



# 354-12, 354-12B & Deere 135 FEED MIXER OPERATION AND PARTS MANUAL



ROTO-MIX  
P.O. BOX 1724  
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Dodge City, Kansas 67801  
(620) 225-1142

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

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Revision Date	Changes
2/2024	Add chains to Drive Assembly, pg. 78.



## 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

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

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

### 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

## **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.

## OPERATOR QUALIFICATIONS

Operation Of this mixer/feeder shall be limited to competent and experienced persons. In addition, anyone who will operate or work around a mixer/feeder must use good common sense. In order to be qualified, he or she must also know and meet all other qualifications, such as:

1. Some regulations specify that no one under the age of sixteen (16) may operate power machinery. It is your responsibility to know what these regulations are in your area and/or situation.
2. Current OSHA regulations state in part: At the time of initial assignment and at least annually thereafter, the employer shall instruct **EVERY** employee in the safe operation and servicing of all equipment with which the employee is, or will be involved.
3. Unqualified persons are to **STAY OUT OF THE WORK AREA.**
4. A person who has not read and understood all operating and safety instructions is not qualified to operate the machinery.

**FAILURE TO READ THIS MIXER/FEEDEE MANUAL AND ITS SAFETY INSTRUCTIONS IS A MISUSE OF THE EQUIPMENT.**



## SAFETY

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.



**THIS SYMBOL MEANS**

**-ATTENTION!**

**-BECOME ALERT!**

**-YOUR SAFETY IS INVOLVED!**

**SIGNAL WORDS:** Note the use of the signal words **DANGER**, **WARNING**, and **CAUTION** with the safety messages. The appropriate signal word for each has been selected using the following guidelines:

**DANGER:** Indicates an imminently hazardous situation that, if not avoided, will result in serious injury or death. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.

**WARNING:** Indicates a potentially hazardous situation that, if not avoided, will result in serious injury or death, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

**CAUTION:** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

If you have questions not answered in this manual or require additional copies or the manual is damaged, please contact your dealer or ROTO-MIX, 2205 E. Wyatt Earp, Dodge City, Kansas, 67801. (Telephone) 620-225-1142 (Fax) 620-225-6370

## **SAFETY FIRST**

**REMEMBER:** The careful operator is the best operator. Most accidents are caused by human error. Certain precautions must be observed to prevent the possibility of injury or death.



**DO NOT ALLOW PERSONNEL OTHER THAN THE QUALIFIED OPERATOR NEAR THE MACHINE.**



**NEVER START MACHINE UNTIL ALL GUARDS AND SAFETY SHIELDS ARE IN PLACE.**



**DO NOT CLEAN, ADJUST OR LUBRICATE THE MACHINE WHILE IT IS IN MOTION.**



**BEFORE STARTING TRACTOR ENGINE, BE SURE PTO SHIELDS TURN FREELY.**



**LOOSE OR FLOPPY CLOTHING SHOULD NOT BE WORN BY THE OPERATOR.**

### **OPERATING PRECAUTIONS & INSTRUCTIONS:**

- A. Check to see that no obstructions are present in the mixer prior to start up.
- B. Before loading, run the mixer empty and check all operations.
- C. Do not overload the mixer, as the mixing efficiency may be reduced and unit damage may occur. (See loading instructions).
- D. Remove all moisture drain plugs if the mixer is going to set in the rain or snow.
- E. Be sure all shields are in place before operation.
- F. Use common sense when operating.



## EQUIPMENT SAFETY GUIDELINES



Safety of the operator is one of the main concerns in designing and developing a new piece of equipment. Designers and manufactures build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or for you, follow them.

In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. 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.

Replace any CAUTION, WARNING, DANGER or instruction safety decal that is not readable or is missing. Location of such decals are indicated in this manual.

Do not attempt to operate this equipment under the influence of drugs or alcohol.

Review the safety instructions with all users annually.

This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations. Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.

To prevent injury or death, use a tractor equipped with a Roll Over Protective System (ROPS). Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

Never exceed the limits of a piece of machinery. in its ability to do a job, or to do so safely, is in question - **DON'T TRY IT.**



## 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.





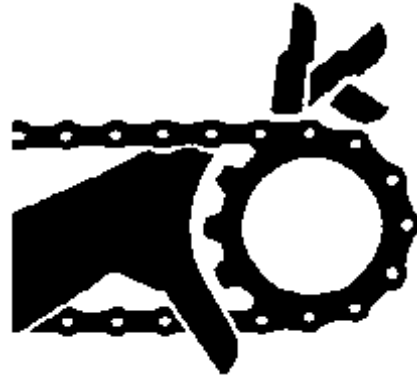
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### KEEP ALL SHIELDS IN PLACE

Do not operate mixer/feeder without safety shields in place.

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

Disconnect PTO driveline before removing shields for adjustment or service.



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### OPERATE MIXER/FEEDER SAFELY

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

Never enter a mixer/feeder while in operation.

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

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.

Keep transmissions in gear when traveling downhill.



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### KEEP RIDERS OFF MIXER/FEEDER

Keep riders off.

Riders are subject to injury such as being struck by foreign objects and being thrown off. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.





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## STAY CLEAR OF ROTATING DRIVELINES

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Wear close fitting clothing. Stop the engine and be sure PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment .



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## PREVENT BATTERY EXPLOSIONS

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

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 16C (60F).



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## AVOID HIGH-PRESSURE FLUIDS

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

Avoid the hazard relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.





## PREPARING TRACTOR FOR TRAILER MIXER

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### POSITIONING DRAWBAR

**IMPORTANT:** Drive components can be damaged from excessive speed. Under no circumstances should a feed mixer equipped with 540 RPM be operated by a tractor with 1000 RPM PTO.

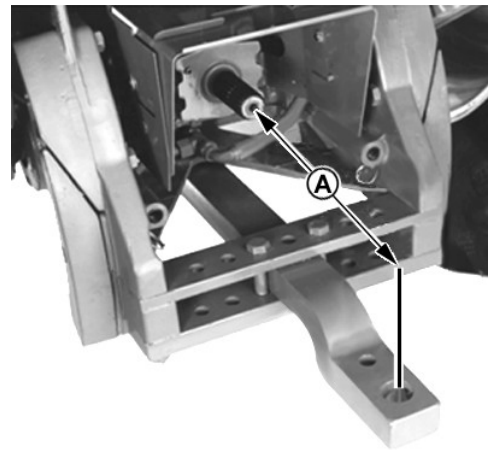
Feed mixers are available with either 540 or 1000 RPM driveline. Match tractor PTO with the feed mixer driveline.

**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	DIMENSION (A)
540 RPM	14" (256 mm)
1000 RPM (1-3/8" - 21 SPLINE)	16" (406 mm)



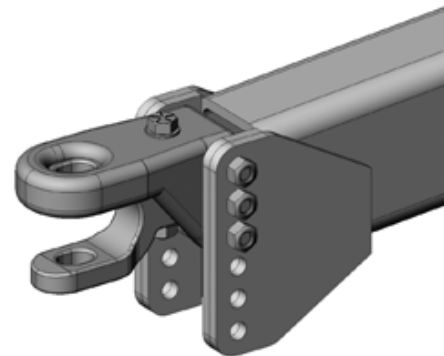
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### ADJUST TRAILER HITCH CLEVIS

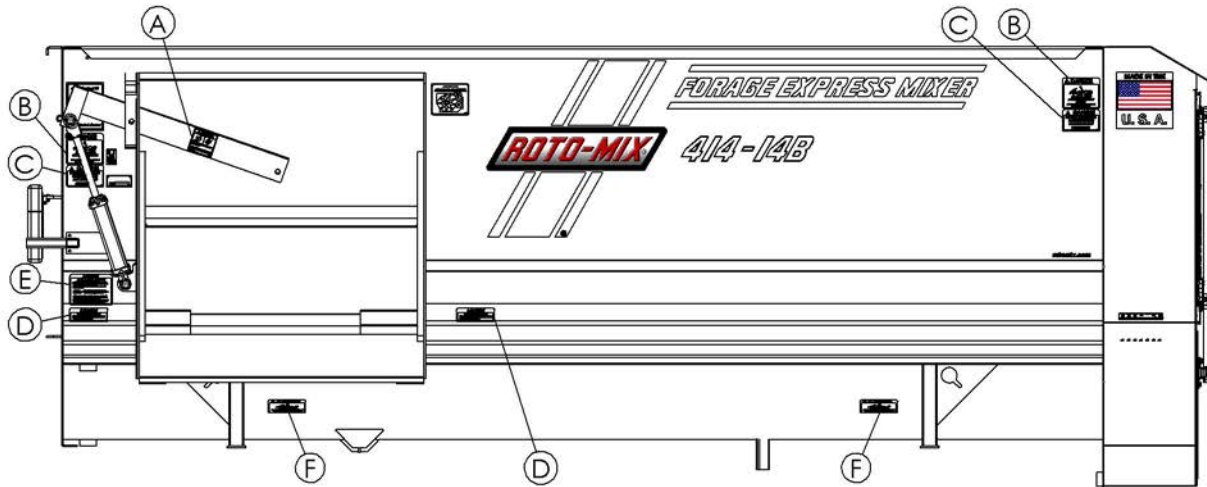
Mixer should be approximately level when attached to tractor.

Adjust clevis by changing hole location on tongue.

Hitch Pin Size --- 1" x 7"



# SAFETY SIGNS



(A) 440833



(B) 440827



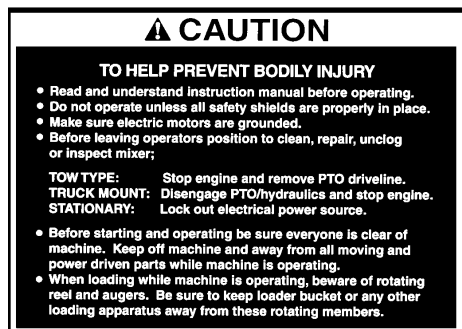
(C) 440831



(D) 440818



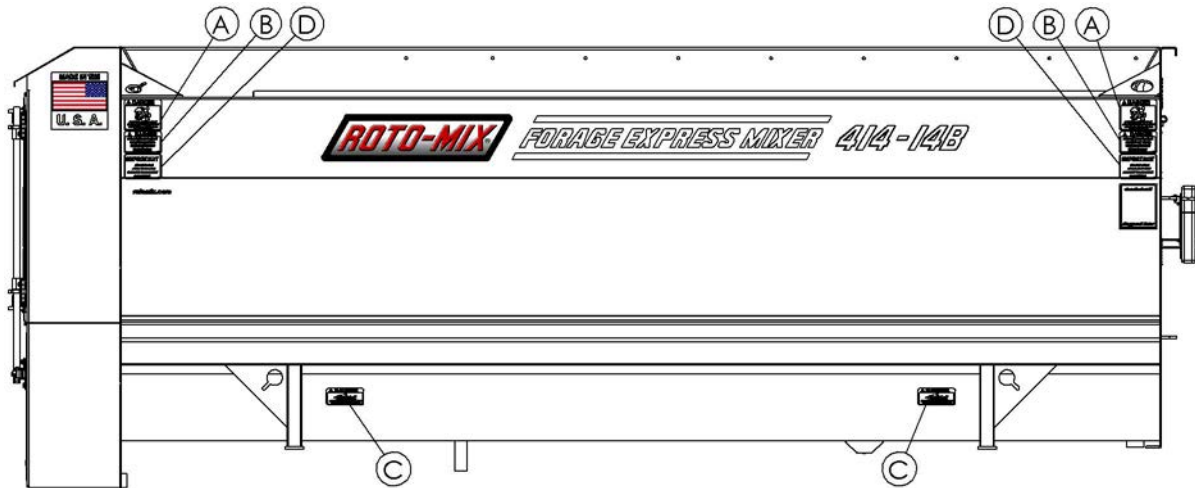
(E) 440819



(F) 440826



# SAFETY SIGNS



(A) 440828



(B) 440831



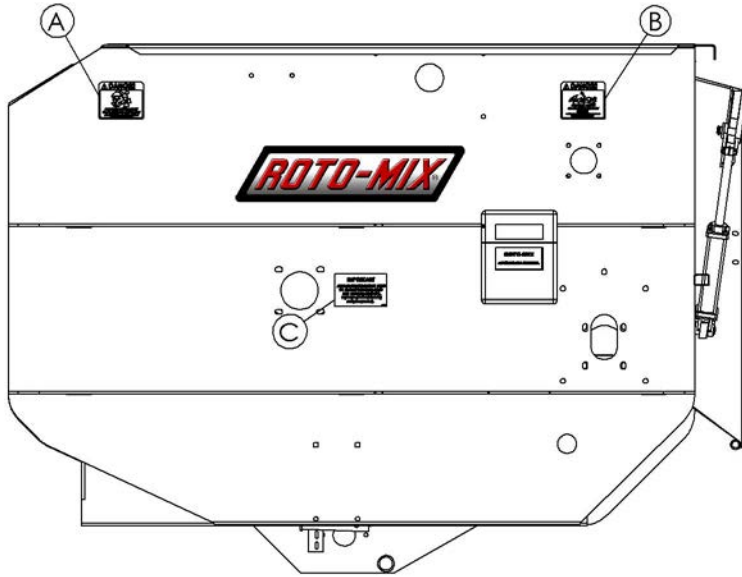
(C) 440826



(D) 440862



# SAFETY SIGNS



(A) 440828



(B) 440827



(C) 440801

**IMPORTANT**  
**ALWAYS REDUCE ENGINE SPEED TO IDLE BEFORE ENGAGING AND DISENGAGING PTO. DISENGAGE TRACTOR PTO BEFORE TURNING.**

440801

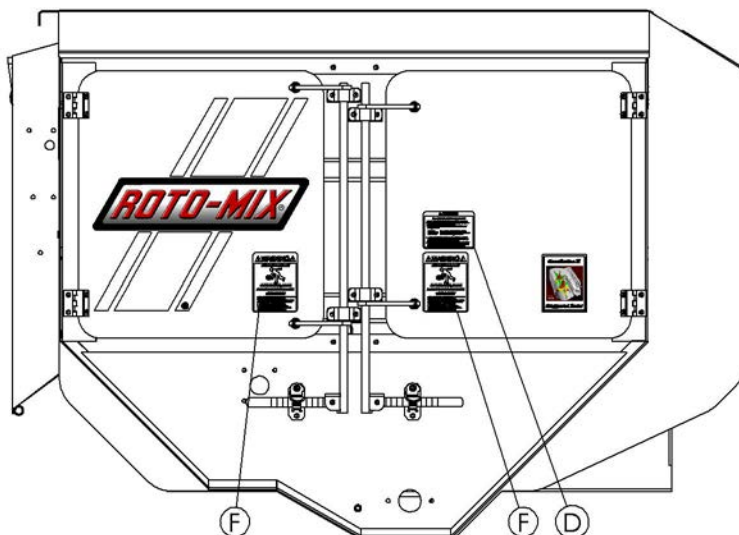
(D) 440819

**CAUTION**  
**TO HELP PREVENT BODILY INJURY**

- Read and understand instruction manual before operating.
- Do not operate unless all safety shields are properly in place.
- Make sure electric motors are grounded.
- Before leaving operators position to clean, repair, unclog or inspect mixer:

**TOW TYPE:** Stop engine and remove PTO driveline.  
**TRUCK MOUNT:** Disengage PTO/hydraulics and stop engine.  
**STATIONARY:** Lock out electrical power source.

- Before starting and operating be sure everyone is clear of machine. Keep off machine and away from all moving and power driven parts while machine is operating.
- When loading while machine is operating, beware of rotating reel and augers. Be sure to keep loader bucket or any other loading apparatus away from these rotating members.



(F) 440822





## **SAFETY DECAL CARE**



Keep safety decals and signs clean and legible at all times.

Replace safety decals and signs that are missing or have become illegible.

Replaced parts that displayed a safety sign should also display the current sign.

Safety decals or signs are available from your dealer or the ROTO-MIX manufacturing plant.

### **How to Install Safety Decals:**

Be sure that the installation area is clean and dry.

Decide on the exact position before you remove the backing paper.

Remove the smallest portion of the split backing paper.

Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.

Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place.

Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.



## **PRACTICE FIRE PREVENTION**

Keep fire extinguishers accessible at all times. Use the extinguisher recommended for the material being processed. It should be rated safe for use on electrical fires.

Never smoke close to combustible material.

Clean the area before welding or other activities which may make sparks.

Keep all components that generate excessive heat clear of oil and other combustible materials.



## **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.**

### **BEFORE OPERATION:**

Carefully study and understand this manual.

Do not wear loose-fitting clothing which may catch in moving parts.

Always wear protective clothing and substantial shoes.

Keep wheel lug nuts or bolts tightened to specified torque.

Assure that agricultural implement tires are inflated evenly.

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.

Be sure that there are no tools lying on or in the mixer/feeder.

Do not use the unit until you are sure that the area is clear, especially children and animals.

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.

Don't hurry the learning process or take the unit for granted. Ease into it and become familiar with your new mixer/feeder.

Practice operation of your mixer/feeder and its attachments. Completely familiarize yourself and other operators with its operation before using.

Securely attach to towing unit. Use a high strength, appropriately sized hitch pin with a mechanical retainer.

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





## DURING OPERATION:

Beware of bystanders, **particularly children!** Always look around to make sure that it is safe to start the engine of the towing vehicle or move the unit. This is particularly important with higher noise levels and quiet cabs, as you may not hear people shouting.

**NO PASSENGERS ALLOWED** - Do not carry passengers anywhere on, or in, the tractor or equipment, except as required for operation.

Keep hands and clothing clear of moving parts.

Do not clean, lubricate or adjust your mixer/feeder while it is moving.

Be especially observant of the operating area and terrain - watch for holes, rocks or other hidden hazards. Always inspect the area prior to operation.

**Do not** operate near the edge of drop-offs or banks.

**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 levellest possible route when transporting across fields. Avoid the edges of ditches or gullies and steep hillsides.

Be extra careful when working on inclines.

Periodically clear the equipment of brush, twigs or other materials to prevent buildup of dry combustible materials.

Maneuver the tractor or towing vehicle at safe speeds.

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

Avoid loose fill, rocks and holes; they can be dangerous for equipment operation or movement. Allow for unit length when making turns.

Do not walk or work under raised components or attachments unless securely positioned and blocked.

Keep all bystanders, pets and livestock clear of the work area.

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

Never stand alongside of the unit with engine running. Never attempt to start engine and/or operate machine while standing alongside of unit.



### **DURING OPERATION (CONT.)**

Never leave running mixer/feeder unattended.

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



### **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.



### **HIGHWAY AND TRANSPORT OPERATIONS:**

Adopt safe driving practices:

Keep the 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. Deep 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.



## **HIGHWAY AND TRANSPORT OPERATIONS (CONT.):**

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 driving the tractor and 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.

Plan your route to avoid heavy traffic.

Be a safe courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.

Be observant of bridge loading ratings. Do not cross bridges rated lower than the gross weight at which you are operating.

Watch for obstructions overhead and to the side while transporting.

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.



## **PERFORMING MAINTENANCE:**

Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.

Make sure there is plenty of ventilation. Never operate the engine of the towing vehicle 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.

Always use a safety support and block the wheels. Never use a jack to support the machine.



## **PERFORMING MAINTENANCE (CONT.):**

Always use the proper tools or equipment for the job at hand.

Use extreme caution when making adjustments.

Never use our hands to locate hydraulic leaks on attachments. Use a small piece of cardboard or wood. Hydraulic fluid escaping under pressure can penetrate the skin.

When disconnecting hydraulic lines, shut off hydraulic supply and relieve all hydraulic pressure.

Openings in the skin and minor cuts are susceptible to infection from hydraulic fluid. If injured by escaping hydraulic fluid, see a doctor at once. Gangrene can result. Without immediate treatment, serious infection and reactions can occur.

Replace all shields and guards after servicing and before moving.

After servicing, be sure all tools, parts and service equipment are removed.

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.

Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. ROTO-MIX will not claim responsibility for use of unapproved parts and/or accessories and other damages as a result of their use.

If equipment has been altered in any way from original design, ROTO-MIX does not accept any liability for injury or warranty.

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

## **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.

### **CHAIN TENSION**

All the single roller chain should be tightened to the point of .042" (1 mm) (dime) clearance is reached between the coils of the 1-1/4" idler tension springs and .068" (1.7 mm) (nickel) clearance is reached between the coils of the 1-3/4" idler tension springs.

### **LOADING INSTRUCTIONS & PRECAUTIONS**

- A.** Do not add side board extensions to the mixer.
- B.** Do not overload the mixer. Mixer capacity can be reached by weight or volume. By volume, the rotor bars and wipers should always be visible at the peak of the rotor cycle. If the rotor is completely submerged under the mix, mixing efficiency may be reduced, spillage may occur, and damage to the mixer may result. Maximum capacity by weight can be calculated by multiplying 28 pounds times mixer cubic foot capacity.
- C.** Load liquid supplements with a manifold system to distribute the full length of the mixer (approximately 10 feet). These ingredients should be added towards the end of the loading sequence.
- D.** When adding minute supplements or medication in non-liquid form, these ingredients should be loaded in the middle of the loading sequence.

**NOTE:** These procedures may not work on all rations. Loading sequences may be changed to give the best possible mix.

### **ATTENTION:**

- F.** Never load the mixer from the right side (side opposite the discharge) with a front end loader or payloader.

## ROTO-HAY PROCESSOR

The ROTO-HAY PROCESSOR is designed for processing hay into the mixer.

### **THE ROTO-HAY PROCESSOR MUST BE PROPERLY USED. ALWAYS USE DRY HAY.**

**Drain rain water out of mixer before use.** 1" of rain in a 354 12 equals 46 gal (460 lbs.) of water which will increase the moisture in 1000 lbs. of dry hay (12%) to 40% moisture or 500 lbs. of dry hay to 54% moisture.

The ROTO-HAY PROCESSOR will handle small amounts of damp hay, but this is done at your own risk. ROTO-MIX will not warranty bent or broken rotor tubes, bent or broken augers, or bent hay pans caused from misuse, wet hay, foreign objects, and/or overloading.

### **HAY PREPARATION**

1. **SMALL BALES** - (60 to 150 lbs., 2 or 3 wire) Remove twine or wire from bales and break bales apart.
2. **LARGE SQUARE BALES** - (3' x 4' x 8' or 4' x 4' x 8')
  - A. Position bale so you can get to the end of bale with front end loader.
  - B. Remove twine or wrapping.
  - C. With front end loader, pull a 12" flake away from the bale so it can be picked up with loader bucket - or - by adding 3 or 4 teeth (12" long) to the top of your loader bucket, you can stab the end of the bale and pick up a 12" flake to lay on the mixer hay pan.
3. **ROUND BALES** - Round bales are not recommended with Hay Processor unless tub ground.

### **LOADING INSTRUCTIONS FOR HAY PROCESSOR**

Load all commodities except liquids on the discharge (auger) side with the hay pan in the raised position. The raised hay pan does not affect the mixing action

1. With the mixer running at a minimum rotor speed of 4 RPM, (450 PTO speed on a 540 drive trailer), load prepared hay towards the front of the hay pan on discharge side of mixer. For best results, when loading with a tractor front end loader or payloader, each bucket load should not exceed 200 lbs at one time. Allow time for the hay to be processed into the mixer before loading another 200 lbs. Repeat until desired amount of hay is processed (DO NOT OVERLOAD). Let the mixer run until desired length of hay is reached.
2. Finish loading dry commodities.
3. Load wet feeds, such as silage, after all commodities and hay are in the mixer.
4. Load liquid supplements with a manifold system to distribute the full length of the mixer (approximately 10 feet).
5. If water is to be added to the ration - **Do this last!**

## **OPERATION:**

Trailer mounted mixers can be furnished with single tractor controls or dual controls. Dual controls are standard unless specified.

1. Single controls operate as follows: Spout goes down first - door opens second. Door closes first - spout goes up second.
2. The disadvantage of the single control is that it does not let you adjust the spout height without first closing the door.

## **MIXER INFORMATION**

The mixer trailers are equipped with recapped tires with a new tread cap.

## LUBRICATION CHART

**DISENGAGE PTO & SHUT OFF POWER BEFORE LUBRICATING THE MACHINE.**

**LOOSE OR FLOPPY CLOTHING SHOULD NOT BE WORN BY THE OPERATOR.**

**OIL BATH:** Fill the oil bath with 30 weight motor oil to sight plug at center of input shaft.

**GREASE BANK:** Grease every 100 hours.

**FRONT END BEARINGS:** Grease every 100 hours.

**INPUT BEARINGS:** One (1) on input shaft beneath mixer/feeder. Grease every 100 hours.

**PTO SHAFTS & U-JOINTS:** Grease every 10 to 20 hours.

**GEARBOX (Only on Truck Mounts with Automatic Transmission):**

Prior to operation, remove the uppermost plug and replace with vent plug provided. After the first 100 hours of operation, drain the initial oil, preferably warm. Flush the gear case with an approved non-flammable, non-toxic solvent and refill with oil. Thereafter oil should be changed every 2500 hours or every 12 months, whichever occurs first. Fill the gearbox with 1-1/2 pints of (Mobil Delvac Synthetic Gear Oil 75W-90).





## 354-12 SPECIFICATIONS

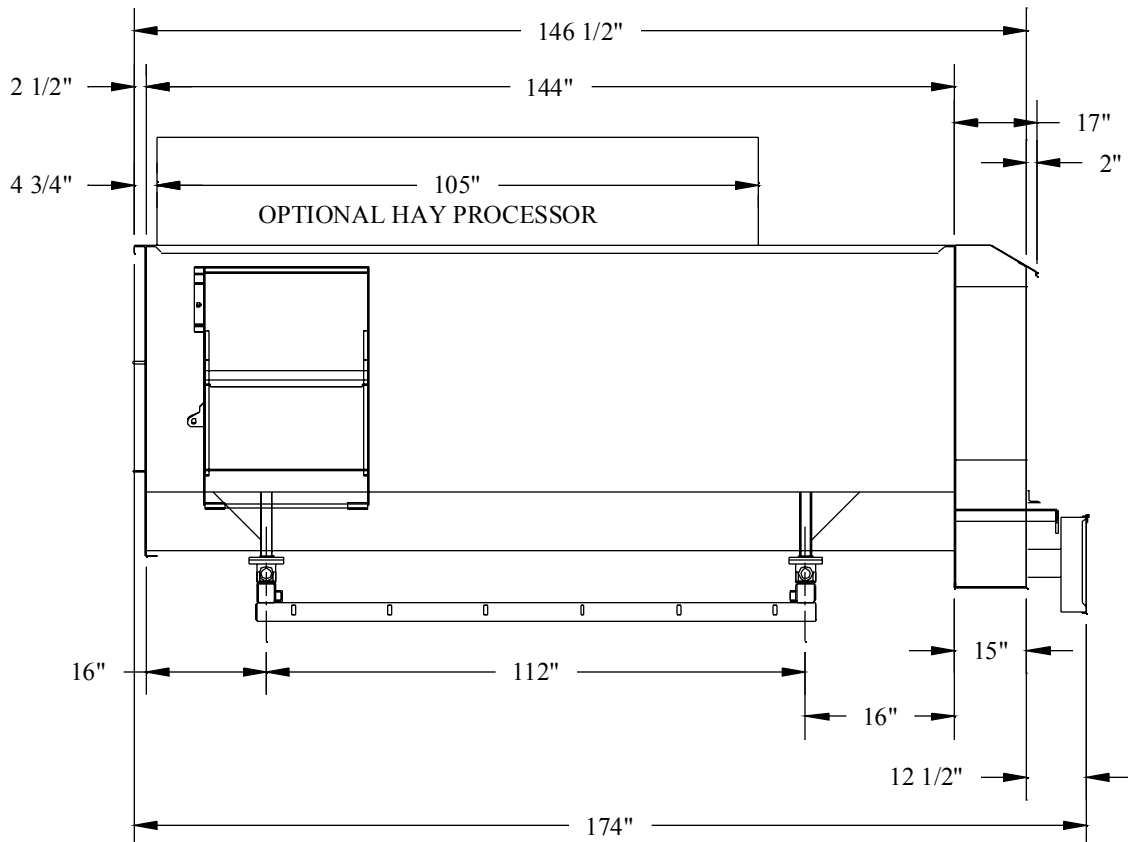
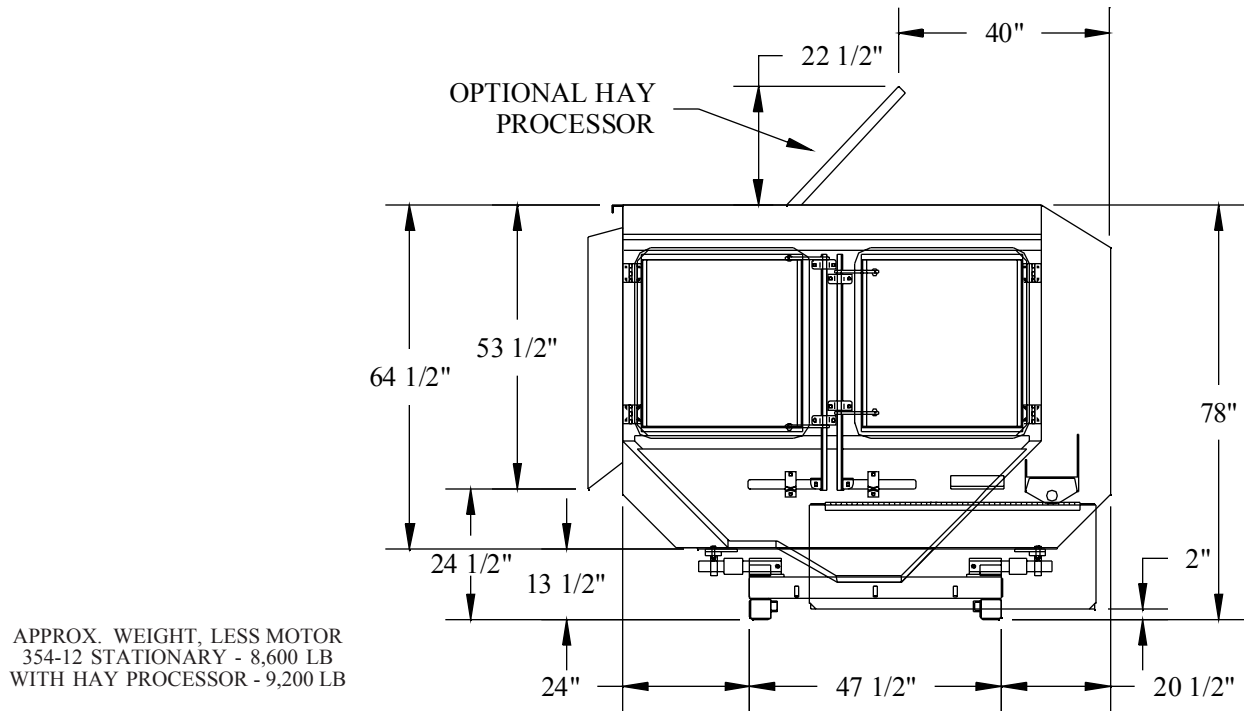
Capacity (Cu. ft.).....	350
Struck level capacity (Cu. ft.).....	400
Top Auger Bearing (Front) .....	1-3/4" 4-Bolt
Top Auger Bearing (Rear).....	2-1/2" 4-Bolt
Bottom Auger Bearing (Front).....	2-3/16" 4-Bolt
Bottom Auger Bearing (Rear).....	3" 4-Bolt
Rotor Bearing (Front) .....	2-7/16" 4-Bolt
Rotor Bearing (Rear) .....	3-1/2" 4-Bolt
Top Auger Sprockets .....	100 B 21H & 80 B 70
Bottom Auger Sprockets .....	100 B 13H & 100 B 45
Rotor Sprocket .....	100 B 96
Jackshaft Sprockets .....	60 B 54 & 80 B 17H Trk & Stat 1000 PTO 60 B 42 & 80 B 17H -Trl 540 PTO
Drive Sprockets .....	60 B 17H - Trk & Stat 1000 PTO 60 B 25H - Trl 540 PTO
Top Auger Flighting .....	3/8" x 20"OD RH 14" Pitch
Bottom Auger Flighting .....	1/2" x 20"OD RH & LH Full Pitch
Tub Bottom Construction .....	3/8" Steel
Auger Bottom Construction .....	3/8" Steel
Right Side Sheet Construction.....	7GA (3/16") Steel
Left Side Sheet Construction .....	7GA (3/16") Steel
Front End Sheet Construction .....	1/4" Steel
Rear End Sheet Construction .....	7GA (3/16") Steel

**PTO CHART**  
**354-12**

	PTO (% ENGINE SPEED)		INPUT SPROCKET	JACKSHAFT SPROCKET
	50		18 Tooth	42 Tooth
<b>DIESEL</b>	55		16 Tooth	42 Tooth
<b>STANDARD</b>	60		15 Tooth	42 Tooth
<b>TRANS</b>	65		18 Tooth	54 Tooth
	70		17 Tooth	54 Tooth
	75		15 Tooth	54 Tooth
<b>DIESEL</b>				
<b>AUTOMATIC</b>	85 87	2:1 Gearbox	21 Tooth	42 Tooth
<b>TRANS</b>				
<b>STANDARD TRANSMISSIONS: REQUIRE OPPOSITE ENGINE ROTATION PTO &amp; DRIVELINE KIT #650015.</b>				
<b>AUTOMATIC TRANSMISSIONS: REQUIRE ENGINE ROTATION PTO, 2:1 GEARBOX, &amp; DRIVELINE KIT #650069.</b>				
<b>1000</b>				
<b>TRACTOR</b>			17 Tooth	54 Tooth
<b>DRIVE</b>				
<b>(OPTIONAL)</b>				
<b>540</b>				
<b>TRACTOR</b>			25 Tooth	42 Tooth
<b>DRIVE</b>				
<b>(STANDARD)</b>				
		<b><u>BELT RATIO</u></b>		
		25 HP 5V-3 Groove 16" & 5V-3 Groove 6.3"	17 Tooth	54 Tooth & 17 Tooth
		2 Belts 5VX-1000		
<b>STATIONARY</b>		20 HP 5V-2 Groove 16" & 5V-3 Groove 6.3"	17 Tooth	54 Tooth & 17 Tooth
<b>1750 RPM</b>		2 Belts 5VX-1000		
<b>ELECTRIC</b>		15 HP 5V-2 Groove 16" & 5V-3 Groove 4.9"	15 Tooth	54 Tooth & 15 Tooth
		2 Belts 5VX-1000		

**NOTE: IF OPTIONAL HAY PROCESSOR IS INSTALLED A 25HP MOTOR IS REQUIRED.**

## 354 STATIONARY DIMENSIONS



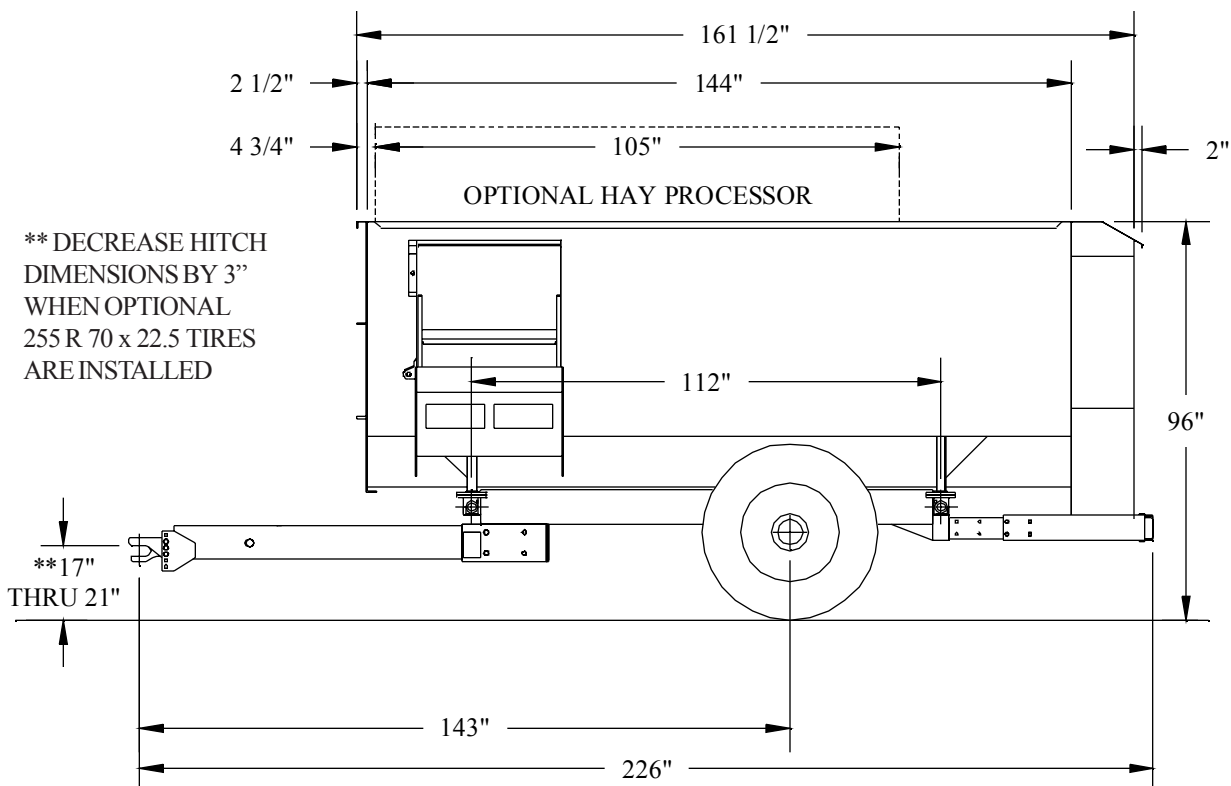
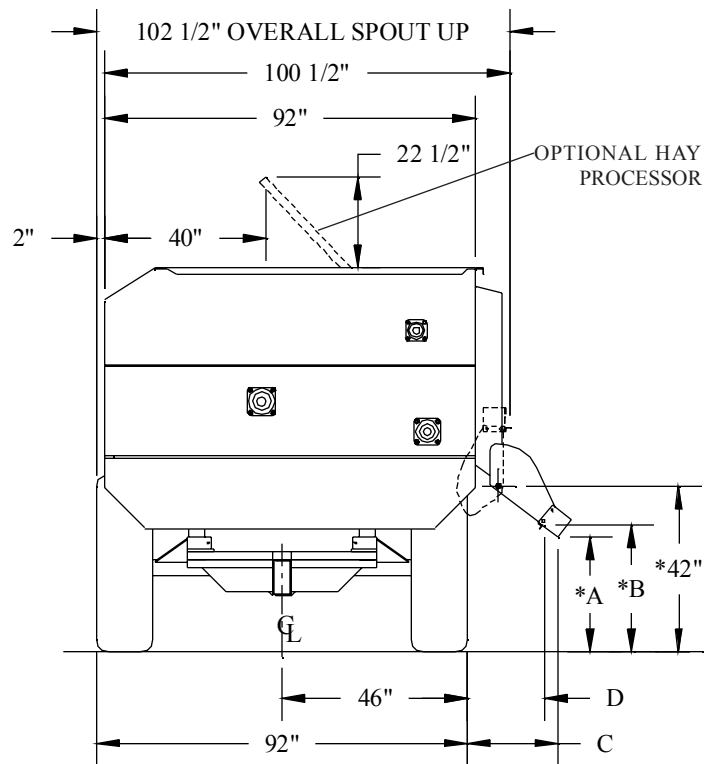
All Dimensions and Specifications are Approximate and Subject to Change Without Notice.

