SCHMEISER

3-PT. FOLDING SMOOTH AN' ROLLTM



T. G. SCHMEISER OPERATION AND PARTS MANUAL

Version 1.0 April 2019





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INTRODUCTION

Your Schmeiser 3-Pt. Folding Smooth An' Roll (implement) 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. The 3-Pt. Folding Smooth An' Roll helps save time and money when attached behind a plow or disc, seeder, fertilizer spreader, or fumigator.

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

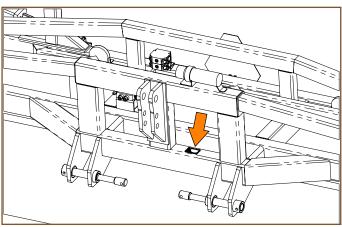
Should this implement require replacement parts, contact your local Schmeiser dealer. Always order genuine Schmeiser OEM replacement parts.

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 3-Pt. Folding Smooth An' Roll.

Serial Number Location



Serial No	
Model No	
Date Purchased	
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

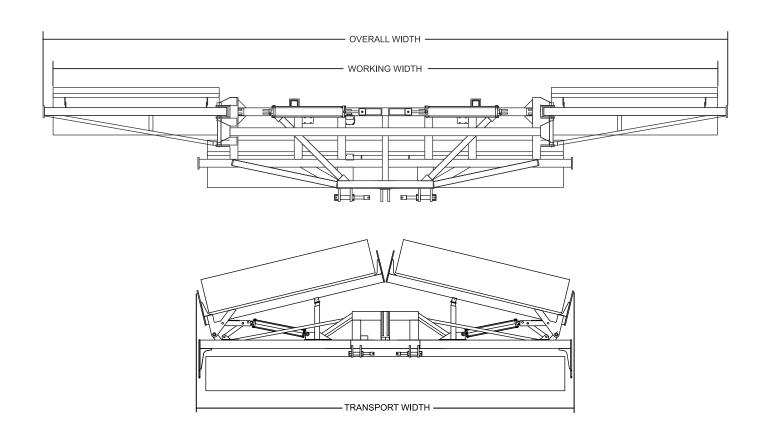
For replacement decals, questions, or to order parts, contact your dealer:



SPECIFICATIONS

Model	Folding Smooth An' Roll
Working Width	Available in 21 working widths from 20' to 40'
Overall Width	Overall width is 9-3/4" greater than working width
Transport Width*	14' for units from 20' to 24' 16' for units from 25' to 32' 18' for units from 33' to 34' 20' for units from 35' to 36' 22' for units from 37' to 40'
Roller Size	20" Diameter 24" Diameter
Lbs.per Foot of Working Width	20" Dia 170 lbs/ft. empty, 300 lbs/ft. filled with water 24" Dia 195 lbs/ft. empty, 390 lbs/ft. filled with water
HP Required	3-5 HP per foot of working width

^{*}Transport Width is 2' wider than Main Frame size





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".

A 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 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.
- Set the brakes.
- 4. Make sure wheel cylinder transport lock is attached.
- 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.



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.





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

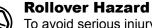
The tractor must be equipped with a Roll Over Protective Structure (ROPS) (tractor cab or roll-bar) and seat belt to protect the operator from falling off the tractor, especially during a roll-over where the driver could be crushed and killed.

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



WARNING





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.

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.



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).



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.

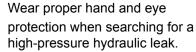
Escaping hydraulic fluid under pressure, even a pinhole size leak, can penetrate body tissue, causing serious injury and possible death. If fluid is injected into your skin, it must be treated immediately by a doctor familiar with this type of injury.

NOTICE

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







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.



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.

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



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.

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		

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.





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 SIGNS AND DECALS

SAFETY INSTRUCTIONS

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

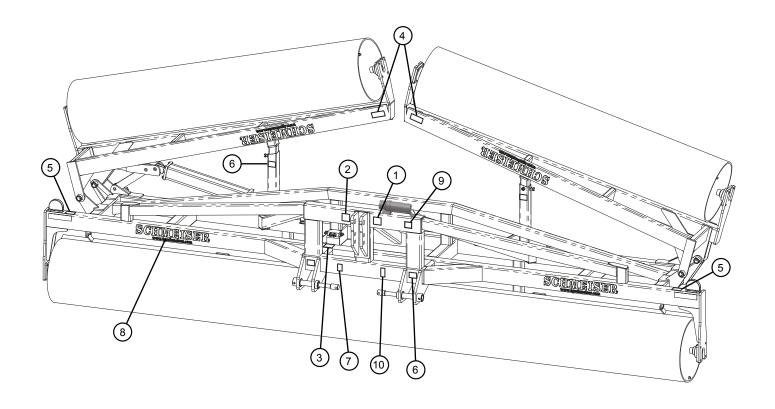


Replace all worn or damaged safety and instruction decals.

