

### 8200 SERIES WIDE BODY FORAGE BOX



#### WARNING

READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING THIS EQUIPMENT. UNSAFE OPERATION OR MAINTENANCE OF THIS EQUIPMENT CAN RESULT IN SERIOUS INJURY OR DEATH.

WB8218A Starting Serial #322WBA1801 WB8220A Starting Serial #322WBA2001 WB8222A Starting Serial #322WBA2205 WB8222 Starting Serial #322WB22001 WB8224A Starting Serial #322WBA2401 WB8224 Starting Serial #322WB24005 WB8226 Starting Serial #322WB26001 WB8230 Starting Serial #322WB30005 WBCT8230 Starting Serial #322WBC0001

Part#90788

# M Е U

Rev. #02 HSMFG0323

STRONG HERITAGE - STRONG PEOPLE - STRONGER FUTURE

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#### **H&S WARRANTY**

H&S Manufacturing Co., Inc. ("H&S") warrants this product to be free from defect in material and workmanship. Except as noted below, this warranty term is twelve (12) months on parts and labor, and twenty-four (24) months on parts only from the date of delivery of the product to the original purchaser by an authorized H&S dealer. Under this warranty, H&S will repair or replace, at its option, any covered part which is found to be defective in material or workmanship during the applicable warranty term. In no case will the covered repair cost of a part or parts exceed the replacement cost of that part. In no case, unless pre-authorized by H&S, will a component be replaced versus repaired unless the cost of labor and parts exceeds 75% of the cost of a new component. Warranty repairs must be performed by H&S or a dealer authorized by H&S to sell and/or service the product involved, and will use only new or remanufactured parts or components furnished by H&S. Any warranty repairs needing to be performed by a third party must be pre-authorized by H&S. Standard freight costs will be covered by H&S for any part used to make a warrantable repair, any form of express freight will not be covered unless pre-authorized by H&S. This warranty includes approved parts and labor to repair the product but does not include, and the purchaser is responsible for, any service call and/or transportation of the product to and from the dealer's place of business, for any costs related to travel, for any premium charged for overtime labor requested by the purchaser, and for any service work not directly related to any defect covered under this warranty.

This warranty includes only those components of the product manufactured by H&S. Warranty for any component not manufactured by H&S including, but not limited to, engines, batteries, tires, rims, hydraulic motors, pumps, etc. are covered by the warranty, if any, provided separately by their respective manufacturers. H&S reserves the right to request the return of any failed component.

This warranty in all its parts is extended solely to the original purchaser of the product, is terminated upon any subsequent transfer or sale from or by the original purchaser, and extends no third party benefits or rights whatsoever.

The warranty term for any product used in any for hire, rental fleet or rental application, is limited to six (6) months from the date of delivery of the product to the original purchaser by an authorized H&S dealer.

This warranty does not include: (1) Any product that has been altered or modified in ways not approved by H&S; (2) Depreciation or damage caused by normal wear, use for which the product was not designed, misuse, improper or insufficient maintenance, improper operation, accident or failure to follow the product Operator's Manual recommendations and product decal recommendations; (3) Normal maintenance parts and service; (4) Repairs made with parts other than those available from H&S or performed by anyone other than H&S or a dealer authorized by H&S to sell and/or service the product involved.

To secure warranty service the purchaser must report the product defect to a dealer authorized by H&S to sell and/or service the product involved within the applicable warranty term together with evidence of the warranty start date and make the product available to that dealer within a reasonable period of time.

For these warranty terms to be in effect the selling authorized H&S dealer and/or the customer must submit the warranty registration to H&S.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. H&S and the companies affiliated with it make no warranties, representations, or promises, express or implied, as to the performance or freedom from defect of its products other than those set forth above and NO IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS OR FITNESS FOR A PARTICULAR PURPOSE IS MADE. IN NO EVENT WILL THE DEALER, H&S OR ANY COMPANY AFFILIATED WITH H&S BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. The ONLY REMEDY the purchaser has in connection with the breach of performance of any warranty on H&S products are those set forth above.

The selling dealer has no authority to make any representation or promise on behalf of H&S, or to modify the terms or limitations of this warranty in any way.

