# OSWALT®

# Mixers by *ROTO-MIX*

# MODEL 200, 250, 300 & 350 TMR RUFFAGE MASTER TRAILER AND STATIONARY MIXERS

# OPERATOR'S MANUAL INSTALLATION INSTRUCTIONS AND PARTS

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

SERIAL NUMBER

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## INTRODUCTION

Congratulations on the purchase of your new mixer from OSWALT by ROTO-MIX LLC. 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.

#### **A** WARNING

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

Some covers and guards have been removed for illustrative/photographic purposes only in this manual.

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 and model number tag is located on a metal plate which is attached close to the lower right front structure viewed from behind the mixer. These numbers should be recorded on the Registration and Inspection Certificate for your reference and for proper identification of your OSWALT mixer by ROTO-MIX LLC.

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 and understand the machine or the system could lead to serious injury. If you do not understand the instructions in this manual contact either your dealer or OSWALT by ROTO-MIX

at Dodge City, Ks 67801.

This supersedes all previous published instructions.

# MODEL 200/250/300/350 TMR RUFFAGE MASTER™

#### INSPECT THE FOLLOWING AND SERVICE AS REQUIRED

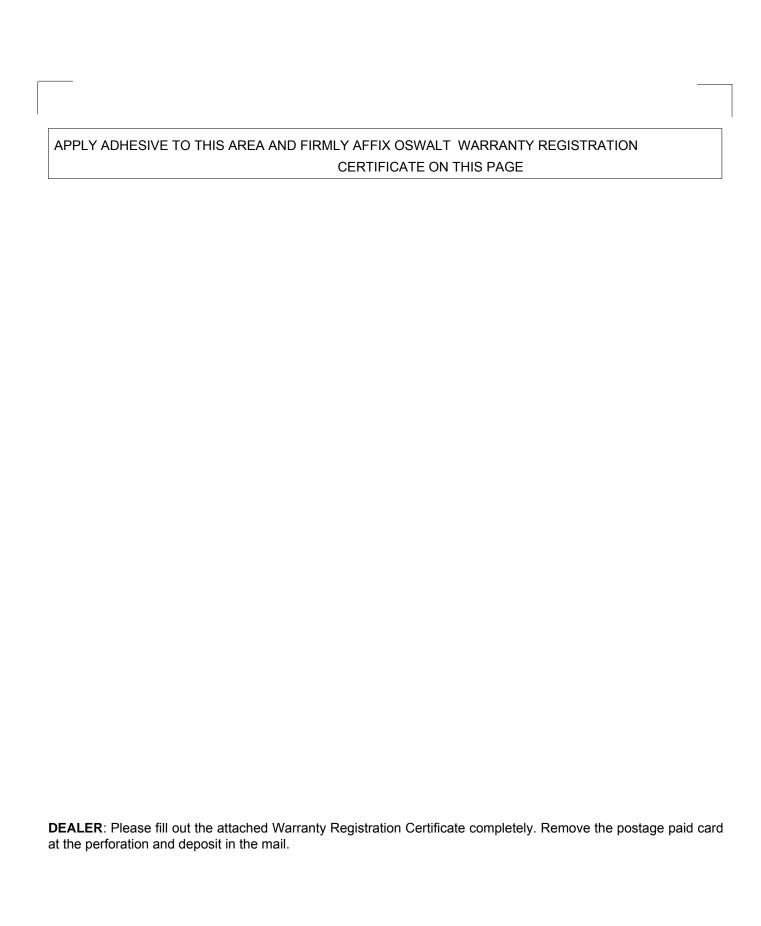
			Check rear drive bearings for alignment, tightne of locking collars and proper placement of bearing.			
			stops.			
	Check rear doors for proper latch tension and f correct any leaks.		Check rear drive enclosure for alignment and proper chain tensions.			
_			Check oil level of rear drive enclosure.			
	Check conveyor chain for proper tension ar proper clearance. See Adjustment Section.		Check main drive shaft for proper installation and clearance.			
	Check clearance between moving parts.	_				
	Check scale mounts for alignment and pins follooseness.		Check hoses for correct clearance and fittings for leaks.			
			Check U-joint for timing and installation.			
Ц	Check inside of mixing chamber for trash, aug- clearance and check augers for correct install- tion.		Check frame/box mounting points for proper installation.			
	Check external paint for appearance.		Check auger bearings for correct installation and grease bearings.			
	Check all bolted connections for tightness.					
	Check wheel lug bolts and torque to 85 ftlbs. Maintain tire pressure at 55-60 psi.		Check for trash or foreign articles in discharge conveyor.			
	RUN MIXER AND CHECK THE FOLLOWING:					
	☐ Check for vibration or runout of drive lines.					
	☐ Check for free operation	of disch	arge conveyor.			
	☐ Check augers for straigh	ntness.				
		Check mixer, observing all safety decals and safety shields are in place and secured, including top guards on stationary units.				
	☐ Check for chain vibration in rear drive.					
☐ Check chute and door actuatio						

## **A** WARNING

safety precautions.

Operator has been instructed in operation, maintenance and

ALWAYS DISCONNECT AND LOCKOUT ELECTRICAL POWER (STATIONARY MODELS) OR DISENGAGE PTO AND REMOVE KEYS FROM TRACTOR (TRAILER MODELS) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS MACHINE.





# 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.

Warranty Statement WS-0716

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

Lubricants
Filters
Hoses
Augers
Wipers
Blades
Belts

- Tires - Idlers

#### 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 OSWALT by 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.

Warranty Statement WS-0716

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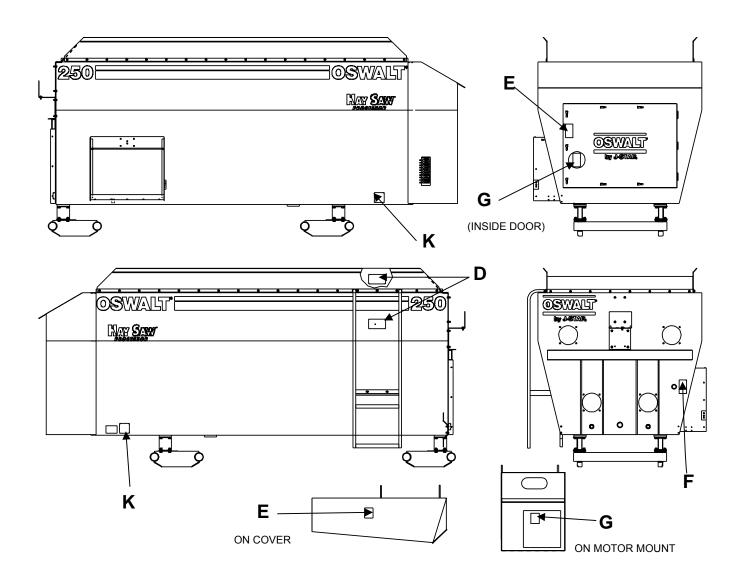
# **A**SAFETY- STATIONARY MIXER

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

**A** DANGER Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.

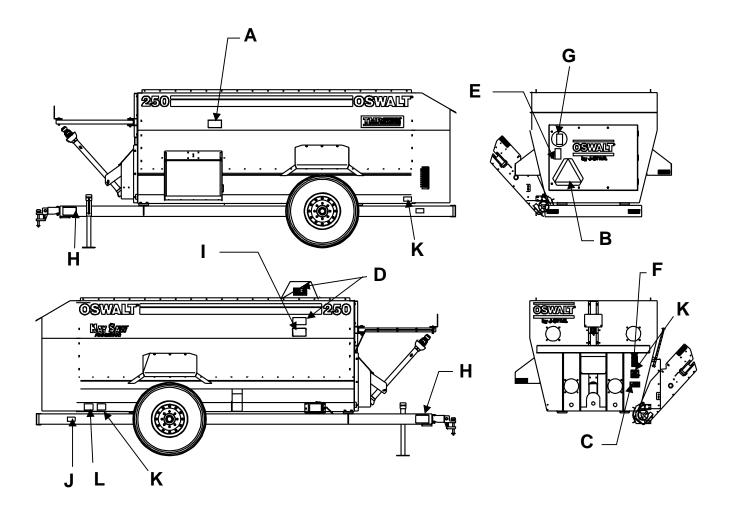
**↑ CAUTION** Indicates a potentially hazardous situation that, if not avoided may result in minor or moderate injury.

A WARNING Indicates a potentially hazardous situation that, if not avoided could result in death or serious injury, and includes hazards that are exposed when guards are removed.



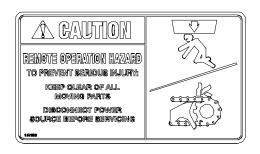
A CAUTION READ ALL SIGNS ON THE MACHINE AND IN THIS MANUAL. REPLACE ANY LOST OR DAMAGED SIGN BY ORDERING THE PART NUMBERS SHOWN ON THE SAFETY DECAL PAGE.

# **ASAFETY- TRAILER MIXER**



ANY LOST OR DAMAGED SIGN BY ORDERING THE PART NUMBERS SHOWN ON THE SAFETY DECAL PAGE.

# SAFETY DECALS



**DECAL B.** 157511



**DECAL A.** B157506

**DECAL C.** 152545



**DECAL D. 154576** 



**DECAL E.** 154579



**DECAL F.** 154583



**DECAL G.** 154578



**DECAL H.** 143553



**DECAL I.** 157509s



**DECAL J. 157505** 

DECAL K. SW104





**DECAL L.** 157510

BOLT ONLY.

NOTE: Complete Decal Kit (all sizes) - 160411

## **AMIXER SAFETY**

#### A CAUTION

Do not operate your feed mixer until you have read this Owner's Manual, the Truck Owner's Manual, and understand the danger associated with its operation.

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

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

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

#### **▲** WARNING

ON STATIONARY MIXER MODELS THE TOP PROTECTIVE GRID MUST BE INSTALLED PRIOR TO MIXING OPERATION AND KEPT IN PLACE. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

#### A CAUTION

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

#### FOR YOUR SAFETY:

Do Not Operate, Service, Inspect Or Otherwise Handle This Equipment Unless You Have Read The Owner's Manual And Have Been Properly Trained In Its Intended Usage.

Require All Personnel Who Will Operate This Machinery Or Perform Service, To Read And Understand The Safe Operating Practices And Safety Precautions In This Manual.

Do Not Operate Until All Shields, Covers And Guards Are In Place.

Do Not Allow Children Or Inexperienced Person To Operate This Machine.

Keep Hands, Feet And Clothing Away From Power Take-off Shaft.

Do Not Climb On Or Enter Machine While In Operation.

Do Not Make High Speed Maneuvers With Trailer Mounted Mixer.

Do Not Allow Riders On A Trailer Mounted Mixer.

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



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

#### FOR YOUR SAFETY:

Disengage Power Take-off And Remove Keys From Tractors Before Servicing A Trailer Mounted Mixer.

Do Not Attempt To Clean, Oil Or Adjust Mixer While It Is In Motion.

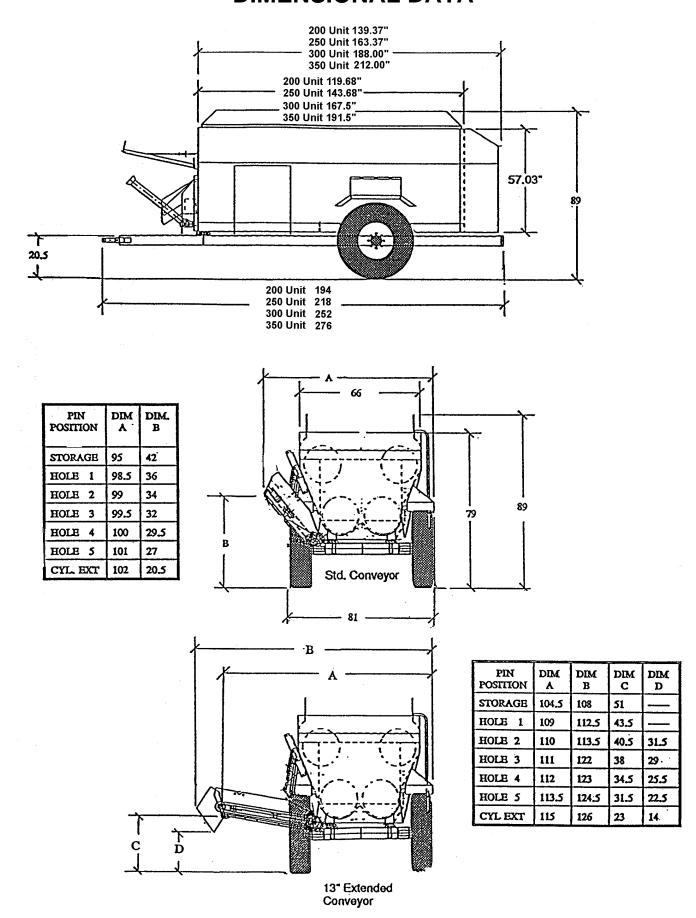
Before Entering Mixing Chamber Or Servicing Stationary Mixer, Disconnect Main Power Source And Lock The Disconnect Device In Off Position To Prevent Accidental Start-up.

Do Not Work Under Mixer Without Supporting With Suitable Support Stands.

Do Not Work Under Mixer Without Blocking Wheels To Prevent Rolling.

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

# **DIMENSIONAL DATA**



## **GENERAL INFORMATION**

#### MIXING CAPACITY

#### **Maximum Ration Volume**

Model 200	200 cu. ft.
Model 250	250 cu. ft.
Model 300	300 cu. ft.
Model 350	350 cu. ft.

#### Maximum Ration Weight

(Based on 30 lb/ft<sup>3</sup> ration) Model 200 6,000 lb. Model 250 7,500 lb. Model 300 9,000 lb. Model 350 10,500 lb.

#### **Maximum Weight Of Baled Hay**

10% of ration by weight.

#### **ROUGHAGE LENGTH**

The mixer is designed to mix complete rations including roughages which fall within the following length limits.

- 1. At least 75% of the material is 1-1/2 inches or shorter.
- 2. Less than 20% of the material exceeds 2-1/2 inches.
- 3. Maximum fiber length does not exceed 4 inches.

#### **USE OF BALED HAY**

Oswalt mixers are designed to blend feed ingredients with "dry hay" to obtain a total mixed ration. Dry hay will have less than 20% moisture. A simple hand test on three stems of hay will tell you if the hay should be put into the mixer.

Reach into the core of the bale and remove 3 stems of hay. Try to bend and break these 3 stems when holding them between the thumb and forefinger of both hands. If they snap and break easily the mixer will process the hay fairly easily. If the hay is **NOT** very brittle and you have to twist, tug, pull, and pinch to break it apart, you have a "tough hay" condition. Weather and plant varieties, etc., can generate these conditions.

#### **Conditions That Cause Abnormal Tough Hay**

High Moisture Content (20% plus) High Density Bales High Grass Content Outdoor Storage Long Stem Length Use of Hay Preservatives

FINE STEM GRASS HAY WITH LENGTHS OVER 16 INCHES <u>Are Not Recommended</u> because they tend to wrap around the augers unless they are extremely brittle.

When in doubt, throw in a half bale of the questionable feed to insure hay breaks apart and does not wind or wad.

If, in your judgement, the baled hay quality comes within the definition of "tough hay" per above, then it's recommended you process the bale to shorter length prior to adding to the mixer.

#### LOADING

The loading sequence depends on the type of feed being used. For this reason, we offer a few suggested loading sequences to maximize mixer performance and avoid equipment failure.

**NOTE:** When is doubt, throw in a half bale of the questionable feed to insure hay breaks apart and does not wind or wad in the mixer.

For a ration utilizing "dry hay" the ingredients can be all added at one time and then mixed. The ingredients should be added with the mixer stopped to avoid over processing. The ingredients should be added in the following order: all dry ingredients (corn, soybeans, cottonseed, etc.) then the hay, and the remaining materials last. When all ingredients have been added, the mixer can be started and mixing completed.