- 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.
- Make sure the safety signs and other instructional decals are legible and attached to the unit before use.
- 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.
- Locations for the labels and replacement part numbers are shown in this section.

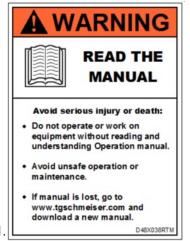
Safety Sign Placement

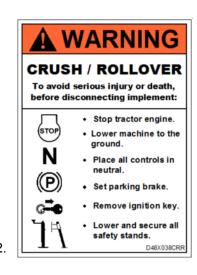




Safety Signs

Item	Part Number	Description	Qty.
1	D48X038RTM	Read the Manual	1
2	D48X038CRR	Crush / Rollover Hazard	1
3	D48X064HPF	High Pressure Fluids	1
4	D28X0048ECH	Electrocution Hazard	2
5	D28X048CRH	Crush Hazard	4
6	D28X048PPT	Pinch Point	4
7	D32X048RBC	Made in the USA	1
8	D52X272BLK	Schmeiser	8
9	D48X48QR	Scan to Access Online Manual	1
10	DFEMALOGO1	FEMA	1











D32X048



HIGH PRESSURE FLUID HAZARD

To prevent serious injury or death:



Check or tighten all connections BEFORE applying pressure.

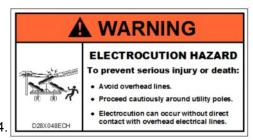


Releave pressure on system before repairing, or adjusting, or disconnecting.



when searching for leaks. Use wood or cardboard instead of hands.

Wear proper hand and eye protection







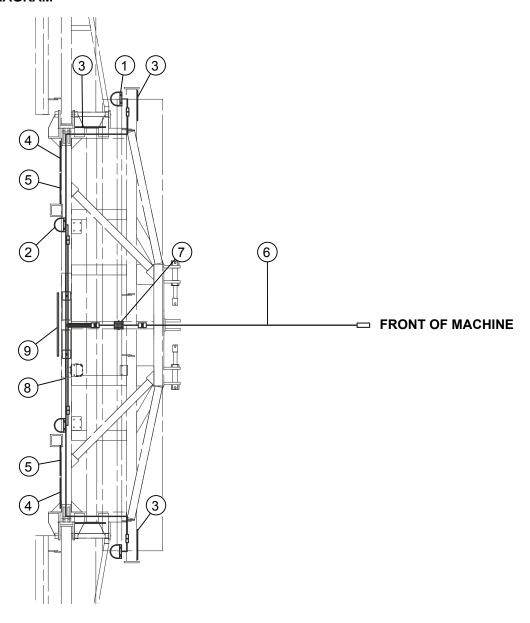


Ph. (559) 268-8128 www.tgschmeiser.com 13 Fax (559) 268-3279



SAFETY MARKING AND LIGHTING

WIRING DIAGRAM



Item	Part Number	Description	Q'ty
1	GLT-LSDY	Lamp, Surface Mount Double Yellow	2
2	GLT-LSSR	Lamp, Surface Mount Single Red	2
3	D-2X9RY	Reflective Tape, Yellow	4
4	D-2X9RR	Reflective Tape, Red	2 or 4
5	D-2X9FL	Fluorescent Tape, Orange	2 or 4
6	GLT-HF07	Front Harness, 7 Ft. Long	1
7	GLT-FCM	Flasher Control Module	1
8	GLT-HW1024	Rear Wishbone Harness 10 Ft24 Ft.	1
9	GLT-FCM	Slow Moving Vehicle Sign	1



ASSEMBLY

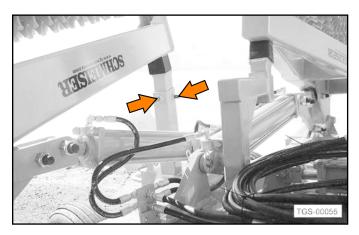
WARNING

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

Wing Arm Stops

The adjustable wing stands should be factory preset for the correct height. If adjustment is required:

- 1. Completely unfold the wings.
- 2. Loosen two set screws on each wing rest and adjust the wing stands to the desired height.



