

# **720-16 FEED MIXER**

# **OPERATION & PARTS MANUAL**



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

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Revision Date	Changes
08/2023	Add Wiper Assembly numbers, pgs. 48-49



### Limited Warranty Statement

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

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

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

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

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

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

#### **What this Warranty Covers**

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

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

- Improper operation
- Natural calamities
- Unauthorized modifications
- Unauthorized repairs
- Use of Non ROTO-MIX parts
- Neglected maintenance
- The use of PTO Shaft
  - Adaptors

- Usage contrary to the intended purpose of the product

#### Warranty continues on the next page.

#### **Limited Warranty Statement continued**

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

- Lubricants- Filters- Augers- Chains- Blades- Belts

- Hoses - Wipers - Batteries

#### This Warranty does not cover:

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

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

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

#### **Parts Warranty**

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

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

#### SCALES WARRANTY & SERVICE POLICY

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

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

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

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

#### **OPERATOR QUALIFICATIONS**

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

- 1. Some regulations specify that no one under the age of sixteen (16) may operate power machinery. It is your responsibility to know what these regulations are in your area and/or situation.
- 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 TRACTOR ENGINE, BE SURE PTO SHIELDS TURN FREELY.



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

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

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





#### **EQUIPMENT SAFETY GUIDELINES**

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

In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.

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

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

Review the safety instructions with all users annually.

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

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



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

#### LIGHTING AND MARKING

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

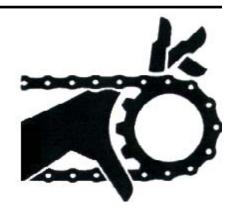


#### **KEEP ALL SHIELDS IN PLACE**

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

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

Disconnect PTO driveline before removing shields for adjustment or service.



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

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



#### 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 relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

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

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





#### PREPARING TRACTOR FOR TRAILER MIXER

#### **POSITIONING DRAWBAR**

IMPORTANT: Drive components can be damaged from excessive speed. Under no circumstances should a feed mixer

equipped with 540 RPM be operated by a tractor with 1000 RPM PTO.

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

IMPORTANT: To prevent driveline damage, adjust

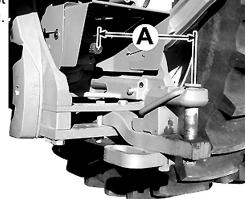
tractor drawbar to recommended setting. Disengage tractor PTO before turning.

Remove clevis if equipped. Turn offset drawbar down.

Adjust drawbar length:

PTO SPEED DIMENSION (A)

540 RPM 14 inches (356 mm) 1000 RPM 16 inches (406 mm)

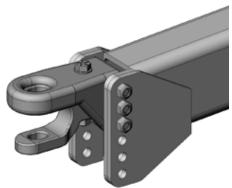


#### **ADJUST TRAILER HITCH CLEVIS**

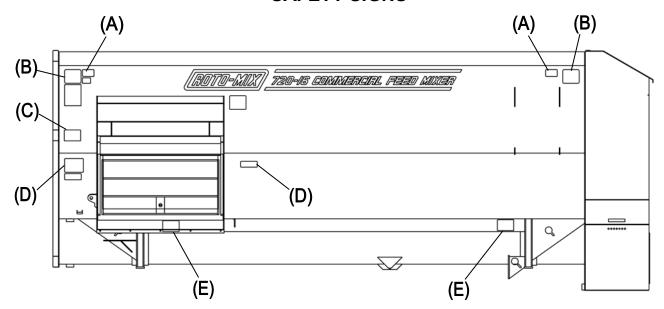
Mixer should be approximately level when attached to tractor.

Adjust clevis by changing hole location on tongue.

Hitch Pin Size --- 1" x 7"



#### **SAFETY SIGNS**



(A) 440831



(B) 440827



(C) 440819

#### **A** CAUTION

#### TO HELP PREVENT BODILY INJURY

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

TOW TYPE: TRUCK MOUNT

Stop engine and remove PTO driveline.

Disengage PTO/hydraulics and stop engine

Lock out electrical power source.

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

(D) 440818

#### **A CAUTION**

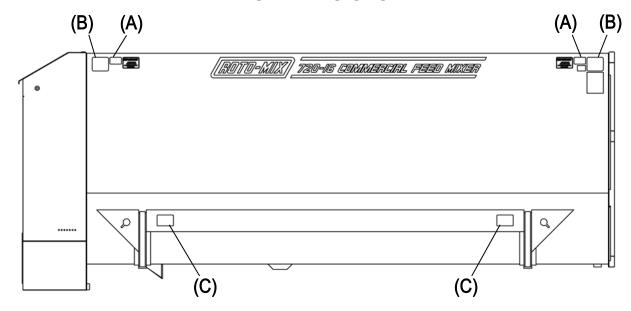
#### TO HELP PREVENT BODILY INJURY

Stay clear of discharge area. Spout, door and conveyor motion are remotely controlled and can operate without mixer running. Motion can be fast.

(E) 440826



#### **SAFETY SIGNS**



(A) 440831



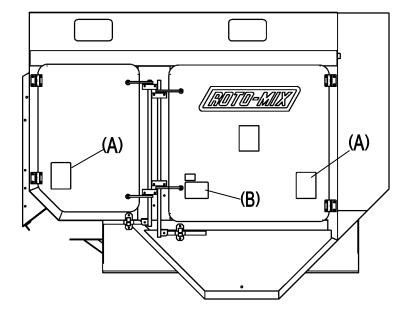
(C) 440826



(B) 440828



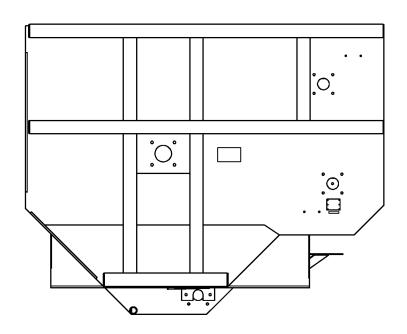
#### **SAFETY SIGNS**



(A) 440822



(B) 440819



# **A** CAUTION





#### 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.





#### <u>REMEMBER</u>

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

#### **BEFORE OPERATION:**

Carefully study and understand this manual.

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

Always wear protective clothing and substantial shoes.

Keep wheel lug nuts or bolts tightened to specified torque.

Assure that agricultural implement tires are inflated evenly.

Give the unit a visual inspection for any loose bolts, worn parts or cracked welds, and make necessary repairs. Follow the maintenance safety instructions included in this manual.

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

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

Because it is possible that this mixer/feeder may be used in dry areas or the presence of combustibles, special precautions should be taken to prevent fires and fire fighting equipment should be readily available.

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

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

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

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





#### **DURING OPERATION:**

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

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

Keep hands and clothing clear of moving parts.

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

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

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

Do not operate on steep slopes as overturn may result.

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

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

Be extra careful when working on inclines.

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

Maneuver the tractor or towing vehicle at safe speeds.

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

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

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

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

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

Never stand alongside of the unit with engine running. Never attempt to start





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

Never leave running mixer/feeder unattended.

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



#### **FOLLOWING OPERATION:**

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

Store the unit in an area away from human activity.

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

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

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

Wheel chocks may be needed to prevent unit from rolling.



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

Adopt safe driving practices:

Keep the brake pedals latched together at all times. **Never use** independent braking with machine in tow as loss of control and/or upset of unit can result.

Always drive at a safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop to be safe and secure. Deep speed to a minimum.

Reduce speed prior to turns to avoid the risk of overturning.

Avoid sudden uphill turns on steep slopes.

Always keep the tractor or towing vehicle in gear to provide engine braking when going downhill. Do not coast.

Do not drink and drive.





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

Comply with state and local laws governing highway safety and movement of farm machinery on public roads.

Use approved accessory lighting flags and necessary warning devices to protect operators of other vehicles on the highway during daylight and nighttime transport.

The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.

When driving the tractor and mixer/feeder on the road or highway under 20 MPH (40 KPH) at night or during the day, use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem.

Plan your route to avoid heavy traffic.

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

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

Watch for obstructions overhead and to the side while transporting.

Always operate mixer/feeder in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the mixer/feeder when making turns, stopping the unit, etc.



#### **PERFORMING MAINTENANCE:**

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

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

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

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

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





#### PERFORMING MAINTENANCE (CONT.):

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

Use extreme caution when making adjustments.

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

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

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

Replace all shields and guards after servicing and before moving.

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

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

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

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

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

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

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

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

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

#### **CHAIN TENSION**

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

#### **LOADING INSTRUCTIONS & PRECAUTIONS**

- **A.** Do not add side board extensions to the mixer.
- **B.** Do not overload the mixer. Mixer capacity can be reached by weight or volume. By volume, the rotor bars and wipers should always be visible at the peak of the rotor cycle. If the rotor is completely submerged under the mix, mixing efficiency may be reduced, spillage may occur, and damage to the mixer may result. Maximum capacity by weight can be calculated by multiplying 28 pounds times mixer cubic foot capacity.
- C. Load molasses and/or liquid protein supplements first with mixer not running, then add one (1) commodity ingredient before starting the mixer. For the shortest mixing time and maximum mixing efficiency, these items should be added at the first of the loading process.
- **D.** When adding minute supplements or medication in non-liquid form, these ingredients should be loaded in the middle of the loading sequence.

#### E. RATIONS WITH GROUND HAY:

- **1.** Load molasses (or liquids) first with the mixer not running.
- 2. Load one (1) commodity ingredient and start mixer.
- **3.** Finish loading commodities, silage, or ground hay. Loading ground hay after mixing liquids with another commodity will prevent molasses hay balls.

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

#### ATTENTION:

**F.** Never load the mixer from the right side (side opposite the discharge) with a front end loader of payloader while the mixer is running.

#### OPERATION:

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

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

#### ROTO-HAY PROCESSOR

The ROTO-HAY PROCESSOR is designed for processing hay into the mixer. This eliminates the need for grinding hay, which saves the time and expense of grinding and can save up to 18% loss from wind and handling.

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

**Drain rain water out of mixer before use.** 1" of rain in a 720-16 equals (83 1/2 gal) 696 lbs. of water which will increase the moisture in 1000 lbs. of dry hay (12%) to 48% moisture or 500 lbs. of dry hay to 63% moisture.

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

#### **HAY PREPARATION:**

- **1.** SMALL BALES (60 to 150 lbs., 2 or 3 wire) Remove twine or wire from bales and break bales apart by pushing into a pole with a front end loader.
- 2. LARGE SQUARE BALES (3' x 4' x 8' or 4' x 4' x 8')
  - A. Position bale so you can et to end of bale with front end loader.
  - B. Remove twine or wrapping.
  - C. With front end loader, pull a 12" flake away from the bale so it can be picked up with loader bucket or by adding 3 or 4 teeth (12" long) to the top of your loader bucket, you can stab the end of the bale and pick up a 12" flake to lay on the mixer hay pan.

#### 3. ROUND BALES

- A. Remove twine or wrapping.
- B. Cut bale with a ROTO-BALE CUTTER a minimum of 5 times to part the bale into a minimum of 12" chunks. More times may be desired for ease of handling.
- C. Break bales apart by pushing into a pole with a front end loader so the hay can be loaded in quantities of approximately 200 lbs. at a time.

#### LOADING INSTRUCTIONS FOR HAY PROCESSOR

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

- 1. If molasses and/or liquid protein is used, load on the rotor side of the mixer first with the mixer not running.
- 2. Load one (1) grain or dry commodity in a minimum amount equal to the amount of hay to be put into mixer with the mixer not running.
- 3. Start the mixer and run approximately one (1) minute before adding hay.
- 4. With the mixer running at a minimum rotor speed of 4 RPM, load prepared hay towards the front of the hay pan on discharge side of mixer. For best results, when loading with a tractor front end loader or payloader, each bucket load should not exceed 200 lbs at one time. Allow time for the hay to be processed into the mixer before loading another 200 lbs. Repeat until desired amount of hay is processed (DO NOT OVERLOAD). Let the mixer run until desired length of hay is reached.
- 5. Finish loading dry commodities.
- 6. Load wet feeds, such as silage, after all commodities and hay are in the mixer.
- 7. If water is to be added to the ration **Do this last!**

#### MIXER INFORMATION

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

### **LUBRICATION**

DISENGAGE PTO & SHUT OFF POWER BEFORE LUBRICATING THE MACHINE.

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

**OIL BATH:** Fill the oil bath with 30 weight motor oil to sight plug level.

**GREASE BANK:** Grease every 10 hours.

FRONT END BEARINGS: Grease every 10 hours.

**INPUT BEARINGS:** One (1) on input shaft beneath mixer/feeder. Grease every 10 hours.

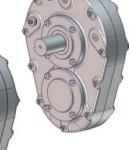
PTO SHAFTS & U-JOINTS: Grease every 10 to 20 hours.

**HYDRAULIC PUMP DRIVE LINE:** Inspect and grease every 10 hours.

**2:1 GEARBOX:** Prior to operation, remove the uppermost plug and replace with vent plug provided. After the first 100 hours of operation, drain the initial oil, preferably warm. Flush the gear case with an approved non-flammable, non-toxic solvent and refill with oil. Thereafter oil should be changed every 2000 hours or every 12 months, whichever occurs first. Fill the gearbox to the check oil level with (Mobil Delvac Synthetic Gear Oil 75W-90).

-FILL OIL HERE ON STATIONARY DRIVES FILL OIL HERE ON TRUCK DRIVELINE

E



CHECK OIL LEVEL HERE-ON TRUCK DRIVELINE

CHECK OIL LEVEL HERE ON STATIONARY DRIVES

MIXER DOOR CYLINDER HYDRAULICS (TRUCK): Replace hydraulic filter after first 100 hours of operation then every 500 hours of operation with 10 micron element. Replace fluid every 2000 hours of operation or every year, which ever occurs first, with approximately 1 gallon (3.7 liters) of (Citgo Transguard tractor hydraulic oil or equivalent).