## 354-12 TRAILER DIMENSIONS

HEIGHT DIMENSIONS BASED  
ON 44" OD TIRE  
APPROXIMATE WEIGHT  
354-12 ON TRAILER - 10,000 LB  
W/ HAY PROCESSOR - 10,600 LB

\* INCREASE DIMENSIONS BY 4"  
WHEN OPTIONAL RISER BLOCKS  
ARE INSTALLED.  
DECREASE DIMENSIONS BY 3"  
WHEN OPTIONAL 255 R 70 x 22.5  
TIRES ARE INSTALLED.

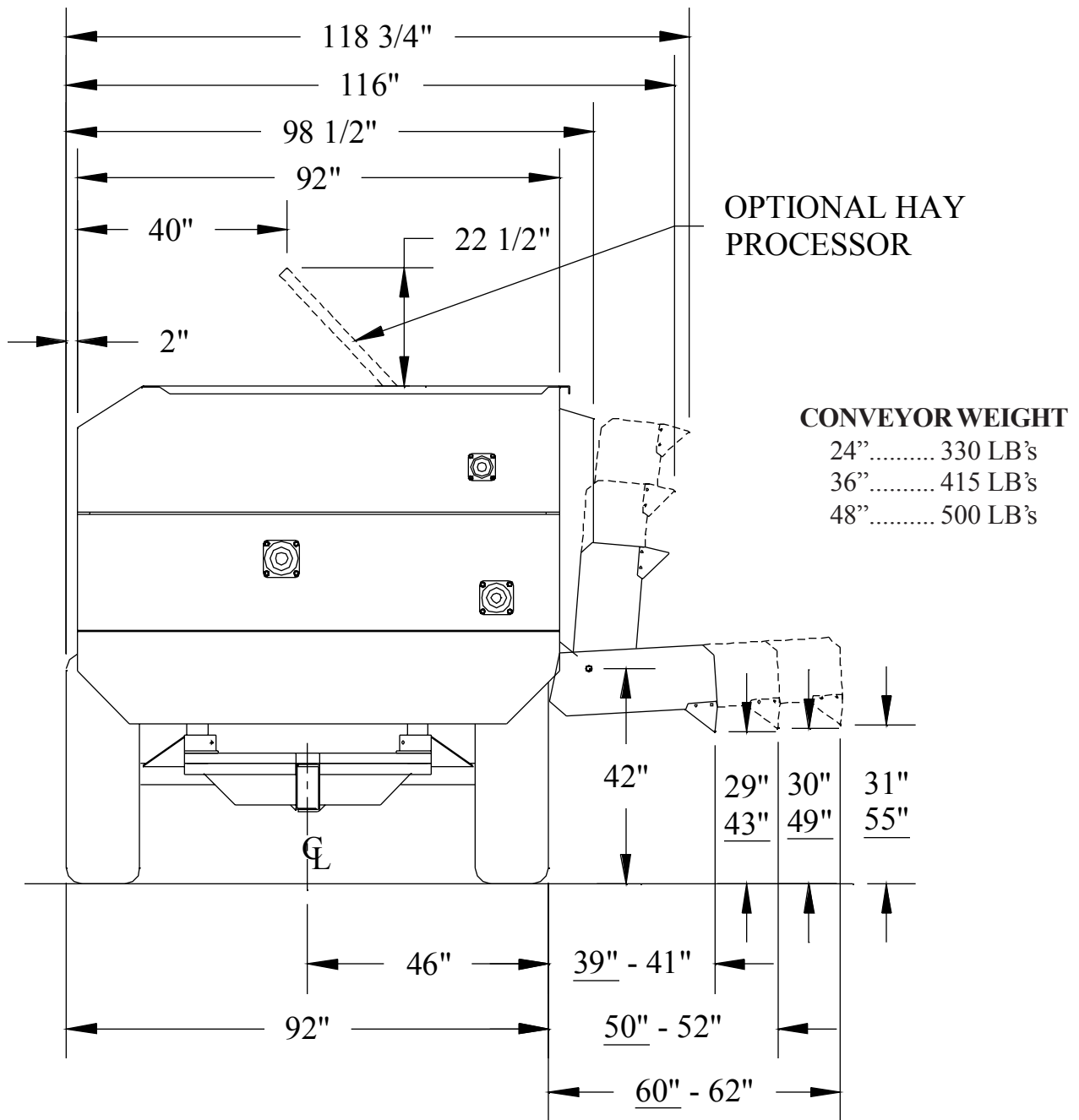
	12" SPT	17" SPT
A	36"	34"
B	39"	37"
C	14"	19"
D	11"	16"



\*\* DECREASE HITCH  
DIMENSIONS BY 3"  
WHEN OPTIONAL  
255 R 70 x 22.5  
TIRES ARE INSTALLED

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

## 354-12 TRAILER DIMENSIONS (WITH CONVEYOR)



UNDERLINED DIMENSION IS  
CONVEYOR SET AT IT'S  
MAXIMUM OPERATING  
ANGLE OF 30 DEG

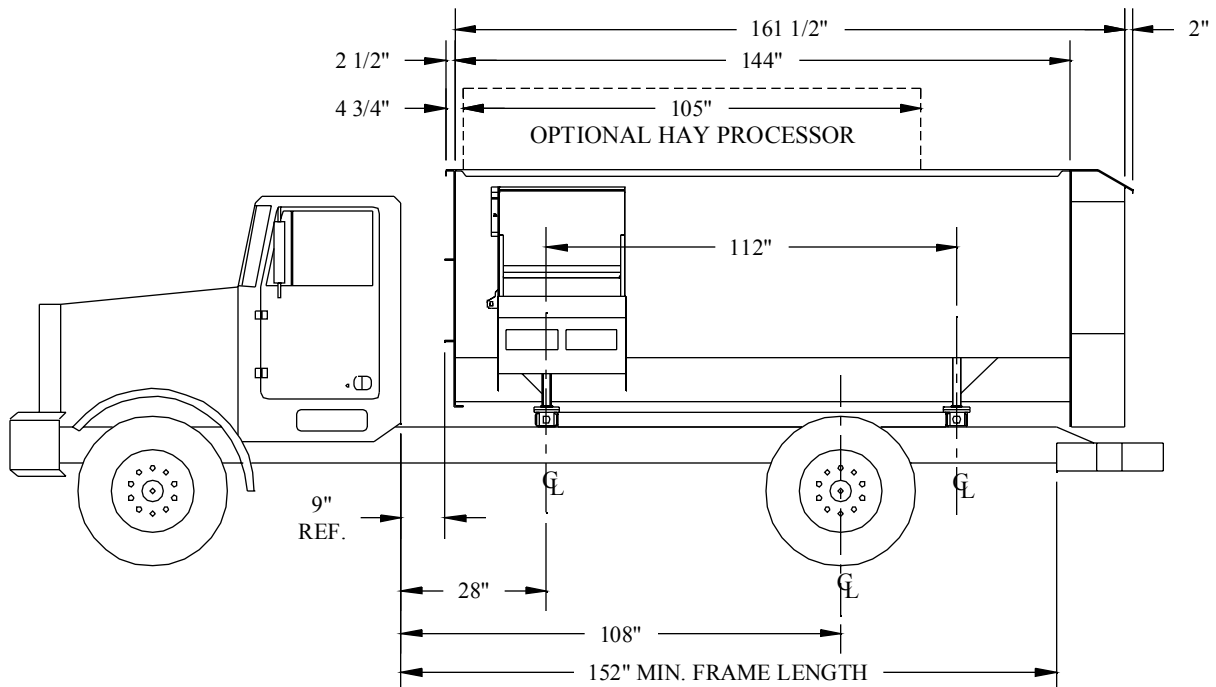
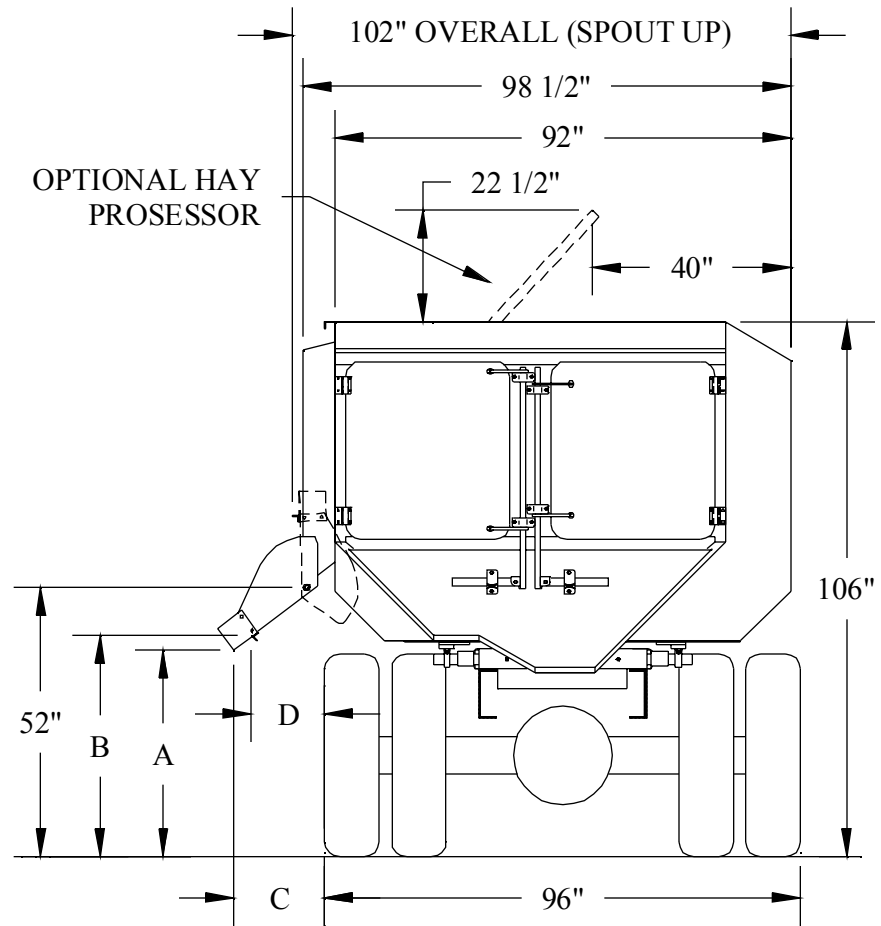
All Dimensions & Specifications are Approximate and Subject to Change Without Notice.

## 354-12 TRUCK DIMENSIONS

	12" SPT	17" SPT
A	46"	44"
B	49"	47"
C	13"	18"
D	10"	15"

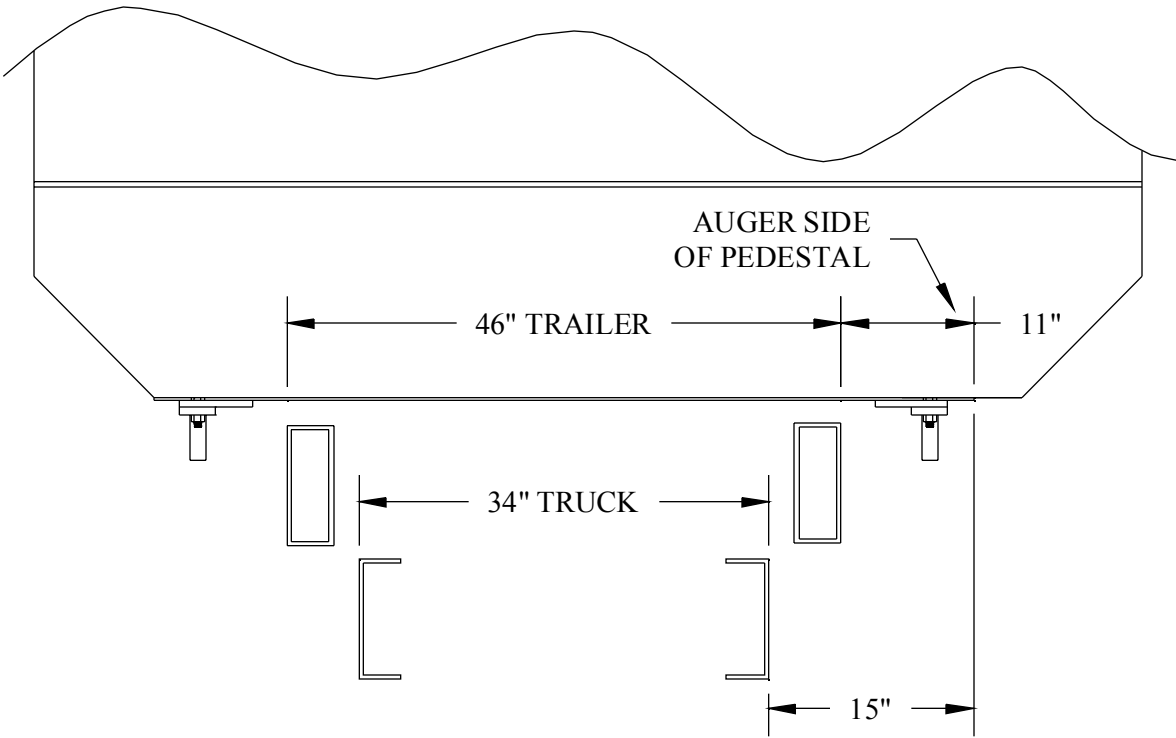
HEIGHT DIMENSIONS BASED  
ON 36" TRUCK FRAME WITH  
17" SPOUT

APPROXIMATE WEIGHT  
354-12 ON TRUCK - 9,300 LB  
W/ HAY PROCESSOR - 9,900 LB



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

# 354-12 MOUNTING DIMENSIONS



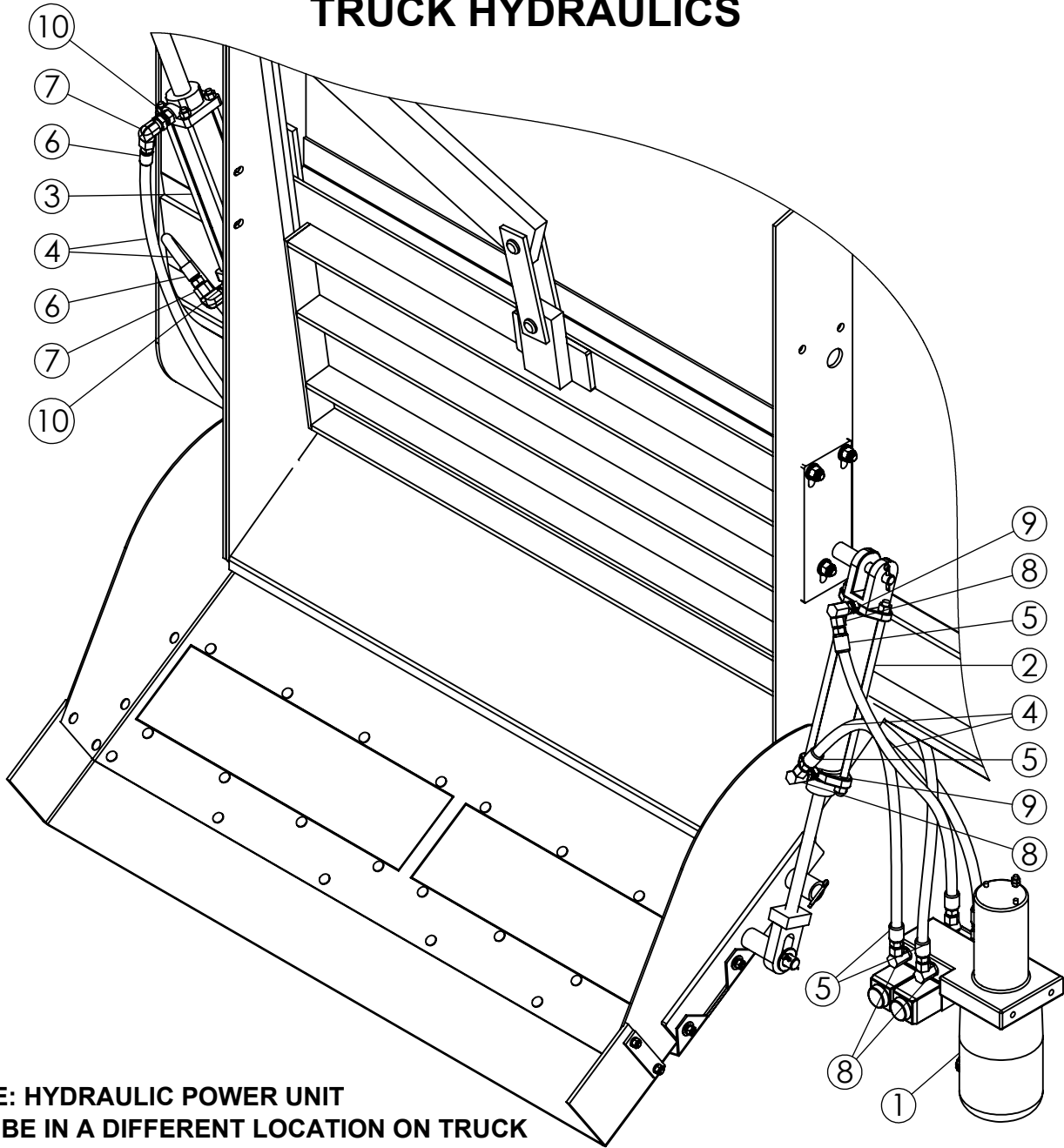
All Dimensions & Specifications are Approximate and Subject to Change Without Notice.

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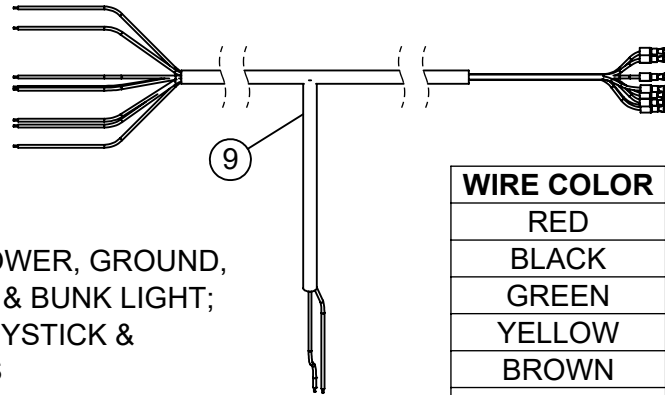
# TRUCK HYDRAULICS



**NOTE: HYDRAULIC POWER UNIT  
MAY BE IN A DIFFERENT LOCATION ON TRUCK**

ITEM#	PART#	DESCRIPTION	QTY.
1	362152	12V HYD POWER UNIT	1
2	364035	HYDRAULIC CYLINDER 1-1/2" x 8"	1
3	364055	HYD CYL 2" x 8" 20-1/4" CL	1
4	366006	3/8" HYDRAULIC HOSE	AS NEEDED
5	367064	HOSE COUPLING, 3/8" x 1/4" MP MEGACRIMP	6
6	367066	HOSE COUPLING, 3/8" x 3/8" MP MEGACRIMP	2
7	368007	HYD ADAPTER 3/8"MP x 3/8"FPX 90° .109 ORIFICE	2
8	368010	HYD ADAPTER 90° 1/4MP x 1/4FPX 0.125" ORIFICE	6
9	368106	HYD APAPTER, STR 9/16"MOR x 1/4"FP SWIVEL	2
10	368115	HYD ADAPTER 9/16 MOR x 3/8 FP SWIVEL	2

# JOYSTICK CONTROL PANEL & WIRING

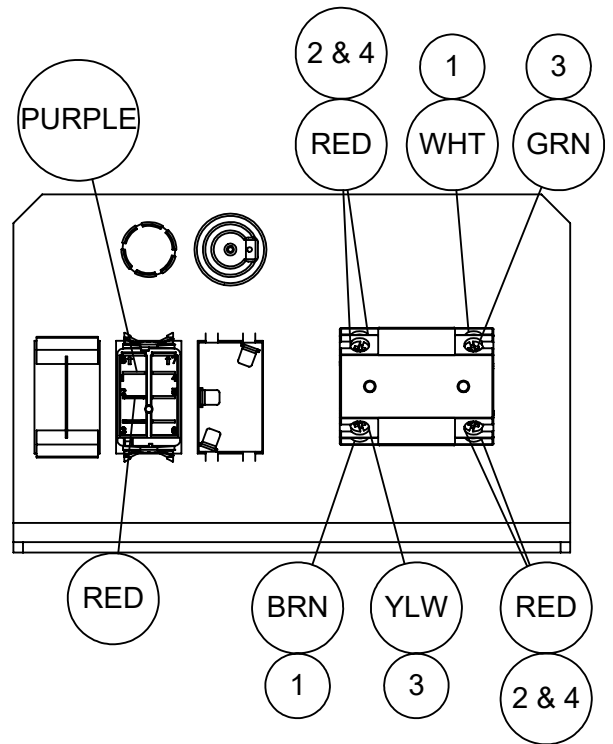
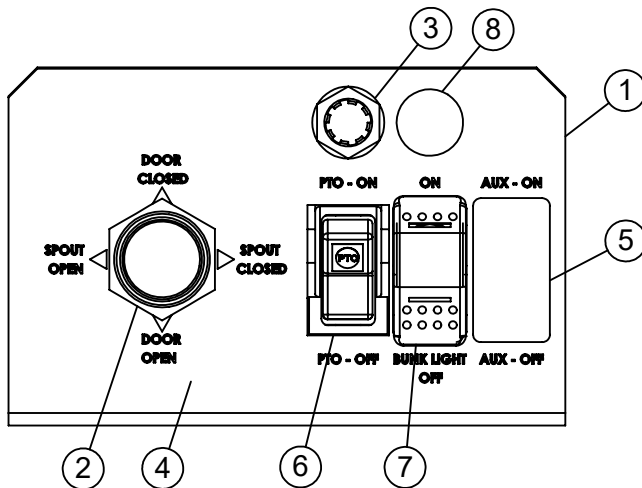


BARE ENDS FOR POWER, GROUND, HYDRAULIC VALVE, & BUNK LIGHT; FORK ENDS FOR JOYSTICK & ROCKER SWITCHES

WIRE COLOR	FUNCTION
RED	POWER
BLACK	GROUND
GREEN	DOOR STACK VALVE
YELLOW	DOOR STACK VALVE
BROWN	SPOUT STACK VALVE
WHITE	SPOUT STACK VALVE
PURPLE	BUNK LIGHTS

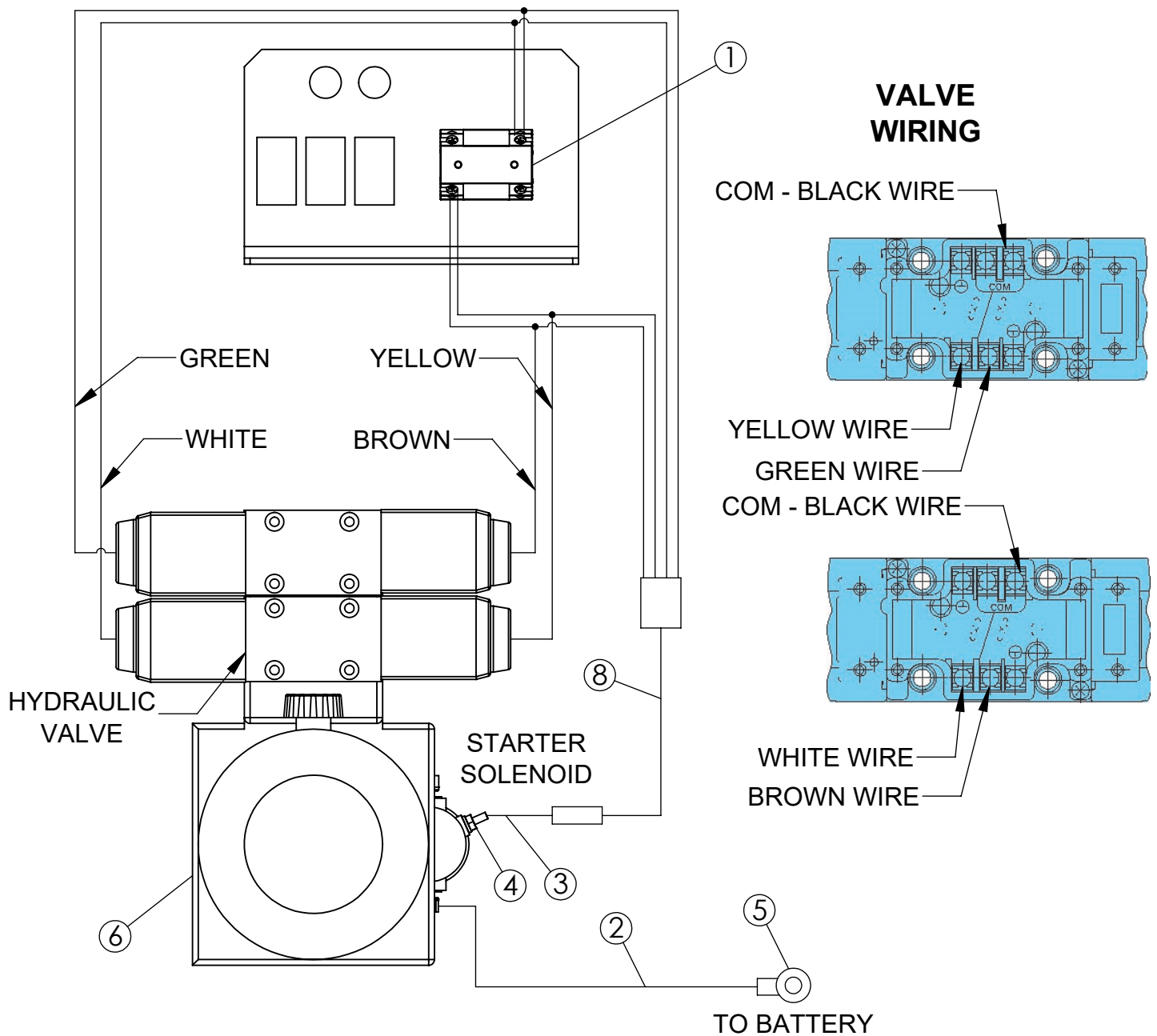
USE DIN CONNECTORS FOR HYDRAULIC STACK VALVE

USE HARNESS SUPPLIED WITH PTO FOR PTO SWITCH & LIGHT



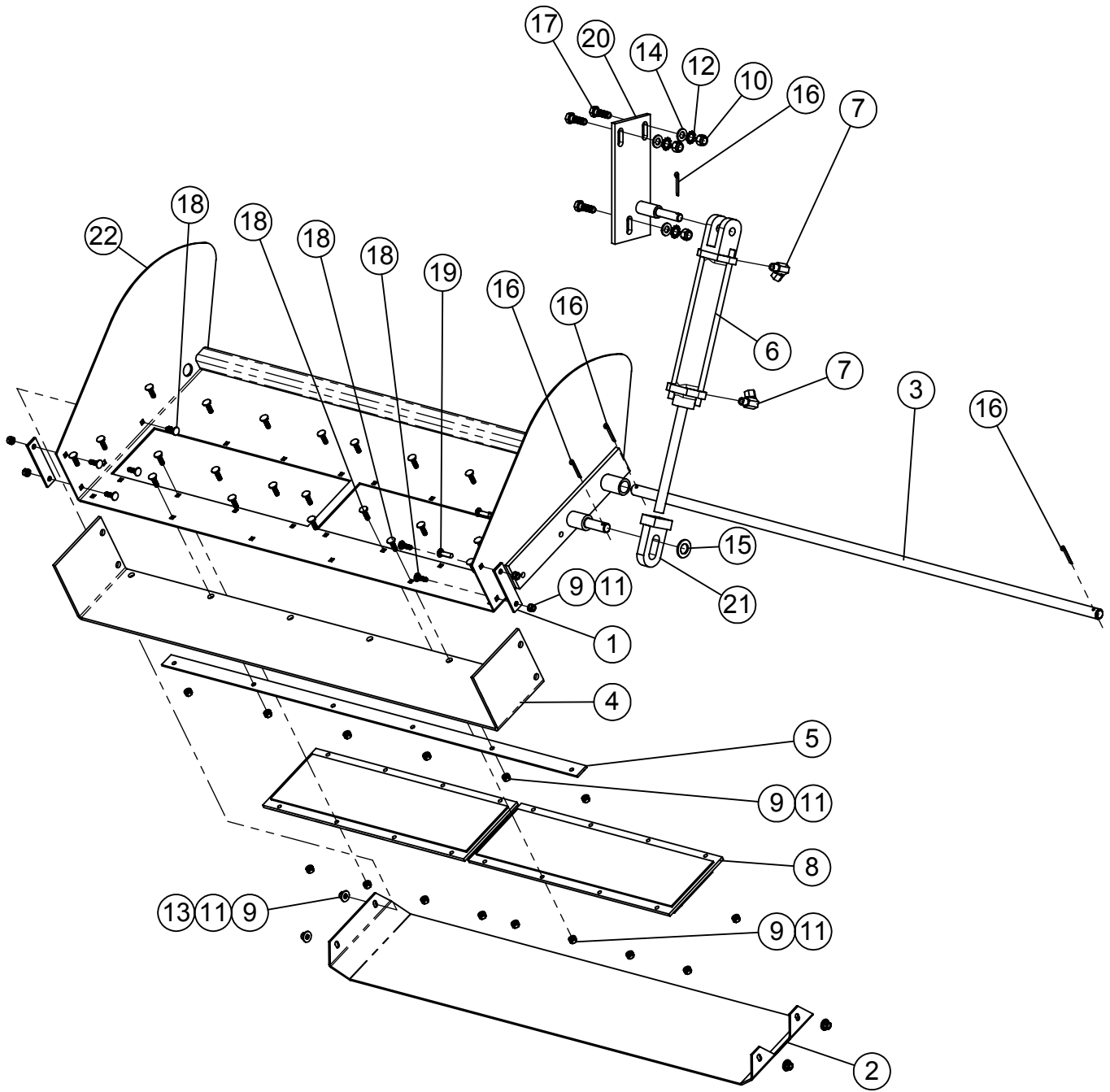
ITEM #	PART #	DESCRIPTION	QTY.
1	190928	TRUCK SWITCH PANEL	1
2	357705	JOYSTICK, (4-WAY) SCHNEIDER 9001K35	1
3	357753	LIGHT, RED INDICATOR, 3/4" DIA.	1
4	440835	DECAL, 4-WAY JOYSTICK - HORIZONTAL	1
5	452726	PLUG, PANEL	1
6	452730	SWITCH, ROCKER ON-OFF	1
7	452744	SWITCH, ROCKER ON-OFF, SPST	1
8	452763	PLUG, PANEL 11/16" DIA	1
9	781055	TRUCK TO MIXER WIRE ASSY	1

# WIRING SCHEMATIC FOR 12V HYDRAULIC POWER UNIT



ITEM#	PART#	DESCRIPTION	QTY.
1	357705	JOYSTICK, (4-WAY) SCHNEIDER 9001K35	1
2	358028	BATTERY CABLE 4-GA	AS NEEDED
3	358031	WIRE, RED 16-GA	AS NEEDED
4	358223	CONNECTOR, RING 14-16 GA, 1/4"	1
5	358229	COPPER CRIMP RING, 4-6 GA - 3/8" STUD	2
6	362152	12V HYD POWER UNIT	1
7	781055	TRUCK TO MIXER WIRE ASSY	1
8	781247	WIRE ASSEMBLY, 12V HYD POWER UNIT	1

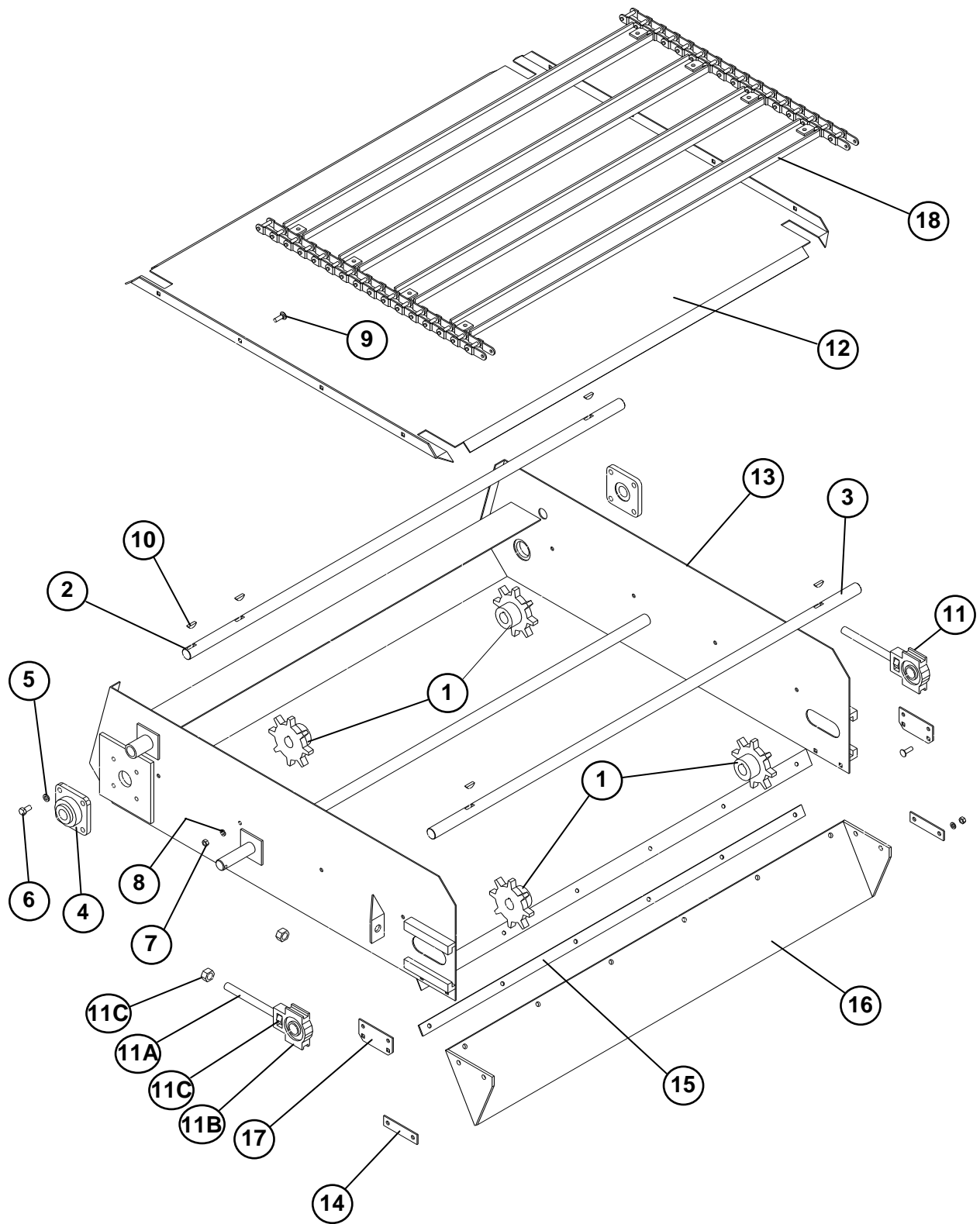
# 17" SPOUT ASSEMBLY



## 17" SPOUT ASSEMBLY

ITEM #	PART #	DESCRIPTION	QTY.
1	150150	SPOUT RUBBER END PLT	2
2	150299	SPOUT MAGNET GUARD 8" x 51-3/4"	1
	150159	SPOUT MAGNET GUARD 8" x 39-1/2"	1
3	150383	SPOUT PIVOT TUBE 52-3/4"	1
	150160	SPOUT PIVOT TUBE 40-3/4"	1
4	150384	SPOUT RUBBER, 6" x 57 1/2"	1
	150161	SPOUT RUBBER, 6" x 45-1/2"	1
5	183152	SPOUT BACKUP ANGLE, 47"	1
	187274	SPOUT BACKUP ANGLE, 35"	1
6	364035	HYDRAULIC CYLINDER 1-1/2" x 8"	1
7	368010	90° 1/4MP x 1/4" FP SWVL ORF 1/8	2
8	375005	ACRO PLATE MAGNET AM 2200, 7" x 22-3/4"	2
	375004	ARCO PLATE MAGNET AM 1500, 8" x 15"	2
9	400205	HEX NUT 5/16"-18 #5 PLTD	30
10	401108	HEX NUT, 1/2"-13 NYLOC #5 PLTD	3
11	402005	SPRING LOCK WASHER 5/16" MED PLTD	30
12	402108	1/2" EXTERNAL STAR LOCKWASHER	3
13	402405	FLAT WASHER 5/16" MED PLTD	4
14	402508	FLAT WASHER, 1/2" ID x 1" OD	3
15	402512	FLAT WASHER 3/4" SAE	1
16	404002	COTTER PIN 3/16" x 1 1/2"	4
17	405703	HHCS 1/2"-13 x 1-1/2" #5 PLTD	3
18	407021	CHCS 5/16"-18 x 1" #5 PLTD	28
19	407022	CARRIAGE BOLT 5-16"-18 x 1-1/4"	2
20	850050	SPOUT CYL TOP BRKT WA	1
21	850053	SPOUT CYLINDER LUG WA	1
	850050RH	SPOUT CYLINDER LUG WA (RH)	1
22	850106	SPOUT, 17" x 47"	1
	850084	SPOUT, 17" x 35"	1
	850106RH	SPOUT (RH), 17" x 47"	1
	850084RH	SPOUT WA (RH), 17" x 35"	1

