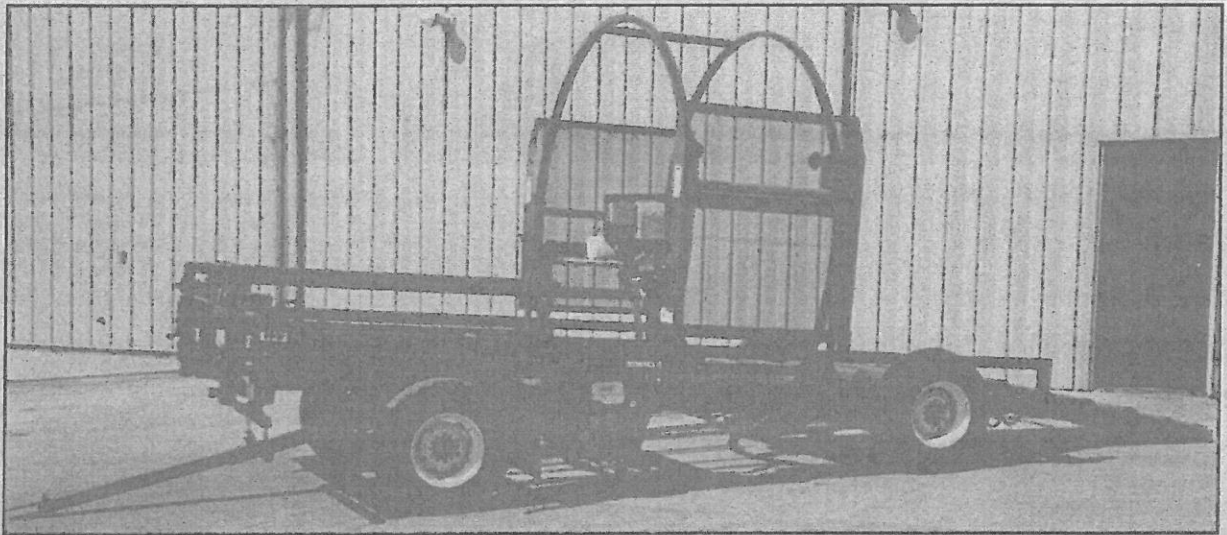


# H&S

# LINEWRAP

## BALE WRAPPER



### **WARNING!**

READ AND UNDERSTAND THIS MANUAL BEFORE OPERATING THIS EQUIPMENT.

UNSAFE OPERATION OR MAINTENANCE OF THIS EQUIPMENT CAN RESULT IN SERIOUS INJURY OR DEATH.

## OPERATOR'S MANUAL

and

## PARTS LIST

12-16-99

**H&S MANUFACTURING CO., INC.**  
MARSHFIELD, WISCONSIN 54449

# H&S LINEWRAP

## CONTENTS

Warranty & Warranty Registration Card . . . . .	1-2
Dealer Pre-Delivery & Delivery Checklist . . . . .	3
Be Alert Symbol . . . . .	5
Explanation of Safety Signs . . . . .	6
Warning Decals . . . . .	7
Warning - Owner/Operator Must Read & Understand . . . . .	8
Emergency - Stop Operation . . . . .	9
Operation . . . . .	9-16
Optional Remote Control . . . . .	17
Lubrication Guide . . . . .	18
Ordering Parts - About Improvements . . . . .	19
Decal Identification & Location . . . . .	20-21
Troubleshooting . . . . .	22-23-24
Service Notes . . . . .	25
Figure 1 – Frame, Rear Axle & Rollers . . . . .	26-27
Figure 2 – Front Axle & Steering . . . . .	28-29
Figure 3 – Hoop, Bale Platform & Guides . . . . .	30-31
Figure 4 – Bale Pusher . . . . .	32-33
Figure 5 – Honda Engine . . . . .	34-35
Figure 6 – Hydraulics . . . . .	36-37
Figure 7 – Electrical . . . . .	38-39
Figure 8 – Linewrap Push Cylinders . . . . .	40
Figure 9 – Linewrap Tail Section Cylinders . . . . .	41
Service Notes . . . . .	42
Specifications . . . . .	Inside Back Cover

# WARRANTY

## Mr. Owner: Before Operating—Read and Understand Operating and Safety Instructions

H&S Manufacturing Co., Inc. truly believes you have made a wise choice and a sound and lasting investment. Many years of development have made available these quality machines to assure you the performance and reliability you need. **We ask you to read the following agreement and warranty as this unit is subject to this warranty and agreement and no other.**

### THE H&S WARRANTY

H&S Manufacturing Co., Inc. warrants this unit to be free from breakage or malfunctions due to defects in material and or workmanship for a period of one year from date of original sale on parts and limited labor, two years parts. Should such breakage or malfunction occur within warranty period the liability of H&S, its employees, agents, authorized distributors, and dealers (Hereinafter collectively referred to as sellers) is hereby expressly limited to repairing or, at its option, replacing free of charge at its factory, any such defective part or parts. Sellers liability is further expressly limited with respect to components manufactured by others, such as engines, batteries, electronic components, universal joints, bearings, detachable link and roller chains, tires, belts or trade accessories, to the extent of such warranties as are extended thereon to sellers by these manufacturers.

**THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR APPLICABLE FOR ANY PARTICULAR PURPOSE, AND THE OBLIGATION AND LIABILITY OF SELLERS UNDER THIS WARRANTY, DOES NOT EXTEND TO LOSS OF CROPS, LOSS BECAUSE OF DELAY IN HARVESTING OR ANY EXPENSE OR LOSS INCURRED FOR LABOR, SUPPLIES, SUBSTITUTE MACHINERY OR RENTAL MACHINERY, TRANSPORTATION OR OTHER CHARGES, OR ANY OTHER INDIRECT OR CONSEQUENTIAL LOSS.**

H&S Mfg. Co., Inc. reserves the right to make changes in design and components or material or to utilize available materials which it deems satisfactory, in order to improve its products. Also H&S reserves the right to make changes in the construction or design of any parts without any incurring obligations to install these improvements or changes on previously delivered units.

This warranty shall be void if any part or parts not manufactured or supplied by H&S are used either in servicing and maintaining the unit, and sellers obligation to repair or replace parts are then voided. This warranty shall be void if in the judgement of H&S, repairs are made in such a manner to affect this unit in a materially adverse manner or if this unit is operated unsafely or while in a state of disrepair.

The terms and conditions of this warranty cannot be altered, modified, or waived by any seller without the expressed, written consent of an officer of H&S Mfg. Co., Inc.

### NOTICE

H&S Manufacturing Co., Inc. disclaims any liability for the operation of the equipment with the safety guards removed or modified. The nature of this product requires that it be operated in a safe way only, and in good repair by qualified persons. Each purchaser, through the process of purchasing this equipment, agrees with H&S Manufacturing Co., Inc. to operate it in a safe manner and in accordance with applicable state and federal laws and agrees to indemnify and hold harmless H&S Manufacturing Co., Inc. from any loss to any person or persons caused by purchaser's failure to do so. Each purchaser further agrees to bring to the attention this notice to each subsequent purchaser, and to obtain his agreement thereto as a condition of resale or transfer.

### IMPORTANT

**TO MAKE THIS WARRANTY EFFECTIVE, THE OWNERS WARRANTY REGISTRATION FURNISHED WITH EACH MACHINE MUST BE FILLED OUT AND SENT TO H&S MANUFACTURING CO., INC. IF PURCHASER DOES NOT ACCEPT THIS WARRANTY AND AGREEMENT, HE MAY RESCIND THE SALE BY NOTIFYING ANY OF THE SELLERS IN WRITING OF THAT FACT WITHIN TEN DAYS FROM DATE OF SALE AND/OR PRIOR TO ANY USE OF THE EQUIPMENT WITHIN THIS 10 DAYS.**

LW2

### WARRANTY REGISTRATION

Date of Purchase \_\_\_\_\_

Purchaser \_\_\_\_\_ Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Product \_\_\_\_\_ Model # \_\_\_\_\_ Serial # \_\_\_\_\_

Dealer \_\_\_\_\_ Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

\_\_\_\_\_  
Signature of original buyer

**FILL OUT AND MAIL  
IMMEDIATELY TO MAKE  
WARRANTY EFFECTIVE**



**IMPORTANT!**

Tear on dotted line, provide the information requested on the card. The H&S Warranty is valid **“only”** after this card is received and recorded at H&S Mfg. Co. Mail at once. No postage is required in the U.S.A.

This Is Your Warranty Card  
Please Fill Out  
And Mail Immediately



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

**BUSINESS REPLY MAIL**

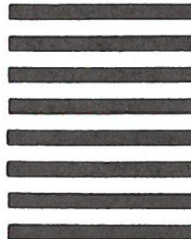
FIRST CLASS MAIL Permit No. 195 Marshfield, WI 54449

POSTAGE WILL BE PAID BY ADDRESSEE

**H&S Manufacturing Co., Inc.**

PO Box 768

Marshfield WI 54449-9963



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

**H&S  
DEALER PRE-DELIVERY CHECK LIST**

After the Linewrap Bale Wrapper has been completely set-up, check to be certain it is in correct running 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.

- All shields and guards are in place and fastened.
- All grease fittings and other areas have been lubricated. See lubrication guide in this manual.
- All mechanisms are operating trouble free.
- Hydraulic fluid reservoir is filled to proper level.
- All bolts and fasteners are tight.
- All decals are in place and legible.

(Dealer's Name)	LW2 Model Number
(Signature of Pre-Delivery Inspector)	Serial Number  (Inspection Date)

**DEALER DELIVERY CHECK LIST**

This check list that follows is an important reminder of valuable information that should be passed on to the customer at the time this Linewrap Bale Wrapper is delivered.

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

This pre-delivery check list, when properly filled out and signed assures the customer that the pre-delivery 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 settings for different types of bales.
- Explain to customer that regular lubrication is required for proper operation and long life of machine. Show customer the lubrication section of Owner's Manual.
- Give the customer Owner's Manual and make sure he reads and understands all operating and service instructions.
- Record Serial Number on Page 19 of this Manual.
- Have customer sign a completed "Warranty Registration," and mail it promptly.

Date Delivered \_\_\_\_\_

Dealer's Name \_\_\_\_\_

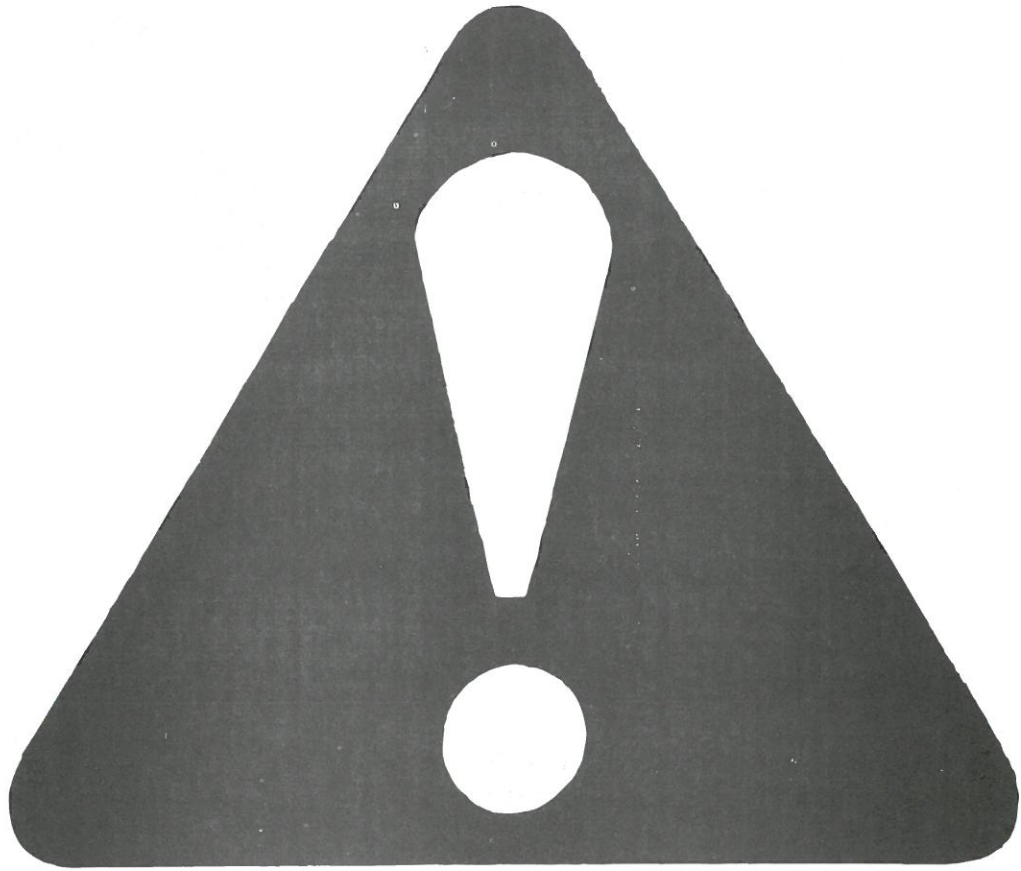
By \_\_\_\_\_

\_\_\_\_\_  
Signature of Original Buyer

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

Remove Dealers File Copy At Perforation





**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.**

## 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 signal 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.



## 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.

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







 <b>WARNING</b>	<b>TO PREVENT SERIOUS INJURY OR DEATH NEVER OPERATE THIS UNIT UNLESS EMERGENCY STOP FUNCTIONS PROPERLY.</b> <small>5896C</small>
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 <b>WARNING</b>
<b>DO NOT OPERATE THIS EQUIPMENT IF THIS DECAL IS EXPOSED. REPLACE SAFETY SHIELDS.</b>
<small>32597A</small>





 <b>WARNING</b>
<b>DO NOT OPERATE THIS EQUIPMENT IF THIS DECAL IS EXPOSED. REPLACE SAFETY SHIELDS.</b>
<small>32597D</small>

	 <b>DANGER</b> <b>SHUT ENGINE COMPLETELY OFF BEFORE ADJUSTING OR SERVICING MACHINE. MACHINE MAY START UNEXPECTEDLY FAILURE TO HEED THIS WARNING MAY RESULT IN PERSONAL INJURY OR DEATH</b>
<small>32597C</small>	

	 <b>DANGER</b> <b>STAY CLEAR OF TAIL SECTION IN RAISED POSITION FAILURE TO HEED THIS WARNING MAY RESULT IN PERSONAL INJURY OR DEATH</b>
<small>32597B</small>	

 <b>WARNING</b>

<b>DO NOT REMOVE SHIELDS MOVING PARTS INSIDE</b>
<small>32597E</small>

	 <b>WARNING</b> <b>DO NOT GO NEAR LEAKS</b> <ul style="list-style-type: none"> <li>• High pressure oil easily punctures skin causing serious injury, gangrene or death.</li> <li>• If injured, seek emergency medical help. Immediate surgery is required to remove oil.</li> <li>• Do not use finger or skin to check for leaks.</li> <li>• Lower load or relieve hydraulic pressure before loosening fittings.</li> </ul>
	<small>11599</small>

## H&S LINEWRAP



# WARNING

### 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 MACHINE BEFORE STARTING IT.

**DO NOT** attempt to perform maintenance, repair, or adjustment with engine running.

**DO NOT** allow minors to operate machine.

**NEVER** step up on machine while engine is running.

**PRIOR TO** starting engine, check to make sure all guards are in place and all persons are clear of the machine.

**ALWAYS** shut engine completely off before extending or retracting last bale push off mechanism. Machine may start unexpectedly.