If adding all the materials at once causes mixing problems or if you have a "tough hay" condition, then add the ingredients using the following sequence. With the mixer stopped, add all dry ingredients. The introduction of the dry ingredients first helps the mixer break up the hay. Next turn on the mixer and add the hay. Hay should be broken apart and added at the drive end of the mixer. Allow the dry materials and hay to mix until the flakes of hay are broken up. Then add the remaining materials and complete the mixing. If this process causes over processing of the ingredients, shut off the mixer after mixing the hay and dry ingredients and restart and complete mixing after all remaining ingredients have been added.

If this process causes mixing problems associated with the hay, then it is recommended that the hay be processed to a shorter length prior to adding to the mixer. A J-Star bale cutter is recommended to accomplish this.

**NOTE**: Round bales should not be incorporated directly into the mixer without first being processed.

#### **MIXING TIME**

Normal mixing time after the last ingredient has been added.

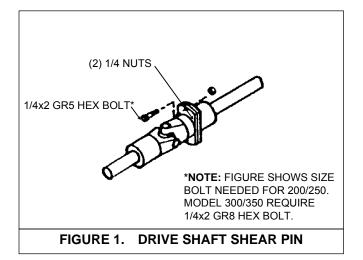
Trailer 5 min. @540 RPM

Stationary 10 minutes

Total run time (filling, mixing, and discharging) should not exceed 15 minutes per batch for a trailer and 30 minutes for a stationary. Use of baled hay in the mix will increase the mix time for a trailer by 5 minutes and a stationary by 10 minutes.

#### **SHEAR PIN**

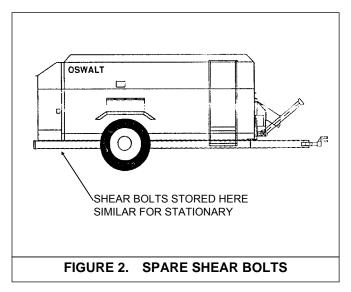
The shear pin assembly is located at the back of the mixer just in front of the oil bath drive housing, see figure 1.



Extra shear bolts are located in a holder on the right side of the rear structure, see figure 2.

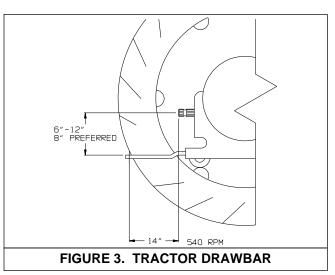
# TRACTOR HYDRAULIC SYSTEM RECOMMENDATIONS

10 GPM Minimum 15 GPM Maximum 1200 to 1600 PSI Operating Range Hydraulic system should be self purging.



#### TRACTOR DRAWBAR

See tractor drawbar as shown in figure 3.



A CAUTION Failure to set drawbar properly may cause shaft to over extend and separate or bend when cornering or transporting. Resulting in death or personal injury.

## TRAILER OPERATION

#### **PTO ENGAGEMENT**

Avoid high speed sudden engagement of the mixer. Doing so may cause the shear pin to shear.

#### **CORNERING**

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

#### **DISCHARGING FEED**

The discharge door and conveyor tilt are hydraulically actuated using the tractor's remote hydraulic system. The discharge door and conveyor tilt are sequenced so when the tractor's remote hydraulic control lever is moved one way the conveyor will tilt out and the door will open. The reverse will happen when the lever is moved in the other direction. Two hydraulic ports on the tractor are required.

A hydraulic motor is used to run the discharge conveyor chain using the tractor's remote hydraulic system. Moving the tractor's remote hydraulic control one way will cause the chain to move in the discharge direction. Moving the lever in the opposite direction will not move the chain due to a check valve in the mixer hydraulic system. Two hydraulic ports on the tractor are required.

To discharge feed, move the hydraulic valve lever on the tractor to open the door and tilt the conveyor. Move the other lever to start the conveyor chain. Start the pto. The discharge rate can be controlled by the position of the door and the transmission gear selected.

Reverse this sequence when through discharging.

#### **SCALE SWING MOUNT**

The scale head is mounted to a swing arm. The swing arm is designed to allow scale head viewing from either side of the mixer or from the tractor just by rotating the scale arm before loading or unloading starts. As a convenience a chain is attached to a scale swing mount. The chain is used to swing the mount arm from one side of the mixer to the other.

#### OPTIONAL SINGLE VALVE CONVERSION

This conversion is used when the tractor has only two remote hydraulic ports. A control valve is mounted on the mixer and a rope is attached to the valve handle.

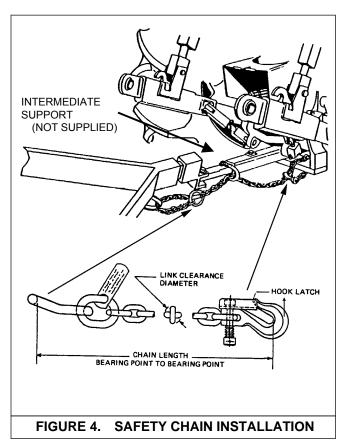
Moving the tractor's remote hydraulic control lever will start the conveyor chain in motion. With the tractor lever still moved the rope is pulled to shift the valve on the mixer. Shifting this valve tilts the conveyor out and opens the door. To close the door and tilt the conveyor back the lever on the tractor must be shifted opposite and the rope pulled.

#### **SCALE SYSTEM**

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

#### **TRANSPORTING**

A safety chain should be installed to retain the connection between the tractor (or other towing vehicle) and mixer if the hitch connection would separate; whenever traveling on highways. A suggested attachment is illustrated on figure 4.



The chain must be strong enough to hold the weight of a loaded mixer. If using a grab hook at the end to secure the chain to itself, a hook latch must be installed as illus-

The length of the safety chain is not to be any longer than necessary to turn without interference. If any chain lengths or attachment hardware are broken or stretched, repair before using. Store chain so it does not corrode or become damaged. Do not use this chain for other implements because the strength and length of chain may not be adequate. Identify this chain for use on this particular mixer.

The ratio of the loaded mixer weight compared to the weight of the towing tractor or other vehicle must not be greater than 1.50.

trated.

## STATIONARY OPERATION

#### **MOTOR CURRENT**

An ammeter should be installed in the line where it can monitor motor current. It may be necessary to adjust the amount of feed that is processed in the mixer to obtain an amp draw equal to or less than the full load motor current rating.

#### **DISCHARGING FEED**

#### **Manual Operator**

To open the discharge door, first pull back on the lock pin, see figure 5. This pin is positioned close to the hand wheel hub. With the pin pulled back turn the pin handle 90 degrees and release. The pin will now stay disengaged and the hand wheel can be turned to the desired open position.

When the door is open far enough, turn the pin handle back 90 degrees and rotate the hand wheel until the pin drops into the nearest lock hole.

PIN

PULL BACK AND TURN 90

HAND WHEEL FREE TO SPIN

PIN

FIGURE 5. HAND WHEEL

#### **Electric Door Operator**

A electric motor drive linear actuator opens and closes the mixer discharge door. The actuator motor is controlled by a dealer installed switch. Moving the switch in one direction opens the door and in the other direction closes the door. The middle position is off, keeping the door in the current position. The actuator can be stopped in any position to control the flow of feed.

The actuator will "free wheel" at each end of its total stroke.

NOTE: Always open and close discharge door with the mixer running. This will prevent high material pressure against the door which may stall out the actuator motor.

#### **SCALE SYSTEM**

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

## **ADJUSTMENTS**

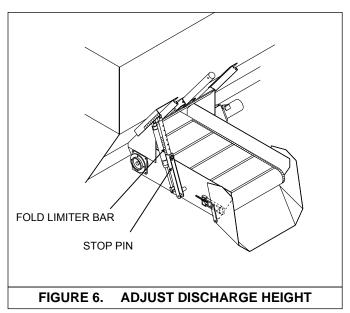
#### **A** WARNING

ALWAYS DISCONNECT AND LOCKOUT ELECTRICAL POWER (STATIONARY MODELS) OR DISENGAGE POWER TAKE AND REMOVE KEYS FROM TRACTOR (TRAILER MODELS) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS MACHINE. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

#### **TRAILER**

#### **Discharge Conveyor Height**

The discharge chute height can be set by positioning the stop pin in the desired hole of the fold limiter bar, see figure 6.



#### **Discharge Chute Folding**

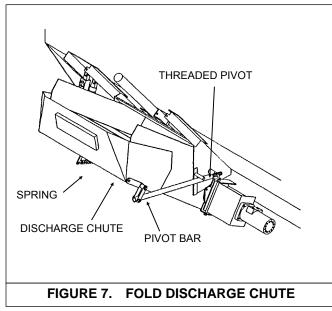
Folding of the discharge chute is controlled by the adjustment of the threaded pivot on the side of the conveyor and position of the spring underneath the conveyor, see figure 7.

Threading the pivot out of the end of the pivot bar will make the chute fold closed more when the conveyor is tilted up for storage. Threading the pivot into the pivot bar will cause the chute to fold down more when discharging feed. If the chute does not rotate down when conveyor is lowered, move the spring mount so the spring is stretched longer.

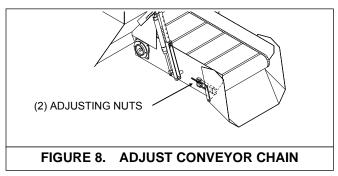
#### **Conveyor Drive Chain**

There are adjusting nuts on each side of the conveyor. Tighten or loosen these nut to allow approximately 1-1/4 inches between the bottom of the chain flight and

the conveyor pan when the chain is pulled up at the



center of the conveyor, see figure 8.



# Trailer Hitch Clevis Adjustment (trailer mount only)

NOTE: 350 Only

Mixer should be approximately level when attached to the tractor.

Adjust clevis by changing hole location on tongue.

Hitch Pin Size - 1" x 6"

#### **STATIONARY**

#### **Belt Tightening**

Tighten belts so a 10 lb. force will deflect the belt 1/2 inch in the middle of the belt span. Drive belts can be tightened by slightly loosening the 4 motor mount bolts. With these bolts loose use the threaded motor tightener bolts to pull the motor out which tightens the belts. Retighten motor mount bolts.

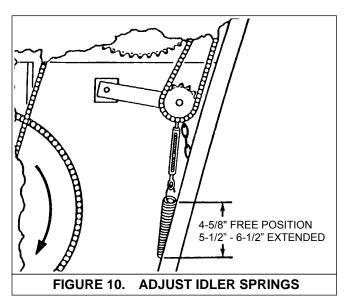
#### **▲** WARNING

DRIVE BELT SHIELD COVER WILL HAVE TO BE REMOVED TO CHECK BELT TENSION. REINSTALL BEFORE RETURNING MIXER TO SERVICE. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

#### STATIONARY AND TRAILER

#### **Chain Idler Springs**

To maintain proper chain tension adjust the turn buckle on each idler spring so the gap between the coils is the thickness of a nickel. This should occur when the spring is extended to 5-1/2 - 6-1/2 inches measured outside of coil to outside of coil, see figure 10. If there is insufficient adjustment to achieve the proper chain tension a full chain link should be removed and replaced with an offset link.



#### SERVICE JACKSHAFT ASSEMBLY

Before reassembling the jackshaft assembly, inspect all bearings and races. Clean any that are still serviceable and replace worn out ones. Prelube bearings with grease and reassemble per figure 9. Be sure assembly turns freely.

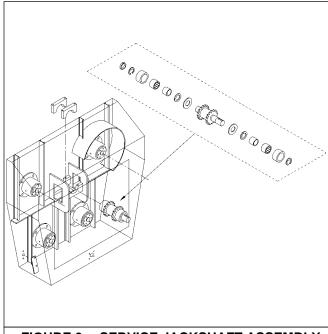
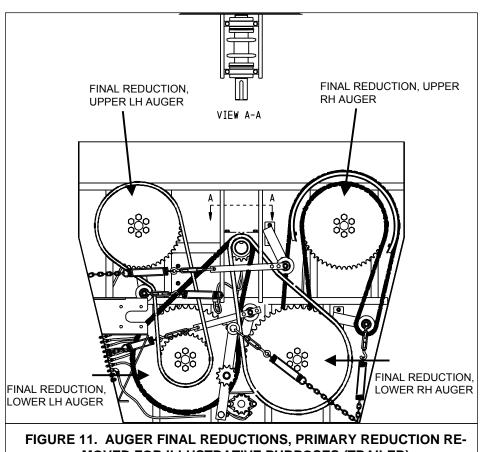


FIGURE 9. SERVICE JACKSHAFT ASSEMBLY

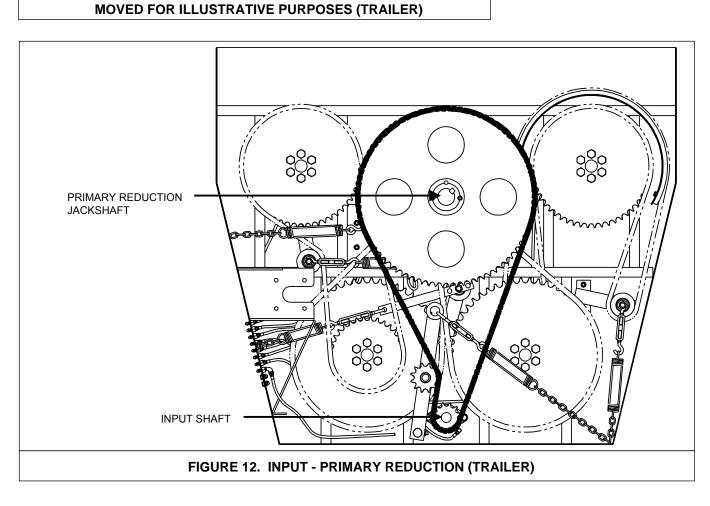
Reinstall assembly on mixer frame and install bearing clamps. Tighten clamps uniformly and continually check that the assembly turns freely. If not loosen clamps slightly and tap assembly with mallet so it seats itself. Retighten. Torque on bolts is approximately 12 ft-lbs.

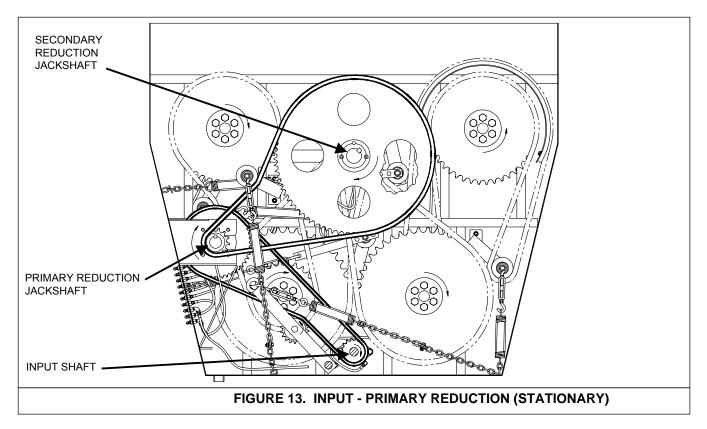


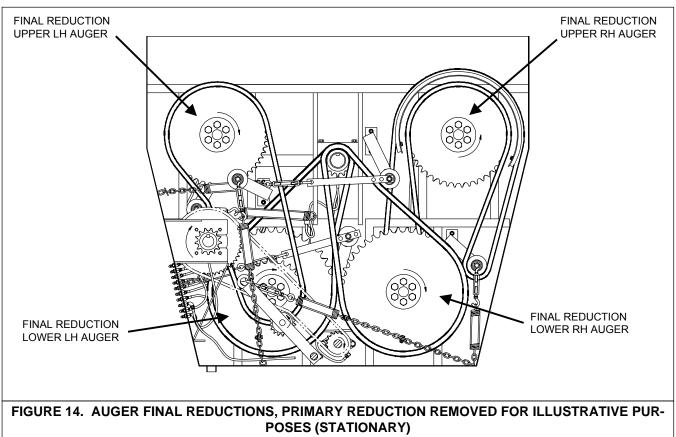
#### **DRIVE CHAIN ROUTING**

The drive chain routing for the mixer auger drive is shown on figures 11 and 12. (Trailer)

Figures 13 and 14. (Stationary)



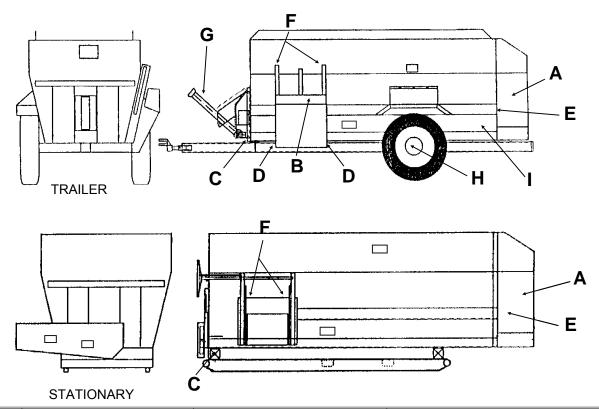




## **LUBRICATION**

#### **A** WARNING

ALWAYS DISCONNECT AND LOCKOUT ELECTRICAL POWER (STATIONARY MODELS) OR DISENGAGE POWER TAKE AND REMOVE KEYS FROM TRACTOR (TRAILER MODELS) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS MACHINE. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.