# **720-16 SPECIFICATIONS**

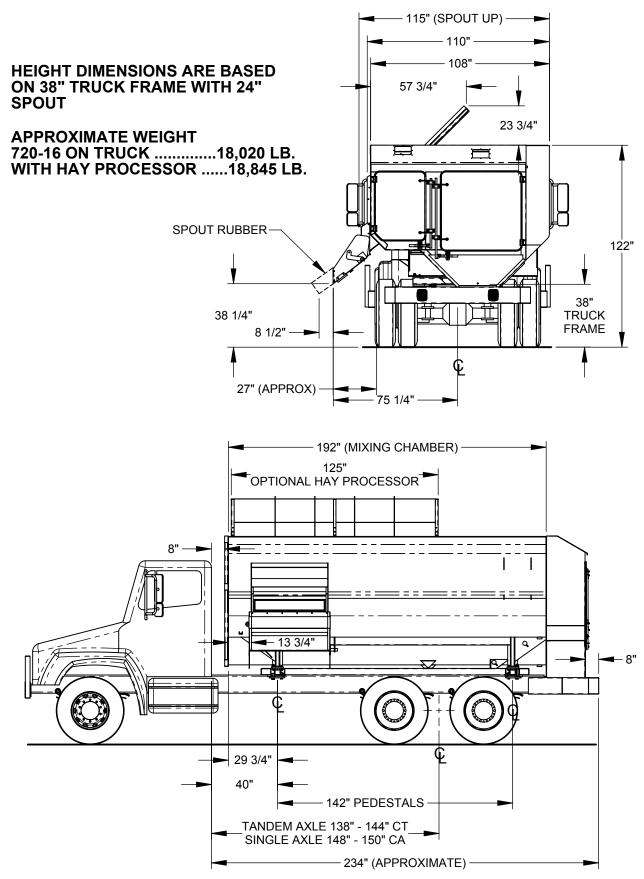
Capacity (Cu. ft.)	.720
Struck level capacity (Cu. ft.)	.750
Top Auger Bearing (Front)	. 2-7/16" 4-Bolt
Top Auger Bearing (Rear)	. 4" 4-Bolt
Bottom Auger Bearing (Front)	. 2-7/16" 4-Bolt
Bottom Auger Bearing (Rear)	. 4" 4-Bolt
Rotor Bearing (Front)	. 3-7/16" 4-Bolt
Rotor Bearing (Rear)	. Nylatron Sleeve
Top Auger Sprockets	. 120 A 54 & 140 A 26H
Bottom Auger Sprockets	. 140 C 45 & 120-2 B 12H
Rotor Sprocket	. (2) 120 A 90
Jackshaft Sprockets	. 120 B 14H & 100 E 48 120 B 12H & 100 E 48 - TRL 1000 PTO
Jackshaft Sprockets  Drive Sprocket	120 B 12H & 100 E 48 - TRL 1000 PTO
	120 B 12H & 100 E 48 - TRL 1000 PTO . 100 SF 17H
Drive Sprocket	120 B 12H & 100 E 48 - TRL 1000 PTO . 100 SF 17H . 3/8" x 24" O.D. RH 2/3 PITCH
Drive Sprocket  Top Auger Flighting	120 B 12H & 100 E 48 - TRL 1000 PTO . 100 SF 17H . 3/8" x 24" O.D. RH 2/3 PITCH . 1/2" X 24" O.D. RH & LH FULL PITCH
Drive Sprocket  Top Auger Flighting  Bottom Auger Flighting	120 B 12H & 100 E 48 - TRL 1000 PTO . 100 SF 17H . 3/8" x 24" O.D. RH 2/3 PITCH . 1/2" X 24" O.D. RH & LH FULL PITCH . 1/4" Steel or 3/8" Steel
Drive Sprocket  Top Auger Flighting  Bottom Auger Flighting  Tub Bottom Construction	120 B 12H & 100 E 48 - TRL 1000 PTO . 100 SF 17H . 3/8" x 24" O.D. RH 2/3 PITCH . 1/2" X 24" O.D. RH & LH FULL PITCH . 1/4" Steel or 3/8" Steel . 3/8" Steel
Drive Sprocket  Top Auger Flighting  Bottom Auger Flighting  Tub Bottom Construction  Auger Bottom Construction	120 B 12H & 100 E 48 - TRL 1000 PTO . 100 SF 17H . 3/8" x 24" O.D. RH 2/3 PITCH . 1/2" X 24" O.D. RH & LH FULL PITCH . 1/4" Steel or 3/8" Steel . 3/8" Steel . 3/16" Steel
Drive Sprocket	120 B 12H & 100 E 48 - TRL 1000 PTO . 100 SF 17H . 3/8" x 24" O.D. RH 2/3 PITCH . 1/2" X 24" O.D. RH & LH FULL PITCH . 1/4" Steel or 3/8" Steel . 3/8" Steel . 3/16" Steel

# PTO CHART 720-16

PTO (% ENGINE SPEED)			INPUT SPROCKET	JACKSHAFT SPROCKET		
	80-85 250 ft-lb/min Engine rotation	2:1 Gearbox	17 Tooth	14 Tooth 48 Tooth		
(For otl	(For other engine or transmission applications, consult factory)					
1000 TRACTOR DRIVE (STANDARD)			15 Tooth	12 Tooth 48 Tooth		
BELT RATIO						
STATIONARY ELECTRIC	40HP 5V- 5V-2 Groo 2 Belts 5V					
	50HP 5V- 5V-2 Groo 2 Belts 5V					

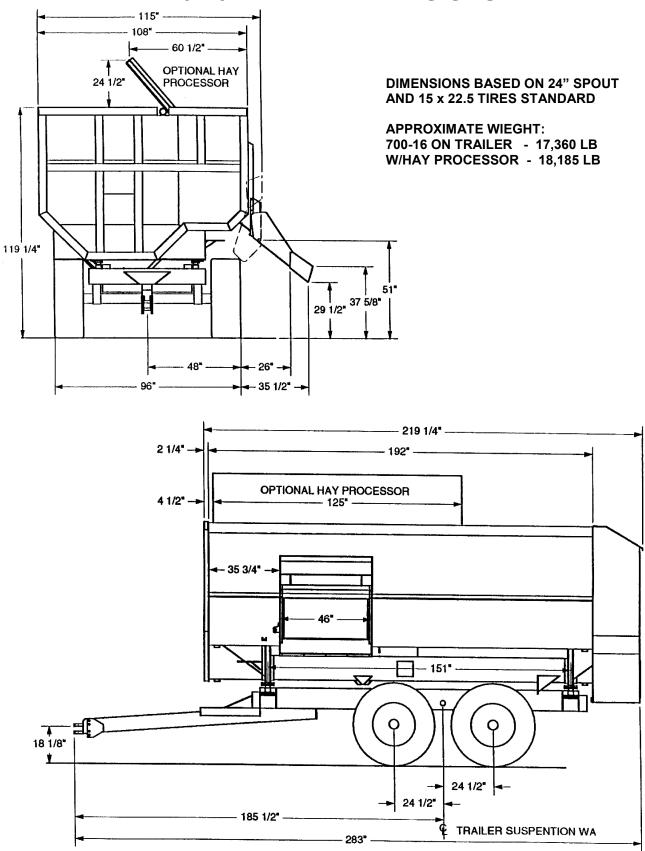
NOTE: IF OPTIONAL HAY PROCESSOR IS INSTALLED A 50HP MOTOR IS REQUIRED.

## 720-16 TRUCK DIMENSIONS



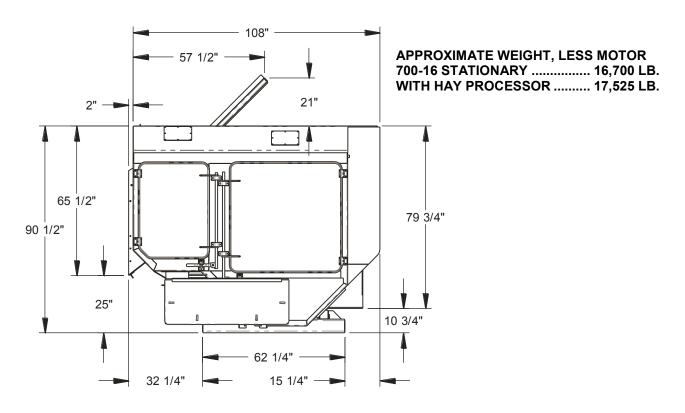
All Dimensions & Specifications are Approximate and Subject to Change Without Notice.

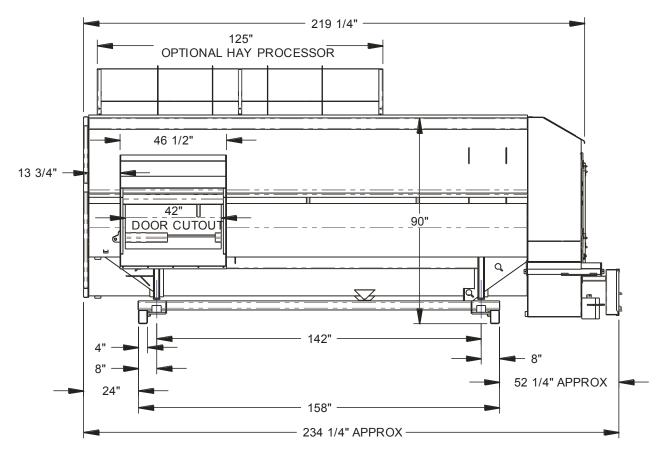
## 720-16 TRAILER DIMENSIONS



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

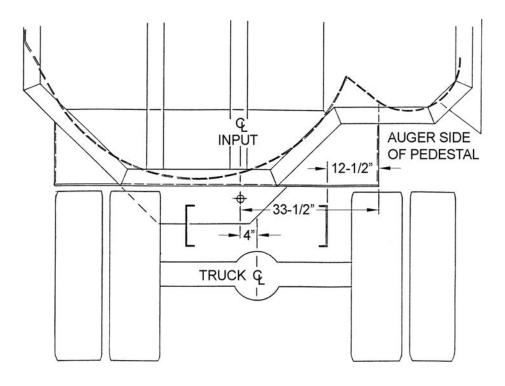
## 720-16 STATIONARY DIMENSIONS



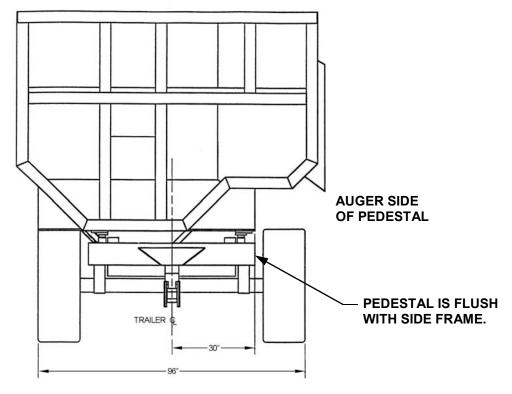


All Dimensions & Specifications are Approximate and Subject to Change Without Notice

## 720-16 TRUCK MOUNTING DIMENSIONS



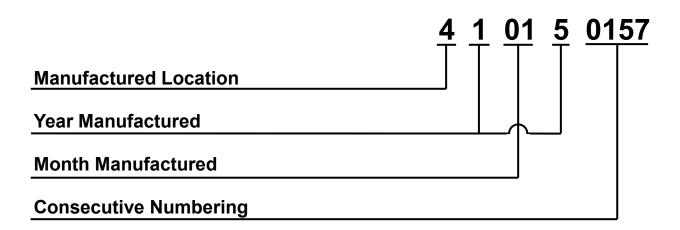
# 720-16 TRAILER MOUNTING DIMENSIONS



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

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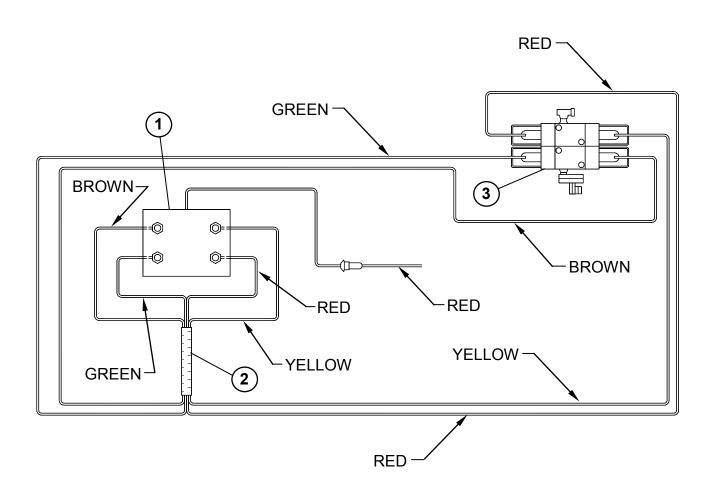
## How to read a Roto-Mix Serial Number



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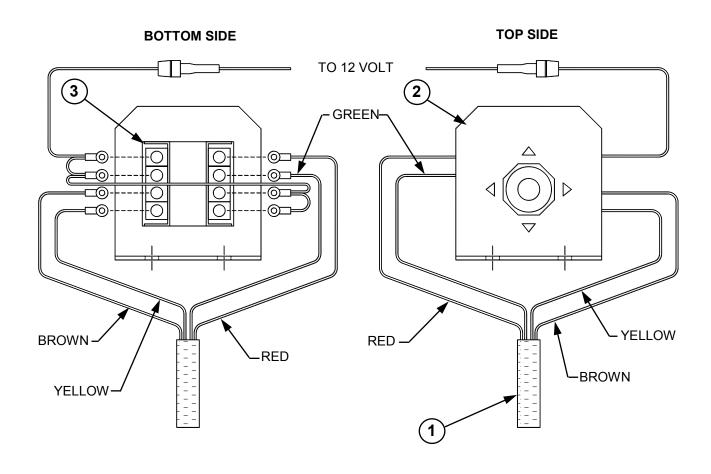
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HYDRAULIC VALVE	
HYDRAULIC PUMP (TRUCK)	38
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# WIRING SCHEMATIC FOR STRAIGHT DOOR



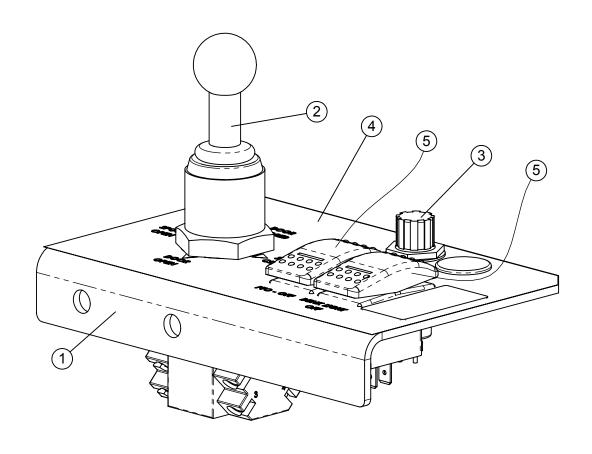
REF#	PART#	DESCRIPTION	QTY.
1A	780080	PUSH BUTTON SWITCH PANEL ASSEMBLY	1
1B	780081	JOYSTICK PANEL ASSEMBLY	1
2	781055	TRUCK TO MIXER WIRE ASSEMBLY	1
3	780123	HYDRAULIC CONTROM VALVE	1

# **JOYSTICK ASSEMBLY**



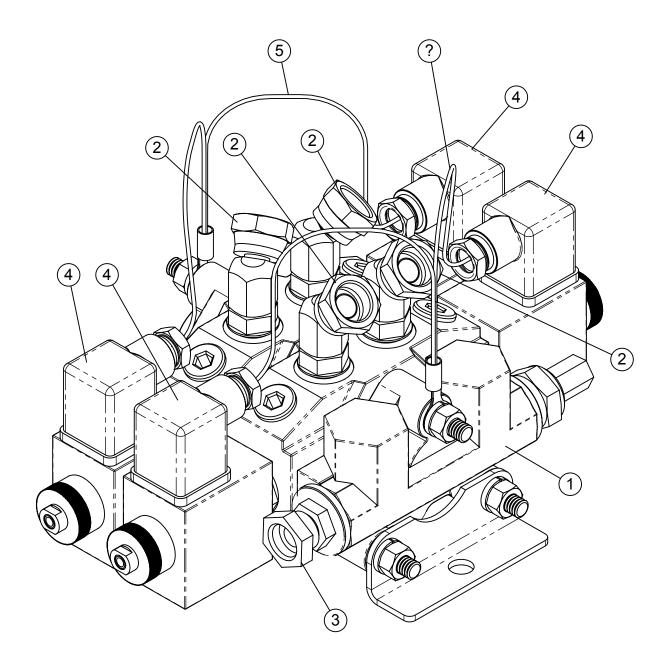
REF#	PART#	DESCRIPTION	QTY.
1	781056	SWITCH WIRE ASSEMBLY	1
2	185575	JOYSTICK BRACKET	1
3	357705	JOYSTICK SWITCH	1