#### **MANUFACTURER'S STATEMENT**

Congratulations on your selection of an H&S product. Your new H&S product has been manufactured of the finest quality materials and components. The performance you receive from your machine is largely dependent upon how well you read, understand this manual, and apply this knowledge. There is a right and a wrong way to do everything. Please do not assume that you know how to operate and maintain your machine before reading this manual carefully. Keep this manual available for ready reference. We are very appreciative of your patronage.

H&S reserves the right to make changes or add improvements to its products at any time without incurring any obligation to make such changes to products previously manufactured. Specifications, statements and descriptions of products contained in this publication are subject to change without prior notification.

#### **WARRANTY REGISTRATION**

Date of Purchase:	<del></del>
Purchaser Name:	
Street Address:	
• City:	
• State:	Zip:
Phone Number:	
E-mail Address:	
Product:	
Model Number:	
Serial Number:	
You have received the Operato	r's Manual for this product. Yes No
	S E-mail Newsletter? Yes No
Street Address:	
• State:	
Signature:	

 All fields must be filled out to ensure prompt notification of product and/or warranty updates.

Please mail the completed WARRANTY REGISTRATION FORM to:
H&S Manufacturing Co., Inc.
2608 S. Hume Ave.
Marshfield, WI 54449

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# (Remove Dealers File Copy At Perforation)

#### **DEALER PRE-DELIVERY CHECKLIST**

#### AFTER COMPLETION, DEALER SHOULD REMOVE AND RETAIN FOR RECORDS

After the Wide Body has been completely set up, check to be certain it is in correct operating order before delivering to the customer. The following is a list of points to inspect. Check off each item as you have made the proper adjustments and found the item operating satisfactorily.

	Wide Body was not damaged in shipment. Check for dents and loose or missing parts. Report damage immediately to H&S Manufacturing Co., Inc.				
	Wide Body has been correctly assembled according to the H&S set-up instructions.				
	All bolts and fasteners are tight.				
	All shields and guards are in place and fastened.				
	All grease fittings have been lubricated.				
	Hoses and fittings are properly attached and there are no visible leaks.				
	All mechanisms are operating trouble free.				
	Drive chains are at proper tension.				
	Apron chains are adjusted according to the ADJUSTMENT CHAPTER in this manual.				
	Decals are in place and legible.				
Mode	el Number				
Seria	al Number				
Deal	er's Name				
Inspe	Inspection Date				
Sign	ature of Pre-Delivery Inspector				

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#### **DEALER DELIVERY CHECKLIST**

#### AFTER COMPLETION, DEALER SHOULD REMOVE AND RETAIN FOR RECORDS

This checklist that follows is an important reminder of valuable information that should be passed on to the customer at the time this Wide Body is delivered.

Check off each item as you explain it to the customer.

This delivery checklist, when properly filled out and signed, assures the customer that the predelivery service was satisfactorily performed.

	Explain to the customer that the pre-delivery inspection was made.
	Explain to the customer all the safety precautions they must exercise when operating this unit.
	Explain recommended load limits for different types of materials.
	Explain to customer that regular lubrication is required for proper operation and long life of the machine.
	Show customer the lubrication section of Owner's Manual.
	Give the customer Operator's Manual and make sure they read and understand all operating and service instructions.
	Have customer sign a completed "Warranty Registration" and mail it promptly.
Date D	Delivered
Dealer	's Name
Ву	
Signat	ure of Original Buyer

Note: Warranty is not valid until warranty card is completed and returned to H&S Mfg. Co., Inc.

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## BE ALERT!

YOUR SAFETY IS INVOLVED.

THIS SYMBOL IS USED THROUGHOUT THIS BOOK WHENEVER YOUR PERSONAL SAFETY IS INVOLVED. TAKE TIME TO BE CAREFUL. REMEMBER: THE CAREFUL OPERATOR IS THE BEST OPERATOR. MOST ACCIDENTS ARE CAUSED BY HUMAN ERROR. CERTAIN PRECAUTIONS MUST BE OBSERVED TO PREVENT THE POSSIBILITY OF INJURY OR DAMAGE.

**H&S MANUFACTURING CO. INC.** 

Keep signs in good condition. Immediately replace any missing or damaged signs.

#### RECOGNIZE SAFETY INFORMATION

This is the safety alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.



#### UNDERSTAND SIGNAL WORDS

A single word - DANGER, WARNING, or CAUTION is used with the safety alert symbol. DANGER identifies the most serious hazards.

