

CMF-430[™] Vertical Mixer



Operating Instructions

and Parts Reference







CMF-430[™] Vertical Mixer

Operating Instructions

and Parts Reference

DuraTech Industries International Inc. (DuraTech Industries) has made every effort to assure that this manual completely and accurately describes the operation and maintenance of the CMF-430™ Vertical Mixer as of the date of publication. DuraTech Industries reserves the right to make updates to the machine from time to time. Even in the event of such updates, you should still find this manual to be appropriate for the safe operation and maintenance of your unit.

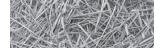
This manual, as well as materials provided by component suppliers to DuraTech Industries are all considered to be part of the information package. Every operator is required to read and understand these manuals, and they should be located within easy access for periodic review.

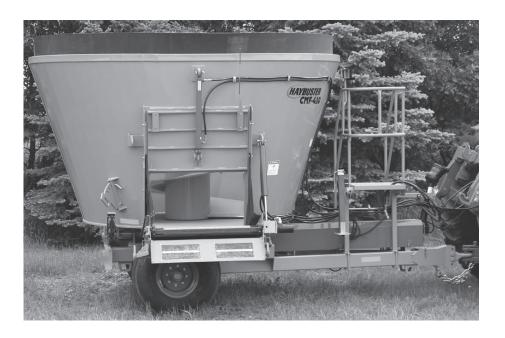




INDUSTRIES & are registered trademarks of DuraTech Industries International, Inc. CMF-430 is a trademark of DuraTech Industries International, Inc.







Foreword

All personnel must read and understand the following sections before operating the *CMF-430 VERTICAL MIXER*.

Appropriate use of unit/Introduction

Your model CMF-430 is designed to cut, mix and distribute feed rations including baled forage. It is designed for all bale sizes and ration moisture contents.

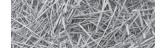


To avoid possible damage to the machine and risk of injury to the operator, consult with a DuraTech Industries International, Inc. (DuraTech Industries) representative before attempting to mix and distribute materials other than livestock forage.

The CMF-430 is used to mix hay and forage with grain and other supplements to feed livestock. The front conveyor with optional left, right or tandem discharge makes distribution of forage mix easier.

Statement of Misuse

This vertical mixer is not to be used for any purpose other than for which it is intended as explained in the operator's manual, advertising material and other pertinent written material prepared by DuraTech Industries. Any machine subject to misuse may cause personal injury or death, and void manufactures warranty.



Purpose

The purpose of this owner's manual is to explain maintenance requirements and routine adjustments for the most efficient operation of your CMF-430. There is also a trouble shooting section that may help in case of problems in the field. Any information not covered in this manual may be obtained from your dealer.



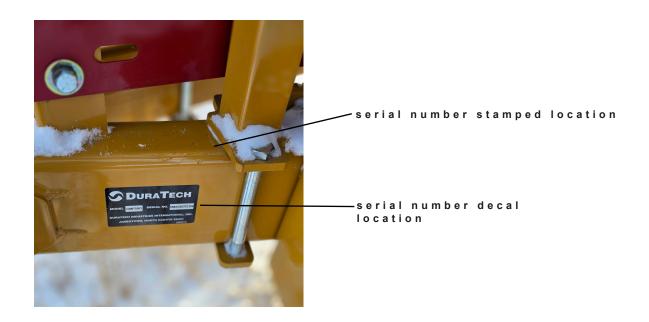
Special Note: When reference is made as to front, rear, right hand or left hand of this machine, the reference is always made from standing at the rear end of the machine and looking towards the hitch. Always use serial number and model number when referring to parts or problems. Please obtain your serial number and write it below for your future reference.

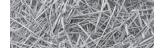
MODEL: CMF-430 VERTICAL MIXER SERIAL NO_

Serial Number Location

The serial number location decal can be found on the left hand side of the hitch frame between the jack bell and the hand rail mount. If the serial number decal is missing, the number is also stamped on the top of the hitch frame.

Please have the serial number ready when making inquiries regarding this machine.





How to use this manual

Manual organization

This manual is organized into the following parts:

- Part 1: Operating Manual explains how to set up, use and maintain the CMF-430 VERTICAL MIXER.
 - 1. Section 1: Safety
 - 2. Section 2: Dealer Preparation
 - 3. Section 3: Operation
 - 4. Section 4: Lubrication
 - 5. Section 5: Troubleshooting
 - 6. Section 6: Options
 - 7. Section 7: Maintenance
- Part 2: Parts Reference contains diagrams of each assembly, with the part number of each part. A key on the facing page contains a description of the part and the quantity used.
 - 1. The **parts reference** section can be found towards the back of this manual behind **Appendix B**.

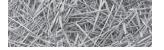
Dealer responsibilities

- Read Section 2, "Dealer Preparation," and perform the tasks outlined. Also perform a pre-operation inspection as described in Section 3.
- Upon delivery of the unit to the customer, it is your responsibility to conduct a training session on the safe operation of the unit for primary operator(s). You must also conduct a "walk-around" inspection of all safety instructional decals on the machine itself. Decals are illustrated in **Part 2: Parts Reference**.
- Complete and return the Warranty Registration Card. Receipt of this form is required to activate the warranty. **Appendix A** provides details of the warranty.

Operator responsibilities

- Operator is responsible for his safety.
- Operator is also responsible for the safety of others near the machine.
- Review Section 2, "Dealer Preparation," to verify that the machine has been prepared for use.
- Thoroughly review sections 1 and 3, which explain normal operation of the machine, and section 4, which explains maintenance requirements.
- Note the important safety information in the Forward and Section 1, "Safety"
- Keep copies of all manuals in a readily accessible location for future reference

TABLE OF CONTENTS



ectio	on 1: Safety	
1.1	Safety-alert symbols	
1.2	Operator - personal equipment	
1.3	Machine safety labels	
1.4	Shielding	
1.5	Safety review section	
1.6	Towing/road transport	· • •
ectio	on 2: Dealer Preparation	. 1
2.1	Pre-delivery inspection	•••
ectio	on 3: Operation	. 1
	Pre-starting inspection instructions	
3.2	Setup and Adjustments	
	3.2.1 Hitch Adjustments	
	3.2.2 Jack	· • •
	3.2.3 P.T.O. Shield	· • •
	3.2.4 Hydraulic Cylinder and Valve	· • •
	3.2.5 Tires and Rims	· • •
	3.2.6 Knives	· • •
	3.2.7 Vertical knives	
	3.2.8 Free motion automatic clutch	
	3.2.9 Scale Indicator	· • •
	3.2.10 Two-Speed Gearbox (Option)	· • •
	3.2.11 Extension Conveyor Spouts (Option)	
	3.2.12 Setting Chain Tension on Side Conveyors (Single Auger Machines	;)
3.3	Hitching the CMF-430	
3.4	Unhitching the CMF-430	· • •
3.5	Operation precautions and instructions	· • •
3.6	Starting the machine	· • •
3.7	Loading and processing	· • •
3.8	Unloading	· • •
3.9	Storing the CMF-430 mixer/feeder	· • •
3.10	Removing the CMF-430 from storage	
3.11	Normal shut-down procedure	· • •
3.12	Light Kit	· • •
ectio	n 4: Lubrication	. 2
4.1	Lubrication	
4.2	General appearance	
		•

TABLE OF CONTENTS

Section 5: Troubleshooting	31
Section 6: Options	32
6.1 Magnetic extension spouts	32
6.2 Non-magnetic extension spout	32
6.3 Two-Speed Gearbox	33
6.4 Conveyor Options	34
Section 7: Maintenance	35
7.1 Welding Procedure	35
Appendix A: Warranty	36
Appendix B: Specifications	37





CMF-430TM Vertical Mixer

Operating Instructions

DuraTech Industries International Inc. (DuraTech Industries) has made every effort to assure that this manual completely and accurately describes the operation and maintenance of the CMF-430™ Vertical Mixer as of the date of publication. DuraTech Industries reserves the right to make updates to the machine from time to time. Even in the event of such updates, you should still find this manual to be appropriate for the safe operation and maintenance of your unit.

This manual, as well as materials provided by component suppliers to DuraTech Industries are all considered to be part of the information package. Every operator is required to read and understand these manuals, and they should be located within easy access for periodic review.





are registered trademarks of DuraTech Industries

International, Inc. CMF-430 is a trademark of DuraTech Industries International, Inc.



Section 1: Safety

The safety of the operator is of great importance to DuraTech Industries. We have provided decals, shield and other safety features to aid you in using your machine safely. In addition, we ask you to be a careful operator who will properly use and service your Haybuster equipment.



WARNING: FAILURE TO COMPLY WITH SAFETY INSTRUCTIONS THAT FOLLOW WITHIN THIS MANUAL COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH. BEFORE ATTEMPTING TO OPERATE THIS MACHINE, CAREFULLY READ ALL INSTRUCTIONS CONTAINED WITHIN THIS MANUAL. ALSO READ THE INSTRUCTION MANUAL PROVIDED WITH YOUR TRACTOR.

THIS MACHINE IS NOT TO BE USED FOR ANY OTHER PURPOSE OTHER THAN THOSE EXPLAINED IN THE OPERATOR'S MANUAL, ADVERTISING LITERATURE OR OTHER DURATECH INDUSTRIES WRITTEN MATERIAL PERTAINING TO THE CMF-430.

1.1 Safety-alert symbols

Decals are illustrated in Part 2: Parts Reference.

The safety decals located on your machine contain important and useful information that will help you operate your equipment safely.

To assure that all decals remain in place and in good condition, follow the instructions below:

- Keep decals clean. Use soap and water not mineral spirits, adhesive cleaners and other similar cleaners that will damage the decal.
- Replace all damaged or missing decals. When attaching decals, surface temperature of the machine must be at least 40° F (5° C). The surface must be also be clean and dry.
- When replacing a machine component to which a decal is attached, be sure to also replace the decal.

DuraTech Industries uses industry accepted **ISO/ANSI** standards in labeling its products for safety and operational characteristics.



Safety-Alert Symbol

Read and recognize safety information. Be alert to the potential for personal injury when you see this safety-alert symbol.



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

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. 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.



DANGER:

Signal word - White Lettering/Red Background Safety Alert Symbol - White Triangle/Red Exclamation Point



WARNING:

Signal word - Black Lettering/Orange Background Safety Alert Symbol - Black Triangle/Orange Exclamation Point



CAUTION:

Signal word - Black Lettering/Yellow Background Safety Alert Symbol - Black Triangle/Yellow Exclamation Point

This manual uses the symbols to the right to denote important safety instructions and information.

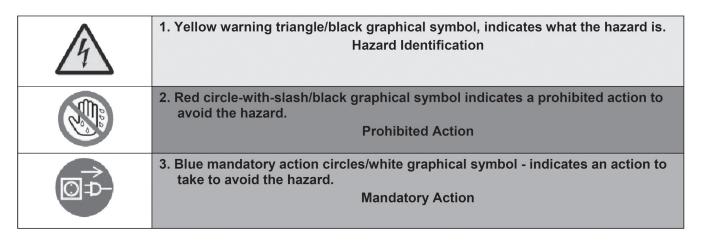
The **DANGER**, **WARNING** and **CAUTION** symbols are used to denote conditions as stated in the text above. Furthermore, the text dealing with these situations is surrounded by a box with a white background, will begin with **DANGER**, **WARNING**, or **CAUTION**.

The **INFORMATION** symbol is used to denote important information or notes in regards to maintenance and use of the machine. The text for this information is surrounded by a box with a light grey background, and will begin with either **Important** or **Note**.











1.2 Operator - personal equipment

THE OPERATOR

Physical Condition

You must be in good physical condition and mental health and not under the influence of any substance (drugs, alcohol) which might impair vision, dexterity or judgment.

Do not operate a **CMF-430 VERTICAL MIXER** when you are fatigued. Be alert - If you get tired while operating your **CMF-430 VERTICAL MIXER**, take a break. Fatigue may result in loss of control. Working with any farm equipment can be strenuous. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating

Proper Clothing



Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Avoid loosefitting jackets, scarfs, neckties, jewelry, flared or cuffed pants, unconfined long hair or anything that could become entangled with the machine.



Protect your hands with gloves when handling flail and sections. Heavyduty, nonslip gloves improve your grip and protect your hands.



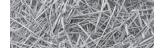
Good footing is most important. Wear sturdy boots with nonslip soles. Steel-toed safety boots are recommended.



To reduce the risk of injury to your eyes never operate a CMF-430 VERTICAL MIXER unless wearing goggles or properly fitted safety glasses with adequate top and side protection.



Tractor noise may damage your hearing. Always wear sound barriers (ear plugs or ear mufflers) to protect your hearing. Continual and regular users should have their hearing checked regularly.



1.3 Machine safety labels

The safety decals located on your machine contain important information that will help you operate your equipment. Become familiar with the decals and their locations.



DANGER: Rotating Driveline, Keep Away! Entanglement can cause serious injuries or death.

Do Not Operate Without

- All driveline guards, tractor and equipment shields in place.
- · Drivelines securely attached at both-ends.
- Driveline guards that turn freely on driveline.



6500085



DANGER

- Rotating parts can entangle or strike people, resulting in death.
- Never enter a mixer/feeder while in operation.
- Operate the mixer/feeder from the operator's seat only.



6500383



WARNING: HIGH-PRESSURE FLUID HAZARD

To prevent serious injury or death:

- Relieve pressure on system before repairing or adjusting or disconnecting.
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
- Keep all components in good repair.



6500220





WARNING: Pitch Point Stay Back



6500339



WARNING: FOR YOUR PROTECTION AND SAFETY OF OTHERS, FOLLOW THESE SAFETY RULES.

- Read and understand operators manual before operating machine.
- Place all controls in neutral, stop engine, remove ignition key, lock out power source, and wait for all motion to stop before servicing, adjusting, repairing, or unplugging.
- Read and understand all decals on machine for your safety.
- Keep all shields in place while machine is in operation.
- Keep hands, feet, hair, and clothing away from moving parts.
- Keep others away from machine while in operation.
- 7. Install safety locks before transporting, or working beneath components.
- 8. Do not allow riders at any time.
- Do not leave machine unattended with engine running.
- 10. Keep all hydraulic lines, couplings, and fittings free of leaks during operation.
- 11. Keep away from overhead electrical lines.
 Electrocution can occur without direct contact.
- 12. Review safety instructions periodically.



6500208

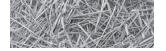


WARNING: No Riders

Serious personal injury could result from riding on the machine.



6500043





WARNING: Risk of eye injury Eye Protection required



WARNING

Risk of eye injury.

Eye protection required.

6500487



WARNING: Moving parts can crush and cut. Keep hands clear.



WARNING

Moving parts can crush and cut.

Keep hands clear.

6500488



WARNING: Noise hazzard. Ear protection required.



WARNING

Noise hazard.

Ear protection required.

6500489



WARNING: No Step

Do not step, stand, or sit on this surface. May cause injury and/or equipment damage.



WARNING

No Step.
Do not step, stand or sit on this surface.
May cause injury and/or equipment damage.

6500490



CAUTION:

- Adjust tractor drawbar so that the distance from the end of the PTO shaft on the tractor to the center of the drawbar hitch pin is 16".
- 2. Adjust the hitch clevis so the machine is parallel with the ground when hitched to tractor.
- 3. Hitch machine to tractor with a 1" hitch pin and secure to prevent loss.
- Adjust PTO bearing bracket so the shaft on the machine is level with the PTO shaft on the tractor.



6500322

Replacement decals can be purchased from your Haybuster dealer.



1.4 Shielding

Shields are installed for your protection. Keep them in place, and replace damaged shields.

figure 1.1 PTO driveline sheild



CAUTION! NO STEP! DO NOT STEP OR STAND AT THIS LOCATION

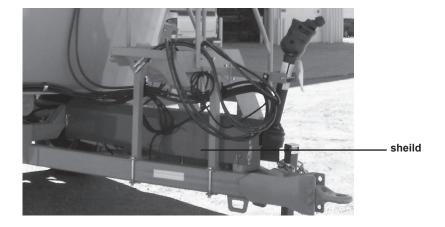
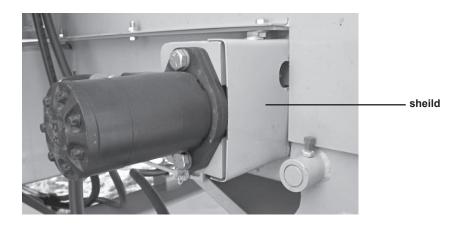


figure 1.2 Orbit motor auger drive sheild





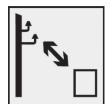
1.5 Safety review section

BEFORE OPERATING

- Read and follow all instructions contained in:
 - 1. This CMF-430 operator's manual
 - 2. Tractor operator's manual
 - 3. Decals on the CMF-430



Note: Additional copies of the above mentioned materials can be obtained from your dealer.



Keep sufficient distance away from electrical power lines.

WARNING: Electrocution is possible when running this machine during an electric storm or heavy fog.

- Allow only responsible, properly instructed individuals to operate your machine. Provide proper training and carefully supervise inexperienced operators.
- Use a tractor which meets the tractor requirement contained within this manual. Additional weights may be necessary.
- Make sure all bystanders and other workers are clear before starting the tractor and CMF-430.
- Make no modifications to the machine unless specifically recommended or requested by DuraTech Industries.
- Check periodically for breaks or unusual wear and make any necessary repairs.
- Securely attach to towing unit. Use high strength, appropriately sized hitch pin with a mechanical retainer.
- If required install P.T.O. safety chain, check local regulations regarding safety chain requirements.
- Be sure that there are no tools lying on or in the CMF-430.
- Because it is possible that your CMF-430 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.



NO SMOKING IN THIS AREA



DANGER! NO OPEN FLAMES IN THIS AREA

• Do not allow anyone to stand between the tongue or hitch and the towing vehicle when backing up to the CMF-430.



• Be sure the tractor operator is the only person riding on the tractor.



Never allow riders on the machine at any time.

- Keep all bystanders, pets and livestock clear of work area.
- Keep hands and clothing clear of moving parts.
- Never enter the CMF-430 while in operation. Rotating parts can entangle or strike people, resulting in personal injury or death.
- Operate the CMF-430 from the operator's seat only.
- Power takeoff shafts must be locked in place with protective P.T.O. shields in place.
- Do not exceed load capacity of the CMF-430. (See loading instructions in Section 3.7)
- Do not clean, lubricate or adjust your CMF-430 while it is moving.
- Periodically clean the equipment to prevent buildup of dry combustible materials.
- Be especially observant of the operating area and terrain watch for holes, rocks other hidden hazards. Always inspect the area prior to operation.
- Be extra careful when working on inclines.
- Pick the most level route possible when transporting across fields. Avoid the edges of ditches or gullies and steep hillsides.
- Never leave the CMF-430 running unattended.
- As a precaution, always check the hardware on the CMF-430 following every 100 hours of operation. Correct all problems. Follow the maintenance safety procedures.

DURING SERVICE & MAINTENANCE

- Before working on or near the CMF-430 for any reason, including servicing, cleaning, unplugging or inspecting machine, use normal shut down procedures unless instructed differently in this manual.
- Never work on or near the CMF-430 unless engine is shut off, and all power drives and PTO are disengaged. Always follow normal shutdown procedures.
- Check periodically and tighten any loose bolts or connections.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. DuraTech Industries 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 its original design, DuraTech Industries does not accept any liability for injury or warranty.



- If it is necessary to operate the tractor engine indoors for more than a few seconds, be sure to provide enough ventilation to remove the tractor exhaust fumes.
- Hydraulic fluid escaping under pressure can be invisible and have enough force to penetrate the skin. When searching for a suspected leak, use a piece of wood or cardboard rather than your hands. If injured, seek medical attention immediately to prevent serious infection.
- Relieve all pressure in the hydraulic system before disconnecting the hose or performing other work on the system. Make sure all connections are tight and the hose is in good condition before applying pressure to the system.
- Replace all shields and guards after servicing and before moving.



DO NOT PERFORM MAINTENANCE ON THE INTERIOR OF THE TUB DURING WET WEATHER CONDITIONS

1.6 Towing/road transport

- Use good judgment and drive slowly over rough or uneven terrain.
- Avoid loose fill, rocks and holes; they can be dangerous for equipment operation or movement. Allow for unit length when making turns.
- Be sure tractor brakes are properly adjusted and foot pedals are locked together.
- Check your state laws regarding the use of light, slow moving vehicle signs, safety chain and other possible requirements.



Section 2: Dealer Preparation

2.1 Pre-delivery inspection

Instructions: Before delivering the machine, check the following items carefully and make corrections when necessary. Place an "X" in the box after each item has been checked and found to be acceptable.

Check machine for missing items or damage in transit.
Check for loose bolts. Torque to 130-184 ft lbs. (18-25 kgm)
Check all hydraulic components for leaks or damage.
Check lug bolts for tightness.
Check tires for proper air pressure. (44 PSI or 300 kPa cold) Verify tire markings before inflating.
Check condition of tire rims
Check machine for proper lubrication.
Check all shields for proper installation and condition.
Check condition of all decals.
Check all phases of operation.
Check gearbox oil levels.



Section 3: Operation

To insure long life and economical operation, we highly recommend the operator of the CMF-430 be thoroughly instructed in the maintenance and operation of the machine. There is no substitute for a sound preventative maintenance program and well trained operator.