# CHAIN CONVEYOR ASSEMBLY



# CHAIN CONVEYOR ASSEMBLY

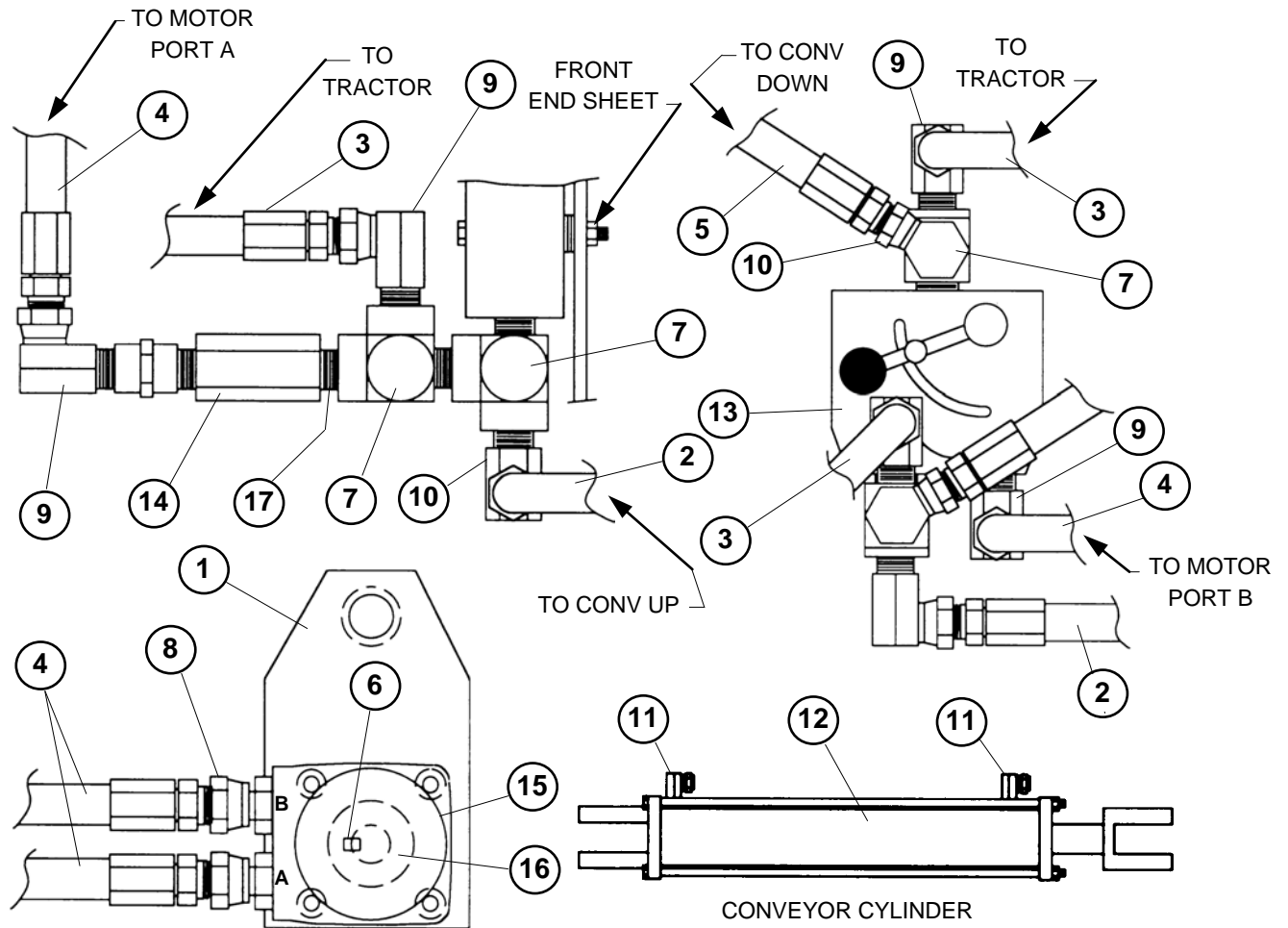
**#781411 .....24”L x 36”W CONVEYOR ASSEMBLY**

**#781410 .....36”L x 36”W CONVEYOR ASSEMBLY**

**#781412 .....48”L x 36”W CONVEYOR ASSEMBLY**

ITEM#	PART#	DESCRIPTION	QTY.
1	160025	8 TOOTH #55 SPROCKET x 1”ID	4
2	188412	36”W CONVEYOR DRIVE SHAFT	1
3	188413	36”W CONVEYOR IDLER SHAFT	1
4	340316	RCJC 1” 4-BOLT FLANGE BEARING	2
5	402006	3/8” SPLIT LOCKWASHER	8
6	405652	3/8”-16 x 3/4” HHCS	8
7	400205	5/16”-18 HEX NUT	20
8	402005	5/16” SPLIT LOCKWASHER	20
9	407021	5/16”-18 x 1” CARRIAGE BOLT	20
10	409916	1/4” x 1” WOODRUFF KEY	4
11	760000	TAKE-UP BEARING ASSEMBLY	2
11A	188390	TAKE-UP BOLT 1”	1
11B	341323	TAKE-UP BEARING 1”	1
11C	400210	HEX NUT 5/8”-11 PLTD #5	1
11D	400810	HEX CTR LOCK NUT 5/8”-11 PLTD #5	1
12	874114	24”L x 36”W CONVEYOR PAN WELDMENT	1
	874110	36”L x 36”W CONVEYOR PAN WELDMENT	
	874118	48”L x 36”W CONVEYOR PAN WELDMENT	
13	874116	24”L x 36”W CONVEYOR WELDMENT	1
	874112	36”L x 36”W CONVEYOR WELDMENT	
	874120	48”L x 36”W CONVEYOR WELDMENT	
14	188304	CONVEYOR SPOUT RUBBER BAR – 4”	2
15	188302	CONVEYOR SPOUT RUBBER BAR – 34-1/2”	1
16	188417	36”W CONVEYOR SPOUT RUBBER	1
17	188418	CONVEYOR SPOUT RUBBER SIDE BAR	2
18	874115	24”L x 36”W CONV. C55 CHAIN WELDMENT	1
	874111	36”L x 36”W CONV. C55 CHAIN WELDMENT	
	874119	48”L x 36”W CONV. C55 CHAIN WELDMENT	

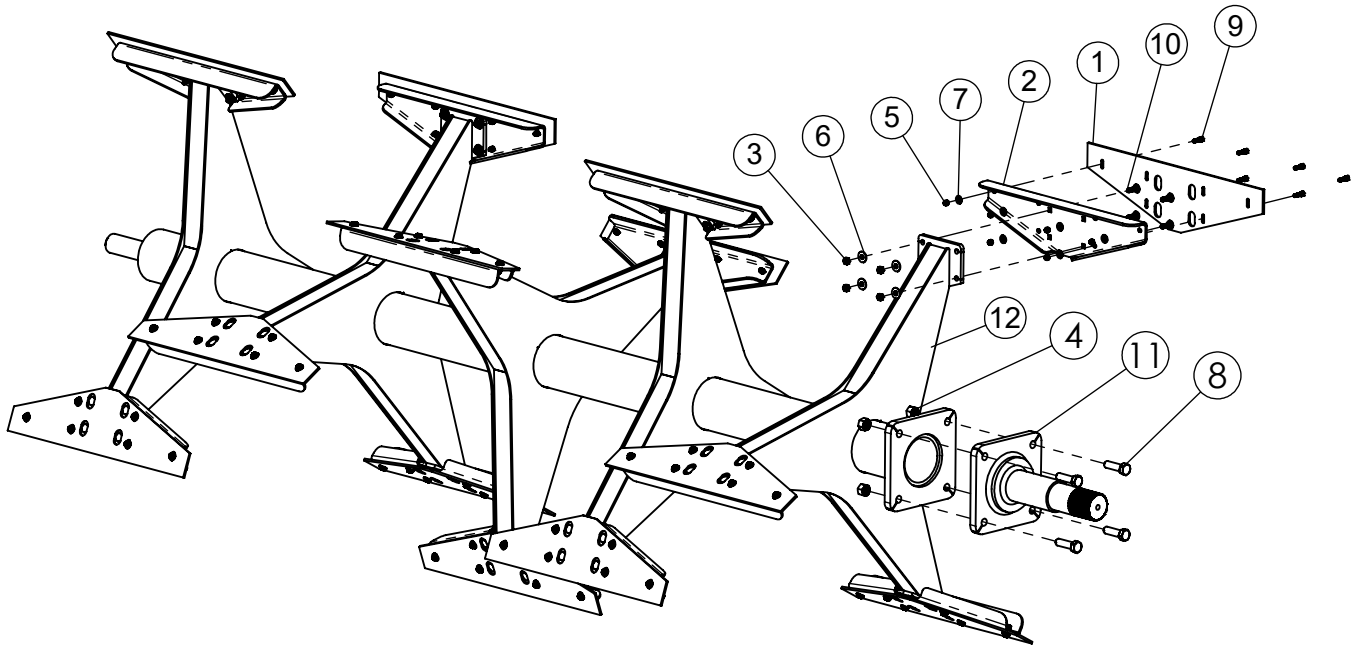
# CHAIN CONVEYOR HYDRAULIC ASSEMBLY



ITEM#	PART#	DESCRIPTION	QTY.
1	874071	CONVEYOR MOTOR PLATE WELDMENT	1
2	781329	3/8" X 125" HYD. HOSE ASSY. (3/8"MP ENDS)	1
3	781328	1/2" X 128" HYD. HOSE ASSY. (1/2"MP ENDS)	2
4	781327	1/2" X 56" HYD. HOSE ASSY (1/2"MP ENDS)	2
5	781326	3/8" X 112" HYD. HOSE ASSY. (3/8"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°	4
10	368028	1/2" X 3/8"FPSW	2
11	368007	3/8"MP X 3/8"FPSW 90° .109" ORFICE	2
12	364060	2" X 16" HYDRAULLIC CYLINDER	1
13	362283	HYDRAULIC FLOW CONTROL VALVE	1
14	362240	1/2"FP X 1/2"FP BALL CHECK VALVE	1
15	360009	9.7 CI HYDRAULIC MOTOR	1
	360010	5.9 CI HYDRAULIC MOTOR (24" CONVEYOR)	1
16	332654	1"ID X 2"OD X 3"LTB CPLG W/1/4" KEY	1
17	310805	1/2" CLOSE NIPPLE	1

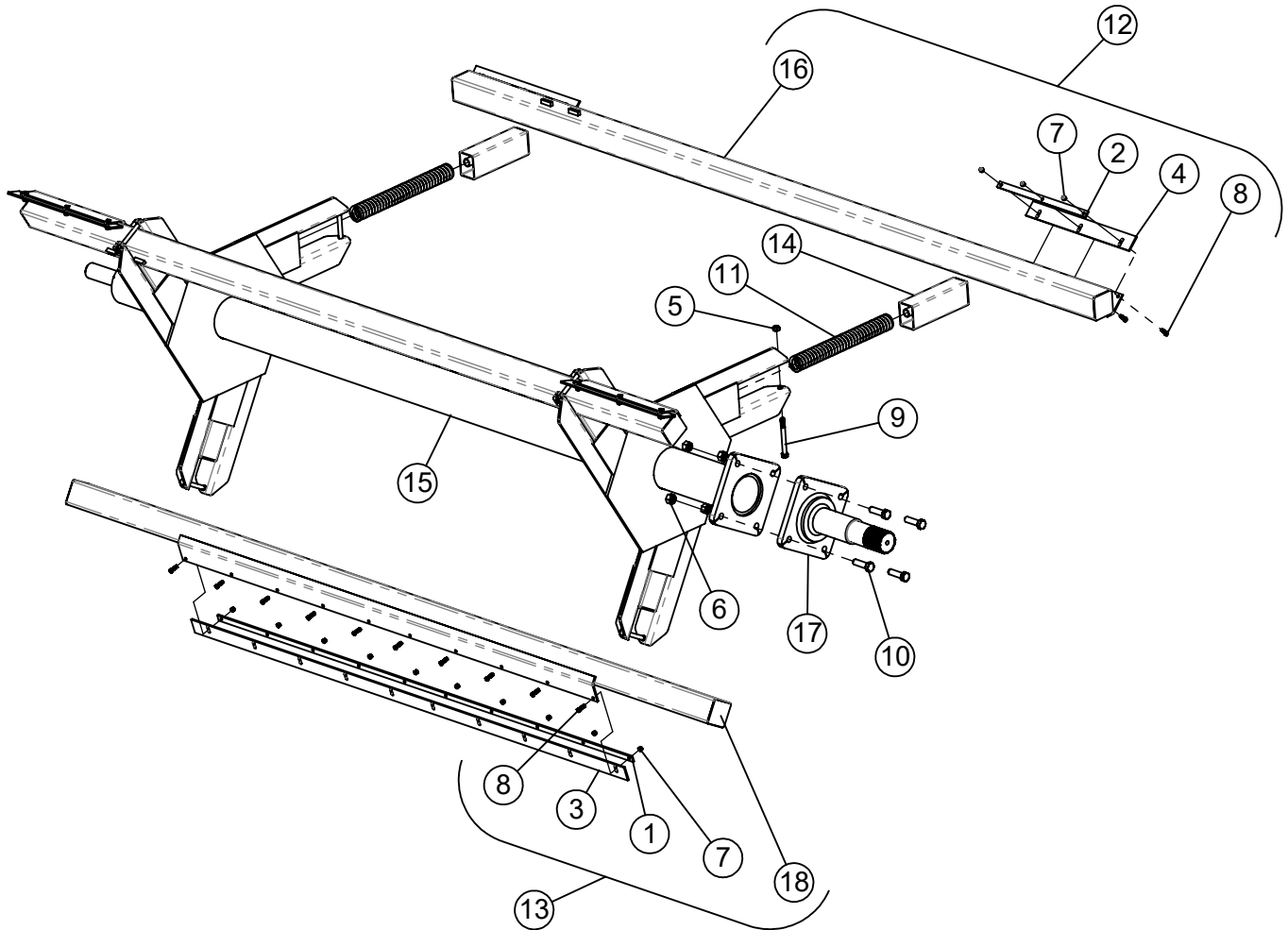


# 354-12B STAGGERED ROTOR ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY.
1	190473P	PLASTIC WIPER	15
2	190474	WIPER CHANNEL 10-3/16"x27-3/4"	15
3	400908	HEX CROWN LOCNUT 1/2"-13 #9	60
4	400914	HHCS CROWN LOCK 7/8"-9 GRD 5 PLTD	4
5	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	90
6	402408	WASHER, FLAT 1/2" MED PLTD	60
7	402806	FLAT WASHER 3/8" #9 BOWMALLOY	90
8	406502	HHCS 7/8"-9 x 3" GRD 8	4
9	406906	HHCS 3/8"-16 x 1-1/4" #9 BOWMALLOY	90
10	407102	CHCS 1/2"-13 x 1-1/2" #5 PLTD	60
11	850502	274/354 ROTOR SHAFT FLANGE WA	1
12	850623	354 STAGGERED ROTOR WA	1

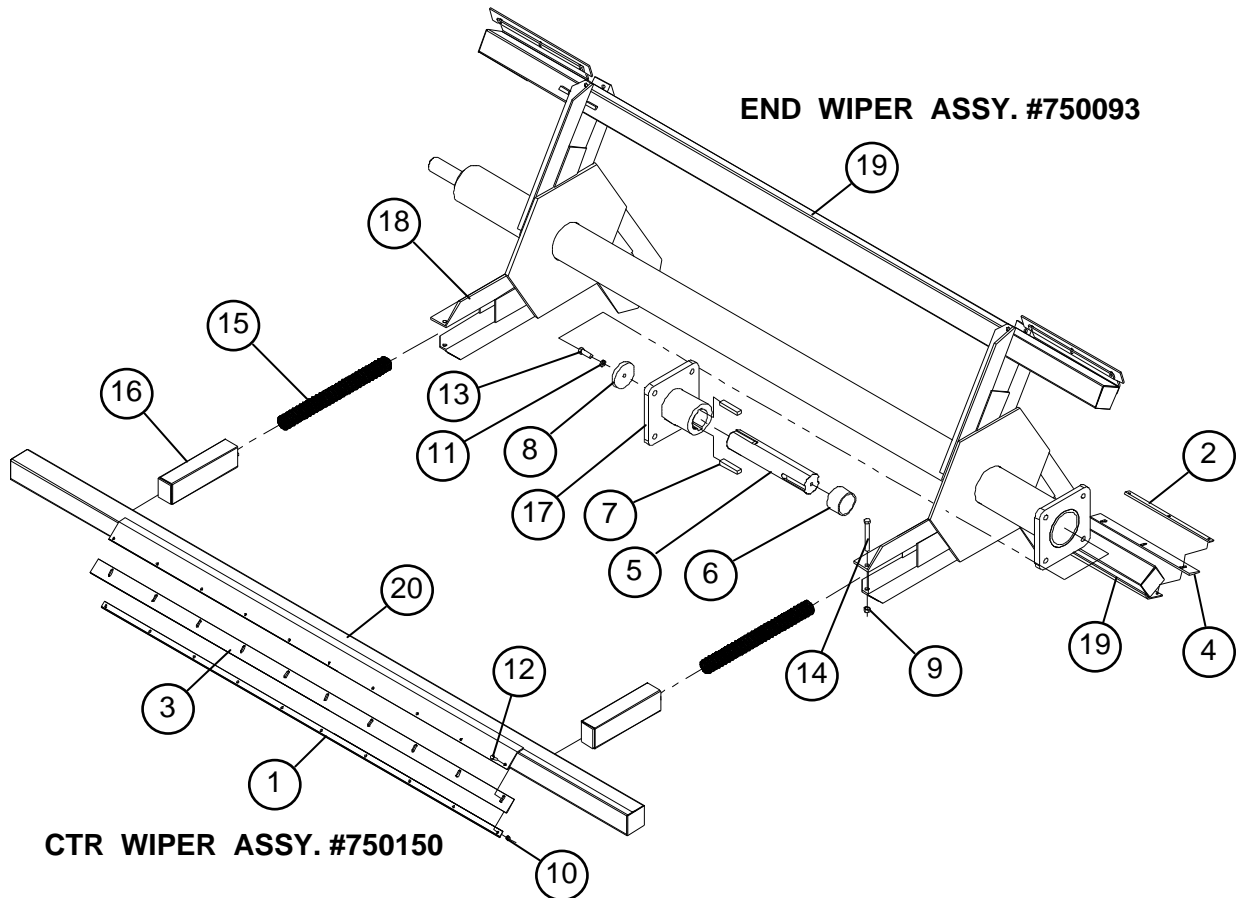
## 354-12B 3 ARM ROTOR ASSEMBLY AFTER SERIAL #890473440



ITEM #	PART #	DESCRIPTION	QTY.
1	150013	WIPER STRAP 90 1/2"	1
2	150014	END WIPER STRAP 19 1/4"19.250	4
3	150015	PLASTIC WIPER 2-1/2" x 94-1/2"	1
4	150016	END PLASTIC WIPER 2-1/2" x 22-1/2"	4
5	400910	HEX CROWN LOCNUT 5/8"-11 #9 PLTD	6
6	400914	HEX CROWN LOCK 7/8"-9 GRD 5 PLTD	4
7	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	22
8	405654	HHCS 3/8"-16 x 1-1/4" #5 PLTD	22
9	406465	HHCS 5/8 11 x 6 GRD 8	6
10	406502	HHCS 7/8"-9 x 3" GRD 8	4
11	410005	SPRING, COMPRESSION, 2 1/2" x 24" x .41"	6
12	750093	274/354 END WIPER ASSEMBLY (Includes 2,4,7,8 & 14)	2
13	750150	274/354 CENTER WIPER ASSEMBLY (Includes 1,3,7,8 & 16)	1
14	850007	ROTOR SPRING COVER WA	6
15	850256	354 ROTOR W.A	1
16	850304	STAGGERED WIPER WA	2
17	850502	274/354 ROTOR SHAFT FLANGE WA	1
18	850547	354 CENTER WIPER WA. 12'	1

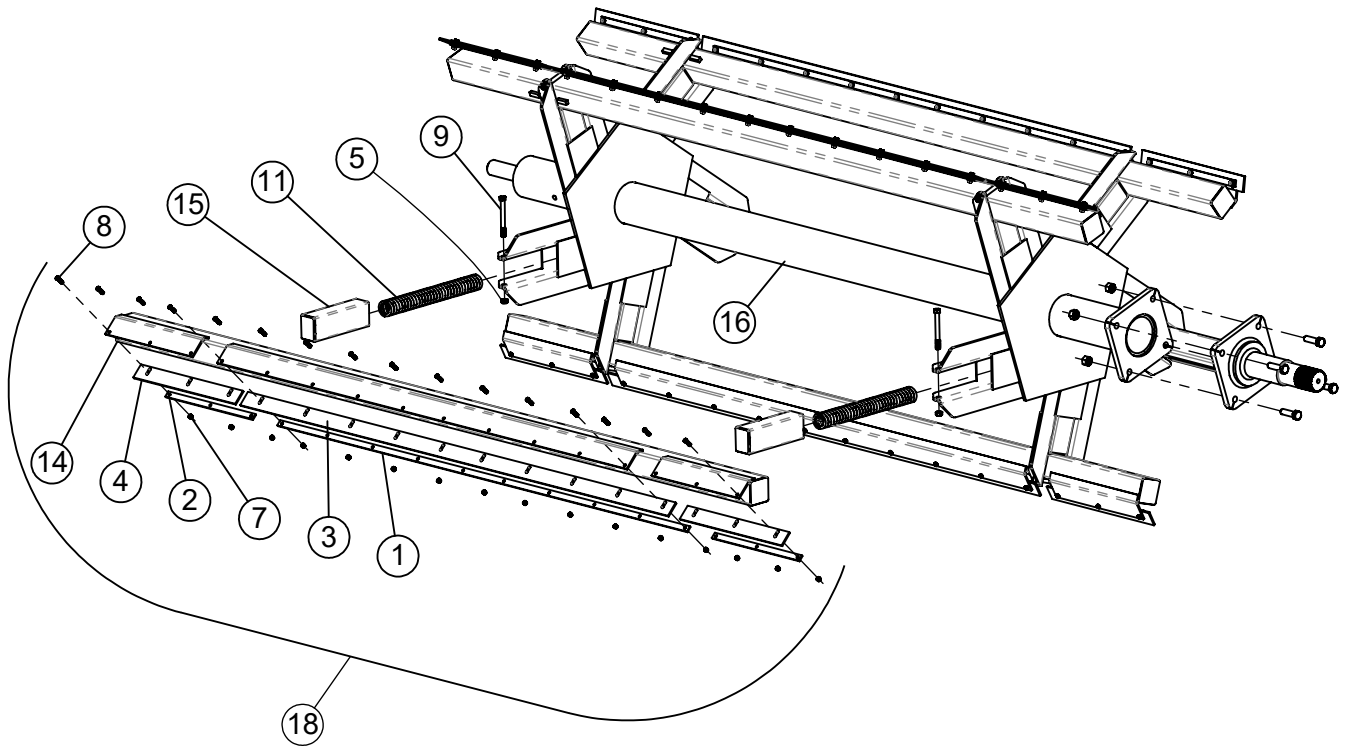
# 354-12 3 ARM ROTOR ASSEMBLY

BEFORE SERIAL #890473440



ITEM#	PART#	DESCRIPTION	QTY.
1	150013	CENTER WIPER STRAP	1
2	150014	END WIPER STRAP	4
3	150015	CENTER PLASTIC WIPER	1
4	150016	END PLASTIC WIPER	4
5	150025	ROTOR DRIVESHAFT	1
6	150031	ROTOR HUB SPACER SLEEVE	1
7	150081	KEY, RECTANGLAR, 5/8" x 7/8" x 4"	2
8	185329	RETAINER, 4-1/2"	1
9	400910	HEX CTR LOCKNUT, 5/8"-11	6
10	401106	HEX NUT, 3/8"16 NYLOCK	22
11	402010	SPLIT LOCK WASHER, 5/8"	1
12	405654	HHCS, 3/8"-16 x 1-1/4"	22
13	405754	HHCS, 5/8"-11 x 2"	1
14	405765	HHCS, 5/8"-11 x 5-1/2"	6
15	410005	COMPRESSION SPRING, 2-1/2" x 24" x 0.410"	6
16	850007	ROTOR SPRING COVER WELDMENT	6
17	850010	ROTOR HUB WELDMENT	1
18	850256	3 ARM ROTOR WELDMENT	2
19	850304	END WIPER WELDMENT	2
20	850547	CENTER WIPER WELDMENT	1

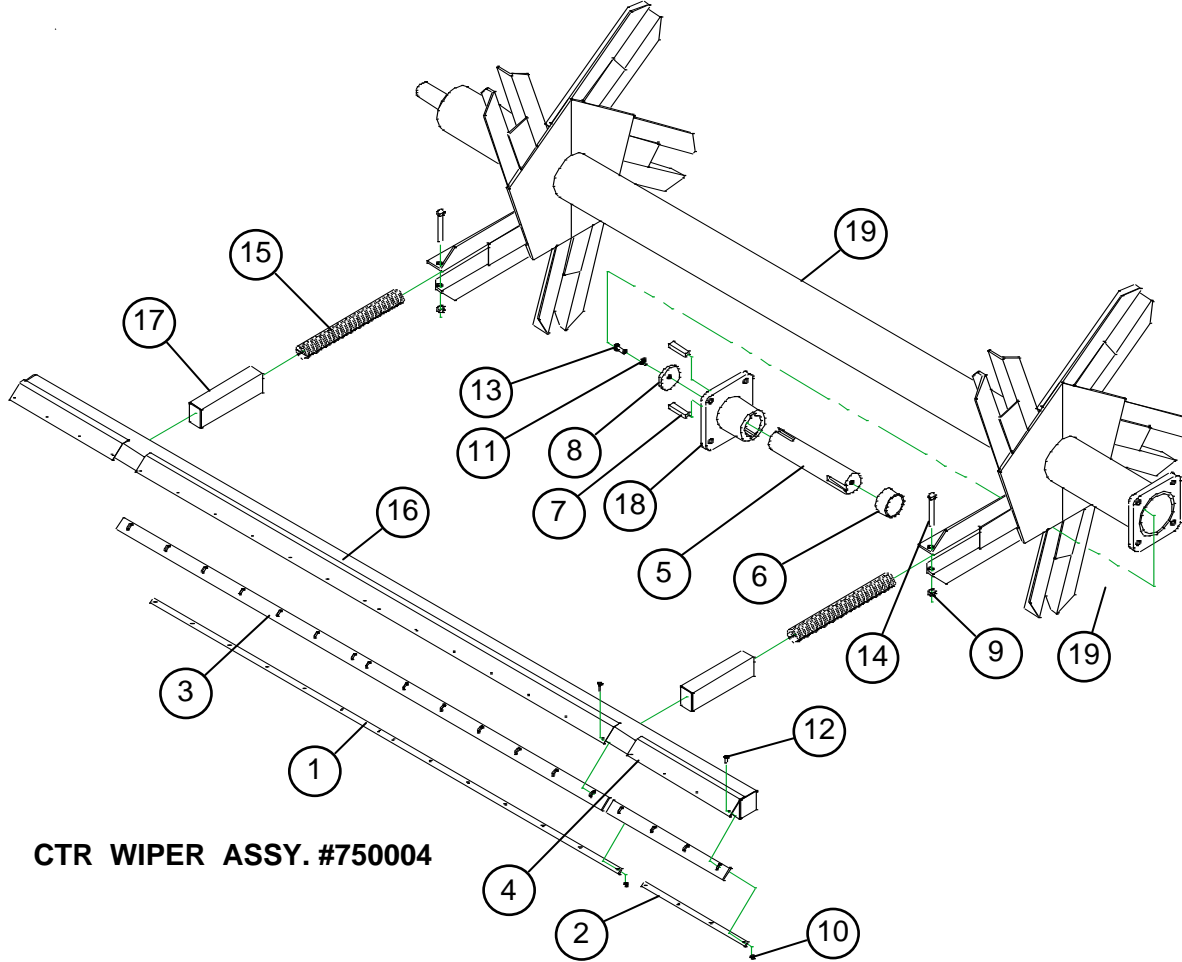
## 354-12B 5 ARM ROTOR ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY.
1	150013	WIPER STRAP 90 1/2"	5
2	150014	END WIPER STRAP 19 1/4"19.250	10
3	150015	PLASTIC WIPER 2-1/2" x 94-1/2"	5
4	150016	END PLASTIC WIPER 2-1/2" x 22-1/2"	10
5	400910	HEX CROWN LOCNUT 5/8"-11 #9 PLTD	10
6	400914	HEX CROWN LOCK 7/8"-9 GRD 5 PLTD	4
7	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	80
8	405654	HHCS 3/8"-16 x 1-1/4" #5 PLTD	80
9	406465	HHCS 5/8"-11 x 6" GRD 8	10
10	406502	HHCS 7/8"-9 x 3" GRD 8	4
11	410005	SPRING, COMPRESSION, 2 1/2" x 24" x .41"	10
12	850006	354 WIPER TUBE WELDMENT	5
13	850006	12 FT WIPER WA	5
14	850007	ROTOR SPRING COVER WA	10
15	850268	354 5 ARM ROTOR W.A.	1
	850268RH	354 5 ARM ROTOR W.A. RH	1
17	850502	274/354 ROTOR SHAFT FLANGE WA	1
18	750004	354-12 WIPER ASSEMBLY (Includes Items 1,2,3,4,7,8,&13)	5

# 354-12 5 ARM ROTOR ASSEMBLY

## BEFORE SERIAL #890473440

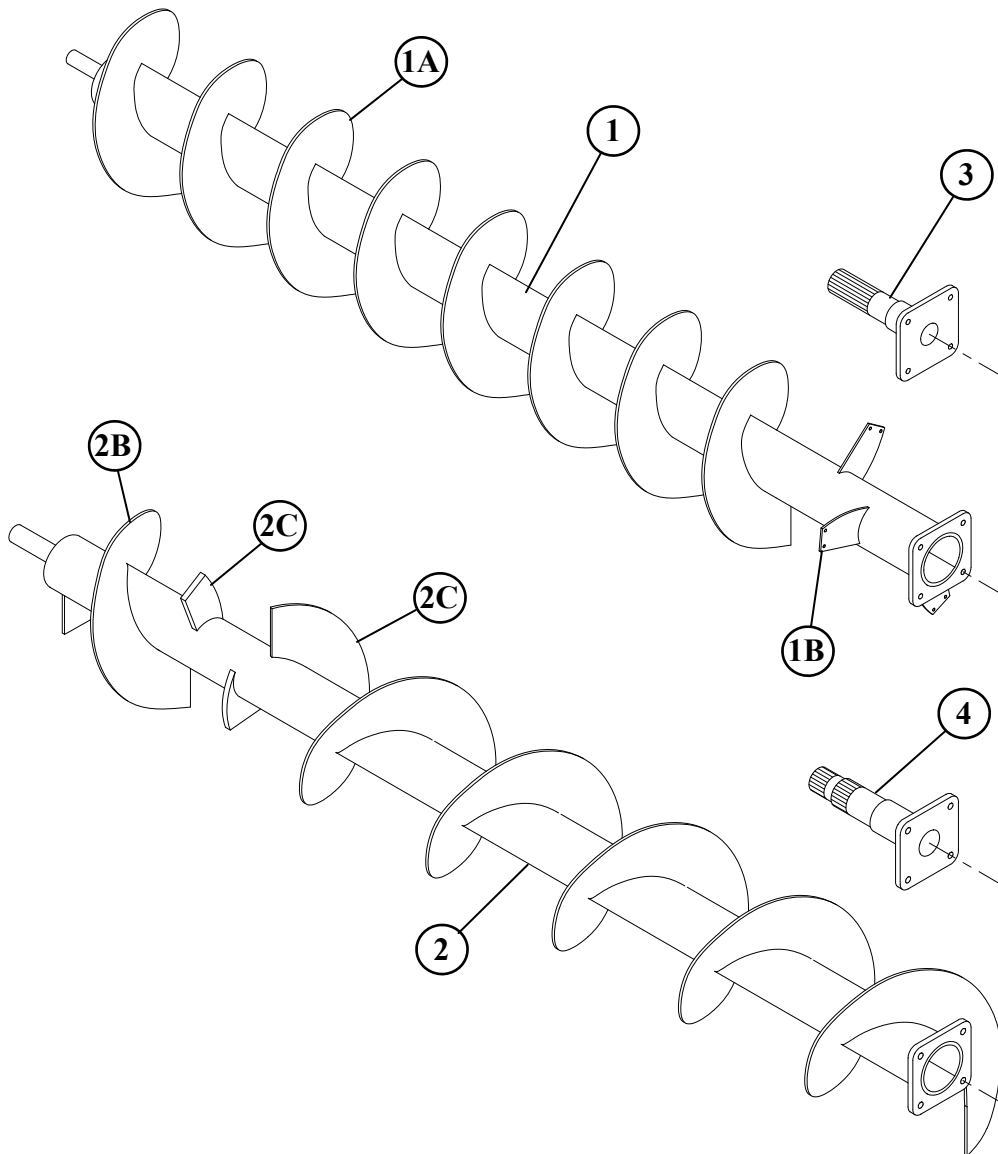


**CTR WIPER ASSY. #750004**

ITEM#	PART#	DESCRIPTION	QTY.
1	150013	CENTER WIPER STRAP	5
2	150014	END WIPER STRAP	10
3	150015	CENTER PLASTIC WIPER	5
4	150016	END PLASTIC WIPER	10
5	150025	ROTOR DRIVESHAFT	1
6	150031	ROTOR HUB SPACER SLEEVE	1
7	150081	KEY, RECTANGULAR, 5/8" x 7/8" x 4"	2
8	185329	RETAINER, 4-1/2"	1
9	400910	HEX-CTR LOCKNUT, 5/8"-11	10
10	401106	HEX NUT, 3/8"-16 NYLOCK	80
11	402010	LOCKWASHER, 5/8"	1
12	405654	HHCS, 3/8"-16 x 1 1/4"	80
13	405754	HHCS, 5/8"-11 x 2"	1
14	405765	HHCS, 5/8"-11 x 5 1/2"	10
15	410005	COMPRESSION SPRING, 2-1/2" x 24" x 0.410"	10
16	850006	354 WIPER TUBE WELDMENT	5
17	850007	ROTOR SPRING COVER WELDMENT	10
18	850010	ROTOR HUB WELDMENT	1
19	850268	354 5 ARM ROTOR WELDMENT	1

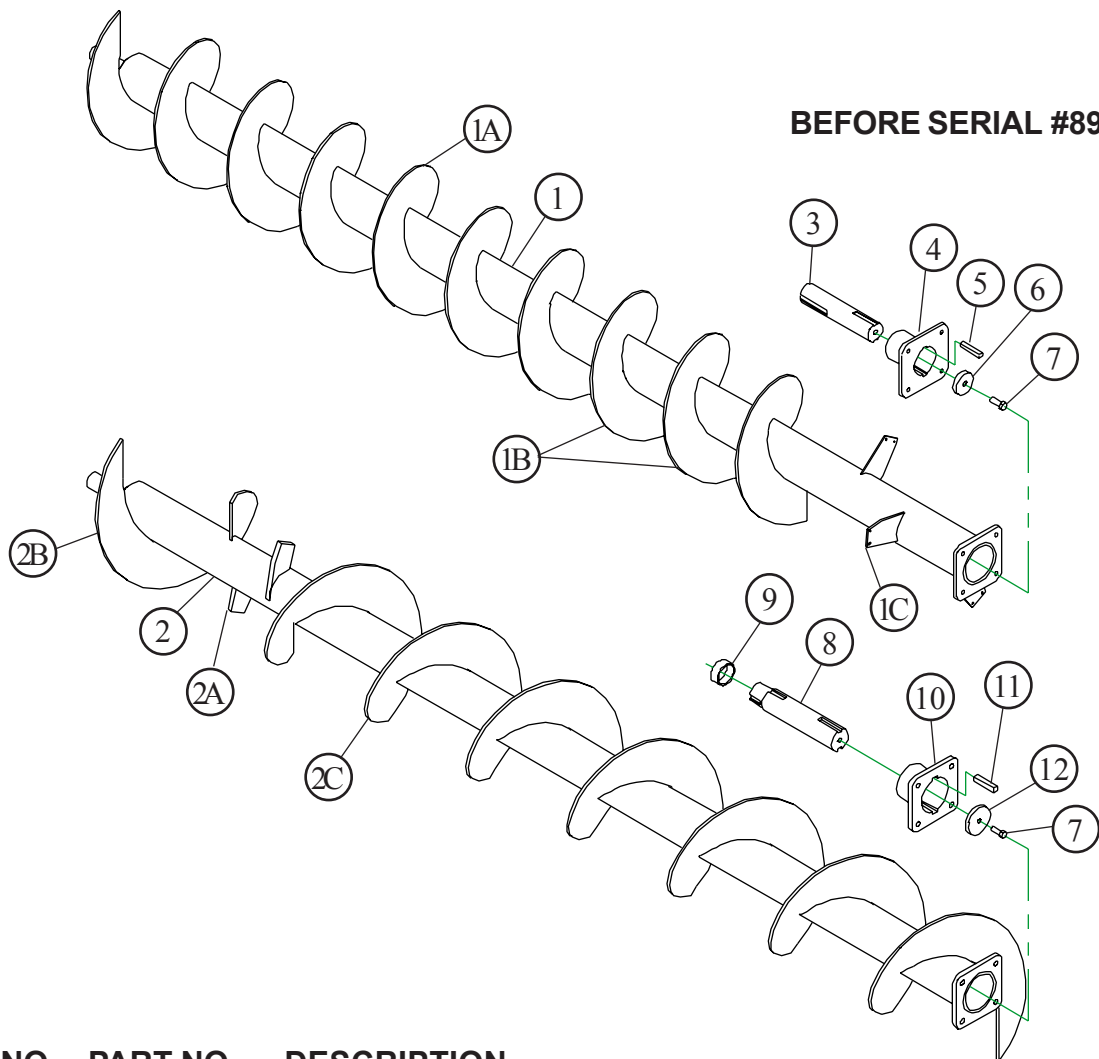
# 354-12 STANDARD TOP & BOTTOM AUGER ASSEMBLY