**NEVER** tow the bale wrapper at speeds over 20 m.p.h.

**ALWAYS** engage brake prior to operating the wrapper, retract brake prior to transport.

**CHECK EMERGENCY STOP** mechanism frequently to insure that it is operating properly.

**BE SURE** to read and understand engine owner/operator manual supplied with machine.

H&S Mfg. Co. always takes the operator and his safety into consideration and guards exposed moving parts for his protection. However, some areas cannot be guarded or shielded in order to assure proper operation. In addition, the operators 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**



# WARNING

## TO PREVENT SERIOUS INJURY OR DEATH NEVER OPERATE THIS UNIT UNLESS EMERGENCY STOP FUNCTIONS PROPERLY

Your H&S Linewrap is equipped with an electric emergency stop switch. (A). This switch is activated by the stop cable. (B). Activating the emergency stop will stop all functions of the machine. The engine will continue to run.

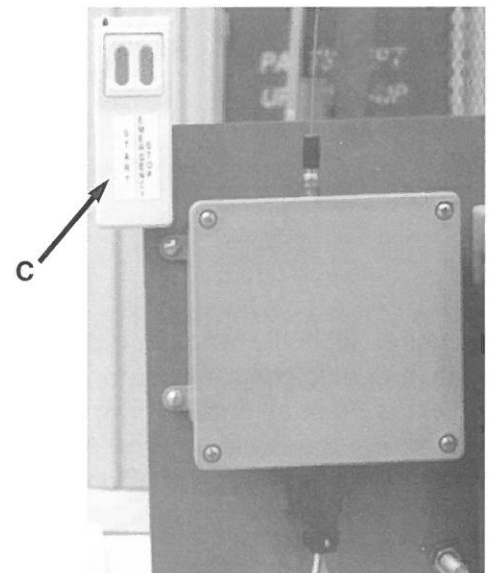
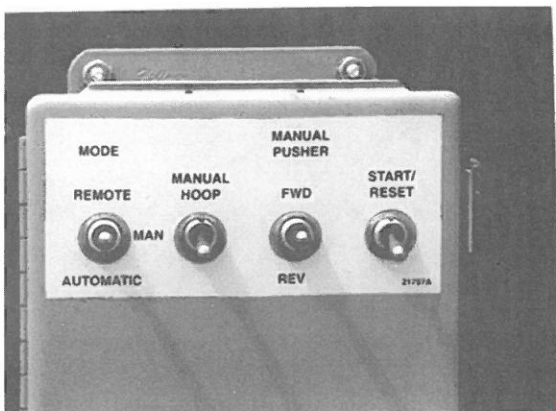
**IF THE EMERGENCY STOP IS TRIPPED DURING WRAPPING CYCLE, THE UNIT MUST BE SWITCHED TO MANUAL MODE ON THE CONTROL PANEL. PRESS THE START/RESET SWITCH. PRESS AND HOLD MANUAL PUSHER REVERSE SWITCH UNTIL PUSHER RETURNS TO ITS HOME POSITION. SELECT DESIRED MODE, AUTOMATIC OR REMOTE ON THE CONTROL BOX TO CONTINUE NORMAL OPERATION.**

If the optional remote handset (C) is used, the emergency stop may be activated by pressing the emergency stop button. **TO RESUME NORMAL OPERATION, FOLLOW THE ABOVE PROCEDURE.**



B

A



C

# OPERATION


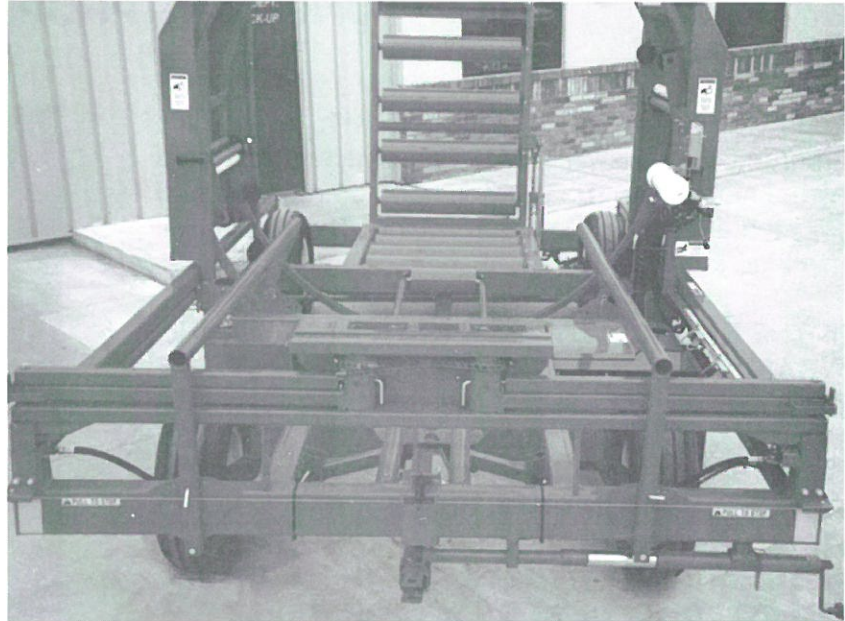


**! DANGER**  
**SHUT ENGINE COMPLETELY OFF BEFORE ADJUSTING OR SERVICING MACHINE.**  
**MACHINE MAY START UNEXPECTEDLY**  
**FAILURE TO HEED THIS WARNING MAY RESULT IN PERSONAL INJURY OR DEATH**

32597C

There are many features of your H&S Linewrap machine that you should become familiar with to operate the unit. Before you start wrapping, be sure to read and understand these instructions and engine owner's manual.

Be sure to shorten the tongue into the steering position. This can be done by lifting the spring loaded telescoping lock pin and sliding the telescoping tongue in. Once the tongue has been retracted, the tongue can be pinned to the hand crank mechanism. Steering will enable the machine to be guided around contours or along fence lines.



**! DANGER**  
**STAY CLEAR OF TAIL SECTION IN RAISED POSITION**  
**FAILURE TO HEED THIS WARNING MAY RESULT IN PERSONAL INJURY OR DEATH**

32597B

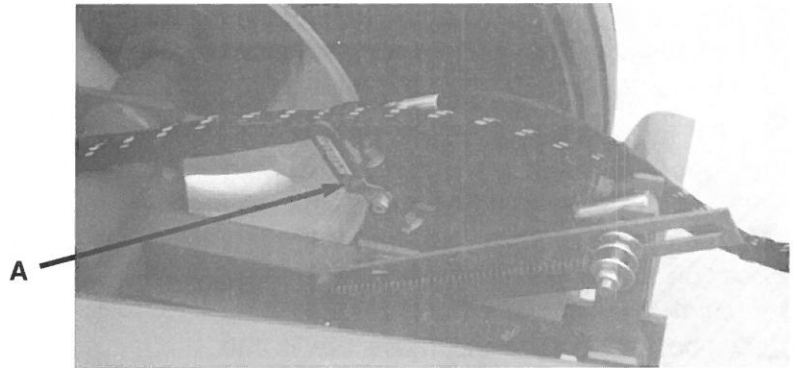
Start the engine, let it idle for a short period of time to warm up. Activate hydraulic control lever to TAIL UP/BRAKE OFF position. Release the tail section from the transport position by disconnecting the lockbar. The lockbar can then be rotated forward to the storage position.



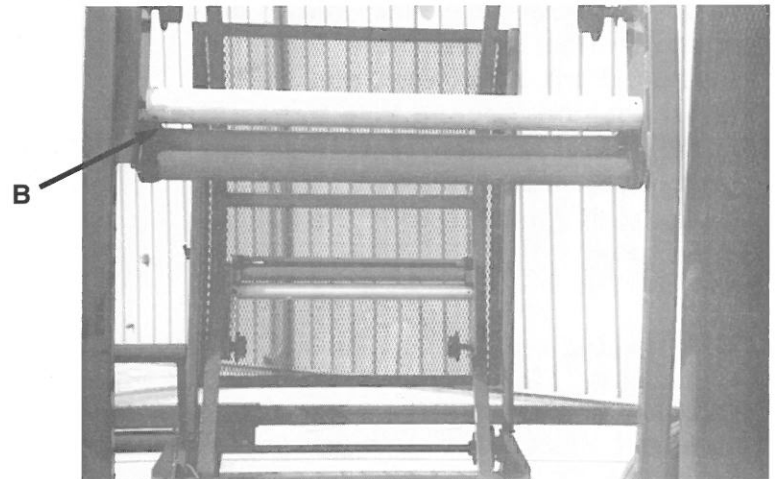
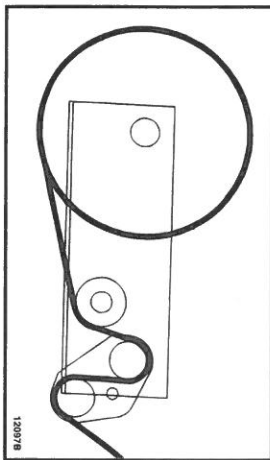
## OPERATION (Continued)



Push the hydraulic lever to TAIL DOWN/ BRAKE ON position and hold until tail section lowers and brake activates. If the brake should fail to activate, open the brake lockout valve located near the left rear tire of the machine. Now push hydraulic lever until brake activates. Once the brakes are on, close the brake lockout valve (A) to prevent creep. The brakes are used to restrict the machine from moving freely forward. This allows the bales to be wrapped in a tight compressed line.

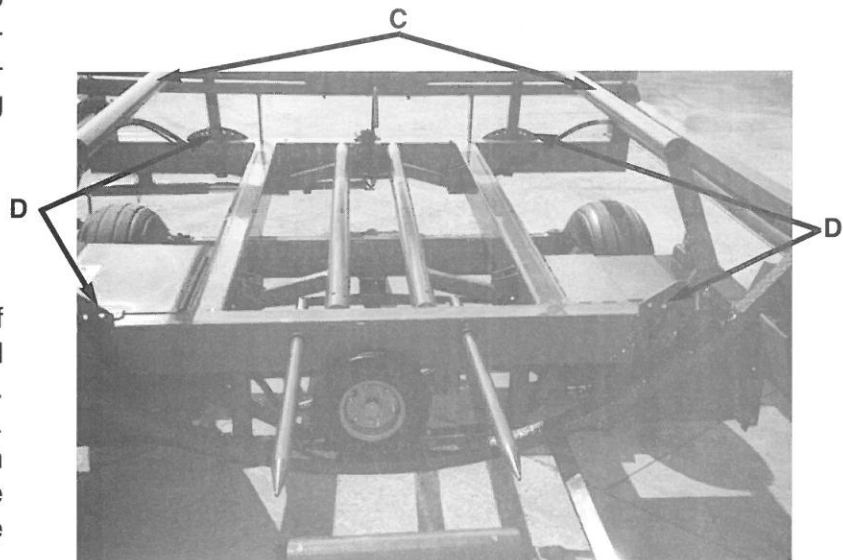


To install plastic film on the machine, shut off engine, and open side shield on the engine side of the machine. Rotate the hoop upwards by hand until the first prestretcher (B) is accessible. Put on the first roll of film and thread film through prestretcher as shown on decal. Close safety shield. Walk around the machine and open safety shield. Add second roll of film. Loading film in this order will help reduce the possibility of hoop rotation while installing film.



### VIEWED FROM REAR OF MACHINE

Adjust the bale guides (C) to fit the size of bales to be wrapped. These guides are used to keep the bales centered while wrapping. **DO NOT** load bales onto the guides. Improper use of the guides may result in damage to the machine. Adjustment can be made by removing pins (D) and rotating the guides.

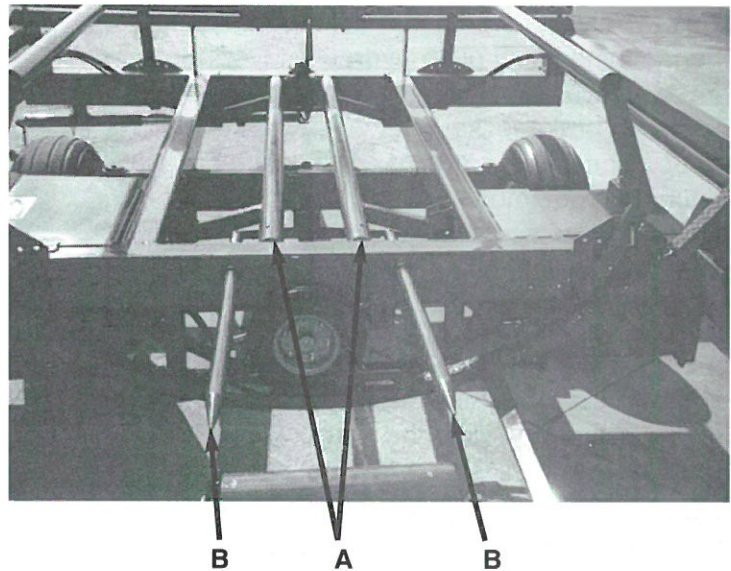


## OPERATION (Continued)

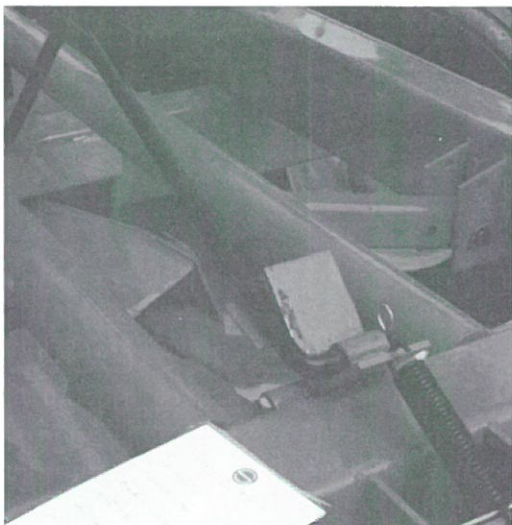


There are two risers (A) at the front of the machine. All round bales should be wrapped with the risers in the down position. These risers serve as a loading platform in the down position, and help to raise square bales in the up position. Be sure to shut engine off before adjusting the risers.

