

# 532-16 & 672-20 MANURE SPREADER TRUCK UNIT



### OPERATION AND PARTS MANUAL ROTO-MIX LLC 2205 E. Wyatt Earp PO Box 1724 Dodge City, Kansas 67801 (620) 225-1142 ©Roto-Mix 2006

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### INTRODUCTION

Congratulations on the purchase of your new spreader from Roto-Mix. With proper operation and preventative maintenance it will last for years.

This SAFETY ALERT SYMBOL indicates important safety messages in the manual. When you see this symbol, be alert to the possibility of PER-SONAL INJURY and carefully read the message that follows.

**WARNING** NEVER OPERATE WITHOUT ALL COVERS, SHIELDS AND GUARDS IN PLACE. KEEP HANDS, FEET AND CLOTHING AWAY FROM MOVING PARTS.

Some covers and guards have been removed for illustrative/photographic purposes only in this manual. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use. The Guarantee appears in the front of this book along with the Registration and Inspection Certificate.

For information on ordering repair parts, refer to the Repair Parts section at the back of this book.

The serial number plate is located on the drivers side lower front of the main frame. This number should be recorded on the Registration and Inspection Certificate for your reference and for proper identification of your spreader by Roto-Mix.

You are urged to study this manual and follow the instructions carefully. Your efforts will be repaid in better

operation and service as well as a savings in time and

repair expense. Failure to read and understand the machine or the system could lead to serious injury. If you

do not understand the instructions in this manual contact

either your dealer or Roto-Mix at Dodge City, Kansas 67801.

This supersedes all previous published instructions.



### Limited Warranty Statement

ROTO-MIX LLC warrants to the original purchaser all products manufactured by it to be free from defects in material and workmanship under normal use and service

ROTO-MIX's obligation under this warranty is limited to repairing or replacing, as the company may elect, free of charge and without charge for installation, at the place of business of a dealer or distributor authorized to handle the equipment covered by this warranty or at a ROTO-MIX facility, any parts that prove, in the company's judgment, to be defective in material or workmanship within one (1) year after delivery to the original purchaser, and still owned by the original purchaser. This warranty shall in no way make ROTO-MIX liable to anyone for personal injuries or damages, loss of time, or expense of any kind either direct or indirect resulting from part failure or defect. This warranty is subject to acts of God, fire and existing conditions of supply and demand, or production, or ability or inability to deliver, or for any other valid reason beyond the reasonable control of ROTO-MIX, to obtain materials, manufactured replacement parts, or make delivery thereof. No distributor, dealer, agent, or ROTO-MIX employee (other than the CEO or President in writing) is authorized to extend any other or further express or implied warranty or incur any additional obligation on ROTO-MIX's behalf in connection with the sale of this product.

If ROTO-MIX, or its duly authorized representative, shall find that such returned part or parts are defective and such defects, or defect, are included in and covered by said warranty, then such defective part or parts shall promptly be replaced without charge to the purchaser, F.O.B. the ROTO-MIX plant.

Product Registration - It is a condition of this warranty that the original purchaser must fill out the warranty card furnished by ROTO-MIX and that it be returned to ROTO-MIX within 10 days of purchase and be recorded in ROTO-MIX's owner file for this warranty to be valid. In the event an owner's card is not on file at the ROTO-MIX office, the warranty period will extend only from date equipment was picked up or shipped from the ROTO-MIX plant.

Maintenance - It is the customer's responsibility to maintain their equipment in accordance with the instructions provided in the Operator's Manual. ROTO-MIX recommends that you keep records and receipts; you may be asked to prove that maintenance instructions have been followed.

Operation – It is the customer's responsibility to operate the equipment only for the purpose for which it was designed and in accordance with all safety and operational recommendations contained in the Operators Manual. If a defect in materials or workmanship occurs, it is the customer's responsibility to cease operating the equipment until authorized repairs are made. Damage, which occurs from continued operation, may not be covered by this warranty.

#### What this Warranty Covers

This warranty covers failures caused by defects in materials or workmanship only.

#### This Warranty does not cover failures caused by:

Improper operation

Unauthorized repairs

- Natural calamities
- Unauthorized modifications
- Use of Non ROTO-MIX parts Neglected maintenance

#### This Warranty does not cover replacement of Wear or Maintenance Items including, but not limited to.

- lubricants
- Filters
- Hoses

- Chains Idlers

Augers

Wipers

- The use of PTO Shaft Adaptors
- · Usage contrary to the intended purpose of the product
- Batteries
- Blades
- · Belts

Tires

#### This Warranty does not cover:

- Pickup and delivery of the equipment
- Service Calls or Travel Time to and from sites
- Rental of replacement equipment during repair period
- Products that have been declared a total loss and subsequently salvaged
- Overtime labor charges
- ROTO-MIX is not responsible and will not be liable for damage caused to persons or property, commercial loss, loss of time or production, loss of use by reason of the installation or use of ROTO-MIX products or their mechanical failure.

#### **Right to Make Changes**

ROTO-MIX reserves the right to make any changes to a ROTO-MIX product at any time without incurring any obligation with respect to any product previously ordered, sold or shipped, with or without notice.

#### **Parts Warranty**

ROTO-MIX warranties replacement parts against defects in materials or workmanship for a period of 90 days or the remainder of the product warranty, whichever is longer. Remedy for defective replacement parts for units that are beyond the original product warranty, will be limited to replacement of the failed part. Failures that are due to damage, improper installation, lack of maintenance or improper operation will not be covered.

#### ROTO-MIX 2205 East Wyatt Earp Blvd., Dodge City, KS 67801 (620) 225-1142 Fax: (620) 225-6370

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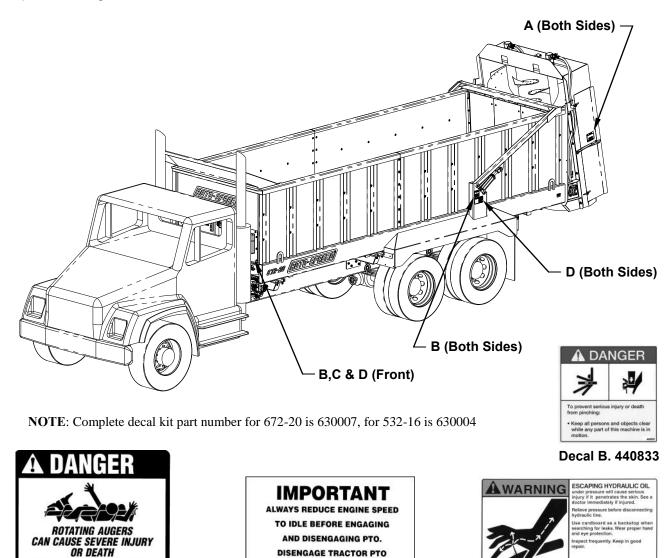
### **SAFETY - SPREADER**

A brief definition of signal words that may be used in this manual:

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

**WARNING** Indicates a potentially hazardous situation that, if not avoided could result in death or serious injury, and includes hazards that are exposed when guards are removed.

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



Decal A. 440827

TURN OFF POWER AND LOCK OUT BEFORE SERVICING OR INSPECTING

Decal C. 440801

**BEFORE TURNING.** 

Decal D. 441657

FAILURE TO HEED WILL CAUSE SERIOUS INJURY

**CAUTION** READ ALL SIGNS ON THE MACHINE AND IN THIS MANUAL. REPLACE ANY LOST OR DAMAGED SIGN BY ORDERING THE PART NUMBERS SHOWN ON THE SAFETY DECAL PAGE.

### SPREADER SAFETY

#### A CAUTION

Do not operate your spreader until you have read this Owner's Manual, and understand the danger associated with its operation.

This spreader is comprised of rotating drive shafts and rotating beaters. Any exposure to these spreader components can result in serious personal injury or death.

Study the safety decal page and understand where the danger points are.

#### A CAUTION

#### THERE ARE INHERENT HAZARDS ASSOCIATED WITH THE OPERATION OF YOUR SPREADER.

#### FOR YOUR SAFETY:

- Do Not Operate, Service, Inspect Or Otherwise Handle This Equipment Unless You Have Read The
- Owner's Manual And Have Been Properly Trained In Its Intended Usage.
- Do Not Attempt To Operate This Equipment Under The Influence Of Drugs Or Alcohol.
- Do Not Allow Personnel Other Than The Qualified Operator Near The Machine.
- Require All Personnel Who Will Operate This Machinery Or Perform Service, To Read And Understand The Safe Operating Practices And Safety Precautions In This Manual.
- Do Not Operate Until All Shields, Covers And Guards Are In Place.
- Do Not Allow Children Or Inexperienced Persons To Operate This Machine.
- Keep Hands, Feet And Clothing Away From Power Take-Off Shaft.
- Loose Or Floppy Clothing Should Not Be Worn By The Operator. Wear Close Fitting Clothing.
- Stop The Engine And Be Sure PTO Drive line Is Stopped Before Making Adjustments, Connections, Or
- Cleaning Out PTO Driven Equipment.
- Do Not Climb On Or Enter Machine While In Operation.
- Do Not Allow Riders On The Spreader.
- Rotating Parts Can Crush Or Dismember Causing Personal Injury Or Death.
- Rotating Parts Can Entangle Or Strike People, Resulting In Personal Injury Or Death.
- Operate The Spreader From The Operator's Seat Only.
- Clear The Area Before Equipment Start Up.
- Do Not Go Near The Spreader Beaters While Machine Is Operating.

#### FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

- Stay Clear Of Rotating Drive lines.
- Entanglement In Rotating Drive line Can Cause Serious Injury Or Death.
- Do Not Exceed Load Capacity Of The Spreader (See Specifications).
- Do Not Operate On Steep Slopes As Overturn May Result. Operate Up And Down (Not Across) Intermediate Slopes. Avoid Sudden Starts And Stops. Pick The Most Level Possible Route When Transporting Across Fields. Avoid The Edges Of Ditches Or Gullies And Steep Hillsides.
- Use Caution When Traveling Over Uneven Terrain And When Approaching Stops.
- Avoid Overhead Wires Or Other Obstacles. Contact With Overhead Lines Could Cause Serious Injury or Death.
- As A Precaution, Always Recheck The Hardware On Spreader Following Every 100 Hours Of Operation. Correct All Problems. Follow The Maintenance Safety Procedures.

