



1105H - 1355H - 1505H TRUCK VERTICAL FEED MIXER



OPERATION AND PARTS MANUAL

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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.

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

⚠ WARNING

Some covers and guards have been removed for illustrative/photographic purposes only in this manual. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.

The Guarantee appears in the front of this book along with the Registration and Inspection Certificate.

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

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

You are urged to study this manual and follow the instructions carefully. Your efforts will be repaid in better operation and service as well as a savings in time and repair expense. Failure to read 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.**

- | | | |
|------------------------------|-----------------------------|----------------------------------|
| - Improper operation | - Unauthorized repairs | - The use of PTO Shaft Adaptors |
| - Natural calamities | - Use of Non ROTO-MIX parts | - Usage contrary to the intended |
| - Unauthorized modifications | - Neglected maintenance | purpose of the product |

Warranty continues on the next page.

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

- | | | |
|--------------|----------|-------------|
| - Lubricants | - Tires | - Chains |
| - Filters | - Augers | - Idlers |
| - 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 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

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/FEEDER 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 MIXER, 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. Maximum load is 33,500LB. Maximum load is determined by weight, not volume.
- D. Be sure all shields are in place before operation.
- E. 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.

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, if 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.



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 power and turn the truck off before removing shields for adjustment or service.



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.



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.





STAY CLEAR OF ROTATING DRIVELINES

Entanglement in rotating driveline can cause serious injury or death.

Keep 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 .



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)



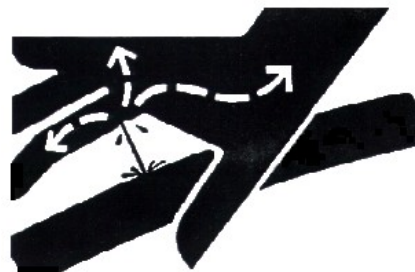
AVOID HIGH-PRESSURE FLUIDS

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

Avoid the hazard, relieve 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.





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.



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

440801





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 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.



DURING OPERATION:

Beware of bystanders, **particularly children!** Always look around to make sure that it is safe to start the engine 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 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 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 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, set the brakes, disengage 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:

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 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 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 vehicle in a closed building. The exhaust fumes may cause asphyxiation.

Before working on the mixer/feeder, stop the 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.



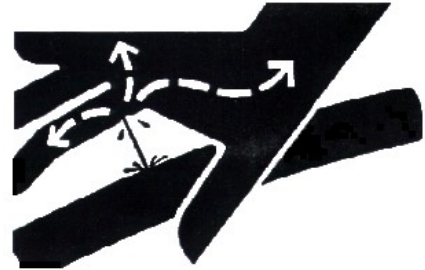
PERFORMING MAINTENANCE (CONT.):

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

Use extreme caution when making adjustments.

Never use your 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

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 vehicle.

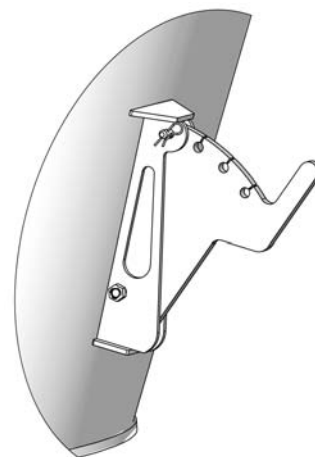
LOADING INSTRUCTIONS & PRECAUTIONS

- A. Visually inspect mixer before each load.
- B. Do not overload the mixer. Mixer capacity is determined by weight. An overloaded mixer will not mix correctly, and will pull harder, which could damage your unit. **Maximum weight is 22,500 LB for the 1105H model, 28,750 LB for the 1355H model and 32,500 for the 1505H model.**

- C. Load hay first with machine running: **TRUCK ENGINE RUNNING FROM 1,700 - 1,800 RPM.** Use a slower auger speed if you are using very tender, very fine stemmed hay that breaks apart very easily. Slower speeds allow for maximum staple length. Increase auger speed (TRUCK - using the hydrostat control handle) as the hay texture changes from very tender, to fine stemmed, to normal good quality hay, to very rough course hay.

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.

NOTE: engaging dogs and excessive amount will cause mix quality to deteriorate.



- D. 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.
- E. Load silage, green chop and/or other high moisture products.
- F. Load molasses, animal fat, and/or other liquid supplements last.
- G. Allow mixer three to four minutes to complete mixing after last ingredient is added. (**NOTE:** this time will vary, and could be longer under certain conditions.)
- H. View mixing operation only from observation platform of mixer. Never allow more than two people on platform at one time.
- I. For best results, off load mixed feed at as high a RPM as possible, and with the door as open as possible.

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.

LUBRICATION

DISENGAGE & SHUT OFF POWER BEFORE LUBRICATING THE MACHINE.

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

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

IT IS RECOMMENDED THAT ALL TRUCK HYDRAULIC RESERVOIRS (except the gearbox reservoir) USE (CITGO TRANSGARD TRACTOR 10W HYDRAULIC FLUID OR EQUIVALENT) .

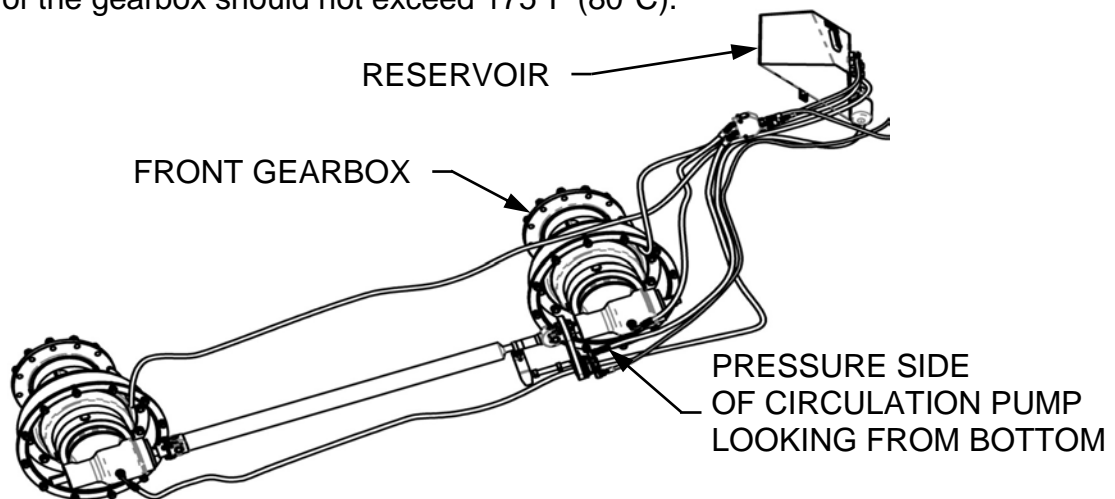
All reservoirs (except the gearbox reservoir) should be changed every 2000 hours or every year, whichever comes first. Approximate volume of oil is 32 gallon per reservoir. All filters should be changed the first 100 hours then every 1000 hours or with every fluid change. 10 micron filter elements are recommended. The reservoir should be checked daily for proper fluid level. Visually check daily for any fluid leakage.

GEARBOXES: After the first 100 hours of operation, drain initial oil, preferably when box is warm. Flush out the gear case with an approved non-flammable, non toxic solvent and refill with oil. Thereafter oil should be changed every 2000 hours or 12 months, whichever comes first. If machine usage is severe or more than 10 loads per day, it is advisable to change the oil every 1000 hours or 6 months. Inspect and wash oil reservoir breather cap as needed. Air dry before reinstalling. Fill each gearbox with approximately 13 gallon of **MOBIL DELVAC SYNTHETIC GEAR OIL 75W-90.**

PROCEDURE FOR FILLING GEARBOXES: Remove pressure side oil line from circulation pump and attach to oil supply pump. Pressure oil in gear box until oil starts to show in bottom of sight gauge on oil reservoir. Reconnect oil line to circulation pump. Fill reservoir to center of sight gauge, run unit and add oil up to center of sight gauge if needed.. Check daily, oil level must always be visible in sight gauge. **Note: Do not fill gearbox through oil reservoir after draining the gearbox and refilling, use procedure described above.** After the gearboxes are full extra oil can be added through the reservoir.

RECOMMENDATION: It is advisable to check the oil level of gearboxes at least once a month. If more than 10% of the total oil capacity has to be added, check for oil leaks.

GEARBOX TEMPERATURES: During normal running conditions, the temperature of the outer casing of the gearbox should not exceed 175°F (80°C).



LUBRICATION CHART

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

ITEM	LUBRICATION	INTERVAL
Conveyor Chain	Light Weight Oil	Brush or spray on lightly every 40 hours of operation
Conveyor Bearings	Good Quality Grease	One pump every 8 hours of operation
Gearbox	Synthetic Gear Lube 75W-90	Every 2000 hours or 12 months
PTO (Slip Shaft)	Good Quality Grease	Every 10 hours IMPORTANT: At each lubrication make sure the slip shaft slides in and out freely, failure of the shaft to slide freely will result in drive train damage.
Truck Hydrostat Reservoir	Citgo Transgard Tractor 10W Hydraulic Fluid	2000 hours or every 12 months, whichever comes first
Gearbox Top Bearing	Good Quality Grease	Every 2000 hours or 12 months

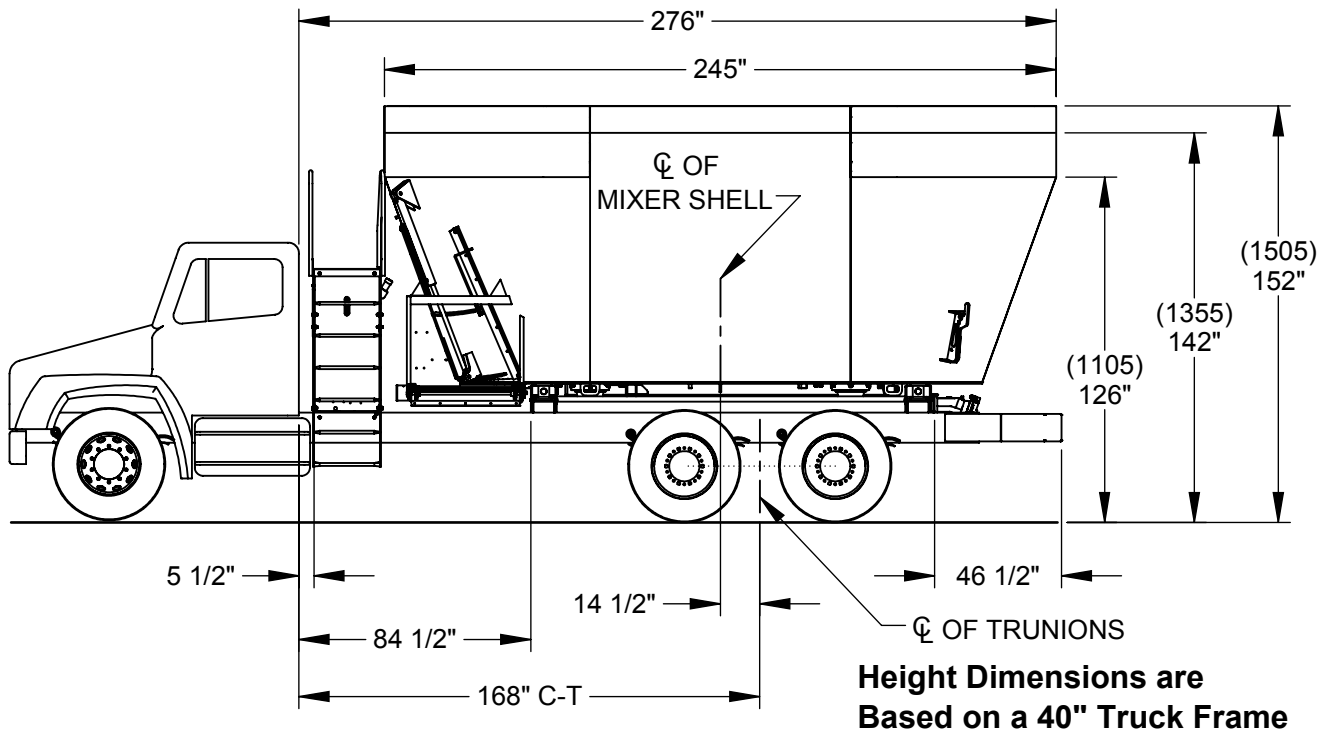
TROUBLE SHOOTING

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

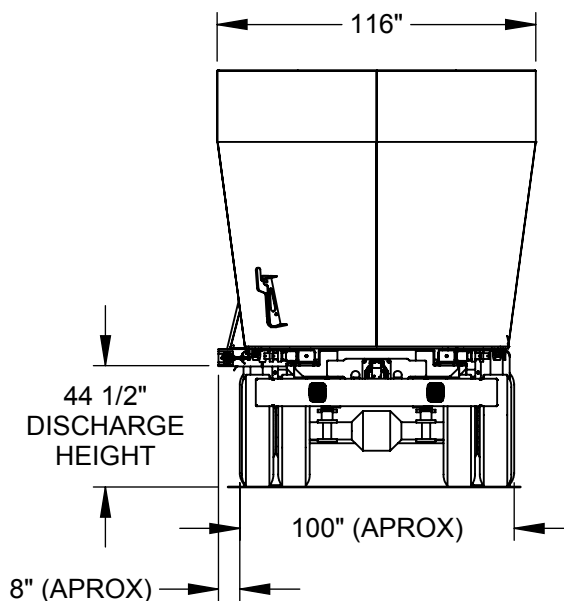
NOTE: THIS CHART DOES NOT COVER ALL PROBLEMS. CONTACT YOUR DEALERSHIP FOR FURTHER ASSISTANCE.

PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY
Machine Vibration	Universal Joints Are Out Of Alignment.	Check And Realign
	Worn Out Bearing.	Replace Bearing.
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 19.
	High concentration of long hay, not being torn apart.	Extend restrictor plates (dogs) further into tub as instructed on page 19.
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 19.
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 19.

1105H-1355H-1505H TRUCK DIMENSIONS



	1105H	1355H	1505H
Typical max load with hay ration @ 18 lbs per cu. ft. (kg)	16,200 lb. (7348)	20,700 lb. (9389)	23,400 lb. (10614)
Typical max load with heavier ration @ 25 lbs per cu. ft. (kg)	22,500 lb. (1025)	28,750 lb. (13040)	32,500 lb. (14741)
Mixing capacity* cu. ft. (m ³)	900 cu.ft.	1,150 cu.ft.	1,300 cu.ft.



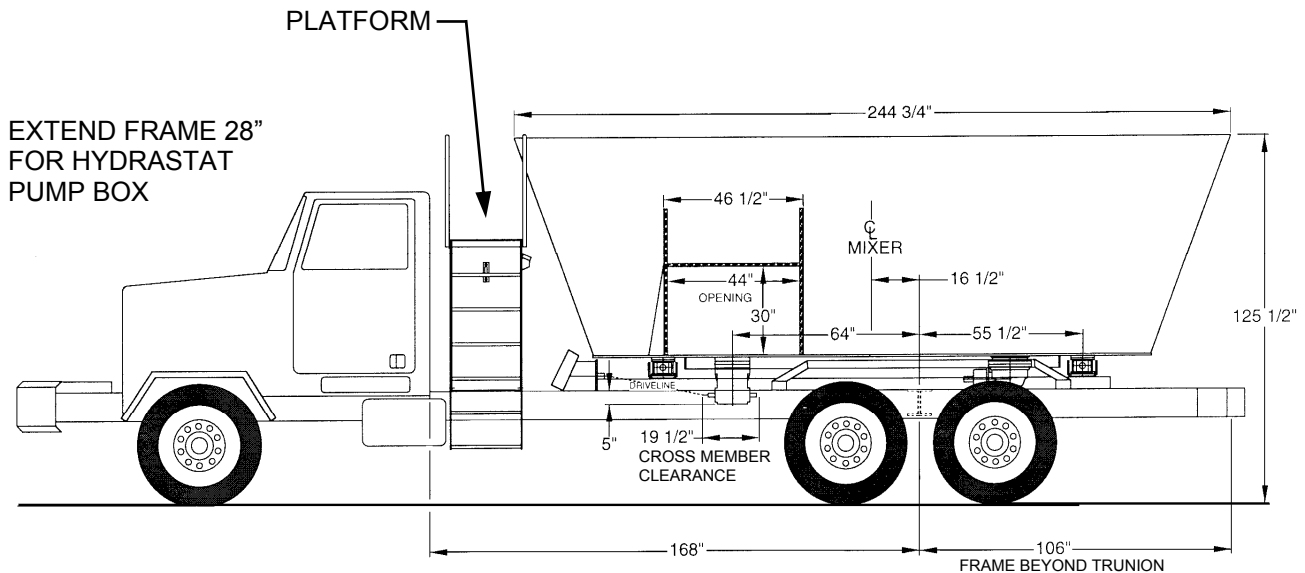
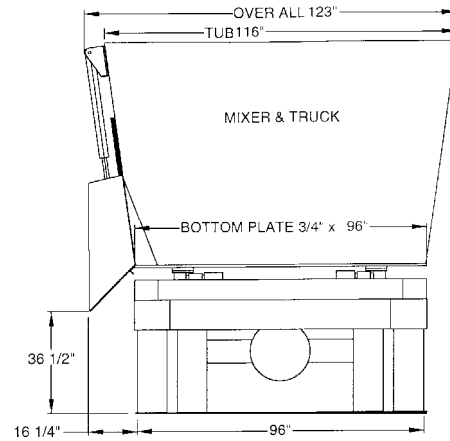
All Dimensions & Specifications are Approximate and Subject to Change Without Notice.