# **720-16 CONTROL PANEL ASSEMBLY**



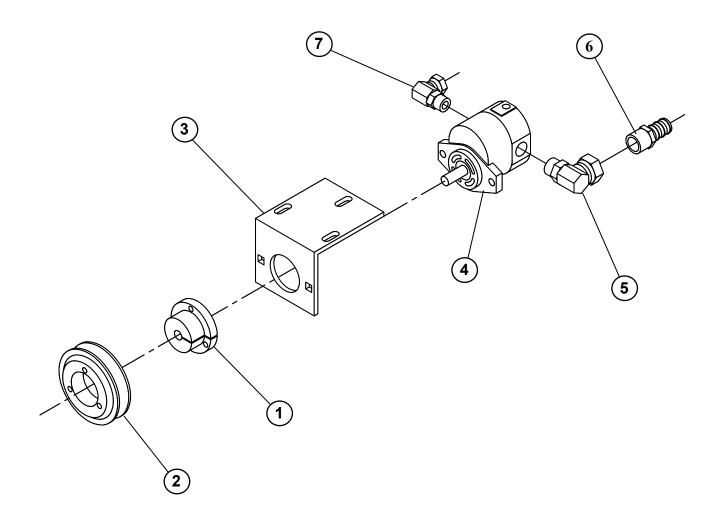
ITEM #	PART#	DESCRIPTION	QTY.
1	190928	TRUCK SWITCH PANEL	1
2	357705	JOYSTICK, (4-WAY) SCHNEIDER 9001K35	1
3	357753	RED LIGHT INDICATOR 3/4" DIA.	1
4	440835	DECAL, 4-WAY JOYSTICK (HORIZONTAL)	1
5	452744	SWITCH, ROCKER ON-OFF, (SPST), 44301	2

## **HYDRAULIC VALVE**



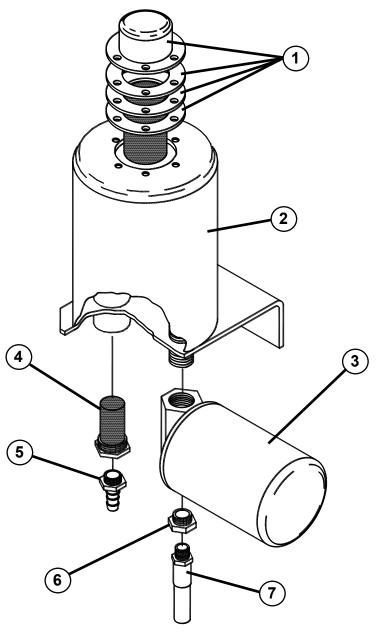
ITEM#	PART#	DESCRIPTION	QTY.
1	362209	HYD VALVE 12V DOUBLE, BUCHER	%
2	368024	HYD SWIVEL 9/16"MOR x 3/8"FPS 45°	(
3	368115	STRAIGHT ADAPTER 9/16 MOR x 3/8 FPS	&
4	453146	DIN CONNECTOR	(
5	781057	12 VOLT SOLENOID VALVE GROUND WIRE	&

## **HYDRAULIC PUMP**



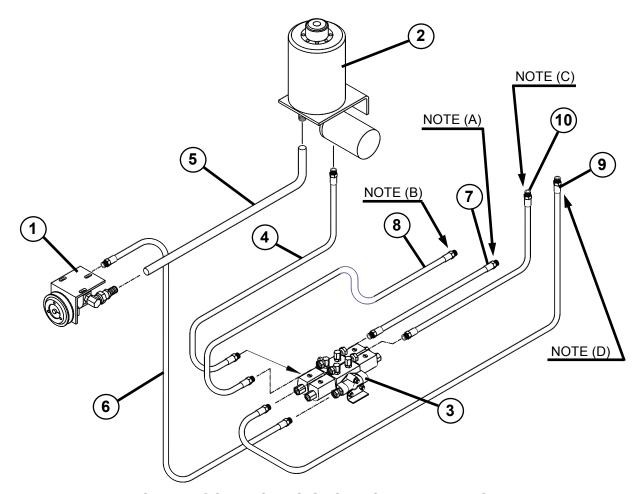
REF.#	PART#	DESCRIPTION	QTY.
1	336008	SH BUSHING 1/2" BORE	1
2	324040	1B x 4.0" SH BELT SHEAVE	1
3	182766	HYDRAULIC PUMP BRACKET	1
4	362017	HYDRAULIC PUMP	1
5	368050	3/4" FP x 7/8" MOR 90o SWIVEL	1
6	368512	3/4" MP x 3/4" HOSE BARB	1
7	368040	3/8" FP x 3/4" MOR 90o SWIVEL	1

## **OIL RESERVOIR**



REF.#	PART#	DESCRIPTION	QTY.
1	362550	FILLER CAP	1
2	870477	OIL RESERVOIR WELDMENT	1
3	362400	FILTER ASSEMBLY	1
4	362504	SUCTION SCREEN	1
5	368512	3/4" HOSE BARB	1
6	310815	3/4" TO 3/8" REDUCER BUSHING	1
7	781059	3/8" x 20" HYD. HOSE ASSY. (3/8" MP ENDS)	1

#### **HYDRAULIC SCHEMATIC**



**NOTE A: CONNECT TO SPOUT CYLINDER BASE** 

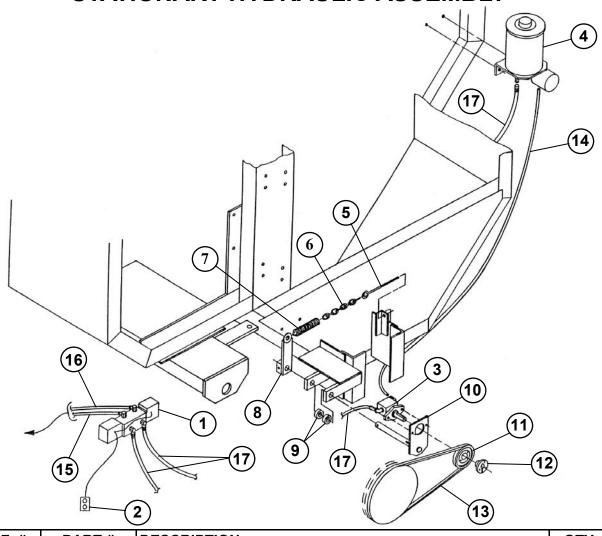
NOTE B: CONNECT TO SPOUT CYLINDER ROD END

NOTE C: CONNECT TO DOOR CYLINDER BASE

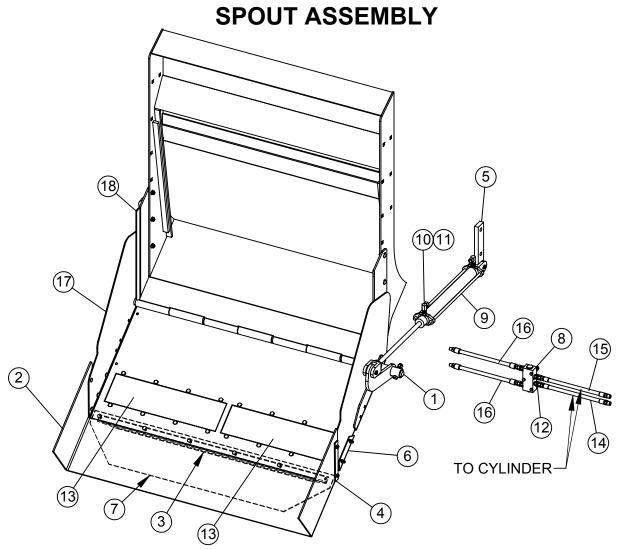
NOTE D: CONNECT TO DOOR CYLINDER ROD END

REF.#	PART#	DESCRIPTION	QTY.
1	780064	HYDRAULIC PUMP ASSEMBLY	1
2	780205	RESERVOIR ASSEMBLY	1
3	780123	HYDRAULIC VALVE ASSEMBLY	1
4	781059	HYD. HOSE ASSY. 3/8" x 20" w/3/8" MP ENDS	1
5	184291	HYD. HOSE ASSY. 3/4" x 144" (SUCTION LINE)	1
6	781073	HYD. HOSE ASSY. 3/8" x 144" w/3/8" MP ENDS	1
7	781066	HYD. HOSE ASSY. w/3/8" MP & 1/4" MP ENDS	1
8	781069	HYD. HOSE ASSY. w/3/8" MP & 1/4" MP ENDS	1
9	781061	HYD. HOSE ASSY. w/3/8" MP ENDS	1
10	781098	HYD. HOSE ASSY. w/3/8" MP ENDS	1

#### STATIONARY HYDRAULIC ASSEMBLY

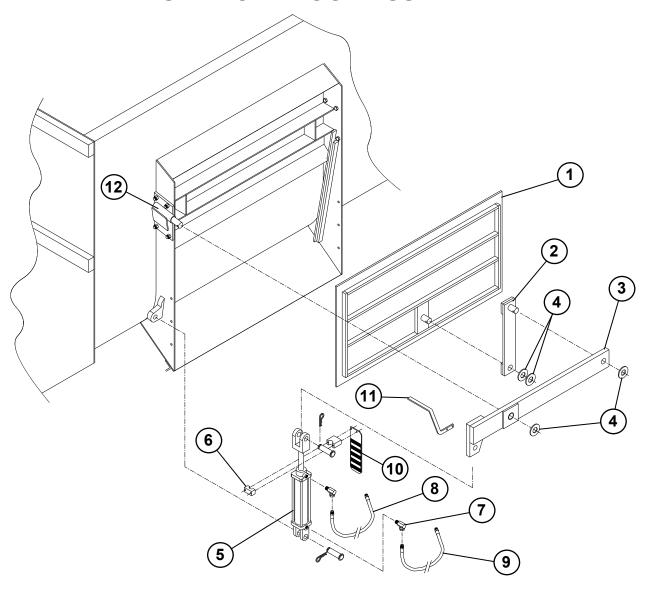


REF.#	PART#	DESCRIPTION	QTY.
1	781004	HYDRAULIC VALVE ASSEMBLY	1
2	357700	PENDANT SWITCH	1
3	781134	STATIONARY HYDRAULIC PUMP ASSEMBLY	1
4	781005	OIL RESERVOIR ASSEMBLY	1
5	410852	EYEBOLT, 3/8" x 8"	1
6	185448	CHAIN, 2/0 x 18"	1
7	410008	PULL SPRING, 1-1/4" x 5-1/4"	1
8	872136	PUMP LEVER ARM WELDMENT	1
9	412416	SET COLLAR, 1"	2
10	872138	PUMP SWING ARM WELDMENT	1
11	324046	BELT SHEAVE, 1B x 4.6" SH	1
12	336009	BUSHING, SDS 1/2" QD	1
13	325060	V-BELT, B60	1
14	189088	SUCTION HOSE x 94" LONG	1
15	781075	HYD. HOSE ASSY. 3/8" x 180" WITH 3/8" MP ENDS	1
16	781077	HYD. HOSE ASSY. 3/8" x 192" WITH 3/8" MP ENDS	1
17	781099	HYD. HOSE ASSY. 3/8" x 120" WITH 3/8" MP ENDS	2



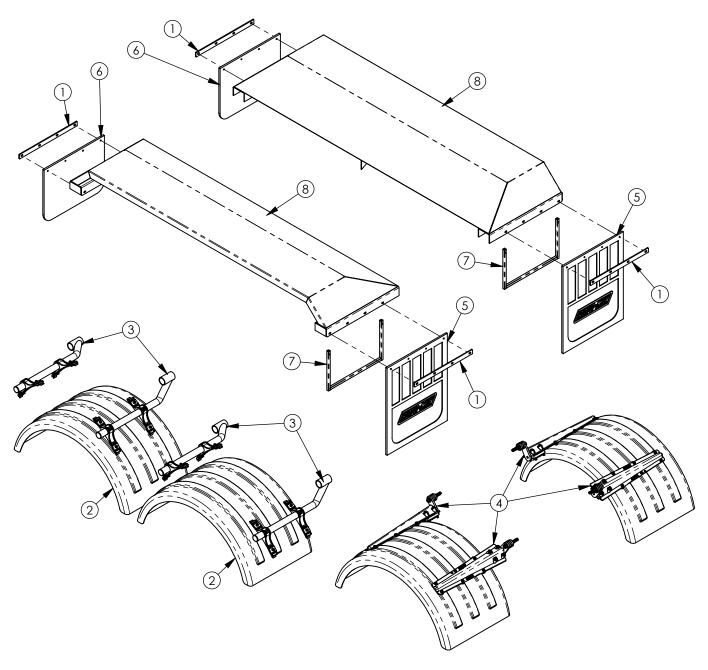
ITEM#	PART#	DESCRIPTION	QTY.
1	182238	SPOUT SHAFT	1
2	183145	SPOUT RUBBER 16" x 64"	1
3	183152	SPOUT BACKUP ANGLE, 47"	1
4	183160	SPOUT RUBBER SIDE BAR x 8"	2
5	185896	SPOUT CYLINDER BAR - 9-1/2	1
6	189079	SPOUT MAGNET GUARD, 24" XD	1
7	192118P	SPOUT RUBBER SUPPORT	1
8	362219	DOUBLE PILOT OPERATED CHECK VALVE, 3/8" NPT PORTS	1
9	364040	HYD. CYL. 25-1/4 CC 1 1/2" x 16"	1
10	368010	90° 1/4MP x 1/4" FP SWVL ORF 1/8	2
11	368106	STR. 9/16"MOR x 1/4"FP SWIVEL	2
12	368110	HYD ADAPTER, STRAIGHT 3/8MP x 3/8FP SWIVEL	4
13	375005	ACRO PLATE MAGNET AM 2200,	2
14	781918	HOSE ASM, 3/8" x 17", 3/8MP x 3/8MP	1
15	781919	HOSE ASM, 3/8" x 18", 3/8MP x 3/8MP	1
16	781920	HOSE ASM, HYD 3/8" x 66", 3/8MP x 1/4MP	2
17	872284	24" SPOUT WA (SHOWN)	1
	872283	14" SPOUT WA (NOT SHOWN)	1
18	873261	SPOUT HINGE W.A. 620 XD	1

## STRAIGHT DOOR ASSEMBLY



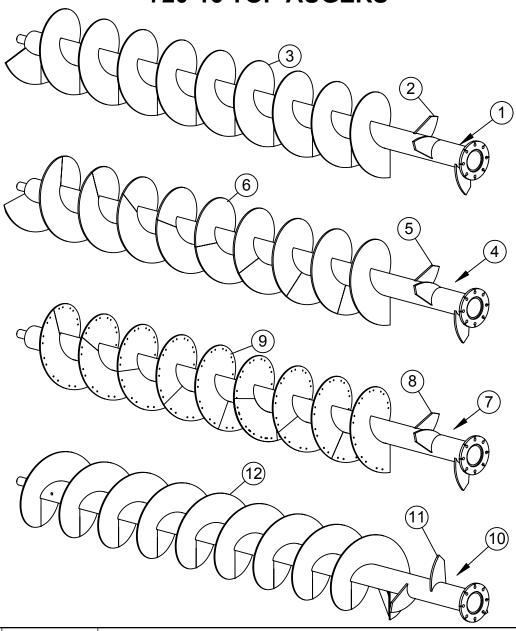
REF.#	PART#	DESCRIPTION	QTY.
1	872328	STRAIGHT DOOR PLATE WELDMENT	1
2	872248	STRAIGHT DOOR ARM WELDMENT	1
3	872247	STRAIGHT DOOR LEVER ARM WELDMENT	1
4	402518	FLAT WASHER 1 1/8" SAE	4
5	364055	HYDRAULIC CYLINDER 2" x 8"	1
6	184267	DOOR CYLINDER MARKER CLAMP (2 PIECE)	1
7	368007	HYD. ADAPTER 3/8"MP x 3/8"FPSW 90° x .109" ORF.	2
8	781061	HYD. HOSE 3/8" x 42" (3/8"MP ENDS)	1
9	781098	HYD. HOSE 3/8" x 32" (3/8"MP ENDS)	1
10	184259	DOOR CYLINDER MARKER PLATE (TRUCK)	1
11	150385	DOOR MARKER BAR ( <b>TRAILER</b> )	1
12	872258	STRAIGHT DOOR LEVER ARM WELDMENT	1