- 3. Retighten the set screws.
- 4. Fold the wings back into the storage position and recheck their position.

OPERATION

WARNING

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

Connecting to the Tractor

Make sure the unit is resting on the ground with safety stands securely installed before attaching the unit to the tractor.

Use caution when connecting the 3-Pt. Folding Smooth An' Roll to the tractor. Keep hands and feet from under the unit and clear of pinch points between the tractor drawbar and the 3-Pt. Folding Smooth An' Roll hitch.

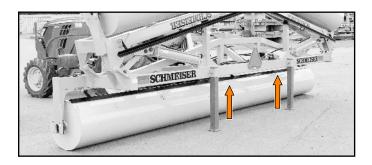
- 1. Shorten or remove the tractor drawbar to avoid interference when raising and lowering the 3-Pt. Folding Smooth An' Roll.
- 2. Remove the lynch pins and lift pins.
- 3. Board the tractor and start the engine. Positions the tractor with the 3-point lift arms positioned at the same height and aligned with the 3-Pt. Folding Smooth An' Roll 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 3-Pt. Folding Smooth An' Roll. 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 3-Pt. Folding Smooth An' Roll top link. Insert the top link hitch pin and insert the lynch 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 3-Pt. Folding Smooth An' Roll does not make contact with the tractor tire, draw var, or any other equipment on the tractor.

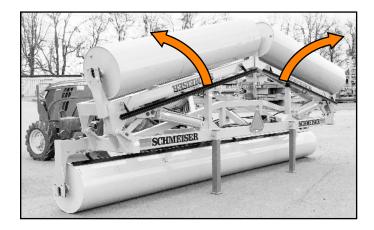
NOTE: Move or remove the draw bar if it interferes with the implement.

- 9. Adjust any lower link check chains, guide blocks, or sway blocks to prevent the 3-Pt. Folding Smooth An' Roll from swaying side-to-side.
- 10. Clean lead hose tips from dirt and debris. Connect the hydraulic hoses to the proper ports on the tractor.
- 11. Raise the implement off the ground using tractor's 3-point hitch, raise safety stands and secure them in the up position with safety pins provided.





12. Unfold and fold the wings several times NOT GOING OVER CENTER to bleed air from the hydraulic components. Fully charge the hydraulic system, getting rid of all air prior to unfolding wings over center.



DANGER



Crush Hazard

Crush hazard under raised wing. Do not allow anyone to stand near or under the raised wing when unfolding the wing.

Trapped air in the hydraulic system may cause erratic operation, and allow the wings to drop suddenly. Fully charge the hydraulic system, getting rid of all air prior to unfolding wings over center.

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 "Connecting to Tractor" on page 15.			
		Make sure all hardware is properly installed and tightened. Refer to "Maintenance" on page 17.			
MAN NO SECOND		Adjust the wing arm stops, if necessary. Refer to "Wing Arm Stops" on page 15.			
		Lubricate all grease fittings. Refer to "Lubrication Points" on page 17.			

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 the ring rollers 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.

General Operating Instructions

- 1. Make sure the 3-Pt. Folding Smooth An' Roll is properly attached to the tractor before beginning work. Inspect the condition of the roller bearings and the overall implement 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 3-Pt. Folding Smooth An' Roll.

- 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 3-Pt. Folding Smooth An' Roll, 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

NOTICE

The implement does not have a hydraulic reservoir and therefore can deplete the oil in the tractor's reservoir during initial sequencing of the cylinders. Check the tractor's hydraulic oil reservoir after this initial setup and add oil as necessary.

Detaching From Tractor

- Park the tractor, place the transmission in park or neutral, and apply the parking brake. Shut down the engine and remove the key before exiting the tractor.
- Remove safety stands from their storage location, lower and secure them to the safety stand sleeves by fully inserting locking pins through the stands and the sleeves.
- 3. Lower implement until main frame safety stands and rollers make full contact with the ground.
- Relieve hydraulic pressure and disconnect hydraulic hoses from the tractor. Coil the hoses and store them on top of the implement.
- 5. Disconnect the implement from the tractor 3-point links.
- 6. Drive the tractor away from the implement.

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.

Note: When greasing a pin and bushing, add grease until it is visibly forced out of the joint.