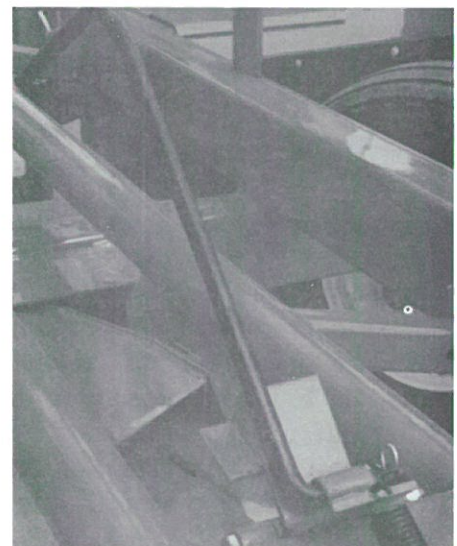
In the up position, a longer bale can be wrapped sideways, since it is going through the wider part of the hoop. Be sure to remove the forks (B) from the low position and pin them into the end of the risers if wrapping with the risers in the up position. Make sure the risers are in the proper position for the bales being wrapped. **Make sure the forks are pinned in the proper hole for each position. First hole from end in the raised position, Second hole from end in the lower position. Failure to pin forks in the proper position will result in plastic film being torn at the bottom of the bales.**



The automatic start bar must be moved to the up position when the risers are raised to the up position for square bales. Lift start bar above rest bracket and slide to your right. Rest start bar on to rest bracket. Remove hair pin from end hole and place in second hole from the end of the rod. This will secure start bar in the up position. Start bar is now in position to be activated by square bale when placed on the risers in the up position. When risers are lowered for round bales, start bar must be lowered or round bale will activate automatic start prematurely. Pusher will start to move before bale is lowered completely onto table.



**DOWN  
POSITION**

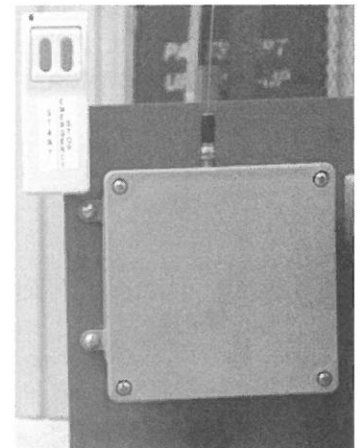
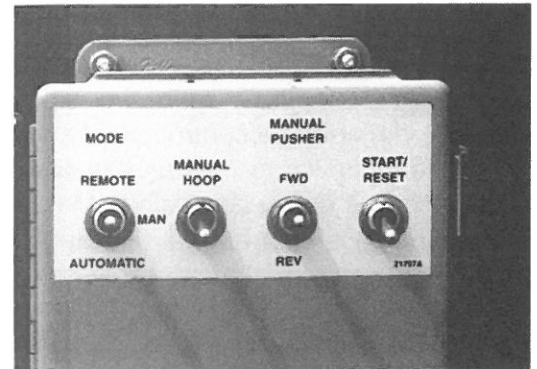


**UP  
POSITION**

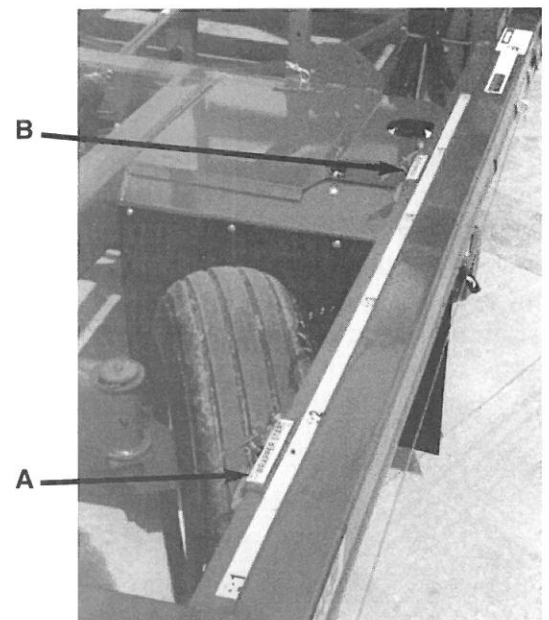
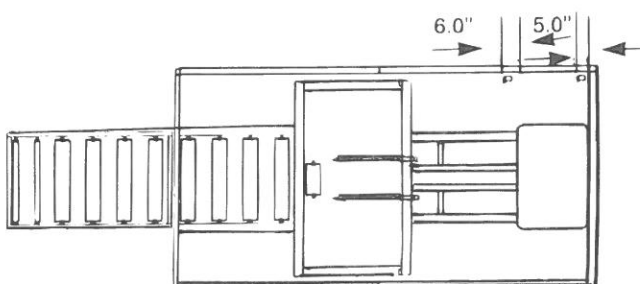
## OPERATION (Continued)



Note that there are four switches on the control panel. The mode selection switch allows the operator to wrap bales manually, automatically, or from the optional remote control (Remote handset shown). The Linewrap will not operate in the remote position, unless the remote option is installed on the machine. The manual hoop switch allows the operator to rotate the hoop while in the manual mode. The manual pusher switch allows the pusher to be moved forward or reverse while in the manual mode. The start/reset switch is to be used after starting the engine or after the emergency stop has been activated. **IF THE EMERGENCY STOP IS TRIPPED DURING WRAPPING CYCLE, THE UNIT MUST BE SWITCHED TO MANUAL OPERATION ON THE CONTROL PANEL. PRESS THE START/RESET SWITCH. PRESS AND HOLD MANUAL PUSHER REVERSE SWITCH UNTIL PUSHER RETURNS TO ITS HOME POSITION. SELECT DESIRED MODE, AUTOMATIC OR REMOTE ON THE CONTROL BOX TO CONTINUE NORMAL OPERATION.**



The Linewrap is now ready to begin wrapping bales. Set mode selection switch to manual position. Start engine. Press start/reset switch. Load first bale on the machine. Adjust the wrapper start switch (A) so it is about five inches from one end of the bale as shown. Now set the pusher stop switch (B) so it is approximately six inches from the opposite end of the bale. Be sure wires from switches are placed in storage channel below switches. Set mode selection switch to automatic. The Linewrap will complete one cycle. Now load the second bale. The start bar will be depressed and the machine will cycle automatically. The hoop should begin to rotate after the first bale begins to move. This may be adjusted by sliding the hoop start switch in the desired direction. Continue loading bales until the first bale is pushed off the rollers and onto the ground.



## OPERATION *(Continued)*



Shut off the engine. Open the side safety shield near the control panel and rotate hoop upwards by hand until a prestretcher is easily accessible. Make sure film is threaded through prestretcher as previously explained. Pull approximately five feet of film through prestretcher and tie to the bale strings. Go to the other side of the machine and repeat previous steps. Close shields and start the engine. Push the start/reset switch. Select desired mode of wrapping.



If manual mode is selected, follow these steps to begin and continue wrapping. Place another bale on the machine. Push and hold manual hoop switch to start wrapping. After four wraps, push and hold manual pusher switch to the forward position. Hold manual hoop wrapping switch and manual pusher forward switch until there is sufficient room to place another bale on the machine. Release both switches at this time. Push and hold pusher reverse switch until pusher returns to its home position. Place another bale on the machine. Push and hold manual pusher forward switch. When the bale on the forks start to move, push and hold manual hoop wrapping switch. Again hold both switches until there is room to place another bale on the machine. Release both switches and push manual pusher reverse switch. Repeat the above process to continue wrapping.

If automatic mode is selected, follow these steps to begin and continue wrapping. Place selection switch in manual mode. Push and hold manual hoop switch to begin wrapping. Hold manual hoop switch until there are four wraps on the bale and release. Switch selection mode to automatic. Place another bale on the machine. Start bar will be depressed and machine will cycle automatically. Pusher will start to move and push bale. When wrapper start switch is activated by pusher, hoop will begin to rotate. When pusher stop switch is activated by pusher, pusher will stop and return to its home position allowing room for another bale to be placed on the machine. Machine will again cycle automatically, repeating the above process. Continue to add bales on to Linewrap.

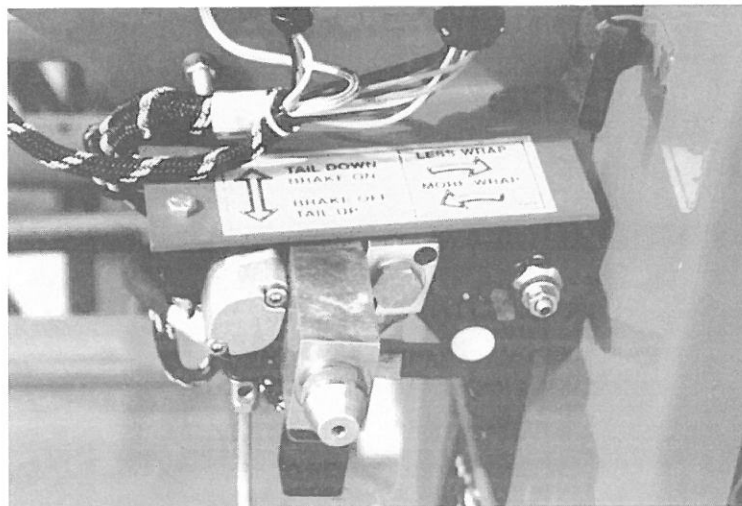


## OPERATION (Continued)



If Linewrap is equipped with optional remote, and remote mode is selected, follow these steps to begin and continue wrapping. Place switch in manual mode. Push and hold manual hoop switch to begin wrapping. Hold manual hoop switch until there are four wraps on the bale and release. Switch selection mode to remote. Place another bale on the machine. Press the start button on the remote handset and machine will cycle automatically. Pusher will start to move and push bale. When wrapper start switch is activated by pusher, hoop will begin to rotate. When pusher stop switch is activated by pusher, pusher will stop and return to its home position allowing room for another bale to be placed on to the machine. Place another bale on the machine. Push start button on remote hand set. Machine will again cycle automatically, repeating above process. Continue to repeat the above steps.

While wrapping bales, the amount of wrap can be adjusted by turning the flow control valve located below the control panel. Initially set by turning the control all the way clockwise, and back off about one-half turn. Silage bales should be wrapped with 6-8 layers of film. The number of layers of film can be determined by dividing the width of the film (in inches) by the number of inches between wraps. The number of inches between wraps is determined by measuring the seam to seam distance of the film on the bales. **Example:** Film width = 30 inches, distance between wraps is 5 inches, the amount of film being applied is  $30 \div 5 = 6$  layers of film.



When there are enough wrapped bales on the ground to provide a stable row to push against, pick up the first bales that were pushed through the machine and not wrapped. Place these bales back on to the machine and continue wrapping.

## OPERATION (Continued)



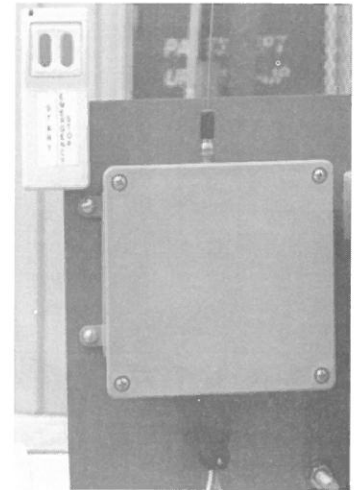
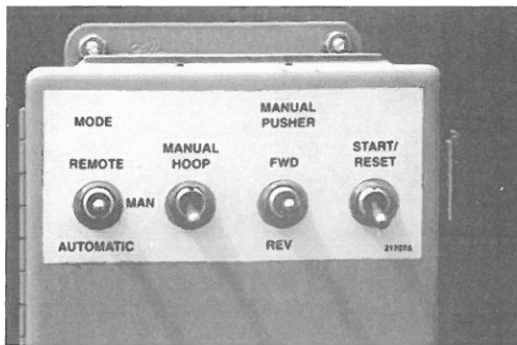
Continue to add bales until nearly done. Adjust the flow valve to apply more film when there are four bales left to wrap. Wrap the last four bales. Continue to wrap the last bale manually until it is nearly all on the forks. Return the pusher to its home position. Shut engine off. Fold out the last bale push off mechanism of the Linewrap to the locked position. Start engine. Push Start/Reset switch on control panel. Again manually start wrapping the last bale. When the last bale has been fully wrapped, release the manual hoop switch but continue to hold manual pusher forward switch until the last bale is pushed as far as possible. Return the pusher to its home position. Shut engine off completely. Fold last bale push off mechanism back to its storage position. Cut off plastic film between bale and prestretcher.

Extend tongue into the transport position. Make sure tongue is securely locked. Hook onto the tongue. Slowly pull the machine away from the bales. When free from the bales, open the brake lock-out valve. Start engine, and raise tail section into the transport position. Lock tail section up with lock bar for transport. Shut off engine. The machine is now ready for transport. Tear off some film from the rolls and apply it to the ends of the row that has just been finished. Inspect the row for any holes that may have been made. If holes are present, seal with tape.

## OPTIONAL REMOTE

The H&S Linewrap has been designed to easily add a remote control option. The remote option may be added by bolting the remote box next to the main control box and connecting the four pin remote connecting cord from the remote box to the main control box. With this remote option, the Linewrap may be started or stopped remotely from the tractor or skid-steer by use of the hand held activator.

