



1355

**DIRECT DRIVE
VERTICAL FEED MIXER**



SAFETY, OPERATION & PARTS MANUAL

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

TABLE OF CONTENTS

	PAGE NO.
INTRODUCTION.....	4
WARRANTY	5
SCALES WARRANTY & SERVICE POLICY	6
OPERATOR QUALIFICATIONS	7
SAFETY	8-18
OPERATION	19-22
LUBRICATION	23
TROUBLE SHOOTING.....	24
VERTICAL MIXER FEATURES & SPECIFICATIONS	25-28
REPAIR PARTS TABLE OF CONTENTS	31

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 mixer by ROTO-MIX.

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

Failure to read this manual and understand the safe operation of the mixer could lead to serious injury.

If you do not understand the instructions in this manual contact either your dealer or ROTO-MIX at Dodge City, Kansas 67801.

This supersedes all previous published instructions.



Limited Warranty Statement

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

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

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

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

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

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

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

Warranty continues on the next page.

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

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.

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 shall be limited to competent and experienced persons. In addition, anyone who will operate or work around a mixer 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 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. Maximum load for the 1105 is 27,500 LB and for the 1355 it is 33,750 LB and for the 1505 it is 33,750 LB. 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 a shield is removed to perform maintenance or make a repair, reinstall the shield after the maintenance or repair is complete.

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 perform maintenance or repairs on 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 follow 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 safe operation 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.



KEEP ALL SHIELDS IN PLACE

Do not operate mixer 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.



OPERATE MIXER SAFELY

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

Never enter a mixer while in operation.

Operate the mixer from the operator's tractor seat only.

Do not exceed load capacity of the mixer. (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

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.

Do not wear loose-fitting clothing which may catch in moving parts. 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 60F (16C).



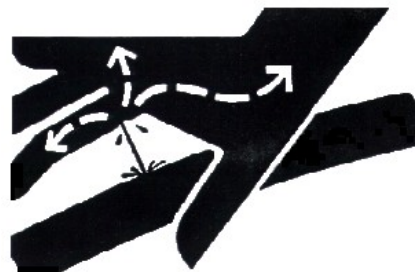
AVOID HIGH-PRESSURE FLUIDS

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

Avoid this 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 of the decal.

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



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: (for the 8 bolt hub, torque the lug nuts to 220 ft-lb), (for the 10 bolt hubs, torque the lug nuts to 450 ft-lb).

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.

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

Because it is possible that this mixer 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.

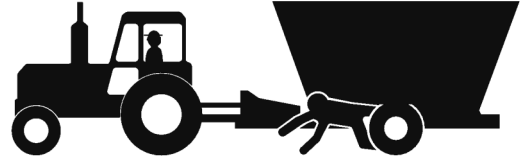
Don't hurry the learning process or take the unit for granted. Become familiar with your new mixer before operating.

Practice operation of your mixer 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 very important with higher noise levels and quiet cabs, 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 while it is moving.

Be 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 rollover may result.

Operate up and down (not across) slopes. Avoid sudden starts and stops.

Pick a smooth and as level as possible route when transporting across fields. Avoid the edges of ditches or gullies and steep hillsides.

Be extra careful when working on inclines.

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 tractor 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 unattended.

As a precaution, always recheck the hardware on mixer 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 to equipment 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 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 in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the mixer 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 can cause asphyxiation.

Before working on the mixer, 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.

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 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 can be infected 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.

READ THE FOLLOWING BEFORE WELDING ON THIS MIXER

When welding on your mixer, do not allow the current to flow through the ball bearings or the roller chains. Ground directly to the item being welded. Clean the area before welding and have a fire extinguisher accessible at all times.

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



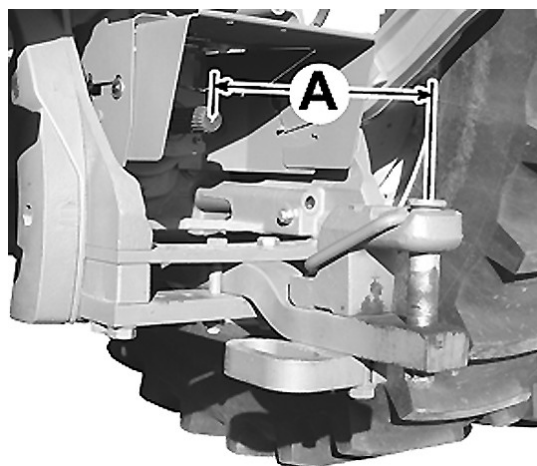
PREPARING TRACTOR FOR TRAILER MIXER

POSITIONING DRAWBAR

IMPORTANT: Drive components can be damaged from excessive speed. Do not operate tractor at speeds in excess of recommended PTO RPM.

This feed mixer is equipped with a 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.



Install clevis on tractor drawbar.

Adjust drawbar length:

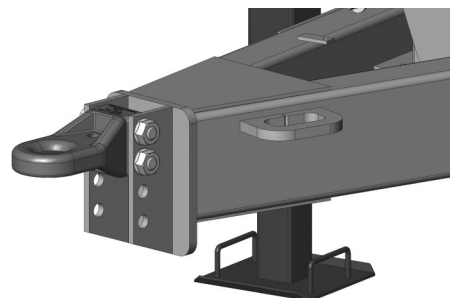
PTO SPEED	DIMENSION (A)
1000 RPM (1-3/8"-21 SPLINE)	16 inches (406 mm)
1000 RPM (1-3/4"-20 SPLINE)	20 inches (508 mm)

ADJUST TRAILER HITCH

Mixer should be approximately level when attached to tractor.

Adjust hitch by changing hole location on mixer tongue.

Hitch Pin Size - 1 1/2" Dia. Minimum - 2" Dia. Maximum



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:
1105 - 27,500 LB
1355 - 33,750 LB
1505 - 33,750 LB

- A. Load hay first with machine running: **TRACTOR RUNNING AT 1000 RPM PTO SPEED.**

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.

VERTICAL MIXER OPERATION

Description of Operation :

This is a trailer mounted mixer that uses a 1000 RPM tractor PTO with 3 pairs of hydraulic outlets.

1. To operate the mixer, first read the LOADING INSTRUCTIONS & PRECAUTIONS on the previous page.
2. Attach the mixer to the tractor draw bar using the appropriate size hitch pin. A pin with a close fit will increase the longevity of the trailer hitch and tractor draw bar.
3. Connect PTO driveline to the tractor and connect the hydraulic lines that operate the discharge door and if equipped with a conveyor, the conveyor extension cylinder and the conveyor motor.
4. Start tractor and engage the PTO until the augers begin to move and slowly increase the speed according to your needs.
5. When feed ration is fully mixed and ready to discharge, engage the hydraulics to move the conveyor out and turn on conveyor (if equipped with a conveyor), then raise the discharge door to the height needed for the volume that is required.

For best results, off load mixed feed at as high a RPM as possible and with the door as open as possible. This will insure a more even flow of feed and result in better clean out of the mixer.

LUBRICATION

DISENGAGE PTO & SHUT OFF POWER BEFORE LUBRICATING THE MACHINE.

DO NOT WEAR LOOSE FITTING CLOTHING THAT MAY CATCH IN MOVING PARTS.

PTO SHAFTS & U-JOINTS: Grease every 8 hours of operation.

AUGER 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 **(Mobil Delvac Synthetic Gear Oil 75W-90)** .

OIL FILTER SERVICE: All filters should be changed the first 24 hours after start up of the system, and there after during normal maintenance every 500 hours of service. 10 micron filter elements are recommended. All reservoirs should be checked daily for proper fluid level. Visually check daily for any fluid leakage.

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 TRACTOR BEFORE 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.
PTO (Slip Shaft)	Good Quality Grease	Every 8 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.
Wheel Bearings	90w Gear Lube	Inspect daily for leaks.
U-Joint	Good Quality Grease	Every 8 hours
CV-Joint	Good Quality Grease	Every 8 hours
Auger Gearbox	Mobil Delvac Synthetic Gear Oil 75W-90	After the first 100 hours of operation. 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.

TROUBLE SHOOTING

⚠ WARNING ALWAYS DISCONNECT OR DISENGAGE POWER TAKE OFF AND REMOVE KEYS FROM TRACTOR 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.

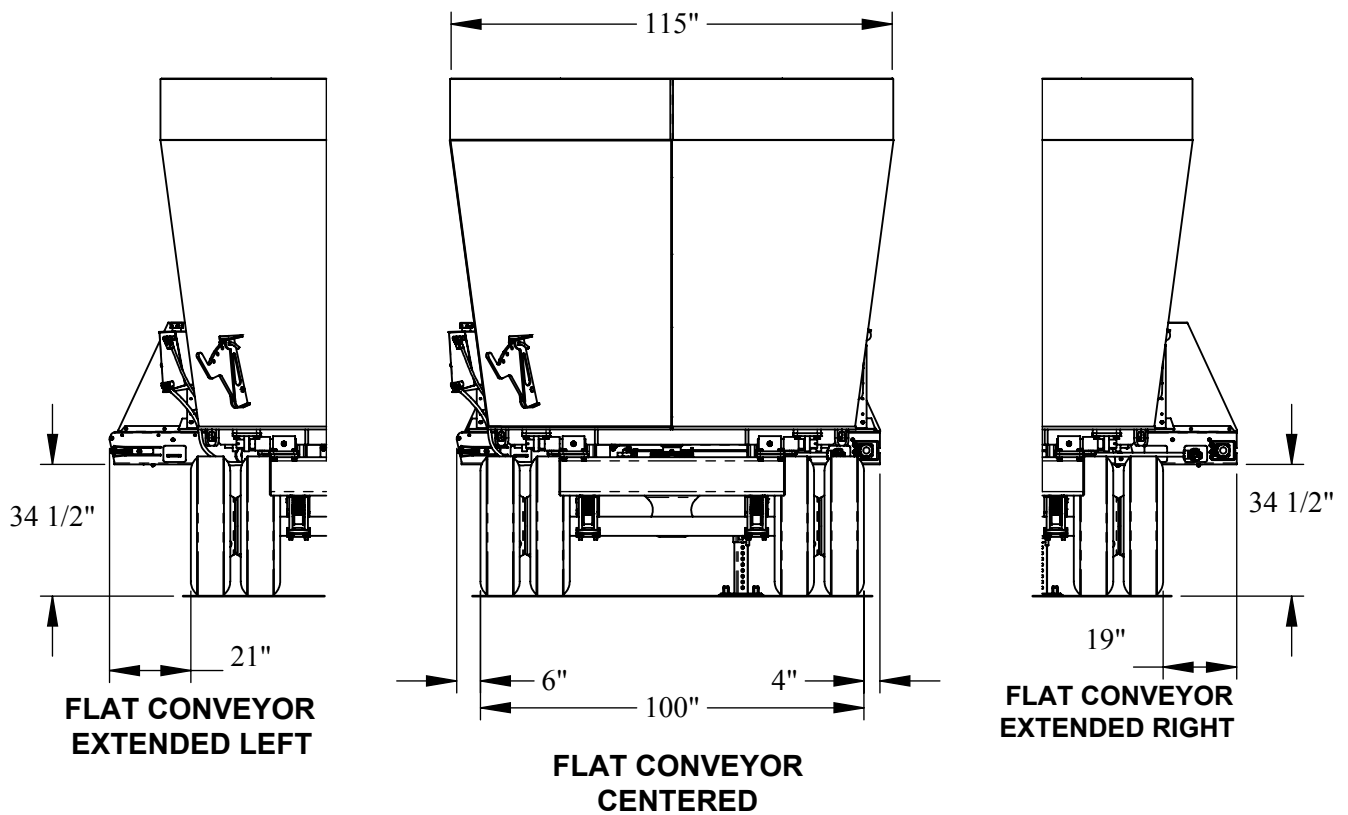
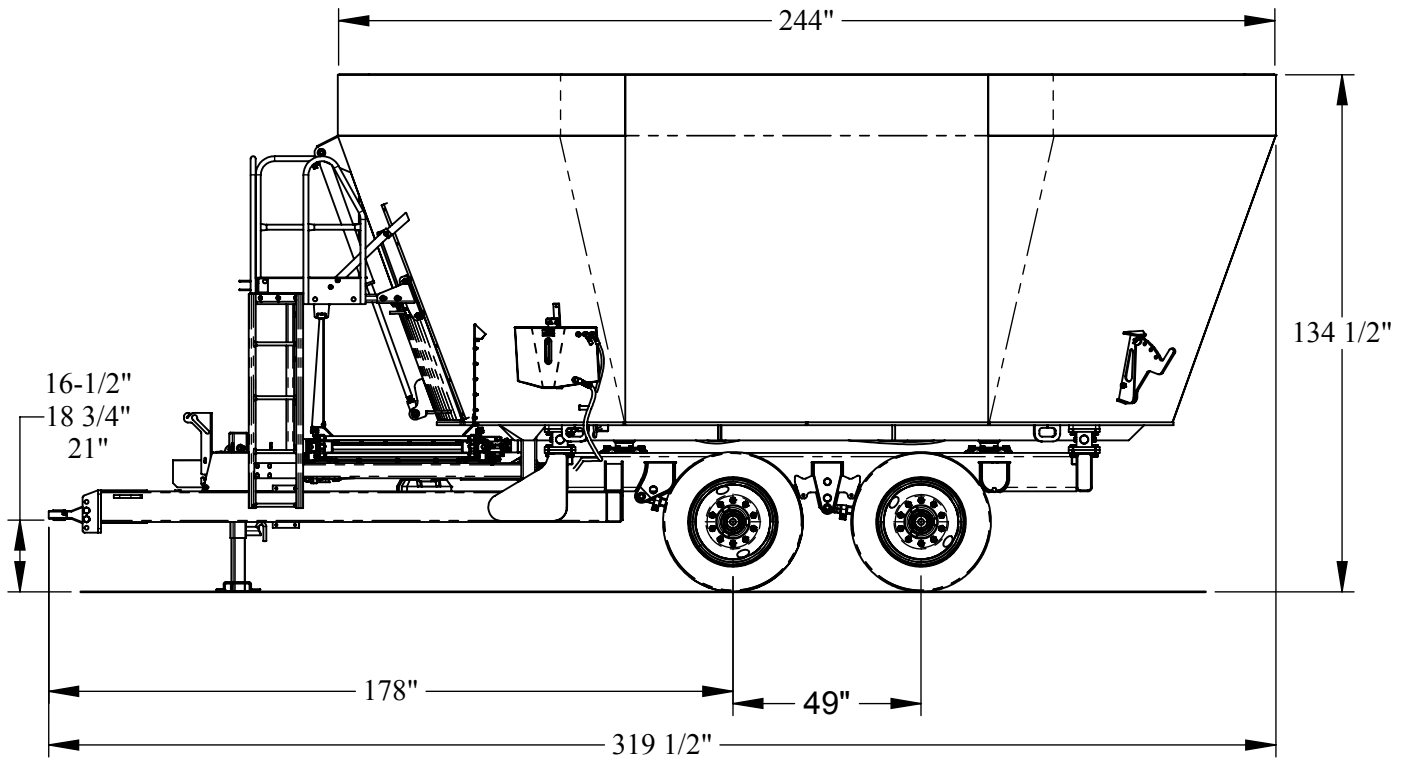
PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY
Machine Vibration	Universal Joints Are Out Of Alignment.	Check And Realign.
	Worn Out Bearing.	Replace Bearing.
Excessive Bearing Failure	Improper Lubrication	Refer To Lubrication Chart.
	Contamination	Check Seal
	Excessive Loads.	Refer To General Information About 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 under LOADING INSTRUCTIONS & PRECAUTIONS.
	High concentration of long hay, not being torn apart.	Extend restrictor plates (dogs) further into tub as instructed under LOADING INSTRUCTIONS & PRECAUTIONS.
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 under LOADING INSTRUCTIONS & PRECAUTIONS.
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 under LOADING INSTRUCTIONS & PRECAUTIONS.

**1105 - 1355 - 1505 VERTICAL TRAILER MIXER
FEATURES & SPECIFICATIONS**

MODEL DESCRIPTION	1105 Trailer	1355 Trailer	1505 Trailer
Maximum Load with Hay Ration	19,800 LB.	24,300 LB.	27,000 LB.
Maximum Load with Heavy Ration	27,500 LB.	33,750 LB.	33,750 LB.
Empty Weight, Approximate	17,100 LB.	20,600 LB.	20,980 LB.
Mixing Capacity cu. ft.	900 CU. FT.	1,150 CU. FT.	1,300 CU. FT.
Additional Weight, 8" End-Cap Extensions	150 LB.	150 LB.	150 LB.
Tire Size	21R x 22.5, 42"OD	255/R70 x 22.5, 34"OD	255/R70 x 22.5, 34"OD
HUB, LB.	10 BOLT, 20,000 LB.	10 BOLT, 20,000 LB.	10 BOLT, 20,000 LB.
Screw Speeds	34 RPM	34 RPM	34 RPM
PTO Speed	1,000 RPM	1,000 RPM	1,000 RPM
Conveyor Width	42"	42"	42"

