

# **FOLDING TILL AN' PAK™**



**T. G. SCHMEISER®**

## **OPERATION AND PARTS MANUAL**

*Read and understand the manual. This manual provides information and procedures to safely operate and maintain the Folding Till An' Pak™*







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## INTRODUCTION

Your Schmeiser Folding Till An' Pak (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 Folding Till An' Pak 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

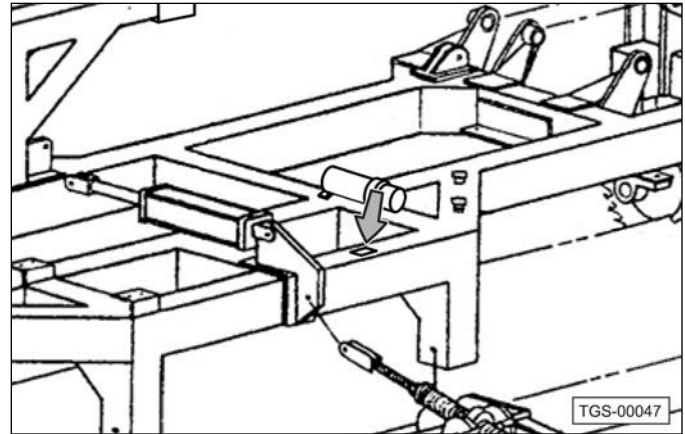
Should this implement require replacement parts, contact your local Schmeiser dealer. Always order genuine Schmeiser OEM replacement parts.

### 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 Folding Till An' Pak.

## 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](http://www.tgschmeiser.com).

### Dealer Contact Information

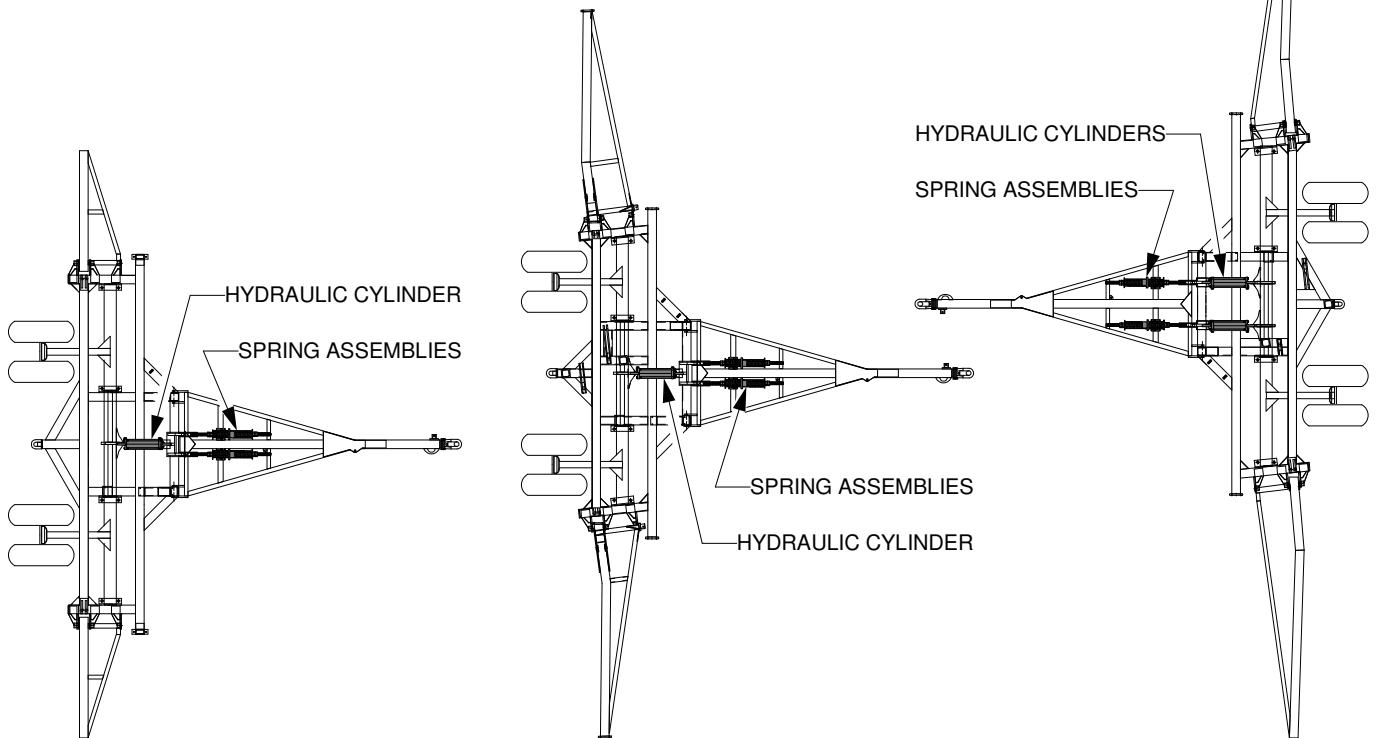
For replacement decals, questions, or to order parts, contact your dealer:



**SPECIFICATIONS**

Model	Folding Till An' Pak
<b>Working Width</b>	Available in 17 working widths from 20' to 36'
<b>Overall Width</b>	Overall width is 9-3/4" greater than working width
<b>Transport Width*</b>	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'
<b>Tube Diameter</b>	12" Standard 10" and 14" Available
<b>Ring Roller Size</b>	14 / 20 (ID / OD) Standard 16 / 22 (ID / OD) Available
<b>Lbs . per Foot of Working Width</b>	360 lbs/ft. — 12"-14 / 20 380 lbs/ft. — 14"-16 / 22
<b>Tire Size (4)</b>	9.5 x 15, 8 Ply (for units with 14/20 rings) 12.5 x 16, 14 Ply (for units with 16/22 rings)
<b>HP Required</b>	3-5 HP per foot of working width

\*Transport Width is 2' wider than Main Frame size



20' - 24' WIDE, 12' SQUARE MAIN FRAME  
25' - 28' WIDE, 14' SQUARE MAIN FRAME  
DOUBLE SPRING, SINGLE CYLINDER

25' - 27' WIDE, 12' OFFSET MAIN FRAME  
DOUBLE SPRING, SINGLE CYLINDER

29' - 32' WIDE, 14' OFFSET MAIN FRAME  
33' - 34' WIDE, 16' SQUARE MAIN FRAME  
35' - 36' WIDE, 18' SQUARE MAIN FRAME  
DOUBLE SPRING, DOUBLE CYLINDER

## SAFETY

### General

The safe operation of any implement is an important concern to farmers and manufacturers. Safety of the operator and bystanders is one of the main concerns in designing and developing a new implement. There are obvious and hidden potential hazards involved in the operation of this implement. Carefully read and follow all safety precautions before operation. 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, tow, 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.

### **WARNING**



Do not use or tow the unit until you read and understand the information contained in this manual.



Safety precautions and warnings are provided in this manual and on the unit. If these hazard warnings are not heeded, bodily injury or death could occur to you or to other persons.

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

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

### Safety Alert Symbols



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

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

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

### **DANGER**

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

### **WARNING**

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

### **CAUTION**

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

### **NOTICE**

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

### **SAFETY INSTRUCTIONS**

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






**Note:** Contains additional information important to a procedure.

### Safety Icons Nomenclature

This manual and the equipment has numerous safety icons. These safety icons provide important operating instructions which alert you to potential personal injury hazards.

### Personal Protection/Important Information





-  Read the manual
-  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
-  Set parking brake
-  Slow vehicle placard
-  Stop engine
-  Support stand usage

-  Use proper tools
-  Visually inspect
-  Use ROPS
-  Install transport lock
-  Use adequate lighting
-  Use proper 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
-  Crush hazard (rolling over)
-  Crush hazard (falling wing)
-  Defective or broken part

-  Explosive separation hazard
-  Falling hazard
-  High-pressure fluid hazard
-  Hose damage
-  Maintain safe distance
-  Overturn hazard
-  Pinch point hazard
-  Pressure alert / check pressure
-  Safety alert symbol
-  Sharp object hazard
-  Zero pressure
-  Flying object hazard
-  Compressed air hazard
-  Explosive force hazard
-  Falling hazard

**General Operating 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 assemble 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)**  
 When disconnecting the unit or leaving the operator's seat:

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

**Injury Hazard**  
 Do not permit children to play on or around the stored 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.

**⚠️ WARNING**

**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

**SAFETY INSTRUCTIONS**

**⚠️** 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.

**Towing Safety**

For towing safety information, refer to "Towing" on page 22.

**Operation Safety**

For operating safety information, refer to "Operation" on page 15.

**Assembly Safety**

For assembly safety information, refer to "Assembly" on page 13.

**Maintenance Safety**

For maintenance safety information, refer to "Maintenance" on page 24.

**Disposal of Equipment at End of Useful Life**

The T. G. Schmeiser Folding Till An' Pak has been designed implement 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.

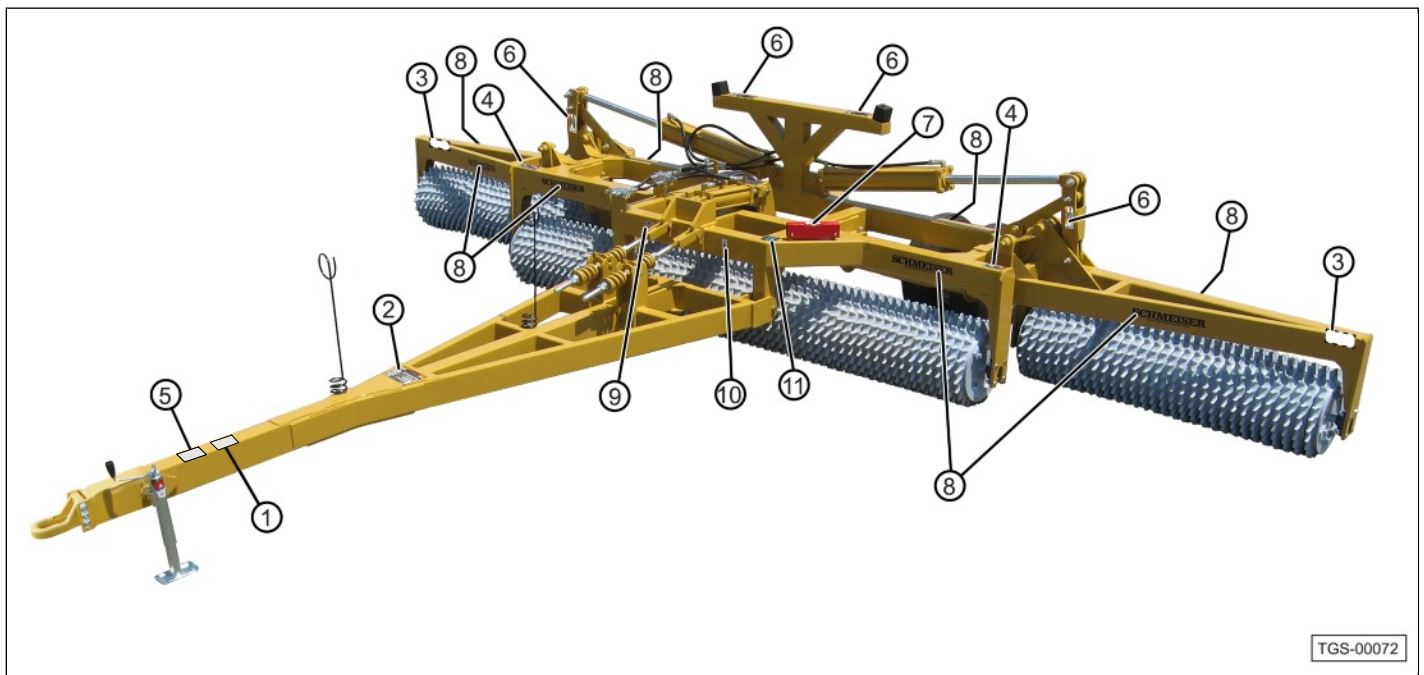


Replace all worn or damaged safety and instruction decals.

- 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




TGS-00072

**Safety Signs**

Item	Part Number	Description	Qty.
1	D48X038RTM	Read the Manual	1
2	D48X064HPF	High Pressure Fluids	1
3	D28X0048ECH	Electrocution Hazard	2
4	D28X048CRH	Crush Hazard	2
5	D48X038CRR	Crush / Rollover Hazard	1
6	D28X048PPT	Pinch Point	4
7	D28X048RBW	Transport Lockout	1*
8	D32X048RBC	Made in the USA	1
9	D52X272BLK	Schmeiser	8
10	DFEMALOGO1	FEMA	1
11	D48X48QR	Scan to Access Online Manual	1

\*Two used on dual cylinder models.

**WARNING**



**READ THE MANUAL**

**Avoid serious injury or death:**

- Do not operate or work on equipment without reading and understanding Operation manual.
- Avoid unsafe operation or maintenance.
- If manual is lost, go to [www.tgschmeiser.com](http://www.tgschmeiser.com) and download a new manual.


D48X038RTM

1.

**WARNING**

**HIGH PRESSURE FLUIDS**

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.




- Check or tighten all connections BEFORE applying pressure.
- Release all pressure before removing hoses and/or valves by:
  - Stop the engine.
  - Hold hydraulic control levers in float position.
- DO NOT use your bare hand to check for potential leaks. Always use a board or cardboard when checking for a leak.

D48X064HPF

2.

**WARNING**




**ELECTROCUTION HAZARD**  
Be aware of overhead electrical lines.

- Proceed cautiously around overhead electrical lines and utility poles.
- Electrocution can occur without direct contact with overhead electrical lines.

D28X048ECH

3.

**DANGER**




**CRUSH HAZARD**  
Crushing under folding wing will result in serious injury or death.

- Never stand within folding zone of raised wing.

D28X048CRH

4.

**WARNING**

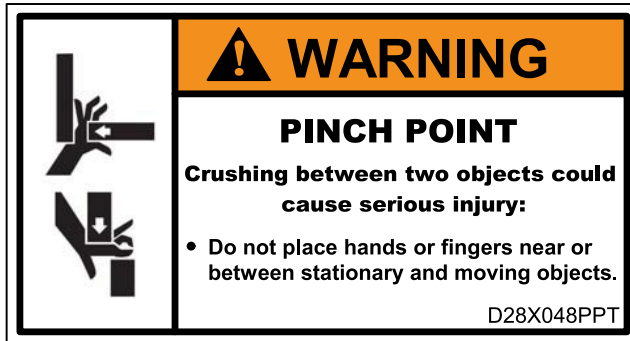


**CRUSH / ROLLOVER**  
When disconnecting implement or leaving operator's seat avoid serious injury or death:

- Completely stop tractor.
- Shut off engine and remove ignition key.
- Place transmission in park.
- Set parking brake.

D48X038CRR

5.



6.



7.



10.



8.

D52X272BLK



9.