1105H TRUCK DIMENSIONS & SPECIFICATIONS

HEIGHT DIMENSIONS BASED
ON A 40" TRUCK FRAME

APPROXIMATE WEIGHT ON TRUCK - 15,500 LB.

MAXIMUM LOAD BY WEIGHT: 27,500 LBS



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

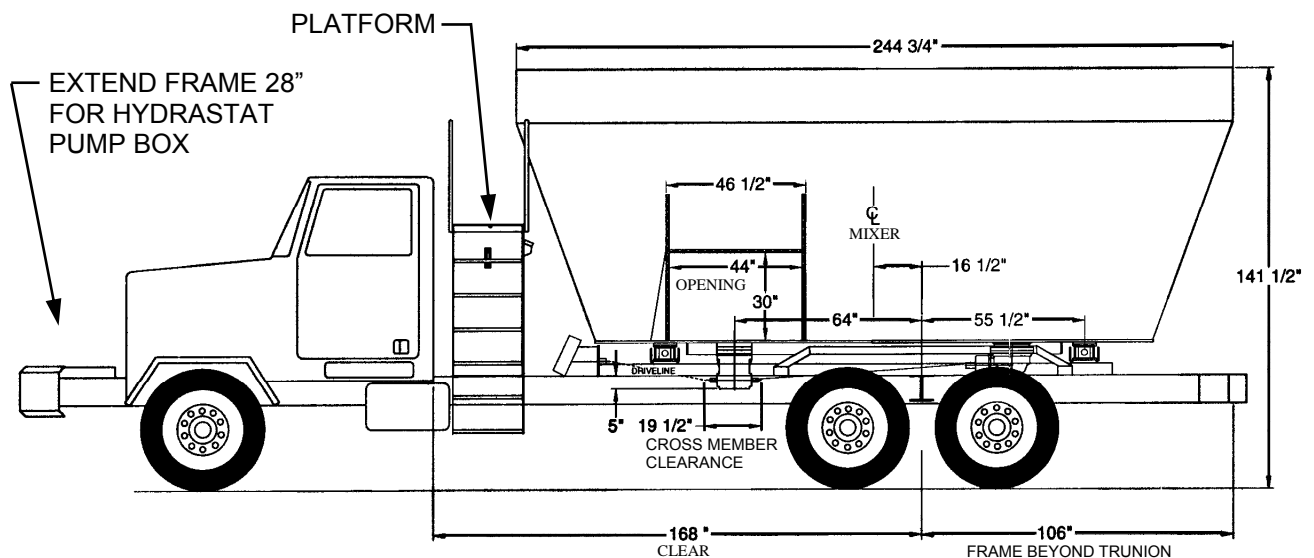
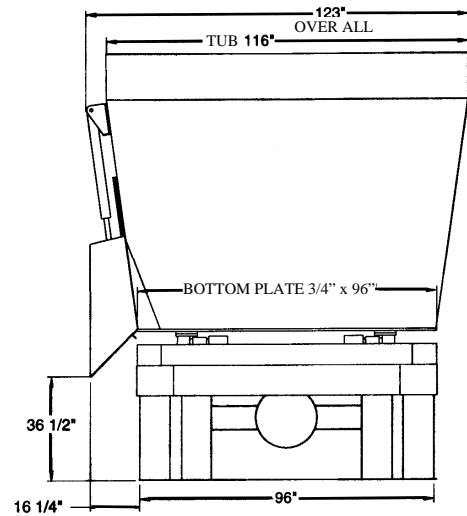
1355H TRUCK DIMENSIONS & SPECIFICATIONS

HEIGHT DIMENSIONS BASED
ON A 40" TRUCK FRAME

APPROXIMATE WEIGHT ON TRUCK - 16,000 LB.

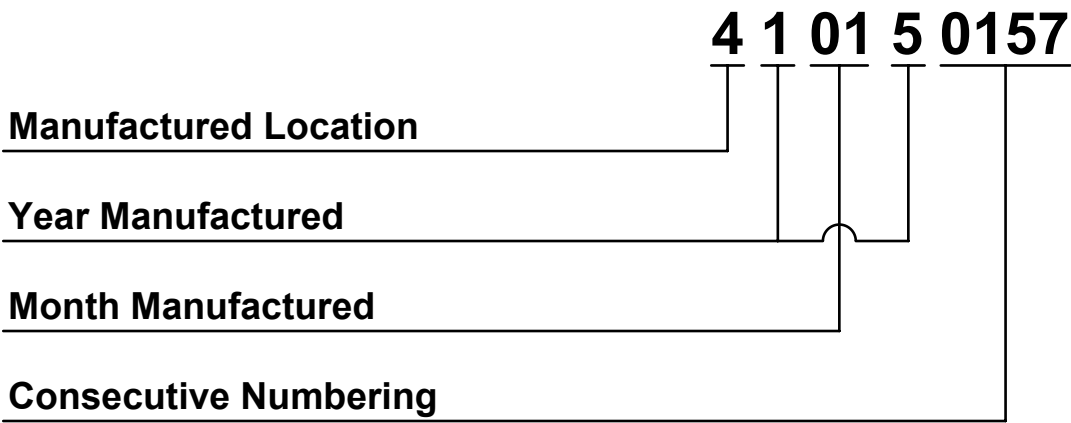
(Side Discharge)

MAXIMUM LOAD BY WEIGHT: 33,500 LBS



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

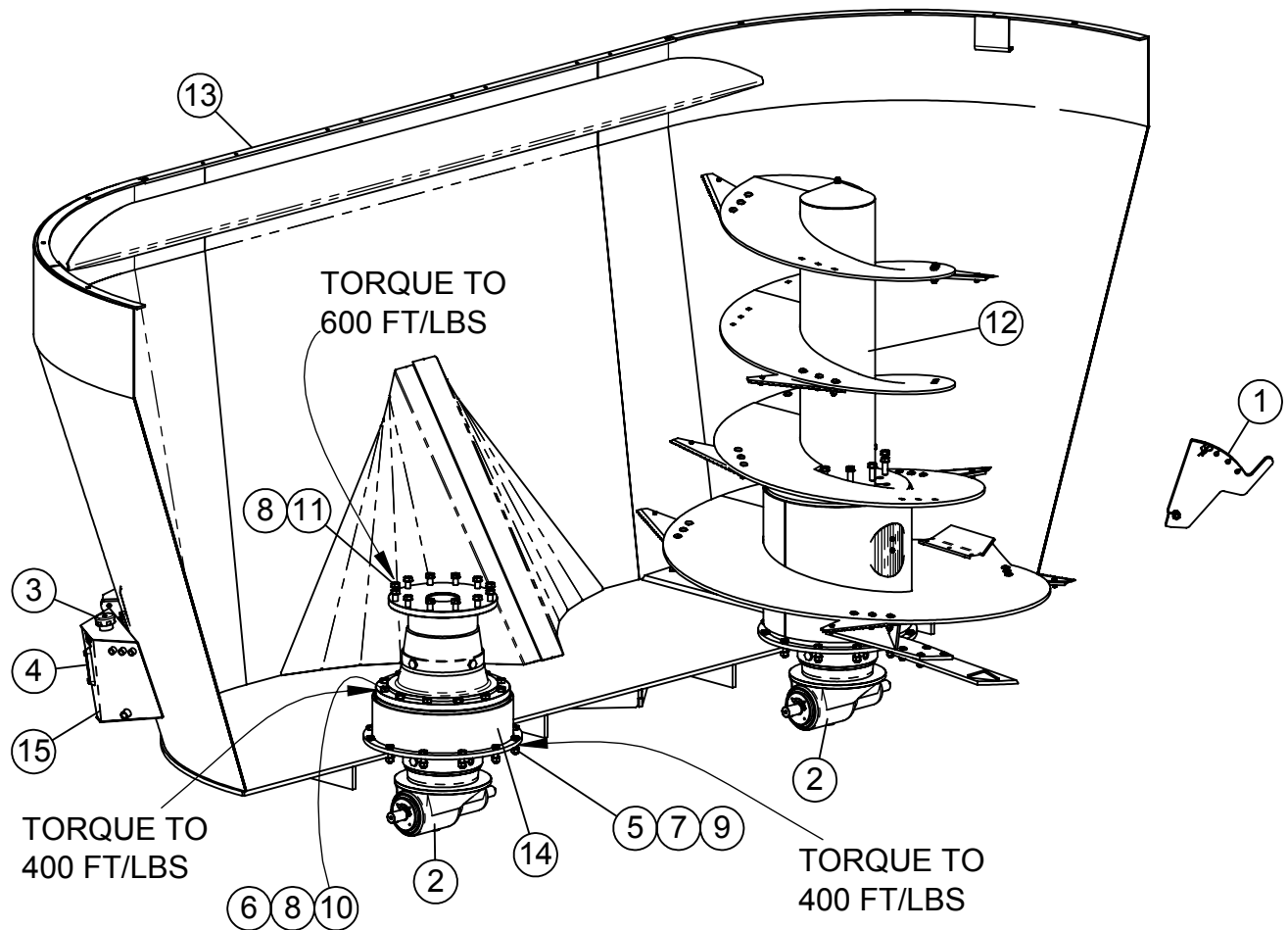
How to read a Roto-Mix Serial Number



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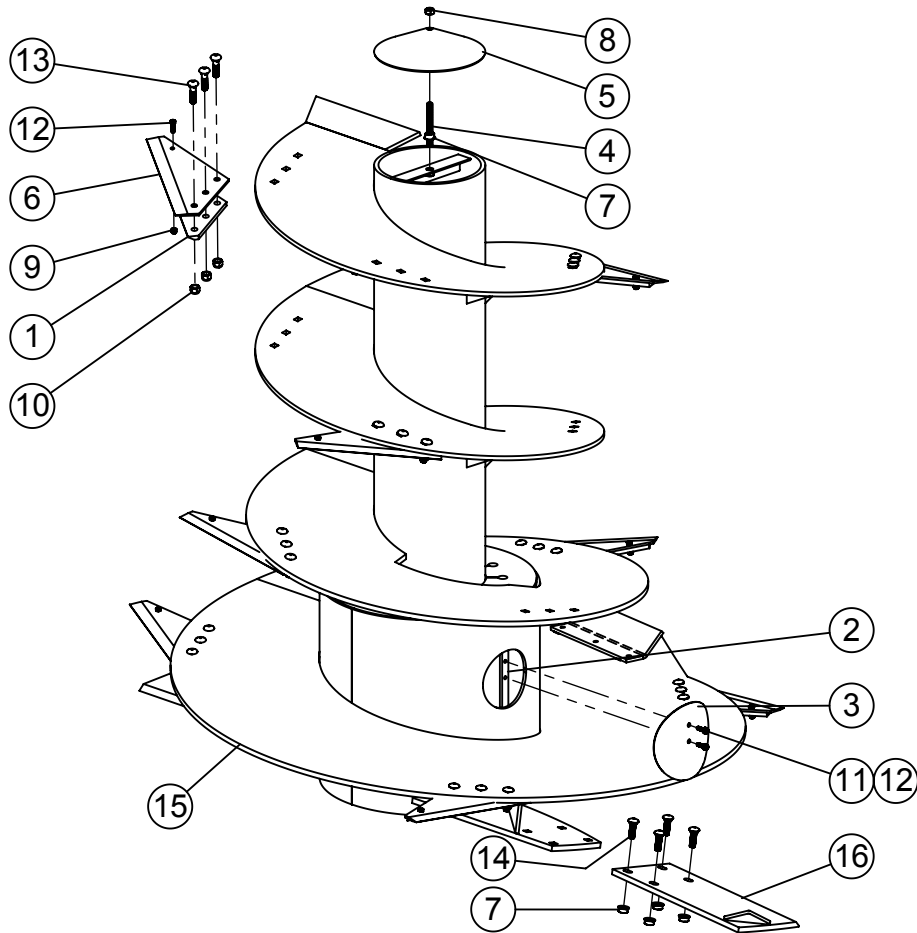
1105-1355-1505 TRUCK TUB ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY.
1	160118	VERTICAL KNIFE	1
2	344164	GEARBOX COMER PGA 3003/53.5/	2
3	362549	TANK BREATHER 8" DIP STICK	1
4	362555	SIGHT GAUGE 5"	1
5	400512	HEX NUT 3/4"-16 #8 PLTD	24
6	400514	HEX NUT 7/8"-14 #8	24
7	402112	LOCK WASHER, EXTERNAL STAR 3/4"	24
8	402114	EXTERNAL STAR LW 7/8"	48
9	406781	HHCS 3/4"-16 x 2 1/2" #8 PLTD	24
10	406792	HHCS 7/8"-14 x 3" #8 PLTD	24
11	407823	HHCS M22-1.5 x 60MM GR 10.9	24
12	760627	1355/1505 SINGLE FLIGHT AUGER ASM	2
	760629	1105 SINGLE FLIGHT AUGER ASM (used on 1105 only)	2
13	860321	1355 STA TUB WA NO DOORS	1
	860783	1505 STATIONARY TUB W.A.	1
	860468	1105 STATIONARY TUB W.A.	1
14	860474	COMER GEARBOX ADAPTER WA	2
15	860749	GEARBOX RESERVOIR WA, 5 GAL	1

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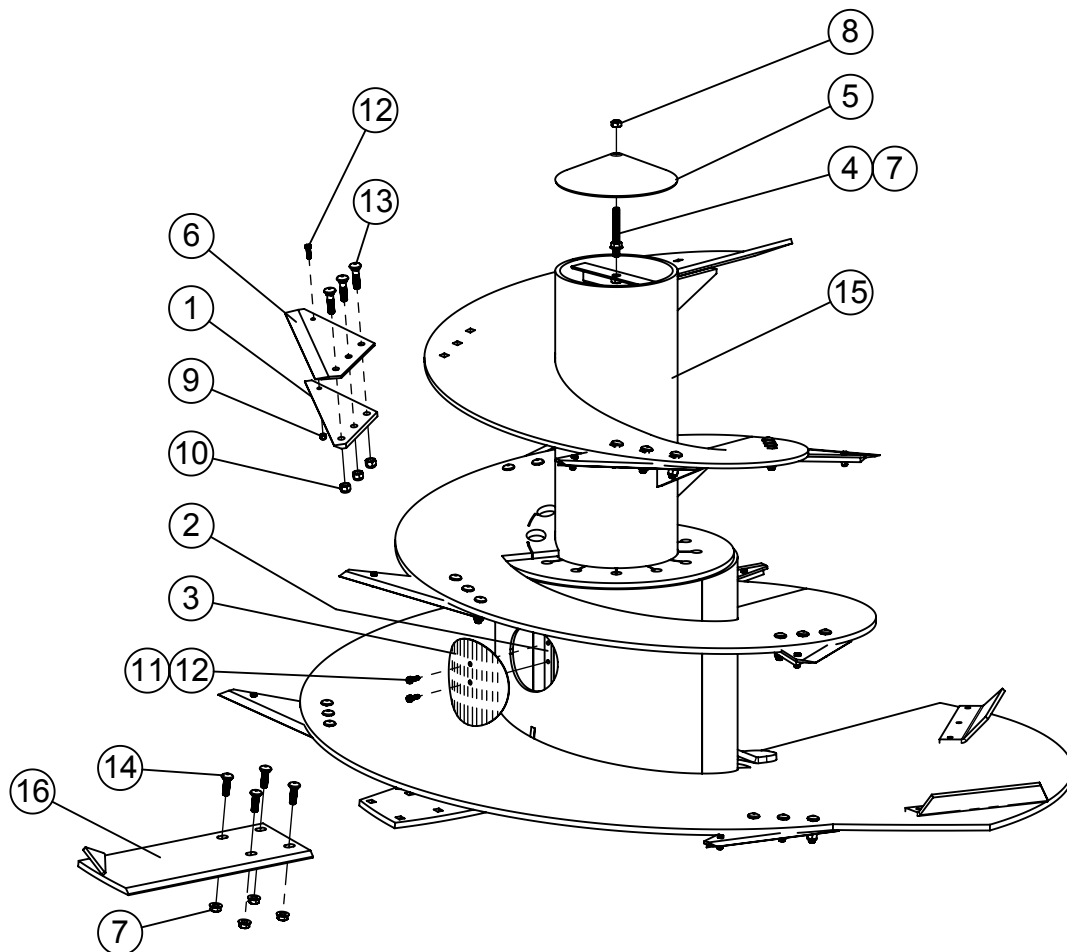
1355 & 1505 AUGER ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY.
1	160076	KNIFE BACKUP PLATE - LEFT HAND	AN
2	161290	AUGER COVER BOLT BAR 3/8 x 1 x 8	1
3	161298	AUGER ACCESS COVER - 7" OD	1
4	162399	ALL THREAD 5/8 x 5-1/4"	1
5	162489	AUGER TUBE CAP 12" PIPE 5/8" HOLE	1
6	385007	KNIFE BLADE 7 1/2" x 17 1/4"	AN
	385008	CARBIDE KNIFE BLADE 7-1/2" x 17-1/4"	AN
7	400115	FLANGE NUT, 5/8-11 SERRATED	5
8	400910	HEX CROWN LOCNUT 5/8"-11 #9 PLTD	1
9	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	AN
10	401110	HEX NYLOC NUT 5/8"-11 #5 Pltd	AN
11	402006	WASHER SPRING LOCK 3/8" MED PLTD	2
12	405654	HHCS 3/8"-16 x 1-1/4" #5 PLTD	AN
13	407122	CHCS 5/8"-11 x 2-1/2" #5 Pltd	AN
14	407130	CHCS 5/8"-11 x 2" #8 PLTD	4
15	860445	1355/1505 AUGER W/A (COMER GEARBOX) After Serial #800187502	1
	860326	1355/1505 AUGER WA (BREVINI GEARBOX) Before Serial #800487644	
16	860840	AUGER WING KICKER WA - 1355	1