Prior to starting the engine of the tractor, we recommend the operator make a visual inspection of the unit. This can be done as the lubrication is being carried out. Any items that are worn, broken, missing or needing adjustment must be serviced accordingly before operating the CMF-430.

3.1 Pre-starting inspection instructions



WARNING: Before inspecting the machine, use the normal shut-down procedure in Section 3.11.

Check the following:

☐ Hydraulic components for leaks or damage.



Warning: Hydraulic fluid escaping under pressure can be almost invisible and can have sufficient force to penetrate the skin. When searching for suspected leaks, use a piece of wood or cardboard rather than your hands. If injured, seek medical attention immediately to prevent serious infection or reaction.

- ☐ Check for loose bolts, worn or broken parts.
- Lug nuts for tightness. Torque to 130-184 ft lbs. (18-25 kgm)
- ☐ Condition of tire rims.
- Tires for proper air pressure. (44 PSI or 300 kPa cold) Verify tire markings before inflating.
- ☐ Installation and condition of shields.
- ☐ Installations of slow moving vehicle (SMV) sign if required.
- ☐ Condition of decals.
- ☐ Gearbox oil levels.



3.2 Setup and Adjustments

3.2.1 Hitch Adjustments

The hitch is adjustable so that the machine is parallel to the ground when attached to the tractor drawbar. This is accomplished by removing the two mounting bolts and reinstalling them with the hitch at the proper height. The distance from the end of the P.T.O. shaft on the tractor to the center of the drawbar hitch pin hole should be 16" (41cm), and the height from the top of the drawbar to the centerline of the P.T.O, should be 8" (20 cm).

figure 3.1 Hitch adjustments



The hitch pin should be of proper diameter to prevent movement and length to extend through all components of the hitch. The pin should be secured with a hairpin clip or suitable device to prevent the loss of the pin.

3.2.2 Jack

An adjustable jack is provided with the machine to support the hitch when the machine is disconnected from the tractor. The jack must only be used on firm, level ground or similar base to prevent it from sinking.

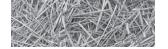


Warning: Never unhook the CMF-430 with material in tub.

When unhooking the machine remove the jack pin and move the jack from the storage location to the hitch position and reinstall the pin. Crank the jack until the hitch is no longer supported by the drawbar of the tractor. The hitch pin now can be removed.



Warning: Never use the jack without reinstalling the jack pin.



When hooking up the machine, install a proper hitch pin and secure it with a hairpin clip or comparable device, crank the jack until the foot of the jack is fully raised. Remove the jack pin and relocate the jack to the storage location. Reinstall the jack pin.

3.2.3 P.T.O. Shield



Warning: Before lifting the P.T.O. shield be sure to follow the normal shut down procedure. Be certain that the tractor is shut off and all rotating components of the machine have come to a complete stop before lifting shield. Loose clothing is discouraged, and long hair should be restrained whenever working on P.T.O. shafts.

To raise the P.T.O. shield, remove the bolts from the front of the shield and lift the shield. If it does not pivot freely look for build up of debris or other obstructions at the pivot point. Do not force the shield, as damage to the shield may occur.

figure 3.2 Raising the P.T.O. shield



CAUTION! NO STEP! DO NOT STEP OR STAND AT THIS LOCATION



PTO shield bolt

3.2.4 Hydraulic Cylinder and Valve

All cylinder and valve hose connections should be tight and leak free. If the area near a hose connection becomes oily or dirty, repairs should be made to seal the leak. Hoses should be free of cracks or cuts to ensure safe operation. Cylinder seal kits are available from your dealer to repair a leaky cylinder. Pin connections should be free of excessive wear. If pins become worn they should be replaced. Also check yokes and mounts for cracks and wear.



Warning: Hydraulic fluid escaping under pressure can be almost invisible and can have sufficient force to penetrate the skin. When searching for suspected leaks, use a piece of cardboard or wood rather than your hands. If injured seek qualified medical attention immediately to prevent serious infection or reaction.



3.2.5 Tires and Rims

Tires should be inflated to 44 PSI (300 kPa) and should be free of cuts or cracks. There should also be adequate tread and no visible cords, wires or tread separation. Tires must also be of proper load rating, speed rating and size.

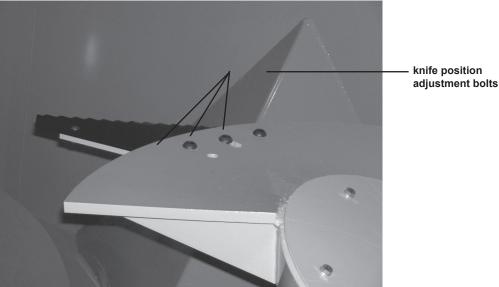
Rims must be free of cracks and rust pitting. Lug bolts must also be tight. Inspect the area around the lug bolts. Lug nuts need to be torqued to 130-184 ft lbs. (18-25 kgm). If rust develops this is a sign of loose lug bolts. Check wheel bearings and seals, replace and grease as use requires.

3.2.6 Knives

Your new CMF is setup with seven knives on each auger, the top two knives in each auger have two positions, in or out. When processing tough hay the knives should be in the out position to better attack the long stem hay. Having the knives in the out position increases the horsepower requirements. Alternatively, knives can be removed if the ration does not require much processing and/or over-processing is a possibility. Ingredient condition and rations will determine the optimum layout.

figure 3.3 Knife position adjustments, knives in the 'outside' position





3.2.7 Vertical knives

The purpose of the vertical knives is to create restriction to the flow of material around the tub and provide a shear point for the auger knives. The further into the tub the vertical knives are set the shorter the final stem length will be. The vertical knives also can affect the horsepower demand, which may be important depending on tractor size. Start using your CMF with the knives at neutral or one hole in and adjust as necessary.

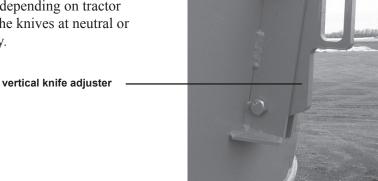
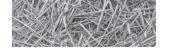


figure 3.4 Vertical knife adjustments, shown with knife in the fully engaged position



3.2.8 Free motion automatic clutch

Torque protection is built into the PTO driveline with two free motion automatic clutches. These clutches are located on each driveline immediately before each gearbox. When overload occurs the clutch disengages and does not reengage until the driveline speed is reduced to near zero. The clutch makes a loud click when it disengages.



3.2.9 Scale Indicator

The indicator for the four-point scale should be mounted on the indicator mount located on top of the main conveyor. The mount can be mounted in the left or right side of the conveyor. The indicator is powered by a 12 volt battery located under the tub on the left side of the frame.



3.2.10 Two-Speed Gearbox (Option)

The two-speed gearbox is available on the CMF-430 for operators who want more control of their mixing speeds, want to reduce overall horsepower requirements, or prefer to turn off mixer while transporting a loaded mixer. The two-speed gearbox has two speeds, low and high. Pictures in **Section 6.5**, show lever in two positions in both gear selections.

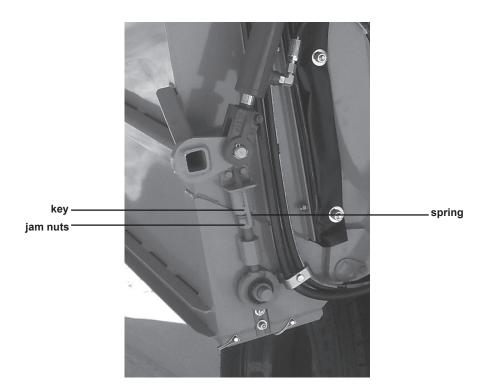


3.2.11 Extension Conveyor Spouts (Option)

Spouts are available with or without magnets. Spouts are adjustable in three hole positions on sides. Point spout down further when running the conveyor extensions at higher angles to avoid material build up on the end of the conveyor. When running conveyor at lower angles, direct spouts so that the magnets are positioned further into the flow of material. Pictures of available spouts can be found in **Sections 6.2 and 6.3**.

3.2.12 Setting Chain Tension on Side Conveyors (Single Auger Machines)

Tension the chain assemblies while the conveyor is running. Turn the tensioning nut compressing the spring until the spring is flush with the key attached to the side of the spring cup. Set the other side. After both springs are maintaining constant compression at the end of the keys, lock the jam nuts.



3.3 Hitching the CMF-430



Warning: Do not operate the CMF-430 unless the tractor complies with the following requirements:

- Tractor has a minimum of 80 horsepower. (without two-speed option)
- Tractor has rollover protective structure and seatbelts.
- Tractor's hydraulic system has at least (2) two-way valves, and a minimum flow of 8 GPM @ 1500 psi.
- 1-3/8" 6-spline P.T.O. shaft

To hitch the CMF-430 to the tractor, perform the following steps:

1. Adjust the tractor drawbar so that the distance from the end of the P.T.O. shaft on the tractor to the center of the drawbar hitch pin hole should be 16" (41 cm), and the height for the top of the centerline of the P.T.O. should be 8" (20 cm). Refer to figure 3.6

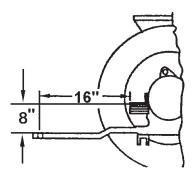
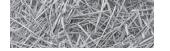


figure 3.6 Safe P.T.O. distance

- 2. Hitch the CMF-430 to the tractor drawbar. Adjust the hitch so the machine is parallel with the ground.
- 3. The hitch pin should be sized to prevent excessive movement, and should extend through all components of the hitch. The pin should be secured with a hairpin clip or suitable device to prevent the loss of the pin.
- 4. Raise the jack. Pull the lock pin and store in transport position.
- 5. Attach the P.T.O. shaft to the tractor P.T.O. shaft. Depress coupling and slide the coupling onto the splined shaft. Make sure the spring loaded safety catch is properly seated.



- 6. This machine is set up to operate on 1000 rpm only!
- 7. If required, install the safety chain. Check local regulations regarding safety chain requirements. Refer to figure 3.7

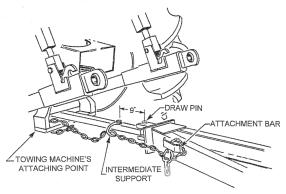


figure 3.7 Safety chain installation

- 8. Connect the two hydraulic hoses from the hydraulic door cylinder to one set of hydraulic couplers on the tractor. Connect the two hydraulic hoses from the discharge conveyor to the second set of hydraulic couplers on the tractor. Connect the two hydraulic hoses from the extension conveyor to the third set of hydraulic couplers on the tractor.
- 9. If equipped with a rear door and/or second extension conveyor, connect the two hydraulic hoses from each to the fourth and/or fifth hydraulic couplers on the tractor.

3.4 Unhitching the CMF-430

To unhitch the CMF-430, perform the following steps:



Warning: Never unhook the CMF-430 with material in tub.

- 1. Follow normal shut-down procedure.
- 2. Lower jack and secure. Raise the tongue off the tractor draw bar.
- 3. Place wheel chocks under wheels to keep from rolling.
- 4. Detach the P.T.O. shaft from the tractor.
- 5. Cycle the hydraulic control levers to release any pressure in the hydraulic hoses.
- 6. Detach the hydraulic hoses.
- 7. Remove the safety chain, if installed.
- 8. Remove the hitch pin.



3.5 Operation precautions and instructions

- Make sure there are no bystanders in the way.
- Before loading, run the mixer empty and check all operations.
- Do not overload the mixer.

Be sure all shields are in place before operation.

- Use common sense when operating.
- Never attempt to climb on the CMF while the tractor is running.

•

3.6 Starting the machine

- 1. Park machine on a hard level surface keeping the driveline as straight as possible.
- 2. Close the mixer door.
- 3. If the scale indicator is not at zero, re-zero indicator per the scale indicator manufacturer's instructions.
- 4. If equipped with two-speed gearbox option, select mixing gear desired.
- 5. Engage the tractor PTO and increase engine RPM to desired mixing speed.

3.7 Loading and processing

- 1. Load baled products and materials that require processing first. The center core of round bales will be the toughest to process. Allow enough processing time to adequately process roughage.
- 2. Set vertical knives per adjustment section.
- 3. Do not over process as processing continues through the mixing stage.
- 4. Load silage and/or other high moisture products next.
- 5. Load dry ingredients.
- 6. Load liquid supplements last.
- 7. Allow three to four minutes of mixing time after last ingredient.
- 8. ALL PROCESSING AND MIXING TIMES WILL VARY.
- 9. Do not overload the CMF.



3.8 Unloading

To unload the CMF-430, perform the following steps:

- 1. If possible, move the mixer to the unloading site while finishing the mixing stage to avoid the need for loaded PTO start-up.
- 2. Align CMF with bunk and lower the conveyor extension to desired angle (if equipped).
- 3. Engage the chain conveyor; chain speed is controlled using the auxiliary valve flow control on the tractor.
- 4. If the augers are not already engaged, engage the PTO.
- 5. Open the tub door and proceed along the bunk. Engine speeds around 1500 rpm are usually adequate when the tub is full, however engine should be run at rated speed to clean out the tub and provide even feed flow when the tub is near empty. If equipped with two-speed gearbox, turn off mixer and shift to high speed and re-engage to achieve maximum clean out RPM. Most new tractors have P.T.O. brakes which will require the tractor to be turned off before the two-speed can be shifted.

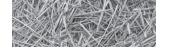
3.9 Storing the CMF-430 mixer/feeder



Warning: When preparing machine for storage, use normal shut-down procedure.

To prepare the CMF-430 for storage, perform the following steps:

- 1. Clean all mud, dirt, grease and other foreign material from the exterior and interior of the machine. Wash the complete machine. To inhibit rusting repaint places where bare metal is exposed.
- 2. Place the jackstand in the down and in locked position. Place wheel chocks under wheels if needed to keep machine from rolling. If possible, store the machine in a dry, protected place. (If it is necessary to store the machine outside, cover it with waterproof canvas, plastic, or other suitable protective material.)
- 3. Coat exposed lift cylinder rods with grease. Oil chains on conveyors. Lubricate thoroughly according to lubrication instructions. Repack wheel bearings.
- 4. Check the machine for any worn or broken parts. By ordering parts now, you will avoid delays when it is time to remove the machine from storage. When ordering parts always specify machine serial number and the part number of the replacement part. Part numbers can be found in the parts section of this manual.



3.10 Removing the CMF-430 from storage

To remove the CMF-430 from storage, perform the following steps:

- 1. Remove all protective coverings.
- 2. Remove blockings from under the CMF-430. Check tire pressure.
- 3. Lubricate machine in accordance with lubrication instructions found in this manual.
- 4. Check the conveyor chain tension.
- 5. Check all hydraulic hoses for deterioration and, if necessary, replace. Tighten any loose bolts, nuts and hydraulic fittings.
- 6. Follow pre-starting inspection instructions.

3.11 Normal shut-down procedure



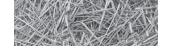
Warning: For your safety and the safety of others, you must use the following normal shut-down procedure before leaving the tractor controls unattended for any reason, including servicing, cleaning, or inspecting the CMF-430. A variation of the following procedure may be used if so instructed within this manual or your tractor manual or if an extreme emergency requires it.

- 1. Disengage P.T.O.
- 2. Place transmission in park or set park brake.
- 3. Shut off machine and remove key.
- 4. Wait for all movement to stop.
- 5. Engage tractor park brake, turnoff and remove key engine prior to entering the tub and/or making any adjustments to CMF.

3.12 Light Kit

figure 3.8 Light kit for the CMF-430





Section 4: Lubrication

The operator should make a check of all grease fittings on the unit before beginning to operate it so as to become familiar with their location and correct service schedule.



Warning: Use normal shut-down procedure (Section 3.11) before lubricating the machine.

4.1 Lubrication

Use only a high quality, #2 multi-purpose grease when lubricating the unit. Make sure all fittings and the nozzle of the grease applicator are clean before applying the grease. If grease fittings are missing, replace them immediately.

Lubricate with grease every ten (10) hours of operating time.

- 1. P.T.O. universal joints 8 places
 - **1a.** As many as seven (8) pumps of grease are required to purge all cross and bearing lube point with fresh grease.
- 2. Telescoping shafts -2 places
 - 2a. Telescoping members require enough grease to maintain a smooth sliding action. When telescoping members become contaminated with dirty grease, they should be inspected and cleaned to insure smooth operation.
 - **2b.** Shield components should be lubed and inspected to insure all components are in working condition or are replaced if damaged. A properly maintained shield will inhibit dirt from contaminating telescoping members.
- 3. P.T.O stand bearing -1
- 4. Conveyor bearings 2
- 5. Extension conveyor bearings 2 each

Lubricate with grease every fifty (50) hours of operating time.

- 6. Automatic clutches Two places 1 pump only. *Be careful not to over grease*.
- 7. Auger grease line 1

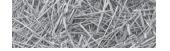


figure 4.1 P.T.O. Universal joint (1 of 8)

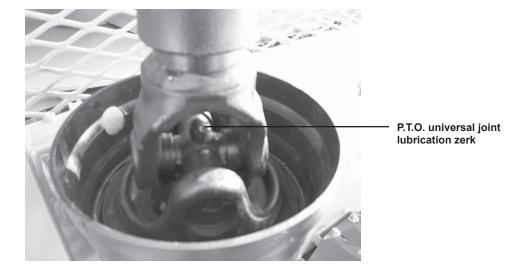


figure 4.2 P.T.O. Universal joint (2, 3 & 4 of 8)

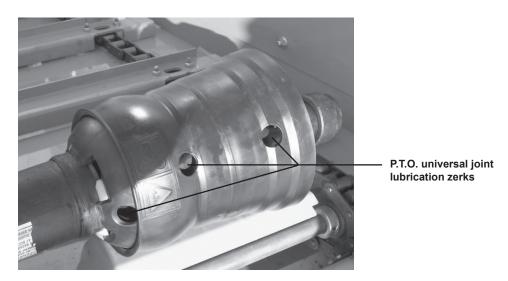


figure 4.3 P.T.O. Universal joint (5 of 8), and P.T.O stand bearing (1 of 1)

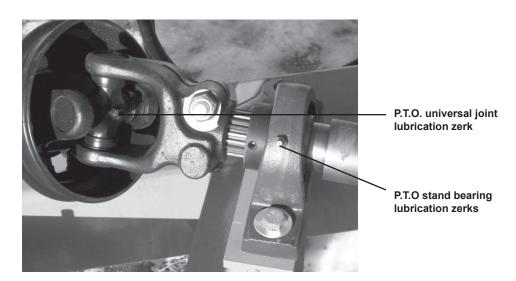




figure 4.4 P.T.O. Universal joint (6 of 8), and automatic clutch

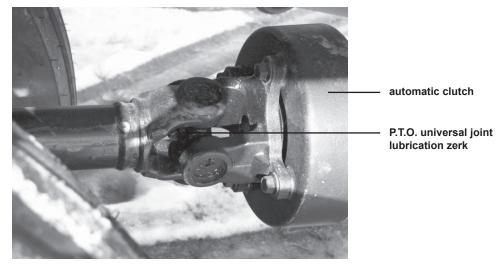


figure 4.5 P.T.O. Universal joint (7 of 8)

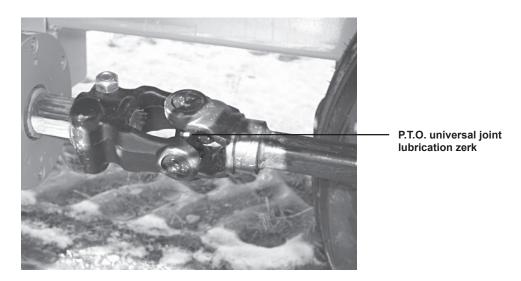
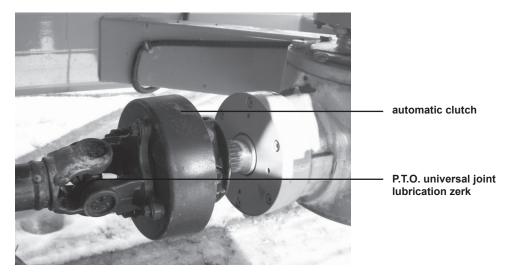


figure 4.6 P.T.O. Universal joint (8 of 8), and automatic clutch



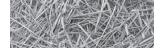
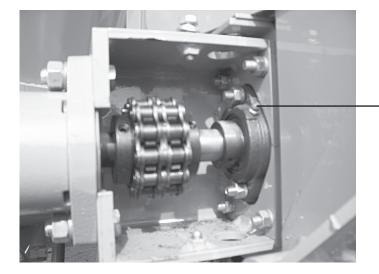
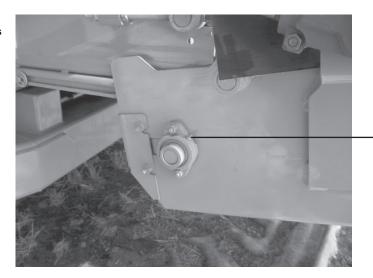


figure 4.7 Conveyor bearings lubrication point (1 of 2)



conveyor bearings lubrication zerk

figure 4.8 Extention conveyor bearings lubrication point (1 of 4)



extention conveyor bearings lubrication zerk

figure 4.9 Telescoping P.T.O. shaft



telescoping shaft



figure 4.10 Auger grease line



auger grease line lubrication zerk



4.1 Lubrication cont.

Wheel bearings: repack annually

Gearbox: Grease 20-30 pumps every 250 hours (each gearbox), located on the bottom of the tub in front of the left

Chains: Oil conveyor chains every 15 hours.