D32X048RBC

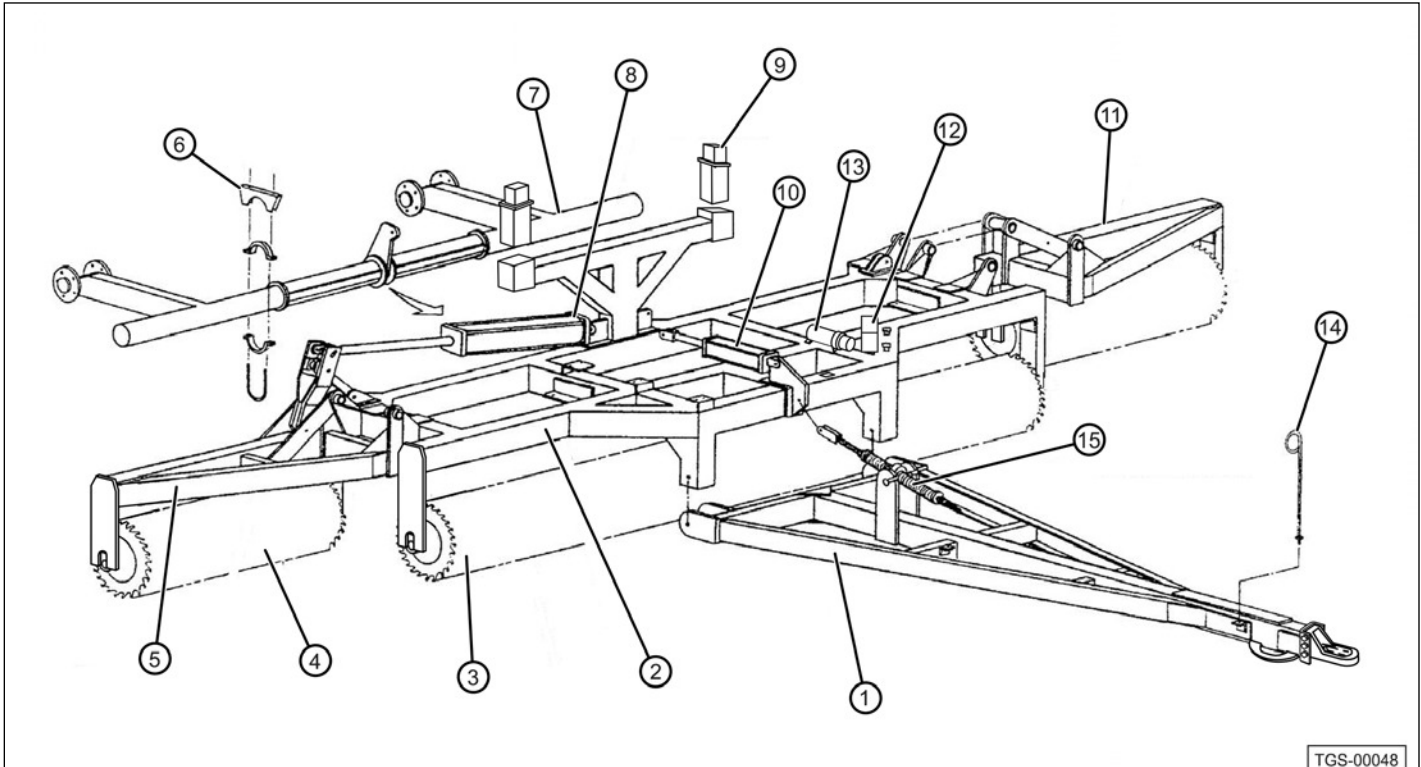


11.

D48X48QR

## COMPONENT NOMENCLATURE

### Component Locations



TGS-00048

Item	Description
1	Pull Frame
2	Main Frame
3	Ring Roller, Main Frame
4	Ring Roller, Wing
5	Wing, RH
6	Bearing Assembly
7	Wheel Axle
8	Wing Fold Hydraulic Cylinder, 5 x 30
9	Adjustable Wing Rest
10	Lift Hydraulic Cylinder, 4 x 12
11	Wing, LH
12	Lift Cylinder Transport Lock
13	Document Storage Tube
14	Hydraulic Hose Bracket
15	Pull Frame Spring Assembly

## ASSEMBLY

### Safety

#### WARNING



#### Pinch Point Hazard

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



#### Sharp Object Hazard

Do not place any part of your body under the implement. Severe injury will occur if the implement falls on a person.



#### Crush Hazard (Rolling Over)

When disconnecting the unit or leaving the operator's seat:

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

#### NOTICE

Wheel bearings do not require lubrication during the initial assembly of the unit. These bearings should be greased sparingly every 50 hours of service. Check for end play in the bearings prior to adding grease.

### Assembly Procedure

1. Using a suitable lifting device, attach the pull frame to the main frame with the supplied 7/8-14 x 7-1/2" bolts and locking nuts. Make sure the pull frame can pivot on the bolts.



2. Attach the pull frame spring system. Insert the pad eye weldment into the slot on the mounting brackets. Rotate the forked end of the spring rod weldment back and align to the main frame bracket. Insert the 1" x 3" clevis pin through the fork and bracket. Install the 1/4" x 2-1/2" cotter pin to retain the clevis pin.



3. Adjust the height of the hitch to correspond to the drawbar height of the tractor.

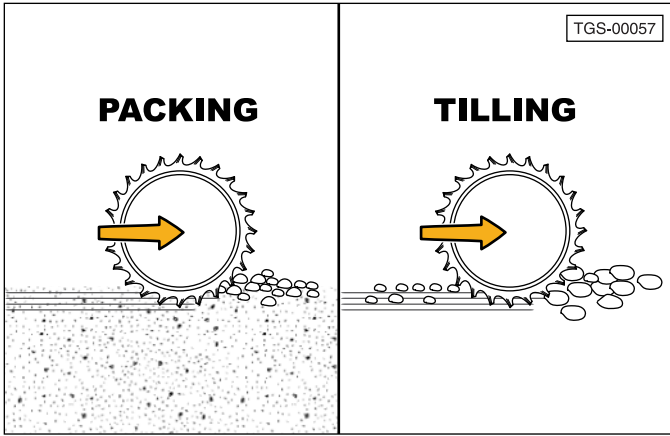


4. Route the hydraulic hose (customer supplied) through the hose rings on the hitch assembly.



### Ring Roller Orientation

As shipped from the factory, the rollers are set up in a "packing" orientation. If it is desired to use the Folding Till An' Pak as a "tilling" tool, the ring rollers must be reversed.



1. Remove the four 1/2" x 2-1/4" bolts, lock washers, and nuts from each flange bearing on one ring roller.



2. Turn the ring roller 180 degrees end-for-end to reverse its orientation.
3. Replace the bolts, lock washers, and nuts in the flange bearings.
4. Repeat Steps 1, 2, and 3 for the remaining two ring rollers.

## WARNING



### Rolling Hazard

Block the wheels before reversing the ring rollers.



### 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 reversing the ring rollers.

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.

## OPERATION

### Safety

#### **WARNING**

To prevent serious injury or death, follow these safety instructions



#### **Read And Understand Manual**

Make sure that anyone who will be operating, maintaining, or working around the unit, reads and understands all the operating, maintenance, and safety information in this manual and other related OEM equipment manuals before operating, maintaining, or working around the unit.



#### **Crush Hazard (Rolling Over)**

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



#### **Crush Hazard (Rolling Over)**

When disconnecting the unit or leaving the operator's seat:

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



#### **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.



#### **Safe Distance**

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



#### **Fall Hazard**

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

#### **WARNING**



#### **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.



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

#### **CAUTION**



This is a towed implement that removes weight from the front wheels of the tractor whenever the implement wheels are supporting the implement (transport wheels in down position). This transfer or decrease of front-end weight can cause loss of steering with possible overturn and personal injury.

To prevent this potential hazard, add front-end weight until at least 20% of tractor's original weight is on the front wheels.

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.

#### **SAFETY INSTRUCTIONS**

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



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.

### Tractor Horsepower

The tractor used to operate the Folding Till An' Pak must have between 3 and 5 HP per foot of working width.

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

### **⚠ WARNING**



#### **Rollover Hazard**

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

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

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.



## 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.

Keep hands and feet from under the implement and clear of pinch points between the tractor drawbar and implement hitch.

## ⚠ 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 the hitch and implement during hook-up operations.



### 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.

## SAFETY INSTRUCTIONS



If the unit is not resting on the ground, make sure wheel chocks are securely fitted on both sides of each wheel.

## Connecting to the 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. On Category 3 pintle hitches use a 1-1/2" (38 mm) pin. On Category 3 clevis hitches use a 1-5/8" (40 mm) pin.

## ⚠ WARNING



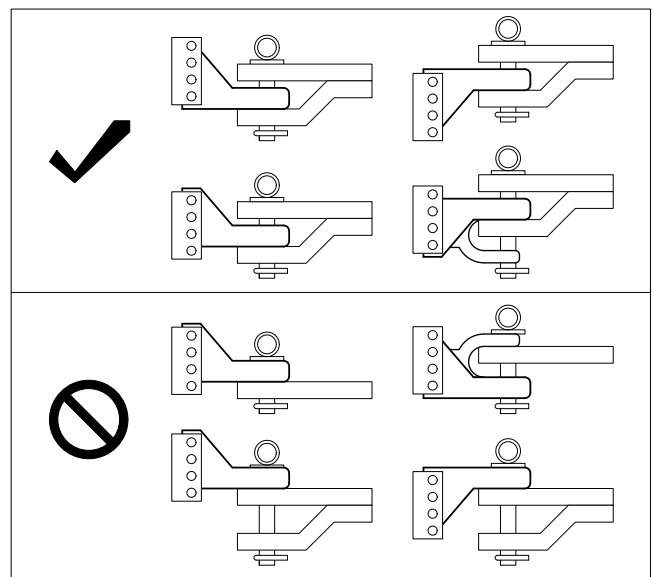
### Unexpected Separation Hazard

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.

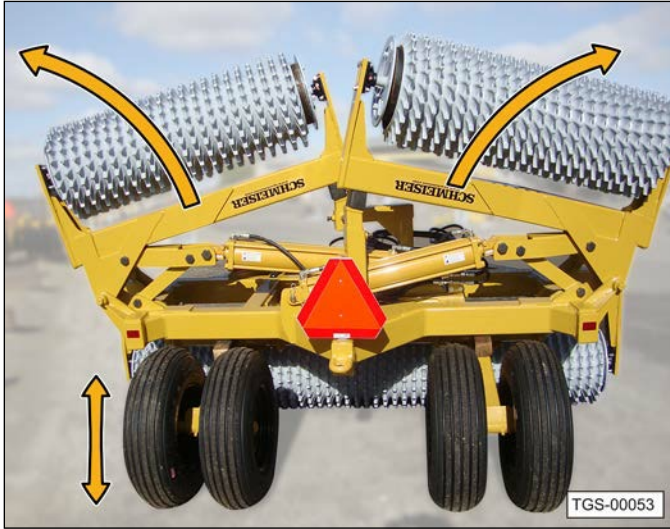
Using a pin not intended for this type of towing can result in unexpected separation of the unit from the tow vehicle, resulting in equipment damage and personal injury.

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

**Note:** Hoses and quick disconnect hydraulic couplers are not supplied with the unit. These may be procured from a local equipment dealer.



5. Raise and lower implement (wheels up and down) and unfold and fold the wings using the hydraulic cylinders to sequence the unit.



## Sequence Valve Adjustment

A sequence valve allows one hydraulic valve to operate both the transport wheels and the wing folding mechanism.



1. When switching from the transport mode to the field mode, the wings will unfold first and then the machine lowers to ground (wheels raise up last).

## **⚠ DANGER**



### Crush Hazard

Crush hazard under raised wing. Do not allow anyone to stand near 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.

## **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.

6. Move the unit to the desired location and position it for operation following the towing recommendation provided in this manual and/or any other local, State, or Federal regulations that may apply.

## **⚠ DANGER**



### Crush Hazard

Do not stand beside or under the wings during the unfolding process. Personal injury and possibly death can occur by being crushed from a heavy component.

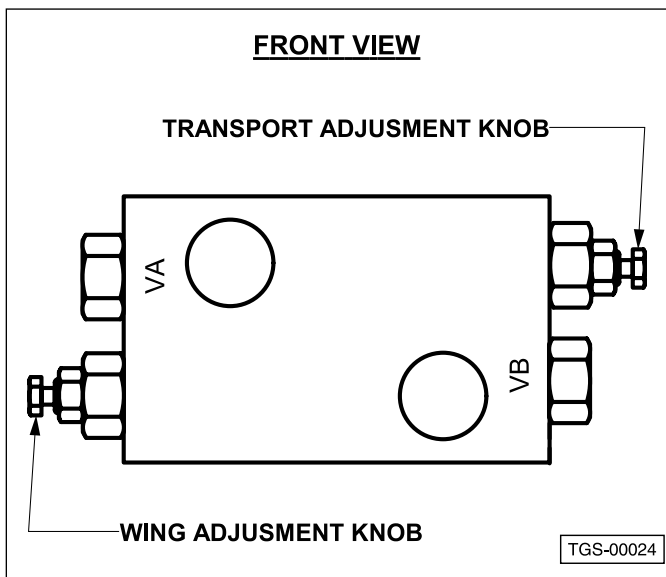


### Crush Hazard (Rolling Over)

When leaving the operator's seat:

1. Stop the tractor or towing vehicle.
  2. Shut off the engine and remove the ignition key.
  3. Set the brakes.
  4. Relieve hydraulic fluid pressure.
2. If machine begins to lower before the wings completely unfold:
    - a. Refold the wings into the transport position.
    - b. Turn off the tractor and release all hydraulic pressure.
    - c. Adjust the transport adjustment knob clockwise, in 1/2 turn increments (as shown below).
    - d. Repeat the unfold process until the implement performs as intended.

3. When switching from the field mode to the transport mode, the main frame raises up first and then wings fold into the transport position.
4. If wings begin to fold before the machine is completely raised:
  - a. Unfold the wings into the field position.
  - b. Turn off the tractor and release all hydraulic pressure.
  - c. Adjust the transport adjustment knob clockwise, in 1/2 turn increments (as shown below).
  - d. Repeat the unfold process until the implement performs as intended.



**Note:** The two wings may not fold or unfold at the same time.

## Wing Arm Stops

**⚠ DANGER**



**Crush Hazard**  
Do not stand beside or under the wings during the unfolding process. Personal injury and possibly death can occur by being crushed from a heavy component.



Before leaving the tractor, shut off the engine, set the parking brake, and remove the ignition key.

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

1. Completely unfold the wings.
2. Loosen the two square head lock bolts on each wing rest and adjust the wing stands to the desired height.



3. Retighten the square head lock bolts.
4. Fold the wings back into the storage position and recheck their position.





**NOTICE**

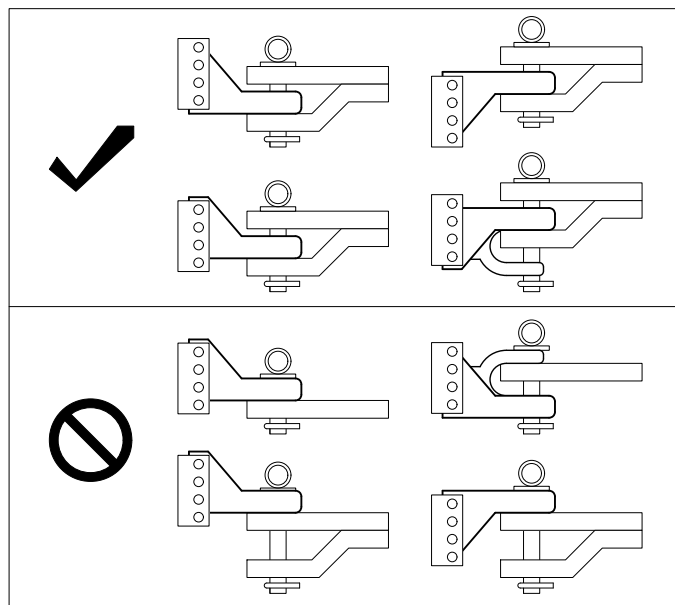
*If the wings fold down too far, they can damage the wing linkage or cylinders.*

### 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 17.
	Make sure all hardware is properly installed and tightened. Refer to "Maintenance" on page 24.
	Adjust the wing arm stops, if necessary. Refer to "Wing Arm Stops" on page 19.
	Lubricate all grease fittings. Refer to "Lubrication Points" on page 26.



### 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.

### Pull Frame Spring Adjustment

#### ⚠ WARNING



#### Pinch Point Hazard

Do not place hands or fingers between moving and/or stationary parts. The weight of the unit will easily cause serious bodily injury.