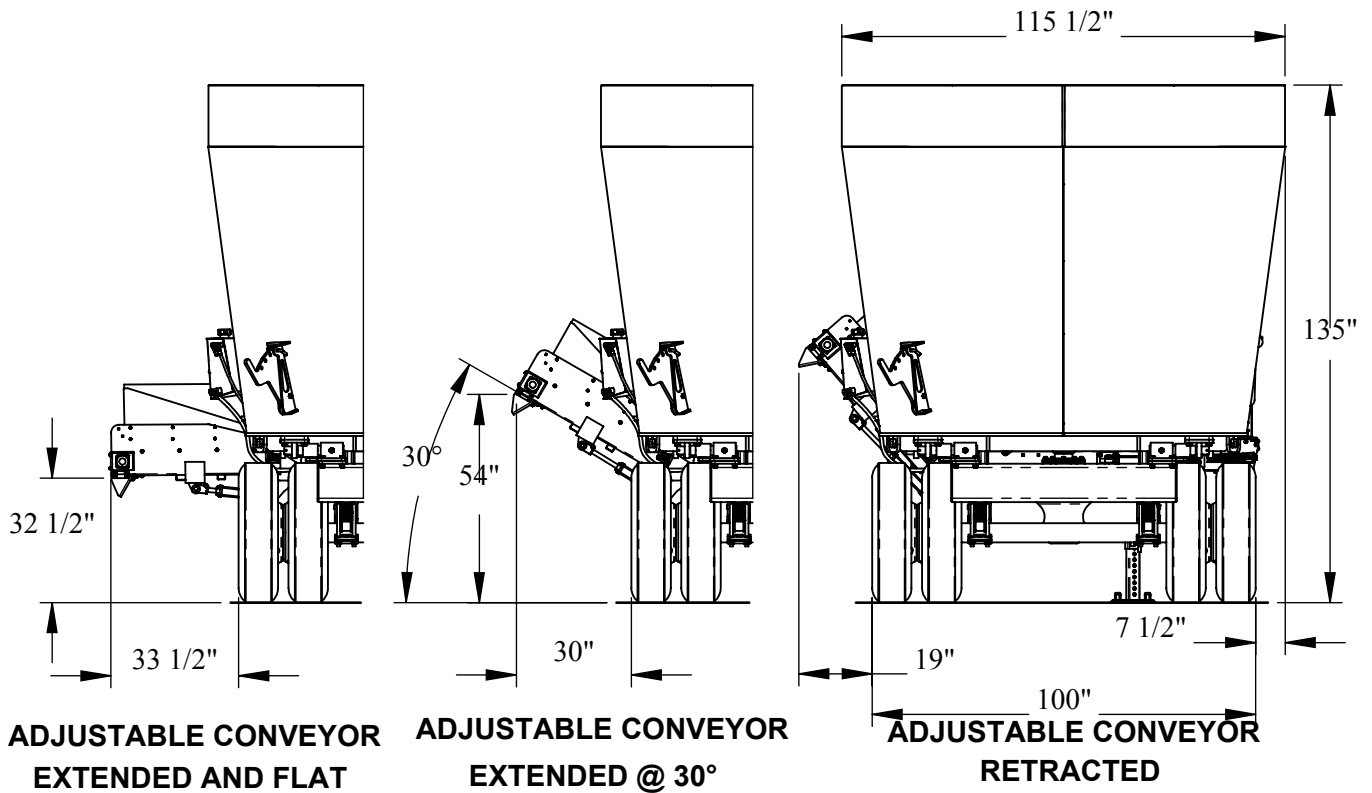
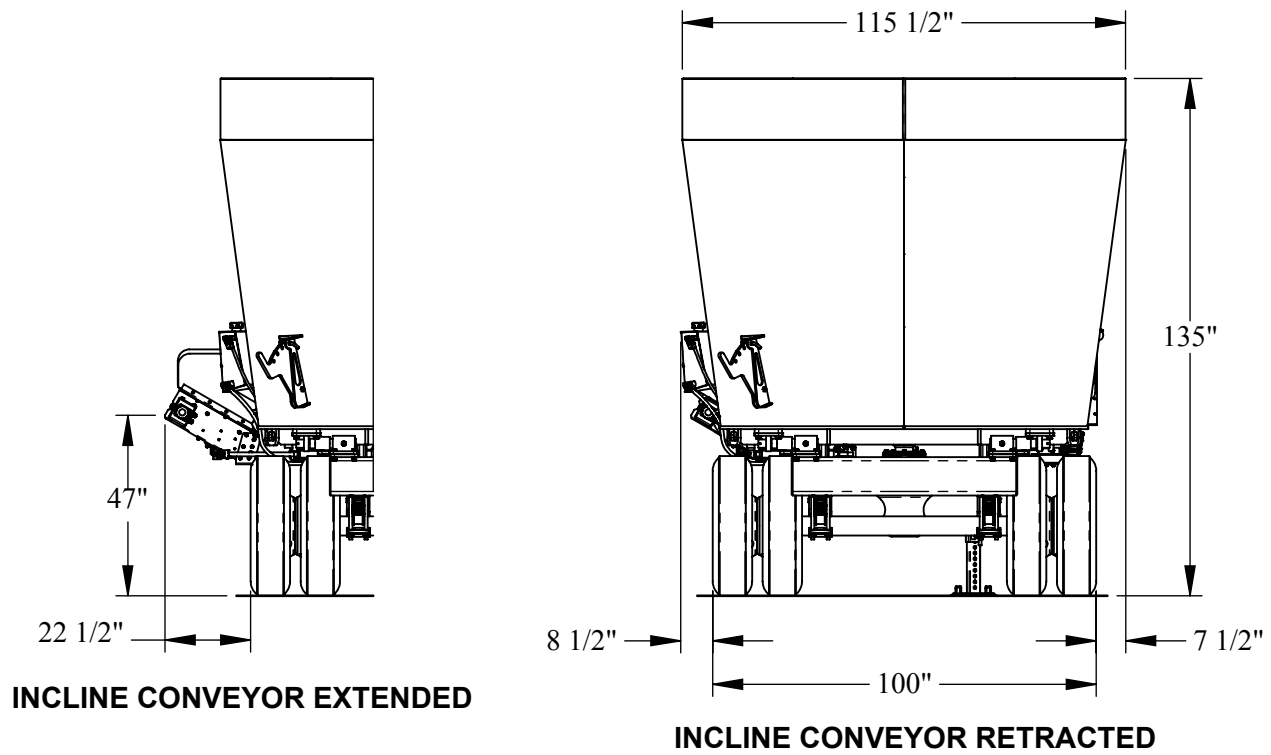
All Dimensions & Specifications are Approximate and Subject to Change Without Notice.

1355 DIRECT DRIVE TRAILER FRONT CENTER DISCHARGE DIMENSIONS



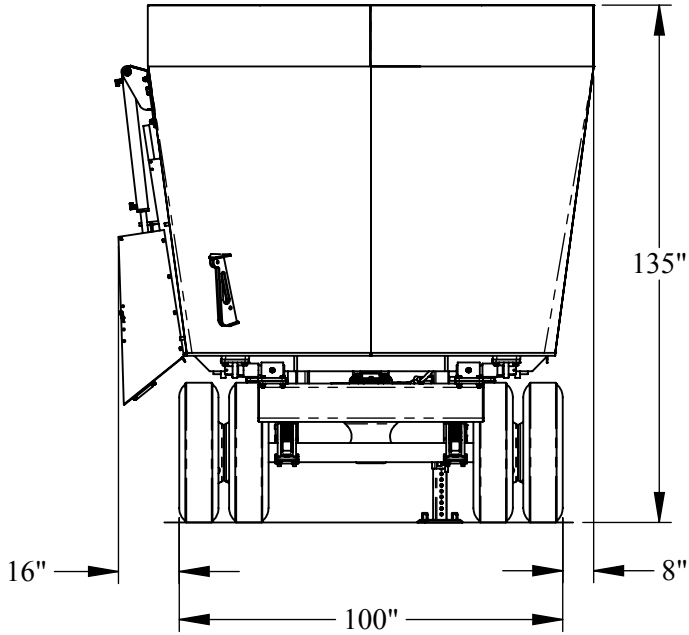
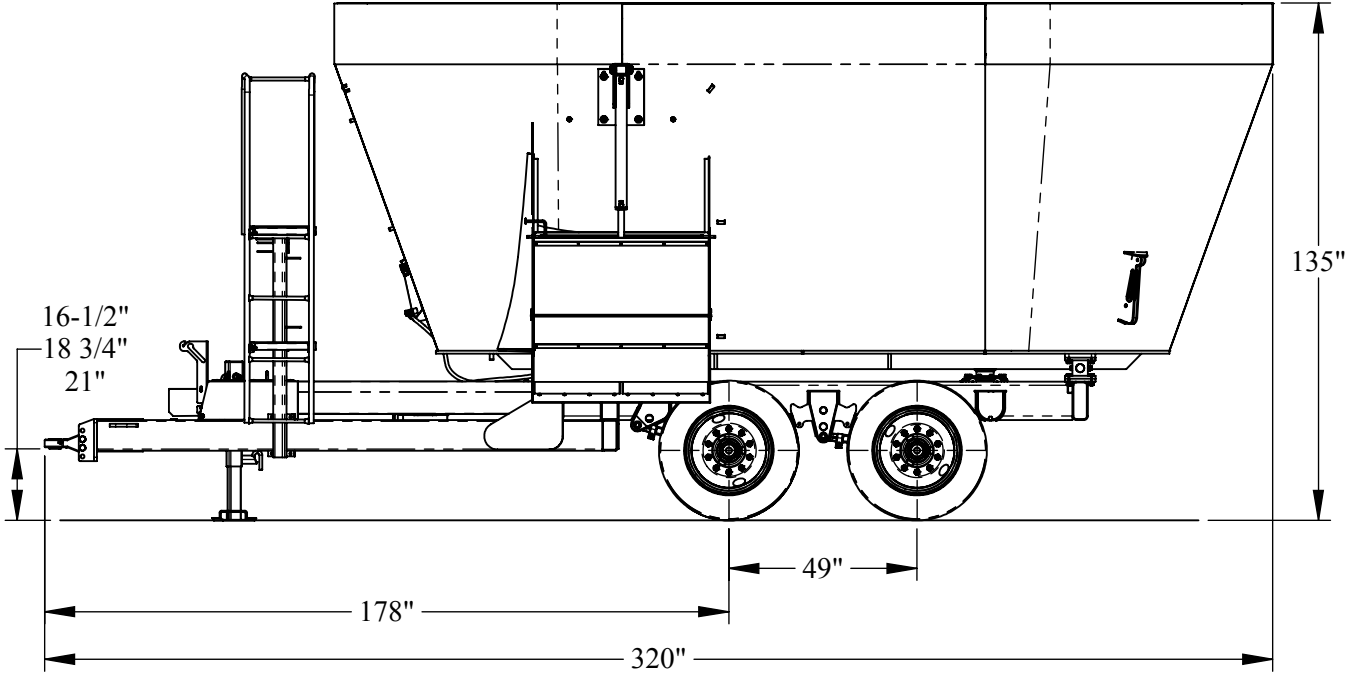
All Dimensions & Specifications are Approximate and Subject to Change Without Notice.

1355 DIRECT DRIVE TRAILER FRONT CENTER DISCHARGE DIMENSIONS



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

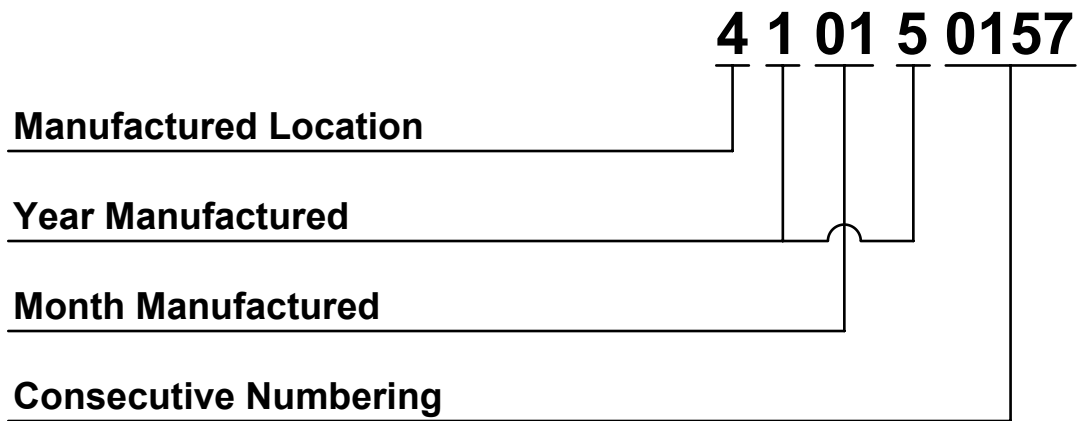
1355 DIRECT DRIVE TRAILER SIDE DISCHARGE DIMENSIONS



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

This Page intentionally left blank.

How to read a Roto-Mix Serial Number

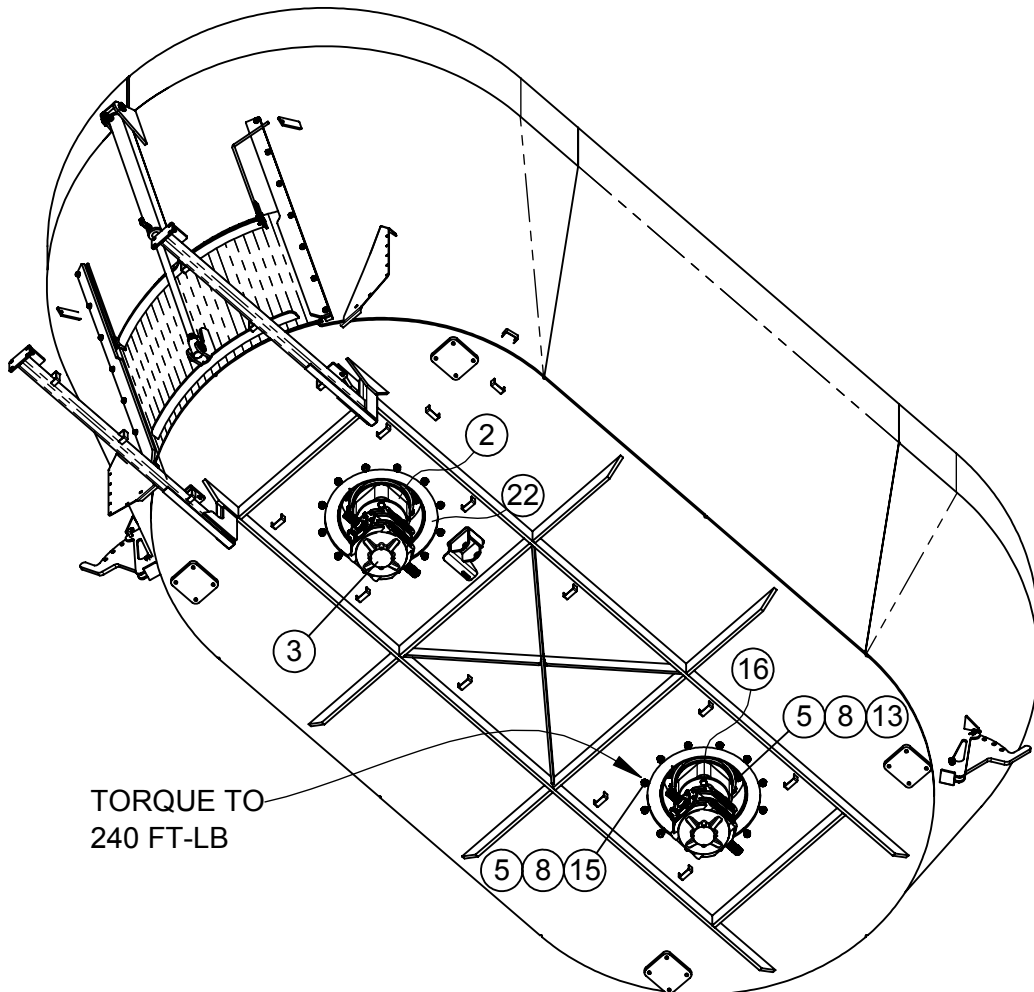
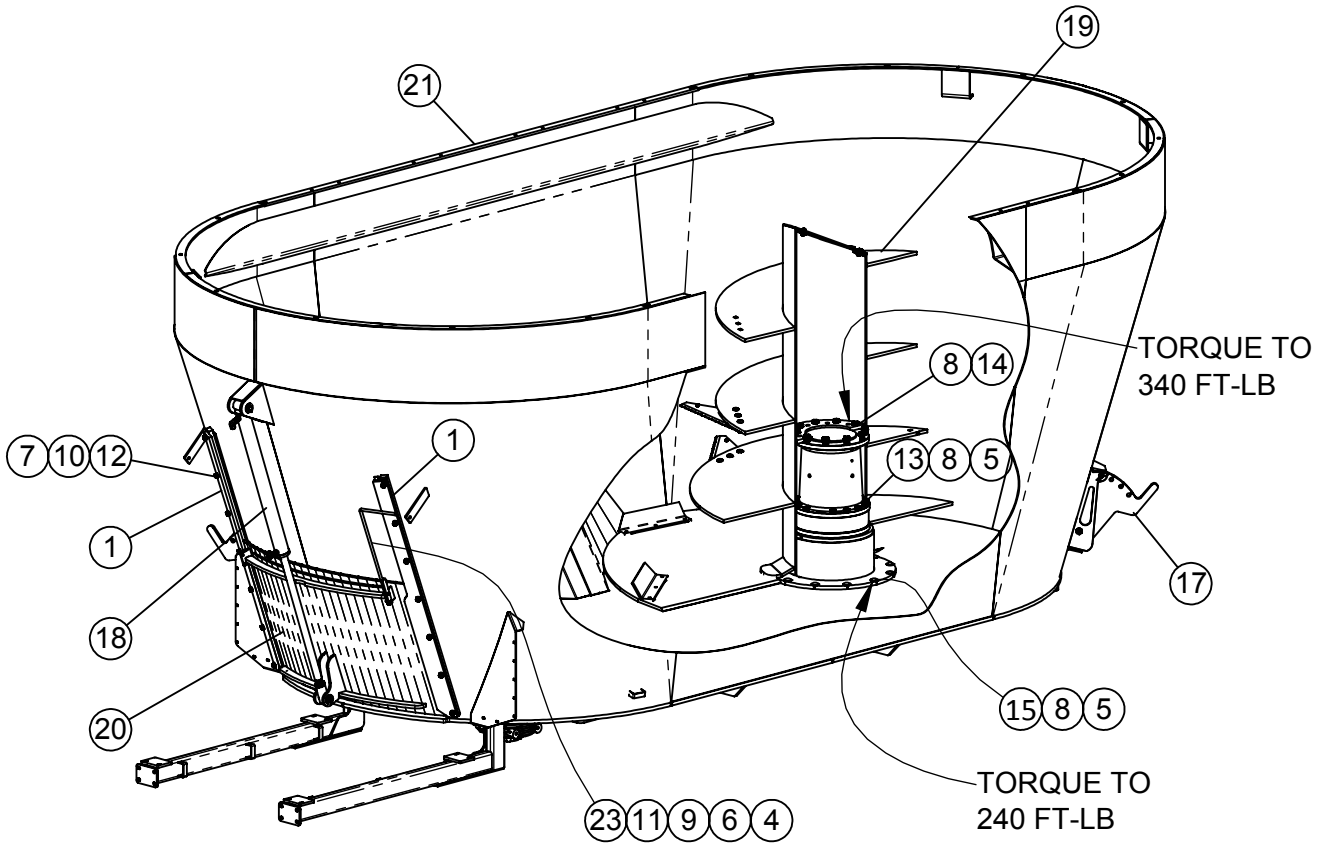


1355 DIRECT DRIVE REPAIR PARTS

TABLE OF CONTENTS

	PAGE NO.
MIXER ASSEMBLY	32-33
AUGER ASSEMBLY	34
DISCHARGE DOOR CYLINDER ASSEMBLY	35
SIDE DOOR DISCHARGE.....	36-37
TRAILER ASSEMBLY	38-39
TRAILER HUB & SPINDLE ASSEMBLY	40
TRACTOR DRIVELINE	41
JACK SHAFT TO GEARBOX DRIVE LINE	42
GEARBOX TO GEARBOX DRIVE LINE	43
GEARBOX RESERVOIR KIT	44-45
FRONT CENTER DISCHARGE PLATFORM ASSEMBLY	46-47
SIDE DOOR DISCHARGE PLATFORM ASSEMBLY	48
SCALE PARTS	49
FLAT CONVEYOR ASSEMBLY	50-51
FLAT CONVEYOR SLIDE ASSEMBLY	52-53
INCLINE CONVEYOR ASSEMBLY	54-55
INCLINE CONVEYOR SLIDE ASSEMBLY	56-57
ADJUSTABLE INCLINE CONVEYOR ASSEMBLY.....	58-59
ADJUSTABLE INCLINE SLIDE ASSEMBLY	60-61
CONVEYOR RUBBER FLAP KIT	62
TUB END EXTENSION KIT, 8"	63
TUB END EXTENSION KIT, 8", WITH RUBBER SIDES.....	64