When to change oil in gearboxes:

• After the first 50-100 hours of operation, drain initial oil, preferably when box is warm. There after oil should be changed every 1500 hours or 12 months, whichever comes first. If machine usage is severe or more than 10 loads per day, it is advisable to change the oil every 1000 hours or 6 months. Inspect and wash oil reservoir breather cap as needed. Air dry before reinstalling. Fill each gearbox with approximately 5 ½ gallons of EP150 or 80w-90 GL-5 weight Gear Lube. RR-USA recommends using synthetic oil in their gearbox. Monitor the oil level in the reservoir daily. Oil level should be in the middle of the sight gauge. The working temperature must not exceed (90 degrees C) 194 degrees F max. Proper lubrication is essential for efficient running and long life of the unit as a whole. It is also important to select the correct type of oil to ensure the long life of the gear reducer.

Procedure for changing oil in gearboxes (see chart 4.1 on the following page):

- 1. Remove magnetic drain plug from the bottom of the right angle gearbox and clean the magnet if it has any metal on it. Return plug to the gearbox before filling.
- 2. Disconnect the lube lines from the top of the gearboxes at the tee fitting. Disconnect the other lube lines from the bottom of the gearboxes at the other tee.
- 3. To fill, connect (-8)3/4" MJIC fitting to hose connected to the right angle box and place overflow hose in a pan. Pump oil into the gearbox until it runs out of the overflow hose. Reconnect hoses to the correct fitting.
- 4. Fill reservoir and continue to monitor reservoir levels during operation so that oil remains half-way up in sight gauge or higher, allow for more expansion in warmer climates.
- 5. Two-speed gearbox should be half full of oil so that oil is present in sight gauge. Follow same maintenance schedule and use the same oils as recommended above for vertical gearboxes.
- 6. Any brand of 80w-90 gear oil with a GL-5 rating may also be used; *RR-USA recommends use of synthetic oils.*

Recommendation: Prior to starting each day it is advisable to check the oil level of gearboxes at the sight gauge.

Contact information for:

ConocoPhillips Lubricants: Telephone: 1-800-255-9556 (Technical Hotline)

Email: conocolubricants@conophillips.com

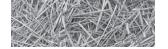


chart 4.1 lubrication chart for reduction gears

Ambient	-4 F - +41 F	- 41 F - +104F	+86 F - +149 F	+104 F - +149 F
Te mpe rature	-20 C - +5 C	+5 C - +40 C	+30 C - ++65 C	+40 C - +65 C
Viscosity				
ISO VG	100	150	220	320
E/50 C	7.3	10.8 -12.5	15 -18	22 - 26
AGIP	BLASIA 100	BLASIA 150	BLASIA 220	BLASIA 320
BP-MACH	ENERGOL	ENERGOL	ENERGOL	ENERGOL
	GR-HP100	GR-HP150	GR-HP220	GR-HP320
CASTROL	ALPHA SP 100	ALPHA SP 150	ALPHA SP 220	ALPHA SP 320
CHEVRON	NL GEAR	NL GEAR	NL GEAR	NL GEAR
	COMPOUND	COMPOUND	COMPOUND	COMPOUND
	100	150	220	320
ELF	REDUCTELF SP 100	REDUCTELF SP 150	REDUCTELF SP 220	REDUCTELF SP 320
ESSO	SPARTAN EP 100	SPARTAN EP 150	SPARTAN EP 220	SPARTAN EP
				320
FINA	GIRAN 100	GIRAN 150	GIRAN 220	GIRAN 320
IP	MELLANA 100	MELLANA 150	MELLANA 220	MELLANA 320
MOBIL		MOBILGEAR 629	MOBILGEAR 630	MOBILGEAR 632
SHELL	OMALA EP 100	OMALA EP 150	OMALA EP 220	OMALA EP 320
TOTAL	CARTER EP 100	CARTER EP 150	CARTER EP 220	CARTER EP 320

4.2 General appearance

Clean all mud, dirt, grease and other foreign material from the exterior of the machine. Wash the entire machine. Repaint places where bare metal is exposed.



Section 5: Troubleshooting

Troubleshooting chart

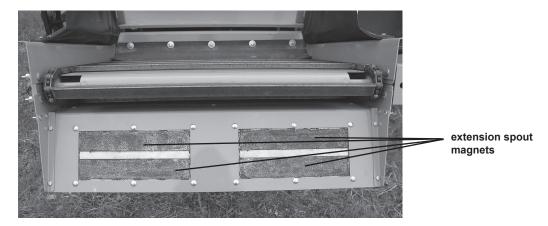
Problem	Cause	Remedy
1.Spillage over tub	1. Vertical knives are in to far.	1. Pull knives out one notch at a time until material stops spilling.
	2. Auger speed is to fast.	2. Slow engine speed
	3. Tub is overfilled	3. Wait longer while processing first bale, before adding more hay or other ingredients. Allow more time to process bulky materials.
		4. Park on level ground.
2. Augers stopped turning	Automatic clutch disengaged because of shock loading	Disengage tractor PTO. Wait till driveshaft stops and reengage PTO. Clutch automatically reengages when driveline slows to near zero rpm. May need to shift
		Gearbox to low.
	2. Verify two-speed is engaged	2.Check lever position on two-speed gearbox,
		Forward-high speed
		Middle-neutral
		Back-low speed
3. Convey or does not move	1. Convey or plugged	1. Look for obstruction
	2. Chains to tight	2. Reduce chain tension
	3. Hoses uncoupled.	3. Make sure hoses are coupled properly.
4. Convey or plugged at transition to extension	Extension conveyor running at to steep of an incline	Run extension conveyor at lowest height possible to reach the necessary bunk height.
	2. Convey or stalls.	Running conveyor at steep angle, move spout to a more downward position.
5. Ration over processed	1. Processing continues through mixing stage	Add secondary ingredients that don't require processing to the batch sooner.
	2. To many knives	2. Take knives out.
	3. Vertical knives in to far	3. Pull vertical knives out further,
	4. Auger speed to fast	4. Reduce tractor engine rp m
6. Ration under processed	1. Not enough knives on the augers	1. Add knives
	2. Knives are dull	2. Replace knives
	3. Auger speed not fast enough	3. Increase auger speed, careful not to cause spillage.
	4. Vertical knives not in far enough	4. Push vertical knives in one notch.
7. Scale does not power up	1. Battery not charged	1. Charge the battery/replace if necessary.
	2. Loose battery connection	2. Tighten/clean connections at battery post.
	3.Battery power cable damaged	3. Repair/replace cable.
(Consult scale manufactures manual for all other information)	For 24 hour Tech service, Go to digi-star.com or call 1-800-225-7695	
8. Door is loose/does not seal	1. Door clamps out of adjustment	1. Readjust door clamps



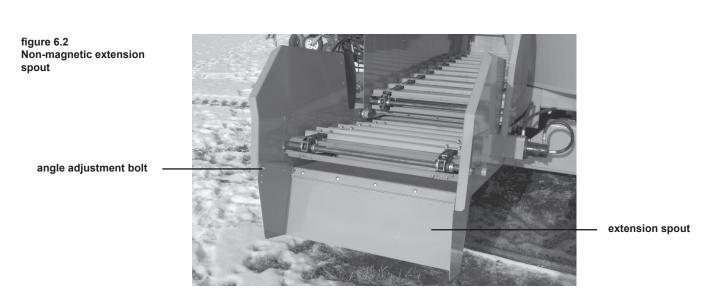
Section 6: Options

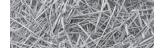
6.1 Magnetic extension spouts

figure 6.1 Magnetic extension spout



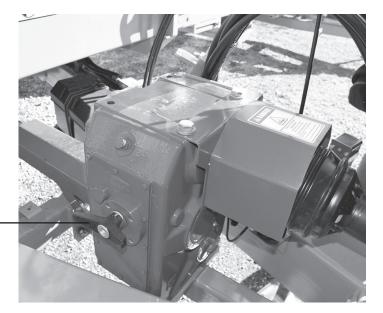
6.2 Non-magnetic extension spout





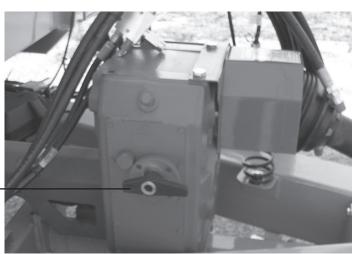
6.3 Two-Speed Gearbox

figure 6.4 Two speed gearbox in low speed position



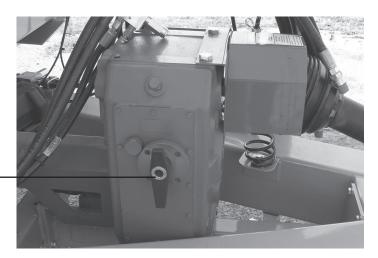
speed selector — low speed position

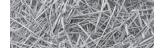
figure 6.5 Two speed gearbox in high speed position



speed selector ——high speed position

figure 6.6 Two speed gearbox in neutral speed position





Conveyor Options 6.4







5-Ft. Conveyor



Section 7: Maintenance

7.1 Welding Procedure

CMF-430 welding procedures for machines with a weight scale

Precautions are required for welding on machines with electronic components. Electronic components including but not limited to: electronic scales.

Proper welding procedures are necessary with in order to avoid damage to the components, their sensors, and associated components.

When possible, remove the parts to be welded from the machine.

If not possible to remove the parts, follow the following procedure:



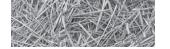
Note: Do not ground the welder to electrical components listed above, sensors, or wiring. Improper grounding can also damage bearings of hydraulic components. Clamp the ground cable from the welder to the part that will be welded. Place the clamp as close as possible to the weld. This will help reduce the possibility of damage.

- 1. Unhitch the CMF-430 from the tractor.
- 2. Disconnect the connectors from the electronic scale. Move the connectors to a position that will not allow the connectors to accidentally move back and make contact with any of the pins.
- 3. Connect the welding ground cable directly to the part that will be welded. Place the ground cable as close as possible to the weld in order to reduce the possibility of welding current damage to bearings, hydraulic components, and electrical components.



Note: If the electrical/electronic components are used as a ground for the welder, or electrical/ electronic components are located between the welder ground and the weld, current flow from the welder could damage the components.

- 4. Protect the wiring harnesses and hydraulic lines from welding debris and spatter.
- 5. Use standard techniques to weld the materials.



Appendix A: Warranty

DuraTech Industries International Inc., warrants to the original purchaser for one year from purchase date that this product will be free from defects in material workmanship when used as intended and under normal maintenance and operating conditions. This warranty is limited to the replacement of any defective part or parts if DuraTech Industries is notified within thirty (30) days of failure.

DuraTech Industries International Inc. uses RR planetary gear boxes in all CMF machines. The planetary gear boxes carry a two year parts and labor warranty through DuraTech Industries International Inc.

BIMA two speed gear boxes are covered under the DuraTech Industries International Inc. standard one year warranty

This warranty shall become void if in DuraTech Industries International, Inc's., judgment the machine has been subject to misuse, negligence, alterations, damaged by accident or lack of required maintenance, or if the product has been used for a purpose for which it was not designed for.

All claims for warranty must be made through the dealer which originally sold the product and all warranty adjustments must be made through same.

This warranty does not apply to tires or bearings or any other trade accessories not manufactured by DuraTech Industries International Inc.'s. Buyer must rely solely on the existing warranty, if any, of these respective manufactures.

DuraTech Industries International Inc., shall **not** be held liable for damages of any kind, direct, contingent, or consequential to property under this warranty. DuraTech Industries International Inc., cannot be held liable for any damages resulting from causes beyond its control. DuraTech Industries International Inc., shall **not** be held liable under this warranty for loss of crops, or rental costs or any expense or loss for labor or supplies.

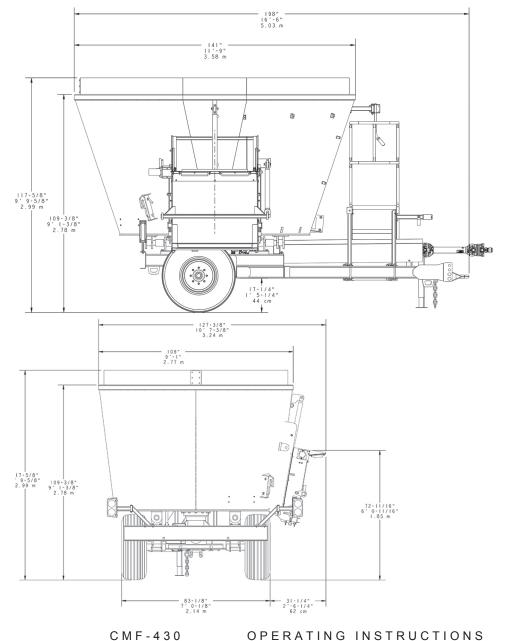
DuraTech Industries International Inc., reserves the right to make changes in material and/or design of this product at any time without notice.

All other warranties made with respect to this product, either expressed or implied, are hereby disclaimed by DuraTech Industries International.

Appendix B: CMF-430 Specifications

General specifications

Max. Weight	8,120 LBS (3,683 Kg)
Overall length, including trailer	198" (503 cm)
Overall width	128" (325 cm)
Tractor P.T.O speed(1-3/8" 6 spline)	540
Minimum horsepower required	80 HP. Min.
Mixing capacity, cu. ft	
Max. Gross Weight	17,120 LBS (7,764 Kg)
Tires – size.	146 X 16.1-12 ply
Loading height with extensions	117 5/8" (299 cm)
Loading height without extensions	109 3/8" (278 cm)







CMF-430TM Vertical Mixer

Parts Reference

DuraTech Industries International Inc. (DuraTech Industries) has made every effort to assure that this manual completely and accurately describes the operation and maintenance of the CMF-430™ Vertical Mixer as of the date of publication. DuraTech Industries reserves the right to make updates to the machine from time to time. Even in the event of such updates, you should still find this manual to be appropriate for the safe operation and maintenance of your unit.

This manual, as well as materials provided by component suppliers to DuraTech Industries are all considered to be part of the information package. Every operator is required to read and understand these manuals, and they should be located within easy access for periodic review.



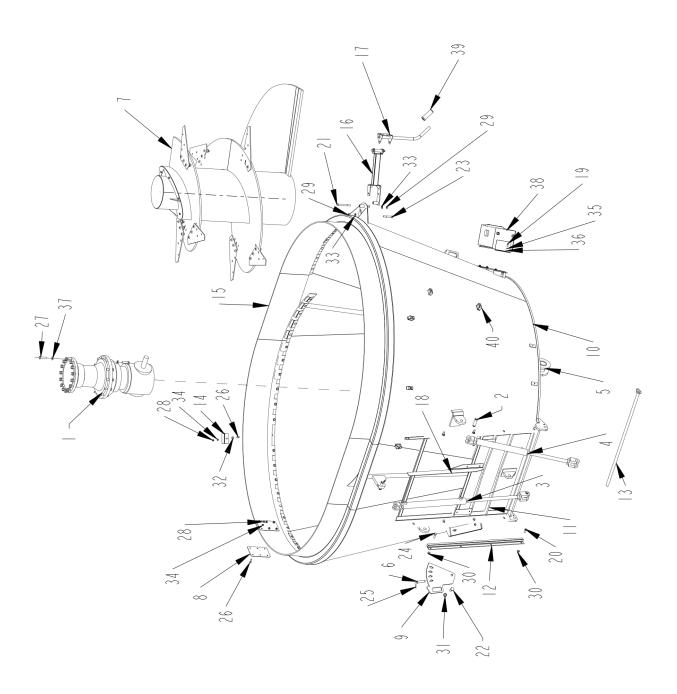
HAYBUSTER

INDUSTRIES & are registered trademarks of DuraTech Industries International, Inc. CMF-430 is a trademark of DuraTech Industries International, Inc.



CMF-430 Vertical Mixer Parts Reference

CMF-430 Right Hand Tub Assembly (for SN Up to VM15027430)	. 1
CMF-430 Right Hand Tub Assembly (for SN VM18028430 and Up)	5
CMF-430 Left Hand Tub Assembly (for SN Up to VM15027430)	. 9
CMF-430 Left Hand Tub Assembly (for SN VM18028430 and Up)	13
CMF-430 Mainframe Assembly W/Standard 1-3/8" CV Driveline	17
CMF-430 Auger Assembly (for SN up to VM15027430)	27
CMF-430 Auger Assembly (for SN VM18028430 and Up)	29
Optional 3 FT. Conveyor Assembly (for SN Up to VM13012430)	31
Optional 3 FT. Conveyor Assembly (for SN VM15013430 & Up)	35
Optional 5 FT. Conveyor Assembly (for SN Up to VM13012430)	39
Optional 5 FT. Conveyor Assembly (for SN VM15013430 and Up)	43
Digi-Star Cables, Brackets and Cells	47
Magnetic Conveyor Spout Assembly	49
Non-Magnetic Conveyor Assembly	51
Magnetic Tub Spout Assembly	53
Non-Magnetic Tub Spout Assembly	55
Conveyor and Door Hydraulic Assemblies	57
Gearbox Hydraulic and Lube Assembly	61
Planetary Gearbox Hydraulic Tank Assembly	63
Orbit Motors 3900025-3900032	65
Hydraulic Cylinder Assembly	67
3100224 - Planetary Gearbox	69
3100225 - 2-Speed Gearbox Assembly	71
2900140 - Hub Assembly	73
3600596 - Standard Driveline	75
3600793 - Standard Driveline	
3600794 - 2-Speed Driveline	79
3600795 - 2-Speed Driveline	81
3600840 - Standard Driveline (for a 1000 RPM Shaft Only)	83
CMF-430 Decals	85
CMF-430 Decal Locations	87
CMF-430 Decal Locations	88
5701081-Tail Light Harness Kit	89



CMF-430 Right Hand Tub Assembly (for SN Up to VM15027430)

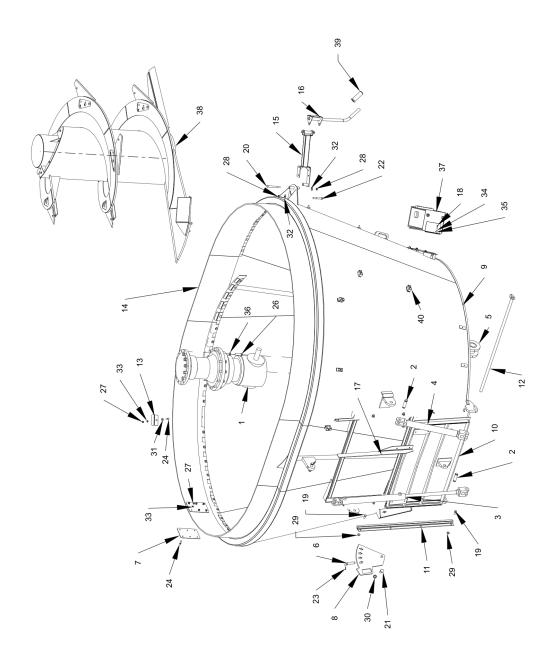
Item	Part No.	Name	Remarks	Qty	Uom
1	3100224	GRBX\PLANETARY\SNGL\1800\13.93:1	(for a 540 driveline)	1	EA
1a	3100214	GRBX\PLANETARY\DBL\1800	(for a 1000 RPM driveline)	1	EA
2	4100030	PIN 1" X 3-1/2" HYD. CYL.		3	EA.
3	4100241	CYL\HYD\2"X24"\1-1/4"ROD		1	EA
4	4100284	CYL\HYD\2X16\1-1/4RD\WELDE		1	EA
5	4703988	MNT\LOADCELL\TMR		4	EA
6	4704181	PIN\LOCK\3/4X2-1/2		2	EA
7	4704315	AUGERVASSY		1	EA
8	4704340	PL\CLMP\EXT\TUB		2	EA
9	4704567	KNIFE\VERT		2	EA
10	4705354	TUB\WELD\CMF430		1	EA
11	4705357	DOOR\TUB\CMF300		1	EA
12	4705360	CLAMP\DOOR\TUB		2	EA
13	4705366	PIN\CNVYR\SIDE		1	EA
14	4705376	CLAMP\BELT\CMF300		64	EA
15	4705377	BELT\12"\EXT\CMF430		1	EA
16	4705380	BRKT\MONITOR		1	EA
17	4705381	BRKT\SW\MONITOR		1	EA
18	4705528	INDCTR\DOOR		1	EA
19	4800013	BOLT\HEX\5/16X1		4	EA.
20	4800018	BOLT\HEX\1/2X1-1/4		2	EA.
21	4800041	BOLT\HEX\1/2X5		2	EA.
22	4800115	BOLT\HEX\3/4X2-1/2		2	EA.
23	4800135	BOLT\HEX\1/2X3-1/2		1	EA.
24	4800178	BOLT\HEX\1/2X1-3/4		6	EA.
25	4800456	PIN\RLLD\3/16X1-1/8		2	EA.
26	4800486	BOLT\HEX\3/8X1-1/4\GR8\NC		70	EA
27	4800948	BOLT\HEX\M16XM60		42	EA
28	4900002	NUT\HEX\3/8\NC		70	EA.
29	4900016	NUT\NYLCK\1/2\NC		3	EA
30	4900133	NUT\FLG\1/2\NC		8	EA
31	4900139	NUT\TPLCK\3/4\GR8\NC		2	EA.
32	5000001	WASH\FLAT\3/8		64	EA.
33	5000004	WASH\FLAT\1/2		3	EA.
34	5000019	WASH\LOCK\3/8		76	EA.
35	5000022	WASH\LOCK\5/16		4	EA.
36	5000023	WASH\FLAT\5/16		4	EA.
37	5000114	WASH\FLAT\5/8\EXTRTHK\GR8		42	EA