#### 

# THERE ARE ADDITIONAL HAZARDS ASSOCIATED WITH THE SERVICE AND MAINTENANCE OF YOUR SPREADER.

FOR YOUR SAFETY:

- Always Wear Eye Protection When Servicing Spreader.
- Disengage Power Take-Off And Remove Keys From Truck Before Servicing Spreader.
- Do Not Attempt To Clean, Oil Or Adjust Spreader While It Is In Motion.
- Stop The Engine And Be Sure Spreader Is Stopped Before Making Adjustments, Connections, Or Cleaning Out Equipment.
- Make Sure There Is Plenty Of Ventilation. Never Operate The Engine Of The Vehicle In A Closed Building. The Exhaust Fumes May Cause Asphyxiation.
- Before Working On The Spreader, Stop The Vehicle, Set The Brakes, Disengage The PTO And All Power Drives, Shut Off The Engine And Remove The Ignition Keys.
- Inspect When First Delivered And Regularly Thereafter; That All Connections And Bolts Are Tight And Secure Before Operating.
- Retighten All Wheel Bolts After The First Hour Of Operation. Check Periodically Thereafter.
- Maintain Proper Tire Air Pressure At All Times.
- Be Certain All Moving Parts On Attachments Have Come To A Complete Stop Before Attempting To Perform Maintenance.
- Before Entering Mixing Chamber Or Servicing Spreader, Disconnect Main Power Source And Lock The Disconnect Device In Off Position To Prevent Accidental Start-Up.

#### FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

- Do Not Work Under A Spreader Without Supporting With Suitable Support Stands. Always Use A Safety Support And Block The Wheels. Never Use A Jack To Support The Machine.
- Do Not Work Under A Spreader Without Blocking The Wheels To Prevent Rolling.
- A Fire Extinguisher And First Aid Kit Should Be Kept Readily Accessible While Performing Maintenance On This Spreader.
- Escaping Hydraulic Fluid Under Pressure Can Penetrate The Skin Causing Serious Injury Or Death.
- Avoid Hydraulic Hazard By Relieving Hydraulic Pressure Before Disconnecting Hydraulic Or Other Lines.
- Tighten All Connections Before Applying Pressure.
- Search For Hydraulic Leaks With A Piece Of Cardboard. Protect Hands And Body From High Pressure Fluids. Never Use Your Hands To Locate Hydraulic Leaks On Attachments.
- Replace All Shields And Guards After Servicing And Before Moving.
- Never Replace Hex Bolts With Less Than Grade Five (5)Bolts Unless Otherwise Specified.

#### **REMEMBER:**

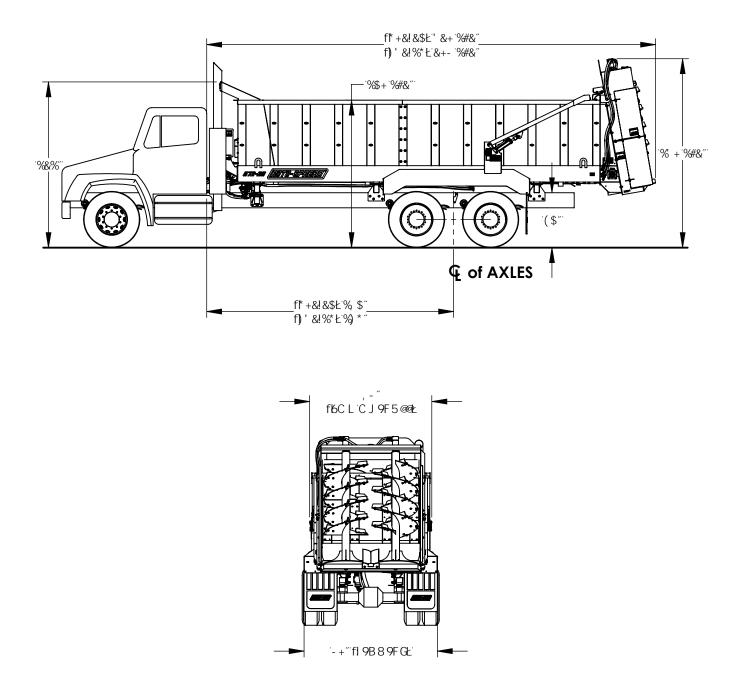
Your best assurance against accidents is a careful and responsible operator. If there is any portion of this manual or function you do not understand, contact your dealer or the ROTO-MIX plant.

#### Safety Decal Care

- 1. Keep safety decals and signs clean and legible at all times.
- 2. Replace safety decals and signs that are missing or have become illegible.
- 3. Replaced parts that displayed a safety sign should also display the current sign.
- 4. Safety decals or signs are available from your dealer or the ROTO-MIX manufacturing plant.
- 5. How to Install Safety Decals:
  - A. Be sure that the installation area is clean and dry.
  - B. Decide on the exact position before you remove the backing paper.
  - C. Remove the smallest portion of the split backing paper.
  - D. Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.
  - E. Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.
  - F. Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.

#### FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

### 532-16 & 672-20 TRUCK DIMENSIONAL DATA



ALL DIMENSIONS ARE APPROXIMATE AND SUBJECT TO CHANGE WITHOUT NOTICE. VERTICAL DIMENSIONS ARE BASED ON A 40" TRUCK FRAME HEIGHT.

### **SPECIFICATIONS**

Roto-Spread	532-16 Truck	672-20 Truck
Capacity (Heaped)	532 Cubic Foot	672 Cubic Foot
Struck Level	385 Cubic Foot 2,880 Gallon	480 Cubic Foot 3,450 Gallon
Spreader Weight (Empty)	10,830 Lbs	12,187 Lbs
Load Capacity (Net)	34,000 Lbs	43,000 Lbs
Inside Dimensions	48" High, 71.5" High, 192" Long	48" High, 71.5" Wide, 240" Long
Outside Dimensions	96.5" Fender Width	96.5" Fender Width
Overall Length	274"	322"
Overall Height (Gate Low- ered)	137" (Based on 40" truck frame)	137" (Based on 40" truck frame)
Overall Height (Gate Raised)	157" (Based on 40" truck frame)	157" (Based on 40" truck frame)
Unload Speed/Time	Variable	Variable
Discharge Height	48"	48"
Spread Coverage	12' to 30'	12' to 30'
Recommended HP	300 (Minimum) Truck	375 (Minimum) Truck
Beater Drive	PTO Driven Triple Gear Pump Driving 2 High Torque Motors	PTO Driven Triple Gear Pump Driving 2 High Torque Motors
Belt Drive/Rear Gate	Uses truck PTO Hydraulics. Belt Drive Speed Regulated by an Ad- justable Flow Control Valve.	Uses truck PTO Hydraulics. Belt Drive Speed Regulated by an Ad- justable Flow Control Valve.
Beaters	Two 35" Diameter High Speed Vertical Beaters with Spinners, and Double Flighting 300 RPM @ 2000 PTO RPM	Two 35" Diameter High Speed Vertical Beaters with Spinners, and Double Flighting 300 RPM @ 2000 PTO RPM
Belt Material & Chain	5/16" 350 PSI PVC Belt & C102.5 Combination Chain for Belt and Retention Gate Drive System	5/16" 350 PSI PVC Belt & C102.5 Combination Chain for Belt and Retention Gate Drive System
Floor, Gate & Side Walls	High Density Polyethylene on Floor, Side Walls and End Gate	High Density Polyethylene on Floor, Side Walls and End Gate

#### PRINCIPLE OF OPERATION

Two vertical spinning beaters at the rear of the spreader expel manure in a uniform spread pattern. Each beater is driven by a hydraulic motor. A PTO driven hydraulic power supply on the spreader provides power to the beaters. The hydraulic pump is two stage thereby supplying independent power to each beater motor.

A wide heavy duty belt covers the box floor. At the front of the spreader, this belt is attached to a sliding gate. At the rear, this belt goes around a winged idler pulley and on the lower side is connected to a drive chain. At the front of the spreader, this chain is driven by a hydraulic motor driving a planetary gear box and sprocket that is powered by the tractor hydraulic system. See figure 1. Driving the belt toward the rear of the spreader pulls the sliding gate rearward to move the load toward the beaters. A manually adjustable flow control in the drive chain motor circuit regulates the speed the gate moves.

An end gate at the rear of the spreader is raised and lowered by two hydraulic cylinders, powered by the tractor hydraulic system. See figure 5. This gate must be lowered during loading to prevent packing of the material into the beaters and to help prevent leakage during transport.

#### PRE OPERATION CHECKLIST

- 1. Carefully study and understand this manual.
- 2. Do not wear loose-fitting clothing, which may catch in moving parts.
- 3. Always wear protective clothing and substantial shoes.
- 4. Keep wheel lug nuts or bolts tightened to specified torque.
- 5. Give the unit a visual inspection for any loose bolts, worn parts or cracked welds, and make necessary repairs. Follow the maintenance safety instructions included in this manual.
- 6. Check to see that no obstructions are present in the spreader prior to start up.
- 7. Be sure that there are no tools lying on or in the spreader.
- 8. Do not use the unit until you are sure that the area is clear, especially children and animals.
- 9. The ball valve in the suction line must be open prior to engaging PTO (handle parallel with valve housing).
- 10. Because it is possible that this spreader may be used in dry areas or the presence of combustibles, special precautions should be taken to prevent fires and fire fighting equipment should be readily available.
- 11. Don't hurry the learning process or take the unit for granted. Ease into it and become familiar with your new spreader.
- 12. Practice operation of your spreader and its attachments. Completely familiarize yourself and other operators with its operation before using.
- 13. Do not allow anyone to ride on the inside or the outside of the spreader unit at any time.

#### HIGHWAY AND TRANSPORT OPERATION

- 1. Adopt safe driving practices.
- 2. 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.
- 3. Reduce speed prior to turns to avoid the risk of overturning.