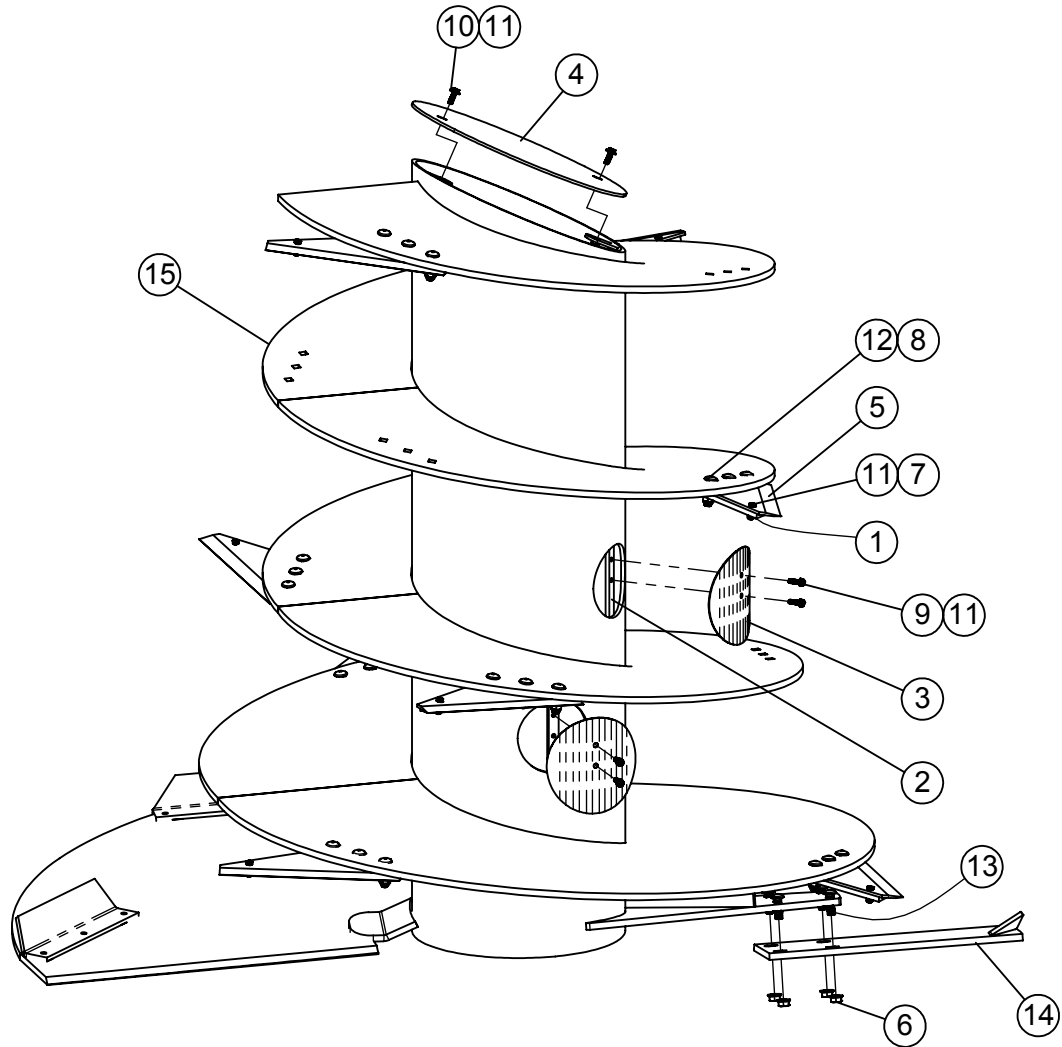
1355 DIRECT DRIVE MIXER ASSEMBLY



1355 DIRECT DRIVE MIXER ASSEMBLY

ITEM #	PART #	DESCRIPTION	QTY.
1	160115	DOOR GUIDE BAR	2
2	344165	GEARBOX COMER PR 3002 29.12:1	2
3	344166	COMER GEARBOX, T-301B, 1:1	2
4	400204	HEX NUT 1/4"-20 #5 PLTD	2
5	400212	HEX NUT 3/4"-10 #5 PLTD	52
6	402004	WASHER, SPRING LOCK 1/4" PLTD	2
7	402008	SPRING LOCK WASHER 1/2" PLTD	14
8	402112	LOCK WASHER, EXTERNAL STAR 3/4"	72
9	402404	FLAT WASHER 1/4" PLTD	2
10	402508	FLAT WASHER, SAE, 1/2" ID x 1" OD	14
11	405605	HHCS 1/4"-20 x 1 1/4" #5 PLTD	2
12	405703	HHCS 1/2"-13 x 1-1/2" #5 PLTD	14
13	405793	HHCS 3/4"-10 x 7" #5 PLTD	28
14	406479	HHCS 3/4"-10 x 2" #8 PLTD	20
15	407141	CHCS 3/4"-10 x 2-1/2" #5 PLTD	24
16	407803	M20 x 40 mm HHCS Metric	8
17	660058	855 VERT KNIFE GATE KIT	2
18	660059	SINGLE CYL DISCH DOOR HYD KIT	1
19	760695	1355 SINGLE FLIGHT AUGER ASM	2
20	860455	1105 FRONT CENTER DOOR WA	1
21	860617	1355 FRONT CENTER TUB WA - COMER	1
22	860861	COMER GEARBOX ADAPTER WA	2
23	872329	TRAILER STRAIGHT DOOR MARKER WA	1

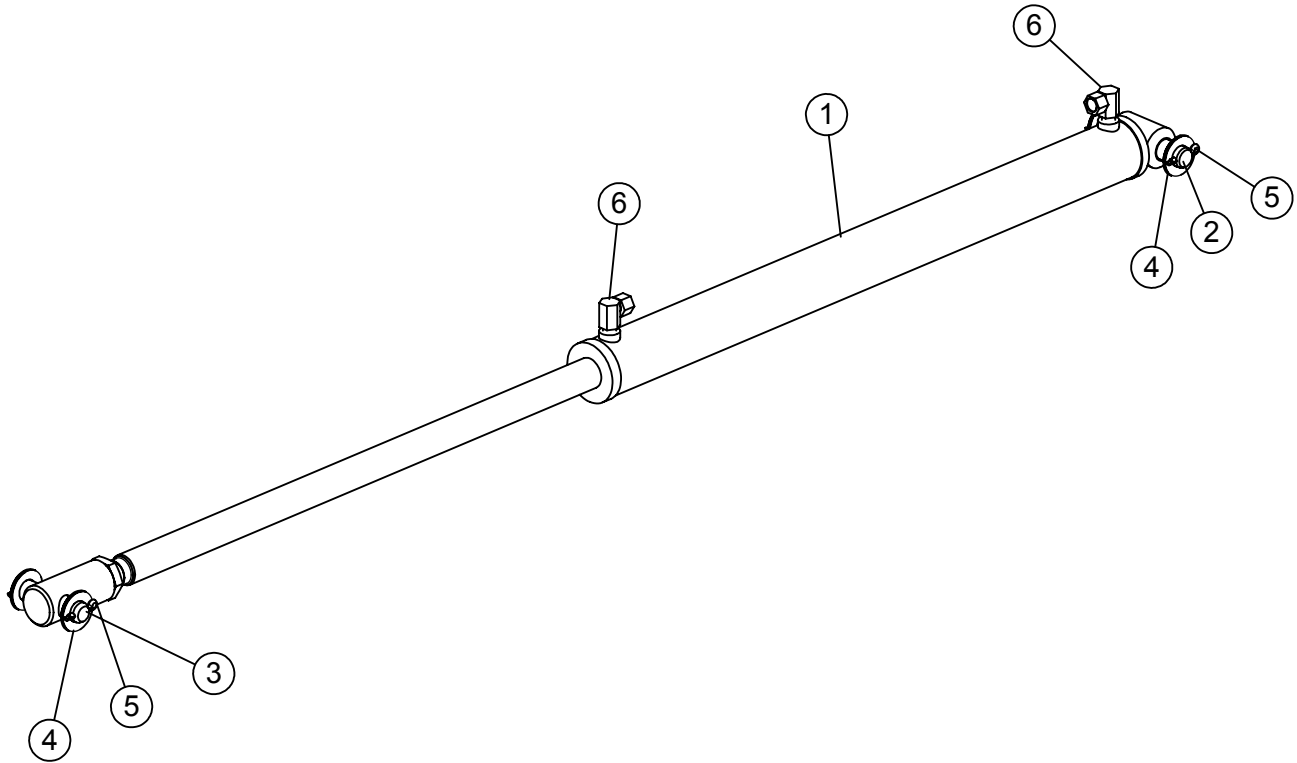
1355 DIRECT DRIVE AUGER ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY
1	160076	KNIFE BACKUP PLATE - LEFT HAND	AN
2	161290	AUGER COVER BOLT BAR 3/8 x 1 x 8	2
3	161298	AUGER ACCESS COVER - 7" OD	2
4	162932	AUGER TUBE CAP 22-1/8" x 20-1/4"	1
5	385007	KNIFE BLADE 7 1/2" x 17 1/4"	AN
6	400115	FLANGE NUT, 5/8-11 SERRATED	4
7	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	AN
8	401110	HEX NYLOC NUT 5/8"-11 #5 Pltd	AN
9	402006	WASHER SPRING LOCK 3/8" MED PLTD	4
10	402406	FLAT WASHER 3/8" PLTD	2
11	405654	HHCS 3/8"-16 x 1-1/4" #5 PLTD	AN
12	407122	CHCS 5/8"-11 x 2-1/2" #5 Pltd	AN
13	407130	CHCS 5/8"-11 x 2" #8 PLTD	4
14	860840	AUGER WING KICKER WA - 1355	1
15	860863	1355 AUGER WA (COMER PR3002 GEARBOX)	1

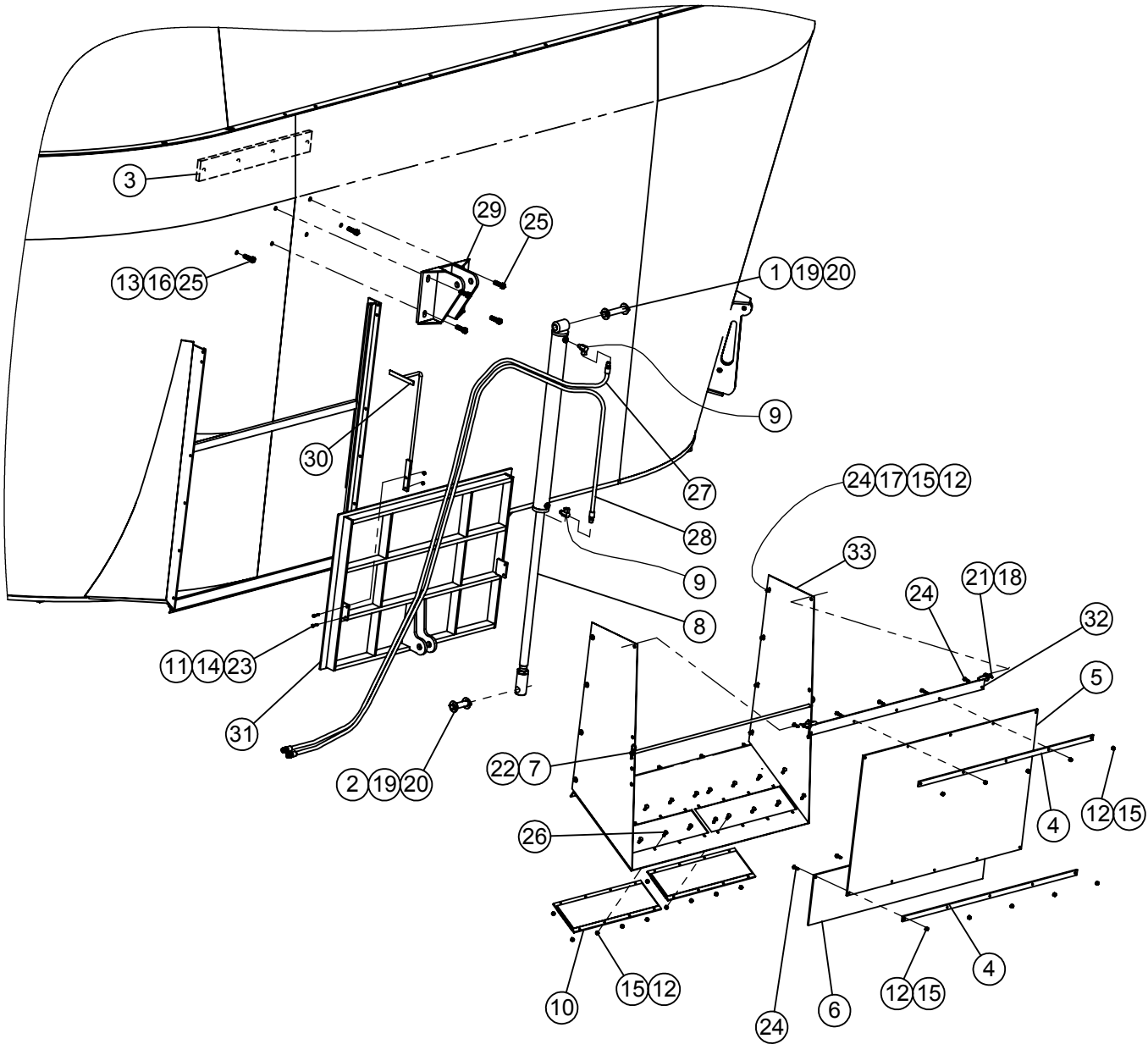
AN = AS NEEDED

DOOR CYLINDER PARTS



ITEM #	PART #	DESCRIPTION	QTY.
1	364079	CYL. 2-1/2" BORE x 1-1/2" ROD x 30-1/4" STROKE	1
2	160619	CYLINDER PIN 5 7/8"	1
3	160620	CYLINDER PIN 1" x 4 1/4"	1
4	402516	WASHER FLAT, 1" SAE PLTD	4
5	404000	COTTER PIN 1/4" x 1 1/2"	4
6	368007	HYD ADAPTER 3/8"MP x 3/8"FPX 90° .109 orifice	2

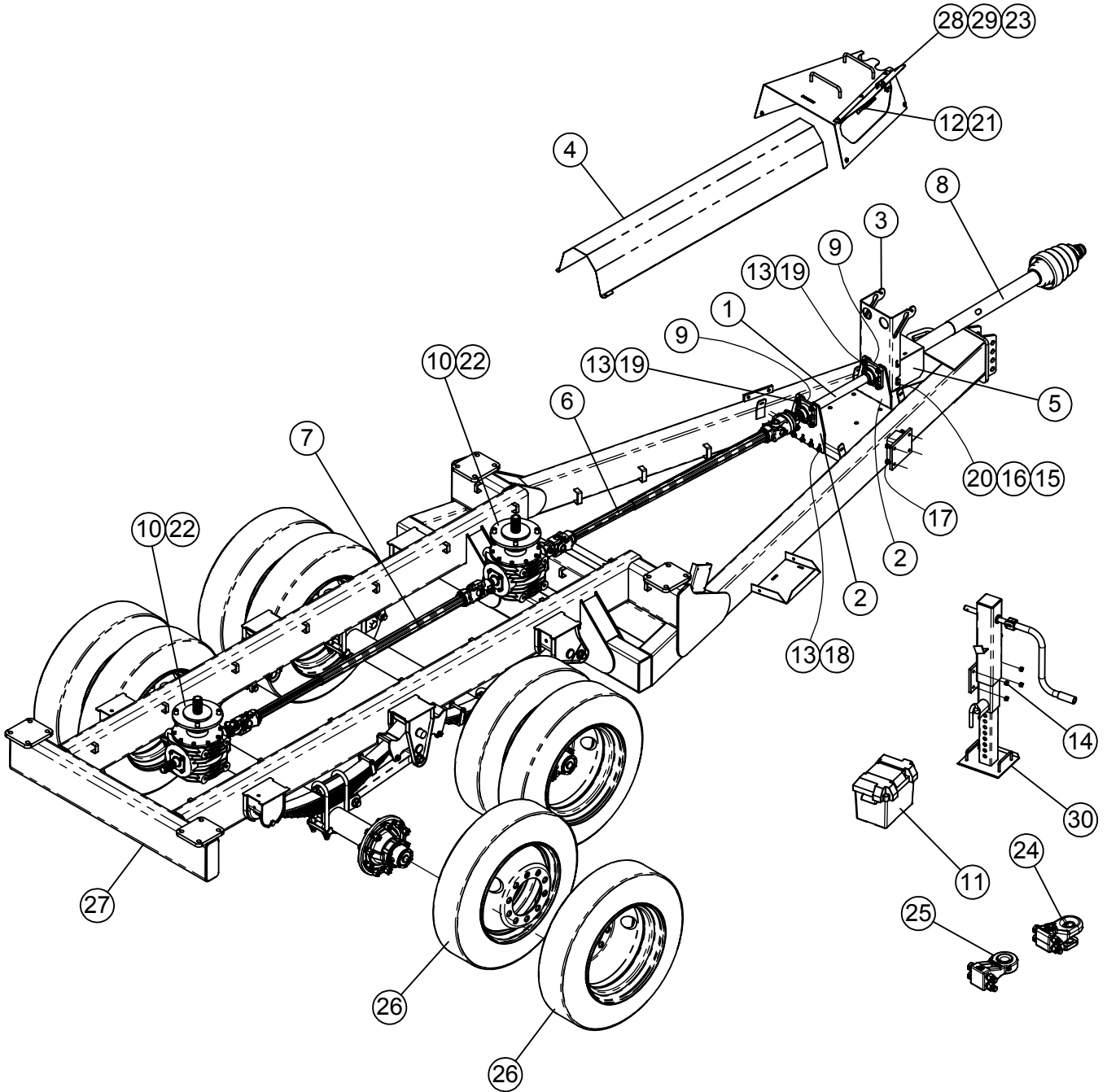
1355 DIRECT DRIVE SIDE DOOR DISCHARGE



1355 DIRECT DRIVE SIDE DOOR DISCHARGE

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	160861	BELT HINGE CLAMP 45 1/2"	2
5	160862	BELT SKIRT 28" X 45 1/2"	1
6	160992	BELT DSCH PLT - 10" x 45 1/2"	1
7	161001	SKIRT ROD 1/2" DIA. x 47"	1
8	364079	CYL. 2-1/2" BORE x 1-1/2" ROD x 30-1/4" STROKE	1
9	368007	HYD ADAPTER 3/8"MP x 3/8"FPX 90° .109 orifice	2
10	375005	ACRO PLATE MAGNET AM 2200,	2
11	400204	HEX NUT 1/4"-20 #5 PLTD	2
12	400205	HEX NUT 5/16"-18 #5 PLTD	39
13	400210	HEX NUT 5/8"-11 #5 PLTD	6
14	402004	WASHER, SPRING LOCK 1/4" PLTD	2
15	402005	WASHER 5/16", SPRING LOCK, MED PLTD	39
16	402010	SPRING LOCK WASHER 5/8" PLTD	6
17	402405	FLAT WASHER 5/16" MED PLTD	8
18	402408	WASHER, FLAT 1/2" MED PLTD	2
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	405605	HHCS 1/4"-20 x 1 1/4" #5 PLTD	2
24	405628	HHCS 5/16"-18 x 1" #5 PLTD	23
25	405754	HHCS, 5/8"-11 x 2" #5 PLTD	6
26	407021	CHCS 5/16"-18 x 1" #5 PLTD	16
27	781363	HYD HOSE 3/8" x 312"	1
28	781364	HYD HOSE 3/8" x 348"	1
29	860203	CYLINDER BRACKET W.A.	1
30	860218	DOOR MARKER W.A.	1
31	860257	SIDE DISCHARGE DOOR W.A.	1
32	860258	BELT HINGE W.A.	1
33	860294	MAG SKIRT BOTTOM W.A.	1