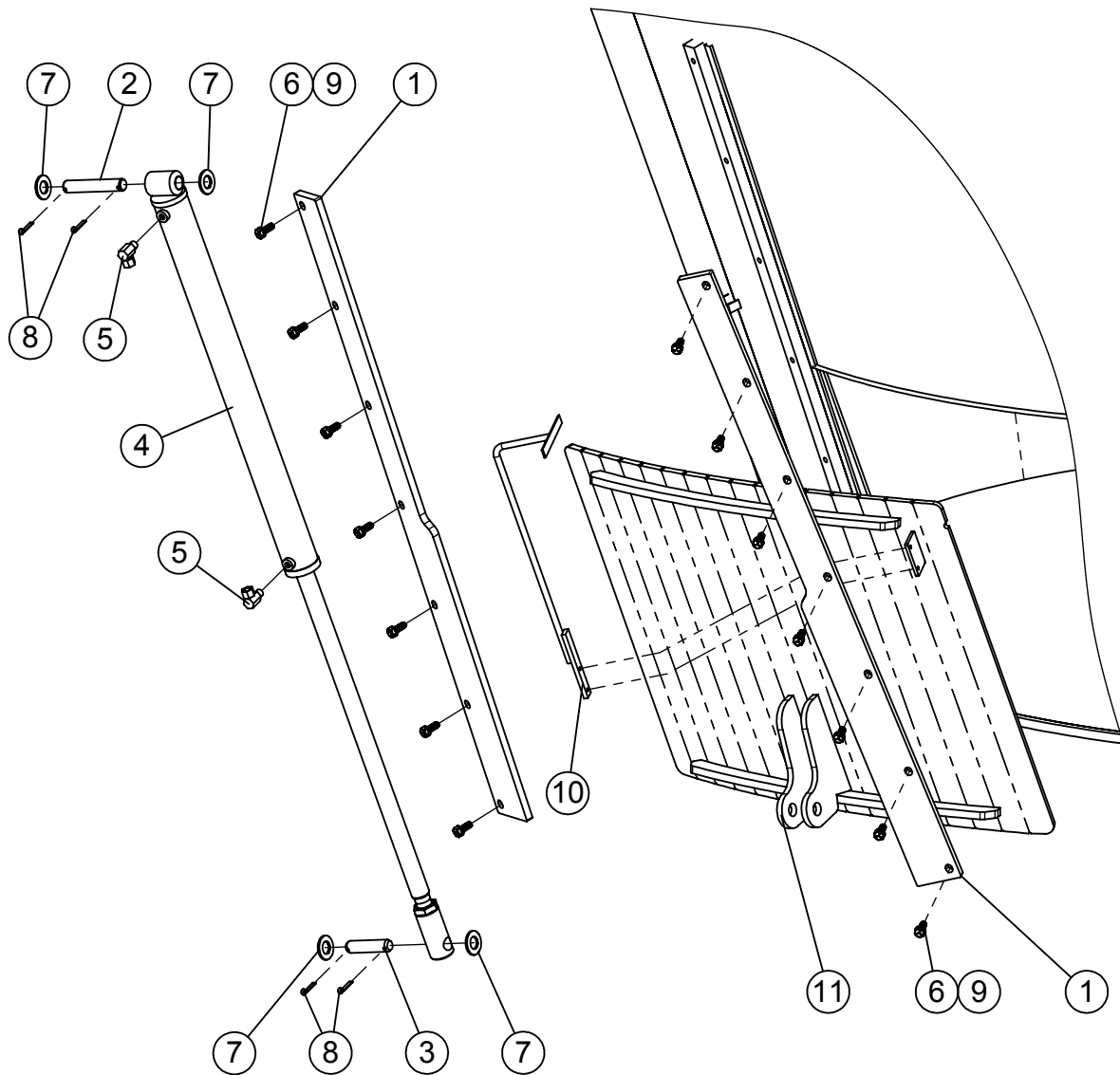
AN = AS NEEDED

1105 AUGER ASSEMBLY



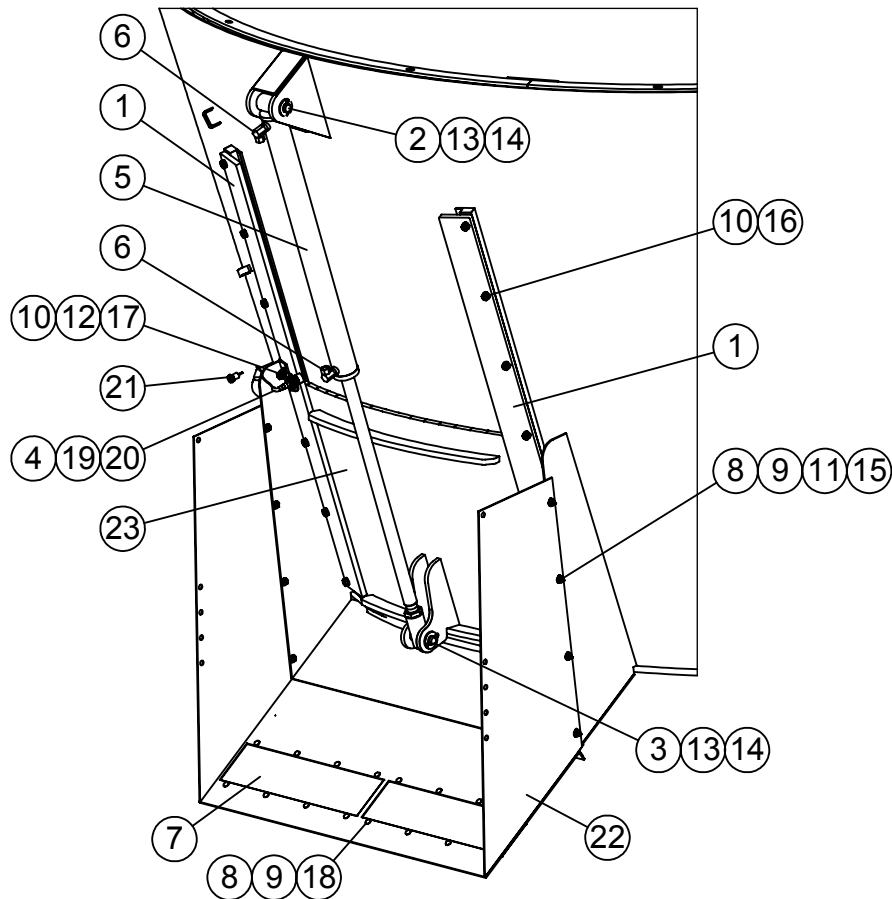
ITEM #	PART #	DESCRIPTION	QTY.
1	160076	KNIFE BACKUP PLATE - LEFT HAND	AN
2	161290	AUGER COVER BOLT BAR 3/8 x 1 x 8	1
3	161298	AUGER ACCESS COVER - 7" OD	1
4	162399	ALL THREAD 5/8 x 5-1/4"	1
5	162489	AUGER TUBE CAP 12" PIPE 5/8" HOLE	1
6	385007	KNIFE BLADE 7 1/2" x 17 1/4"	AN
	385008	CARBIDE KNIFE BLADE 7 1/2" x 17 1/4"	AN
7	400115	FLANGE NUT, 5/8-11 SERRATED	5
8	400910	HEX CROWN LOCNUT 5/8"-11 #9 PLTD	1
9	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	AN
10	401110	HEX NYLOC NUT 5/8"-11 #5 Pltd	AN
11	402006	WASHER SPRING LOCK 3/8" MED PLTD	2
12	405654	HHCS 3/8"-16 x 1-1/4" #5 PLTD	AN
13	407122	CHCS 5/8"-11 x 2-1/2" #5 Pltd	AN
14	407130	CHCS 5/8"-11 x 2" #8 PLTD	4
15	860468	1105 AUGER W/A (COMER GEARBOX) After Serial #800187502	1
	860274	1105 AUGER WA (BREVINI GEARBOX) Before Serial #800487644	1
16	860840	AUGER WING KICKER WA - 1355	1

FRONT CORNER DISCHARGE DOOR ASSEMBLY



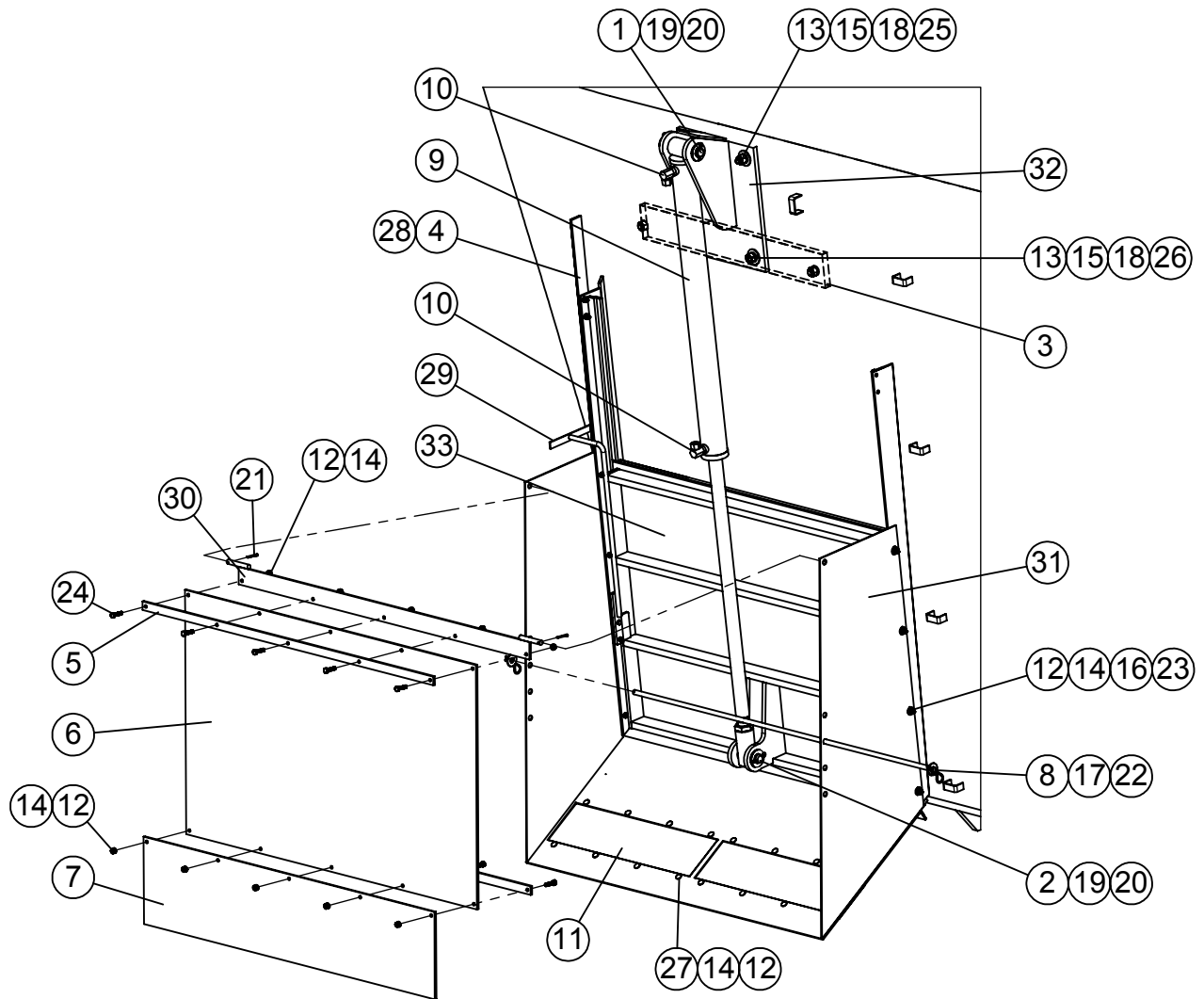
ITEM #	PART #	DESCRIPTION	QTY.
1	160115	DOOR GUIDE BAR	2
2	160619	CYLINDER PIN 5 7/8"	1
3	160620	CYLINDER PIN 1" x 4 1/4"	1
4	364079	CYL. 2-1/2" BORE x 1-1/2" ROD x 30-1/4" STROKE	1
5	368007	HYD ADAPTER 3/8"MP x 3/8"FPX 90° .109 orifice	2
6	402008	SPRING LOCK WASHER 1/2" PLTD	14
7	402516	WASHER FLAT, 1" SAE PLTD	4
8	404000	COTTER PIN 1/4" x 1 1/2"	4
9	405702	HHCS 1/2"-13 x 1-1/4" #5 PLTD	14
10	860218	DOOR MARKER W.A.	1
11	860452	1105/1355/1505 FRT CORNER DOOR WA	1

1105-1355-1505 REAR DOOR ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY.
1	160115	DOOR GUIDE BAR	2
2	160619	CYLINDER PIN 5 7/8"	1
3	160620	CYLINDER PIN 1" x 4 1/4"	1
4	161724	BRACKET, SWITCH 1105/1505 REAR DOOR	1
5	364079	CYL. 2-1/2" BORE x 1-1/2" ROD x 30-1/4" STROKE	1
6	368007	HYDRAULIC ADAPTER 3/8"MP x 3/8"FPX 90° .109 orifice	2
7	375005	ACRO PLATE MAGNET AM 2200,	2
8	400205	HEX NUT 5/16"-18 #5 PLTD	29
9	402005	WASHER 5/16", SPRING LOCK, MED PLTD	29
10	402008	SPRING LOCK WASHER 1/2" PLTD	14
11	402405	FLAT WASHER 5/16" MED PLTD	16
12	402508	FLAT WASHER, 1/2" ID x 1" OD	1
13	402516	WASHER FLAT, 1" SAE PLTD	4
14	404000	COTTER PIN 1/4" x 1 1/2"	4
15	405628	HHCS 5/16"-18 x 1" #5 PLTD	13
16	405702	HHCS 1/2"-13 x 1-1/4" #5 PLTD	13
17	405703	HHCS 1/2"-13 x 1-1/2" #5 PLTD	1
18	407021	CHCS 5/16"-18 x 1" #5 PLTD	16
19	452860	SENSOR, PROXIMITY (ALLIED 501-0722)	1
20	452861	SENSOR WIRE ADAPTER, RIGHT ANGLE	1
21	454116	LED LIGHT, RED ALLIED # 70082066	1
22	860294	MAG SKIRT BOTTOM W.A.	1
23	860453	1105 REAR DOOR WA	1

1105-1355-1505 SIDE DOOR ASSEMBLY

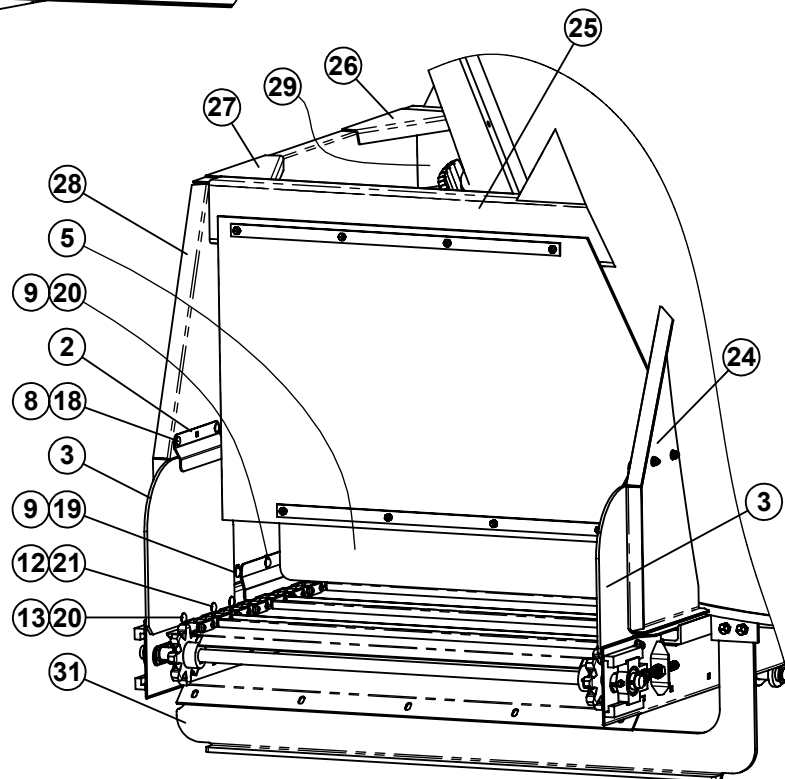
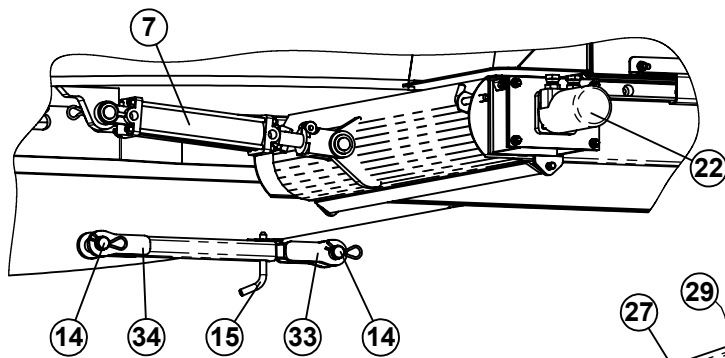


