



**VXT 325—VXT425—VXT505  
TRAILER & TRUCK  
OPERATION AND PARTS  
MANUAL**

**ROTO-MIX LLC  
P.O. BOX 1724  
2205 E. Wyatt Earp Blvd.  
Dodge City, Kansas 67801  
(620) 225-1142  
© ROTO-MIX LLC 2006**

SERIAL NUMBER \_\_\_\_\_

# INTRODUCTION

Congratulations on the purchase of your new Vertical Mixer 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 PERSONAL 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 mixer 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 this manual and understand the safe operation of the mixer 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
- Natural calamities
- Unauthorized modifications
- Unauthorized repairs
- Use of Non ROTO-MIX parts
- Neglected maintenance
- The use of PTO Shaft Adaptors
- Usage contrary to the intended purpose of the product

Warranty continues on the next page.

## **Limited Warranty Statement continued**

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

- |              |          |             |          |
|--------------|----------|-------------|----------|
| - Lubricants | - Tires  | - Chains    | - Blades |
| - Filters    | - Augers | - Idlers    | - Belts  |
| - Hoses      | - Wipers | - Batteries |          |

**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 warrants 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**

---

---

## **SCALES WARRANTY & SERVICE POLICY**

### **DIGI-STAR SCALE SYSTEMS**

Digi-Star, LLC warrants for a period of one year from date of installation, to correct by repair or replacement, at Digi-Star's option, any defect in material or workmanship in any part of this product. In the event of replacement, Digi-Star's sole obligation shall be to provide replacement products or parts. F.O.B. Digi-Star, LLC, W5527 Hwy 106, Fort Atkinson, WI 53538 USA.

### **WEIGH-TRONIX SCALE SYSTEMS**

WEIGH-TRONIX warrants for a period of one year from date of installation, to correct by repair or replacement, at Weigh-Tronix's option, any defect in material or workmanship in any part of this product. In the event of replacement, Weigh-Tronix's sole obligation shall be to provide replacement products or parts. F.O.B. Avery Weigh-Tronix, 1000 Armstrong Drive, Fairmont, MN 56031-1439 USA.

# TABLE OF CONTENTS

INTRODUCTION .....	2
WARRANTY .....	3
SCALE WARRANTY & SERVICE POLICY .....	4
TABLE OF CONTENTS .....	5
MIXER SAFETY .....	6
SAFETY DECALS .....	7
SPECIFICATIONS .....	11-16
PREOPERATION .....	17
MIXER OPERATION .....	18
MAINTENANCE.....	21
TROUBLESHOOTING .....	24
OPTIONAL COMPONENT INSTALLATION.....	25
REPAIR PARTS TABLE OF CONTENTS .....	26

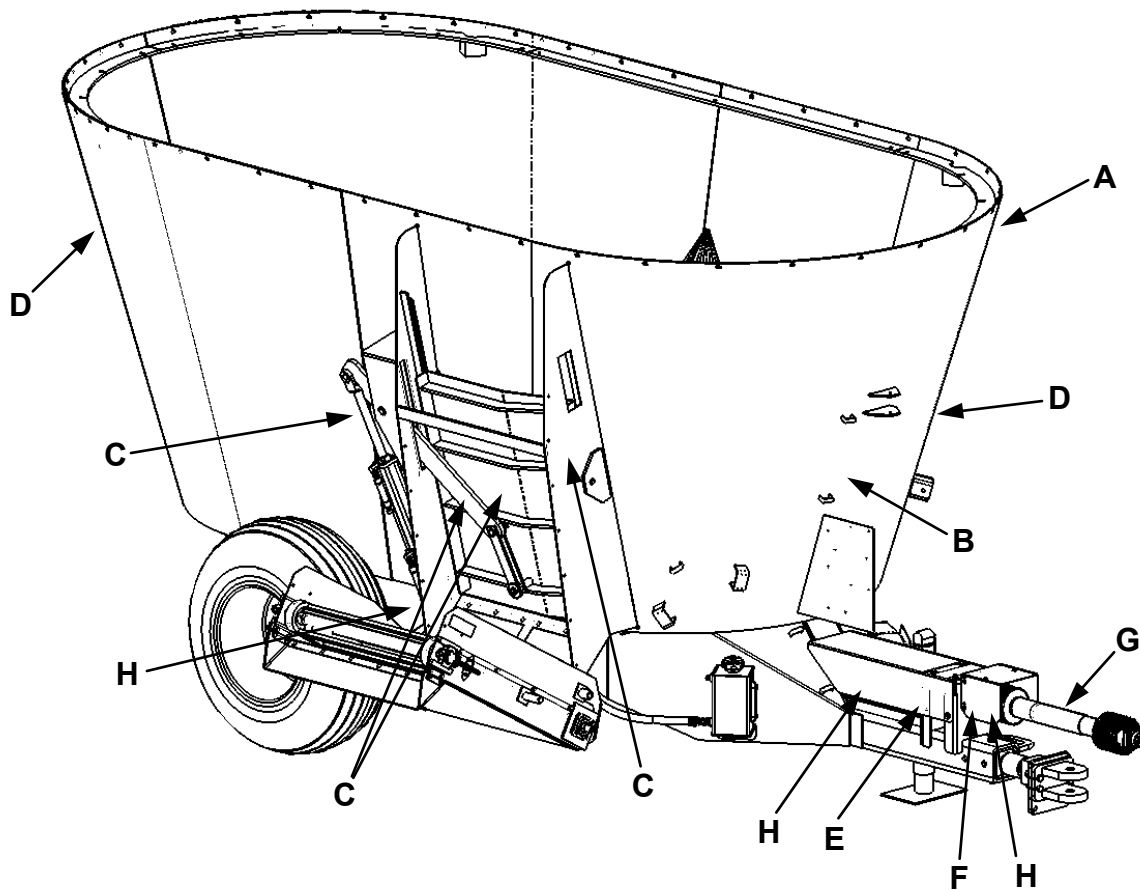
# MIXER SAFETY

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

**⚠ 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.



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

# SAFETY DECALS



DECAL A. 440827



DECAL C. 440833  
DECAL D. 440833-M



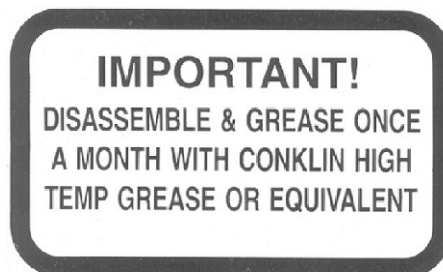
DECAL B. 440801



DECAL E. 440826



DECAL F. 440830



DECAL G. 440838

GREASE ALL JOINTS EVERY 10 HOURS

DECAL H. 441661

# MIXER SAFETY

## **⚠ CAUTION**

Do not operate your feed mixer until you have read this owner's manual, the truck owner's manual, and understand the danger associated with its operation.

This feed mixer is comprised of rotating drive shafts and mixing augers. Any exposure to these mixer components can result in serious personal injury or death.

Study the safety decal page associated with your model mixer and understand where the danger points are.

On truck or trailer mounted mixers, never allow operating personnel to be above the level of the feed mixing chamber. Entry into the mixing chamber while the mixer is running will result in serious injury or death.

**⚠ CAUTION** THERE ARE INHERENT HAZARDS ASSOCIATED WITH THE OPERATION OF YOUR MIXER.

### 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.

Before starting tractor or truck engine, be sure PTO shields turn freely.

Do not operate until all shields, covers and guards are in place.

Do not allow children or inexperienced person to operate this machine.

Keep hands, feet and clothing away from power take-off shaft and rotating drivelines.

Loose or floppy clothing should not be worn by the operator. Wear close fitting clothing.

Stop the engine and be sure all movement is stopped before making adjustments, connections, or cleaning out equipment.

Do not climb on or enter machine while in operation.

Do not make high speed maneuvers with a mounted mixer.

Do not allow riders on the mixer.

Rotating parts can crush or dismember causing personal injury or death.

Rotating parts can entangle or strike people, resulting in personal injury or death.

Never enter the mixer/feeder while in operation.



Operate the mixer/feeder from the operator's seat only.

Stay clear of rotating drivelines.

Entanglement in rotating drive line can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times.

Make sure rotating shields turn freely.

Do not exceed load capacity of the mixer/feeder. (See loading instructions).

Reduce speed when turning or traveling on rough terrain. Avoid traveling over loose fill, rocks, ditches or holes.

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.


Keep transmission in gear when traveling downhill.

Keep sparks, lighted matches, and open flame away from the top of battery. Battery gas can explode.

Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.

As a precaution, always recheck the hardware on mixer/feeder following every 100 hours of operation. Correct all problems. follow the maintenance safety procedures.

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

 **CAUTION** THERE ARE ADDITIONAL HAZARDS ASSOCIATED WITH THE SERVICE AND MAINTENANCE OF YOUR MIXER.

**FOR YOUR SAFETY:**

Disengage power take-off and remove keys from tractor or truck before servicing a mixer.

Do not attempt to clean, oil or adjust mixer while it is in motion.

Stop the engine and be sure all movement is stopped before making adjustments, connections, or cleaning out equipment. Disconnect tractor PTO shaft.

Make sure there is plenty of ventilation. Never operate vehicle engine in a closed building. The exhaust fumes may cause asphyxiation.

Before working on the mixer/feeder, stop the towing vehicle, set the brakes, disengage the PTO and all power drives, shut off the engine and remove the ignition keys.

Be certain all moving parts on attachments have come to a complete stop before attempting to perform maintenance.

Before entering mixing chamber or servicing mixer, disengage power take-off and remove keys from tractor or truck to prevent accidental start-up.

Do not work under a trailer mixer 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 mixer without blocking the wheels to prevent rolling.

A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this mixer/feeder.

Never check battery charge by placing a metal object across the posts. Use a volt-meter or hydrometer.

Do not charge a frozen battery; it may explode. Warm battery to 16 c(60 f)

Escaping hydraulic fluid under pressure can penetrate the skin causing serious injury or death. Avoid the 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.

Do not allow grease or oil to build up on any step or platform.

Never replace hex bolts with less than grade five (5) bolts unless otherwise specified.

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

**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.

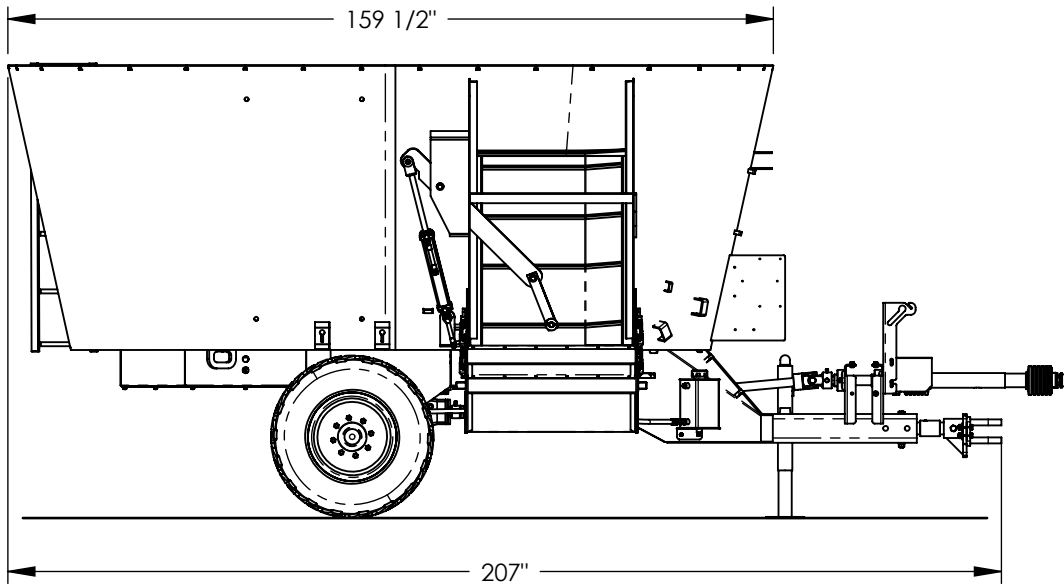
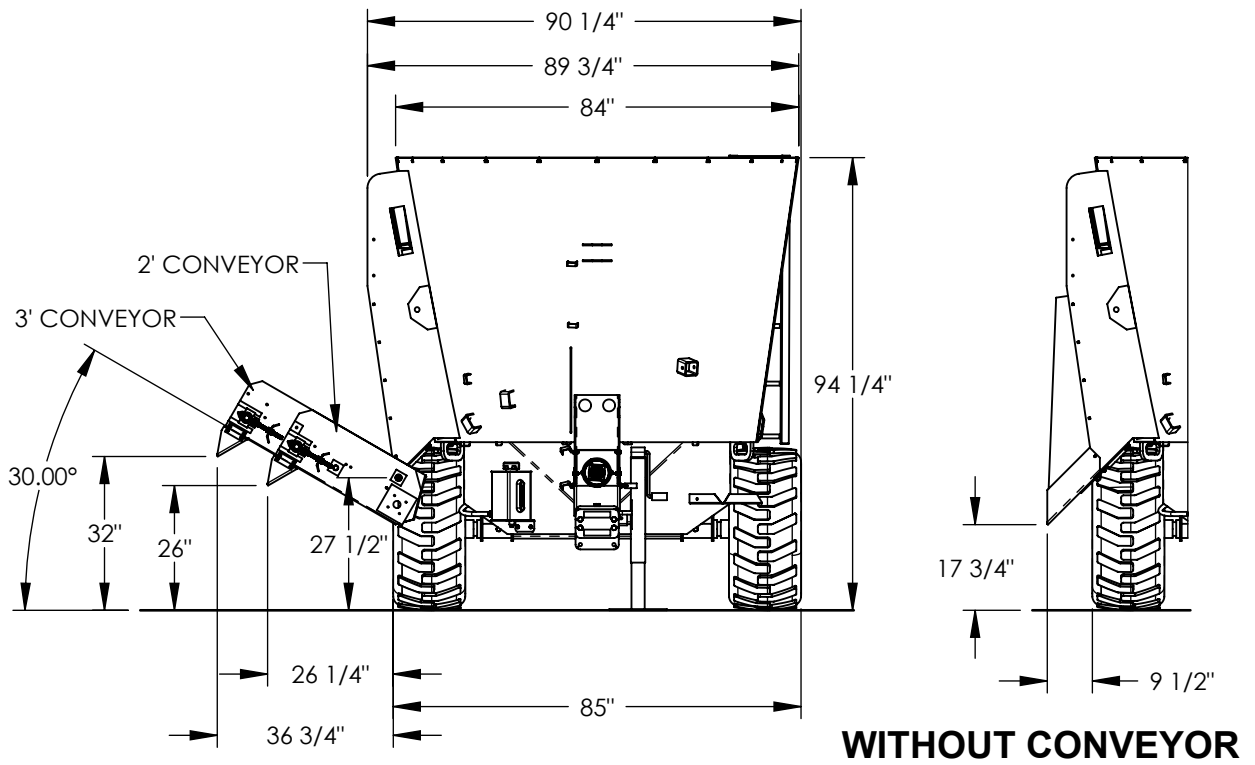
**SAFETY DECAL CARE**

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.**

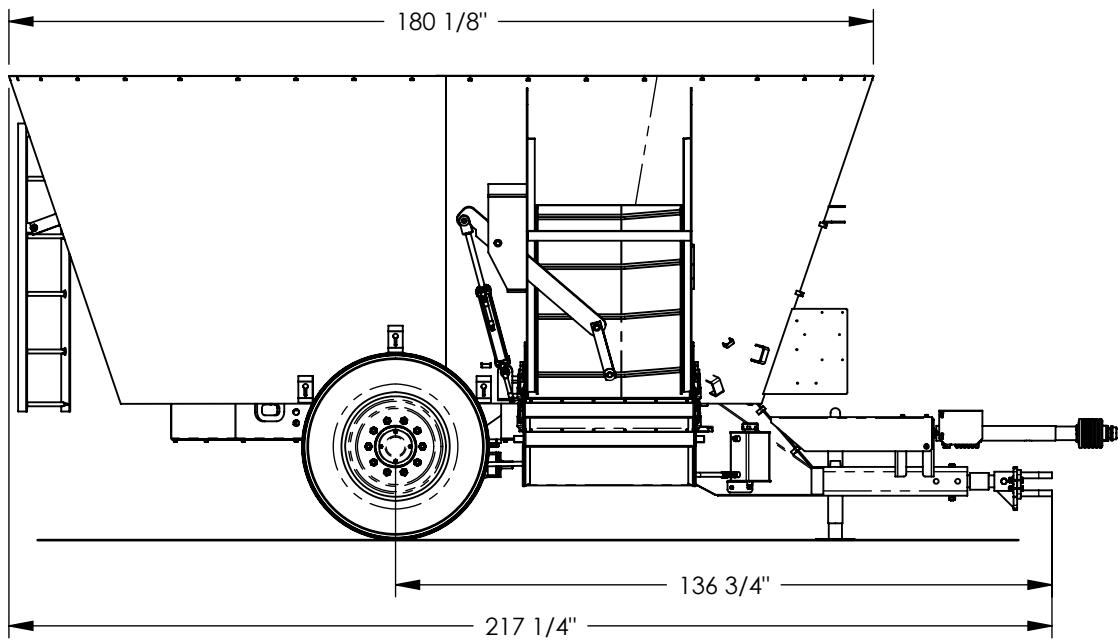
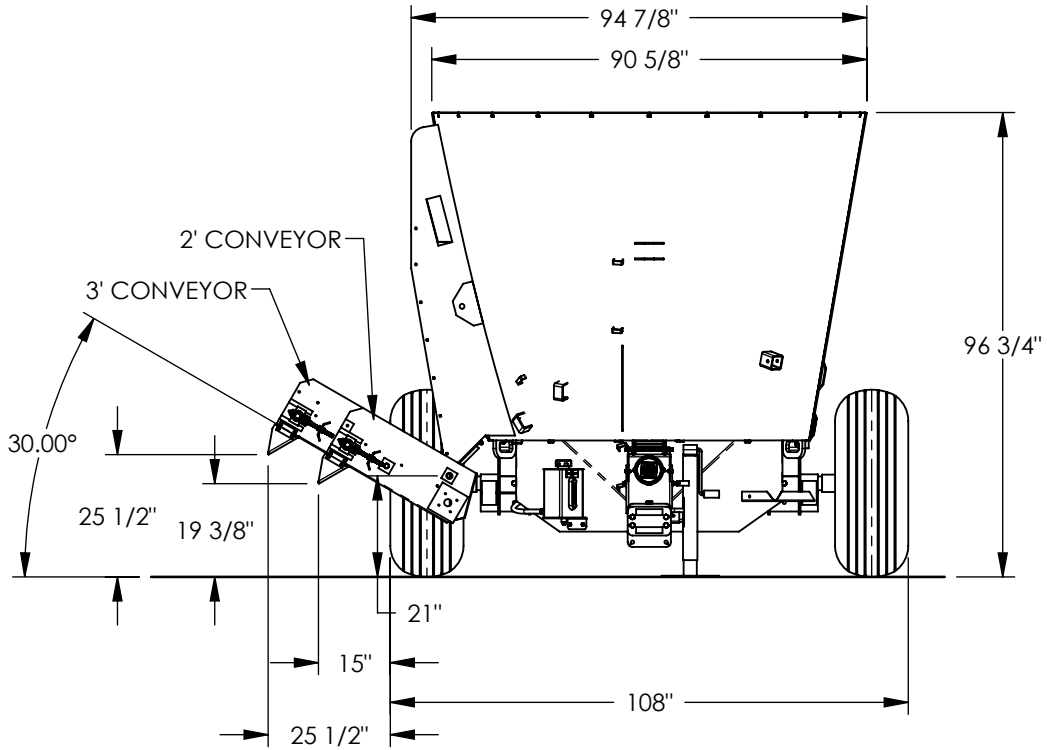
# SPECIFICATIONS

## 325 VXT TRAILER DIMENSIONAL ILLUSTRATION



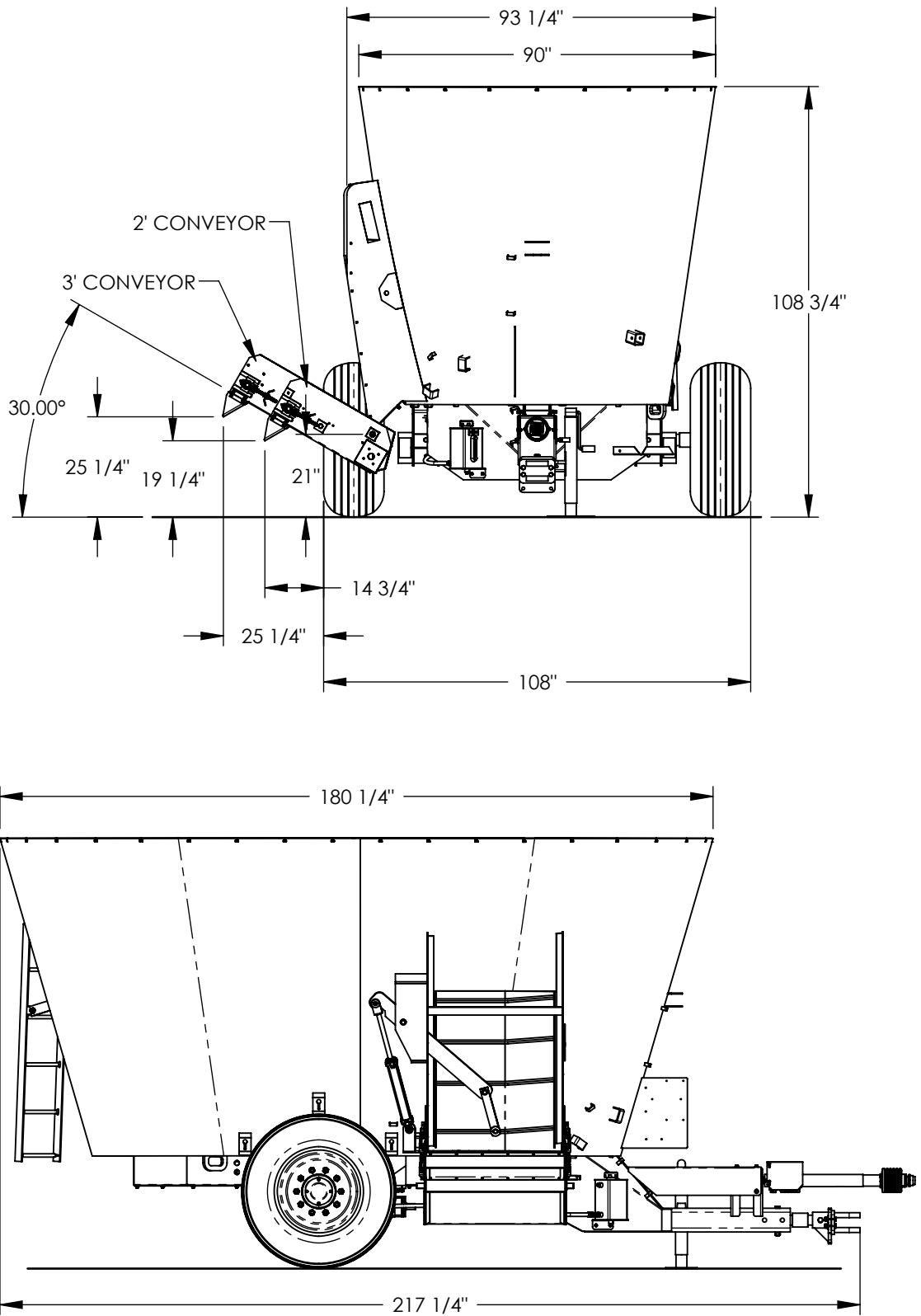
All Dimensions & Specifications are Approximate & Subject to Change Without Notice.