FROM SERIAL #890473440



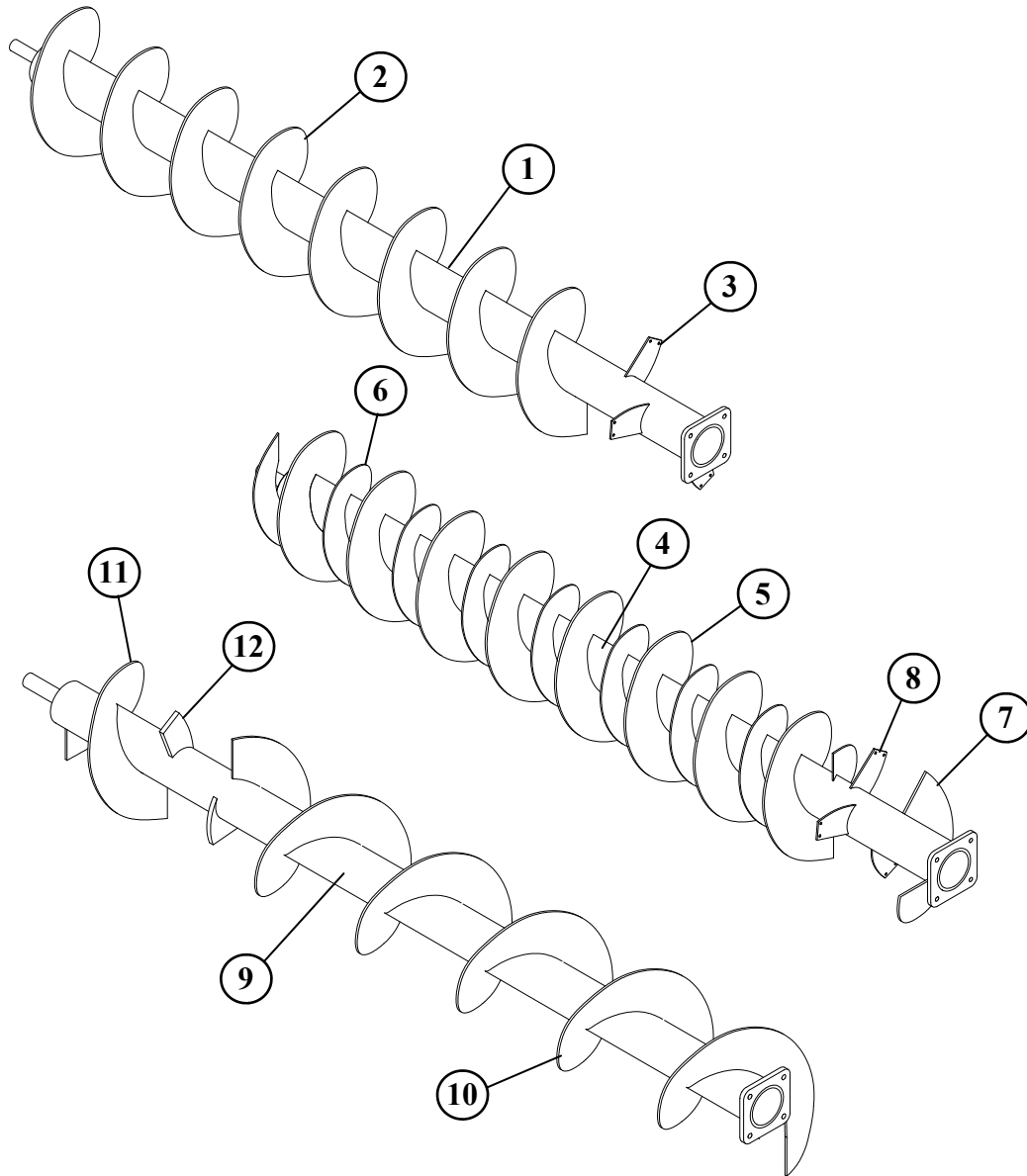
REF. NO	PART NO.	DESCRIPTION	QTY.
1.	850096	TOP AUGER W.A. ....	1
A.	382026	20" OD x 6-5/8" ID x 3/8" RH 14" PITCH FLT. ....	8
B.	150126	TOP AUGER PADDLE.....	33
2.	850097	BOTTOM AUGER W.A.....	1
A.	150411	20" AUGER KICKER.....	2
B.	3820200	20" OD x 6-5/8" ID x 1/2" RH 20" P FLT.....	1
C.	382021	20" OD x 6-5/8" ID x 1/2" LH 20" P FLT.....	5
3.	850500	TOP AUGER SHAFT & FLANGE W.A.....	1
4.	850501	BTM AUGER SHAFT & FLANGE W.A.....	1

# 354-12 STANDARD TOP & BOTTOM AUGER ASSEMBLY



REF. NO	PART NO.	DESCRIPTION	QTY.
1.	850257	TOP AUGER W.A. ....	1
A.	382024	20" OD x 6-5/8" ID x 1/4" RH 14" PITCH FL .....	6
B.	382026	20" OD x 6-5/8" ID x 3/8" RH 14" PITCH FL .....	2
C.	150126	TOP AUGER PADDLE .....	3
2.	850258	BOTTOM AUGER W.A. ....	1
A.	150411	20" AUGER KICKER. ....	2
B.	382022	20" OD x 6-5/8" ID x 3/8" RH 20" P KN FL .....	1
C.	382023	20" OD x 6-5/8" ID x 3/8" LH 20" P KN FL .....	5
3.	150037	TOP AUGER DRIVESHAFT .....	1
4.	850018	TOP AUGER HUB WELDMENT .....	1
5.	150077	1/2" x 5/8" RECT. KEY x 4" LONG .....	1
6.	185259	3 1/2" OD SHAFT RETAINER .....	1
7.	405781	3/4"-10 x 2 1/2" HHCS .....	2
8.	150036	BOTTOM AUGER DRIVESHAFT .....	1
9.	150034	HUB SPACER SLEEVE .....	1
10.	850017	BOTTOM AUGER HUB WELDMENT .....	1
11.	150080	1/2" x 3/4" RECT. KEY x 3" .....	1
12.	185329	4 1/2" RETAINER .....	1

# 354-12 OPTIONAL TOP & BOTTOM AUGER ASSEMBLY

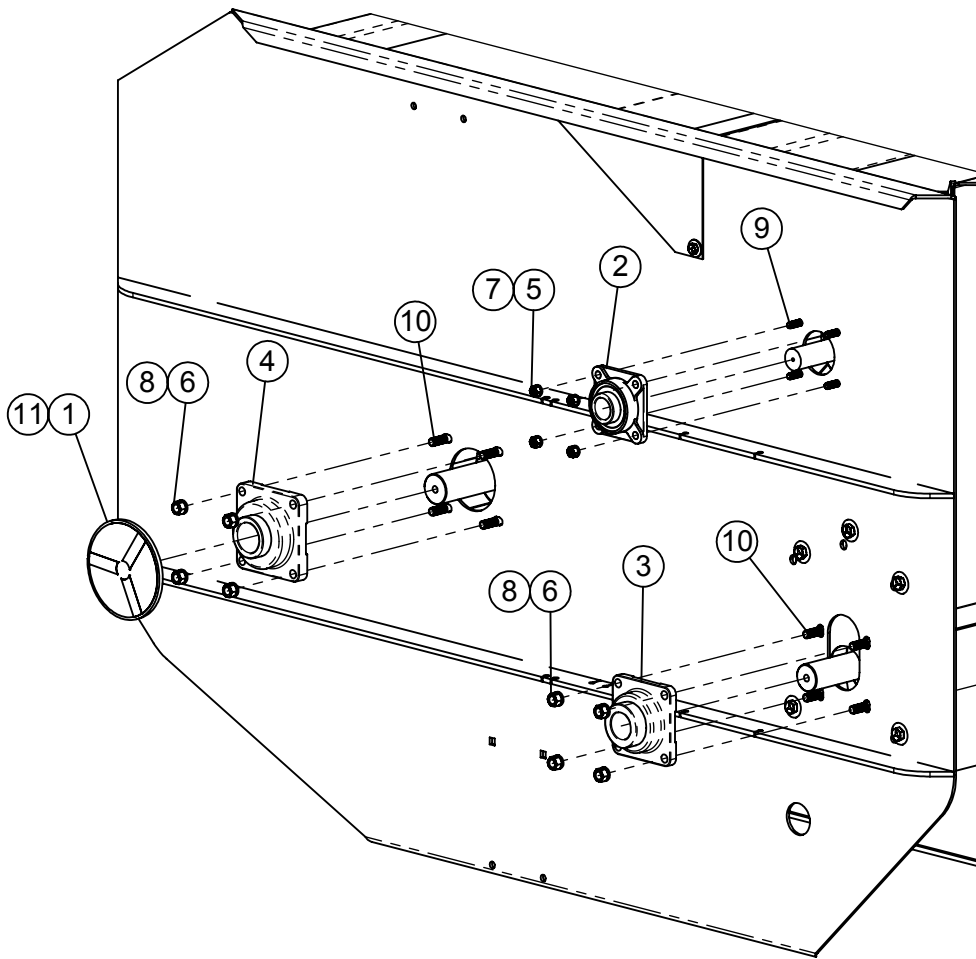


REF. NO	PART NO.	DESCRIPTION	QTY.
1.	<b>850642</b>	<b>TOP AUGER 1/2" FLIGHT W.A.</b> .....	<b>1</b>
2.	382724	FLIGHT RH 20" OD x 6-5/8" ID x 1/2" x 14" PITCH .....	8
3.	150126	TOP AUGER PADDLE .....	3
4.	<b>850257B</b>	<b>TOP AUGER DOUBLE FLIGHT W.A.</b> .....	<b>1</b>
5.	382026	FLIGHT RH 20" OD x 6-5/8" ID x 3/8" x 14" PITCH .....	8
6.	381625	FLIGHT RH 16" OD x 6-5/8" ID x 1/4" x 14" PITCH .....	8
7.	382023	FLIGHT LH 20" OD x 6-5/8" ID x 3/8" x 20" PITCH .....	1/2
8.	150126	TOP AUGER PADDLE .....	3
9.	<b>850643</b>	<b>BOTTOM AUGER 5/8" FLIGHT W.A.</b> .....	<b>1</b>
10.	382035	FLIGHT LH 20" OD x 6-5/8" ID x 5/8" x 20" PITCH .....	5
11.	382034	FLIGHT RH 20" OD x 6-5/8" ID x 5/8" x 20" PITCH .....	11
12.	150411	20" AUGER KICKER .....	2



# 354-12B FRONT END ASSEMBLY

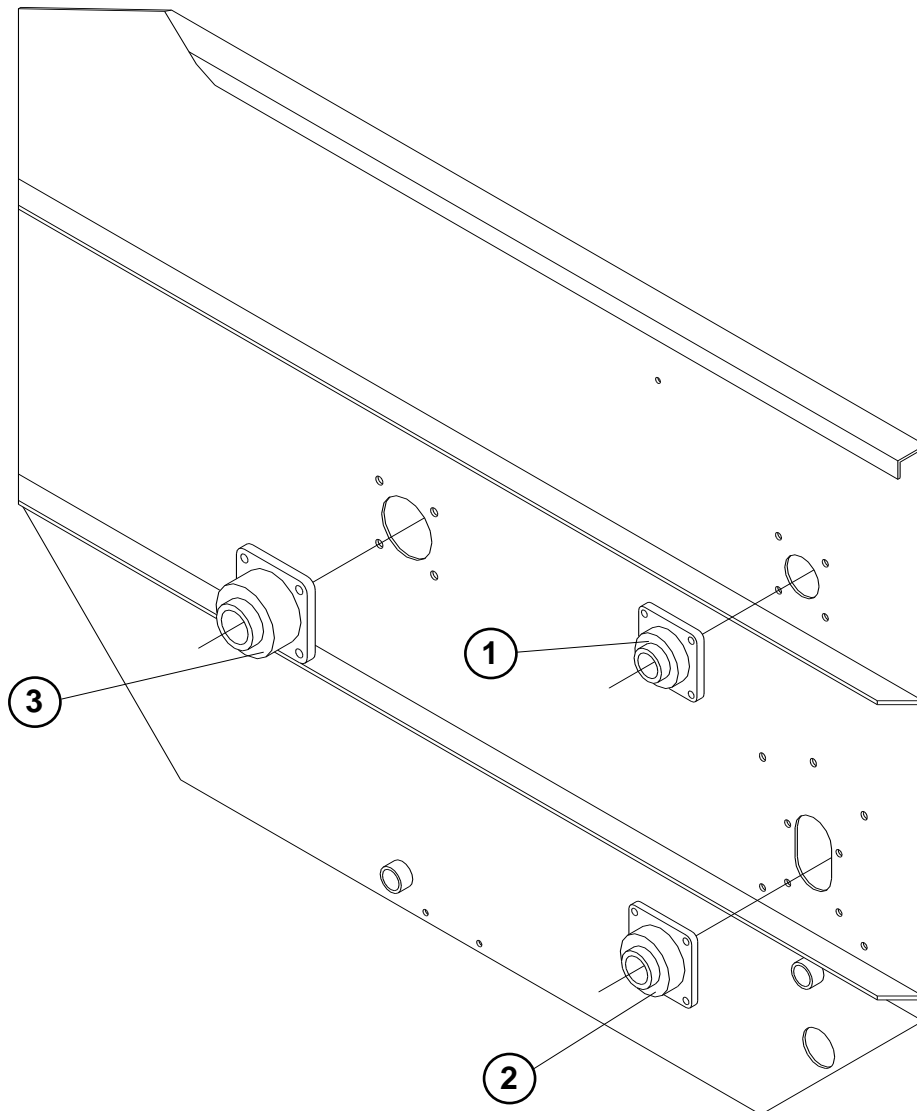
FROM SERIAL #890473440 TO CURRENT



ITEM #	PART #	DESCRIPTION	QTY.
1	185258	ROTOR PLATE INDICATOR, 15/16" OD	1
2	340427	1 3/4" - 4 BOLT FLANGE BRG F3W228U	1
3	340436	BEARING 2 3/16" FAFNIR	1
4	340438	FAFNIR 2 7/16" BEARING	1
5	400208	HEX NUT 1/2"-13 #5 PLTD	4
6	400210	HEX NUT 5/8"-11 #5 PLTD	12
7	402008	SPRING LOCK WASHER 1/2" PLTD	4
8	402010	SPRING LOCK WASHER 5/8" PLTD	14
9	405703	HHCS 1/2"-13 x 1-1/2" #5 PLTD	4
10	405754	HHCS, 5/8"-11 x 2" #5 PLTD	15
11	440848	DECAL - ROTOR 3 ARM IND.	1

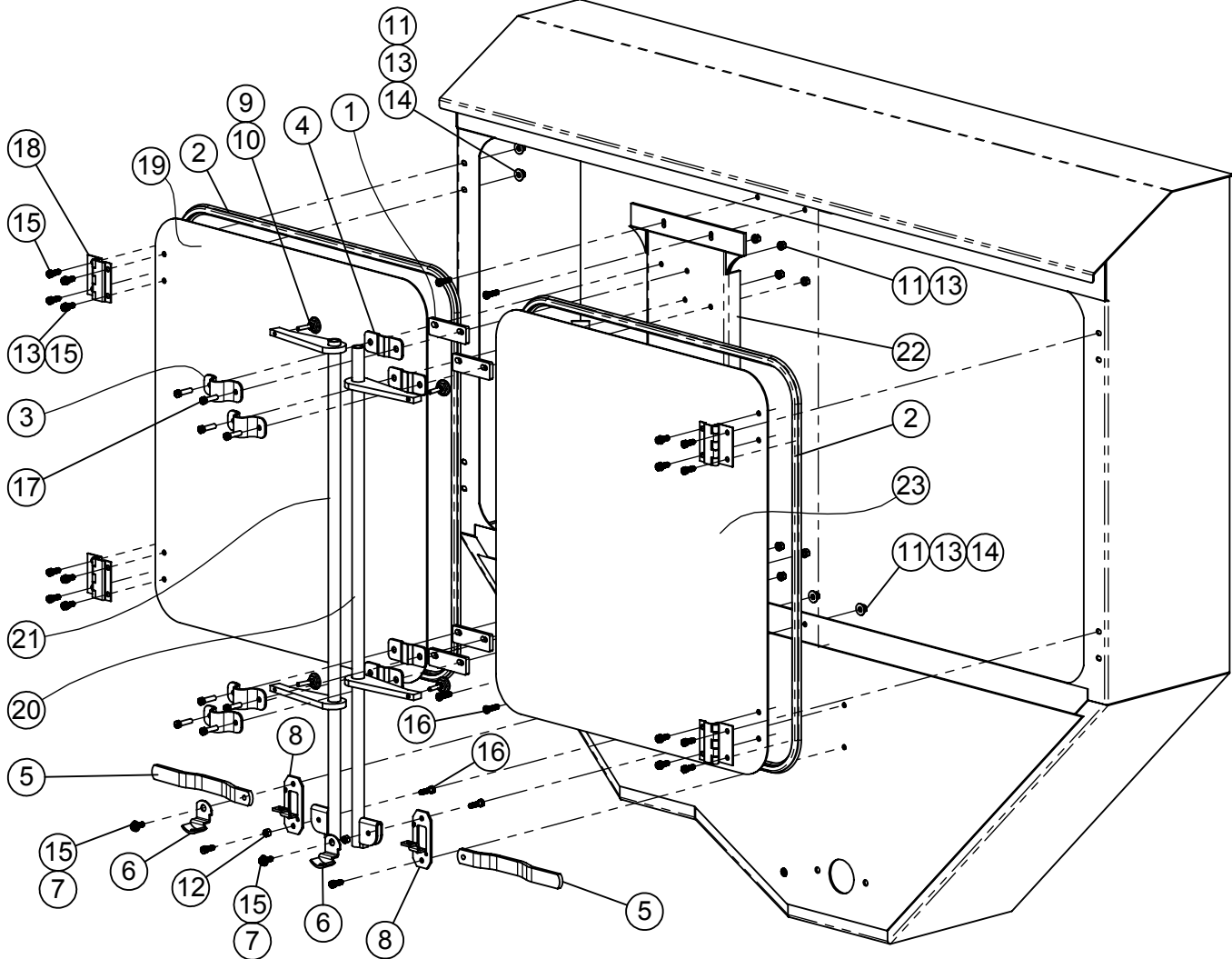
# 354-12 FRONT END ASSEMBLY

BEFORE SERIAL #890473440



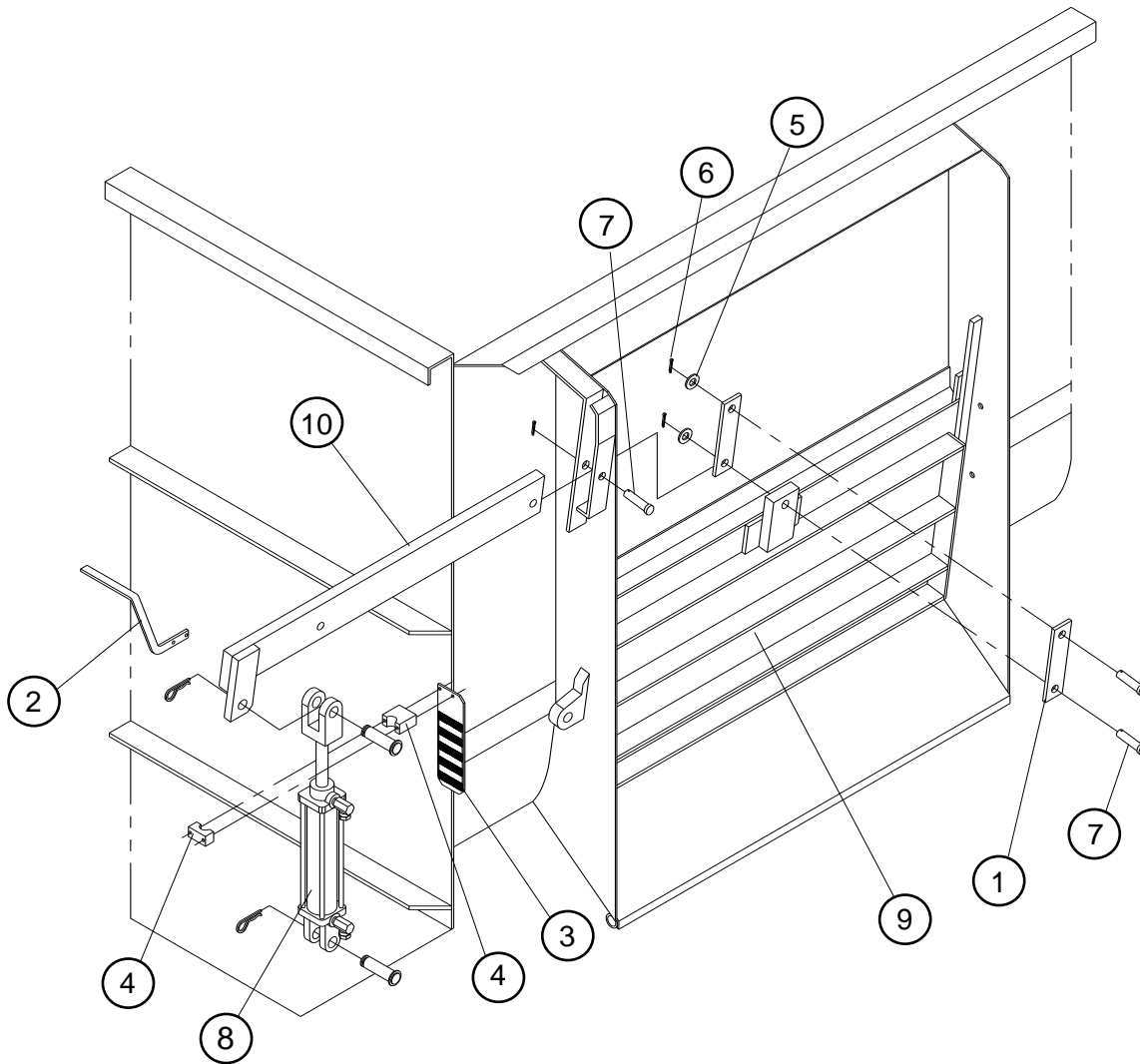
ITEM#	PART#	DESCRIPTION	QTY.
1	340428	FLANGE BEARING VCJ 1 3/4" 4-BOLT	1
2	340435	FLANGE BEARING RCJ 2 3/16" 4-BOLT	1
3	340438	FLANGE BEARING RCJ 2 7/16" 4-BOLT	1

# 354-12B OIL BATH DOOR ASSEMBLY



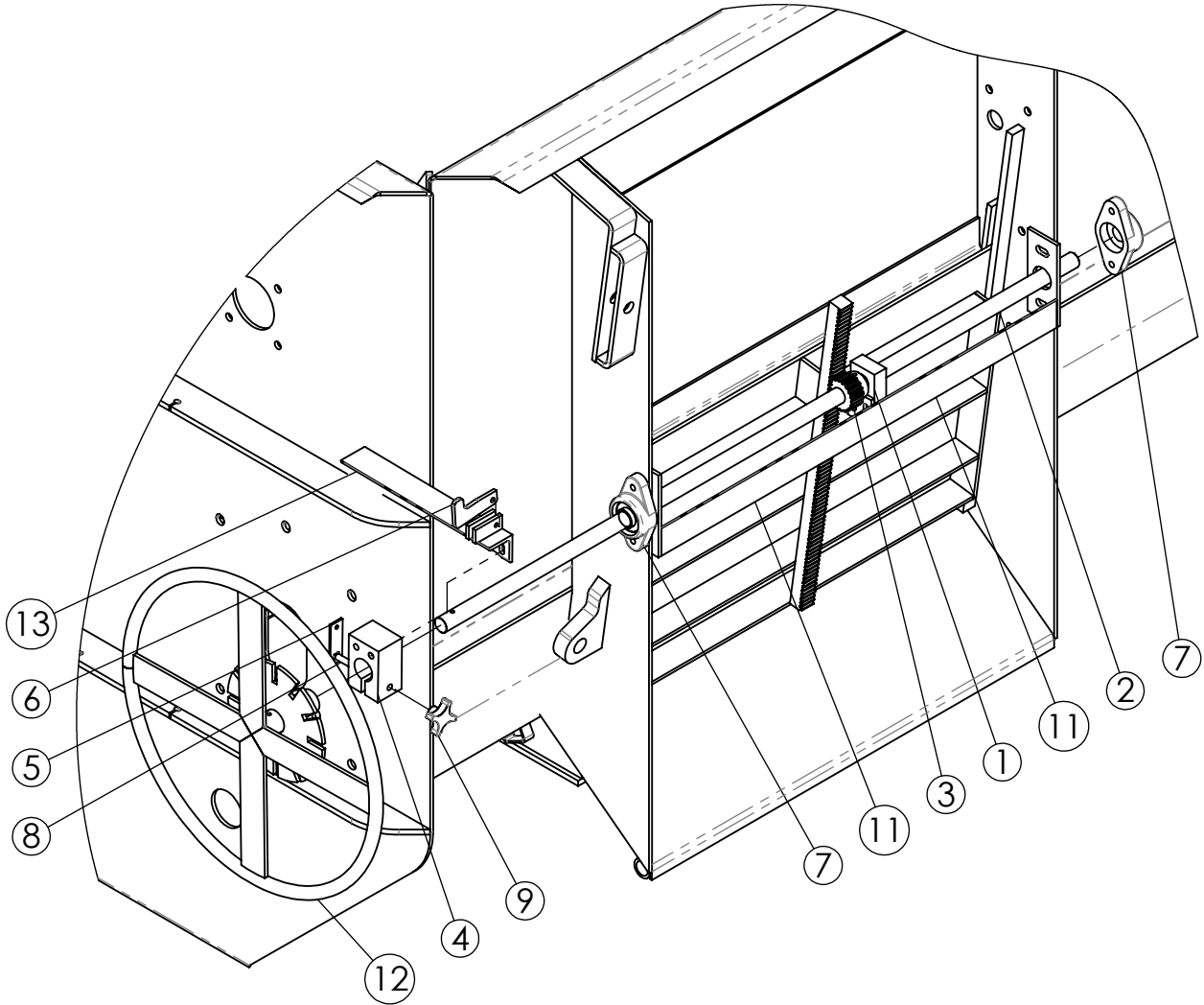
ITEM #	PART #	DESCRIPTION	QTY.
1	189503	CAM ROD SPACER	4
2	351056	RUBBER BULB SEAL 5/32"	25
3	370316	CAM LOCK TOP PLATE	4
4	370317	CAM LOCK BOTTOM PLATE	4
5	370319	CAM LOCK HANDLE	2
6	370320	HANDLES CAM LOCK	2
7	370321	CAM LOCK BUSHING	2
8	370322	HANDLE STOP	2
9	370323	LEVELING PAD	4
10	400205	HEX NUT 5/16"-18 #5 PLTD	4
11	400206	HEX NUT 3/8"-16 #5 PLTD	24
12	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	2
13	402006	WASHER SPRING LOCK 3/8" MED PLTD	32
14	402406	FLAT WASHER 3/8" PLTD	12
15	405653	HHCS 3/8"-16 x 1" #5 PLTD	20
16	405654	HHCS 3/8"-16 x 1-1/4" #5 PLTD	6
17	405655	HHCS 3/8"-16 x 1 1/2" #5 PLTD	8
18	410219	HINGE, OFFSET, 3 1/2" SQ	4
19	850573	354/414 OIL BATH DOOR WA LH	1
20	850574	420/490 RH CAM LOCK WA	1
21	850575	420/490 LH CAM LOCK WA	1
22	850576	354/414 OIL BATH CENTER CHANNEL W.A.	1
23	850629	354/414 OIL BATH DOOR WA RH	1

# 354-12B DISCHARGE DOOR ASSEMBLY



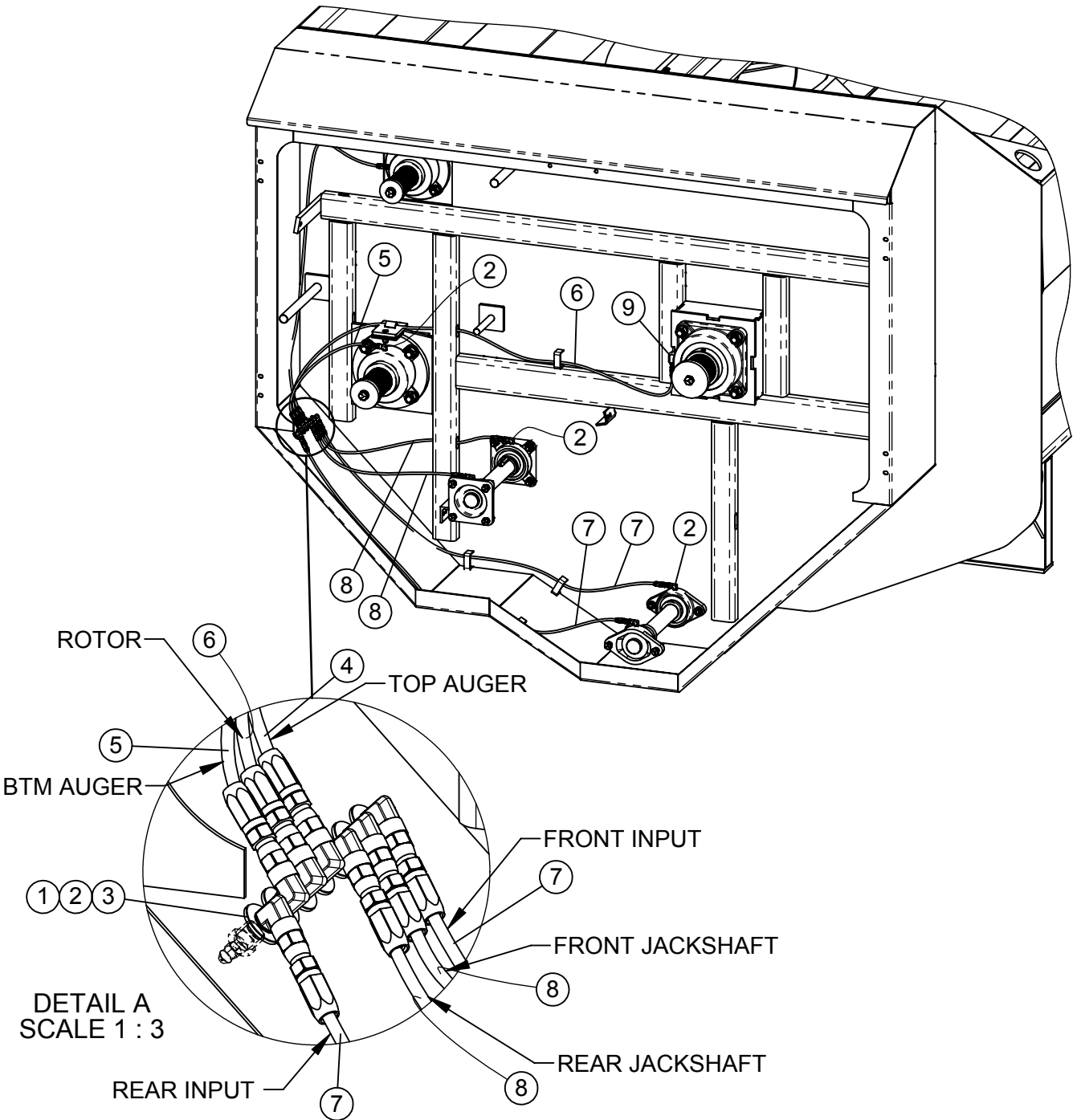
ITEM#	PART#	DESCRIPTION	QTY.
1	150049	DOOR ARM	2
2	150385	DOOR MARKER BAR <b>(TRAILER)</b>	1
3	184259	DOOR CYLINDER MARKER PLATE <b>(TRUCK)</b>	1
4	184267	DOOR CYLINDER MARKER CLAMP	1
5	402512	FLAT WASHER 3/4" SAE	3
6	404003	COTTER PIN 5/32" X 1 1/4"	3
7	404350	CLEVIS PIN 3/4" X 2"	3
8	780109	HYDRAULIC CYLINDER 2" X 8" <b>(WITH FITTINGS)</b>	1
A	364055	HYDRAULIC CYLINDER 2" X 8" <b>(CYLINDER ONLY)</b>	1
B	364954	HYDRAULIC CYLINDER ROD 2" X 8" X 1 1/16"	1
C	364400	HYDRAULIC CYLINDER 2" REPAIR KIT	1
9	850019	DISCHARGE DOOR WELDMENT	1
10	850020	DOOR LEVER ARM WELDMENT	1

## 352-12 HAND WHEEL ASSEMBLY



ITEM#	PART#	DESCRIPTION	QTY.
1	150244	HAND WHEEL BEARING BLOCK	1
2	150387	HAND WHEEL SHAFT - 53-1/2"	1
3	185114	DRIVE GEAR, 1"	1
4	189105	BEARING BRAKE BLOCK	1
5	189106	HAND KNOB BLOT SUPPORT	1
6	189112	BRAKE ARM	1
7	340216	1" FLANGE MOUNT BEARING	2
8	407047	CHCS, 3/8-16 x 3", #5 PLTD	1
9	410305	HAND KNOB 3/8"-16	1
10	850077	DISCHARGE DOOR WA	1
11	850079	HAND WHEEL FRAME WELDMENT	1
12	872030	HAND WHEEL WA	1
13	872349	BEARING BRAKE MOUNT WA (RH)	1

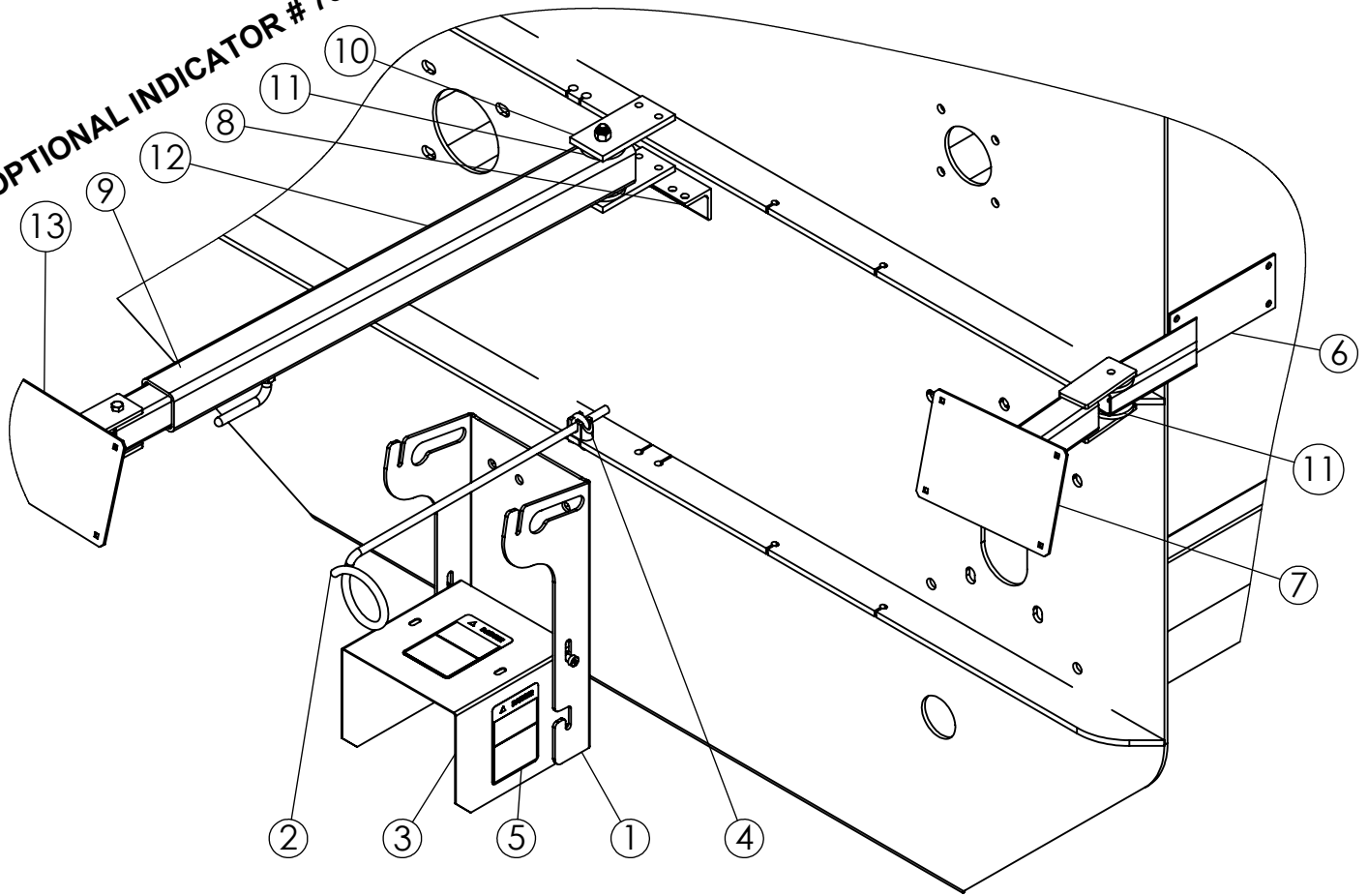
# 354-12 OIL BATH BEARING LUBE SYSTEM



ITEM #	PART #	DESCRIPTION	QTY.
1	310750	FPT GREASE ZERK PLTD 1/8	7
2	368000	PIPE ELBOW, 90° STREET 1/8"MP x 1/8"FP	12
3	402507	FLAT WASHER 7/16" SAE	7
4	367536	GREASE LINE x 40"	1
5	367534	GREASE LINE x 20"	1
6	367527	GREASE LINE x 61"	1
7	367525	GREASE LINE x 51"	2
8	367535	GREASE LINE x 25"	2
9	368324	ELBOW, STREET, 1/4"MP x 1/8"FP (STEEL)	1