## 720-16 FENDERS & MUD FLAPS



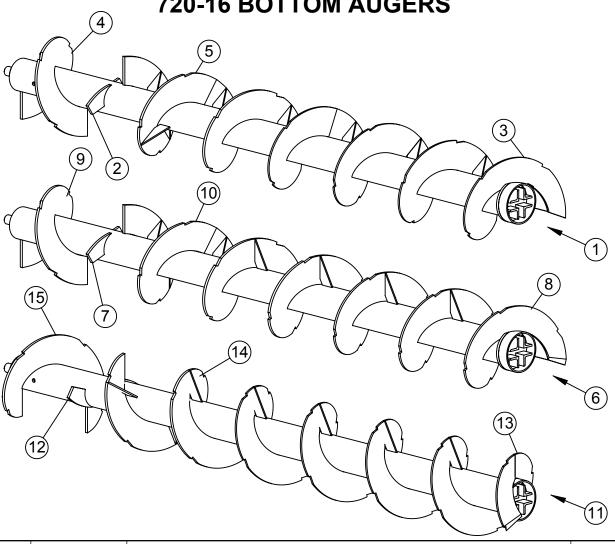
REF#	PART#	DESCRIPTION	QTY
1	183087	MUD FLAP STRAP	4
2	354391	POLY FENDER	3
3	354392	POLY FENDER TUBING MOUNT KIT (2 per kit)	2
4	354393	POLY FENDER TAPER BRACKET KIT (4 per kit)	1
5	370200	ROTO-MIX MUD FLAP 24" x 30"	2
6	370202	ROTO-MIX MUD FLAP 24" x 18-1/2"	2
7	872120	MUD FLAP BRACKET WA	2
8	872130	TANDEM FENDER WA	2

## **720-16 TOP AUGERS**



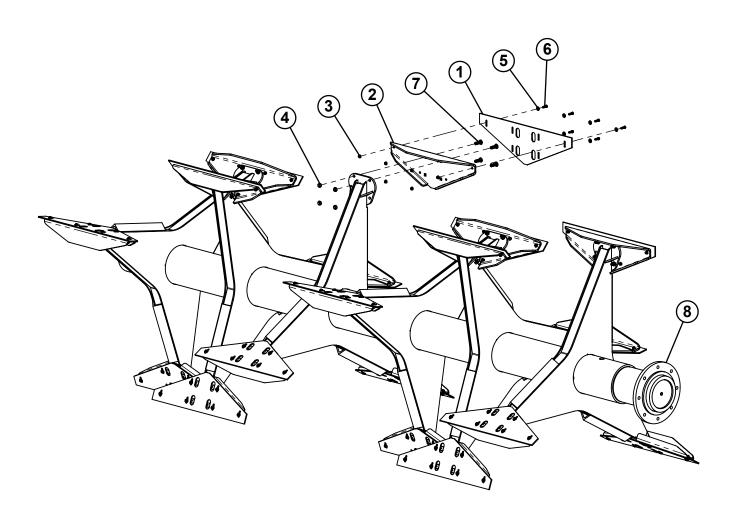
ITEM#	PART#	DESCRIPTION	QTY.
1	872367	620/700 TOP AUGER WA 3/8" FLGT	1
2	185708	24" TOP AUGER PADDLE - 6" x 9 5/8"	3
3	382424	FLIGHT 24"OD x 6 5/8"ID x 3/8" RH 2/3 PITCH	9
4	872736	620/720 HVY TOP AUGER W.A1/2" FLGT	1
5	185708	24" TOP AUGER PADDLE - 6" x 9 5/8"	3
6	382430	FLIGHT 24"OD x 6-5/8"ID x 1/2" RH 2/3 PITCH	8
7	872691	620/700 TOP AUGER WA 3/8" FLGT W\HOLES	1
8	185708	24" TOP AUGER PADDLE - 6" x 9 5/8"	3
9	382428	FLIGHT 24"OD x 6-5/8"ID x 3/8" RH 16" PITCH	9
10	872367RH	620/700 TOP AUGER WA (RH DSCH)	1
11	185708	24" TOP AUGER PADDLE - 6" x 9 5/8"	3
12	382425	FLIGHT 24"OD x 6-5/8"ID x 3/8" LH 2/3 PITCH	8

## **720-16 BOTTOM AUGERS**



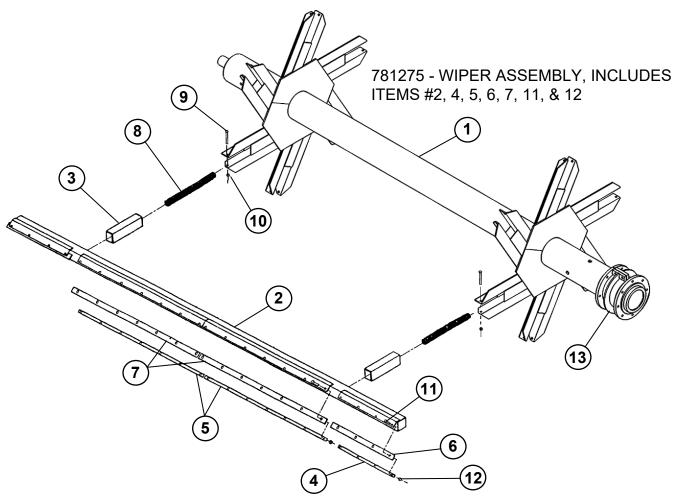
ITEM#	PART#	DESCRIPTION	QTY.
1	872730	720 BTM AUGER WA - 3/4"	1
2	189269	24" AUGER KICKER 4-7/16" x 9-7/16"	2
3	382427	24" OD x 8 5/8" ID x 1/2" LH FULL PITCH	4
4	382454	24" OD x 8-5/8" ID x 3/4" RH FULL PITCH	1
5	382455	24" OD x 8 5/8" ID x 3/4" LH FULL PITCH	2
6	872738	720 EXTRA DUTY BTM AUG WA	1
7	189269	24" AUGER KICKER 4-7/16" x 9-7/16"	2
8	382435	24" OD x 8 5/8" ID x 5/8" LH FULL PITCH	3
9	382454	24" OD x 8-5/8" ID x 3/4" RH FULL PITCH	1
10	382455	24" OD x 8 5/8" ID x 3/4" LH FULL PITCH	3
11	872730RH	720 BOTTOM AUGER WA 3/4" (RH)	1
12	189269	24" AUGER KICKER 4-7/16" x 9-7/16"	2
13	382426	24"OD x 8 5/8" ID x 1/2" RH FULL PITCH	5
14	382454	24" OD x 8-5/8" ID x 3/4" RH FULL PITCH	2
15	382455	24" OD x 8 5/8" ID x 3/4" LH FULL PITCH	1

## 720-16 STAGGERED ROTOR ASSEMBLY



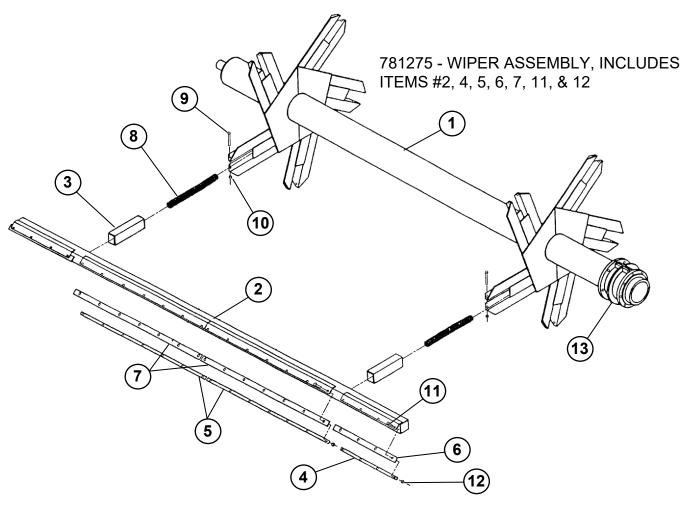
ITEM#	PART#	DESCRIPTION	QTY.
1	190339P	PLASTIC WIPER	18
2	190770	WIPER CHANNEL 5/8 BOLTS	18
3	401106	HEX NUT, 3/8"-16 NYLOCK #5	108
4	400910	HEX CROWN LOCNUT 5/8"-11 #9 PLTD	72
5	402806	FLAT WASHER 3/8" #9 BOWMALLOY	108
6	406906	HHCS 3/8"-16 x 1-1/4" #9 BOWMALLOY	108
7	407130	CHCS 5/8"-11 x 2" #8 PLTD	72
8	872937	720-16 STAGGERED ROTOR WA	1

#### 720-16 6-BAR ROTOR ASSEMBLY



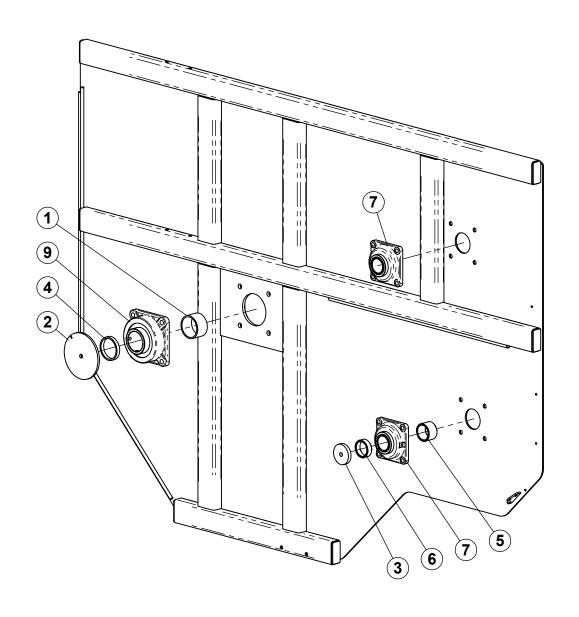
REF.#	PART#	DESCRIPTION	QTY.
1	872414	720-16 6-ARM ROTOR WELDMENT	1
2	872361	ROTOR SQUARE WIPER WELDMENT	6
3	850007	ROTOR SPRIMG COVER WELDMENT	12
4	189141	END WIPER STRAP 27-1/4"	12
5	189142	CENTER WIPER STRAP 60"	12
6	189143	END PLASTIC WIPER 62-1/2"	12
7	189144	CENTER PLASTIC WIPER 62-1/2"	12
8	410005	COMPRESSION SPRING 2-1/2" x 24" x .410"	12
9	406490	HHCS 3/4"-10 x 6-1/2" #8 PLTD	12
10	400912	HEX CENTER LOCKNUT 3/4"-10	12
11	405654	HHCS 3/8"-16 x 1-1/4"	132
12	401106	HEX NYLOCK NUT 3/8"-16	132
13	872037	NYLATRON BEARING ASSEMBLY	1

#### 720-16 5-ARM ROTOR ASSEMBLY



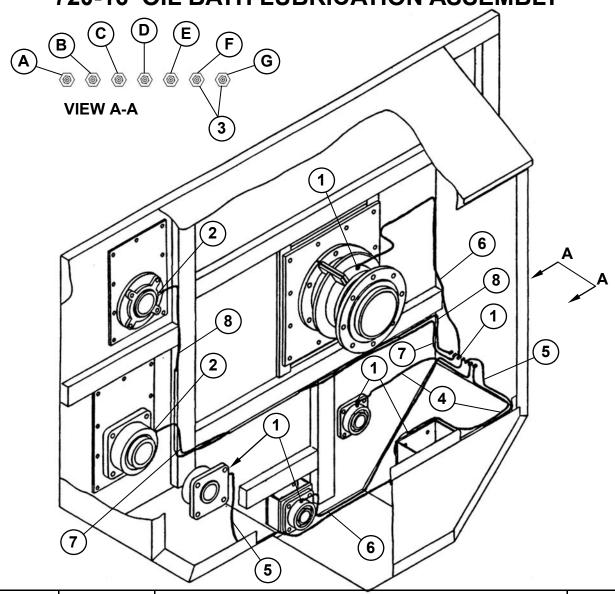
REF.#	PART#	DESCRIPTION	QTY.
1	872372	720-16 5-ARM ROTOR WELDMENT	1
2	872361	ROTOR SQUARE WIPER WELDMENT	5
3	850007	ROTOR SPRIMG COVER WELDMENT	10
4	189141	END WIPER STRAP 27-1/4"	10
5	189142	CENTER WIPER STRAP 60"	10
6	189143	END PLASTIC WIPER 62-1/2"	10
7	189144	CENTER PLASTIC WIPER 62-1/2"	10
8	410005	COMPRESSION SPRING 2-1/2" x 24" x .410"	10
9	406489	HHCS 3/4"-10 x 6" #8 PLTD	10
10	400912	HEX CENTER LOCKNUT 3/4"-10	10
11	405654	HHCS 3/8"-16 x 1-1/4"	110
12	401106	HEX NYLOCK NUT 3/8"-16	110
13	872037	NYLATRON BEARING ASSEMBLY	1

#### 720-16 FRONT END ASSEMBLY



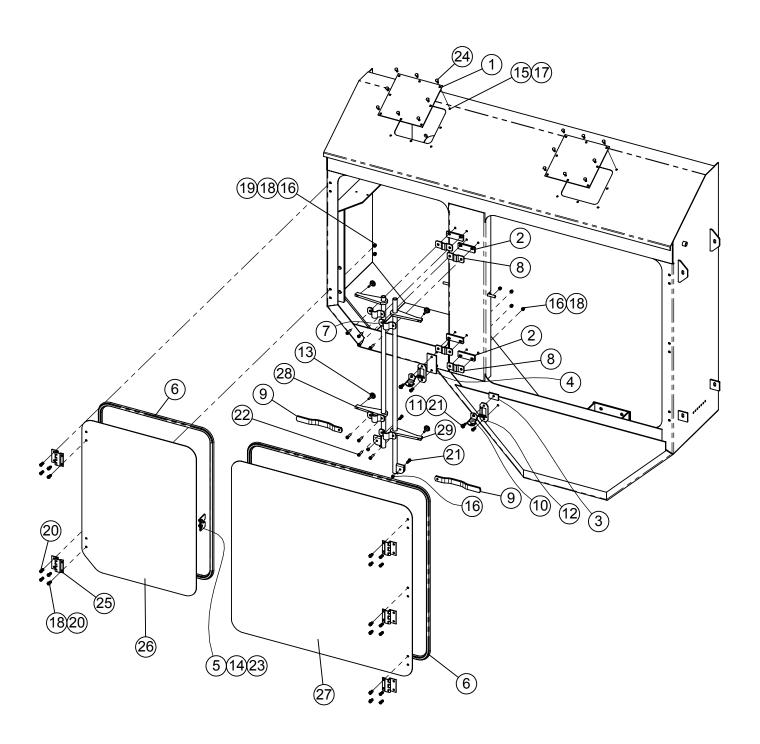
ITEM#	PART#	DESCRIPTION	QTY.
1	185257	SHAFT SPACER	1
2	185258	ROTOR PLATE INDICATOR, 15/16" OD	1
3	185259	Washer, Shaft Spkt, 3 1/2 OD	1
4	191969	SHAFT SPACER, 5/8" x 3-1/2" ID	1
5	192383	AUGER SHAFT SPACER, 2 1/2" ID X 1 7/8"	1
6	192384	AUGER SHAFT SPACER, 2 1/2" ID X 15/16"	1
7	340439	BEARING, 2 7/16" FLANGE, RCJC	2
9	W823890	BEARING, 4-BOLT FLANGE, 3-7/16"	1

