ATTENTION!

- REMOVE OR RETRACT TRACTOR DRAW BAR IF SKID PLATE FITTED

- DO NOT FORCE BALE AGAINST FILM CARRIAGE - UNLOAD BALE AND RELOCATE ROTATING ARM TO PARKING RAMP THEN RELOAD BALE.

- NOTE: MAXIMUM ARM SPEED 28 RPM

- CHECK THAT HYDRAULIC TOP LINK DOES NOT BIND AND THAT HOSES WILL WORK FREELY.

- TAKE CARE THAT THE OVER HEAD ARM DOES NOT STRIKE REAR WINDOW OR CABIN OF TRACTOR WHEN RAISING LOWER LINKAGES.
Familiarize yourself with the contents of your Operation and Maintenance Manual, as it will help you gain the maximum pleasure and benefit from your Hayday 1507 rotating arm wrapper. The information, illustrations and specifications contained herein were in effect at the time of printing. These are, however, subject to change without notice in the course of product improvement.
DEAR HAYDAY OWNER,

Thank you, for purchasing your Hayday 1507 rotating arm wrapper. We hope you will enjoy years of productive use from it.

PLEASE DO NOT ASSUME THAT YOU KNOW HOW TO OPERATE AND MAINTAIN YOUR HAYDAY 1507. READ THIS MANUAL CAREFULLY.

If you have trouble or are not completely satisfied Please telephone or fax us directly on:
Tel. +1-740-587-3476
Fax. +1-740-587-2711

Correspondence should be addressed to:

Hayday USA
3236 Loudon Street
Granville, OH 43023 USA

Your Wrapper Serial No. ____________________________

Your Dealer ________________________________

Supplied _____/_____/_____
Limited Warranty

HAYDAY USA Limited of 3236 Loudon Street, Granville, OH 43023 USA (hereinafter called the "Company") warrants, in accordance with the provisions below, to each original retail purchaser of Hayday new equipment of its own manufacture, that such equipment is, at the time of delivery to such purchaser, free from defects in material and workmanship and that such equipment will be warranted for a period of one year from the date of delivery to the end user providing the machine is used and serviced in accordance with the recommendations in the Operator's Manual.

THESE CONDITIONS ARE SUBJECT TO THE FOLLOWING EXCEPTIONS:

1. Parts of the machines which are not of our manufacture ie all hydraulic components, control box, bearings etc, are not covered by this Limited Warranty but are subject to the warranty of the original manufacturer. Any claim falling into this category will be taken up with the manufacturer concerned (ref. to spare parts section for further information).

2. This Limited Warranty will be withdrawn if any equipment has been used for purposes other than for which it was intended or if it has been misused, neglected or damaged by accident or let out on hire. Nor can claims be accepted if parts other than those manufactured by us have been incorporated in any of our equipment. Furthermore, the Company shall not be responsible for damage in transit or handling by any common carrier and under no circumstances within or without the warranty period will the Company be liable for damages, for loss of use or damages resulting from delay or any consequential damage.

We cannot be held responsible for loss of earnings caused by breakdown or for injuries either to the owner or to a third party, nor can we be called upon to be responsible for labor charges, other than originally agreed, incurred in the removal or replacements of components.

THE CUSTOMER WILL BE RESPONSIBLE FOR AND BEAR THE COSTS OF:

1. Normal maintenance such as greasing, maintenance of oil levels, minor adjustments, etc

2. Transportation of any kind of Hayday product to and from the place the warranty work is performed.

3. Dealers travel time to and from the machine or to deliver and return the machine from the workshop for repair.

4. Dealer travelling costs.

Parts defined as normal wearing items are listed as follows and are not in any way covered under this Limited Warranty:
Gears, knife/clamp foam, hydraulic hoses and motors, high density polyethylene components.
HAYDAY Limited Warranty will not apply to any product, which is altered or modified without the expressed permission of the Company.

LIMITED WARRANTY IS DEPENDENT UPON STRICT OBSERVANCE BY THE PURCHASER OF THE FOLLOWING PROVISIONS:

- That this Limited Warranty shall not be assigned or transferred to anyone unless the Company’s consent in writing has first been obtained.

- The warranty sheet has been correctly completed by dealer and purchaser with their names and addresses, dated, signed and returned to the Company.

- The judgement of the Company in all cases of claims under this Limited Warranty shall be final and conclusive and the purchaser agrees to accept its decisions on all questions as to defect and to the exchange of any part or parts.

- That all safety instructions in the Operators Manual shall be followed.

No warranty is given on second hand products and none is to be implied. Persons dealing in the Company’s products are in no way legal agents of the Company and have no right or authority to assume any obligation on their behalf, or to bind them in any way.

HAYDAY USA Limited reserves the right to incorporate any change in design in its products without obligation and to make such changes on units previously manufactured.

DISCLAIMER OF FURTHER WARRANTY

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, EXCEPT AS SET FORTH ABOVE. THERE IS NO WARRANTY OF MERCHANTABILITY. THERE ARE NO WARRANTIES, WHICH EXTEND BEYOND THE DESCRIPTION OF THE PRODUCT CONTAINED HEREIN. IN NO EVENT SHALL THE COMPANY BE LIABLE FOR INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES (SUCH AS LOSS OF ANTICIPATED PROFITS) CONCERNING THE RETAIL PURCHASER’S USE OF THE PRODUCT.
Safety

TAKE NOTE! THIS SAFETY ALERT SYMBOL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.

THIS SYMBOL MEANS
ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!

SIGNAL WORDS:

Note: the use of signal words DANGER, WARNING and CAUTION with safety messages. The appropriate signal word for each has been selected using the following guidelines:

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

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in serious injury or death. 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.

If you have questions not answered in this manual or require additional copies or the manual is damaged, please contact your dealer or

Hayday USA
3236 Loudon Street
Granville, OH 43023 USA
Tel: +1-(740) 587-3476 Fax: +1-(740) 587-2711

7 of 37
SAFETY . . . YOU CAN LIVE WITH IT

**EQUIPMENT SAFETY GUIDELINES:** Safety of the operator is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or for you, follow them.