# 354-12 SCALE INDICATOR ASSEMBLY

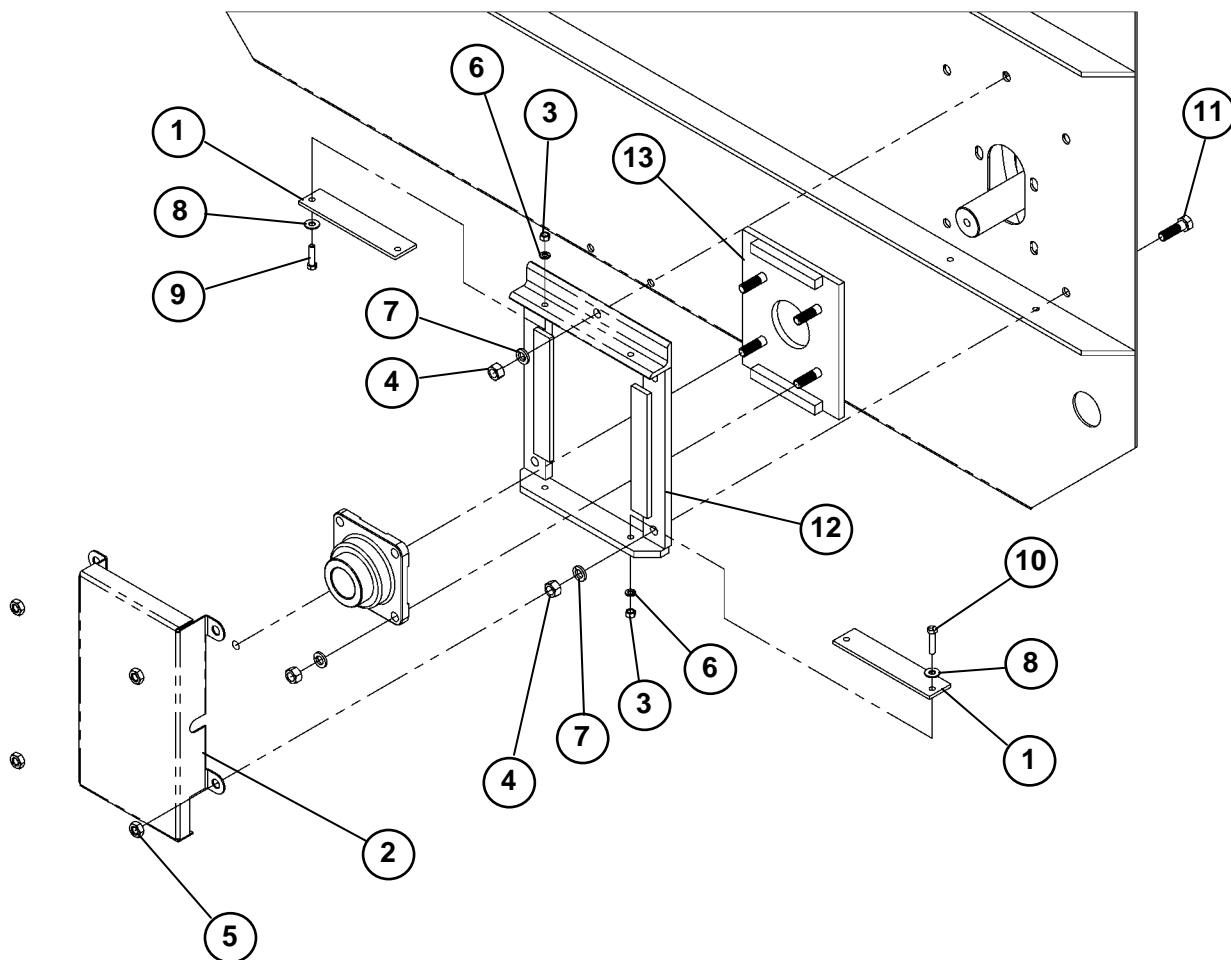
OPTIONAL INDICATOR # 780908



ITEM#	PART#	DESCRIPTION	QTY.
1	151274	414 PTO SHIELD MTG BRACKET	1
2	184283	HOSE CARRIER 36"	1
3	185302	P.T.O. SHIELD	1
4	412205	CABLE CLAMP, 3/8"	1
5	440830-S	DANGER : ROTATING DRIVE LINE	3
6	850047	SCALE INDICATOR PLATE W/A	1
7	850048	SCALE INDICATOR ARM WA	1

ITEM#	PART#	DESCRIPTION	QTY.
8	185303	TRAILER SCALE ARM ANGLE 6-1/4"	1
9	185490	TRAILER SCALE IND TUBE	1
10	185491	TRL SCALE HINGE PLATE - 5-1/2"	2
11	185493	SCALE HINGE WASHER 2-1/2" O.D.	4
12	872125	TRAILER SCALE ARM WA 2-1/2" SQ x 34"	1
13	872126	SCALE IND ARM WA	1

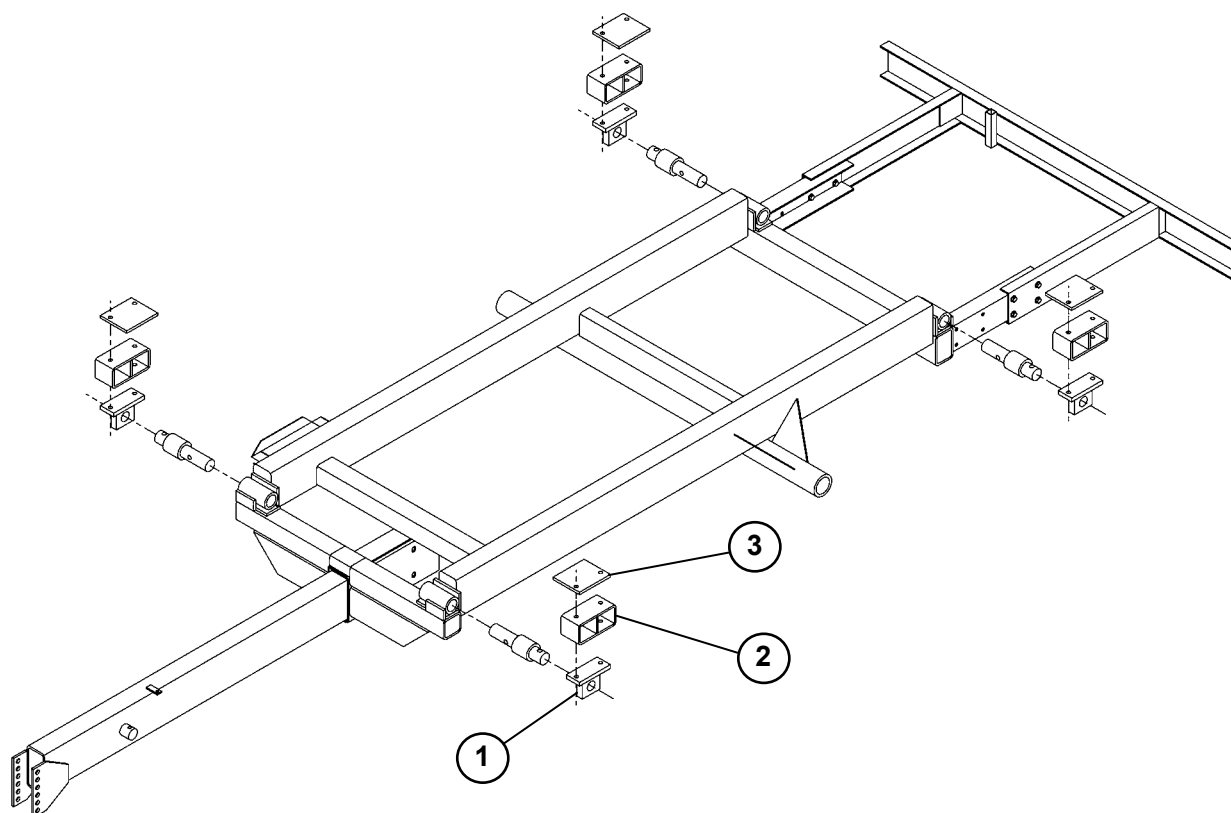
## 354-12B LOWER AUGER FLOAT ASSEMBLY



ITEM#	PART#	DESCRIPTION	QTY.
1	150418	BEARING SLIDER PLASTIC	2
2	150764	FLOATING AUGER SHIELD	1
3	400206	HEX NUT 3/8"-16 #5 PLTD	4
4	400210	HEX NUT 5/8"-11 #5 PLTD	5
5	400610	HEX JAM NUT # 5 PLTD 5/8"-11	4
6	402006	SPRING LOCK WASHER 3/8" MED PLTD	4
7	402010	SPRING LOCK WASHER 5/8" PLTD	5
8	402406	FLAT WASHER 3/8" PLTD	4
9	405655	HHCS 3/8"-16 x 1 1/2" #5 PLTD	2
10	405656	HHCS 3/8"-16 x 1 3/4" #5 PLTD	2
11	405754	HHCS 5/8"-11 x 2" #5 PLTD	5
12	850154	BEARING SLIDE FRAME WA	1
13	850155	BEARING SLIDE PLATE WA	1

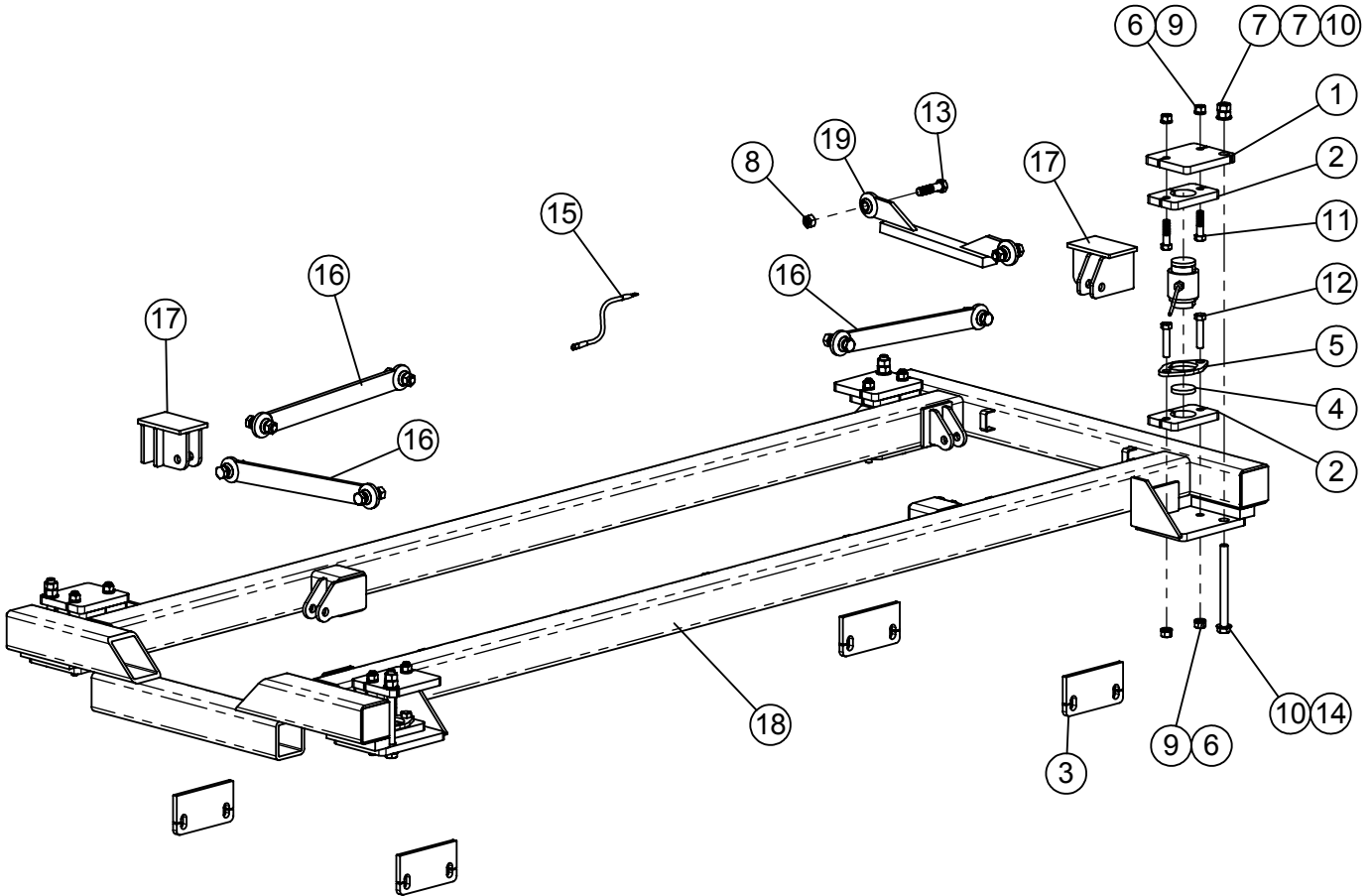


# 354-12B TRAILER WEIGH BAR SCALE FRAME ASSY



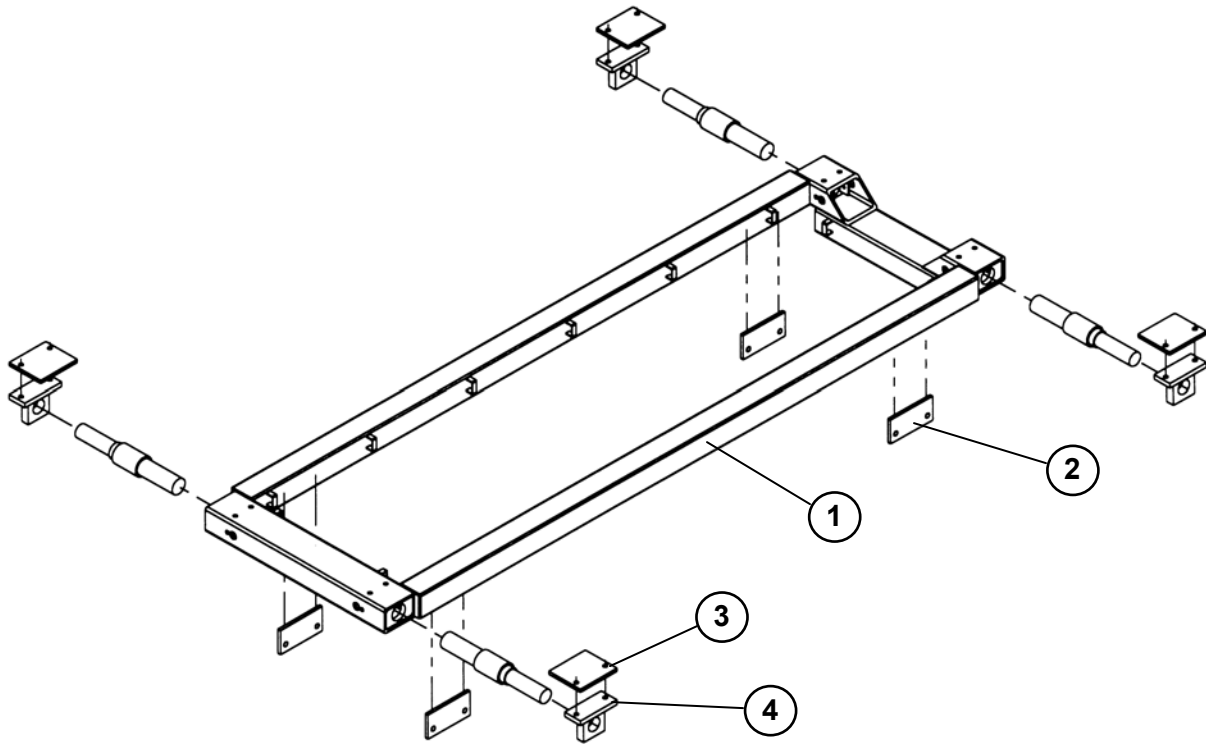
ITEM#	PART#	DESCRIPTION	QTY.
1	872169	WEIGH BAR MOUNT – 2 1/8"	4
2	850070	WEIGH BAR RISER BLOCK (OPTIONAL)	4
3	185609	WEIGH BAR MOUNTING PAD	4

# 354-12B TRUCK LOAD CELL SCALE KIT



ITEM #	PART #	DESCRIPTION	QTY.
1	182881	SCALE MOUNT MIXER PLATE	4
2	182915	LOAD CELL CAGE PLATE	8
3	182998	BRACKET, TRUCK FRAME, 8	4
4	185997	SCALE PAD	8
5	190075	DIGI-STAR LOAD CELL SUPPORT PT	4
6	400210	HEX NUT 5/8"-11 #5 PLTD	16
7	400212	HEX NUT 3/4"-10 #5 PLTD	8
8	400912	HEX CROWN LOCK NUT 3/4"-10 #5 PLTD	8
9	402010	SPRING LOCK WASHER 5/8" PLTD	16
10	402512	FLAT WASHER 3/4" SAE	8
11	405756	HHCS, 5/8"-11 x 2-1/2" #5 PLTD	8
12	405758	HHCS 5/8"-11 x 3" #5 PLTD	8
13	405783	HHCS 3/4-10 x 3" #5 PLTD	8
14	405798	HHCS #5 PLTD 3/4-10 x 8-1/2	4
15	440412	GROUND STRAP 12"	1
16	870501	SCALE CHECK ROD W.A.	3
17	870519	MIXER SCALE CHECK W.A.	2
18	870527	420-490 TRUCK SCALE FRAME W.A.	1
19	872053	OFFSET CHECK ROD W.A.	1

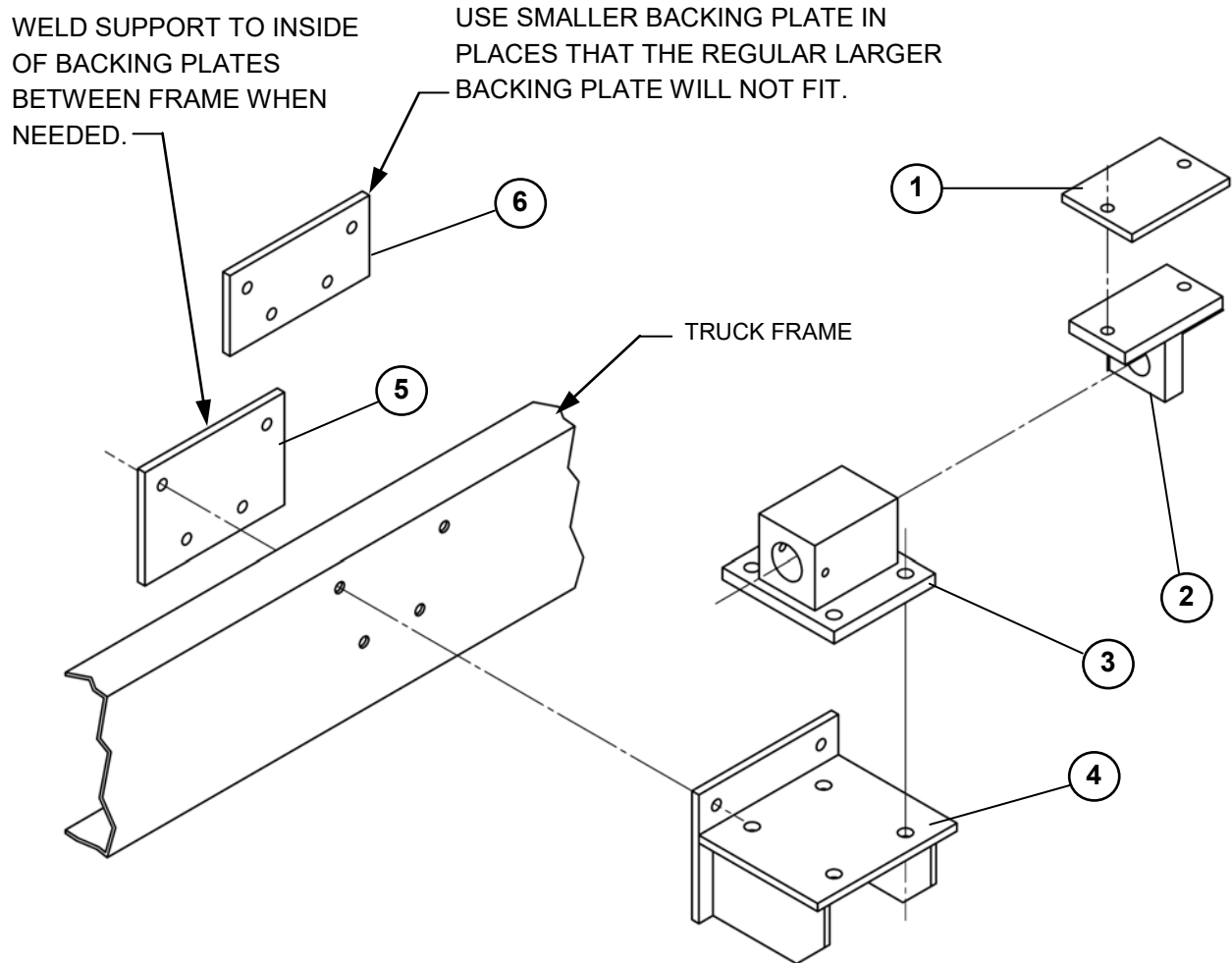
# 354-12B TRUCK WEIGH BAR SCALE FRAME



ITEM#	PART#	DESCRIPTION	QTY.
1	850080	TRUCK WEIGH BAR FRAME – 34”	1
	850274	TRUCK WEIGH BAR FRAME – 29 1/2”	1
2	182998	TRUCK FRAME BRACKET	4
3	185609	MIXER BAR MOUNT PAD	4
4	872169	WEIGH BAR MOUNT 2 1/8”	4

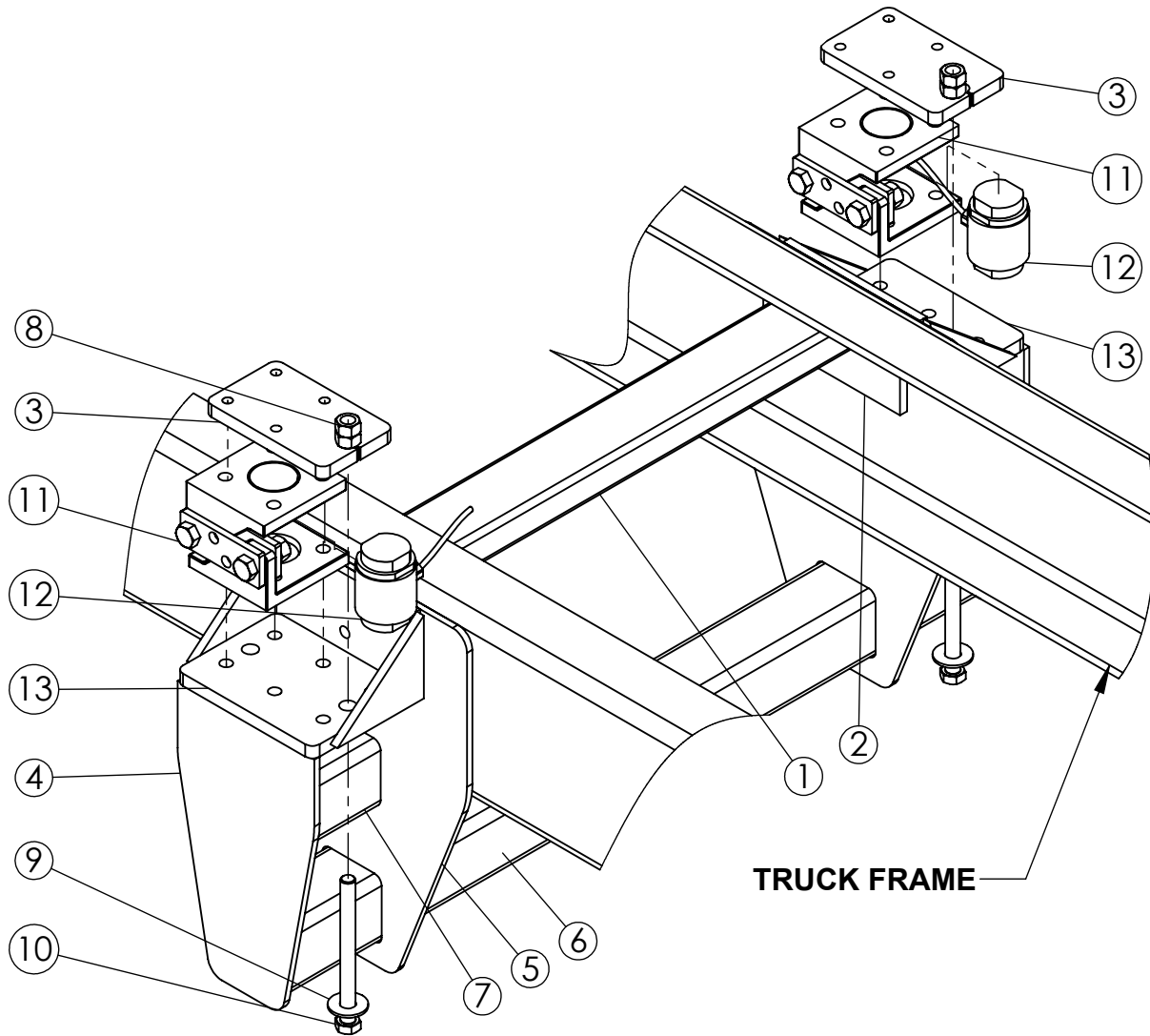
# 354-12B TRUCK WEIGH BAR SADDLE BRACKET

(USED WITHOUT REGULAR SCALE FRAME)



ITEM#	PART#	DESCRIPTION	QTY.
1	189294	WEIGH BAR MIXER PAD – 7"	4
2	873122	WEIGH BAR MOUNT – 2 1/8"	4
3	860088	WEIGH BAR BLOCK – 2 1/8"	4
4	850359	WEIGH BAR SADDLE PLATE W.A.	4
5	150938	WEIGH BAR BACKING PLATE – 7" X 10" - REG	4
6	150939	WEIGH BAR BACKING PLATE – 5" X 10" - OPTIONAL	4

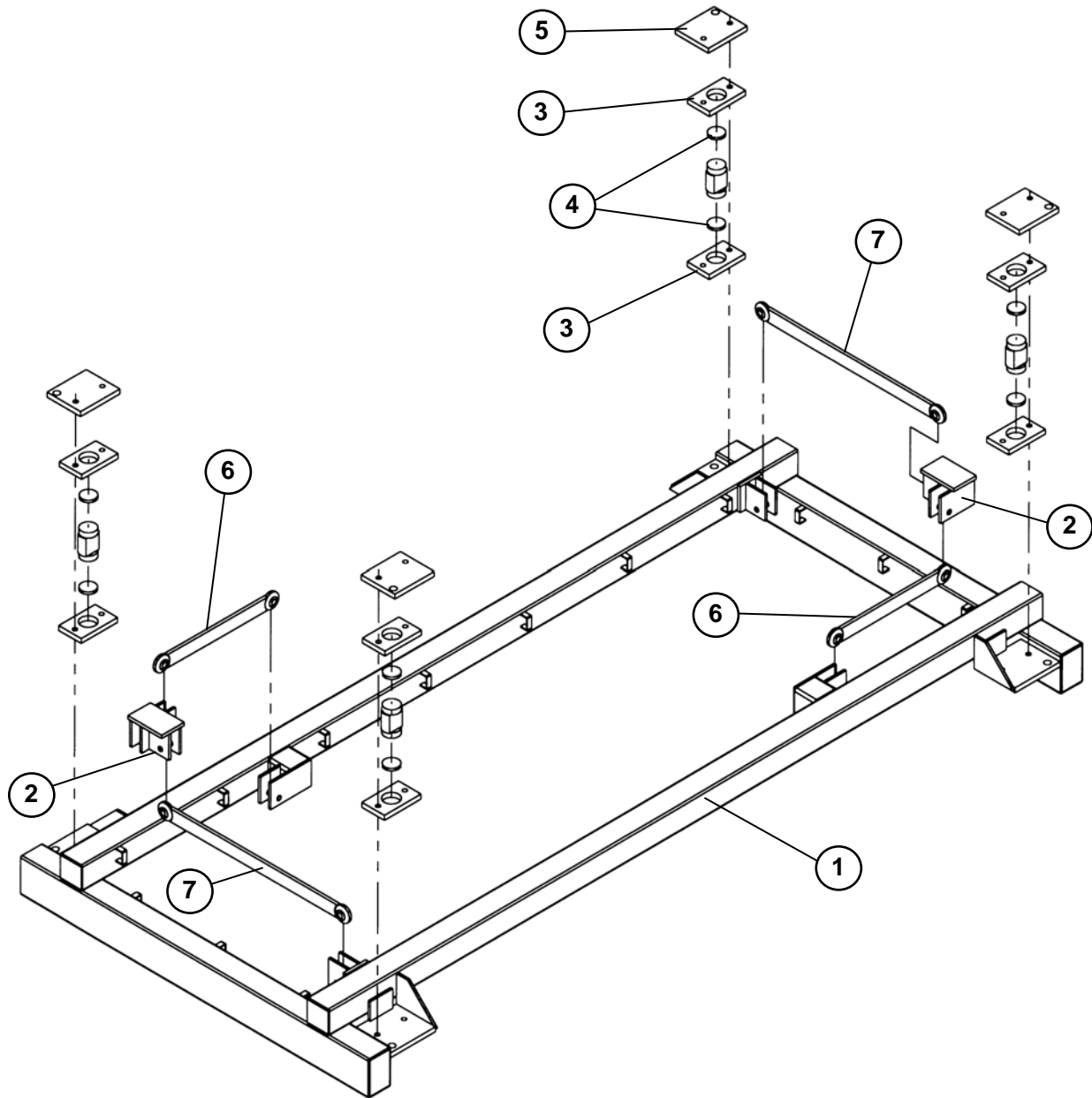
# 354-12 TRUCK LOAD CELL SADDLE BRACKET



ITEM#	PART#	DESCRIPTION	QTY.
1	161486	STIFFNER TUBE	2
2	185567	SADDLE MOUNT BOLT PLATE	4
3	189238	SCALE MNT MIXER PAD	4
4	190371	PLATE, FRT SADDLE MNT 10" x 15"	4
5	190372	PLATE, FRT SADDLE MNT	4
6	190375	TUBE, SADDLE MNT 4" SQ x 49"	2
7	190376	TUBE, SADDLE MNT 4"SQ x 7"	4
8	400212	HEX NUT 3/4"-10 #5 PLTD	8
9	402412	FLAT WASHER 3/4" PLTD	4
10	405798	HHCS #5 PLTD 3/4-10 x 8-1/2	4
11	450860	SCISSOR MOUNTING BRACE (J-STAR)	4
12	450725	LOAD CELL 30K, 1/10% IWS	4
13	872150	SADDLE MOUNT WA	4

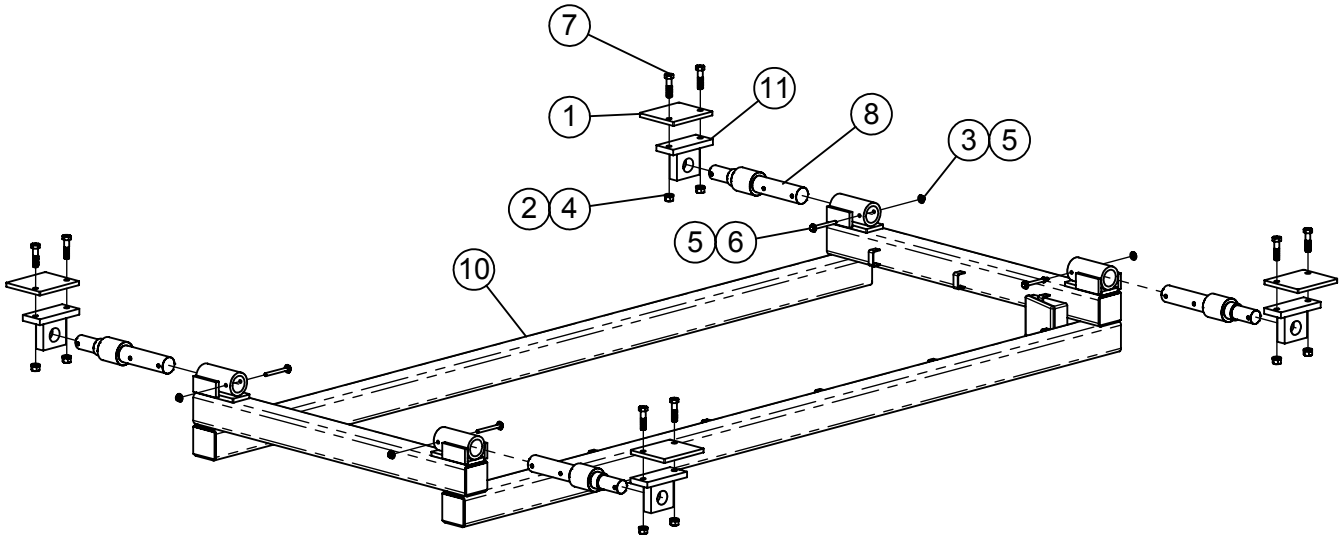
# 354-12B STATIONARY LOAD CELL

## SCALE FRAME ASSEMBLY



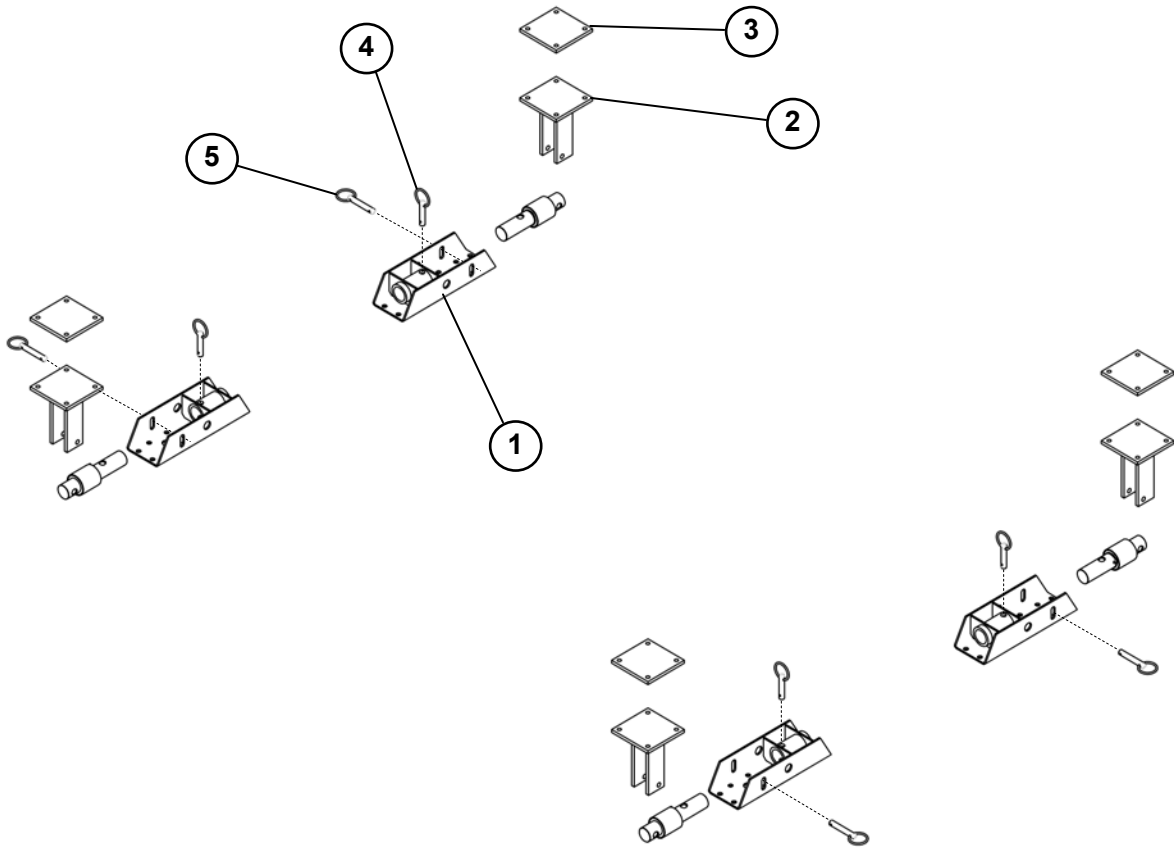
ITEM#	PART#	DESCRIPTION	QTY.
1	872019	STATIONARY SCALE FRAME LOAD CELL W.A.	4
2	870519	MIXER SCALE CHECK	1
3	182915	LOAD CELL CAGE PLATE	1
4	185124	RUBBER SCALE PAD	2
5	182881	SCALE MOUNT MIXER PLATE	8
6	870501	SCALE CHECK ROD W.A. 19 1/2"	8
7	871053	SCALE CHECK ROD W.A. 31 1/2"	20

# 354-12B STATIONARY WEIGH BAR SCALE FRAME ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY.
1	185609	BAR MOUNT MIXER PAD 7"	4
2	400210	HEX NUT 5/8"-11 #5 PLTD	8
3	400906	HEX NUT, 3/8"-16 CROWN LOC #5 PLTD	4
4	402010	SPRING LOCK WASHER 5/8" PLTD	8
5	402406	FLAT WASHER 3/8" PLTD	8
6	405665	HHCS 3/8"-16 x 4" #5 PLTD	4
7	405756	HHCS, 5/8"-11 x 2-1/2" #5 PLTD	8
8	450822	WEIGH BAR, 2-1/8"	4
9	450923	J-BOX 15 FOOT CORD	1
10	850076	354/414 STA SCALE FRAME WA	1
11	872169	2-1/8 WEIGH BAR MOUNT WA	4

