrow Transport Wheel Axle Assembly - Rigid Models (Optional)



Item	Part Number	Description	Qty. Per Wheel Axle
1	SFS-18D100	Rear Transport Option Wheel Axle 18 Ft.	1
2	GHC-35100T	3-1/2" X 10" Hydraulic Cylinder	2
3	GWD-310LB1	Lockout Bar for 3-1/2" X 10" Hydraulic Cylinder	2
4	SFS-00D110	Rear Transport Option Wheel Axle Lockout Pin	2
5	GPN-070LYN	7/16" Lynch Pin	2
6	FTB4-00F600	FTB4 Hinge Pin Weldment	2
7	CSNC507056	7/16" X 3-1/2" Gr.5 NC Cap Screw	2
8	LWASHER-07	7/16" Lock Washer	2
9	HXNUT-07NC	7/16" NC Hex Nut	2
10	SFS-00B307	2-1/8" Removable Spindle	2
11	GHB-8X8HVY	8 X 8 Heavy Hub	2
12	GWT-1316HW	12-16.5 Highway Tire	2
13	GPN-08068H	Lockout Bar Lock Pin ½"	4



Finishing Scraper Front Swivel Hitch Assembly - All Models (Optional)

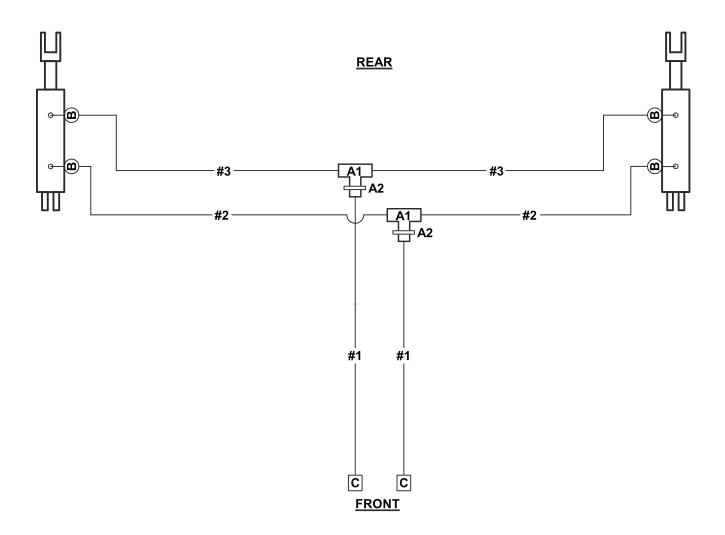


Item	Part Number	Description	Qty.
1	SFS-00C100	Hitch Plate	1
2	SFS-00C200	Swivel Hitch Fork	1
3	SFS-00C300	Swivel Hitch Mount	1
4	GBR-2440G01	1.6" I.D. Thrust Washer	2
5	FTB4-00F600	FTB4 Pivot Pin	1
6	FWASHER-22	1-3/8" Flat Washer	1
7	CANUT-24NF	1-1/2" NF Castle Nut	1
8	GPN-05X48C	5/16" X 3" Cotter Pin	1
9	GBR-2428G60	1-1/2" Self-Lubricating Bushing	2
10	CSNC506056	3/8" X 3-1/2" Gr.5 NC Cap Screw	1
11	FWASHER-06	3/8" Flat Washer	1
12	LWASHER-06	3/8" Lock Washer	1
13	HXNUT-06NC	3/8" NC Hex Nut	1
	PFS-SWH	Swivel Hitch Assembly (Includes all above items)	