In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.

Replace any **DANGER**, **WARNING**, **CAUTION** or instruction safety decal that is not readable or missing. Location of such decals is indicated in this booklet.

Do not attempt to operate this equipment under the influence of drugs or alcohol.

Review safety instructions with all users annually.

This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment’s operations. **Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.**

To prevent injury or death, use a tractor equipped with a Roll Over Protective System (ROPS). Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question – **DON’T TRY IT.**

**LIGHTING AND MARKING:** It is the responsibility of the customer to know the lighting and marking requirements of the local highway authorities and to install and maintain the equipment to provide compliance with these regulations. Add extra lights when transporting at night or during periods of limited visibility.

**SAFETY SIGN LOCATIONS:** The types of Safety Sign and locations on the equipment are shown in the illustration below. Good safety requires you familiarize yourself with the various Safety Signs, the type of warning and the area, or particular function of that area, that requires your SAFETY AWARENESS.
REMEMBER: If Safety Signs have been damaged, removed, become illegible or parts replaced without decals, new decals must be applied. New decals are available from your authorized dealer or Hayday.
SAFETY SIGN CARE:
• Keep safety signs clean and legible at all times.
• Replace safety signs that are missing or have become illegible.
• Replaced parts that displayed a safety sign should also display the current sign.
• Safety signs are available from Hayday USA Limited.

How to Install Safety Signs:
• Be sure that the installation area is clean and dry.
• Decide on the exact position before you remove the backing paper.
• Peel off a small portion of the backing paper.
• Align the decal over the specified area and carefully press the exposed sticky backing in place.
• Slowly peel back the remaining paper and carefully smooth the remaining portion of decal in place.

REMEMBER:
Your best assurance against accidents is a careful and responsible operator. If there is any portion of this manual or function you do not understand, contact your local authorized dealer or the manufacturer.

BEFORE OPERATION:
• Carefully study and understand the manual.
• Do not wear loose-fitting clothing, which may catch, in moving parts.
• Always wear protective clothing and substantial shoes.
• Give the unit a visual inspection for any loose bolts, worn parts or cracked welds, and make necessary repairs. Follow the maintenance safety instructions included in this manual.
• Be sure there are no tools lying in or on the equipment.
• Do not use unit until you are sure that the area is clear, especially children and animals.
• Don’t hurry the learning process or take the unit for granted. Ease into it and become familiar with your equipment.
• Practice operation of your equipment. Completely familiarize yourself and other operators with its operation before using.
• Use a tractor equipped with a Roll-Over-Protective System (ROPS) and fasten your seat belt prior to starting the engine.
• Hayday does not recommend usage of a tractor with the ROPS removed.
• Securely attach to rear three-point linkage or front loader.
• To ensure balanced operation counter-weight appropriately particularly if skid plate is not installed.

DURING OPERATION:
• Beware of bystanders, particularly children! Always look around to make sure that it is safe to start the engine of the tractor or to move the unit.
• NO PASSENGERS ALLOWED. Do not carry passengers anywhere on, or in, the tractor or equipment.
• Keep hands and clothing clear of moving parts.
• Do not clean, lubricate or adjust your equipment while it is moving.
• When halting operation set the tractor brakes, disengage the hydraulic tractor levers, shut off engine and remove the ignition key.
• Operate with increased caution when on slopes. Take care where there is a possibility that the tractor could drop into a hole or ditch and overturn.
• Maneuver the tractor and equipment at safe speeds.
• Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.
• Never stand or work under raised wrapper, unless it is safely supported.
• Keep all bystanders, pets and livestock clear of the work area.
• Never allow wrapper to run unattended.

FOLLOWING OPERATION:
• Following operation, or when unhitching, stop the tractor, set the brakes, disengage the hydraulic tractor levers, shut off engine and remove the ignition key.
• Store unit in area away from human or livestock activity.
• Do not permit children to play on or around the stored unit.
• Make sure all parked machines are on a hard level surface and engage all safety devices.

HIGHWAY AND TRANSPORT OPERATIONS:
• For transport on public roadways, secure rotating arm and travel with the wrapper as close to the road as possible.
• Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
• Use approved accessory lighting flags and necessary warning devices to protect operators of other vehicles on public roadways.
• Max transportation speed 20mph (40 km/hr). When driving the tractor and
equipment on public roadways under 20mph (40kph) use flashing amber warning lights and a Slow Moving Vehicle (SMV) identification emblem.

- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
- Watch for obstructions to the side and overhead while transporting.

**PERFORMING MAINTENANCE:**

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Before working on this machine, stop the tractor, set the brakes, disengage the hydraulic levers, shut off the engine and remove the ignition keys.
- Be certain all moving parts have come to a complete stop before carrying out adjustments, maintenance, or cleaning.
- Never stand or work under raised wrapper, unless it is safely supported. Never use a jack to support the machine.
- Always use the proper tools or equipment for the job at hand.
- The wrapper operates on a high-pressure hydraulic system. Be sure you release the pressure before carrying out any repairs or adjustments to the hydraulic system.
- Never use your hands to locate a hydraulic leak. Use a small piece of cardboard or wood. Hydraulic fluid escaping under pressure can penetrate the skin.
- Openings in the skin and minor cuts are susceptible to infection from hydraulic fluid. **If injured by escaping hydraulic fluid, see doctor at once. Gangrene can result. Without medical treatment, serious infection and reactions can occur.**
- Replace all shields and guards after servicing and before moving.
- Never replace hex bolts with less than grade five bolts unless otherwise specified.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. Hayday will not claim responsibility for use of unapproved parts and / or accessories and other damages as a result of their use.
- If equipment has been altered in any way from original design, Hayday does not accept any liability for injury or warranty.
- A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance.

