

S-2000[™] BALEBUSTER[™] Serial No. II0006 and Up

Operating Instructions and Parts Reference





PO Box 1940, JAMESTOWN, ND 58402-1940

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S-2000[™] BALEBUSTER[™] Serial No. II0006 and Up

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 S-2000TM BALEBUSTER 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.

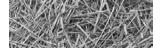
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FOREWORD



Foreword

All personnel must read and understand the following sections before operating the BALEBUSTER™.

- Section 2, "Dealer Preparation," to verify that the machine has been prepared for use.
- Section 3, "Introduction," which explain normal operation of the machine.
- Foreword and Section 1, important safety information.
- Section 4.1, "Pre-Operation Inspection".

Appropriate use of unit

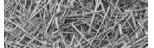
Your model **S-2000** BALEBUSTER is designed to load and shred most types of baled livestock forage. It is designed for use on large square bales.



Note: 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 shred materials other than livestock forage.

The BALEBUSTER has multiple uses:

- · Laying windrows in open fields.
- Filling feed bunks fenceline, circular etc.
- Spreading forage for livestock bedding.
- Spreading forage over perennial plants, such as strawberries, mushrooms, etc.
- Spreading forage over reclaimed land areas.



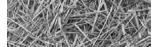


CAUTION: Operator protection

As with all machinery, care needs to be taken in order to insure the safety of the operator and those in the surrounding area.

The OPERATOR IS RESPONSIBLE for the safety of the operator and those in the surrounding area.

Operators of the BALEBUSTER are encouraged to wear head, eye, and ear protection, loose clothing is discouraged.



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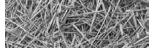


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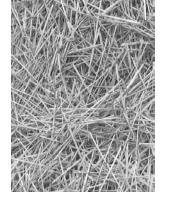
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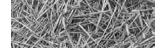
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S-2000[™] BALEBUSTER[™] Serial No. II0006 and Up

Part 1: Operating Instructions



Introduction

Appropriate use of unit

Your model **S-2000** BALEBUSTER is designed to load and shred most types of baled livestock forage. It is designed for use on large square bales.



Note: 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 shred materials other than livestock forage.

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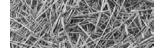
Purpose

The purpose of this owner's manual is to explain maintenance requirements and routine adjustments for the most efficient operation of your S-2000 BALEBUSTER. 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 behind the loader 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: S-2000 BALEBUSTER SERIAL NO.



Section 1: Safety

The safety of the operator is of great importance to DuraTech Industries/Haybuster. 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 PURPOSE OTHER THAN THOSE EXPLAINED IN THE OPERATOR'S MANUAL, ADVERTISING LITERATURE OR OTHER DURATECH INDUSTRIES WRITTEN MATERIAL PERTAINING TO THE S-2000 BALEBUSTER.

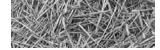
1.1 Safety-alert symbols

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.
- Replacement decals can be purchased from your Haybuster dealer.



DuraTech Industries uses industry accepted **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



CAUTION:

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



CAUTION:

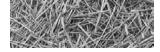
Signal word - Black Lettering/Yellow Background Safety Alert Symbol - Black Triangle/Yellow Exclamation Point

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 **S-2000 BALEBUSTER** when you are fatigued. Be alert - If you get tired while operating your **S-2000 BALEBUSTER**, 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.



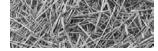
Good footing is most important. Wear sturdy boots with nonslip soles. Steel-toed safety boots are recommended.



To reduce the risk of injury to your eyes never operate a **S-2000 BALEBUSTER** 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: FLYING HAY, ROCKS, AND OTHER OBJECTS THROWN BY MACHINE.

STAY CLEAR OF DISCHARGE SIDE OF MACHINE UNLESS OPERATOR HAS STOPPED TRACTOR ENGINE AND MACHINE HAS STOPPED ROTATING. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SEVERE PERSONAL INJURY OR DEATH.



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DANGER: ROTATING FLAILS CAN KILL OR DISMEMBER

KEEP CLEAR OF MACHINE UNTIL POWER TAKE-OFF HAS BEEN DISENGAGED, TRACTOR ENGINE SHUT OFF AND FLAIL ROTATION STOPPED



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WARNING: FOR YOUR PROTECTION KEEP ALL SHIELDS IN PLACE AND SECURED WHILE MACHINE IS OPERATING MOVING PARTS WITHIN CAN CAUSE SEVERE PERSONAL INJURY.



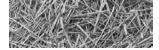
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WARNING: WAIT FOR ALL MOVEMENT TO STOP. FAILURE TO USE CAUTION COULD RESULT IN SERIOUS INJURY OR DEATH.

AWARNING	ADVERTENCIA
WAIT FOR ALL	ESPERE A QUE CESE
MOVEMENT TO STOP	TODO EL MOVIMIENTO
FAILURE TO USE	EL NO EJERCER
CAUTION COULD	PRECAUCION PODRIA
RESULT IN SERIOUS	RESULTAR EN LESIONES GRAVES O LA MUERTE

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WARNING: FOR YOUR PROTECTION AND PROTECTION OF OTHERS, PRACTICE THE FOLLOWING SAFETY RULES.

- 1. BEFORE OPERATING THIS MACHINE, READ THE OPERATOR'S MANUALS SUPPLIED WITH THIS MACHINE AND YOUR TRACTOR.
- 2. CHECK OPERATORS MANUALS TO BE SURE YOUR TRACTOR MEETS THE MINIMUM REQUIREMENTS FOR THIS MACHINE.
- 3. READ ALL DECALS PLACED ON THIS MACHINE FOR YOUR SAFETY AND CONVENIENCE.
- 4. NEVER ALLOW RIDERS ON THIS IMPLEMENT OR THE TRACTOR.
- 5. KEEP OTHERS AWAY FROM THIS MACHINE WHILE IN OPERATION.
- 6. KEEP ALL SHIELDS IN PLACE WHILE MACHINE IS OPERATING.
- 7. KEEP HANDS, FEET, LOOSE CLOTHING, ETC., AWAY FROM POWER DRIVEN PARTS.
- 8. ALWAYS SHUT OFF MACHINE AND ENGINE BEFORE SERVICING, UNCLOGGING, INSPECTING, OR WORKING NEAR THIS MACHINE FOR ANY REASON. ALWAYS PLACE TRANSMISSION IN PARK OR SET PARK BRAKE AND WAIT FOR ALL MOVEMENT TO STOP BEFORE APPROACHING THIS MACHINE.



CAUTION: ADJUST 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 IS 16".

A WARNING

FOR YOUR PROTECTION AND PROTECTION OF OTHERS. PRACTICE THE FOLLOWING SAFETY RULES. SEFORE OPERATING THIS RACHINE, READ THE OPERATOR'S NAMUALS SUPPLIED THIS MACHINE AND YOUR THREAD OR

- THE MACHINE AND TO, IT TRACTOR. DEEKS COFFANDED INMULATE TO REQUEE TO CHE THACTOR MEETS THE MANNUM REQUEEDENTS TO BITLE MACHINE READ ALL DECREE PLACES OF THE WACHINE FOR YOUR LARGET AND CONVENIEND INVEX ALLOW RECEILS OF THE MACHINE FOR YOUR LARGET.
- OTHERE MAAY FROM THIS MACHINE WHILE IN OPERATION. ALL SHELDS IN PLACE WHILE MACHINE & CPERATING. HANDS: FEET, LODGE CLOTHING, LTC, AWAY FROM POWER
- JT OFF BACHARE MO EVAINE BERCRESE FORVIORS, BACLDOEING, , OF WORKING NEAF THE MACHINE FOR MAY REASOL. ALLWICK AND ALCH ON IN "AILS OR SET PARE BEAKS AND WAIT FOR ALL MONIMENT TO STOP

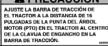
ADVERTENCIA

SIGA LAS REGLAS SIGUENTES DE SEGURIDAD PARA SU PROTECCION Y LA PROTECCION DE OTROS LEN LOS IMMULAS DEL OPERADOR NOLUDOS CON ESTA MADURA Y S TRACTORATEDE O DERAN ESTA MADURA

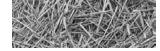
- Inscrum ATTREDE DERKAR ESTA INSCRUM.
 PARA ADDORTATE DE VERKAR ESTA INSCRUM.
 PARA ADDORTATE DE VERKAR ESTA INSCRUM.
 INSCRUM AL ESTA INSCRUM. REVIEL LOS VARIAL ES DEL DORTATION I MAINO PARA ESTA INSCRUM. REVIEL LOS VARIAL ES DEL DORTATION I VARIA EU EDUNT DAS Y CONVINENCIA. LEA YODAS LE CALORIMANES DOLCOLES ESTA LA BADDIAN.
- 4. NUNCA PENIITA PASA JEROS EVESTA NAGI NA O IN EL TRACTOR. 8. UNITENDA ALELADOS 3 LOS ESPECTADORES VIENTRAS ESTA VIRGUNA ESTE OFERANO.
- VERSING ESTE OFFENDO. 6. MUNTERIA TODOL OS PROTECTORES EN SU LUCAR MENTRAS LA MOUNT STEL OFENDO. 7. UNTERVIA LUS UNOCI, PES ROPAS HOLGADAS, ETC., MELADAS DE LAS FERSIS MONOLADAS.
- MELEMANNE ANDRA ANDRA EL INDEDITANTES DE MERITAN BEHYDE MELEMANNE ANDRA EL INDEDITANTES DE MERITAN BEHYDE ILDURE NOTIVO, ANTES DE LACIECARSE A ESTA MADUNA FOR ILDURE NOTIVO, ANTES DE LACIECARSE A ESTA MADUNA DEL DOLE MELE LA TANADOSIN EN ISSTACIONAMENTO O ENGANCHE IL NO DE ESTACIONAMENTO.

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1.4 Shielding

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

1.5 Personal equipment

Operators of this machine are encouraged to wear head, eye, and ear protection. Operators should not wear loose clothing.

1.6 Safety review

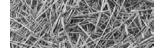
BEFORE OPERATING

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- Read and follow all instructions contained in:
 - A. This S-2000 Operator's manual
 - B. Tractor Operator's manual
 - C. Decals placed on the S-2000

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

- Allow only responsible, properly instructed individuals to operate your machine. Carefully supervise inexperienced operators.
- Use a tractor which meets the tractor requirements contained within this manual. See REQUIRED FOR OPERATION: page 33.
- Make sure the machine is in good operating condition and that all protective shields are in place and in proper working order. Replace damaged shields before operating.
- Make no modifications to the machine useless specifically recommended or requested by DuraTech Industries.
- Check periodically for breaks or unusual wear and make any necessary repairs.



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If required install the PTO safety chain. Check local regulations regarding safety chain requirements.

DURING OPERATION

Enforce the following safety precautions and others contained in this manual to prevent serious personal injury.

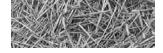
- Everyone must be kept clear of work area except operator seated at tractor controls.
- Disengage PTO before starting engine.
- Never work on or near BALEBUSTER unless engine is shut off and flails have stopped.
- Keep shields in place and in good condition.
- Watch out for and avoid any object that might interfere with the proper operation of the machine.
- Power takeoff shafts must be locked in place with protective PTO shields in place.
- Keep hands, feet and clothing away from power driven parts.
- Never leave tractor controls unattended while the engine is running.
- Exercise extreme care when operating on rough and/or steep terrain. Avoid operation on terrain which is excessively rough or steep.

DURING SERVICE AND MAINTENANCE



CAUTION: Before performing any maintenance or adjustments make sure machine is NOT running. If for any reason arc welding is to be done, always ground rotor to frame of machine to prevent arcing on bearings.