Safety signs with signal word DANGER or WARNING are typically near specific hazards.

General precautions are listed on CAUTION safety signs.





WARNING



**CAUTION** 



#### **FOLLOW SAFETY INSTRUCTIONS**

Carefully read all safety messages in this manual, and all safety signs on your machine. Follow all recommended precautions and safe operating procedures.

#### **OBSERVE MAXIMUM TRANSPORT SPEED**

The maximum transport speed for this implement is 32 km/h (20 mph).

Some tractors are capable of operating at speeds that exceed the maximum transport speed of this implement. Regardless of the maximum speed capability of the tractor being used to tow this implement, do not exceed the implement's maximum transport speed.

Exceeding the implement's maximum transport speed can result in:

- \* Loss of control of the tractor/implement combination
- \* Reduced or no ability to stop during braking
- \* Implement tire failure
- \* Damage to the implement structure or its components

Use additional caution and reduce speed when towing under adverse surface conditions, when turning, and when on inclines.

Do not attempt transport if the fully-loaded implement weighs more than 1.5 times the weight of the tractor.







## A WARNING STAY CLEAR MOVING PARTS UNDER THIS AREA



#### **AWARNING**

#### **DO NOT GO NEAR LEAKS**

- High pressure oil easily punctures skin causing serious injury, gangrene or death.
- If injured, seek emergency medical help.
   Immediate surgery is required to remove oil.
- Do not use finger or skin to check for leaks.
- Lower load or relieve hydraulic pressure before loosening fittings.
   115



#### **A** DANGER

STAY CLEAR OF REAR DOORS WHEN OPENING OR CLOSING.

FAILURE TO HEED THIS WARNING MAY RESULT IN PERSONAL INJURY OR DEATH

KEEP YOURSELF AND OTHERS WELL CLEAR.





#### DO NOT REMOVE SHIELDS MOVING PARTS INSIDE

1494K



#### STAY CLEAR OF DOOR HINGE AREA

FAILURE TO HEED THIS WARNING MAY RESULT IN SERIOUS INJURY OR DEATH

KEEP YOURSELF AND OTHERS WELL CLEAR

3304A



#### **AWARNING**

STAY CLEAR MOVING PARTS BEHIND THIS AREA

#### **AWARNING**

#### HELP AVOID INJURY

- READ & UNDERSTAND THE OPERATORS MANUAL PROVIDED WITH THIS MACHINE. IF MISPLACED CALL H & S MANUFACTURING AT 715-387-3414 WITH MODEL AND SERIAL NUMBER.
- UNDERSTAND ALL SAFETY WARNINGS AND FUNCTION OF CONTROLS.
- . KEEP SAFETY DEVICES IN PLACE AND WORKING.
- KEEP YOURSELF AND OTHERS WELL CLEAR OF MOVING PARTS.
- DISCONNECT ALL POWER BEFORE SERVICING OR CLEANING THIS MACHINE.
- DO NOT EXCEED 20 MPH

72203A



#### TO PREVENT SERIOUS INJURY OR DEATH

BEFORE YOU ATTEMPT TO OPERATE THIS EQUIPMENT, READ AND STUDY THE FOLLOWING INFORMATION. IN ADDITION, MAKE SURE THAT EVERY INDIVIDUAL WHO OPERATES OR WORKS WITH THIS EQUIPMENT, WHETHER FAMILY MEMBER OR EMPLOYEE, IS FAMILIAR WITH THESE SAFETY PRECAUTIONS. KNOW HOW TO STOP UNLOADING MECHANISM BEFORE STARTING IT.

If the machine becomes clogged, <u>disengage truck hydraulics, stop the truck engine, remove ignition</u> <u>key</u> and allow all mechanisms to stop before cleaning or working on the machine.

#### DO NOT ALLOW PERSONNEL OTHER THAN QUALIFIED OPERATOR NEAR THE MACHINE.

**DO NOT** attempt to perform maintenance or repair with truck or tractor running and hydraulics hooked to the power source.

DO NOT step up on machine at any time.

**DO NOT** leave truck or tractor cab when box is in operation.

**DO NOT** allow minors to operate or be near machine.

STAY CLEAR of rear of the Wide Body at all times.