In order for the remote to operate, the mode switch on the control box must be put in the remote position. This will deactivate the start bar that would normally start the wrapping process in the automatic mode. By deactivating the start bar, the operator may set a bale on the machine without activating the wrapping process. Now the operator may add a second bale on top of the first in a "double deck" configuration. Once the second bale has been added, the start button on the remote may be pushed and the machine will start wrapping automatically. If the operator would like to stop wrapping because of an emergency or otherwise, the operator may press the emergency stop button on the remote. Once the emergency stop has been activated by the remote, the machine shuts down as if the safety cable has been pulled. **IF THE EMERGENCY STOP IS TRIPPED DURING THE WRAPPING CYCLE, THE UNIT MUST BE SWITCHED TO MANUAL OPERATION ON THE CONTROL PANEL. PRESS THE START/RESET SWITCH. PRESS AND HOLD MANUAL PUSHER REVERSE SWITCH UNTIL THE PUSHER RETURNS TO ITS HOME POSITION. RETURN SELECT MODE TO REMOTE.**



### REMOTE CONTROL PROGRAMMING

If remote control handset is replaced reprogram using the following steps. Remove cover from remote control box. Locate two program buttons in upper right hand corner of control box. Top button (A) is program for emergency stop. Bottom button (B) is program for start.

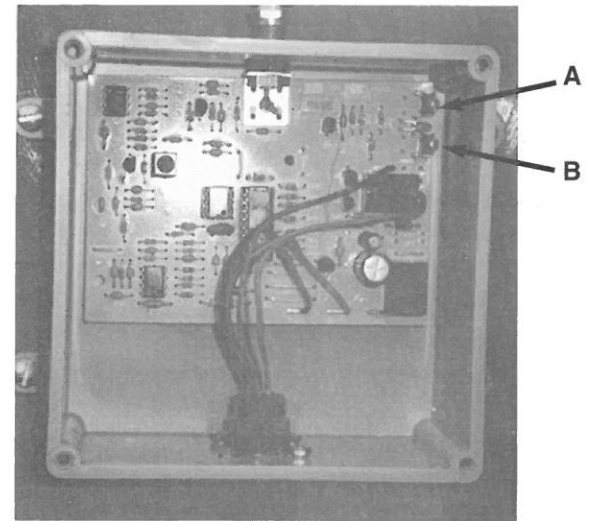
### ERASING MEMORY (Old memory must be erased before reprogramming).

1. Press program button for the channel to erase and continue to hold it through the count of the transmitter.
2. Continue to hold the button after the count until the indicator blinks once for channel one, twice for channel two (about five seconds after the count.)
3. Transmitter programmed into that channel will be erased.

### PROGRAMMING

1. Press and release program button for the desired channel.
2. Program indicator will light if there is room in that channel's memory for another transmitter.
3. Send signal from transmitter (handset), program indicator will flicker as signal is received.
4. Repeat process for second program button.

**NOTE: MAKE SURE THAT BOTH BUTTONS ARE NOT PROGRAMMED ON THE SAME CHANNEL.**

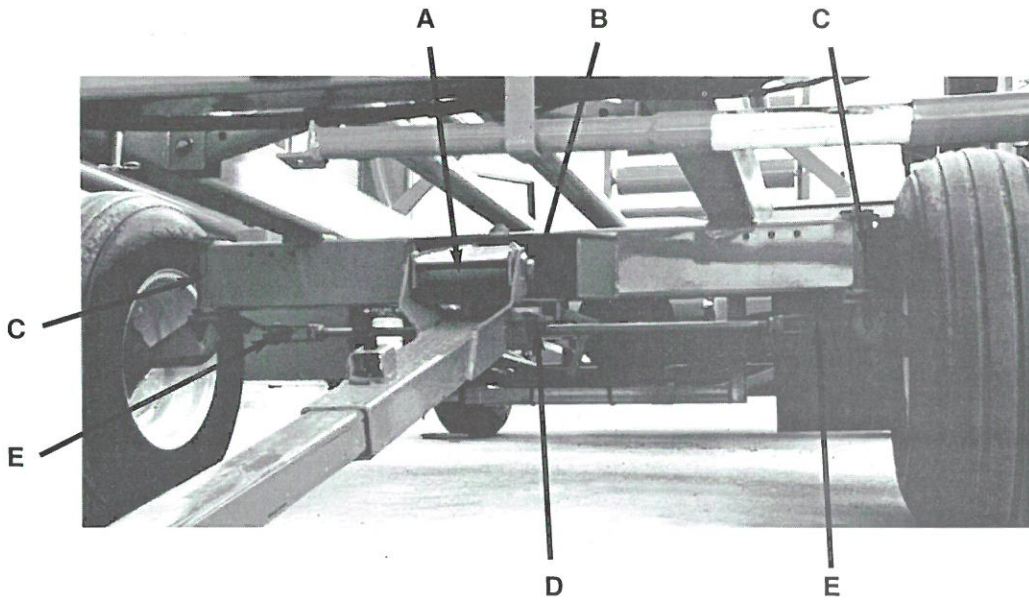


# LUBRICATION GUIDE

There are 15 grease zerks on your H&S Linewrap. Location and recommended intervals are as follows:

Front Steering Mechanism (Items A-E) as needed, at least annually:

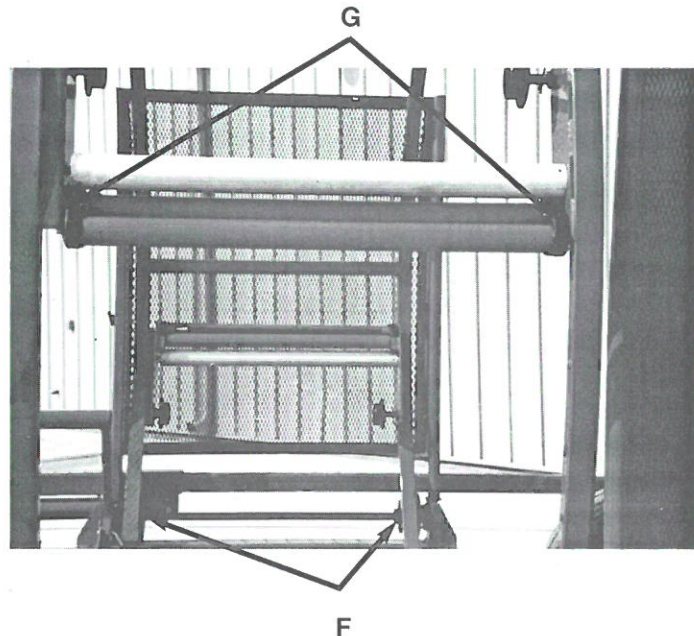
- A. 1 - Pole Pin
- B. 1 - Pole Pivot
- C. 2 - 1 each Spindle Pivot
- D. 1 - Tie Rod Center Pivot
- E. 2 - Tie Rod Ends
- F. 4 - Each Hoop Roller Support - Every 20 Hours of Operation
- G. 4 - 2 on each Tensioner - Annually Only



To insure smoother operation and longer life of your Linewrap, apply liberal amounts of grease to the pusher slides daily, or when the slides appear dry. Additionally, lubricate the following with a light machine oil:

- The removable fork mounts
- The push-off arm pivots
- The pivot points on the rear tailgate

Check the hydraulic oil level regularly. The level of the 20W hydraulic oil should be maintained above the half mark on the sight gauge located on the hydraulic oil reservoir.



# INSTRUCTIONS FOR ORDERING PARTS

All service parts should be ordered through your authorized H&S dealer. He will be able to give you faster service if you will provide him with the following.

1. Model & Serial Number - Both can be located directly below main control panel.
2. All reference to left or right apply to the machine as viewed from the rear.
3. Parts should not be ordered from illustration only. Please order by complete part number.
4. If your dealer has to order parts - give shipping instructions.

VIA truck - large pieces (please specify local truck lines)

VIA United Parcel Service (include full address)

<b>H&amp;S Mfg. Co.</b>	
MARSHFIELD, WIS.	
MOD. NO.	LW2
SER. NO.	

PLEASE RECORD NUMBERS FOR YOUR UNIT FOR QUICK REFERENCE

## ABOUT IMPROVEMENTS

H&S IS CONTINUALLY STRIVING TO IMPROVE IT'S PRODUCTS.

We must therefore, reserve the right to make improvements or changes whenever it becomes practical to do so, without incurring any obligation to make changes or additions to the equipment previously sold.

## DECAL LOCATION

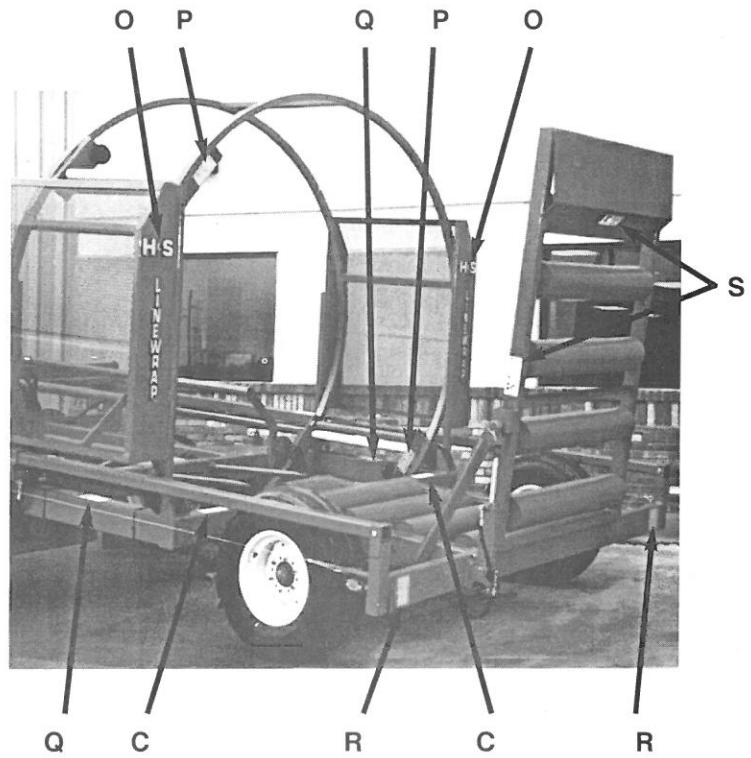
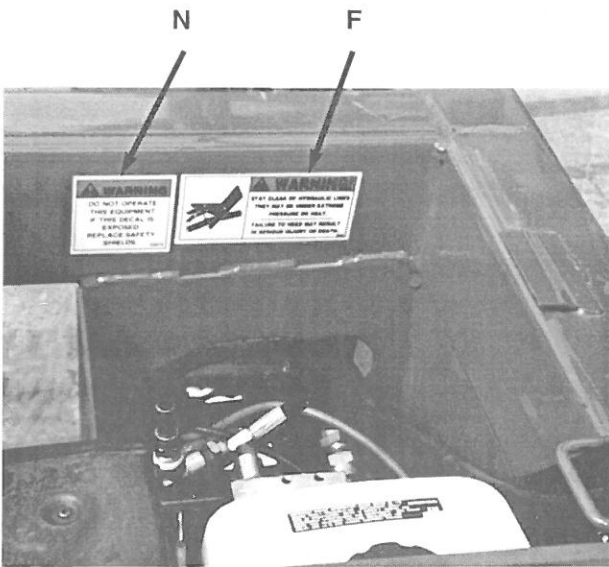
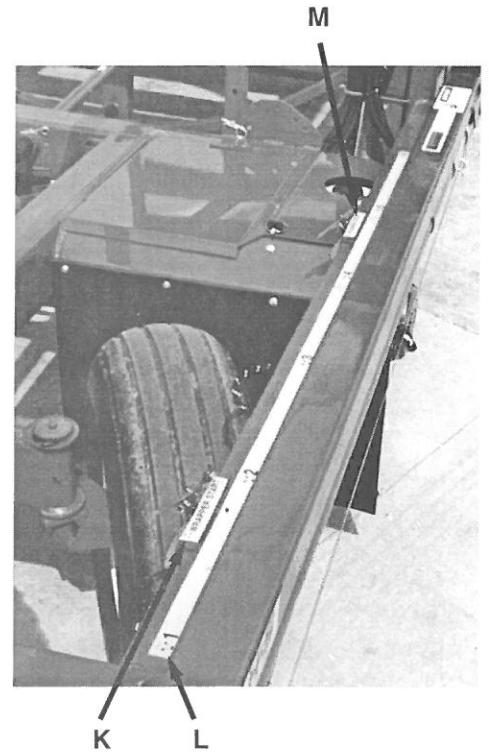
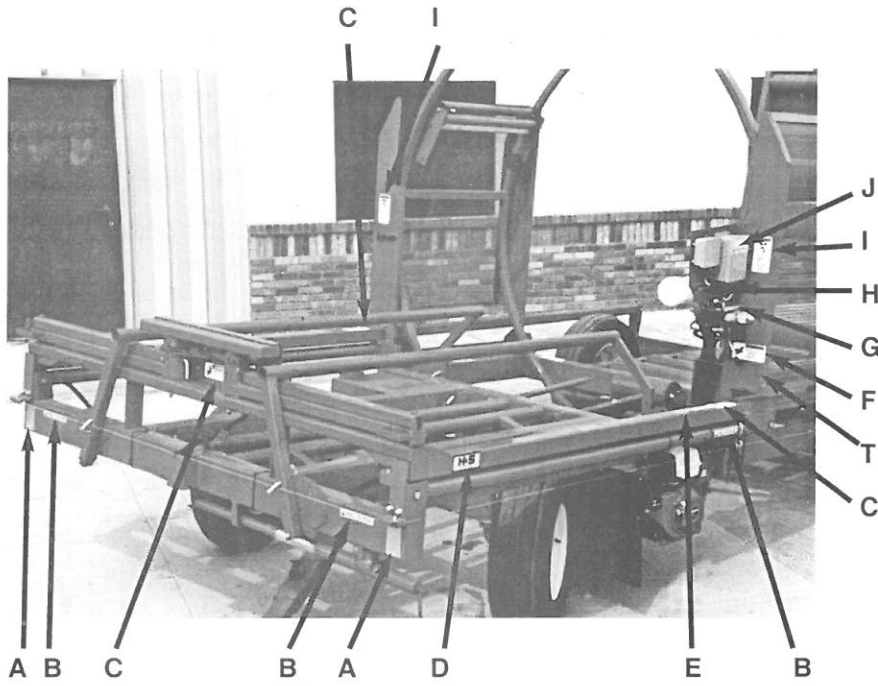
Your H&S L Linewrap was manufactured with operator safety in mind. Located on the wrapper unit are various decals to aid in operation, and warn of danger or caution areas. Pay close attention to all the decals on your Linewrap.