- Never work on the BALEBUSTER with the bale loader in the raised position. Lower the bale loader to ground level.
- Check for loose or badly worn bolts.
- Check for loose or misaligned sprockets.
- Bale pusher chain tension should be adjusted so the chain hangs 1/2" to 1" above the fenders.
- Follow Lubrication Instructions.
- Inspect rotor and all rotating parts for twine or wire build-up. REMOVE DAILY
- Check air pressure in tires, 40 PSI.
- Check wheel bearings, and seals.
- Tighten flail knife anchor bolts to 180 to 190-foot pounds torque.
- Before working on or near the BALEBUSTER for any reason, including servicing, cleaning, unplugging



or inspecting machine use normal shut-down procedures unless instructed differently in this manual.

- Check periodically and tighten any loose bolts or connections.
- Use only replacement parts that are recommended by DuraTech Industries.
- 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.

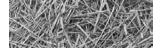


CAUTION: Hydraulic fluid escaping under pressure can be visible and have enough force to penetrate the skin. When searching for a suspected leak, use a piece of wood or cardboard rather than your hands. If injured, seek medical attention immediately to prevent serious infection or reaction.

- 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.
- Adjustment has been provided for tightening main drive belt. The belt tends to stretch rapidly when first put into operation. Tighten regularly to prevent slippage. Belt tension should be checked at 30 minute intervals or as necessary until stretch is eliminated. Correct belt tension can be obtained by tightening the belt until the idler deflects the belt 2' to 2 ¹/₂" inches.

1.7 Towing/road transport

- Use good judgment and drive slowly over rough or uneven terrain.
- Be sure tractor brakes are properly adjusted and foot pedals are locked together.
- When preparing implement for transport, it is recommended that the forks be raised.
- The discharge deflector must be rotated to the closed position.
- Check your state laws regarding the use of lights, slow moving vehicle signs, safety chain and other possible requirements.

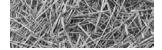


Section 2: Dealer preparation

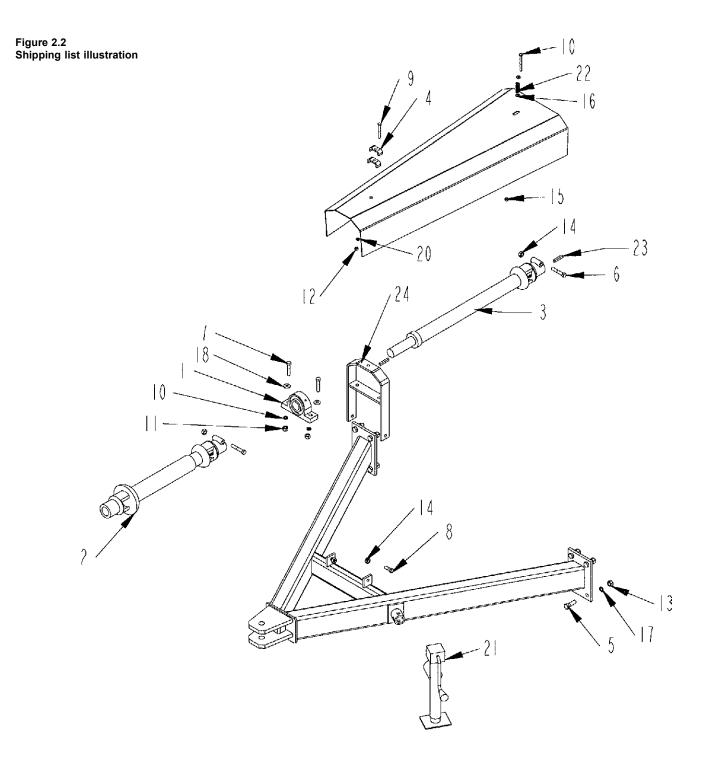
2.1 Pre-delivery inspection

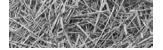
INSTRUCTIONS: Before delivering the machine, check the following items carefully and make corrections when necessary. Place an "X" in the box after each item has been checked and found to be acceptable.

- □ Missing items or damage in transit.
- Loose bolts or set screws.
- □ Hydraulics components for leaks or damage.
- Lug bolts for tightness.
- **Tires for proper air pressure**
- **Condition of tire rims.**
- **D** Proper lubrication.
- □ All chains for proper adjustment.
- All shields for installation and condition.
- Condition of all decals.
- □ All phases of operation

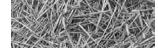


2.2 Shipping list and illustration





ITEM	PART #	QTY.	PART DESCRIPTION
1	2000514	1	BRG\PB\2-BOLT\1-3/4\MAL
2	3600077	1	COMPLETE PTO 35W
3	3600184	1	PTO COMPLETE
4	4700776	2	CLAMP\HOSE\3/8
5	4800010	8	BOLT\HEX\5/8X2
6	4800068	2	BOLT\HEX\1/2X3
7	4800070	2	BOLT\HEX\1/2X2-1/2
8	4800082	2	BOLT\HEX\1/2X1-1/2
9	4800156	1	BOLT\HEX\3/8X3
10	4800197	1	BOLT\HEX\3/8X3-1/2
11	4900001	2	NUT\HEX\1/2\NC
12	4900002	1	NUT\HEX\3/8\NC
13	4900005	8	NUT\HEX\5/8\NC
14	4900014	4	NUT\TPLCK\1/2\NC
15	4900023	1	NUT\TPLCK\3/8
16	5000001	2	WASH\FLAT\3/8
17	5000003	8	WASH\LOCK\5/8
18	5000004	2	WASH\FLAT\1/2
19	5000006	2	WASH\LOCK\1/2
20	5000019	1	WASH\LOCK\3/8
21	5800601	1	JACK (2SM10) 12
22	6100002	1	SPG\COMP\.072W\11/16OD\2-1/8LONG
23	6200020	2	KEY\SQ\3/8X2-1/4\HARDEND
24	8100675	1	BRKT\BRG\DRIVELINE
25	4800143	2	SCR\SET\ALN\3/8X3/8\NC (NOT SHOWN)

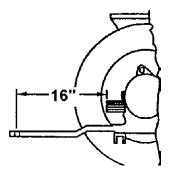


2.3 Assembly required



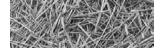
NOTE: Use shipping list and drawing on pages 12 and 13 for reference.

- 1 Adjust the tractor drawbar so that the distance from the end of the PTO shaft on the tractor to the center of the drawbar hitch pin hole is 16" (41 cm.).
- 2 Remove hitch from shipping stand.
- 3 Place jack #21 on main frame mounting bell. Raise main frame and remove front shipping stand.
- 4 Bolt hitch onto main frame using #5 5/8 x 2" bolts, #17 5/8" lock washers and #13 5/8" nuts. Block hitch in a level position and reposition jack on hitch mounting bolt.



For more information on setting the safe distance from P.T.O. see section 4.2.1 "Tractor Set Up"

- 5 Mount bearing bracket #24 on hitch with (2) #8 1/2 x 1-1/2" bolts and #14 1/2" lock nuts. Bracket must hinge freely on bolts!
- 6 Attach drive line #3 to belt drive shaft. Use #23 3/8 SQ x 2-1/4" hardend key, #6 1/2 x 3" bolt and #14 1/ 2" lock nut. #25 3/8" set screw.
- 7 Slide bearing #1 on drive shaft #3, and bolt bearing to bracket #24 using #7 1/2 x 2-1/2" bolt, #18 1/2" flat washers, #19 1/2" lock washers and #11 1/2" hex nuts. Slide bearing on shaft so the bracket is square with hitch. Lock, lockins collar.
- 8 Mount PTO #2 onto drive shaft #3 with #23 3/8 SQ x 2-1/4" hardend key and #14 lock nut.
- 9 With driveline shield in working position bolt the rear end of the shield to the drive belt tightening frame using #9 3/8 x 3" hex bolt, #22 spring, (2) #16 3/8" flat washers and #15 lock nut.
- 10 Bolt drive line shield to PTO Bearing Stand. First stack (4) hoses and (2) 3/8" hose minders (4500892) on top of shield. Insert 3/8" x 3" bolt (4800156) through stack shield and PTO bearing stand. Tighten (1) 3/8" flat washer (500001) lock washer (5000019), nut (4900002).
- 11 Hitch the BALEBUSTER to the tractor drawbar.
- 12 Raise the jack. Pull the lock pin and store in the transport position.
- 13 Attach the PTO to the tractor PTO shaft. Depress coupling and slide the coupling onto the splined shaft. Make sure the spring loaded safety catch is properly seated.
- 14 Connect the two hydraulic hoses from the hydraulic cylinder to one set of hydraulic couplers on the tractor. Connect the two hydraulic hoses from the bale pusher speed control valve to the second set of hydraulic couplers on the tractor.
- 15 Attach hydraulic hose to tractor, raise header to full up position (extending the hydraulic cylinder), remove and discard loader shipping bracket. Cycle cylinder several times to remove air from hydraulic system.



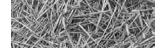
- 16 If required, install the safety chain. Check local regulations regarding safety chain requirements.
- 17 Grease PTO before **use**.
- 18 This machine is set up to operate on 1000 RPM 1-3/8" only!

2.4 Machine operation check

With Tractor hooked up to the BALEBUSTER, try all functions on the machine.

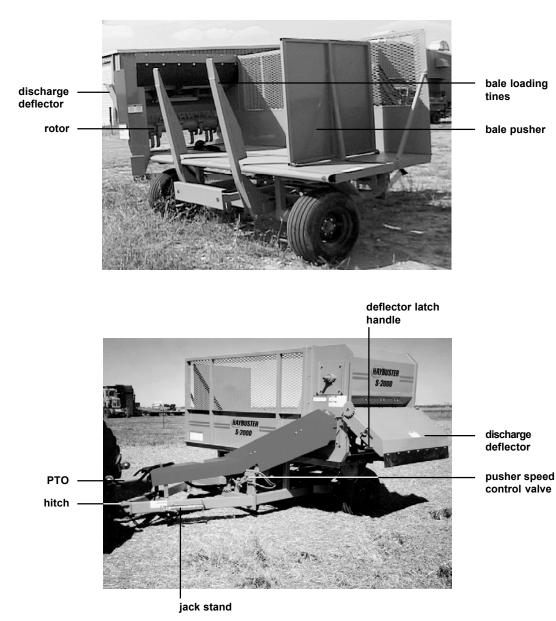
With the engine at idle:

- 1. Raise and lower the bale loader.
- 2. Engage the bale pusher, adjust pusher speed control valve on the BALEBUSTER.
- 3. Engage the tractor PTO, the rotor and beater should be running. Listen for any odd noises and vibrations.



Section 3: Introduction

Figures 3.1 and 3.2 Location of major components



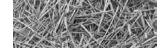


Operator controlled items:

- The loading tines, to load the bale. See section 4.2.6, "Loading bales ..."
- The PTO shaft, which runs the rotor.
- The bale pusher chain.

Adjustable items:

- The bale pusher speed control valve. See section 4.3, "Adjusting The Machine"
- Deflector settings

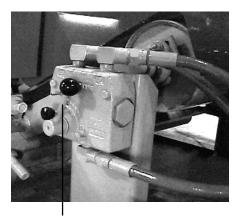


3.2 Bale Pusher

The Bale Pusher moves the bale into the shredding chamber.

Bale Pusher speed is set with the speed control valve or tractor controls if equipped with a PFC system.

To chop the forage finer, decrease the pusher speed by rotating the control lever counter clockwise. For a coarser cut, increase the pusher speed by rotating the lever clockwise.



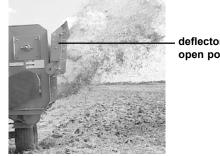
bale pusher speed control valve

3.3 Stripper plate

The S-2000 BALEBUSTER comes with one stripper plate standard. When the stripper plate is installed, the S-2000 will produce a finer cut. Removing the stripper plate will produce a coarser cut.

3.4 Deflector

The deflector assembly can be adjusted for different scattering effects. Remove locking pin and raise the deflector for a wider spread. Lower the deflector for a narrower windrow. When bunk feeding an 18" wide bolt (optional) can be added to the deflector to prevent material from blowing past the bunk.