LOCATION	ITEM	LUBRICATION	INTERVAL
Α	Rear Drive Oil *	SAE 30	Check Every 60 Days Change If Contaminated
В	Conveyor Chain	Light Weight Oil	Brush On Lightly Every 40 Hours Of Operation
С	All Drive Shaft Bearings	Standard All Purpose Grease	One Pump Every 8 Hours Of Operation
D	Conveyor Bearings	Standard All Purpose Grease	One Pump Every 8 Hours Of Operation
E	Bearings In Rear Drive	Standard All Purpose Grease	Three pumps every 8 hrs. For each zerk in grease bank.
F	Guides For Discharge Door	Standard All Purpose Grease	Lubricate Every 40 Hours Of Operation
G	Tumbler Shaft **	Standard All Purpose Grease	Lubricate Every 8 Hours Of Operation For U-Joints. Every 16 Hours For Sliding Members
Н	Wheel Bearings	Pack With Lithium Base Grease	Pack Every 12 Months
I	U-Joint	Standard All Purpose Grease	Every 6 Months

<sup>\*</sup> Refill the rear drive to a point 1" up on the lowest sprocket, approximately 6 gallons. On stationary units with the slow drive speed, the oil is not readily thrown up to the top auger chain. Manually brush the oil onto the chain every 60 days.

<sup>\*\*</sup> **IMPORTANT:** AT EACH LUBRICATION MAKE SURE THE TUMBLER SHAFT SLIDES IN AND OUT FREELY. FAILURE OF THE SHAFT TO SLIDE FREELY WILL RESULT IN DRIVE TRAIN DAMAGE.

# **TROUBLESHOOTING**

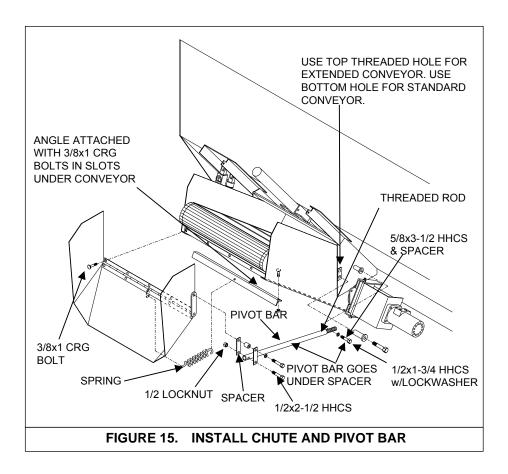
## **A** WARNING

ALWAYS DISCONNECT AND LOCKOUT ELECTRICAL POWER (STATIONARY MODELS) OR DISENGAGE POWER TAKE AND REMOVE KEYS FROM TRACTOR (TRAILER MODELS) BEFORE CLEANING, ADJUSTING, LUBRICATING OR SERVICING THIS MACHINE. FAILURE TO HEED MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH.

PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY
Excessive Shearing Of Powershaft Shear Pin	High Speed Engagement Of PTO Or Conveyor.	Decrease RPM Of The Engine Before Engaging PTO Or Lowering Discharge Chute On Trailer Mixers.
	Wrong Shear Pin.	See Page 9.
	High Moisture, Thin Stemmed Materials And/or Not Fine Enough Chopped Length.	Decrease The Size Of Load Being Mixed And/or Use Materials Chopped To 1-1/2" Or Less Length.
	Conveyor Plugging Before The Door Is Opened.	The Conveyor Must Be Running.
Vibration Or Growling In Rear Struc-	Drive Sprockets Out Of Lline	Check And Realign
ture	Universal Joints Out Of Alignment.	Check And Realign
	Worn Out Bearing.	Replace Bearing.
Chains Jumping Sprocket Teeth	Idler Spings Loose.	Adjust Idlers As Instructed On Page 12.
	Drive Sprockets Out Of Line	Check And Realign
	Worn Sprocket Teeth.	Replace Sprocket.
Drive Chains Breaking	Sprocket Misalignment	Align Sprockets
	Usually Causes Side Bar Breakage Due To Chain Riding Up On Sprocket Teeth.	See Possible Remedies To "chains Jumping Sprocket Teeth" Above
Excessive Bearing Failure	Improper Lubrication	Refer To Lubrication Chart.
	Contamination	Check Seal
	Excessive Loads.	Refer To General Information About Machine Loading

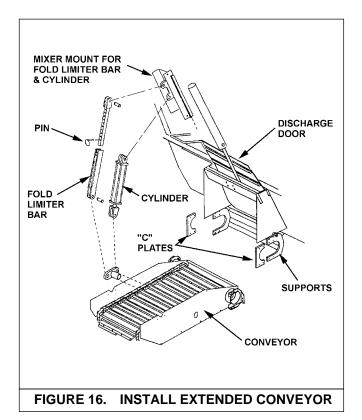
NOTE: CHART NOT ALL INCLUSIVE OF PROBLEMS. CONTACT DEALERSHIP FOR ASSISTANCE.

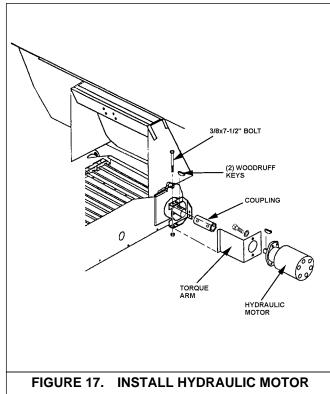
# TRAILER INSTALLATION



#### **INSTALL CHUTE AND PIVOT BAR**

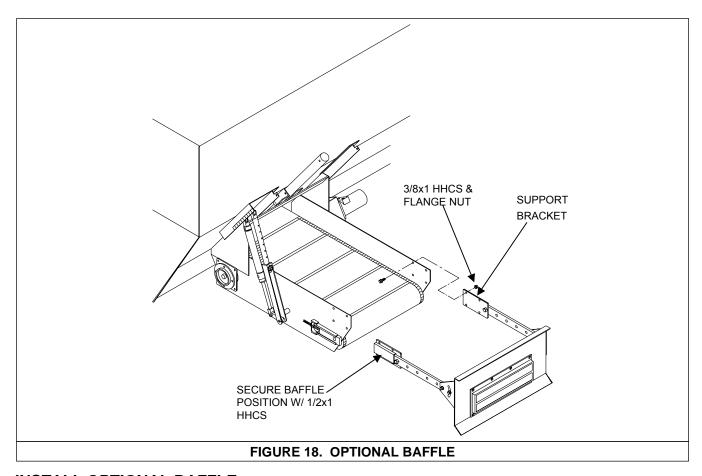
- 1. Assemble the chute and pivot bar as shown on figure
- 2. Adjust threaded rod in pivot bar so chute is completely folded up when conveyor is tilted up.
- 3. Adjust spring tension by moving angle in slots, so chute will fold down when conveyor is tilted down.





# INSTALLING EXTENDED CONVEYOR (OPTIONAL)

- 1. Remove "C" plates from mixer frame. Refer to figure 16.
- 2. Slide conveyor into supports on mixer and reinstall "C" plates.
- 3. Lift end of conveyor up so pin can be installed in end of telescoping fold limiter bar to hold up conveyor.
- 4. Install pin to attach hydraulic cylinder to conveyor.
- 5. Install hydraulic motor on conveyor as shown in figure 17 and connect hydraulic piping.

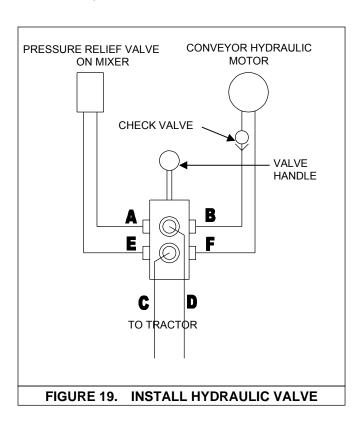


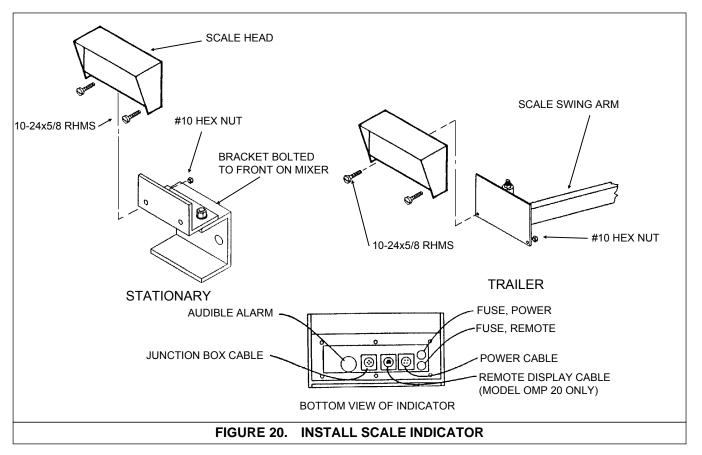
## **INSTALL OPTIONAL BAFFLE**

- 1. Slide the baffle assembly inside the discharge conveyor sides and bolt to the conveyor as illustrated on figure 18.
- 2. Remove the 1/2x1 HHCS to slide the baffle closer or futher from the discharge. Secure the position by reinstalling this bolt.

# INSTALLING SINGLE PAIR HYDRAULIC VALVE (OPTIONAL)

- 1. Disconnect hoses from bracket on top of belt shield.
- 2. Remove bracket from PTO shield.
- 3. Install hydraulic valve from kit.
- 4. Attach two hoses to top of valve. These hoses go to tractor.
- 5. Attach hoses to pressure relief block and hydraulic conveyor motor as shown in figure 19.
- 6. Attach rope to valve handle and fasten to tractor in a convenient spot.





#### INSTALLING SCALE INDICATOR

Plug in power and junction box cables to scale indicator at locations shown in scale operation book supplied with scale indicator.

# INSTALLING SCALE TRACTOR SOCKET (SHIPPED WITH MIXER)

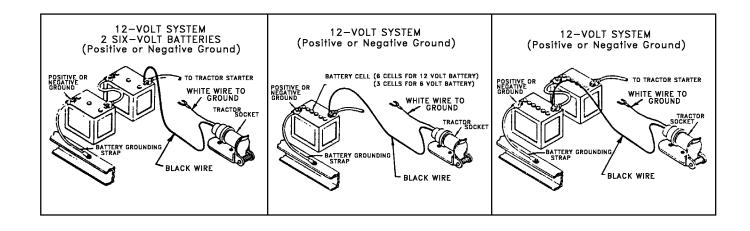
#### **Tractor Wiring Systems**

The scale system operates on 12 Volt DC current only. Your tractor is wired using one of the systems shown

below. Find the system that matches your tractor and wire accordingly.

**NOTE:** Factory installed tractor sockets are not wired correctly for use with the scale system installed on the mixer.

Lubricate the long end of weighbeam and mount sleeve with grease or Never Seize. Insert the long end of the weighbeam into the mount sleeve and retain with 3/4 quick pin. Route weighbeam cable through one of the 1" holes on either side of the mount.

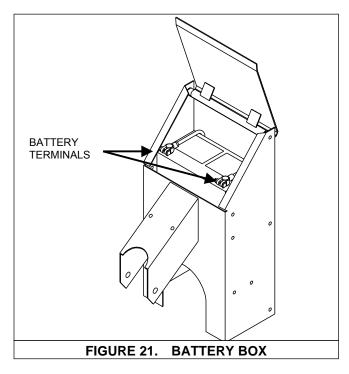


Be careful to install the weighbeam properly. A general application decal, figure 24, is affixed to the weighbeam. Use this decal to install in such a manner that the shaded arrow points down when reading the decal.

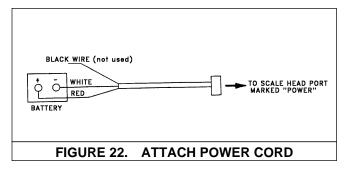
- 5. Use a rubber tie strap to anchor battery to battery shelf (not supplied).
- 6. Close cover and fasten latches.

#### **INSTALLING BATTERY ON MIXER**

- 1. Open cover on battery box . See figure 21.
- 2. Position 12 VDC automotive battery on battery shelf.
- 3. Connect charging wires to battery positive and negative terminals, see figure 21.



4. Connect scale head power cord, see figure 22. Cord to run through side of battery box.

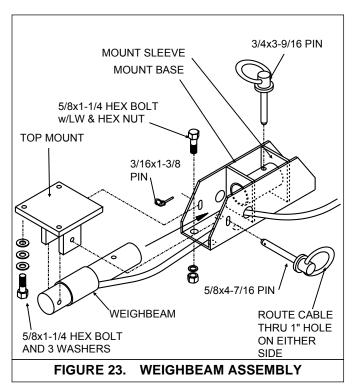


**NOTE:** Tractor socket shipped with mixer is not used when a battery is installed on the mixer.

## STATIONARY INSTALLATION

#### **INSTALLING SCALE SYSTEM**

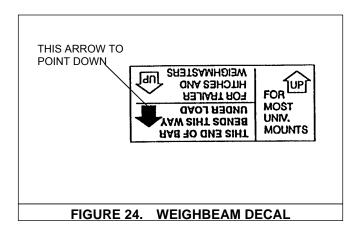
- 1. Remove shipping spacer between mixer and skid. Then install weigh beam mounts, see step 5.
- 2. Cable length for front weighbeams is about 16 ft. long. Length for rear bars is 21 ft.
- 3. Excess cable can be wrapped around storage bracket next to junction box.
- 4. Level each corner by shimming between scale frame and floor when mixer is empty. Each mount must equally share the load.
- 5. Install the weighbeams as shown on figure 23. The top mount is bolted to the mixer mounting pads and the mount base is bolted to the scale frame using 5/8 bolts as shown on figure 26.