**HAYDAY USA Limited accepts no responsibility for damages to this machine, or any other property damage, and / or bodily injury due to careless or improper operation!**
1. Pre-delivery, set-up and installation

1.1. Shipping information. Relocate valve manifold inside of frame and secure thus affording the solenoid and flow control valves protection during handling and shipping. Overhead arm can be lowered. Remove inside hinge bolt to locate end of overhead arm between rollers.

1.2. Unloading instruction. Take care to avoid damage to valve manifold when unloading. Can use forklift to handle. Position prongs under frame either side of skid plate. Secure top of frame to prevent tipping off prongs.

1.3. Assembly Instruction. Raise overhead arm if lowered and secure with clamps. Check that all bolts are secure. Locate and secure valve manifold.

1.4. Pre-Delivery and delivery service checklist.

1.4.1. Grease roller end bearing 1, front and rear roller arm pivots 3 and 4, and widening ram 2. Greasing of point 3 should be done daily.

1.4.2. Lightly oil docking collar bearing surfaces.

1.4.3. Note: do not oil pre-stretcher gears.
1.4.4. The wrapping machine has been factory tested and the wrap controller has been set to 26 wraps sufficient to apply four layers on a 4-ft diameter bale. Check that reed switch and magnet located in the center of the overhead and rotating arms respectively register a count on the control counter. To check this set the control box switch to WRAP position and move rotating arm such that one of the magnets fields passes under the center of the reed switch. The magnet will trigger the switch with a gap between magnet and reed switch of up to 11/4” (30 mm). Move reed switch laterally as shown by arrows diagram above.

![Diagram of reed switch and ceramic pot magnet]

Note: Magnet has two fields. Adjust magnet or reed switch such that reed switch is closed by one of the fields.

1.5. Start-up and operation instructions

1.5.1. Mounting the 1507 are delivered for Cat II - 3 Point Linkage connection. The unit can also be front mounted to a loader (provide counter weight on the rear for tractor stability). Weights on the front of the tractor and / or water in the front wheels will give stability whilst wrapping / handling of rear mounted units. For ease of use, particularly in sloping terrain and with unevenly shaped bales, use a hydraulic top link to allow maximum control of bale movement on rollers whilst wrapping.

1.5.2. Hydraulic Connection: 1/2” standard ISO male Quick Release Couplings, Oil requirement maximum 36 l/min (10 US gal per minute) at 150 bar (2,250 psi) open or closed center hydraulic systems. It may be necessary to adjust the oil flow and Spool Valve settings on the tractor remote hydraulic outlets. Higher flows than 10 gal per minute may result in excessive heat generation causing unsatisfactory wrapping performance.

1.5.3. Connecting The Programmable Control Box The are two electrical cables attached to the control box that need to be connected:

1.5.3.1. Connect the 7-pin plug to a socket, which is attached to a cable attached to the solenoids on the valve manifold on the wrapper.

1.5.3.2. The power supply cable requires a 12V DC power source. Connection of the power supply wires direct to the tractor battery is recommended. Connect the red wire (battery terminal clip marked with +) to positive
terminal, and red with black stripe to negative. Please note; battery test clips are provided for factory testing and are not intended for permanent installation.

1.6. Loading Silage Film. Film carriage and Pre-stretch device accommodate both 20" (500mm) and 30" (750mm) wide film):

1.6.1. Release springs on pre-stretch roller frame,
1.6.2. Unlatch film post and lift away from locating cage,
1.6.3. Place one plastic-docking collar on plate and the other on top of silage film reel,
1.6.4. Insert the film post through and reel core,
1.6.5. Sit the assembly onto base cone and latch the film post into place,
1.6.6. Fasten rollers against film by securing springs in position,
1.6.7. Thread the film as shown in the diagram below. There is also a diagram on a label fixed to overhead arm on the wrapper.

FILM FEED DIAGRAM

15 of 37
2. Operating instructions
   2.1. General Specifications

   2.1.1. Starting Up
   Start the tractor, adjust engine speed to approximately 1100 RPM. Level wrapper and set lower link stabilizers. Set the three-position selector switch to the 'LOAD' position. Start hydraulic flow to the wrapper.

   2.1.2. Before Wrapping
   any bales, it is a good idea to become familiar with the action of the wrapper by performing a test run. This will give you the opportunity to practice coordinating the operation of the switch box or programmable counter and the tractor hydraulic levers, whilst minimizing the chance of an accident occurring. Please ensure that the rotating arm is parked on the parking ramp (if provided) while rotating arm is stationary.

   **Note 1:** If the programmed wrapping cycle is interrupted, disengage hydraulic power to the wrapper and move rotating arm by hand to the parking ramp. When the rotating arm is not in motion it must parked on the ramp to protect arm and film carriage and prevent any collision with the film clamp.

   **Note 2:** If wrapping with switch box take care when engaging the film clamp to avoid colliding with rotating arm.

   2.1.3. Loading a Bale
   2.1.3.1. Before proceeding, refer to drawing on page 15 for a view of the programmable control box.
   2.1.3.2. On the dual preset counter, rotate the green selector knob to LOAD position.
   2.1.3.3. Move the hydraulic lever on the tractor forward to spread the roller forks apart. It is not necessary to fully widen out the rollers to clear the bale.
   2.1.3.4. Maneuver the tractor so that roller forks pass either side of bale, and the end of the bale stops just short of the bale stop rollers.
   2.1.3.5. The roller forks pick up bales by moving closer together. To do this, move the hydraulic lever on the tractor backward.

   **Note:** Loading and unloading of bales can be carried out with the control box disconnected. The lifting roller i.e. the one with the grips is hydraulically driven when loading the bale on to the rollers as the rollers come together.

   2.1.4. Wrapping
   2.1.4.1. As the loading of the bale is completed, turn the green selector knob to ROLL and then to WRAP.

   ![WARNING] Check that it is safe to begin wrapping.

   2.1.4.2. Check to see that the red isolation switch is set to AUTO, and that the digital counter reads “0”.
2.1.4.3. If a new roll of silage film has been loaded, tie film end to the bale twine on the first bale to be wrapped. Thereafter, the wrapper automatically clamps the end of film ready for the next bale.