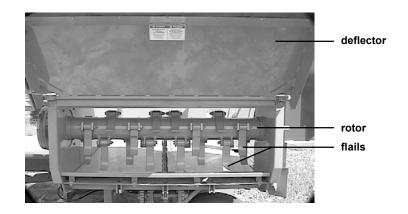


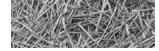
deflector in the fully open position

3.5 Rotor

The rotor flails shred the bale and throws the material into the deflector. Rotor speed should remain constant, which is done by keeping the tractor PTO at 1000 RPM.

Figure 3.3 Rotor, deflector and flails





Section 4: Operation

To insure long life and economical operation, we highly recommend the operator of the BALEBUSTER be thoroughly instructed in the maintenance and operation of the machine.

There is no substitute for a sound preventative maintenance program and a 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 BALEBUSTER.

4.1 Pre-operation inspection



WARNING: Before inspecting the machine, use the normal shut-down procedure in section 5.2.3.

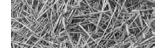
Check the following:

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.

- Lug Nuts for tightness.
- **Condition of tire rims.**
- Tires for proper air pressure.
- □ Installation and condition of flails.
- **Rotor for twine build-up.**
- □ Chains for proper tension, and condition.
- □ Installation of slow moving vehicle (SMV) sign if required.
- □ Condition of decals.
- □ Installation and condition of shields.
- Condition of flails and attachment bolts.
- Belts for proper tension, and condition.

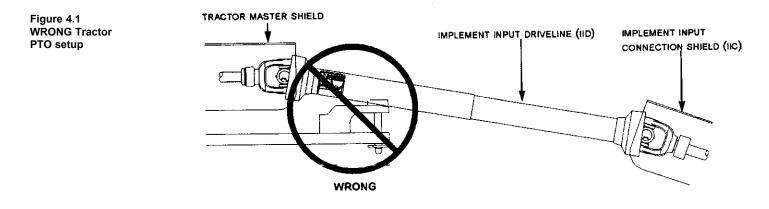


4.2 Machine Operation

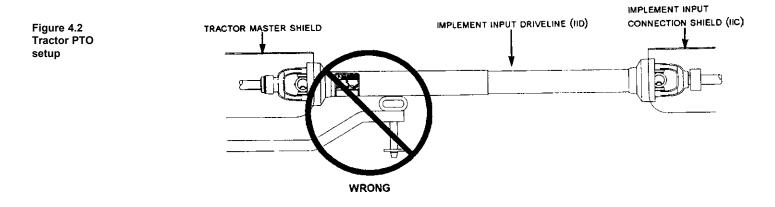
4.2.1 Tractor Set Up

A tractor drawbar and 3-point arms can cause interference with the PTO driveline IID (Implement Input Driveline). This interference can cause serious damage to the IID guarding and the IID telescoping members.

If this implement is attached to a tractor with a clevis hitch (hammer strap) style drawbar, the hammer-strap must be removed to prevent damage to the IID guarding and the IID telescoping members. See Figure 4.1.

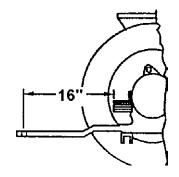


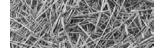
If this implement is attached to a tractor with an offset in the drawbar, be certain it is in the down position to prevent damage to the IID guarding and the IID telescoping members. See Figure 4.2.



If this implement is attached to a tractor with 3-point arms, the arms must be fully raised and locked in position to prevent damage to the IID guarding and the IID telescoping members.

To **PREVENT DAMAGE** to the **PTO**, adjust the tractor drawbar so that the distance from the end of the PTO shaft on the tractor to the center of the drawbar pin is 16". See figure to the right.





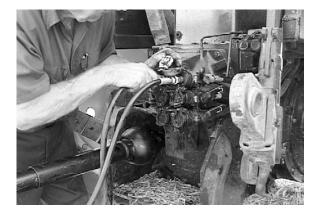
4.2.2 Hitching the BALEBUSTER to a tractor

Figure 4.3 connecting the PTO



To hitch the BALEBUSTER to a tractor, perform the following steps:

- 1. Adjust jack for tractor height
- 2. Position tractor so hitch pin can be installed, and install the hitch pin.
- 3. Adjust jack so that the jackstand is loose. Then place jackstand in the raised and locked position.
- 4. Attach PTO to tractor.
- 5. Clean off the hydraulic hose ends and tractor couplings, then attach the hydraulic hoses.
- 6. Verify hydraulic hoses are hooked up in proper orientation.
- 7. Raise loading tines before moving.

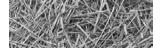


Making the hydraulic connections

4.2.3 Operating the machine



WARNING: After making all necessary hook-ups to tractor, be sure rotor chamber is clear of any solid objects. Make sure any bystanders are away from discharge before engaging PTO. Flying objects can cause serious injury or even death. Stay clear of discharge side of machine unless operator has stopped tractor engine and machine has stopped rotating. Failure to follow these instructions may result in severe injury.



Machines hydraulic system performs two (2) functions. One function raises the bale loader for loading bales into the machine. The second function powers bale pusher by means of a hydraulic motor. Operating tractor PTO at 1000 RPM allows machine to do a better job of chopping forage and also keeps a minimum of twine build-up on the rotor. Twine build-up should be kept to a minimum to reduce fire hazard.

To operate the machine, perform the following steps:

- 1. Load machine according to section 5.2.4 "Loading Bales".
- 2. With tractor at idle, engage PTO.
- 3. Increase tractor engine speed so PTO is at 1000 RPM.
- 4. Engage bale pusher.
- 5. Drive as needed to spread as desired.
- 6. Reverse bale pusher.

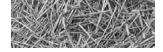
4.2.4 Normal shut-down procedure



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 BALEBUSTER. 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.

To shutdown the machine, perform the following steps:

- 1. Disengage PTO
- 2. Lower machine to ground level.
- 3. Place transmission in park or set park brake
- 4. Shut Off engine and remove key.
- 5. Wait for all movement to stop.



4.2.5 Unhitching the BALEBUSTER from a tractor

To unhitch the BALEBUSTER from a tractor, perform the following steps:

- 1. Follow Normal shut-down procedure
- 2. Lower jack and secure. Raise tongue off of the tractor draw bar
- 3. Detach the PTO shaft from the tractor.
- 4. Cycle the hydraulic control levers to release any pressure in the hydraulic hoses. Be sure loading table is completely down.
- 5. Detach the hydraulic hoses.
- 6. Remove the safety chain, if installed
- 7. Remove the hitch pin.

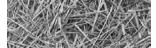
4.2.6 Loading bales into the BALEBUSTER



Note: The bale pusher must be parked far right of the shredding chamber before a bale is loaded. (Steps 2-5).

To load bales into the BALEBUSTER, perform the following steps:

Step 1:	With bale loader in its lowest position, back trailer until bale is loaded on the bale tines.
Step 2:	Slowly lift bale into shredding chamber. Lower the bale loader, this will show you if the twine is over loader tines. Cut twine at this time if necessary.
Step 3:	Slowly raise the bale loader until it stops. Moving the bale as far forward as possible, and then lower loader away from the bale. This is the correct position for shredding a single bale.
Step 4:	To load a second bale, lower bale loader. Back trailer until bale is loaded on the bale tines. Slowly lift the bale off the ground keeping the weight of the bale on the tines. This is the transport position for the second bale.
Step 5:	After the first bale is shredded, repeat Step 2, 3 and 5 loading and shredding a single bale.





Step 1: Load the bale

Step 2: Slowly lift bale



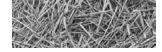
Step 3: Raise bale until it stops



Step 4: Load second bale or shred current bale



Shredding current bale



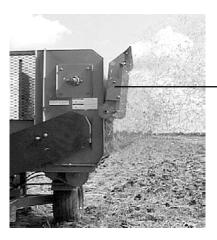
4.3 Adjusting the machine

4.3.1 Changing the output distribution pattern

The deflector can be set to create a windrow, for spreading, bunkfeeding or for stock piling.

To change the setting, remove locking pin and firmly grab the rubber belting or the outer edge of the deflector. With the other hand, grab the deflector latch handle. Lift the handle, which releases the latch on the end of the deflector. Rotate the deflector to the desired position and release the handle. Reinstall the locking pin.

A wider deflector belt is available for bunkfeeding or to help control material.



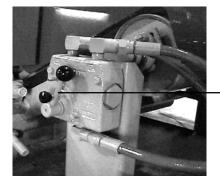
deflector in the fully open position

4.3.2 Adjust bale pusher speed

Moving the lever counterclockwise will slow the pusher, and make a finer product. Moving the lever clockwise will speed up the pusher and make a coarser product.

For tractors with PFC type hydraulic systems:

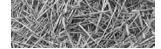
This valve should be set in the full open position. Pusher speed can be controlled directly from the tractor controls.



bale pusher speed control valve



CAUTION: Processing an 8' foot bale faster than 1 minute may damage the machine.



4.4 Storage

4.4.1 Preparing the machine for storage

This machine is designed to fold for ease of transportation and storage. The rack assembly folds inside of bale chamber.



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

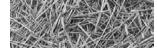
To prepare the BALEBUSTER for storage, perform the following steps:

- 1. Clean all mud, dirt, grease and other foreign material from the exterior of the machine. Cut all twine off from around the rotor. Wash the complete machine. If washing the BALEBUSTER with a high-pressure washer, keep the nozzle away from the sealed bearings. Repaint places where bare metal is exposed this will inhibit rusting.
- 2. Place the jackstand in the down and in locked position. Block the rear axle up taking the weight off the tires, but do not deflate tires. 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 hydraulic cylinder rod with grease. Oil chains. Lubricate thoroughly according to lubrication instructions. Repack wheel bearings.
- 4. Check the machine for any worn or broken parts.
- 5. 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.

4.4.2 Removing the machine from storage

To remove the BALEBUSTER from storage, perform the following steps:

- 1. Remove all protective coverings.
- 2. Remove blocking from under the machine
- 3. Lubricate machine in accordance with lubrication instructions found in this manual.
- 4. Follow pre-starting inspection instructions.

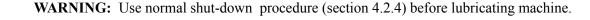


Section 5: General maintenance

NOTE: Before performing any service or maintenance on your BALEBUSTER, review the safety guidelines for performing service and maintenance in section 1.6 "Safety review" under the heading "**DURING SERVICE AND MAINTENANCE**".

5.1 Lubrication

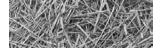
LUBRICATION INSTRUCTIONS: The operator should make a check of all grease fittings in the unit before beginning to operate it so as to become familiar with their location and the correct service schedule.



Use only a high quality, 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 any grease fittings are missing, replace them immediately.

The following grease points will require an eight (8) hour service interval.

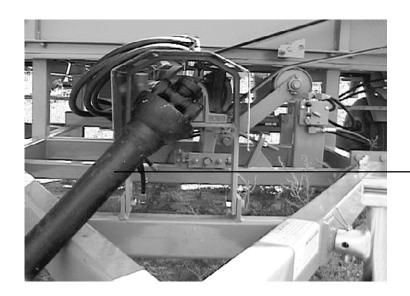
- 1. PTO 2 places (figure 5.1)
- 2. Drive Line 1 place (not shown)
- 3. Drive Line Bearing 1 place (not shown)
- 4. Belt Tightener 2 places (figure 5.2)
- 5. Belt Idler 3 places (figure 5.2)
- 6. Rotor Bearings 2 places (figure 5.4)
- 7. Beater Bearings 2 places (not shown)
- 8. Loader 2 places (figure 5.7)
- 9. Pusher Chain Idler 1 place (figure 5.5)
- 10. Pusher Chain Drive 4 places (not shown)
- 11. Beater Chain Idler 1 place (figure 5.6)
- 12. Deflector Pivots 2 places (figure 5.3)
- 13. Chains Pusher Drive Chains (2) clean and oil chains.
 - Beater Drive Chains (1) clean and oil chains.
- 14. Purge all cross and bearing lube points with fresh grease.