#### **720-16 OIL BATH LUBRICATION ASSEMBLY**



REF.#	PART#	DESCRIPTION	QTY.
1	356001	1/8" NPTF x 3/16" COMP. 90°	12
2	356004	1/4" NPTF x 3/16" XOMP. STRAIGHT	2
3	310750	1/8" FPT GREASE ZERK	7
4	185045	GREASE LINE x 36"	2
Α		REAR JACKSHAFT BEARING	
В		FRONT JACKSHAFT BEARING	
5	185072	GREASE LINE x 100"	1
С		REAR BOTTOM AUGER BEARING	
6	185341	GREASE LINE x 48"	2
D		INPUT BEARING	
E		ROTOR BEARING	
7	185340	GREASE LINE x 84"	1
F		FRONT BOTTOM AUGER BEARING	
8	185339	GREASE LINE x 108"	1
G		TOP AUGER BEARING	

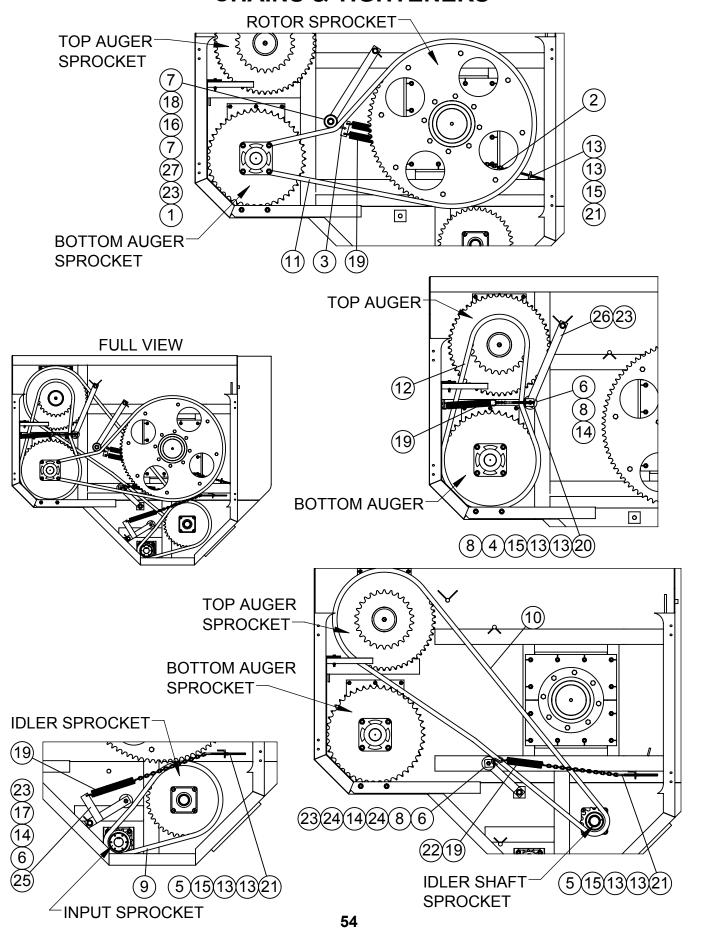
#### 720-16 OIL BATH DOOR ASSEMBLY



#### 720-16 OIL BATH DOOR ASSEMBLY

ITEM#	PART#	DESCRIPTION	QTY.
1	185219	OIL BATH TOP DOOR 12" x 12"	2
2	189503	CAM ROD SPACER	4
3	189873	720 RT OB CAM SPACER	1
4	189874	720 LT OB CAM SPACER 5"	1
5	190713	OB DOOR SUPPORT PLATE - WIDE	2
6	351056	OB BULB SEAL, 5/32"	2
7	370316	CAM LOCK TOP PLATE	4
8	370317	CAM LOCK BOTTOM PLATE	4
9	370319	CAM LOCK HANDLE	2
10	370320	HANDLES CAM LOCK	2
11	370321	CAM LOCK BUSHING	2
12	370322	HANDLE STOP	2
13	370323	LEVELING PAD	4
14	400106	HEX NUT, 5/16"-18 SER. FLANGE #5 PLTD	4
15	400205	HEX NUT 5/16"-18 #5 PLTD	16
16	400206	HEX NUT 3/8"-16 #5 PLTD	24
17	402005	WASHER 5/16", SPRING LOCK, MED PLTD	16
18	402006	WASHER SPRING LOCK 3/8" MED PLTD	32
19	402506	FLAT WASHER 3/8" SAE PLTD	10
20	405653	HHCS 3/8"-16 x 1" #5 PLTD	22
21	405654	HHCS 3/8"-16 x 1-1/4" #5 PLTD	4
22	405655	HHCS 3/8"-16 x 1 1/2" #5 PLTD	8
23	407020	CHCS 5/16"-18 x 3/4" #5 PLTD	4
24	407021	CHCS 5/16"-18 x 1" #5 PLTD	16
25	410219	HINGE, OFFSET,3 1/2" SQ	5
26	872704	720 LEFT OB DOOR WA	1
27	872705	720 RIGHT OB DOOR WA	1
28	872706	720 LEFT OB DOOR CAM WA	1
29	872707	720 RIGHT OB DOOR CAM WA	1

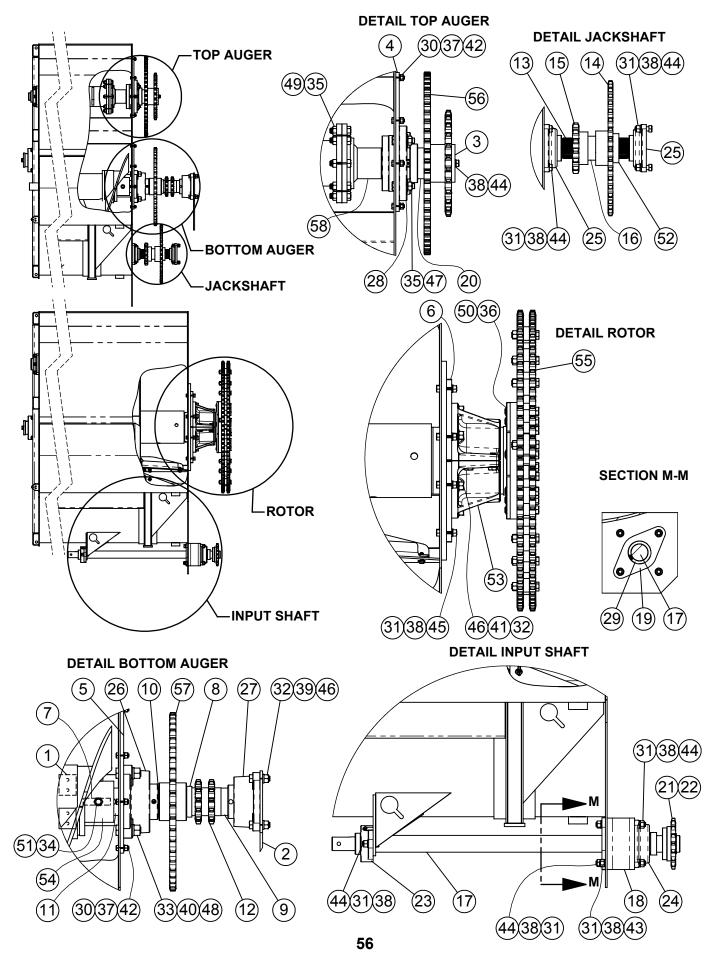
# 720-16 DRIVE ASSEMBLY CHAINS & TIGHTENERS



# 720-16 DRIVE ASSEMBLY CHAINS & TIGHTENERS

ITEM#	PART#	DESCRIPTION	QTY.
1	181198	PULL TAB 3/4"	%
2	182576	CHAIN-2/0 PASSING LINK	%
3	185290	SPRING PULL BAR	&
4	185487	CHAIN, 2/0 x 3"	%
5	185488	CHAIN-2/0 PASSING LINK	&
6	185582	IDLER BLOCK #100 x 2 7/8"	1
7	185620	IDLER BLOCK 4" LGT (#120-2 )	%
8	190836	FORMED IDLER ANGLE	&
9	321066	#100 CHAIN x 66 PITCHES (INPUT)	%
10	321236	#120 CHAIN x 136 PITCHES (TOP AUGER)	%
11	321326	#120-2 CHAIN x 126 PITCHES	%
12	321471	#140 CHAIN x 71 PITCHES	%
13	400206	HEX NUT 3/8"-16 #5 PLTD	,
14	400910	HEX CROWN LOCNUT 5/8"-11 #9 PLTD	1
15	402406	FLAT WASHER 3/8" PLTD	(
16	402512	FLAT WASHER 3/4" SAE	%
17	405762	HHCS 5/8"-11 x 4" #5 PLTD	&
18	405789	HHCS 3/4"-10 x 5" #5 PLTD	%
19	410012	Spring Pull 1 3/4" x 7 x .218	)
20	410851	EYE BOLT 3/8" X 6"	%
21	410852	EYE BOLT 3/8" X 8"	1
22	411805	S - HOOK 5/16"	1
23	412416	COLLAR, SET ASSY	,
24	872069	IDLER ARM 5/8"BORE, 21 3/4"	%
25	872118	IDLER ARM 5/8"BORE, 21 3/4"	%
26	872252	IDLER ARM 5/8"BORE, 21 3/4"	%
27	872402	IDLER ARM 3/4" BORE, 21-3/4"	%

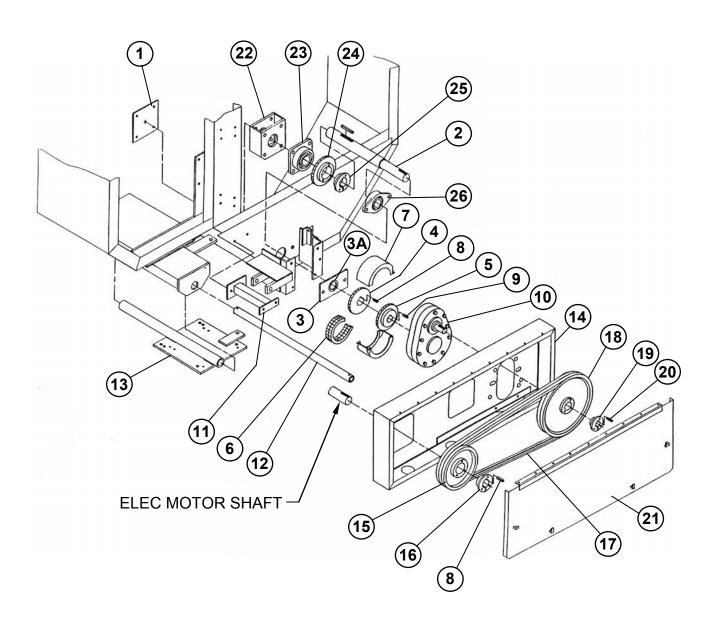
#### 720-16 DRIVE ASSEMBLY



## **720-16 DRIVE ASSEMBLY**

			_
ITEM#	PART#	DESCRIPTION	QTY.
1	185132	INSERT, AUGER COUPLING, 2-1/2" x 3"	8
2	185220	BTM AUGER DRIVE BEARING PLATE	1
			<del>                                     </del>
3	185261	WASHER 5 1/2" O.D.	1 1
4	185268	700 TOP AUGER BRG PLATE 14" x 20-1/4"	1
5	185269	16" BOTTOM AUGER PLATE MSF 64	1
6	185270	ROTOR BEARING PLATE	2
7	185285	SHAFT KEY - 3/4" x 1" x 4"	1
8	185286	BTM AUGER SPRKT SPACER 1-1/4" OFFSET	1
9	185287	SHAFT SPACER, 3 1/2" x 1"	1
10	185288	4" SHAFT SPROCKET SPACER - 1/32"	1 1
			-
11	185415	4" - 2 STEP SPLINE SHAFT - 25"	1
12	189726	D120B12H x 3.75 LTB x 3.27 ID SPROCKET	1
13	190388	JACKSHAFT, SPLINED, 720 (After Serial #400777490)	1
	185385	JACKSHAFT 2-7/16" x 14-1/52', KEYED (Before Serial #400777491)	1
ļ			+
	189104	SQURE KEY, 5/8" x 1-3/4" (Before Serial #400777491)	1
14	190391	SPROCKET, 100B48, 3" SPLINE	1
	331048	SPROCKET, 100E48H QD (Before Serial #400777491)	1
	336139	BUSHING, E 2-7/16" QD (Before Serial #4007774910)	1
		DUSTING, E 2-1/10 QD (Before Serial #400/1/4910)	
	185289	KEY, 5/8" x 2-3/4" (Used with #336139 Bushing)	1
15	190395	SPROCKET, 120B14H, 3" SPLINE	1
	331214	SPROCKET, 3420B14H RF (Before Serial #400777491)	
16	190398	3" SHAFT SPACER 1-1/8"	1
		NINT LIGHT OF ACEN TO CAN TO CAN TO CAN THE CONTROL OF THE CONTROL	
17	190487	INPUT SHAFT 2-7/16" x 50-3/4", 720 (After Serial #400387577)	1
<b> </b>	185284	INPUT SHAFT 2-7/16" x 44-3/4" (Before Serial #400387578)	1
18	190534	INPUT BEARING MOUNT 2-7/16"	1
19	192109	2-7/16" SEAL PLATE - 620 OIL BATH	1 1
			+
20	192115	SHAFT SPROCKET SPACER - 15/16" x 4"	1
21	331017	SPROCKET, 100 SF17H RC (Used with Bar Rotors)	1
	331015	SPROCKET, 100 SF15H RC (Used with Staggered Rotors)	
22		BUSHING, SF 2-7/16" QD	1
22	336039		1 1
23	340232	BEARING, VCJT 2"-2 BOLT FLANGE	1
24	340438	BEARING, 2 7/16" FLANGE MOUNT	1
25	340439	BEARING, 2 7/16" FLANGE, RCJC (After Serial #400777490)	2
25			
	340438	BEARING, 2-7/16" FLANGE, RCJ (Before Serial #400777491)	2
26	340564	4" - MSF BEARING 64-4 BOLT FLANGE	1
27	342051	FLANGE ROLL REX ZB2303 BEARING	1
28	342159	BEARING, 4", 4-BOLT FLANGED ROLLER	1
29	355039		1 1
		Seal-CR 24287 2-7/16" ID	
30	400208	HEX NUT 1/2"-13 #5 PLTD	20
31	400210	HEX NUT 5/8"-11 #5 PLTD	34
32	400212	HEX NUT 3/4"-10 #5 PLTD	14
33		HEX NUT, 1"-8 #5 PLTD	+
	400216		4
34	400612	HEX JAM NUT 3/4-10	2
35	400912	HEX CROWN LOCK NUT 3/4"-10 #5 PLTD	12
36	401012	3/4"-16 2 WAY LOCKNUT	8
37	402008	SPRING LOCK WASHER 1/2" PLTD	20
38	402010	SPRING LOCK WASHER 5/8" PLTD	36
39	402012	SPRING LOCK WASHER 3/4" PLTD	8
40	402016	SPLIT LOCK WASHER 1" MED PLTD	4
			+
41	402112	LOCK WASHER, EXTERNAL STAR 3/4"	6
42	405703	HHCS 1/2"-13 x 1-1/2" #5 PLTD	20
43	405752	HHCS, 5/8"-11 x 1-1/2" #5 PLTD	3
44	405754	HHCS, 5/8"-11 x 2" #5 PLTD	21
45	405756	HHCS, 5/8"-11 x 2-1/2" #5 PLTD	12
46	405781	HHCS 3/4"-10 x 2-1/2" #5 PLTD	14
47	405782	HHCS 3/4"- 10 x 2-3/4" #5 PLTD	4
48	405831	HHCS 1"-8 x 3" #5 PLTD	4
49	406481	HEX BOLT, 3/4-10 x 2-1/2 #8 PITD HHCS	8
50	406786	HHCS #5 Pltd 3/4-16 x 4-1/2	8
51	409623	SQ HEAD SET SCREW 3/4" x 2"	2
52	412434	C-CLAMP COLLAR, 3"	1
			-
53	782037	NYLATRON CAST BEARING ASSY	1
54	872033	AUGER SHAFT COUPLER & HUB WA	1
55	872044	DOUBLE 120A90 SPROCKET WA	1
56	872384	SPRKT WA, 720 TOP AUGER, 120A54 x 140A26 (Used with Bar Rotors)	1 1
50		CONTROL WA, 120 TO AUGER, 120A94 & 140A20 (USER WILL BUT ROLOTS)	
	872875	SPROCKET WA, TOP AUGER, 120A54x140A30 (Used with Staggered Rotors)	1
57	872385	SPROCKET, 140C45, 5-1/2"OD, 31 SPLINE	1
58	873262	HEAVY TOP AUGER SHAFT FLANGE WA 620 4"	1
		The state of the s	<u> </u>