# VXT 425 TRAILER DIMENSIONAL ILLUSTRATION



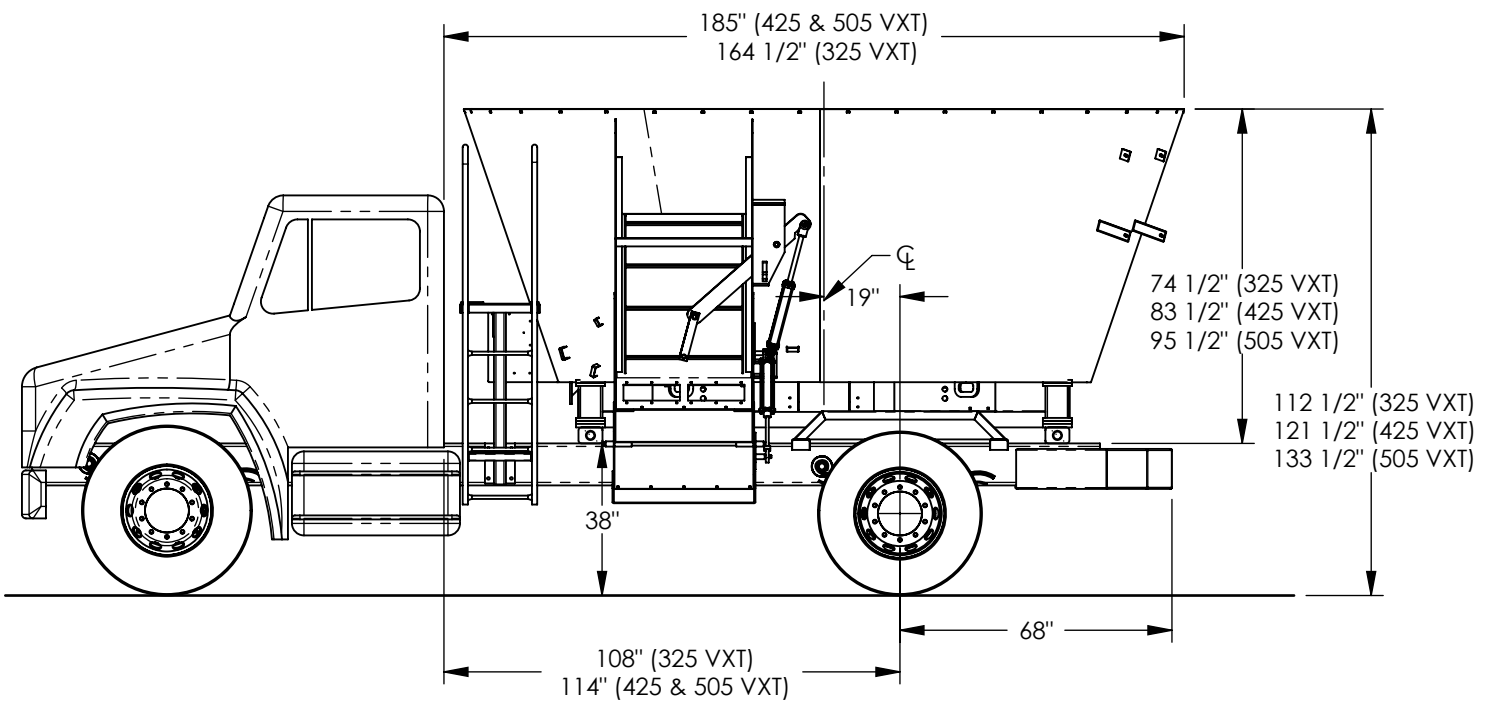
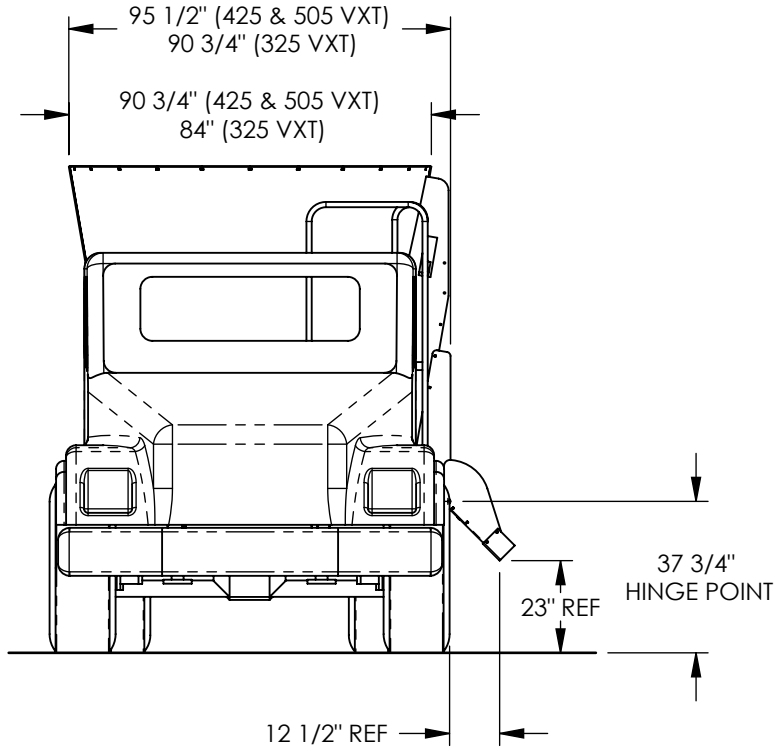
All Dimensions & Specifications are Approximate & Subject to Change Without Notice.

# VXT 505 TRAILER DIMENSIONAL ILLUSTRATION



All Dimensions & Specifications are Approximate & Subject to Change Without Notice.

# VXT TRUCK DIMENSIONAL ILLUSTRATION



All Dimensions & Specifications are Approximate & Subject to Change Without Notice.

## VXT 325 MIXER SPECIFICATIONS

<b>Features</b>	
Mixing Chamber -13'-4" Feet Long Inside	
Gear Box Rt Angle	
540 PTO Drive	
Heavy Duty High Strength Auger Tubes & Heavy Roller Chain Drive	
Splined Shafts & Sprockets on Both Augers	
7" Rubber Side Extensions	
320 Cubic Feet Mixing Capacity	
Optional 36" Wide x 24 & 36" Long Chain Conveyor	

<b>Speciifications and Dimensions</b>	
Tub Bottom Thickness	5/8"
Sides	7 GA
Top Auger Flights	1/2" Thick
Auger Drive-Roller Chain	#100
Auger Drive Shafts	4"
Weight-Mixer	7,940#
Auger Diameter	66"

<b>Capacity</b>	
Maximum Ration Weigh	Hay Ration - 6,400#, Heavy Ration - 8,900#
Minimum Tractor HP	75HP
Cubic Ft. Mixing Capacity	320 cu. ft.
Bushel Mixing Capacity	256

## VXT 425 MIXER SPECIFICATIONS

<b>Features</b>	
Mixing Chamber -15' Feet Long Inside	
Gear Box Rt Angle	
540 PTO Drive	
Heavy Duty High Strength Auger Tubes & Heavy Roller Chain Drive	
Splined Shafts & Sprockets on Both Augers	
7" Rubber Side Extensions	
420 Cubic Feet Mixing Capacity	
36" Wide x 24" Long Chain Conveyor	
Optional 36" Wide x 36" Long Chain Conveyor	

<b>Specifications and Dimensions</b>	
Tub Bottom Thickness	5/8"
Sides	1/4"
Auger Flights	1/2" Thick
Auger Drive-Roller Chain	#100
Auger Drive Shafts	4"
Weight-Mixer	9,660#
Auger Diameter	66"

<b>Capacity</b>	
Maximum Ration Weight	Hay Ration - 8,400#, Heavy Ration - 11,750#
Minimum Tractor HP	90 HP
Cubic Ft. Mixing Capacity	420 cu. ft.
Bushel Mixing Capacity	336

## VXT 505 MIXER SPECIFICATIONS

<b>Features</b>
Mixing Chamber -15' Feet Long Inside
Gear Box Rt Angle
540 PTO Drive
Heavy Duty High Strength Auger Tubes & Heavy Roller Chain Drive
Splined Shafts & Sprockets on Both Augers
7" Rubber Side Extensions
500 Cubic Feet Mixing Capacity
36" Wide x 24" Long Chain Conveyor
Optional 36" Wide x 36" Long Chain Conveyor

<b>Specifications and Dimensions</b>	
Tub Bottom Thickness	5/8"
Sides	1/4"
Auger Flights	1/2" Thick
Auger Drive-Roller Chain	#100
Auger Drive Shafts	4"
Weight-Mixer	10,180#
Auger Diameter	66"

<b>Capacity</b>	
Maximum Ration Weight	Hay Ration - 10,000#, Heavy Ration - 13,990#
Minimum Tractor HP	105 HP
Cubic Ft. Mixing Capacity	500 cu. ft.
Bushel Mixing Capacity	400

## VXT TRUCK SPECIFICATIONS

<b>Truck Engine Type</b>	<b>PTO (% Engine Speed)</b>	<b>Gearbox (Ratio)</b>
Diesel Automatic & Standard Transmission	80-85, 250 FT/LB Min. Engine Rotation	3 to 1



# PREOPERATION

**⚠ CAUTION** THIS MACHINE REQUIRES AN OPERATOR. DO NOT LEAVE UNATTENDED.

## TRACTOR DRAWBAR

Set tractor drawbar as shown in figure 1.

**⚠ CAUTION** FAILURE TO SET DRAWBAR PROPERLY MAY CAUSE SHAFT TO OVER EXTEND AND SEPARATE OR BEND WHEN CORNERING OR TRANSPORTING RESULTING IN DEATH OR PERSONAL INJURY.

**IMPORTANT:** Drive components can be damaged from excessive speed. Under no circumstances should this feed mixer be operated by a tractor with 1000 RPM PTO.

Feed mixer is designed for 540 RPM driveline. DO NOT operate with 1000RPM tractor PTO.

**IMPORTANT:** To prevent driveline damage, adjust tractor drawbar to recommended setting. Disengage tractor PTO before turning.

Remove clevis if equipped. Turn offset drawbar down.

Adjust drawbar length:

PTO SPEED

540 RPM

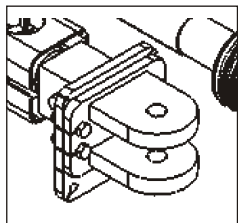
Set drawbar length to

14 inches (356 mm) as shown in Figure 1.

## ADJUST TRAILER HITCH CLEVIS

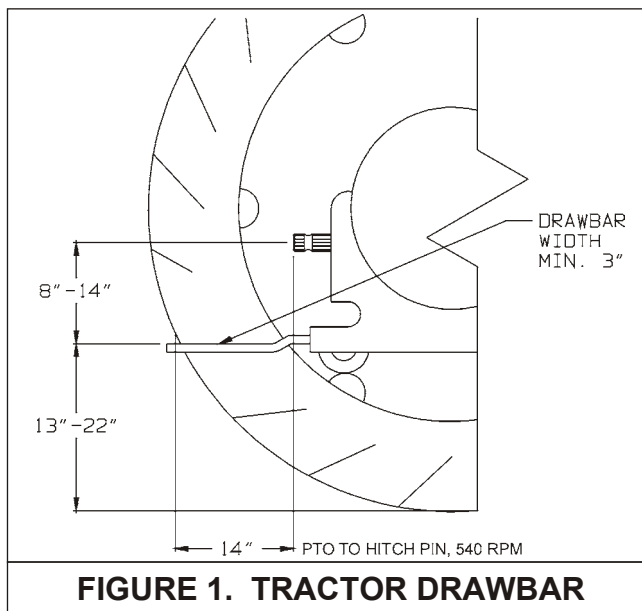
Mixer should be approximately level when attached to tractor.

Adjust clevis by changing hole location on trailer tongue.



## PREOPERATION 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. Assure that agricultural implement tires are inflated evenly.
6. 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.
7. Check to see that no obstructions are present in the mixer prior to start up.
8. Be sure that there are no tools lying on or in the mixer/feeder.
9. Do not use the unit until you are sure that the area is clear, especially children and animals.
10. Because it is possible that this mixer/feeder 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 mixer/feeder.
12. Practice operation of your mixer/feeder and its attachments. Completely familiarize yourself and other operators with its operation before using.
13. Securely attach to towing unit. Use a high strength, appropriately sized hitch pin with a mechanical retainer.
14. Do not allow anyone to stand between the tongue or hitch and the towing vehicle when backing up to the mixer/feeder.



**FIGURE 1. TRACTOR DRAWBAR**

**⚠ WARNING**

STAY CLEAR OF ALL ROTATING PARTS WHILE MIXER IS OPERATING.

## MIXER OPERATION

### PTO ENGAGEMENT - TRAILER

This mixer is designed for 540 rpm PTO. Do Not Operate mixer with 1000 rpm tractor PTO.

Avoid high speed sudden engagement of the mixer. Doing so may damage drive components.

### CORNERING - TRAILER

Sharp cornering with the PTO engaged is not recommended. If it is necessary to mix when cornering, it should be done at reduced speeds and on wide corners only.

### LOADING INSTRUCTIONS & PRECAUTIONS

1. Visually inspect mixer before each load
2. DO NOT overload the mixer. Mixer capacity is determined by weight. An overloaded mixer will not mix correctly and will pull harder, which could cause damage. Maximum weight - see page 15.
3. Be sure the discharge door is closed before adding any ingredients.
4. It is recommended that the mixer be operated while loading.

**⚠ WARNING**

DO NOT CLIMB ON OR STAND ON MIXER WHILE LOADING.

5. Add hay first.
6. Add balance of grain and/or commodities, keeping more fragile ingredients toward the end of the loading sequence as possible. For best results, add concentrates or other dry ingredients of small quantity as close to the middle of the loading sequence as possible
7. Load Silage, green chop and/or other high moisture products.
8. Load molasses, animal fat and/or other liquid supplements last.
9. View mixing operation only from tractor seat.
10. The mixer is equipped with a 3-point electronic scale system. The hitch and each of the two axle spindles is an electronic weigh beam and sends information to the scale indicator to indicate

weight of ingredients added. The scale indicator is calibrated to compensate for the empty weight of the mixer. Complete details for proper scale operation are included with the documentation for the scale system.

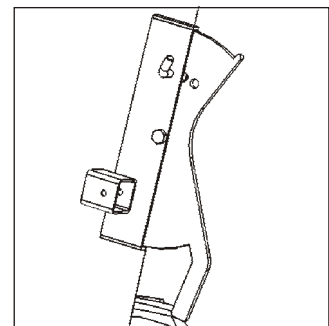
### HAY PREPARATION

SMALL BALES (60 to 150 lbs., 2 or 3 wire),  
LARGE SQUARE BALES (3' x 4' x 8' or 4' x 4' x 8') and ROUND BALES.

Remove all twine, wire and/or wrapping and load bale in mixer.

### SETTING RESTRICTOR PLATES (DOGS)

1. Adjustable, mixing restrictor plates are provided at two locations, 180 degrees across from each other, on the mixing tub.
2. The speed that the batch rotates inside the mixing tub is dependent on the weight of the ingredients in the batch and the setting of these dogs.
3. The dogs can be adjusted by pulling the pin and pivoting the dog further into the tub, or out of the tub. Replace the pin and secure when adjustment is complete.



Adjust restrictor plates (dogs) to fine tune length of cut. Always start with one dog, preferably the rear, engaged one hole and increase until length of cut is correct.

- The dogs should be extended no further than necessary into the tub and still obtain satisfactory mixing results. This will result in minimum power consumption and minimum mixing time. On the other hand, if mixing quality is not consistent or if hay is not being properly shredded and incorporated into the batch, extend these dogs further into the tub. The lighter the weight of the ingredients and the higher the content of hay is, the further these dogs must extend into the tub.

**NOTE:** Engaging dogs an excessive amount may cause mix quality to deteriorate.

## MIXING

After adding the last ingredient, increase the PTO speed to 540 RPM and continue the mixing operation for about 3 to 4 minutes. The exact mixing time will be dependent on the size of the batch and difference in types of ingredients.

**NOTE:** You may find by experience that regulating PTO speed other than 540 RPM will improve mixing. This will be dependent on batch ingredients, batch size, and desired mixing time.

**⚠ WARNING** DO NOT CLIMB ON THE MIXER TO OBSERVE THE MIXING OPERATION. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

To observe the mixing quality, do so as feed is discharged. DO NOT climb or stand on the machine to observe mixing.

## DISCHARGING FEED

- Begin unloading with PTO drive engaged and mixing augers operating.
- For mixers with optional conveyor, conveyor motor and conveyor tilt are sequenced so when the hydraulic control lever is moved one way, the conveyor will extend downward and the conveyor motor will begin to operate, fully engaging after the cylinder is fully extended.
- Lower the optional conveyor and start conveyor.
- Open the discharge door which is operated using separate hydraulic controls.
- For best results, off load mix feed at full PTO speed, and with the door as open as possible.
- When through feeding, close the discharge door, clear conveyor of all remaining feed, and retract hydraulic cylinder to lift conveyor.

## SHUT DOWN

- Stop The PTO drive.
- Close the discharge door.
- Stop the conveyor, if so equipped.

## SCALE SWING MOUNT

The scale head is mounted to a swing arm. The swing arm is designed to allow scale head viewing from either side of the mixer or from the tractor just by rotating the scale arm before loading or unloading starts.

## SCALE SYSTEM

Refer to the operation book supplied with the scale indicator head.

## HIGHWAY AND TRANSPORT OPER A TON

- Adopt safe driving practices:
- Keep the tractor brake pedals latched together at all times. Never use independent braking with machine in tow as loss of control and/or upset of unit can 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.
- Do not drink and drive.
- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- Use approved accessory lighting flags and necessary warning devices to protect operators of other vehicles on the highway during daylight and nighttime transport.
- The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
- When transporting the mixer/feeder on the road or highway under 20 MPH (40 KPH) at night or during the day, use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem.

12. Plan your route to avoid heavy traffic.
13. Be a safe courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
14. Be observant of bridge loading ratings. Do not cross bridges rated lower than the gross weight at which you are operating.
15. Watch for obstructions overhead and to the side while transporting.
16. Always operate mixer/feeder in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the mixer/feeder when making turns, stopping the unit, etc.

## **LIGHTING AND MARKING**

It is the responsibility of the customer to know the lighting and marking requirements of the local highway authorities and to install and maintain the equipment to provide compliance with the regulations. Add extra lights when transporting at night or during periods of limited visibility.