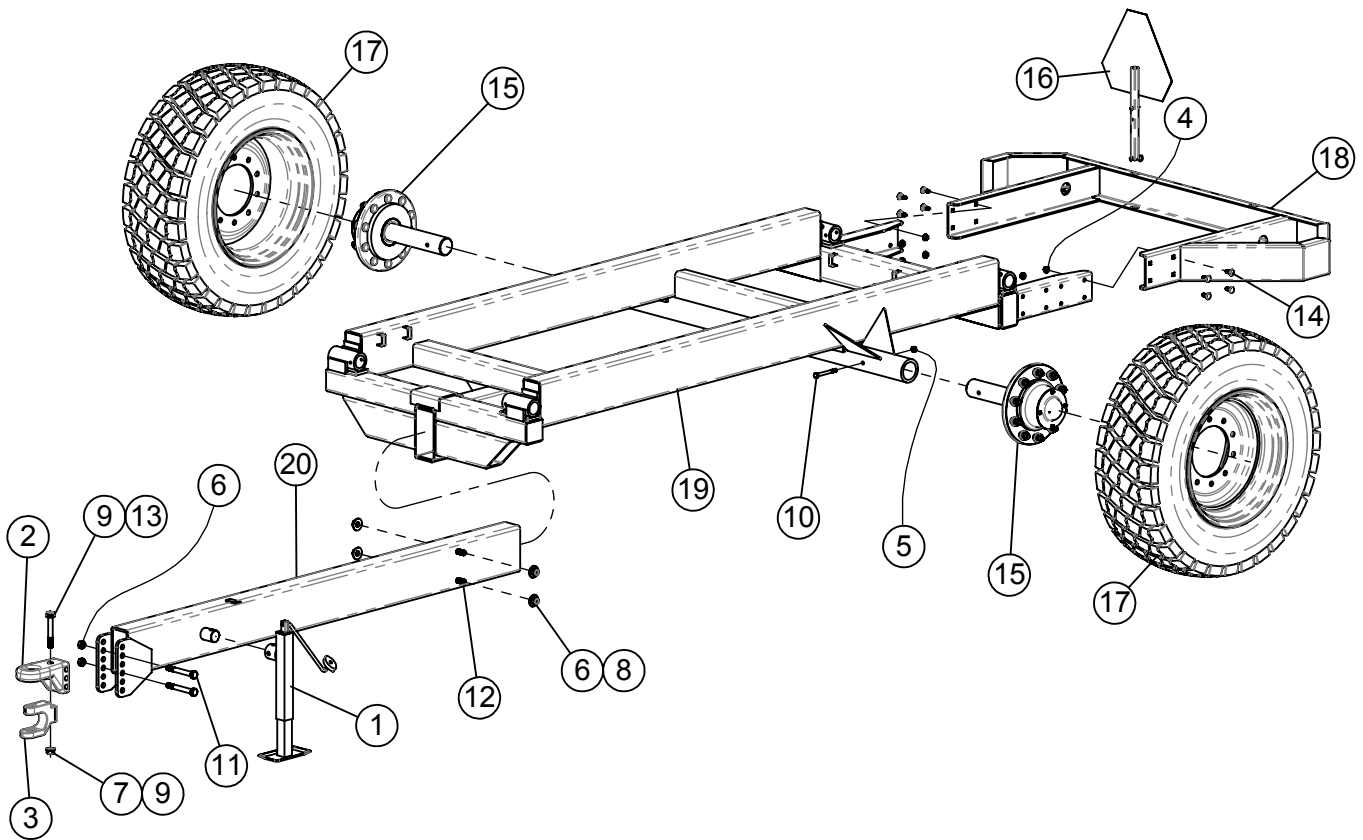
# 354-12B STATIONARY FLOOR MOUNT SCALE ASSY



ITEM#	PART#	DESCRIPTION	QTY.
1	450863	STATIONARY BASE BRACKET W.A. – 2 1/8" W.B.	4
2	850524	STATIONARY PAD W.A.	4
3	151016	STATIONARY SCALE PAD	4
4	404280	LATCH PIN – 3/4" X 3 1/2"	4
5	404281	WEIGH BAR PIN – 5/8" X 4 3/4"	4



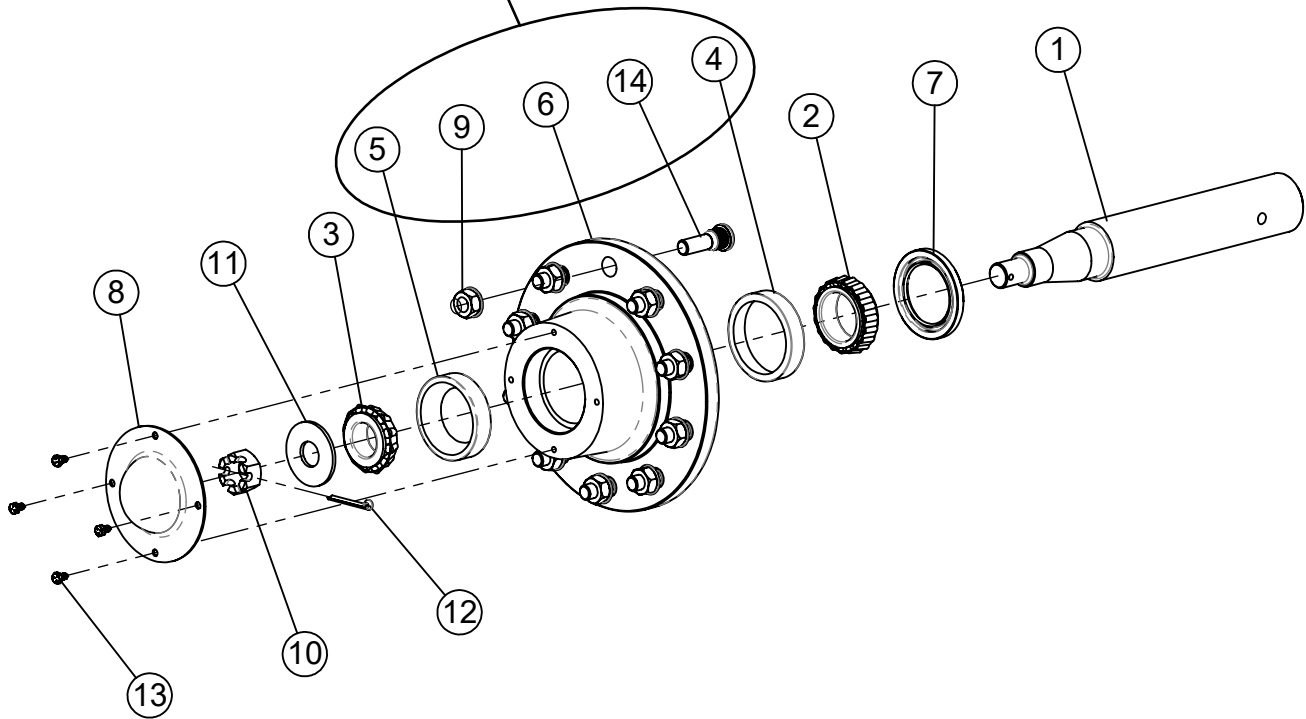
# 354-12B TRAILER FRAME ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY.
1	374002	JACK, 5,000# (G & G 456-0510)	1
	780904	JACK, 9,000# DROP LEG (OPTIONAL)	1
2	374100	CAT 3 BASE HITCH BODY (PPI-237VR)	1
3	374101	CAT 3 CLEVIS INSERT (PPI-208VR)	1
4	400114	HEX NUT, 1/2-13 SERRATED FLANGE #5	8
5	400908	HEX CROWN LOCNUT 1/2"-13 #9	2
6	400912	HEX CROWN LOCK NUT 3/4"-10 #5 PLTD	6
7	400918	HEX CROWN LOCKNUT 3/4"-10 #8 PLTD	1
8	402412	FLAT WASHER 3/4" PLTD	4
9	402512	FLAT WASHER 3/4" SAE	2
10	405714	HHCS 1/2" x 4-1/2" #5 PLTD	2
11	405791	HHCS 3/4" x 6"	2
12	406479	HHCS 3/4"-10 x 2" #8 PLTD	4
13	406488	HHCS 3/4"-10 x 5-1/2" #8 Pltd	1
14	407101	CHCS 1/2"-13 x 1-1/4" #5 PLTD	8
15	750006	HUB & SPINDLE ASSY, 10 BOLT, 12,000#	2
16	750018	SLOW VEHICLE SIGN ASSEMBLY	1
17	781209	TIRE & WHEEL ASSY 15 x 22.5 (385/65R22.5)	2
18	850564	TRAILER BUMPER WA	1
19	850565	354/414 TRAILER W.A.	1
20	850578	354/414 TRAILER TONGUE W.A.	1

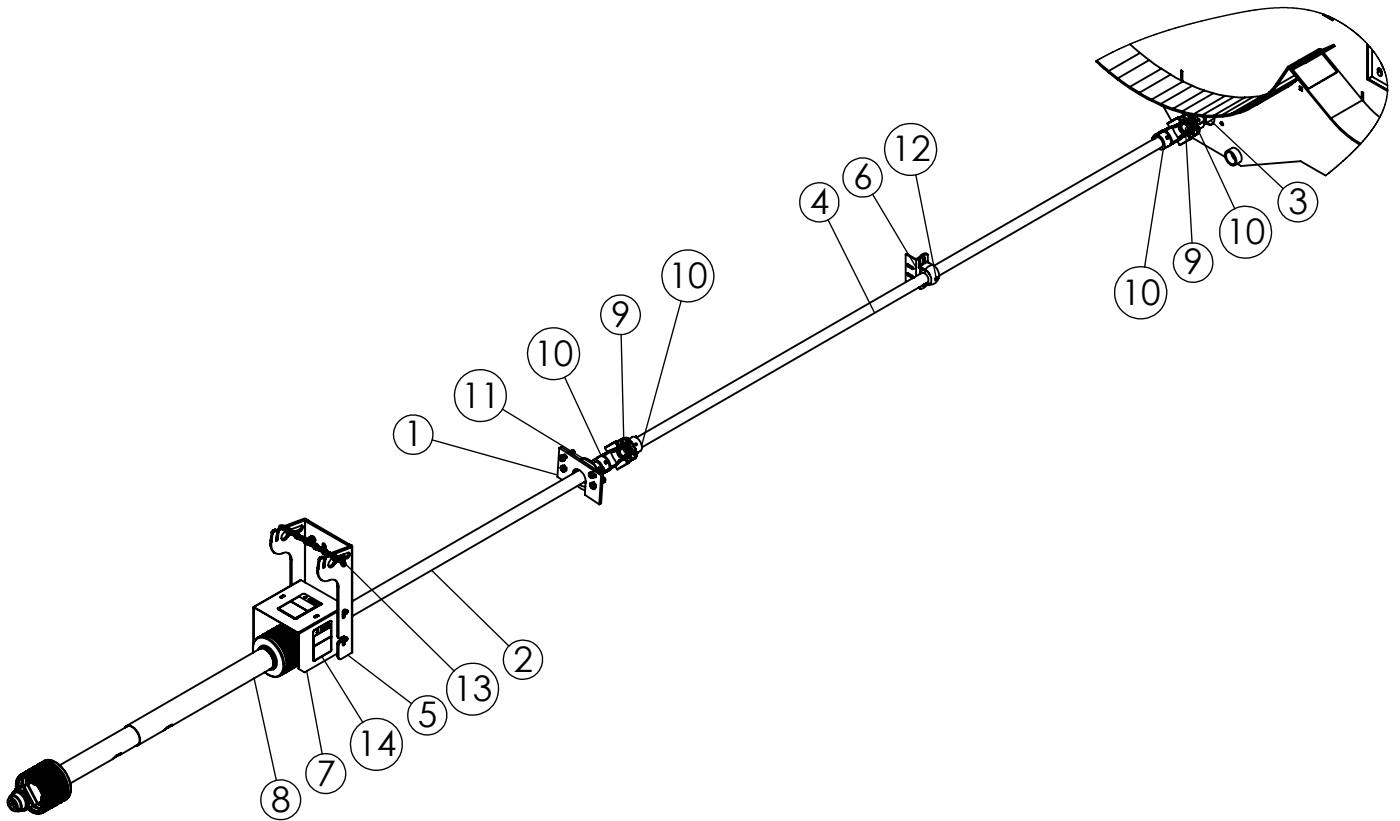
# 354-12B TRAILER, 12K HUB ASSEMBLY

#372209A INCLUDES THESE PARTS AS AN ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY.
1	150117	SPINDLE, 3" DIA, 12,000 LB x 20"	1
2	342209	INNER BEARING 2-1/2" BORE	1
3	342210	BEARING, 1.75 BORE Tim #460	1
4	342211	INNER BEARING RACE 4-7/16"OD	1
5	342212	OUTER BEARING RACE 4-1/4" OD	1
6	372209	HUB ASSY , 10 BOLT-12000LB (HUB ONLY)	1
7	372306	SEAL-OIL 3.0 DIA SHAFT, CR#30087	1
8	372308	DUST CAP, 12000 LB AXLE	1
9	400131	NUT, SWIVEL FLANGE LUG 3/4"-16	10
10	401820	HEX CASSLE NUT, 1-1/4"-12, SAE PLTD	1
11	402911	WASHER 3-1/4"OD x 1-7/32"ID x 3/16"THK	1
12	404001	1/4" COTTER PIN x 2-1/2"	1
13	405625	HHCS 5/16"-18 x 1/2" #5 PLTD	4
14	407729	STUD BOLT 3/4" X 2 3/4, W/1" SHOULDER	10

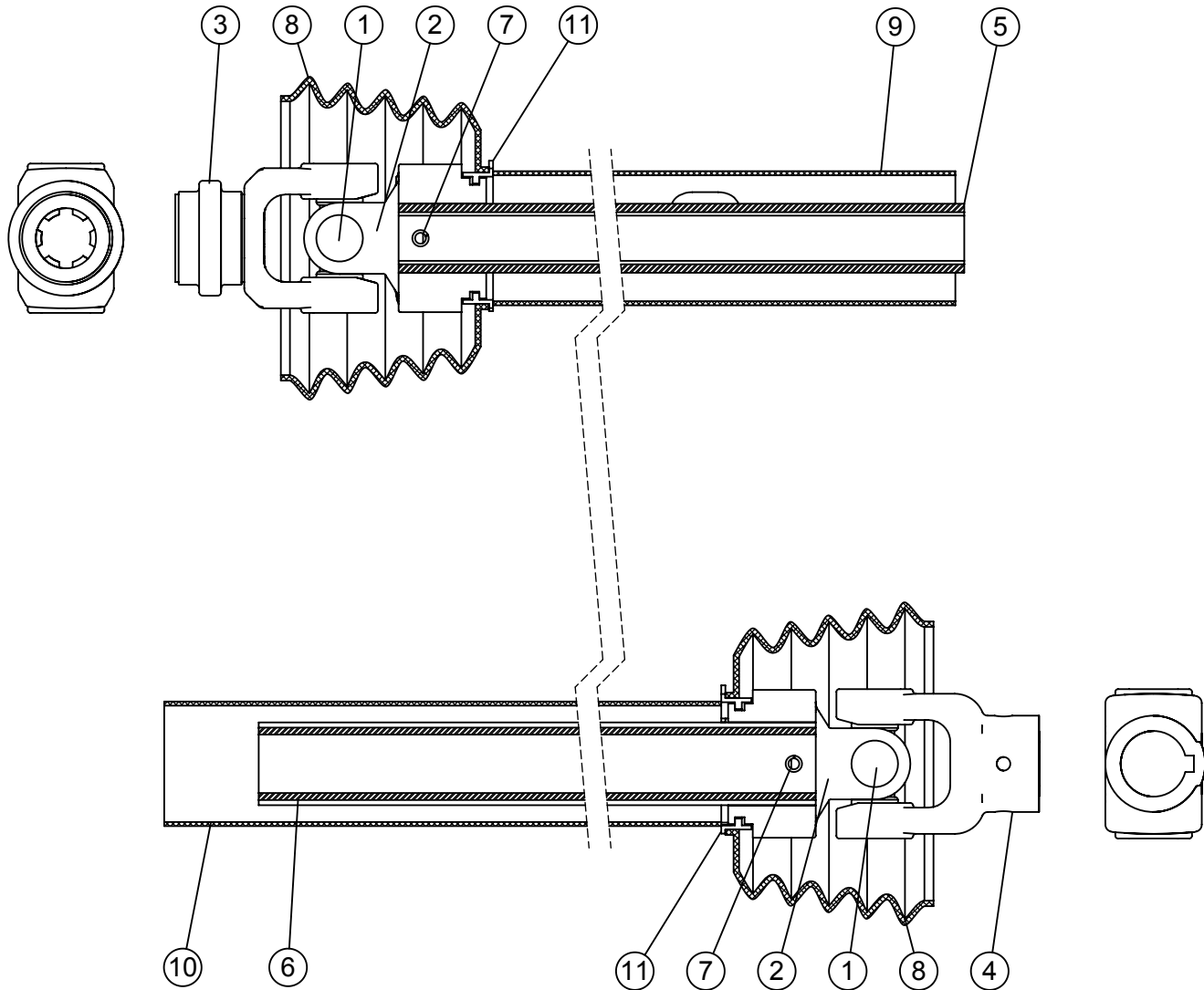
# 354-12 TRAILER DRIVELINE ASSEMBLY



ITEM#	PART#	DESCRIPTION	QTY.
1	150511	1-1/2" BEARING PLATE 5 x 8	1
2	150551	414 FRONT SHAFT - 59-1/4 (540 RPM)	1
3	150700	414 INPUT SHAFT	1
4	150644	354 DRIVELINE 69-3/4 (540 RPM)	1
5	151274	414 PTO SHIELD MTG BRACKET	1
6	185299	CARRIER BEARING ANGLE	1
7	185302	PTO SHIELD	1
8	338029	Dr Shaft W2400 1-3/8"x6 SPL	1
9	338441	CROSS KIT 2300	2
10	338456	YOKE W2300 1-1/2" RB	4
11	340225	BEARING, 1-1/2" 2-BOLT	2
12	341024	BEARING, 1-1/2" WOOD BLOCK	1
13	412020	CHAIN-2/0 PASSING LINK	1
14	440830-S	DANGER : ROTATING DRIVE LINE	3
15	185480	KEY 3/8" SQ. X 2"	4

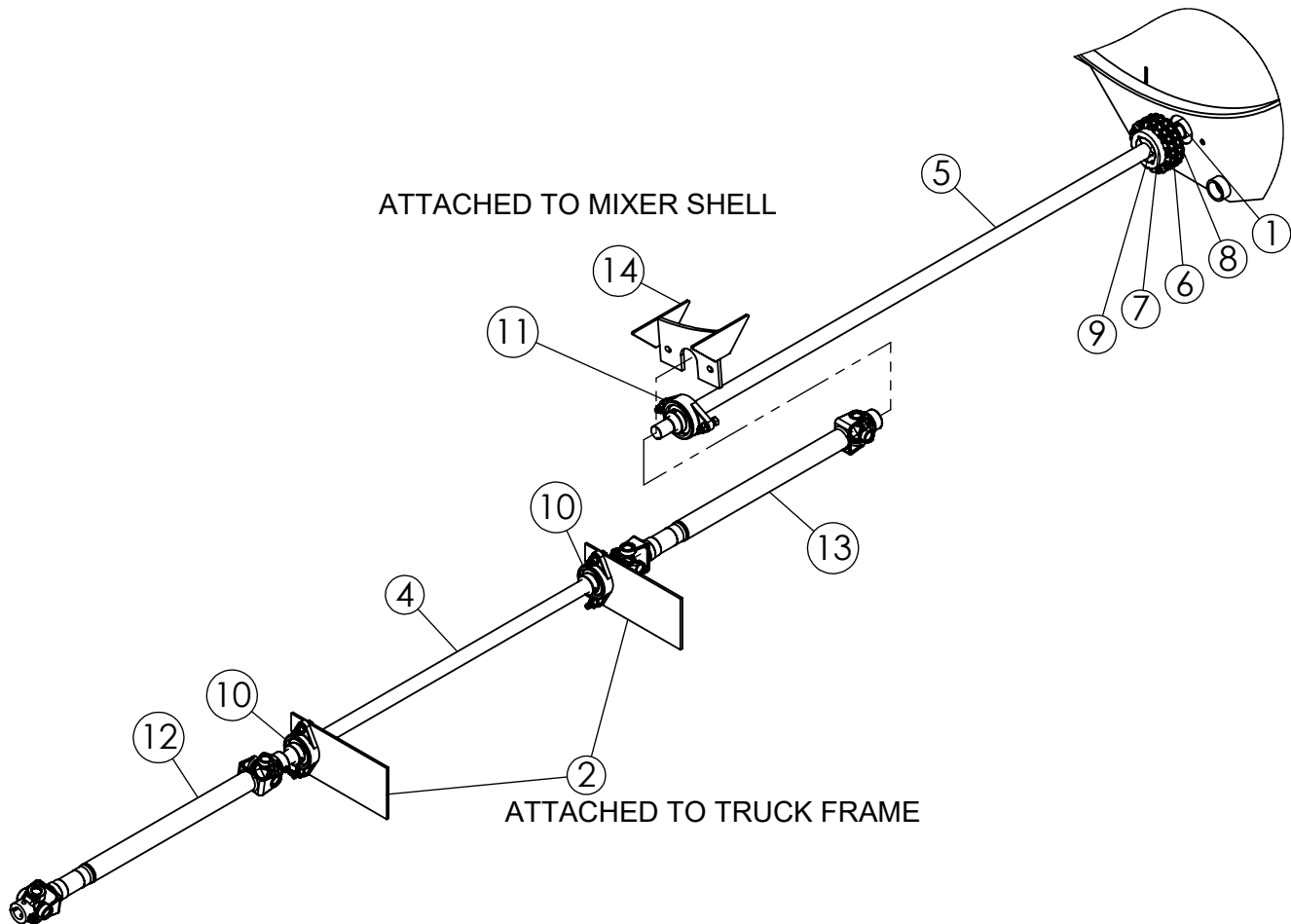
# 354-12 TRAILER DRIVESHAFT ASSEMBLY

#338023



ITEM #	PART #	DESCRIPTION	QTY.
1	338441	CROSS KIT 2300	2
2	338452	INBOARD YOKE I W2300 041318	2
3	338455	YOKE 1-3/8"-6 W2300 ASGE	1
4	338456	YOKE W2300 1-1/2" RB	1
5	338461	INNER PROFILE Ov W2300 013377	1
6	338462	OUTER PROFILE I W2300 050184	1
7	338473	ROLL DRIVE PIN WLTSH 10MM x 90MM	2
8	338490	SHIELD CONE 5 RIB W2300	2
9	338491	OUTER SHIELD TUBE RD - 058023	1
10	338492	INNER SHIELD TUBE RD - 057679	1
11	338493	BEARING RING SC15, 087279	2

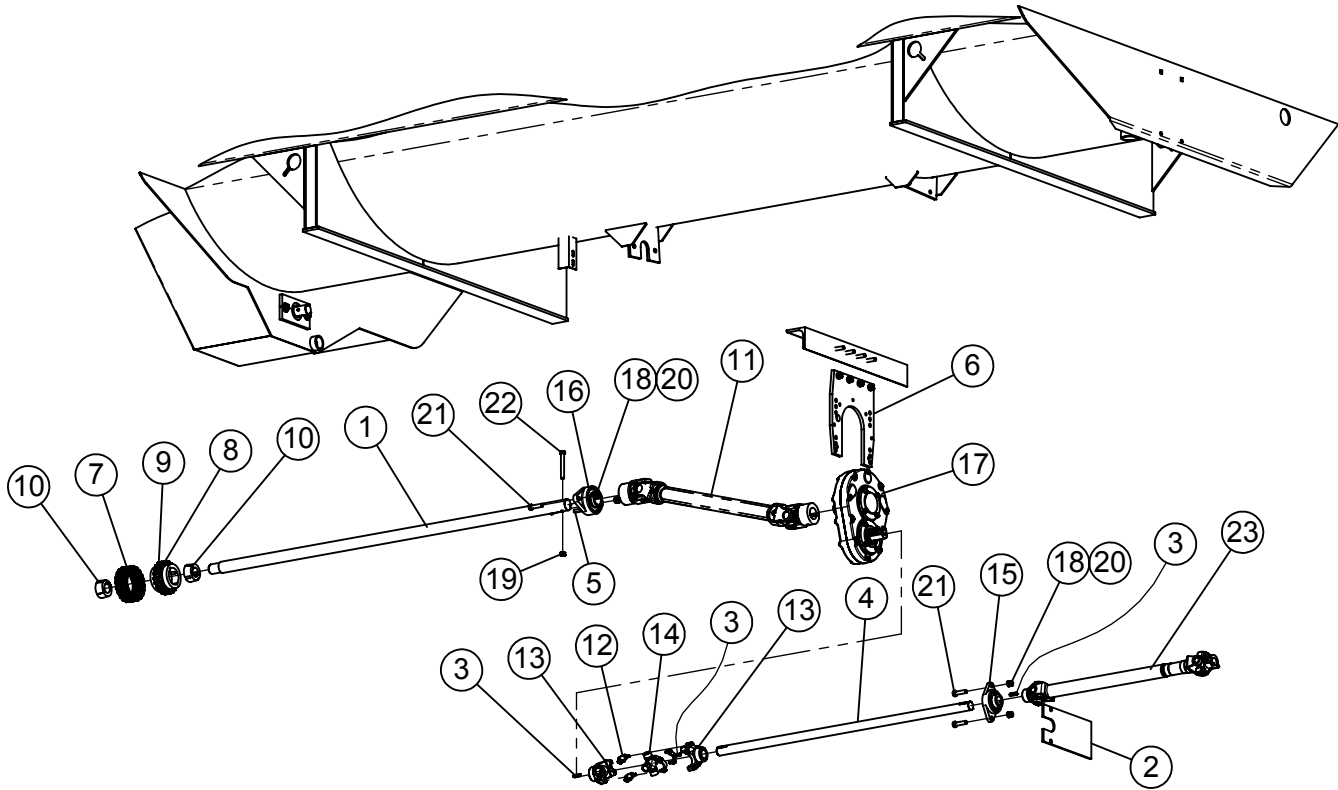
# 354-12 TRUCK DRIVELINE ASSEMBLY (STANDARD TRANS)



DRIVELINE COMPONENTS LISTED ON NEXT PAGE

ITEM#	PART#	DESCRIPTION	QTY.
1	150700	414 INPUT SHAFT	1
2	183319	TRUCK JACKSHAFT BRACKET	2
3	185483	KEY 5/16" SQ x 1-1/4" LG.	2
4	183327	JACKSHAFT, TRUCK, 1-3/8" x 32"	1
5	187306	TRUCK DRIVELINE 1-1/2" x 68"	1
6	320720	6020 CHAIN	1
7	332610	SPROCKET 6020 TLF CHAIN COUPLING	1
8	332611	SPROCKET 6020 TLH CHAIN COUPLING	1
9	335024	BUSHING, 2012 TL 1-1/2"	2
10	340222	BEARING, 1 3/8" VCJT	2
11	340225	BEARING, 1-1/2" 2-BOLT	1
12	780486	1280 DRIVESHAFT ASSY 1-1/4" x 1-3/8 (LENGTH VARIES)	1
13	780494	1280 DRIVESHAFT 1-3/8" x 1-3/8" (LENGTH VARIES)	1
14	850265	TRK BEARING BRKT WA	1

## 354-12 TRUCK DRIVELINE ASSEMBLY (AUTOMATIC TRANSMISSION)

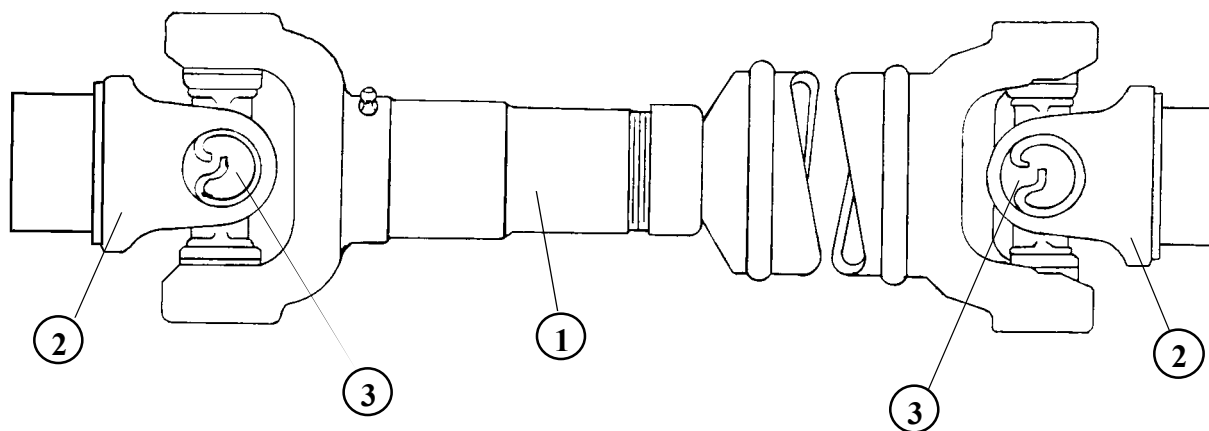


ITEM #	PART #	DESCRIPTION	QTY.
1	150704	274/354 AUTO TRUCK DRIVELINE - 68"	1
2	183319	TRUCK JACKSHAFT BRACKET	1
3	185483	KEY 5/16" SQ x 1-1/4" LG.	3
4	185504	JACKSHAFT, 700 TRK, 1-3/8" x 48"	1
5	188043	3/8" SQ. X 1 7/16" KEY	1
6	190403	6100 GEAR BOX PLATE - 11-1/4" x 13 1/2"	1
7	320720	6020 CHAIN	1
8	332610	SPROCKET 6020 TLF CHAIN COUPLING	1
9	332611	SPROCKET 6020 TLH CHAIN COUPLING	1
10	335024	BUSHING, 2012 TL 1-1/2"	2
11	338042	TRUCK DRIVE SHAFT *	1
12	338413	U STRAP & BOLT KIT 3-70-28X (1350)	2
13	338424	YOKE 1-3/8" RD BORE, 5/16" KQY	2
14	338436	CROSS KIT, SPICER 1350 5-178X	1
15	340222	BEARING, 1 3/8" VCJT	1
16	340229	BEARING, 1 3/4" 2-BOLT	1
17	344022	GEARBOX 2-1 HUB CITY 200	1
18	400208	HEX NUT 1/2"-13 #5 PLTD	4
19	400908	HEX CROWN LOCNUT 1/2"-13 #9	1
20	402008	SPRING LOCK WASHER 1/2" PLTD	4
21	405705	HHCS 1/2"-13 x 2" #5 PLTD	4
22	405713	HHCS 1/2"-13 x 4" #5 PLTD	1
23	780486	1280 DRIVESHAFT ASSY 1-1/4" x 1-3/8" *	1

\* Drive shaft components are on previous and next page

## 354-12 TRUCK DRIVELINE – REAR

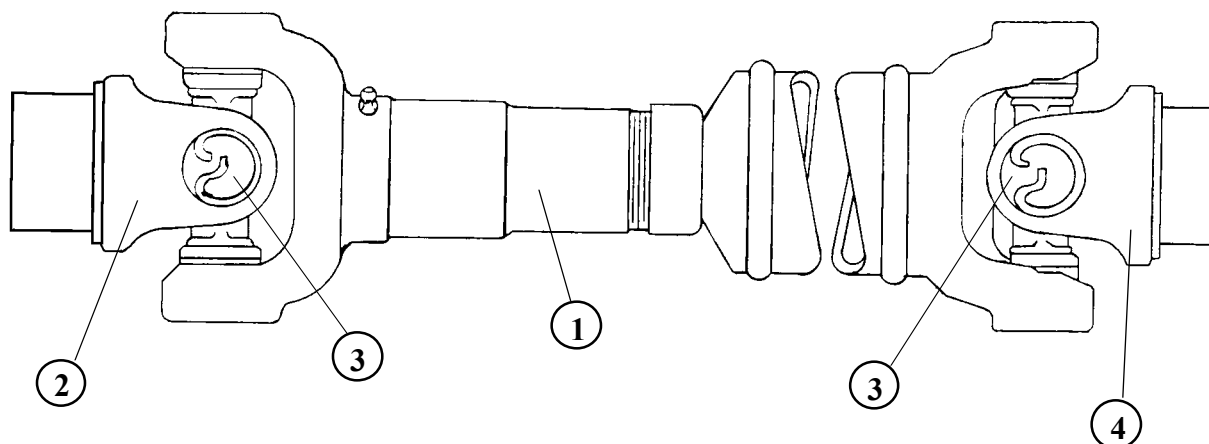
#780494 (STANDARD TRANSMISSION)



REF. NO	PART NO.	DESCRIPTION	QTY.
1	338053	DRIVESHAFT SPLINE TUBE ASSY. (SPICER).....	1
2	338422	YOKE 1 3/8" (SPICER).....	2
3	338435	CROSS KIT (SPICER) .....	2

## 354-12 TRUCK DRIVELINE – FRONT

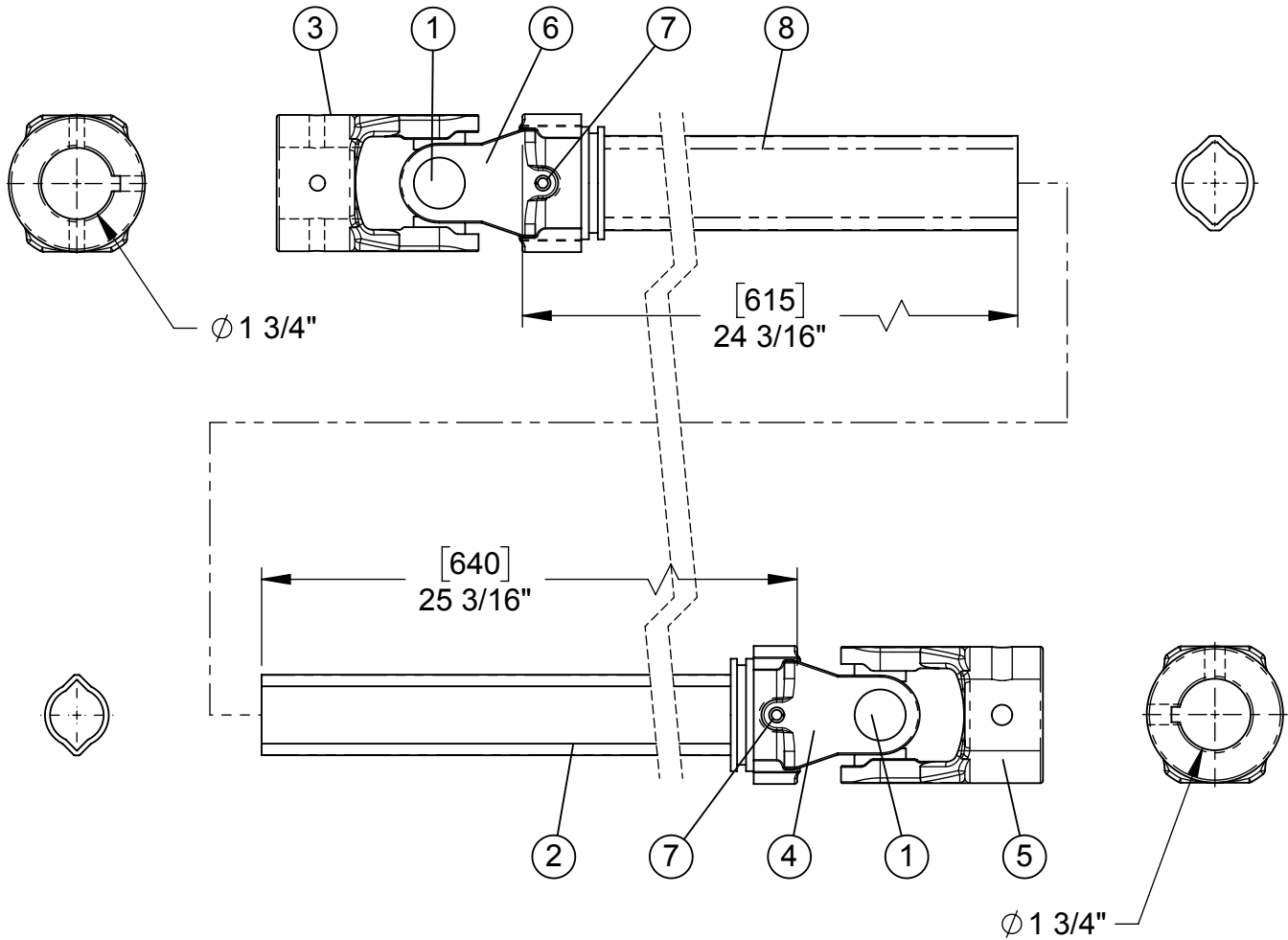
#780486 (AUTO & STANDARD) TRANSMISSION)



REF. NO	PART NO.	DESCRIPTION	QTY.
1	338053	DRIVESHAFT SPLINE TUBE ASSY. (SPICER).....	1
2	338420	YOKE 1 1/4" (SPICER).....	1
3	338435	CROSS KIT (SPICER) .....	2
4.	338422	YOKE 1 3/8" (SPICER).....	1