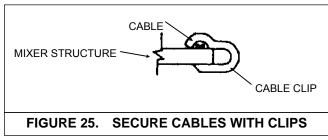


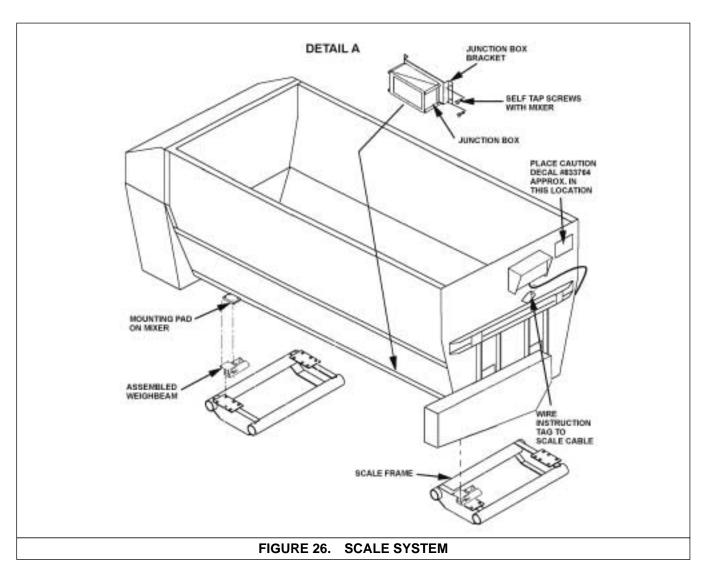
6. Make sure all wiring is kept clear of rotating drive shaft parts. Use cable clips to secure indicator cables along the mixer, figure 25.

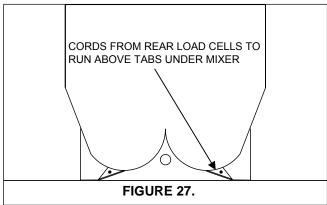
Route cords from rear weighbeams, figure 27.

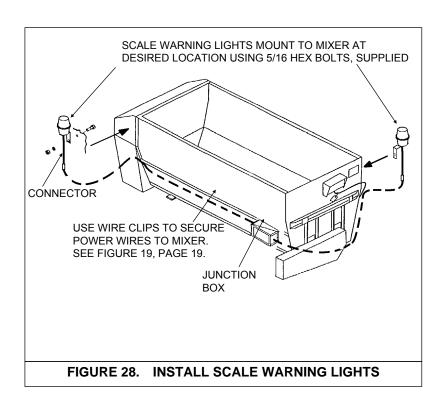
- 7. Mount junction box to mixer, detail A, figure 26.
- 8. Connect scale wiring as shown on figure 29.

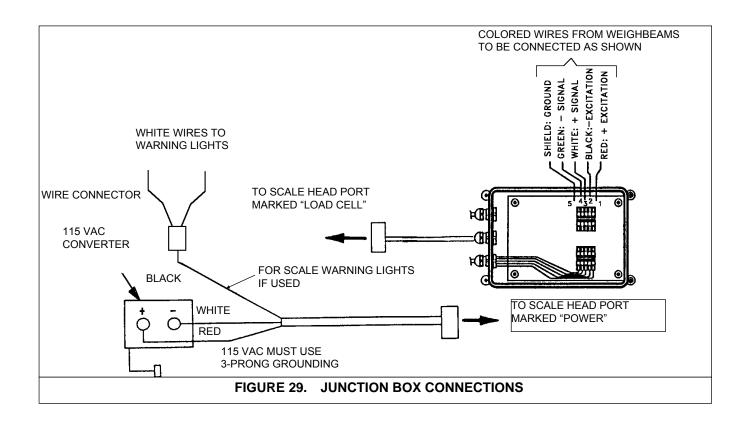






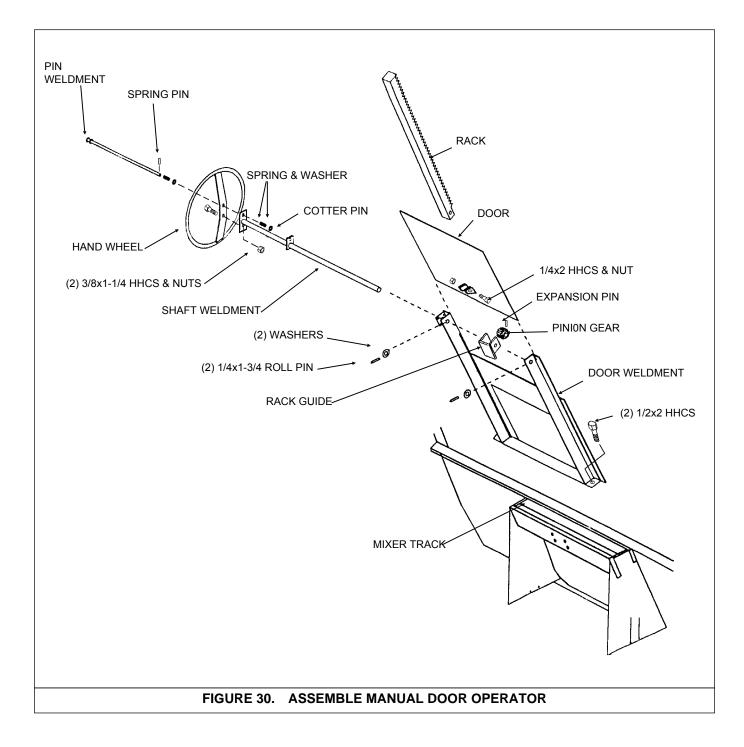


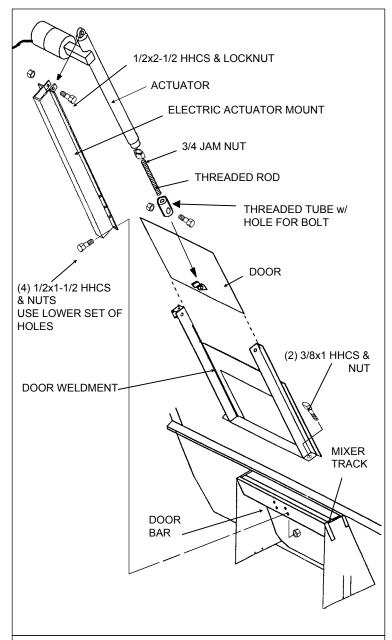




#### **INSTALLING MANUAL DOOR OPERATOR**

- 1. Slide door weldment into existing door track on mixer, and bolt to mixer bottom using 2-3/8 x 1 hex bolts. Figure 30.
- 2. Slide door into door weldment track.
- 3. Slide shaft weldment through frames, washers, pinion gear and rack guide. Secure shaft weldment using  $1/4 \times 13/4$  roll pins.
- 4. Slide rack between pinion gear and rack guide. Fasten rack to door with 1/4 x 2 hex bolt and nut.
- 5. Attach hand wheel to shaft weldment with 2-3/8 x 1 1/4 hex bolts and nuts.
- 6. Slide pin weldment through handwheel. Slide spring and washer on pin weldment. Install spring pin at extreme end of pin weldment. Compress spring and washer and install cotter key.





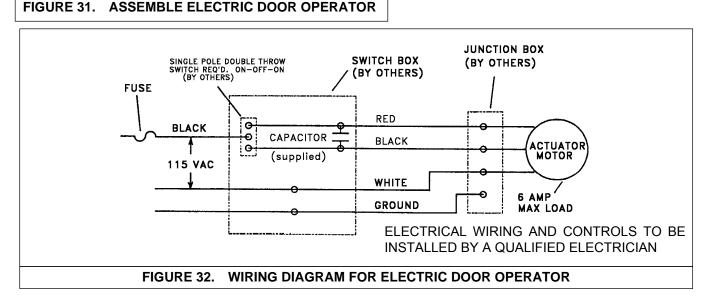
# INSTALLING ELECTRIC DOOR OPERATOR

- 1. Slide door weldment into existing door track on mixer and bolt to mixer bottom using 2-3/8 x 1 hex bolts and nuts. Figure 31.
- 2. Slide door into door weldment track.
- 3. Attach electric actuator mount to door bar using 4-1/2 x 1 1/2 hex bolts and nuts.
- 4. Thread  $3/4 \times 3$  rod into actuator and thread jam nut on threader rod. Thread clevis onto rod and attach actuator to actuator mount. Attach clevis to door using pin.
- 5. Wire actuator as shown on figure 32.

#### Adjustment

With actuator fully extended adjust 3/4 x 3 All Thread so there is approximately a 1/4 inch space at the bottom of discharge door. Further adjustment may be required so actuator will free wheel when door is fully closed and fully open positions.

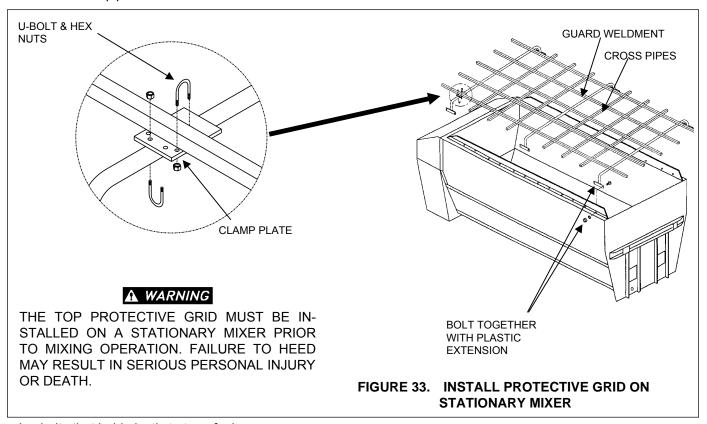
**NOTE:** Always open and close discharge door with mixer running to avoid high material pressure against discharge door.NSTALLING TOP GUARD



#### **INSTALLING TOP GUARD**

Each Mixer installation will be somewhat unique in a way the Mixer is loaded from the top. Thus the Top Grid is shipped unassembled to allow for its installation with a variety of conveyor/hopper positions. Figure 33 shows the intended method of installation.

1.Install cross pipes and attach to mixer as shown us-

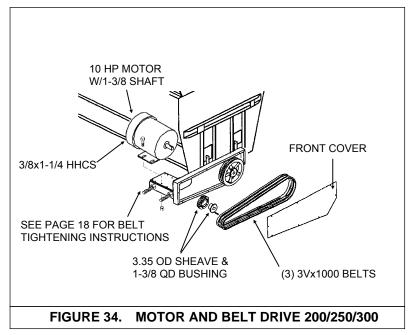


ing bolts that hold plastic to top of mixer.

2. Evenly space guard pipes across mixer and fasten as shown in detail.

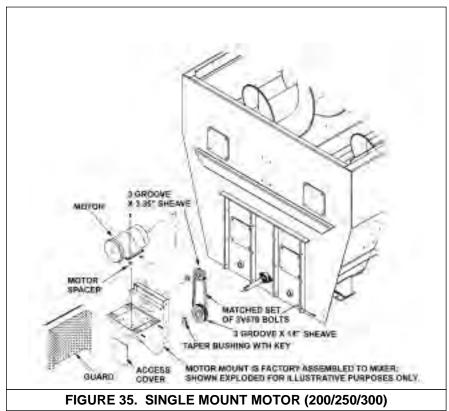
#### **INSTALLING SIDE MOUNT MOTOR**

Install the motor and belt drive as shown on figure 34.



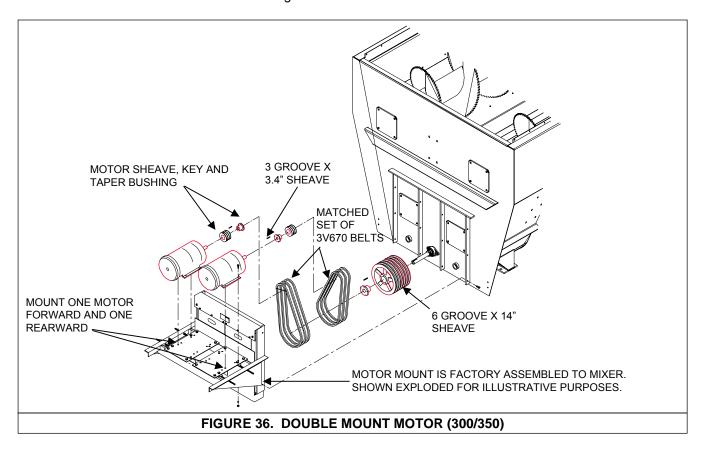
# INSTALLING SINGLE MOTOR, FRONT MOUNT

Install the motor and belt drive as shown on figure 35.



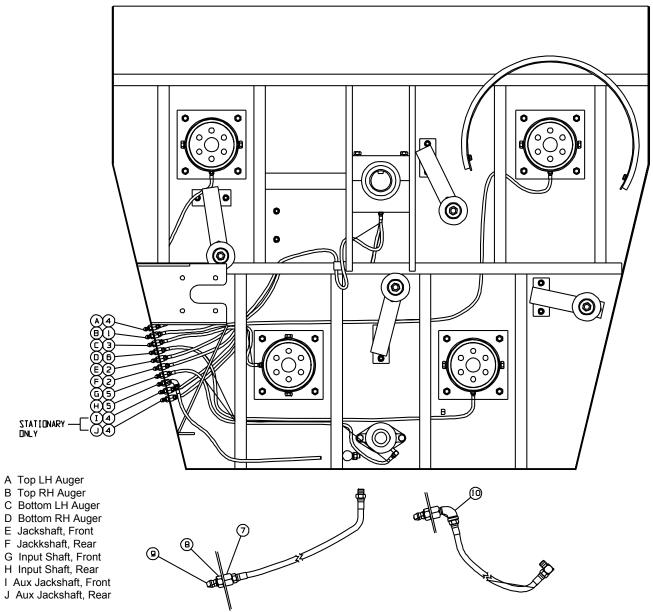
#### **INSTALL DOUBLE MOTOR, FRONT MOUNT**

Install the motor and belt drive as shown in figure 36



# **REPAIR PARTS**

#### **GREASE BANK ASSEMBLY**

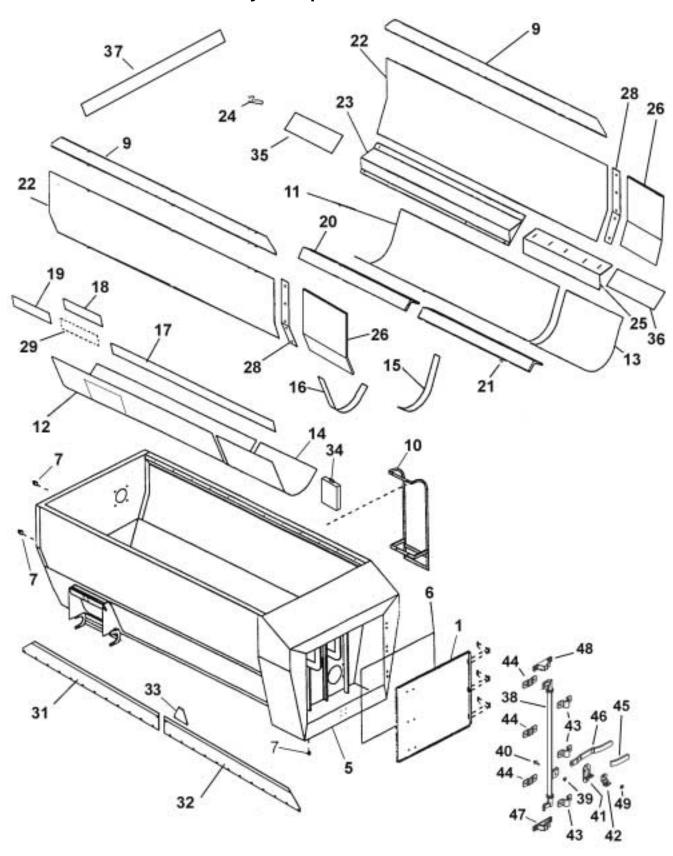


	•	
KEY	PART NO.	DESCRIPTION
1	156990	Grease Line 70 1/2"
2	156988	Grease Line 42 1/2"
3	156985	Grease Line 19 1/4"
4	156986	Grease Line 26 1/4"
5	156987	Grease Line 33 1/4"
6	156989	Grease Line 46 1/4"
7	PF305	Connector, Banklube
8	PF316	Nut, Lock 1/8 NPSM
9	P3337	Zerk, Grease (Stationary Only)
10	152358	Street Elbow 90° 1/4" NPT (Stationary Only)
11	PF306	Elbow