2.1.4.4. With the hydraulic lever on the tractor in the backward position the wrapping process will begin and continue according to the program settings.

2.1.4.5. After at least the second wrap, the film end can be released from its clamped position by depressing the green film release button on the programmable control box. A reed switch magnet arrangement at the end of the rotating arm prevents the film clamp colliding with the rotating arm. If using a switch box pause the rotating arm momentarily then lift the film clamp arm to release film end.

2.1.4.6. The wrapper continues to wrap to the pre-set number of times. On the second last wrap (P1) the knife / clamp rises to catch the film, then lowers back down and clamps the film as the rotating arm comes to a stop (P2).

**NOTE**: The programmable counter is factory pre-set at P1=25 and P2=26. Twenty-six is the minimum required number of wraps for a 4' X 4' bale assuming 20” wide silage film and four layers 2 + 2 applied. The controller is easily re-programmed - refer to Adjustments and the wrap data sheets

**IMPORTANT** - check overlaps on initial bale and adjusts as necessary (Refer to section on Adjustments).

Once the wrapping process has ceased, the bale continues to rotate until the hydraulic control lever is disengaged. By rolling the bale, the film end can be positioned underneath, and is thus automatically secured when bale is unloaded

2.1.5. Unloading the bale ensure the hydraulic lever on the tractor is disengaged. Turn the green selector knob to ‘LOAD’ and move the lever on the tractor backward to widen out roller forks and place the bale gently on the ground. The unloading of the bale should be carried out with the wrapper skid plate less than two inches off the ground. As the tractor is maneuvered away, the film tears free at the perforation at the film clamp.

**NOTE**: should the hydraulic lever mistakenly be moved forward the drive roller (with the grips) will be driven, as is necessary for loading, and damage to the plastic on the bale may occur.

2.1.6. Precautions Always return green selector switch to ‘LOAD’ position after wrapping. This ensures that:

2.1.6.1. The bale can be set down with out damage. The roller with grips will rotate to allow bale to be set down without tearing the plastic

2.1.6.2. Accidental movement of rotating arm does not occur.

2.1.6.3. The tractor battery is not drained by wrapper solenoids.
2.1.7. Other Functions On The Wrapper

2.1.7.1. Manual wrapping is possible by turning the red isolation switch on the programmable control box to MAN. This allows the operator leave the wrapping cycle to add more wrap and re-enter the programmed cycle. To fully control the wrapping process without the program joining the brown and blue wires of the valve block electrical harness will remove the anti-collision feature making the film clamp active when ever the film release button is depressed. Set switch to ROLL position before raising film clamp. This may be useful in the re-wrapping of damaged or weathered bales. The counter is reset by switching to ROLL. This automatically happens during normal wrapping procedure.

2.1.7.2. Loading and unloading of bales can be carried out with the programmable counter disconnected.

2.1.7.3. The 'ROLL' function on the programmable counter allows the roller forks to roll the bale without the need to wrap. This feature is useful for three main reasons:

2.1.7.3.1. The bales can be tipped on end.
2.1.7.3.2. Bales can be unwound for feeding out.
2.1.7.3.3. The life of the plastic on the bale can be extended by picking up and rotating the bale so that the weathered side is underneath.

2.1.8. Bale Unloading

2.1.8.1. Some farmers store the wrapped bales on their ends. Bales stored this way maintain their shape better, and are easier to feed out. In addition, the many layers of wrap on the ends serves to enhance resistance to bird and rodent attack, and slows the effects of UV deterioration on the film.

2.1.8.2. To store the wrapped bales on end, lift linkage slightly and extend the hydraulic top link to tilt wrapper. As the bale continues to rotate on the rollers it will `walk off' and tip onto its end.
2.2. Identity of controls

1. Roller Forks
2. Bale Stops Roller Group
3. Hydraulic Knife / Clamp
4. Skid Plate
5. Electrical Socket 12v DC
6. Solenoid Operated Hydraulic Valve Manifold
7. Overhead Arm
8. Rotor Motor
9. Rotating Arm
10. 20” / 30” Gear Type Pre-Stretcher And Film Carriage
11. Film Carriage Parking Ramp
12. Programmable Control Box
13. hydraulic connection – one double acting hydraulic outlet
14. Three point linkage tractor attachment

2.2.1. Roller Forks are hinged to the main frame. A hydraulic ram swing widens the 12-inch diameter bale carry rollers out to a clear parallel opening of approximately 5 feet (1.5m), for ease of loading and unloading the bale. Rollers narrowed to approximately 22” (550mm), for wrapping.

2.2.2. The roller fork with grips (the lifting roller) is hydraulically driven during loading to facilitate bringing the bale up onto the roller forks. The rotation of this roller is reversed when unloading to prevent damage to the film. Whilst wrapping both rollers are driven to ensure uniform bale rotation. After the bales are wrapped, use your 1507 to handle the bales. Rotate bale to secure film end underneath, place bales exactly where you want, tip the bales on their ends, or move bales to another location without damaging the silage wrap.

2.2.3. Bale Stop Roller Group assist in the control of the bale for loading and while wrapping.

2.2.4. Hydraulic Knife / Clamp is bolted to the main frame. The clamp rises automatically to catch and then clamp the film end at the completion of each automatic wrapping cycle. This means that once the silage film is
loaded and clamped there is no need to get off the tractor again until the entire reel is finished. As each bale is wrapped and set down, the film end is held ready to begin a new bale.

2.2.5. Skid Plate allows for the discharge of weight during wrapping, thus enabling use of the wrapper on smaller tractors.

2.2.6. Electrical Socket is connected to a one-yard long lead running from the valve manifold, which allows for convenient connection of programmable controller.

2.2.7. Solenoid Operated Valve Manifold is a compact assembly of valves and flow controls in an aluminum manifold. The valve manifold features a multitude of control valves which can be adjusted to optimize overall wrapping performance.

2.2.8. Overhead Arm is a curved post, clamped to the main frame, and supports the rotating arm. The overhead arm is hinged to give a low profile for transport or storage.