**DO NOT** clean, adjust, or lubricate the machine when any part is in operation.

**BE SURE** the machine is clear of people, tools, and any other objects before engaging hydraulics.

**NEVER** start Wide Body until all guards and safety shields are secured in place.

STAY CLEAR of hydraulic lines, they may be under extreme pressure or heat.

**CAUTION** - Beware of low electrical wires.

Loose or floppy clothing should not be worn by the operator.

H&S Mfg. Co. always takes the operator and their safety into consideration and guards exposed moving parts for their protection. However, some areas cannot be guarded or shielded in order to assure proper operation. In addition, the Operator's Manual and decals on the machine itself warn you of further danger and should be read and observed closely.

Study The Above Safety Rules
ATTENTION - BE ALERT - YOUR SAFETY IS INVOLVED

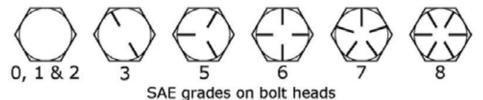
#### CAP SCREW TORQUE VALUES

The specifications below are the torque values for fasteners as it adheres to the SAE torque value standards. All fasteners should be torqued to the proper values found in the figures below unless otherwise specified by the engineering drawing.

Lubed torque would be any fastener that has grease, liquid Loctite, oil, etc. on the threads. Dry torque would be any fastener which has threads that are clean and dry and do not have any liquid Loctite or grease on them.

#### **Hex Head Fasteners**

The figure shown below shows how to determine what grade a fastener is.



SUGGESTED ASSEMBLY TORQUE VALUES				WORKING TORGUE						
SAE GRADE 2 -6"		SAE GRADE 5		SAE GRADE 8		18-8 SS	316 SS	BRASS	SILICON BRONZE	
Diam & Thrds Per Inch	Dry FT. LB.	LUB FT. LB.	Dry FT. LB.	LUB FT. LB.	Dry FT.LB.	LUB FT. LB.	IN LBS	IN LBS	IN LBS	IN LBS
1/4-20	5.5	4.2	8	6.3	12	9	75.2	78.8	61.5	68.6
1/4-28	6.3	4.7	10	7.2	14	10	94.0	99.0	77.0	87.0
5/16-18	11	8	17	13	24	18	132	138	107	123
5/16-24	12	9	19	14	27	20	142	147	116	131
3/8-16	20	15	30	23	45	35	236	247	192	219
3/8-24	23	17	35	25	50	35	259	271	212	240
7/16-14	32	24	50	35	70	50	376	393	317	349
7/16-20	36	27	55	40	80	60	400	418	327	371
1/2-13	50	35	75	55	110	80	517	542	422	480
1/2-20	55	40	85	65	120	90	541	565	443	502
9/16-12	70	55	110	80	150	110	682	713	558	632
9/16-18	80	60	120	90	170	130	752	787	615	697
5/8-11	100	75	150	110	210	160	1110	1160	907	1030
5/8-18	110	85	170	130	240	180	1244	1301	1016	1154
3/4-10	175	130	260	200	380	280	1530	1582	1249	1416
3/4-16	200	140	300	220	420	310	1490	1558	1220	1382
7/8-9	170	125	430	320	600	450	2328	2430	1905	2140
7/8-14	180	140	470	350	670	500	2318	2420	1895	2130
1-8	250	190	640	480	910	680	3440	3595	2815	3185
1-14	280	210	720	540	1020	760	3110	3250	2545	2885

#### **SET-UP & ASSEMBLY**

Note: Determine right and left side of the Wide Body by viewing it from the rear. If instructions or parts lists call for bolts, refer to Cap Screw Torque Values page to identify.

- 1. Check the Wide Body for proper assembly and adjustment.
- 2. Make sure that all bolts are tightened.
- 4. Lubricate the Wide Body completely. (See <u>Lubrication Chapter</u> in this manual).
- 5. Check all taillights and clearance lights that they are functioning properly.

#### PREPARING FOR OPERATION

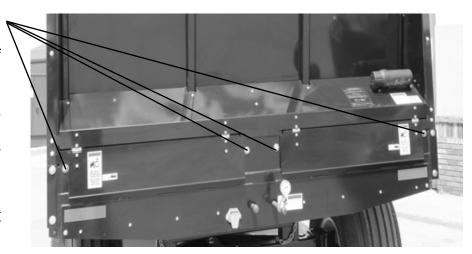
#### **PREPARING THE WIDE BODY**

Properly lubricate the Wide Body by refering to the <u>Lubrication Chapter</u> of this manual for locations.