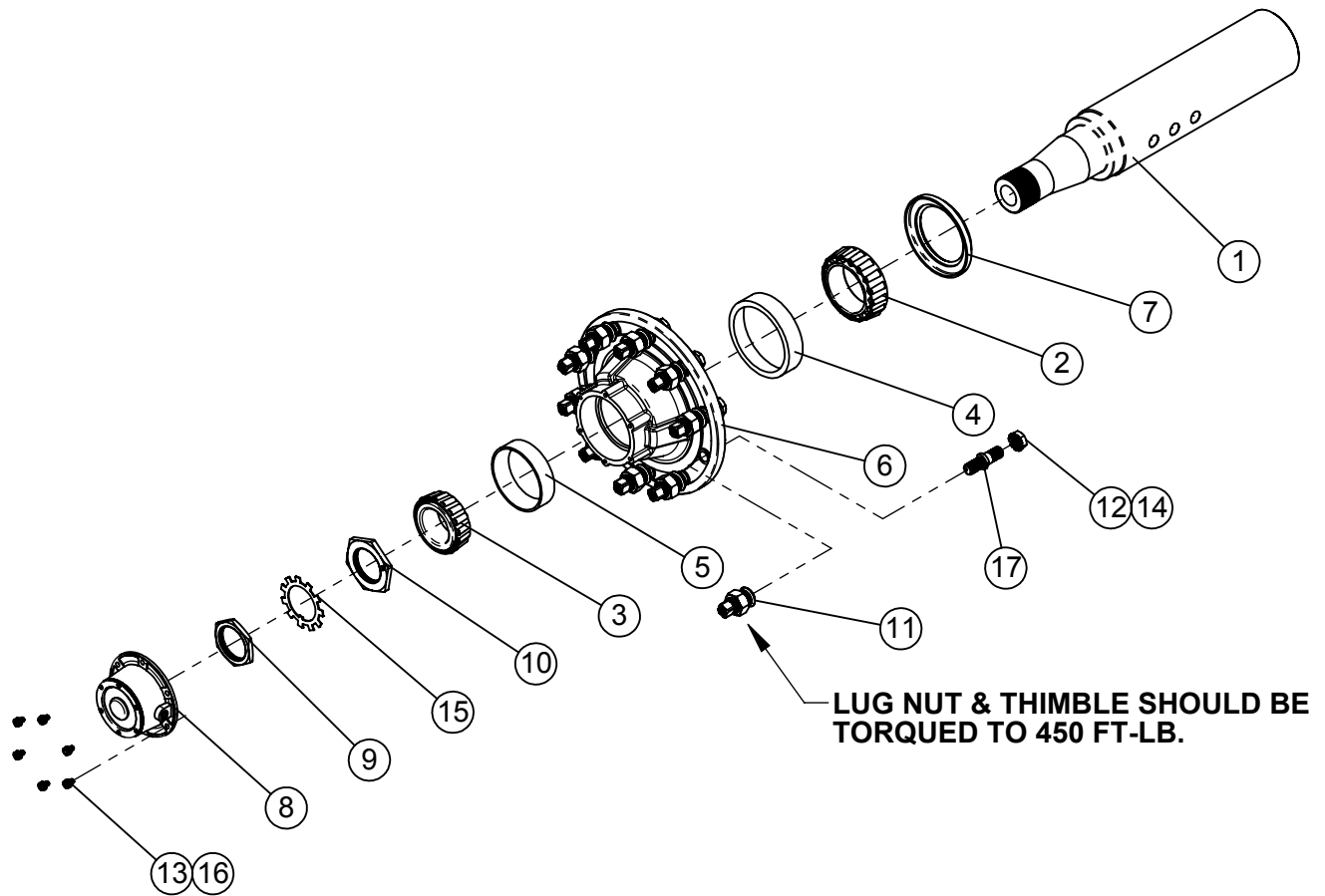
1355 DIRECT DRIVE TRAILER ASSEMBLY



1355 DIRECT DRIVE TRAILER ASSEMBLY

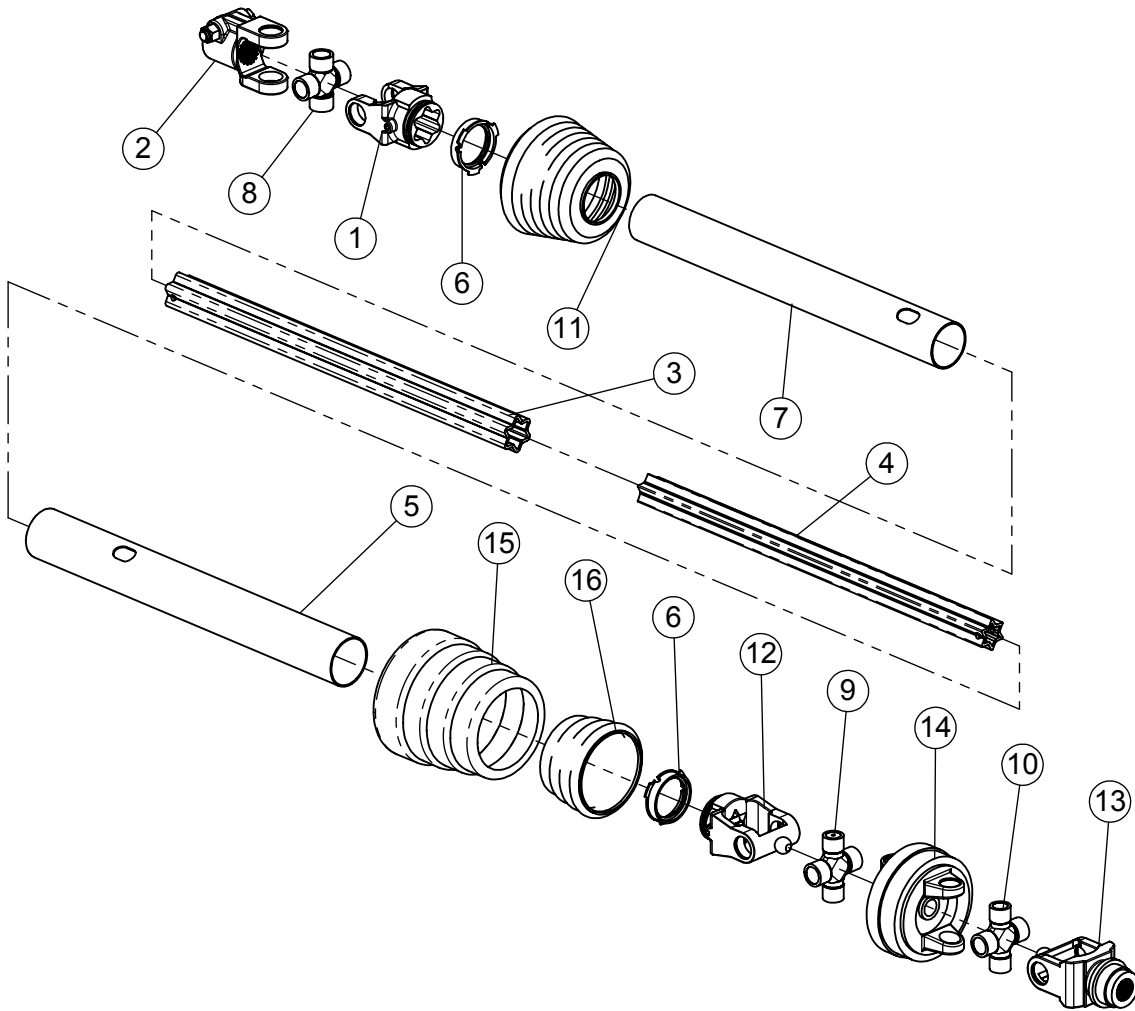
ITEM #	PART #	DESCRIPTION	QTY.
1	162360	TRAILER JACKSHAFT	1
2	162364	JACKSHAFT BEARING MOUNT PLATE	2
3	162388	PTO SHIELD MOUNT BRACKET	1
4	162938	DRIVELINE SHIELD - 1355 TRL	1
5	185302	P.T.O. SHIELD	1
6	338038	DRIVE SHAFT, W2500 W/SHEAR CLUTCH 396993	1
7	338039	DRV SHAFT W2400 1-3/4" 20T x 1-3/4" 20T	1
8	338041	DRIVESHAFT, WWE2580 397026	1
9	340428	BEARING, VCJ, 4-BOLT FLANGE, 1-3/4"	2
10	344166	COMER GEARBOX, T-301B, 1:1	2
11	357400	BATTERY BOX W/STRAP	1
12	400010	HEX NYLOC NUT M10-1.5, 8.8 PLTD	5
13	400114	HEX NUT, 1/2-13 SERRATED FLANGE #5	16
14	400908	HEX CROWN LOCNUT 1/2"-13 #9	4
15	401105	HEX NUT, 5/16"-18 NYLOC #5 PLTD	4
16	402404	FLAT WASHER 1/4" PLTD	4
17	405703	HHCS 1/2"-13 x 1-1/2" #5 PLTD	4
18	407101	CHCS 1/2"-13 x 1-1/4" #5 PLTD	8
19	407103	CHCS 1/2"-13 x 1-3/4" #5 PLTD	8
20	407410	SHOULDER BOLT, 3/8 x 3/8 LG x 5/16 THD	4
21	407800	HHCS M10-1.5 x 60MM, GRADE 10.9 PLTD	5
22	407803	M20 x 40 mm HHCS Metric	8
23	410300	SOUTH-CO LATCH	1
24	660372	CLEVIS HITCH KIT - CATEGORY 3	1
25	660373	BALL HITCH KIT CATEGORY 4	1
26	781235	RECAP TIRE & DUAL WHEEL 255R70 x 22.5	8
27	860613	1355 DIRECT DRIVE TRAILER WA	1
28	860720	DRIVELINE ACCESS DOOR WA	1
29	860767	DRIVELINE COVER WA, 1355	1
30	872090	DROP LEG JACK 9T	1

1355 DIRECT DRIVE HUB ASSEMBLY AND SPINDLE



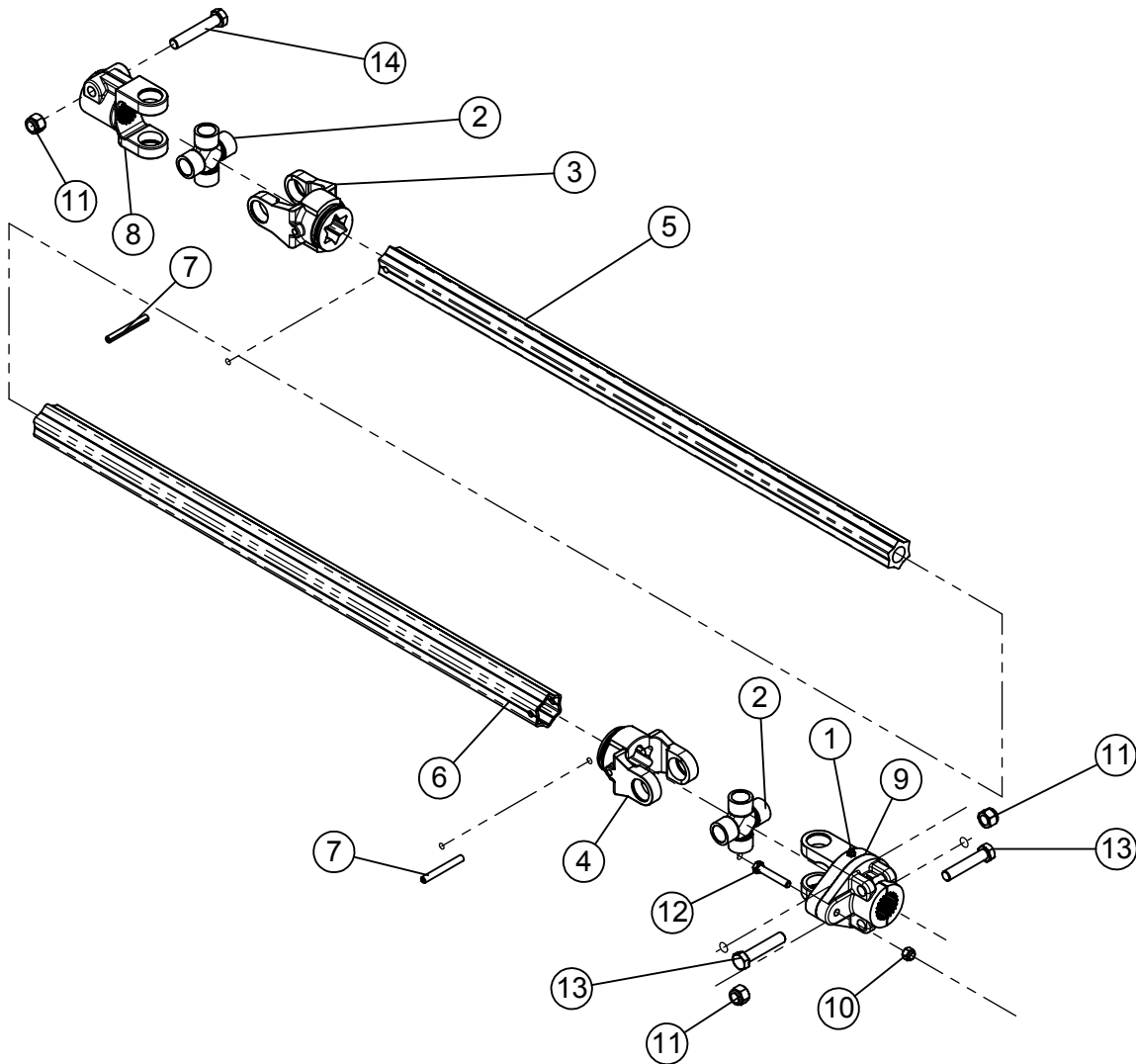
ITEM #	PART #	DESCRIPTION	QTY.
1	184614	SPINDLE, 20,000#	1
2	342213	INNER BEARING 3.543" BORE	1
3	342214	OUTSIDE BEARING 2-5/8" OD	1
4	342215	INNER BEARING RACE 5.787"OD	1
5	342216	OUTSIDE BEARING RACE 4-13/16" OD	1
6	372212	10-BOLT HUB ASSEMBLY, (RIGHT HAND) 20,000#	1
7	372304	SEAL 4-3/8" BORE	1
8	372309	DUST CAP, 20,000# HUB	1
9	400033	OUTER NUT, 3/8" THICK x 2-5/8" ID	1
10	400034	INNER NUT, 3/8" THICK x 2-5/8" ID	1
11	400112	RH INNER THIMBLE & OUTER LUG NUT	10
12	400712	HEX JAM NUT 3/4"-16	10
13	402005	WASHER 5/16", SPRING LOCK, MED PLTD	6
14	402112	LOCK WASHER, EXTERNAL STAR 3/4"	10
15	402904	LOCKING WASHER 1/4" THICK x 2-41/64" ID	1
16	405625	HHCS 5/16"-18 x 1/2" #5 PLTD	6
17	407724	STUD BOLT RH 3/4"-16	10