CME-	130 Right	Hand Tub	Accombly	for SN	Un to	VM15027430	۱۱
CIVIT-	430 KIUIII	. Manu Tub	ASSEIIIDIV	HOL SIN	UD IO	V IVI 1 3 U Z / 4 3 U	JI

This page intentionally left blank

CMF-430 Right Hand Tub Assembly (for SN Up to VM15027430)

Item	Part No.	Name	Remarks	Qty	Uom
38	5900039	TANK\LUBE\RH_PORTS\ASSY		1	EA.
39	7500736	GRIP\HAND\1X4-1/2\FLG		1	EA.
40	7501336	CLMP\HOSE\CUSH\3/8		5	EA
41	7501525	CLAMP\HOSE\1/2\2		2	EA
CA	4705356	TUB\ASSY\RH_DISCH\CMF430			EA



CMF-430 Right Hand Tub Assembly (for SN VM18028430 and Up)

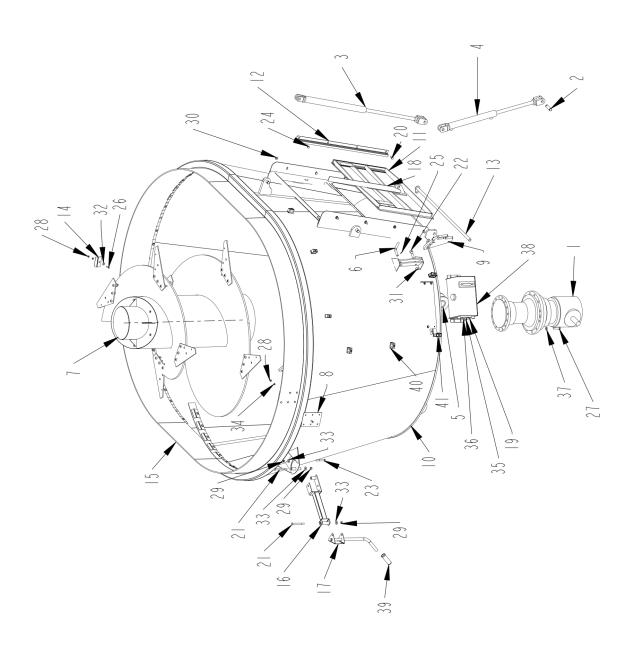
Item	Part No.	Name	Remarks	Qty	Uom
1	3100224	GRBX\PLANETARY\SNGL\1800\13.93:1	(for a 540 driveline)	1	EA
1A	3100214	GRBX\PLANETARY\DBL\1800	(for a 1000 RPM driveline)	1	EA
2	4100030	PIN 1" X 3-1/2" HYD. CYL.		3	EA.
3	4100241	CYL\HYD\2"X24"\1-1/4"ROD		1	EA
4	4100284	CYL\HYD\2X16\1-1/4RD\WELDE		1	EA
5	4703988	MNT\LOADCELL\TMR		4	EA
6	4704181	PIN\LOCK\3/4X2-1/2		2	EA
7	4704340	PL\CLMP\EXT\TUB		2	EA
8	4704567	KNIFE\VERT		2	EA
9	4705354	TUB\WELD\CMF430		1	EA
10	4705357	DOOR\TUB\CMF300		1	EA
11	4705360	CLAMP\DOOR\TUB		2	EA
12	4705366	PIN\CNVYR\SIDE		1	EA
13	4705376	CLAMP\BELT\CMF300		64	EA
14	4705377	BELT\12"\EXT\CMF430		1	EA
15	4705380	BRKT\MONITOR		1	EA
16	4705381	BRKT\SW\MONITOR		1	EA
17	4705528	INDCTR\DOOR		1	EA
18	4800013	BOLT\HEX\5/16X1		10	EA.
19	4800018	BOLT\HEX\1/2X1-1/4		8	EA.
20	4800041	BOLT\HEX\1/2X5		2	EA.
21	4800115	BOLT\HEX\3/4X2-1/2		2	EA.
22	4800135	BOLT\HEX\1/2X3-1/2		1	EA.
23	4800456	PIN\RLLD\3/16X1-1/8		2	EA.
24	4800486	BOLT\HEX\3/8X1-1/4\GR8\NC		70	EA
25	4800583	BOLT\HEX\5/8X2\GR8		5	EA
26	4800948	BOLT\HEX\M16XM60		42	EA
27	4900002	NUT\HEX\3/8\NC		70	EA.
28	4900016	NUT\NYLCK\1/2\NC		3	EA
29	4900133	NUT\FLG\1/2\NC		8	EA
30	4900139	NUT\TPLCK\3/4\GR8\NC		2	EA.
31	5000001	WASH\FLAT\3/8		64	EA.
32	5000004	WASH\FLAT\1/2		3	EA.
33	5000019	WASH\LOCK\3/8		76	EA.
34	5000022	WASH\LOCK\5/16		4	EA.
35	5000023	WASH\FLAT\5/16		4	EA.
36	5000114	WASH\FLAT\5/8\EXTRTHK\GR8		42	EA
37	5900039	TANK\LUBE\RH_PORTS\ASSY		1	EA.

CMF-430	Right Hand	Tub Assemb	ly (for SN	VM18028430	and Un)
CIVII -TJU	ixidili Halid	I UD AGGEIIIL	71 V 11 O1 O14	V IVI I UULUTJU	allu UDI

This page intentionally left blank

CMF-430 Right Hand Tub Assembly (for SN VM18028430 and Up)

Item	Part No.	Name	Remarks	Qty	Uom
38	5900119	AUGER\ASSY\SILAGE\CMF		1	EA.
39	7500736	GRIP\HAND\1X4-1/2\FLG		1	EA.
40	7501336	CLMP\HOSE\CUSH\3/8		5	EA
41	7501525	CLAMP\HOSE\1/2\2		4	EA
CA	4705356	TUB\ASSY\RH_DISCH\CMF430			EA



CMF-430 Left Hand Tub Assembly (for SN Up to VM15027430)

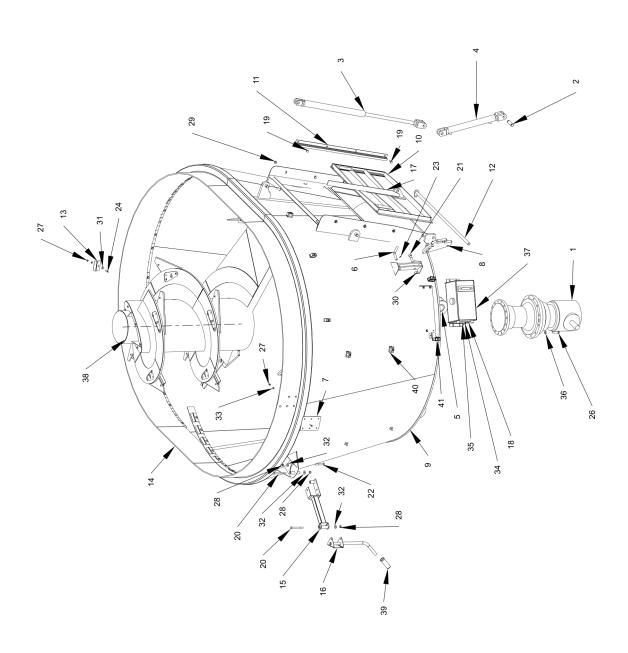
Item	Part No.	Name	Remarks	Qty	Uom
1	3100224	GRBX\PLANETARY\SNGL\1800\13.93:1		1	EA
1a	3100214	GRBX\PLANETARY\DBL\1800		1	EA
2	4100030	PIN 1" X 3-1/2" HYD. CYL.		4	EA.
3	4100241	CYL\HYD\2"X24"\1-1/4"ROD		1	EA
4	4100284	CYL\HYD\2X16\1-1/4RD\WELDE		1	EA
5	4703988	MNT\LOADCELL\TMR		4	EA
6	4704181	PIN\LOCK\3/4X2-1/2		2	EA
7	4704315	AUGERASSY		1	EA
8	4704340	PL\CLMP\EXT\TUB		2	EA
9	4704567	KNIFE\VERT		2	EA
10	4705354	TUB\WELD\CMF430		1	EA
11	4705357	DOOR\TUB\CMF300		1	EA
12	4705360	CLAMP\DOOR\TUB		2	EA
13	4705366	PIN\CNVYR\SIDE		1	EA
14	4705376	CLAMP\BELT\CMF300		64	EA
15	4705377	BELT\12"\EXT\CMF430		1	EA
16	4705380	BRKT\MONITOR		1	EA
17	4705381	BRKT\SW\MONITOR		1	EA
18	4705528	INDCTR\DOOR		1	EA
19	4800013	BOLT\HEX\5/16X1		4	EA.
20	4800018	BOLT\HEX\1/2X1-1/4		2	EA.
21	4800041	BOLT\HEX\1/2X5		2	EA.
22	4800115	BOLT\HEX\3/4X2-1/2		2	EA.
23	4800135	BOLT\HEX\1/2X3-1/2		1	EA.
24	4800178	BOLT\HEX\1/2X1-3/4		6	EA.
25	4800456	PIN\RLLD\3/16X1-1/8		2	EA.
26	4800486	BOLT\HEX\3/8X1-1/4\GR8\NC		70	EA
27	4800948	BOLT\HEX\M16XM60		42	EA
28	4900002	NUT\HEX\3/8\NC		70	EA.
29	4900016	NUT\NYLCK\1/2\NC		3	EA
30	4900133	NUT\FLG\1/2\NC		8	EA
31	4900139	NUT\TPLCK\3/4\GR8\NC		2	EA.
32	5000001	WASH\FLAT\3/8		64	EA.
33	5000004	WASH\FLAT\1/2		3	EA.
34	5000019	WASH\LOCK\3/8		77	EA.
35	5000022	WASH\LOCK\5/16		4	EA.
36	5000023	WASH\FLAT\5/16		4	EA.
37	5000114	WASH\FLAT\5/8\EXTRTHK\GR8		42	EA

CMF-430 Left Hand Tub Assembly (for SN Up to VM1502743)	CMF-430 I	l eft Hand	Tub Asse	mbly (for	SN Up to	VM15027430
---	-----------	------------	----------	-----------	----------	------------

This page intentionally left blank

CMF-430 Left Hand Tub Assembly (for SN Up to VM15027430)

			· · · · · · · · · · · · · · · · · · ·		
Item	Part No.	Name	Remarks	Qty	Uom
38	5900039	TANK\LUBE\RH_PORTS\ASSY		1	EA.
39	7500736	GRIP\HAND\1X4-1/2\FLG		1	EA.
40	7501336	CLMP\HOSE\CUSH\3/8		5	EA
41	7501525	CLAMP\HOSE\1/2\2		2	EA
CA	4705532	TUB\ASSY\LH_DISCH\CMF430			EA



CMF-430 Left Hand Tub Assembly (for SN VM18028430 and Up)

Item	Part No.	Name	Remarks	Qty	Uom
1	3100224	GRBX\PLANETARY\SNGL\1800\13.93:1		1	EA
1a	3100214	GRBX\PLANETARY\DBL\1800		1	EA
2	4100030	PIN 1" X 3-1/2" HYD. CYL.		4	EA.
3	4100241	CYL\HYD\2"X24"\1-1/4"ROD		1	EA
4	4100284	CYL\HYD\2X16\1-1/4RD\WELDE		1	EA
5	4703988	MNT\LOADCELL\TMR		4	EA
6	4704181	PIN\LOCK\3/4X2-1/2		2	EA
7	4704340	PL\CLMP\EXT\TUB		2	EA
8	4704567	KNIFE\VERT		2	EA
9	4705354	TUB\WELD\CMF430		1	EA
10	4705357	DOOR\TUB\CMF300		1	EA
11	4705360	CLAMP\DOOR\TUB		2	EA
12	4705366	PIN\CNVYR\SIDE		1	EA
13	4705376	CLAMP\BELT\CMF300		64	EA
14	4705377	BELT\12"\EXT\CMF430		1	EA
15	4705380	BRKT\MONITOR		1	EA
16	4705381	BRKT\SWMONITOR		1	EA
17	4705528	INDCTR\DOOR		1	EA
18	4800013	BOLT\HEX\5/16X1		10	EA.
19	4800018	BOLT\HEX\1/2X1-1/4		8	EA.
20	4800041	BOLT\HEX\1/2X5		2	EA.
21	4800115	BOLT\HEX\3/4X2-1/2		2	EA.
22	4800135	BOLT\HEX\1/2X3-1/2		1	EA.
23	4800456	PIN\RLLD\3/16X1-1/8		2	EA.
24	4800486	BOLT\HEX\3/8X1-1/4\GR8\NC		70	EA
25	4800583	BOLT\HEX\5/8X2\GR8		5	EA
26	4800948	BOLT\HEX\M16XM60		42	EA
27	4900002	NUT\HEX\3/8\NC		70	EA.
28	4900016	NUT\NYLCK\1/2\NC		3	EA
29	4900133	NUT\FLG\1/2\NC		8	EA
30	4900139	NUT\TPLCK\3/4\GR8\NC		2	EA.
31	5000001	WASH\FLAT\3/8		64	EA.
32	5000004	WASH\FLAT\1/2		3	EA.
33	5000019	WASH\LOCK\3/8		77	EA.
34	5000022	WASH\LOCK\5/16		4	EA.
35	5000023	WASH\FLAT\5/16		4	EA.
36	5000114	WASH\FLAT\5/8\EXTRTHK\GR8		42	EA
37	5900039	TANK\LUBE\RH_PORTS\ASSY		1	EA.

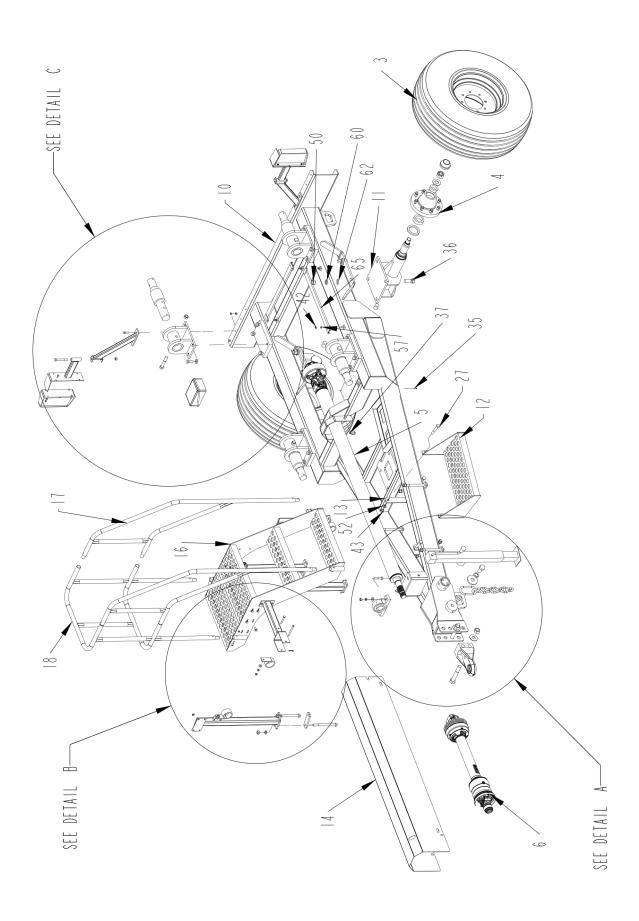
CMF-430 Left Hand Tub	Assembly (for	SN VM18028430	and IIn)
CIVIE-430 LEIL HAIIU TUD	ASSEIIIDIV IIDI	SIN VIVI I OUZO#3U	and our

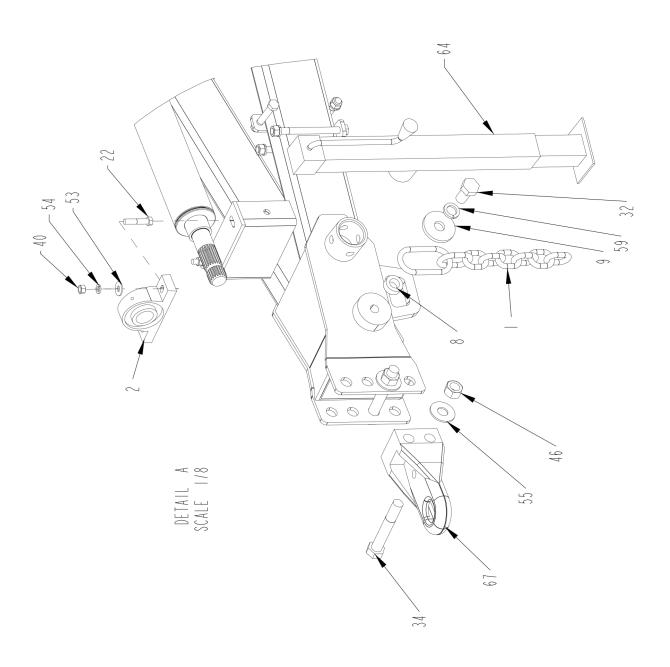
This page intentionally left blank

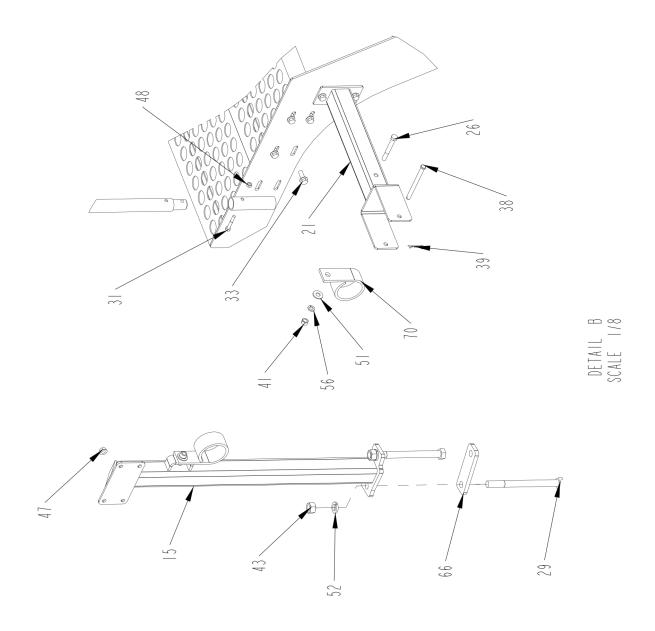
CMF-430 Left Hand Tub Assembly (for SN VM18028430 and Up)

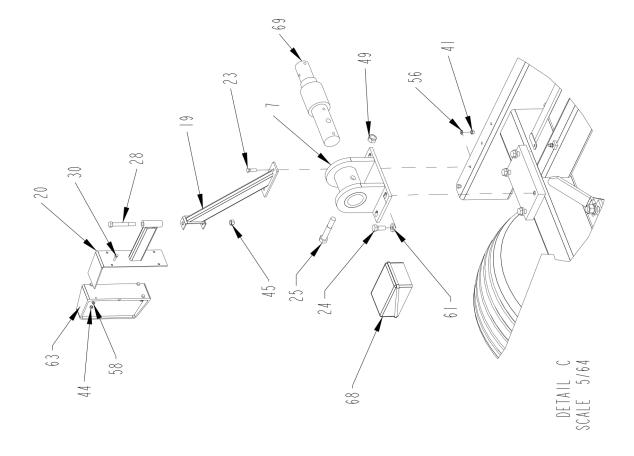
Item	Part No.	Name	Remarks	Qty	Uom
38	5900119	AUGER\ASSY\SILAGE\CMF		1	EA.
39	7500736	GRIP\HAND\1X4-1/2\FLG		1	EA.
40	7501336	CLMP\HOSE\CUSH\3/8		5	EA
41	7501525	CLAMP\HOSE\1/2\2		2	EA
CA	4705532	TUB\ASSY\LH_DISCH\CMF430			EA

CMF-430 Vertical Mixer Parts Reference









CME 42	O Mainframa	A a a a m b b s	W/Ctondord	4 2/0"	CV Driveline
CIVIT-43	u waintrame	ASSEMBIV	w/Standard	1-3/8	Cv Driveline