Four main apron adjustment bolts with tension springs are located on the idler shaft at the front of the box.

Check to make sure that the main apron chains are adjusted evenly before you use the Wide Body. Check again after the first few loads. The main aprons should be at proper tension at all times.

Refer to the <u>Adjustment Chapter</u> in this manual for proper tension and adjustment.



Run the unloading mechanism for several minutes. This will serve as a break-in and as a check that all parts are assembled and lubricated properly. Successful operation will be achieved by periodic adjustments and experience of the operator.

After you have run your Wide Body for a few loads, check the main apron chains again for proper adjustment, as paint may initially come off the apron chains and chains may loosen.

#### **TRANSPORTING**

When transporting on the highway or roads, regularly clean the lights and reflective tape on the sides and at the rear of the Wide Body.



NOTE: Obey all state and local laws concerning the use of the Wide Body on public roads.

#### **OPERATION**

#### **UNLOADING**

- 1. Park the Wide Body on level ground whenever possible during unloading.
- 2. With the operator in the truck or tractor seat, and all others well clear of the Wide Body, engage the hydraulics.
- 3. The gate delay will automatically activate.
- 4. During unloading, move the truck forward to allow the material to fall away from the rear of box.
- 5. When the Wide Body is empty, disengage the hydraulics.
- 6. Engage the switch for the barn doors to close them. (if applicable)
- 7. Check the rear door to make sure it is securely latched.

#### **TOP PIVOT DOOR/REAR DOOR LATCHES/GATE DELAY**

Located at the bottom left, center, and right-hand side of the rear door are the door latches. The latches lock into the apron chain to hold the door closed when loading. When the hydraulics for the main apron chain are activated, the latches automatically flip to open with the movement of the apron chains. The rear door is held open by two hydraulic cylinders. This system allows for a total cleanout of the box. Upon completion of unloading & switching off the apron chain, the rear door will close.



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#### **OPERATION**

#### **BARN DOORS**

Barn doors are optional on the Wide Body. Latches for the doors are located at the bottom center of the rear doors.

These latches lock in the main apron chain of the rear drive shaft to hold doors closed when loading. When the hydraulics are activated, the main aprons turn, and the latches flip to open, allowing the rear door to swing free. Upon completion of unloading, activate the switch for the rear door air cylinders to close.

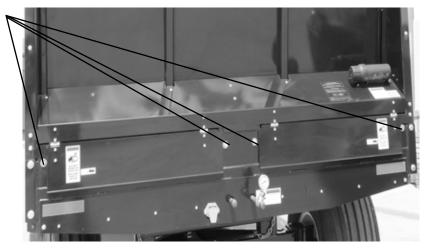




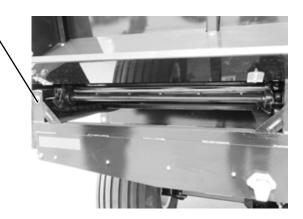
#### **ADJUSTMENTS**

#### **MAIN APRON ADJUSTMENT**

The four main apron adjustment bolts help maintain proper tension on the apron chains.

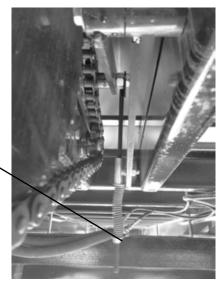


Tighten the full threaded bolts to adjust aprons. Aprons are properly adjusted when two cross slats, or about three feet of chain lift off the chain return slides from the front of the box. Maintain this when operating the box.



#### **MAIN APRON ADJUSTMENT**

Proper tension for the center drive chain is maintained by a spring loaded tightener system. For proper chain tention, tighten the nut on the threaded rod.



#### **OPTIONAL EQUIPMENT**

- Electric Actuator for Front Flip-Down
- Roof Hood Helps keep forage from blowing out of the opposing side of the box
- Chassis & Truck Mount Scale System
- The end-to-end arm tarp system is ideal for forage and is a fast and easy system to use.

#### **LUBRICATION GUIDE**

Become familiar with all lubrication points and establish a systematic routine to ensure complete and quick lubrication of the machine.