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

Listed below are the decals on your Linewrap. These decals may be ordered individually by part number or by ordering complete set.

ITEM	PART NO.	DESCRIPTION
A		(2) Amber Reflector
B	120-2177	(4) Pull To Stop
C	32597C	(5) Danger - Shut Engine Off
D	D12	(2) H&S Decal (3" x 6")
E	5896C	Warning - To Prevent Serious Injury
F	11599	(2) Warning - Stay Clear of Leaks
G	12097A	Tail Down - Tail Up Down
H		Serial No. - Model No.
I	32597E	(2) Warning - Do Not Remove Shields
J	21797A	Electric Switches Decal
K	1297A	Wrapper Start
L		Measurement for Wrapper/Pusher Switches
M	12797B	Pusher Stop
N	32597A	Warning - Do Not Operate
O		(2) H&S Linewrap
P	12097B	(2) Film Wrap Diagram
Q	32597D	(2) Warning - Do Not Operate
R		(2) Red Reflector
S	32597B	Danger - Stay Clear
T	41097A	If Linewrap is setting...Disconnect Ground Terminal
	121699LW	Complete Set of Decals
Paint - H&S Red	ZX21	Gallon
	ZX22	Quart
	ZX23	Pint



**WARNING:** Shields removed for clarification. Replace Shields before operation.

# TROUBLESHOOTING

## PLASTIC TENSIONERS

*If wrinkles appear in plastic while wrapping. . .*

1. Check to make sure the wrap is threaded properly.
2. Check if the tensioner gears are broken. The gears are broken if the red tensioners rotate independently of each other.

*If plastic tears between tensioner and bale. . .*

1. Make sure film holders are turning freely. Turn holders by hand until free.
2. Slave rollers not turning freely. Turn manually until free.
3. Use a higher quality plastic. Some brands are more tear resistant than others.
4. Plastic tensioners may be tacky. If tensioners are built up with adhesive from wrapping in hot weather, wash tensioners with soap and water.

## ENGINE DOESN'T START

If the engine has been run out of gas, fill tank, turn on key, and wait for about 10 seconds before attempting to start. The Linewrap is equipped with an electric fuel shutoff valve located between the gas tank and the engine's carburetor. This valve lets gas through when the key is turned on, and stops fuel when key is turned off. By leaving the key on before starting, gas has time to refill the carburetor fuel bowl.

For other starting problems, refer to manufacturers owners manual.

## MACHINE DOESN'T WRAP IN THE REMOTE (Optional) MANUAL, OR AUTOMATIC MODES

Press the start/reset button.

Insure wiring harness is properly connected to control box.

Insure wiring harness is properly connected to the engine.

## MACHINE DOESN'T WRAP IN THE AUTOMATIC MODE

Press the start/reset button

Make sure pusher is in the home position. The machine will not begin a wrapping cycle unless the pusher is in the home position (i.e., the limit switch that stops the pusher at the end of the cycle must be activated). If not in the home position, put machine in manual mode and manually return the pusher to the home position.

Open control box and read digital display for error codes, then consult pages 23 and 24 of this manual.

## MACHINE DOESN'T WRAP IN THE MANUAL MODE

Press start/reset button.

Make sure mode selection switch is in manual mode.

TROUBLESHOOTING AND MAINTENANCE OF ELECTRICAL COMPONENTS - SEE PAGE 23.



# TROUBLESHOOTING-ELECTRONICS

## MAINTENANCE PRECAUTIONS

WHEN PERFORMING ANY INSPECTION OR MAINTENANCE WORK ON THE ELECTRONIC SYSTEM, ALWAYS TAKE SPECIAL CARE TO PREVENT INJURY TO YOURSELF AND OTHERS OR DAMAGE TO THE EQUIPMENT. The following are general precautions which should be closely followed.

1. Do not have hydraulic power available to the valves when performing electrical tests.
2. Never operate or test any function with any other person near or on the machine.
3. Take care to prevent metal tools from coming in contact with sensitive electronic components.
4. Turn power off before connecting or disconnecting valve coils or other electrical loads.

## ROUTINE MAINTENANCE

1. Clean transmitter regularly with a damp cloth and mild detergent.
2. Periodically check switch mounting nuts and compression fittings for tightness.
3. Inspect electrical wiring for wear points or other damage. Repair as required.
4. Inspect all connections (especially to the valves) for looseness or corrosion. Tighten and/or "seal" as necessary.

## CONTROL BOX

If there is no power at the control box:

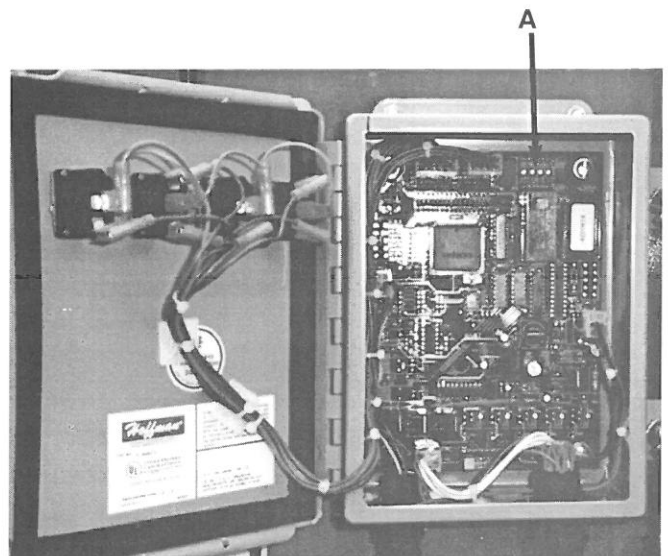
1. Check 25 Amp fuse located in engine start box.
2. Check wiring connections from engine start box to main control box.

## DISPLAY

The system is designed with an integrated 4-Character Alphanumeric red LED Intelligent Display (located upper right inside control box A). This display serves two functions:

1. The display will show the number of bales the Linewrap has wrapped. The counter cannot be reset. A custom operator may use this feature for billing purposes.

If used for billing purposes, it is suggested to read display AFTER plastic film has been attached to the first bale, then add the number of bales sitting on the machine in front of first bale to be wrapped.



## DISPLAY (Continued)

2. The display will show diagnostic information for troubleshooting.

Display Shows	Problem/Solution
RST	Press Start/Reset Button
EC01	Short or open connection at output to forward solenoid
EC02	Short or open connection at output to reverse solenoid
EC03	Short or open connection at output to hoop solenoid

### TOP VIEW VALVE (Located Below Control Box)

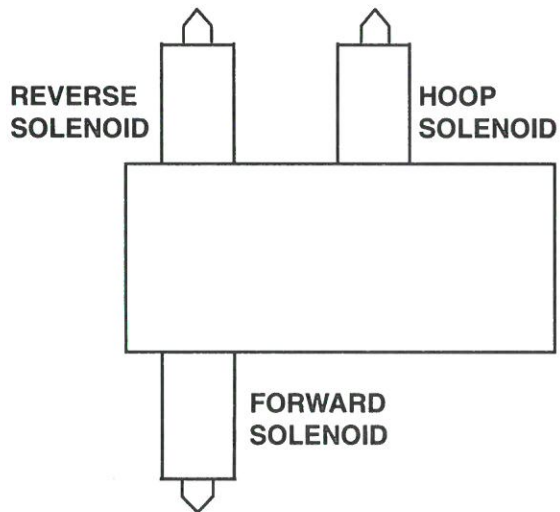
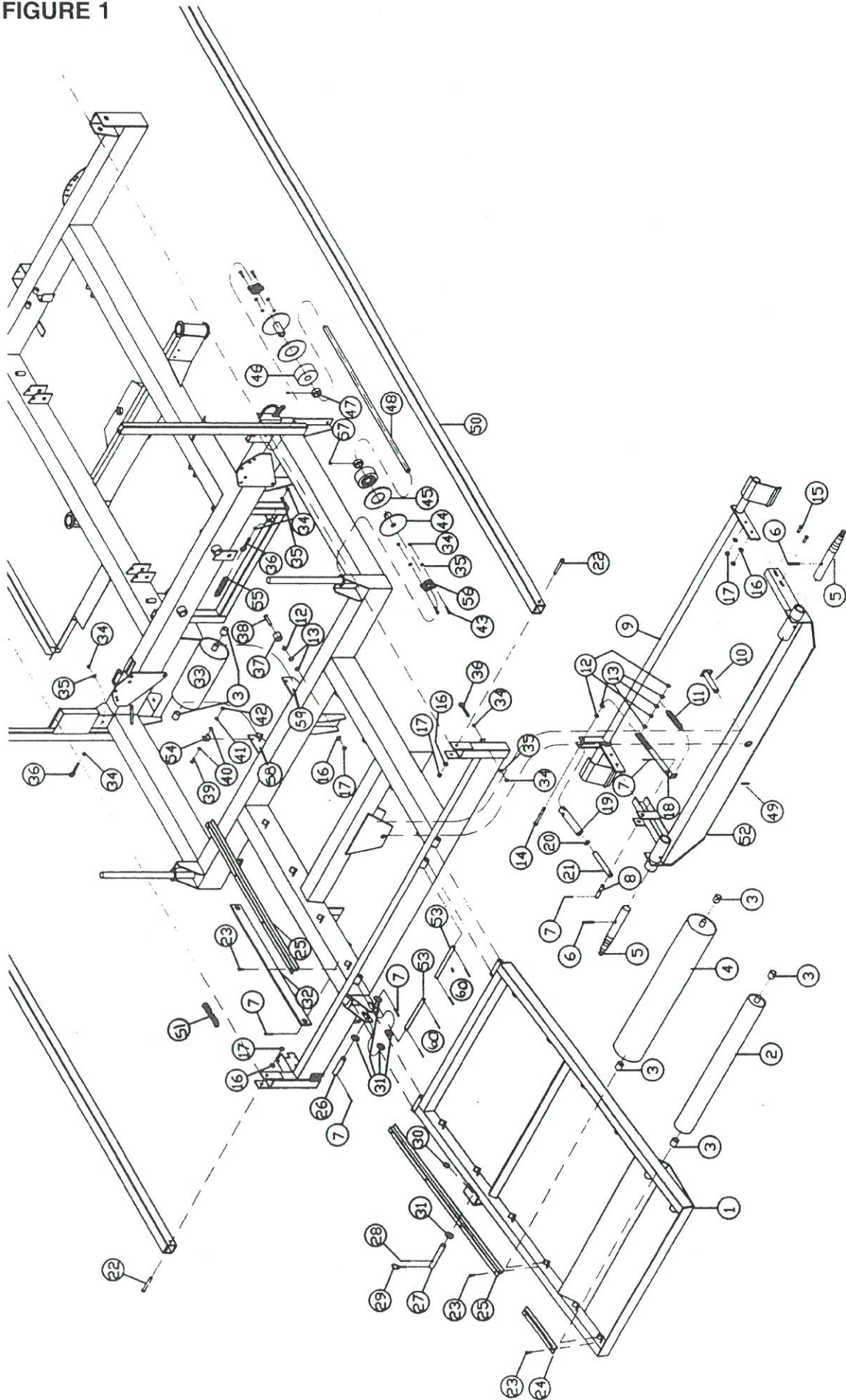