1105-1355-1505 SIDE DOOR ASSEMBLY

ITEM #	PART #	DESCRIPTION	QTY.
1	160619	CYLINDER PIN 5 7/8"	1
2	160620	CYLINDER PIN 1" x 4 1/4"	1
3	160710	SUPPORT BAR 29"	1
4	160759	DOOR MARKER PLATE 12"	1
5	160861	BELT HINGE CLAMP 45 1/2"	2
6	160862	BELT SKIRT 28" X 45 1/2"	1
7	160992	BELT DSCH PLT - 10" x 45 1/2"	1
8	161001	SKIRT ROD 1/2" DIA. x 47"	1
9	364079	CYL. 2-1/2" BORE x 1-1/2" ROD x 30-1/4" STROKE	1
10	368007	HYDRAULIC ADAPTER 3/8"MP x 3/8"FPX 90° .109 orifice	2
11	375005	ACRO PLATE MAGNET AM 2200,	2
12	400205	HEX NUT 5/16"-18 #5 PLTD	41
13	400210	HEX NUT 5/8"-11 #5 PLTD	6
14	402005	WASHER 5/16", SPRING LOCK, MED PLTD	41
15	402010	SPRING LOCK WASHER 5/8" PLTD	6
16	402405	FLAT WASHER 5/16" MED PLTD	8
17	402408	FLAT WASHER 1/2" MED PLTD	2
18	402410	FLAT WASHER 5/8" MED PLTD	4
19	402516	WASHER FLAT, 1" SAE PLTD	4
20	404000	COTTER PIN 1/4" x 1 1/2"	4
21	404003	COTTER PIN, 5/32" x 1-1/4" PLTD	2
22	404210	CLIPP PIN 5/32" x 2.94 # 10	2
23	405628	HHCS 5/16"-18 x 1" #5 PLTD	15
24	405629	HHCS 5/16"-18 x 1-1/4" #5 PLTD	10
25	405754	HHCS, 5/8"-11 x 2" #5 PLTD	4
26	405756	HHCS, 5/8"-11 x 2-1/2" #5 PLTD	2
27	407021	CHCS 5/16"-18 x 1" #5 PLTD	16
28	440912	DECAL, DOOR HEIGHT 1-5/16" x 35-1/2"	1
29	860218	DOOR MARKER W.A.	1
30	860258	BELT HINGE W.A.	1
31	860294	MAG SKIRT BOTTOM W.A.	1
32	860823	CYLINDER BRACKET W.A.	1
33	860828	SIDE DISCHARGE DOOR WA	1

This diagram shows an exploded view of a mechanical assembly, likely a door or panel mechanism. The components are labeled with circled numbers:

- 1**: Main frame or support structure.
- 2**: Small pin or fastener.
- 3**: Curved guide or support plate.
- 4**: Small pin or fastener.
- 5**: Small pin or fastener.
- 8**: Small pin or fastener.
- 9**: Small pin or fastener.
- 11**: Small pin or fastener.
- 12**: Small pin or fastener.
- 13**: Small pin or fastener.
- 16**: Small pin or fastener.
- 18**: Small pin or fastener.
- 20**: Small pin or fastener.
- 22**: Small pin or fastener.
- 23**: Small pin or fastener.
- 24**: Small pin or fastener.
- 25**: Small pin or fastener.
- 26**: Small pin or fastener.
- 27**: Small pin or fastener.
- 28**: Small pin or fastener.
- 30**: Small pin or fastener.
- 31**: Small pin or fastener.
- 32**: Small pin or fastener.

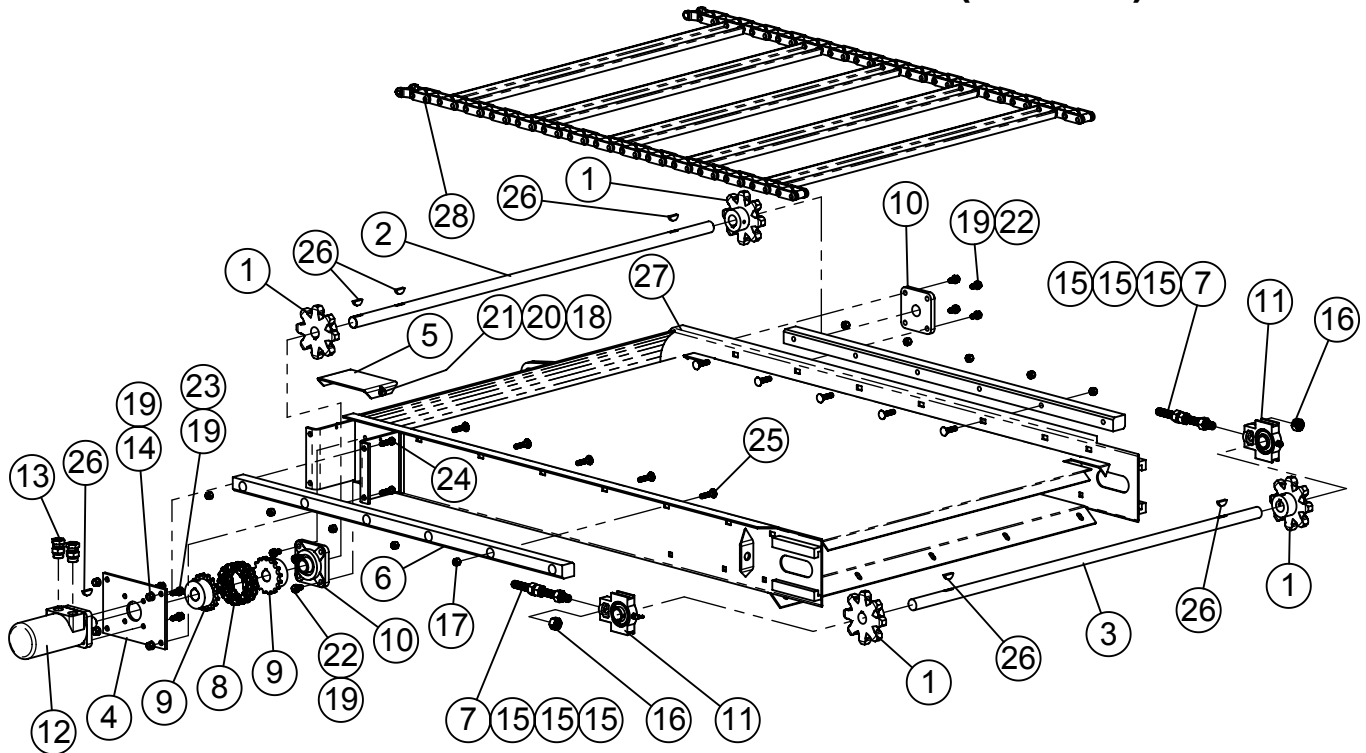


VERTICAL MIXER FRONT CORNER CONVEYOR 60" 660344 & 660349

ITEM #	PART #	DESCRIPTION	QTY.
1	161509	STRAP	2
2	162069	OFFSET BRACKET	2
3	162614	1105/1355H CONVEYOR WIND SHIELD	2
4	162619	1105/1355H CONV DEFLECTOR BELT	1
5	162620	DEFLECTOR BOTTOM PLATE	1
6	162630	CONVEYOR OFFSET BRACKET	1
7	364055	HYD CYL 2" x 8" 20-1/4" CL	1
8	400106	HEX NUT, 5/16"-18 SER. FLANGE #5 PLTD	6
9	400107	HEX NUT, 3/8"-16 SERRATED FLANGE #5	6
10	400114	HEX NUT, 1/2"-13 SERRATED FLANGE #5	2
11	401105	HEX NUT, 5/16"-18 NYLOC #5 PLTD	8
12	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	6
13	402405	FLAT WASHER MED PLTD 5/16"	2
* 14	404211	PIN 1" x 2-3/4", CYLINDER PIN	2
* 15	404214	PIN, 1/2" x 3", RECEIVER HITCH	1
16	405628	HHCS 5/16"-18 x 1" #5 PLTD	8
17	405701	HHCS 1/2"-13 x 1" #5 PLTD	2
18	407020	CHCS 5/16"-18 x 3/4" #5 PLTD	6
19	407039	CHCS 3/8"-16 x 3/4" #5 PLTD	3
20	407040	CHCS 3/8"-16 x 1" #5 PLTD	5
21	407042	CHCS 3/8"-16 x 1-1/2" #5 PLTD	4
22	660041	HYD MOTOR KIT	1
23	760645	40 x 60 CHAIN CONV ASM	1
24	162616	1105/1355H REAR CONVEY SKIRT	1
25	160587	1355 CONV. FRT. BRACE	1
26	160132	CONVEYOR TOP GUSSET	1
27	160469	CONV. LEFT GUSSET	1
28	162615	1105/1355H CONVEYOR SIDE FRONT	1
29	161004	1105 CONVEYOR BACK SIDE 18 1/4" x 33"	1
30	161003	1105 CONVEY BACK BRACE - 8 5/8"	1
31	163102	CONVEYER SUPPORT	1
32	162613	CONV GUIDE - 1105/1355	1
* 33	860758	SLIDE LIMIT BAR WA	1
* 34	860759	SLIDE LIMITER ARM WA	1

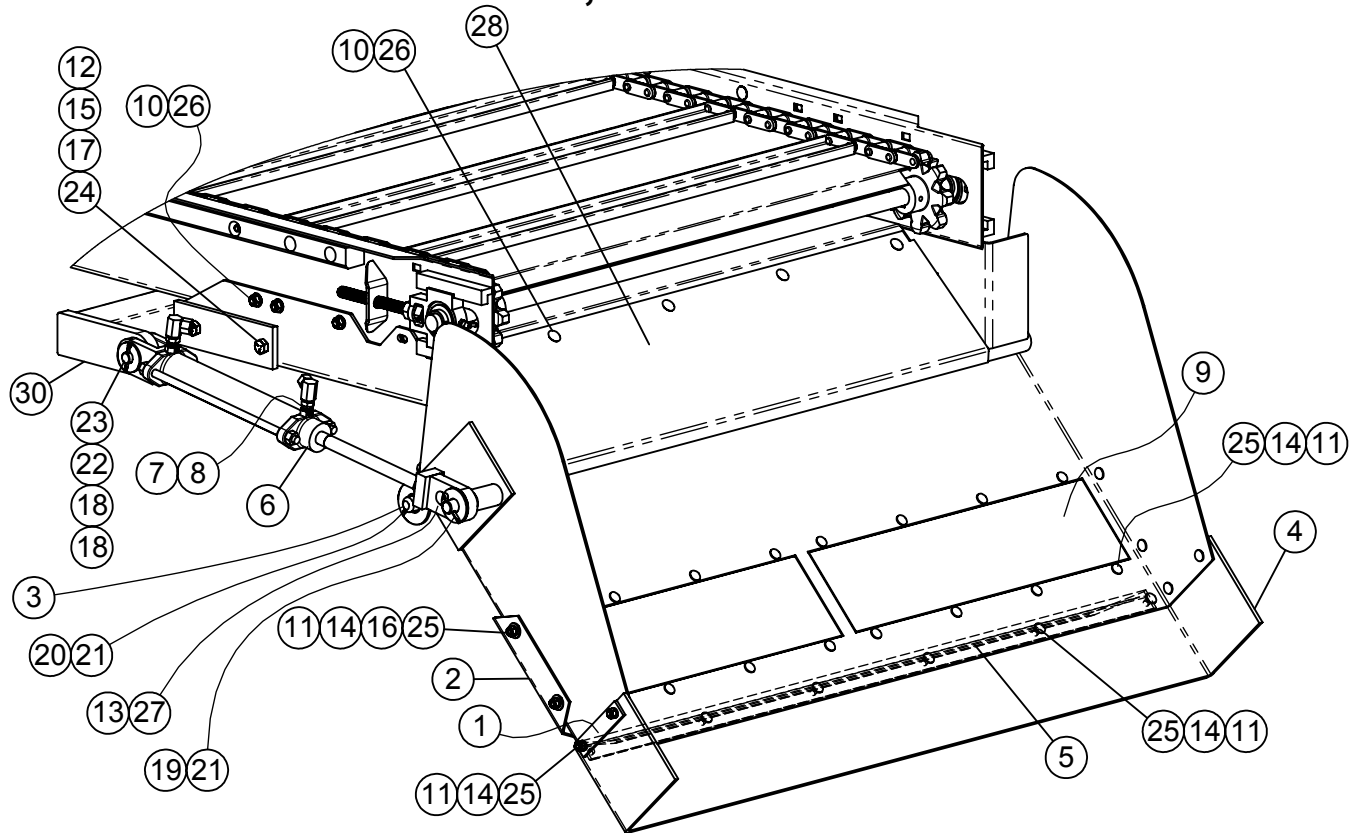
* ITEMS #14, 15, 33 & 34 REPLACE THE HYDRAULIC CYLINDER WHEN THE CONVEYOR IS ORDERED AS A FIXED CONVEYOR KIT.

VERTICAL MIXER FRONT CORNER CHAIN CONVEYOR ASSEMBLY (760645)



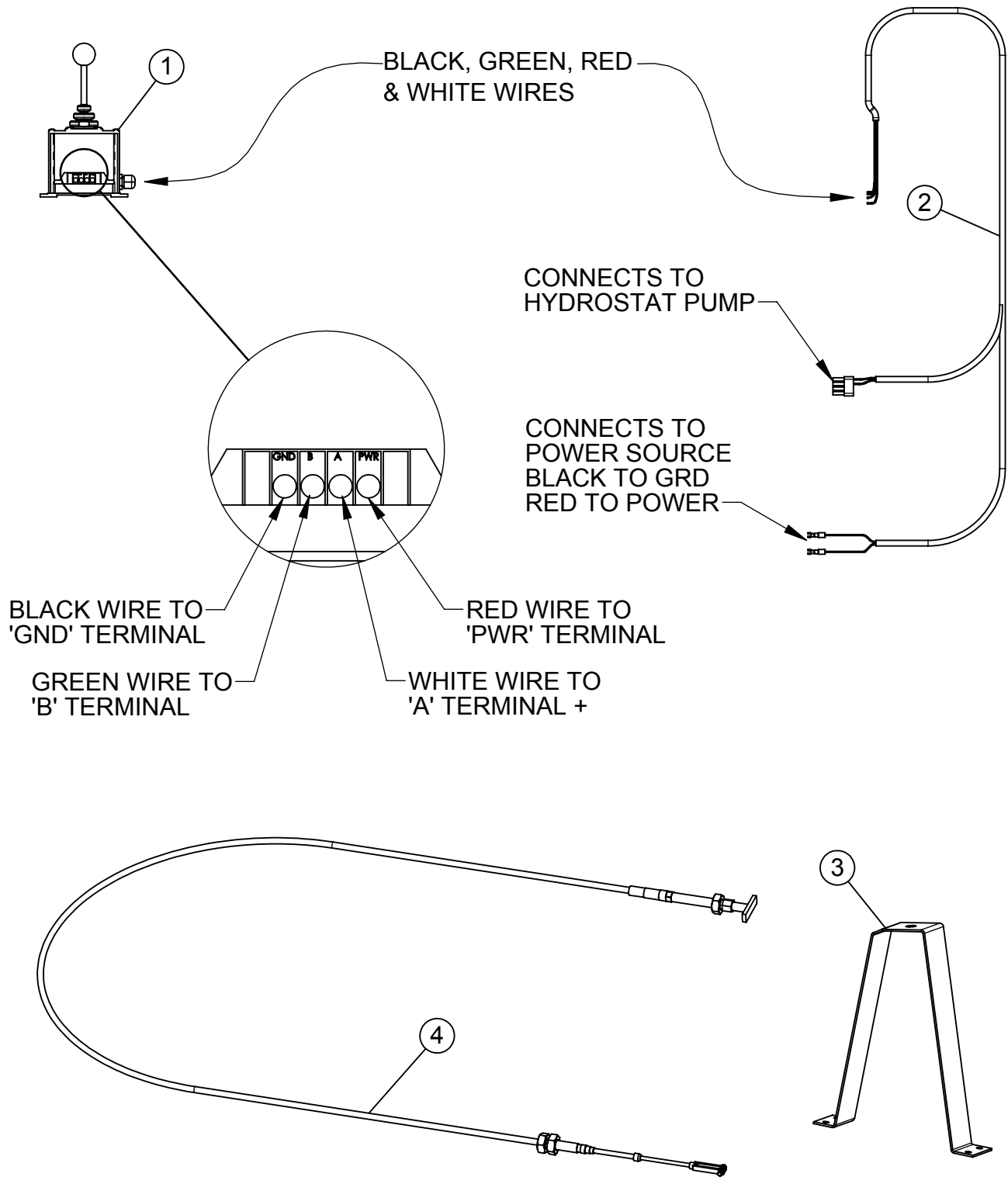
ITEM #	PART #	DESCRIPTION	QTY.
1	160025	SPROCKET C55, 8 TOOTH x 1" I.D.	4
2	160027	1" CONV. DRIVE SHAFT 44 3/4"	1
3	160028	1" CONV. IDLER SHAFT 43 1/4"	1
4	160082	MOTOR MOUNT PLATE	1
5	160083	MOTOR MOUNT COVER	1
6	162611	CONVEYOR SLIDE BAR - UHMW	2
7	188390	TAKE UP BOLT x 7"	2
8	320516	COUPLER CHAIN #50-2 RC x 16	1
9	332606	COUPLER SPROCKET, 50B16 x 1"	2
10	340316	FLANGE BEARING 1" 4 BOLT RCJC	2
11	341323	TAKE-UP BEARING 1"	2
12	360014	HYDRAULIC MOTOR 101-1012 14.1 CU IN.	1
13	368118	HYD ADAPTER 7/8"MORB x 1/2" FP SWIVEL	2
14	400206	HEX NUT 3/8"-16 #5 PLTD	4
15	400210	HEX NUT 5/8"-11 #5 PLTD	6
16	400810	HEX UNILOCK NUT 5/8"-11	2
17	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	10
18	402004	WASHER, SPRING LOCK 1/4" PLTD	2
19	402006	WASHER SPRING LOCK 3/8" MED PLTD	16
20	402404	FLAT WASHER 1/4" PLTD	2
21	405602	HHCS 1/4" -20 x 3/4" USS #5 PLTD.	2
22	405652	HHCS 3/8"-16 x 3/4" #5 PLTD	8
23	405653	HHCS 3/8"-16 x 1" #5 PLTD	4
24	405654	HHCS 3/8"-16 x 1-1/4" #5 PLTD	4
25	407042	CHCS 3/8"-16 x 1-1/2" #5 PLTD	10
26	409916	WOODRUFF KEY 1/4" x 1"	6
27	860753	VERT CONV WA 40 x 60	1
28	860755	40" VERTICAL CONV CHAIN WA x 72 PITCHES	1