#### Sharp Object Hazard

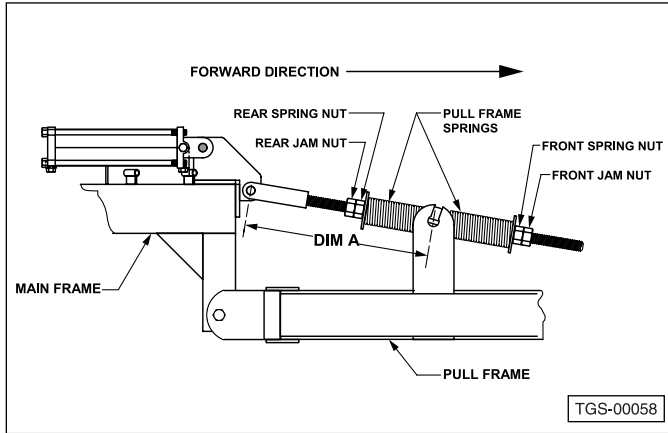
Do not place any part of your body under the ring roller during the adjustment process. Severe injury will occur if a person contacts or falls under the ring roller.

The Folding Till An' Pak is equipped with adjustable springs in order to distribute loads equally between the main frame and wing rollers.

1. Start the tractor and use the tractor's control lever to lower the wheels (raise the ring rollers) to the maximum height.
2. Begin to pull the unit through the field.
3. Slowly raise the wheels until they are clear of the ground.
4. Once the full weight of the implement is on the ground, the unit may be leveled by adjusting the pull frame spring assembly.

**If there is more load on the front main frame roller than on the wing rollers, follow these steps:**

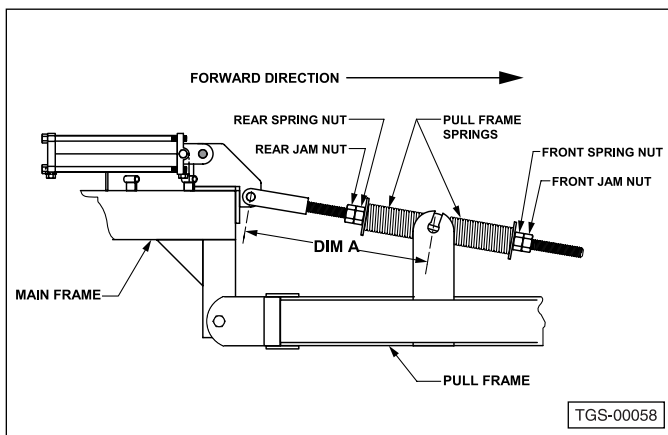
1. Loosen and back away front and rear jam nuts.
2. Loosen and back away front spring nut (see drawing).



3. Rotate rear spring nut CW to increase dimension 'A' until loads are equal on all rollers.
4. Retighten front spring nut and both jam nuts to the proper torque.

**If there is more load on the wing rollers than on the main frame roller, follow these steps:**

1. Loosen and back away front and rear jam nuts.
2. Loosen and back away front spring nut (see drawing).



3. Rotate rear spring nut CCW to decrease dimension 'A' until loads are equal on all rollers.
4. Retighten front spring nut and both jam nuts to the proper torque.

**Detaching From Tractor**

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

**CAUTION**



**Explosive Separation Hazard**


Be sure all hydraulic pressure is relieved before disconnecting hydraulic lines or fittings between the Folding Till An' Pak and the tractor hydraulic system.


5. Disconnect the hitch safety chain.
6. Remove the hitch pin and drive the tractor away from the implement.

## TOWING

### General 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.





**NO PASSENGERS ALLOWED -**  
Do not carry passengers anywhere on or in the tractor or implement.

#### **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.


 Make sure the hitch and coupling on the towing vehicle are rated equal to, or greater than, the unit's "gross vehicle weight rating" (GVWR). Refer to "Safety Signs and Decals" on page 9.


 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. Refer to "Tire and Lug Torque Specifications" on page 29.

#### **SAFETY INSTRUCTIONS**

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

 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.

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

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.

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

## Safety Chain

### SAFETY INSTRUCTIONS

If the unit will be transported on a public highway, the safety chain must be attached to the tow vehicle.

 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.

Be sure to check with local law enforcement agencies for any local regulations or restrictions.


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.

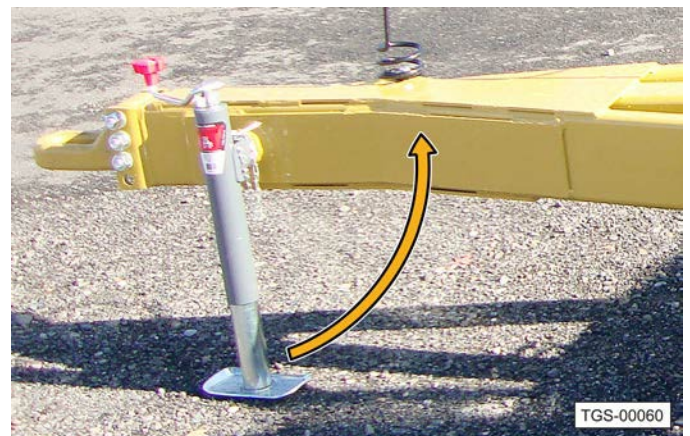
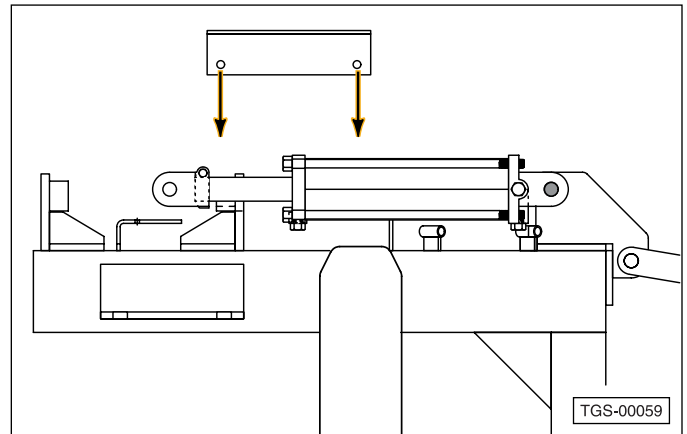
Some localities prohibit the use of flashing amber lights. Local laws should be checked for all highway lighting and marking requirements.

### SAFETY INSTRUCTIONS

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.



## MAINTENANCE

### Personal Safety

# WARNING

To prevent serious injury or death:



#### Rolling Over / Crush Hazard

To prevent serious

injury or death, before servicing, adjusting, repairing, or performing other work on the implement, always make sure the tractor or towing vehicle engine is stopped, the ignition key is removed, the unit is lowered to the ground, all controls are placed in neutral, the parking brake is set, and all hydraulic fluid pressure is relieved (zero pressure).



#### Rolling Hazard

Block the wheels before performing maintenance or repairs.



#### 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.

## General Maintenance Safety

### 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.



## Hydraulic Component Safety

### **⚠ WARNING**



#### **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.



#### **Zero Pressure**

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



#### **High-Pressure Separation Hazard**

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



#### **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.



#### **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.



#### **High-Pressure Fluids**

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.

Hydraulic fluid escaping under pressure can penetrate the skin. Openings in the skin and minor cuts are susceptible to infection from hydraulic fluid. 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.

### **NOTICE**

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

## Tire Safety

### **⚠ WARNING**



#### **Explosive Separation Hazard**

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



#### **Explosive Hazard**

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



#### **Flying Objects Hazard**

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

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

Make sure the tires are inflated evenly.



Before leaving the tractor, shut off the engine, set the parking brake, and remove the ignition key.

### **SAFETY INSTRUCTIONS**

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



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.



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



Keep wheel lug nuts or bolts tightened.

### 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.

### Wheel Hub Bearings

Re-pack with grease once a season – inspect bearings and races for wear and replace if necessary.



### Ring Roller Bearings

The ring 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 Fold Linkage

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



### Service Items

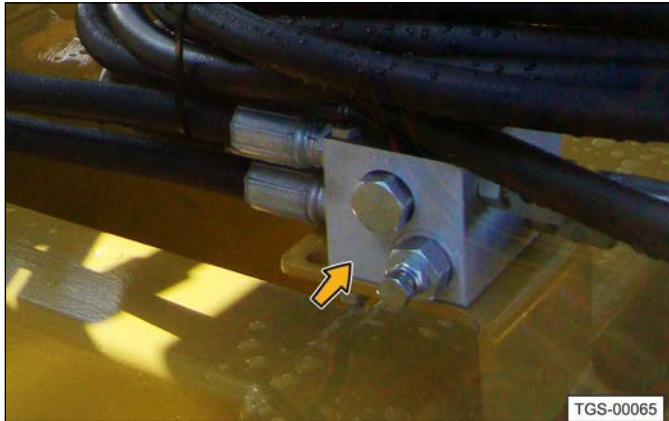
#### Wheel Axle Bearings

Visually inspect and replace when the castings are overly worn or broken.



### Sequence Valve

Visually inspect, replace if damaged or leaking.



### Hydraulic Hoses

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



### Pull Frame Spring Replacement

Visually inspect and replace when springs are overly worn or damaged.



### 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.



### Ring Rollers

Visually inspect Till An' Pak rings for wear and damage. Replace any damaged rings.





**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.

<b>Hours and Serviced By</b>																		
<b>Maintenance</b>																		
<b>Before Each Use</b>																		
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.																		
Check Till An' Pak rings for wear and damage. Replace if necessary.																		
Lubricate zerk fittings on ring roller bearings with a good general purpose grease.																		
<b>Every 50 Hours or Weekly</b>																		
Perform the Daily Maintenance schedule.																		
Lubricate zerk fittings on wing hinges and ring roller bearings with a good general purpose grease.																		
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. Refer to "Tire and Lug Torque Specifications" on page 31.																		
<b>Every 1000 Hours or Annually</b>																		
Perform the Daily Maintenance schedule.																		
Perform the Weekly Maintenance schedule.																		
Lubricate zerk 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.																		
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.																		




### Bolt Torque Requirements

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

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

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

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

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

### Tire and Lug Torque Specifications

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

## 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.

### Welding Repairs



Before performing any type of welding repair to the Folding Till An' Pak, 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**

Follow all operating and safety instructions found in this manual when storing this implement.



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.

### Storage Preparation

After Folding Till An' Pak field work is completed for a season, perform the following maintenance procedures before storing the implement.

1. Check all bolted connections. Ensure that the fasteners are tight, and all retaining pins are secured in place with appropriate retaining clips.
2. Check the tire pressure and set to the tire manufacturer's recommended specification. Inspect the tires for wear and/or damage. Make sure the wheel lugs are properly tightened. Refer to "Tire and Lug Torque Specifications" on page 29.
3. Inspect the frame for structure fractures and inspect the side wing pivot points for wear or damage.

4. Check all the bearings for signs of seal damage or excessive wear.
5. Inspect all the hydraulic hoses and fittings for leaks or signs of wear.
6. Check the ring rollers for wear and damage. If any roller teeth are excessively worn or damaged, they must be replaced.
7. Make sure all the warning decals are in place and legible. Replace any worn decals as needed.
8. Remove debris and clean the entire implement with compressed air or low pressure water.

#### **NOTICE**

To help prevent damage, avoid spraying air, water, steam, or cleaning solvents directly at the bearings and seals.

9. Lubricate all grease fittings on the frame members with a good general purpose lithium grease. Refer to "Lubrication Points" on page 26 for the location of the fittings.
10. 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.
11. Check and adjust the tension on the pull frame springs. For more information, refer to "Pull Frame Spring Adjustment" on page 20 of this manual.
12. 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.).
13. To help prevent corrosion, remove rust and apply a coat of paint to frame surfaces where paint has been worn off or damaged.

## Placing in storage

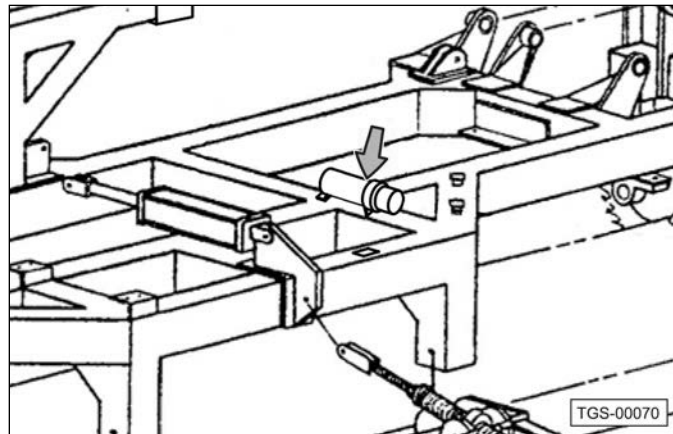
1. Raise the implement, place the side wings in the transport mode, and install the transport lock.
2. Move the Folding Till An' Pak to a storage area with a firm and level base to prevent it from tipping or sinking into the ground. For best results, always store the Folding Till An' Pak in a dry, protected 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 21.
4. Store the implement with the transport wheels extended in the transport mode and the wheel support lock installed over the cylinder rod. Do not leave the tractor attached to the implement while in storage.

## Removing From Storage

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

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

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



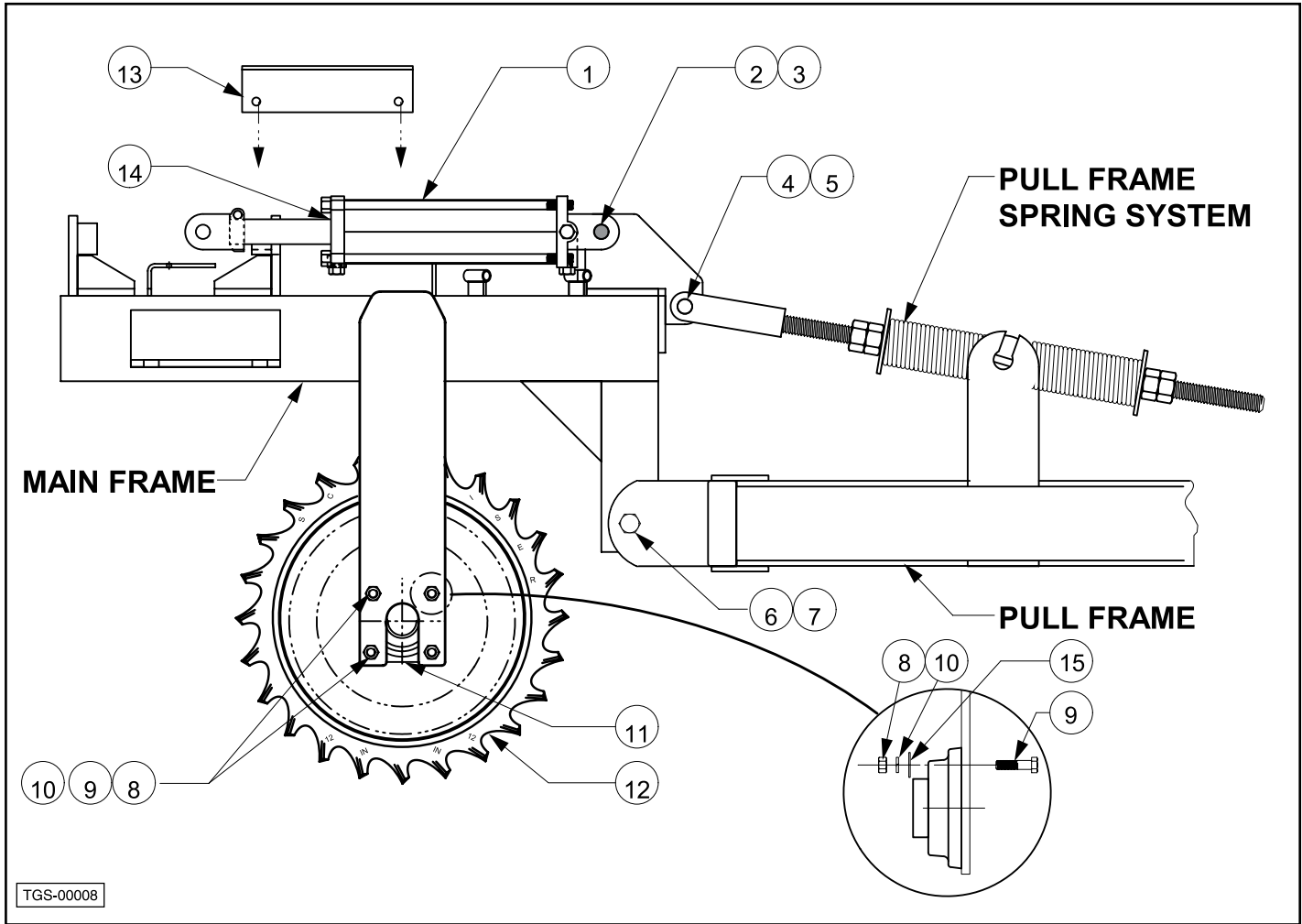
2. Perform any recommended maintenance that was not completed when the implement was put into storage.
3. Visually inspect the implement for wear or damage.
4. Check the tire pressure and set to the tire manufacturer's recommended specification. Inspect the tires for wear and/or damage.
5. Inspect all the hydraulic hoses and fittings for leaks and signs of wear or damage.
6. Make sure all the warning decals are in place and legible. Replace any damaged or missing decals.
7. Hitch the implement to a tractor and connect all hydraulic hoses. Refer to "Attaching to Tractor" on page 17. 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.