2.2.9. Rotor Motor drives the rotating arm. The motor hydraulic circuit has an adjustable pressure relief (PR) valve and counter balance valve (CBV).

2.2.10. Rotating Arm supports the film roll carriage and pre-stretch device. The arm turns in a clockwise direction, as viewed from above.

2.2.11. 20” / 30” Pre-Stretch Device And Film Carriage stretches the silage film between two rollers connected by gears. The gear ratio is designed to give a 55% pre-stretch of the film ensuring optimum film thickness and 'shrink-back' on the bale, assuring that each bale will be tightly and compactly wrapped.

2.2.12. Film Carriage Parking Ramp is an automatic device that rises to park the film carriage. This ramp, operated by a small hydraulic cylinder and heavy compression springs and acts to:
   - Secure the film carriage and maintain a fixed relationship between the pre-stretch device and film clamp when travelling over uneven terrain.
   - Support pre-stretch device and film load for transport.
   - Hold film carriage whilst tipping bale on end.

2.2.13. Dual Preset Counter controls the following functions on the machine. The counter has two outputs P1 and P2. P1 energizes the film clamp solenoid on the valve manifold that in turn activates a hydraulic valve causing the clamp arm to rise ready to catch the wrapping film. When P2 is reached (P1=n make P2=(n+1)) the rotating arm solenoid is energized and the film clamp de-energized. Now the rollers continue to rotate the bale whilst the clamp lowers clamping and lancing the film across a toothed blade where it is perforated.

2.2.14. Programmable Control Box has selector switch, film release and counter isolation switches.

2.2.15. Hydraulic Connection consists of two hoses with male quick couplers 1/2" ISO standard.

2.2.16. Three-Point Linkage Tractor Attachment is CAT II with several options available.
2.3. Illustrations to clarify operation

2.3.1. Adjusting Film Overlap

FILM OVERLAP

Shown 4 layers (2+2) with recommended overlap +50%.

When applying four layers of film, the correct overlap will give a minimum of four layers at every point on the bale.

Should water manage to enter behind the first layer, further ingress is almost impossible.

Hayday RB1500 can fine tune overlap for all field temperatures. Such precise control of film overlap is necessary as film will 'neck down' more on warmer days.

Please observe: Every join has three layers.

FILM UNDERLAP

Shown 4 layers (2+2), with less than 50% overlap.

When applying four layers of film, incorrect overlap will only give two or three layers of protection on parts of the bale.

Please observe: Only one layer at the joins.
### Table

<table>
<thead>
<tr>
<th>ROT</th>
<th>Rotor speed adjustment</th>
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<tbody>
<tr>
<td>ROL</td>
<td>Roller speed adjustment</td>
</tr>
<tr>
<td>RP</td>
<td>Rotor pressure relief valve</td>
</tr>
<tr>
<td>RV2</td>
<td>Roller pressure relief valve</td>
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<tr>
<td>CBV</td>
<td>Counter Balance Valve</td>
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2.3.1.1. Film overlap can be controlled by altering the relationship between the speed of the roller forks, and the speed of the rotating arm. Increasing the speed of the rotating arm and / or decreasing the speed of the roller forks has the effect of increasing film overlap.

2.3.1.2. The following factors contribute to differences in the degree of overlap:
- Temperature variations can cause the silage film to "neck-down" (i.e. become narrower). On warmer days, silage film will tend to neck-down more than on cooler days.
- Different silage film widths affect the amount of overlap.
- Out of shape bale also have an effect.

2.3.1.3. Adjust the speed of the rotating arm first.
Before commencing any adjustments, ensure that there is no hydraulic pressure.
Locate the ROT flow control valve on the valve manifold. Turn valve-adjusting screw
*Clockwise to increase speed of rotation,*
*Anti-clockwise to decrease speed of rotation.*

**NOTE:** Recommended arm speed is 20 - 25 RPM. Maximum wrapping speed not to exceed 28 RPM.

2.3.1.4. Adjusting the speed of the roller forks
Before commencing any adjustments, ensure that there is no hydraulic pressure.
Locate the ROL flow control valve on the valve manifold. Turn valve-adjusting screw
*clockwise to increase speed of rotation*
*anti-clockwise to decrease speed of rotation*

Adjust speed to achieve three layers at every joint as illustrated above.
2.3.2. **Setting the Dual Preset Counter.** It may be necessary to re-program dual preset counter from time to time to accommodate different width of wrap and wrapping requirements. The counter is factory preset for 26 wraps, which is ideal for bales of 4ft (1200mm) diameter. Smaller bales will require fewer wraps, while larger ones will require more. To re-program the counter, please follow the steps below.

2.3.2.1. Connect control box to 12V DC power source (battery). Ensure red wire is connected to positive and black wire is connected to negative terminal.

2.3.2.2. Set the red isolation switch to **AUTO**

2.3.2.3. Set the control box selector switch to **WRAP** position. The counter should display '0' (zero).

- Press 'E' on keypad of counter once and **P1** will illuminate, and the first digit will flash. If nothing is entered within 10 seconds, the setting of **P1** will cease automatically. **P1** sets the count at which the film clamp arm rises to catch the film. This is **ALWAYS ONE COUNT LESS** than the total number of wraps required. Enter numbers by pressing the ^ key to count up for each key entry (note after reaching 9, the digit goes back to 0). Use the < to move to the next digit on the left. Make sure to fill in all the digits with a number otherwise the counter may not operate. For example, if the setting **P1** is to be 25 enter 00025.

- Press 'E' until **P2** illuminates. **P2** sets the required number of wraps. Enter digits (the same way as for **P1**). For example, if the setting is to be 26 enter 00026.

- **PSC** should read 1.000 on the digital display. This setting has been fixed.

- To verify the settings press E once to check **P1**, then again to check **P2**.