1355 DIRECT DRIVE TRACTOR DRIVE LINE #338041



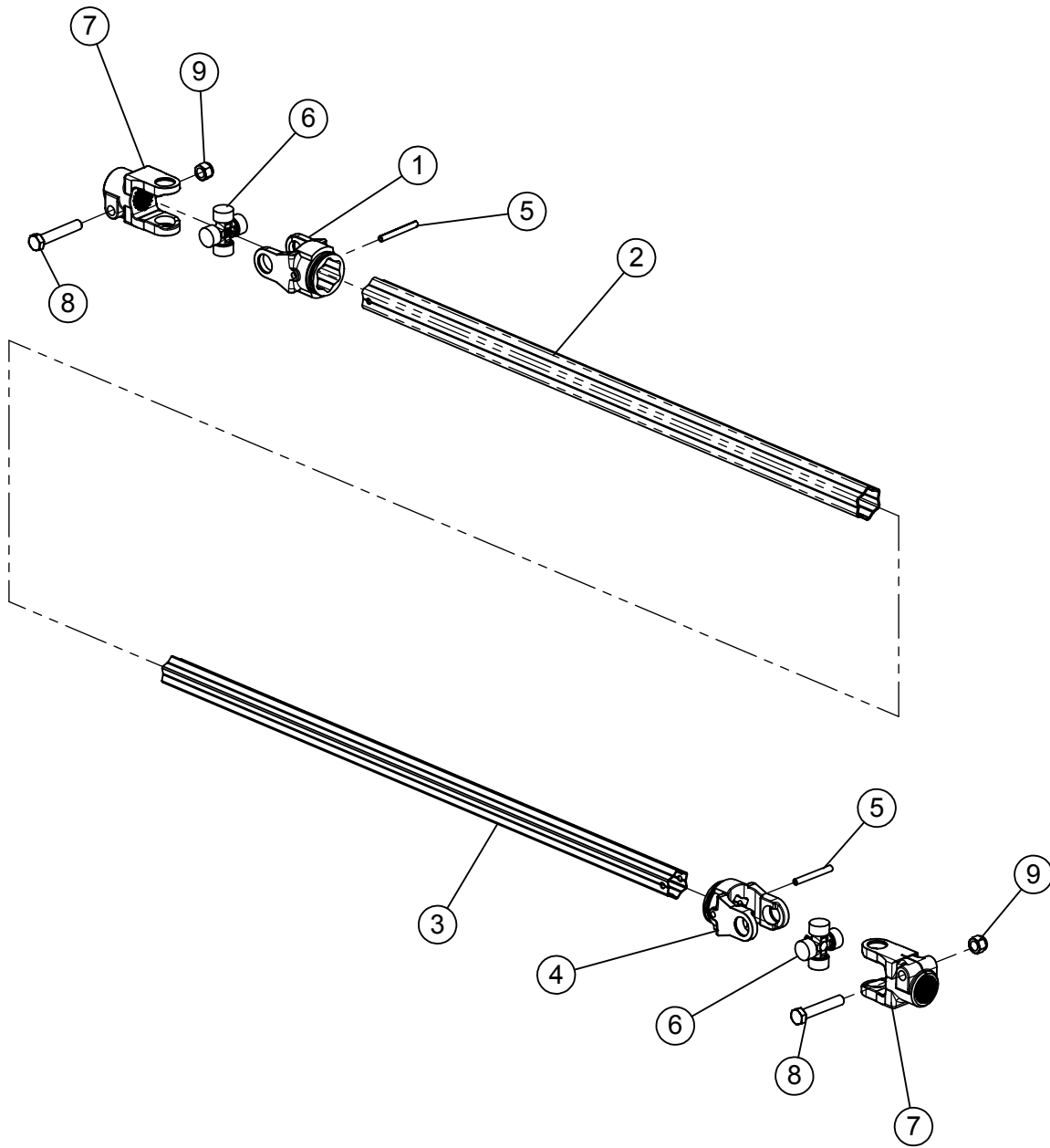
ITEM #	PART #	DESCRIPTION	QTY.
1	338454	INBOARD YOKE S5, W2500 097140	1
2	338606	YOKE 1-3/4" 20 SPL W2500 325027	1
3	338605	OUTER PROFILE & SLEEVE WA W2500 388535	1
4	338604	INNER PROFILE W2500 S4GA 344144	1
5	338607	OUTER SHIELD TUBE OVL - W-2500 397529, 398486	1
6	338489	BEARING RING SC25, 087276	2
7	338041	INNER SHIELD TUBE OVL - W-2500 387147	1
8	338446	CROSS KIT W2500 312209	1
9	338631	CV Cross Kit - W2580 395867	1
10	338603	CV Cross Kit - W2580 384316	1
11	338473	GUARD CONE 7 RIB 365387	1
12	338602	INBOARD YOKE W2580 S4 133993	1
13	338404	YOKE 1-3/8"-21 SPL QD W2500 396454	1
14	338601	DOUBLE YOKE CVC W-2500 365725	1
15	338634	CV CONE & BEARING ASSEMBLY -W2500 392061	1
16	338610	SHIELD CONE 4 RIB 104786	1

1355 DIRECT DRIVE DRIVE SHAFT JACKSHAFT TO GEARBOX #338038



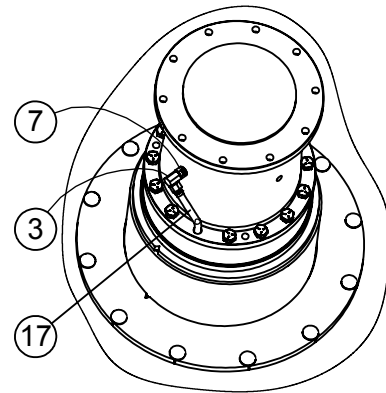
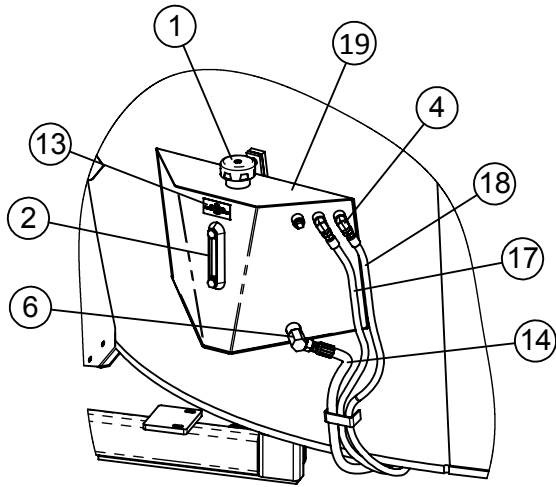
ITEM #	PART #	DESCRIPTION	QTY.
1	310748	1/8"-27 MALE PIPE GREASE ZERK	1
2	338446	CROSS KIT W2500 312209	2
3	338453	INBOARD YOKE W2500 S4 097133	1
4	338454	INBOARD YOKE S5, W2500 097140	1
5	338465	INNER PROFILE S4, W-2400 373013	1
6	338466	OUTER PROFILE, S5L 324190	1
7	338473	ROLL DRIVE PIN WLTSH 10MM x 90MM	2
8	338606	YOKE 1-3/4" 20 SPL W2500 325027	1
9	338637	YOKE 1-3/4" 20 SPL W/CLUTCH W2500 387505	1
10	400010	HEX NYLOC NUT M10-1.5, 8.8 PLTD	1
11	400014	HEX NYLOC NUT M16-2.0 #5 PLTD	3
12	407800	HHCS M10-1.5 x 60MM, GRADE 10.9 PLTD	1
13	407841	HHCS M16-2.0 x 80, 8.8 #5 PTLTD	2
14	407842	HHCS M16-2.0 x 90, 8.8 #5 PLTD	1

1355 DIRECT DRIVE SHAFT GEARBOX TO GEARBOX, #338039

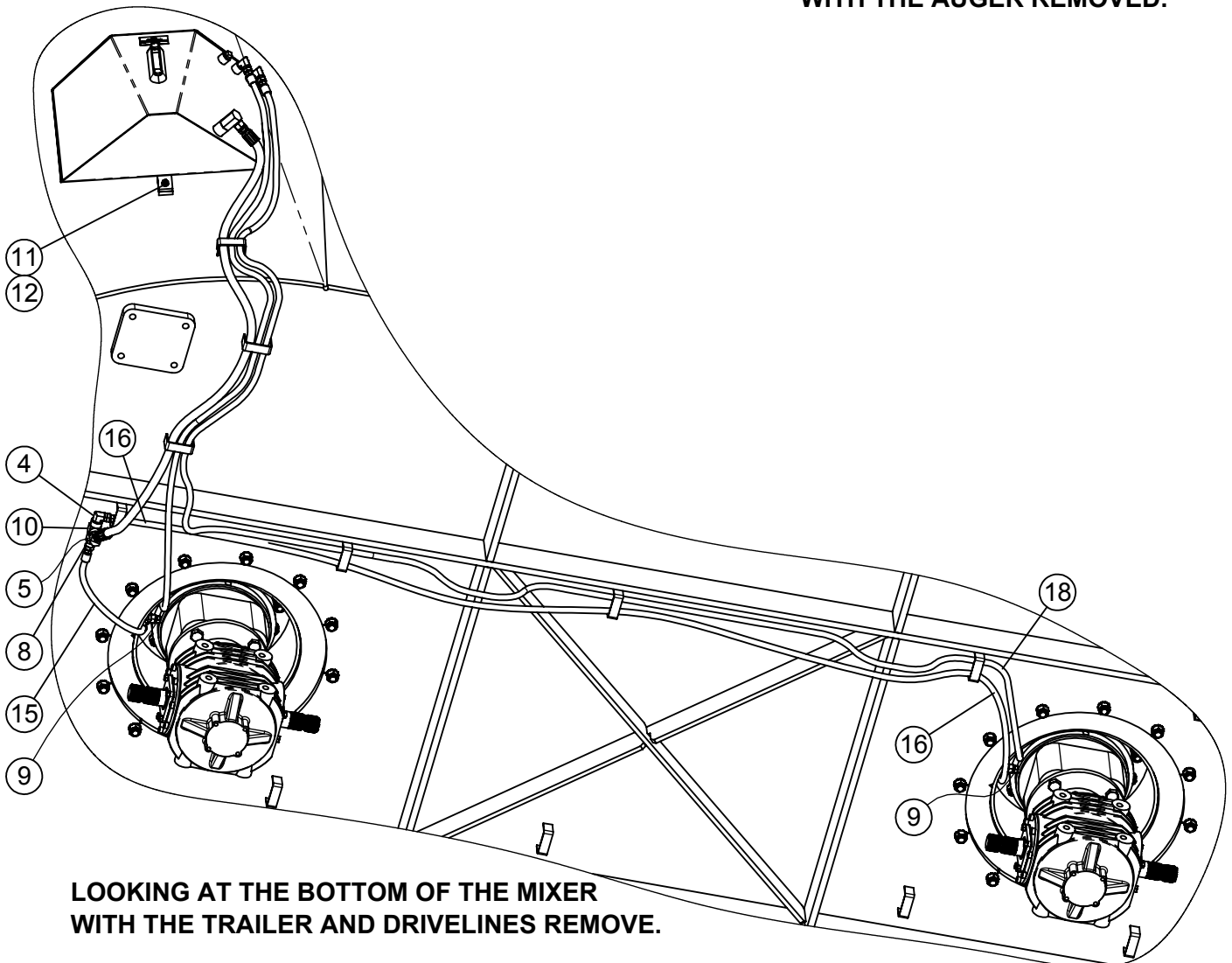


ITEM #	PART #	DESCRIPTION	QTY.
1	338452	INBOARD YOKE S5 W2400 356906	1
2	338615	OUTER PROFILE S5 W2400 109485	1
3	338614	INNER PROFILE S4 W2400 391623	1
4	338450	INBOARD YOKE W2400 S4 356905	1
5	338473	ROLL DRIVE PIN WLTSH 10MM x 90MM	2
6	338443	CROSS KIT 32mm x 76mm W2400 312410	2
7	338612	YOKE 1-3/4" 20 SPL W2400 331053	2
8	407842	HHCS M16-2.0 x 90, 8.8 #5 PLTD	2
9	400014	HEX NYLOC NUT M16-2.0 #5 PLTD	2

1355 DIRECT DRIVE TRAILER GEARBOX RESERVOIR KIT



**LOOKING AT THE GEARBOX
ON INSIDE OF THE MIXER
WITH THE AUGER REMOVED.**

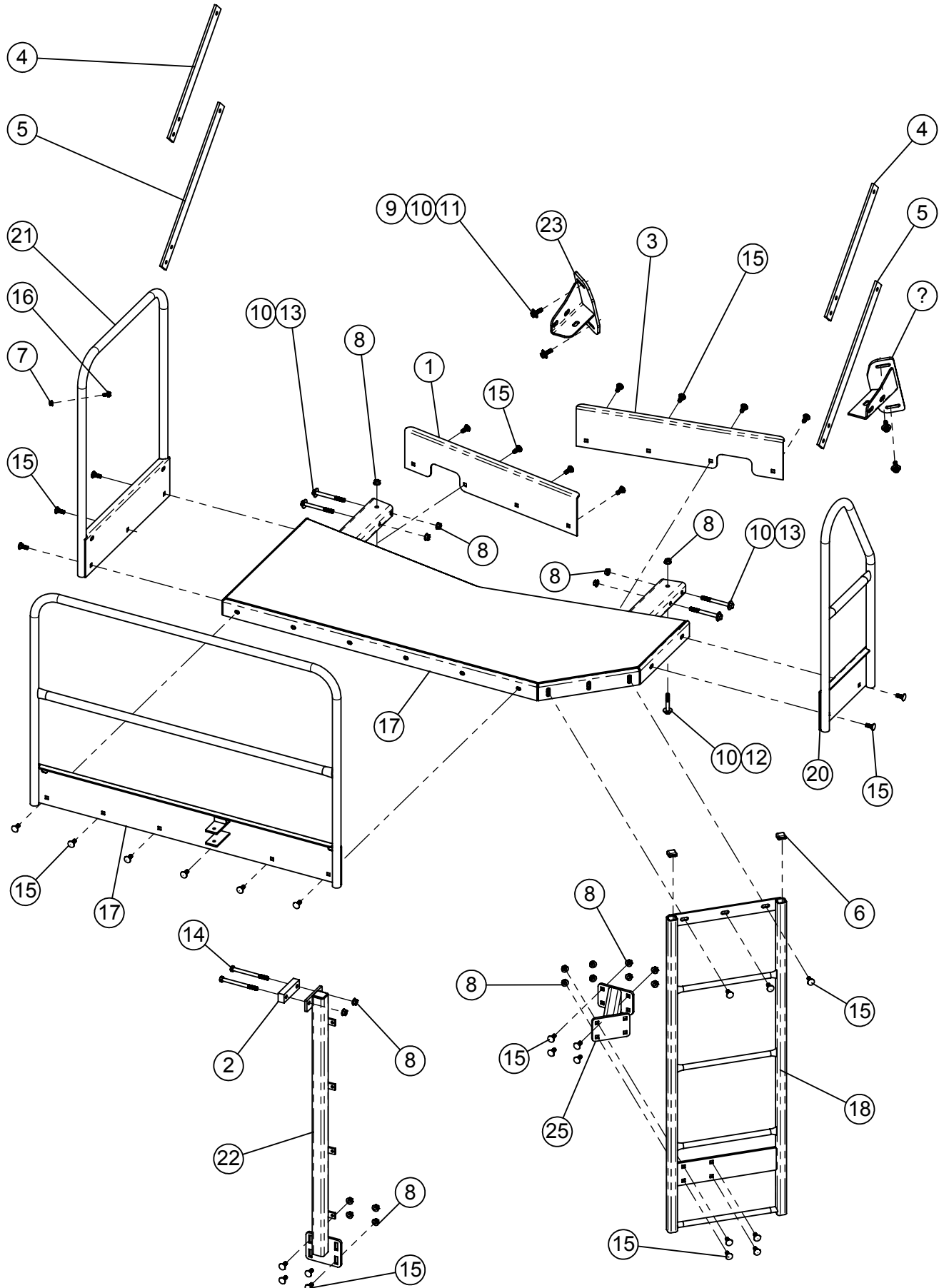


**LOOKING AT THE BOTTOM OF THE MIXER
WITH THE TRAILER AND DRIVELINES REMOVE.**

1355 DIRECT DRIVE TRAILER GEARBOX RESERVOIR KIT

ITEM #	PART #	DESCRIPTION	QTY.
1	362549	TANK BREATHER 8" DIP STICK	1
2	362555	SIGHT GAUGE 5"	1
3	368020	SWIVEL 90° 3/8MP x 3/8FP	2
4	368028	SWIVEL 90° 1.2MP x 3/8FP	3
5	368029	HYD SWIVEL 1/2"MP x 1/2"FP 45°	1
6	368041	SWIVEL, 90° 3/4" MP x 1/2" FP	1
7	368108	STR ADPTR, 3/8"MBPP x 3/8"FP, 3455-06-06	2
8	368116	HYD ADAPTER STR 1/2" x 3/8" FP SWIVEL	1
9	368233	HYD ADAPTER, STRT 3/8 x 9/16JIC	2
10	368609	TEE 1/2"FP x 1/2"FP x 1/2"FP	1
11	402006	WASHER SPRING LOCK 3/8" MED PLTD	2
12	405652	HHCS 3/8"-16 x 3/4" #5 PLTD	2
13	440954	DECAL, USE MOBIL SYNTHETIC 75W-90	1
14	781683	1/2 x 59 HOSE ASM 1/2MP x 1/2MP	1
15	781958	3/8 x 17 HOSE ASM 3/8MP x 9/16FJ90	1
16	781959	3/8 x 118 HOSE ASM 3/8MP x 9/16FJ90	1
17	781960	3/8 x 100 LOLA HOSE ASM 3/8MP x 3/8MP	1
18	781961	3/8 x 180 LOLA HOSE ASM 3/8MP x 3/8MP	1
19	860749	GEARBOX RESERVOIR WA, 5 GAL	1