This page intentionally left blank

CMF-430 Mainframe Assembly W/Standard 1-3/8" CV Driveline

Item	Part No.	Name	Remarks	Qty	Uom
1	1100255	CHAIN\SAFETY\AG\1/2"\40K_CAP		1	EA
2	2000514	BRG\PB\1-3/4\2BOLT\MALLEABLE		1	EA.
3	2600869	WHL\ASSY\14L-16.1	(Includes 2600870 and 2600871)	2	EA
	2600870	TIRE\14LX16.1-12PLY\4680LB		2	EA
	2600871	WHL\8-BOLTX8OC\16.1XW11C\+1-1/8"OFFSET		2	EA
4	2900140	HUB\ASSY\H817\8BOLT\8"B.C.\6"PILOT	(See also Hub Assembly)	2	EA.
5	3600596	PTO\44E\18KAUTO\NO2SPD		1	EA
6	3600793	PTO\245-25698\35E\1-3/8-6 WWCV		1	EA
7	4703989	MNT\LOADCELL\FRAME		4	EA
8	4704337	BUSHING\MNT\CHAIN\SAFETY		1	EA
9	4704338	WASHER\CHAIN\SAFETY		1	EA
10	4705362	FRM\WELD\CMF430		1	EA
11	4705363	AXLE\ASSY\CMF430		2	EA
12	4705375	STEP\FRM\CMF		1	EA
13	4705378	PL\CLMP\FRM		2	EA
14	4705382	SH\SHIELD\D/S		1	EA
15	4705383	LEG\LONG\DECK\PLTFRM		2	EA
16	4705385	PLTFRM\VIEW\CMF		1	EA
17	4705386	RAIL\STEPS\VIEW\PLTFRM		2	EA
18	4705387	RAIL\DECK\VIEW\PLTFRM		1	EA
19	4705520	MNT\LIGHTS\TAIL		2	EA
20	4705521	BRKT\LIGHTS\TAIL		2	EA
21	4705530	MNDR\HOSE\SHAFT		1	EA
22	4800070	BOLT\HEX\1/2X2-1/2		2	EA.
23	4800098	BOLT\HEX\3/8X1-1/4\NC		4	EA.
24	4800106	BOLT\HEX\5/8X1-1/2		16	EA.
25	4800139	BOLT\HEX\3/4X4-1/2		4	EA
26	4800156	BOLT\HEX\3/8X3		1	EA.
27	4800158	BOLT\HEX\5/8X4-1/2		4	EA.
28	4800188	BOLT\HEX\1/2X4		2	EA.
29	4800268	BOLT\HEX\5/8X7-1/2		8	EA.
30	4800277	BOLT\HEX\1/4X1		8	EA.
31	4800506	BOLT\HEX\1/4X1-3/4\NC		4	EA
32	4800547	BOLT\HEX\1X2\NC		1	EA.
33	4800913	BOLT\FLG\SERR\3/8X1\NC		12	EA
34	4800919	BOLT\HEX\1X6-1/2\GR5\NC		2	EA
35	4801231	SCR\HEX\#8-18X3/4"\SELF-DRILLING		4	EA
36	4801234	BOLT\HEX\7/8X2-1/2\GR8\NC		8	EA

CME 42	O Mainframa	A a a a m b b s	W/Ctondord	4 2/0"	CV Driveline
CIVIT-43	u waintrame	ASSEMBIV	w/Standard	1-3/8	Cv Driveline

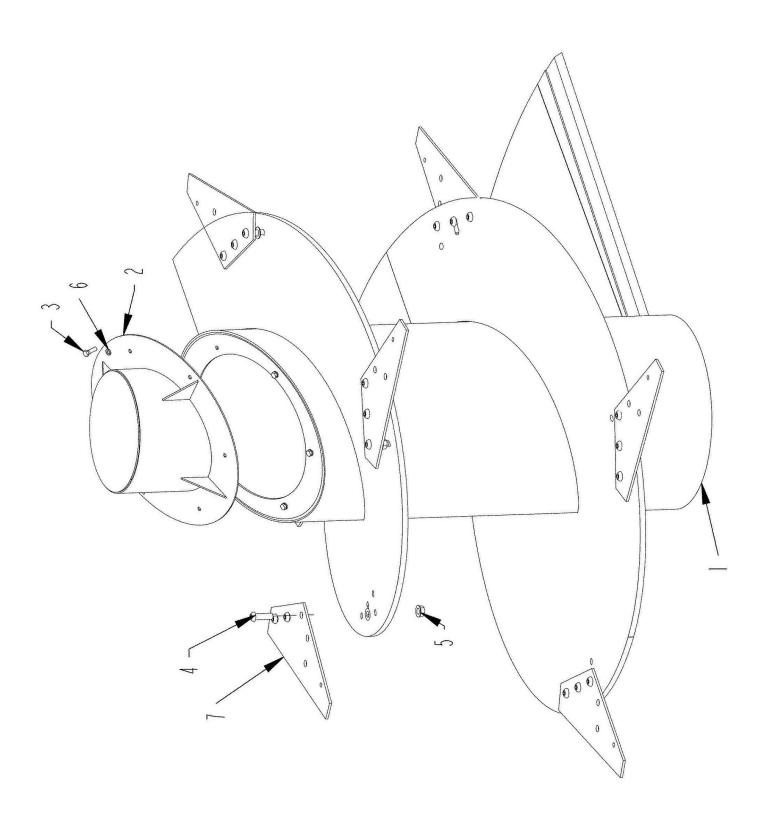
CMF-430 Mainframe Assembly W/Standard 1-3/8" CV Driveline

Item	Part No.	Name	Remarks	Qty	Uom
37	4801236	PIN\LYNCH\1/4X1-9/16\ZN_PLT		2	EA
38	4801288	PIN\CLEVIS\3/8X4-1/2		1	EA
39	4801289	PIN\HAIR\14GA\1-7/16		1	EA
40	4900001	NUT\HEX\1/2\NC		2	EA.
41	4900002	NUT\HEX\3/8\NC		7	EA.
42	4900003	NUT\HEX\5/16\NC		4	EA.
43	4900005	NUT\HEX\5/8\NC		12	EA.
44	4900009	NUT\HEX\1/4\NC		8	EA.
45	4900014	NUT\TPLCK\1/2\NC		2	EA.
46	4900015	NUT\NYLCK\1\NC		2	EA.
47	4900076	NUT\FLG\SERR\3/8\NC		10	EA.
48	4900084	NUT\TPLCK\1/4\NC		4	EA.
49	4900139	NUT\TPLCK\3/4\GR8\NC		4	EA.
50	4900192	NUT\HEX\7/8\GR8\NC		8	EA.
51	5000001	WASH\FLAT\3/8		3	EA.
52	5000003	WASH\LOCK\5/8		12	EA.
53	5000004	WASH\FLAT\1/2		2	EA.
54	5000006	WASH\LOCK\1/2		2	EA.
55	5000014	WASH\FLAT\1		2	EA.
56	5000019	WASH\LOCK\3/8		7	EA.
57	5000022	WASH\LOCK\5/16		4	EA.
58	5000024	WASH\LOCK\1/4		8	EA.
59	5000053	WASH\LOCK\1		1	EA
60	5000106	WASH\LOCK\7/8		8	EA
61	5000114	WASH\FLAT\5/8\EXTRTHK\GR8		16	EA
62	5000120	WASH\FLAT\7/8\EXTRTHK\GR8		8	EA
63	5700423	KIT\LIGHT		2	EA
64	5800627	JACK\7000LB\SWIVEL-STYLE		1	EA.
65	5900091	CHNNL\FRM\WIRE\24"		2	EA
66	6300096	PL\CLMP\FRM		4	EA
67	7500641	HITCH\BASE\#3\PPI\1"PIN		1	EA
68	7500978	2620 LOADCELL JUCTION BOX, 2000		1	EA.
69	7501326	DIGI-STAR_2.5_CELL		4	EA
70	7501528	STRAP\HANG\2.5ID\STD		3	EA
CA	4705361	FRM\ASSY\CMF430			EA
NS	5700226	ENCL\BATT\PLSTC\GRP27		1	EA
NS	5700227	BATT\12VDC\GRP24		1	EA
NS	5700275	TERM\BATT\UNIV\MARINE\		2	EA

CMF-430 Mainframe	Accombly	W/Standard	1 2/0"	CV Drival	ina
CIVIT-430 Maintrame	ASSEMBIV	w/Standard	1-3/8	Cv Drivei	ıne

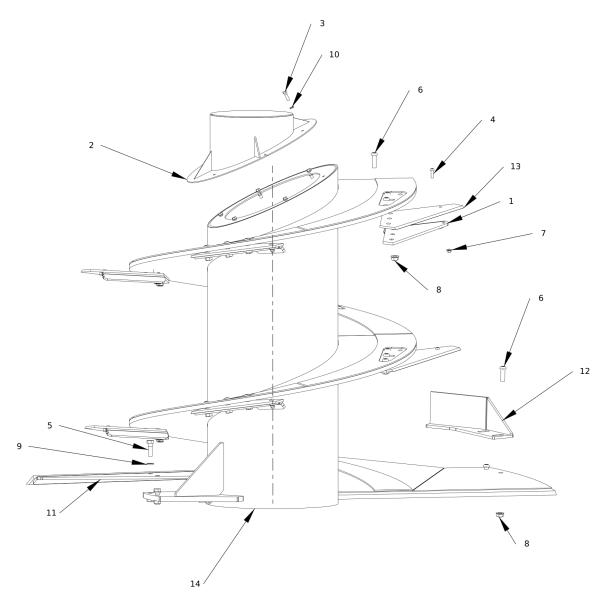
CMF-430 Mainframe Assembly W/Standard 1-3/8" CV Driveline

Item	Part No.	Name	Remarks	Qty	Uom
NS	5700810	HARN\JMPR\PWR\SCALE\CMF		1	EA
NS	7501677	HITCH\ASSY\BULL_PULL\CAT3&4	Optional Hitch (Includes 7501678, 7501679 and 7501680)	1	EA.
NS	7501678	RING\SNAP\HITCH\ASSY\BULL_PULL\CAT3&4		1	EA.
NS	7501679	BUSHING\1-1/2"\HITCH\BULL_PULL\CAT3&4		1	EA.
NS	7501680	BALL\HITCH\BULL_PULL\CAT3&4		1	EA.



CMF-430 Auger Assembly (for SN up to VM15027430)

Item	Part No.	Name	Remarks	Qty	Uom
1	4704313	AUGER\WELD\CMF700		1	EA
2	4704884	COVERVAUGER		1	EA
3	4800098	BOLT\HEX\3/8X1-1/4\NC		6	EA.
4	4801290	SCR\BUT\ALN\5/8X1-3/4\NC		21	EA
5	4900002	NUT\HEX\3/8\NC		6	EA.
6	4900110	NUT\FLG\SERR\5/8\NC		21	EA.
7	5000019	WASH\LOCK\3/8		6	EA.
8	7501161	BLADE\CMF\STANDARD		7	EA
CA	4704315	AUGER\ASSY			EA

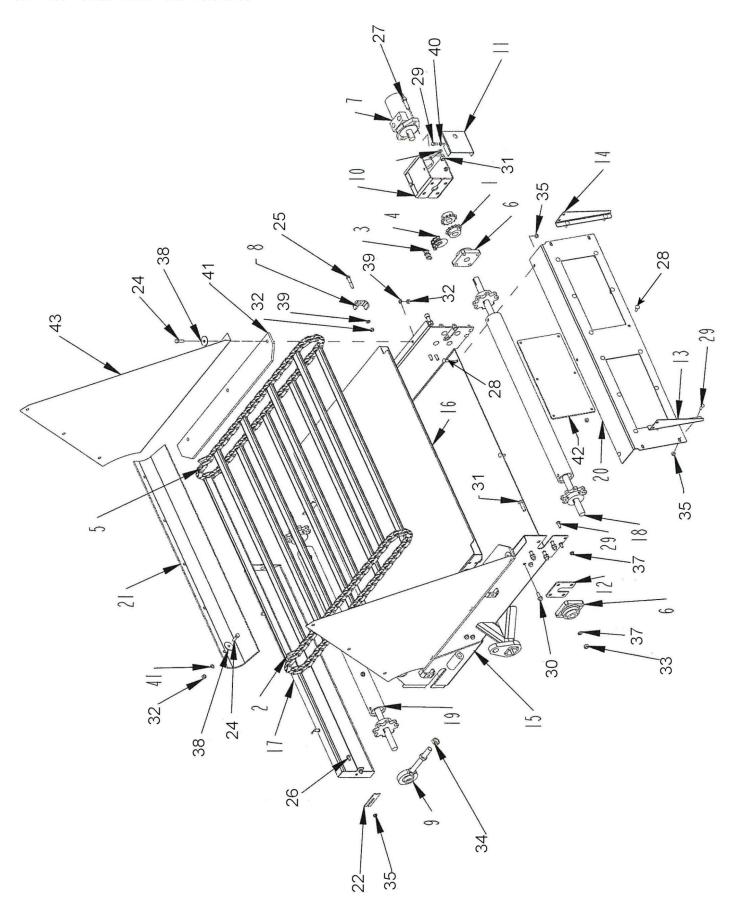


Note: Blade Kits Per Blade Mfg-(Item #4 is the only difference) Kooima: (PN 7501161) uses PN 4800274-SCR\BUT\ALN\3/8X1-1/4 Renyson: (PN 7501704) uses PN 4800412-SCR\CSK\ALN\3/8X1-1/4

CMF-430 Auger Assembly (for SN VM18028430 and Up)

Item	Part No.	Name	Remarks	Qty	Uom
1	4704365	PL\BACK\BLADE		7	EA
2	4704884	COVERVAUGER		1	EA
3	4800098	BOLT\HEX\3/8X1-1/4\NC		6	EA.
4	4800274	SCR\BUT\ALN\3/8X1-1/4\NC	(Used with PN 7501161)	7	EA
4a	4800412	SCR\CSK\ALN\3/8X1-1/4\NC	(Used with PN 7501704)	7	EA.
5	4800583	BOLT\HEX\5/8X2\GR8		5	EA
6	4800659	SCR\BUT\ALN\5/8X2\NC		23	EA
7	4900076	NUT\FLG\SERR\3/8\NC		13	EA.
8	4900110	NUT\FLG\SERR\5/8\NC		28	EA.
9	5000003	WASH\LOCK\5/8		5	EA.
10	5000019	WASH\LOCK\3/8		6	EA.
11	5900070	KICKER\AUGER\CMF830		1	EA
12	5900163	SWEEP\AUGER\SILAGE		1	EA
13	7501161	BLADE\CMF\STANDARD	(Uses PN 4800274 with this blade)	7	EA
13a	7501704	BLADE\CMF\PRM\SRRTD	(Uses PN 4800412 with this blade)	7	EA.
14	5900104	AUGER\WELD\SILAGE		1	EA
CA	5900119	AUGER\ASSY\SILAGE\CMF			EA.

CMF-430 Vertical Mixer Parts Reference



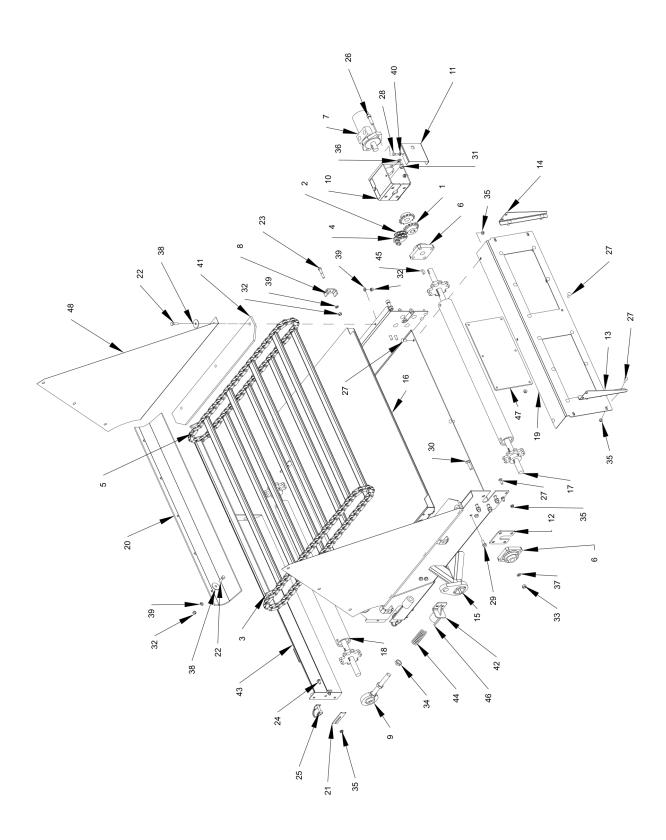
Optional 3 FT. Conveyor Assembly (for SN Up to VM13012430)

Item	Part No.	Name	Remarks	Qty	Uom
1	1000055	SPKT\50\B\12\1\1/4KW		2	EA.
2	1100067	CHAIN\2062\CL		2	EA
3	1100099	CHAIN\50DBL\CL		1	EA
4	1100271	CHAIN\50DBL\11		1	EA
5	1100298	CHAIN\ASSY\2062H\3FT\SIDE		1	EA
6	2000323	BRG\FLG\1\4BOLT		2	EA
7	3900032	MOTOR\HYD\22.6\H		1	EA
8	4700777	CLMP\HOSE\1/2		6	EA.
9	4704585	BRG\ASSY\CNVYR\CMF		2	EA
10	4705188	MNT\MTR\CNVYR\DOG		1	EA
11	4705192	COVER\CPLR\CHAIN\CNVYR		2	EA
12	4705194	PL\BRG\SHIM		1	EA
13	4705351	SH\SIDE\L\RAMP\FRM\DOG		1	EA
14	4705352	SH\SIDE\R\RAMP\FRM\DOG		1	EA
15	4705365	CNVYR\SIDE\3FT\WELD		1	EA
16	4705367	DECK\CNVYR\SIDE		1	EA
17	4705368	COVER\CNVYR\SIDE		1	EA
18	4705370	SHAFT\ASSY\CNVYR\SIDE\CMF		1	EA
19	4705372	IDLER\ASSY\SIDE\CNVYR\CMF		1	EA
20	4705373	SH\RAMP\FRM\SIDE		1	EA
21	4705529	BELT\COVER\SHAFT\CNVYR		1	EA
22	4705533	SH\SEAL\SHAFT\CNVYR		2	EA
23	4800098	BOLT\HEX\3/8X1-1/4\NC		11	EA.
24	4800146	BOLT\HEX\3/8X2		2	EA.
25	4800153	BOLT\CRG\5/16X3/4\NC		4	EA.
26	4800434	SCR\CAP\ALN\1/2X1-3/4\NC		2	EA
27	4800473	BOLT\CRG\5/16X1\NC		23	EA
28	4800643	BOLT\HEX\5/16X3/4		4	EA.
29	4800913	BOLT\FLG\SERR\3/8X1\NC		8	EA
30	4800947	BOLT\CRG\7/16X2\NC		8	EA
31	4900001	NUT\HEX\1/2\NC		2	EA.
32	4900002	NUT\HEX\3/8\NC		13	EA.
33	4900025	NUT\HEX\7/16\NC		8	EA.
34	4900104	NUT\JAM\3/4\NC		6	EA.
35	4900108	NUT\FLG\SERR\5/16\NC		31	EA.
36	5000006	WASH\LOCK\1/2		2	EA.
37	5000015	WASH\LOCK\7/16		8	EA.
38	5000017	WASH\FLAT\FNDR\.395X1-5/8X.090		11	EA

Optional 3 FT.	Conveyor	Assembly	(for	SN Up to	VM1301	2430)
Optional 5 i i.	COLLACACL	MOSCIIIDIV	uu		, , , , , , , , , , , , , , , , , , ,	2 7 301

Optional 3 FT. Conveyor Assembly (for SN Up to VM13012430)

Item	Part No.	Name	Remarks	Qty	Uom
39	5000019	WASH\LOCK\3/8		13	EA.
40	5000022	WASH\LOCK\5/16		4	EA.
41	5900048	BELT\SIDE\CNVYR\300		2	EA
42	7501271	MAG\PL\14X6X1-1/2		2	EA
43	7501493	TARP\CNVYR\SIDE		2	EA
NS	4705531	CNVYR\SIDE\3FT\ASSY\RH			EA
NS	4705364	CNVYR\SIDE\3FT\ASSY\LH			EA



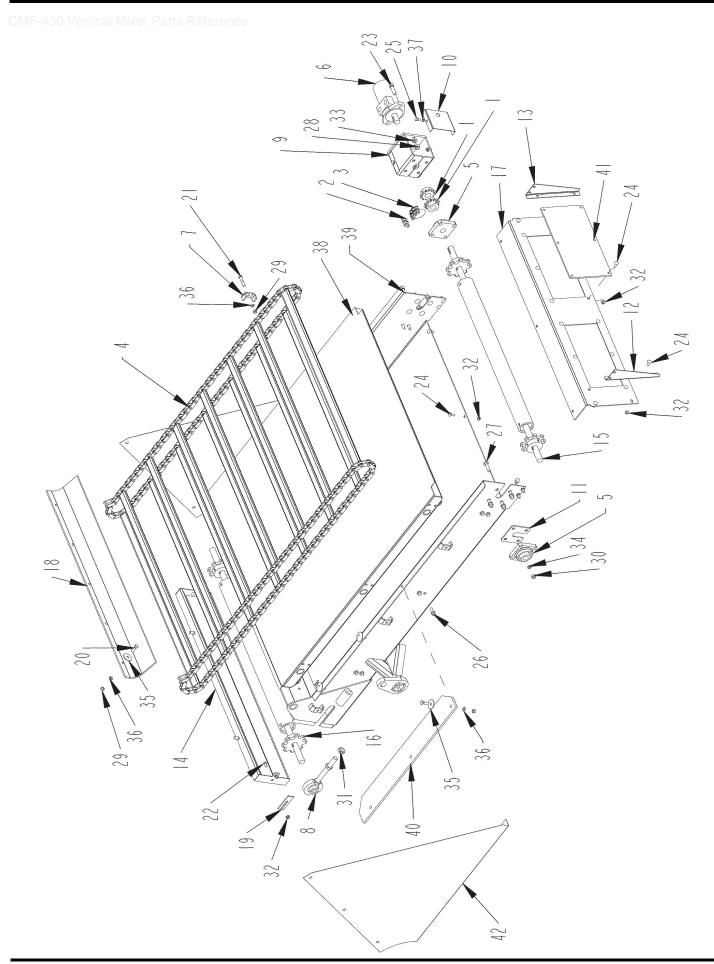
Optional 3 FT. Conveyor Assembly (for SN VM15013430 & Up)