At each eight (8) hour service interval also inspect the following items, and lubricate as necessary.

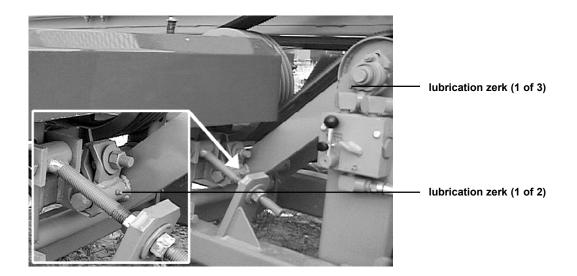
- A. Telescoping members require enough grease to maintain a smooth sliding action. When telescoping members become contaminated with dirty grease, they should be inspected and cleaned to insure smooth operation.
- B. Shield components should be lubed and inspected to insure all components are in working condition or are replaced if damaged. A properly maintained shield will inhibit dirt from contaminating telescoping members.

Figure 5.1 Lubrication points for PTO



PTO has a lubrication zerk at each end

Figure 5.2 belt tightener and belt idler lubrication points



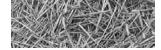


Figure 5.3 deflector pivots lubrication points

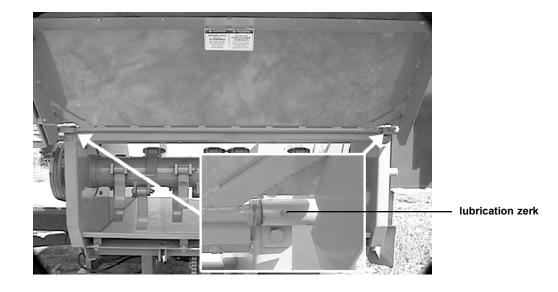
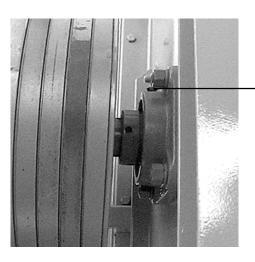
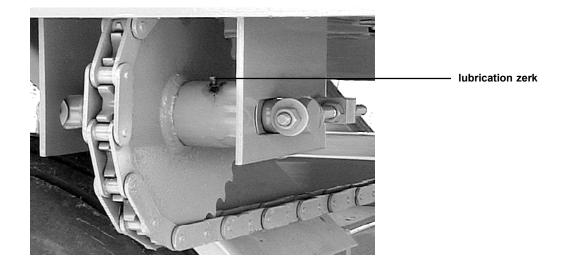


Figure 5.4 rotor bearing lubrication point



lubrication zerk (1 of 2)

Figure 5.5 pusher chain idler lubrication point



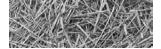


Figure 5.6 beater chain idler lubrication point

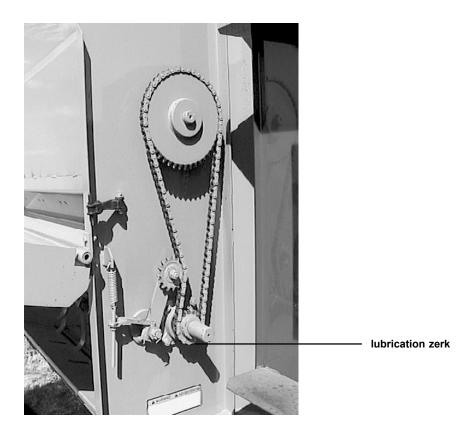
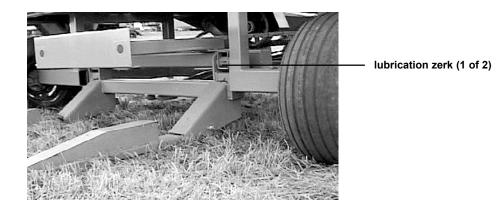


Figure 5.7 loader pivot lubrication point

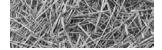


5.2 Axle, wheels, tires

Repack wheel bearings annually.

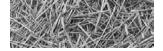
5.3 General appearance

Clean all mud, dirt, grease and other foreign material from the exterior of the machine. Cut all twine off from around the rotor and beater. Wash the entire machine. If washing the BALEBUSTER with a high pressure washer, keep the nozzle away from the sealed bearings. Repaint places where bare metal is exposed.



Section 6: Troubleshooting

PROBLEM	CAUSE	REMEDY
1 No Capacity	1. Bale feeding too slow.	1. Open bale pusher speed control valve.
2. Bale Does Not Feed	1. Bale lodged in feeder.	1. Reverse bale pusher, follow shut down procedure and dislodge bale.
3. Excessive Vibration	 Broken Flail. Defective bearing. Misaligned or worn PTO Build up of twine on rotor or beater. 	 Replace Flail. Replace Bearing. Replace worn part or complete PTO. Remove all twine.
4. Machine Will Not Lift Bale	 One or both of the (hydraulic) hoses are disconnected from tractor. Tractor hydraulic pressure too low. Hydraulic oil leaking by piston in cylinder. 	 Install hydraulic hose and fitting properly. Check pressure. Repair or replace hydraulic cylinder
5. Forage Too Coarse	 Pusher speed too fast. Stripper plate removed. 	 Decrease pusher speed. Replace or add additional stripper plate.
6. Forage Too Fine	1. Pusher speed too slow.	1. Increase pusher speed.
7. Forage Blows Past Bunk When Bunk Feeding	1. Deflector too high.	1. Lower deflector or add optional 18" deflector belting.
8. Feeding is uneven	1. Pusher speed is too fast	1. Decrease pusher speed.



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 and 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 returned to our factory in Jamestown, N.D., within thirty (30) days of failure.

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 normal maintenance, or if the product has been used for a purpose for which it was not designed.

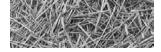
All claims for warranty must be made through the dealer which originally sold the product and all warranty adjustments must be made through same.

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 form 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 designs 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 Inc.



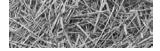
Appendix B: S-2000 BALEBUSTER Specifications

General:

Tractor H.P. required	Minimum 65 H.P.
Capacity	48" x 51" 9 ft. long 2,000 Lbs.
Chamber Length	
Rotor Diameter	
Rotor Bearings - Ball	
Flails - Heat-Treated	
Wheel - Taper Roller Bearings - Tire Size	11L x 16.10 Ply
Working Position 1 Bale Height	
Length	
Width	
Working Position 2 Bales Height	
Length	
Width	

Transport Position:

Length with Tines Removed/Raised	
Width	
Height	
Weight	5,500 Lbs.
РТО	1,000 RPM
Dual Hydraulics (single hydraulic system optional)	1,500 PSI
Cylinder 3 1/2" x 12" Double Acting	

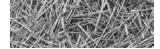


Appendix C: Required For Operation

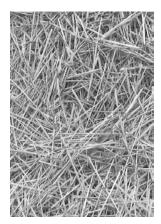


WARNING: Do not operate the BALEBUSTER unless the tractor complies with the following requirements:

- 1. Horsepower 65 HP minimum. 1000 rpm, 1-3/8" PTO shaft.
- 2. Rollover protective structure and seat-belts.
- 3. Hydraulic system 8 gallons per minute (30 liters per minute) minimum, 1500 Psi minimum (105 bar) two-way valves.
- 4. Two sets of two-way hydraulic outlets.
- 5. The tractor must be of equal or greater weight than the BALEBUSTER and bale to assure adequate braking and steering control.
- 6. Counterbalance weight It may be necessary to add weight to the front end of your tractor to maintain adequate tractor stability and control. At least 20% of the total weight must remain on the front axle.
- 7. Tractor is setup according to section 4.2.1 "tractor setup"





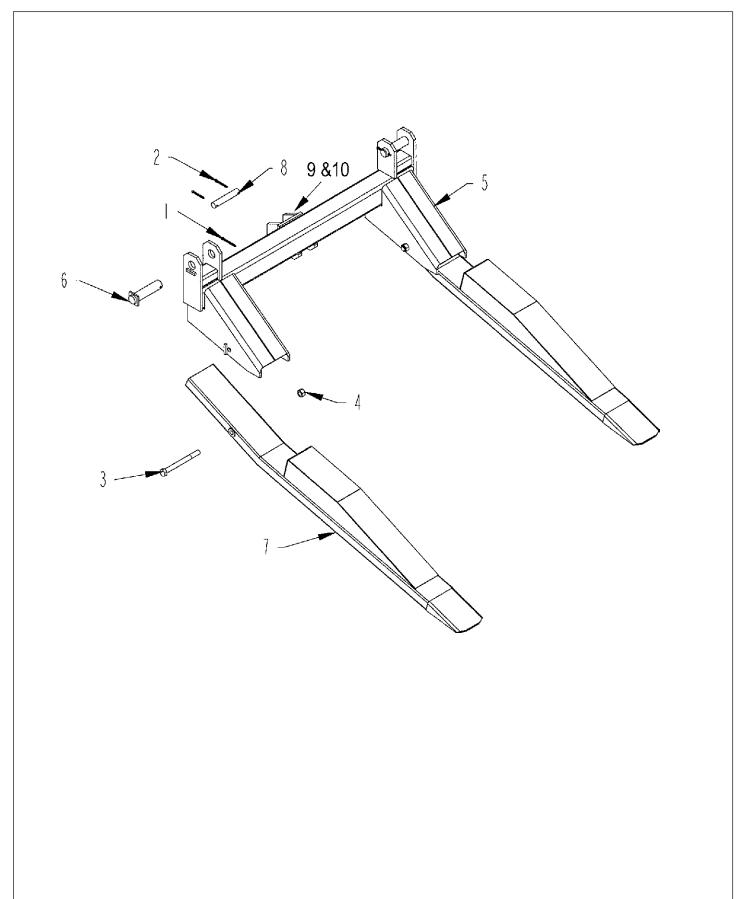




S-2000[™] BALEBUSTER[™]

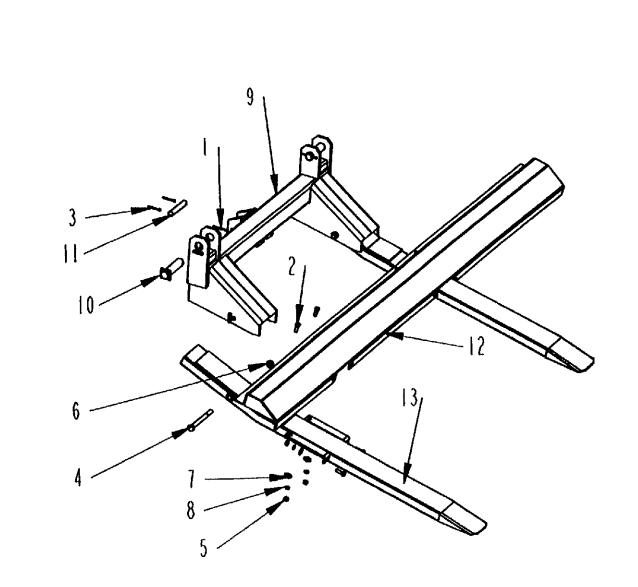
Serial No. II0006 and Up

Part 2: Parts Reference



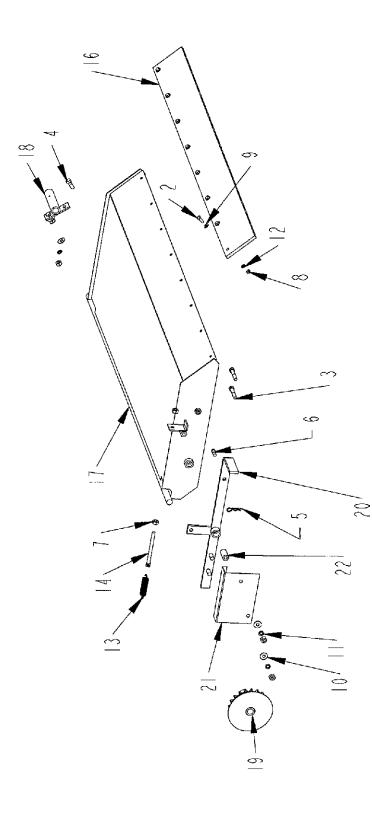
BALE LOADER ASSEMBLY S.N. 0006 TO 0056

ITEM	PART	QTY.	PART DESCRIPTION	
1	4800043	2	PIN\COT\1/4X2-1/2	
2	4800103	2	PIN\COT\1/4X2	
3	4800232	2	BOLT\HEX\3/4X8	
4	4900139	2	NUT\TPLCK\3/4\GR8\NC	
5	8100691	1	FRAME\LOADER\BALE	
6	8100692	2	PIN\HINGE\LOADER\BALE	
7	8100693	2	TINE\LOADER\BALE	
8	8100694	1	PIN\CYL\HYD	
9	D1008447		MNT\CYL\FRM\LOADER	
10	D1008446		MNT\CYL\FRM\LOADER	