### Ordering Parts

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

### Parts Drawings

#### Folding Till An' Pak Hitch Assembly



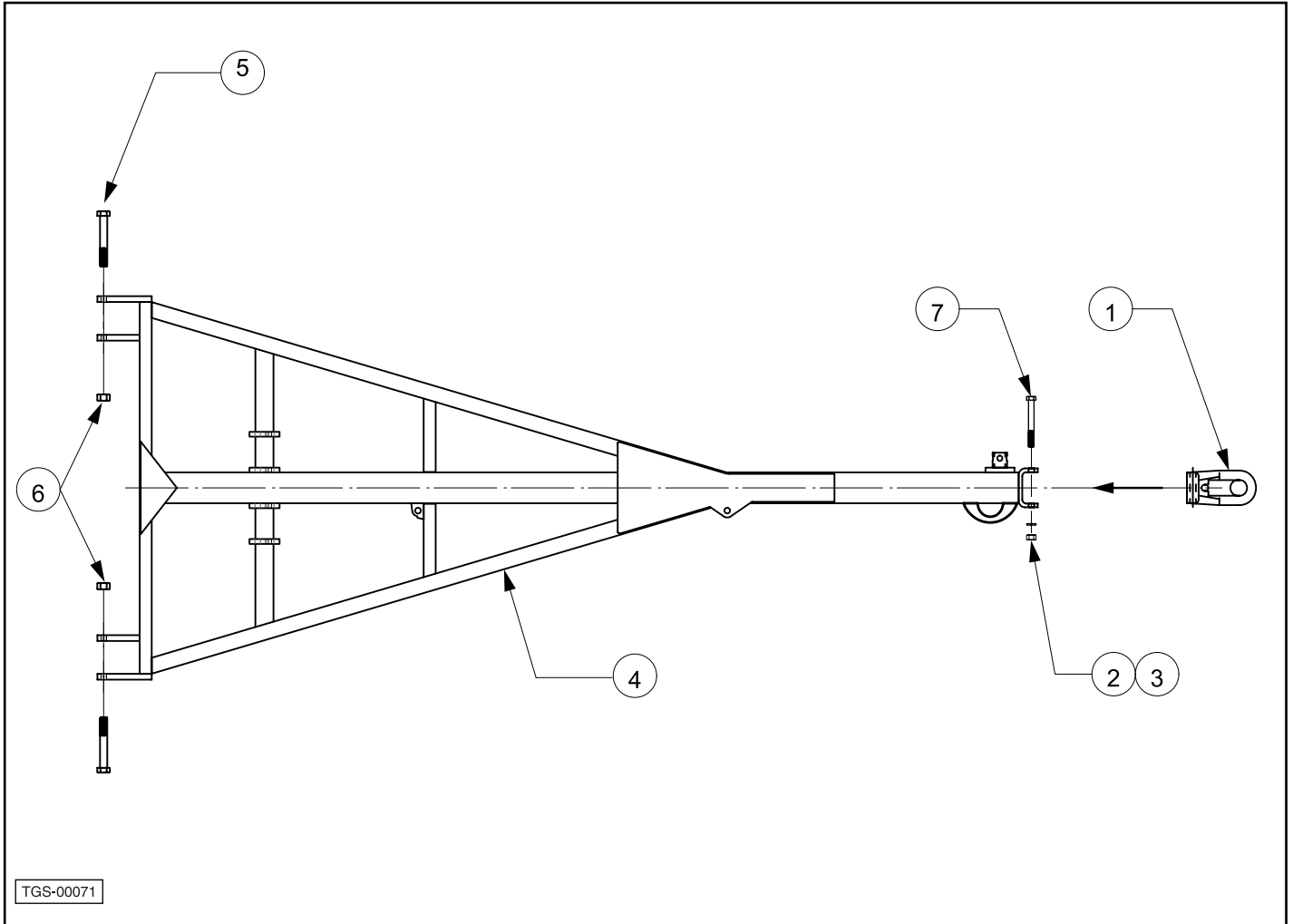
Item	Part Number	Description	Qty.
1	GHC-40120T	4" x 12" Tie Rod, Hydraulic Cylinder	1
2	GPN-1656HC	1" x 3-1/2" Cylinder Pin	1
3	GPN-02CLIP	3/32" Wire Diameter Hair Pin Clip	2
4	GPN-16X048	1" x 3" Clevis Pin	1
5	GPN-04X40C	1/4" x 2-1/2" Cotter Pin	1
6	CSNC814120	7/8" x 7-1/2" NC Cap Screw, Gr. 8	1
7	NYNUT-14NC	7/8" NC Nylon Hex Nut	1
8	HXNUT-08NC	1/2" NC Hex Nut	8
9	CSNC508036	1/2" x 2-1/4" NC Cap Screw, Gr. 5	8
10	LWASHER-08	1/2" Lock Washer	8

Item	Part Number	Description	Qty.
11	TPP 3152	1-11/16" Flange Bearing for Roillers 15' and under*	6
	TPP-3157	1-15/16" Flange Bearing for Rollers 16' and up*	
12	TPP3353D	14/20 Domestic Rings	5/ft
	TPP3354D	16/22 Domestic Rings	
13	GWD-412LB2	Lockout Bar for 4" x 12" Hydraulic Cylinder	1
14	PMCK-34000	Seal Kit for 4" x 12" Hydraulic Cylinder	1
15	FWASHER-08	1/2" Flat Washer	24

\* Models fabricated before July 1997, use 1-11/16" and 1-15/16" Pillow Block Bearings.

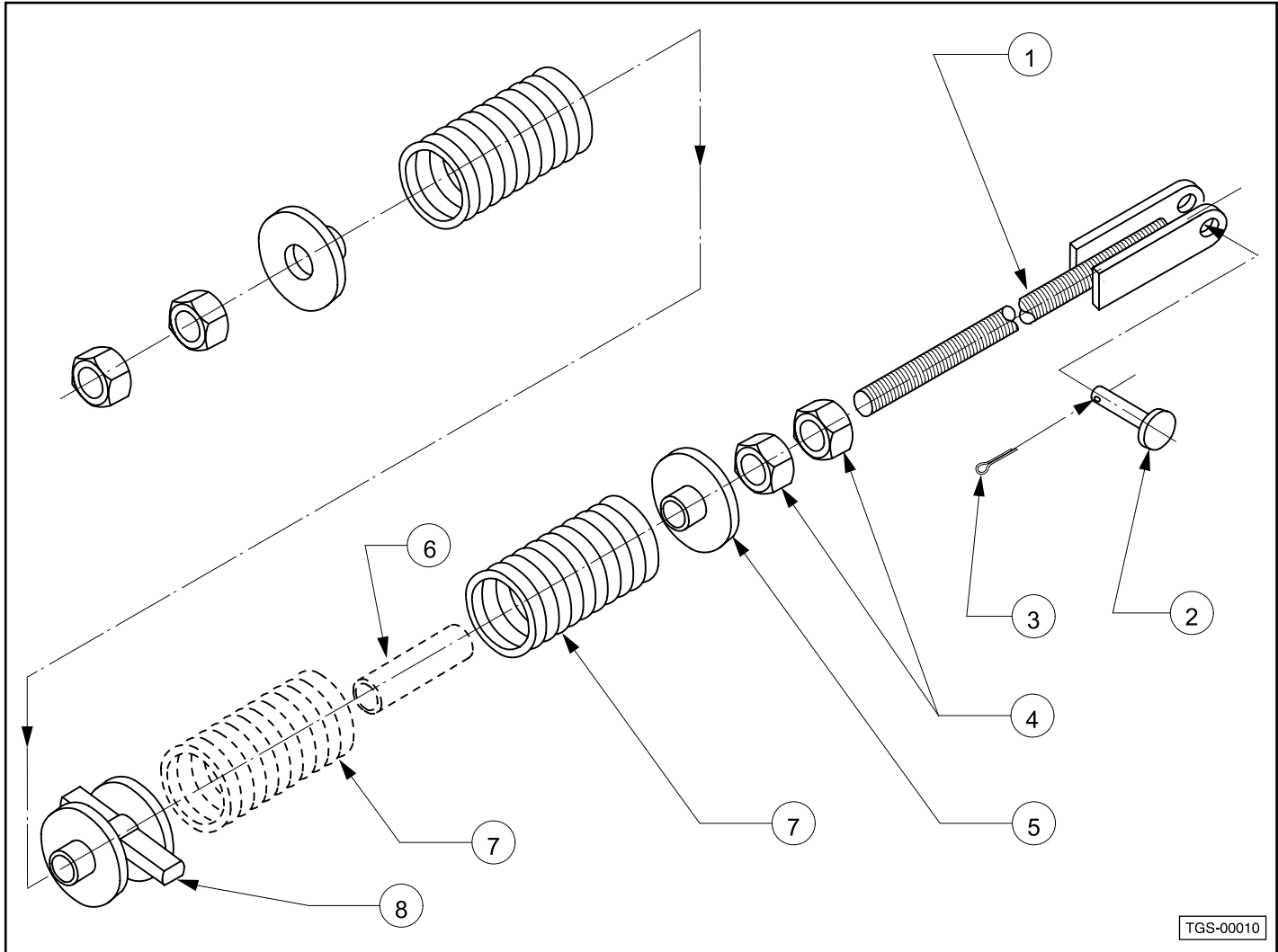


**Folding Till An' Pak Pull Frame Assembly**



Item	Part Number	Description	Qty
1	GMB-HITCHCA3	CA 3 Perfect Hitch	1
2	LWASHER-12	3/4" Lock Washer	3
3	HXNUT-12NC	3/4" NC Hex Nut	3
4	FTP-00P100 FTP-00P200	Pull Frame, Double Spring, Single Cyl. Units Pull Frame, Double Spring, Double Cyl. Units	1
5	CSNC814120	7/8" x 7-1/2" NC Cap Screw, Gr. 8	2
6	NYNUT-14NC	7/8" Nylon NC Hex Nut	2
7	CSNC512096	3/4" X 6" NC Cap Screw	3

**Folding Till An' Pak Pull Frame Spring System**



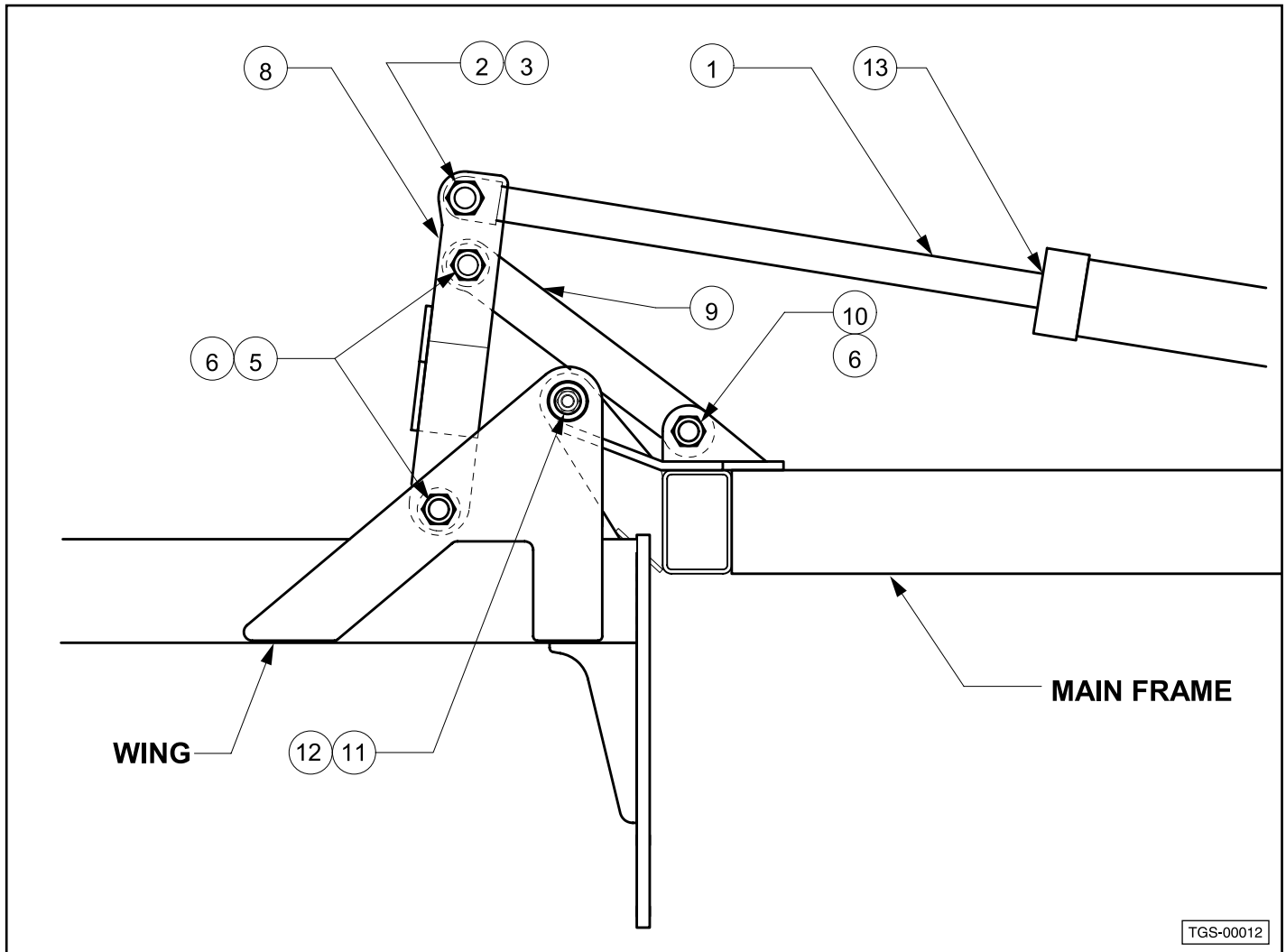
TGS-00010

Item	Part Number	Description	Qty.
1	FTP-00S000	Pull Frame Spring Rod Weldment	1
2	GPN-16X048	1" Ø x 3" Clevis Pin	1
3	GPN-04X40C	1/4" x 2-1/2" Cotter Pin	1
4	HXNUT-20NC	1-1/4" Standard NC Hex Nut	4
5	FTP-00S100	Pull Frame Spring Washer Weldment	2
6*	FTP-00S004	Pull Frame Spring Bushing	1
7**	GSR-BUSH01	Pull Frame Spring	2
8	FTP-00E000	Pad Eye Weldment	1

\* Req'd for 29' and up Folding Till An' Paks only.