# 354-12 TRUCK DRIVELINE - REAR

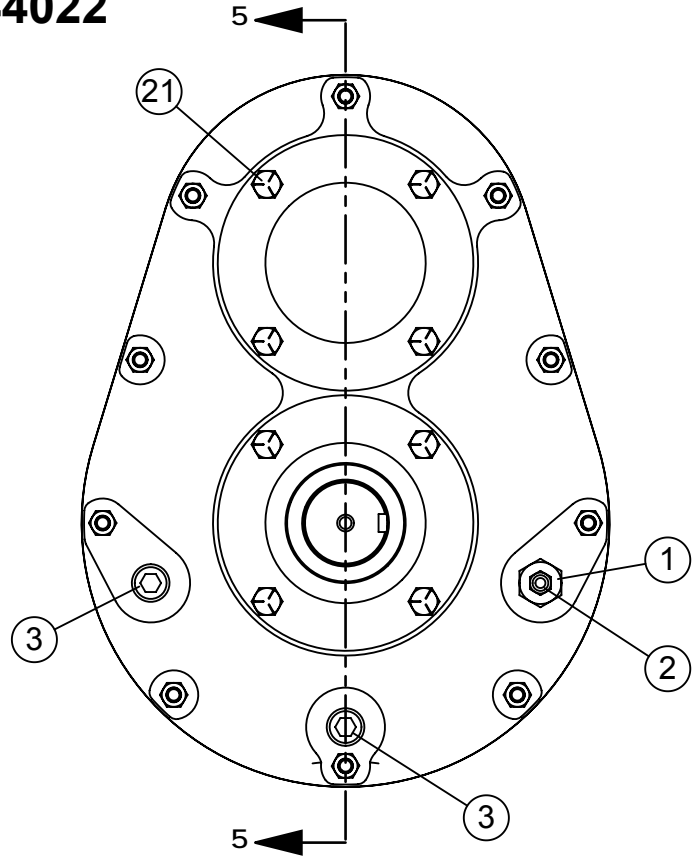
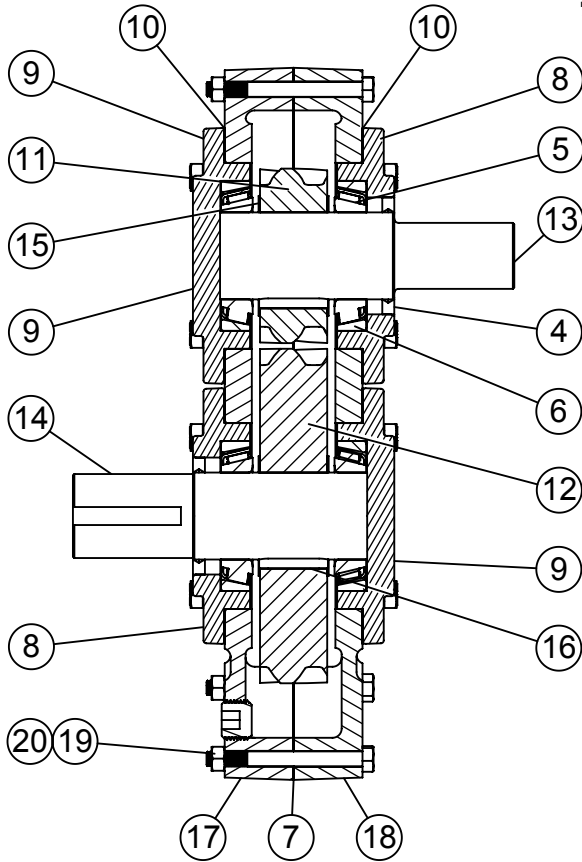
## #338042 AUTOMATIC TRANSMISSION



ITEM #	PART #	DESCRIPTION	QTY.
1	338443	CROSS KIT 32mm x 76mm W2400 312410	2
2	338448	INNER PROFILE W2400 1B-021467	1
3	338449	Yoke 1-3/4"RD, W2400, 3/8"-16 Shear Bolt, 385559 - 383397	1
4	338450	INBOARD YOKE 1b W2400 019518	1
5	338451	Yoke 1-3/4"RD, W2400, (2) 1/2"-13 Set Screws 381830	1
6	338452	INBOARD YOKE W2400 019519	1
7	338473	ROLL DRIVE PIN W LTSH 10MM x 90MM	2
8	338518	OUTER PROFILE W2400 384836	1



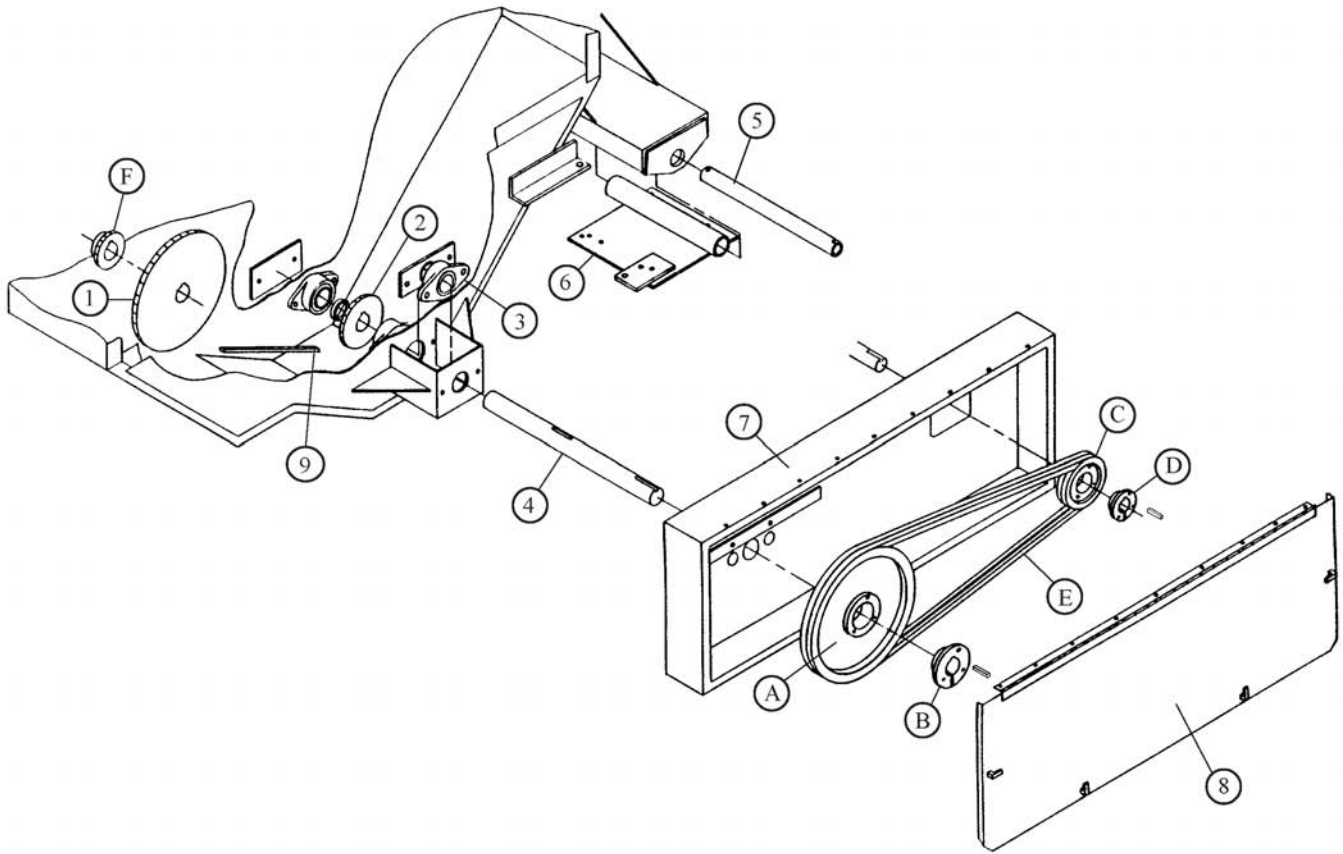
# GEARBOX 2:1 HUB CITY #344022



**SECTION A-A**

ITEM #	PART #	DESCRIPTION	QTY
1	310710	PIPE BUSHING, 1/2" x 1/8" GALV	1
2	310718	BREATHER PLUG, 1/8" PIPE	1
3	310798	PIPE PLUG, 1/2" INTERNAL HEX	2
4	344209	GEARBOX SEAL 1-3/4" CR 18039	2
5	344210	BEARING CONE 1-13/16" ID 18690	4
6	344211	BEARING CUP 3-1/8" OD 18620	4
7	344212	CENTER CASE GASKET DC	1
8	344213	OPEN END CAP HUB CITY	2
9	344214	CLOSED END CAP HUB CITY	2
10	344215	CAP GASKET HC .002	4
11	344216	HIGH SPEED HELICAL GEAR 20T	1
12	344217	LOW SPEED HELICAL GEAR 40T	1
13	344218	HIGH SPEED SHAFT 1-3/8" HC 2:1	1
14	344223	LOW SPEED SHAFT 1-3/4" HC 2:1	1
15	344267	SPACER HUB CITY GEARBOX	4
16	344268	GEARBOX KEY 3/8"sq x 1-7/16" HC	2
17	344269	HOUSING HALF W/PIPE PLUGS HC	1
18	344270	HOUSING HALF WO/PIPE PLUGS HC	1
19	400205	HEX NUT 5/16"-18 #5 PLTD	10
20	405637	HHCS 5/16"-18 x 3-1/4" #5 PLTD	10
21	405653	HHCS 3/8"-16 x 1" #5 PLTD	16

# 354-12 ELECTRIC SINGLE MOTOR DRIVE



# 354-12 ELECTRIC SINGLE MOTOR DRIVE

REF. NO	PART NO.	DESCRIPTION	QTY.
1.	330654	#60 B 54 RCSPROCKET.....	1
2.	330607	#60 B 17H RC SPROCKET (20 & 25 HP).....	1
	330610	#60 B 15H RC SPROCKET (15 HP).....	1
3.	340228	VCJT 1-3/4" 2-BOLT FLANGE BEARING.....	1
4.	150716	ELECTRIC MOTOR INPUT SHAFT.....	1
5.	150229	ELECTRIC MOTOR PIVOT PIPE.....	1
6.	850072	354 MOTOR BASE WELDMENT.....	1
7.	850074	ELECTRIC BELT SHIELD WELDMENT.....	1
8.	781001	ELECTRIC BELT SHIELD DOORASSEMBLY.....	1
9.	320611	#60 RC x 101 PITCHES COMP.....	1

## 15 HP MOTOR DRIVE CARTON (#650073)

A.	324016	5V-2 GROOVE 16.0" SF BELT SHEAVE.....	1
B.	336027	SF 1-3/4" QD BUSHING.....	1
C.	324004	5V-2 GROOVE 4.9" SDS BELT SHEAVE.....	1
D.	336026	SDS 1-5/8" QD BUSHING.....	1
E.	325100	5VX-1000 V-BELT.....	2
F.	330803	#80 B 15H RCSPROCKET.....	1

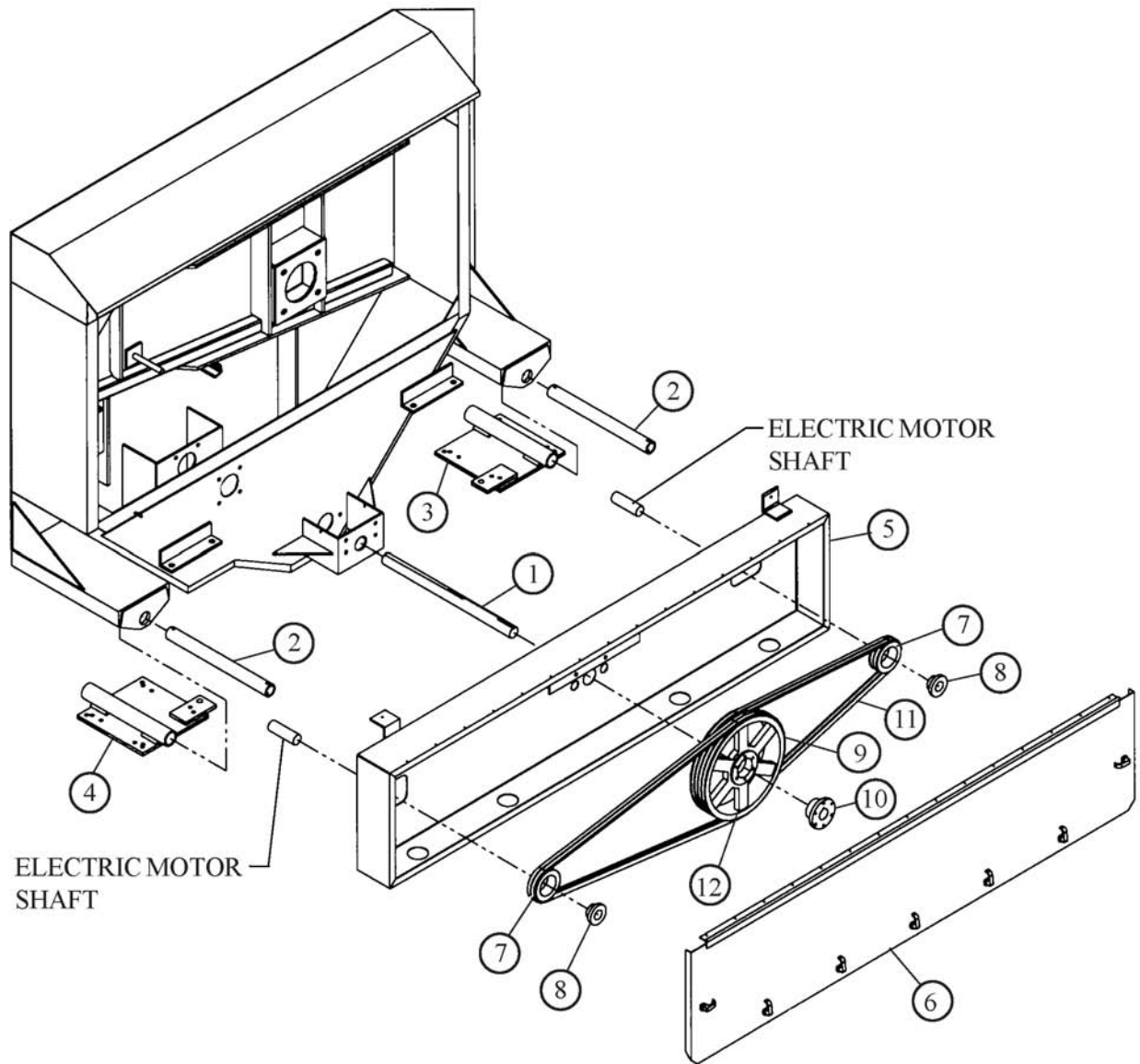
## 20 HP MOTOR DRIVE CARTON (#650074)

A.	324016	5V-2 GROOVE 16.0" SF BELT SHEAVE.....	1
B.	336027	SF 1-3/4" QD BUSHING.....	1
C.	324006	5V-2 GROOVE 6.3" SK BELT SHEAVE.....	1
D.	336021	SK 1-5/8" QD BUSHING.....	1
E.	325100	5VX-1000 V-BELT.....	2
F.	330807	#80 B 17H RCSPROCKET.....	1

## 25 HP MOTOR DRIVE CARTON (#650094)

A.	324016	5V-2 GROOVE 16.0" SF BELT SHEAVE.....	1
B.	336027	SF 1-3/4" QD BUSHING.....	1
C.	324006	5V-2 GROOVE 6.3" SK BELT SHEAVE.....	1
D.	336030	SK 1-7/8" QD BUSHING.....	1
E.	325100	5VX-1000 V-BELT.....	2
F.	330807	#80 B 17H RCSPROCKET.....	1

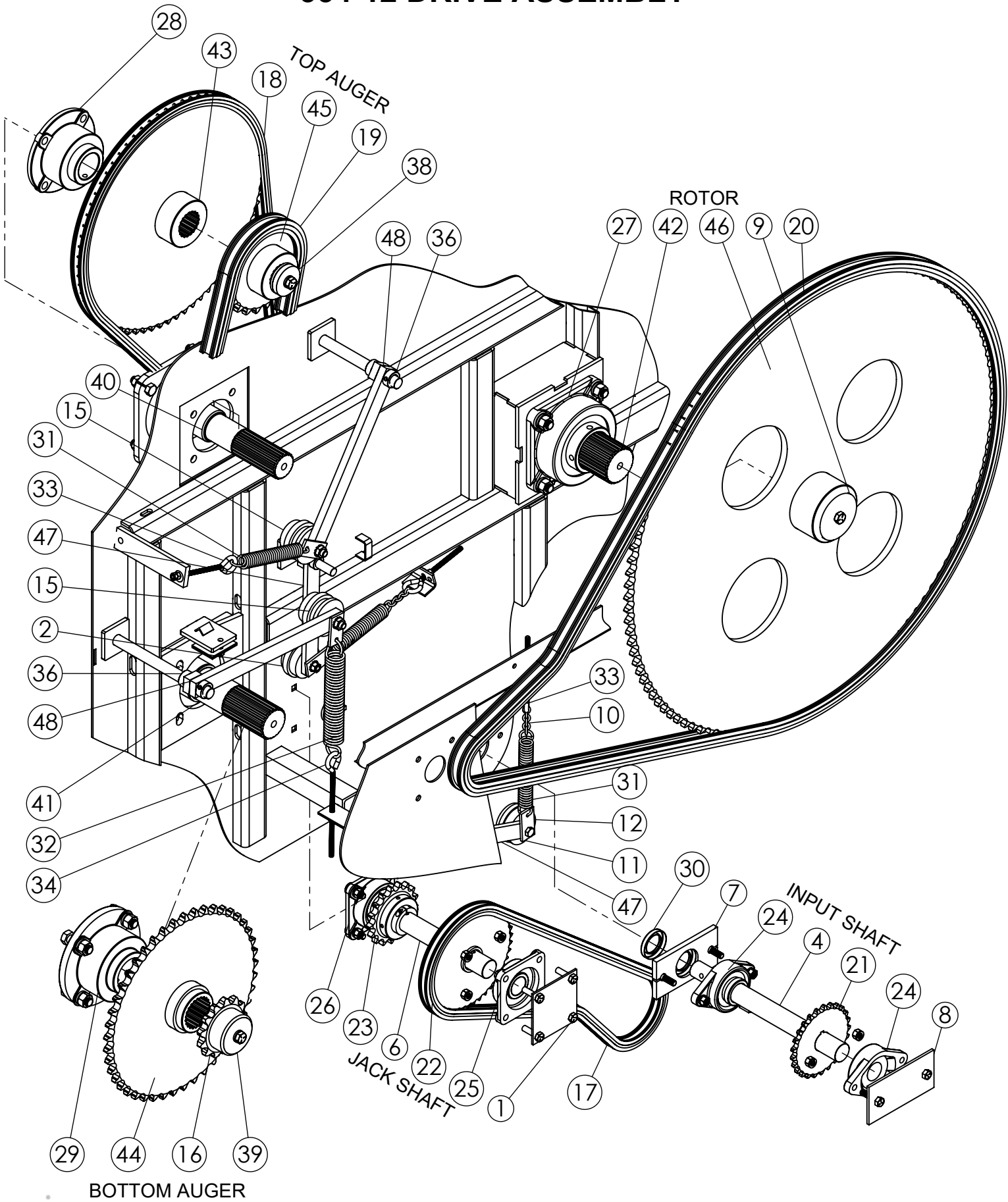
# 354-12 ELECTRIC DUAL MOTOR DRIVE



## 354-12 ELECTRIC DUAL MOTOR DRIVE

REF. NO	PART NO.	DESCRIPTION	QTY.
1.	150716	ELECTRIC MOTOR INPUT SHAFT.....	1
2.	150229	ELECTRIC MOTOR PIVOT PIPE.....	2
3.	850200	MOTOR BASE WELDMENT (213T-254T).....	1
4.	850318	LEFT MOTOR BASE WELDMENT (213T-254T)....	1
5.	850311	ELECTRIC EXT. BELT SHIELD WELDMENT.....	1
6.	750098	ELECTRIC EXT. BELT SHIELD DOORASSY.....	1
7.	324004	5V-2 GROOVE 4.90" SDS BELT SHEAVE.....	2
8.	336015	SDS 1-3/8" QD BUSHING.....	2
9.	324017	5V-4 GROOVE 16.0" E BELT SHEAVE.....	1
10.	336138	E 1-3/4" QD BUSHING.....	1
11.	325100	5VX-1000 V-BELT.....	2
12.	325101	5VX-1120 V-BELT.....	2

# 354-12 DRIVE ASSEMBLY

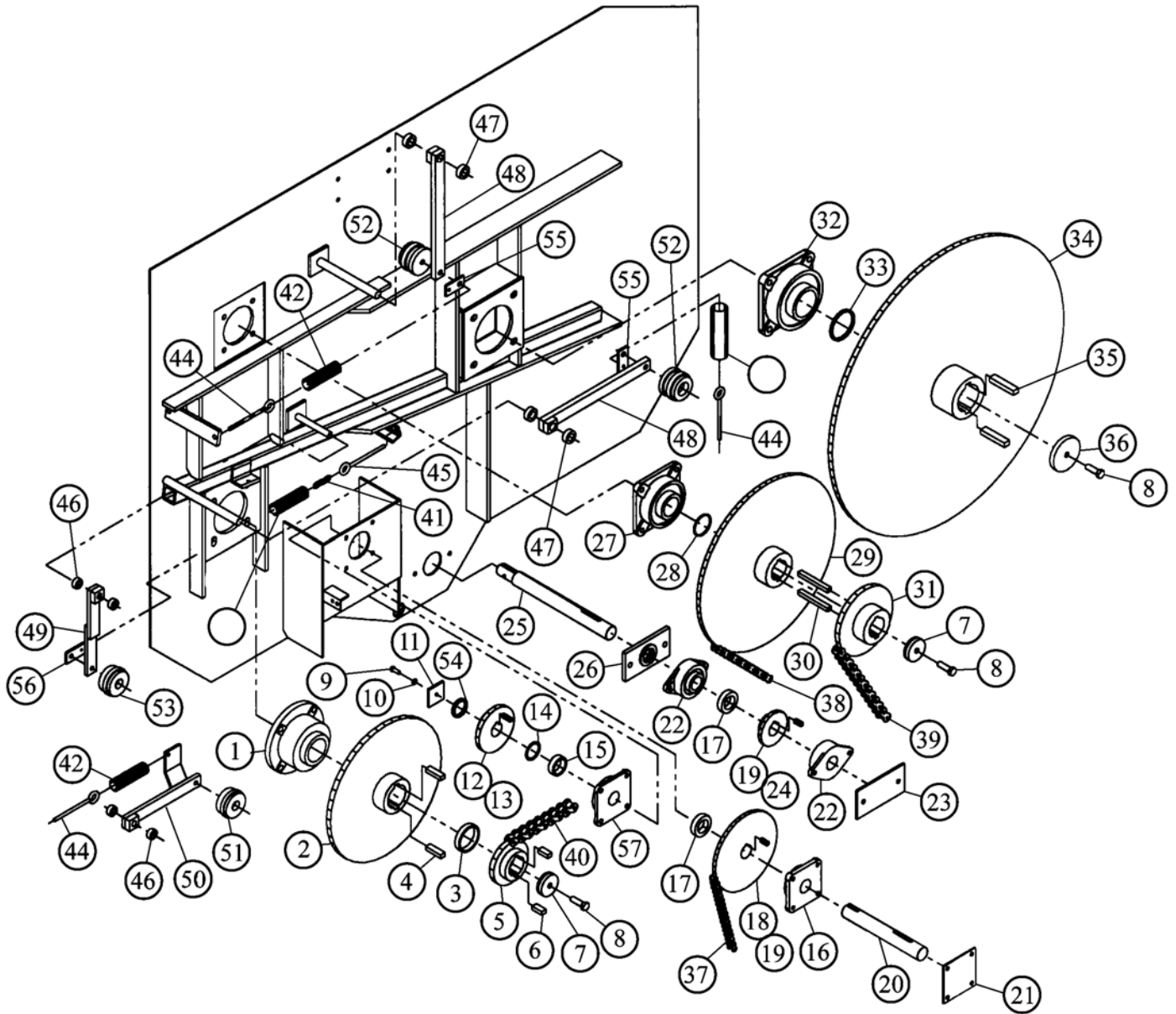


## 354-12 DRIVE ASSEMBLY

ITEM#	PART#	DESCRIPTION	QTY.
1	150075	1-3/4 BEARING COVER PLATE 5-3/8	1
2	150224	#80 IDLER BLOCK 1-3/4 x 3-1/2	1
3	150271	SQUARE KEY, 3/8" x 1-3/16" LGT	2
4	150700	414 INPUT SHAFT	1
5	151011	BOTTOM AUGER SHIM - 2-1/2"	2
6	151097	414 JACKSHAFT 14-11/16"	1
7	182634	SHAFT SEAL PLATE 1-3/4", 4"x7-1/2"	1
8	183616	JACKSHAFT PLATE - 8	1
9	185329	SPROCKET WASHER 3 1/2" SHAFT x 4 1/2"	1
10	185487	CHAIN, 2/0 x 3"	2
11	187153	1/2" PULL TAB	2
12	187154	#60 IDLER BLOCK	1
13	187157	5/8" PULL TAB	2
14	188043	3/8" SQ. X 1 7/16" KEY	1
15	189178	IDLER BLOCK, #80-100	2
16	189723	SPROCKET, 100B13H, 3" SPLINE BORE (BTM AUGER)	1
17	320612	.PITCHES, COMP #60 RC x 102	1
18	320820	.PITCHES, COMP #80 RC x 120	1
19	321075	.PITCHES, COMP #100 RC x 75	1
20	321128	.PITCHES, COMP #100 RC x 128	1
21	330625	SPROCKET, 60B25 1-3/4" (INPUT SHAFT 540 RPM)	1
21B	330607	SPROCKET, 60B17 1-3/4" (INPUT SHAFT 1000 RPM)	1
22	330642	SPROCKET, 60B42 x 1-3/4" (JACKSHAFT 540 RPM)	1
22B	330654	SPROCKET, 60B54 X 1-3/4" (JACKSHAFT 1000 RPM)	1
23	330807	SPROCKET 80B17H x 1-3/4" (JACKSHAFT)	1
24	340229	BEARING, 1 3/4" 2-BOLT	2
25	340427	1 3/4" - 4 BOLT FLANGE BRG F3W228U	1
26	340528	1 3/4" - 4 BOLT FLANGE BRG MSF-28	1
27	340556	BEARING 3 1/2" - MSF 56 - 4 BOLT FLANGE	1
28	342040	BEARING 2-1/2" FLANGE ROLLER 4-BOLT REX MB2208	1
29	342048	BEARING 3" FLANGE ROLLER 4-BOLT REX MB2300	1
30	355028	GREASE SEAL 1-3/4"	2
31	410008	PULL SPRING 1 1/4" X 5 1/4"	3
32	410012	PULL SPRING 1-3/4" x 7"	1
33	410851	EYE BOLT 3/8" X 6"	3
34	410852	EYE BOLT 3/8" X 8"	1
35	412412	SET COLLAR 3/4" PLTD	4
36	412416	SET COLLAR 1" PLTD	4
37	412428	1 3/4" C-CLAMP COLLAR	3
38	850054	END CAP WA 2-7/8"	1
39	850129	END CAP W.A. - 3 1/2"	1
40	850500	274/354/414 TOP AUGER SHAFT FLANGE WA	1
41	850501	274/354/414 BOTTOM AUGER SHAFT FLANGE WA	1
42	850502	274/354/414 ROTOR SHAFT FLANGE WA	1
43	850507	80B70 x 2-1/2" BORE x 2-1/2" LTB WA (TOP AUGER)	1
44	850508	100C45 x 3" BORE x 3" LTB WA (BTM AUGER)	1
45	850510	100B21H 2.5"SPL B x 2.5" LTB WA (TOP AUGER)	1
45B	850545	100B17H 2.5"SPL B x 2.5" LTB WA (DOUBLE FLIGHT TOP)	1
46	850509	100B 96 x 3-1/2" BORE x 3-1/2" LTB WA (ROTOR)	1
47	870303	IDLER ARM WA - 12-1/2	2
48	873054	IDLER ARM WA - 18	2

# 354-12 DRIVE ASSEMBLY

Before Serial #890473440



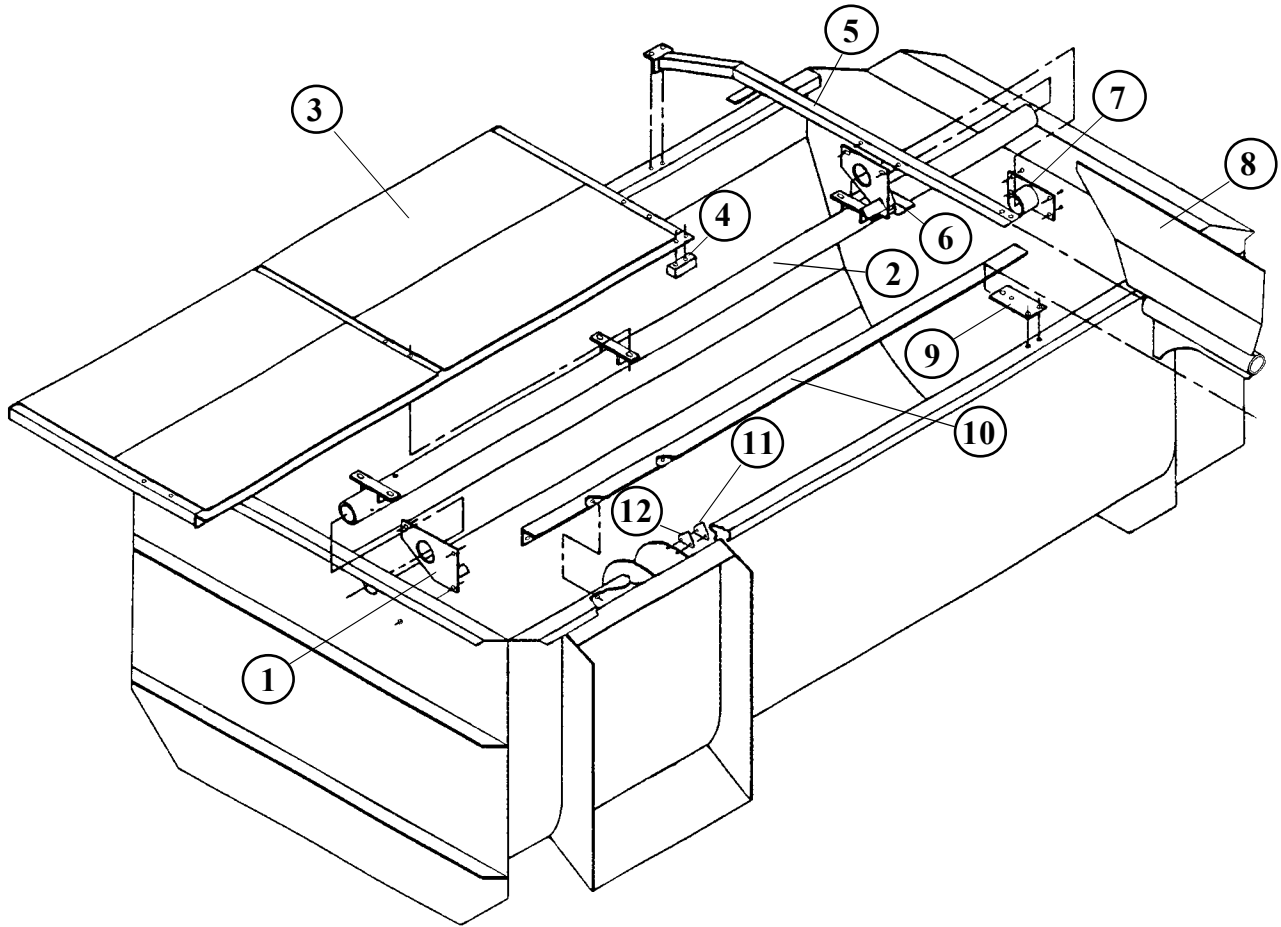


# 354-12 DRIVE ASSEMBLY

Before Serial #890473440

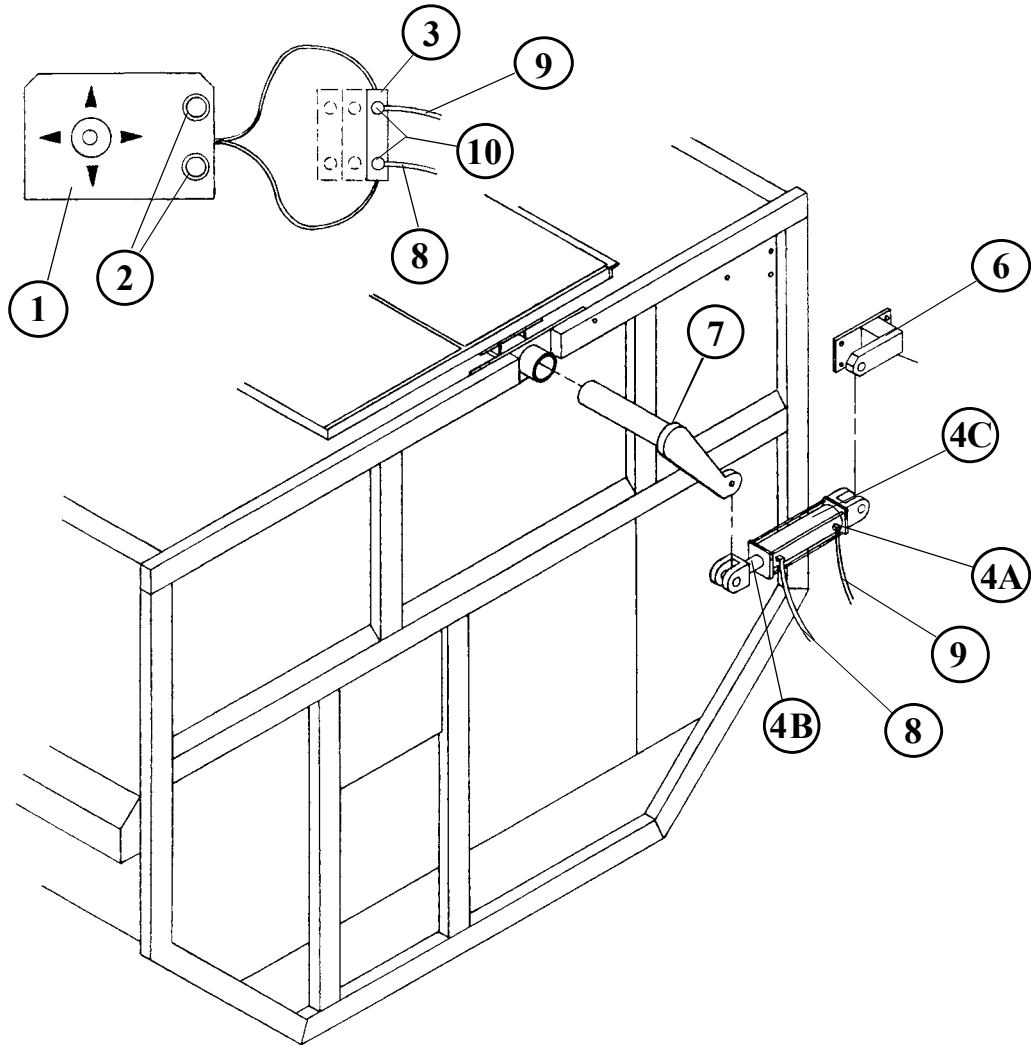
ITEM #	PART #	DESCRIPTION	QTY.
1	342048	REX MB2300 4-BOLT FLANGE BEARING	1
2	850043	#100 B 45 RC SPROCKET WELDMENT	1
3	150035	3" SHAFT SPACER 21/32"	1
4	150079	1/2" x 3/4" RECT. KEY x 1/2"	2
5	150082	#100 B 13H RC SPROCKET	1
6	150078	1/2" x 3/4" RECT. KEY x 1-5/8"	2
7	850054	1/2" x 2-7/8" CAP WELDMENT	2
8	405754	5/8"-11 x 2" HHCS	1
10	402006	3/8" SPLIT LOCKWASHER	1
11	150272	1/4" x 2-1/2" SQUARE RETAINER	1
12	330807	#80 B 17H RC SPROCKET	1
13	188043	3/8" SQUARE KEY x 1-7/16"	1
14	150274	1-3/4" SHAFT SPACER x 1/16"	1
15	150273	1-3/4" SHAFT SPACER x 3/4"	1
16	340428	VCJ 1-3/4" 4-BOLT FLANGE BEARING	1
17	412428	1-3/4" C-CLAMP COLLAR	2
18	330642	#60 B 42 RC SPROCKET (540 PTO TRAILER)	1
	330654	#60 B 54 RC SPROCKET (1000 PTO TRK & STAT)	1
19	150271	3/8" SQUARE KEY x 1-3/16"	2
20	150029	354 JACKSHAFT	1
21	150075	BEARING COVER PLATE	1
22	340228	VCJT 1-3/4" 2-BOLT FLANGE BEARING	2
23	183616	ELECTRIC JACKSHAFT PLATE	1
24	330625	#60 B 25H RC SPROCKET (540 PTO TRAILER)	1
	330607	#60 B 17H RC SPROCKET (1000 PTO TRK & STAT)	1
25	150700	INPUT SHAFT 18-5/8"	1
26	780015	SEAL PLATE ASSEMBLY	1
26A	355028	GREASE SEAL 1-3/4"	2
27	340540	2-1/2" MSF 40 4-BOLT FLANGE BEARING	1
28	150206	2-1/2" SHAFT SPACER - 3/32"	1
29	850042	#80 B 70 RC SPROCKET WELDMENT	1
30	150076	1/2" x 5/8" RECT. KEY x 5"	2
31	850045	#100 B 21H RC SPROCKET WELDMENT	1
32	340556	3-1/2" MSF 56 4-BOLT FLANGE BEARING	1
33	150032	ROTOR SHIM - .219"	1
34	850044	#100 B 96 RC SPROCKET WELDMENT	1
35	150081	5/8" x 7/8" RECT. KEY x 4"	2
36	185329	5/8" x 4-1/2" OD WASHER	1
37	320611	#60 RC x 101 PITCHES COMP	1
38	320820	#80 RC x 120 PITCHES COMP	1
39	321075	#100 RC x 75 PITCHES COMP	1
40	321128	#100 RC x 128 PITCHES COMP	1
41	185487	2/0 PASSING LINK CHAIN x 3"	1
42	410008	1-1/4" x 5-1/4" x .188" PULL SPRING	3
43	410012	1-3/4" x 7" x .218" PULL SPRING	1
44	410851	3/8" x 6" EYEBOLT	3
45	410852	3/8" x 8" EYEBOLT	1
46	412412	3/4" SET COLLAR	4
47	412416	1" SET COLLAR	4
48	873054	IDLER ARM WELDMENT	2
49	850151	OFFSET IDLER ARM WELDMENT	1
50	850065	IDLER ARM WELDMENT	1
51	187154	#60 IDLER BLOCK UHMW	1
52	187159	#100 IDLER BLOCK UHMW	2
53	150224	#80 IDLER BLOCK UHMW	1
54	150276	1-3/4" SHAFT SPACER (IF REQUIRED)	1
55	187157	5/8" PULL TAB	2
56	187153	1/2" PULL TAB	1
57	340528	1-3/4" MSF 28 4-BOLT FLANGE BEARING	1