2.3.3. **Adjusting Magnets / Reed Switches**

Note: Magnet has two fields. Adjust magnet or reed switch such that reed switch is closed by one of the fields.
RV  Rotor Valve
KV  Knife Valve
SV  Selector Valve

R1 R2  Rotor Motor
S1 S2  Slave Roller Motor
L1 L2  Lifting Roller Motor
                  Roller with grips
WC WR  Widening Ram Cap
                  And Rod End Ports
PC PR  Parking Ram Cap
                  And Rod End Ports
KC KR  Knife Ram Cap
                  And Rod End Ports
PRESS  Pressure Port Inlet
TANK  Tank Port Return

HAYDAY AUTOWRAP
ROLL
LOAD
WRAP
FILM
RELEASE

ISOLATION
AUTO
MAN

SWITCH

MAGNETIC "FEET" FOR EASE
OF MOUNTING & DEMOUNTING.
2.4. Wrapping Hints

**USE GOOD QUALITY PASTURE**

Ideally a mixture of both grasses and leguminous plants cut just prior to heading or flowering.

*REMEMBER: RUBBISH IN IS RUBBISH OUT*

**BALE AT OPTIMUM MOISTURE CONTENT**

50% dry matter (DM), a short sharp wilt to remove excess moisture and to increase the concentration of plant sugars. If there is danger of rain, bale anyway.

*SQUEEZE TEST*
Take a representative sample of pasture
Cut into 1/2 to 1cm lengths
Squeeze a handful for 30 sec, release suddenly
*IF IT* - Retains its shape, too wet (under 30% DM)
*IF IT* - Falls apart slowly, a bit wet (30% - 40% DM)
*IF IT* - Springs apart quickly, ideal (over 40% DM)

*MICROWAVE TEST*
Collect representative samples of pasture, chop & mix
Weigh out 100gm sample \((W1)\)
Spread sample on paper tray, put in microwave
Place 250ml glass 3/4 full of water in oven, maintain water level
Microwave at 80 - 90% of maximum power for 4 minutes
Remove sample, mix & weigh
Continue to microwave for 1-2min intervals, re-weigh grass after each drying interval (you made need to lower heat & shorten time as sample dries) - Sample is 100% dry if weight does not change after 2 or 3 drying intervals, this is final weight \((W2)\)
Calculate dry matter content as follows:
\[
\frac{W2}{W1} \times 100 = \% \text{ DRY MATTER}
\]
(ie. if final weight is half initial weight, then moisture content is 50%)

*AIM TO MAKE HAYLAGE, RATHER THAN SILAGE*

**MINIMISE CONTAMINATION** avoid mixing soil with the plant material

**SOIL IS A SOURCE OF BACTERIAL INFECTION**

**MAKE EVEN SHAPED, HIGH DENSITY BALES**

1.2m x 1.2m (4ft x 4ft) bales are recommended for greater ease of handling, transporting, and feeding out. For best results, wrap immediately after baling.
DENSE BALES GIVE BETTER ECONOMY
FEWER BALES REQUIRE LESS PLASTIC

ENSURE A UNIFORMLY AIRTIGHT SEAL

For best results apply four layers of plastic film (26 wraps) at 50% + overlap, its easy with AW1500S’s fully adjustable overlap control and wrap counter.

ONLY USE RECOMMENDED HAYLAGE FILM

When pre-stretched 55% and applied as recommended above the UV-stabilized adhesive stretch film can give up to 12 months protection depending on exposure conditions.

STORE FILM REELS IN A COOL DRY PLACE TO PREVENT CORE DETERIORATION AND SOFTENING OF THE FILM

CHECK FOR LOOSE ENDS AND HOLES

Firmly secure any loose film ends, and tape over any holes in the plastic as quickly as possible.

REMEMBER: AIR IS THE ENEMY OF HAYLAGE

STORAGE SUGGESTIONS

store bales in the field where possible. The wrapped bales may be tipped on their ends so that the area most exposed will have maximum cover of film. For bales stored on their barrel, use your AW1500S to pick up and rotate bales 180 degrees after the first full summer to double the life of the film. Discourage vermin by sprinkling lime on the ground around the storage area. Inspect bales regularly for any damage.

USE HAYDAY 1507 AS YOURWRAPPER / HANDLER / STACKER
**Film storage**
Store film reels in a cool dry place.
Protect film reels from sunlight (ultra-violet rays) and other heat sources.
Keep the film in its factory wrapping until just before use.
Provide additional protection when transporting loose reels to the work site.

**The pasture**
Leave a stubble length of at least 50mm to prevent soil contamination of the haylage.
Ted the cut pasture well soon after mowing to facilitate wilting.
Aim for a pasture dry matter content of between 35 - 50% at time of baling.
Start harvesting just before pastures are coming into head, slightly later if clover dominate. Haylage made later results in reduced animal production.

**Making bales**
Make bales tight and dense to achieve good quality silage.
Barrel shaped bales of uniform size and density are easier to wrap, handle, and stack.
Pockets of residual air remaining in the bale result in mould development.
Avoid using chemically treated twine or net as these may react with the film.

**Wrapping bales**
Wrap the bales soon after baling.
At ambient temperature of 30 degrees Centigrade within 1 hour.
At ambient temperature of 20 degrees Centigrade within 2 hours.
Each bale should have at least 4 layers of film. Aim for 2 + 2 wrap with 50+% overlap to ensure a complete seal.

**Storage of wrapped bales**
1. If possible, store the bales on their flat ends. With a dry matter content up to 30% not more than one bale on top of another.
2. Avoid the collection of rubbish in the storage area.
3. Space the bale rows to allow regular inspection for damage to the film from mice, grubs, ants, birds etc.
4. Repair any damage with a compatible tape as soon as possible, ensuring that the film surface is clean and dry before patching.
5. Try to avoid a storage area in the direct sun. Storage in the shade is preferable.
6. Some chemicals such as natural manure, herbicides, and mineral oils increase the risk of premature destruction of the film. Avoid contact with such chemicals on the film.
7. Use transport equipment suitable for wrapped bales to avoid damaging the film.
8. For extended storage - place in sheds, under a sheet of plastic, or apply 6 layers of film. Alternatively, pick up and rotate unused bales to place weathered side underneath or wrap 2 more layers.
2.5. Description of Accessories

2.5.1. Hydraulic Top Link for handling capacity.

2.5.2. High Pressure Filter: can be fitted to protect the hydraulic circuit from contamination due to dirty Quick couplings.