# Basic Body Group 200/250/300/350

KEY	PART NO. M200	PART NO. M250	PART NO. M300	PART NO. M350	DESCRIPTION
1	159707	159707	159707	159707	Rear Door Wldmt
5	157090	157091	157092		Body Wldmt, 1/4 Steel Bottom
				159349	Body Wldmt, 3/8 Steel Bottom
				159361	Body Wldmt, 1/4 SS Bottom
6	157070	157070	157070	157070	Door Trim Seal- 152"
7	157089	157089	157089	157089	Pipe Plug- 1-1/4" NPT
9	157103	157102	157073		Tuff Glide Extensions
10	156791	156791	156791	156791	Ladder Widmt
11	157151	159512	157151	157151	Front Bottom Liner RH- Tuff Glide
12	157153	161159	157153	157153	Front Bottom Liner LH- Tuff Glide
13		159512	157152	159512	Rear Bottom Liner RH- Tuff Glide
14		159511	157154	159511	Rear Bottom Liner LH- Tuff Glide
15		159577	159577	159577	RH Bottom Hold Down
16	4==0=0	157354	157354	157354	LH Bottom Hold Down
17	157353	457005			Hold Down 72.5
		157025	457050	457050	Hold Down 99.5
40	457000	457000	157352	157352	Hold Down - 123 1/2"
18	157022	157022	157022	157022	Hold Down - 30" (Above Door)
19	157023	157023	157023	157023	Hold Down - 14"
20	157347	457004			Angle Hold Down 48"
		157024	457040	157040	Hold Down - 72"
24	157004	157004	157348	157348	Hold Down Angle - 95"
21	157024	157024	157024	157240	Hold Down Angle - 72"
22	157149	157076	157150	157348 157150	Hold Down Angle - 95" Side Liner
23	157 149	157576	157715	159232	Hay Shelf
23 24	847121	847121	847121	847121	Carriage Bolt- 3/8NCx1-1/4 Stainless Steel
25	159575	159575	159575	159575	Hayshelf Hold Down 38.25
26	159575	109373	109373	159520	Side Liner Ext.
28				159580	Splice, Side Liner
29				159574	Hold Down 1/4 x 4 x 23.75
31				159611	Extension 350 RH
32				159610	Extension 350 LH
33				159612	Splice - 350 Only
34	158222	158222	158222	158222	Case Manual Storage
35	159680				Hold Down 119
		159776	159776		Hold Down 144
				157352	Hold Down 123-1/2
36			159777		Hold Down 23-7/8
				159529	Hold Down 67-3/8
37	157502	157502	157502	157502	Front Tuff Glide Extension
38	N/A	N/A	N/A	N/A	Rod Door Lock Assy (Order Complete Assy - 159734)
39	159795	159795	159795	159795	Nut - Handle
40	159794	159794	159794	159794	Bolt - Handle
41	159465	159465	159465	159465	Plate - Seal Pin Bottom
42	159464	159464	159464	159464	Plate - Seal Pin Top
43	159461	159461	159461	159461	Plate - Door Rod Top
44	159462	159462	159462	159462	Plate - Door Rod Back
45	N/A	N/A	N/A	N/A	Grip - Handle
46	159466	159466	159466	159466	Handle - Door
47	N/A	N/A	N/A	N/A	Keeper - Door RH (Order Complete Assy - 159734)
48	N/A	N/A	N/A	N/A	Keeper - Door LH (Order Complete Assy - 159734)
49	159463	159463	159463	159463	Bushing - Seal Pin

# Basic Body Group 200/250/300/350



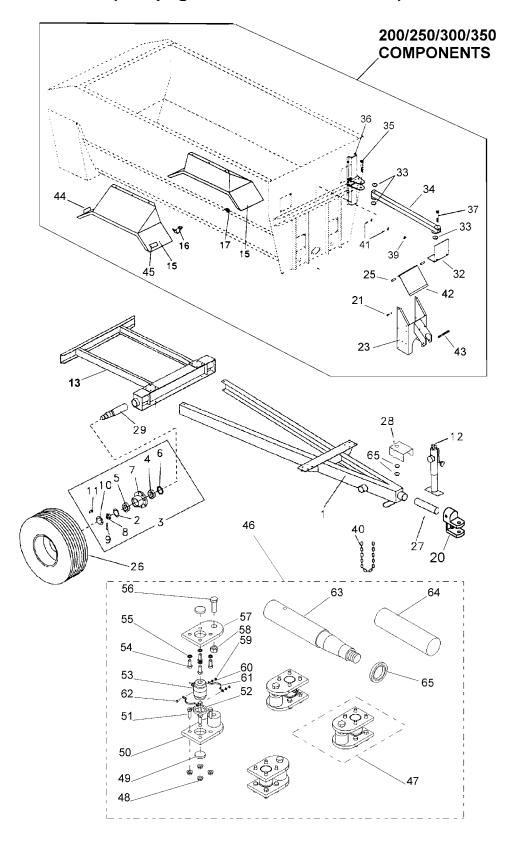
## 200/ 250/ 300 TRAILER GROUP

KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	156887	A-Frame Wldmt 300Mixer	23	157396	Weld, Battery Shield
	156747	A-Frame Wldmt 250 Mixer	25	157162	Hinge Pin
	157171	A-Frame Wldmt 200 Mixer	26	157084	Small Bomber Tire & Wheel -H40 x 14.5
2	174103	Washer, Spindle Wilton		160869	Wheel 8 Bolt H40 x 14.5 x 19
3	156932	Hub Assy, Trailer		160866	Inner Tube H40 x 14.5 x 19
4	19245	Bearing Cone		160868	Flap H40 x 14.5 x 19
5	361306	Bearing Cone	27	S140708	Weighbeam 2.125 x 16 Ft. Cord
6	156961	Seal Oil, Single Lip	28	157087	Shield Weigh Bar
7	156963	Hub & Races 834477 & 834478	29	S146772	Axle, Weigh Assy 2-1/2x16 Ft Cord
8	V94487	7/8-14NF Slotted Hex Nut	32	157539	Scale Head Bracket
9	V94488	1/8 x 1 1/2 Cotter Pin	33	157096	Friction Pad
10	156962	Cap Hub	34	156866	Swing Arm
11	143409	Lug, Bolt	35	P5645	Hex Bolt, 1/2"NC x4-1/2"
12	21431	Jack, Tube Mount Swivel	36	156982	Swivel Weldment
13	157173	Axle & Bumper Wldmt 200	37	V180192	Hex Bolt, 1/2" NC x 3-1/2"
	156737	Axle & Bumper Wldmt 250	39	157039	5/8" Cable Clamp
	156796	Axle & Bumper Wldmt 300	40	157609	Safety Chain
15	157334	Fender Weldment	41	157716	Self Drilling Screw
16	157163	Fender Tab RH - 200/250	42	157399	Weld, Battery Cover Lid
	156967	Fender Tab RH - 300	43	157042	Pin, 5/8x6"
	159709	Fender Tab RH - 350	44	157504	Red Reflector
17	157164	Fender Tab LH - 200/250	45	157503	Amber Reflector
	156376	Fender Tab LH - 300	65	P2649	Flat Washer 3/4" Narrow
	159710	Fender Tab LH - 350	NS	157611	Heavy Duty Jack-7000 lb (Optional)
20	156964	Clevis Hitch			
21	840671	HHCS 3/8x1 Serr. Flange			

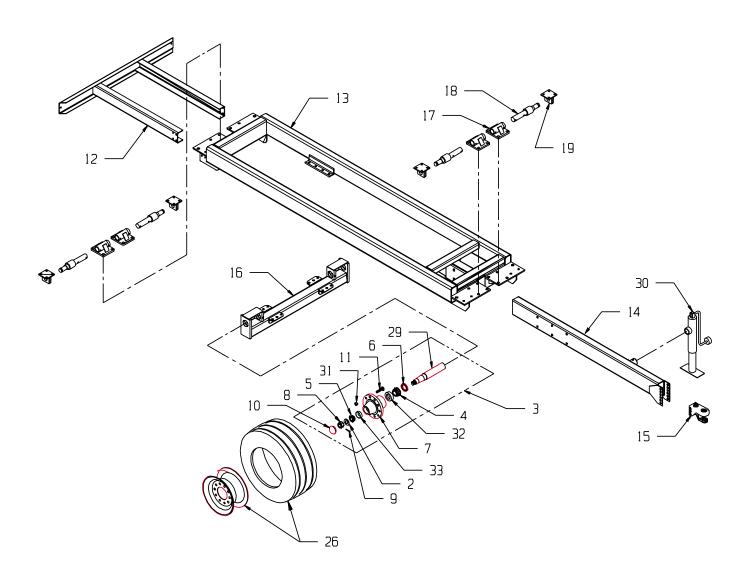
## **CT SCALE OPTION**

KEY	PART NO.	DESCRIPTION
46	159578	CT Scale Option on 200/250/300
47	S826947	Assembly, Load Cell Mount
48	141763	Nut, Hex 5/8-11 NC Serrated Flange
49	S400118	Shim, CT Mount 7/16
50	826897	Load Cell Mount Base
51	19226	Screw HHCS 5/8-11 x 2 ZP GR5
52	S830409	Sealing Ring
53	S153101	Cell CT30KTC-30' 0.25%
54	95205	Screw HHCS 5/8-11x 1-1/2 ZP GR5
55	P468	Wash Lock 5/8 ZP
56	159614	Screw HHCS 1-8 x 3.0 GR8, ZP
57	159613	Load Cell Mount Base Plate
58	95036	Nut, Hex 1-8 ZP
59	P557	Nut, Hex 1/4-20 ZP
60	P463	Lock Washer, 1/4 ZP
61	160128	CT Clamp
62	P5609	Screw, Hex 1/4 ZP, GR
63	S839008	Spindle - 2-1/2
64	S841045	Bar - Hitch 2-1/8
65	156961	Seal - Oil, Single Lip

# 200/250/300 TRAILER GROUP (See page 44 for 350 Frame/Axle)



# **350 TRAILER GROUP**

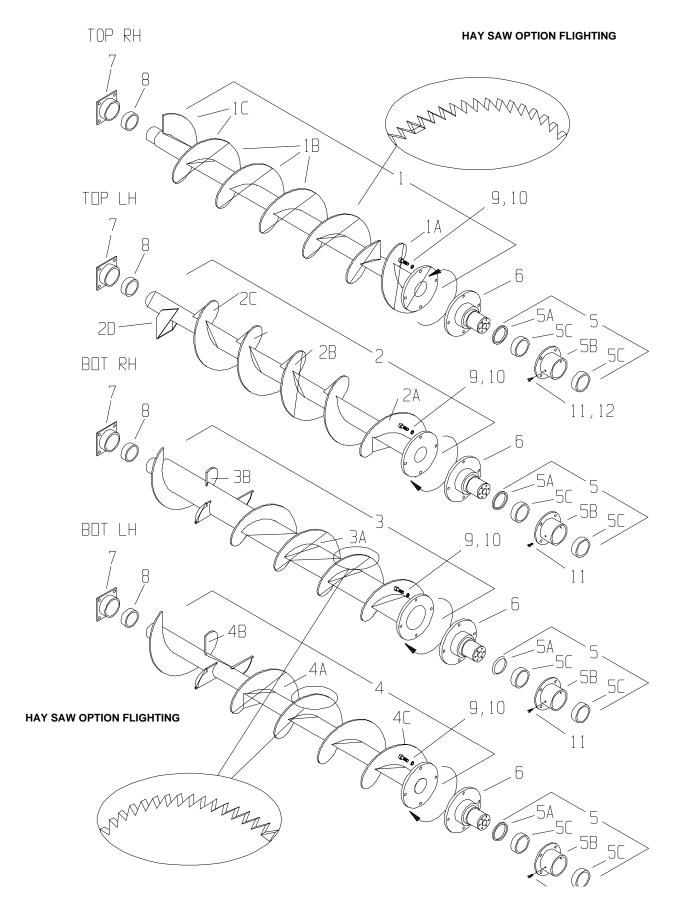


## **350 TRAILER GROUP**

#### KEY PART NO. DESCRIPTION

2	P2998	Washer, Spindle Wilton
3	159455	Hub & Spindle Assembly, 10 Bolt, 12000 lb.
4	835163	Bearing Cone - Inner
5	159452	Bearing Cone - Outer
6	159454	Seal
7	158683	Hub & Races
8	148280	Slotted Hex Nut
9	V94488	1/8 x 1 1/2 Cotter Pin
10	159446	Cap Hub
11	159453	Lug, Bolt
12	159265	Weldment, Bumper - D350
13	159217	Weldment, Trailer Frame
14	159177	Weldment, Tongue
15	159442	Hitch Assembly, Perfect
16	159386	Weldment, Axle
17	159222	Weld Base Mount
18	S143989	Cel 2.12DB-21 1.75 Neck
19	159225	Weld Support Mount
26	159366	Tire/Wheel - H40 x 14.5 x 19 10 Bolt
	160866	Inner Tube - H40 x 14.5 x 19
	160868	Flap H40 x 14.5 x 19
29	159447	Spindle, 12000 lbs.
30	21431	Jack w/Base
31	156515	Nut - Bud 3/4-16
32	835165	Bearing Cup - Inner
33	159451	Bearing Cup - Outer
NS	157611	Heavy Duty Jack - 7000 lb (Optional)

#### **200/250/300/350 AUGERS AND COMPONENT PARTS**



#### **200/250/300/350 AUGERS AND COMPONENT PARTS**

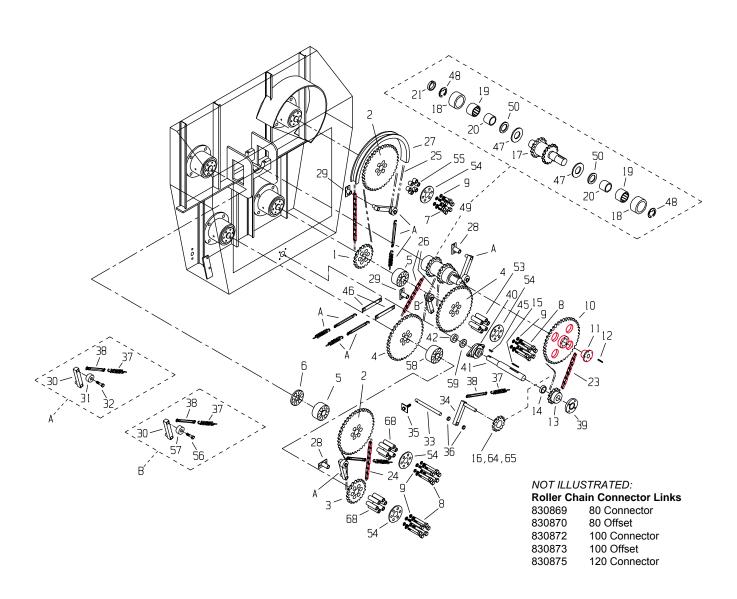
KEY	PARTNO. M200	PARTNO. M250	PARTNO. M300	PART NO. M350	DESCRIPTION
1	157030	157034	157038	159435	Top Right Hand Auger
	157775	157776	157777	159412	Top RH Auger, Hay Saw Option
2	157031	157035	157053	159413	Top Left Hand Auger
3	157028	157032	157036	159434	Bottom Right Hand Auger
	157316	157318	157320	159268	Bottom Right Hand Auger, Hay Saw Option
4	157029	157033	157037	159433	Bottom Left Hand Auger
	157315	157317	157319	159269	Bottom Left Hand Auger, Hay Saw Option
5	157068	157068	157068	157068	Auger Bearing Assembly
5A	157027	157027	157027	157027	Seal
5B	157063	157063	157063	157063	Bearing Housing
5C	157065	157065	157065	157065	Bearing Insert
6	159203	159203	159203	159203	Stub Shaft Weldment
7	143125	143125	143125	143125	Bearing Housing
8	143127	143127	143127	143127	Front Bearing Insert
9	157222	157222	157222	157222	Hex Bolt 7/8NC x 1-3/4
10	157221	157221	157221	157221	Lock Washer 7/8
11	157072	157072	157072	157072	Hex Brass Bolt 3/8NC x 5/8
12	P465	P465	P465	P465	Lock Washer 3/8"

