

HEAVY DUTY HYDRAULIC POWERED WINCH

OWNER'S & OPERATOR'S MANUAL

Effective March 15, 2013

Publication No. 1042602

IMPORTANT! The winch gear box is shipped **With Oil**.
Ensure oil level is correct before operation.
Refer to the Hydraulic Winch Section
in this manual.

HUTCHINSON  MAYRATH 

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aggrowth.com | **AGI **

HUTCHINSON | MAYRATH

POLICIES and PROCEDURES

Prices: Prices in effect at time of shipment will apply. Prices are subject to change without notice. All prices are F.O.B. Clay Center, Kansas. Orders shipped from locations other than Clay Center, Kansas will be subject to additional charges, such as back freight and/or additional freight.

Service Charge: A service charge will be assessed for all past due balances as permitted by state law not to exceed 1-1/2% per month.

Minimum Order: Processing and handling costs necessitate a minimum charge of \$15.00 net on all orders.

Back Orders: Back orders will be shipped as they become available. Contact Hutchinson,Mayrath Customer Service for alternative shipping options or if cancellation is desired.

Damaged Goods: It is the consignee's responsibility to check all shipments thoroughly upon receipt of goods. If any damage is discovered, it must be noted on the freight bill of lading before signing. The consignee must make necessary claims against the respective freight line. All damage claims must be submitted within 30 days of delivery receipt.

Shortages: All shortages must be noted at time of delivery. Shortages must be noted on the freight bill of lading before signing. Hutchinson,Mayrath must be advised of all concealed shortages upon discovery. Once notified of concealed shortages Hutchinson,Mayrath will advise corrective action to be taken.

Return of Goods: All returns must be approved by Hutchinson,Mayrath prior to shipment. All return requests will be issued a return authorization number. **NO RETURNS WILL BE ACCEPTED WITHOUT A RETURN AUTHORIZATION NUMBER AND PRIOR AUTHORIZATION FROM THE FACTORY.** All returns must be shipped prepaid. A 15% restocking charge will be applied to all returned merchandise. Custom Products may not be returned for credit. Only current products in new and salable condition may be returned. No safety devices may be returned for credit.

Modifications: It is the policy of Hutchinson,Mayrath to improve its product whenever possible and practical to do so. We reserve the right to make changes, improvements and modifications at any time without incurring the obligation to make such changes, improvements and modifications on any equipment sold previously.

Limited Warranty: (a) For a period of (1) year after receipt of goods by the original consumer buyer, Hutchinson,Mayrath will supply free of charge replacement parts for parts that prove defective in workmanship or material. Defective parts must be returned freight prepaid to a specified Hutchinson,Mayrath location. Only Hutchinson,Mayrath original repair parts may be used for warranty repairs.

(b) This limited warranty does not extend to parts designed to wear in normal operation and be replaced periodically; or to damage caused by negligence, accident, abuse or improper installation or operation.

(c) **GOODS NOT MANUFACTURED BY HUTCHINSON,MAYRATH CARRY ONLY THE MANUFACTURER'S WARRANTY.**

(d) **THIS UNDERTAKING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

FAILURE TO FOLLOW THE INSTRUCTIONS CONTAINED IN THE OWNER'S & OPERATOR'S MANUALS AND THE ITEMS LISTED BELOW WILL RESULT IN THE VOIDING OF THIS LIMITED WARRANTY.

(1) Improper assembly, including failure to properly install all safety equipment.

(2) Improper installation.

(3) Unauthorized alternations of goods.

(4) Goods operated when obviously in need of repair.

(5) Use of unauthorized repair parts.

(6) Irresponsible operation.

(7) Used to handle materials other than free flowing, nonabrasive and dry materials, as intended.

(8) Damaged through abusive use or accident.

Limitation of Liability: BUYER AGREES THAT IN NO EVENT SHALL HUTCHINSON,MAYRATH HAVE LIABILITY FOR DIRECT DAMAGES IN EXCESS OF THE CONTRACT PRICE OF THE GOODS IN RESPECT OF WHICH CLAIM IS MADE. BUYER FURTHER AGREES THAT IN NO EVENT SHALL HUTCHINSON,MAYRATH ON ANY CLAIM OF ANY KIND HAVE LIABILITY FOR LOSS OF USE, LOSS OF PROFITS, OR FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

GENERAL SAFETY STATEMENT

This manual was written with the safety of the operator and others who work with the equipment as our prime concern. The instructions presented will help the reader learn **SAFE** day to day work practices. We want you as our partner in safety.

It is your responsibility as an owner, operator or supervisor to know what specific safety requirements and precautions exist and to make these known to all other personnel working with the equipment or in the area, so that they too may safely perform their duties and avoid any potentially hazardous situations.