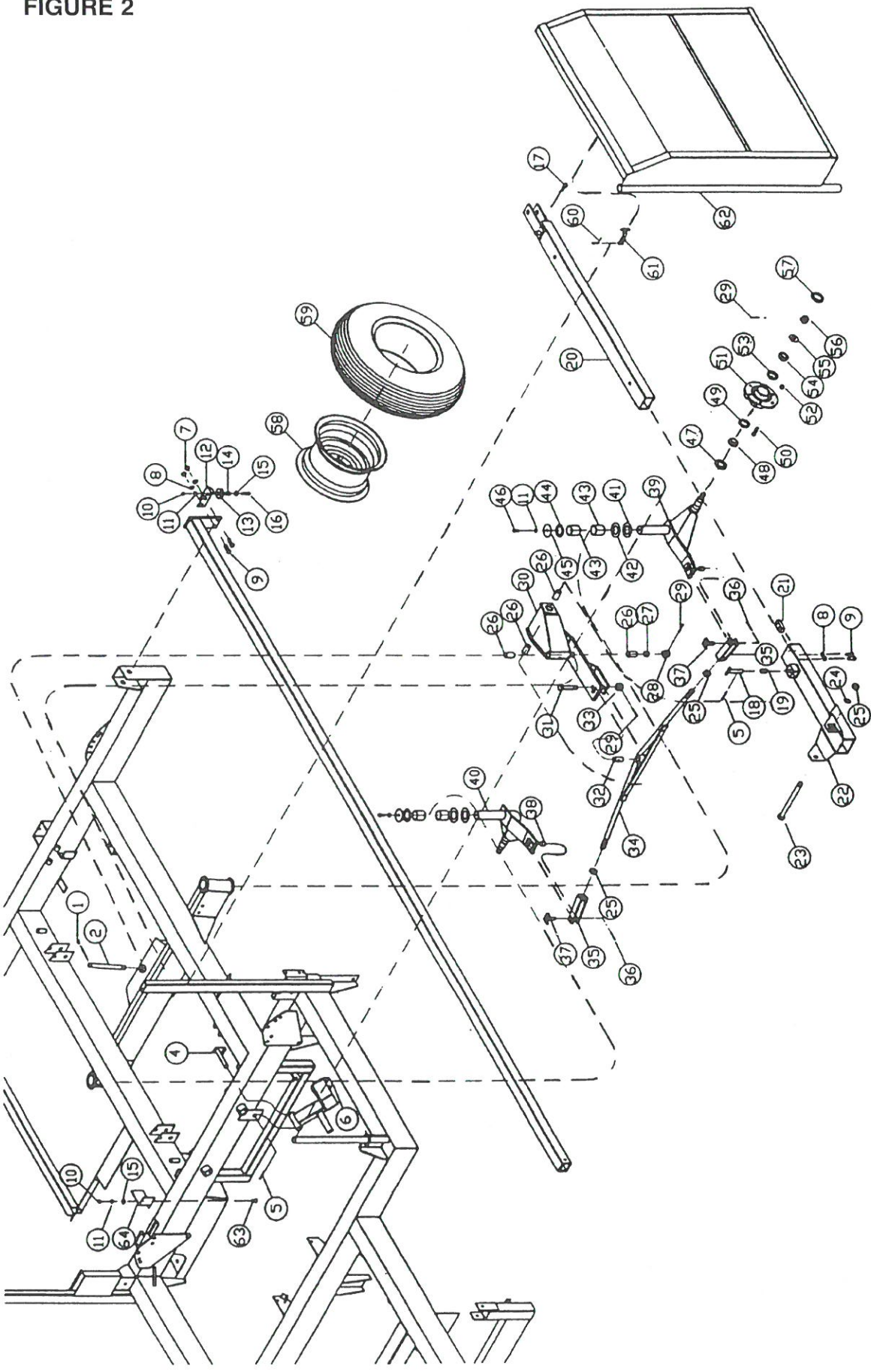
FIGURE 1



**FIGURE 1  
FRAME, REAR AXLE AND ROLLERS**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
1.	LW161	Tail
2.	LW157	Small Roller
3.	LW63	PVC Bearing
4.	LW158	Large Roller
5.	LW27	Rear Spindle
6.	12V59	3/8" x 2-3/4" Expansion Pin
7.	T72	5/32" x 1-1/2" Cotter Pin
8.	LW57	Cylinder Pin
9.	LW12	Brake Assembly
10.	LW43	Rear Axle Pin
11.	10R14	Spring Brake Return
12.	LW125	Nylon Jam Nut
13.	K68	1/2" Flat Washer
14.	23N130	Bolt 1/2" x 4-1/2" GR.5 Full Thread
15.	50N81	Carriage Bolt 1/2" x 1-1/2" GR.5
16.	R35	Lock Washer 1/2"
17.	R29	Nut 1/2"
18.	LW45	Brake Cylinder Stop
19.	BFR116	Brake Cylinder
20.	BFR115	Brake Cylinder "O" Ring
21.	BFR114	Brake Cylinder Rod
22.	LW123	Bolt 1/2" x 3-3/4" GR.5
23.	LW124	5/16" x 3/4" Button Head
24.	LW159	Short Roller Holder
25.	LW160	Long Roller Holder
26.	LW55	Tail Cylinder Pin-Cylinder End
27.	LW56	Tail Cylinder Pin-Rod End
28.	23N108	3/16" x 2" Cotter Pin
29.	F56	Linchpin
30.	X94	Spacer
31.	BFR33	Washer 49/64"
32.	LW165	Tail Storage Link
33.	LW163	Short Roller
34.	T116	Nut 5/16"
35.	RGB39	Lock Washer 5/16"
36.	ES10	5/16" x 3" I-Bolt
37.	LW67	Rear Hoop Guide
38.	LW130	Bolt 1/2" x 2-1/2" Allen Head Center Sunk
39.	X111	Bolt 3/8" x 1" GR.5
40.	X67	Flat Washer 3/8"
41.	B68	Lock Washer 3/8"
42.	K60	Nut 3/8"
43.	LW199	Bolt 5/16" x 1-1/4" GR.5
44.	LW61	Hoop Roller Hub
45.	LW64	Hoop Roller Lip
46.	LW22	Hoop Roller
47.	LW60	Hoop Roller Collar
48.	LW53	Hoop Roller Shaft
49.	3G22	5/16" x 1-3/4" Expansion Pin
50.	LW7	Pusher Slide - RH
51.	LW111	Safety Spring
52.	LW20	Rear Axle
53.	LW54	Tail Hinge Pin
54.	LW48	Short Roller Clip
55.	ST36	Hydraulic Motor Spring
56.	T40	Bearing W/Lock Collar
57.	G83	3/8" Set Screw
58.	LW154	LH Roller Bracket Mount
59.	LW155	RH Roller Bracket Mount
60.	BFR22	Set Screw

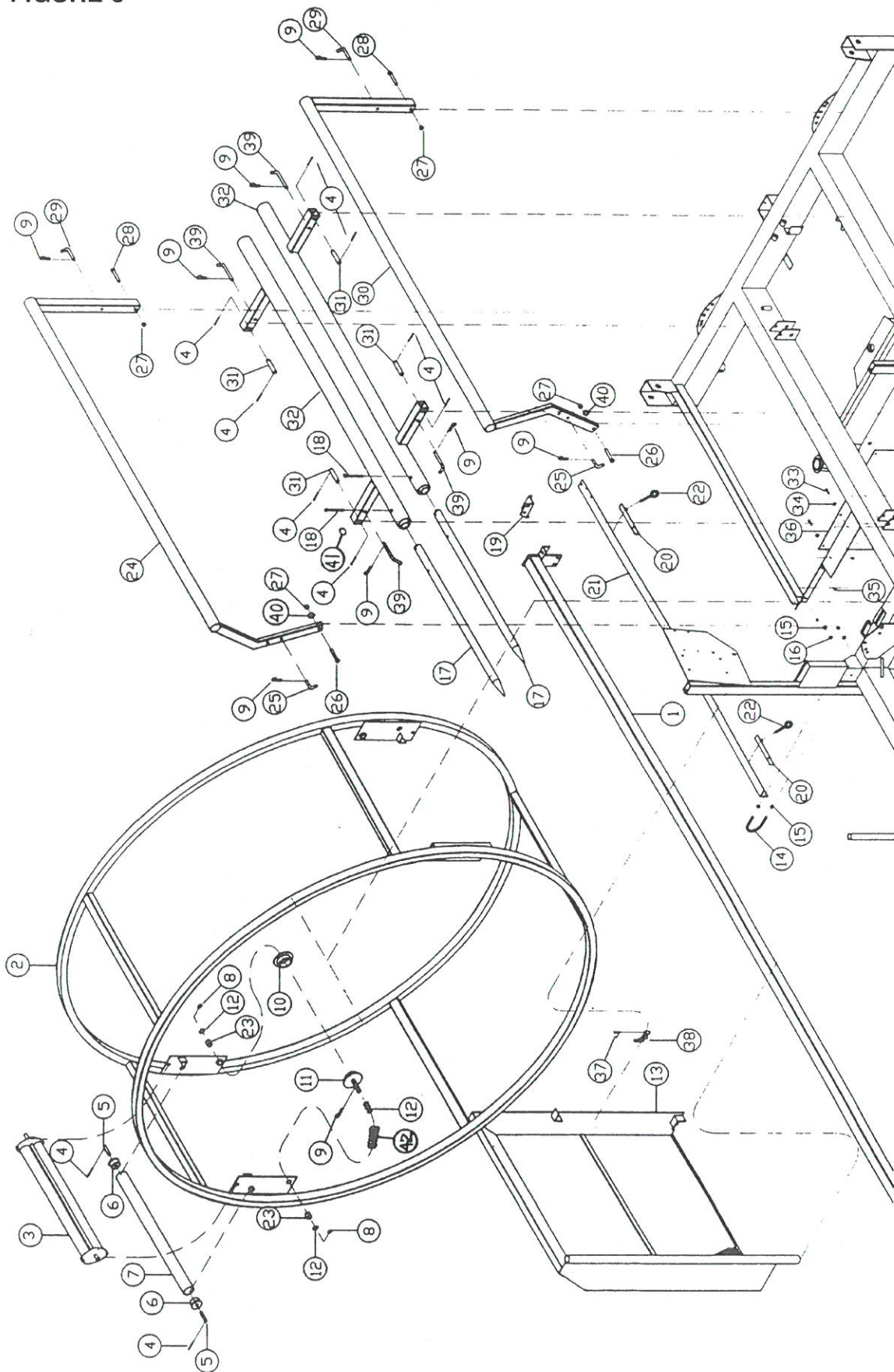
FIGURE 2



**FIGURE 2**  
**FRONT AXLE & STEERING**

ITEM	PART NO.	DESCRIPTION
1.	RG80	7/8" External Snap Ring
2.	RG287	Steering Pin
4.	BFR234	Hydraulic Motor Pin
5.	T72	5/32" x 1-1/2" Cotter Pin
6.	LW11	Hydraulic Motor Mount
7.	R29	Nut 1/2"
8.	R35	Lock Washer 1/2"
9.	12V45	Bolt 1/2" x 1-1/2" GR.5
10.	K60	Nut 3/8"
11.	B68	Lock Washer 3/8"
12.	LW36	Stop Pulley RH
13.	BFR283	Pulley
14.	ST81	Bushing
15.	X67	Flat Washer 5/8"
16.	LW134	Bolt 3/8" x 1-1/2" GR.5
17.	ES7	Hairpin
18.	BFR241	Adjustment Handle
19.	BFR240	Pole Latch Spring
20.	LW16	Inner Pole
21.	RG54	Tele-Pole Stop
22.	LW15	Outer Pole
23.	RG85	Pole Pin
24.	RG79	Star Washer 7/8"
25.	RG80	Jam Nut 7/8"
26.	RG77	Bushing 57/64" ID x 1-1/8" OD x 2"
27.	RG81	Bushing 57/64" ID 1-1/8" OD x 5/8"
28.	RG82	Slotted Nut 7/8"
29.	T56	5/16" x 2" Cotter Pin
30.	LW44	Pole Pivot
31.	RG33	Tie Rod Center Bolt
32.	RG18	Bushing 3/4" ID x 1" OD x 2"
33.	T35	Slotted Nut 3/4"
34.	RG83	Tie Rod
35.	RG91	Tie Rod End
36.	T37	5/32" x 1-1/4" Cotter Pin
37.	RG30	Clevis Pin
38.	RG31	Bushing 5/8" ID x 7/8" OD x 1"
39.	RG86	Spindle RH
40.	RG93	Spindle LH
41.	RG87	1/8" Bronze Thrust Washer
42.	RG88	1/16" Thrust Washer
43.	RGT3	Bushing 1-49/64" ID x 2" OD x 2"
44.	RG90	Poly Washer
45.	RG89	Front Spindle Cap
46.	X111	Bolt 3/8" x 1" GR.5
47.	RG98	Seal
48.	RG97	Inner Bearing
49.	RG100	Inner Race
50.	RG102	Stud
51.	RG101	Hub - 6 Bolt
52.	BFR144	Stud Nut
53.	RG47	Outer Race
54.	RG48	Outer Bearing
55.	RG182	Washer
56.	RG105	Hub Nut
57.	RG103	Hub Cap
58.	12N24	Wheel 6 - Bolt
59.	LW122	Tire 11L x 15
60.	X195	Pin & Cotter Pin
61.	X192	Handle
62.	LW14	Shield RH
63.	BFR247	Carriage Bolt 3/8" x 1"
64.	LW40	Battery Holder