VERTICAL SPOUT KIT, FRONT CORNER CONVEYOR



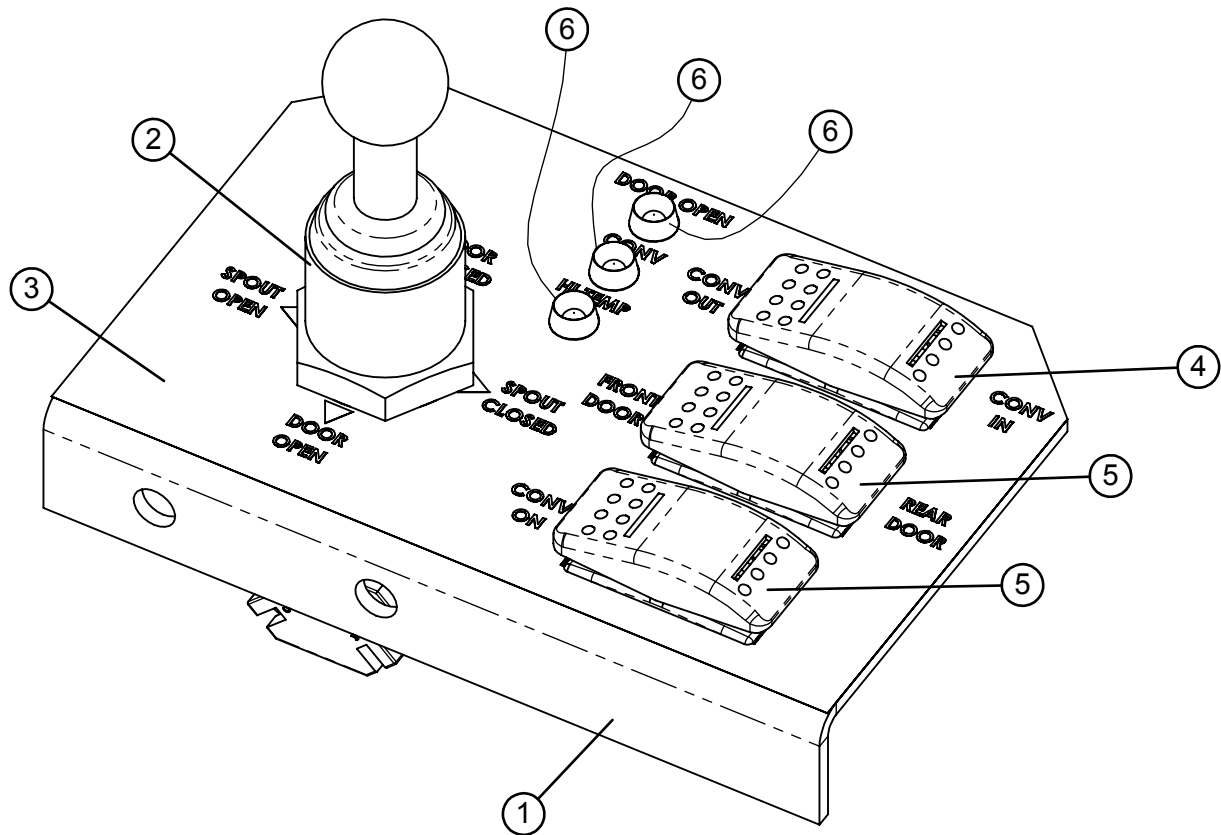
ITEM #	PART #	DESCRIPTION	QTY.
1	150150	SPOUT RUBBER END PLT	2
2	150299	SPOUT MAGNET GUARD 8" x 51-3/4"	1
3	150383	SPOUT PIVOT SHAFT	1
4	150384	SPOUT RUBBER, 6" x 57-1/2"	1
5	183152	SPOUT BACKUP ANGLE, 47"	1
6	364035	HYDRAULIC CYLINDER 1-1/2" x 8"	1
7	368010	90° 1/4MP x 1/4" FP SWVL ORF 1/8	2
8	368106	HYD FITTING, STR 9/16"MOR x 1/4"FP SWIVEL	2
9	375005	ACRO PLATE MAGNET AM 2200,	2
10	400107	HEX NUT, 3/8"-16 SERRATED FLANGE #5	11
11	400205	HEX NUT 5/16"-18 #5 PLTD	30
12	400208	HEX NUT 1/2"-13 #5 PLTD	4
13	400712	HEX JAM NUT 3/4"-16	1
14	402005	WASHER 5/16", SPRING LOCK, MED PLTD	30
15	402008	SPRING LOCK WASHER 1/2" PLTD	2
16	402405	FLAT WASHER MED PLTD 5/16"	4
17	402408	WASHER, FLAT 1/2" MED PLTD	4
18	402410	FLAT WASHER 5/8" MED PLTD	2
19	402412	FLAT WASHER 3/4" PLTD	1
20	402416	FLAT WASHER, 1" ID x 2-1/2" OD	2
21	404002	COTTER PIN 3/16" x 1 1/2"	3
22	404003	COTTER PIN, 5/32" x 1-1/4" PLTD	1
23	404345	5/8" x 2 1/2" CLEVIS PIN	1
24	405702	HHCS 1/2"-13 x 1-1/4" #5 PLTD	4
25	407021	CHCS 5/16"-18 x 1" #5 PLTD	30
26	407039	CHCS 3/8"-16 x 3/4" #5 PLTD	11
27	850053	SPOUT CYLINDER LUG WA	1
28	860036	SPOUT FRAME WA	1
29	860037	20 x 47 SPOUT WA W/MAGNET	1
30	860835	VERTICAL SPOUT BRACKET W.A.	1

TRUCK HYDROSTAT ELECTIRC DISPLACEMENT CONTROL & MANUAL CONTROL ENGINE DRIVEN PUMP



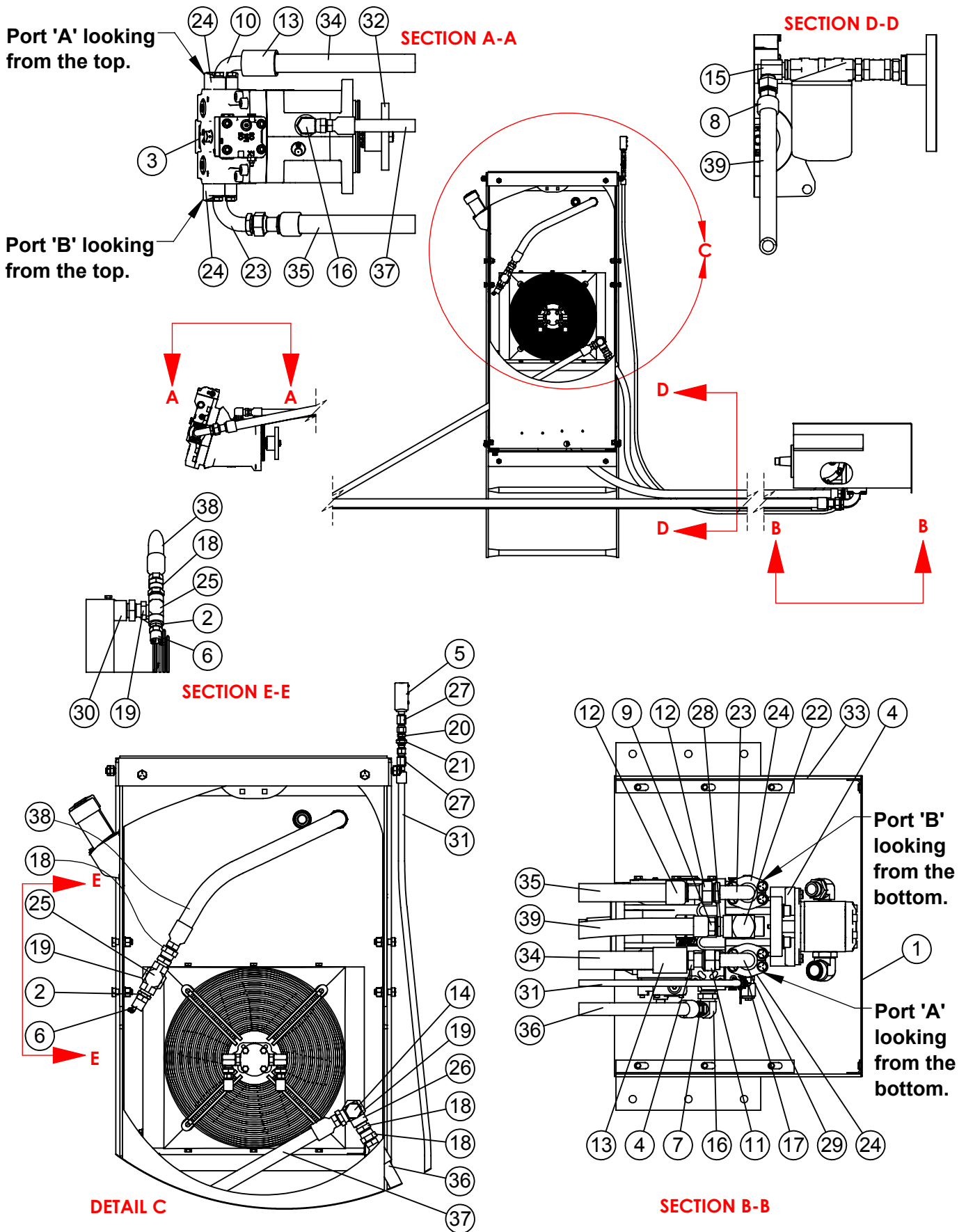
ITEM #	PART #	DESCRIPTION	QTY.
1	357710	MACHINE CONTROL HANDLE	1
2	358444	TRUCK EDC HARNESS	1
3	189267	T-LOCK CABLE BRACKET	1
4	370304	T-LOCK CABLE W/ 1/4" CLEVIS	1

VERTICAL TRUCK JOYSTICK SWITCH PANEL ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY.
1	162624	JOYSTICK BRACKET W/REAR DOOR SWITCH	1
2	357705	JOYSTICK, (4-WAY) SCHNEIDER 9001K35	1
3	440864	DECAL, 4-WAY JOYSTICK (VERTICALS)	1
4	452743	SWITCH, ROCKER ON-OFF-ON, (DPDT) 44323	1
5	452744	SWITCH, ROCKER ON-OFF, (SPST), 44301	2
6	454111	LIGHT, RED LED	3

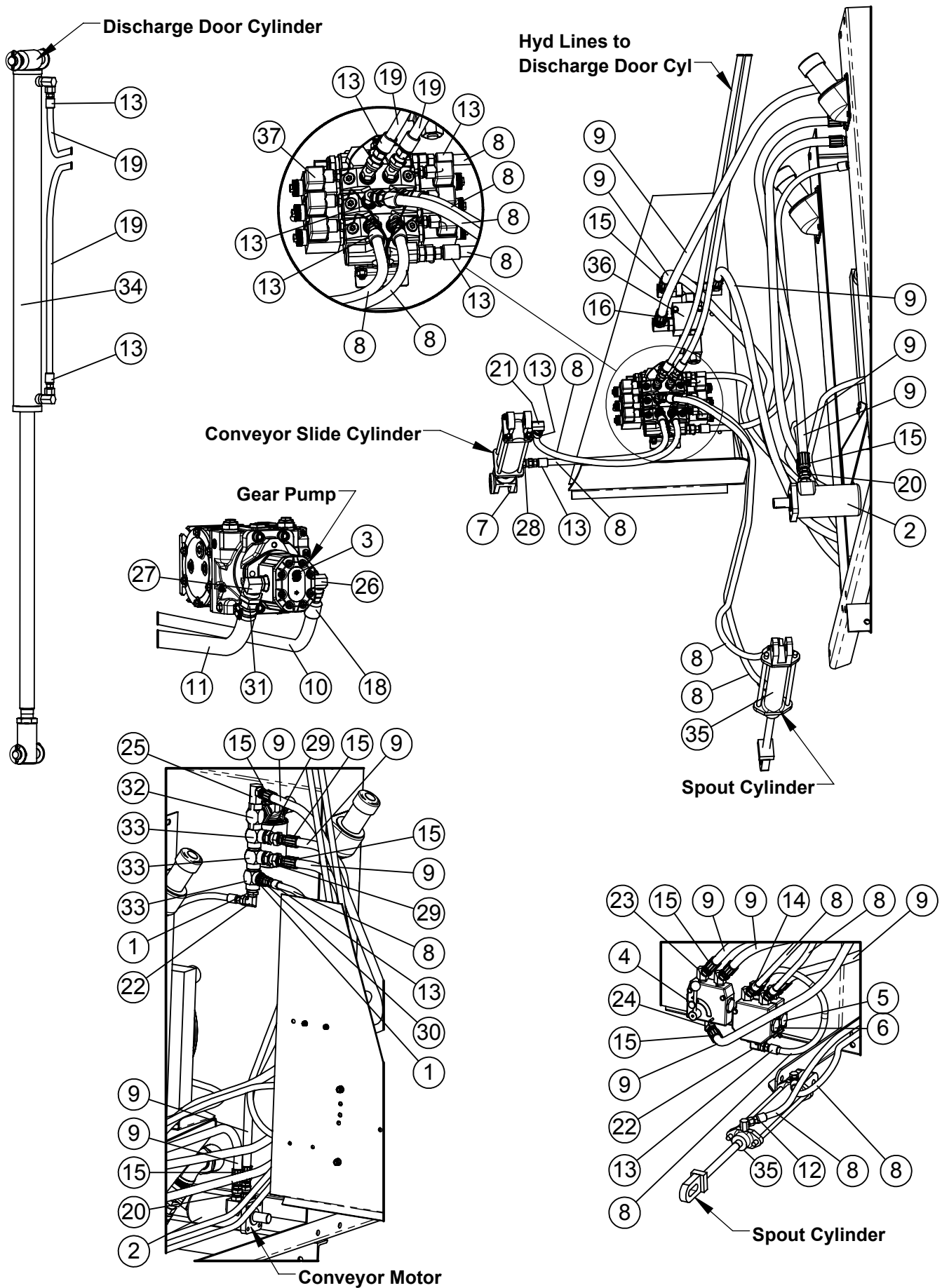
1105H, 1355H & 1505H TRUCK HYDRAULIC DRIVE CONTROL