\*\* (3) per rod assembly required for units 29" and up.

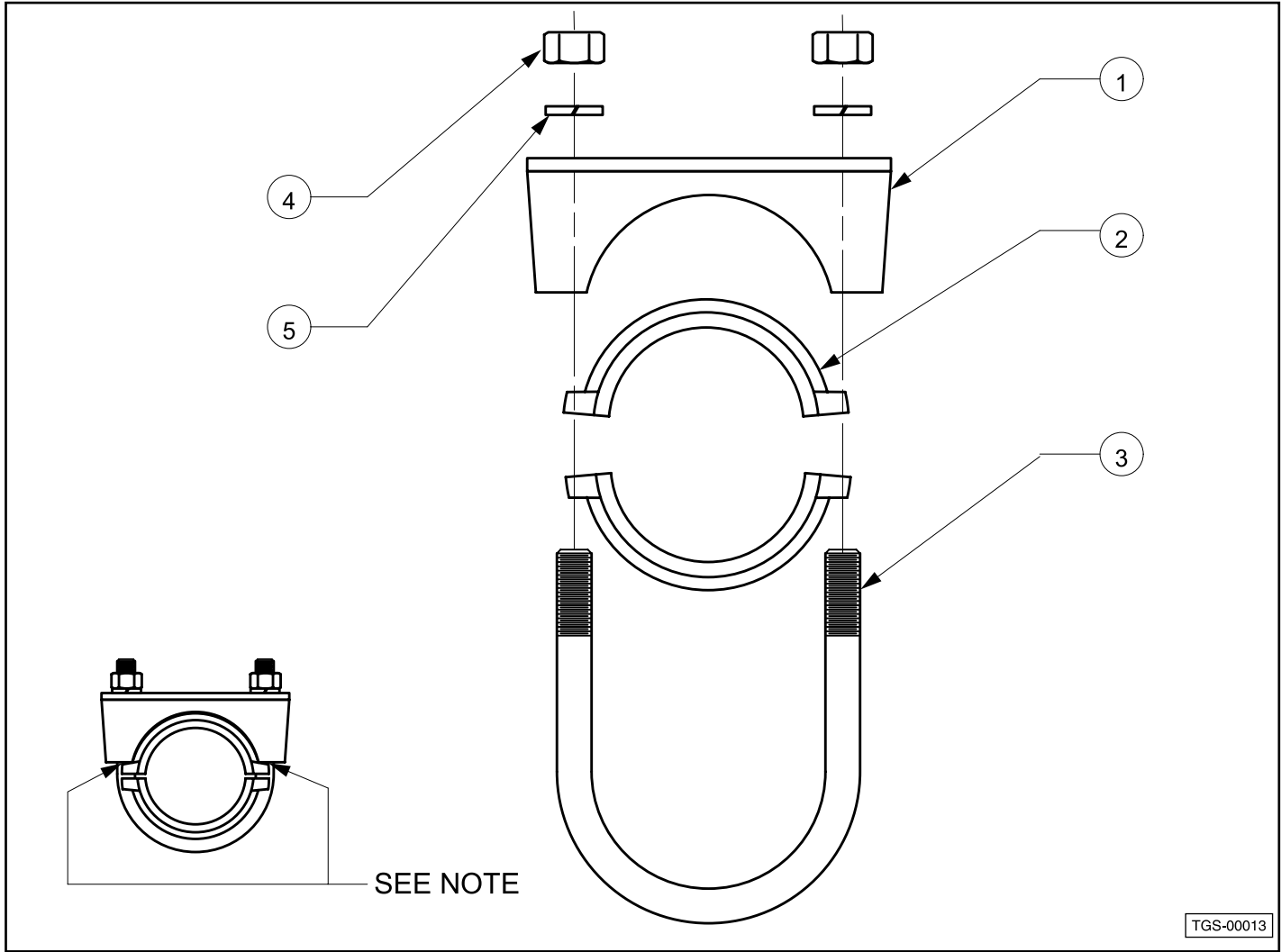
**Folding Till An' Pak Hinge Linkage Assembly**



TGS-00012

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

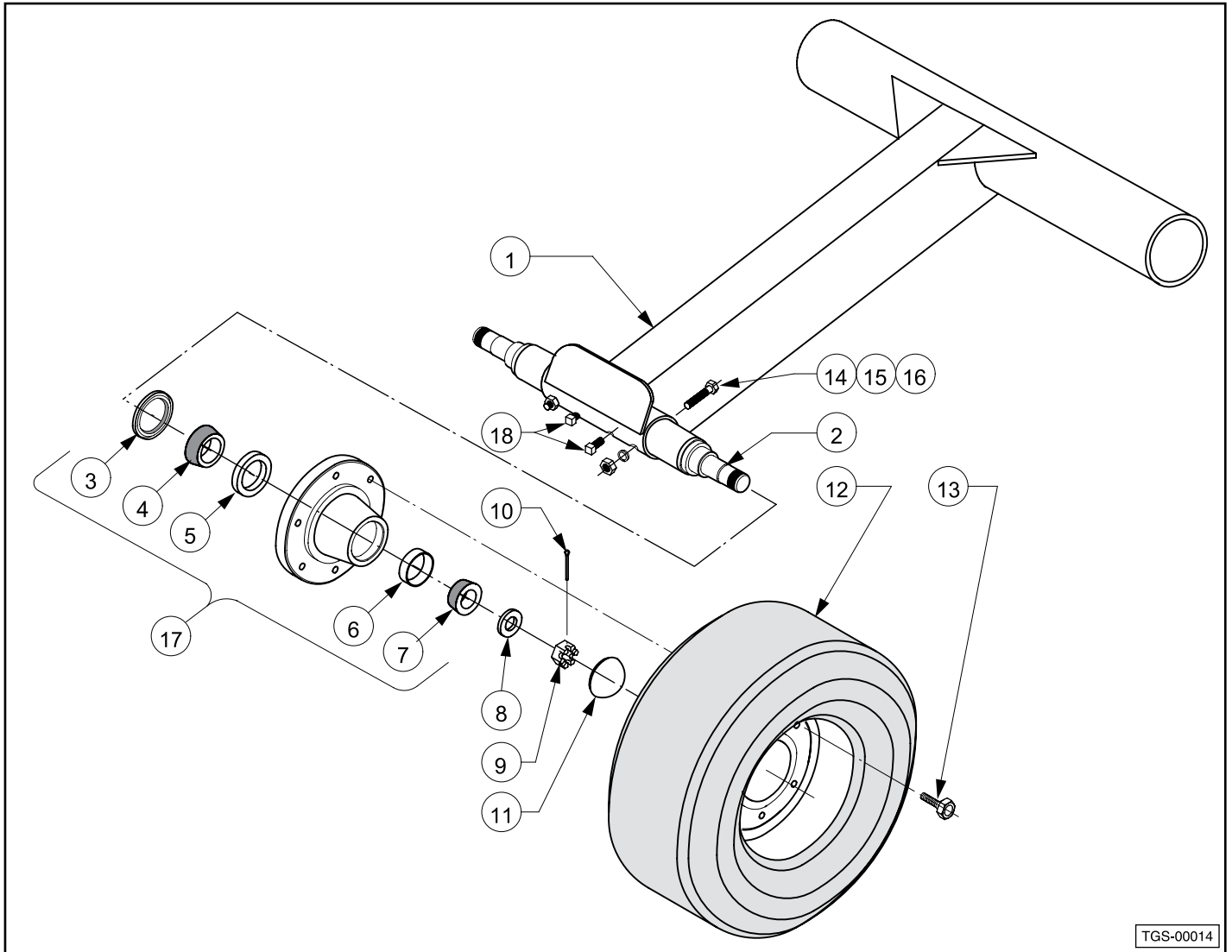
Folding Till An' Pak Wheel Axle Bearing Assembly



Item	Part Number	Description	Qty.
1	SLL 1351	Bearing Cradle Cap Weldment	4
2	SLL 1350	Bearing Cap Casting Machined	8
3	UBNC16122R	1" Bearing U-bolt	4
4	HXNUT-16NC	1" NC Hex Nut	8
5	LWASHER-16	1" Lock Washer	8
—	SLL 1352	U-Bolt Ass'y. (includes items 3, 4, and 5)	—
—	SLL 1353	Wheel Bearing Assembly, complete (includes items 1, 2, 3, 4, and 5)	—

**Note:** Ensure equal amount of space on each side before tightening U-bolts .  
Ensure equal number of threads on each side of U-Bolt.

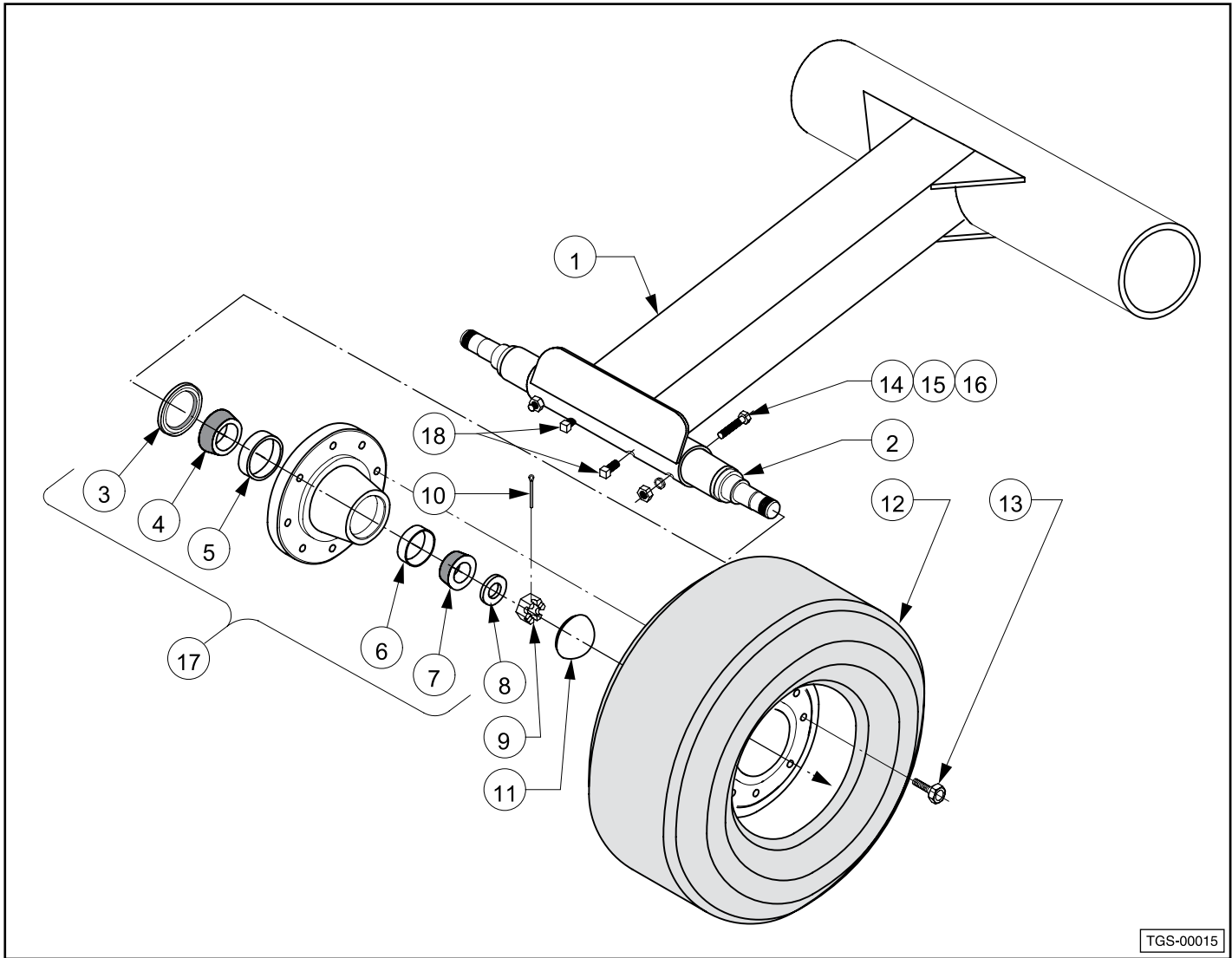
**Folding Till An' Pak Wheel Axle Assembly  
For Units with 14/20 Rings**



Item	Part Number	Description	Qty.
1	FTP-00A000	Wheel Axle Weldment (specify main frame size and configuration)	1
2	TBU-01G016	2" x 20-1/4" Double Ended Removable Spindle (includes items 8, 9, 10)	2
3	GHB-6X6GSL	Grease Seal CR16289	4
4	GHB-6X6ICN	Inner Bearing Cone	4
5	GHB-6X6IRC	Inner Bearing Cup	4
6	GHB-6X6ORC	Outer Bearing Cup	4
7	GHB-6X6OCN	Outer Bearing Cone	4
8	FWASHER-14	7/8" Flat Washer	4
9	GSP-14CANT	Spindle Castle Nut	4
10	GPN-03X32C	3/16" x 2" Cotter Pin	4

Item	Part Number	Description	Qty.
11	GHB-6X6CAP	Hub Cap	4
12	GWT-951508	9.5 x 15 8 Ply Tire with Wheel	4
13	WHB-08X016	Wheel Bolts for 6 on 6 Heavy Hub	24
14	CSNC507056	7/16" X 3-1/2" NC Cap Screw with Lock Washer and Hex Nut	4
15	LWASHER-07	7/16" Lock Washer	4
16	HXNUT-07NC	7/16" NC Hex Nut	4
17	GHB-6X6HVY	Heavy 6 x 6 Hub Assembly Complete (includes items 3, 4, 5, 6, 7, 11, and 13)	
18	SSNCS08X16	1/2" X 1" Square Head Set Screw	4