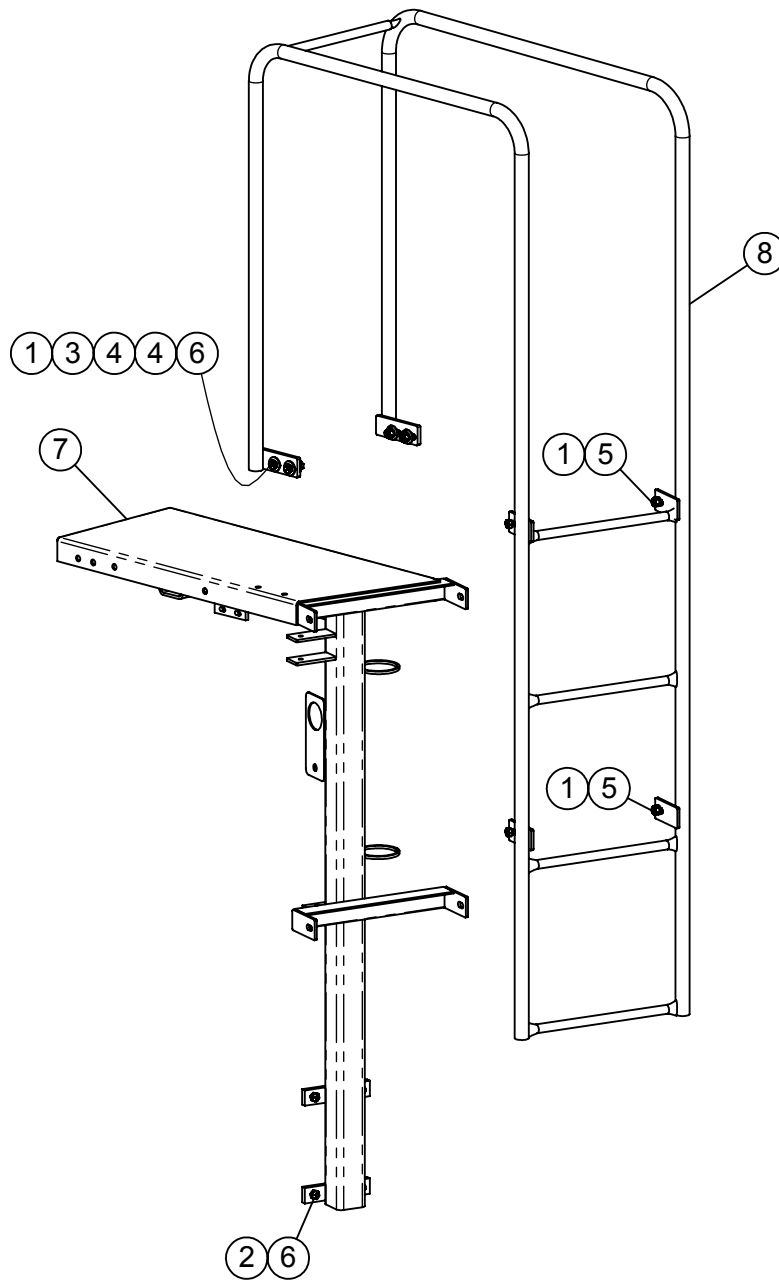
1355 DRIECT DRIVE, FRONT CENTER DISCHARGE PLATFORM ASSEMBLY - #760597



1355 DRIECT DRIVE, FRONT CENTER DISCHARGE PLATFORM ASSEMBLY - #760597

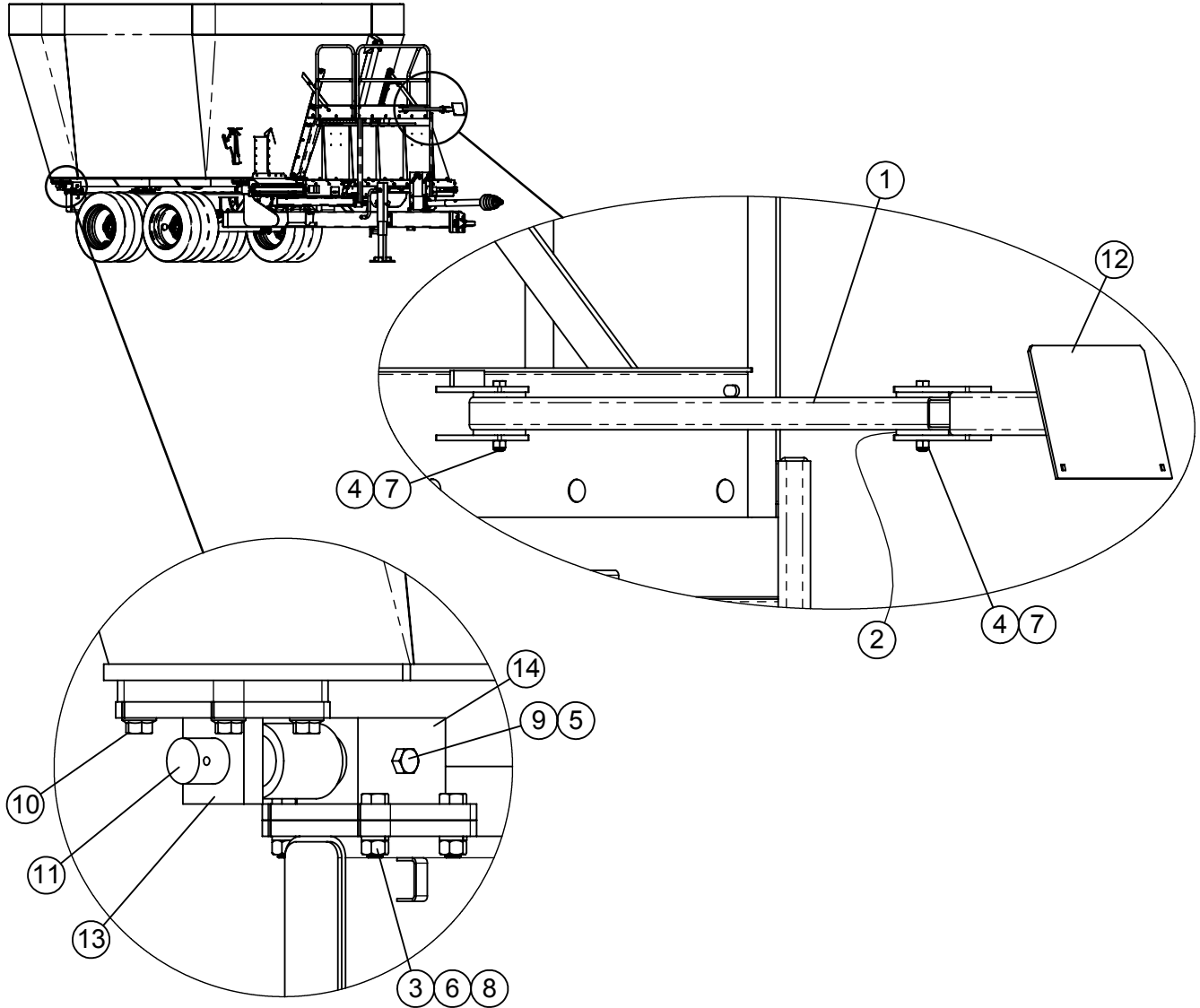
ITEM #	PART #	DESCRIPTION	QTY.
1	161908	KICKBOARD RH REAR	1
2	161926	SPACER PLATE	1
3	162071	KICKBOARD LH REAR	1
4	162284	PLATFROM SUPPORT BAR - 865	2
5	162285	PLATFORM SUPPORT BAR - 745	2
6	310954	CAPLUG-RIBBED-SQ 1-1/4" x 1.175"	2
7	400107	HEX NUT, 3/8"-16 SERRATED FLANGE #5	1
8	400114	HEX NUT, 1/2"-13 SERRATED FLANGE #5	42
9	402008	SPRING LOCK WASHER 1/2" PLTD	4
10	402408	WASHER, FLAT 1/2" MED PLTD	10
11	405703	HHCS 1/2"-13 x 1-1/2" #5 PLTD	4
12	405709	HHCS 1/2"-13 x 3" #5 PLTD	2
13	405715	HHCS 1/2"-13 x 5" #5 PLTD	4
14	405717	HHCS 1/2"-13 x 6" #5 PLTD	2
15	407101	CHCS 1/2"-13 x 1-1/4" #5 PLTD	34
16	407900	HHCS 3/8"-16 x 3/4" SERRATED #5 PLTD	1
17	860541	PLATFORM WA 1355 TRAILER	1
18	860542	LADDER WA 1355 TRAILER	1
17	860543	FRONT HANDRAIL - TRL	1
20	860544	HANDRAIL LH	1
21	860545	RH HANDRAIL TRAILER	1
22	860546	PLATFORM SUPPORT TUBE WA	1
23	860547	FRONT RH PLATFORM SUPPORT	1
24	860548	FRONT LH PLATFORM SUPPORT	1
25	860549	PLATFORM MOUNT WA - VERT	1

1355 DIRECT DRIVE SIDE DOOR DISCHARGE PLATFORM AND LADDER ASSEMBLY



ITEM #	PART #	DESCRIPTION	QTY.
1	400208	HEX NUT 1/2"-13 #5 PLTD	8
2	400908	HEX CROWN LOCNUT 1/2"-13 #9	4
3	402008	SPRING LOCK WASHER 1/2" PLTD	8
4	402408	WASHER, FLAT 1/2" MED PLTD	8
5	405702	HHCS 1/2"-13 x 1-1/4" #5 PLTD	4
6	405703	HHCS 1/2"-13 x 1-1/2" #5 PLTD	8
7	860280	STAND TUBE W. A.	1
8	860295	VERTICAL LADDER W.A.	1

1355 DIRECT DRIVE SCALE PARTS

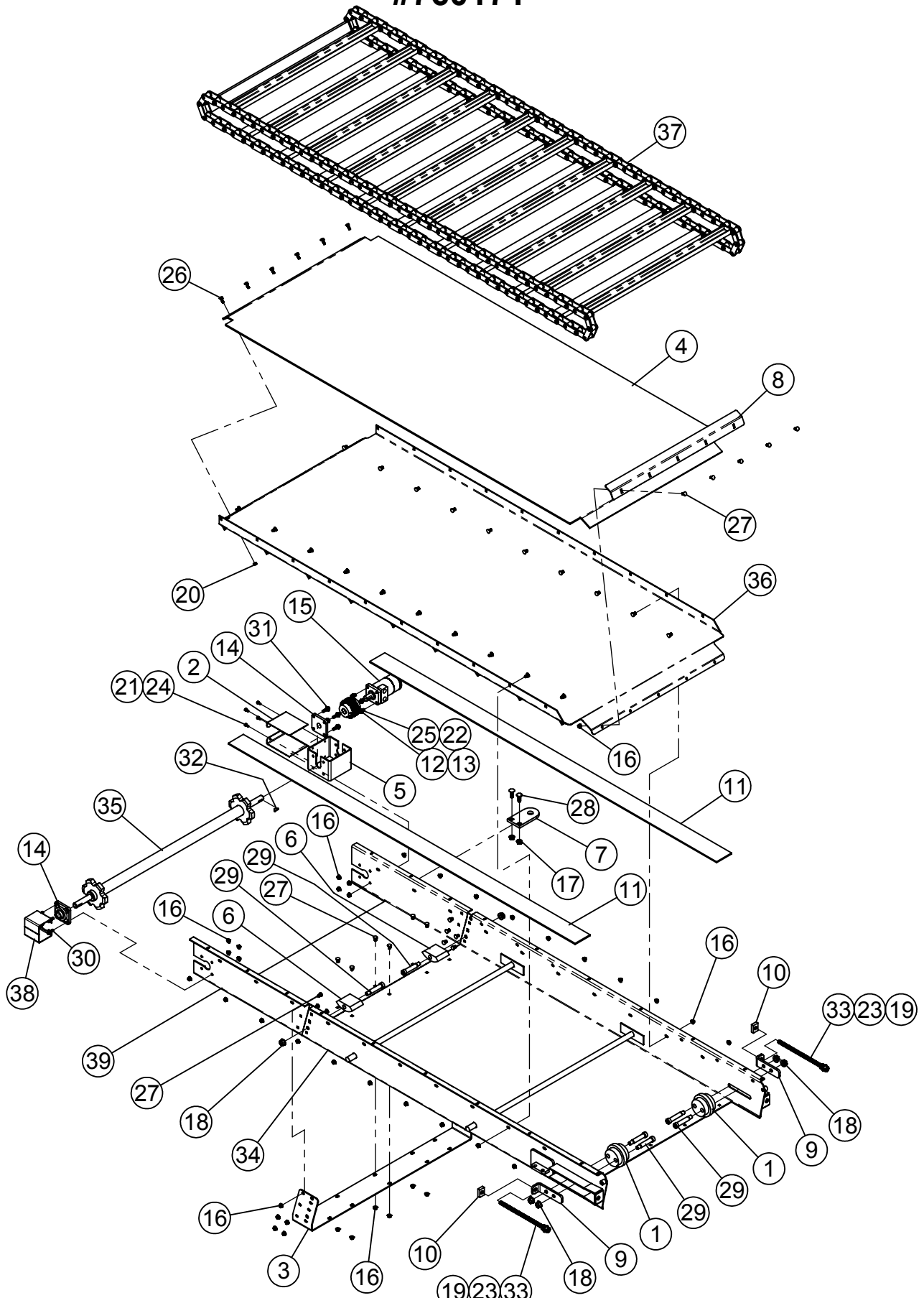


ITEM #	PART #	DESCRIPTION	QTY.
1	160783	SCALE INDICATOR PIVOT ARM x 26"	1
2	185493	SCALE HINGE WASHER 2-1/2" O.D.	4
3	400212	HEX NUT 3/4"-10 #5 PLTD	16
4	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	2
5	401112	HEX NUT, 3/4"-10 NYLOC #5 PLTD	4
6	402012	SPRING LOCK WASHER 3/4" PLTD	16
7	405661	HHCS, 3/8"-16 x 3" #5, PLTD	2
8	405781	HHCS 3/4"-10 x 2-1/2" #5 PLTD	16
9	405789	HHCS 3/4"-10 x 5" #5 PLTD	4
10	407933	HHCS 3/4"-10 x 1-1/2" SERRIATED FLANGE GR5	16
11	450824	WEIGH BAR 2-1/2", 21 FT CORD	4
12	850048	SCALE INDICATOR ARM WA	1
13	860054	2 1/2" BAR END BLOCK WA	4
14	860055	2-1/2" BAR BLOCK WA	4

1355 FLAT CONVEYOR ASSEMBLY

ITEM #	PART #	DESCRIPTION	QTY
1	161810	RAIL BOLT PLATE	4
2	161811	CONVEYOR SLIDE ROLLER	4
3	161872	CONVEYOR SIDE SHIELD	2
4	161934	CONVEYOR SLIDE RAIL FLAT & DOGLEG	2
5	161944	PLASTIC SLIDE RAIL	1
6	364076	HYDRAULIC CYLINDER 2" x 30", 40-1/4" C-C	1
7	368020	HYD SWIVEL 90° 3/8"MP x 3/8"FP	2
8	368118	HYD STRAIGHT ADAPTER 7/8"MOB x 1/2" FP SWIVEL	2
9	368238	QUICK DISCONNECT, PIONEER-1/2" FP	4
10	400106	HEX NUT, 5/16"-18 SERRATED FLANGE #5 PLTD	19
11	400107	HEX NUT, 3/8"-16 SERRATED FLANGE	20
12	400114	HEX NUT, 1/2"-13 SERRATED FLANGE #5 PLTD	4
13	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	4
14	407020	CHCS 5/16"-18 x 3/4" #5 PLTD	19
15	407039	CHCS 3/8"-16 x 3/4" #5 PLT	8
16	407040	CHCS 3/8"-16 x 1" #5 PLTD	12
17	407101	CHCS 1/2"-13 x 1-1/4" #5 PLTD	4
18	409001	SHCS, 3/8" x 1-1/2"	4
19	760171	VERTICAL CONVEYOR ASSY FLAT SLIDING	1
20	781075	HYD HOSE ASSY, 3/8" x 180" x 3/8" MP	1
21	781088	HYD HOSE ASSY, 3/8" x 220" x 3/8" MP	1
22	781301	HYD HOSE ASSY, 1/2" x 198" x 1/2" MP	2
23	860563	FRONT SHIELD SUPPORT CHANNEL	1
24	860564	CONVEYOR FRONT SHIELD FLAT SLIDING	1
25	860597	SLIDE CYL LUG WA	1

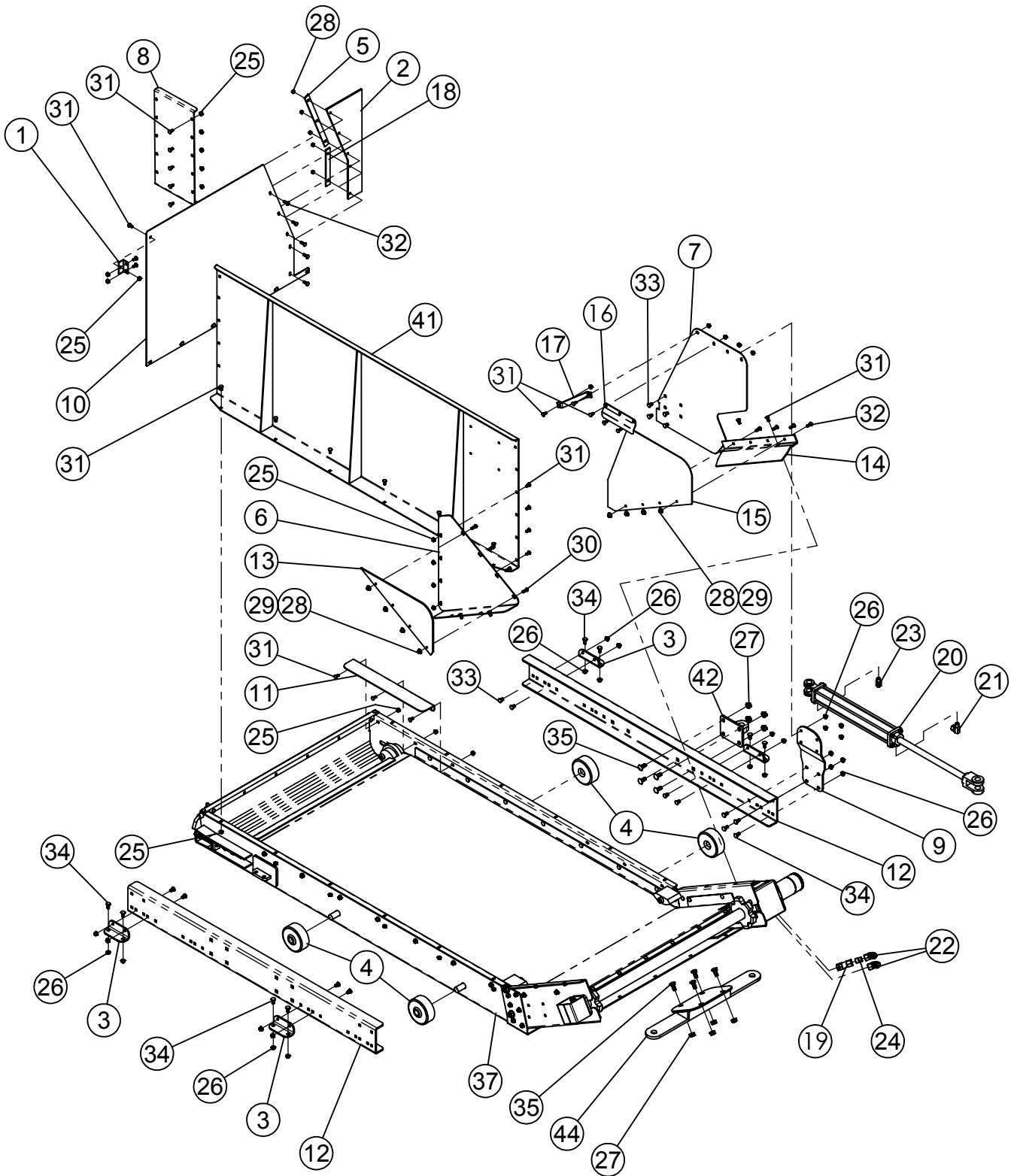
1355 FLAT CONVEYOR SLIDE ASSEMBLY #760171



1355 FLAT CONVEYOR SLIDE ASSEMBLY #760171

ITEM #	PART #	DESCRIPTION	QTY.
1	161508	PLASTIC IDLER	2
2	161774	DRIVE CHAIN COVER	2
3	161777	CONVEYOR BOLT PLATE	1
4	161780	PLASTIC LINER FLAT CONVEYOR	1
5	161783	MOTOR MOUNT TUBE	1
6	161830	CONVEYOR CHAIN HOLD DOWN	2
7	161940	SLIDE CYLINDER BOLT-ON LUG	1
8	162024	PLASTIC LINER HOLD DOWN STRAP	1
9	162074	TENSION BRACKET	2
10	162087	TAPPED TENSIONER BAR	2
11	162094	PLASTIC GLIDE 42"W FLAT CONVEYOR	2
12	320516	COUPLER CHAIN #50-2 RC x 16	1
13	332606	COUPLER SPROCKET, 50B16 x 1"	2
14	340316	FLANGE BEARING 1" 4 BOLT RCJC	2
15	360015	HYDRAULIC MOTOR 17.9 CU IN.	1
16	400107	HEX NUT, 3/8"-16 SERRATED FLANGE	49
17	400114	HEX NUT, 1/2"-13 SERRATED FLANGE #5 PLTD	2
18	400115	FLANGE HEX NUT 5/8"-11 SERRATED #5 PLTD	6
19	400610	HEX JAM NUT 5/8"-11 #5 PLTD	2
20	401105	HEX NUT, 5/16"-18 NYLOC #5 PLTD	6
21	402004	SPRING LOCK WASHER 1/4" PLTD	4
22	402106	EXTERNAL STAR LOCKWASHER 3/8"	4
23	402510	FLAT WASHER 5/8" SAE PLTD	4
24	405601	HHCS 1/4"-20 x 5/8" USS #5 PLTD	4
25	405652	HHCS 3/8"-16 x 3/4" #5 PLTD	4
26	407021	CHCS 5/16"-18 x 1" #5 PLTD	6
27	407039	CHCS 3/8"-16 x 3/4" #5 PLTD	41
28	407102	CHCS 1/2"-13 x 1-1/2" #5 PLTD	2
29	407411	SHOULDER BOLT, 3/4"D x 3" LG	6
30	407901	HHCS 3/8"-16 X 1" SERRATED #5 PLTD	4
31	407904	HHCS SERRATED 3/8" -16 x 1-1/4" #5 PLTD	4
32	409916	WOODRUFF KEY 1/4" x 1"	1
33	860489	ALL THREAD WA	2
34	860512	BASE CONVEYOR WA 42" WIDE	1
35	860513	CONVEYOR DRIVE SHAFT 42"W	1
36	860516	CONVEYOR PAN WA	1
37	860517	81X CONVEYOR CHAIN WA 42" x 82P	1
38	860538	SHAFT COVER WA	1
39	860565	FLAT CONVEYOR EXTENSION WA	1