## **FOLLOWING OPERATION**

Following operation or when unhitching, stop the tractor or towing vehicle, set the brakes, disengage the PTO and all power drives, shut off the engine and remove the ignition keys.

Store the unit in an area away from human activity.

Do not park equipment where it will be exposed to livestock for long periods of time. Damage and livestock injury could result.

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

Make sure parked machine is on a hard, level surface and engage all safety devices.

Wheel chocks may be needed to prevent unit from rolling.

## **TRUCK OPERATION**

For truck operation and limitations, refer to the truck's owner manual.

# MAINTENANCE

**⚠ WARNING**

ALWAYS DISCONNECT OR DISENGAGE POWER TAKE OFF AND REMOVE KEYS FROM TRACTOR OR TRUCK BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS MACHINE. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

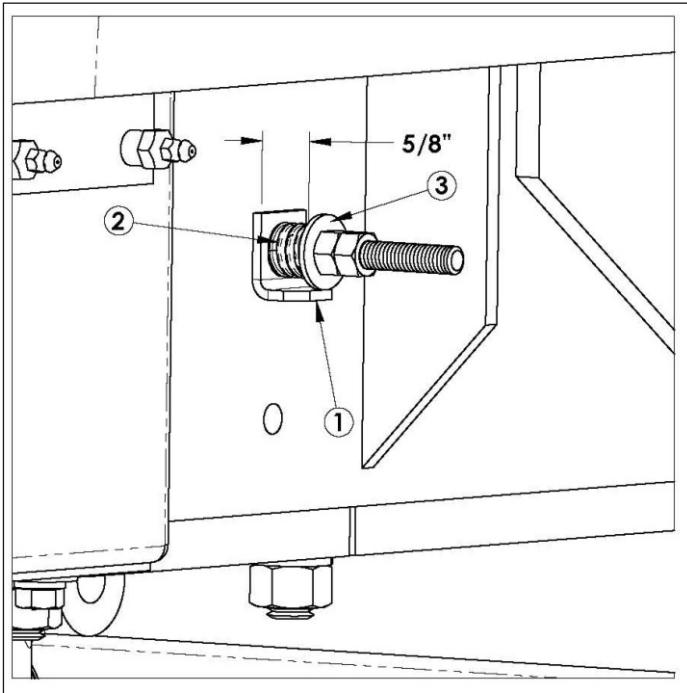
The lowered position of the conveyor is limited by the mechanical interference of the bottom of the chute and the bottom of the conveyor.

## READ THE FOLLOWING BEFORE WELDING ON THIS MIXER/FEEDER

When welding on your mixer/feeder, do not allow the current to flow through the ball bearings or the roller chains. Ground directly to the item being welded.

Always disconnect the scale instrumentation from the weigh bars or load cells and the power source. Be sure the current does not pass through weigh bars or load cells or scale indicator. The alternator should always be disconnected if the mixer/feeder is not disconnected from the towing vehicle.

## DRIVE CHAIN ADJUSTMENT INSTRUCTIONS:



The chain tension adjustment should be checked regularly, when the mixer is serviced.

The washer (#3) should be adjusted so that it is 5/8" from the spring guide (#1), or at the end of the spring guide, which is 5/8".

When this spring is adjusted to 5/8" the drive chains should have the correct tension and when the chains are lubricated correctly, the chains and sprockets will last longer.

This adjustment should be maintained at locations on both sides of the mixer.

KEY	QTY.	PART #	DESCRIPTION
1	2 Per Mixer	161226	VXT Spring Guage 1" x 1 5/8"
2	2 Per Mixer	410013	Spring, 3/4" x 1", Blue, Die Sprg.

# LUBRICATION

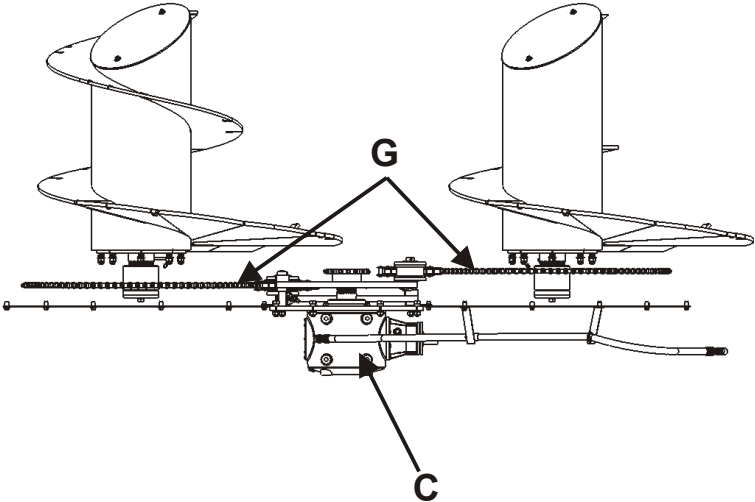
**⚠ WARNING** ALWAYS DISCONNECT OR DISENGAGE POWER TAKE OFF AND REMOVE KEYS FROM TRACTOR OR TRUCK BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS MACHINE. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

See Diagram on Page 23.

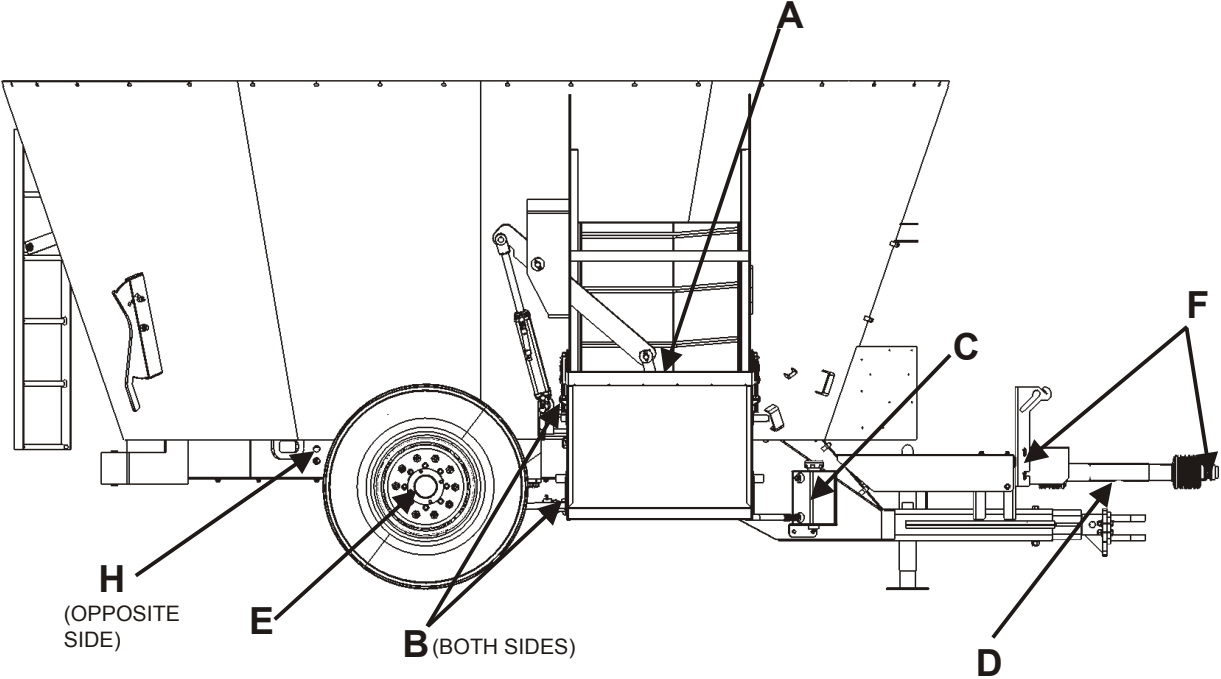
LOCA-TION	ITEM	LUBRICATION	INTERVAL
A	Conveyor Chain	Light Weight Oil	Brush Or Spray On Lightly Every 40 Hours Of Operation
B	Conveyor Bearings	Standard All Purpose Grease	One Pump Every 8 Hours Of Operation
C	Gearbox	Gear Lube (EP 90 weight). Maintain level within ½" of top of sight gauge on reservoir.	After First 100 Hrs. Of Operation, Drain The Oil. Flush Gear Case With An Approved Nonflammable, Nontoxic Solvent And Refill With Oil. Thereafter Oil Should Be Changed Every 2000 Hrs. Or 12 Months.
D	PTO (Tumbler Shaft)	Standard All Purpose Grease	Every 10 Hrs. <b>IMPORTANT:</b> AT EACH LUBRICATION MAKE SURE THE TUMBLER SHAFT SLIDES IN AND OUT FREELY. FAILURE OF THE SHAFT TO SLIDE FREELY WILL RESULT IN DRIVE TRAIN DAMAGE.
E	Wheel Bearings	Pack With Lithium Base Grease	Pack Every 12 Months
F	U-Joint	Standard All Purpose Grease	Every 10-20 hrs.
G	Gearbox Drive Chain	Light Weight Oil	Spray On Lightly Thru Access Holes Every 40 Hours Of Operation
H	Grease Auger Bearings	All Purpose Grease	Every 16 HRS Of Operation
Truck Chassis		See Manufacturer's Recommendations.	

**NOTE: LOCATIONS A,B,C, G & H ARE ALSO FOR THE TRUCK APPLICATION.**

**LUBRICATION DIAGRAM**



**NOTE: TRAILER MODEL ILLUSTRATED**  
**NOTE: LOCATIONS A,B,C, G & H ARE ALSO FOR THE TRUCK APPLICATION.**



# TROUBLESHOOTING

**⚠ WARNING** ALWAYS DISCONNECT OR DISENGAGE POWER TAKE OFF AND REMOVE KEYS FROM TRACTOR OR TRUCK BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS MACHINE. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

**NOTE:** CHART NOT ALL INCLUSIVE OF PROBLEMS. CONTACT DEALERSHIP FOR ASSISTANCE.

PROBLEM	POSSI BLECAUSE	POSSI BLEREMEDY
Machine Vibration	Universal Joints Out Of Alignment.	Check And Realign
	Worn Out Bearing.	Replace Bearing.
Auger Drive Chains Jumping Sprocket Teeth	Idler Springs Loose.	Adjust Idlers
	Worn Sprocket Teeth.	Replace Sprocket.
Auger Drive Chains Breaking	Usually Causes Side Bar Breakage Due To Chain Riding Up On Sprocket Teeth.	See Possible Remedies To “chains Jumping Sprocket Teeth” Above
	Excessive Loads	Refer To General Information About Machine Loading
Excessive Bearing Failure	Improper Lubrication	Refer To Lubrication Chart.
	Contamination	Check Seal
	Excessive Loads.	Refer To General Information About Machine Loading
Mixing quality poor, not thorough.	Batch has high concentration of light weight ingredients and rotates too fast inside tub for thorough mixing.	Extend restrictor plates (dogs) further into tub as instructed on page 18.
	High concentration of long hay, not being torn apart.	Extend restrictor plates (dogs) further into tub as instructed on page 18.
Hay being added to batch, but not being incorporated into mixture.	Hay not getting shredded by mixing action, batch rotating inside tub too fast.	Extend restrictor plates (dogs) further into tub as instructed on page 18.
Too much power being consumed to mix.	Restrictor plates extend too far into tub and retarding rotation of batch.	Move restrictor plates (dogs) away from tub as instructed on page 18.



# OPTIONAL COMPONENT INSTALLATION

## INSTALLING BATTERY ON MIXER (TRAILER MOUNT ONLY)

**NOTE:** Tractor socket shipped with mixer is not used when a battery is installed on the mixer.

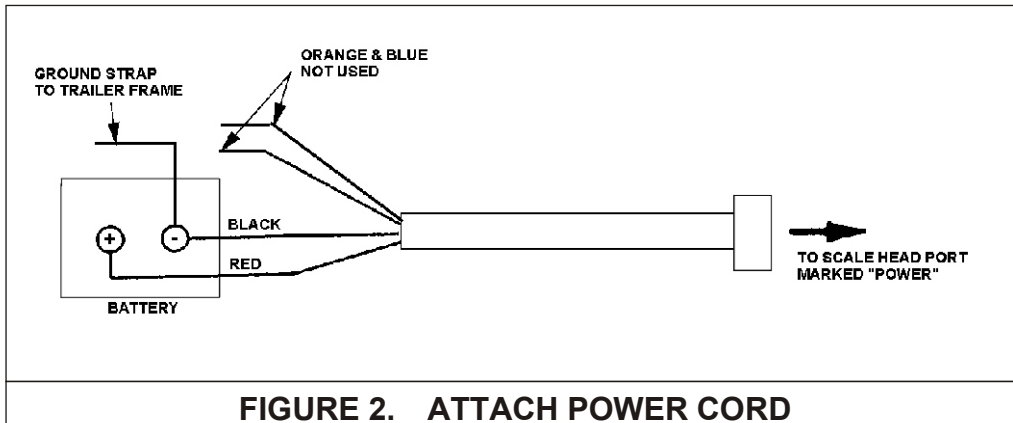
1. Open cover on battery box .
2. Position 12 VDC automotive battery on battery shelf.
3. Connect to battery positive and negative terminals.
4. Connect scale head power cord, see figure 2. Cord to run through side of battery box.
5. Use a nylon strap to anchor battery to battery shelf (not supplied).
6. Close cover and strap down.

## SCALE MOUNTING (TRUCK MOUNT ONLY)

The primary scale indicator is mounted to the right hand side of the driver seat on an adjustable pedestal. The pedestal is custom fit to the truck and is bolted to the floor of the cab and supported with braces to avoid vibration. The pedestal can be adjusted to provide easy viewing and access from the drivers seat.

Auxiliary indicator mounts are also supplied on the right and left hand side of the mixer to provide for mounting of an optional Remote Indicator on either or both sides of the mixer. These mounts allow the indicator to be rotated for easy viewing.

The Truck mixer is initially provided with mounting brackets matching the scale indicator purchased. If in the future a different scale indicator is purchased, new mounting brackets will be needed.



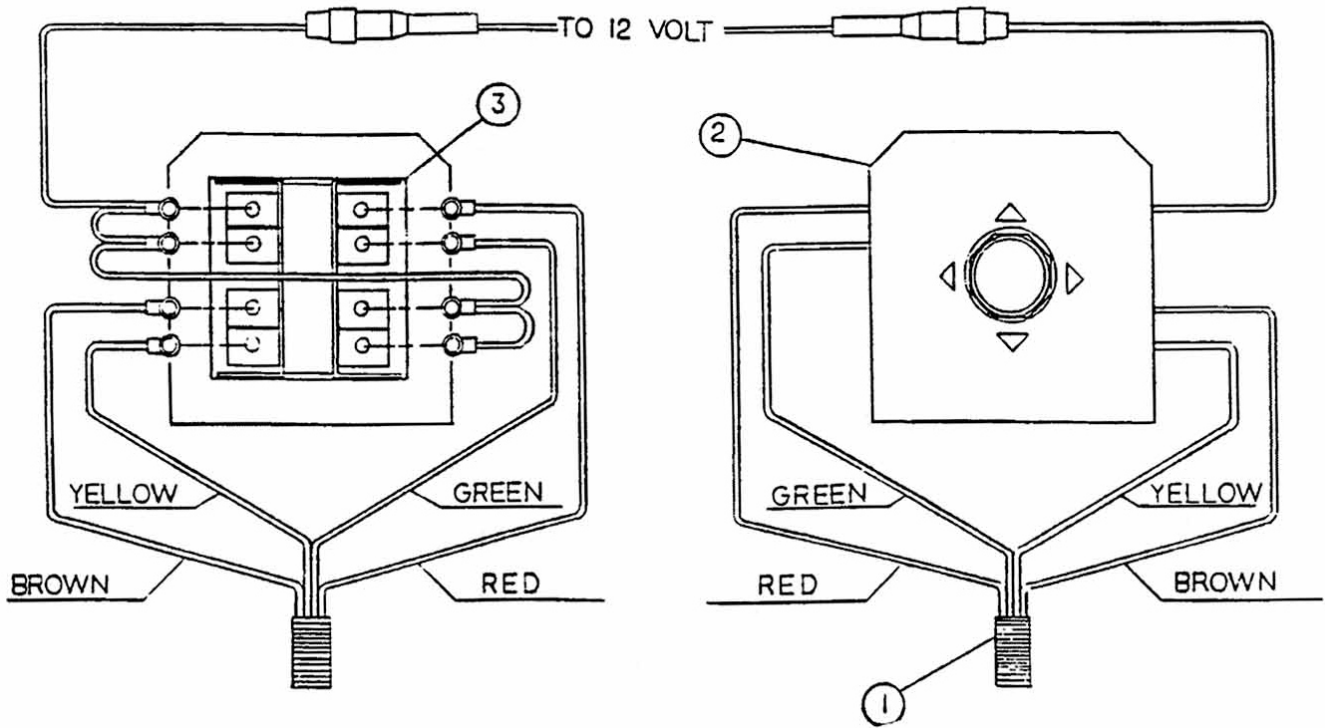
# REPAIR PARTS TABLE OF CONTENTS

DESCRIPTION	PAGE #
JOY STI CK ASSEMBLY .....	27
TRUCK CONTROL VALVE .....	28
STRAIGHT DOOR WIRING SCHEMATIC .....	29
MAIN ASSEMBLY .....	30
AUGERS.....	32
AUGER DRIVE .....	34
PTO DRIVELINE ASSEMBLY.....	36
DRIVE SHAFT ASSEMBLY .....	38
VXT 325 HUB & SPINDLE ASSY, 8000#, 8 BOLT TRAILER.....	40
VXT 425 & 505 HUB & WEIGH BAR ASSEMBLY, 10 BOLT TRAILER.....	42
DECALS .....	44
RUBBER EXTENSION KIT 7" .....	45
CHAIN CONVEYOR ASSEMBLY .....	46
CONVEYOR HYDRAULIC ASSEMBLY, SINGLE CYLINDER .....	48
3 AUGER CONVEYOR ASSEMBLY .....	50
HYDRAULIC ASSEMBLY,3 AUGER CONVEYOR ASSEMBLY.....	52
VXT SCALE MOUNT KIT.....	54
VXT KNIFE KIT, STD.....	56
VXT 325 DISCHARGE SPOUT.....	57
VXT TRUCK CAB SCALE PARTS .....	58-59
VXT TRUCK SCALE PARTS .....	60
VXT TRUCK FENDERS, BUMPERS & PLATFORM.....	61
FRONT CENTER CONVEYOR.....	62-63
TRUCK 17" FOLD-UP SPOUT KIT .....	64