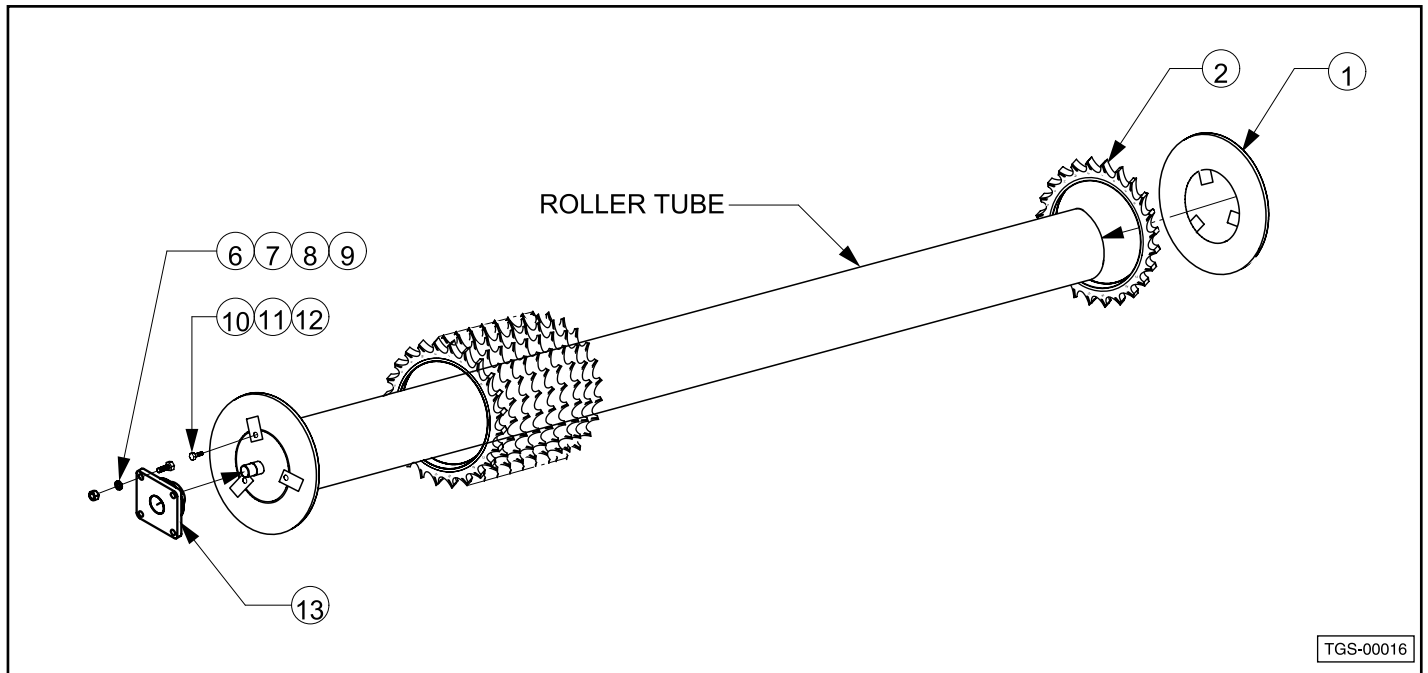
**Folding Till An' Pak Wheel Axle Assembly  
For Units with 16/22 Rings**



Item	Part Number	Description	Qty.
1	FTP-00A000	Wheel Axle Weldment (specify main frame size and configuration)	1
2	FTB-00M008	2-1/8" x 27-3/4" Double Ended Removable Spindle	2
3	GHB-8X8GSL	Grease Seal	4
4	GHB-8X8ICN	Inner Bearing Cone	4
5	GHB-8X8IRC	Inner Bearing Cup	4
6	GHB-8X8ORC	Outer Bearing Cup	4
7	GHB-8X8OCN	Outer Bearing Cone	4
8	FWASHER-14	7/8" Flat Washer	4
9	GSP-14CANT	Spindle Castle Nut	4

Item	Part Number	Description	Qty.
10	GPN-03X32C	3/16" x 2" Cotter Pin	4
11	GHB-8X8CAP	Hub Cap	4
12	GWT-121614	12.5 x 16 14 Ply Tire with Wheel	4
13	WHB-09X018	Wheel Bolts for 8 on 8 Heavy Hub	24
14	CSNC507056	7/16" X 3-1/2" NC Cap Screw with Lock Washer and Hex Nut	4
15	LWASHER-07	7/16" Lock Washer	4
16	HXNUT-07NC	7/16" NC Hex Nut	4
17	GHB-8X8HVY	Heavy 8 x 8 Hub Assembly Complete (includes items 3, 4, 5, 6, 7, 11, and 13)	
18	SSNCS08X16	1/2" X 1" Square Head Set Screw	4

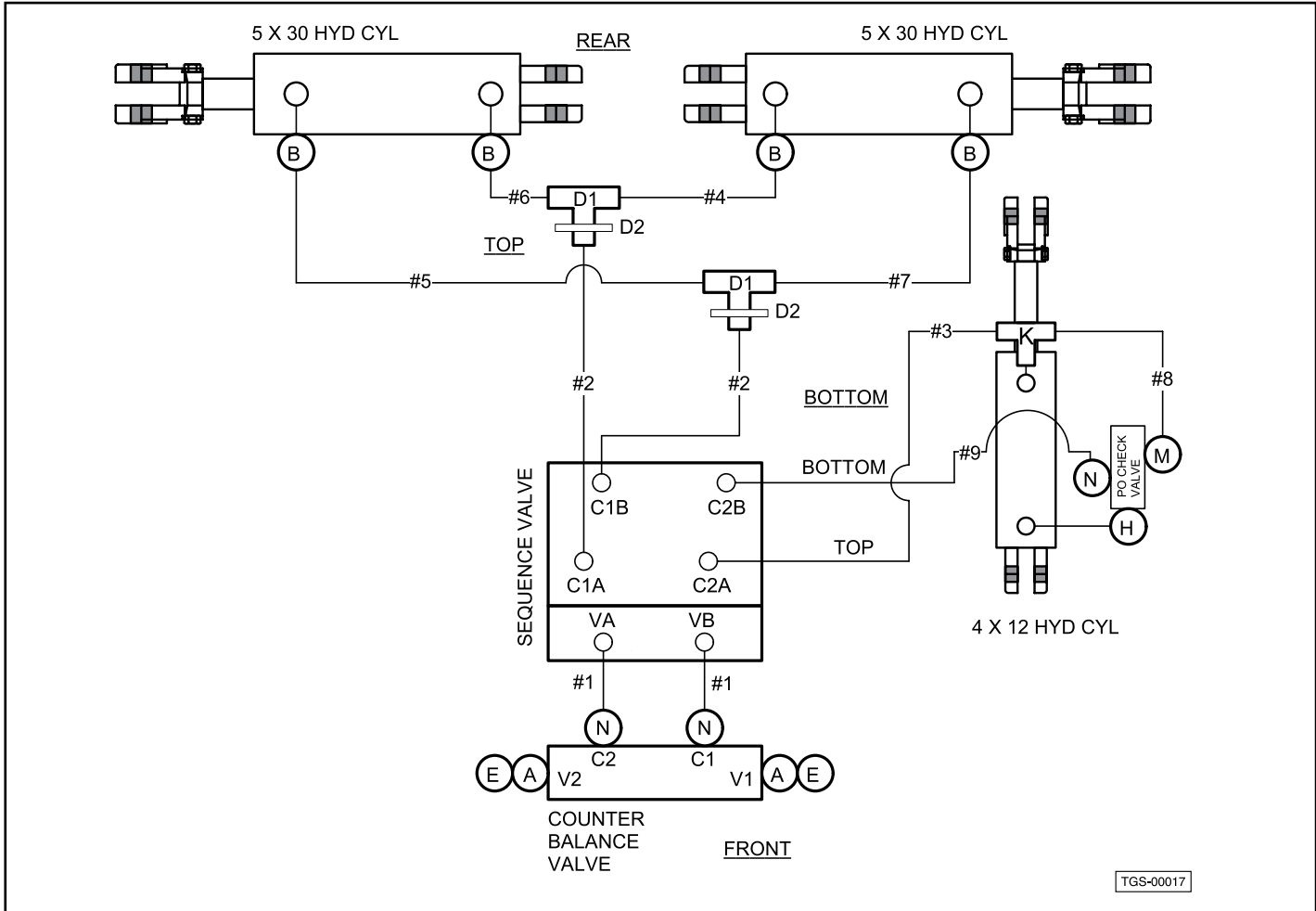
**Folding Till An' Pak Ring Roller Assembly**



TGS-00016

Item	Part Number	Description	Qty
1	TPP3208	Till An' Pak Roller Retainer, 10 - 18 for 10"-14 / 20	2
	TPP3210	Till An' Pak Roller Retainer, 12 - 18 for 12"-14 / 20	
	TPP3211	Till An' Pak Roller Retainer, 12 - 20 for 12"-16 / 22	
	TPP3212	Till An' Pak Roller Retainer, 14 - 20 for 14"-16 / 22	
2	TPP3353D	Till An' Pak Roller Ring, 14 / 20	5 / ft.
	TPP3354D	Till An' Pak Roller Ring, 16 / 22	
6	CSNC508036	1/2" x 2-1/4" NC Cap Screw	4
7	LWASHER-08	1/2" Lock Washer	4
	LWASHER-10	5/8" Lock Washer (for 2-3/16" Bearings)	
8	HXNUT-08NC	1/2" NC Hex Nut	4
	HXNUT-10NC	5/8" NC Hex Nut (for 2-3/16" Bearings)	
9	FWASHER-08	1/2" Flat Washer	4
	FWASHER-10	5/8" Flat Washer (for 2-3/16" Bearings)	
10	CBNC510020	5/8" X 1-1/4" NC Carriage Bolt	6
11	LWASHER-10	5/8" Lock Washer	6
12	HXNUT-10NC	5/8" NC Hex Nut	6
13	TPP3152	1-11/16" Flange Bearing (2' to 15' rollers)	2
	TPP3157	1-15/16" Flange Bearing (16' rollers and up)	
	TPP3158	2-3/16" Flange Bearing (All rollers with 16 / 22 Rings)	

**Folding Till An' Pak Hydraulic Diagram for 12' Square Main Frame**



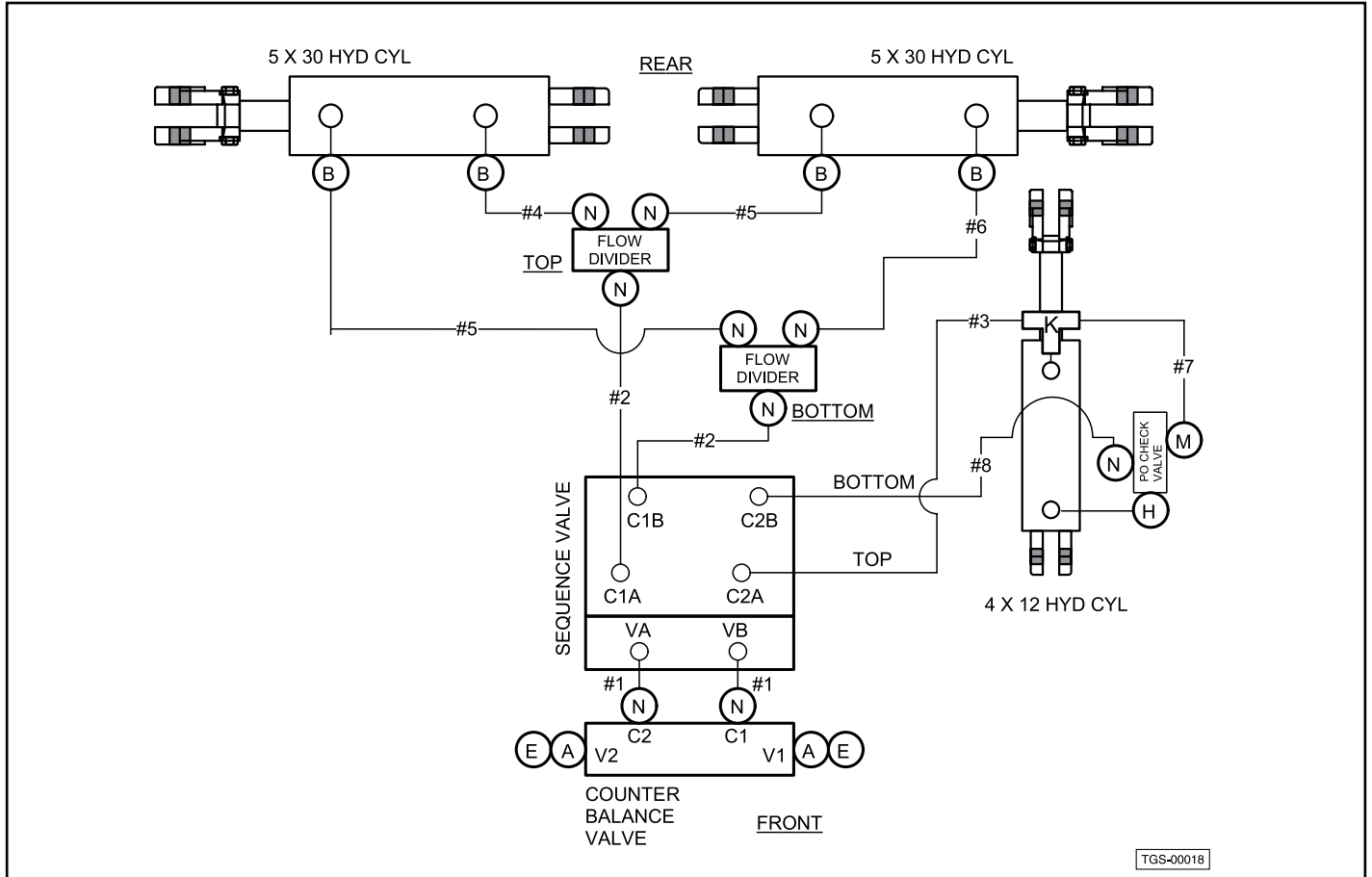
Item	Part Number	Description	Qty.
<b>Hydraulic Cylinders</b>			
	GHC-40120T	4" x 12" Tie Rod Cyl.	1
	GHC-50300T	5" x 30" Tie Rod Cyl.	2
<b>Fittings</b>			
A	FMBMJ9088	MB-MJ 90° 8-8 Elbow	2
B	FMBMJ90108	MB-MJ 90° 10-8 Elbow	4
D1	FMJHT8	MJ-MJ-MJ Bulkhead Tee	2
D2	FHN8	Bulkhead Lock Nut	2
E	FJC8	Plug	2
H	FMBMB9088	MB-MB 90° 8-8 Elbow	1
K	FMJMJMBT08	MJ-MJ-MB-8 Tee	1
M	FMBMJ66C	MB-MJ 6-6 Straight Adapter	1
N	FMBMJ88C	MB-MJ 8-8 Straight Adapter	3

Item	Part Number	Description	Qty.
<b>Hoses</b>			
#1	—	1/2" MB-1/2" FJX 12 1/2" LONG	2
#2	—	1/2" MB-1/2" FJX 19" LONG	2
#3	—	1/2" MB-1/2" FJX 26" LONG	1
#4	—	1/2" FJX-1/2" FJX 36" LONG	1
#5	—	1/2" FJX-1/2" FJX 25" LONG	1
#6	—	1/2" FJX-1/2" FJX 38" LONG	1
#7	—	1/2" FJX-1/2" FJX 70" LONG	1
#8	—	3/8" FJX-1/2" FJX 20" LONG	1
#9	—	1/2" MB-1/2" FJX 36" LONG	1
<b>Valves</b>			
	—	OVER CENTER COUNTER BALANCE VALVE*	1
	V08CBBSUN	YAJ BODY "SUN"	1
	V08CBCARTR	CBEA LAN CARTRIDGE	2
	V08SEQVSUN	SEQUENCE VALVE	1
	VCKCBXCN-ECJ	PO CHECK VALVE ASSEMBLY	1

\*Over Center Counter Balance Valve consists of YAJ body and two CBEA LAN cartridges.