- 4. Avoid sudden uphill turns on steep slopes.
- 5. Do not drink and drive.
- 6. Comply with state and local laws governing highway safety.
- 7. Plan your route to avoid heavy traffic.
- 8. Be a safe courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
- 9. Be observant of bridge loading ratings. Do not cross bridges rated lower than the gross weight at which you are operating.
- 10. Watch for obstructions overhead and to the side while transporting.
- 11. Make allowances for increased length and weight of the spreader when making turns, stopping the unit, etc.

### **OPERATION**

#### LOADING

Park the spreader for loading. Put the truck in PARK or NEUTRAL and apply the parking brake.

Make sure the sliding front gate is all the way to the front of the spreader and close the hydraulic rear gate before loading.

It is unlawful to allow any manure spillage to occur on public roadways. Be sure rear gate is fully closed and sliding gate scrapers are adjusted so no liquid leakage occurs. Do not heap load such that manure is allowed to fall off spreader during transporting on roadways.

Load the spreader. The moisture content will determine how full it can be loaded. See SPECIFICATIONS for capacity. Solid manure can generally be loaded level to slightly heaped. High moisture slurries are heavier and loading may be limited.

#### UNLOADING

- 1. Press beater switch to "ON" (WHENEVER THE BEATER IS USED ALWAYS PLACE SWITCH IN THE ON POSITION BEFORE ENGAGING THE PTO).
- 2. Press "ON" button.
- 3. Engage PTO.
- 4. Press rear gate switch "UP" to raise gate completely.
- 5. When gate is completely raised return rear gate switch to center.
- 6. Press belt switch "BACK" to start floor.
- 7. Adjust belt speed "DIAL" for desired floor speed.
- 8. Select correct gear to maintain engine RPM to 1500-2100 and give the desired rate of application to the field. (A combination of gear selections and "DIAL" settings will fine tune the rate of application).
- 9. Start forward motion of truck when "SPREAD" light comes on.
- 10. When "SPREAD" light goes out the load is emptied.

- 11. Press belt switch "FORWARD" to return floor to the front.
- 12. When floor and front gate are at the front of the spreader return the belt switch to the center position.
- 13. Press the rear gate switch to "DOWN" to lower gate to the closed position.
- 14. Return the rear gate switch to center when rear gate is completely closed.
- 15. Press beater switch to "OFF".
- 16. This completes the cycle of off loading the material.

The "wings" may be adjusted to change the width of the spread pattern. Normally a "mid position" setting is a good place to start. (Note "wings" may be removed of desired for close quarter operation in pens".

If unloading semi-liquid material the rear gate may be raised in incremental amounts to control the rate of discharge.

#### <u>NOTE!</u> BEFORE MOVING THE FRONT GATE, THE REAR GATE MUST BE RAISED COMPLETELY TO PREVENT DAMAGE TO THE FRONT GATE.

Unit is equipped with a beater stall warning horn. The intensity of the horn can be adjusted by turning a "muffler" on the face of the horn. Intermittent sounding of the horn during operation is normal. If the horn sounds continuously the belt speed dial should be reset to a lower number.

Vary belt speed with the consistency of the material being spread. A lower setting might be desired for sticky or frozen material. A higher setting for dry and light material.

#### Spread Pattern

The spread pattern is affected by the speed of the rotating beaters. The two beater hydraulic motors are powered independently by a two stage hydraulic pump on the spreader. This pump is powered by the truck PTO. The spreader is de-signed to give a uniform spread pattern when the truck engine is operated at 1500—2100 RPM for typical materials. Adjustment of the beater speed and spread pattern is regulated by the engine speed.

### STORAGE AND CLEANING

**WARNING** TURN OFF ALL POWER DURING CLEANING AND INSPECTION. DO NOT USE POWER TO MOVE ANY COMPONENTS OR TO DISCHARGE MATERIAL WHILE CLEANING OR INSPECTING.

DISCONNECT PTO DRIVE SHAFT AND HYDRAULIC HOSES BEFORE CLEANING, ADJUSTING, LUBRICATING, OR SERVICING THIS MACHINE.

- 1. The spreader must be thoroughly cleaned for extended storage. Manure is acidic and will damage paint and cause rusting of metal components.
- 2. Allow the spreader to completely unload.
- 3. Return the sliding gate to the front of the spreader.
- 4. To clean the spreader, raise the rear gate.
- 5. Hose off manure from the outside and inside of the spreader. Completely clean manure from moving mechanisms such as the beaters, winged pulley, sliding gate, chain drive and rear gate. Remove

accumulation in confined areas or pockets that trap manure.

- 6. Avoid directing high pressure spray directly on bearings, seals and flow control valve.
- 7. Keep high pressure spray moving on painted surfaces. Sustained spray on cracks or scratches in paint can result in paint peeling.
- 8. Allow machine to dry.
- 9. Lower rear gate completely down before storing spreader.
- 10. Inspect the spreader for loose connections, damaged hydraulic hoses or connections and for other damaged components. Repair if necessary so the spreader is ready for future operation.

### MAINTENANCE

WARNING PUT THE TRACTOR IN PARK, AP-PLY THE PARKING BRAKE, TURN OFF ENGINE AND REMOVE IGNITION KEY BEFORE CLEANING, AD-JUSTING, LUBRICATING OR SERVICING THIS

#### READ THE FOLLOWING BEFORE WELDING ON THIS MACHINE

- 1. When welding on your spreader, do not allow the current to flow through the ball bearings or the roller chains. Ground directly to the item being welded.
- 2. The alternator on the truck should always be disconnected if the spreader is not disconnected from the towing vehicle.

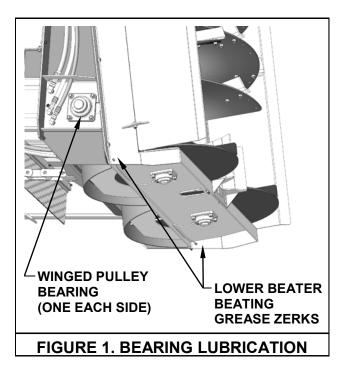
#### LUBRICATION

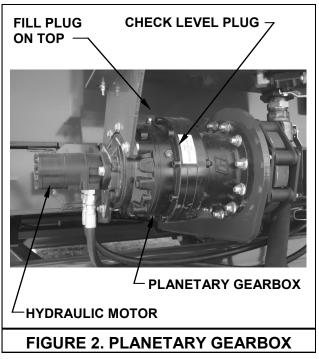
#### Bearings

MACHINE.

(See figure 1)

Grease 2 lower beater bearings and 2 wing pulley bearings every 100 hours of operation with 2 pumps of grease.





#### Planetary Gearbox

(See figure 2)

Oil Specification: Mobil Delvac Synthetic Gear Oil 75W-90

. There is a check plug half way up on the gearbox. Maintain the oil level to this check plug. Fill plug is

#### HYDRAULIC SYSTEM

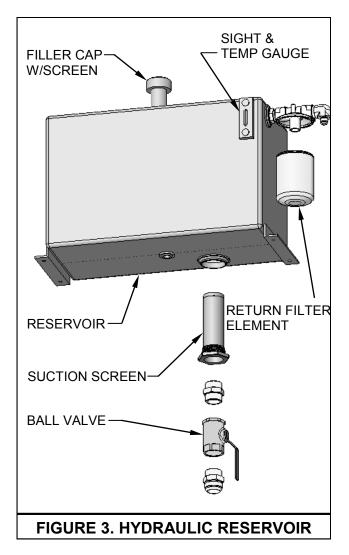
(See figure 3)

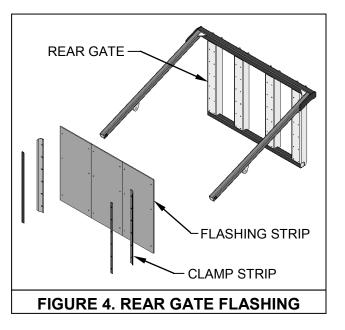
- 1. Oil Specification: CITGO Transgard Tractor Hydraulic Fluid - Material Code 633310001.
- 2. Capacity: 40 gallon.
- 3. Maximum allowable operating temperature 240°F.
- 4. Check the oil level in the reservoir daily. It should be maintained 1" from the top level on the sight gauge.
- 5. Oil is added through a filter screen inside the filler neck. Before filling, remove the screen, inspect and clean if required.
- 6. Carefully clean dirt from the return filter head and element. Replace the filter element every 500 hrs of operation.
- Drain reservoir and refill with new oil every 2000 hrs or annually, whichever occurs first. If the oil becomes contaminated and appears milky colored, replace immediately.
- 8. Every 100 hrs of operation, inspect all hydraulic hoses, hose connections, pump seals and motor seals for leakage. Tighten loose connections and replace damaged components.
- 9. A ball valve is provided at the bottom of the reservoir where the suction hose is connected. Turn this valve off to service hydraulic components. This prevents draining of the reservoir, however it is necessary to catch the oil that drains from disconnected hoses into a suitable container for proper disposal. Always check and refill the reservoir as required when servicing is completed.

#### **Rear Gate Flashing**

(See figure 4)

- 1. Swinging gate flashing strips are clamped to both vertical ends of the rear gate frame. These strips must bear against the vertical box sides to minimize leakage.
- 2. To adjust, loosen the six 3/8" carriage bolts clamping the flashing.
- 3. Move the flashing strips so they contact against the box wall and retighten bolts.

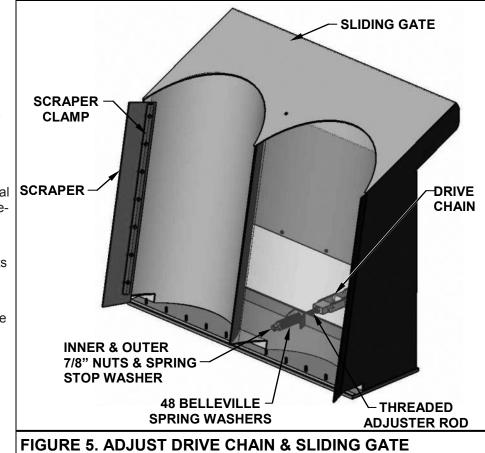




#### ADJUSTMENTS

# Sliding Gate Scrapers (See figure 5)

- 1. A high density polyethylene scraper bar is clamped to the vertical edges of the sliding gate. These scrapers must contact the vertical box walls to clean material.
- 2. To adjust, loosen the seven 3/8 carriage bolts clamping the scraper.
- Move the scrapers so they contact against the box wall and retighten bolts.