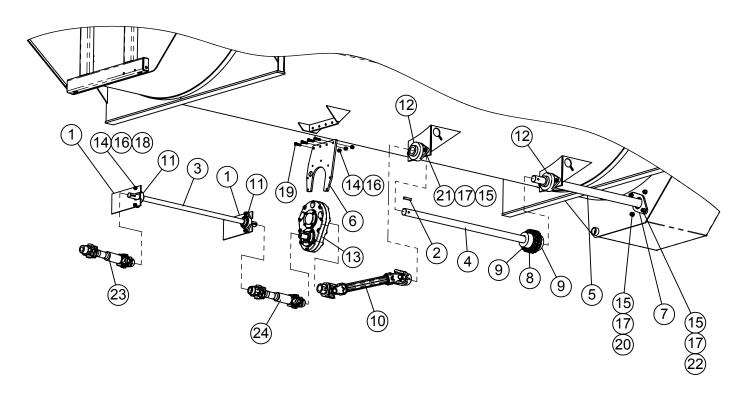
#### 720-16 STATIONARY DRIVE ASSEMBLY



### **720-16 STATIONARY DRIVE ASSEMBLY**

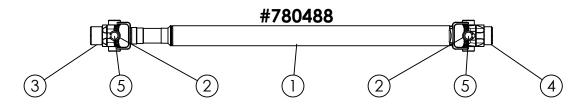
REF.#	PART#	DESCRIPTION	QTY.
1	185641	COVER PLATE 8" x 8"	1
2	185643	720 STATIONARY INPUT SHAFT 25"	1
3	781130	SEAL PLATE ASSEMBLY 2"	1
3A	355032	SHAFT SEAL 2" CR 20098	1
4	332618	SPROCKET CHAIN COUPLER, 80B18 x 2"	1
5	332617	SPROCKET CHAIN COUPLER, 80B18 x 1-3/4"	1
6	320818	CHAIN, 80-2 RC x 18 PITCHS COMPLETE	1
7	332619	CHAIN COUPLER COVER 8018	1
8	185485	SQUARE KEY, 1/2" x 2-1/2"	2
9	185480	SQUARE KEY, 3/8" x 2"	1
10	344022	GEARBOX, 2:1 HUB CITY	1
11	872003	BELT SHIELD SUPPORT WELDMENT	1
12	185645	720 MOTOR PIVOT PIPE 35"	1
13	872176	720 ELECTRIC MOTOR BASE WA (25-50 HP)	1
	872724	920 ELECTRIC MOTOR BASE WA (60 HP)	1
14	872006	ELECTRIC BELT SHIELD WELDMENT	1
15	324001	BELT SHEAVE, 5V-3 GROVE 10.9" SF	1
16	336034	BUSHING, SF 2-1/8" QD	1
17	325402	V-BELT, POWER BAND 2/5V-1120	1
18	324016	BELT SHEAVE, 5B-2 GROOVE 16.0" SF	1
19	336022	BUSHING, SF 1-3/8" QD	1
20	185484	SQUARE KEY, 5/16" x 2"	1
21	781001	ELECTRIC BELT SHIELD DOOR ASSEMBLY	1
22	190534	INPUT BEARING MOUNT 2-7/16"	1
23	340438	BEARING, 2-7/16" 4-BOLT FLANGE RCJ	1
		(Before Serial #401277491)	
	344439	BEARING, 2-7/16" 4-BOLT FLANGE RCJC	1
		(After Serial #401277490)	
24	331017	SPROCKET #100 SF 17H RC	1
25	336039	BUSHING, SF 2-7/16" QD	1
26	340232	BEARING, 2" 2-BOLT FLANGE VCJT	1

## 720-16 TRUCK TANDEM AXLE, DRIVELINE ASSEMBLY

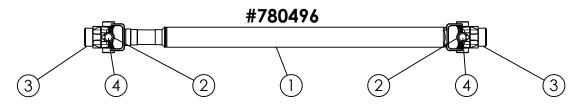


ITEM#	PART#	DESCRIPTION	QTY.
1	183319	TRUCK JACKSHAFT BRACKET	2
2	185485	KEY, 1/2 x 1/2 x 2-1/2 LG.	2
3	185504	JACKSHAFT, 700 TRK, 1-3/8" x 48"	1
4	188267	DRIVESHAFT x 48"	1
5	190487	INPUT SHAFT 2-7/16" x 50-3/4", 720	1
6	191974	GEAR BOX PLATE	1
7	192109	2-7/16" SEAL PLATE - 620 OIL BATH	1
8	320818	COUPLER CHAIN #80-2 RC x 18 COMPLETE	1
9	332618	SPROCKET, COUPLER 80B18 x 2 CH	2
10	338048	TRUCK DRIVE SHAFT	1
11	340222	BEARING, 1 3/8" VCJT	2
12	340232	BEARING, VCJT 2"-2 BOLT FLANGE	2
13	344022	GEARBOX 2-1 HUB CITY 200	1
14	400208	HEX NUT 1/2"-13 #5 PLTD	8
15	400210	HEX NUT 5/8"-11 #5 PLTD	8
16	402008	SPRING LOCK WASHER 1/2" PLTD	8
17	402010	SPRING LOCK WASHER 5/8" PLTD	8
18	405703	HHCS 1/2"-13 x 1-1/2" #5 PLTD	4
19	405704	HHCS 1/2"-13 x 1-3/4" #5 PLTD	4
20	405752	HHCS, 5/8"-11 x 1-1/2" #5 PLTD	2
21	405754	HHCS, 5/8"-11 x 2" #5 PLTD	4
22	405754	HHCS, 5/8"-11 x 2" #5 PLTD	2
23	780488	1350 DRIVESHAFT ASSY 1-1/4" x 1-3/8"	1
24	780496	1350 DRIVE SHAFT ASSY 1-3/8" x 1-3/8"	1

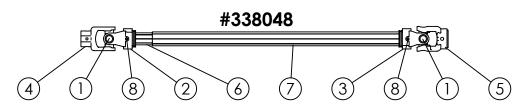
#### **620-16/720-16 TRUCK DRIVELINES**



ITEM#	PART#	DESCRIPTION	QTY.
1	338054	DRIVE SHAFT ASSY, INCLUDES ITEMS 2 & 5	1
2	338413	U-STRAP & BOLT KIT 1350	4
3	338423	YOKE 1-1/4" RD BORE, 5/16" KWY	1
4	338424	YOKE 1-3/8" RD BORE, 5/16" KWY	1
5	338436	CROSS KIT, SPICER 1350 5-178X	2

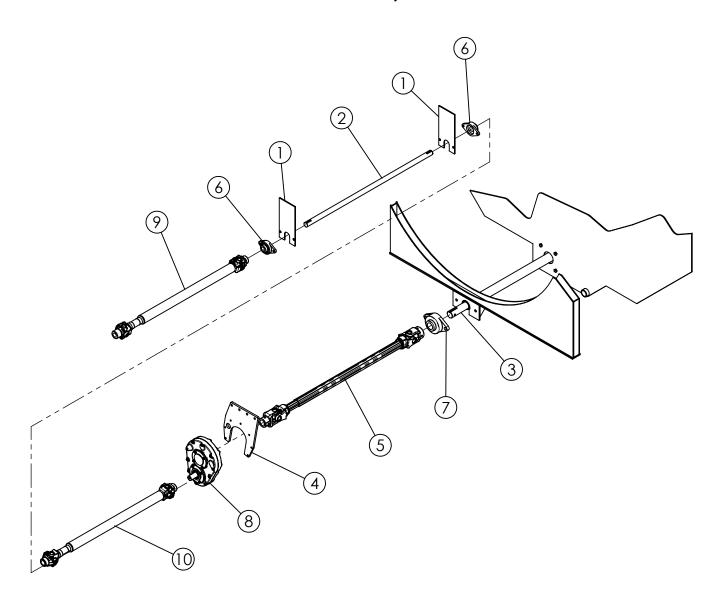


ITEM#	PART#	DESCRIPTION	QTY.
1	338054	DRIVE SHAFT ASSY, INCLUDES ITEMS 2 & 5	1
2	338413	U-STRAP & BOLT KIT 1350	4
3	338424	YOKE 1-3/8" RD BORE, 5/16" KWY	2
4	338436	CROSS KIT, SPICER 1350 5-178X	2



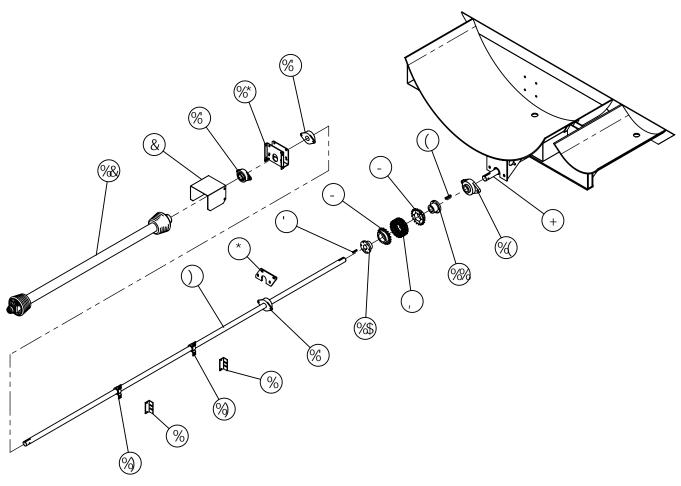
ITEM#	PART#	DESCRIPTION	QTY.
1	338453	INBOARD YOKE, S4, W2500	2
2	338466	OUTER PROFILE TUBE, S5, 39.17", W2500	1
3	338459	YOKE, 2" ROUND BORE, 1/2" KEYWAY, W2500	1
4	338458	Yoke, 1-3/4" RD BORE , 3/8" KWY W2500	1
5	338465	INNER PROFILE TUBE, S4, 39.37", W2500	1
6	338489	BEARING RING, SC25, W-2400	1
7	338611	SHIELD CONE, 7-Rib, W2580	1
8	338454	INBOARD YOKE, S5, W2500	2

## 720-16 TRUCK SINGLE AXLE, DRIVELINE ASSEMBLY



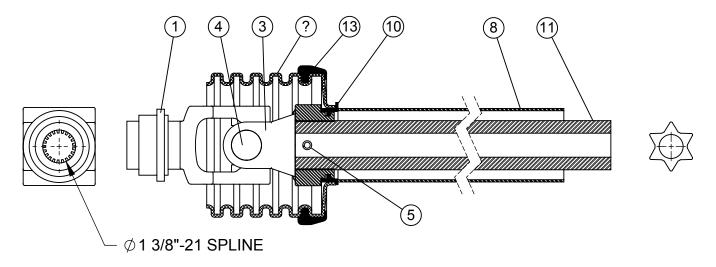
ITEM#	PART#	DESCRIPTION	QTY.
1	183319	TRUCK JACKSHAFT BRACKET	2
2	185504	JACKSHAFT, 700 TRK, 1-3/8" x 48"	1
3	190487	INPUT SHAFT 2-7/16" x 50-3/4", 720	1
4	191974	GEAR BOX PLATE	1
5	338048	TRUCK DRIVE SHAFT	1
6	340222	BEARING, 1 3/8" VCJT	2
7	340232	BEARING, 2", 2 BOLT FLANGE, VCJT	1
8	344022	GEARBOX 2-1 HUB CITY 200	1
9	780488	1350 DRIVESHAFT ASSY 1-1/4" x 1-3/8"	1
10	780496	1350 DRIVE SHAFT ASSY 1-3/8" x 1-3/8"	1

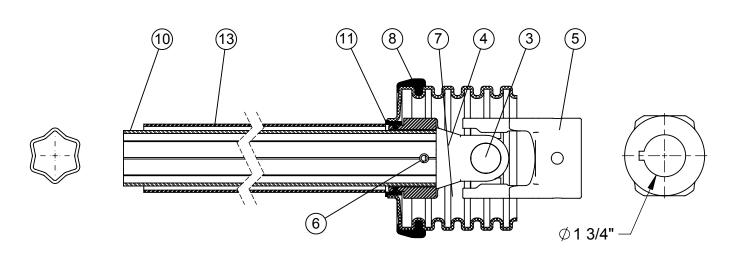
## **720-16 TRAILER DRIVELINE ASSEMBLY**



ITEM#	PART#	DESCRIPTION	QTY.
1	185299	CARRIER BEARING ANGLE	2
2	185302	PTO SHIELD	1
3	185480	3/8" SQ. X 2" KEY	2
4	185485	KEY, 1/2" SQUARE	1
5	185733	600 TRAILER DRIVELINE 1-3/4"	1
6	189555	TRAILER BEARING PLATE	1
7	190487	700 INPUT SHAFT 2-7/16" x 50-3/4"	1
8	320818	COUPLER CHAIN #80-2 RC x 18 COMPLETE	1
9	332620	SPROCKET, 80-18 SF CHAIN COUPLING	2
10	336027	BUSHING, 1-3/4" SF QD	1
11	336032	BUSHING, 2" QD SF	1
12	338058	DRIVE SHAFT W2400 1000 x 1-3/4" Rd	1
13	340228	BEARING, 1-3/4" FLANGE, 2-BOLT	3
14	340232	BEARING, 2" - 2 BOLT FLANGE VCJT	1
15	341028	BEARING, 1-3/4" PABCO BKP28T-TP W	2
16	872604	720 JACKSHAFT BRG PLATE W/A	11