# JOYSTICK ASSEMBLY

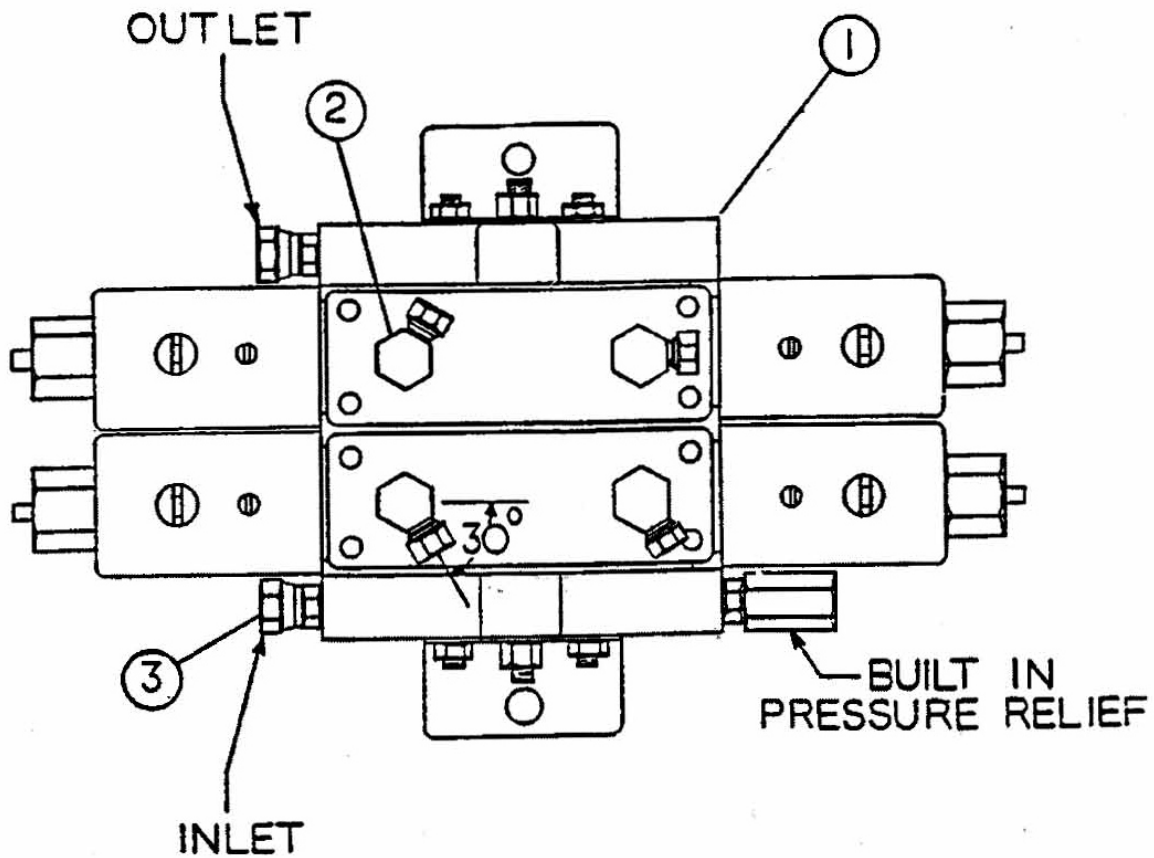
BOTTOM

TOP



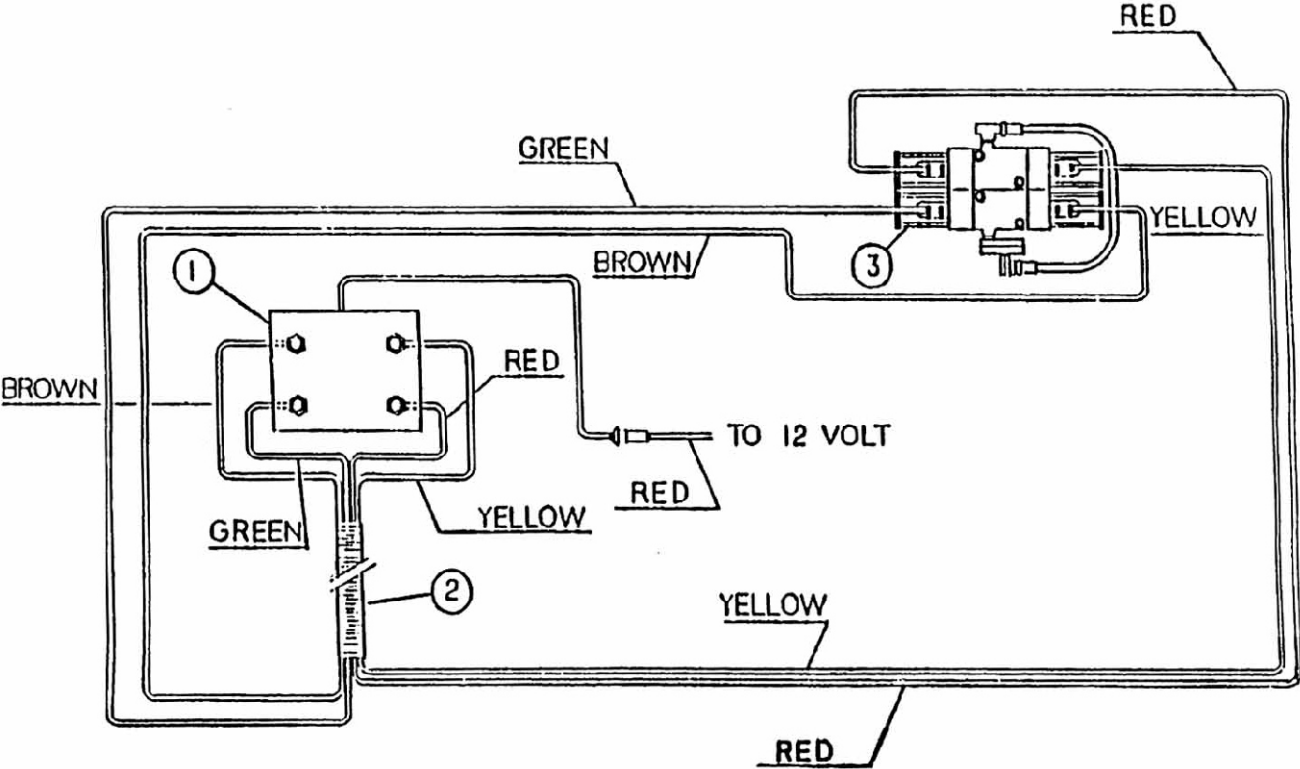
Key	Part No.	Description	Qty.
1	781056	Push-Button Switch Wire Assembly	1
2	185575	Joy stickBracket	1
3	357705	Joy stickSwitch	1

# VXT TRUCK CONTROL VALVE



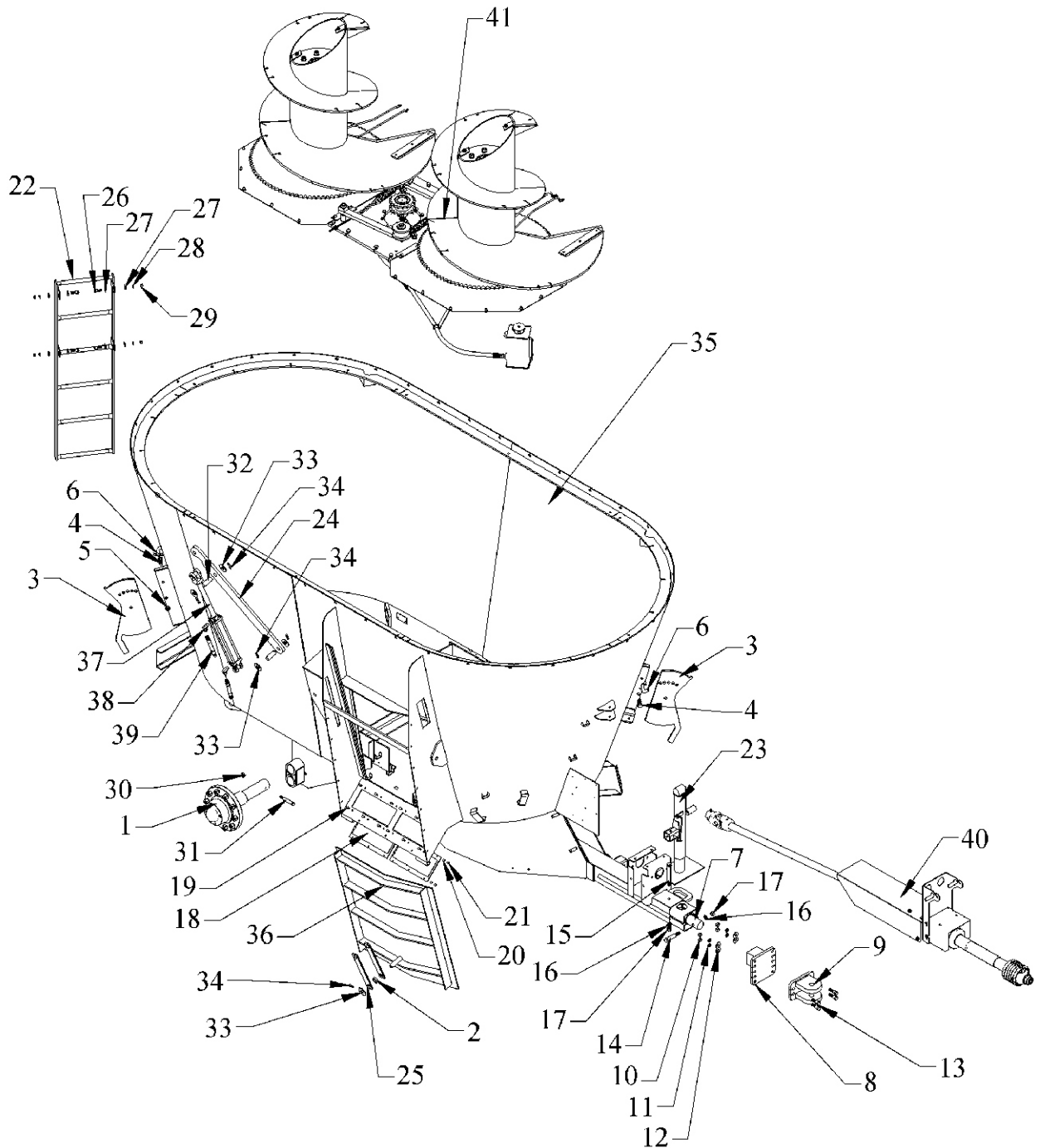
Key	Part No.	Description	Qty.
1	362209	Fluid Tech Hydraulic Valve	1
2	368030	9/16" MOR x 3/8" FPSW 90°	4
3	368115	9/16" MOR x 3/8" FPSW Straight ADP	2

# STRAIGHT DOOR WIRING SCHEMATIC



Key	Part No.	Description	Qty.
1	780081	Joystick Switch Panel Assembly	1
2	781055	Truck To Mixer Wire Assembly	1
3	780123	MV5 Hyd Control Valve Assembly	1

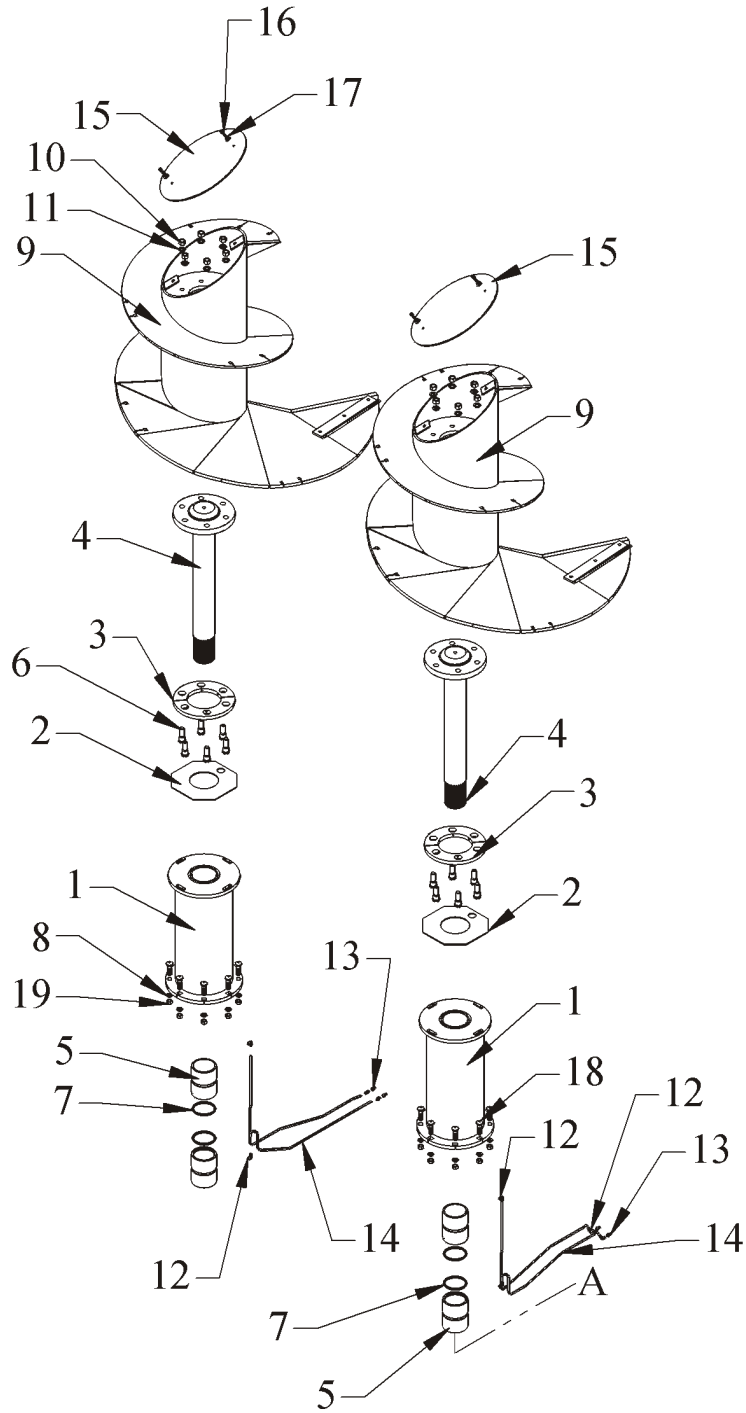
# MAIN ASSEMBLY



# MAIN ASSEMBLY

Key	Part No.	Description	Qty.
1	760130	Trl 10 Bolt Hub Assy (VXT-425 & 505) (See Page 42)	2
	760527	8000# 8 Bolt Hub & Spindle (VXT-325) (See Page 40)	2
2	412416	Set Collar 1" Pltd	1
3	161086	325/425 Tub Knife	2
4	405781	HHCS #5 Pltd 3/4-10 x 2.5	2
5	400912	Hex C Locknut 5 Pltd. 3/4-10	2
6	404209	Pin, 5/8 x 4, Receiver Hitch	2
7	450756	Weighbar Hitch, 2.50 Dia (VXT-425 & 505)	1
	450781	Weighbar Hitch, 2.50 Dia (VXT-325)	1
8	860354	VXT Hitch Bar WA	1
9	860370	VXT Clevis Hitch WA	1
10	400310	Hex Nut #5 Pltd 5/8-18	4
11	402010	Spring Lock Washer Med 5/8"	4
12	402410	Flat Washer Med Pltd 5/8	4
13	405756	HHCS #5 Pltd 5/8-11 x 2 1/2	4
14	405789	HHCS #5 Pltd 3/4-10 x 5	1
15	405793	HHCS #5 Pltd 3/4-10 x 7	1
16	402012	Lock Washer, Pltd. 3/4"	2
17	400212	Hex Nut #5 Pltd 3/4-10	2
18	375004	Magnet AM 1500 Arco Plate	2
19	407021	Car. Bolt #5 Pltd 5/16-18 x 1	12
20	402005	Spring Lock W Med Pltd 5/16	12
21	400205	Hex Nut #5 Pltd 5/16-18	12
22	872273	Trailer Ladder WA	1
23	875384	Mixer Jack W.A.	1
24	161098	Door Lift Arm 4-1/2" x 39"	1
25	161121	VXT Door Lift Strap 2" x 12-1/2"	2
26	405704	HHCS #5 Pltd 1/2-13 x 1 3/4	4
27	402408	Flat Washer Med Pltd 1/2	8
28	402008	Lock Washer, Pltd., 1/2"	4
29	400208	Hex Nut #5 Pltd 1/2-13	4
30	401110	Nut 5/8-11 Hex Nyloc #5 Pltd	2
31	405764	HHCS #5 Pltd 3/8-11 x 5	2
32	161192	Cylinder Pin 1 x 3 1/4	2
33	402416	Flat Washer Med Pltd 1	5
34	404000	Cotter Pin Pltd 1/4 x 1 1/2	5
35	860355	325 VXT Tub WA (Not Illustrated)	1
	860371	425 Left Hand Truck Shell WA (Not Illustrated)	1
	860361	425 VXT Tub WA (Illustrated)	1
	860390	505 Left Hand Truck Shell WA (Not Illustrated)	1
	860385	505 Right Hand Trailer Shell WA	1
36	860342	425 Door WA	1
	860387	505 Right Hand Door WA	1
	860342LH	425/505 Left Hand Door WA (Not Illustrated)	1
37	364058	Hyd. Cyl. 22-1/4 Cc 2" x 12"	1
37A	364400	Cylinder Repair Kit, 2"	AN
38	368020	Swivel 90 Deg. L 3/8"MP x 3/8" FP	2
39	781379	Hyd Hose 3/8-1 x 189-1/2"	2
40	760566	PTO/ Driveline Assy. (See Page 36)	1
41	760563	VXT Auger Drive BDL (325 & 425) (See Page 32)	1
	760572	505 VXT Auger Drive BDL	1

# AUGERS

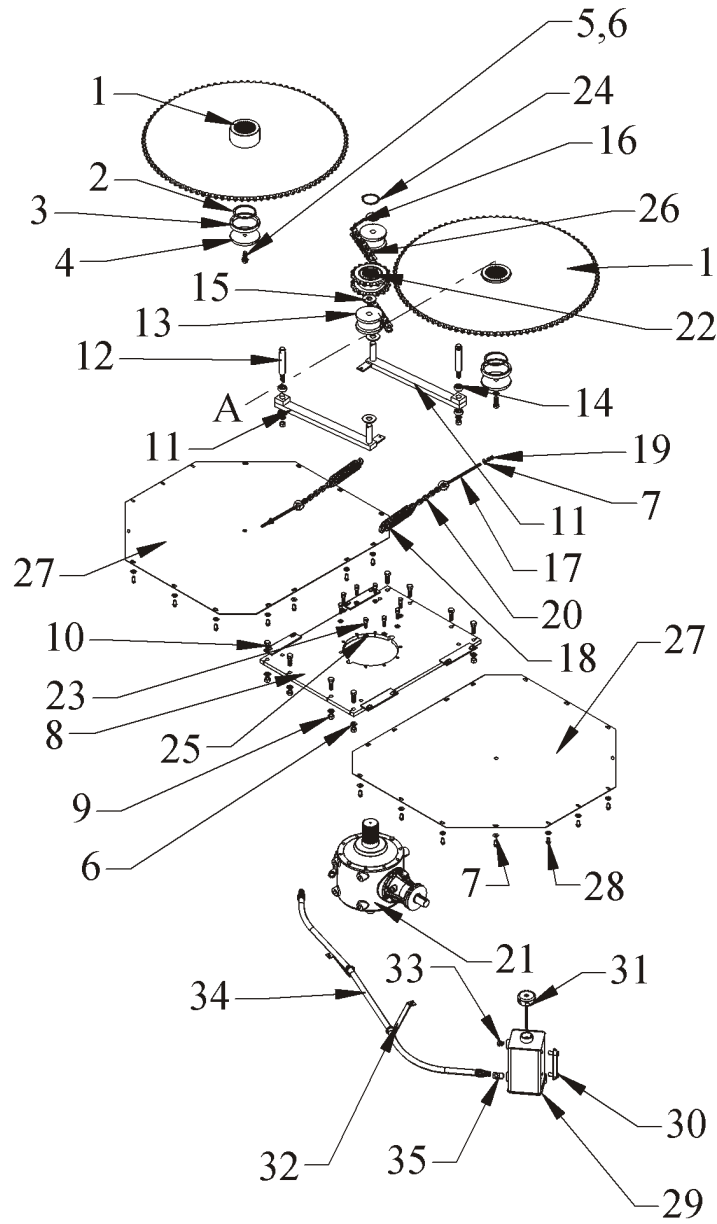




## AUGERS

Key	Part No.	Descrip tbn	Qty.
1	860348	VXT Auger Bearing Column WA	2
2	161065	325/425 SS Thrust Washer 11-3/4" x 11-3/4"	2
3	161148	Nylatron Thrust Washer 3/4" x 6-1/2" x 11-5/8"	2
4	860345	VXT Auger Shaft WA 4" x 34-3/4"	2
5	161118	Nylatron Bearing 4"ID x 4-3/4"OD	4
6	407729	Stud Bolt 3/4" X 2 5/8, W/1" Shoulder	12
7	351907	O-Ring 3.975"ID x .210"C.S.	4
8	402010	Spring Lock W Med Pltd 5/8	28
9	860350	VXT 325/425 Auger WA	2
	860384	VXT 505 Auger WA	2
10	400312	Hex Nut #5 Pltd. 3/4" - 16	12
11	402012	Spring Lock W Med Pltd 3/4	12
12	356001	Comp 90 Deg 1/2M NPFT x 3/16	8
13	310750	FPT Grease Zerk Phd 1/8	4
14	356203	Copper Tubing 3/16 OD	4
15	161100	Auger Tube Cap 16-1/4" x 19-5/16"	2
16	405654	HHCS #5 Pltd., 3/8"-16 x 1 1/4"	4
17	402006	Lockwasher Med. Pltd., 3/8"	36
18	407122	5/8"-11 x 2" Carriage Bolt #5 Pltd.	16
19	400210	Hex Nut #5 Pltd 5/8-11	26