1105H, 1355H & 1505H TRUCK HYDRAULIC DRIVE CONTROL

ITEM #	PART #	DESCRIPTION	QTY.
1	189216	LONG PUMP BOX COVER 22-1/4"	1
2	310818	BUSHING 3/4" MP x 1/2" FP	1
3	360120	250 CC H1 BENT AXIS VARIABLE DISP MOTOR	1
4	362108	PUMP, SAUER 130 LH (1105/1355/1505, EDC Control)	1
	362108RH	PUMP, SAUER 130 RH (1105/1355/1505, EDC Control)	1
	362107	PUMP, SAUER 130 MAN LH (1105/1355/1505, Manual Control)	1
	362107RH	PUMP, SAUER 130 MAN RH (1105/1355/1505, Manual Control)	1
5	362806	PSI GAGE, 0-6000 - 1/4 MP STEM	1
6	362812	SWITCH, 190° TEMP w/SPADES	1
7	367104	HOSE STEM, 3/4" x 3/4"MP 12G-12MP MEGA	6
8	367128	HOSE STEM, 1" x 1"MP 16G-16MP MEGA	1
9	367129	HOSE STEM, 1" x 1"MPX 16G-16MPX MEGA	1
10	367153	HOSE STEM, 1-1/4 x 1-1/4, 20GS-20FL90M	1
11	367154	HOSE STEM 1-1/4" x 20GS-20FFORX	1
12	367155	HOSE CPLG 1-1/4 x 1-5/8 FJX	2
13	367418	FERRULE, 20GS1F-6	2
14	368042	SWIVEL 90v3/4MP x 3/4FP	1
15	368053	ELBOW SWIVEL, 1"MP x 1"FPS 90°	1
16	368062	SWIVEL, 90° 1 5/16" MOR x 3/4" FP	2
17	368094	SWIVEL 90 9/16MOR x 1/4FPS	1
18	368117	STRAIGHT SWIVEL, 3/4" MP x 3/4" FPS	2
19	368145	STRAIGHT ADAPTER, 1-5/16" MOR x 3/4" FPSW	2
20	368336	STRAIGHT ADAPTER, 9/16 JIC BULKHEAD	1
21	368337	BULKHEAD NUT, 9/16" JIC	1
22	368420	ELBOW, 1-5/8"MOR x 1-1/4"FP 90°	1
23	368452	FLANGE, 20FLH-20MJ90 O-Ring C62	2
24	368453	FLANGE SET 20 FHH C62 (1-1/4")	4
25	368614	BRANCH TEE 3/4" MP x 3/4" FP x 3/4" FP	1
26	368616	STREET TEE 3/4"MP x 3/4"FP x 3/4"FP	1
27	368639	STRAIGHT ADAPTER, 1/4 NPT x 9/16 JIC SWIVEL	2
28	368666	HEX REDUCER, 1-1/4" MP x 1" FP	1
29	368700	FLANGE ADAPTER, ORFS 1-11/16-12, 1-1/4" CODE 62	1
30	670111	HYDRAULIC FAN KIT	1
31	781325	HYD HOSE, 1/4 x 114, 1/4 MP ENDS	1
32	860277	DRIVE HUB W.A., 250 MOTOR 1480	1
33	872739	130 PUMP BOX WA - LONG	1
34	HOSE 22	HOSE ASSY, 1-1/4 x 350 HP, PRESSURE	1
35	HOSE 23	HOSE ASSY, 1-1/4 x 350 LP, RETURN	1
36	HOSE 4	HOSE ASSY, 3/4 x 144, 3/4MP x 3/4MP	1
37	HOSE 5	HOSE ASSY, 3/4 x 240, 3/4MP x 3/4MP	1
38	HOSE 6	HOSE ASSY, 3/4 x 24, 3/4MP x 3/4MP	1
39	HOSE 7	HOSE ASSY, 1 x 138, 1MP x 1MPX	1

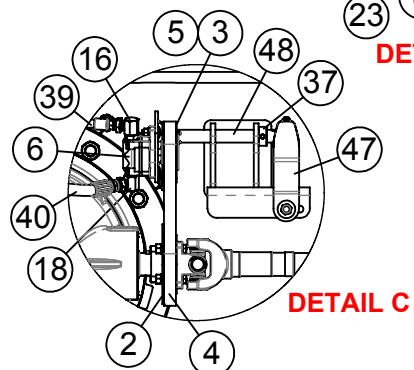
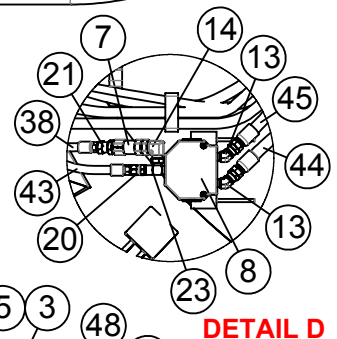
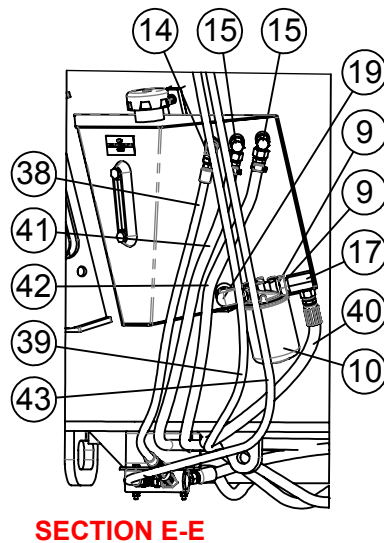
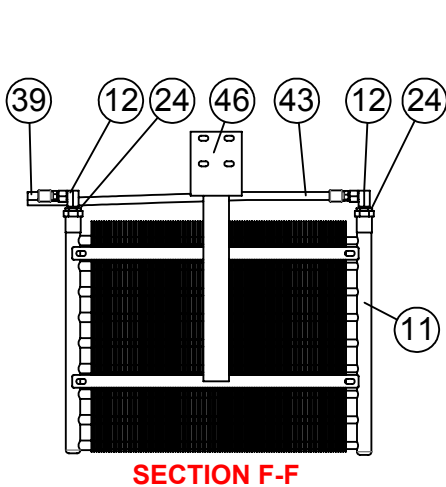
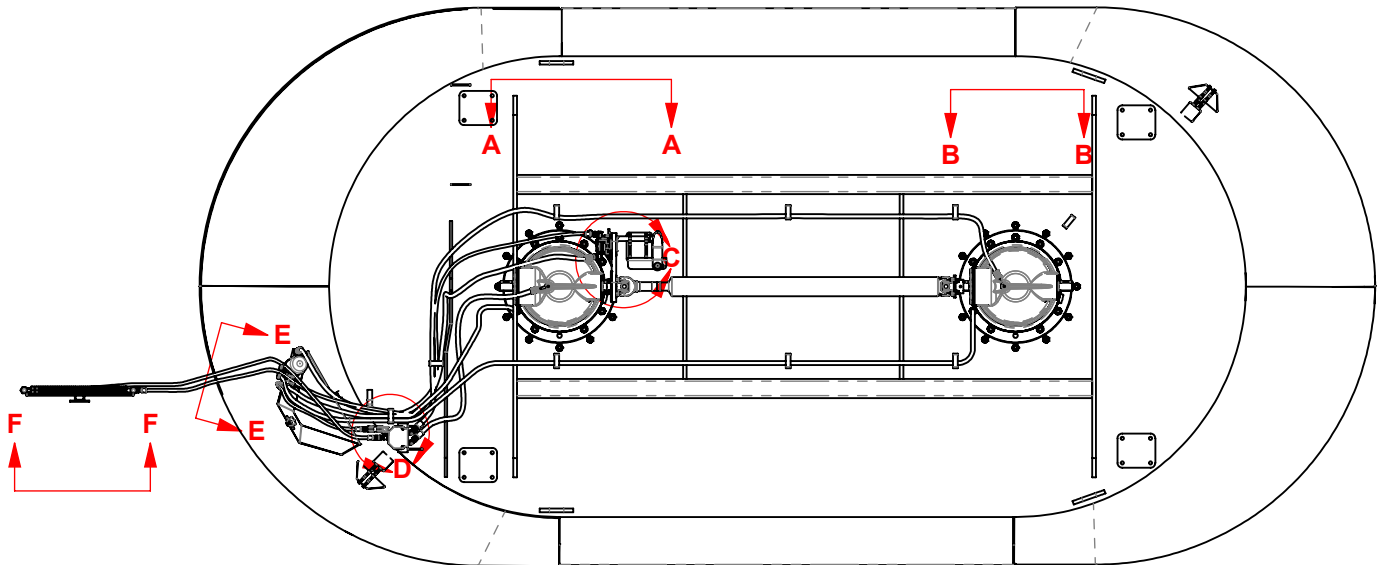
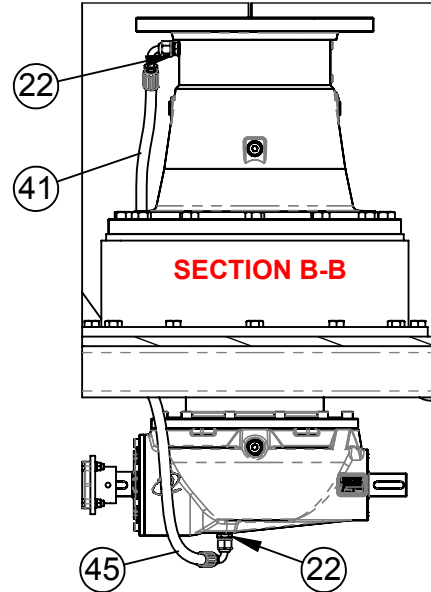
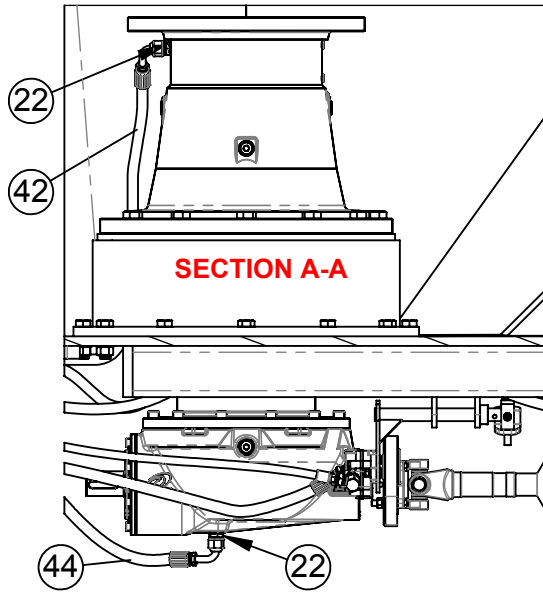
TRUCK VERTICAL CONVEYOR HYDRAULIC PARTS



VERTICAL TRUCK CONVEYOR HYDRAULIC PARTS

ITEM #	PART #	DESCRIPTION	QTY.
1	310818	BUSHING 3/4" MP x 1/2" FP	2
2	360014	HYDRAULIC MOTOR 101-1012 14.1 CU IN.	1
3	362016	GEAR PUMP, 2.32 CCW 13T	1
4	362283	VALVE PRINCE HYD. FLOW DIVIDER	1
5	362286	VALVE PRINCE HYD. FLOW DIVIDER 70/30	1
6	362289	FLOW DIVIDER VALVE, PRINCE HYD	1
7	364055	HYDRAULIC CYLINDER 2" x 8", 20-1/4" CC	1
8	366006	HYD HOSE 3/8"-2 (3000PSI)	9
9	366008	HYD HOSE 1/2"-2 (3000PSI)	6
10	366032	HYD HOSE, 3/4"-2 (3000PSI)	1
11	366047	HYD HOSE, 1-1/4" (625PSI)	1
12	367064	HOSE STEM 3/8" x 1/4" MP	2
13	367066	HOSE COUPLING, 3/8" x 3/8" MP MEGACRIMP	16
14	367068	HOSE COUPLING, 3/8" x 1/2" MP MEGACRIMP	3
15	367088	HOSE COUPLING 1/2"MP x 1/2" MEGACRIMP	11
16	367089	HOSE COUPLING 1/2" x 3/4MP (MEGACRIMP)	1
17	367103	HOSE COUPLING 1/2"MP x 3/4 MEGA CRIMP	1
18	367104	HOSE STEM, 3/4" x 3/4"MP 12G-12MP MEGA	1
19	368006	HYD HOSE 3/8" x 312", 3/8" MP	2
20	368118	HYD ADAPTER 7/8"MORB x 1/2" FP SWIVEL	2
21	368020	HYD ADAPTER 3/8"MP x 3/8"FPX 90°	1
22	368028	HYD SWIVEL 90° 1/2"MP x 3/8"FP	2
23	368029	HYD SWIVEL 1/2"MP x 1/2"FP 45°	6
24	368031	HYD SWIVEL 1/2" MP x 1/2" FP 90°	2
25	368041	SWIVEL, 90° 3/4" MP x 1/2" FP	1
26	368057	ELBOW SWIVEL, 1-1/16"MOR x 3/4"FPS 90°	1
27	368066	HYD FITTING 1-5/16" MOR x 1-1/4" FPS - 90deg.	1
28	368110	HYD ADAPTER, STRAIGHT 3/8MP x 3/8FP SWIVEL	1
29	368113	STRAIGHT SWIVEL, 3/4" MP x 1/2" FPS	2
30	368116	HYD ADAPTER STR 1/2" x 3/8" FP SWIVEL	1
31	368514	HOSE BARB 1-1/4" MP x 1-1/4"	1
32	368614	BRANCH TEE 3/4" MP x 3/4" FP x 3/4" FP	1
33	368616	STREET TEE 3/4"MP x 3/4"FP x 3/4"FP	3
34	660059	SINGLE CYL DISCH DOOR HYD KIT	1
35	750019	CYLINDER ASSY, 1-1/2" x 8"	1
36	760013	DUMP VALVE ASSY.	1
37	780121	TRIPLE HYD CONTROL VALVE ASSY-TRK	1

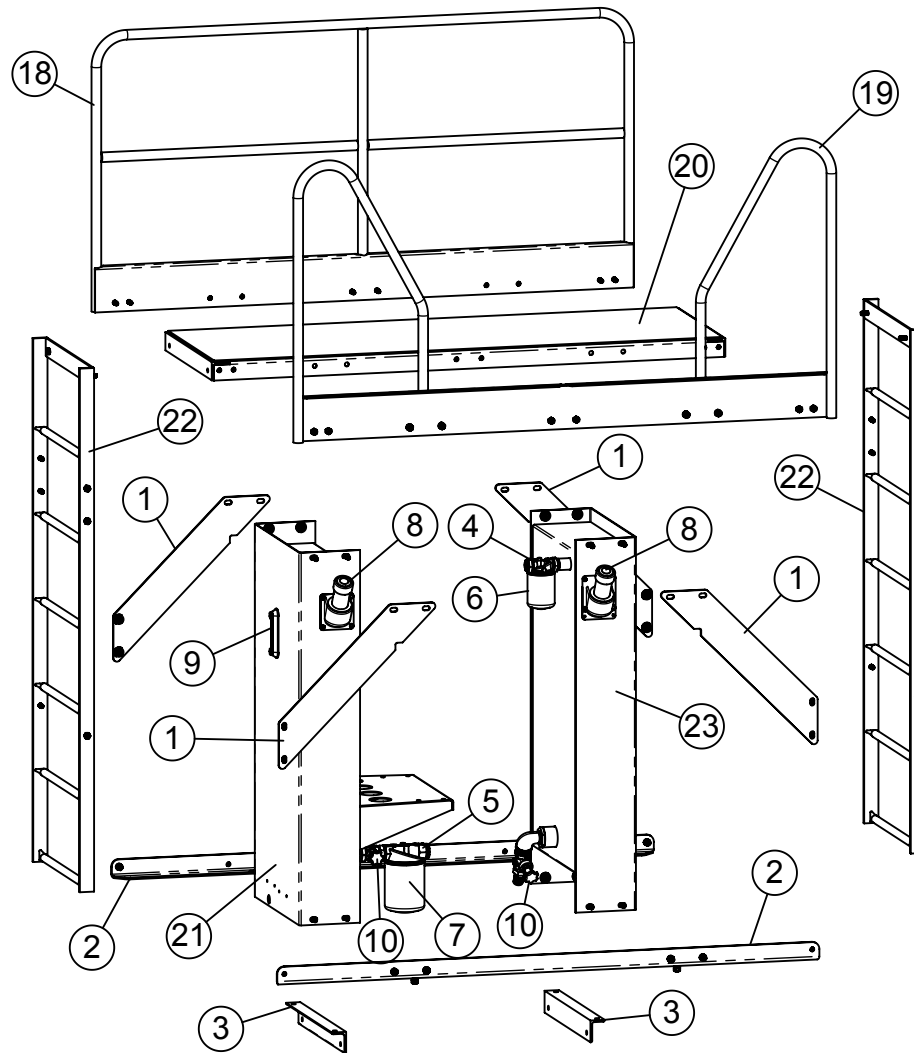
1105H, 1355H & 1505H TRUCK GEARBOX CIRCULATION ASSEMBLY