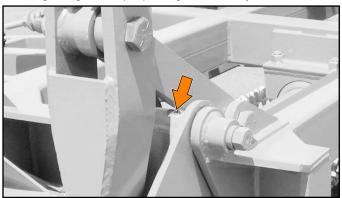
Roller Bearings

The roller bearings are greased at the factory. Prior to applying grease, allow 40 hours of operation time to break in seals. Then grease every 8 hours thereafter.



Wing Hinge Linkage

Lubricate the zerk fittings on the wing hinge linkages with a good general purpose grease every 50 hours.



Service Items

Hydraulic Hoses

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





Maintenance Schedule

The period recommended is based on normal operating conditions. Severe or unusual conditions may require more frequent service.

Copy this page to continue the record.

Hours and Serviced By							
Before Each Use							
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.							
Inspect all hydraulic hoses and fittings for leaks or signs of wear.							
Lubricate zerk fittings on roller bearings with a good general purpose grease.							
Every 50 Hours or Weekly							
Perform the Daily Maintenance schedule.							
Lubricate zerk fittings on wing hinges and ring roller bearings with a good general purpose grease.							
Every 1000 Hours or Annually							
Perform the Daily Maintenance schedule.							
Perform the Weekly Maintenance schedule.							
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 3-Pt. Folding Smooth An' Roll 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. Inspect the frame for structure fractures and inspect the side wing pivot points for wear or damage.
- Check all the bearings for signs of seal damage or excessive wear.
- 4. Inspect all the hydraulic hoses and fittings for leaks or signs of wear.
- Check the ring rollers for wear and damage. If any roller teeth are excessively worn or damaged, they must be replaced.
- 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 17 for the location of the fittings.
- Apply a thin layer of grease or rust preventative to all exposed metal surfaces of the cylinder rods or other adjustable mechanisms (threaded rods, etc.).
- 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

 Move the 3-Pt. Folding Smooth An' Roll to a storage area with a firm and level base to prevent it from tipping or sinking into the ground. For best results, always store the 3-Pt. Folding Smooth An' Roll in a dry, protected location. Leaving this implement unprotected will shorten the service life.

- 2. Place the implement on the ground, place the side wings in the transport mode, lower safety stands, and secure them in place with locking pins.
- Disconnect all hydraulic hoses, and unhitch the implement from the tractor. Refer to "Detaching From Tractor" on page 17.

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.

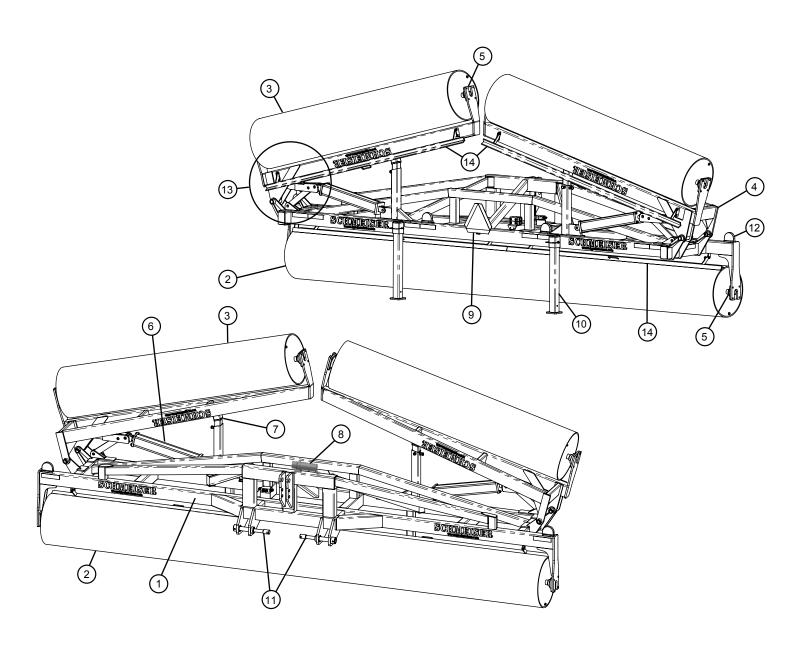
Note: Store the operator's manual in the document storage canister located on the main frame.

- 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.
- 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 the Tractor" on page 15. Place the implement in an area clear of overhead obstructions or power lines. Cycle the hydraulic system circuits to phase (synchronize) the hydraulic cylinders, verify proper operation, and check for leaks.