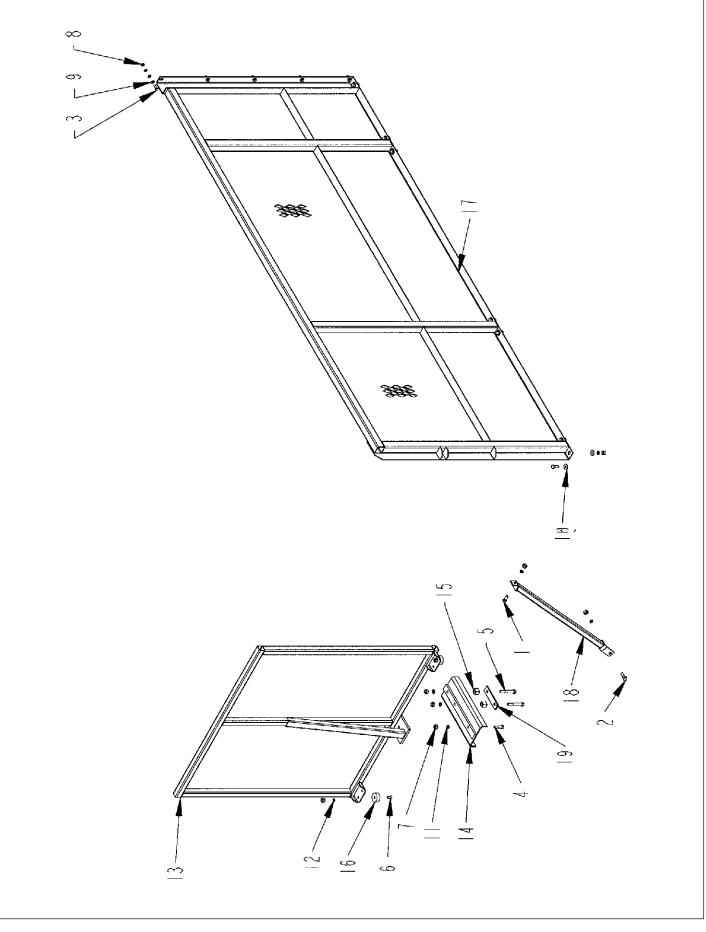
BALE LOADER ASSEMBLY S.N. 0057 AMD UP

ITEM	PART	QTY.	PART DESCRIPTION	
1	4800043	2	PIN\COT\1/4X2-1/2	
2	4800082	8	BOLT\HEX\1/2X1-1/2	
3	4800103	2	PIN\COT\1/4X2	
4	4800232	2	BOLT\HEX\3/4X8	
5	4900001	8	NUT\HEX\1/2X1-1/2	
6	4900139	2	NUT\TPLCK\3/4\GR8\NC	
7	5000004	8	WASH\FALT\1/2	
8	5000006	8	WASH\LOCK\1/2	
9	8100691	1	FRAME\LOADER\BALE	
10	8100692	2	PIN\HINGE\LOADER\BALE	
11	8100694	1	PIN\CYL\HYD	
12	8100811	1	BRKT\PUSHER\BALE\LOADER	
13	8100812	2	TINE\LOADER\BALE	



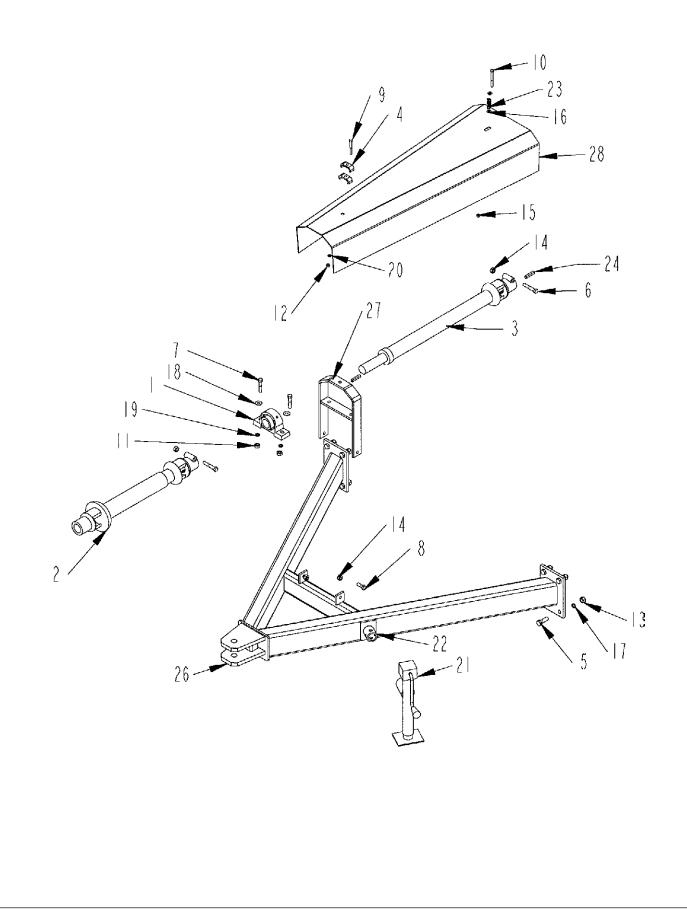
DEFLECTOR ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION
2	4800003	8	BOLT\HEX\3/8X1
3	4800068	2	BOLT\HEX\1/2X3
4	4800082	4	BOLT\HEX\1/2X1-1/2
5	4800107	1	PIN\HAIR\1/8
6	4800595	1	PIN\CLEVIS\1/2X1-1/4
7	4900001	8	NUT\HEX\1/2\NC
8	4900002	8	NUT\HEX\3/8\NC
9	5000001	8	WASH\FLAT\3/8
10	5000004	6	WASH\FLAT\1/2
11	5000006	6	WASH\LOCK\1/2
12	5000019	8	WASH\LOCK\3/8
13	6100036	1	1 O.D. X 4 5/16 SPRING
14	7500716	1	ROD\ARM
15	8100672	1	ASSY\DEFLECTOR
16	8100714	1	BLT\DEFLECTR
17	8100715	1	DEFLECTOR
18	8100716	1	MNT\DFLCTR
19	8100717	1	MNT\W-SPRCKT\DFLCTR
20	8100718	1	LATCH\ARM\DFLCTR
21	8100726	1	SHLD\LATCH\DFLCTR
22	8100727	2	BSHNG\LATCH\DFLCTR



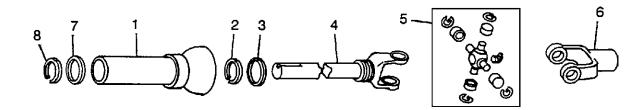
BALEPUSHER ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION	
1	4800018	8	BOLT\HEX\1/2X1-1/4	
2	4800082	1	BOLT\HEX\1/2X1-1/2	
3	4800098	5	BOLT\HEX\3/8X1-1/4\NC	
4	4800114	1	BOLT\HEX\1/2X2	
5	4800231	2	BOLT\HEX\1/2X3-3/4	
6	4800413	2	SCR\CSK\ALN\3/8X1-1/2\NC	
7	4900001	14	NUT\HEX\1/2\NC	
8	4900002	5	NUT\HEX\3/8\NC	
9	5000001	10	WASH\FLAT\3/8	
10	5000004	14	WASH\FLAT\1/2	
11	5000006	12	WASH\LOCK\1/2	
12	5000019	7	WASH\LOCK\3/8	
13	8100697	1	BRKT\PUSHER\BALE	
14	8100698	1	GUIDE\PUSHER\BALE	
15	8100699	2	MNT\CHAIN\PUSHER\BALE	
16	8100700	2	GUIDE\PLASTIC\PUSHER\BALE	
17	8100706	1	SHLD\PLTFRM	
18	8100723	1	BRC\SHLD\PLTFRM	
19	8100740	1	MNT\WASHER\PUSHER\BALE	

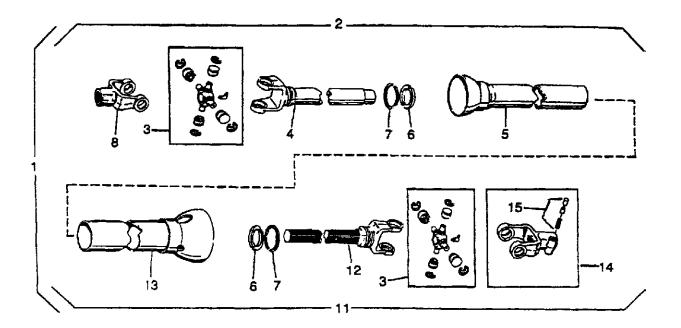


HITCH ASSEMBLY

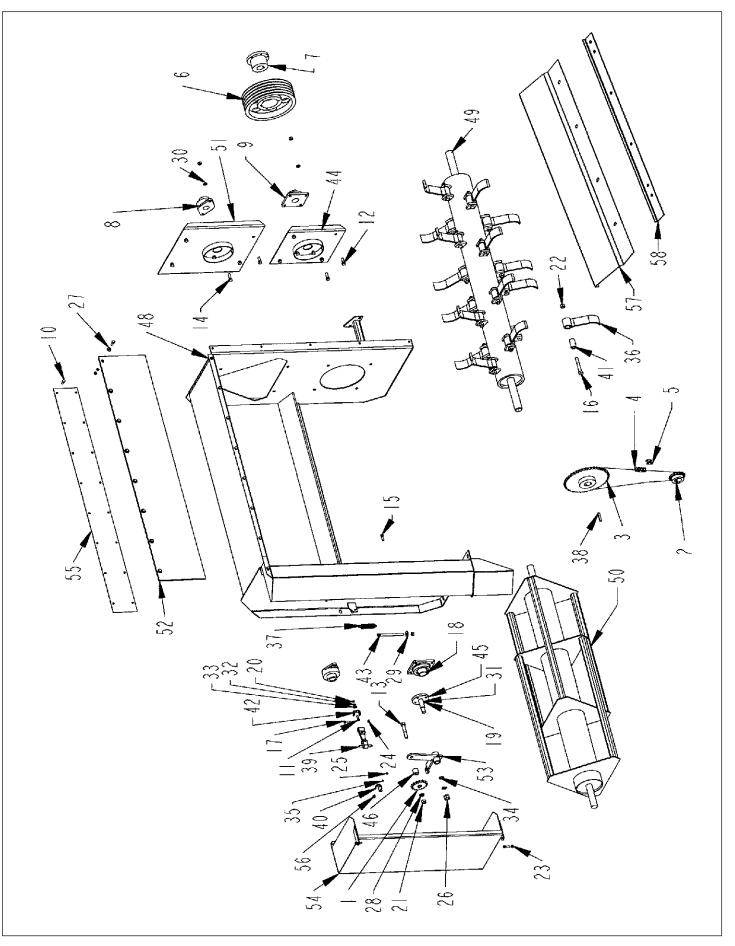
ITEM	PART	QTY.	PART DESCRIPTION			
1	2000514	1	BRG\PB\1-3/4\MAL			
2	3600077	1	COMPLETE PTO 35W			
3	3600184	1	PTO COMPLETE			
4	4500892	2	CLAMP\HOSE\3/8			
5	4800010	8	BOLT\HEX\5/8X2			
6	4800068	2	BOLT\HEX\1/2X3			
7	4800070	2	BOLT\HEX\1/2X2-1/2			
8	4800082	2	BOLT\HEX\1/2X1-1/2			
9	4800156	1	BOLT\HEX\3/8X3			
10	4800197	1	BOLT\HEX\3/8X3-1/2			
11	4900001	2	NUT\HEX\1/2\NC			
12	4900002	1	NUT\HEX\3/8\NC			
13	4900005	8	NUT\HEX\5/8\NC			
14	4900014	4	NUT\TPLCK\1/2\NC			
15	4900023	1	NUT\TPLCK\3/8			
16	5000001	2	WASH\FLAT\3/8			
17	5000003	8	WASH\LOCK\5/8			
18	5000004	2	WASH\FLAT\1/2			
19	5000006	2	WASH\LOCK\1/2			
20	5000019	1	WASH\LOCK\3/8			
21	5800601	1	JACK (2SM10) 12			
22	5800604	1	WELD ON BELL (2SM10)			
23	6100028	1	2-1/4 COMP SPR.125 X .725			
24	6200020	2	KEY\SQ\3/8X2-1/4\HARDEND			
25	8100668	1	ASSY\HITCH			
26	8100674	1	HITCH\S-2000			
27	8100675	1	BRKT\BRG\DRIVELINE			
28	8100688	1	SHLD\DRIVELINE			