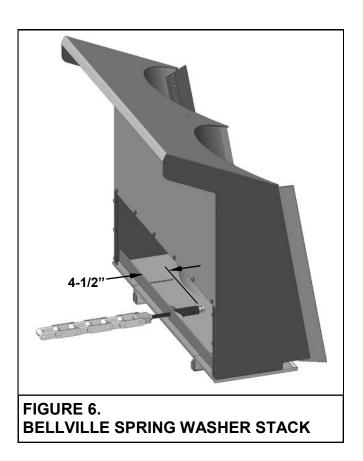


#### **Drive Chain Slack**

(See figure 6)

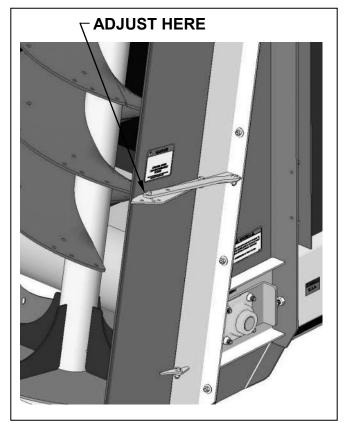
- 1. To adjust the floor drive chain, run the sliding gate all the way to the rear of the spreader until it stops.
- 2. Remove the front panel of the sliding gate.
- 3. A threaded adjuster rod is provided where the drive chain attaches to the sliding gate. It is factory preset, but may require adjustment with usage.
- Loosen the two 7/8" hex nuts on the end of the threaded rod. Tighten the inner nut until the forty eight Belleville washers are almost fully compressed (approximately 4-1/2"). Tighten the outer nut against the inner to lock the adjustment.
- 5. Replace the front panel.

NOTE: The Belleville washers are assembled in "tail to tail" pairs and stacked per figure 11.



# Adjust Spread Pattern (See figure 7)

The spread pans at the rear of the spreader can be set for wide spreading or they can be hinged inward to spread straight behind the spreader.



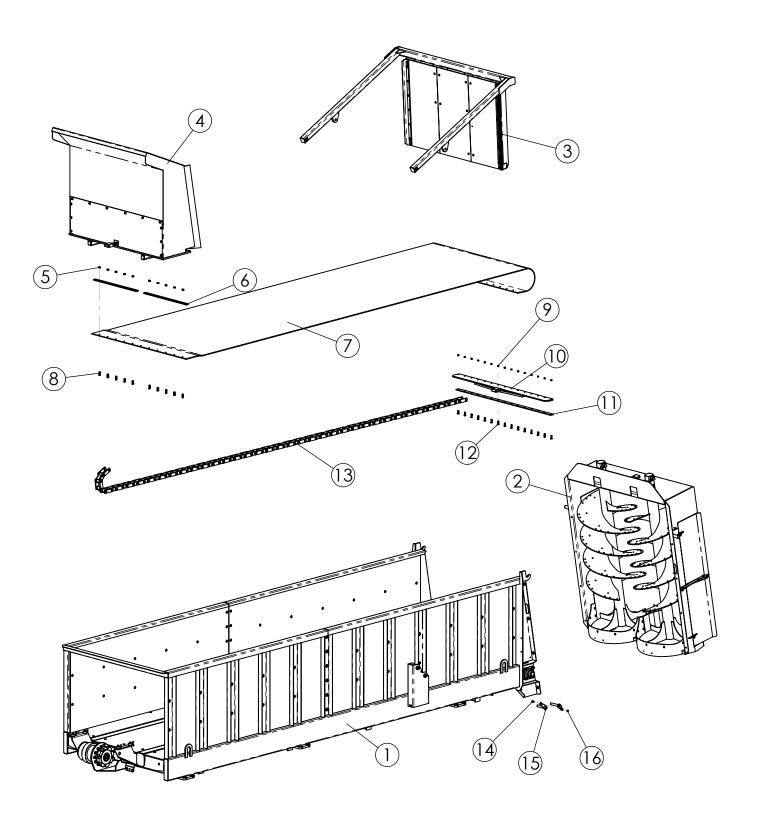
**FIGURE 7. ADJUST SPREAD PATTERN** 

### **REPAIR PARTS**

### 532-16 & 672-20

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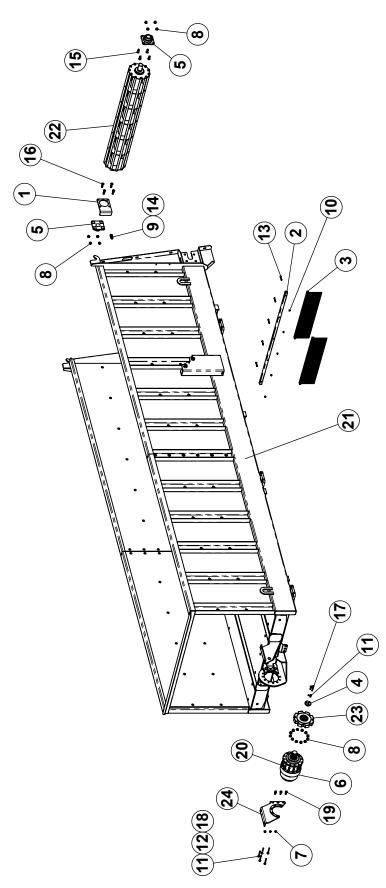
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Spreader Hydraulic Parts	30-35
Spreader Hydraulic Control Block	
Spreader Electrical Parts	
Truck Mount Kit Without Scales	
Truck Mount Kit With Scales	
Control Box & Armrest Assembly	40
Decals	
Truck Fenders	42



# 532-16/672-20 TRUCK SPREADER ASSEMBLY

ITEM #	PART NO.	DESCRIPTION	QTY.
1	730110	672-20 SPREADER BOX ASSY (TRUCK)	1
	730109	532-16 SPREADER BOX ASSY (TRUCK)	1
2	730131	532/672 EXT BEATER ASSY, FULL FLIGHT	1
3	730106	REAR GATE ASSY	1
4	730134	532/672 SLIDING GATE ASSY	1
5	401207	HEX NYLOC NUT #5 Pltd 7/16" -20	10
6	130480	BELT CLAMP	2
7	351035	672-20 BELT, 5/16" x 71" x 281 1/2" LONG	1
	351033	532-16 BELT, 5-16" x 71" x 235' LONG	1
8	407730	STUD BOLT, RIBBED NECK 7/16-20 UNF x 1 3/4"	10
9	401106	3/8" - 16 HEX NYLOC NUT #5 PLTD	15
10	830239	CHAIN / BELT ADAPTER W/A	1
11	130445	PLATE BELT CLAMP	1
12	407043	CHCS #5 Pltd. 3/8"-16 x 1 3/4"	15
13	322560	COMBINATION CHAIN (672-20 SPREADER)	24 FT
	322560	COMBINATION CHAIN (532-16 SPREADER)	20 FT
14	407901	3/8"-16 X 1" HHCS SERRATED #5 PLTD	2
15	830235	802 PIVOT PIN W/A	2
16	400107	HEX NUT, SERRATED FLANGE #5 PLTD - 3/8-16	2

### 532-16/672-20 TRUCK SPREADER BOX ASSEMBLY

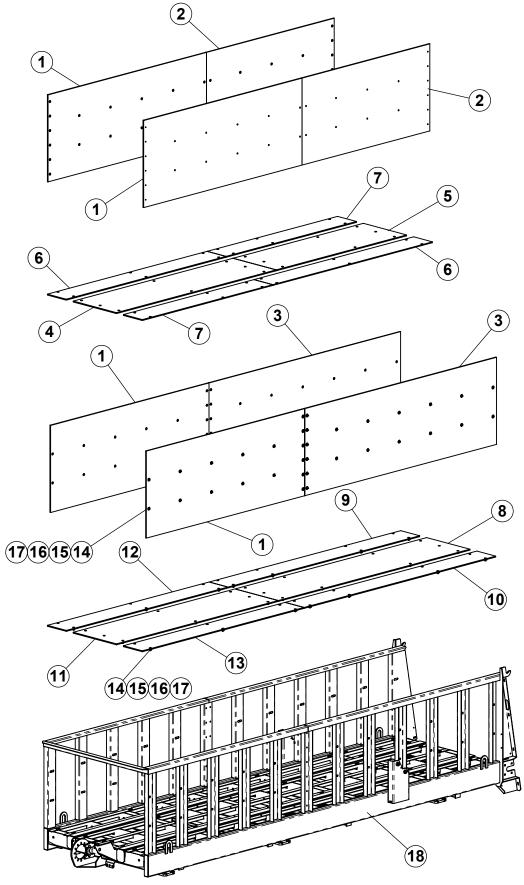


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		: ;
130316	BRACKET, BELT ADJUSTER	-
130446	BROOM CLAMP	-
130837	BROOM, 8" BRISTLES x 36" LG	2
332676	RETAINER,	~
 340436	FAFNIR 2 3/16" BEARING	2
 344136	GEAR BOX, 25.98:1 REDUCTION	~
 400114	HEX NUT, SERRATED FLANGE #5 Pltd., 1/2"-13	ო
 400115	HEX NUT, SERRATED FLANGE #5 PLTD 5/8"-11	20
 400912	HEX C LOCNUT 5 PLTD 3/4" - 10	-
 401106	HEX NYLOC NUT #5 Pltd 3/8" -16	S
 402006	3/8" MED PLTD SPRING LOCK WASHER	ω
 402406	FLAT WASHER, 3/8" ID x 1" OD	5
 405659	HHCS #5 PLTD., 3/8-16 x 2-1/2 LG.	വ
 405780	3/4"-10 x 2-1/4" HHCS #5 PLTD	~
 407121	CARRIAGE BOLT, 5/8" -11 x 2", #5 PLTD	4
 407122	CHCS #5 Pltd., 5/8" -11 x 2-1/2" LG.	4
 407810	HHCS 8.8 - 10MM × 50MM	ო
 407820	HHCS METRIC 10mm-1.5 x 100mm	5
 407913	HHCS, SERRATED #5 Pltd. 1/2"-13 x 1 1/2"	ო
 407924	HHCS, SERRATED #5 Pltd., 5/8-11 x 2 1/2 LG	12
 830209	SPREADER BOX W/A (672-20)	~
 830300	SPREADER BOX W/A (532-16)	~
 830220	WING PULLEY 72" W.A.	~
830224	SPROCKET W/A, SPREADER	~
 830320	GEARBOX / TANK MOUNT W/A	-