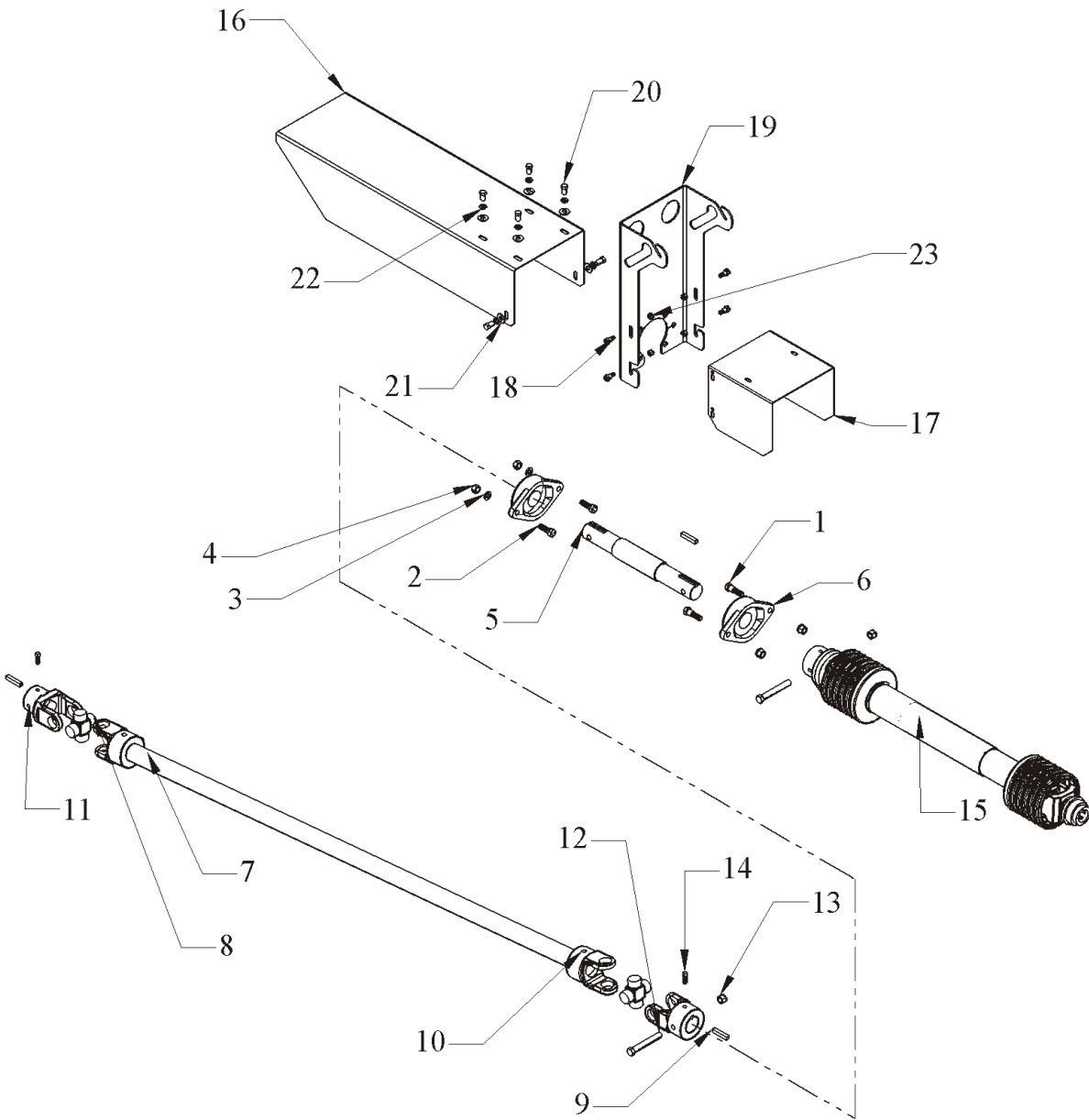
# AUGERS DRIVE



## AUGERS DRIVE

Key	Part No.	Descrip tbn	Qty.
1	860359	VXT Auger Sprocket WA	2
2	409962	Snap Ring 4"X.109" SH400	2
3	161150	VXT Retainer Sleeve	2
4	185261	5 ½" O.D. Washer	2
5	405753	HHCS #5 Pltd. 5/8-11X1 ¾	2
6	402010	Spring Lock W Med Pltd 5/8	28
7	402406	Flat Washer, 3/8" ID X 1" OD	36
8	860340	VXT Gearbox Mnt WA	1
9	400210	Hex Nut #5 Pltd 5/8-11	26
10	405754	HHCS #5 Pltd., 5/8"-11 X 2"	8
11	860357	Idler Arm WA 1" X 2" X 21"	2
12	161170	325/425 Idler Pin 1" X 7-3/8"	2
13	161165	Idler Block 5" OD UHMW	2
14	412416	Set Collar 1" Pltd	4
15	402416	Flat Washer Med Pltd 1	4
16	404001	5/32" Cotter Pin X 1 ¼"	2
17	410852	3/8" X 8" Eye Bolt	2
18	410012	Spring Pull 1 ¾" X 7 X .218	2
19	400206	Hex Nut #5 Pltd 3/8-16	6
20	170323	Chain-14 Links	2
21	344071	GB,Rt Agl,1.75"ln,3"SPL Out	1
22	860358	VXT Gearbox Sprocket WA	1
23	407819	M12-1.75 x 45mm HHCS 10.9	8
24	409961	Snap Ring 3" x .093 SH300	1
25	402008	Spring Lock W Med Pltd ½	8
26	321118	Pitch - Complete #100 RC x 118P	2
27	161077	325/425 Chain Drive Door 43-1/4"X45-5/16"	2
28	405653	3/8" -16 X 1" #5 Pltd HHCS	32
29	875416	Gearbox Reservoir WA 6 x 6 x 10	1
30	362555	5" Sight Gauge	1
31	362549	Tank Breather NBF-2016 8" Dip Stick	1
32	860369	VXT GB Tube Hanger WA	2
33	310702	½" Pipe Plug	2
34	781512	1/2x76" Hyd Hose 1/2MP x 1/2MP	1
35	368111	Str. Adp. ½" X ½" FP Swivel	1

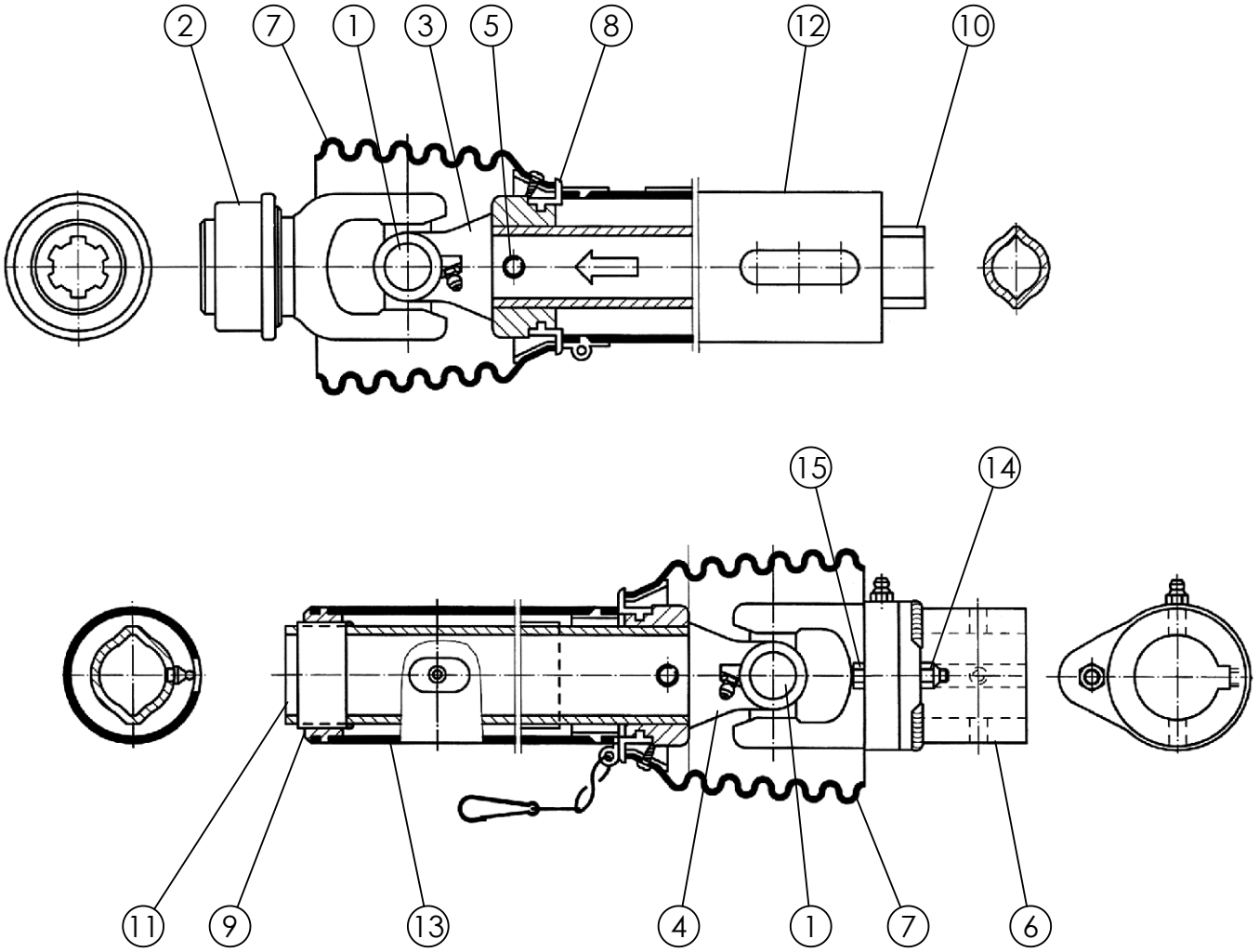
# PTO DRIVELINE ASSEMBLY



## PTO DRIVELINE ASSEMBLY

Key	Part No.	Descrip tbn	Qty.
1	405704	HHCS #5 Pltd, ½" X 1 ¾" Lg	2
2	405703	½" X 1 ¼" HHCS	2
3	402008	Lock Washer, Pltd., ½"	4
4	400208	Hex Nut #5 Pltd., ½"-13	4
5	161132	VXT Jack Shaft 1/3/4" X 15-1/4"	1
6	340228	Brg VCJT 1 ¾" - 2 Bolt Flange	2
7	161176	VXT Driveline 1-3/4" X 66-1/8"	1
8	338443	W-2400 Cross & Bearing Kit - 312410	2
9	185480	3/8" Sq. X 2" Key	5
10	338449	Yoke W2400 1 ¾ Rd 385559	3
11	338463	Yoke W2400 1 ½ Rb -383388	1
12	405713	½"-13 X 4" HHCS	2
13	401108	Hex Nyloc Nut #5 Pltd., ½-13	2
14	409543	Sq Hd Set Scr Cup 3/8" X 1"	4
15	338055	DR Shaft W2400 1 /38 x 6 SPL (See Page 38)	1
16	161128	VXT PTO Shield 23-5/8" X 33-1/2"	1
17	185302	P.T.O. Shield 9" X 22 9/16"	1
18	407410	Shoulder Bolt, 3/8 Dia X 3/8 Lg (5/16 Thd)	4
19	130561	PTO Shield Mtg Bracket	1
20	405652	3/8" X ¾" HHCS USS Pltd	6
21	402406	Flat Washer, 3/8" Id X 1" OD	6
22	402006	Lockwasher Med. Pltd., 3/8"	6
23	401105	Hex Nyloc Nut #5 Pltd., 5/16"-18	4

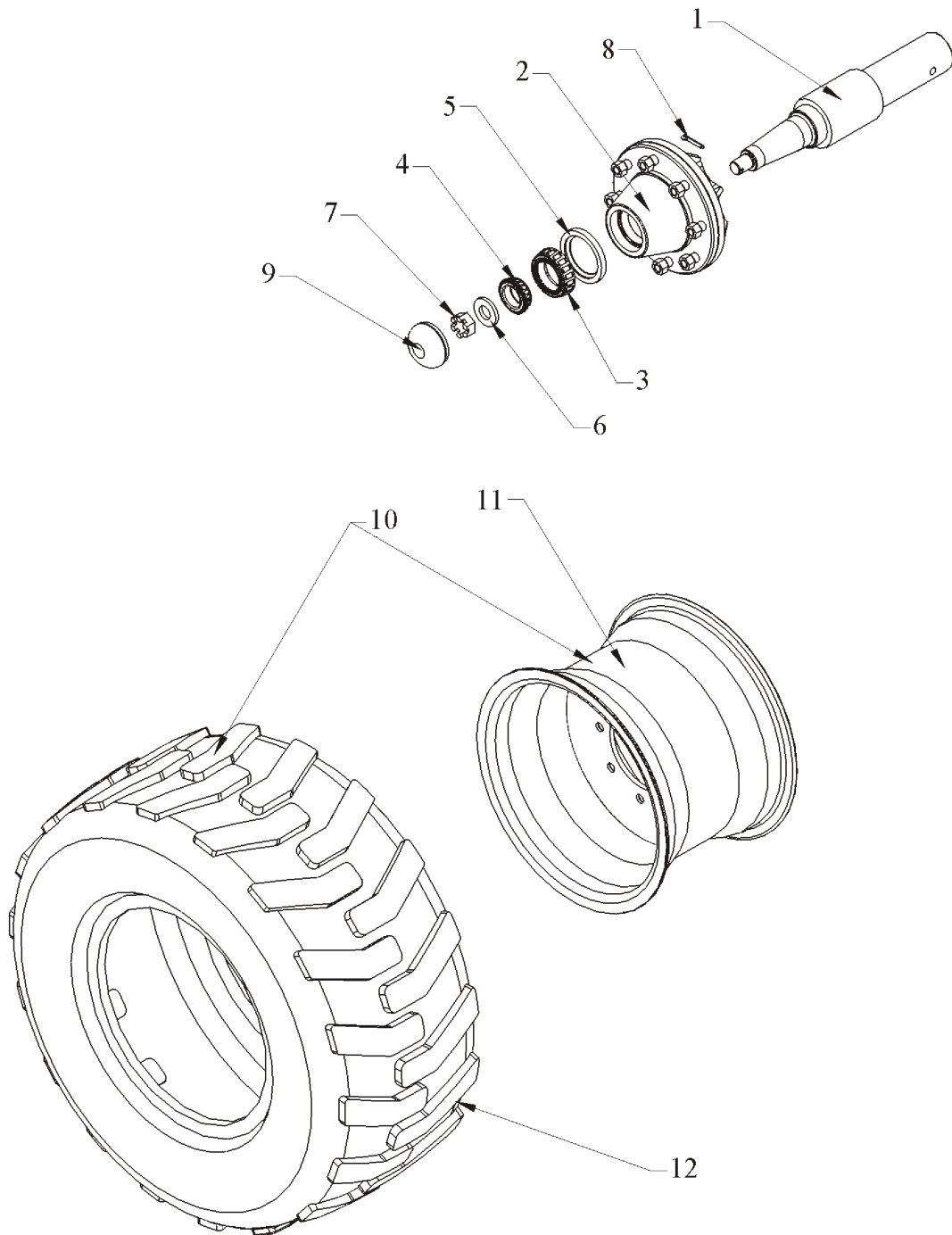
# VXT DRIVE SHAFT ASSEMBLY #338055



## VXT DRIVE SHAFT ASSEMBLY #338055

ITEM #	PART #	DESCRIPTION	QTY
1	338443	CROSS KIT 1-1/4" x 2-7/8", 312410 W2400	2
2	338444	YOKE, 1 3/8"- 6 SPLINE AS- 380907 WWE-2480	1
3	338450	INBOARD YOKE W2400 019518	1
4	338452	INBOARD YOKE W2400 019519	1
5	338473	ROLL PIN 10mm x 90mm	2
6	338478	SHEAR PIN YOKE 1-3/4", 389255 W2400	1
7	338486	SHIELD CONE 6-RIB, 365366 W-2400	2
8	338489	BEARING RING SC25, 087276	2
9	338503	SUPPORT BEARING- 355155	1
10	338572	INNER PROFILE 1b, OVAL - 081926 WWE-2480	1
11	338573	PROFILE & SLEEVE W.A. - 382415 WWE- 2480	1
12	338574	INNER SHIELD TUBE ROUND - 395519 WWE-2480	1
13	338575	INNER SHIELD TUBE ROUND - 382413 WWE-2480	1
14	400008	NUT M8 x 1.25 TOP LOCK	1
15	407836	HHCS M8 x 1.25 x 60, 8.8 PLTD (SHEAR BOLT)	1

# 8,000# 8 BOLT HUB & SPINDLE - VXT 325

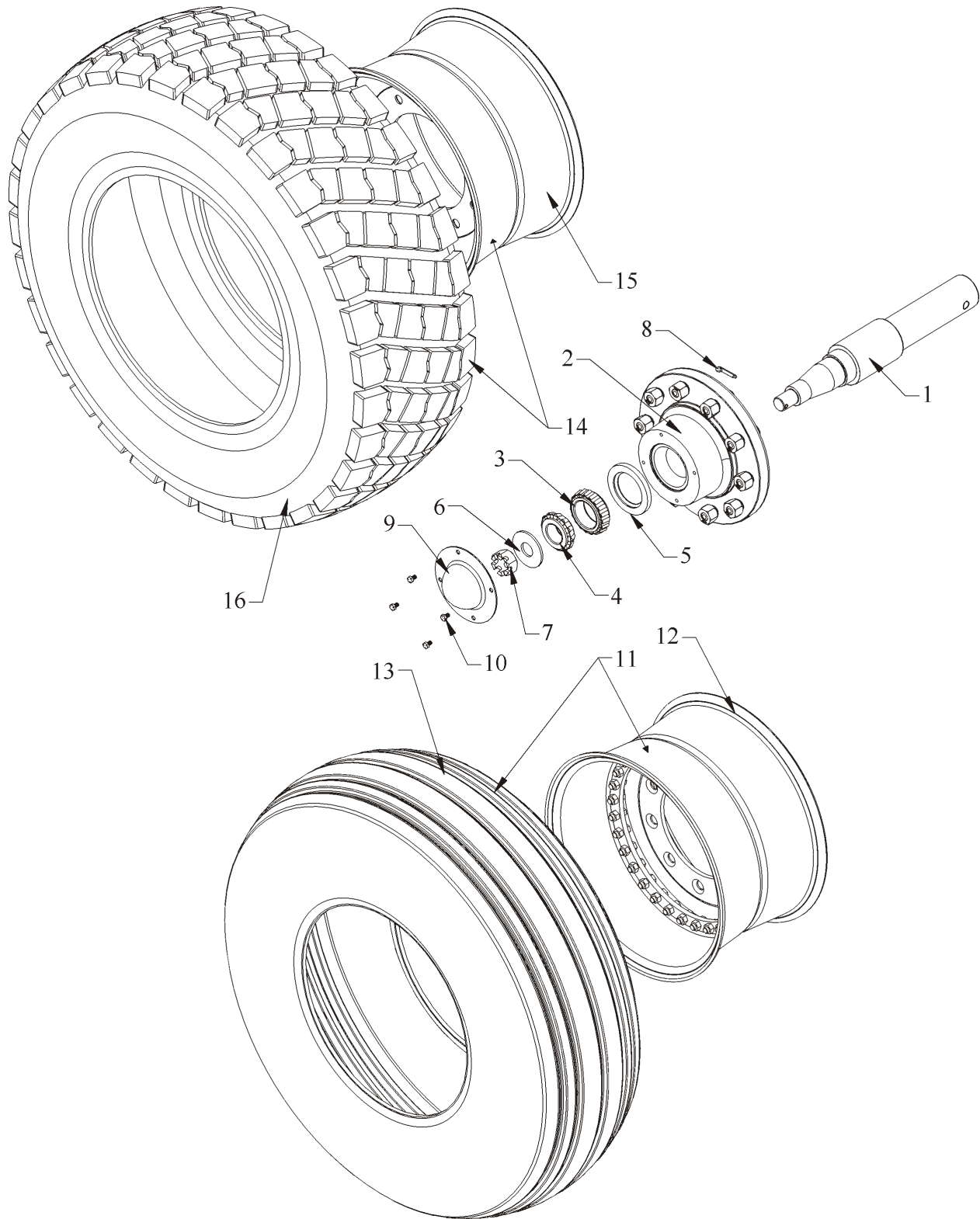




## 8,000# 8 BOLT HUB & SPINDLE - VXT 325

KEY	PART NO.	DESCRIPTION	QTY.
1	450780	Weighbar Axle, 2.875 Dia	1
2	372207A	Hub 8 Bolt 8000LB	1
3	342205	Brg. 2.25 Bore	1
4	342206	Brg. 1.625 Bore	1
5	355066	Seal 4" OD x 2 7/8" ID x x7/16W	1
6	402910	Washer, 2.13ID x 1.06OD x .26Thk	1
7	401816	1 1/4" Hex Castle Nut	1
8	404006	5/32" Cotter Pin x 1 1/4"	1
9	372307	Dust Cap Wilton	1
10	780754-R	33 x 16.5 Wheel & Tire W/Lug Tread - Right Hand	1
10A	780754-L	33 x 16.5 Wheel & Tire W/Lug Tread - Left Hand	1
11	372437	Wheel, 12" W x 16.50" DIA, 8 Bolt	1
12	372637	Tire, 33" x 15.5" x 16.5", Off Road Tread	1

# TRAILER 10 BOLT HUB & WEIGH BAR ASSY - VXT 425 & 505



## TRAILER 10 BOLT HUB & WEIGH BAR ASSY - VXT 425 & 505

KEY	PART NO.	DESCRIP TDN	QTY.
1	450711	Axle Bar Cell, 2 7/8 12K Hub	1
2	372209A	Hub 10 Bolt 12000LB	1
3	342209	Brg. 2.5 Bore	1
4	342210	Brg. 1.75 Bore	1
5	372321	Seal 2 7/8" Bore x 4 1/2" OD	1
6	402911	Washer, 1.22ID x 3.25OD x .19Thk	1
7	401820	1 1/4-12 Hex Castle Nut SAE Pltd	1
8	404003	Cotter Pin 5/32 x 1 1/4	1
9	372308	Dust Cap Wilton #9099831	1
10	405625	HHCS #5 Pltd 5/16 x 1/2	4
11	781466	Wheel & Tire 40x14.5x19 Recap Aircraft	1
12	W159365	Wheel 19x11-10 Bolt, Bolt Together	1
13	W158677	Tire H40x14.5x19 Recap Aircraft	1
NS	W160833	Inner Tube H40x14.5x19	1
NS	W160868	Flap H40x14.5x19	1
14	781209	15x22.5 Tire & Wheel Assy. (Option)	1
15	372422	15x22.5 10 Bolt Wheel	1
16	372614	Tire Lug Tread 15x22.5	1