Note; if a high-pressure filter is not fitted to the Hayday1507, care must be exercised that the quick release couplings are clean before connection. HAYDAY USA Limited will not be held responsible for any damage to the hydraulic motors and valves caused by contaminated hydraulic oil, or by the introduction of foreign matter through dirty quick release couplings.

2.5.3. Big bale adjusting brackets
**Maintenance Section**

**Maintenance**

**General**

1. Keep the hydraulic QUICK RELEASE COUPLINGS clean.
2. LIGHT LUBRICATION of PLASTIC COMPONENTS film docking collars as required.
3. DO NOT GREASE OR OIL THE PRE-STRETCHER GEARS.
4. Connect hydraulic hoses and RUN THE WRAPPER DURING BETWEEN SEASON STORAGE to ensure lubrication of bearings, valves, and seals.
5. WRAP COUNTER CONTROL BOX to be kept indoors when not in use. We recommend storing the wrapper under cover between seasons.

**Before the season**

1. GREASE roller hinge bushes (front & rear), roller end bearing and widening ram bushes. Continue to grease regularly during season.
2. If touch-up PAINT is required, heavy-duty enamel in John Deere Yellow, John Deere Green and International Harvester Red is readily available.

**After the season**

- CLEAN THE WRAPPER thoroughly at the end of each season. If high pressure water jets are used be careful of the valve block Solenoids and valves
2. LIGHTLY GREASE the HYDRAULIC RAMS and store closed.
3. At the end of each silage season, note any repairs / spare parts that are required for next season.
## Specifications

<table>
<thead>
<tr>
<th><strong>Wrapper data</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>1280 lb. (580kg) approximately</td>
</tr>
<tr>
<td>Length</td>
<td>8ft 4in (2527mm) with skid plate</td>
</tr>
<tr>
<td>Width</td>
<td>5ft (1500mm)</td>
</tr>
<tr>
<td>Height</td>
<td>8ft 3in (2540mm) 4ft 2in (1270mm) O/H arm lowered</td>
</tr>
<tr>
<td>Attachment</td>
<td>rear three-point linkage, CAT II or front mounting possible</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Hydraulic connection</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2&quot; standard ISO male quick release coupling</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Hydraulic flow rate</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10 US gal per minute maximum at 2250 psi</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Operating configuration</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>one double acting hydraulic for wrapping machine additional double acting outlet for hydraulic top link</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Electric connection</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12 V DC to tractor battery</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Arm rotation speed</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 30 RPM, fully adjustable hydraulic flow divider</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Roller rotation speed</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully adjustable hydraulic flow divider to set film overlap</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Bale data</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Round bale</td>
<td></td>
</tr>
<tr>
<td>Bale diameter 3 ft 6 in to 5 ft 6 in (1100mm to 1650mm)</td>
<td></td>
</tr>
<tr>
<td>Bale width 4 ft or 5 ft or 5ft 6in (1200mm to 1650mm)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Film data</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Film overlap</td>
<td>approximately 55%</td>
</tr>
<tr>
<td>Film layer</td>
<td>apply minimum of 4 layers at 55% overlap</td>
</tr>
<tr>
<td>Silage film</td>
<td>20 in or 30 in wide</td>
</tr>
<tr>
<td>5000 ft or 6000 ft long</td>
<td></td>
</tr>
<tr>
<td>1 mil thick</td>
<td></td>
</tr>
<tr>
<td>UV-stabilized self-adhesive stretch film</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Options</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Programmable counter</td>
<td>Automatically counts the wraps, clamps the film and resets ready for next wrapping cycle</td>
</tr>
<tr>
<td>Hydraulic Knife / Clamp</td>
<td>Hydraulic clamp to hold and release film onto bale from the tractor seat</td>
</tr>
<tr>
<td>Bale stop roller group</td>
<td>To assist control of poorly shaped bales</td>
</tr>
<tr>
<td>Rotating arm parking ramp</td>
<td>Locking device for rotating arm and film carriage. Most useful and necessary if tipping bales on end</td>
</tr>
<tr>
<td>Skid Plate</td>
<td>bolt on skid plate for use with smaller tractors and with tractors without counter weight</td>
</tr>
<tr>
<td>Hydraulic Top Link</td>
<td>10” stroke X 3” bore Cat II top link incl. hoses + fittings</td>
</tr>
<tr>
<td>High Pressure Filter</td>
<td>filter plus filter element incl. mounting bracket, hose + fittings</td>
</tr>
<tr>
<td>Feature</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Rotating arm system</td>
<td>Gives uniform consistent film application. Stable wrapping heavy bale rotates slowly and safely on fork rollers.</td>
</tr>
<tr>
<td>20” / 30” gear type pre-stretcher</td>
<td>Constant pre-stretching of wrapping film set at recommended 55%. No adjustment needed.</td>
</tr>
<tr>
<td>3pt linkage / front mounting</td>
<td>Easy maneuvering. Pick-up, wrap and place wrapped bales gently. Can load on transport or stack in storage. Can tip bales on end.</td>
</tr>
<tr>
<td>Roller forks widen out 5 feet</td>
<td>Easy loading can approach bale at an angle. The roller forks widen out parallel to approximately 5 feet (1.5m) clear opening.</td>
</tr>
<tr>
<td>Unique Self-loading “roll-up” action</td>
<td>Requires only one tractor to load and wrap. A driven roller lifts bale up.</td>
</tr>
<tr>
<td>Rotating arm parking ramp</td>
<td>Film roll carriage and pre-stretcher are locked in position ready for next wrapping cycle.</td>
</tr>
<tr>
<td>Support skid plate</td>
<td>Can wrap and handle with smaller tractors. The skid plate can carry the weight shed by smaller tractors and medium tractors without counter weight.</td>
</tr>
<tr>
<td>Parallel roller forks</td>
<td>Wraps at the storage site handle bales only once. Bales are put in storage position as part of the wrapping operation saving the cost of handling. Operator may roll the bale off the end of the support rollers - sit bale on end.</td>
</tr>
<tr>
<td>Programmable counter</td>
<td>Controls the number of wraps catches and clamps the wrapping film when wrapping is done. Counter resets automatically, ready for next wrapping operation. Can wrap with or without program.</td>
</tr>
<tr>
<td>Solenoid controlled hydraulic knife / clamp</td>
<td>Automatic wrapping operation. One person can wrap and handle bales from the tractor seat. Operator can continue to roll bale after wrapping such that loose end of film will be fix between bale and ground when bale is gently unloaded.</td>
</tr>
<tr>
<td>Hydraulic system</td>
<td>Low maintenance, high reliability. Eight grease points.</td>
</tr>
<tr>
<td>Hydraulic top link</td>
<td>For easy control of conical bales and to tip bales on end.</td>
</tr>
<tr>
<td>High pressure filter</td>
<td>For extra protection of hydraulic system.</td>
</tr>
</tbody>
</table>
**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>2.53m (8’4&quot;) Skid Plate attached</td>
</tr>
<tr>
<td>Width</td>
<td>1.50m (5’) Rollers in closed position</td>
</tr>
<tr>
<td>Height</td>
<td>2.54m (8’3&quot;) Skid Plate attached</td>
</tr>
<tr>
<td>Hydraulic flow</td>
<td>37 l/m (10 US gpm)</td>
</tr>
<tr>
<td>Height</td>
<td>1.27m (4’2&quot;) O/H arm lowered</td>
</tr>
<tr>
<td>Weight</td>
<td>585kg (1300lbs) approx</td>
</tr>
<tr>
<td>Hydraulic pressure</td>
<td>150 bar (2250 psi)</td>
</tr>
<tr>
<td>Attachment</td>
<td>to tractor CAT II</td>
</tr>
<tr>
<td>Electrical</td>
<td>requirements</td>
</tr>
<tr>
<td>requirements</td>
<td>12VDC</td>
</tr>
</tbody>
</table>