532-16/672-20 TRUCK SPREADER BOX ASSEMBLY

532-16/672-20 TRUCK SPREADER BOX, SIDES & FLOOR

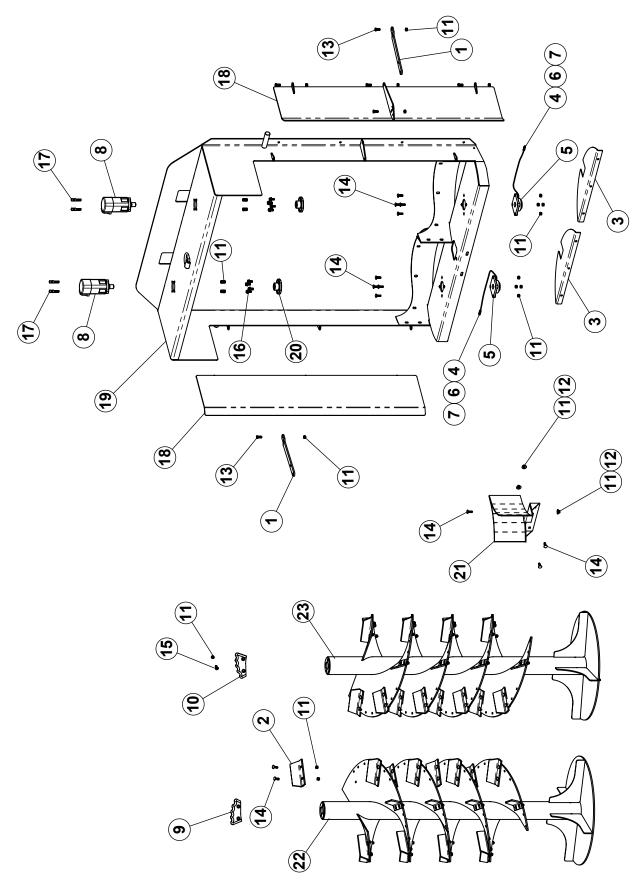


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# 532-16/672-20 TRUCK SPREADER BOX, SIDES & FLOOR

ITEM #	PART NO.	DESCRIPTION	QTY.
1	130320	532 & 672 HDPE-UVI SIDE, FRONT 1/2"x48"x120"	2 EA
2	130330	532 HDPE-UVI SIDE, REAR 1/2"x48"x96"	2
3	130350	672 HDPE-UVI SIDE, REAR 1/2"x48"x144"	2
4	130491	532 HDPE-UVI FLOOR STRIP 1/2"x32-1/2"x120"	1
5	130492	532 HDPE-UVI FLOOR STRIP 1/2"x32-1/2"x98"	1
6	130493	532 HDPE-UVI FLOOR STRIP 1/2"x14-3/16"x120"	2
7	130494	532 HDPE-UVI FLOOR STRIP 1/2"x14-3/16"x98"	2
8	130609	672 HDPE-UVI FLOOR STRIP 1/2"x32-1/2"x144"	1
9	130610	672 HDPE-UVI FLOOR STRIP 1/2"x14-3/16"x144"	1
10	130615	672 HDPE-UVI FLOOR STRIP 1/2"x14-3/16"x144"	1
11	130821	672 HDPE-UVI FLOOR STRIP 1/2"x32-1/2"x121-1/2"	1
12	130822	672 HDPE-UVI FLOOR STRIP 1/2"x14-3/16"x121-1/2"	1
13	130823	672 HDPE-UVI FLOOR STRIP 1/2"x14-3/16"x121-1/2"	1
14	130314	SPACER - 3/8" ID x 9/16" OD x 11/16" LG	AN
15	401106	3/8" - 16 HEX NYLOC NUT #5 PLTD	AN
16	402606	FENDER WASHER PLTD. 3/8"ID x 1 1/2"OD	AN
17	405050	TRUSS HD SCREW, 3/8"-16 x 1 1/4" LG	AN
18	830209	672-20 SPREADER BOX W.A.	1
	830200	532-16 SPREADER BOX W.A.	1

### 532-16/672-20 TRUCK SPREADER BEATER ASSEMBLY

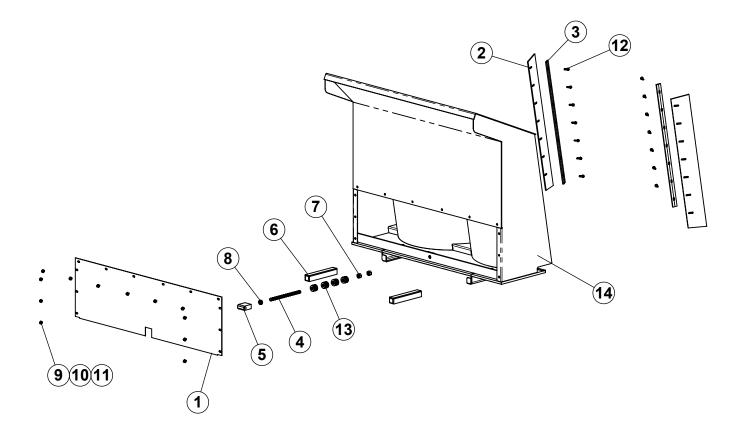


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### 532-16/672-20 TRUCK SPREADER BEATER ASSEMBLY

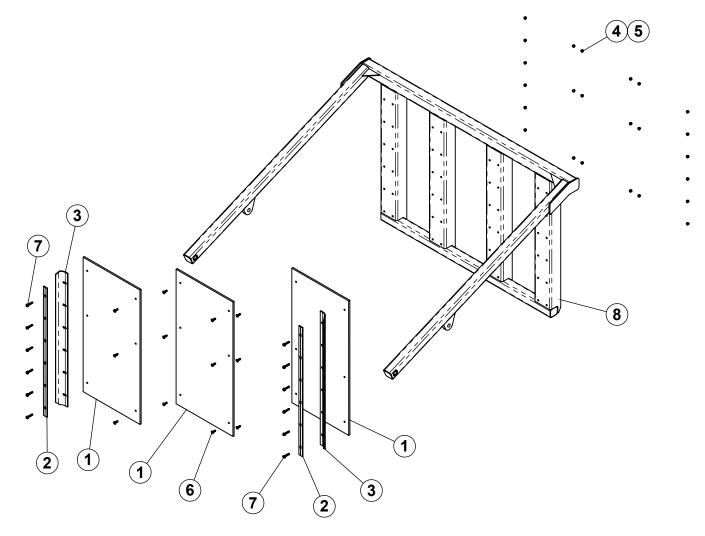
ITEM #	PART NO.	DESCRIPTION	QTY.
-	130378	DOOR LINK	2
2	130464	ANGLE DEFLECTOR 9" x 4-1/2"	48
3	130905	SKIRT SUPPORT PLATE	2
4	310750	GREASE ZERK PLTD 1/8"	2
5	340425	BEARING, RCJC, 4-BOLT FLANGE, 1-1/2"	2
9	356002	COMP STR. FITTING 1/8" MP x 3/16" TUBE	4
7	356203	GREASE LINE, 3/16 x 24" LG	2
ω	360035	HYD MOTOR, SPREADER BEATER 18.7 CID	2
6	385006	L.H. ROOSTER COMB KNIFE (OPTIONAL)	22
10	385009	R.H. ROOSTER COMB KNIFE (OPTIONAL)	22
11	401108	HEX NYLOC NUT #5 Pltd., 1/2-13 (88 USED ON KNIVES)	214
12	402408	FLAT WASHER, 1/2" ID × 1-3/8" OD	3
13	405702	HHCS #5 PLTD. 1/2"-13 x 1 1/4" LG	10
14	407102	CAR BOLT, 1/2"-13 X 1-1/2",	107
15	407553	Socket Flat Hd Cs, 1/2" X 2" (USED ON KNIVES)	88
16	407911	HHCS SERR. FLANGE. #5 PLTD. 1/2-13 x 1"LG	8
17	409065	SHCS, 1/2 × 1 1/2 LG	8
18	830207	DEFLECTOR W/A, VERTICAL BEATER	2
19	830211	FRAME W/A, VERTICAL BEATER (EXT)	٢
20	830234	DRIVE FLANGE W/A	2
21	830245	DEFLECTOR W/A	1
22	830315	532/672 LEFT BEATER W.A.	-
23	830316	532/672 RIGHT BEATER W.A.	~