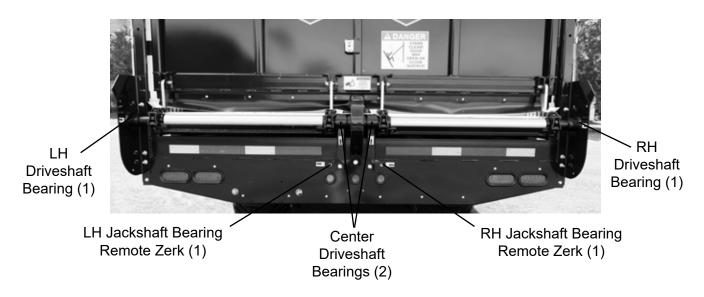
#### **GENERAL INFORMATION**

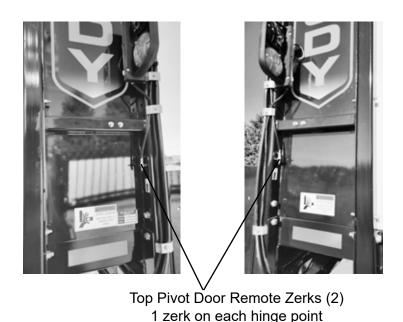
**IMPORTANT:** Catch and dispose of fluid per local waste disposal regulations whenever service is performed on hydraulic components, valves, cylinders, hoses, etc.

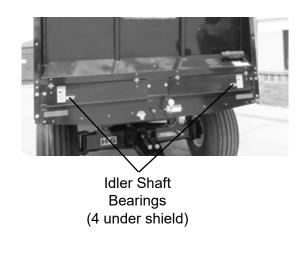
#### **Grease Zerks**

Grease daily during normal use and **before and after storage and after power washing.** Use a good grade of high-quality grease.

Listed are the location and quantity of zerks.







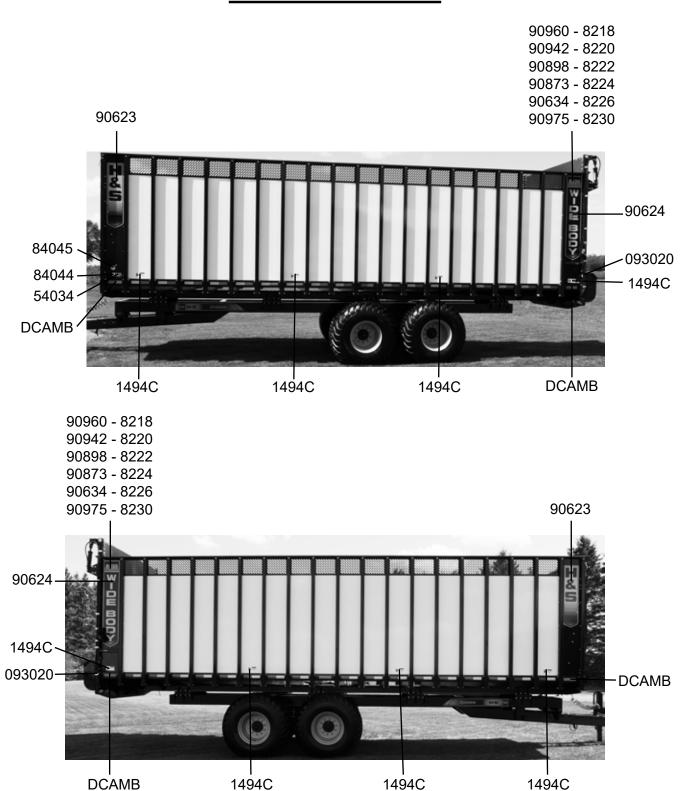
Your H&S Wide Body was manufactured with operator safety in mind. Located on the Wide Body are various decals to aid in operation and warn of caution areas. Pay close attention to all decals.