1105H, 1355H & 1505H TRUCK GEARBOX CIRCULATION ASSEMBLY

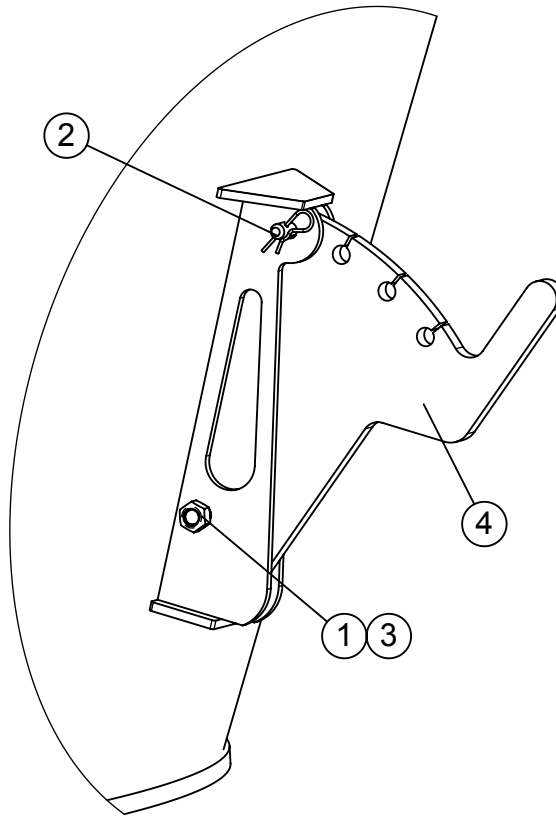
ITEM #	PART #	DESCRIPTION	QTY.
2	162710	PULLEY, 1350 3V-2 GROOVE DR FLG	1
3	324118	SHEAVE , 3V-2GRV X 4.75 SH	1
4	325383	V-BELT POWERBAND, 3VX-355	1
5	336008	BUSHING SH 1/2 QD	1
6	362010	HYDRAULIC PUMP, CCW (for left hand discharge units)	1
	362011	HYDRAULIC PUMP, CW (for right hand discharge units)	1
7	362240	CHECK VALVE, 5 PSI (1/2" FP x 1/2" FP)	1
8	362289	FLOW DIVIDER VALVE, PRINCE HYD	1
9	362403	FILTER HEAD 3/4", ZAF-07-25-0	1
10	362440	FILTER ELEMENT - AE-10	1
11	362578	HAYDEN COOLER 1290 (GB)	1
12	368020	HYD ADAPTER 3/8"MP x 3/8"FPX 90°	2
13	368025	HYD SWIVEL 45° (3/8 MP x 3/8 FPX)	2
14	368028	HYD SWIVEL 90° 1/2"MP x 3/8"FP	2
15	368031	HYD SWIVEL 1/2" MP x 1/2" FP 90°	2
16	368040	HYD SWIVEL 3/4" MOR x 3/8"FP 90°	1
17	368041	SWIVEL, 90° 3/4" MP x 1/2" FP	1
18	368047	HYD SWIVEL 7/8"MOR x 1/2"FP 90°	1
19	368049	HYD ADAPTER, 90° 3/4 MP x 3/4 MP	1
20	368110	HYD ADAPTER, STRAIGHT 3/8MP x 3/8FP SWIVEL	1
21	368116	HYD ADAPTER STR 1/2" x 3/8" FP SWIVEL	1
22	368227	HYD ADAPTER, STRT 1/2 x 3/4JIC (8MJIC-8MBSSP)	4
23	368604	HYD ADAPTER, TEE 3/8" FP x (2)3/8"MP	1
24	368612	HYD BUSHING, STEEL 3/4"MP x 3/8"FP	2
37	412416	SET COLLAR 1" PLTD	2
38	781061	HOSE ASM 3/8 x 42, 3/8MP x 3/8MP	1
39	781073	HOSE ASM 3/8" x 144" 3/8MP x 3/8MP	1
40	781352	HOSE ASM 1/2 x 97, 1/2MP	1
41	781386	HOSE ASM, LOLA 1/2 x 184, 1/2MP x 3/4 FJ90	1
42	781387	HOSE ASM, LOLA 1/2 x 97, 1/2 MP x 3/4 FJ90	1
43	781840	HOSE ASM, 3/8 x 109, 3/8MP x 3/8MP	1
44	781890	HOSE ASM 1/2 x 50, 3/8MP x 3/4FJ90	1
45	781891	HOSE ASM, 1/2 x 158, 3/8MP x 3/4FJ90	1
46	860208	COOLER HANGER WA	1
47	860790	CIRCULATION PUMP LEVER ARM WA	1
48	872138	PUMP SWING ARM	1

1105H, 1355H & 1505H TRUCK PLATFORM & HYDRAULIC RESERVOIR ASSEMBLY



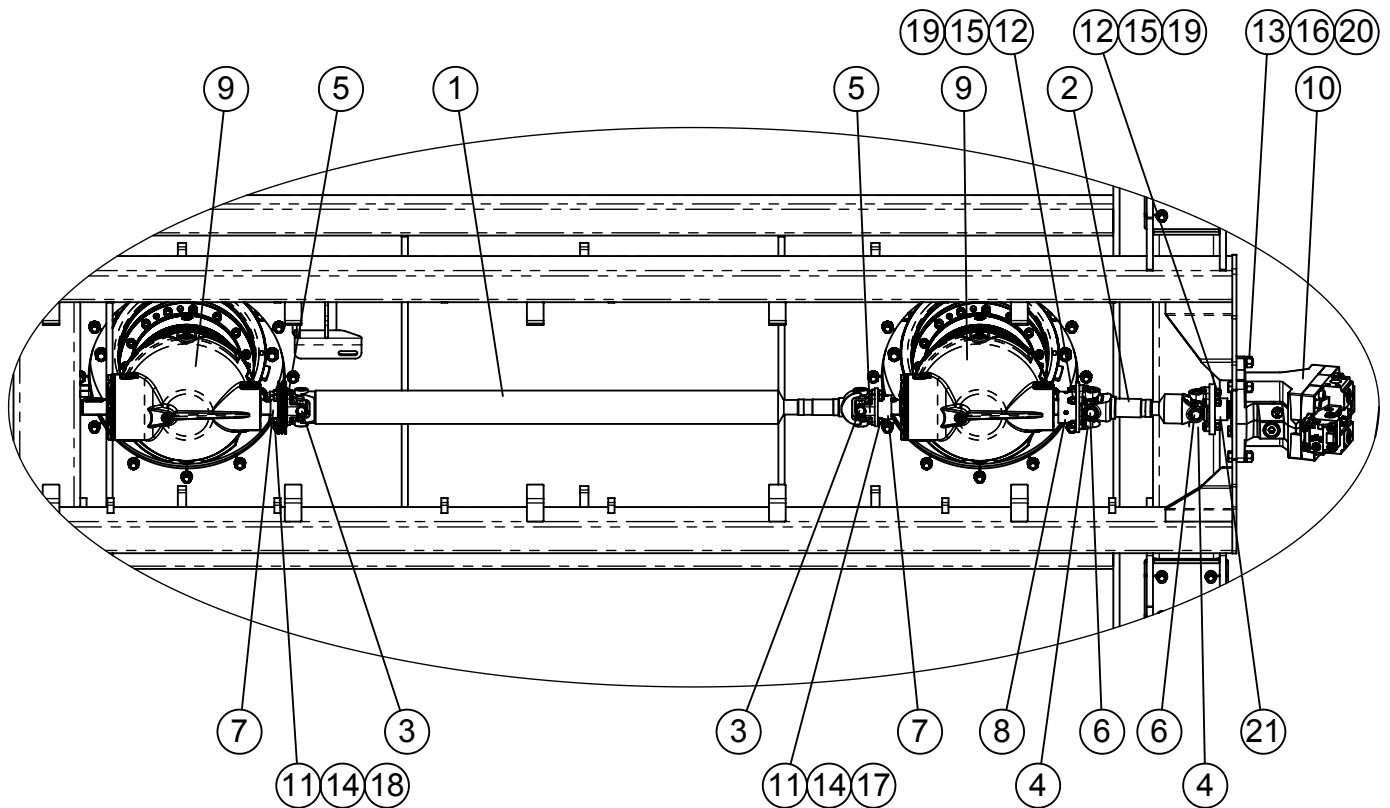
ITEM #	PART #	DESCRIPTION	QTY.
1	160007	GUSSET, 5" x 30-9/16" PLATFORM CORNER	4
2	160008	LADDER SUPT ANGLE 4" x 76"	2
3	160009	LADDER SUPT CTR ANGLE X 24"	2
4	362402	1" FILTER ASSY	1
5	362404	FILTER HEAD, 1-1/4" FP	1
6	362441	FILTER ELEMENT VE-10 - 1"	1
7	362442	FILTER ELEMENT 1-1/4"	1
8	362552	SIDE FILLER HI-NECK ASSY	2
9	362555	SIGHT GAUGE 5"	2
10	368525	GATE VALVE 1-1/4"	2
18	860000	LONG HANDRAIL WA	1
19	860001	SHORT HANDRAIL WA	1
20	860003	PLATFORM FRAME WA	1
21	860005	LH OIL RESEVOIR WA	1
22	860006	LADDER WA	2
23	860014	RH OIL RESEVOIR W/A	1

1105H, 1355H & 1505H VERTICAL MIXER RESTRICTOR PLATE ASSEMBLY



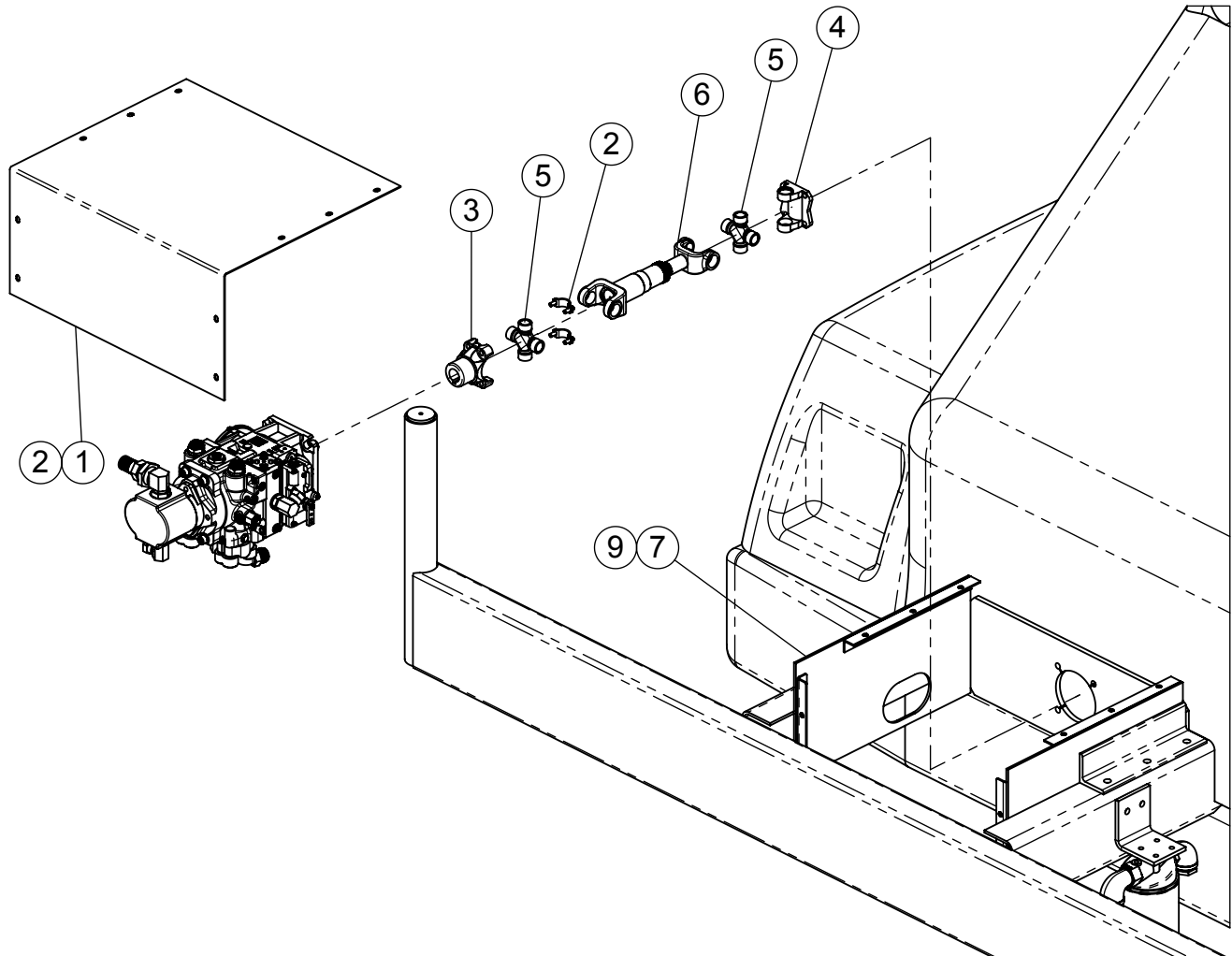
ITEM #	PART #	DESCRIPTION	QTY.
1	400912	HEX CROWN LOCK NUT 3/4"-10 #5 PLTD	1
2	404209	PIN, 5/8" x 4", RECEIVER HITCH	1
3	405781	HHCS 3/4"-10 x 2-1/2" #5 PLTD	1
4	160118	VERTICAL KNIFE	1

1105H, 1355H & 1505H VERTICAL TRUCK GEARBOX DRIVELINES



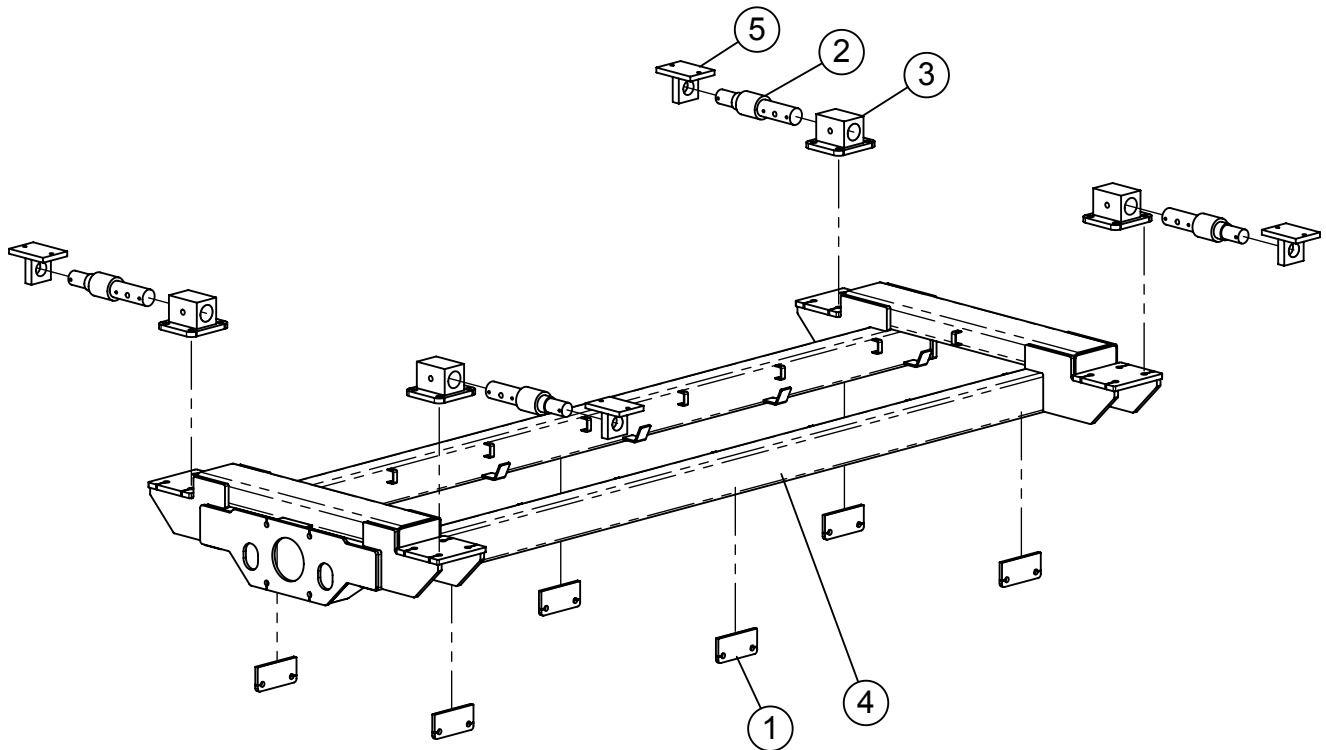
ITEM #	PART #	DESCRIPTION	QTY.
1	338002	DRIVE LINE 1410, 67" C-C (Includes Cross Kits & Flanges)	1
2	338008	DRIVELINE 1480 13" CC (Includes Cross Kits & Flanges)	1
3	338402	CROSS KIT, SPICER, 1410 5-160X	2
4	338405	FLANGE YOKE, SPICER 1480 3-2-489 (1.5")	2
5	338411	FLANGE YOKE, SPICER 1410, 3-2-159	2
6	338437	CROSS KIT, SPICER 1480 5-188X	2
7	338592	COMPANION FLANGE 1350 45mm W/KW	2
8	338593	COMPANION FLANGE, 1480 45mm W/KEYWAY	1
9	344164	GEARBOX, COMER PGA 3003/53.5:1	2
10	360120	250 CC H1 BENT AXIS VARIABLE DISP MOTOR	1
11	400207	HEX NUT, 7/16"-14, #5 PLTD	8
12	400208	HEX NUT 1/2"-13 #5 PLTD	8
13	400212	HEX NUT 3/4"-10 #5 PLTD	20
14	402007	SPRING LOCK WASHER 7/16" PLTD	8
15	402008	SPRING LOCK WASHER 1/2" PLTD	22
16	402012	SPRING LOCK WASHER 3/4" PLTD	20
17	405678	HHCS 7/16"-14 x 1 1/2" #5 PLTD	4
18	405682	HHCS 7/16"-14 x 2 1/2" #5 PLTD	4
19	405704	HHCS 1/2"-13 x 1-3/4" #5 PLTD	8
20	405781	HHCS 3/4"-10 x 2-1/2" #5 PLTD	22
21	860277	DRIVE HUB W.A., 250 MOTOR 1480	1