# 532-16/672-20 TRUCK SPREADER SLIDE GATE ASSEMBLY



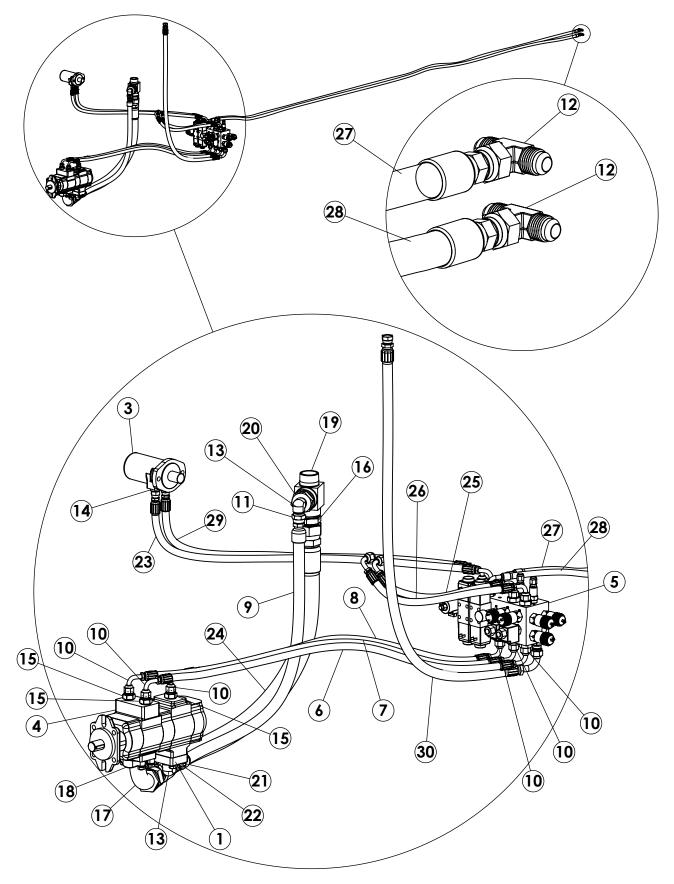
ITEM #	PART NO.	DESCRIPTION	QTY.
1	130423	SHEET SLIDING GATE COVER	1
2	130428	SCRAPER (6 1/2" x 48" )	2
3	130429	CLAMP, SCRAPER (44 1/2" LG)	2
4	130448	THREADED ROD, BELT TENSION	1
5	130593	LUG, CHAIN	1
6	130726	UHMW GUIDE BLOCK, - 2" SQ x 13 1/2"	2
7	400214	HEX NUT #5 PLTD, 7/8-9	2
8	400614	HEX JAM NUT #5, 7/8-9 PLATED	1
9	402006	3/8" MED PLTD SPRING LOCK WASHER	12
10	402406	FLAT WASHER, 3/8" ID x 1" OD	12
11	405652	HHCS #5 PLTD., 3/8"-16 x 3/4"	12
12	407904	HHCS, SERRATED #5 Pltd. 3/8" -16 X 1-1/4"	14
13	410027	PACKAGE OF (12) BELLVILLE SPRING WASHERS	4
14	830302	SLIDING GATE W.A. 532/672	1

### 532-16/672-20 TRUCK SPREADER REAR GATE ASSEMBLY



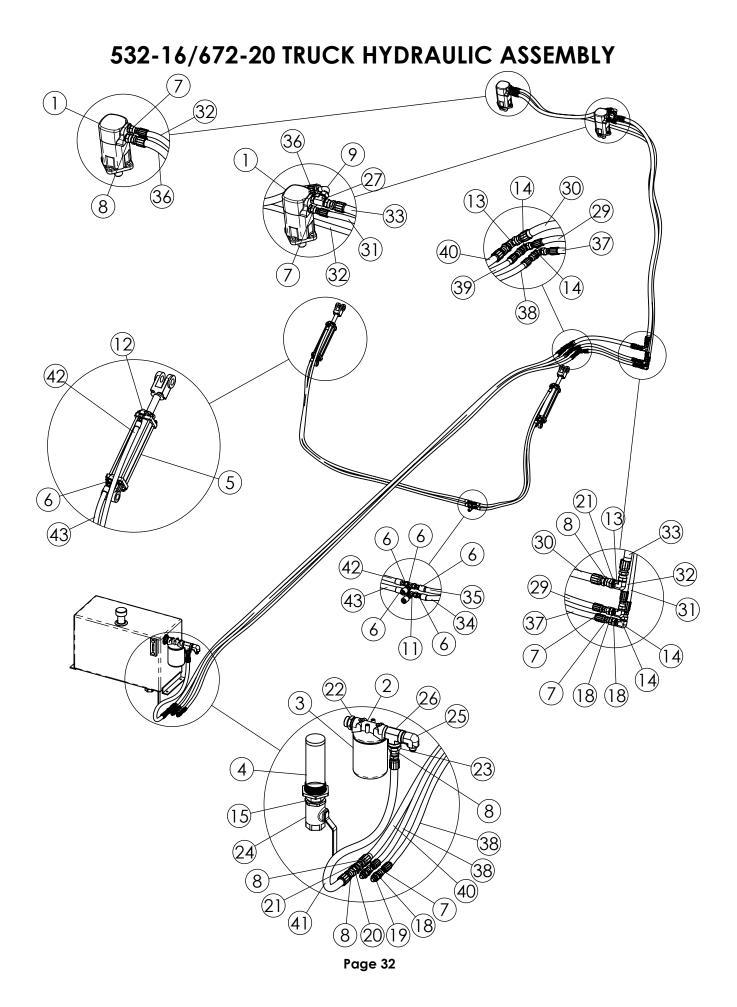
ITEM #	PART NO.	DESCRIPTION	QTY.
1	130334	END GATE LINER	3
2	130439	CLAMP, SEAL	2
3	130440	FLASHING, SWINGING GATE	2
4	401106	HEX NYLOC NUT #5 Pltd 3/8" -16	24
5	402506	3/8" WASHER, FLAT	24
6	405050	TRUSS HD SCREW, 3/8"-16 x 1 1/4" LG	12
7	407903	.HHCS, SERRATED #5 Pltd. 3/8" -16 x 2"	12
8	830201	REAR GATE W.A.	1

532-16/672-20 TRUCK SPREADER HYDRAULIC ASSEMBLY



# 532-16/672-20 TRUCK SPREADER HYDRAULIC ASSEMBLY

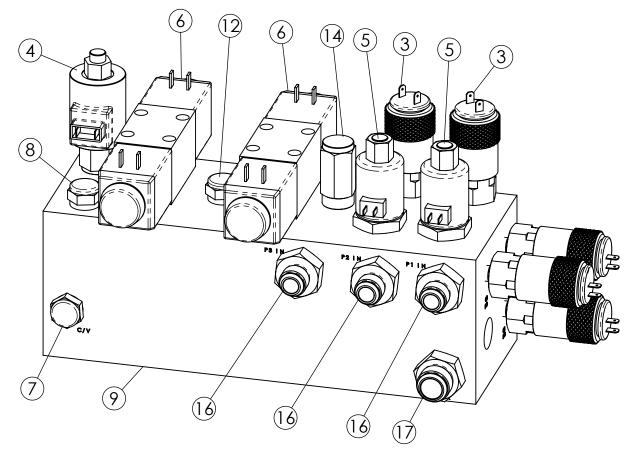
ITEM #	PART NO.	DESCRIPTION	QTY.
1	130826	2 CODE 61 FLG ADPT x 1" FP	1
2	351910	O-RING, 2-1/2" OD x 1/8"	2
3	360023	(672) MOTOR, CHAR-LYNN T SERIES, 18.7 CID 13T SPL	1
	360025	(532) MOTOR, CHAR-LYNN T SERIES, 14.9 CID 13T SPL	1
4	362032	PUMP, TRIPLE GEAR 2.56 CID-LH (STD TRANS)	1
	362029	PUMP,TRIPLE GEAR 2.29 CID,R/H (AUTO TRANS)	1
5	362357	CONTROL VALVE BLOCK ASSY, TRUCK SPREADER	1
6	366028	1/2" x ( AS REQ'D ) HOSE, (7/8FJX90 x 7/8FJX90)	AR
7	366028	1/2" x ( AS REQ'D ) HOSE, (7/8FJX90 x 7/8FJX90)	AR
8	366028	1/2" x ( AS REQ'D ) HOSE, (7/8FJX90 x 7/8FJX90)	AR
9	366040	1" x ( AS REQ'D ) HOSE, (1-3/16FJX)	AR
10	367096	7/8 FJX90S x 1/2" HOSE COUPLING	6
11	367131	1-5/16 FJX x 1" HOSE COUPLING	2
12	368022	TEE, 9/16-18 JIC (UNION)	2
13	368064	90° ADPT, 1"MP x 1-5/16 JIC	2
14	368161	STR ADPT, 7/8 MOR x 7/8 JIC	2
15	368169	STR ADPT, 1-3/16 MOR x 1-1/16 JIC	3
16	368423	ST ADPT, 2-1/2 JIC x 2 MP	1
17	368454	90° FLANGE, 2-1/2" JIC x 2" FLANGE	1
18	368456	SPLIT FLANGE KIT, 2'' CODE 61	1
19	368632	TEE, 2" x 2" x 2" MP, ( STREET)	1
20	368633	2" MP x 1" FP REDUCER	1
21	402008	1/2" SPRING LOCK WASHER PLTD	4
22	405703	1/2"-13 x 1-1/2" HEX BOLT #5 PLTD	4
23	781569	1/2" x 49" HOSE ASSY, (7/8FJX90 x 7/8FJX)	1
24	781570	2" x (LENGTH AS REQ'D) HOSE ASSY (2-1/2FJX)	1
25	781575	1/2" x 18" HOSE ASSY, (7/8FJX90 x 7/8FJX90)	1
26	781576	1/2" x 23" HOSE ASSY, (7/8FJX90 x 7/8FJX90)	1
27	781578	3/8" x 160" HOSE ASSY, (9/16FJX90 x 9/16FJX)	1
28	781579	3/8" x 162" HOSE ASSY, (9/16FJX90 x 9/16FJX)	1
29	781580	1/2" x 46" HOSE ASSY (7/8FJX90 x 7/8FJX)	1
30	781595	3/4" x 58" HOSE ASSY, (1-1/16 FJX x 1-1/16 FJX90)	1