Item	Part No.	Name	Remarks	Qty	Uom
1	1000029	SPKT\50\B\14\1\1/4KW		2	EA.
2	1100026	CHAIN\50DBL\13		1	EA
3	1100067	CHAIN\2062\CL		2	EA
4	1100099	CHAIN\50DBL\CL		1	EA
5	1100298	CHAIN\ASSY\2062H\3FT\SIDE		1	EA
6	2000323	BRG\FLG\1\4BOLT		2	EA
7	3900032	MOTOR\HYD\22.6\H		1	EA
8	4700777	CLMP\HOSE\1/2		6	EA.
9	4704585	BRG\ASSY\CNVYR\CMF		2	EA
10	4705188	MNT\MTR\CNVYR\DOG		1	EA
11	4705192	COVER\CPLR\CHAIN\CNVYR		2	EA
12	4705194	PL\BRG\SHIM		1	EA
13	4705351	SH\SIDE\L\RAMP\FRM\DOG		1	EA
14	4705352	SH\SIDE\R\RAMP\FRM\DOG		1	EA
15	4705365	CNVYR\SIDE\3FT\WELD		1	EA
16	4705367	DECK\CNVYR\SIDE		1	EA
17	4705370	SHAFT\ASSY\CNVYR\SIDE\CMF		1	EA
18	4705372	IDLER\ASSY\SIDE\CNVYR\CMF		1	EA
19	4705373	SH\RAMP\FRM\SIDE		1	EA
20	4705529	BELT\COVER\SHAFT\CNVYR		1	EA
21	4705533	SH\SEAL\SHAFT\CNVYR		2	EA
22	4800098	BOLT\HEX\3/8X1-1/4\NC		11	EA.
23	4800146	BOLT\HEX\3/8X2		2	EA.
24	4800153	BOLT\CRG\5/16X3/4\NC		4	EA.
25	4800365	PIN\LNCH\3/8X1-1/2\W/KEEPER		4	EA
26	4800434	SCR\CAP\ALN\1/2X1-3/4\NC		2	EA
27	4800473	BOLT\CRG\5/16X1\NC		23	EA
28	4800643	BOLT\HEX\5/16X3/4		4	EA.
29	4800913	BOLT\FLG\SERR\3/8X1\NC		8	EA
30	4800947	BOLT\CRG\7/16X2\NC		8	EA
31	4900001	NUT\HEX\1/2\NC		2	EA.
32	4900002	NUT\HEX\3/8\NC		13	EA.
33	4900025	NUT\HEX\7/16\NC		8	EA.
34	4900104	NUT\JAM\3/4\NC		6	EA.
35	4900108	NUT\FLG\SERR\5/16\NC		31	EA.
36	5000006	WASH\LOCK\1/2		2	EA.
37	5000015	WASH\LOCK\7/16		8	EA.
38	5000017	WASH\FLAT\FNDR\.395X1-5/8X.090		11	EA

Optional 3 FT.	Conveyor	Assembly	(for SN	VM15013430	& Unl
Optional 5 i i.		A33CIIIDI Y	1101 011	V 101 1 30 1 3730	G OP

Optional 3 FT. Conveyor Assembly (for SN VM15013430 & Up)

Item	Part No.	Name	Remarks	Qty	Uom
39	5000019	WASH\LOCK\3/8		13	EA.
40	5000022	WASH\LOCK\5/16		4	EA.
41	5900048	BELT\SIDE\CNVYR\300		2	EA
42	5900057	STOP\SPRNG\TNSNR		2	EA
43	5900059	COVER\CNVYR\SIDE		1	EA
44	6100076	SPRING\1-1/4ODX3-3/4 LX3/16WX10		2	EA.
45	6200011	KEY\WDF\1/4X1		1	EA.
46	6200017	KEY\SQ\1/4X3		2	EA
47	7501271	MAG\PL\14X6X1-1/2		2	EA
48	7501493	TARP\CNVYR\SIDE		2	EA
CA	4705531	CNVYR\SIDE\3FT\ASSY\RH			EA
CA	4705364	CNVYR\SIDE\3FT\ASSY\LH			EA



Optional 5 FT. Conveyor Assembly (for SN Up to VM13012430)

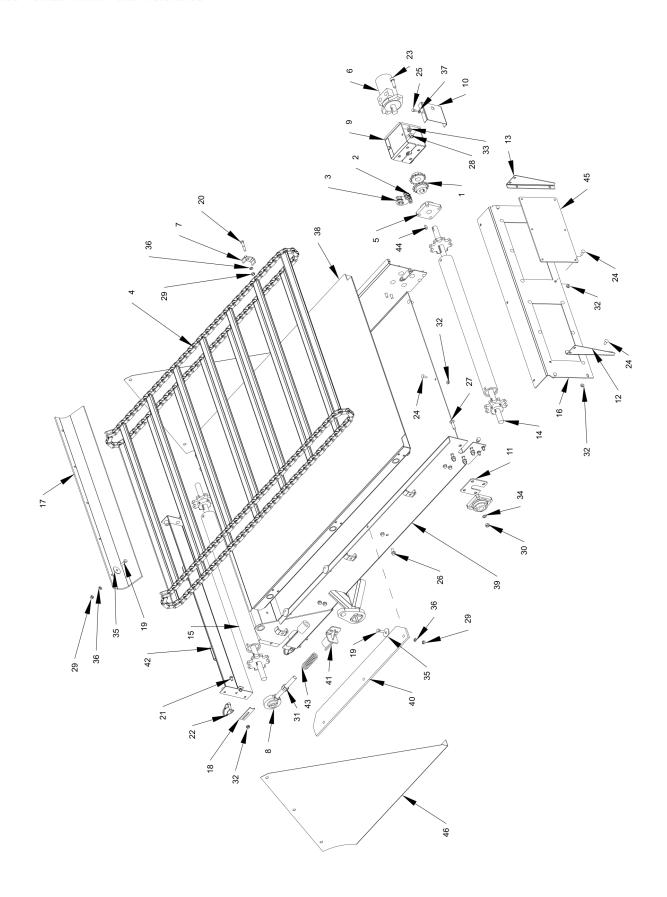
Item	Part No.	Name	Remarks	Qty	Uom
1	1000055	SPKT\50\B\12\1\1/4KW		2	EA.
2	1100099	CHAIN\50DBL\CL		1	EA
3	1100271	CHAIN\50DBL\11		1	EA
4	1100307	CHAIN\ASSY\CNVYR\5FT		1	EA
5	2000323	BRG\FLG\1\4BOLT		2	EA
6	3900032	MOTOR\HYD\22.6\H		1	EA
7	4700777	CLMP\HOSE\1/2		9	EA.
8	4704585	BRG\ASSY\CNVYR\CMF		2	EA
9	4705188	MNT\MTR\CNVYR\DOG		1	EA
10	4705192	COVER\CPLR\CHAIN\CNVYR		2	EA
11	4705194	PL\BRG\SHIM		1	EA
12	4705351	SH\SIDE\L\RAMP\FRM\DOG		1	EA
13	4705352	SH\SIDE\R\RAMP\FRM\DOG		1	EA
14	4705368	COVER\CNVYR\SIDE		1	EA
15	4705370	SHAFT\ASSY\CNVYR\SIDE\CMF		1	EA
16	4705372	IDLER\ASSY\SIDE\CNVYR\CMF		1	EA
17	4705373	SH\RAMP\FRM\SIDE		1	EA
18	4705529	BELT\COVER\SHAFT\CNVYR		1	EA
19	4705533	SH\SEAL\SHAFT\CNVYR		2	EA
20	4800098	BOLT\HEX\3/8X1-1/4\NC		11	EA.
21	4800146	BOLT\HEX\3/8X2		3	EA.
22	4800153	BOLT\CRG\5/16X3/4\NC		4	EA.
23	4800434	SCR\CAP\ALN\1/2X1-3/4\NC		2	EA
24	4800473	BOLT\CRG\5/16X1\NC		23	EA
25	4800643	BOLT\HEX\5/16X3/4		4	EA.
26	4800913	BOLT\FLG\SERR\3/8X1\NC		12	EA
27	4800947	BOLT\CRG\7/16X2\NC		8	EA
28	4900001	NUT\HEX\1/2\NC		2	EA.
29	4900002	NUT\HEX\3/8\NC		14	EA.
30	4900025	NUT\HEX\7/16\NC		8	EA.
31	4900104	NUT\JAM\3/4\NC		6	EA.
32	4900108	NUT\FLG\SERR\5/16\NC		31	EA.
33	5000006	WASH\LOCK\1/2		2	EA.
34	5000015	WASH\LOCK\7/16		8	EA.
35	5000017	WASH\FLAT\FNDR\.395X1-5/8X.090		11	EA
36	5000019	WASH\LOCK\3/8		14	EA.
37	5000022	WASH\LOCK\5/16		4	EA.
38	5900033	DECK\CNVYR\5FT\SIDE		1	EA

Optional 5 FT.	Conveyor	Assembly (f	for SN Ur	to VM	13012430)
Optional J I I.	COLLACACL	MOOGIIIDIV (I	101	J LO V 1VI	130127301

Optional 5 FT. Conveyor Assembly (for SN Up to VM13012430)

Item	Part No.	Name	Remarks	Qty	Uom
39	5900034	CNVYR\SIDE\5FT\WELD		1	EA
40	5900048	BELT\SIDE\CNVYR\300		2	EA
41	7501271	MAG\PL\14X6X1-1/2		2	EA
42	7501493	TARP\CNVYR\SIDE		2	EA
CA	5900032	CNVYR\SIDE\5FT\RH\ASSY			EA
CA	5900054	CNVYR\SIDE\5FT\LH\ASSY			EA.

CMF-430 Vertical Mixer Parts Reference



Optional 5 FT. Conveyor Assembly (for SN VM15013430 and Up)

Item	Part No.	Name	Remarks	Qty	Uom
1	1000029	SPKT\50\B\14\1\1/4KW		2	EA.
2	1100026	CHAIN\50DBL\13		1	EA
3	1100099	CHAIN\50DBL\CL		1	EA
4	1100307	CHAIN/ASSY/CNVYR/5FT		1	EA
5	2000323	BRG\FLG\1\4BOLT		2	EA
6	3900032	MOTOR\HYD\22.6\H		1	EA
7	4700777	CLMP\HOSE\1/2		9	EA.
8	4704585	BRG\ASSY\CNVYR\CMF		2	EA
9	4705188	MNT\MTR\CNVYR\DOG		1	EA
10	4705192	COVER\CPLR\CHAIN\CNVYR		2	EA
11	4705194	PL\BRG\SHIM		1	EA
12	4705351	SH\SIDE\L\RAMP\FRM\DOG		1	EA
13	4705352	SH\SIDE\R\RAMP\FRM\DOG		1	EA
14	4705370	SHAFT\ASSY\CNVYR\SIDE\CMF		1	EA
15	4705372	IDLER\ASSY\SIDE\CNVYR\CMF		1	EA
16	4705373	SH\RAMP\FRM\SIDE		1	EA
17	4705529	BELT\COVER\SHAFT\CNVYR		1	EA
18	4705533	SH\SEAL\SHAFT\CNVYR		2	EA
19	4800098	BOLT\HEX\3/8X1-1/4\NC		11	EA.
20	4800146	BOLT\HEX\3/8X2		3	EA.
21	4800153	BOLT\CRG\5/16X3/4\NC		4	EA.
22	4800365	PIN\LNCH\3/8X1-1/2\W/KEEPER		4	EA
23	4800434	SCR\CAP\ALN\1/2X1-3/4\NC		2	EA
24	4800473	BOLT\CRG\5/16X1\NC		23	EA
25	4800643	BOLT\HEX\5/16X3/4		4	EA.
26	4800913	BOLT\FLG\SERR\3/8X1\NC		12	EA
27	4800947	BOLT\CRG\7/16X2\NC		8	EA
28	4900001	NUT\HEX\1/2\NC		2	EA.
29	4900002	NUT\HEX\3/8\NC		14	EA.
30	4900025	NUT\HEX\7/16\NC		8	EA.
31	4900104	NUT\JAM\3/4\NC		6	EA.
32	4900108	NUT\FLG\SERR\5/16\NC		31	EA.
33	5000006	WASH\LOCK\1/2		2	EA.
34	5000015	WASH\LOCK\7/16		8	EA.
35	5000017	WASH\FLAT\FNDR\.395X1-5/8X.090		11	EA
36	5000019	WASH\LOCK\3/8		14	EA.
37	5000022	WASH\LOCK\5/16		4	EA.
38	5900033	DECK\CNVYR\5FT\SIDE		1	EA

Optional 5 FT.	Conveyor	Assembly	(for SN	VM15013430	and Up)
Obtional 5 i i.		A33CIIIDIV	1101 011		alla obi

Optional 5 FT. Conveyor Assembly (for SN VM15013430 and Up)

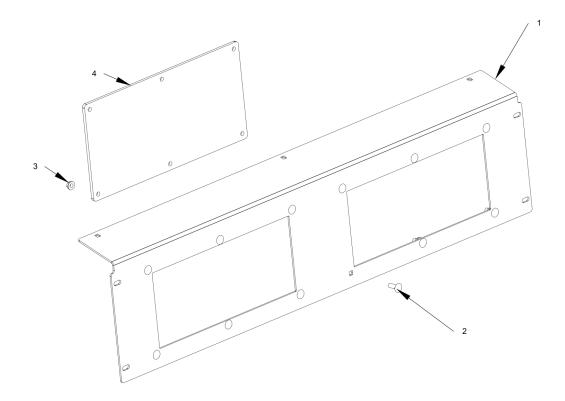
Item	Part No.	Name	Remarks	Qty	Uom
39	5900034	CNVYR\SIDE\5FT\WELD		1	EA
40	5900048	BELT\SIDE\CNVYR\300		2	EA
41	5900057	STOP\SPRNG\TNSNR		2	EA
42	5900059	COVER\CNVYR\SIDE		1	EA
43	6100076	SPRING\1-1/4ODX3-3/4 LX3/16WX10		2	EA.
44	6200011	KEY\WDF\1/4X1		1	EA.
45	7501271	MAG\PL\14X6X1-1/2		2	EA
46	7501493	TARP\CNVYR\SIDE		2	EA
CA	5900032	CNVYR\SIDE\5FT\RH\ASSY			EA
CA	5900054	CNVYR\SIDE\5FT\LH\ASSY			EA.



Digi-Star product support: email: tasupportds@topcon.com toll free phone: 800-225-7695

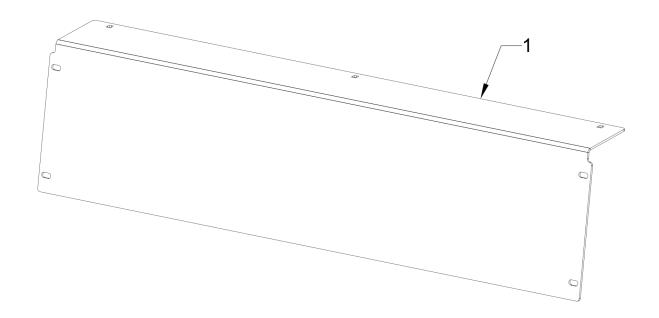
Digi-Star Cables, Brackets and Cells

Item	Part No.	Name	Remarks	Qty	Uom
1	7501612	CABLE\EXT\20'\J-BOX;TO;SCALE	DIGI-STAR P/N 408099		EA
2	7501424	BRKT\IND\MNTG	DIGI-STAR P/N 840459 (TO MOUNT MASTER INDICATOR)		EA
3	7500979	CABLE\EXT\10'\J-BOX;TO;SCALE	DIGI-STAR P/N 141941 (Replacement cable for tractor to machine. Also order 7501212)		EA
4	7501211	POWER\CORD\10'\4-WIRE	DIGI-STAR P/N 146698		EA
5	7501212	CBL\15\J-BOX\	DIGI-STAR P/N 824316 (Replacement cable for tractor to monitor, also order 7500979) (Replacement cable between junction box and indicator)		EA
6	7501555	KIT\CONN\LOAD;CELL	DIGI-STAR P/N 403456 (Includes all necessary components to patch a Digi-Star load cell cable injury)		EA.
7	7501326	DIGI-STAR_2.5_CELL	DIGI-STAR P/N 146110 (Cal # 32000, Setup # 146050)		EA
8	7501377	LOADCELL\2.875"DBND\30'\CABLE	DIGI-STAR P/N 403803 (Cal # 36753, Setup # 126060)		EA
9	7501431	CABLE\EXT\REMOTE\25FT	DIGI-STAR P/N 403670 (male- female 8 pin)		EA
10	7501438	HRNSS\WIRE\DWNLDNG\DIGISTAR	DIGI-STAR P/N 400951		EA
11	7501609	MNT\RAM\3SUCTIONCUP	DIGI-STAR P/N 407434		EA.
12	7501517	PLUG\OPTNL\2400V\3RDPORT	DIGI-STAR P/N 404845 (TO ADD ADDITIONAL MONITOR)		EA
13	7501659	CABLE\RD4000\33'	DIGI-STAR P/N 405190 (male-male 8 pin)		EA
14	7501615	Cable\Y\Remote	DIGI-STAR P/N 400190		EA.
15	7501350	Data Key for Legacy Monitors prior to USB ports	DIGI-STAR P/N 403247 (DATA KEY ONLY)		EA.
16	7501310	INDICATOR\EZ3600V	D-S 405211 (INCLUDES INDICATOR (7501349) AND DATA KEY (7501350))		EA.
17	7501349	INDICATOR\3600V\W/ODATAKEY	D/S 403065-23		EA.



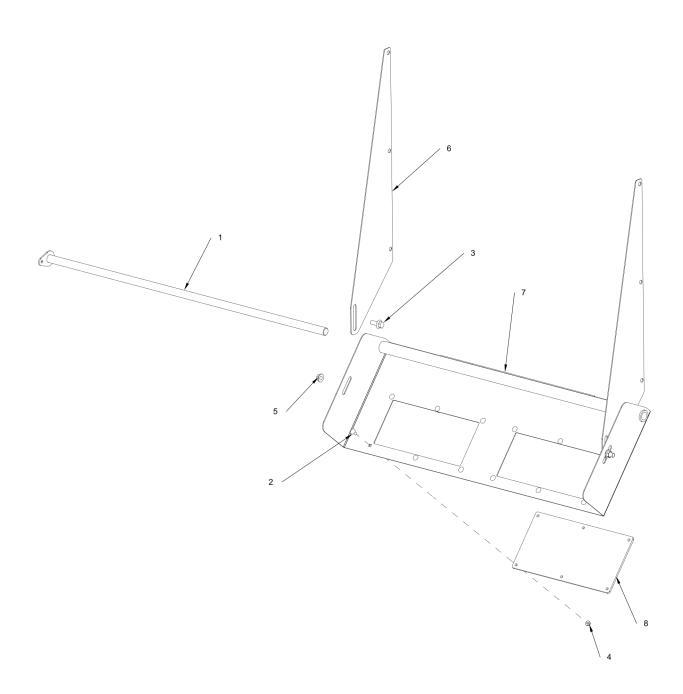
Magnetic Conveyor Spout Assembly

Item	Part No.	Name	Remarks	Qty	Uom
1	4705373	SH\RAMP\FRM\SIDE		1	EA
2	4800473	BOLT\CRG\5/16X1\NC		12	EA
3	4900108	NUT\FLG\SERR\5/16\NC		12	EA.
4	7501271	MAG\PL\14X6X1-1/2		2	EA
CA	5900028	SPOUT\MAG\CNVYR\CMF430			EA