Please remember safety equipment provides important protection for persons around a grain handling system that is in operation. Be sure **ALL** safety shields and protection devices are installed and properly maintained. **If any shields or guards are damaged or missing, contact your dealer to obtain the correct replacement items.**

Avoid any alterations of the equipment. Such alterations may create a dangerous situation where serious injury or death may occur.

SAFETY DECALS

Check to ensure all Safety Decals are present and in good condition. If a decal cannot easily be read for any reason, or has been painted over, replace the decal immediately. Safety decals are offered free of charge, and can be ordered through your Hutchinson/Mayrath dealer or directly from the factory.

SAFETY ALERT SYMBOL

The safety symbol shown is used throughout this manual to alert you to information about unsafe actions or situations, and will be followed by the word DANGER, WARNING, or CAUTION.

DANGER - Indicates immediate hazards that may result in severe injury or death. **WARNING** - Indicates unsafe actions or situations that may cause severe injury, death and/or major equipment or property damage. **CAUTION** - Indicates unsafe actions or situations that may cause injury, and/or minor property damage.

Watch this symbol - it points out important safety precautions. It means - **ATTENTION! Become alert! Your safety and the safety of others is involved!** Read the message that follows the symbol when a warning is given, be alert to the possibility of personal injury or death.



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WARNING!

Anyone who will operate or work around this machine shall first read this manual! This manual must be delivered with the equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

OPERATOR QUALIFICATIONS

Operation of this winch shall be limited to competent and experienced persons. In addition, anyone who will operate or work around the winch must use good common sense. In order to be qualified, the operator must also know and meet all other requirements, such as:

1. Some regulations specify that no one under the age of 16 may operate power machinery. This includes this winch. It is your responsibility to know what these regulations are in your area or situation.
2. Current OSHA regulations state in part: "At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in safe operation and servicing of all equipment which the employee is, or will be involved with." *

3. Unqualified persons are to stay out of the work area. See page 4.
4. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine.

***Federal Occupational Safety & Health Standards for Agriculture Subpart D, Section 1928.57 (a) (6).**

SIGN-OFF SHEET

As a requirement of OSHA, it is necessary for the employer to train the employee in the safe operation and safety procedures with this auger.


We include this sign off sheet for your convenience and personal record keeping.

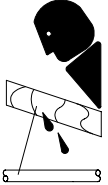
<u>Training Sign-Off Sheet</u>		
Date	Employer Signature	Employee Signature


RIGHT and LEFT SIDE DESIGNATION

When referencing the left, right, front or rear of the unit, it is always determined by standing at the inlet end of the auger and looking towards the discharge end.

HYDRAULIC WINCH

 **WARNING!** Hydraulic systems are highly pressurized. Do Not connect or disconnect hydraulic components when there is pressure within the system.

 Escaping hydraulic oil, even an invisible pin hole leak can penetrate body tissues and cause serious injury. Use a piece of wood or cardboard when searching for leaks, Never use your hands or other parts of your body.

 If injured by hydraulic oil escaping under pressure, see a doctor immediately. Serious infection or reaction can occur if medical attention is not received at once.

Even under normal working conditions, oil still has a tendency to dissipate. Periodically check and maintain oil level.

IMPORTANT! The hydraulic winch is shipped *with* oil. Ensure oil level is sufficient before installing winch onto the auger.

- Use “quick attach” type hydraulic fittings to connect the winch hydraulic hoses to the tractor.
- The fittings required for attaching the hoses to the tractor are not furnished. **Two (2) 1/2” NPT female fittings are needed for attaching the hose ends to the tractor fittings.**
- Check hoses, fittings and connectors for leaks. Repair or replace as necessary.
- Allow hoses to coil in their original shape. Avoid pinching, crimping or twisting the hoses that would otherwise restrict the flow of the hydraulic system. **IMPORTANT! Keep hydraulic hoses away from moving parts. Make sure to secure the hoses in a manner that they cannot become damaged when transporting the auger.**
- When not in use, make sure the fittings on the end of the hoses are protected from dirt and other contaminants.
- Never remove the winch hoses or fittings from the winch unless the unit is fully lowered with the lift arm against the upper stop. Relieve hydraulic pressure before disconnecting hydraulic lines.

Use the check/fill plug as shown in Fig. 1 to check oil level. Position auger as level as possible and remove the plug. Oil should leak from the plug opening.

If it does not, add oil until it begins to flow from the opening, replace plug.

For winch lubrication in normal operating temperatures between 40°F and 120°F (4.5°C and 48.9°C), use a non-foaming **SAE 90W** multipurpose gear oil.

For temperatures below 40°F (4.5°C) use an **SAE 80W** non-foaming multipurpose gear oil. Use a grade that is commercially used in automotive differentials.

Extra pressure additives may be of some value when used in severe applications.

Do Not add more oil than what is recommended. Too much oil can damage the seals.