COMPONENT NOMENCLATURE

Component Locations

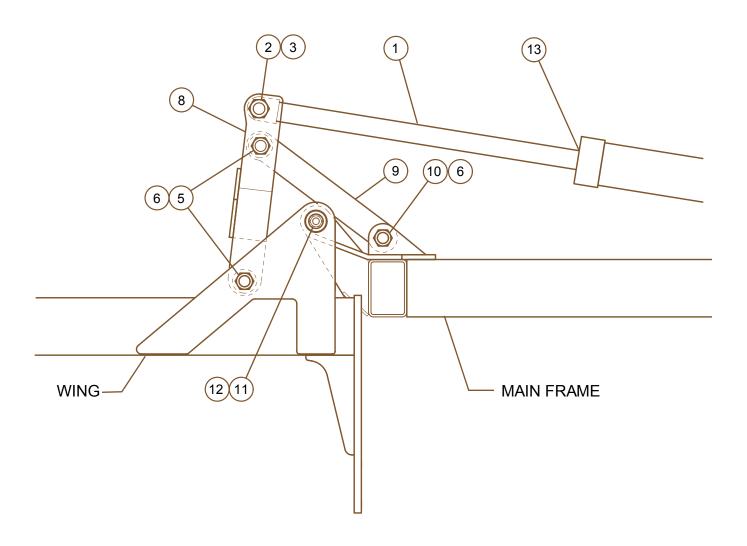




Item	Part Number	Description	Q'ty
1	FTP3-00MS00	3-Pt. Folding Smooth An' Roll Square Main Frame (specify size)	1
2		Main Frame Roller	1
3		Wing Roller	2
4	FTP-00WS00	Folding Till An' Pak Square Wings (pair)	1
5	TPP3158	2-3/16" Roller Bearings	6
6	GHC-50300T	5" X 30" Tie Rod Hydraulic Cylinder	2
7	FTP-00MS22	Adjustable Wing Stand for Square Frames	
8	OMC1	Owner Manual Canister	1
9	GMB-SMVSN	Slow Moving Vehicle Sign	1
10	FTP-00T000	Safety Stand	2
11	GPN-31CA34	CA III and IV Pull Pin	2
12		Safety Light (see p. 14 for details)	4
13		Wing Hinge Linkage (see p. 22 for details)	2
14	SRMS-40F	Mud Scraper Kit for 40 Ft. Units (includes Main Frame Roller Scraper and Wing Roller Scrapers)	1



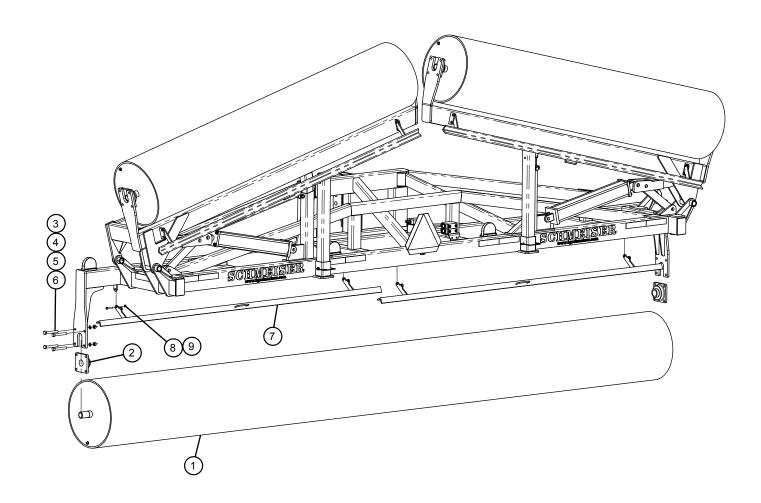
3-Pt. Folding Smooth An' Roll Hinge Linkage Assembly



Item	Part Number	Description	Qty.
1	GHC-50300T	5" x 30" Hydraulic Cylinder	2
2	CSNC820112	1-1/4" x 7" NC Cap Screw Gr. 8	2
3	NYNUT-20NC	1-1/4" NC Nylon Lock Hex Nut	2
5	CSNC818112	1-1/8" x 7" NC Cap Screw Gr. 8	4
6	NYNUT-18NC	1-1/8" NC Nylon Lock Hex Nut	6
8	GWD-WHLINK	Hinge Link Weldment	2
9	GPR-L10003	Loose Link	2
10	CSNC818080	1-1/8" x 5" NC Cap Screw Gr. 8	2
11	GPN-HING01	1-1/2" x 9-1/2" Hinge Pin (Rear)	2
12	GPN-HING02	1-1/2" x 4-1/2" Hinge Pin (Front)	2
13	PMCK-3500	Seal Kit for 5" x 30" Hydraulic Cylinder	1