#### FLIGHTING REPAIR

# NON-FLANGE REPAIR AUGER KIT NUMBERS (Includes Auger and Keys 6, 9, 10)

KEY	PARTNO	DESCRIPTION	(Includes Aug	ger and Keys 6, 9, 10
1a	156711	Flight313 x 20 x 6.625 RH		
1b	156710	Flight313 x 20 x 6.625 LH	PART NO.	DESCRIPTION
	157209	Haysaw5 x 20 x 6.625 LH	157761	200 RH Bottom
1c	156766	Flight313 x 20 x 6.625 LH 3/4P	157762	200 LH Bottom
2a	156710	Flight313 x 20 x 6.625 LH	157763	200 RH Top
2b	156711	Flight313 x 20 x 6.625 RH	157764	200 LH Top
2c	156767	Flight313 x 20 x 6.625 RH 3/4P	157765	250 RH Bottom
3a	156705	Flight5 x 19 x 8.625 LH	157766	250 LH Bottom
	157207	Haysaw5 x 19 x 8.625 LH	157767	250 RH Top
3b	156706	Flight5 x 19 x 8.625 RH	157768	250 LH Top
	157208	Haysaw5 x 19 x 8.625 RH		
4a	156708	Flight5 x 20 x 6.625 LH		
	157209	Haysaw5 x 20 x 6.625 LH		
4b	156709	Flight5 x 20 x 6.625 RH		
	157210	Haysaw5 x 20 x 6.625 RH		
4c	156707	Flight- 0.375 x 20 x 6.625 LH		

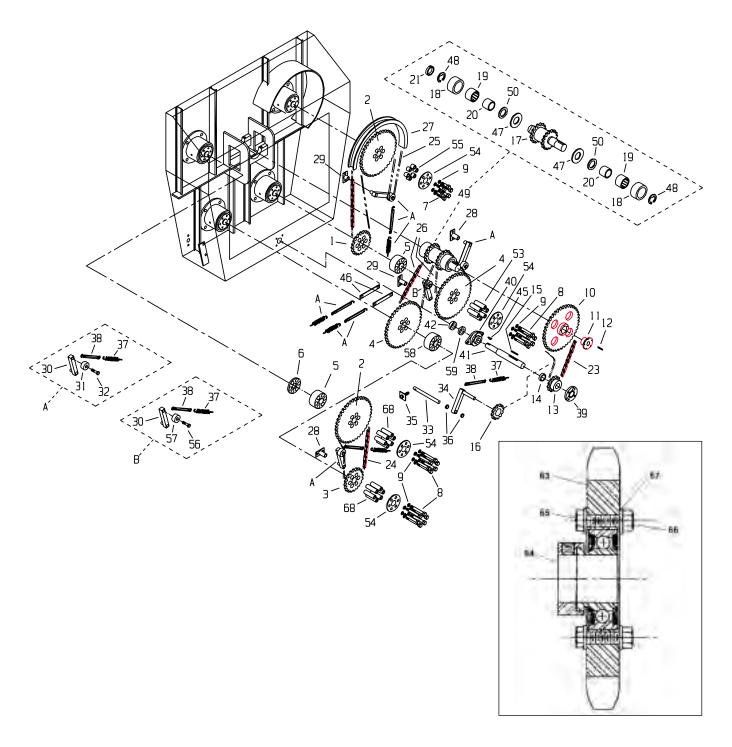
#### 200/250 TRAILER DRIVE GROUP



## 200/250 TRAILER DRIVE GROUP

KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	159689	Sprocket 80A24	32	P5626	Screw HHCS 5/8-11 x 6 ZP GR5
2	159691	Sprocket 80A54	33	157094	Shaft Idler Pivot
3	159690	Sprocket 80A33	34	157146	Weld Idler Arm
4	159688	Sprocket 100A54	35	157419	Weld Idler Bolt
5	159211	Spacer	36	141691	Collar Shaft Clamp 1.25
6	159212	Spacer	37	157165	Spring - Extension
7	19511	3/4 x 2-1/2 Hex Bolt ZP GR5	38	157048	Turn Buckle 3/8 x 5
8	P3232	3/4 x 6 Hex Bolt ZP GR5	39	156928	Bearing Spherical 1.938
9	P2689	Washer Lock 3/4 ZP	40	156925	Bearing Flanged 1.4375
10	156947	Sprocket - 80BTL80	41	157098	Shaft Input Stub
11	156948	Bushing - Taper 2.438"	42	156974	Collar Shaft Clamp 1.438
12	140962	Key 5/8 x 5/8 x 2	45	V90723	Key Woodruff 1212
13	156943	Sprocket 80B513H x 1.938	46	157095	Link - Idler Adjuster
14	156975	Collar Shaft Clamp 1.938	47	157015	Thrust Washer
15	145259	Key 1/2 x 1/2 x 1-1/2	48	157060	Retaining Ring
16	140941	Sprocket 80B12 w/1.0 Bearing	49	157016	Assembly Jackshaft
17	157005	Weldment - Jackshaft	50	157054	Spacer
18	157064	Bearing Housing	53	159204	Tube Key Long
19	156929	Roller Bearing	54	159298	Drive End Plate
20	156927	Inner Race	55	159205	Tube Key Short
21	157059	Retainer Ring	56	143551	Bolt Tap 5/8-11 x 5 Hex ZP
23	156934	Chain 80 x 114P	58	159211	Spacer
24	158521	Chain 80 x 102P	57	157139	UHMW Idler 3.5 OD x 2.375
25	156935	Chain 80 x 176P	59	157680	Spacer Collar
26	156936	Chain 100 x 76P	63	140940	Sprocket, Bottom Idler
27	157026	Channel	64	145220	Bearing
28	157132	Weld Idler Stand 4-5/8	65	156951	Retaining Ring
29	157134	Weld Idler Stand 1-3/8	68	159204	Tube Key Long
30	157137	Weld Idler Arm 9"			
31	157138	UHMW Idler 3.5 OD x 2.875			

## 300/350 TRAILER DRIVE GROUP



## **300/350 TRAILER DRIVE GROUP**

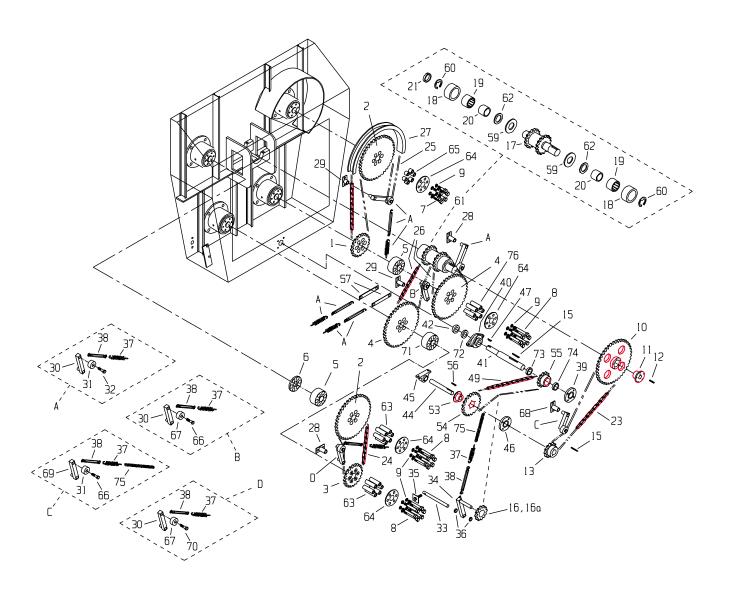
KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	159208	Sprocket 100A27	35	157419	Weld Idler Bolt
2	159209	Sprocket 100A44	36	141691	Collar Shaft Clamp 1.25
3	159207	Sprocket 100A33	37	157165	Spring - Extension
4	159206	Sprocket 120A45	38	157048	Turn Buckle - 3/8 x 5
5	159211	Spacer	39	156928	Bearing Spherical 1.938
6	159212	Spacer	40	156925	Bearing Flanged 1.4375
7	19511	3/4 x 2-1/2 Hex Bolt ZP GR5	41	157098	Shaft Input Stub
8	P3232	3/4 x 6 Hex Bolt ZP GR5	42	156974	Collar Shaft Clamp 1.438
9	P2689	Washer Lock 3/4 ZP	45	V90723	Key Woodruff 1212
10	159410	Sprocket - 100BTL60	46	157095	Link - Idler Adjuster
11	156948	Bushing - Taper 2.438"	47	157015	Thrust Washer
12	140962	Key 5/8 x 5/8 x 2	48	157060	Retaining Ring
13	159396	Sprocket 100B10H x 1.938	49	157017	Assembly Jackshaft 300
14	156975	Collar Shaft Clamp 1.938	50	157054	Spacer
15	145259	Key 1/2 x 1/2 x 1-1/2	53	159836	Tube Key Long
16	820273	Sprocket 100A12 w/1.0 Bearing	54	159298	Drive End Plate
17	157006	Weldment - Jackshaft	55	159205	Tube Key Short
18	157064	Bearing Housing	56	143551	Bolt Tap 5/8-11 x 5 Hex ZP
19	156929	Roller Bearing	58	159210	Spacer
20	156927	Inner Race	57	157139	UHMW Idler 3.5 OD x 2.375
21	157059	Retainer Ring	59	157680	Spacer Collar
23	159721	Chain 100 x 89P	63	830858	Sprocket, Bottom Idler
24	159411	Chain 100 x 85P	64	820244	Bearing w/Collar
25	156938	Chain 100 x 146P	65	P5609	Cap Screw, Hex Head 1/4x1
26	156939	Chain 120 x 64P	66	P557	Nut, Hex 1/4
27	157026	Channel	67	P456	Washer, Flat 1/4
28	157132	Weld Idler Stand 4-5/8	68	159204	Tube Key - Long
29	157134	Weld Idler Stand 1-3/8			
30	157137	Weld Idler Arm 9"			
31	157138	UHMW Idler 3.5 OD x 2.875			
32	P5626	Screw HHCS 5/8-11 x 6 ZP			
33	157094	Shaft Idler Pivot			
34	157146	Weld Idler Arm			

#### 200/250 STATIONARY DRIVE

#### NOT ILLUSTRATED:

Roller Chain Connector Links 830869 80 Connector 830870 80 Offset 100 Connector 100 Offset 830872 830873

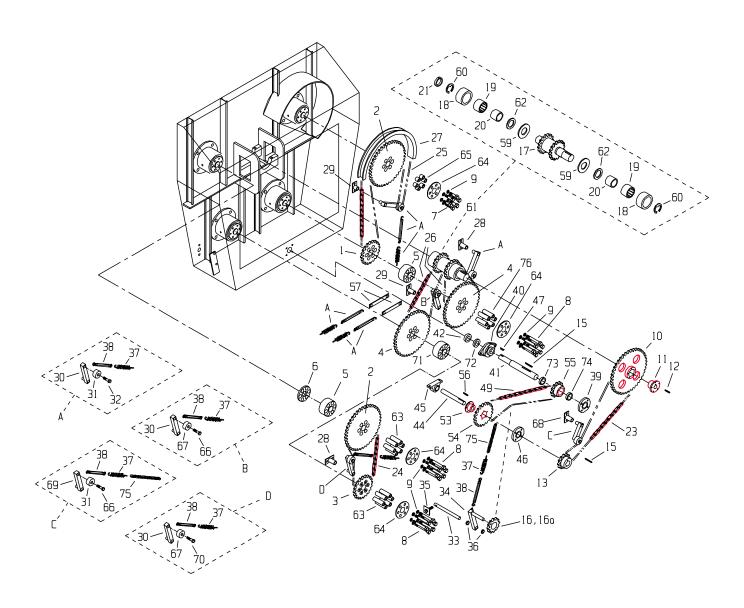
120 Connector 120 Offset



## 200/250 STATIONARY DRIVE

KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	159689	Sprocket, 80A24, 6 Bolt	37	157165	Spring Extension
2	159691	Sprocket, 80A54, 6 Bolt	38	157048	Turnbuckle 3/8x5
3	159690	Sprocket, 80A33, 6 Bolt	39	156928	Bearing Spherical 1.938
4	159688	Sprocket, 100A54, 6 Bolt	40	156925	Bearing Flanged 1.4375
5	159211	Spacer Bottom Sprocket	41	157098	Shaft Input Stub
6	159212	Spacer Top Sprocket	42	156974	Collar Shaft Clamp 1.438
7	19511	Screw HHCS 3/4-10x2.5 ZP GR5	44	157200	Jackshaft Auxiliary
8	P3232	Screw HHCS 3/4-10x6 ZP	45	157196	Bearing Pillow, SPH
9	P2689	Wash Lock 3/4 ZP	46	156928	Bearing Spherical 1.938
10	156947	Sprocket 80BTL80 Taper	47	V90723	Key Woodruff 1212
11	156948	Bush Taper 2.438 Bore	49	157198	Chain #60 x 112P
12	140962	Key 5/8 x 5/8 x 2	53	157186	Bush SF x 1-15/16
13	156943	Sprocket 80BS13H x 1.938	54	157187	Sprocket 60SF48
15	839050	Key 1/2 x 1/2 x 1-1/4	55	157190	Sprocket 60SDS17
16	157199	Sprocket 60B18 w/1" Bearing	56	145259	Key 1/2 x 1/2 x1-1/2
16a	145220	Bearing	57	157095	Link Idler Adjuster
17	157006	Jackshaft Weldment	59	157015	Bronze Thrust Washer
18	157064	Jackshaft Bearing Housing	60	157059	Retaining Ring
19	156929	Bearing, Torrington	61	157016	Assembly Jackshaft
20	156927	Bearing, Torrington	62	157060	Spacer
21	157059	Retaining Ring	63	159204	Tube Key Long
23	156933	Chain #80 x 104P	64	159298	Drive End Plate
24	158521	Chain #80 x 102P	65	159205	Tube Key Short
25	156935	Chain #80 x 176P	66	143551	Bolt Tap 5/8-11 x 5 Hex ZP
26	156936	Chain #100 x 76P	67	157139	UHMW Idler 3.50D x 2.375
27	157026	Channel	68	157297	Weld Idler Stand
28	157132	Weld Idler Stand 4-5/8	69	157299	Weld Idler Arm
29	157134	Weld Idler Stand 1-3/8	70	157792	Screw HHCS 5/8-11 x 5.5 ZP GR5
30	157137	Weld Idler Arm 9"	71	159211	Spacer Bottom Sprocket
31	157138	UHMW Idler 3.5OD x 2.875	72	159680	Spacer Collar
32	P5626	Screw HHCS 5/8-11 x 6 ZP	73	156975	Collar Shaft Clamp 1.938
33	157094	Shaft Idler Pivot	74	156975	Collar Shaft Clamp 1.938
34	157146	Weld Idler Arm	75	11562	Chain 3/16 x 12"
35	157419	Weld Idler Bolt	76	159204	Tube Key Long
36	141691	Collar Shaft Clamp 1.25			