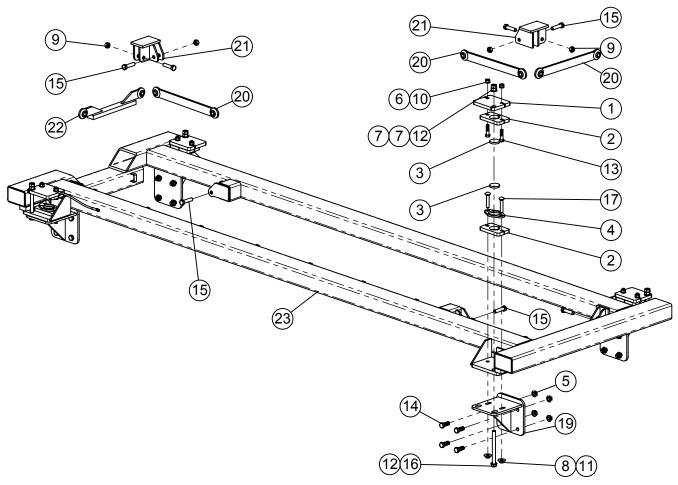
# TRACTOR TO TRAILER DRIVESHAFT (1000 RPM) - #338058





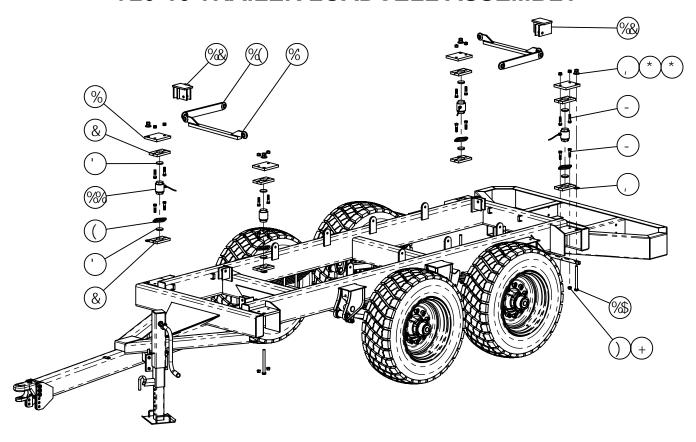
ITEM#	PART#	DESCRIPTION	QTY.
1	338442	SLIDE YOKE 1000 RPM, W2400	1
2	338443	CROSS KIT, W2400	1
3	338450	INBOARD YOKE W2400 S4 356905	1
4	338473	ROLL DRIVE PIN #10MM x 80MM	2
5	338473	ROLL DRIVE PIN W LTSH 10MM x 90MM	2
6	338475	YOKE 1-3/4"RB x 1/2"SC x 3/8"K, W2400	1
7	338486	SHIELD CONE 6-RIB, 365366 W-2400	2
8	338487	OUTER SHIELD TUBE W-2400	1
9	338488	INNER SHIELD TUBE - W-2400	1
10	338489	BEARING RING SC25, 087276	2
11	338568	INNER PROFILE W2400 S4 391623	1
12	338569	OUTER PROFILE S5 W2400 109485	1
13	338623	REINFORCING COLLAR 359474	2

#### 720-16 TRUCK LOAD CELL SCALE FRAME ASSEMBLY



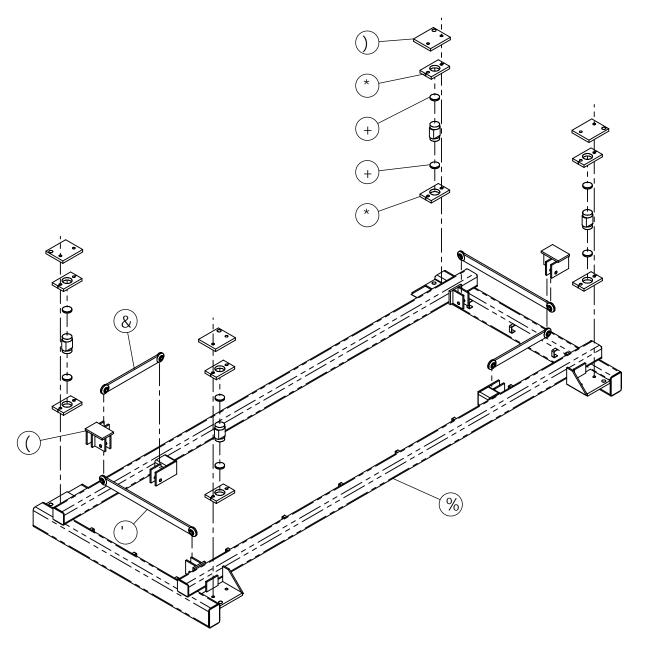
ITEM#	PART#	DESCRIPTION	QTY.
1	182881	SCALE MOUNT MIXER PLATE	4
2	182915	LOAD CELL CAGE PLATE	8
3	185997	SCALE PAD	8
4	192175	LOAD CELL SPPRT PLT, CRG HEAD	4
5	400116	HEX NUT, 3/4"-10 SERRATED FLANGE #5 PLTD	16
6	400210	HEX NUT 5/8"-11 #5 PLTD	8
7	400212	HEX NUT 3/4"-10 #5 PLTD	8
8	400910	HEX CROWN LOCNUT 5/8"-11 #9 PLTD	8
9	400912	HEX CROWN LOCK NUT 3/4"-10 #5 PLTD	8
10	402010	SPRING LOCK WASHER 5/8" PLTD	8
11	402410	FLAT WASHER 5/8" MED PLTD	8
12	402512	FLAT WASHER 3/4" SAE	8
13	405756	HHCS, 5/8"-11 x 2-1/2" #5 PLTD	8
14	405779	HHCS 3/4"-10 x 2" #5 PLTD	16
15	405783	HHCS 3/4-10 x 3" #5 PLTD	8
16	405798	HHCS #5 PLTD 3/4-10 x 8-1/2	4
17	407151	CARG BOLT #8 5/8-11 X 3-1/2	8
18	440412	GROUND STRAP 12"	1
19	830738	BRACKET,SCALE FRAME MOUNT	4
20	870501	SCALE CHECK ROD W.A.	3
21	870519	MIXER SCALE CHECK W.A.	2
22	872053	OFFSET CHECK ROD W.A.	1
23	872188	16' TANDEM SCALE FRAME W.A.	1
	872110	720 SINGLE AXLE SCALE FRAME WA	1

## 720-16 TRAILER LOADCELL ASSEMBLY



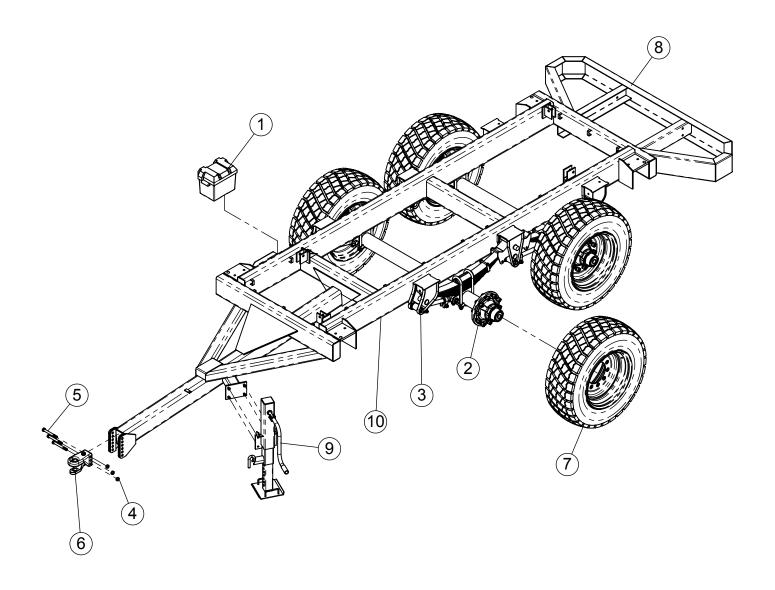
ITEM#	PART#	DESCRIPTION	QTY.
1	182881	SCALE MOUNT MIXER PLATE	4
2	182915	LOAD CELL CAGE PLATE	8
3	185997	SCALE PAD	8
4	190075	DIGI-STAR LOAD CELL SUPPORT PT	4
5	400210	HEX NUT 5/8"-11 #5 PLTD	16
6	400212	HEX NUT 3/4"-10 #5 PLTD	8
7	402010	SPRING LOCK WASHER 5/8" PLTD	16
8	402412	FLAT WASHER 3/4" PLTD	8
9	405756	HHCS 5/8"-11 x 2-1/2" #5 PLTD	16
10	405798	HHSC #5 PLTD 3/4"-10 x 8 1/2"	4
11	450725	LOAD CELL 30K, 1/10% IWS	4
12	870519	MIXER SCALE CHECK W.A.	2
13	872390	OFFSET CHECK ROD WA	2
14	874066	SCALE CHECK ROD WA	2

## 720-16 STATIONARY LOADCELL SCALE FRAME ASSEMBLY



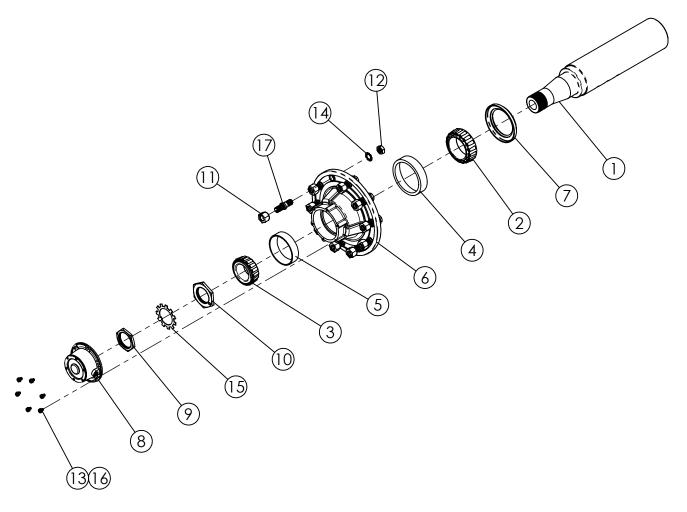
REF#	PART#	DESCRIPTION	QTY.
1	872185	720 STATIONARY SCALE FRAME WELDMENT	1
2	870501	SCALE CHECK ROD WELDMENT 19-1/2" CTR-CTR	2
3	871053	TRAILER CHECK ROD WELDMENT 31-1/2" CTR-CTR	2
4	870519	MIXER SCALE CHECK WELDMENT	2
5	182881	SCALE MIXER MOUNT PLATE	4
6	182915	LOADCELL CAGE PLATE	8
7	185997	SCALE PAD 2-3/8"OD	8

## **720-16 TANDEM TRAILER ASSEMBLY**



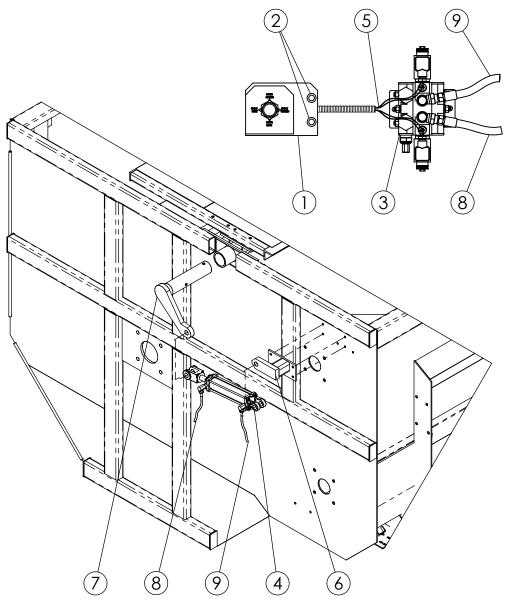
REF NO	PART NO	DESCRIPTION	QTY
1	357400	BATTERY BOX W/STRAP	1
2	372077	AXLE ASSEMBLY 77" WT	2
3	372188	TANDEM SUSPENSION KIT, 44000lb	1
4	400912	HEX CROWN LOCK NUT 3/4"-10 #5 PLTD	3
5	405792	HHCS 3/4" x 6 1/2" #5 PLTD	3
6	651024	PERFECT HITCH KIT CAT 3 (PPI-237VR)	1
7	781209	TIRE & WHEEL ASSY 15 x 22.5	4
8	870568	TRUCK BUMPER 8"	1
9	872090	DROP LEG JACK 9T	1
10	872394	720 TANDEM TRL - TRAILER FRAME	1

## 720-16 10-BOLT HUB ASSEMBLY (20,000LB) #750110



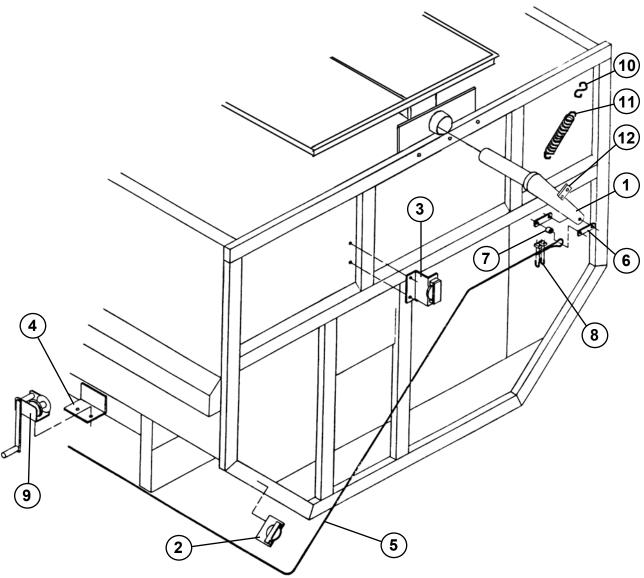
ITEM#	PART#	DESCRIPTION	QTY.
1	184614	SPINDLE, 20,000#	1
2	342213	INNER BEARING 3.543" BORE	1
3	342214	OUTSIDE BEARING 2-5/8" OD	1
4	342215	INNER BEARING RACE 5.787"OD	1
5	342216	OUTSIDE BEARING RACE 4-13/16" OD	1
6	372212	10-BOLT HUB ASSEMBLY, (RIGHT HAND) 20,000#	1
7	372304	SEAL 4-3/8" BORE	1
8	372309	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	400102	LUG NUT, BUDD RH 3/4"-16	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

### 720-16 ROTO-HAY PROCESSOR ASSEMBLY (HYDRAULIC OPTION) #780481



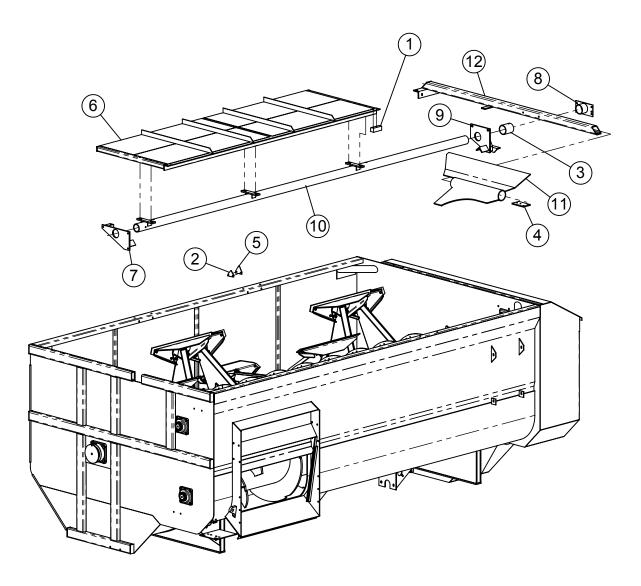
REF#	PART#	DESCRIPTION	QTY.
1	188226	FEEDER ELECTRIC CONTROL BRACKET	1
2	357702	PUSH BUTTON SWITCH 12V-2POLE	2
3	780124	MV5 3RD VALVE ADD ON KIT	1
4	780109	HYDRAULIC CYLINDER ASSY, 2" x 8" (WITH FITINGS)	1
	364055	HYDRAULIC CYLINDER 2" x 8" (CYLINDER ONLY)	
	364400	HYDRAULIC CYLINDER KIT, 2"	
5	781055	TRUCK TO MIXER WIRE ASSEMBLY	1
6	850060	HAY PAN CYLINDER BRACKET WELDMENT	1
7	872357	HAY PAN HYDRAULIC ARM WELDMENT	1
8	781070	3/8" x 87" HYD. HOSE ASSY. (3/8" MP ENDS)	1
9	781097	3/8" x 68" HYD. HOSE ASSY. (3/8" MP ENDS)	1