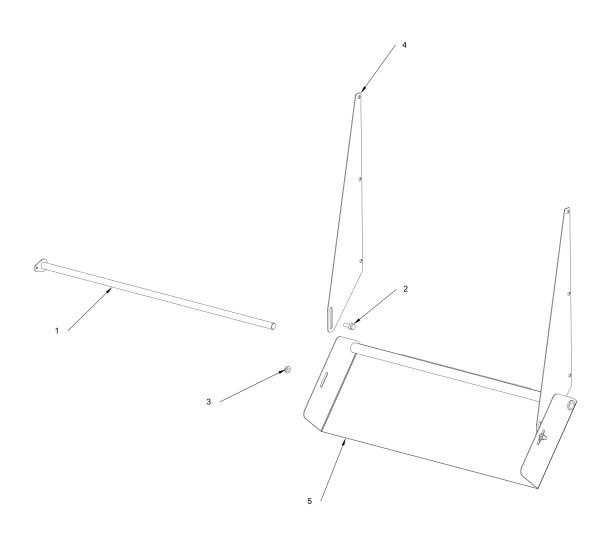
Non-Magnetic Conveyor Assembly

Item	Part No.	Name	Remarks	Qty	Uom
1	5900029	SPOUT\CNVYR\NON-MAG\CMF430		1	EA



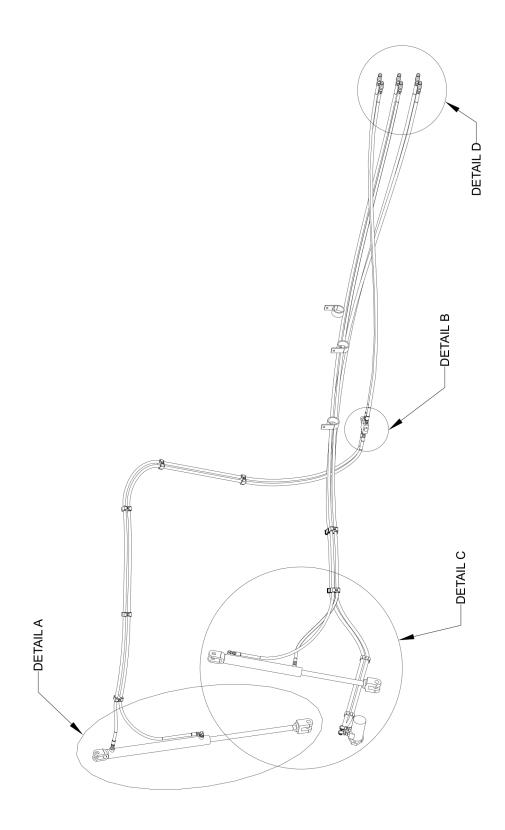
Magnetic Tub Spout Assembly

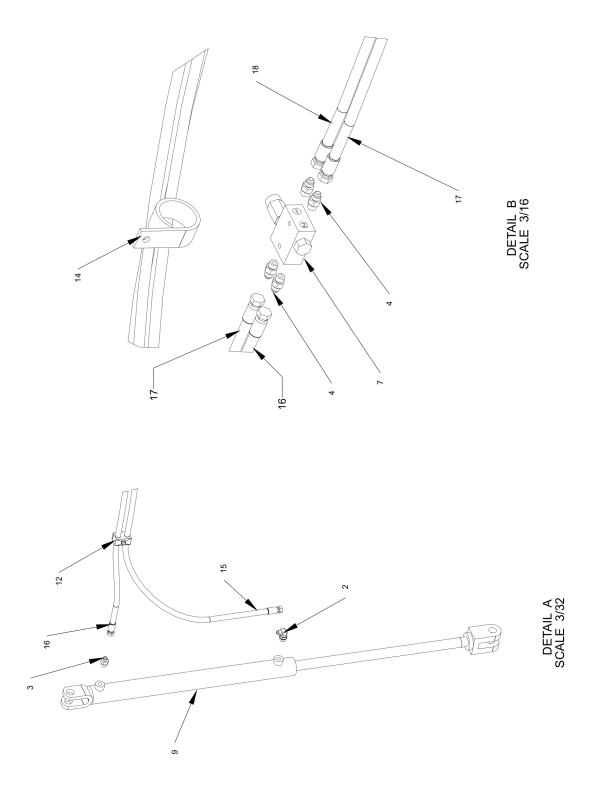
Item	Part No.	Name	Remarks	Qty	Uom
1	4705366	PIN\CNVYR\SIDE		1	EA
2	4800153	BOLT\CRG\5/16X3/4\NC		12	EA.
3	4800928	BOLT\FLG\SERR\1/2X1-1/4\NC		3	EA
4	4900108	NUT\FLG\SERR\5/16\NC		12	EA.
5	4900133	NUT\FLG\1/2\NC		3	EA
6	5900007	EXT\DISCH\DOOR		2	EA
7	5900049	PAN\MAG\DISCH\CMF430		1	EA.
8	7501271	MAG\PL\14X6X1-1/2		2	EA
CA	5900051	PAN\MAG\DISCH\CMF430\ASSY	(INCLUDES #2, #4, #7 & #8)		EA
CA	5900052	DISCH\MAG\ASSY\CMF430			EA.

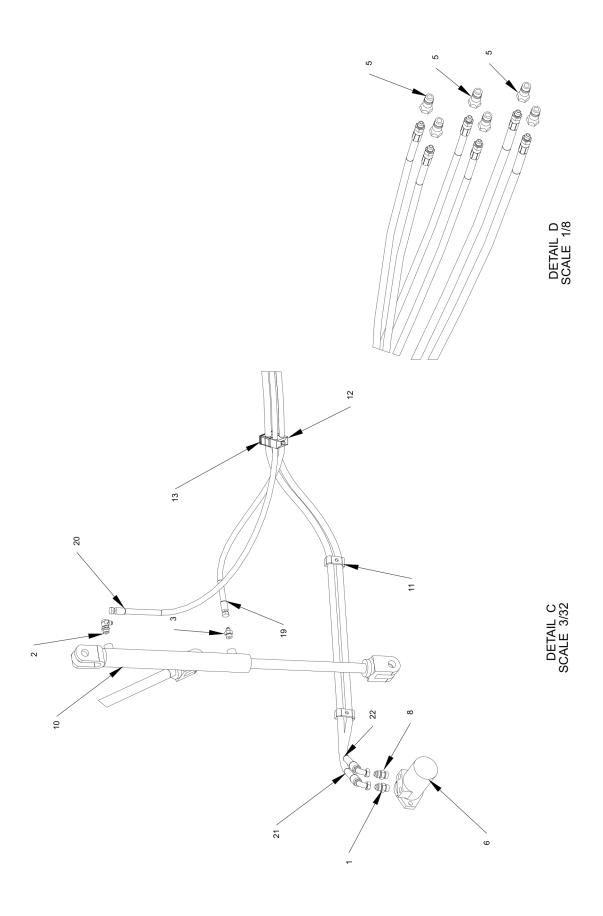


Non-Magnetic Tub Spout Assembly

Item	Part No.	Name	Remarks	Qty	Uom
1	4705366	PIN\CNVYR\SIDE		1	EA
2	4800928	BOLT\FLG\SERR\1/2X1-1/4\NC		2	EA
3	4900133	NUT\FLG\1/2\NC		2	EA
4	5900007	EXT\DISCH\DOOR		2	EA
5	5900050	PAN\DISCH\CMF430		1	EA
CA	5900053	DISCH\NON_MAG\ASSY\CMF430			EA

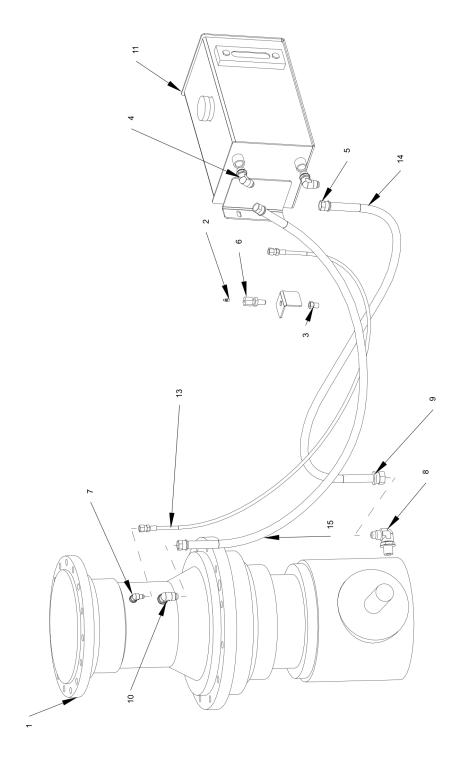






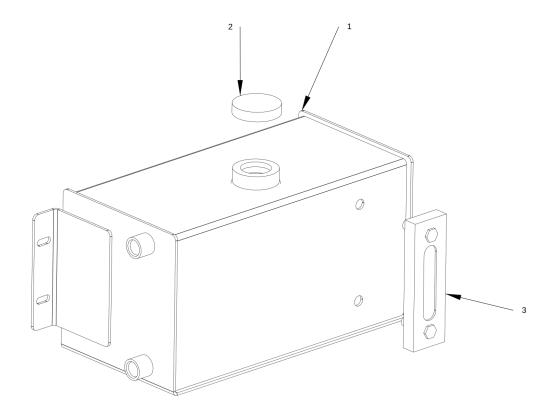
Conveyor and Door Hydraulic Assemblies

Item	Part No.	Name	Remarks	Qty	Uom
1	3800448	FTG\7/8MORX7/8MJIC\ST		1	EA
2	3800453	FTG\3/4MORX9/16MJIC\90		2	EA.
3	3800530	FTG\3/4MORX9/16MJIC\ST		2	EA.
4	3800631	FTG\9/16MORX9/16MJIC\ST		4	EA.
5	3800694	FTG\3/4FOR\QUICK;CPLR\MALE		6	EA.
6	3900032	MOTOR\HYD\22.6\H		1	EA
7	4000245	VALVE\RELIEF\CROSS\SINGLE		1	EA
8	4000288	FTG\7/8MORX7/8MJIC\ST\CHCK		1	EA.
9	4100241	CYL\HYD\2"X24"\1-1/4"ROD		1	EA
10	4100284	CYL\HYD\2X16\1-1/4RD\WELDE		1	EA
11	4700777	CLMP\HOSE\1/2		2	EA.
12	7501336	CLMP\HOSE\CUSH\3/8		7	EA
13	7501525	CLAMP\HOSE\1/2\2		2	EA
14	7501528	STRAP\HANG\2.5ID\STD		3	EA
15	3701695	HOSE\HYD\3/8X212\9/16FJICS(2)	ROD END DOOR CYL. TO CROSS-OVER RELIEF VALVE	1	EA.
16	3701696	HOSE\HYD\3/8X188\9/16FJICS(2)	TUBE END DOOR CYL. TO CROSS-OVER RELIEF VALVE	1	EA.
17	3701458	HOSE\HYD\3/8X84\9/16FJICSX3/4MOR	CROSS-OVER RELIEF VALVE TO TRACTOR COUPLER	1	EA.
18	3701458	HOSE\HYD\3/8X84\9/16FJICSX3/4MOR	CROSS-OVER RELIEF VALVE TO TRACTOR COUPLER	1	EA.
19	3701697	HOSE\HYD\3/8X198\9/16FJICSX3/4MOR	ROD END CONVEYOR CYL. TO TRACTOR COUPLER	1	EA.
20	3701698	HOSE\HYD\3/8X210\9/16FJICSX3/4MOR	TUBE END CONVEYOR CYL. TO TRACTOR COUPLER	1	EA.
21	3701461	HOSE\HYD\1/2X249\7/8FJICS90X3/4MOR	TOP PORT CHAIN MOTOR TO TRACTOR COUPLER	1	EA.
22	3701461	HOSE\HYD\1/2X249\7/8FJICS90X3/4MOR	BOTTOM PORT CHAIN MOTOR TO TRACTOR COUPLER	1	EA.



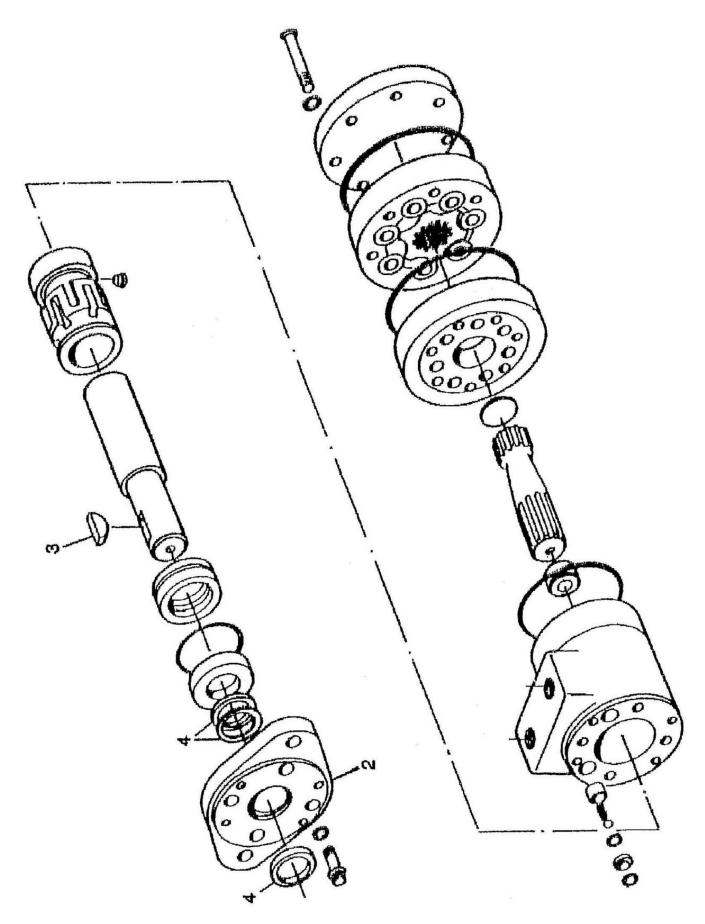
Gearbox Hydraulic and Lube Assembly

Item	Part No.	Name	Remarks	Qty	Uom
1	3100226	GRBX\PLANETARY\DBL\2100A3ZIFL\28.17		1	EA
2	3800082	FTG\LUB\1/4NFXZERK\ADAPT		1	EA.
3	3800514	FTG\1/4MPX1/8FP\ADPT		1	EA
4	3800537	FTG\3/4MORX3/4MJIC\90		2	EA.
5	3800826	FTG\3/4FJICX1/2SHLCK		3	EA
6	3800861	FTG\7/8MJICX1/2FP\BULKHEAD		1	EA
7	3800862	FTG\7/16MJICX#4BSPP		1	EA
8	3800863	FTG\1-1/16MJICX#10BSPP		1	EA
9	3800864	FTG\7/8FJICX1/2SHLCK		1	EA
10	3800960	FTG\3/4MJICX3/8BSPP\90		1	EA
11	5900039	TANK\LUBE\RH_PORTS\ASSY		1	EA.
12	7501525	CLAMP\HOSE\1/2\2		2	EA
13	3700642	HOSE\LUB\1/8X86"\7/16FJIC(2)	GREASE PORT TO ZERK BULKHEAD	1	EA
14	3701463	HOSE\1/2XCUT\3/4FJICX7/8FJIC	BOTTOM PORT TANK TO BOTTOM PORT GEARBOX	1	EA.
15	3701462	HOSE\1/2XCUT\3/4FJIC(2)	TOP PORT TANK TO TOP PORT GEARBOX	1	EA.



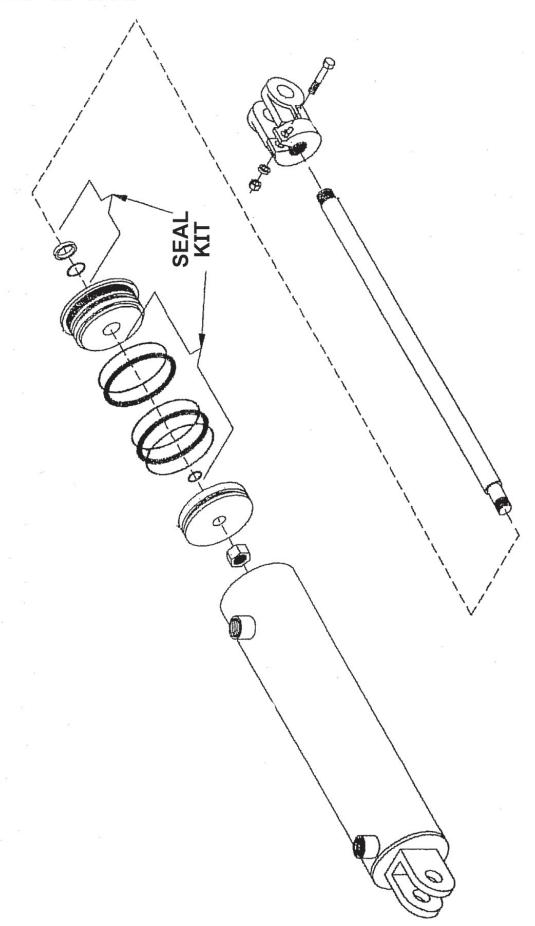
Planetary Gearbox Hydraulic Tank Assembly

Item	Part No.	Name	Remarks	Qty	Uom
1	5900038	TANK\LUBE\RH_PORTS\WELD		1	EA
2	7500275	CAP\VENTED\TANK\OIL		1	EA
3	7501242	GAUGE\LEVEL\5\M12\NOTHERMOMETER		1	EA
CA	5900039	TANK\LUBE\RH_PORTS\ASSY			EA.



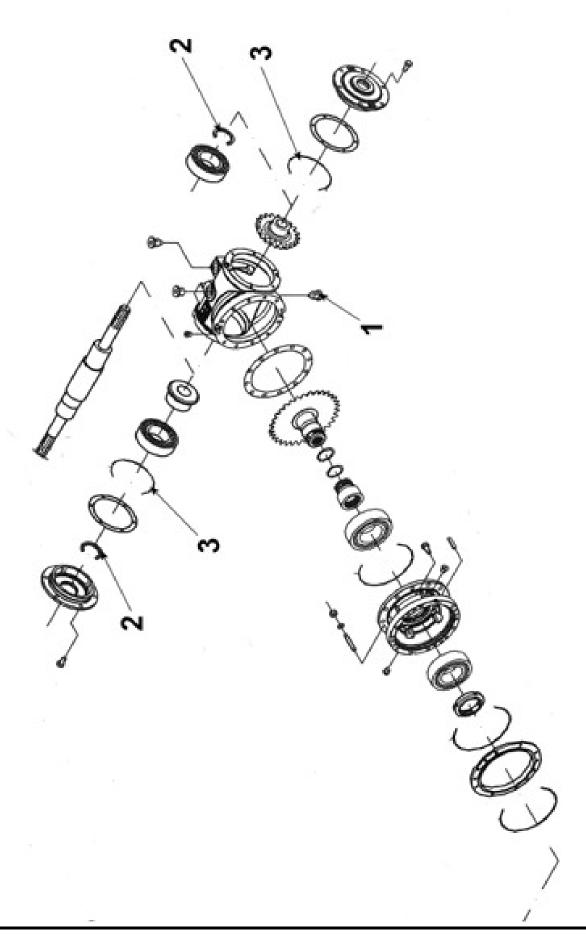
Orbit Motors 3900025-3900032

Item	Part No.	Name	Remarks	Qty	Uom
1	3900025	MOTOR\HYD\17.9\H			EA.
NS	3900032	MOTOR\HYD\22.6\H			EA
2	3900002	MOUNTING FLANGE		1	EA.
3	6200011	KEY\WDF\1/4X1		1	EA.
4	7501038	UNISEAL KIT 007-009		1	EA.



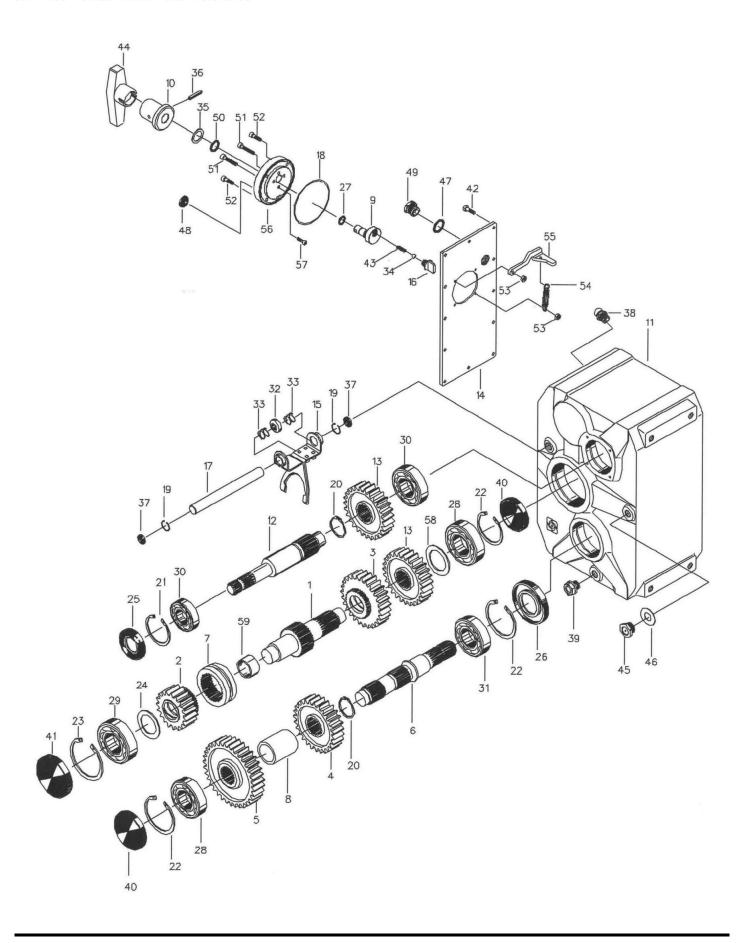
Hydraulic Cylinder Assembly

Item	Part No.	Name	Remarks	Qty	Uom
CA	4100284	CYL\HYD\2X16\1-1/4RD\WELDE	(Used on discharge conveyors)		EA
CA	4100241	CYL\HYD\2"X24"\1-1/4"ROD			EA
	4100228	KIT\SEAL\CYL\HYD\2\1-1/4RD\CTD-for 4100226			EA.