ITEM	PART	QTY.	DESCRIPTION	
	3600184	1	PTO COMPLETE	
1	3600148	1	GUARD TUBE 28 9/16"	
2&3	3600283	1	NYLON REPAIR KIT	
4	3600149	1	YOKE AND SHAFT 35 5/16"	
5	3600042	1	CROSS & BEARING KIT 35	
6	3600079	1	YOKE 35W 1-3/4 RD CLAMP	
7	3600134		NYLON BEARING (BBC)	
8	3600135		BEARING RETAINER (BC)	

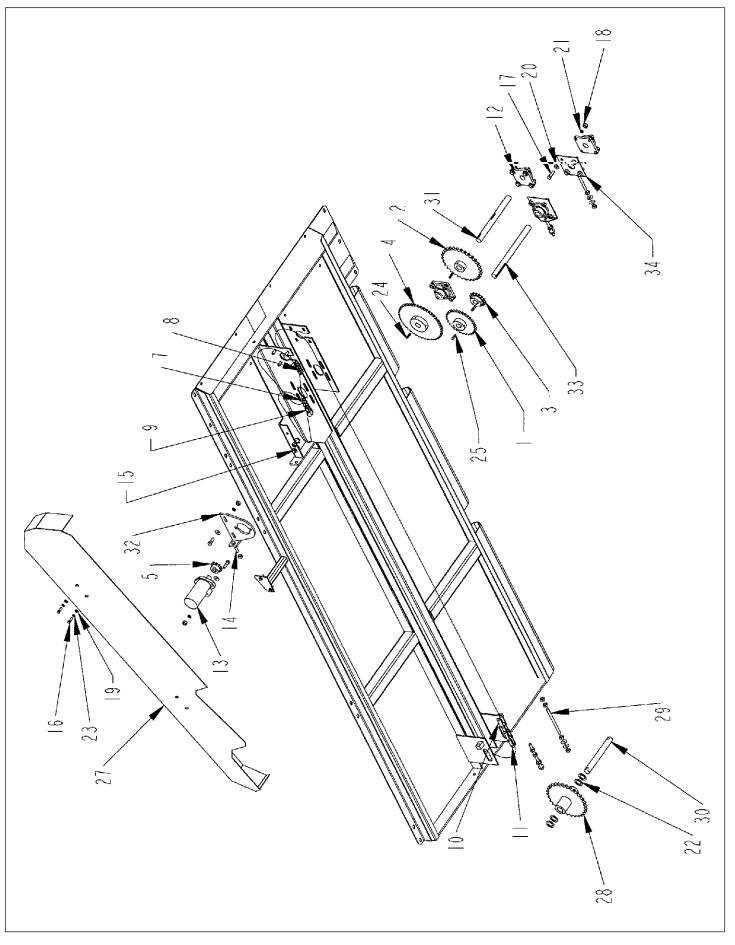


ITEM	PART	QTY.	DESCRIPTION
1	3600077	1	PTO\COMPLETE\35W\256+II
2	3600078	1	PTO\HALF\MACHINE\35W
3	3600042	2	CROSS & BEARING KIT 35
4	3600080	1	YOKE AND TUBE 35W
5	3600081	1	MALE GUARD TUBE, INNER\16-11/16 LONG
6,7	3600283	1	NYLON REPAIR KIT
8	3600079	1	YOKE 35W 1-3/4 RD CLAMP
11	3600082	1	PTO\HALF\TRACTOR\35W
12	3600083	1	YOKE & SHAFT 35W
13	3600085	1	OUTER SHIELD\16-5/16 LONG
14	3600084	1	YOKE 1 3/8 21 SPLINE 35W
15	3600056	1	LOCK PIN & SPRING



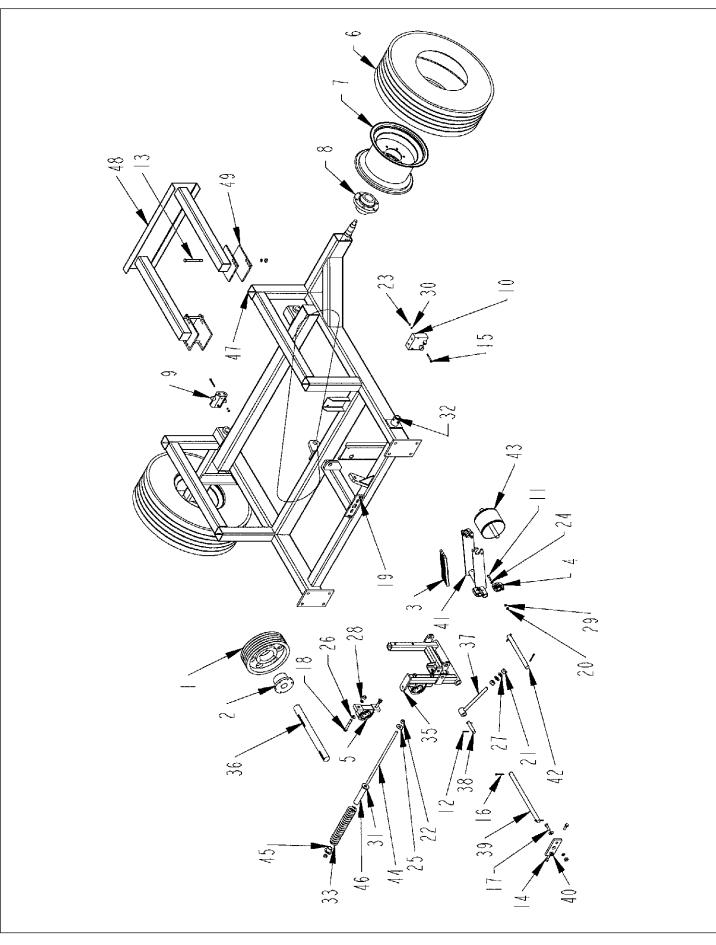
SHREDDER ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION
1	1000007	1	SPKT\15\5/8\IDLER
2	1000086	1	SPKT\60\B\15\1-3/4\3/8
3A	1000228	1	SPKT\60SF45\QD
3B	1400582	1	BUSH\QD\SF\1-1/2
4	1100011	1	CHAIN/60/93
5	1100062	1	
6	1400070	1	SHVE\5R5V125
7 8	1400529	1 2	BUSH\R1\1-3/4 BRG\FLG\CAST\1-1/2\2BOLT
o 9	2000308 2000311	2	BRG\FLG\CAST\1-1/2\2BOLT BRG\FLG\1-3/4\BOLT
9 10	4800003	8	BOLT/HEX/3/8X1
11	4800013	1	BOLT\HEX\5/16X1
12	4800018	8	BOLT\HEX\1/2X1-1/4
13	4800054	1	BOLT\HEX\5/8X3-1/2
14	4800082	12	BOLT\HEX\1/2X1-1/2
15	4800098	14	BOLT\HEX\3/8X1-1/4\NC
16	4800100	20	BOLT\HEX\5/8X4
17	4800281	1	BOLT\HEX\5/16X2\NF
18	4900001	21	NUT\HEX\1/2\NC
19	4900002	12	NUT\HEX\3/8\NC
20	4900003	1	NUT\HEX\5/16NC
21	4900005	1	NUT\HEX\5/8\NC
22	4900012	20	NUT\TPLCK\5/8\NC
23	4900023	2	NUT\TPLCK\3/8
24	4900071	1	
25 26	4900077 4900116	10	NUT\HEX\3/8\NC NUT\SLOT\3/4\NF
20	5000001	1 8	WASH/FLAT/3/8
28	5000003	1	WASHNEAT 5/8
29	5000004	1	WASH\FLAT\1/2
30	5000006	20	WASH\LOCK\1/2
31	5000019	12	WASH\LOCK\3/8
32	5000022	9	WASH\LOCK\5/16
33	5000023	1	WASH\FLAT\5/16
34	5000041	4	WASH\3/4IDX1-1/8OD\16GA
35	5000071	2	WASH\LOCK\EXT;STAR\#10
36	5200009	20	FLAIL\BB\8
37	6100036	1	1 O.D. X 4 5/16 SPRING
38	6200020	1	KEY\SQ\3/8X2-1/4\HARDEND
39	7500166	1	
40	7500190	1	LATCH\RBBR\CATCH\6
41	7500223	20	BUSHING\FAIL LATCH\RBBR\MNT\6
42 43	7500347 7500716	1 1	RODVARM
43	8100191	1	RTR\END\PLATE
45	8100571	1	MNT\IDLER
46	8100582	1	SPCR\IDLER\
47	8100671	1	ASSY\SHREADER\S-2000
48	8100707	1	FRM\SHREADER
49	8100708	1	RTR\FLAIL
50	8100709	1	RTR\BEATER FOR S.N. 0006-0056
	8100803		RTR\BEATER\GSST\S2000 FOR S.N. 0057 AND UP
51	8100710	1	BTR\END\PLATE
52	8100713	1	BELT\DEFLECTOR\SHREDDER
53	8100719	1	MNT\IDLER\CHAIN
54	8100720	1	SHLD\DRIVE\CHAIN
55	8100739	1	MNT\BELT\SHREDDER
56	4800588	2	SCR\RH\SLOT\#10-32X1/2
57	8100712		GUIDE\HAY\S2000 FOR S.N. 0006-0056
58	8100806 8100711		GUIDE\HAY\JJ\S2000 FOR S.N. 0057 AND UP SHT\BAR\STRIPER
NOT SH			SILIDANISINIFER
	5000040	1	WASH\BUSH;MACH\1"NR
	4800050	1	COT PIN
Z	1600079	1	BELT\5VX1700\BANDED (SEE PAGE 53)