FIGURE 3

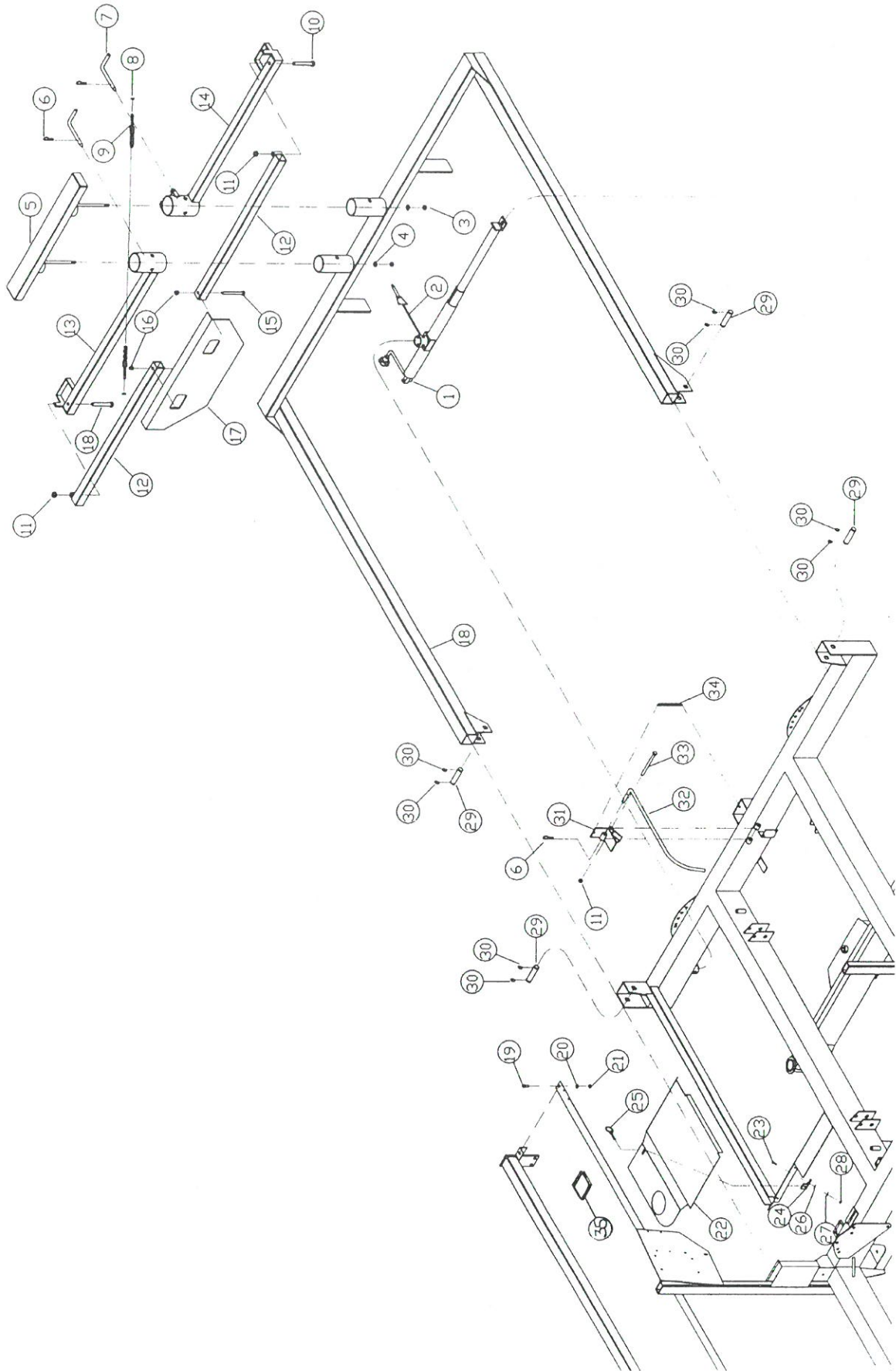




**FIGURE 3  
HOOP, BALE PLATFORM & GUIDES**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
1.	LW6	Pusher Slide LH
2.	LW2	Hoop
3.	LW115	Wrap Tension Head
4.	T72	5/32" x 1-1/2" Cotter Pin
5.	LW50	Wrap PVC Roller Shaft
6.	LW66	Wrap PVC Roller Hub
7.	LW65	Wrap PVC Roller
8.	10R32	3/4" External Snap Ring
9.	ES7	Hairpin
10.	LW29	Front Wrap Holder
11.	LW164	Rear Wrap Holder
12.	LW42	Washer/Spacer
13.	LW13	Shield LH
14.	LW132	3/8" x 3" U-Bolt
15.	K60	Nut 3/8"
16.	B68	Lock Washer 3/8"
17.	LW30	Fork
18.	LW169	Fork Pin
19.	LW35	Stop Puller LH
20.	LW32	Limit Switch Slide
21.	LW31	Limit Switch Rail
22.	BFR319	3/8" x 2-1/2" I-Bolt
23.	LW121	Bushing 1" OD x 3/4" ID x 1" Long
24.	LW8	Bale Guide LH
25.	LW51	Bale Guide Pin Rear
26.	F52	Bolt 1/2" x 2" GR.5
27.	LW125	1/2" Nylon Jam Nut
28.	16SV91	Bolt 1/2" x 3-1/4" GR.5
29.	LW52	Bale Guide Pin Front
30.	LW9	Bale Guide RH
31.	LW57	Brake Cylinder Pin
32.	LW10	Bale Riser
33.	D110	Bolt 1/4" x 1"
34.	T16	Flat Washer 1/4"
35.	LW140	1/4" Nut
36.	LW68	Mud Flap
37.	X195	Pin & Cotter Pin
38.	X192	Handle
39.	LW49	Bale Riser Pin
40.	K68	1/2" Flat Washer
41.	LW170	Circle Cotter Pin
42.	BFR240	Spring

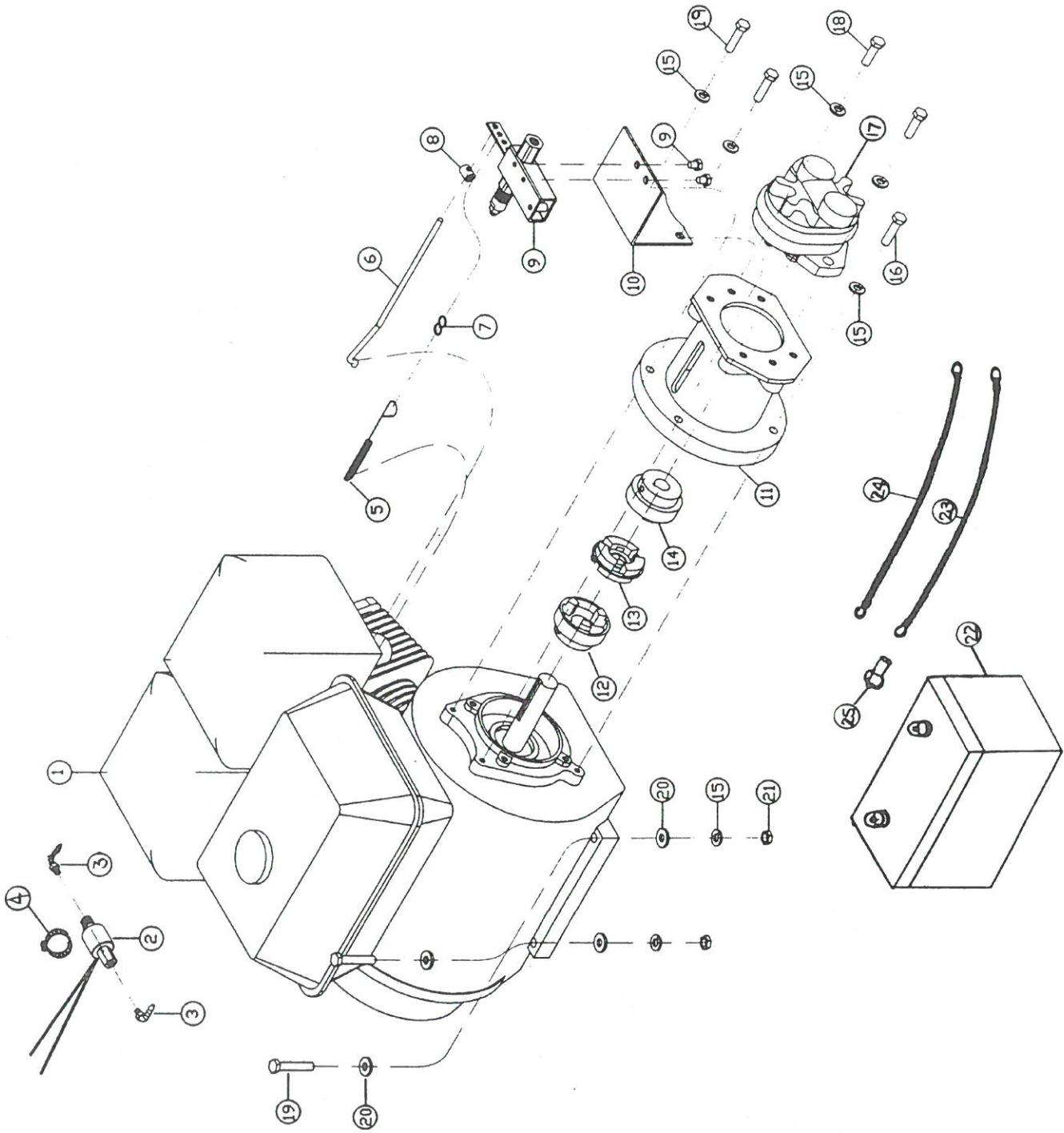
FIGURE 4



**FIGURE 4  
BALE PUSHER**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
1.	LW17	Steering Jack
2.	12N13	Jack Pin W/Chain
3.	R29	Nut 1/2"
4.	R35	Lock Washer 1/2"
5.	LW69	Pusher Top
6.	ES7	Hairpin
7.	LW21	Pusher Pins
8.	A14	Nylock Nut 3/8"
9.	LW71	Timing Chain
10.	LW133	Bolt 5/8" x 4-3/4" GR.5
11.	T60	Top Lock Nut 5/8"
12.	LW70	Pushoff Secondary
13.	LW4	Pushoff Primary LH
14.	LW5	Pushoff Primary RH
15.	LW196	Bolt 1/2" x 4-3/4" GR.5
16.	R11	Top Lock Nut 1/2"
17.	LW79	Pushoff Plate
18.	LW3	Pusher
19.	80N57	Bolt 3/8" x 3/4" GR.5
20.	B68	Lock Washer 3/8"
21.	K60	Nut 3/8"
22.	LW33	Engine Cover
23.	T17	Carriage Bolt 1/4" x 3/4"
24.	LW46	Engine Shield Clip
25.	F56	Linchpin
26.	T16	Flat Washer 1/4"
27.	K84	Lock Washer 1/4"
28.	LW140	Nut 1/4"
29.	LW58	Pusher Cylinder Pin
30.	3G21	1" External Snap Ring
31.	LW18	Start Trigger Pivot
32.	LW19	Start Trigger Arm
33.	16SV77	Bolt 1/2" x 6" GR.5
34.	R27	Start Trigger Spring
35.	LW168	Heat Shield

FIGURE 5

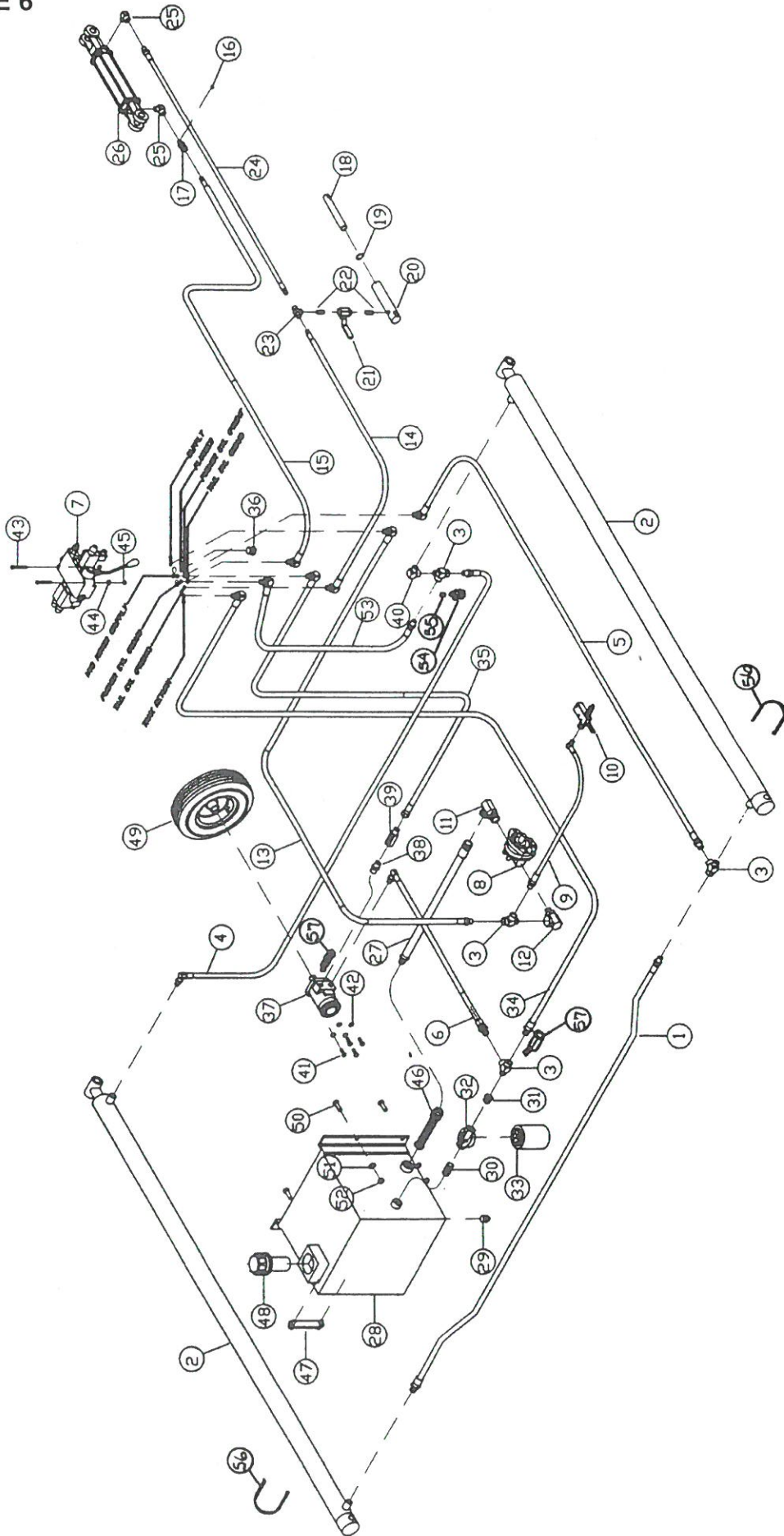


**FIGURE 5  
HONDA ENGINE**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
1.	LW73	13 HP Gas Engine
2.	LW112	Fuel Shut Off
3.	LW135	90 Degree Adapter 1/8" NPT
4.	LW147	1-1/4" Stainless Steel Hose Clamp
5.	23N284	Throttle Return Spring
6.	LW59	Throttle Linkage
7.	X79	"S" Hook
8.	LW62	Throttle Linkage Collar
9.	LW110	Throttle Advance
10.	LW47	Throttle Advance Bracket
11.	LW103	Engine/Pump Adapter
12.	LW107	Coupling Hub - Engine
13.	LW109	Coupling Insert
14.	LW108	Coupling Hub - Pump
15.	B68	Lock Washer 3/8"
16.	LW134	Bolt 3/8" x 1-1/2" GR.5
17.	LW114	Hydraulic Pump
18.	17G141	Bolt 3/8" x 1-1/4" GR.5
19.	HSB60	Bolt 3/8" x 1-3/4" GR.5
20.	X67	Flat Washer 3/8"
21.	K60	Nut 3/8"
22.	LW166	Battery
23.	LW171	Battery Cable - Red
24.	LW172	Battery Cable - Black
25.	LW173	Terminal Cover - Red
*	LW167	Key