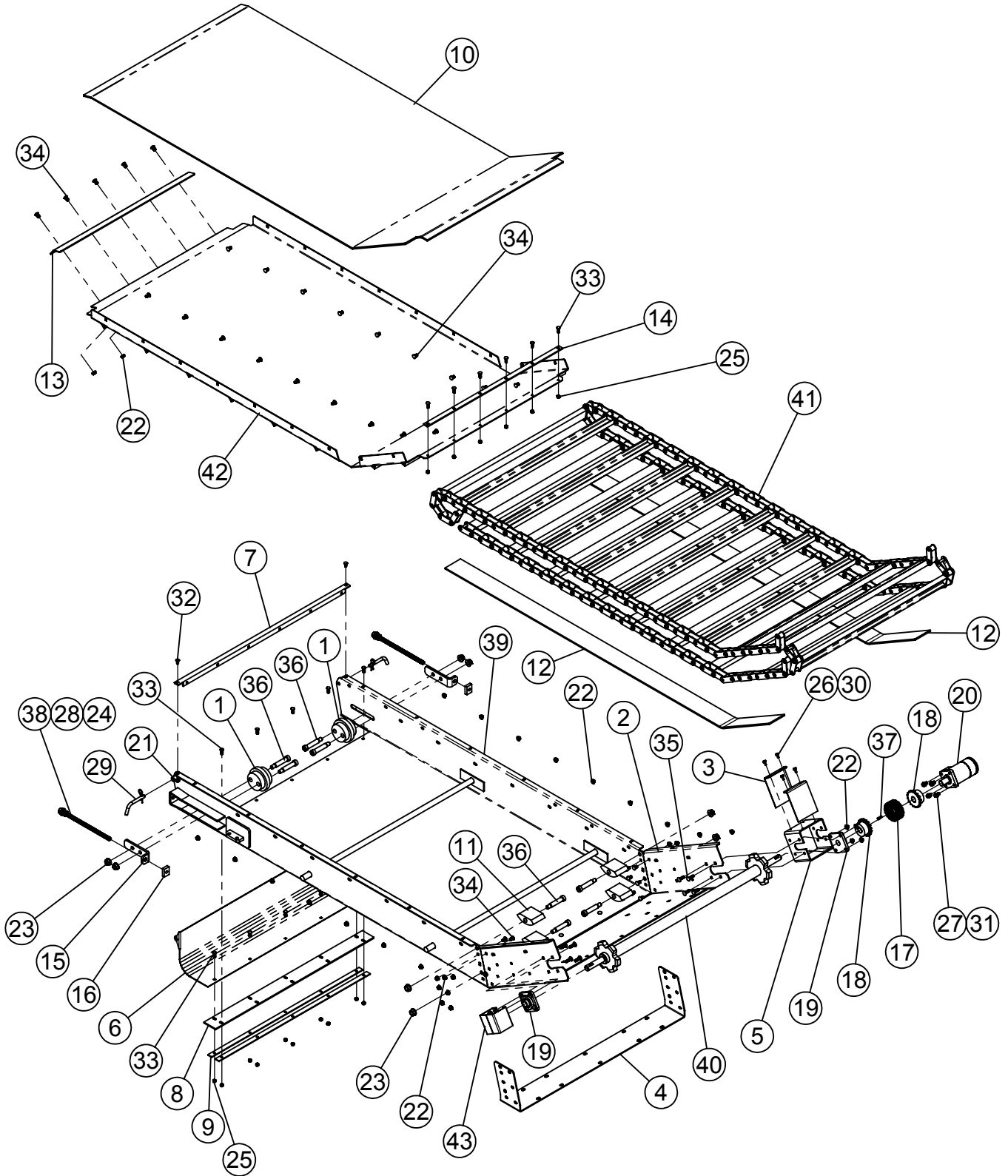
1355 INCLINE CONVEYOR ASSY #660245



1355 INCLINE CONVEYOR ASSY

ITEM #	PART #	DESCRIPTION	QTY
1	161383	MOUNT ANGLE	1
2	161775	DOGLEG RUBBER SHIELD	1
3	161810	RAIL BOLT PLATE	4
4	161811	CONVEYOR SLIDE ROLLER	4
5	161817	RUBBER SUPPORT PLATE	1
6	161818	DOGLEG EXTENSION SHIELD	1
7	161819	DOGLEG CONVEYOR REAR FILLER	1
8	161820	DOGLEG CONVEYOR REAR FILLE	1
9	161821	CONVEYOR SHIELD BOLT PLATE	1
10	161823	DOGLEG CONVEYOR SIDE SHIELD	1
11	161874	CONVEYOR FLAT FILL PLATE	1
12	161934	CONVEYOR SLIDE RAIL FLAT & DOGLEG	2
13	162038	FRONT PLASTIC EXTENSION	1
14	162066	DOGLEG CONVEYOR CHAIN COVER	1
15	162068	DOGLEG CONVEYOR PLASTIC FILLER	1
16	162069	OFFSET BRACKET	1
17	162073	STIFFNER BRACKET	1
18	183160	SPOUT RUBBER SIDE BAR x 8"	1
19	362240	CHECK VALVE 1/2" FP x 1/2" FP	1
20	364060	HYDRAULIC CYLINDER 2" x 16" 26-1/4" CC	1
21	368020	HYDRAULIC SWIVEL 90° 3/8"MP x 3/8"FP	1
22	368052	HYDRAULIC SWIVEL 7/8"MOR x 1/2"FPS	2
23	368110	STRAIGHT ADAPTER 3/8"MP x 3/8"FP SWIVEL	1
24	368642	HEX NIPPLE 1/2" x 1/2" MP	1
25	400106	HEX NUT, 5/16"-18 SERRATED FLANGE #5 PLTD	36
26	400107	HEX NUT, 3/8-16 SERR FLANGE #5 PLTD	24
27	400114	HEX NUT, 1/2"-13 SERRATED FLANGE #5 PLTD	8
28	401105	HEX NUT, 5/16"-18 NYLOC #5 PLTD	13
29	402405	FLAT WASHER 5/16" MED PLTD	8
30	405628	HHCS 5/16"-18 x 1" #5 PLTD	4
31	407020	CHCS 5/16"-18 x 3/4" #5 PLTD	36
32	407021	CHCS 5/16"-18 x 1" #5 PLTD	9
33	407039	CHCS 3/8"-16 x 3/4" #5 PLTD	12
34	407040	CHCS 3/8"-16 x 1" #5 PLTD	12
35	407101	CHCS 1/2"-13 x 1-1/4" #5 PLTD	8
37	760172	VERT CONV ASSY - DOGLEG SLIDE	1
41	860528	CONVEYOR FRONT SHIELD WA	1
42	860529	SLIDE CYLINDER LUG WA	1
44	860552	DOGLEG CYLINDER MOUNT WA	1

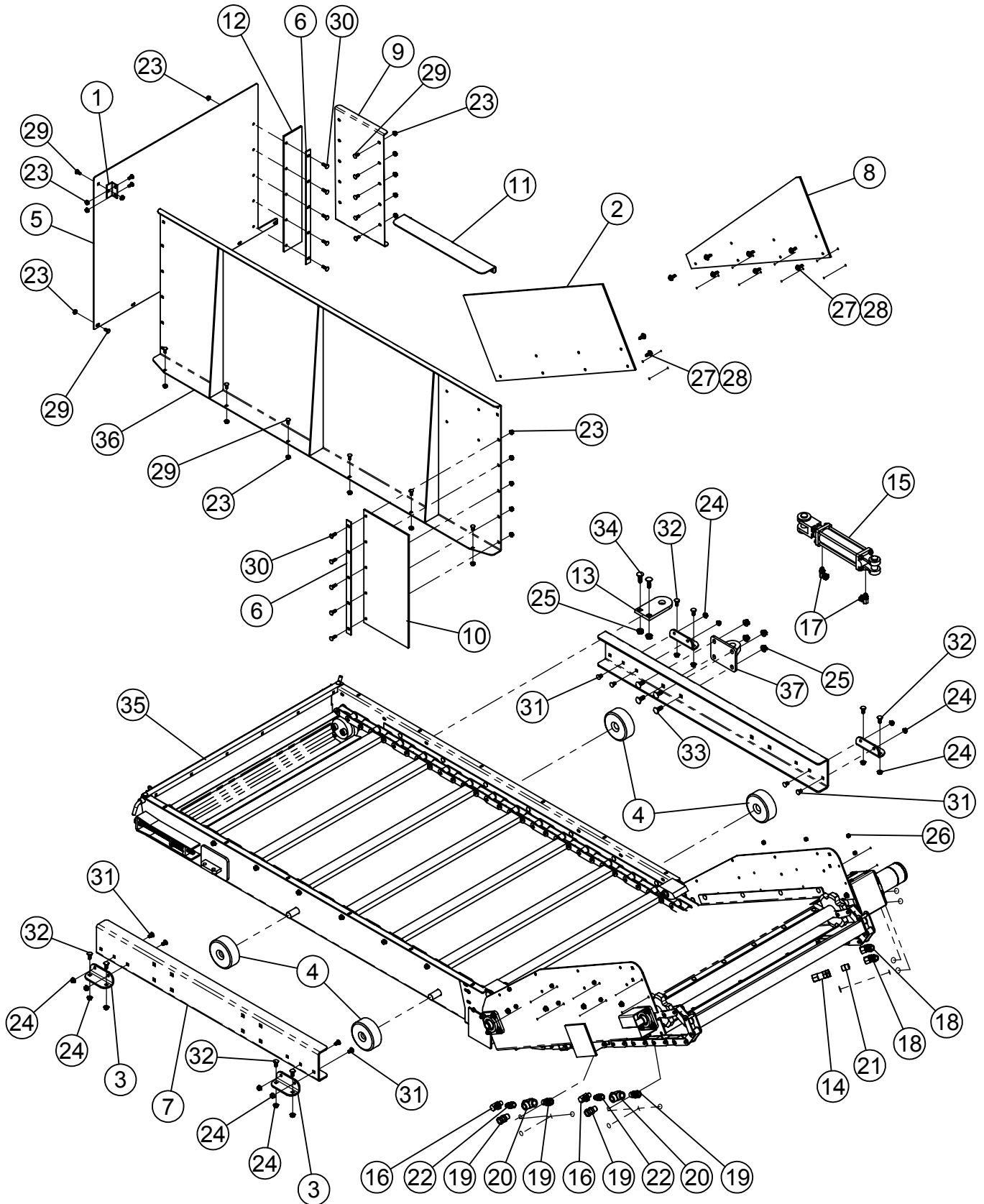
1355 INCLINE CONVEYOR SLIDE ASSY # 760172



1355 INCLINE CONVEYOR SLIDE ASSY # 760172

ITEM #	PART #	DESCRIPTION	QTY
1	161508	PLASTIC IDLER	2
2	161762	DOGLEG EXTENSION BOLT-ON	1
3	161774	DRIVE CHAIN COVER	2
4	161777	CONVEYOR BOLT PLATE	1
5	161783	MOTOR MOUNT TUBE	1
6	161784	CLEANOUT DOOR 42"W CONVEYOR	1
7	161786	CONVEYOR MOUNT ANGLE	1
8	161787	RUBBER HINGE 42"W CONVEYOR	1
9	161788	HINGE STRAP 42"W CONVEYOR	2
10	161789	PLASTIC LINER 42"W DOGLEG CONVEYOR	1
11	161830	CONVEYOR CHAIN HOLD DOWN	4
12	162022	PLASTIC GLIDE 42"W DOGLEG CONVEYOR	2
13	162024	PLASTIC LINER HOLD DOWN STRAP	1
14	162026	PLASTIC STRAP	1
15	162074	TENSION BRACKET	2
16	162087	TAPPED TENSIONER BAR	2
17	320516	COUPLER CHAIN #50-2 RC x 16	1
18	332606	COUPLER SPROCKET, 50B16 x 1"	2
19	340316	FLANGE BEARING 1" 4 BOLT RCJC	2
20	360015	HYDRAULIC MOTOR 17.9 CU IN.	1
21	400106	HEX NUT, 5/16"-18 SERRATED FLANGE #5 PLTD	2
22	400107	HEX NUT, 3/8-16 SERR FLANGE #5 PLTD	46
23	400115	HEX NUT, 5/8"-11 SERRATED FLANGE #5 PLTD	8
24	400610	HEX JAM NUT, 5/8"-11 #5 PLTD	2
25	401105	HEX NUT, 5/16"-18 NYLOC #5 PLTD	16
26	402004	SPRING LOCK WASHER 1/4" PLTD	4
27	402106	EXTERNAL STAR LOCKWASHER 3/8"	4
28	402510	FLAT WASHER 5/8" SAE PLTD	4
29	404214	PIN, 1/2" x 3",RECEIVER HITCH	2
30	405601	HHCS 1/4"-20 x 5/8" USS #5 PLTD	4
31	405652	HHCS 3/8"-16 x 3/4" #5 PLTD	4
32	407020	CHCS 5/16"-18 x 3/4" #5 PLTD	2
33	407021	CHCS 5/16"-18 x 1" #5 PLTD	16
34	407039	CHCS 3/8"-16 x 3/4" #5 PLTD	38
35	407041	CHCS 3/8"-16 x 1-1/4" #5 PLTD	8
36	407411	SHOULDER BOLT, 5/8"-11 x 3/4" DIA x 3" LG	8
37	409916	WOODRUFF KEY 1/4" x 1"	1
38	860489	ALL THREAD WA	2
39	860512	BASE CONVEYOR WA 42" WIDE	1
40	860513	CONVEYOR DRIVE SHAFT 42"W	1
41	860520	81X CONVEYOR CHAIN WA 42" x 79P	1
42	860521	VERTICAL DOGLEG CONVEYOR PAN WA	1
43	860538	SHAFT COVER WA	1

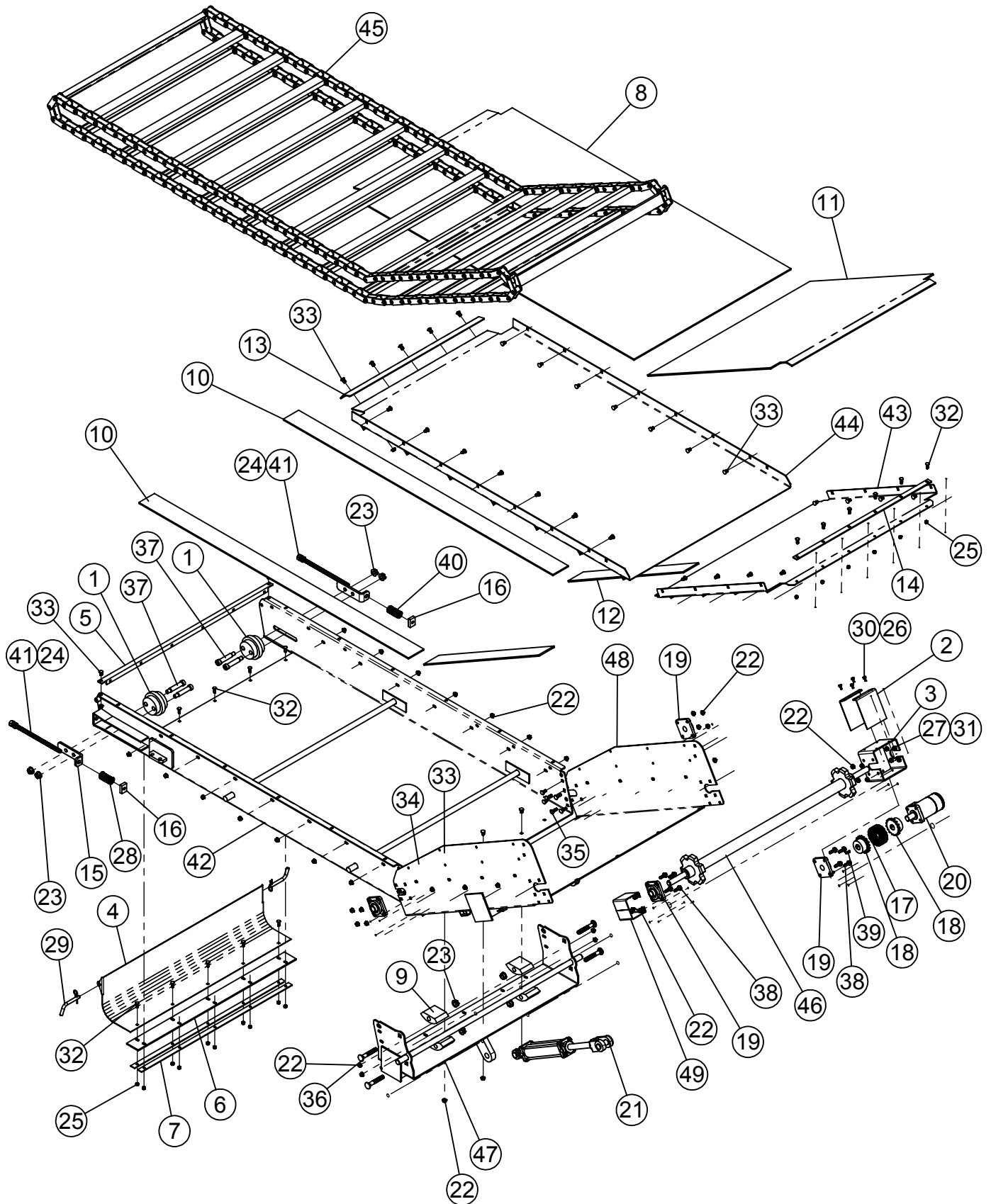
1355 ADJUSTABLE INCLINE CONVEYOR ASSY #660244