# DECALS



1



2

**VXT-425**

3

**VXT-325**

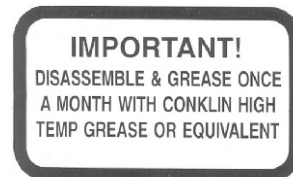
4

**VXT-505**

5

GREASE ALL JOINTS EVERY 10 HOURS

6



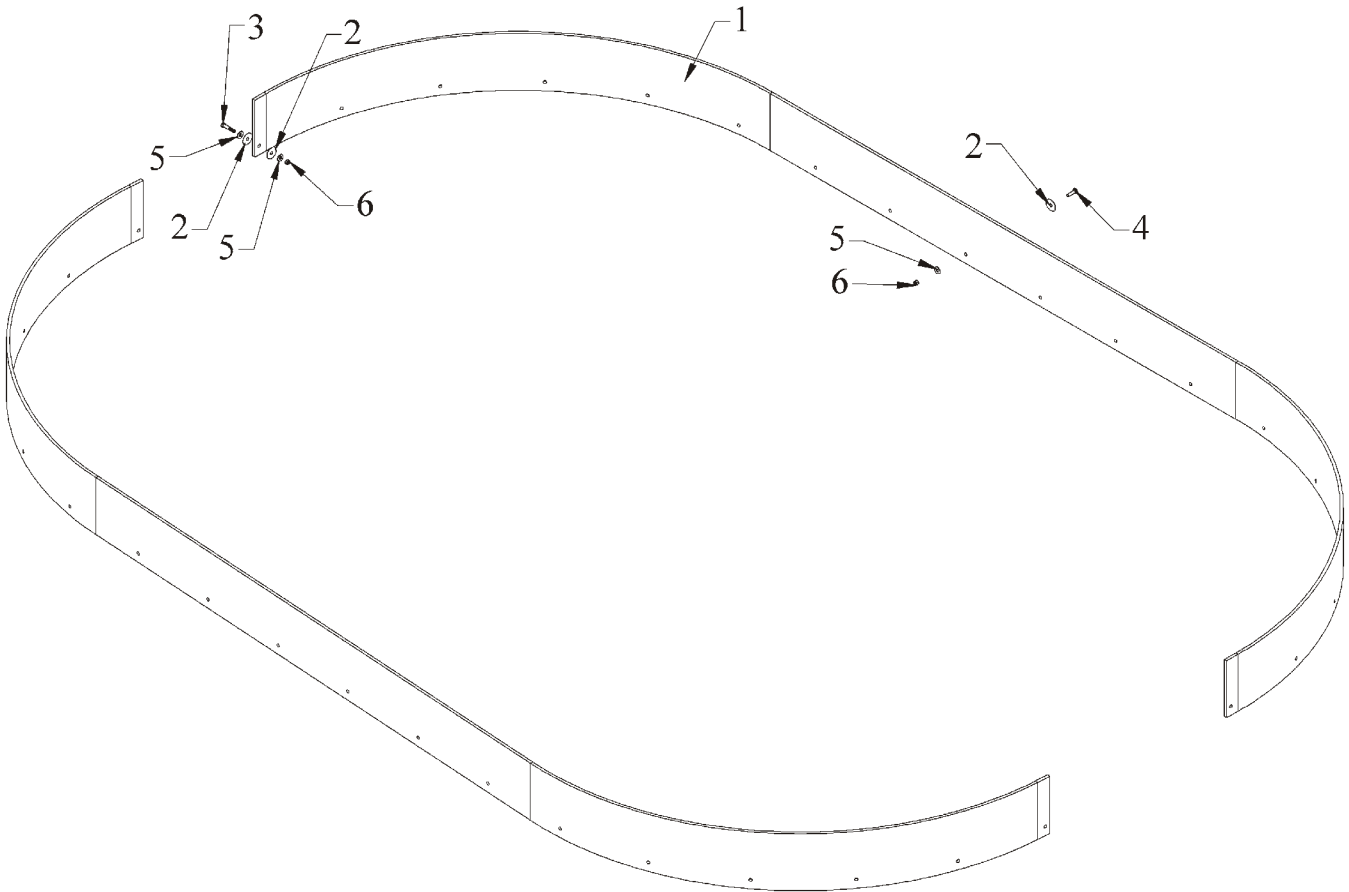
440838

7

For safety decals, see page 7.

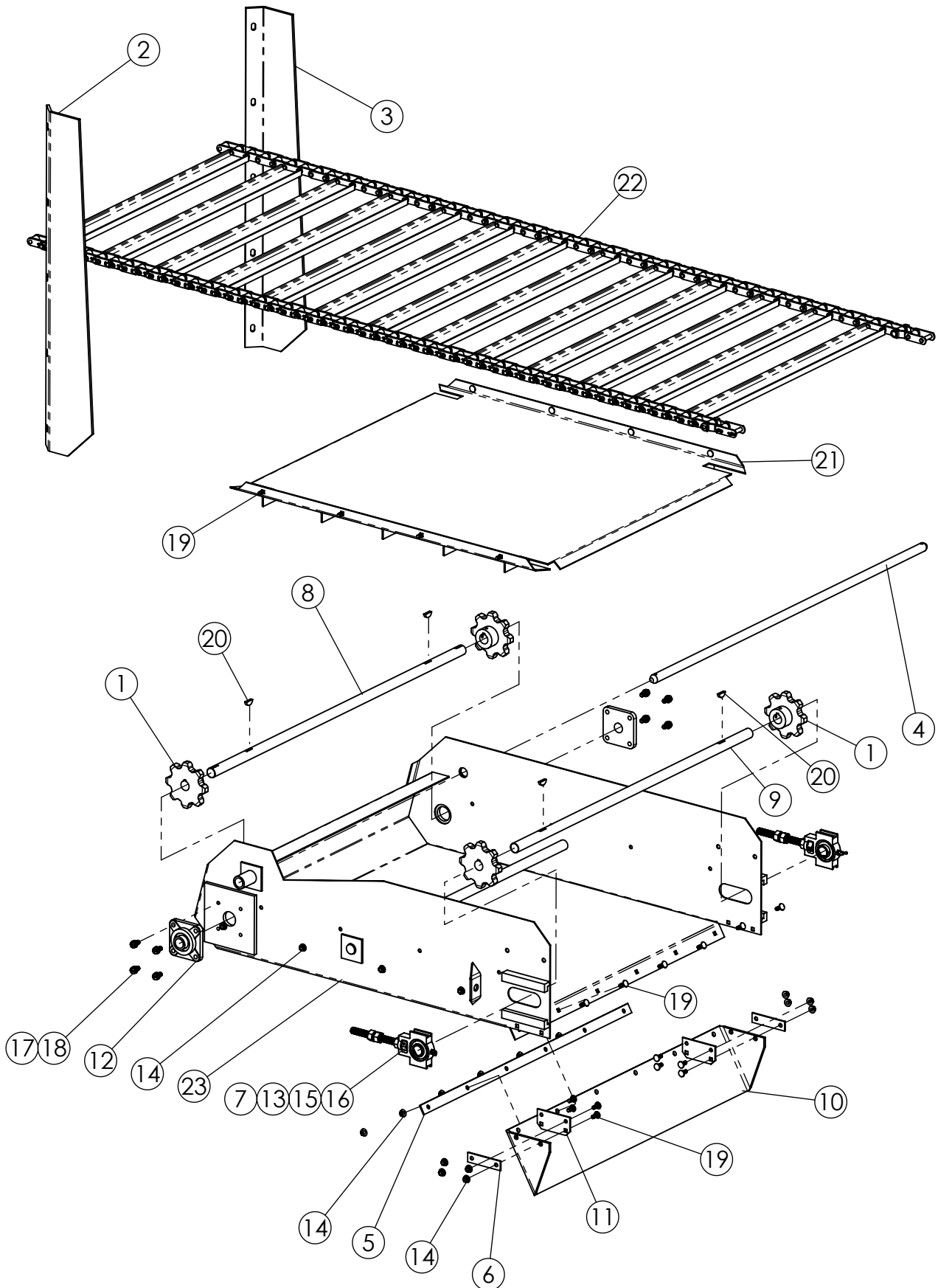
KEY	PART NO.	DESCRIPTION	QTY.
1	440890	Decal ROTO-MIX 27 3/4 x 7 1/2	2
2	440936	Decal Vertical Xpress	2
3	440942	Decal VXT-325	2
4	440943	Decal VXT-425	2
5	440952	Decal VXT-505	2
6	441661	Decal Grease Every 10	6
7	440838	Decal Grease Driveline- 3x11	1
NS	404500	Drive Screw 3/32 x 1/4	6

# RUBBER EXTENSION KIT 7" - VXT



KEY	PART NO.	DE SCRIP TION	QTY. 325	QTY. 425
1	161146	VXT 325 Rubber Ext. End - 3/8" x 8" x 208"	2	
	161147	VXT 425/505 Rubber Ext. End - 3/8" x 8" x 232 3/8"		2
2	402606	Fender Washer Pltd. 3/8" x 1 1/2"	44	48
3	405631	5/16" - 18 x 1 3/4" HHCS USS #5 Pltd.	4	4
4	407022	Carriage Bolt 5-16"-18 x 1-1/4"	36	40
5	402405	5/16" Flat Washer Med Pltd	44	40
6	401105	Hex Nyloc Nut #5 Pltd., 5/16"-18	40	44

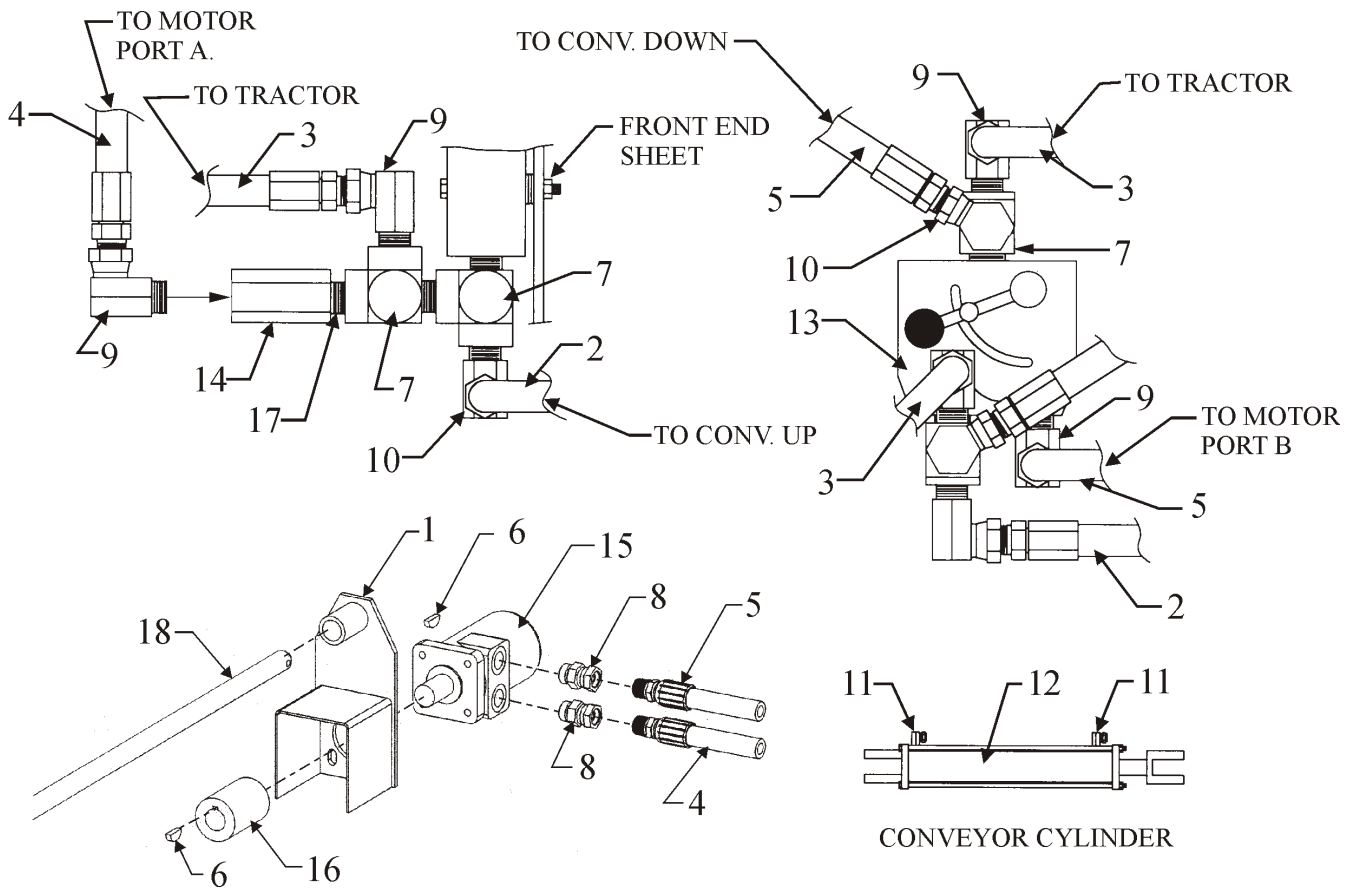
# VXT SIDE CHAIN CONVEYOR ASSEMBLY



## VXT SIDE CHAIN CONVEYOR ASSEMBLY

ITEM #	PART #	DESCRIPTION	QTY.
1	160025	SPROCKET C55, 8 TOOTH x 1" I.D.	4
2	161177	325 RH DISCHARGE SIDE SHIELD 7" x 36"	1
3	161198	325 LH DISCHARGE SIDE SHIELD 7" x 36	1
4	181529	SHAFT, DOOR HINGE 45-1/2"	1
5	188302	CONVEYOR SPOUT RUBBER BAR 34-1/2"	1
6	188304	CONVEYOR SPOUT RUBBER BAR - 4"	2
7	188390	TAKE UP BOLT x 7"	2
8	188412	CONV DRIVE SHAFT x 41 3/4	1
9	188413	CONVEYOR IDLER SHAFT	1
10	188417	36" CONVY SPOUT RUBBER-44 3/4	1
11	188418	SPOUT RUBBER SIDE BAR - 4"	2
12	340316	FLANGE BEARING 1" 4 BOLT RCJC	2
13	341323	TAKE-UP BEARING 1"	2
14	400106	HEX NUT, 5/16"-18 SERRATED FLANGE #5 PLTD	22
15	400210	HEX NUT 5/8"-11 #5 PLTD	6
16	400810	HEX UNILOCK NUT 5/8"-11	2
17	402006	WASHER SPRING LOCK 3/8" MED PLTD	8
18	405652	HHCS 3/8"-16 x 3/4" #5 PLTD	8
19	407020	CHCS 5/16"-18 x 3/4" #5 PLTD	22
20	409916	WOODRUFF KEY 1/4" x 1"	4
21	874110	36"W x 36"L CONVEYOR PAN WA	1
	874114	36"W x 24"L CONVEYOR PAN WA	1
22	874111	CONVEYOR CHAIN WA C-55, 36"W x 36"L CONV	1
	874115	CONVEYOR CHAIN WA C-55, 36"W x 24"L CONV	1
23	874112	CONVEYOR WA, 36"W X 36"L	1
	874116	CONVEYOR WA, 36"W x 24"L	1

# CONVEYOR HYDRAULIC ASSEMBLY (SINGLE CYLINDER)

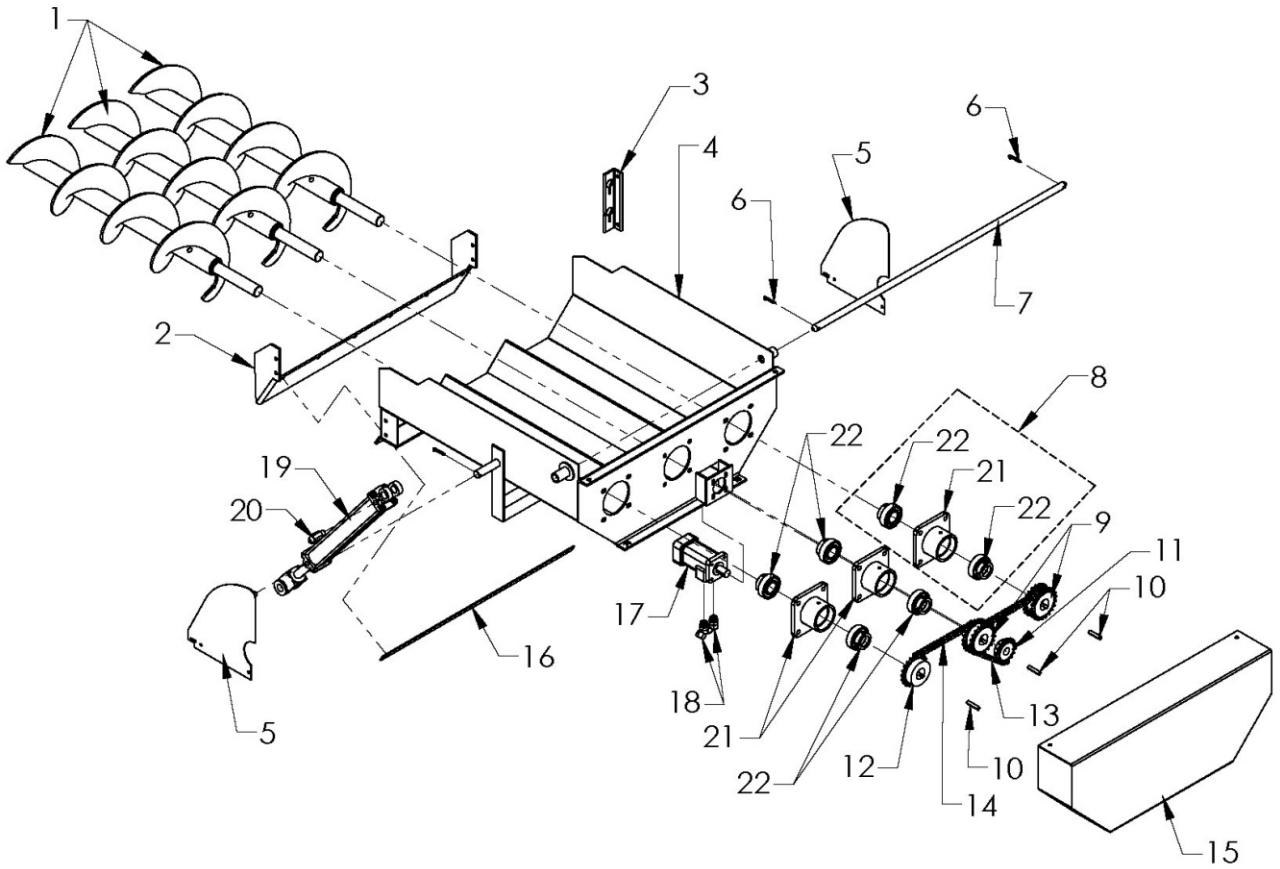




## CONVEYOR HYDRAULIC ASSEMBLY (SINGLE CYLINDER)

KEY	PART NO.	DESCRIP TDN	QTY.
1	874071	Conveyor Motor Plate Weldment	1
2	781097	3/8" x 68" Hyd. Hose Assy. (3/8"MP Ends)	2
3	781352	1/2" x 87" Hud. Hose Assy. (1/2"MP Ends)	2
4	781327	1/2" x 56" Hyd. Hose Assy. (1/2"MP Ends)	1
5	781331	1/2" x 62" Hyd. Assy. (1/2"MP Ends)	1
6	409916	1/4" x 1" Woodruff Key	1
7	368608	1/2"MP x 1/2"FP x 1/2"FP Tee	3
8	368118	7/8"MOR x 1/2" FPSW	2
9	368031	1/2"MP x 1/2"FPSW 90 Degree	4
10	368028	1/2"MP x 3/8"FPSW	2
11	368007	3/8"MP x 3/8"FPSW 90 Degree 109" Orifice	2
12	364060	2" x 16" Hydraulic Cylinder	1
13	362283	Hy drau liFlow Con trolValve	1
14	362240	1/2"FP x 1/2" FP Ball Check Valve	1
15	360009	9.7 CI Hydraulic Motor	1
16	332654	1"ID x 2"OD x 3"LTB CPLG W/ 1/4" Key	1
17	310805	1/2" Close Nipple	1
18	181529	Shaft 7/8" x 45 1/2"	1