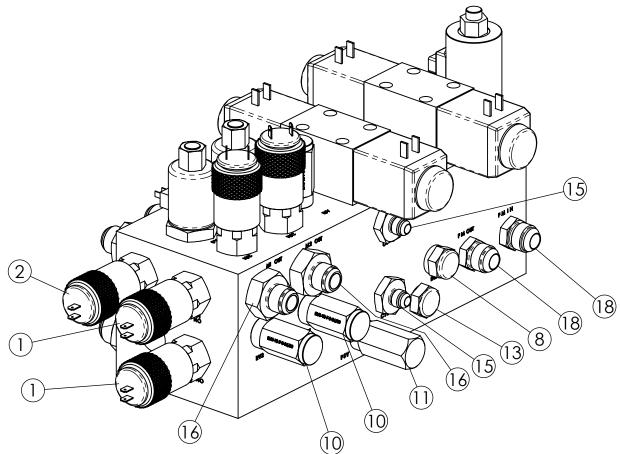


# 532-16/672-20 TRUCK HYDRAULIC ASSEMBLY

	002 10/		
ITEM #	PART NO.	DESCRIPTION	QTY.
1	360035	HYD MOTOR, SPREADER BEATER 18.7 CID	2
2	362404	FILTER HEAD, 1-1/4" FP	1
3	362442	FILTER ELEMENT	1
4	362508	STRAINER, SUCTION	1
5	364073	2-1/2" x 8" x 20-1/4" HYD. CYL.	2
6	367079	6G-6FJX x 3/8" HOSE COUPLING (MEGACRIMP)	10
7	367095	7/8 FJX x 1/2" HOSE COUPLING (MEGACRIMP)	12
8	367105	1-1/16 FJX x 3/4" HOSE COUPLER (MEGACRIMP)	9
9	367106	1-1/16 FJX90 x 3/4" HOSE END (MEGACRIMP)	1
10	368009	90° ELBOW, 3/8 MP x 9/16 JIC .031 ORFICE	2
11	368022	TEE, 9/16-18 JIC (UNION)	2
12	368033	90° ELBOW, 3/8 MP x 9/16 JIC	2
13	368086	90° ADPT, 1-1/16 JIC BULKHEAD	2
14	368087	90° ADPT, 7/8 JIC BULKHEAD	4
15	368130	STADPT, 2 MP x 2 MP HEX NPL	1
16	368161	STR ADPT, 7/8 MOR x 7/8 JIC	2
17	368171	STR ADPT, 7/8 MOR x 1-1/16 JIC	1
18	368327	BULKHEAD NUT, 7/8" JIC	6
19	368328	STR ADPT, 7/8 JIC BULKHEAD FITTING	2
20	368329	STR ADPT, 1-1/16 JIC BULKHEAD	1
21	368330	BULKHEAD NUT, 1-1/16" JIC	3
22	368422	STR ADPT, 1-5/8 MOR x 1-1/4 MP	1
23	368424	ST ADPT, 1-1/16 JIC x 1-1/4 MP	1
24	368523	BALL VALVE, 2" FP	1
25	368626	90° ADPT, 1-1/16 JIC x 1-1/4 MP	1
26	368631	TEE, 1-1/4" PIPE (STREET)	1
27	368638	TEE, 1-1/16 * 7/8 * 1-1/16 JIC RUN	1
28	370235	TANK, 40 GAL HYD	1
29	781392	1/2" x 22" HOSE ASSY, (7/8FJX)	1
30	781393	3/4" x 25" HOSE ASSY, (1-1/16FJX)	1
31	781396	1/2' x 95" HOSE ASSY, (7/8FJX)	1
32	781397	1/2" x 128"HOSE ASSY, (7/8FJX)	1
33	781500	3/4" x 88" HOSE ASSY, (1-1/16FJX)	. 1
34	781505	3/8" x 42" HOSE ASSY, (9/16FJX)	1
35	781506	3/8" X 55" HOSE ASSY, (9/16FJX)	1
36	781510	3/4" x 36" HOSE ASSY, (7/8FJX * 1-1/16FJX90S)	1
37	781511	1/2" x 19" HOSE ASSY, (7/8FJX)	1
38	781528	(672) 1/2" x 264" HOSE ASSY (7/8 FJX)	2
	781394	(532) 1/2" × 216" HOSE ASSY (7/8FJX)	2
40	781529	(672) 3/4" x 264" HOSE ASSY, (1-1/16FJX)	1
TV	781395	(532) 3/4" x 216" HOSE ASSY, (1-1/16FJX)	1
41	781556	3/4" x 46" HOSE ASSY, (1-1/16FJX)	1
42	781563	3/8" x 114" HOSE ASSY, (9/16FJX * 9/16FJX)	1
43	781564	3/8" x 103" HOSE ASSY, (9/16FJX * 9/16FJX)	1

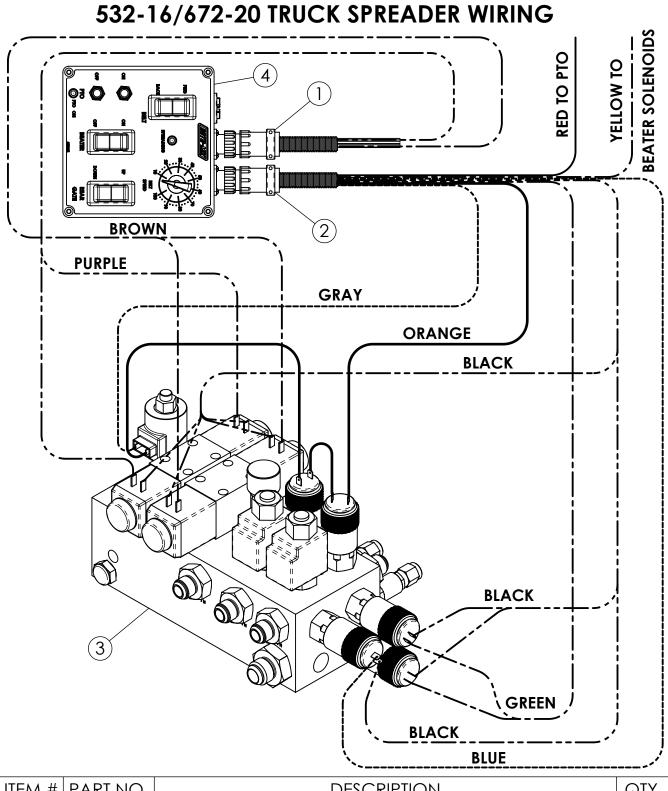
# 532-16/672-20 TRUCK HYDRAULIC CONTROL BLOCK



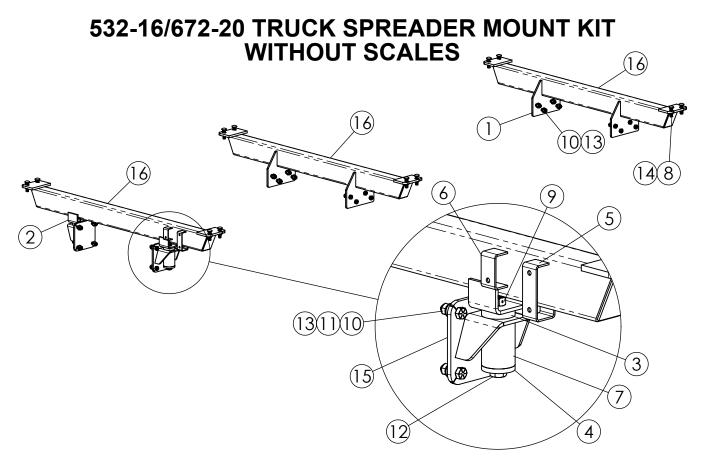


# 532-16/672-20 TRUCK HYDRAULIC CONTROL BLOCK

ITEM #	PART NO.	DESCRIPTION	QTY.
1	357745	PRESSURE SWITCH N/O, NASON PRESET 3650 PSI	2
2	357747	PRESSURE SWITCH N/O, NASON PRESET 1500 PSI	1
3	357748	PRESSURE SWITCH N/C, NASON PRESET 3300 PSI	2
4	362297	PROPORTIONAL FLOW CONTROL VALVE	1
5	362315	SOLENOID VALVE	2
6	362319	SOLENOID OPERATED DIRECTIONAL VALVE	2
7	362346	CHECK VALVE	1
8	362347	DIFFERENTIAL PRESSURE VALVE	2
9	362357	MANIFOLD BLOCK	1
10	362369	RELIEF VALVE CARTRIDGE 3500 PSI	2
11	362372	PRESSURE SENSING VALVE	1
12	362373	PILOT OPERATRED CHECK VALVE	1
13	362374	CHECK VALVE	1
14	362375	RELIEF VALVE	1
15	368155	STR ADPT, 3/4"MOR x 9/16"JIC	2
16	368168	STR ADPT, 1-3/16"MOR x 7/8"JIC	5
17	368173	STR ADPT, 1-3/16"MOR x 1-1/16"JIC	1
18	368334	STR ADPT, 3/4"MOR x 7/8"JIC	2

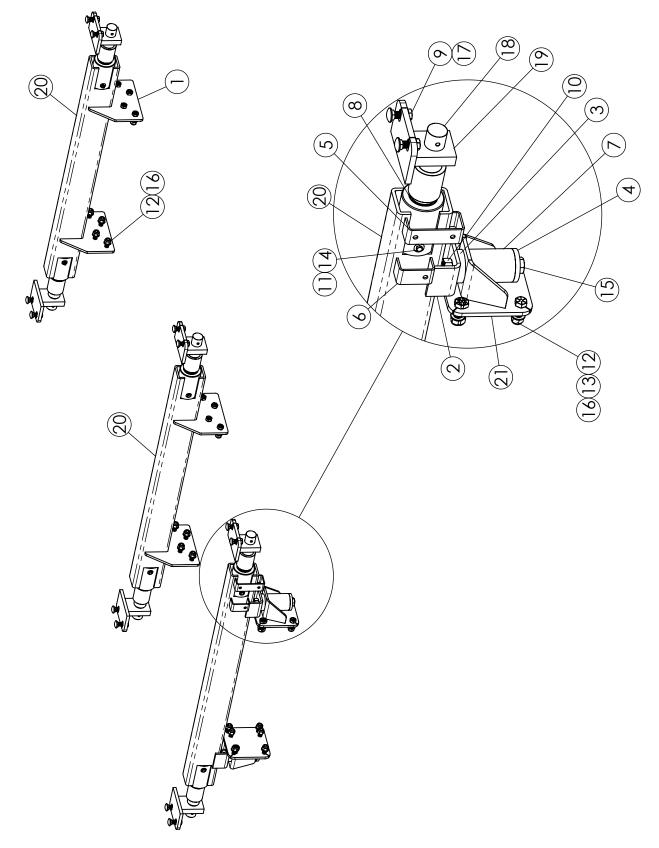


ITEM #	PART NO.	DESCRIPTION	QTY.
1	358419	WIRE HARNESS, 532 TRUCK SPREADER	1
2	358421	WIRE HARNESS, 532-672 TRUCK SPREADER, SUPPL	1
3	362357	HYDRAULIC MANIFOLD 532/672 TRUCK MNT	1
4	780225	ELECT CONT BOX-TRUCK SPREADER	1