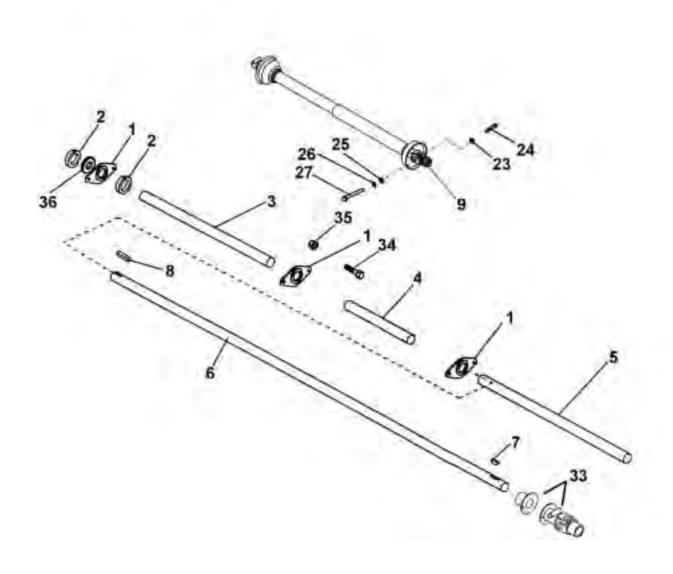
## **300/350 STATIONARY DRIVE**



## **300/350 STATIONARY DRIVE**

KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	159208	Sprocket, 100A27, 6 Bolt	37	157165	Spring Extension
2	159209	Sprocket, 100A44, 6 Bolt	38	157048	Turnbuckle 3/8x5
3	159207	Sprocket, 100A33, 6 Bolt	39	156928	Bearing Spherical 1.938
4	159206	Sprocket, 120A45, 6 Bolt	40	156925	Bearing Flanged 1.4375
5	159211	Spacer Bottom Sprocket	41	157098	Shaft Input Stub
6	159212	Spacer Top Sprocket	42	156974	Collar Shaft Clamp 1.438
7	19511	Screw HHCS 3/4-10x2.5 ZP GR5	44	157200	Jackshaft Auxiliary
8	P3232	Screw HHCS 3/4-10x6 ZP	45	157196	Bearing Pillow, SPH
9	P2689	Wash Lock 3/4 ZP	46	156928	Bearing Spherical 1.938
10	156947	Sprocket 80BTL80 Taper	47	V90723	Key Woodruff 1212
11	156948	Bush Taper 2.438 Bore	49	157198	Chain #60 x 112P
12	140962	Key 5/8 x 5/8 x 2	53	157186	Bush SF x 1-15/16
13	156943	Sprocket 80BS13H x 1.938	54	157187	Sprocket 60SF48
15	839050	Key 1/2 x 1/2 x 1-1/4	55	157190	Sprocket 60SDS17
16	157199	Sprocket 60B18 w/1" Bearing	56	145259	Key 1/2 x 1/2 x1-1/2
16a	145220	Bearing	57	157095	Link Idler Adjuster
17	157006	Jackshaft Weldment	59	157015	Bronze Thrust Washer
18	157064	Jackshaft Bearing Housing	60	157059	Retaining Ring
19	156929	Bearing, Torrington	61	157017	Assembly Jackshaft 300
20	156927	Bearing, Torrington	62	157060	Spacer
21	157059	Retaining Ring	63	159204	Tube Key Long
23	156933	Chain #80 x 104P	64	159298	Drive End Plate
24	159411	Chain #100 x 85P	65	159205	Tube Key Short
25	156938	Chain #100 x 146P	66	143551	Bolt Tap 5/8-11 x 5 Hex ZP
26	156939	Chain #120 x 64P	67	157139	UHMW Idler 3.5OD x 2.375
27	157026	Channel	68	157297	Weld Idler Stand
28	157132	Weld Idler Stand 4-5/8	69	157299	Weld Idler Arm
29	157134	Weld Idler Stand 1-3/8	70	157792	Screw HHCS 5/8-11 x 5.5 ZP GR5
30	157137	Weld Idler Arm 9"	71	159210	Spacer Bottom Sprocket
31	157138	UHMW Idler 3.5OD x 2.875	72	159680	Spacer Collar
32	P5626	Screw HHCS 5/8-11 x 6 ZP	73	156975	Collar Shaft Clamp 1.938
33	157094	Shaft Idler Pivot	74	156975	Collar Shaft Clamp 1.938
34	157146	Weld Idler Arm	75	11562	Chain 3/16 x 12"
35	157419	Weld Idler Bolt	76	159836	Tube Key - Long
36	141691	Collar Shaft Clamp 1.25			

# 200/250/300/350 INPUT DRIVE

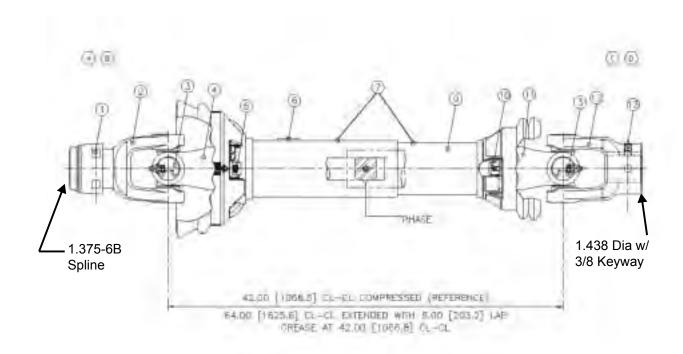


#### 200/250/300/350 INPUT DRIVE

KEY	PART NO.	DESCRIPTION
1	156925	Bearing 1-7/16" 2-Bolt
2	156974	Collar Clamp 1-7/16"
3	157327	Power Shaft Guard- 53.34" (350)
	157327	Power Shaft Guard- 53.34" (300)
	157360	Power Shaft Guard- 62" (250)
	157359	Power Shaft Guard - 58.38" (200)
4	157359	Power Shaft Guard - 58.38" (300/350)
5	157359	Power Shaft Guard- 58.38" (350)
	157365	Power Shaft Guard- 36.56" (300)
	157363	Power Shaft Guard- 65.38" (250)
	157361	Power Shaft Guard- 41.38" (200)
6	159213	350 Input Power Shaft
	157368	300 Input Power Shaft
	157367	250 Input Power Shaft
	157366	200 Input Power Shaft
7	V90723	Key Woodruff 1212
8	11832	Key- 3/8" x 3/8" x 2"
9	156921	Tumbler Shaft, 35R - Trailer Models Only
23	P2977	Jam Nut- 3/8" NC
24	140747	SQ Head Set Screw- 3/8"NCx1
25	P443	Hex Nut- 3/8" NC
26	P465	Lock Washer- 3/8"
27	P5612	Hex Bolt- 3/8"NC x 3-1/4"
33	156922	U-Joint w/ Shear Hub
34	19225	HHCS 1/2-13 x 2, GR5
35	P5631	Nut, 1/2-13 Flange
36	157680	Spacer, Collar
37	834067	Shear Bolt, 1/4" x 2.0", GR5 (200/250)
	157790	Shear Bolt, 1/4" x 2.0", GR8 (300/350)

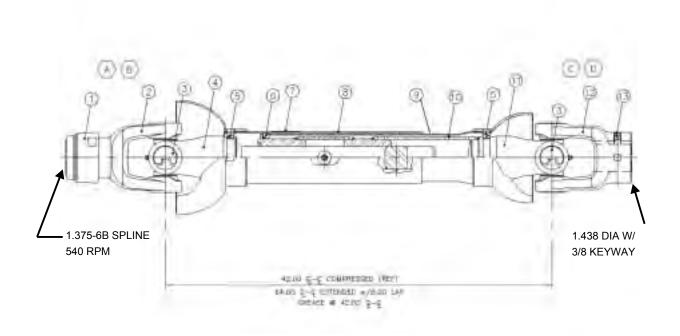
NOTE: Items not numbered are not available - order complete PTO Shaft

## PTO SHAFT W/ PLASTIC SHIELD - TRAILER MOUNT

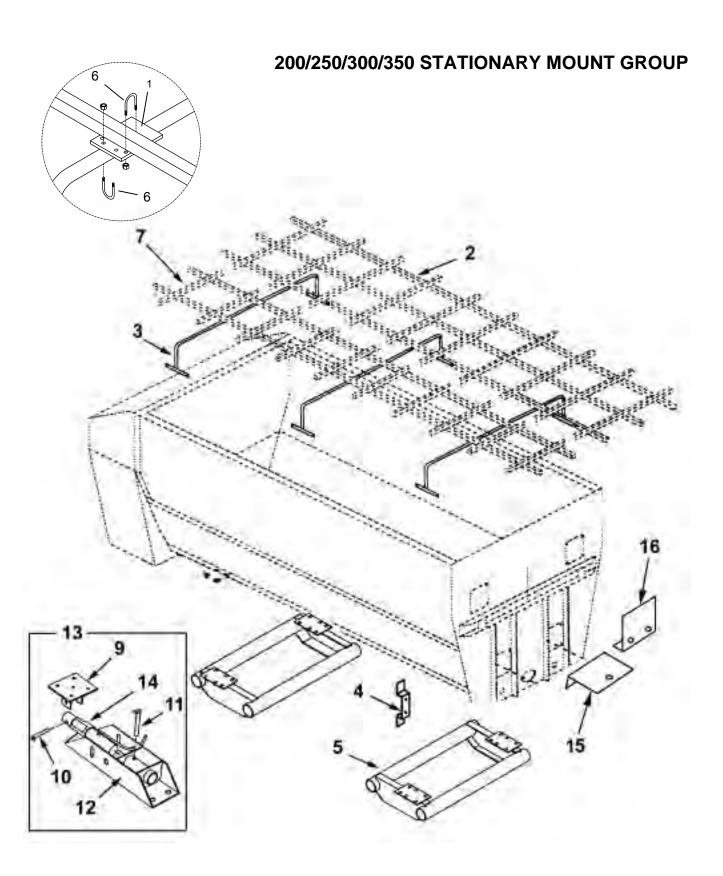


KEY	PART NO.	DESCRIPTION
1	19284	Safety Slide Lock Repair Kit
2	160464	Safety Slide Lock Yoke Asssy.
3	19430	35R Cross & Bearing Kit
4	N/A	Yoke And Shaft
5	161559	Guard Repair Kit, Outer
6	152556	Safety Sign
7	161556	Guard Set
9	152559	Safety Sign
10	161560	Guard Repair Kit, Inner
11	N/A	Yoke, Tube & Slip Sleeve
12	161294	Yoke
13	P1369	Set Screw, .375-16 x .38 Lg, Knurled Cup Point
Α	161558	Joint & Shaft Half Assy. W/ Gaurd
В	161554	Joint & Shaft Half Assy.
С	161557	Joint & Shaft Half Assy. W/ Gaurd
D	161555	Joint & Shaft Half Assy.

## PTO SHAFT W/ METAL SHIELD - TRAILER MOUNT



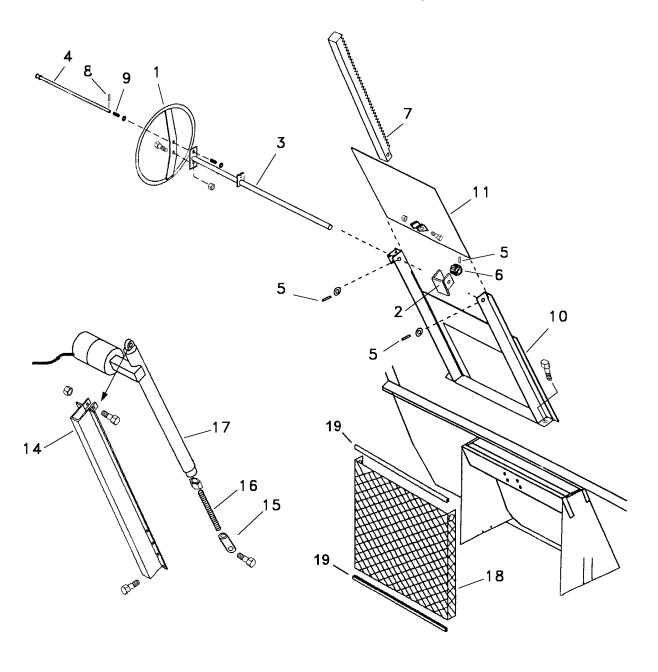
KEY	PART NO.	DESCRIPTION
1	19284	Safety Slide Lock Repair Kit
2	160464	Safety Slide Lock Yoke Asssy.
3	19430	35R Cross & Bearing Kit
4	N/A	Yoke And Shaft
5	152555	Nylon Repair Kit
6	V94163	Centralizer
7	152556	Safety Sign
8	160463	Outer Gaurd
9	160465	Inner Gaurd
10	152559	Safety Sign
11	N/A	Yoke, Tube & Slip Sleeve
12	161294	Yoke
13	P1369	Set Screw, .375-16 x .38 Lg, Knurled Cup Point
Α	161295	Joint & Shaft Half Assy. W/ Gaurd
В	N/A	Joint & Shaft Half Assy.
С	161296	Joint & Shaft Half Assy. W/ Gaurd
D	N/A	Joint & Shaft Half Assy.



## **200/250/300/350 STATIONARY MOUNT GROUP**

KEY	PARTNO. M200	PARTNO. M250	PARTNO. M300	PART NO. M350	DESCRIPTION
1	157225	157225	157225	157225	Guard Mounting Pad
2	157226	157249	157243	159485	Guard LH
3	157242	157242	157242	157242	Guard Cross Member Weldment
4	157541	157541	157541	157541	Bracket Excess Cable
5	157520	157520	157520	157520	Stationary Frame
6	157159	157159	157159	157159	U-Bolt
7	157652	157653	157654	159486	Guard, RH
9	141243	141243	141243	141243	Bracket Top Mount 2-1/8
10	146830	146830	146830	146830	Pin 5/8 x 4-7/16
11	146832	146832	146832	146832	Pin 3/4 x 3-9/16
12	141807	141807	141807	141807	Weld 2-1/8 DB Universal Mount
13	141806	141806	141806	141806	2-1/8 DB Universal Mount
14					See Scale Components In This Manual
15	157322	157322	157322	157322	Remote Mount Bracket
16	157321	157321	157321	157321	Indicator Stand
NS	146853	146853	146853	146853	Pin Lynch 3/16 x 1-3/8 Ring

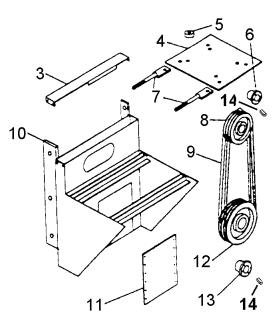
# 200/250/300/350 DISCHARGE DOOR, STATIONARY



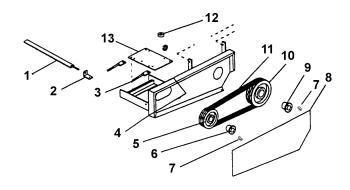
KEY	PART NO.	DESCRIPTION	KEY	PART NO.	DESCRIPTION
1	157238	Handwheel	12	V81923	Capacitor (not shown)
2	157230	Housing Weldment	14	157271	Electric Actuator Mount
3	157235	Hand Wheel Weldment	15	157280	Hyd Clevis
4	157240	Detent Pin Weldment	16	157279	Screw-All Thread 3/4" x 3"
5	V94751	Spring Pin 1/4 x 1-3/4"	17	157181	Actuator 18"
6	157168	Gear Pinion	18	157273	Cover, Expanded Metal
7	157169	Gear, Rack	19	157274	Edge Guard
8	V150488	Spring Pin 1/8 x 1 ZP			
9	157197	Compression Spring			
10	157267	Sub Door Weldment			
11	157261	Mini Door Weldment			