Due to ongoing product improvement specifications subject to change without notice
## Troubleshooting

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knife arm rises after clamping releasing film</td>
<td>- Air in knife hydraulic cylinder and hoses.</td>
<td>- Bleed hydraulic cylinder and hoses. Air may be dispersed in the hydraulic oil and repeated bleeding may be necessary.</td>
</tr>
<tr>
<td>Counter does not function</td>
<td>- incorrect connection to battery terminal</td>
<td>- Ensure red wire is connected to positive terminal of battery and red/black-striped wire is connected to negative terminal of battery.</td>
</tr>
<tr>
<td></td>
<td>- counter not set correctly</td>
<td>- Check that all five digits of the counter are set (all spaces must show a digit. Blanks do not count).</td>
</tr>
<tr>
<td></td>
<td>- sensor out of adjustment</td>
<td>- Reposition the magnet on the rotating arm if counter does not count.</td>
</tr>
<tr>
<td>Rollers rotate too slowly</td>
<td>- incorrect flow control adjustment</td>
<td>- Screw in roller motor flow control valve clockwise to increase speed</td>
</tr>
<tr>
<td></td>
<td>- low tractor hydraulic flow</td>
<td>- Under load, tractor flow may be insufficient check tractor hydraulic flow under load conditions.</td>
</tr>
</tbody>
</table>
BOLT TORQUE

CHECKING BOLT TORQUE

The table shown below gives the correct torque values for various bolts and cap screws. Tighten all bolts to the torque specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

TORQUE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Diameter</th>
<th>SAE 2</th>
<th>SAE 5</th>
<th>SAE 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;A&quot;</td>
<td>lb-ft</td>
<td>lb-ft</td>
<td>lb-ft</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>6</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>5/16&quot;</td>
<td>10</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>20</td>
<td>33</td>
<td>45</td>
</tr>
<tr>
<td>7/16&quot;</td>
<td>30</td>
<td>53</td>
<td>75</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>45</td>
<td>80</td>
<td>115</td>
</tr>
<tr>
<td>9/16&quot;</td>
<td>70</td>
<td>115</td>
<td>165</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>95</td>
<td>160</td>
<td>220</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>165</td>
<td>290</td>
<td>400</td>
</tr>
<tr>
<td>7/8&quot;</td>
<td>170</td>
<td>420</td>
<td>650</td>
</tr>
<tr>
<td>1&quot;</td>
<td>225</td>
<td>630</td>
<td>970</td>
</tr>
</tbody>
</table>

Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or cap screws unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

Torque value for bolts and cap screws are identified by their head markings.
This form must be filled out by the dealer and owner and set to: Hayday USA 3236 Loudon Street Granville OH 43023

WARRANTY REGISTRATION FORM & INSPECTION REPORT

WARRANTY REGISTRATION

This form must be filled out by the dealer and signed by both dealer and customer at time of delivery.

Customer name __________________________ Dealer Name___________________________

Address_____________________________ Address____________________________________

City, state, ZIP _______________________ City, state, ZIP_____________________________

Telephone number (____) ________________

Model_______________ Serial number ______________ Delivery date____________________

DEALER INSPECTION REPORT

SAFETY

_____ Hydraulic fittings tight

_____ Fasteners tight

_____ Wiring harness connected

_____ Lubricate machine

_____ Hydraulic hoses free

_I have thoroughly instructed the buyer on the above-described equipment; review included the operator's manual content, equipment care, adjustments, safe operation and applicable warranty policy._

Date _______________ Dealer's signature_________________________________________

The above equipment and operator's manual has been received by me and I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

Date _______________ Owner's signature ____________________________

<table>
<thead>
<tr>
<th>WHITE</th>
<th>YELLOW</th>
<th>PINK</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFG.</td>
<td>DEALER</td>
<td>CUSTOMER</td>
</tr>
</tbody>
</table>