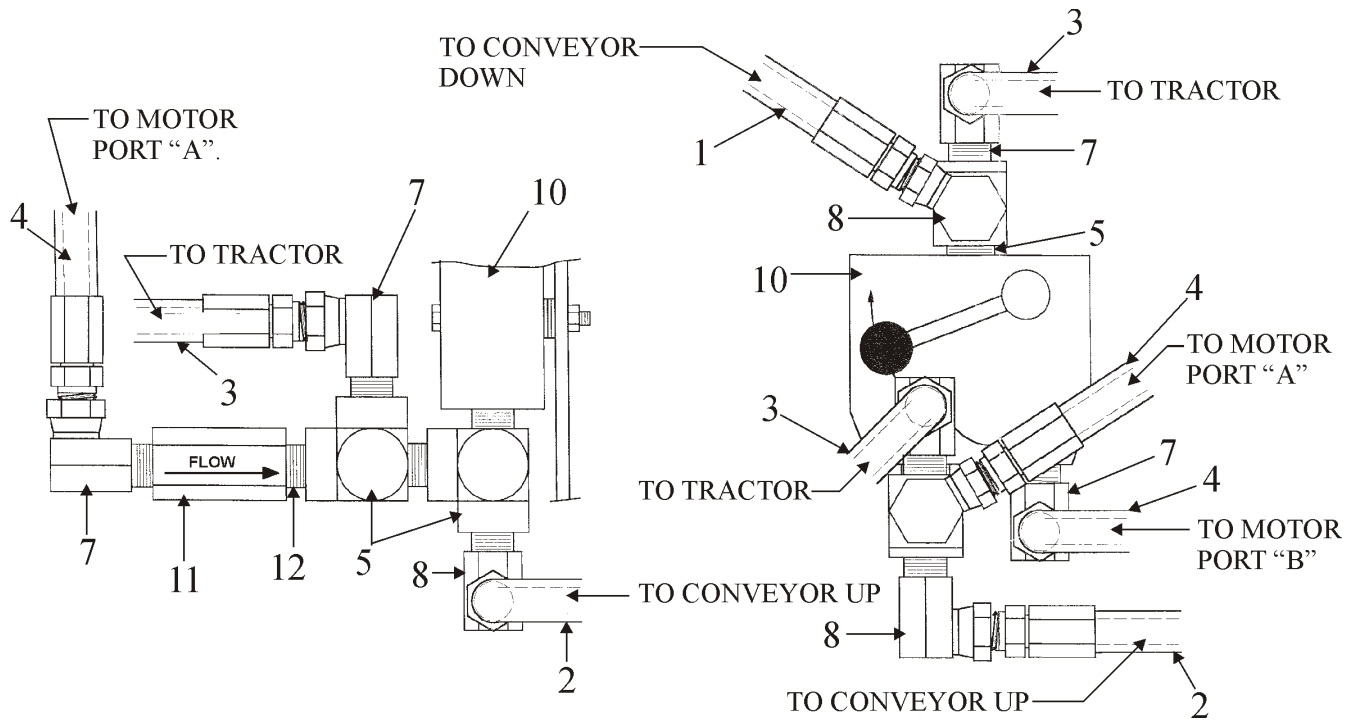
# 3 AUGER CONVEYOR ASSEMBLY



### 3 AUGER CONVEYOR ASSEMBLY

KEY	PART NO.	DESCRIP TDN	QTY.
1	874131	AUGER W.A.	3
2	188453	SPOUT, RUBBER	1
3	188031	CONVEYOR CHAIN ANGLE R.H. - 9"	1
4	874133	AUGER CONVY BODY W.A.	1
5	188056	CONV SIDE SHIELD 14 1/16" x 12 1/8"	2
6	404000	5/32" COTTER PIN x 1 1/4"	3
7	181529	SHAFT, DOOR HINGE 45-1/2"	1
8	781415	AUGER BEARING ASSY W/ BEARING	3
9	330521	SPROCKET, 1 1/2" BORE, DS 50A21H	2
10	185480	3/8" SQ. X 2" KEY	3
11	330518	SPROCKET, 1" BORE, 50BS16HT	1
12	330522	SPROCKET, 1 1/2" BORE, 50BS21HT	1
13	320540	#50 RC Xx 42 PITCH	1
14	320557	#50 RC x 56 PITCH	2
15	874134	CHAIN GUARD W.A.	1
16	188302	CONVEYOR SPOUT RUBBER BAR 34-1/2"	1
17	360009	HYD. MOTOR 101-1012 9.7 CU IN.	1
18	368052	SWIVEL 45° 7/8" MOR x 1/2" FPS	2
19	364060	HYD. CYL. 26-1/4 CC 2" x 16"	1
20	368007	SWIVEL 90° 3/8MP x 3/8FPS, .109 ORFICE	2
21	874132	BEARING HOUSING	3
22	341624	BEARING INSERT 1 1/2"	6
NS	320501	#50 RC CONNECTING LINK	3
NS	412004	1/4" LOG CHAIN	6.5'
NS	320502	#50 RC OFFSET LINK/FOR 320540	1

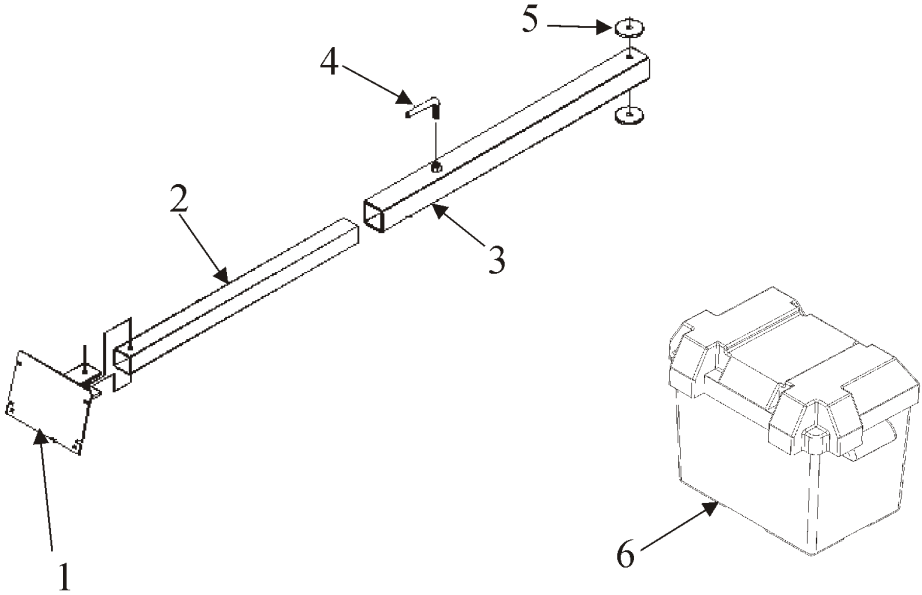
# CONVEYOR HYDRAULIC ASSEMBLY (SINGLE CYLINDER)



## CONVEYOR HYDRAULIC ASSEMBLY (SINGLE CYLINDER)

KEY	PART NO.	DESCRIP TDN	QTY.
1	781326	3/8" x112" HYD HOSE ASSY. (3/8"MP ENDS)	1
2	781329	3/8" x125" HYD HOSE ASSY. (3/8"MP ENDS)	1
3	781312	1/2" x104" HYD HOSE ASSY. (1/2"MP ENDS)	2
4	781337	1/2" x80" HYD HOSE ASSY. (1/2"MP ENDS)	2
5	368608	1/2"MP x 1/2"FP x 1/2"FP TEE	3
6	368052	7/8" MOR x 1/2" FPSW 45	2
7	368031	1/2" MP x 1/2" FPSW 90	4
5	368028	1/2" MP x 3/8" FPSW	2
9	368007	3/8" MP x 3/8" FPSW 90 , .109" ORIFICE	2
10	362283	HY DRAU LIQFLOW CON TRQL VALVE	1
11	362240	1/2"FP x 1/2"FP BALL CHECK VALVE	1
12	310805	1/2" CLOSE NIPPLE	1

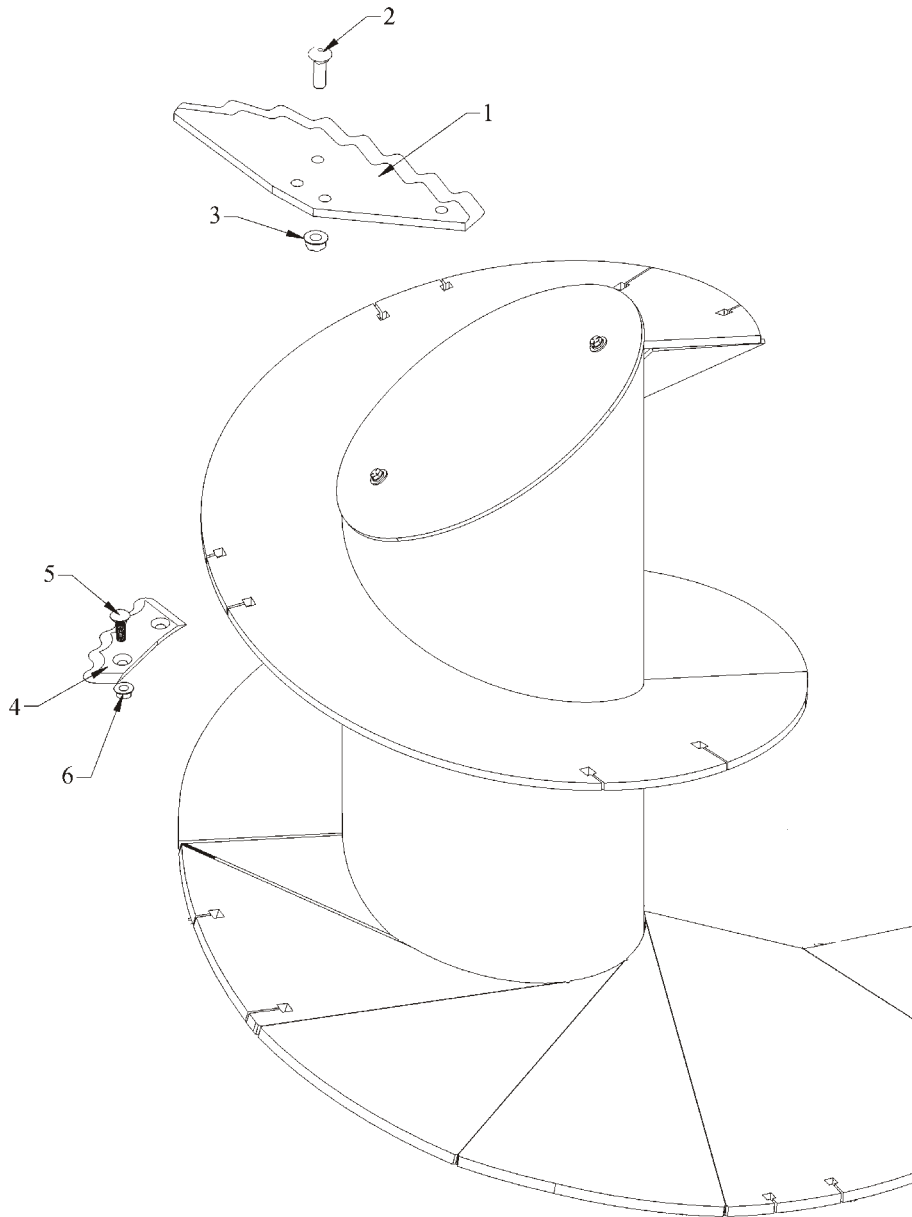
# VXT SCALE MOUNT KIT



## VXT SCALE MOUNT KIT

KEY	PART NO.	DESCRIP TDN	QTY.
1	872126	Trl Scale Ind Arm WA-2Sq X	1
2	185490	Tube, Trl Scale Indicator, 29	1
3	872125	Trl Scale Arm WA-2 1/2Sq X	1
4	185492	Handle, 1/2" Locking, 6	1
5	185493	Washer, Scale Hinge, 2 1/2 OD	2
6	357400	Battery Box W/Strap 7.5 x 11	1
NS	450923	J-Box (141879 J-Star 15')	1
NS	455407	Battery Clamp, Lawson 45804	1
NS	455406	Battery Clamp, Lawson 45803	1

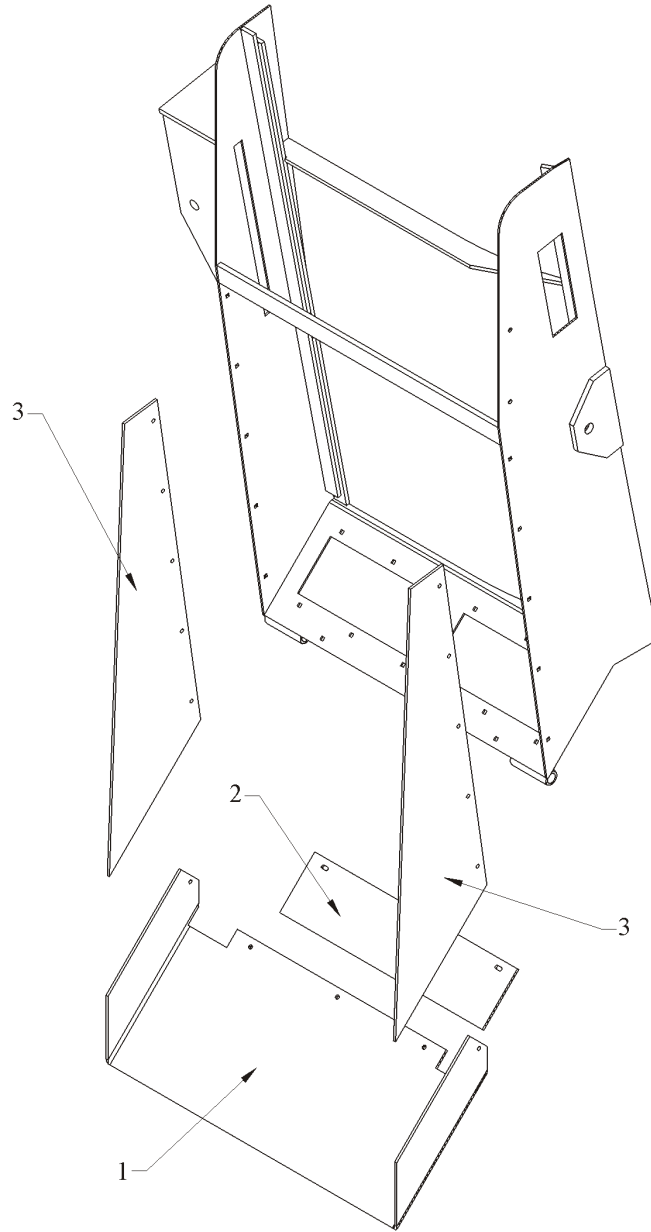
# VXT KNIFE KIT - STD



KEY	PART NO.	DESCRIP TDN	QTY.
1	385012	Knife Blade- 1/2" Curved	3
2	407121	Car Bolt #5 Pltd 5/8-11 x 2	6
3	400115	Flange Nut, 5/8-11 Serrated	6
4	385009	Blade RH Aug Knife- 3 1/2 x 8"	2
5	407102	Carg Bolt #5 Pltd 1/2 x 1 1/2	4
6	400114	Flange Nut, 1/2-13 Serrated	4

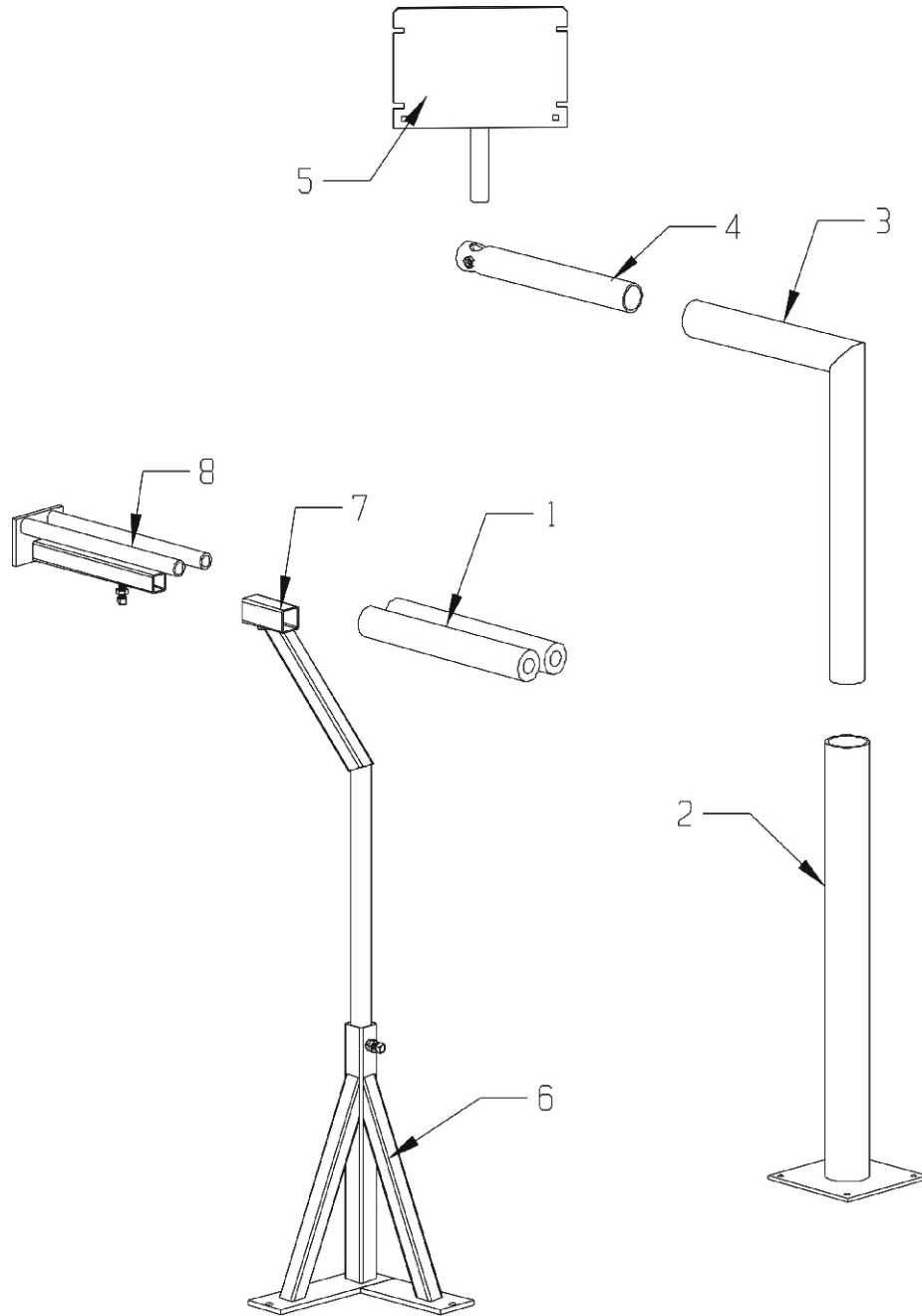


# VXT 325 DISCHARGE SPOUT



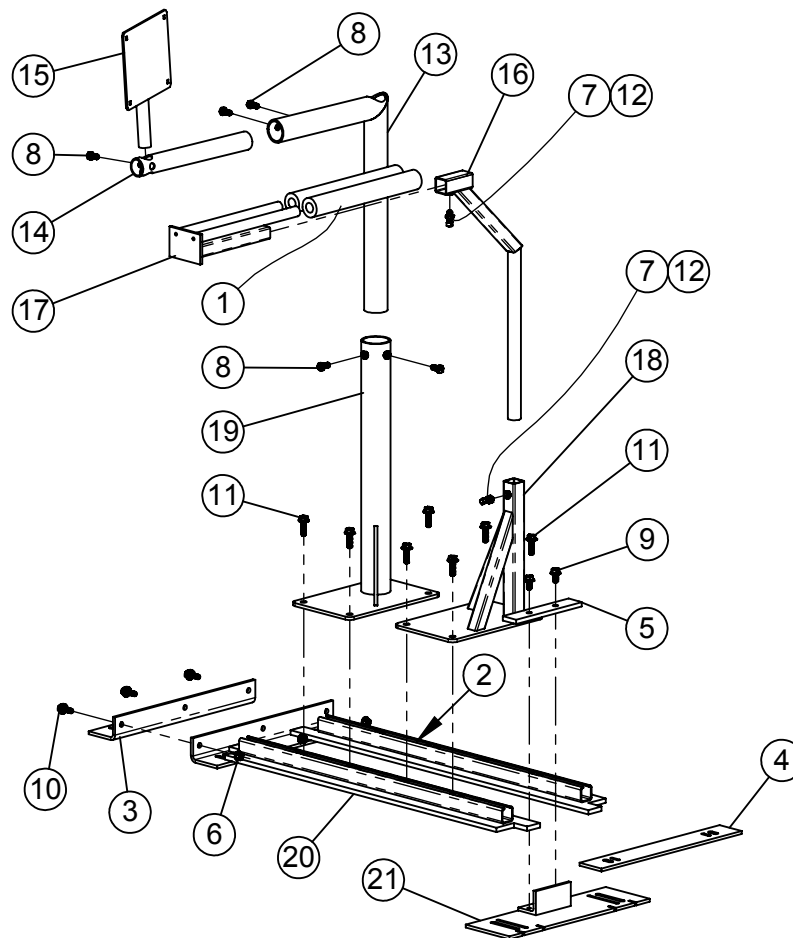
KEY	PART NO.	DESCRIP TDN	QTY.
1	161179	Rub berSPOUT	1
2	161178	SPOUT Gusset	1
3	161180	Side Shield	2