1355 ADJUSTABLE INCLINE CONVEYOR ASSY #660244

ITEM #	PART #	DESCRIPTION	QTY
1	161383	MOUNT ANGLE	1
2	161532	CONVEYOR EXTENSION	1
3	161810	RAIL BOLT PLATE	4
4	161811	CONVEYOR SLIDE ROLLER	4
5	161866	SIDE SHIELD ADJUSTABLE CONVEYOR	1
6	161867	RUBBER SUPPORT PLATE	2
7	161868	CONV SLIDE RAIL ADJ CONV	2
8	161871	CONVEYOR EXTENSION	1
9	161872	CONVEYOR SIDE SHIELD	1
10	161873	CONVEYOR RUBBER FILLER	1
11	161874	CONVEYOR FLAT FILL PLATE	1
12	161875	RUBBER CONVEYOR SIDE FILLER	1
13	161940	SLIDE CYLINDER BOLT-ON LUG	1
14	362240	CHECK VALVE 1/2" FP x 1/2" FP	1
15	364054	HYDRAULIC CYLINDER 2" x 6", 16-1/4" CC	1
16	368007	HYDRAULIC SWIVEL 90° 3/8"MP x 3/8"FPS, .109" ORFICE	2
17	368030	HYD SWIVEL 9/16"MOR x 3/8"FPS 90°	2
18	368052	HYDRAULIC SWIVEL 7/8"MOR x 1/2"FPS	2
19	368111	STRAIGHT ADAPTER 1/2" x 1/2"FP SWIVEL	4
20	368609	TEE 1/2"FP x 1/2"FP x 1/2"FP	2
21	368642	HEX NIPPLE 1/2" x 1/2" MP	1
22	368680	STRAIGHT ADAPTOR 1/2" MP x 3/8" MP	1
23	400106	HEX NUT, 5/16"-18 SERRATED FLANGE #5 PLTD	28
24	400107	HEX NUT, 3/8"-16 SERRATED FLANGE	16
25	400114	HEX NUT, 1/2"-13 SERRATED FLANGE #5 PLTD	6
26	401105	HEX NUT, 5/16"-18 NYLOC #5 PLTD	14
27	402405	FLAT WASHER 5/16" MED PLT	14
28	405628	HHCS 5/16"-18 x 1" #5 Pltd	14
29	407020	CHCS 5/16"-18 x 3/4"	18
30	407021	CHCS 5/16"-18 x 1" #5 PLTD	10
31	407039	CHCS 3/8"-16 x 3/4" #5 PLTD	8
32	407040	CHCS 3/8"-16 x 1" #5 PLTD	8
33	407101	CHCS 1/2"-13 x 1-1/4" #5 PLTD	4
34	407102	CHCS 1/2"-13 x 1-1/2" #5 PLTD	2
35	760173	ADJUSTABLE INCLINE VERTICAL CONVEYOR ASSY	1
36	860528	CONVEYOR FRONT SHIELD WA	1
37	860529	SLIDE CYLINDER LUG WA	1

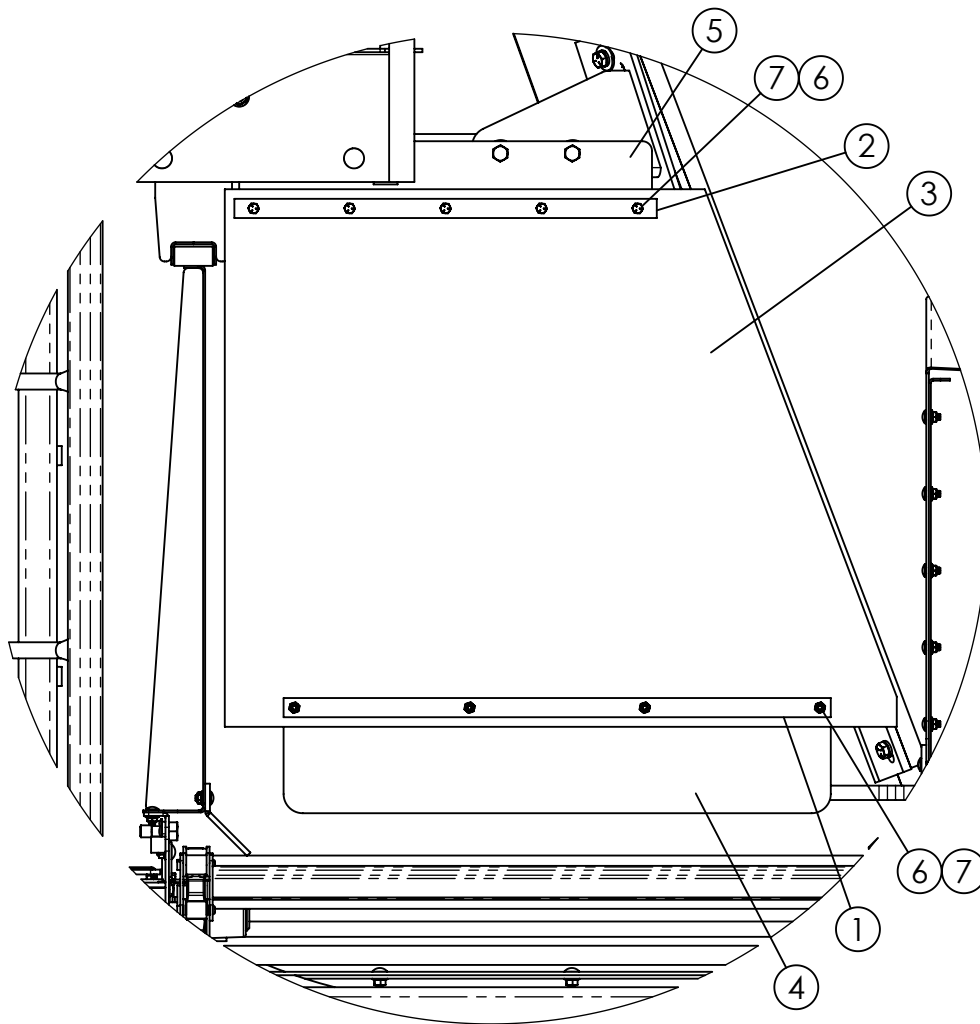
1355 ADJUSTABLE INCLINE SLIDE ASSY # 760173



1355 ADJUSTABLE INCLINE SLIDE ASSY # 760173

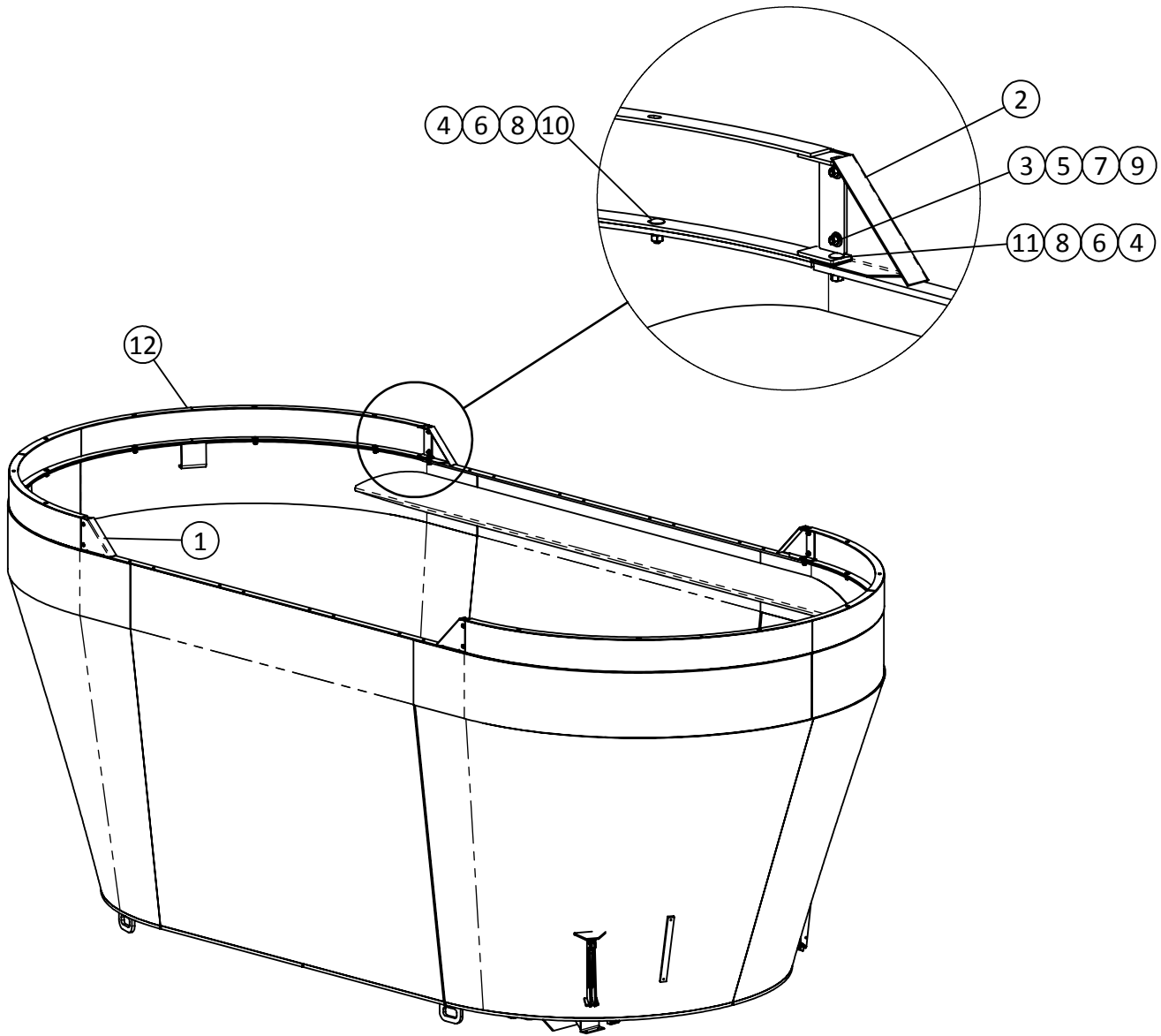
ITEM #	PART #	DESCRIPTION	QTY
1	161508	PLASTIC IDLER	2
2	161774	DRIVE CHAIN COVER	2
3	161783	MOTOR MOUNT TUBE	1
4	161784	CLEANOUT DOOR 42"W CONVEYOR	1
5	161786	CONVEYOR MOUNT ANGLE	1
6	161787	RUBBER HINGE 42"W CONV	1
7	161788	HINGE STRAP 42"W CONVEYOR	2
8	161799	PLASTIC LINER 42"W ADJ CONVEYOR	1
9	161830	CONVEYOR CHAIN HOLD DOWN	4
10	161863	CONVEYOR GLIDE STRIP	2
11	161864	PLASTIC LINER 42"W ADJ CONVEYOR	1
12	161865	CONVEYOR GLIDE STRIP	2
13	162024	PLASTIC LINER HOLD DOWN STRAP	1
14	162026	PLASTIC STRAP	1
15	162074	TENSION BRACKET	2
16	162087	TAPPED TENSIONER BAR	2
17	320516	COUPLER CHAIN #50-2 RC x 16	1
18	332606	COUPLER SPROCKET, 5016 x 1"	2
19	340316	FLANGE BEARING 1" 4 BOLT RCJC	4
20	360015	HYDRAULIC MOTOR 17.9 CU IN.	1
21	364055	HYDRAULIC CYLINDER 2" x 8", 20-1/4" CC	1
22	400107	HEX NUT, 3/8"-16 SERRATED FLANGE	52
23	400115	HEX NUT, 5/8"-11 SERRATED FLANGE #5 PLTD	8
24	400610	HEX JAM NUT, 5/8"-11 #5 PLTD	2
25	401105	HEX NUT, 5/16"-18 NYLOC #5 PLTD	16
26	402004	SPRING LOCK WASHER 1/4" PLTD	4
27	402106	EXTERNAL STAR LOCKWASHER 3/8"	4
28	402510	FLAT WASHER 5/8" SAE PLTD	4
29	404214	PIN, 1/2" x 3",RECEIVER HITCH	2
30	405601	HHCS 1/4"-20 x 5/8" USS #5 PLTD.	4
31	405652	HHCS 3/8"-16 x 3/4" #5 PLTD	4
32	407021	CHCS 5/16"-18 x 1" #5 PLTD	16
33	407039	CHCS 3/8"-16 x 3/4" #5 PLTD	32
34	407040	CHCS 3/8"-16 x 1" #5 PLTD	4
35	407041	CHCS 3/8"-16 X 1-1/4" #5 PLTD	8
36	407128	CHCS 5/8" x 4" #5 PLTD	4
37	407411	SHOULDER BOLT, 5/8" THREAD x 3/4" DIA x 3" LG	4
38	407904	HHCS 3/8" -16 x 1-1/4" SERRATED #5 PLTD	8
39	409916	WOODRUFF KEY 1/4" x 1"	1
40	410017	DIE SPRING, 1-1/4" x 4"	1
41	860489	ALL THREAD WA	2
42	860512	BASE CONVEYOR WA 42" WIDE	1
43	860515	ADJUSTABLE CONVEYOR PAN WA 42"W	1
44	860522	ADJUSTABLE CONVEYOR FLAT PAN WA 42"W	1
45	860523	81X CONVEYOR CHAIN WA 42" x 98P	1
46	860524	CONVEYOR DRIVE SHAFT 42"W ADJ	1
47	860525	PIVOT PLATE WA	1
48	860526	PIVOTING CONVEYOR WA	1
49	860538	SHAFT COVER WA	1

1355 CONVEYOR RUBBER FLAP KIT



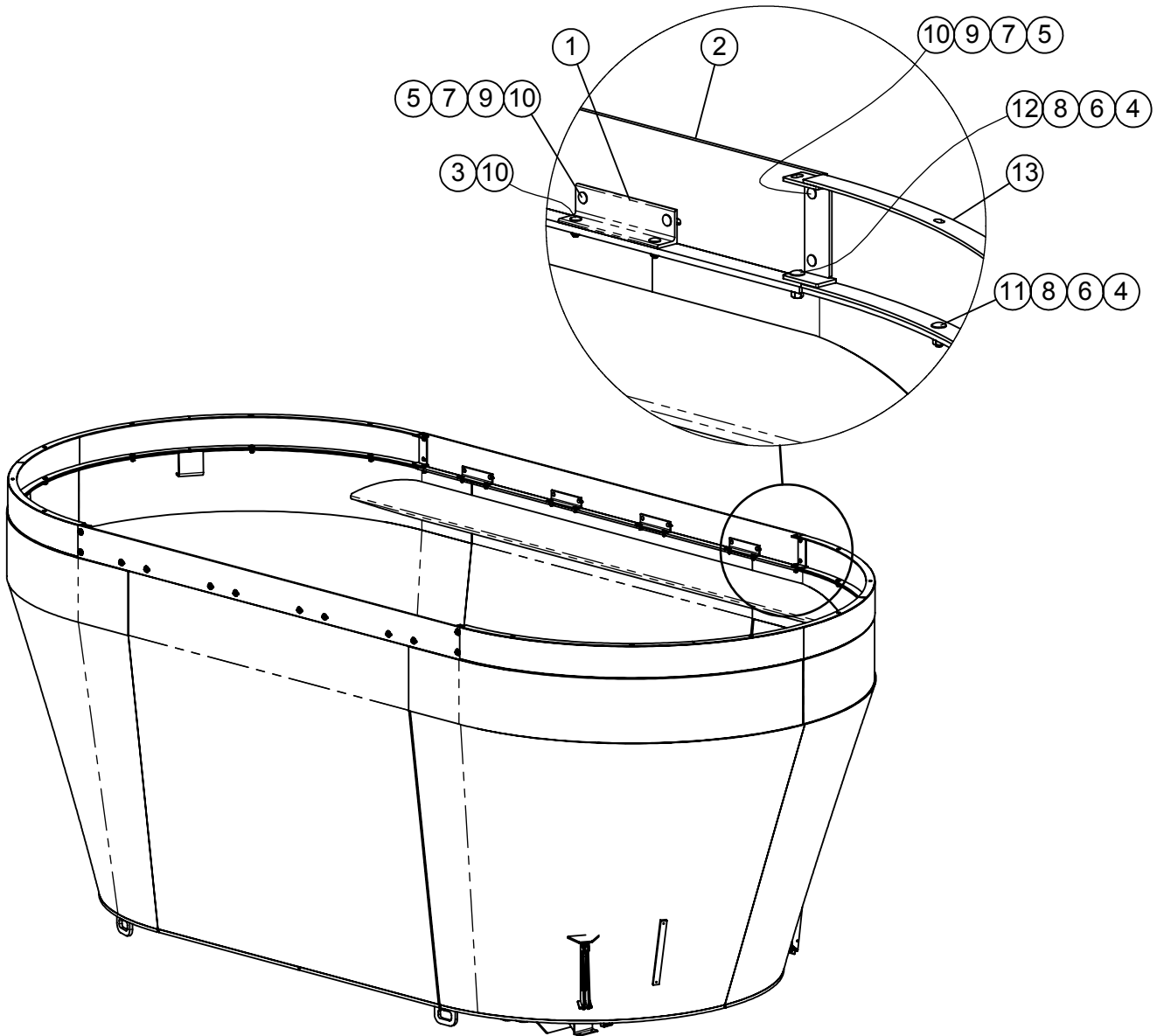
ITEM #	PART #	DESCRIPTION	QTY.
1	161509	STRAP	1
2	161867	RUBBER SUPPORT PLATE	1
3	162400	CONVEYOR RUBBER FLAP - 1105-1505	1
4	162620	DEFLECTOR BOTTOM PLATE	1
5	162716	CONV RUBBER BOLT PLATE - 1105-1505	1
6	401105	HEX NUT, 5/16"-18 NYLOC #5 PLTD	9
7	405628	HHCS 5/16"-18 x 1" #5 PLTD	9

1355 DIRECT DRIVE 8" END EXTENSION KIT



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

1355 DIRECT DRIVE 8" END EXTENSION KIT WITH RUBBER SIDES



ITEM #	PART #	DESCRIPTION	QTY.
1	162444	VX RUBBER EXTENSION BOLT ANGLE - SIDES	8
2	350453	8" VERTICAL RUBBER EXTENSION	2
3	400107	HEX NUT, 3/8"-16 SERRATED FLANGE #5	16
4	400208	HEX NUT 1/2"-13 #5 PLTD	16
5	401106	HEX NUT, 3/8"-16 NYLOC #5 PLTD	24
6	402008	SPRING LOCK WASHER 1/2" PLTD	16
7	402406	FLAT WASHER 3/8" PLTD	24
8	402408	WASHER, FLAT 1/2" MED PLTD	16
9	402606	FENDER WASHER 3/8" x 1 1/2" PLTD	24
10	407041	CHCS 3/8"-16 x 1-1/4" #5 PLTD	40
11	407102	CHCS 1/2"-13 x 1-1/2" #5 PLTD	12
12	407103	CHCS 1/2"-13 x 1-3/4" #5 PLTD	4
13	860285	8" END EXT W.A.	2

This Page intentionally left blank.