# 720-16 ROTO-HAY PROCESSOR ASSEMBLY (CABLE OPTION)



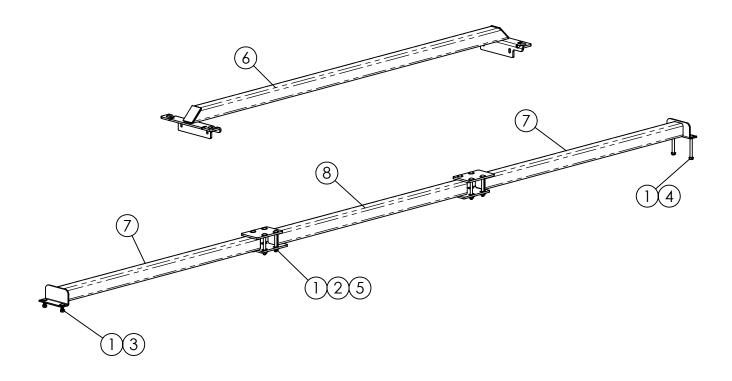
REF.#	PART#	DESCRIPTION	QTY.
1	850090	HAY PAN CABLE ARM W.A.	1
2	850105	CORNER PULLEY BRACKET W.A.	1
3	850066	CABLE PULLEY BRACKET W.A.	1
4	150186	CABLE WINCH MOUNT PLATE	1
5	150279	HAY PAN CABLE 13FT	1
6	150188	CABLE BAR	2
7	150189	SLEEVE 13/16"	1
8	412204	CABLE CLAMP 1/4"	2
9	412325	CABLE BRAKE WINCH 1,000 LB.	1
10	411805	S-HOOK 5/16"	1
11	410009	PULL SPRING 1 1/4" x 14"	1

## 720-16 ROTO-HAY PROCESSOR ASSEMBLY



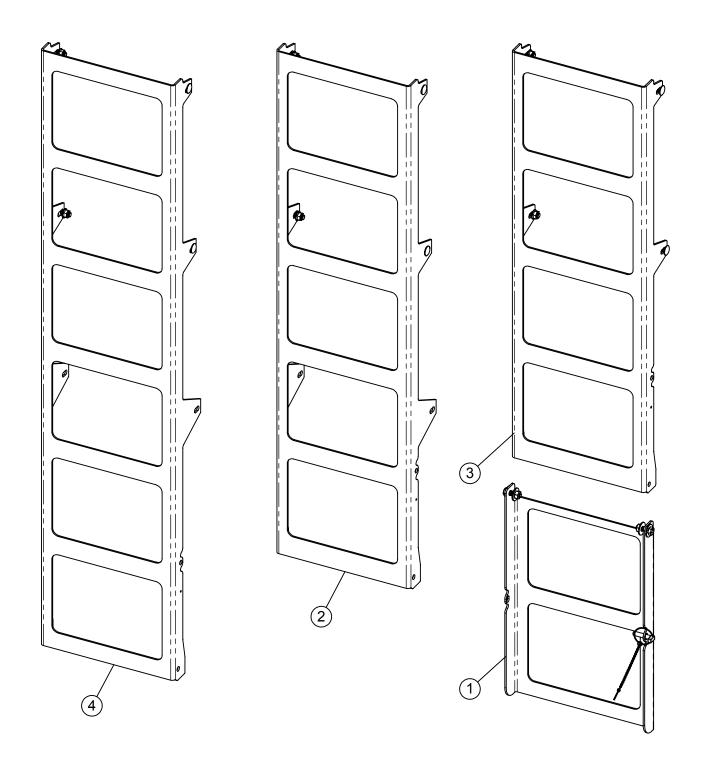
ITEM#	PART#	DESCRIPTION	QTY.
1	150198	BAFFLE PLUNGER 4-3/4"	1
2	150223	KNIFE BACK UP PLATE	1
3	189127	HAY TUBE SLEEVE RETAINER 4-1/2"	1
4	189128	CROSS BAR PLATE	1
5	385002	SICKLE SECTION, HARD SURFACED, 5/16"	1
6	872351	524/600 HAY PAN WA	1
7	872353	600 HAY PAN BEARING W.A.	1
8	872354	REAR HAY PAN BEARING WA	1
9	872355	HAY PAN CENTER BEARING WA	1
10	872358	600 HAY PAN TUBE WA	1
11	872376	720 HAY PAN BAFFLE WA	1
12	872377	HAY PAN CROSS BAR WA	1

#### 720-16 CROSS OVER BAR & HAY SHEAR BAR



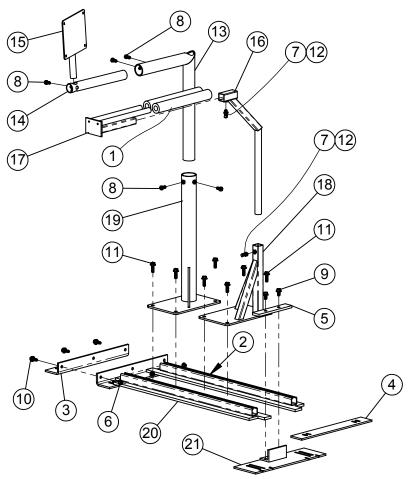
ITEM#	PART#	DESCRIPTION	QTY
1	400908	HEX CROWN LOCNUT 1/2"-13 #9	12
2	402408	WASHER, FLAT 1/2" MED PLTD	8
3	407101	CHCS 1/2"-13 x 1-1/4" #5 PLTD	2
4	407112	CHCS 1/2"-13 x 5" #5 PLTD	2
5	407113	CHCS 1/2"-13 x 4-1/2" #5 PLTD	8
6	872638	620 CROSS OVER BAR W.A.	2
7	873164	620/720 HAY SHEAR TUBE WA END	2
8	873165	620/720 HAY SHEAR TUBE WA CTR	1

## **LADDER OPTIONS AVAILABLE**



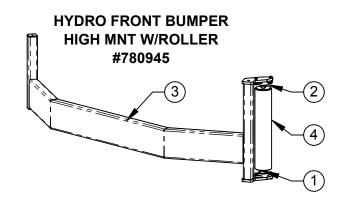
ITEM#	PART#	DESCRIPTION	QTY.
1	780095	LADDER BUNDLE, (2 RUNG EXTN)	1
2	780288	LADDER BUNDLE, (6 RUNG)	1
3	780289	LADDER BUNDLE, (5 RUNG)	1
4	780906	LADDER BUNDLE, (7 RUNG)	1

## TRUCK CAB SCALE INDICATOR FRAME PARTS

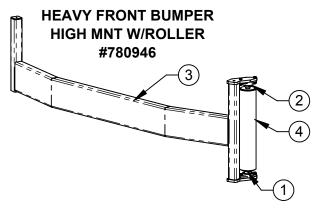


ITEM#	PART#	DESCRIPTION	QTY.
1	185930	ARM REST PAD 12"	2
2	192578	ARM REST SLIDE BAR	4
3	192585	BRACKET, PASSENGER CAB SEAT	1
4	192587	SPACER, TRUCK CAB DRIVER'S SEAT	1
5	192593	PLATE, TRUCK CAB MOUNT SETTING	1
6	400107	HEX NUT, 3/8"-16 SERRATED FLANGE #5	3
7	400606	HEX JAM NUT 3/8-16"	2
8	405652	HHCS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

#### TRUCK FRONT BUMPERS

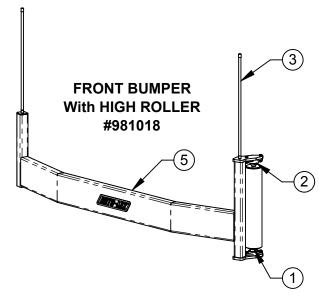


ITEM#	PART#	DESCRIPTION	QTY.
1	192227	SPACER, BUMPER ROLLER	1
2	340222	BEARING, 1 3/8" VCJT	2
3	872431	BMPR FRT HYDRO W/HIGH RLLR WA	1
4	872434	ROLLER, FT BUMPER, 5" DIA.	1

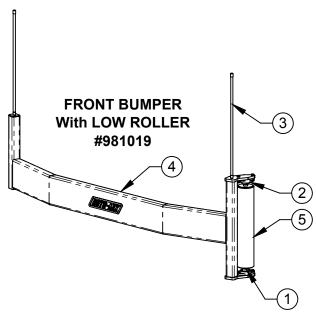


ITEM#	PART#	DESCRIPTION	QTY.
1	192227	SPACER, BUMPER ROLLER	1
2	340222	BEARING, 1 3/8" VCJT	2
3	872430	BUMPER FRT W/LOW ROLLER WA	1
4	872434	ROLLER, FT BUMPER, 5" DIA.	1

#### **TRUCK FRONT BUMPERS**

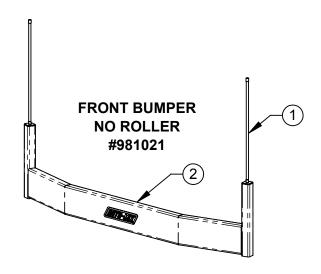


ITEM#	PART#	DESCRIPTION	QTY.
1	192227	SPACER, BUMPER ROLLER	1
2	340222	BEARING, 1 3/8" VCJT	2
3	370334	MARKER, ORANGE STICK x 2 FT	2
4	872434	ROLLER, FT BUMPER, 5" DIA.	1
5	872439	BUMPER FRT W/HIGH ROLLER WA.	1

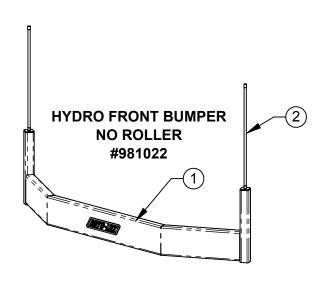


ITEM#	PART#	DESCRIPTION	QTY.
1	192227	SPACER, BUMPER ROLLER	1
2	340222	BEARING, 1 3/8" VCJT	2
3	370334	MARKER, ORANGE STICK x 2 FT	2
4	872430	BUMPER FRT W/LOW ROLLER WA	1
5	872434	ROLLER, FT BUMPER, 5" DIA.	1

#### TRUCK FRONT BUMPERS

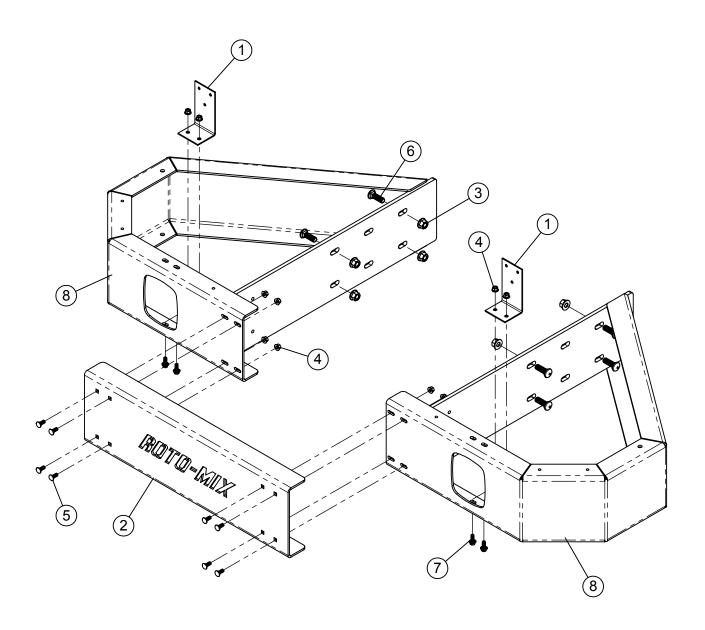


ITEM#	PART#	DESCRIPTION	QTY.
1	370334	MARKER, ORANGE STICK x 2 FT	2
2	872432	BUMPER, TRK FRT, NO ROLLER	1



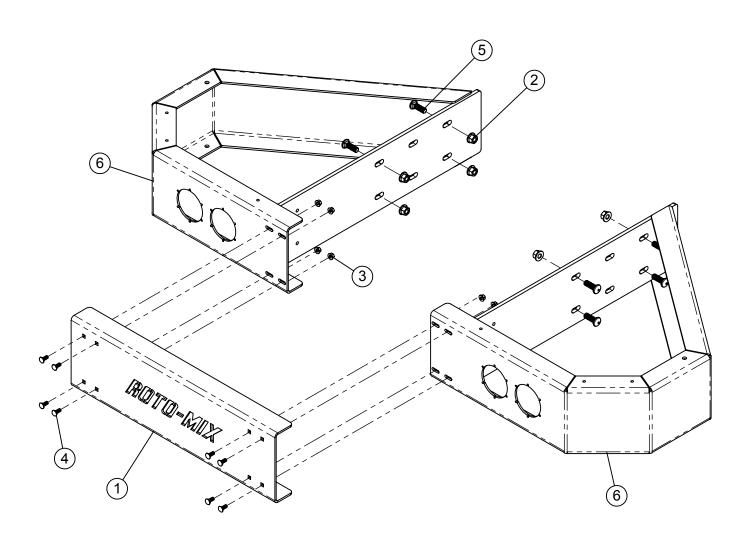
ITEM#	PART#	DESCRIPTION	QTY.
1	872433	BUMPER, TRK FRT NO ROLLER	1
2	370334	MARKER, ORANGE STICK x 2 FT	2

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



ITEM#	PART#	DESCRIPTION	QTY.
1	185600	TAIL LIGHT BRKT	2
2	192219	PLATE, FLR 10" RR BMPR ROTO-MIX	1
3	400005	FLANGE NUT, TOP LOCK. 5/8-11 GR"G"	8
4	400007	Flange Nut, Top Lock. 3/8-16 GR "G"	12
5	407040	CHCS 3/8"-16 x 1" #5 PLTD	8
6	407121	CHCS 5/8"-11 x 2" #5 PLTD	8
7	407901	HHCS 3/8"-16 X 1" SERRATED #5 PLTD	4
8	873286	BMPR, 10" REAR HALF, RECT. W.A.	2

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



ITEM#	PART#	DESCRIPTION	QTY.
1	192219	PLATE, FLR 10" RR BMPR ROTO-MIX	1
2	400005	FLANGE NUT, TOP LOCK. 5/8-11 GR"G"	8
3	400007	Flange Nut, Top Lock. 3/8-16 GR "G"	8
4	407040	CHCS 3/8"-16 x 1" #5 PLTD	8
5	407121	CHCS 5/8"-11 x 2" #5 PLTD	8
6	873287	BMPR, 10" RR HALF RND HOLES W.A.	2