HYDRAULIC DIAGRAMS

Units with 1 Tower Hydraulic Cylinder Diagram



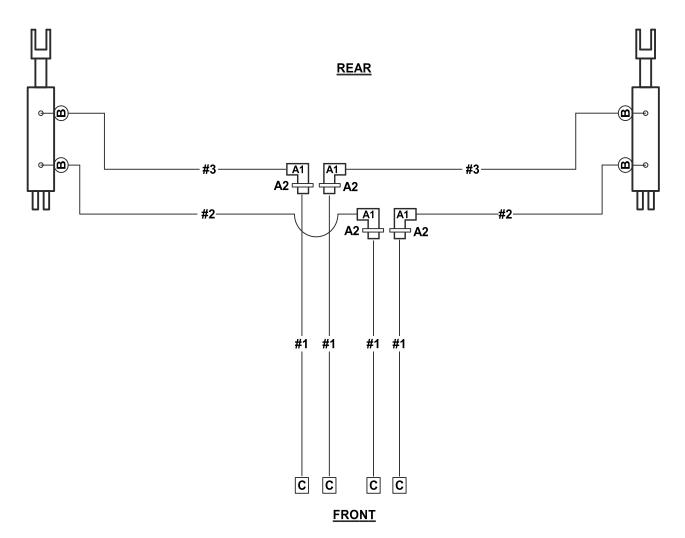
#	Part Number	Description	Qty.
	Hydraulic Cylind	ler	
	GHC-40160T	4" X 16" Tie Rod Hydraulic Cylinder	2
	Hydraulic Hoses		
# 1	1/2" X 240" 8MP-	BFJX Hose - Lead Hoses	2
#2	8FJX-8FJX Hose - SEE TABLE		2
#3	8FJX-8FJX Hose - SEE TABLE		2
	Hydraulic Fittings		
A1	FMJHT8	MJ Bulkhead Tee (on manifold)	2
A2	FHN8 Bulkhead Lock Nut (on manifold)		2
В	FMBMJ9088	MB-MJ 90° Elbow	4
С	FFP08000PT	FP Pioneer Tip	2

Unit Size	Hose # 2	Hose # 3
12 Ft	74"	90"
14 Ft	86"	102"
16 Ft	98"	114"
18 Ft	110"	126"
20 Ft	122"	138"
22 Ft	134"	150"
24 Ft	146"	162"

NOTE: All hydraulic hoses are megatough.



Units with 2 Towers Hydraulic Cylinder Diagram



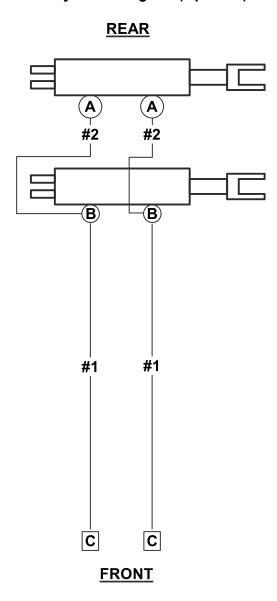
#	Part Number	Description	Qty.
	Hydraulic Cylind	er	
	GHC-40160T	4" X 16" Tie Rod Hydraulic Cylinder	2
	Hydraulic Hoses		
# 1	1/2" X 240" 8MP-8	BFJX Hose - for Rigid Units	4
# 1	1/2" X 320" 8MP-8	BFJX Hose - for Folding Units	4
#2	8FJX-8FJX SEE	TABLE	2
#3	8FJX-8FJX SEE	TABLE	2
	Hydraulic Fittings		
A1	FMJMJH9088	MJ-MJ Bulkhead Elbow (on manifold)	4
A2	FHN8	Bulkhead Lock Nut (on manifold)	4
В	FMBMJ9088	MB-MJ 90° Elbow	4
С	FFP08000PT	FP Pioneer Tip	4

Unit Size	Hose # 2	Hose # 3
12 Ft	74"	90"
14 Ft	86"	102"
16 Ft	98"	114"
18 Ft	110"	126"
20 Ft	122"	138"
22 Ft	134"	150"
24 Ft	146"	162"

NOTE: All hydraulic hoses are megatough.



Units with End Tow Transport Hydraulic Cylinder Diagram (Optional)



#	Part Number	Description	Qty.
	Hydraulic Cylind	ler	
	GHC-40200T	4" X 20" Tie Rod Hydraulic Cylinder	2
	Hydraulic Hoses		
# 1	1/2" X 300" 8MP-	8FJX Lead Hose	2
# 2	1/2" X 27" 8FJX-8	1/2" X 27" 8FJX-8FJX Hose	
	Hydraulic Fitting	Hydraulic Fittings	
Α	FMBMJ9088	MB-MJ 90° Elbow	2
В	FMJMJMBT08	MJ-MJ-MB Tee	2
С	FFP08000PT	FP Pioneer Tip	2

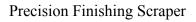
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Precision Finishing Scraper



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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



P.O. Box 1392 Selma, CA 93662 (559) 268-8128

WEB: www.TGSchmeiser.com