**NOTE:** \* (Means Not Shown)

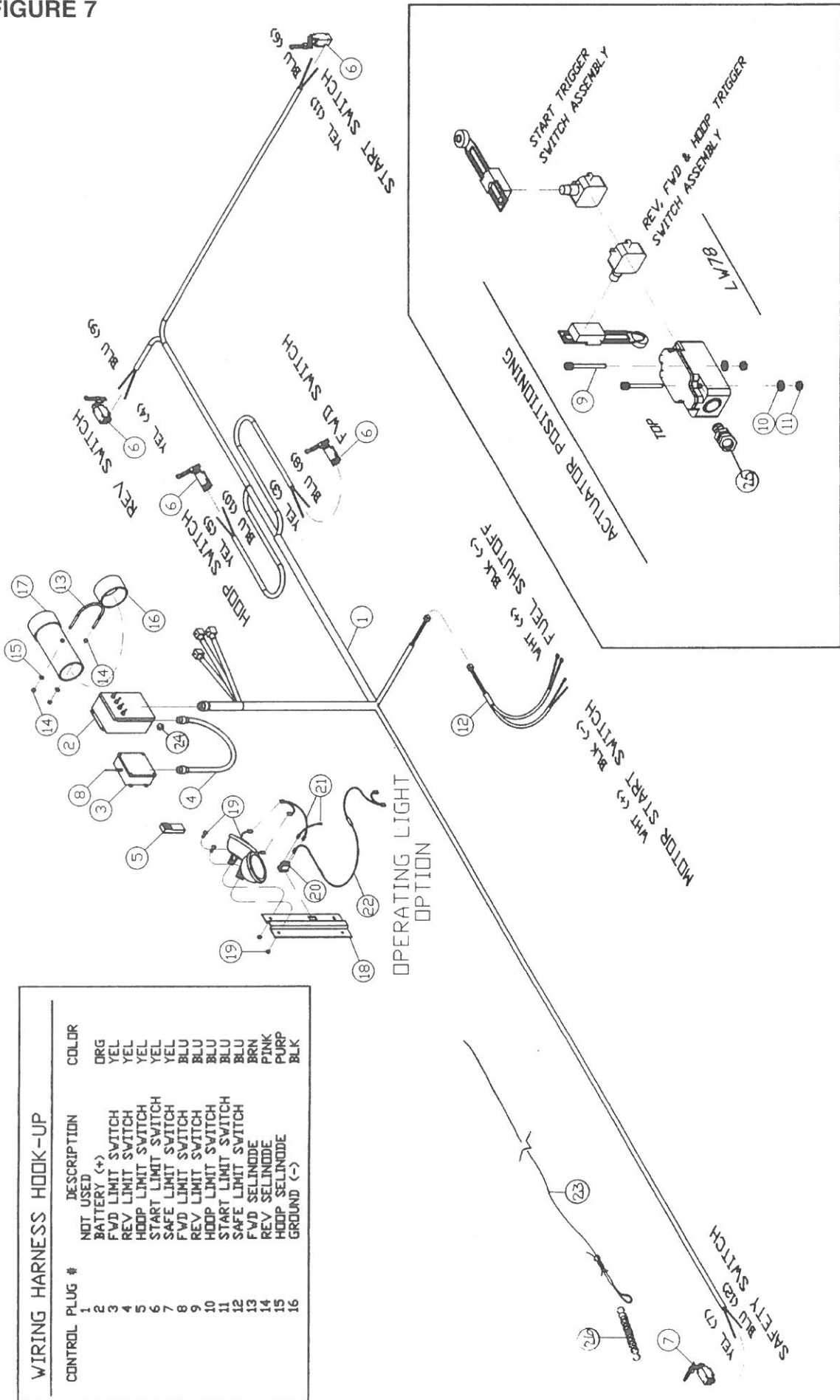
FIGURE 6



**FIGURE 6  
HYDRAULICS**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
1.	LW86	1/2" Hose 97" Long
2.	LW102	Hydraulic Cylinder 2-1/2" x 84"
3.	LW96	Service Tee 1/2"
4.	LW83	1/2" Hose 115" Long
5.	LW84	1/2" Hose 108" Long
6.	LW144	1/2" Hose 40" Long
7.	LW156	Valve - Solenoid
8.	LW114	Hydraulic Pump
9.	LW91	1/4" Hose 16" Long
10.	LW110	Throttle Advance
11.	LW101	1-5/16" "O" Ring Adapter
12.	LW95	7/8" "O" Ring Adapter
13.	LW88	1/2" Hose 49" Long
14.	LW81	1/4" Hose 102" Long
15.	LW82	1/4" Hose 156" Long
16.	BFR120	Orifice .062
17.	BFR122	3/8" Swivel Adapter
18.	BFR114	Hydraulic Piston
19.	BFR115	"O" Ring
20.	BFR116	Hydraulic Cylinder
21.	LW94	1/4" Ball Valve
22.	LW92	1/4" Close Nipple
23.	LW93	1/4" Tee
24.	LW80	1/4" Hose 57" Long
25.	23N234	3/8" Street Elbow
26.	BFR69	2" x 8" Hydraulic Cylinder
27.	LW90	3/4" Hose 56" Long
28.	LW106	15 Gallon Hydraulic Tank
29.	LW97	3/4" NPT Plug
30.	LW98	3/4" Close Nipple
31.	LW99	3/4" Adapter
32.	LW119	Hydraulic Filter Head
33.	LW120	Hydraulic Filter Element
34.	LW89	1/2" Hose 96" Long
35.	LW87	1/2" Hose 67" Long
36.	LW100	3/4" "O" Plug
37.	DF1	Hydraulic Motor
38.	PB105	1/2" Coupling
39.	DF18	1/2" Check Valve
40.	HE58	1/2" Street Elbow
41.	X111	Bolt 3/8" x 1" GR.5
42.	B68	Lock Washer 3/8"
43.	LW197	Bolt 5/16" x 2-3/4" GR.5
44.	BFR39	Lock Washer 5/16"
45.	T116	Nut 5/16"
46.	LW137	Hydraulic Tank Strainer
47.	LW138	Hydraulic Tank Gauge
48.	LW139	Hydraulic Tank Fill
49.	LW113	Drive Wheel
50.	12V45	Bolt 1/2" x 1-1/2" GR.5
51.	R35	Lock Washer 1/2"
52.	R29	Nut 1/2"
53.	50N18	1/2" Hose 40" Long W/"O" Ring
54.	LW174	1/2" Adapter Union
55.	LW175	1/4" Orifice
56.	LW176	U-Bolt
57.	LW187	1/2" Street Elbow 45°

FIGURE 7

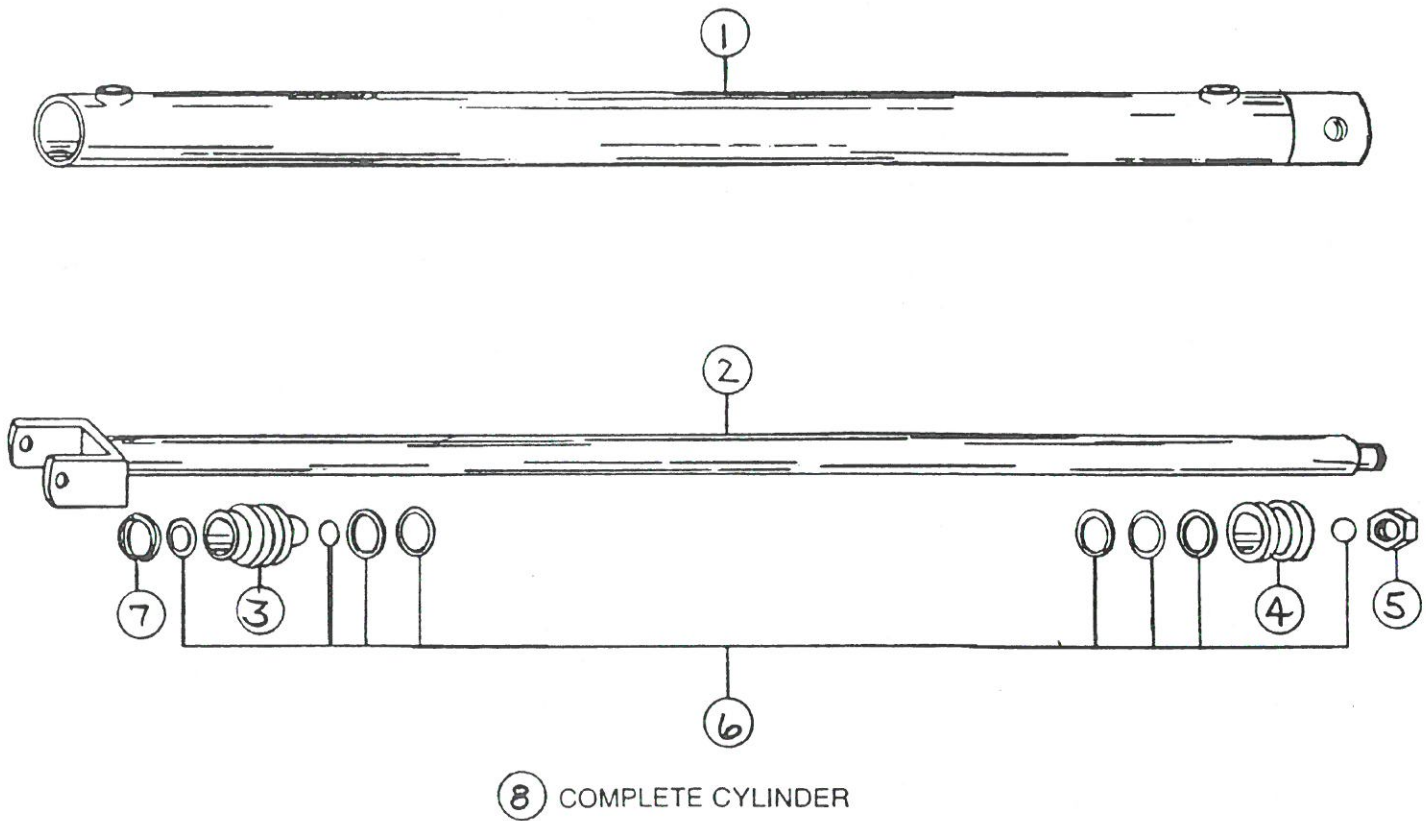




**FIGURE 7  
ELECTRICAL**

<b>ITEM</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
1.	LW72	Main Wiring Harness
2.	LW74	Main Control Box
3.	LW75	Remote Box
4.	LW76	Remote Cord
5.	LW77	Remote
6.	LW78	Micro Switch - Other
7.	LW141	Micro Switch - Safety
8.	LW142	Remote Box Antenna
9.	LW127	Allen Head Bolt #10-32 x 1-3/4"
10.	LW128	Nut #10
11.	LW129	Starwasher #10
12.	LW143	Engine Power Harness (Honda Only)
13.	LW147	U-Bolt 3/8" x 4-1/2" x 6"
14.	K60	Nut 3/8"
15.	B68	Lock Washer 3/8"
16.	LW146	Manual Holder Cap
17.	LW145	Manual Holder
18.	LW149	Operating Light Bracket - Option
19.	LW150	Light - Option
20.	LW151	Light Switch - Option
21.	LW152	Bracket Wiring Harness - Option
22.	LW153	Light Wiring Harness - Option
23.	LW39	Safety Stop Cable
24.	LW177	Terminal Cover
25.	LW178	Connector
26.	LW111	Safety Cable Spring

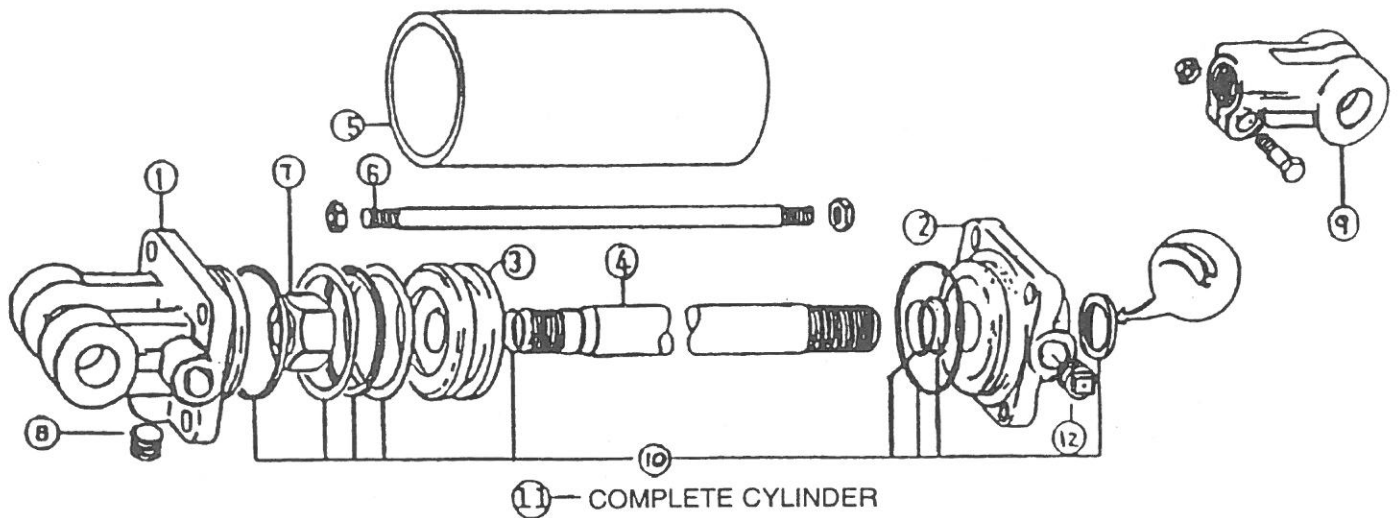
FIGURE 8



**LINEWRAP  
HYDRAULIC PUSH CYLINDER (2)**

ITEM	PART NO.	DESCRIPTION
1.	LW188	Case Weldment
2.	LW189	Rod Weldment
3.	LW190	Head Gland
4.	LW191	Piston
5.	LW192	Coupler
6.	LW193	Seal Kit
7.	LW194	Snap Ring
8.	LW195	Complete Cylinder

FIGURE 9



**LINEWRAP  
HYDRAULIC TAIL SECTION CYLINDER**

ITEM	PART NO.	DESCRIPTION
1.	23N142	Clevis Cap
2.	23N143	Rod Cap
3.	23N144	Piston
4.	T134	Rod
5.	BFR68	Cylinder Tube
6.	T186	Tie Rod
7.	23N148	Piston Nut
8.	23N149	Plug
9.	23N150	Rod Clevis
10.	23N151	Seal Kit
11.	BFR69	Complete Cylinder
12.	BFR70	Vent Plug



## H&S LINEWRAP SPECIFICATIONS

Power . . . . .	13 h.p. Honda Electric Start
Hydraulics . . . . .	15 gallon Self-Contained Reservoir
Controls . . . . .	Automatic or Manual
Shipping Length . . . . .	16'10"
Width . . . . .	8'6"
Height . . . . .	9'3.5"
Weight . . . . .	3,830 lbs.
Length w/Tailgate Down . . . . .	22'9"
Tires . . . . .	[4] 11L-15
Film Tensioner . . . . .	[2] 30" x 55%
Bale Capacity: Round . . . . .	Up to 6'
Square . . . . .	6'6" Lengthwise
Square . . . . .	5' Crosswise

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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