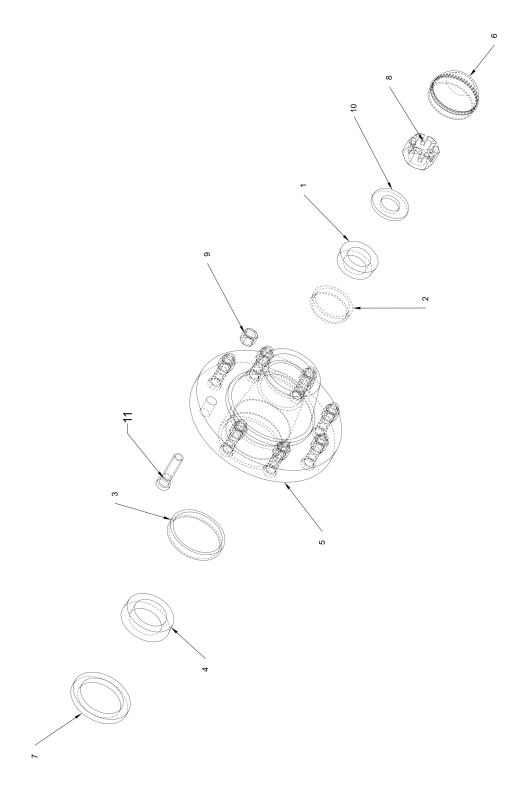
3100224 - Planetary Gearbox

Item	Part No.	Name	Remarks	Qty	Uom
1	3100365	PLUG\MAG\3/4BSPP\GRBX\CMF		1	EA
2	3100395	SEAL\OIL\INPUT\RR1800		2	EA
3	3100396	ORING\COVER\INPUT\RR1800		2	EA
CA	3100224	GRBX\PLANETARY\SNGL\1800\13.93:1			EA



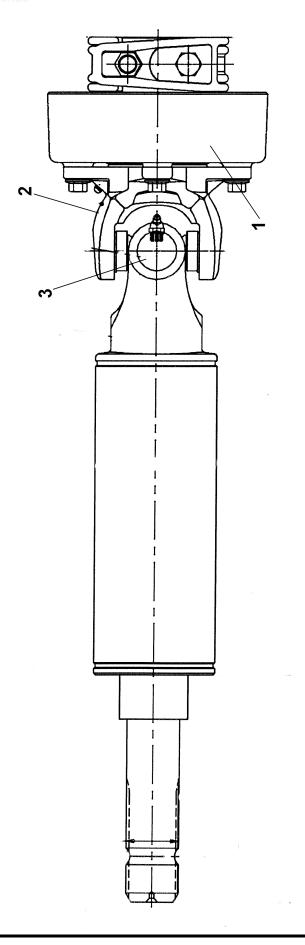
3100225 - 2-Speed Gearbox Assembly

Item	Part No.	Name	Remarks	Qty	Uom
CA	3100225	GRBX\2SPD\1.84:1\B&P6078			EA
18	3100412	ORING\STD\3375		1	EA.
25	3100413	SEAL\OIL\B&P\45X85X10		1	EA
26	3100414	SEAL\OIL\B&P\50X90X10		1	EA
27	3100415	ORING\STD\3043		1	EA.
38	3100416	PLUG\BRTHR\B&P\1/2		1	EA
40	3100417	PLUG\OIL\B&P\RCA90		2	EA
41	3100418	PLUG\OIL\B&P\RCA110		1	EA
45	3100419	PLUG\OIL\B&P\1/2		1	EA
46	3100420	SLEEVE\B&P\215X268X15		1	EA.
47	3100421	ORING\STD\3100		1	EA.
51	3100422	SEAL\OIL\B&P\16X22X34		1	EA.



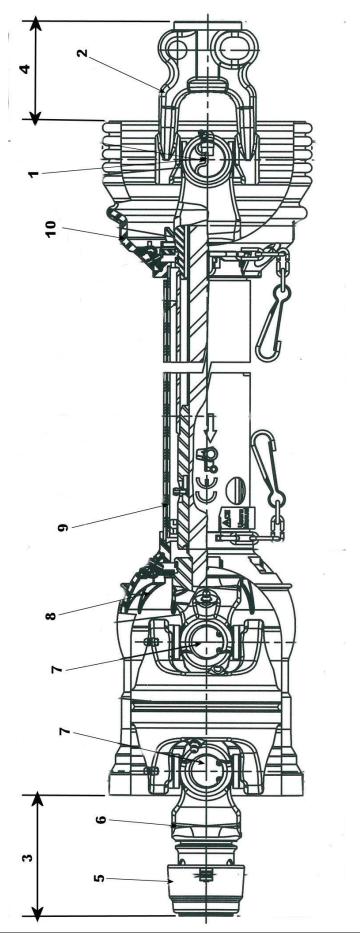
2900140 - Hub Assembly

Item	Part No.	Name	Remarks	Qty	Uom
1	2900125	HUB\H817\CONE\OUTER (LM501349)		1	EA.
2	2900126	HUB\H817\CUP\OUTER (LM501310)		1	EA.
3	2900127	HUB\H817\CUP\INNER (382A)		1	EA.
4	2900128	HUB\H817\CONE\INNER (387A)		1	EA.
5	2900129	HUB\8-BOLT\W/RACES\\W/NUTS		1	EA.
6	2900130	CAP\DUST\H817 (DC26)		1	EA.
7	2900131	SEAL\GREASE\H817 (SE42)		1	EA.
8	4900053	NUT\CASTLE\1-1/4\NF		1	EA.
9	4900114	NUT\TAPER\WHEEL\5/8\NF		8	EA.
10	5000065	WASH\2.50D\1.25ID\224		1	EA
11	2900160	STUD\WHL\5/8-18X2-1/2GR8		8	EA
CA	2900140	HUB\ASSY\H817\8BOLT\8"B.C.\6"PILOT			EA.



3600596 - Standard Driveline

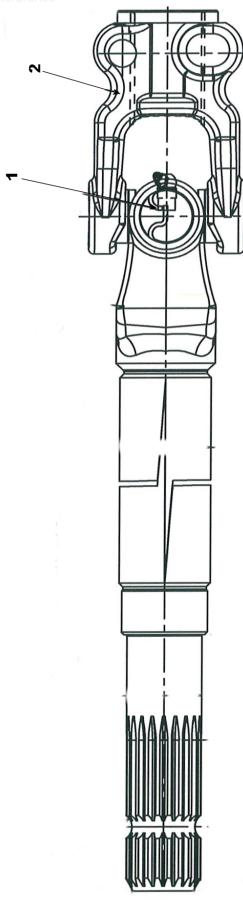
Item	Part No.	Name	Remarks	Qty	Uom
1	3600589	CLUTCH\PACK\18K\AUTO		1	EA
2	3600591	YOKE&HUB\44E\CLTCH\20SPL		1	EA
3	3600604	CROSS&BRG\44E\WSLR		1	EA.
CA	3600596	PTO\44E\18KAUTO\NO2SPD			EA



3600793 - Standard Driveline

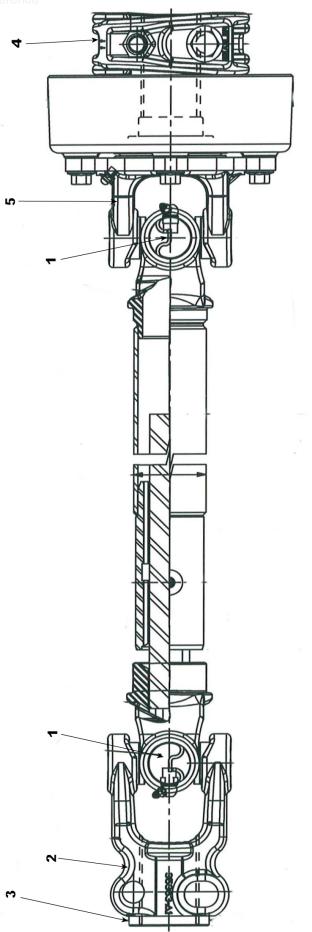
Item	Part No.	Name	Remarks	Qty	Uom
1	3600606	CROSS&BRG\35E\WLSR		1	EA
2	3600713	YOKE\35E\20SPL		1	EA
3	3600821	JOINT&SHFT\ASM\1-3/8SP		1	EA
4	3600822	JOINT&TUBE\ASM\1-3/8SP		1	EA
5	3600271	LOCK\SAFTY;SLID\KIT\1-3/8		1	EA.
6	3600823	YOKE\ASM\AUTO-LOK\1-3/8-6 WWCV		1	EA
7	3600843	CROSS&BRG\35E\CAT 4\80DEG\CV		2	EA.
8	3600825	GUARD\OUTER		1	EA
9	3600826	KIT\REPAIR\GUARD		2	EA
10	3600827	GUARD\INNER		1	EA
CA	3600793	PTO\245-25698\35E\1-3/8-6 WWCV			EA
NS	6500085	DECAL\DNGR\ROTATNG;DR-LNE			EA.
NS	6500310	DECAL\DNGR\GUARD;MISSING			EA
NS	6500510	DECAL\WARNING			EA.





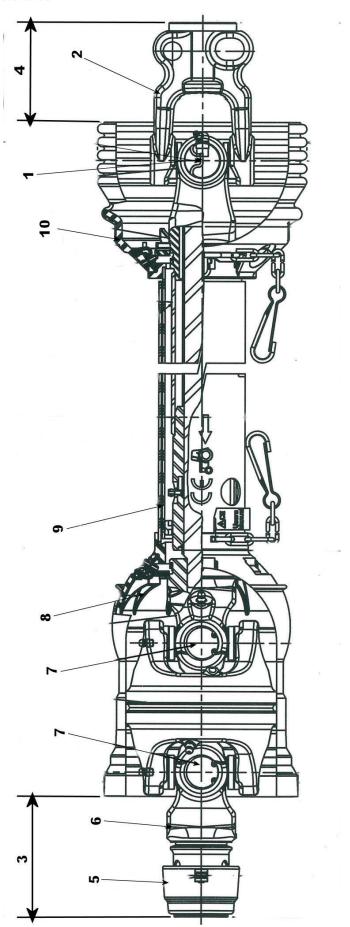
3600794 - 2-Speed Driveline

Item	Part No.	Name	Remarks	Qty	Uom
1	3600606	CROSS&BRG\35E\WLSR		1	EA
2	3600713	YOKE\35E\20SPL		1	EA
CA	3600794	PTO\242-25699\35E\SHAFT			EA



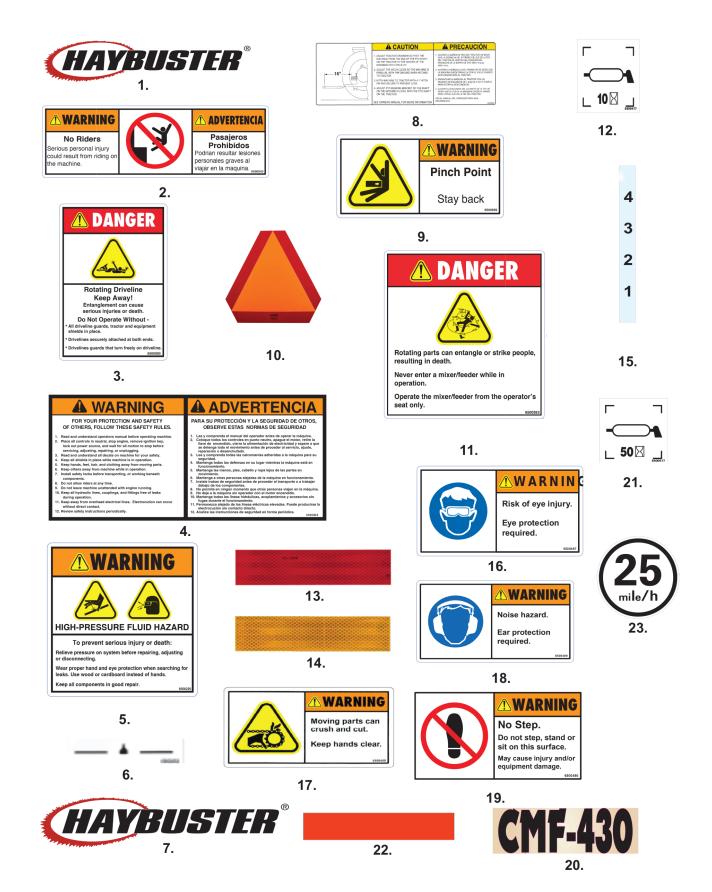
3600795 - 2-Speed Driveline

Item	Part No.	Name	Remarks	Qty	Uom
1	2	CROSS&BRG\35E\WLSR		3600606	EA.
2	1	CLUTCH\ASM\MOTION\FREE		3600713	EA.
3	1	CLUTCH\ASM\MOTION\FREE		3600828	EA.
4	1	CLUTCH\ASM\MOTION\FREE		3600829	EA.
5	1	CLUTCH\ASM\MOTION\FREE		3600830	EA.
CA	3600795	PTO\242-25700\35E\SHAFT\18K CLTCH			EA



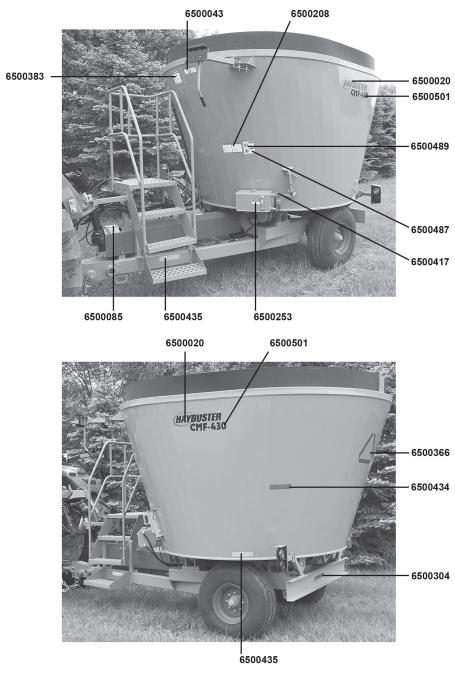
3600840 - Standard Driveline (for a 1000 RPM Shaft Only)

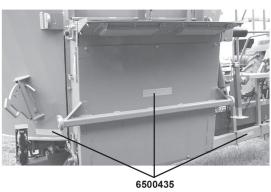
Item	Part No.	Name	Remarks	Qty	Uom
1	3600606	CROSS&BRG\35E\WLSR		1	EA
2	3600847	YOKE\35E\20SPL		1	EA.
3	3600841	JOINT&SHFT\35E\1-3/8-21WWCV		1	EA.
4	3600842	JOINT&TUBE\35E\U\1-3/4-20SPL		1	EA.
5	3600271	LOCK\SAFTY;SLID\KIT\1-3/8		1	EA.
6	3600836	YOKE\35E\21SPL\WWCV		1	EA
7	3600843	CROSS&BRG\35E\CAT 4\80DEG\CV		2	EA.
8	3600844	GUARD\PTO\FRNT\OUTER		1	EA.
9	3600845	KIT\REPAIR\GUARD\35EWWCV		2	EA.
10	3600846	GUARD\PTO\INNER\REAR		1	EA.
CA	3600840	PTO\245-27117\35E\1-3/8-21 WWCV			EA
NS	6500085	DECAL\DNGR\ROTATNG;DR-LNE			EA.
NS	6500310	DECAL\DNGR\GUARD;MISSING			EA
NS	6500510	DECAL\WARNING			EA.

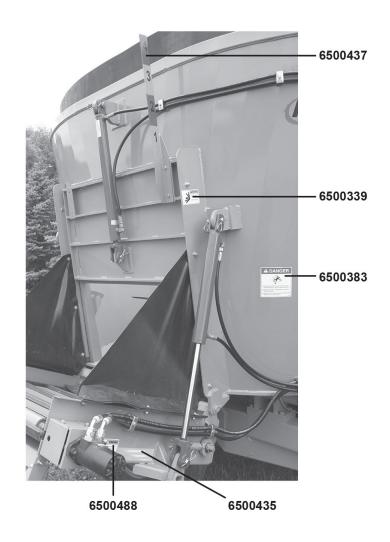


CMF-430 Decals

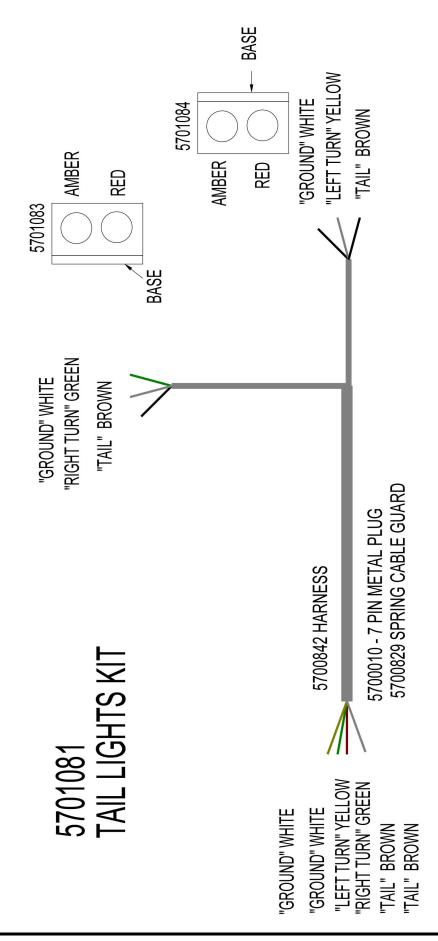
Item	Part No.	Name	Remarks	Qty	Uom
1	6500020	DECAL\LOGO\HYBSTR\SNBRS\3		2	EA.
2	6500043	DECAL\WARN\NO;RIDERS		1	EA.
3	6500085	DECAL\DNGR\ROTATNG;DR-LNE		1	EA.
4	6500208	DECAL\WARN\GENERAL		1	EA
5	6500220	DECAL\WARN\HI;PRESS;FLUID		1	EA.
6	6500253	DECAL\INFO\FLUID;LEVEL\>		1	EA
7	6500304	DECAL\LOGO\HYBSTR\1-3/4\W/		1	EA.
8	6500322	DECAL\CAUT\ADJ_DRAWBAR\16"		1	EA.
9	6500339	DECAL\WARN\PINCH;POINT		2	EA
10	6500366	DECAL\SMV		1	EA
11	6500383	DECAL\WARN\AUGER\MIXER		2	EA
12	6500417	DECAL\GREASE\10 HRS		1	EA.
13	6500434	DECAL\2X9\RED\REFCT		2	EA.
14	6500435	DECAL\2X9\AMBER\REFCT		4	EA.
15	6500437	DECAL\LOCATOR\DOOR		1	EA
16	6500487	DECAL\WARN\PPE\EYE		1	EA
17	6500488	DECAL\WARN\PARTS\MOVING		1	EA.
18	6500489	DECAL\WARN\PPE\HEARING		1	EA
19	6500490	DECAL\WARN\NO STEP		1	EA.
20	6500501	DECAL\LOGO\CMF430		2	EA.
21	6500517	DECAL\GREASE\50HRS		2	EA.
22	6500541	DECAL\2X9\FLRSCNT\NON-REFCT		2	EA.
23	6500599	DECAL\ID\SPEED\25MPH		1	EA.
CA	6500504	DECAL\KIT\CMF\430			EA.
NS	7500077	PAINT\YELLOW\SPRAY\12OZ			EA.
NS	7500092	PAINT\YELLOW\QUART			EA.
NS	7500091	PAINT\YELLOW\GALLON			EA.
NS	7500078	PAINT\RED\SPRAY\12OZ			EA.
NS	7500105	PAINT\RED\QUART			EA.
NS	7500104	PAINT\RED\GALLON			EA.













Delivery Report



			-	•			
Delivery Date			Machine Model		Serial No.		
Dealer Name			Engine Serial No.				
Dealer Address				Invoice No.			
Dealer City				State	Zip		
Dealer Er	Dealer Email Phone					·	
Customa	r Name						
	Customer Name Phone						
	Customer Address Phone Customer City State Zip						
Custome					o tato	p	
	The follo	wing items are to be ch	necked as they are explain	ned to the owner / operato	or at the time of de	elivery	
	Explain the delivery packet and present the operators manual(s) to the owner / operator.						
	Review and inspect the machine safety signs (decals) and the operator's manual.						
	Advise the owner that the dealer is the source to obtain operator training, and information regarding the correct application of the machine to the job, as well as service and warranty information.						
	Explain the capabilities and restrictions of the machine as it applies to the owner's application as defined in the operator's manual.						
	Explain the operation of the controls and start up and shut down procedures of the engine and power transmission components of the machine.						
	Explain rated lift or carrying capacity and loading and unloading procedures of the machine to maintain safety and stability of the machine.						
	Explain proper folding, unfolding, and transporting procedures to the owner / operator.						
	Explain recommended fueling procedures on engine equipped machines.						
	Explain proper loading and unloading of materials from the tub or grinding chamber of the machine.						
	Objects thrown by shredding or spinning rotors may represent a hazard to personnel and property in the area. Minimize risks by planning and by keeping personnel and property clear of hazaard area.						
	Explain the availability and use of the tub cover to further reduce risks of thrown objects.						
	Review maintenance and lubrication procedures with the operator / maintenance person as defined in the operators manual.						
	Advise never to use the machine in an environment with explosive or flammable materials present.						
	Explain warrant	ry policy and limitations	s to the owner / operator.				
			▲ Wa	rning			

Misuse of the machine or modification or removal of the guards, safety devices, or control interlocks can cause injury or death.

The above delivery information has been explained to me.	I understand the operation and maintenance of this machine.	I also acknowledge the warranty conditions
and limitations as outlined.		
Owner / Operator Signature	Date	
Dealer Representative Signature	Date	