ITEM #	PART NO.	DESCRIPTION	QTY.
1	130618	PLATE, SPREADER TRUCK MOUNT ( 12" x 11" )	4
2	130779	802 MOUNTING TUBE SUPPORT (4" x 10")	2
3	130796	802 UHMW MOUNT PAD (3/4" LG )	2
4	130797	802 WASHER, 1/2 x 1-1/16 x 3-1/2	2
5	130827	MOUNT, 532/672 MANIFOLD VALVE	1
6	130828	MOUNT, 532/672 MANIFOLD VALVE	1
7	351988	PIRANHA URETHANE STRIPPER SPRING	2
8	400116	HEX NUT, SERRATED FLANGE #5 Pltd., 3/4-10	12
9	400916	1"-8 #5 PLTD TWO-WAY HEX LOCKNUT	2
10	401212	3/4"-16 HEX NYLOCKNUT	24
11	402512	3/4" SAE FLAT WASHER	24
12	405841	HHCS Pltd 1" x 8"	2
13	406481	HHCS. #8 3/4" - 10 x 2 1/2"	24
14	407142	3/4"-10 X 3" CARRIAGE BOLT	12
15	830314	802 URETHANE MOUNTING BRACKET W/A	2
16	830322	532/672 MOUNTING CROSSMEMBER W/A	3

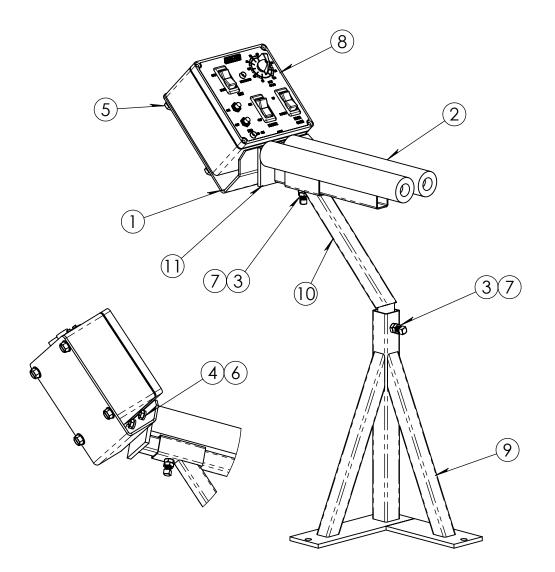
# 532-16/672-20 TRUCK MOUNT KIT WITH SCALES



# 532-16/672-20 TRUCK MOUNT KIT WITH SCALES

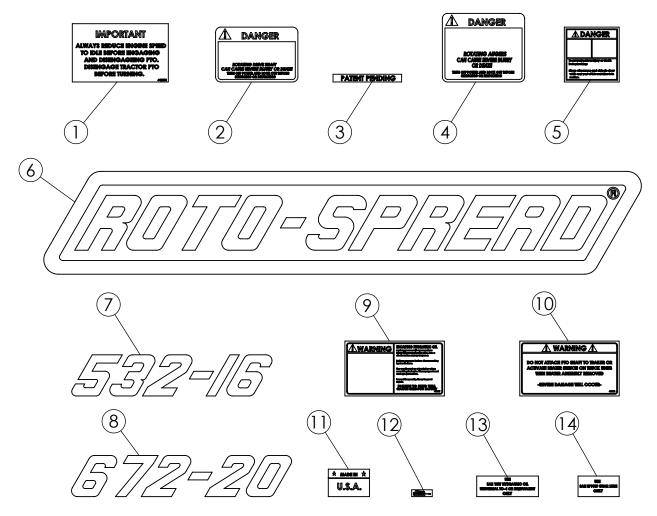
ITEM #	PART NO.	DESCRIPTION	QTY.
	130618	PLATE, SPREADER TRUCK MOUNT (12" × 11")	4
2	130779	802 MOUNTING TUBE SUPPORT (4" × 10")	2
ю	130796	802 UHMW MOUNT PAD (3/4" LG )	2
4	130797	802 WASHER, 1/2 x 1-1/16 x 3-1/2	2
5	130827	MOUNT, 532/672 MANIFOLD VALVE	-
6	130828	MOUNT, 532/672 MANIFOLD VALVE	_
7	351988	PIRANHA URETHANE STRIPPER SPRING	2
ω	355041	SEAL, 3 OD x 2-1/2 ID x 1/4"	6
6	400116	HEX NUT, SERRATED FLANGE #5 PItd., 3/4-10	12
10	400816	HEX CENTER LOCKNUT, #5 PLTD 1"-8	2
11	401106	HEX NYLOC NUT #5 PItd 3/8" -16	9
12	401212	3/4"-16 HEX NYLOCKNUT	30
13	402512	3/4" SAE FLAT WASHER	24
14	405667	3/8"-16 x 5" HHCS, #5, PLTD	6
15	405841	HHCS PItd 1" x 8"	2
16	406481	HHCS. #8 3/4" - 10 x 2 1/2"	30
17	407140	3/4"-10 X 2" CARRIAGE BOLT	12
18	450824	2-1/2" WEIGH BAR	6
19	830249	WEIGH BAR MOUNT W/A	6
20	830272	WEIGH BAR TUBE W.A., 532/672 TRUCK	3
21	830314	802 URETHANE MOUNTING BRACKET W/A	2
22	730120	WEIGH BAR ASSY 532/672 TRUCK MNT INCLUDES PARTS; 8,9,11,14,17,18,19,20	С

### 532-16/672-20 TRUCK CONTROL BOX & ARMREST ASSEMBLY



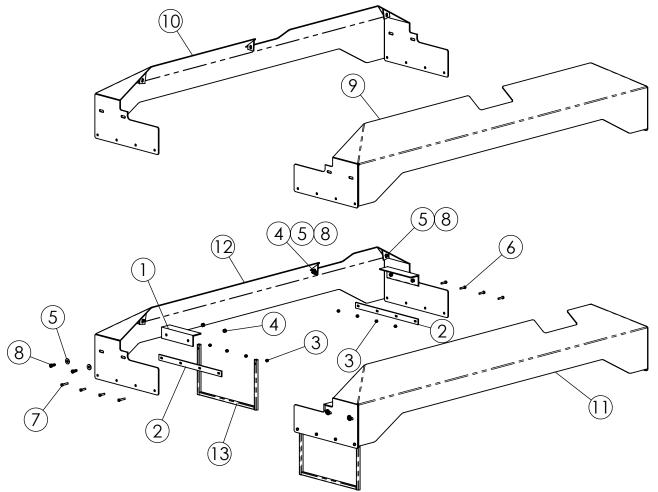
ITEM #	PART NO.	DESCRIPTION	QTY.
1	130369	BRACKET, ELECTRICAL CONTROL BOX	1
2	185930	ARM REST PAD 12"	2
3	400606	HEX JAM NUT 3/8-16"	2
4	402005	5/16" MED PLTD SPRING LOCK WASHER	2
5	403494	3/8" TAPPING BOLT 1-1/4"	4
6	405627	HHCS #5 PLTD 5/16" x 3/4"	2
7	409543	SQ HD SET SCR CUP, 3/8" x 1"	2
8	780225	532/672 TRUCK SPREADER CONTROL BOX ASSY	1
9	872262	ARM REST STAND W.A.	1
10	872263	ARM REST GOOSE NECK W.A.	1
11	872264	ARM REST W.A.	1

### 532-16/672-20 TRUCK SPREADER DECALS



ITEM #	PART NO.	DESCRIPTION	QTY.
1	440801	DECAL(IMP-REDUCE SPD.) 4.25x7	1
2	440826	DECAL - DANGER: ROTATING DRIVE SHAFT	1
3	440841	DECAL - PATENT PEND 11/16x5	1
4	440827	DECAL - DANGER: ROTATING AUGERS	2
5	440833	DANGER PINCH POINT 4''x 4''	4
6	440939	DECAL, ROTO-SPREAD 7-1/2"x43-1/16"	3
7	440940	decal 532-16 (roto-spread)	2
8	440945	decal 672-20 (roto-spread)	1
9	441657	WARNING ESCAPING HYD OIL	3
10	441663	WARNING DO NOT ATTACH PTO SHAFT	2
11	440844	DECAL- ( MADE IN USA)	2
12	440931	GREASE GUN DECAL, 10 HOURS	2
13	440956	DECAL, USE 10W HYD OIL, UNIV TO-4	1
14	440955	DECAL, USE E90W GEAR LUBE ONLY	1

532-16/672-20 TRUCK SPREADER FENDERS



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ITEM #	PART NO.	DESCRIPTION	QTY.
1	130619	ANGLE BRACE, 672 FENDER (11 1/2'' LG )	4
2	183087	MUD FLAP STRAP 23"	4
3	401106	HEX NYLOC NUT #5 Pltd 3/8" -16	16
4	401108	HEX NYLOC NUT #5 Pltd., 1/2-13	10
5	402408	FLAT WASHER, 1/2" ID x 1-3/8" OD	16
6	405655	HHCS #5 PLTD., 3/8"-16 x 1 1/2" LG	12
7	405657	HHCS #5 PLTD., 3/8-16 x 2 LG	4
8	405702	HHCS #5 PLTD. 1/2"-13 x 1 1/4" LG	14
9	830269	532 RIGHT HAND FENDER (TRUCK)	1
10	830270	532 LEFT HAND FENDER (TRUCK)	1
11	830274	672 LEFT HAND FENDER (TRUCK)	1
12	830275	672 RIGHT HAND FENDER (TRUCK)	1
13	872120	MUD FLAP BRACKET W.A.	2