# FRONT MOTOR MOUNT

# **SIDE MOTOR MOUNT**

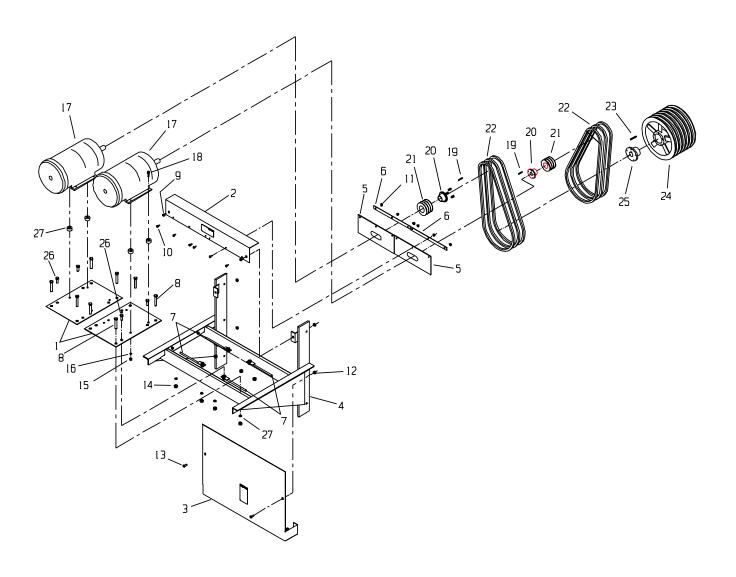


KEY	PART NO.	DESCRIPTION
3	157254	Top Cover
4	157256	Motor Mount Plate
5	157383	Motor Spacer
6	157191	Bushing, SH x 1-3/8"
7	157342	Motor Tension Puller
8	157192	Sheave, 3-3V3.35
9	157193	Belt, 3-3VX670
10	157277	Front Motor Mount Weldment
11	157255	Access Cover
12	157195	Sheave, 3-3V14" SK
13	157194	Bushing, SKx1-7/16"
14		Key Supplied w/Bushing
NS	156532	Bushing 1-5/8" SH



KEY	PART NO.	DESCRIPTION
1	157416	Motor Stabilizer
2	157418	Rod End Angle
3	157342	Motor Tension Puller
4	157178	Belt Guard Weldment
5	157192	Sheave 3-3V-3.35 SH
6	157191	Bushing 1-3/8" SH
7		Key Supplied w/Bushing
8	157179	Belt Guard Cover
9	157194	Bushing SK 1-7/16" SK
10	157195	Sheave 3-3V 14" SK
11	157182	V-Belts 3V x 1000
12	157383	Motor Spacer
13	157256	Motor Mounting Plate
NS	156532	Bushing 1-5/8 SH

# **DOUBLE MOTOR MOUNT 350**



## **DOUBLE MOTOR MOUNT 350**

#### KEY PART NO. DESCRIPTION

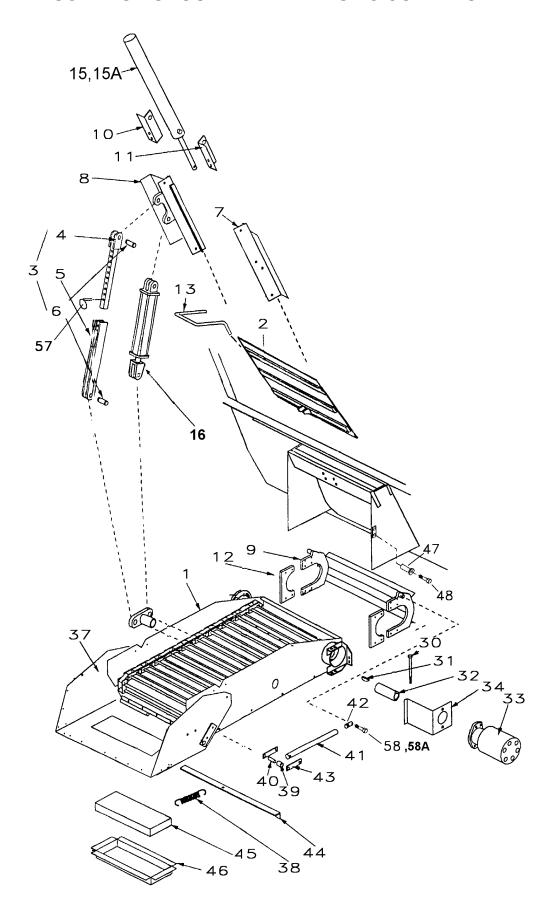
1	157256	Plate Motor Mount
2	158716	Shield Top
3	158723	Shield Front
4	158719	Dual Motor Mount Frame
5	154299	Belt Guard
6	154298	Strip
7	157342	Weld Motor Adjustment
8	P5613	HHCS 1/2-13 x 3 GR5
9	P5511	HHCS 3/8-16 x .75
10	P5602	HHCS 1/4-20 x 5/8 GR5
11	141766	Nut, 1/4-20 Serrated Flange Hex
12	P443	Nut Hex 3/8-16 ZP
13	P5511	HHCS 3/8-16 x .75
14	P445	Nut, Hex 1/2-13 ZP
17		Motor - See Motors & Control price list
19		Key (Supplied w/Bushing)
20	157191	Bush - SH x 1.375
21	157192	Sheave, 3-3V3.35
22	157193	Belt, 3-3V670
23	PU1274	Key, 3/8 x 3/8 x 2-1/8
24	158726	Sheave, 6-3V1400
25	158728	Bush - SK x 1.438
26	P5630	HHCS 1/2-13 ZP
27		Spacer - Motor
27		Flat Washer - Wide 1/2"
NS	156532	Bushing - SH x 1.625
		<b>J</b>

#### DISCHARGE GROUP AND HYDRAULIC CONVEYOR DRIVE

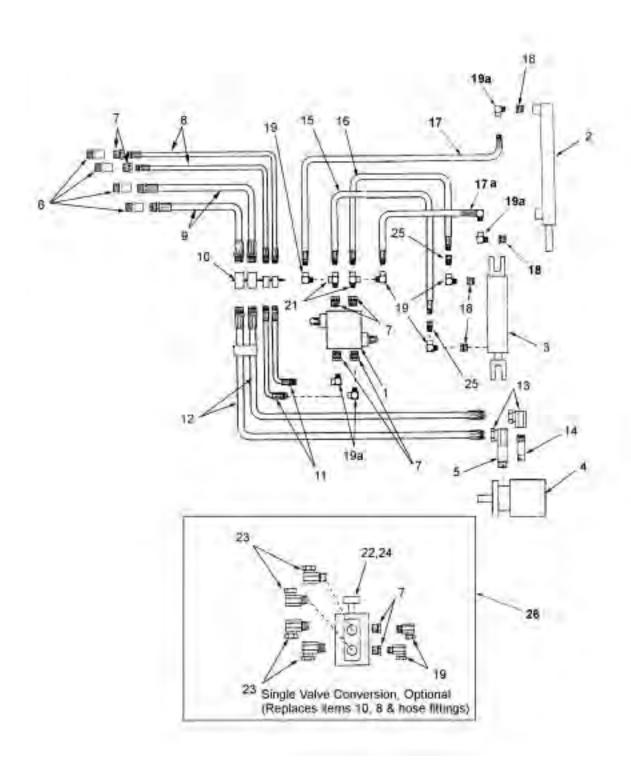
<b>KEY</b>	PART NO.	DESCRIPTION
1	157105	Conveyor Assembly (Std.)
	157122	Conveyor Assembly (Ext.) 200/250
2	156862	Discharge Door
4	156775	Fold Limiter Bar Weldment
5	157077	Fold Limiter Arm Weldment
6	157040	Clevis Pin, 1x 2-3/8" w/Cotter
7	156868	Door Extension Guide, Rear
8	156785	Door Extension Guide, Front
9	156700	Fold Conveyor Adapter, 30"
10	157099	Door Cylinder Mount Front
11	157100	Door Cylinder Mount Rear
12	156960	Swivel Cap
13	157160	Extended Door Position Indicator
15	156996	Hyd Cylinder 2 x 22
15A		Repair Kit for Key 15 Cylinder
16	157003	Hyd Cylinder 2 x 12
30	112701	Bolt 3/8 x 7-1/2"
31	V90721	Key, Woodruff 808
32	157045	Coupling
33	156997	Hyd Motor
34	157097	Torque Arm
37	157404	Folding Chute Weldment
38	V94360	Spring 8 in.
39	157301	Spacer Bushing
40	157308	Standoff
41	157302	Pivot Bar, Standard Conveyor
	157303	Pivot Bar, Extended Conveyor
42	157304	Adjuster
43	157305	Flat Pivot Link
44	157306	Spring Anchor
45	157293	Magnet 30 Oz.
47	157307	Spacer
48	P5548	Bolt 5/8x3-1/2
57	157043	Quick Pin
58	114809	HHCS 1/2-13 x 1-3/4 GR5
58a	P861	Flat Washer - 1/2

\*Note: Check valve installed with  $\checkmark$  towards motor.

# DISCHARGE GROUP AND HYDRAULIC CONVEYOR DRIVE



## **HYDRAULIC GROUP TRAILER**



#### **HYDRAULIC GROUP TRAILER**

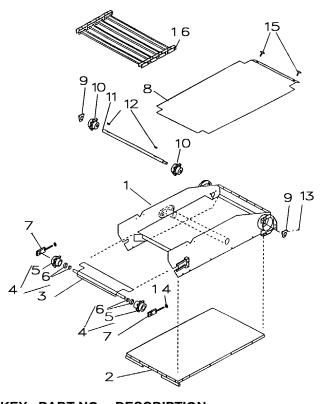
KEY	PART NO.	DESCRIPTION
1	157002	Hydraulic Crossover Relief Valve
2	156996	Hydraulic Cylinder (2" x 22") (Door)
3	157003	Hydraulic Cylinder (2" x 12") (Conveyor)
4	156997	Hydraulic Motor
5	157001	In Line Check Valve
6	157403	Hydraulic Male Connector
7	95433	Bushing, 1/2 to 1/4
8	157877	Hydraulic Hose, 3/8 x 76"
9	157876	Hydraulic Hose, 1/2 x 76"
10	157372	Connector Blank
11	156992	Hydraulic Hose, 3/8 x 45"
12	157051	Hydraulic Hose, 1/2 x106"
13	156998	90 Swivel Female Elbow (1/2 NPT)
14	157044	Pipe Nipple, 1/2 NPT x 4.0"
15	156991	Hydraulic Hose, 3/8 x 36
16	156992	Hydraulic Hose, 3/8 x 45
17	156994	Hydraulic Hose, 3/8 x 62 (Top)
17a	156992	Hydraulic Hose, 3/8 x 45 (Bottom)
18	146537	Bushing, 3/8 to 1/4
19	156984	Steel Street Elbow, 1/4" NPT
19a	159714	90 Swivel, 1/4-18 (Replaces Items 19 and 20)
20	156999	Hose Swivel, 1/4 to 1/4"
21	157000	Hydraulic Service Tee
22	157410	Selector Valve, Hand Operated
23	VH040304	Steel Street Elbow, 1/2" NPT
24	157887	Single Source Hydraulic Valve Mounting Bracket
25	156924	Restrictor Adapter
26	157370	Single Valve Conversion Kit

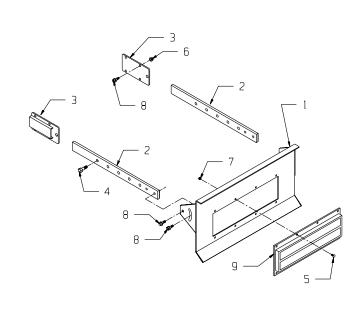
NOTE: A combination of (1) item 19 and (1) item 20 can be used to replace item 19a.

**NOTE:** Check valve (item 5) installed with towards motor.

# **CONVEYOR ASSEMBLY**

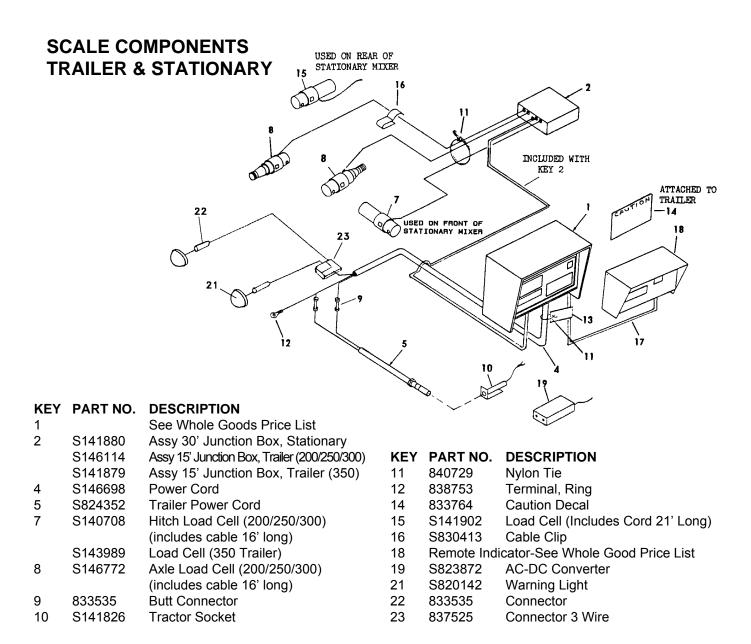
# **BAFFLE**

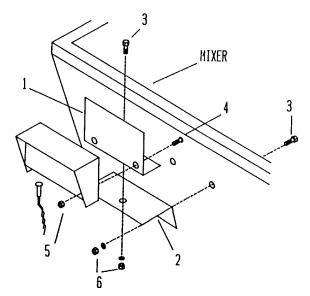




KEY	PART NO.	DESCRIPTION
1	156768	Conveyor Weldment
	157114	Extended Conveyor Shell
		Wldmt
2	157011	Bottom Pan Weldment
	157117	Extended Bottom Pan
		Weldment
3	156692	Front Slide Radius Weldment
4	156949	Sprocket, Idler Assembly
5	152485	Sprocket
6	152486	Bearing Nyloil
7	156695	Retainer Clamp Weldment
8	156780	Top Pan Liner
	157118	Extended Top Pan Liner
9	156889	Bearing 1-1/4" 3 Bolt
10	156950	Sprocket, Drive
11	156703	Shaft, 1-1/4" Conveyor Drive
12	157109	Woodruff Key
13	P3249	Grease Fitting
14	157104	SS 5/8-11NC Hex Nut
15	157108	1/4-20NC x 3/4 Elevator Screw
16	157012	Chain & Slat Assembly
	157121	Extended Chain & Slat Assembly
	157183	Repair Slat Assembly 30"
	157184	Repair Link
	157185	Offset Link

KEY	PART NO.	DESCRIPTION
1	157655	Baffle-Discharge
2	157656	Arm-Support
3	157657	Weld-Bracket Support
4	P2670	SCR-HHCS 1/2-13x1 ZP
5	P5101	Bolt-CRG 1/4-20x3/4 ZP
6	P5614	Nut-Hex 3/8-16 ZP SER FLG
7	141766	Nut-Hex 1/4-20 NC SER FLG
8	840677	SCR-HH SER FLG 3/8-16 NC x3/4
9	157293	Magnet-30oz.





#### REMOTE INDICATOR MOUNTING

KEY	PART NO.	DESCRIPTION
1	157321	Indicator Stand
2	157322	Remote Mount Brkt
3	P592	3/8 x 1 HHCS
4	P317	#10 x 5/8 RHMS
5	P554	#10-24 Hex Nut
6	P5614	3/8 Hex Nut



## FINAL FACTORY INSPECTION

Ready to Ship

1. Finish and Decals	
2. Wheel Lug Nuts are Tight	
3. Hardware Tight	
4. Grease Bank Fully Charged	
5. Guards Properly Installed	
6. Test Run Drive	
7. Chute and Door Actuation	
8. Hydraulic System Check	
Approved By:	
Approved by.	

**General Inspection**