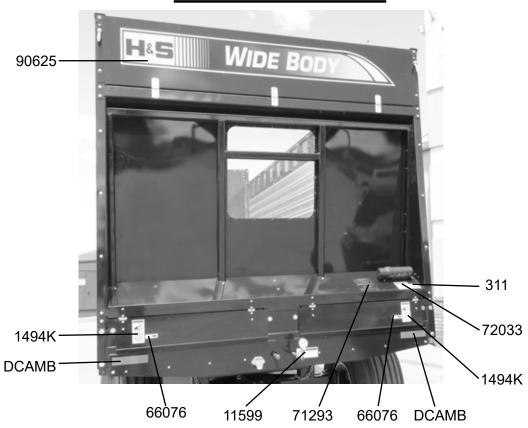
DO NOT REMOVE ANY OF THESE DECALS. IF DECALS ARE LOST, DAMAGED, OR IF THE Wide Body IS REPAINTED, REPLACE DECALS.
REMEMBER: DECALS ARE FOR YOUR PROTECTION AND INFORMATION.

Listed below are the decals on your Wide Body Forage Box.

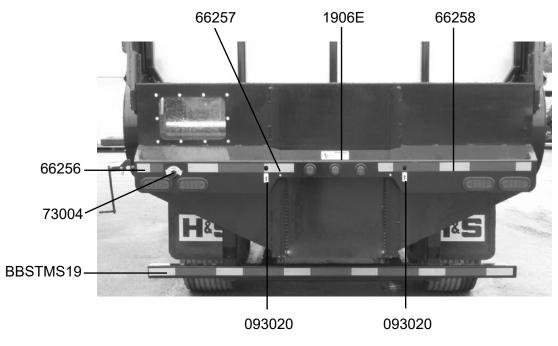
Part #	Quantity	Description
311	1	Patent Decal
1494C	10	Warning - Stay Clear Moving Parts Under This Area
1494K	3	Warning - Do Not Remove Shields
1906E	1	Warning-Stay Clear Moving Parts Behind This Area
		(Grain Hopper ONLY)
3304B	1	Danger - Stay Clear of Rear Door (Top Pivot Door Only)
11599	1	Warning - Do not go near leaks
54034	1	U.S.A.
66076	2	Grease Zerk Decal
71293	1	Informational Decal
72203	1	Warning - Help Avoid Injury
8035	2	Reflective Decal
84044	1	USA
84045	1	H&S Since 1967
90623	2	H&S Branding Decal - Sides
90624	2	Wide Body Branding Decal - Sides
90625	1	H&S/Wide Body Branding Decal - Front
90626	1	H&S Branding Decal - Rear Door
90627	1	Wide Body Branding Decal - Rear Door
90634	2	8226
90873	2	8224
90898	2	8222
90942	2	8220
90960	2	8218
90975	2	8230
093020	7	Grease Zerk Decal







#### <u>Grain</u> <u>Hopper</u>



#### **TROUBLESHOOTING**



#### **WARNING:**

MAKE SURE THE TRUCK/TRACTOR IS SHUT OFF AND THE TRUCK/TRAILER CANNOT MOVE BEFORE SERVICING. MAINTENANCE AND REPAIR SERVICE WORK MUST BE PERFORMED BY A QUALIFIED SERVICE PERSON ONLY.

TROUBLE	CAUSE	REMEDY		
Load will not move	Truck PTO not engaged	Engage truck PTO		
	Tractor Hydraulics not engaged	Engage tractor Hydraulics		
	Hydraulic couplers between truck and Wide Body are not connected or faulty	Check hydraulic couplers to make sure they are connected. Replace if faulty couplers are found		
	Insufficient hydraulic flow and or pressure	Check flow and pressure in truck. Should have minimum 35 G.P.M and 3000 PSI		
	Drive chain off or broken	Replace or repair drive chain		
	Drive motor faulty or worn out	Repair or replace faulty drive motor		
	Key sheared on motor drive	Replace sheared key on motor		
	Drive sprockets broken	Replace sprockets		
Top hinge door will not latch	Feed left in door opening	Clean feed out of door opening		
	Door bent or sprung	Straighten or replace rear door		
	Top hinge pins binding	Lubricate top hinge pins		
Barn doors will not close	Loss of power or blown fuse on door control box	Check for power or replace or latch blown fuse on control box		
	Low truck air pressure	Make sure truck has at least 110 PSI		
	Feed left in door opening	Clean feed out of door opening		
	Door bent or sprung	Straighten or replace rear door		
	Door hinge pins binding	Lubricate door hinge pins		

#### **SERVICE NOTES**


### H&S MFG. CO.

products approved

for the

#### FEMA SEAL OF QUALITY



Manufactured By:

#### **H&S MANUFACTURING CO., INC.**

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