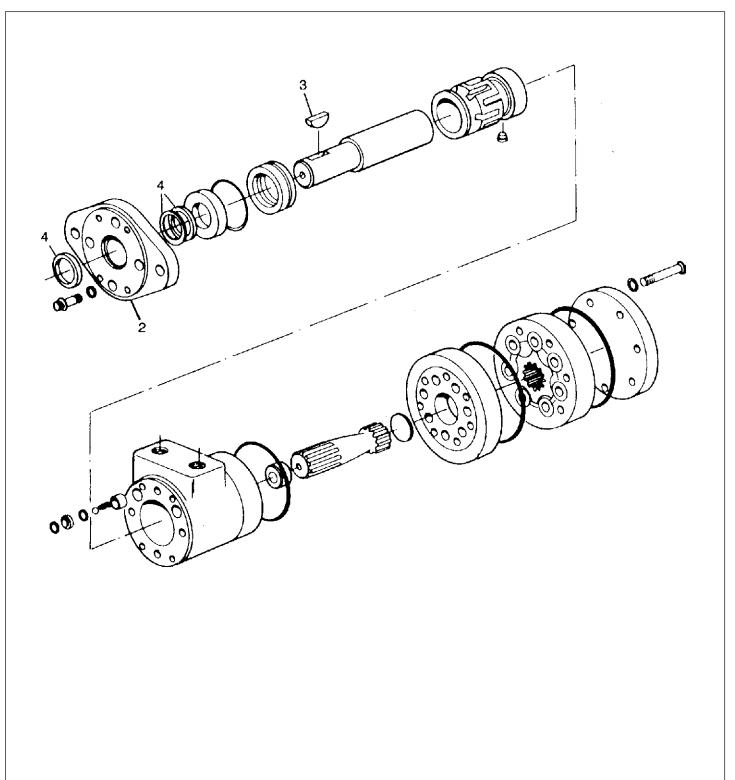
PLATFORM ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION			
1	1000131	1	SPKT\60\B\30\1-1/2\3/8KW			
2	1000226	1	SPKT\80B30\2\1/2KW\2SS>			
3	1000227	1	SPKT\80B12\1-1/2\3/8KW>			
4	1000226	1	SPKT\80B30\2\1/2KW\2SS>			
5	1000215	1	SPKT\60\B\10\1			
7	1100023	1	CHAIN\60\51			
8	1100161	1	CHAIN\80H\41			
9	1100189	2	CHAIN\80\CL			
10	1100070	1	CHAIN\2080\CL			
11	1100214	1	CHAIN\2080\138			
12A	2000312	2	BRG\FLG\CAST\2\4BOLT			
12B	2000303	2	BRG\FLG\1-1/2\4BOLT			
13	3900008	1	M-208 ORBIT MOTOR			
14	4800070	1	BOLT\HEX\1/2X2-1/2			
15	4800082	6	BOLT\HEX\1/2X1-1/2			
16	4800098	4	BOLT\HEX\3/8X1-1/4\NC			
17	4800178	14	BOLT\HEX\1/2\1-3/4			
18	4900001	33	NUT\HEX\1/2\NC			
19	5000001	4	WASH\FLAT\3/8			
20	5000004	24	WASH\FLAT\1/2			
21	5000006	20	WASH\LOCK\1/2			
22	5000007	4	WASH\1-1/4\MACH-BUSH(NR)			
23	5000019	4	WASH\LOCK\3/8			
24	7000345	2	KEY\SQ\1/2X2\CR			
25	6200021	2	KEY\SQ\3/8X1-1/2\HARDEND			
27	8100689	1	SHLD\BELT\DRIVE			
28	8100701	1	SPKT\IDLER\PSHR\BALE			
29	8100702	2	BOLT\ADJ\IDLER\PUSHER			
30	8100703	1	SHFT\IDLER\PUSHER\BALE			
31	8100767	1	SHFT\DRIVE\2"\PUSHER\BALE\1/2"KW			
32	8100705	1	MNT\PLATE\MOTOR\HYD			
33	8100768	1	SHFT\JACK\1-1/2\PUSHER\BL\3/8KW			
34	8100766	2	BRKT\ADJ\SHFT\PUSHER\BALE			
	NOT SHOWN					
	8100721	2	SHLD\FENDER			
	8100722	2	BRC\MNT\FENDER			



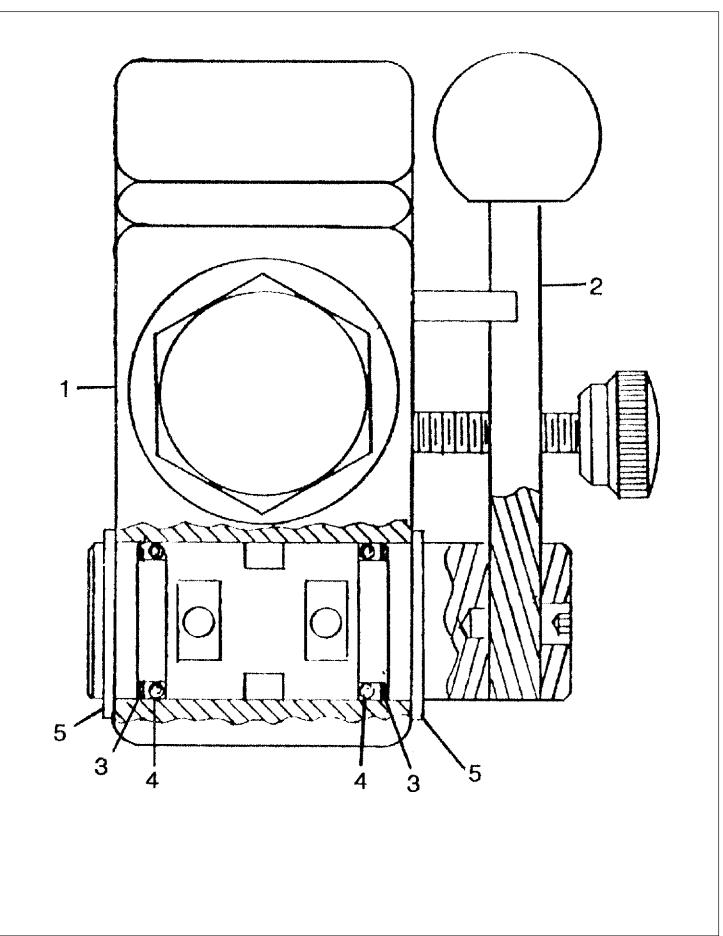
MAINFRAME ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION	
1	1400070	1	SHVE\B8\11	
2	1400529	1	BUSH\R1\1-3/4	
3	1600079	1	BELT\5VX1700\BANDED	
4	2000310	2	BRG\FLG\CAST\1-1/4\2BOLT	
5	2000514	2	BRG\PB\1-3/4\MAL	
6	2600023	2	TIRE\11L-15\8PLY\RIBIMP	
7	2600624	2	15 X 8 6 BOLT WHEEL	
8	2900069	2	HUB\6BOLT\631\COMP	
9	4000141	1	VALVE\RELIEF\CROSS\RC11BB	
10	4000148	1	VALVE\CONTROL\FLOW	
11	4800034	4	BOLT\HEX\3/8X1-1/2	
12	4800050	2	PIN\COT\3/16X1-1/2	
13	4800077	4	BOLT\HEX\1/2X5-1/2	
14	4800082	2	BOLT\HEX\1/2X1-1/2	
15	4800101	4	BOLT\HEX\1/4X2-1/2	
16	4800103	4	PIN\COT\1/4X2	
17	4800178	2	BOLT\HEX\1/2\1-3/4	
18	4800231	4	BOLT\HEX\1/2X3-3/4	
19	4900001	13	NUT\HEX\1/2\NC	
20	4900002	4	NUT\HEX\3/8\NC	
21	4900004	2	NUT\HEX\3/4\NC	
22	4900005	1	NUT\HEX\5/8\NC	
23	4900009	4	NUT\HEX\1/4\NC	
24	5000001	4	WASH\FLAT\3/8	
25	5000002	1	WASH\FLAT\5/8	
26	5000004	6	WASH\FLAT\1/2	
27	5000005	2	WASH\FLAT\3/4	
28	5000006	10	WASH\LOCK\1/2	
29	5000019	4	WASH\LOCK\3/8	
30	5000024	4	WASH\LOCK\1/4	
31	5000050	2	WASH\FLAT\SPCL\0.681X1/4	
32	5800604	1	WELD ON BELL (2SM10)	
33	6100032	1	SPRING\12-1/2X2-1/4 O.D. (.406 WIRE)	
34	8100669	1	ASSY\MAIN\FRAME\S-2000	
35	8100676	1	BRKT\ADJ\BELT	
36	8100677	1	SHFT\ADJ\BELT	
37	8100678	1	ROD\ADJ\BELT	
38	8100679	1	PIN\ADJ\BELT	
39	8100680	1	PIN\HINGE\ADJ\BELT	
40	8100681	1	BRKT\PLATE\ADJ\BELT	
41	8100682	1	BRKT\FORK\IDLER\BELT	
42	8100683	1	PIN\HINGE\FORK\IDLER\BELT	
43	8100684	1	ROLLER\IDLER\BELT	
44	8100685	1	ROD\SPRING\IDLER\BELT	
45	8100686	1	GUIDE\SPRING\SHORT	
46	8100687	1	GIUDE\SPRING\LONG	
47	8100690	1	FRM\MAIN\S-2000	
48	8100695	1	BRKT\BUMPER	
49	8100696	4	BRKT\PLATE\MNT\BUMPER	



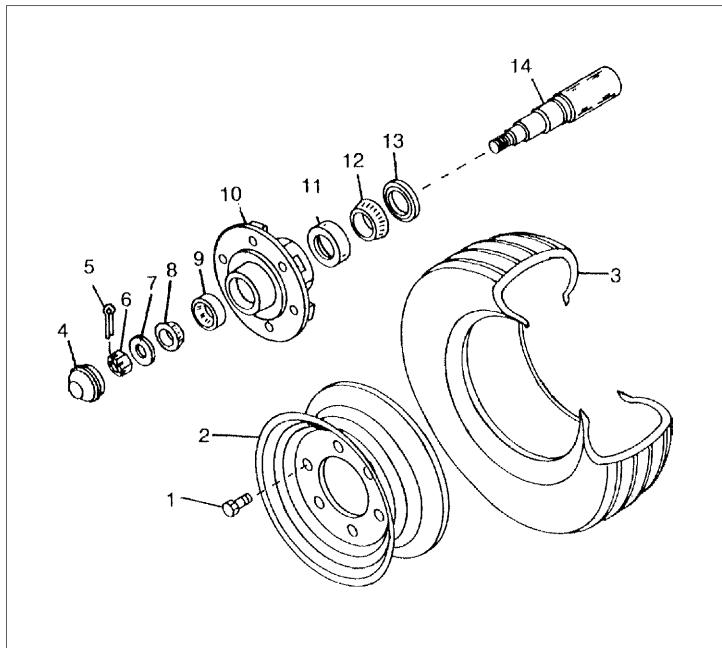
ORBIT MOTOR ASSEMBLY

ITEM	PART	QTY.	DESCRIPTION	
1	3900008		M-208 ORBIT MOTOR	
2	3900002	1	MTG FLG	
3	6200011	1	KEY\WDF\1/4X1\#15\808	
4	7501038	1	UNI SEAL KIT 007-009	