**Folding Till An' Pak Hydraulic Diagram for 12' Offset Main Frame**



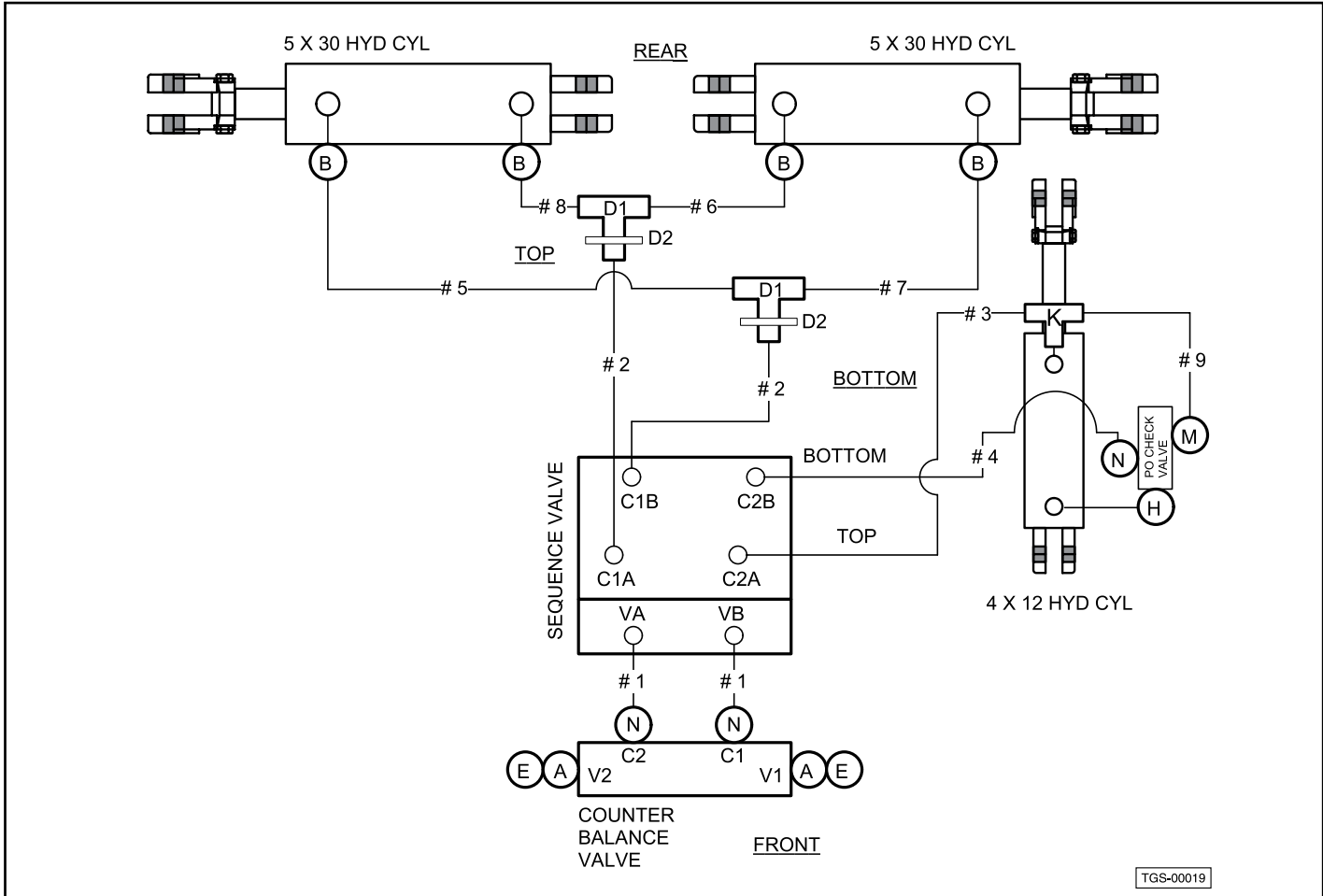
TGS-00018

Item	Part Number	Description	Qty.
<b>Hydraulic Cylinders</b>			
	GHC-40120T	4" x 12" Tie Rod Cyl.	1
	GHC-50300T	5" x 30" Tie Rod Cyl.	2
<b>Fittings</b>			
A	FMBMJ9088	MB-MJ 90° 8-8 Elbow	2
B	FMBMJ90108	MB-MJ 90° 10-8 Elbow	4
E	FJC8	Plug	2
H	FMBMB9088	MB-MB 90° 8-8 Elbow	1
K	FMJMJMBT08	MJ-MJ-MB-8 Tee	1
M	FMBMJ66C	MB-MJ 6-6 Straight Adapter	1
N	FMBMJ88C	MB-MJ 8-8 Straight Adapter	9

Item	Part Number	Description	Qty.
<b>Hoses</b>			
#1	—	1/2" MB-1/2" FJX 12 1/2" LONG	2
#2	—	1/2" MB-1/2" FJX 19" LONG	2
#3	—	1/2" MB-1/2" FJX 26" LONG	1
#4	—	1/2" FJX-1/2" FJX 90° 36" LONG	1
#5	—	1/2" FJX-1/2" FJX 90° 30" LONG	2
#6	—	1/2" FJX-1/2" FJX 90° 67" LONG	1
#7	—	3/8" FJX-1/2" FJX 20" LONG	1
#8	—	1/2" MB-1/2" FJX 36" LONG	1
<b>Valves</b>			
—		OVER CENTER COUNTER BALANCE VALVE*	1
	V08CBBSUN	YAJ BODY "SUN"	1
	V08CBCARATR	CBEA LAN CARTRIDGE	2
	V08SEQVSUN	SEQUENCE VALVE	1
	VFLOWDIV03	STD. FLOW DIVIDER	2
	VCKCBXCN-ECJ	PO CHECK VALVE ASSEMBLY	1

\*Over Center Counter Balance Valve consists of YAJ body and two CBEA LAN cartridges.

**Folding Till An' Pak Hydraulic Diagram for 14' Square Main Frame**

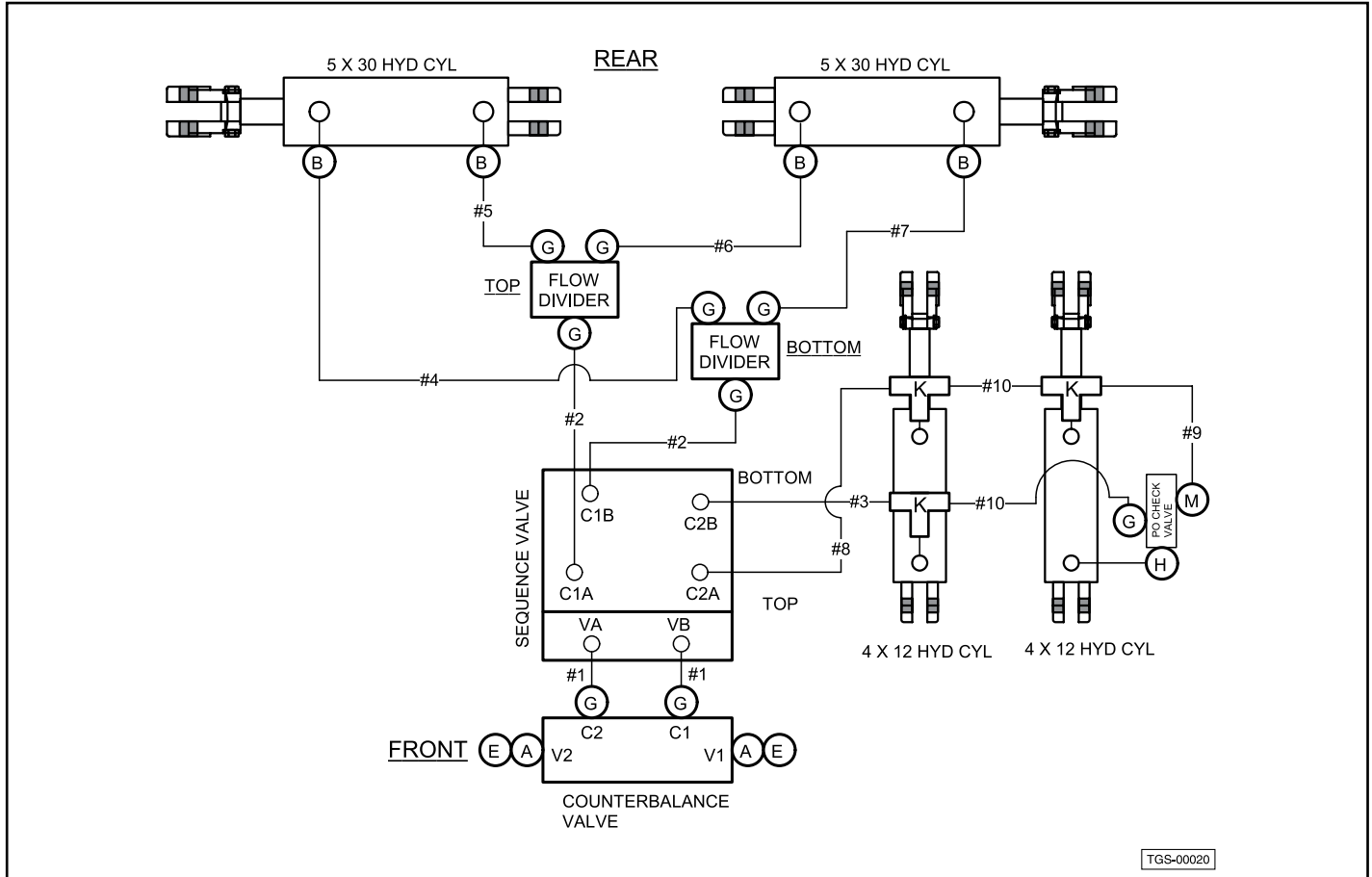


Item	Part Number	Description	Qty.
<b>Hydraulic Cylinders</b>			
	GHC-40120T	4" x 12" Tie Rod Cyl.	1
	GHC-50300T	5" x 30" Tie Rod Cyl.	2
<b>Fittings</b>			
A	FMBMJ9088	MB-MJ 90° 8-8 Elbow	2
B	FMBMJ90108	MB-MJ 90° 10-8 Elbow	4
D1	FMJHT8	MJ-MJ-MJ Bulkhead Tee	2
D2	FHN8	Bulkhead Lock Nut	2
E	FJC8	Plug	2
H	FMBMB9088	MB-MB 90° 8-8 Elbow	1
K	FMJMJMBT08	MJ-MJ-MB-8 Tee	1
M	FMBMJ66C	MB-MJ 6-6 Straight Adapter	1
N	FMBMJ88C	MB-MJ 8-8 Straight Adapter	3

Item	Part Number	Description	Qty.
<b>Hoses</b>			
#1	—	1/2" MB-1/2" FJX 12 1/2" LONG	2
#2	—	1/2" MB-1/2" FJX 19" LONG	2
#3	—	1/2" MB-1/2" FJX 26" LONG	1
#4	—	1/2" MB-1/2" FJX 36" LONG	1
#5	—	1/2" FJX-1/2" FJX 37" LONG	1
#6	—	1/2" FJX-1/2" FJX 48" LONG	1
#7	—	1/2" FJX-1/2" FJX 82" LONG	1
#8	—	1/2" FJX-1/2" FJX 27" LONG	1
#9	—	3/8" FJX-1/2" FJX 20" LONG	1
<b>Valves</b>			
	—	OVER CENTER COUNTER BALANCE VALVE*	1
	V08CBBSUN	YAJ BODY "SUN"	1
	V08CBCARATR	CBEA LAN CARTRIDGE	2
	V08SEQVSUN	SEQUENCE VALVE	1
	VCKCBXCN-ECJ	PO CHECK VALVE ASSEMBLY	1

\*Over Center Counter Balance Valve consists of YAJ body and two CBEA LAN cartridges.

**Folding Till An' Pak Hydraulic Diagram for 14' Offset Main Frame**



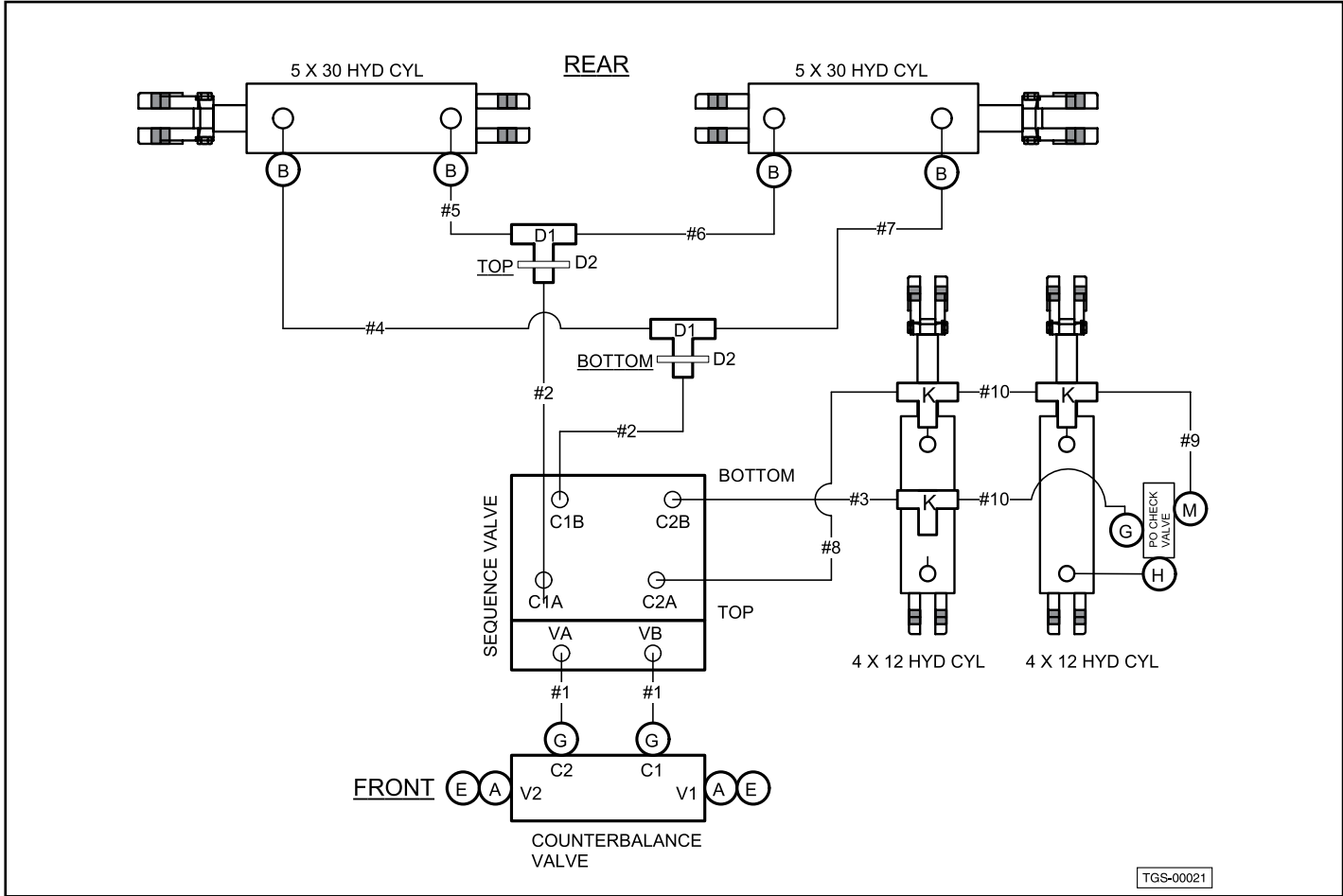
TGS-00020

Item	Part Number	Description	Qty
<b>Hydraulic Cylinders</b>			
	GHC-40120T	4" x 12" Tie Rod Cyl.	2
	GHC-50300T	5" x 30" Tie Rod Cyl.	2
<b>Fittings</b>			
A	FMBMJ9088	MB-MJ 90° 8-8 Elbow	2
B	FMBMJ90108	MB-MJ 90° 10-8 Elbow	4
E	FJC8	Plug	2
G	FMBMJ88C	MB-MJ 8-8 Adapter	9
H	FMBMB9088	MB-MB 90° 8-8 Elbow	1
K	FMJMJMBT08	MJ-MJ-MB-8 Tee	3
M	FMBMJ66C	MB-MJ 6-6 Straight Adapter	1

Item	Part Number	Description	Qty
<b>Hoses</b>			
#1	—	1/2" MB-1/2" FJX 12 1/2" LONG	2
#2	—	1/2" MB-1/2" FJX 19" LONG	2
#3	—	1/2" MB-1/2" FJX 30" LONG	1
#4	—	1/2" FJX-1/2" FJX 90° 38" LONG	1
#5	—	1/2" FJX-1/2" FJX 90° 34" LONG	1
#6	—	1/2" FJX-1/2" FJX 90° 57" LONG	1
#7	—	1/2" FJX-1/2" FJX 90° 88" LONG	1
#8	—	1/2" MB-1/2" FJX 17" LONG	1
#9	—	3/8" FJX-1/2" FJX 20" LONG	1
#10	—	1/2" FJX-1/2" FJX 19" LONG	2
<b>Valves</b>			
	—	OVER CENTER COUNTER BALANCE VALVE*	1
	V08CBBSUN	YAJ BODY "SUN"	1
	V08CBCARTR	CBEA LAN CARTRIDGE	2
	V08SEQVSUN	SEQUENCE VALVE	1
	VFLOWDIV03	STD. FLOW DIVIDER	2
	VCKCBXCN-ECJ	PO CHECK VALVE ASSEMBLY	1

\*Over Center Counter Balance Valve consists of YAJ body and two CBEA LAN cartridges.