# ROTO-HAY PROCESSOR ASSEMBLY



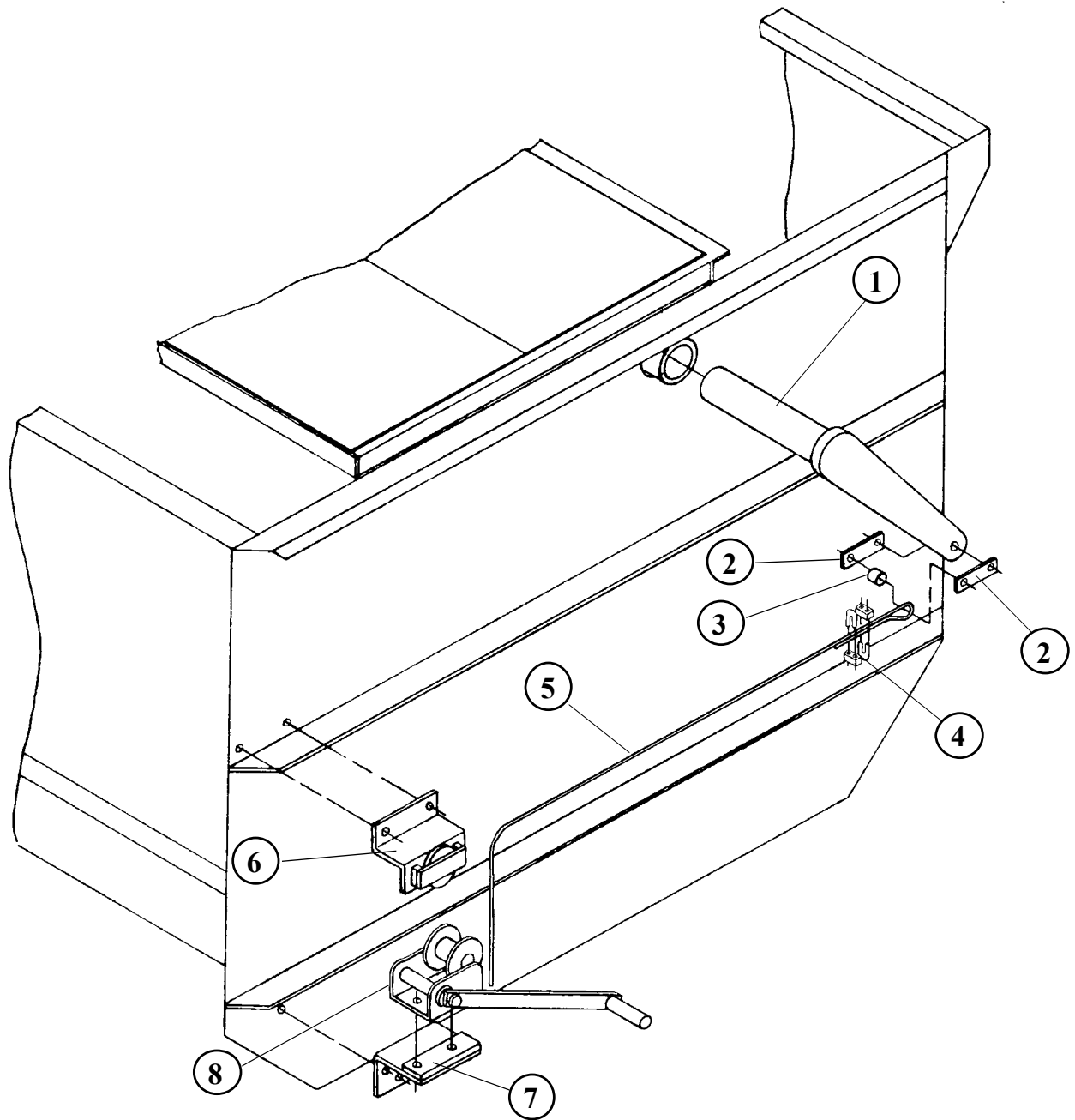
REF. NO	PART NO.	DESCRIPTION	QTY.
1.	850058	HAY PAN FRONT BEARING WELDMENT.....	1
2.	850237	HAY PAN TUBE WELDMENT.....	1
3.	850063	HAY PAN WELDMENT.....	1
4.	150198	BAFFLE PLUNGER UHMW.....	1
5.	850300	CROSS BAR WELDMENT.....	1
6.	850057	HAY PAN CENTER BEARING WELDMENT.....	1
7.	872354	HAY PAN REAR BEARING WELDMENT.....	1
8.	850299	354 HAY PAN BAFFLE WELDMENT.....	1
9.	150141	CROSS BAR PLATE.....	1
10.	150814	274/354 HAY BARANGLE.....	1
11.	385002	SICKLE SECTION HARD SURFACED 5/16".....	41
12.	150223	KNIFE BACK-UP PLATE.....	38

# ROTO-HAY PROCESSOR (Hydraulic Option)



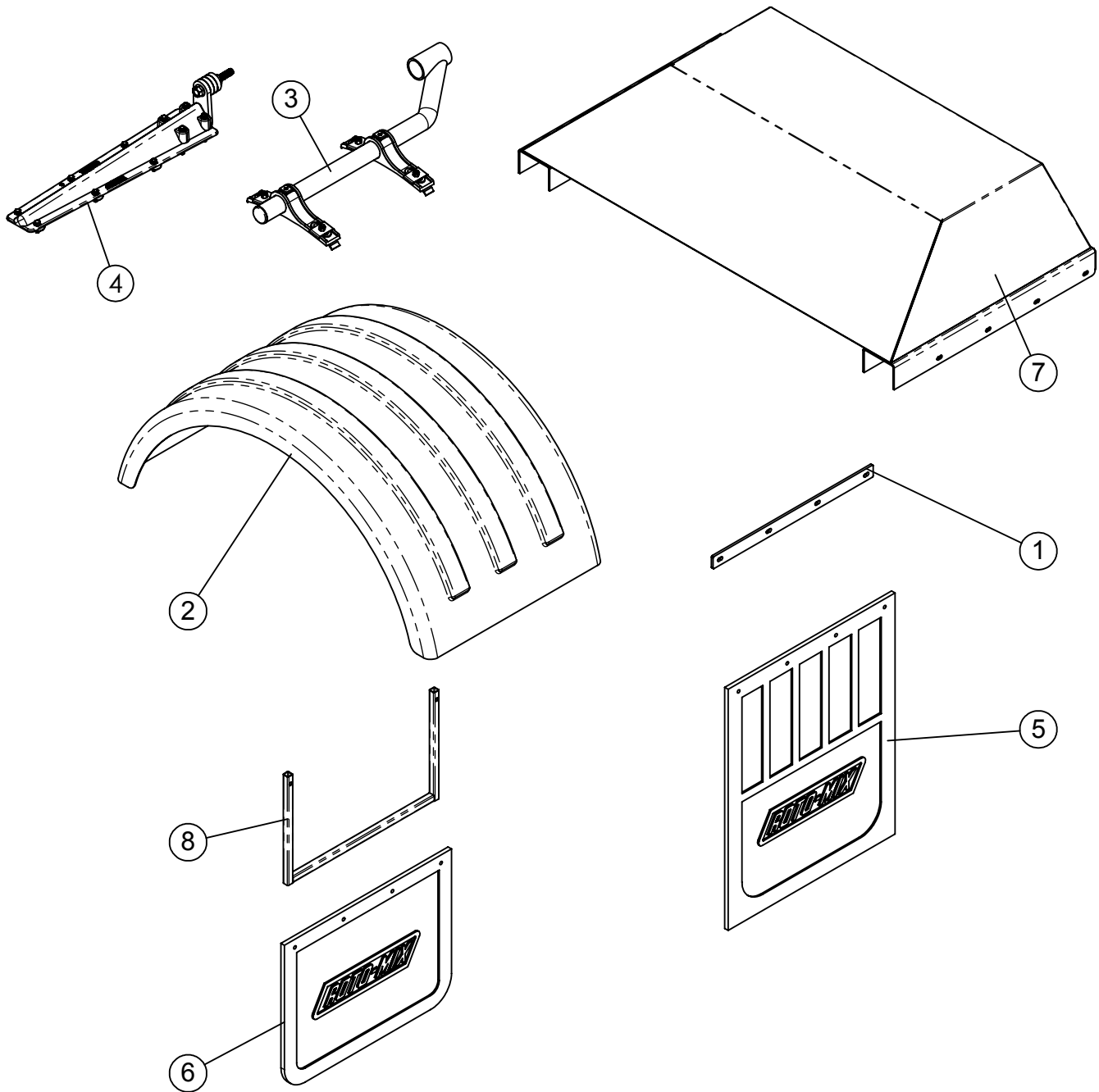
REF. NO			QTY.
1.	188226	FEEDER ELECTRIC CONTROL BRACKET.....	1
2.	357702	PUSH BUTTON SWITCH 12V-2 POLE.....	1
3.	362207	SLD ADD ON VALVE VX-13D (TRUCK).....	1
4.	780109	2" x 8" STRAIGHT DOOR CYLINDER ASSY.....	1
A.	368007	3/8"MP x 3/8"FPSW 90° x .109" RESTRICTION....	2
B.	364954	2" x 8" x 1-1/16" DIA. CYLINDER ROD.....	1
C.	364055	2" x 8" STROKE HYDRAULIC CYLINDER.....	1
D.	364055	2" HYDRAULIC CYLINDER REPAIR KIT.....	1
5.	781055	TRUCK TO MIXER WIRE ASSEMBLY.....	1
6.	850060	HAY PAN HYDRAULIC CYL BRKT WELDMENT...	1
7.	872357	HAY PAN HYDRAULIC ARM WELDMENT.....	1
8.			
A.	781072	3/8" x 134" HYD HOSE – 3/8"MP x 1/4"MP (TRK)	1
B.	781320	3/8" x 184" HYD HOSE – 3/8"MP x 1/2"MP (TRL)...	1
9.			
A.	781330	3/8" x 120" HYD HOSE – 3/8"MP x 1/4"MP (TRK)...	1
B.	781319	3/8" x 174" HYD HOSE – 3/8"MP x 1/2"MP (TRL)...	1
10.	368010	90° 1/4"MP x 1/4" FPSW W/1/8" RESTRICTION...	2

# ROTO-HAY PROCESSOR (Cable Option)



REF. NO	PART NO.	DESCRIPTION	QTY.
1.	850090	HAY PAN CABLE ARM WELDMENT.....	1
2.	150188	CABLE BAR.....	2
3.	150189	SLEEVE 1"OD x 13/16".....	1
4.	412204	1/4" CABLE CLAMP.....	2
5.	150669	CABLE.....	1
6.	850066	CABLE PULLEY BRACKET WELDMENT.....	1
7.	850067	CABLE WINCH MOUNT PLATE WELDMENT.....	1
8.	412325	1000 LB. CABLE BRAKE WINCH.....	1

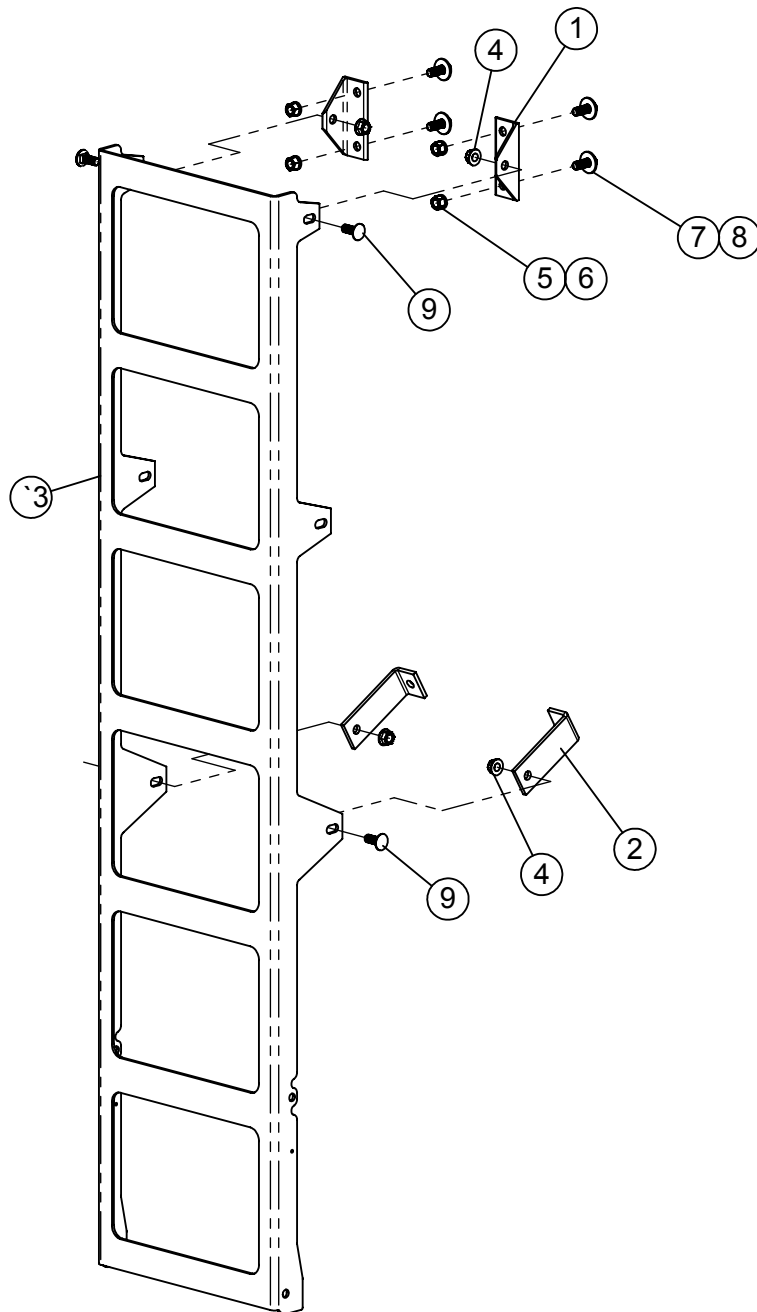
# 354-12 FENDERS, FENDER MOUNT & MUD FLAPS



ITEM #	PART #	DESCRIPTION	QTY.
1	183087	MUD FLAP STRAP	AN
2	354391	POLY FENDER	AN
3	354392	POLY FENDER TUBING MOUNT KIT (2 per kit)	AN
4	354393	POLY FENDER TAPER BRACKET KIT (2 per kit)	AN
5	370200	ROTO-MIX MUD FLAP 24" x 30"	AN
6	370202	ROTO-MIX MUD FLAP 24" x 18-1/2"	AN
7	872108	RIGHT FENDER W.A.	AN
8	872120	MUD FLAP BRACKET WA	AN

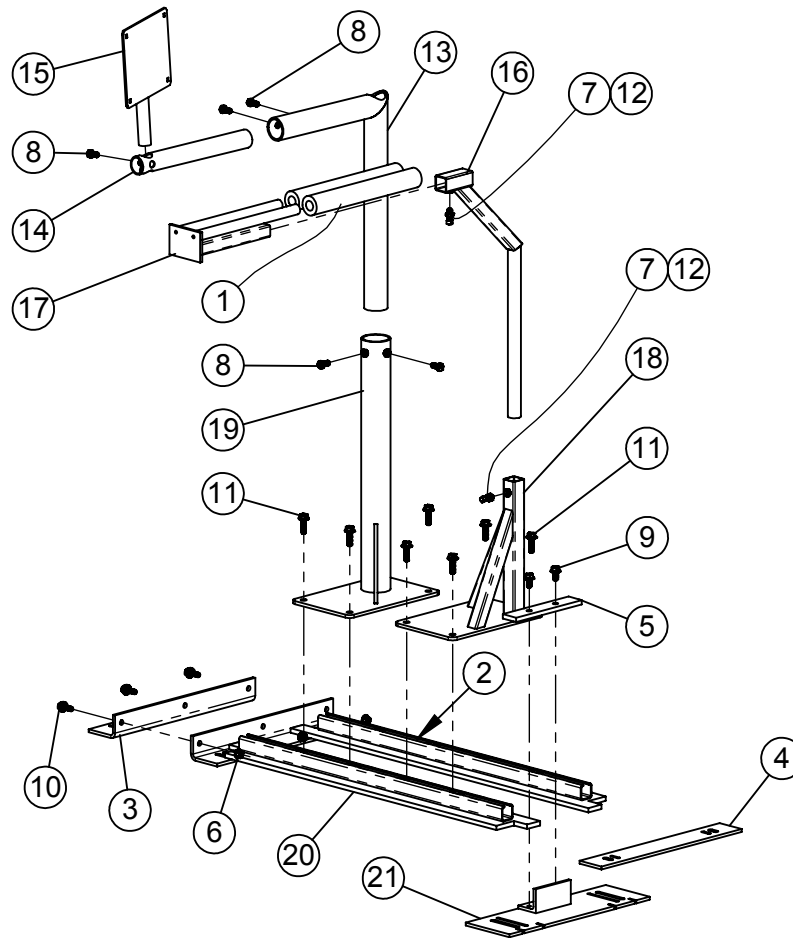
AN = AS NEEDED

# FORAGE EXPRESS LADDER ASSY #950020



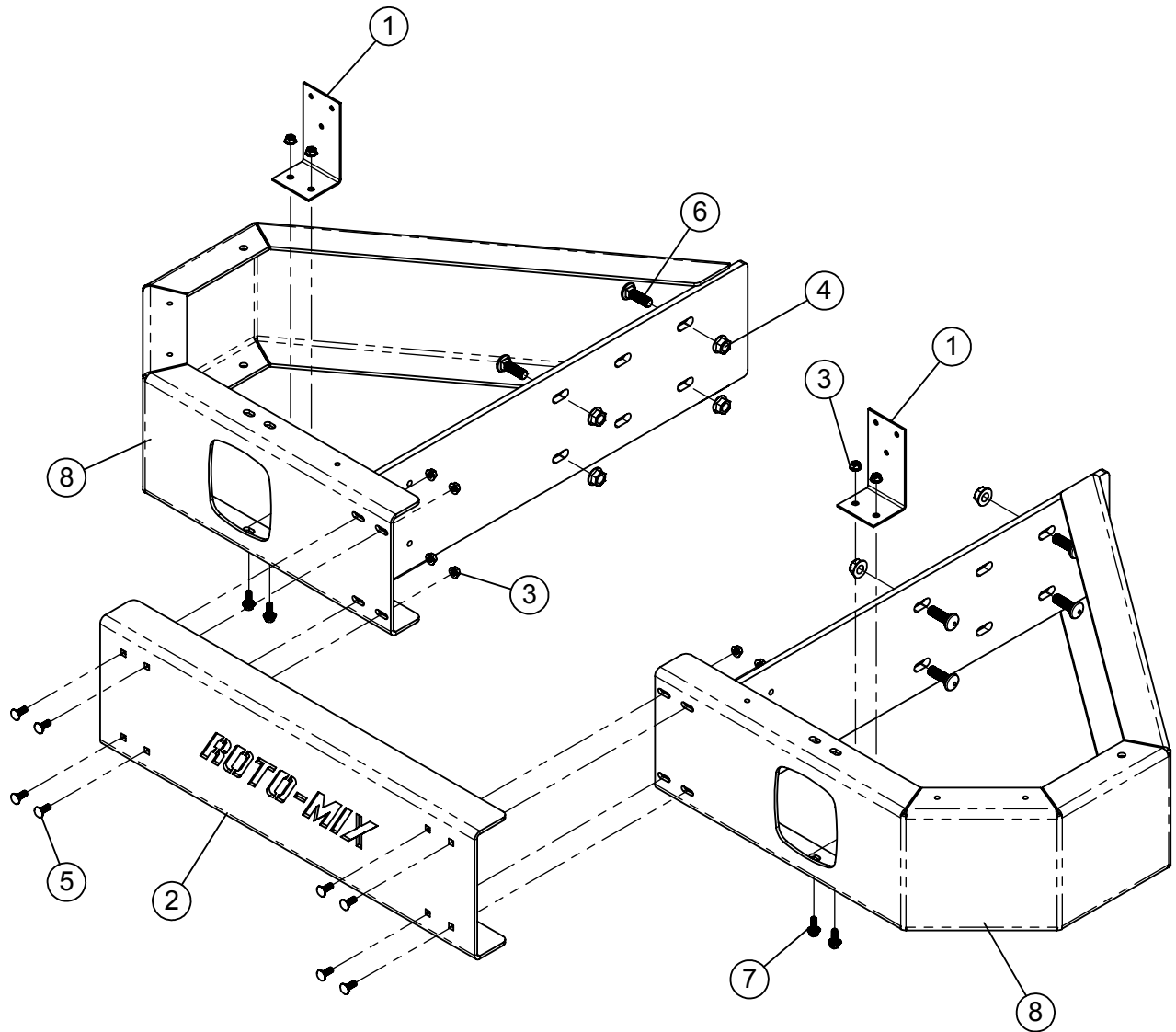
ITEM #	PART #	DESCRIPTION	QTY.
1	150389	LADDER MOUNT ANGLE 5"	2
2	150390	LADDER MOUNT BRACKET 6 7/8"	2
3	190979	LADDER, FORMED 7 RUNG	1
4	400114	HEX NUT, 1/2"-13 SERRATED FLANGE #5	4
5	400208	HEX NUT 1/2"-13 #5 PLTD	4
6	402008	SPRING LOCK WASHER 1/2" PLTD	4
7	402408	WASHER, FLAT 1/2" MED PLTD	4
8	405702	HHCS 1/2"-13 x 1-1/4" #5 PLTD	4
9	407101	CHCS 1/2"-13 x 1-1/4" #5 PLTD	4

# 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

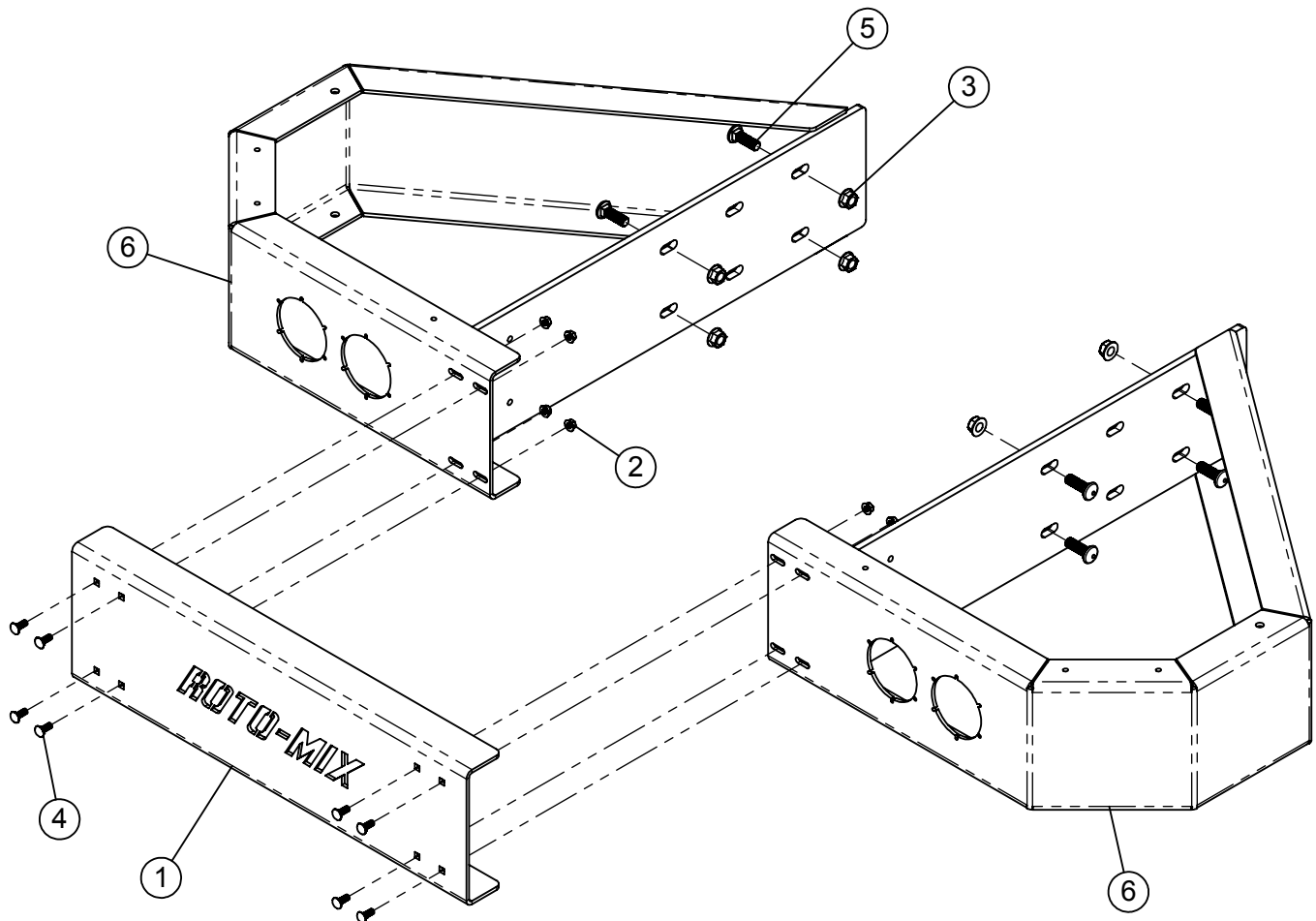
# REAR BUMPER, 10", RECT. LIGHT HOLES #780948



ITEM #	PART #	DESCRIPTION	QTY.
1	185600	TAIL LIGHT BRKT	2
2	192219	PLATE, FLR 10" RR BMPR ROTO-MIX	1
3	400107	HEX NUT, 3/8"-16 SERRATED FLANGE #5	12
4	400115	FLANGE NUT, 5/8-11 SERRATED	8
5	407040	CHCS 3/8"-16 x 1" #5 PLTD	8
6	407121	CHCS 5/8"-11 x 2" #5 PLTD	8
7	407901	HHCS 3/8"-16 X 1" SERRATED #5 PLTD	4
8	873286	BMPR, 10" REAR HALF, RECT. W.A.	2

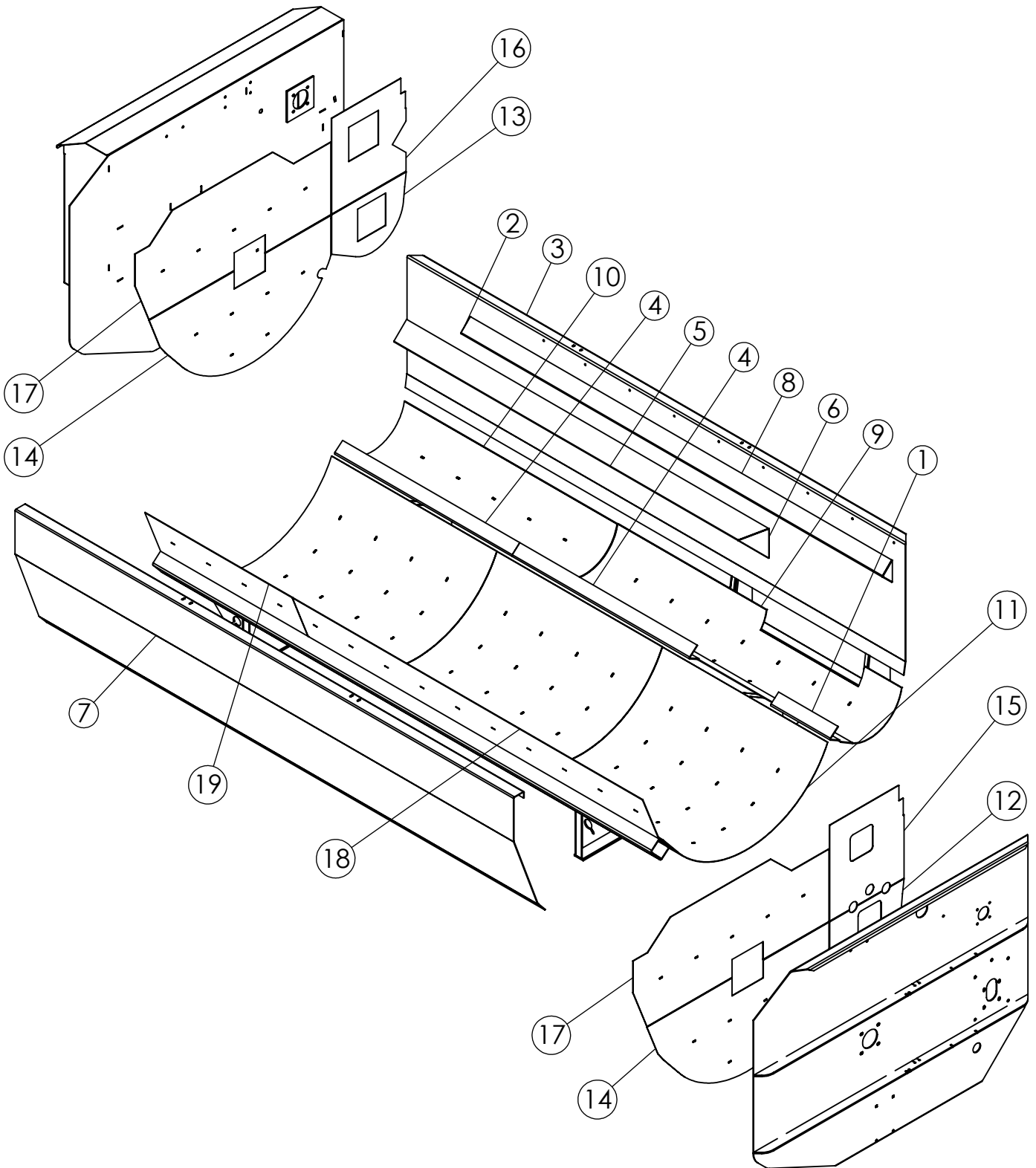


# REAR BUMPER, 10", ROUND LIGHT HOLES #780949



ITEM #	PART #	DESCRIPTION	QTY.
1	192219	PLATE, FLR 10" RR BMPR ROTO-MIX	1
2	400107	HEX NUT, 3/8"-16 SERRATED FLANGE #5	8
3	400115	FLANGE NUT, 5/8"-11 SERRATED	8
4	407040	CHCS 3/8"-16 x 1" #5 PLTD	8
5	407121	CHCS 5/8"-11 x 2" #5 PLTD	8
6	873287	BMPR, 10" RR HALF RND HOLES W.A.	2

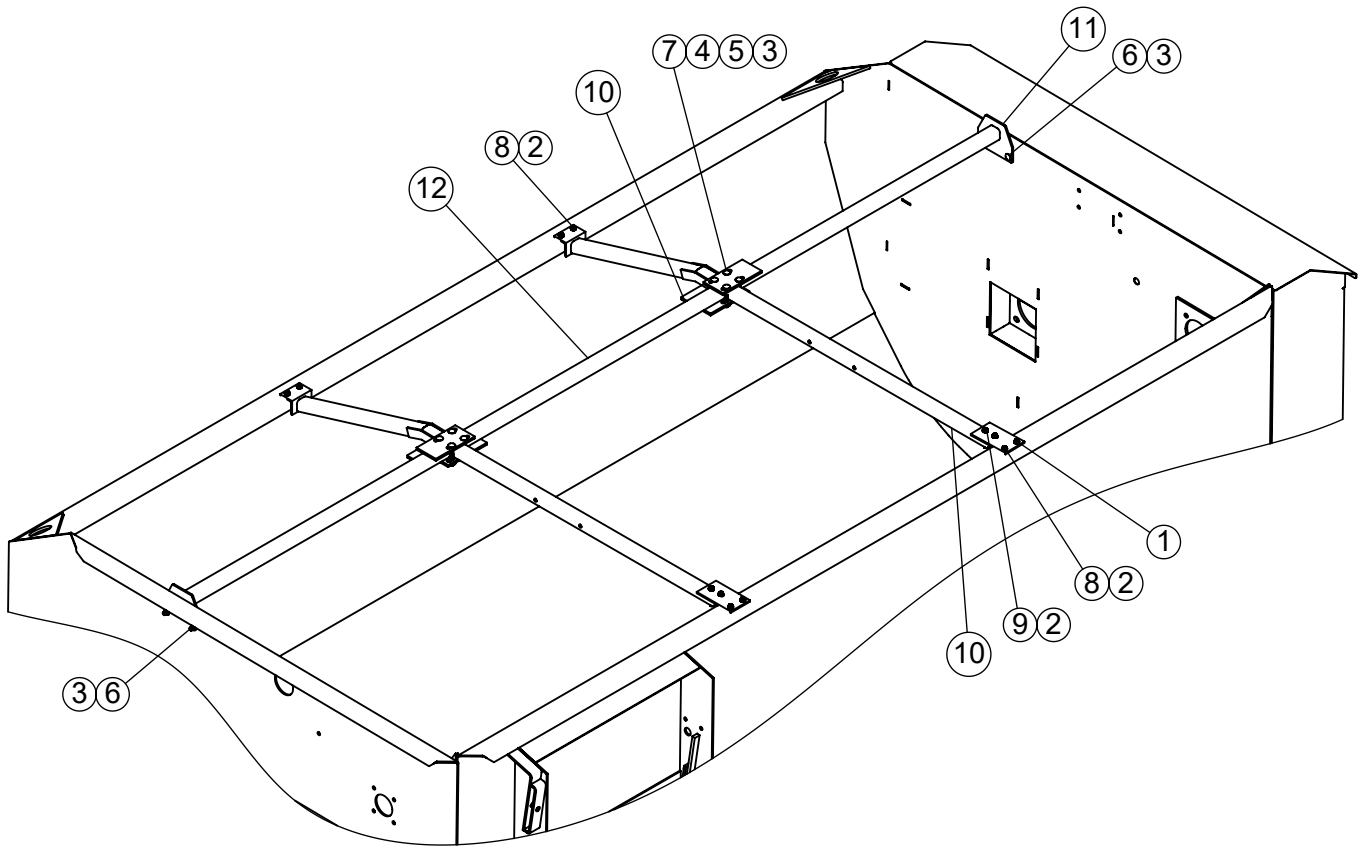
# 354-12 SHELL REPAIR PARTS



## 354-12 SHELL REPAIR PARTS

ITEM#	PART#	DESCRIPTION	QTY.
1	150421	HAY ANGLE 7" x 20"	1
2	150996	GUSSET END CAP 4 1/2" x 4 1/2"	2
3	150746	354 LEFT SIDE SHEET	1
4	150410	HAY ANGLE 7" x 47 3/4"	2
5	151116	INSIDE ANGLE 12" x 98"	1
6	151115	INSIDE ANGLE END CAP	1
7	150747	354 RIGHT SIDE SHEET	1
8	151183	UPPER HAY ANGLE 9" x 118"	1
9	186109-C	LINER, 354/414 AUGER 26" x 95 5/8" 10-GA STAINLESS	1
	186109-D	LINER, 354/414 AUGER 26" x 95 5/8" 7-GA MILD STEEL	1
10	186096-C	LINER, 354 AUGER 26" x 47 5/8" 10-GA STAINLESS	1
	186096-D	LINER, 354 AUGER 26" x 47 5/8" 7-GA MILD STEEL	1
11	186094-C	LINER, 354 TUB 48" X 68-1/2" 10-GA STAINLESS	3
	186094-D	LINER, 354 TUB 48" X 68-1/2" 7-GA MILD STEEL	3
12	186158-C	LINER, 354/414 AUG FRONT END 10-GA STAINLESS	1
	186158-D	LINER, 354/414 AUG FRONT END 7-GA MILD STEEL	1
13	186159-C	LINER, 354/414 AUG REAR 10-GA STAINLESS	1
	186159-D	LINER, 354/414 AUG REAR 7-GA MILD STEEL	1
14	186160-C	LINER, 414 TUB FRT 55-7/8" X 68-1/2" 10-GA STAINLESS	2
	186160-D	LINER, 414 TUB FRT 55-7/8" X 68-1/2" 7-GA MILD STEEL	1
15	186161-C	LINER, 354/414 REAR UPPER AUGER 10-GA STAINLESS	1
	186161-D	LINER, 354/414 REAR UPPER AUGER 7-GA MILD STEEL	1
16	186162-C	LINER, 354/414 AUGER UPPER REAR 10-GA STAINLESS	1
	186162-D	LINER, 354/414 AUGER UPPER REAR 7-GA MILD STEEL	1
17	186163-C	LINER, 354/414 TUB UPPER END 10-GA STAINLESS	2
	186163-D	LINER, 354/414 TUB UPPER END 7-GA MILD STEEL	2
18	186363-C	LINER, 354 SIDE 118" 10-GA STAINLESS	1
19	186200-C	LINER, 354 SIDE 25" 10-GA STAINLESS	1

## 354-12 CROSS BAR ASSEMBLY



ITEM#	PART#	DESCRIPTION	QTY.
1	150141	354 CROSS BAR PLATE	2
2	400107	HEX NUT, 3/8"-16 SERRATED FLANGE #5	12
3	400908	HEX CROWN LOCNUT 1/2"-13 #9	12
4	402120	INT/EXT STAR LOCKWASHER 1/2" PLTD	1
5	402408	WASHER, FLAT 1/2" MED PLTD	8
6	407101	CHCS 1/2"-13 x 1-1/4" #5 PLTD	4
7	407109	CHCS 1/2"-13 X 3-1/2" #5 PLTD	8
8	407901	HHCS 3/8"-16 X 1" SERRATED #5 PLTD	10
9	407906	HHCS, 3/8"-16 x 2" SERRATED #5 PLTD	2
10	850300	354/414 CROSS BAR WA	2
11	873170	354 HAY SHEAR TUBE WA END	2
12	873171	354 HAY SHEAR TUBE WA CTR	1