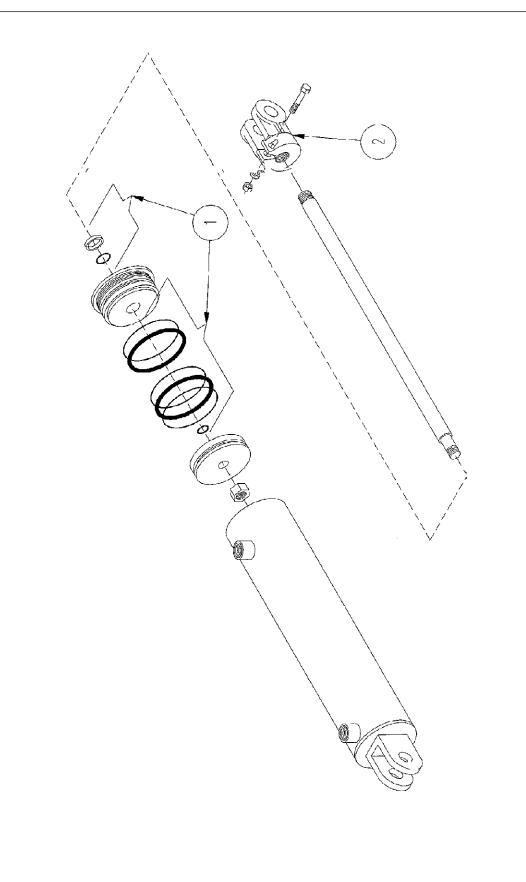
FLOW CONTROL VALVE

ITEM	PART	QTY.	DESCRIPTION	
1	4000148	1	FULL FLOW VALVE RD137-8	
2	4000031	1	HANDLE ASSEMBLY-HYD VALVE	
3&4	4000091		SEAL KIT (INCLUDES 4000032 AND 4000033)	
5	4000034	2	SNAP RING-HYD VALVE	



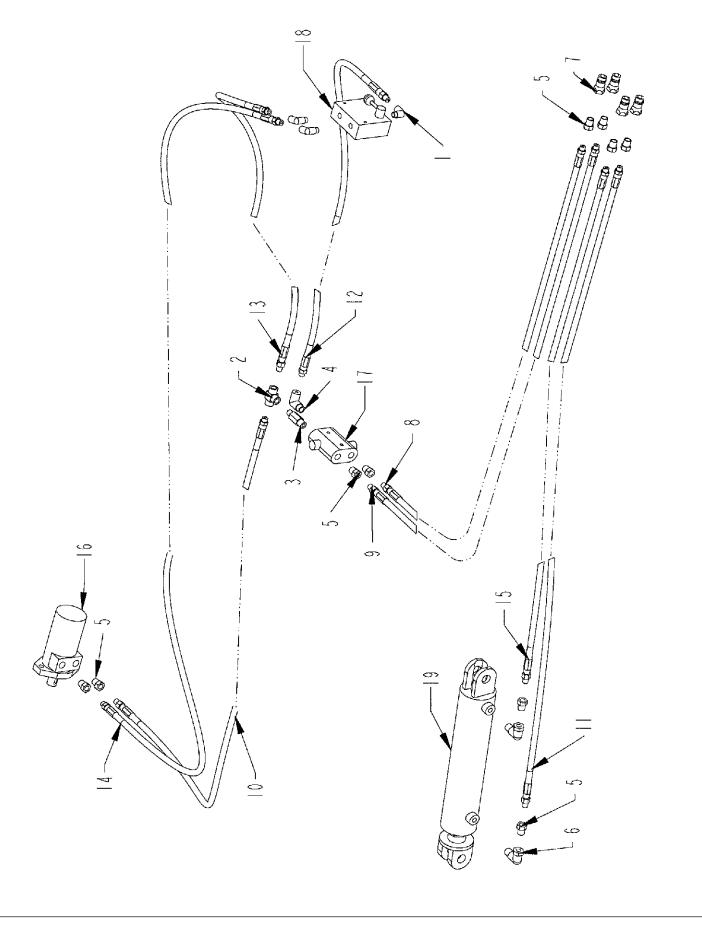
AXLE & WHEELS

ITEM	PART	QTY.	DESCRIPTION	
1	2900012	12	BOLT\WHEEL\WHL;HUB	
2	2600624	2	"15""X10"" 6-BOLT WHEEL"	
3	2600023	2	11L -15 8PLY RIB IMP TIRE	
4	2900013	2	CAP\DUST\WHL;HUB(DC-13)	
5	4800533	2	PIN\COT\3/16X1	
6	4900054	2	NUT\CASTLE\7/8\NF	
7	5000055	2	WASH\SPINDLE\7/8	
8	2900018	2	CONE\OUTER\WHL;HUB(67048100 SERIES)	
9	2900004	2	CUP\OUTER\WHL;HUB 67048100 SERIES	
10	NA	2	ORDER 2900069	
11	2900006	2	CUP\INNER\WHL;HUB 501310	
12	2900007	2	CONE\INNER\WHL;HUB 501349	
13	2900008	2	SEAL/WHL HUB 631(18823)	
14	8100634	2	SPNDL\13X2\2544\631	
	2900069	2	HUB\6-BOLT\(631)\COMPL	
	2600824		WHL\IMP\11L15\TIRE&RIM	



HYDRAULIC CYLINDER SEALS AND OTHER ITEMS

ITEM	PART	QTY.	PART DESCRIPTION	
	4100077	1	CYL\HYD\3-1/2X12\PARAL\CLEV\1/2NPTF	
1	4100105	1	SEAL KIT 3.50 RAM CYL.	
2	4100132	1	YOKE	

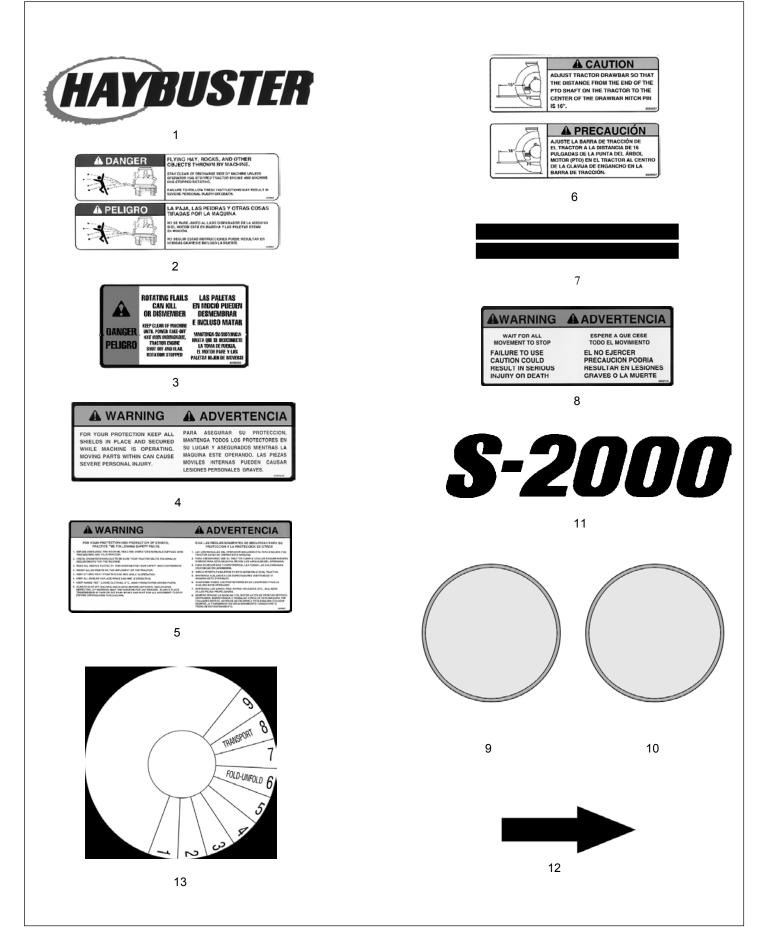


HYDRAULIC ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION	
HYDR	AULICS SN 11000	6 TO 1100	31	
1	3800031	3	FTG\3/8MPX3/8FP\90\ST;EL	
2	3800100	1	FTG\3/8FP\TEE	
3	3800127	1	FTG\1/2MPX3/8MP\NPL	
4	3800133	1	FTG\1/2MPX3/8FP\90\ST;EL	
5	3800216	10	FTG\1/2MPX3/8FP\BUSH	
6	3800228	2	FTG\1/2MPX1/2FP\90\SW\W/1/16REST.	
7	3800525	4	FTG\1/2\NPTF\QUICK;CPLR	
8	3700069	1	HOSE\HYD\3/8X138\SW-SO	
9	3700069	1	HOSE\HYD\3/8X138\SW-SO	
10	3700168	1	HOSE\HYD\3/8X30\SW-SO	
11	3700268	1	HOSE\HYD\3/8X140\SW-SO	
12	3700453	1	HOSE\HYD\3/8X26\SW-SO	
13	3700453	1	HOSE\HYD\3/8X26\SW-SO	
14	3700454	1	HOSE\HYD\3/8X59\SW-SO	
15	3700455	1	HOSE\HYD\3/8X125\SW-SO	
16	3900008	1	M-208 ORBIT MOTOR	
17	4000141	1	VALVE\RELIEF\CROSS\RC11BB	
18	4000148	1	VALVE\CONTROL\FLOW	
19	4100077	1	CYL\HYD\3-1/2X12\1-1/2ROD	
SN IIO	032 AND UP			
1	3800031	3	FTG\3/8MPX3/8FP\90\ST;EL	
2	3800100	1	FTG\3/8FP\TEE	
3	3800127	1	FTG\1/2MPX3/8MP\NPL	
4	3800133	1	FTG\1/2MPX3/8FP\90\ST;EL	
5	NOT NEEDED		,	
6	3800228	2	FTG\1/2MPX1/2FP\90\SW\W/1/16REST.	
7	3800525	4	FTG\1/2\NPTF\QUICK;CPLR	
8	3700483	1	HOSE\HYD\3/8X138\608\609\1/2SW\1/2SO	
9	3700483	1	HOSE\HYD\3/8X138\608\609\1/2SW\1/2SO	
10	3700484	1	HOSE\HYD\3/8X30\91\609\3/8SW\1/2SO	
11	3700485	1	HOSE\HYD\3/8X140\608\609\1/2SO\1/2SW	
12	3700453	1	HOSE\HYD\3/8X26\SW-SO	
13	3700453	1	HOSE\HYD\3/8X26\SW-SO	
14	3700486	1	HOSE\HYD\38X59\91\609\3/8SW\1/2SO	
15	3700487	1	HOSE\HYD\3/8X125\608\609\1/2SW\1/2SO	
16	3900008	1	M-208 ORBIT MOTOR	
17	4000141	1	VALVE\RELIEF\CROSS\RC11BB	
18	4000148	1	VALVE\CONTROL\FLOW	
19	4100077	1	CYL\HYD\3-1/2X12\1-1/2ROD	
	Not Shown			
	3800164	2	FTG\3/8MPX3/8FP\45D\ST;EL	

3800164	2
4500802	1

FTG\3/8MPX3/8FP\45D\ST;EL 4500892 4 CLAMP\HOSE\3/8"



ITEM	PART#	QTY.	DESCRIPTION
		•	
1	6500020	2	Haybuster w/sunburst
2	6500034	2	Flying Hay
3	6500035	1	Rotating Flails
4	6500040	2	Shield; Protection
5	6500041	1	Warning; Protection
6	6500057	1	Caution - Adj. Draw Bar
7	6500102	11 ft.	Logo - Red Stripe
8	6500110	2	Warning - Wait for Movement
9	6500267	4	Warning - 2" Red Reflector
10	6500268	2	Warning - 2" Amber Reflector
11	6500279	2	S-2000 Logo (Blk.)
12	6500291	1	DECAL\INFO\3\BLK\ARROW
13	6500292	1	DECAL\INFO\FOLD-UNFOLD
	7500077	12 oz	Vallow Sprov Paint
			Yellow Spray Paint
	7500092	Quart	
	7500091	Gallon	Yellow Paint
	7500078	12 oz	Red Spray Paint
	7500105	Quart	Red Paint
	7500104	Gallon	Red Paint

NOTES

S-2000 BALEBUSTER Documentation Comment Form

DuraTech Industries welcomes your comments and suggestions regarding the quality and usefulness of this manual. Your comments help us improve the documentation to better meet your needs.

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- Is the information clearly presented?
- Does the manual give you all the information you need to operate the equipment safely and effectively?
- Are the diagrams and illustrations correct?
- Do you need more illustrations?
- What features do you like most about the manual? What features do you like least?

If you find errors or have specific suggestions, please note the topic, chapter and page number.

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