**Folding Till An' Pak Hydraulic Diagram for 14' Square Main Frame with Two Cylinders**

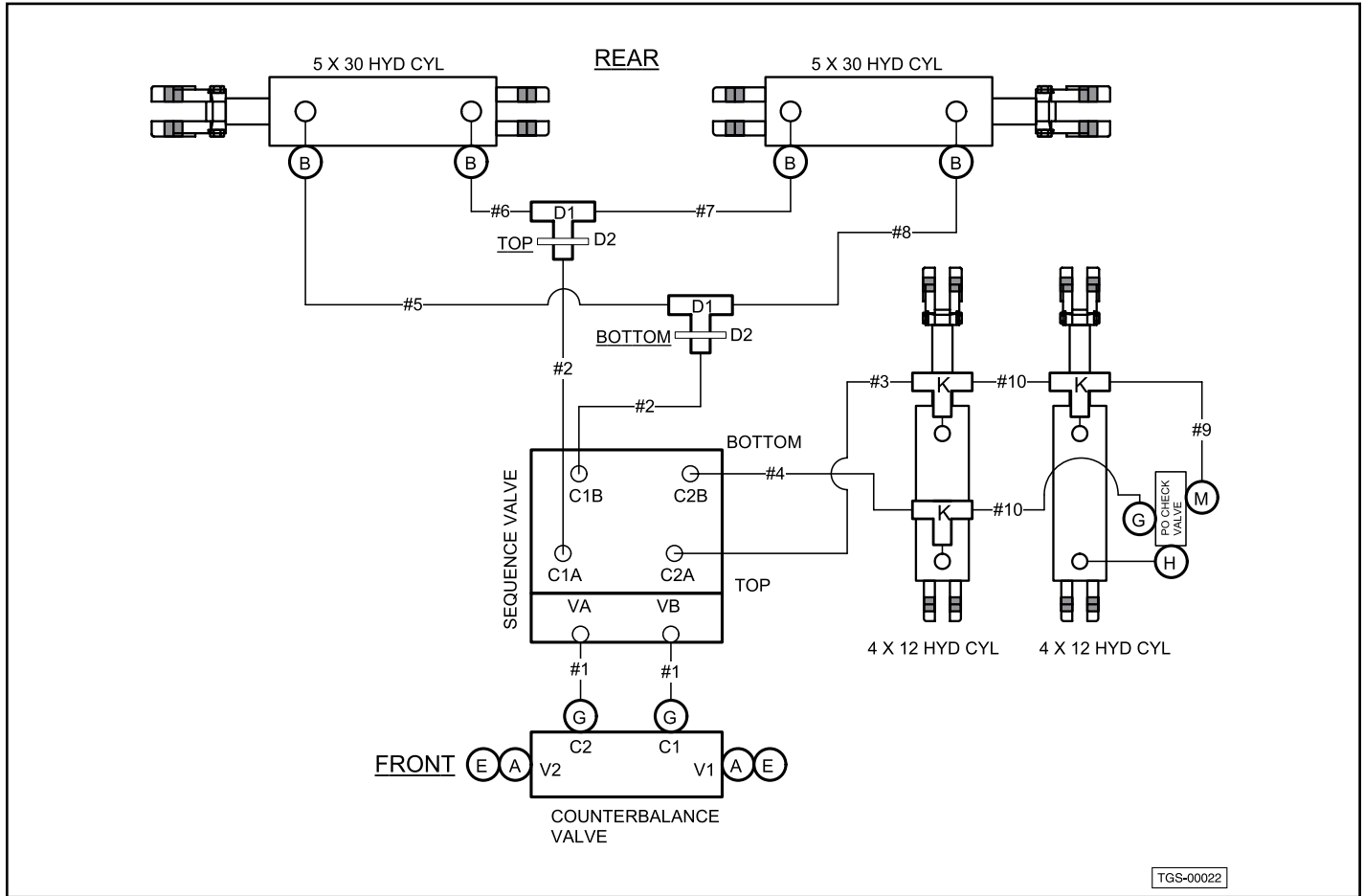


Item	Part Number	Description	Qty.
<b>Hydraulic Cylinders</b>			
	GHC-40120T	4" x 12" Tie Rod Cyl.	2
	GHC-50300T	5" x 30" Tie Rod Cyl.	2
<b>Fittings</b>			
A	FMBMJ9088	MB-MJ 90° 8-8 Elbow	2
B	FMBMJ90108	MB-MJ 90° 10-8 Elbow	4
D1	FMJHT8	MJ-MJ-MJ Bulkhead Tee	2
D2	FHN8	Bulkhead Lock Nut	2
E	FJC8	Plug	2
G	FMBMJ88C	MB-MJ 8-8 Straight Adapter	3
H	FMBMB9088	MB-MB 90° 8-8 Elbow	1
K	FMJMJMBT08	MJ-MJ-MB-8 Tee	3
M	FMBMJ66C	MB-MJ 6-6 Straight Adapter	1

Item	Part Number	Description	Qty.
<b>Hoses</b>			
#1	—	1/2" MB-1/2" FJX 12 1/2" LONG	2
#2	—	1/2" MB-1/2" FJX 19" LONG	2
#3	—	1/2" MB-1/2" FJX 30" LONG	1
#4	—	1/2" FJX-1/2" FJX 37" LONG	1
#5	—	1/2" FJX-1/2" FJX 27" LONG	1
#6	—	1/2" FJX-1/2" FJX 48" LONG	1
#7	—	1/2" FJX-1/2" FJX 82" LONG	1
#8	—	1/2" MB-1/2" FJX 17" LONG	1
#9	—	3/8" FJX-1/2" FJX 20" LONG	1
#10	—	1/2" FJX-1/2" FJX 19" LONG	2
<b>Valves</b>			
—	—	OVER CENTER COUNTER BALANCE VALVE*	1
	V08CBBSUN	YAJ BODY "SUN"	1
	V08CBCARTR	CBEA LAN CARTRIDGE	2
	V08SEQVSUN	SEQUENCE VALVE	1
	VCKCBXCN-ECJ	PO CHECK VALVE ASSEMBLY	1

\*Over Center Counter Balance Valve consists of YAJ body and two CBEA LAN cartridges.

**Folding Till An' Pak Hydraulic Diagram for 16' Square Main Frame with Two Cylinders**



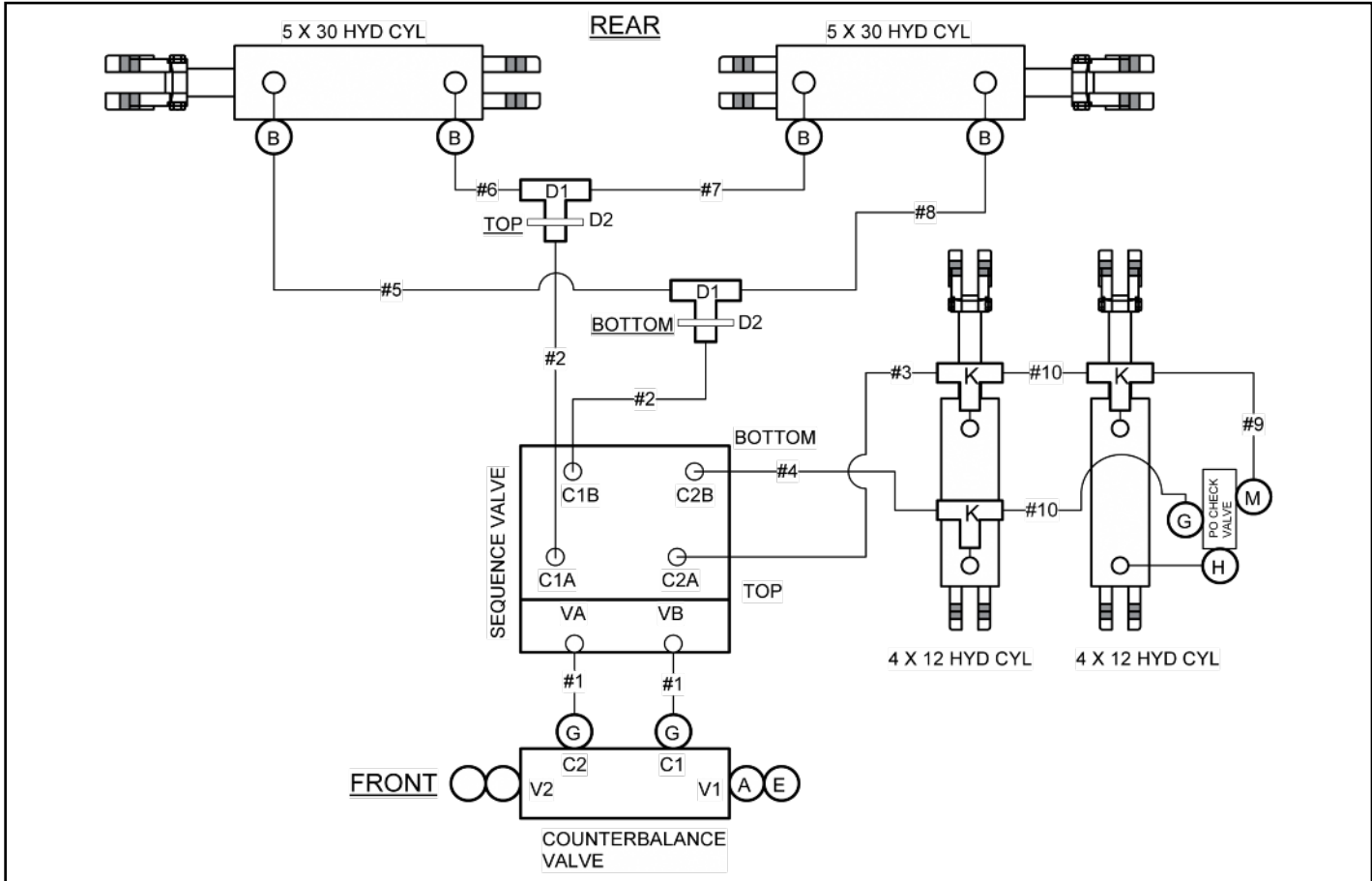
TGS-00022

Item	Part Number	Description	Qty.
<b>Hydraulic Cylinders</b>			
	GHC-40120T	4" x 12" Tie Rod Cyl.	2
	GHC-50300T	5" x 30" Tie Rod Cyl.	2
<b>Fittings</b>			
A	FMBMJ9088	MB-MJ 90° 8-8 Elbow	2
B	FMBMJ90108	MB-MJ 90° 10-8 Elbow	4
D1	FMJHT8	MJ-MJ-MJ Bulkhead Tee	2
D2	FHN8	Bulkhead Lock Nut	2
E	FJC8	Plug	2
G	FMBMJ88C	MB-MJ 8-8 Straight Adapter	3
H	FMBMB9088	MB-MB 90° 8-8 Elbow	1
K	FMJMJMBT08	MJ-MJ-MB-8 Tee	3
M	FMBMJ66C	MB-MJ 6-6 Straight Adapter	1

Item	Part Number	Description	Qty.
<b>Hoses</b>			
#1	—	1/2" MB-1/2" FJX 12 1/2" LONG	2
#2	—	1/2" MB-1/2" FJX 19" LONG	2
#3	—	1/2" MB-1/2" FJX 17" LONG	1
#4	—	1/2" MB-1/2" FJX 30" LONG	1
#5	—	1/2" FJX-1/2" FJX 90° 49" LONG	1
#6	—	1/2" FJX-1/2" FJX 90° 39" LONG	1
#7	—	1/2" FJX-1/2" FJX 90° 60" LONG	1
#8	—	1/2" FJX-1/2" FJX 90° 94" LONG	1
#9	—	3/8" FJX-1/2" FJX 20" LONG	1
#10	—	1/2" FJX-1/2" FJX 19" LONG	2
<b>Valves</b>			
	—	OVER CENTER COUNTER BALANCE VALVE*	1
	V08CBBSUN	YAJ BODY "SUN"	1
	V08CBCARTR	CBEA LAN CARTRIDGE	2
	V08SEQVSUN	SEQUENCE VALVE	1
	VCKCBXCN-ECJ	PO CHECK VALVE ASSEMBLY	1

\*Over Center Counter Balance Valve consists of YAJ body and two CBEA LAN cartridges.

**Folding Till An' Pak Hydraulic Diagram for 18' Square Main Frame**



Item	Part Number	Description	Qty
<b>Hydraulic Cylinders</b>			
	GHC-40120T	4" x 12" Tie Rod Cyl.	2
	GHC-50300T	5" x 30" Tie Rod Cyl.	2
<b>Fittings</b>			
A	FMBMJ9088	MB-MJ 90° 8-8 Elbow	2
B	FMBMJ90108	MB-MJ 90° 10-8 Elbow	4
D1	FMJHT8	MJ-MJ-MJ Bulkhead Tee	2
D2	FHN8	Bulkhead Lock Nut	2
E	FJC8	Plug	2
G	FMBMJ88C	MB-MJ 8-8 Straight Adapter	3
H	FMBMB9088	MB-MB 90° 8-8 Elbow	1
K	FMJMJMBT08	MJ-MJ-MB-8 Tee	3
M	FMBMJ66C	MB-MJ 6-6 Straight Adapter	1

Item	Part Number	Description	Qty.
<b>Hoses</b>			
#1	—	1/2" MB-1/2" FJX 12 1/2" LONG	2
#2	—	1/2" MB-1/2" FJX 19" LONG	2
#3	—	1/2" MB-1/2" FJX 17" LONG	1
#4	—	1/2" MB-1/2" FJX 30" LONG	1
#5	—	1/2" FJX-1/2" FJX 90° 61" LONG	1
#6	—	1/2" FJX-1/2" FJX 90° 51" LONG	1
#7	—	1/2" FJX-1/2" FJX 90° 72" LONG	1
#8	—	1/2" FJX-1/2" FJX 90° 106" LONG	1
#9	—	3/8" FJX-1/2" FJX 20" LONG	1
#10	—	1/2" FJX-1/2" FJX 19" LONG	2
<b>Valves</b>			
—		OVER CENTER COUNTER BALANCE VALVE*	1
	V08CBCSUN	YAJ BODY "SUN"	1
	V08CBCARTR	CBEA LAN CARTRIDGE	2
	V08SEQVSUN	SEQUENCE VALVE	1
	VFLOWDIV03	STD. FLOW DIVIDER	2
	VCKCBXCN-ECJ	PO CHECK VALVE ASSEMBLY	1

\*Over Center Counter Balance Valve consists of YAJ body and two CBEA LAN cartridges.



## LIMITED WARRANTY STATEMENT

### T.G. Schmeiser Co., Inc.

P.O. Box 1392 – Selma, CA 93662  
Phone (559) 268-8128 Fax (559) 268-3279

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

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

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

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

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

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

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

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

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

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

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



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Selma, CA 93662  
(559) 268-8128  
WEB: [www.TGSchmeiser.com](http://www.TGSchmeiser.com)**