# VXT TRUCK CAB SCALE PARTS



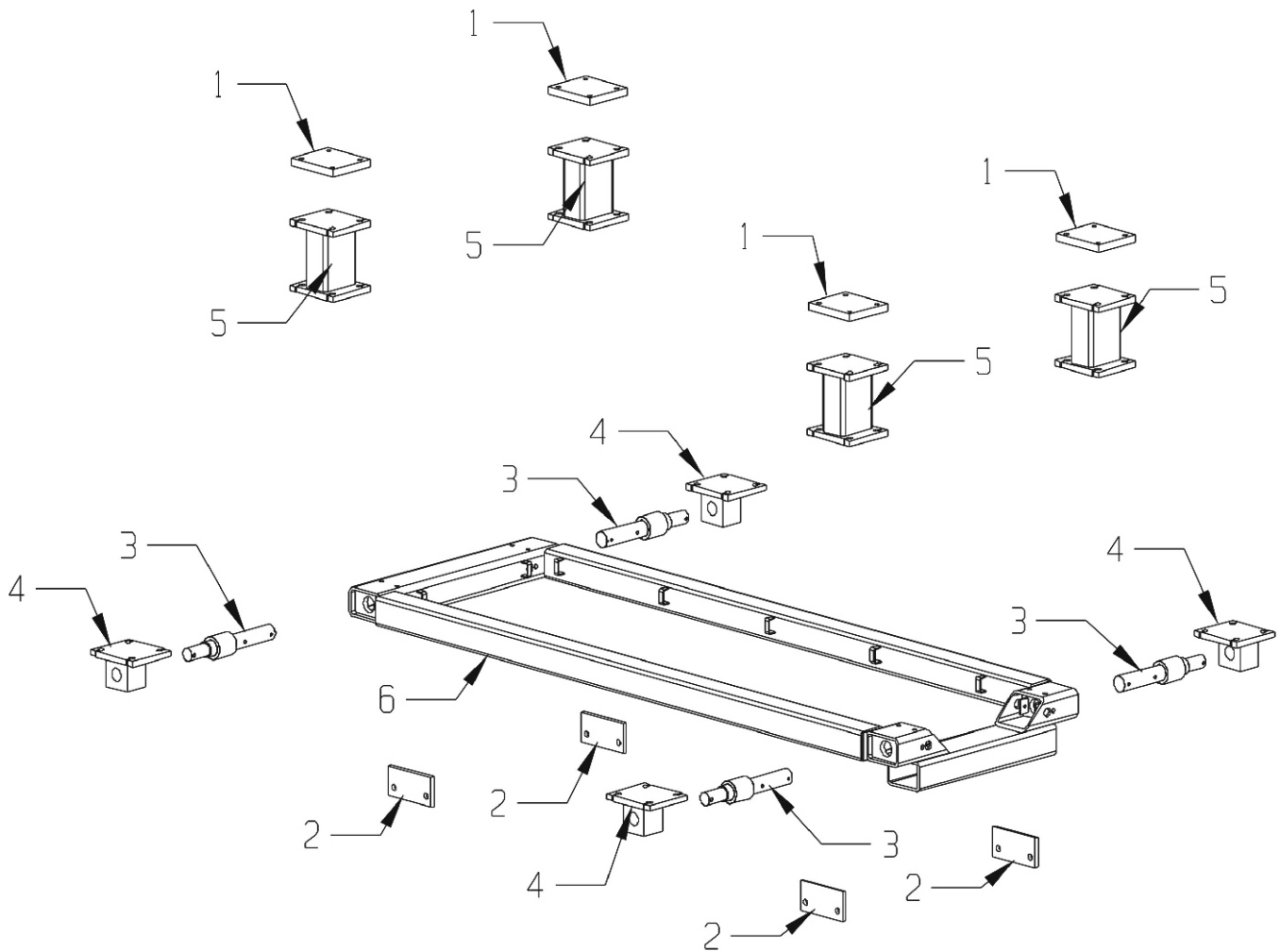
KEY	PART NO.	DESCRIP TDN	QTY.
1	185930	Arm Rest Pad 12"	2
2	871087	Truck Scale Indicator Base WA	1
3	871095	Truck Scale Indicator Mount WA	1
4	871103	In di ca toEx ten sionTube WA	1
5	871111	Truck Scale Indicator Swivel WA	1
6	872262	Arm Rest Stand WA	1
7	872263	Arm Rest Goose Neck WA	1
8	872264	Arm Rest WA	1

# TRUCK CAB SCALE INDICATOR FRAME PARTS



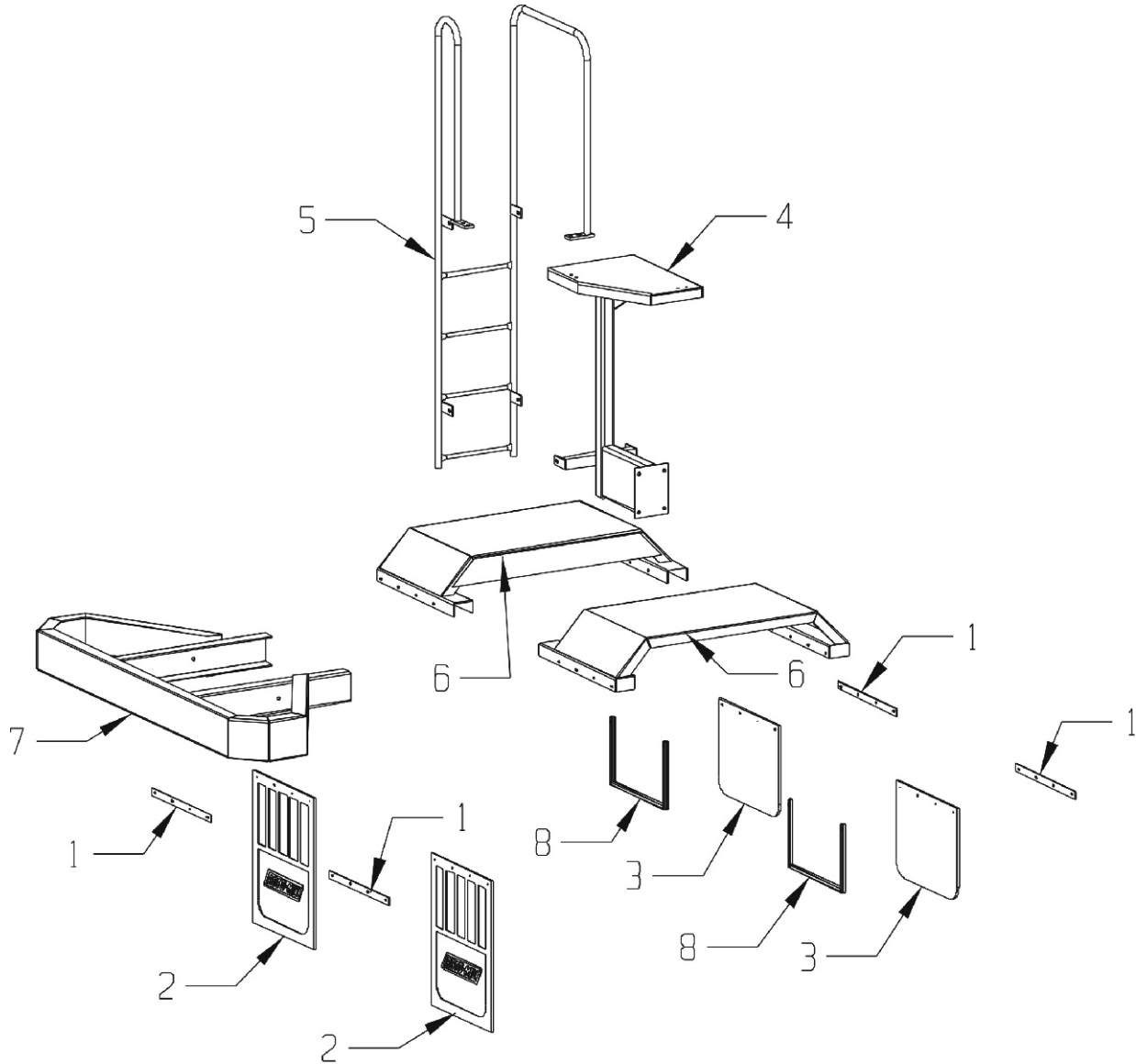
ITEM #	PART #	DESCRIPTION	QTY.
1	185930	ARM REST PAD 12"	2
2	192578	ARM REST SLIDE BAR	4
3	192585	BRACKET, PASSENGER CAB SEAT	1
4	192587	SPACER, TRUCK CAB DRIVER'S SEAT	1
5	192593	PLATE, TRUCK CAB MOUNT SETTING	1
6	400107	HEX NUT, 3/8"-16 SERRATED FLANGE #5	3
7	400606	HEX JAM NUT 3/8-16"	2
8	405652	HHCS 3/8"-16 x 3/4" #5 PLTD	5
9	407900	HHCS 3/8"-16 x 3/4" SERRATED #5 PLTD	2
10	407901	HHCS 3/8"-16 X 1" SERRATED #5 PLTD	3
11	407904	HHCS 3/8"-16 x 1-1/4" SERRATED #5 PLTD	8
12	409543	SQ HD SET SCREW CUP, 3/8" x 1"	2
13	871095	TRUCK SCALE INDICATOR MOUNT W.A.	1
14	871103	INDICATOR EXTENSION TUBE W.A.	1
15	871111	TRUCK SCALE INDICATOR SWIVEL W.A.	1
16	872263	ARM REST GOOSE NECK W.A.	1
17	872264	ARM REST W.A.	1
18	873389	SHORT ARM REST STAND W.A.	1
19	873390	SHORT TRUCK SCALE IND. BASE W.A.	1
20	873391	BASE, TRUCK CAB MOUNT WA	1
21	873394	BRACKET, DRIVER'S SEAT WA	1

# VXT TRUCK SCALE PARTS



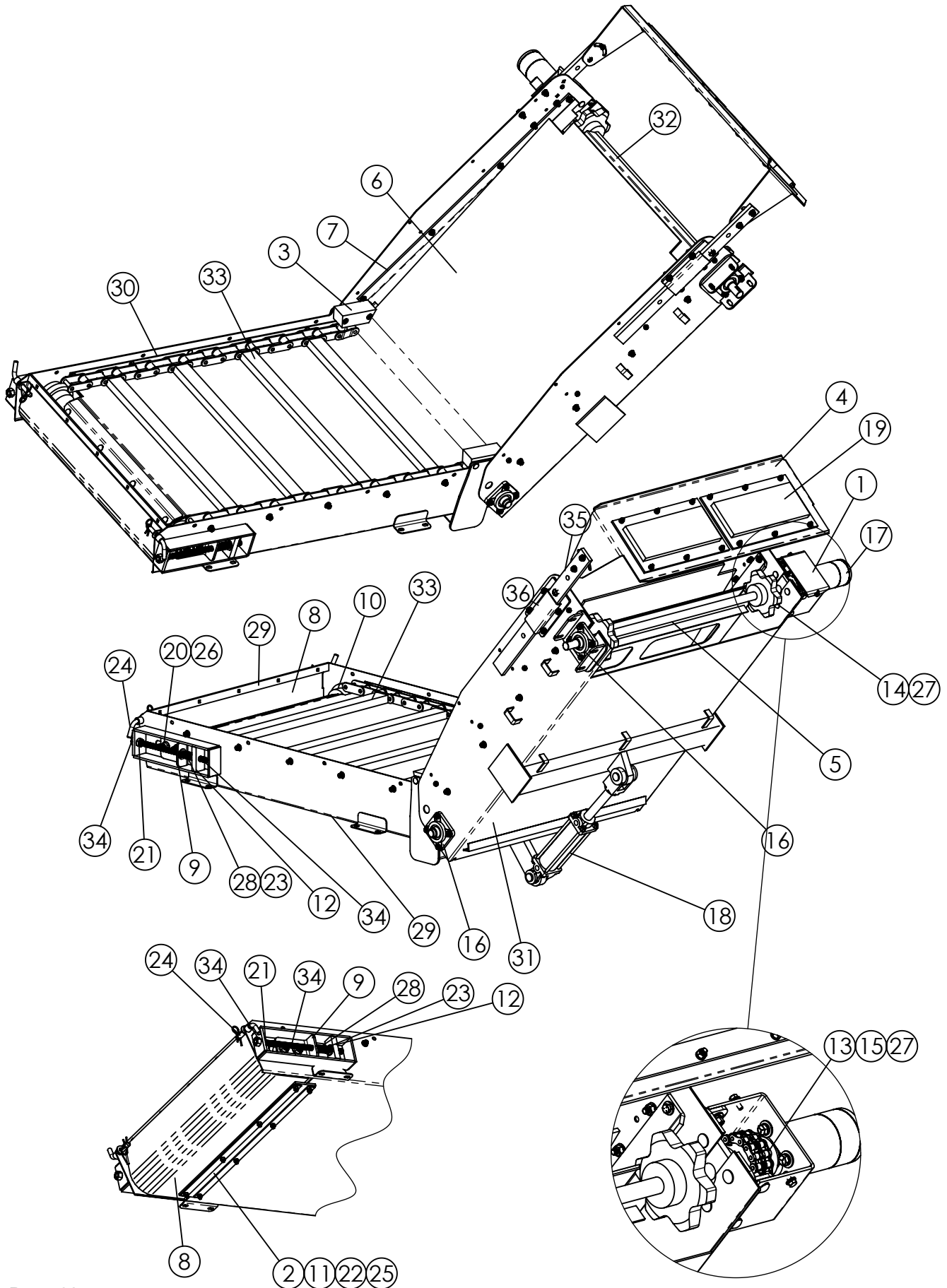
KEY	PART NO.	DESCRIP TDN	QTY.
1	160016	Scale Pad 7 1/8" x 7 7/8"	4
2	182998	Truck Frame Bracket 8"	4
3	450822	Weigh Bar 2 1/8"	4
4	860087	2 1/8" Bar End Block WA	4
5	860373	Riser Block WA 9 1/2"	4
6	872310	350 Truck 2 1/8" Bar Frame WA	1

# VXT TRUCK FENDERS, BUMPERS & PLATFORM



KEY	PART NO.	DESCRIP TDN	QTY.
1	183087	Mud Flap Strap 23 ½"	4
2	370200	Roto-Mix Mud Flap 24" x 30"	2
3	370202	Roto-Mix Mud Flap 24" x 18 ½"	2
4	860388	VXT 425 Truck Platform Mnt. WA	1
5	860389	VXT Truck Platform Ladder WA	1
6	870543	350-490 Left Fender WA	2
7	870568	8" Truck Bumper WA	1
8	872120	Mud Flap Bracket WA	2

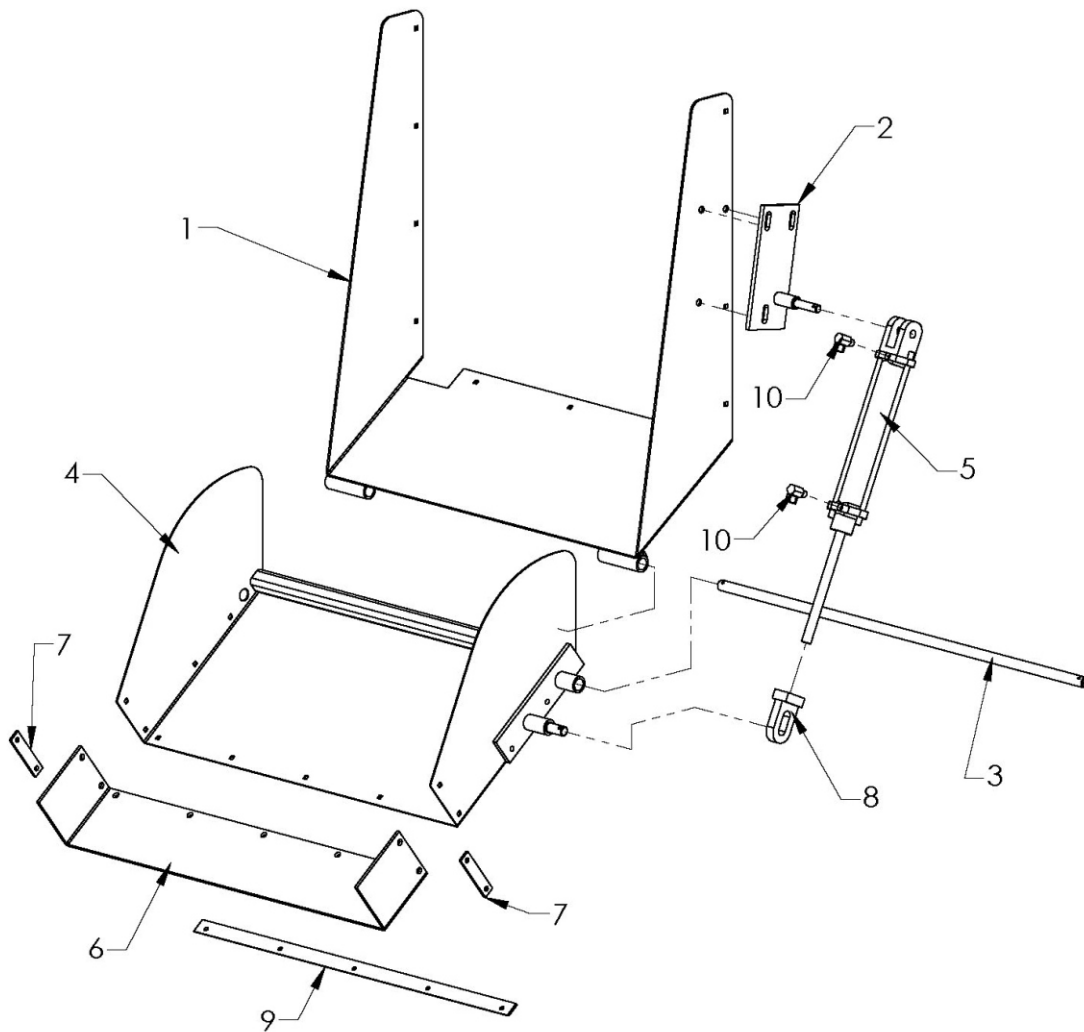
# VXT FRONT CENTER CONVEYOR



## VXT FRONT CENTER CONVEYOR

ITEM #	PART #	DESCRIPTION	QTY
1	160083	MOTOR MOUNT COVER	1
2	161448	RUBBER HINGE	1
3	161492	SLIDER BLOCK	2
4	161495	MAGNET BAFFLE	1
5	161498	CONVEYOR DRIVE SHAFT	1
6	161504	PLASTIC LINER ADJUSTABLE CONVEYOR	1
7	161505	PLASTIC SLIDE	2
8	161506	CLEANOUT DOOR	1
9	161507	TENSION BRACKET	2
10	161508	PLASTIC IDLER	2
11	161509	STRAP	2
12	161662	TAPPED BAR	2
13	320516	COUPLER CHAIN #50-2 RC x 16	1
14	330013	SPROCKET 81X 6-TOOTH 1" BORE	2
15	332606	COUPLER SPROCKET, 50B16 x 1"	2
16	340316	FLANGE BEARING 1" 4 BOLT RCJC	4
17	360015	HYDRAULIC MOTOR 17.9 CU IN.	1
18	364054	HYDRAULIC CYLINDER 2" x 6", 16-1/4" CC	1
19	375004	ARCO PLATE MAGNET AM 1500	2
20	400115	HEX NUT, 5/8"-11 SERRATED FLANGE #5 PLTD	4
21	400610	HEX JAM NUT, 5/8"-11 #5 PLTD	2
22	401105	HEX NUT, 5/16"-18 NYLOC #5 PLTD	16
23	402510	FLAT WASHER 5/8" SAE PLTD	4
24	404214	PIN, 1/2" x 3",RECEIVER HITCH	2
25	407021	CHCS 5/16"-18 x 1" #5 PLTD	20
26	407411	SHOULDER BOLT, 5/8"-11 x 3/4" DIA x 3" LG	4
27	409916	WOODRUFF KEY 1/4" x 1"	3
28	410016	COMPRESSION SPRING 15/16" x 4" x 0.148	2
29	860447	CONVEYOR BODY WA	1
30	860448	VERTICAL CONVEYOR PAN WA	1
31	860449	PIVOTING CONVEYOR WA	1
32	860450	PIVOTING CONVEYOR PAN WA	1
33	860451	CONVEYOR CHAIN WA 81X	1
34	860489	ALL THREAD WA	2
35	W157656	SUPPORT ARM 23-3/4"	2
36	W157657	BAFFLE SUPPORT BRACKET WA	2

# TRUCK 17" FOLD-UP SPOUT KIT



Key	Part No.	Descrip tbn	Qty.
1	860376	VXT425 Door Frame Ext WA	1
2	850050	Spout Cylinder Top Bracket WA	1
3	150160	Tube, Spout Pivot - 40-3/4"	1
4	850085	17" Spout WA No Magnet	1
5	364035	Hyd Cyl-17 1/4CC 1 1/2x8	1
6	150161	Spout Rubber, 45.5	1
7	150150	Plate, Spout Rubber End, 4.5	2
8	850053	Spout Cyl in deLug	1
9	187274	Angle, Spout Back-up, 35	1
10	368010	Orifice 90° 1/4MPx1/4FPSW 1/8	2