1105H, 1355H & 1505H HYDROSTAT DRIVELINE



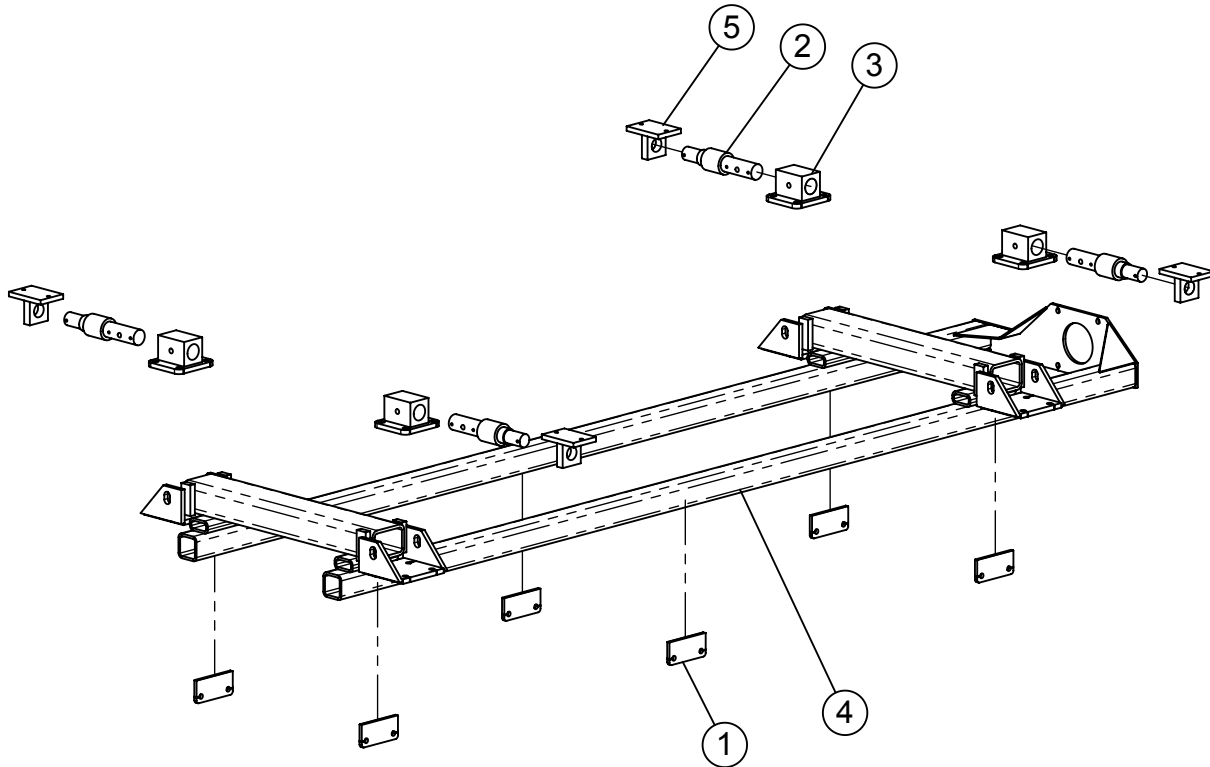
ITEM #	PART #	DESCRIPTION	QTY.
1	189216	LONG PUMP BOX COVER 22-1/4"	1
2	338413	U STRAP & BOLT KIT 3-70-28X (1350)	2
3	338415	SPICER YOKE 1350 1-1/2" TAPER	1
4	338429	SPICER FLANGE YOKE 3-2-119 1350	1
5	338436	CROSS KIT, SPICER 1350 5-178X	2
6	781401	1350 SHAFT AND YOKE ASSY	1
7	872388	LONG PUMP BOX 22-1/4"	1

1355H & 1505H REAR HYDRAULIC MOTOR DRIVE TRUCK SCALE FRAME AND WEIGH BAR PARTS



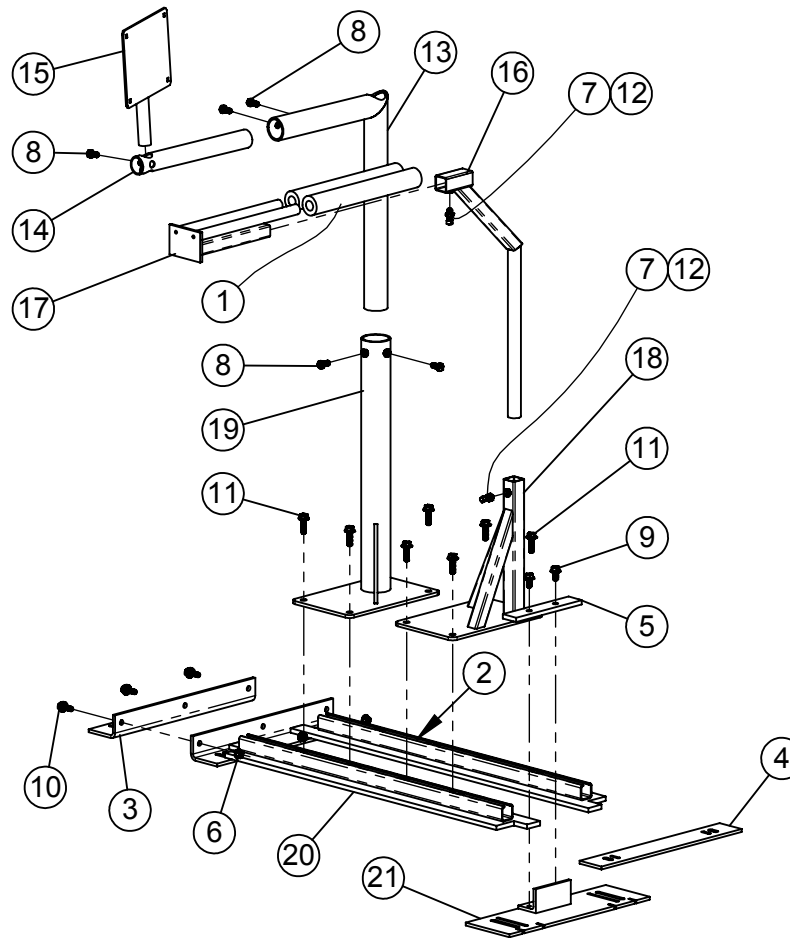
ITEM #	PART #	DESCRIPTION	QTY.
1	182998	BRACKET, TRUCK FRAME	6
2	450824	WEIGH BAR 2-1/2", 21 FT CORD	4
3	860055	2-1/2" BAR BLOCK WA	4
4	860482	1105-1505 TRK TANDEM MNT FRAME WA	1
5	872360	T-BAR WA, 2-1/2"	4

1355H & 1505H FRONT HYDRAULIC MOTOR DRIVE TRUCK SCALE FRAME AND WEIGH BAR PARTS



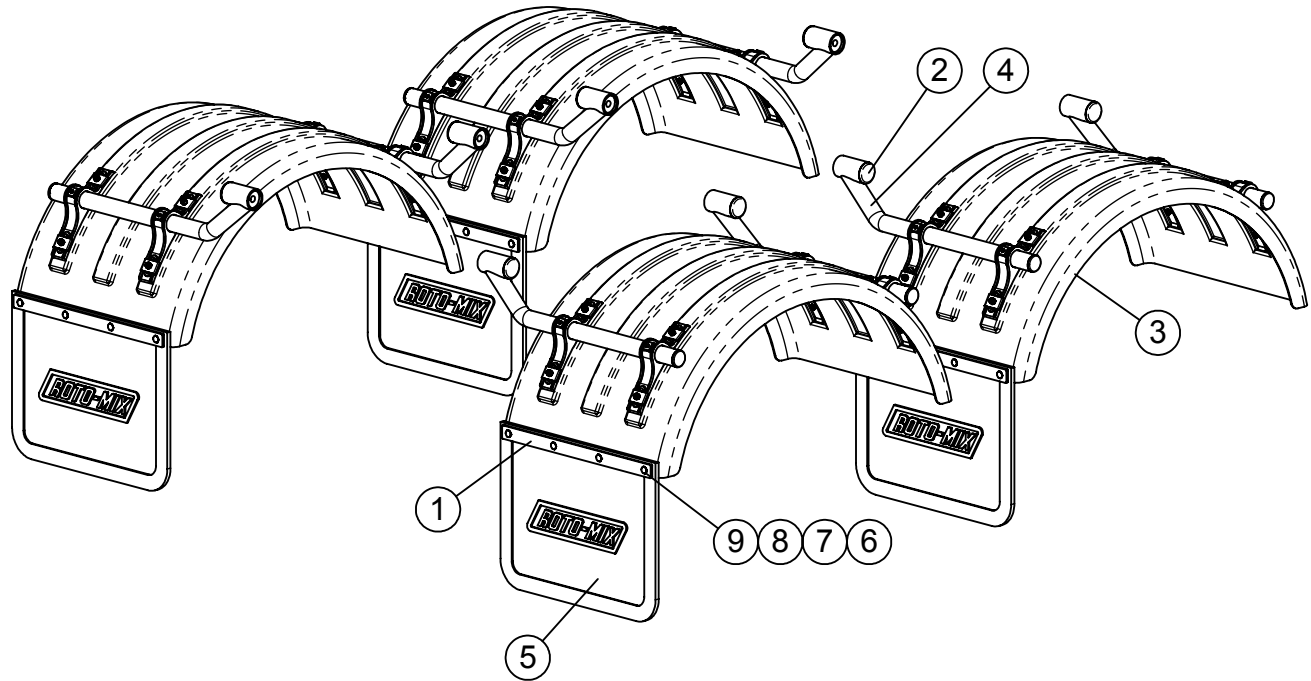
ITEM #	PART #	DESCRIPTION	QTY.
1	182998	BRACKET, TRUCK FRAME	6
2	450824	WEIGH BAR 2-1/2", 21 FT CORD	4
3	860055	2-1/2" BAR BLOCK WA	4
4	860300	TWIN TRUCK TANDEM MOUNT FRAME W.A.	1
5	872360	T-BAR WA, 2-1/2"	4

TRUCK CAB SCALE INDICATOR FRAME PARTS



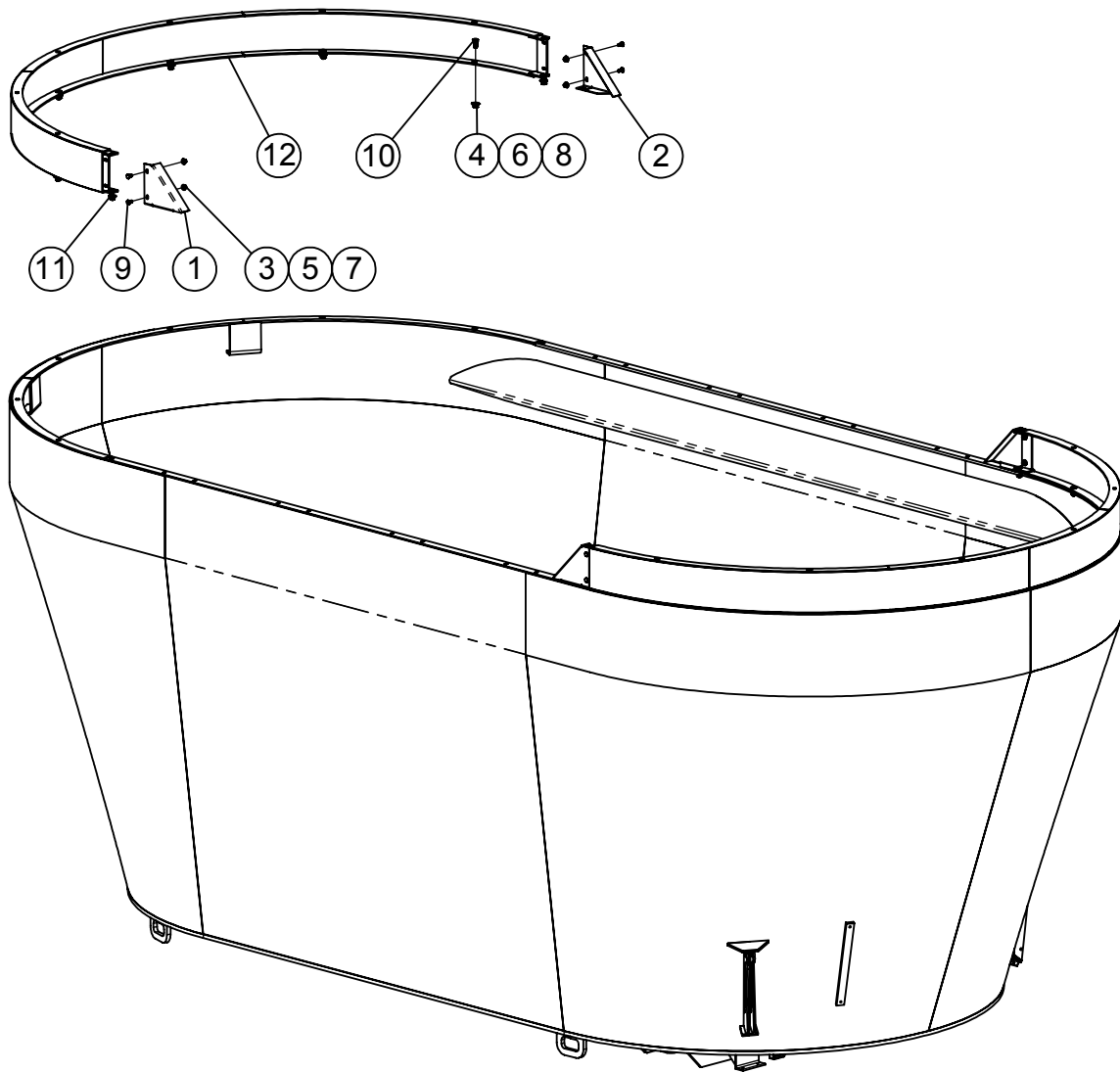
ITEM #	PART #	DESCRIPTION	QTY.
1	185930	ARM REST PAD 12"	2
2	192578	ARM REST SLIDE BAR	4
3	192585	BRACKET, PASSENGER CAB SEAT	1
4	192587	SPACER, TRUCK CAB DRIVER'S SEAT	1
5	192593	PLATE, TRUCK CAB MOUNT SETTING	1
6	400107	HEX NUT, 3/8"-16 SERRATED FLANGE #5	3
7	400606	HEX JAM NUT 3/8-16"	2
8	405652	HHCS 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

1105H, 1355H & 1505H TRUCK FENDERS



ITEM #	PART #	DESCRIPTION	QTY.
1	183087	MUD FLAP STRAP	4
2	310975	CAPLUG-RIBBED-RD 2-3/8" x 2-1/16"	8
3	354391	POLY FENDER	4
4	354392	POLY FENDER MOUNTING KIT	4
5	370202	ROTO-MIX MUD FLAP 24" x 18-1/2"	4
6	400206	HEX NUT 3/8"-16 #5 PLTD	16
7	402006	WASHER SPRING LOCK 3/8" MED PLTD	16
8	402406	FLAT WASHER 3/8" PLTD	16
9	407042	CHCS 3/8"-16 x 1-1/2" #5 PLTD	16

VERTICAL TUB EXTENSIONS



ITEM #	PART #	DESCRIPTION	QTY.
1	160974	LEFT EXT. END	2
2	160975	RIGHT EXT END	2
3	400206	HEX NUT 3/8"-16 #5 PLTD	8
4	400208	HEX NUT 1/2"-13 #5 PLTD	16
5	402006	WASHER SPRING LOCK 3/8" MED PLTD	8
6	402008	SPRING LOCK WASHER 1/2" PLTD	16
7	402406	FLAT WASHER 3/8" PLTD	8
8	402408	WASHER, FLAT 1/2" MED PLTD	16
9	407040	CHCS 3/8"-16 x 1" #5 PLTD	8
10	407102	CHCS 1/2"-13 x 1-1/2" #5 PLTD	12
11	407103	CHCS 1/2"-13 x 1-3/4" #5 PLTD	4
12	860285	8" END EXT W.A.	2