Smooth Roller Assembly

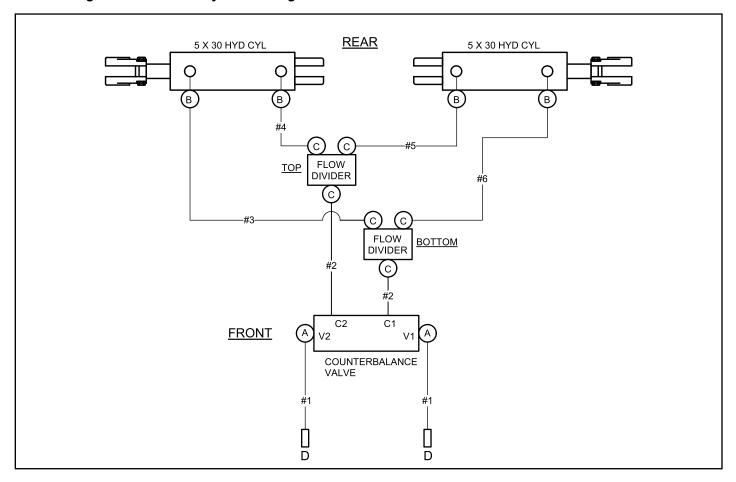


Item	Part Number	Description	Qty/MF Roller	Qty/Wing Rollers (pair)
1		Smooth Roller (specify size and diameter)	1	2
2	TPP3158	Flange Bearing, 2-3/16"	2	4
3	CSNC510040	5/8" X 2-1/2" NC Cap Screw	8	16
4	LWASHER-10	5/8" Lock Washer	8	16
5	HXNUT-10NC	5/8" NC Hex Nut	8	16
6	FWASHER-10	5/8" Flat Washer	8	16
7		Main Frame Mud Scraper	2	ı
		Wings Mud Scraper	-	2
8	CSNC508024	1/2" X 1-1/2" Gr.5 NC Cap Screw	4	4
9	NYNUT-08NC	1/2" Nylon Lock Hex Nut	4	4

NOTE: Mud Scraper Kit for Smooth Roller - SRMS-40F includes items 7 through 9.



3-Pt. Folding Smooth An' Roll Hydraulic Diagram for 20 Ft. Main Frame



ltem	Part Number	Description	Qty.
Hydraulic Cylinders			
GHC-50300T		5" x 30" Tie Rod Cyl.	2
Fittings			
Α	FMBMJ9088	MB-MJ 90° 8-8 Elbow	2
В	FMBMJ90108	MB-MJ 90° 10-8 Elbow	4
С	FMBMJ88C	MB-MJ 8-8 Straight Adapter	6
D	FFP08000PT	1/2" FP Pioneer Tip	2

Item	Part Number	Description	Qty.	
Hose	Hoses			
#1	_	1/2" MP-1/2" FJX 84" LONG	2	
#2	_	1/2" MB-1/2" FJX 19" LONG	2	
#3	_	1/2" FJX-1/2" FJX 90° 78" LONG	1	
#4	_	1/2" FJX-1/2" FJX 90" 44" LONG	1	
#5	_	1/2" FJX-1/2" FJX 90° 76" LONG	1	
#6	_	1/2" FJX-1/2" FJX 90° 110" LONG	1	
Valves				
VFLOWDIV03		STD. FLOW DIVIDER	2	
OVER CENTER COUNTER BALANCE VALVE* 1 (consists of YAJ body and two CBEA LAN cartridges.)			1	
V08CBBSUN		YAJ BODY "SUN"	1	
V08CBCARTR		CBEA LAN CARTRIDGE	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.

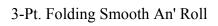
Except as set forth above, T.G.Schmeiser Co, Inc.shall have no obligation or liability of any kind on account of any of its equipment and shall not be liable for special or consequential damages. T.G.Schmeiser Co, Inc. makes no other warranty, expressed or implied, and, specifically, T.G. Schmeiser Co., 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



T.G. Schmeiser Co., Inc.



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3-Pt. Folding Smooth An' Roll



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

WEB: www.TGSchmeiser.com