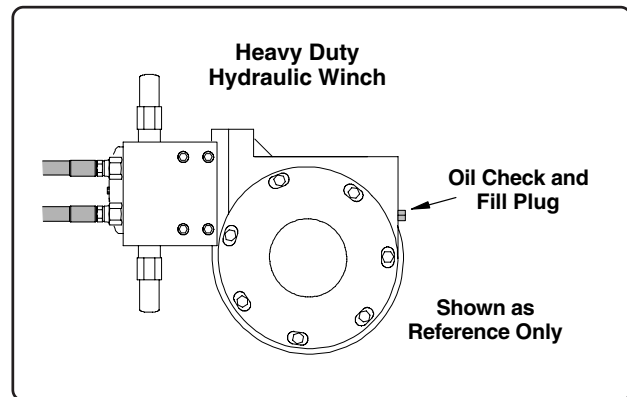



Fig. 1


Adding oil when the winch is mounted onto the auger.


1. Place the auger in as horizontal position as possible (auger will need to be in the full down position and as level as possible for an accurate reading).
2. Remove the plug from the gearbox. Oil should begin to leak from the opening. If it does, oil level is sufficient, reinstall plug.


If additional oil is needed, use a syringe type device, and add oil (See oil recommendations above). Add oil until it begins to flow out of the level check plug opening. Reinstall plug. **Do Not overfill. Too much oil may damage the seals.**


WINCH OPERATION


 **WARNING! Keep hands, hair and clothing away from moving parts. Do Not use hands to guide the cable onto the winch drum during winch operation.**


 **When raising or lowering the auger, be aware and avoid overhead obstructions and electrical power lines.**


 **Watch cable to see that it is properly winding onto the winch drum.**

 **Never fully extend the cable, always keep three (3) complete wraps of cable around the winch drum.**

 **Keep all guards and shields in place. Do Not operate winch with kinked or damaged cable.**

 **Do Not continue to raise auger after undercarriage trolley reaches track stop.**

 **Be aware of overhead obstructions and electrical lines and avoid them.**

 **Keep all guards and shields in place. Shut off and lock out power source to adjust, service or clean.**

The hydraulic winch will operate in either direction. This depends on which port is connected to pressure. If the drum should rotate in the opposite direction desired, simply reverse the hydraulic hoses on the relief valve.

Note: The direction of drum rotation should be so that the cable wraps around the drum in the same direction as it was attached to the drum (refer to Fig 2 below).

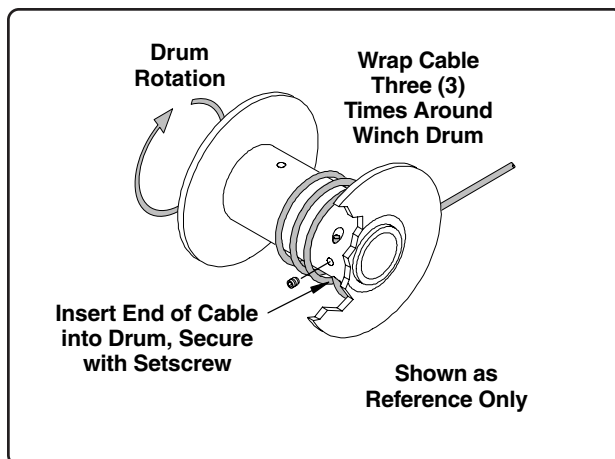


Fig. 2

The hydraulic system on the winch has a pressure relief to protect against overloading. If the winch fails to function, check for interference such as binding of the cable or slide. It is recommended that you do not allow anyone who is not familiar with these operating instructions to operate this winch.

Note: This winch is not designed to be a human hoist and should never be operated when there are persons positioned under, or near the auger when raising or lowering.

Operator's must pay attention when raising and lowering the auger.

TRANSPORTING AUGER

Always transport auger in the full down position. The lift arm of the undercarriage should be seated against the down position stop with slight tension on the winch cable and at least three (3) wraps of cable around the winch drum. **Refer to the Owner's and Operator's manual that came with your auger for complete procedures and guides for transporting the auger.**

WINCH MAINTENANCE

1. Check that the winch is secure and properly mounted to the auger.
2. Check winch cable periodically. Damaged, kinked or frayed cable must be replaced (always replace cable with the same type and size as the original).
3. Check hydraulic hoses and fittings for leakage. Ensure all connections are tight and check hoses for damage.
4. Check oil level in winch gearbox periodically. Refer to the Hydraulic Winch Section on Page 4 for proper filling procedures.

HYDRAULIC WINCH INSTALLATION



CAUTION! The hydraulic winch is heavy and can be awkward to handle. To prevent personal injury, use assistance when installing the winch.



Wear the proper personal protective gear when working with the cable. Gloves and eye protection should be worn to help prevent personal injury.

1. Remove and discard the two shipping bolts from the top of the hydraulic winch assembly (See Fig. 3).

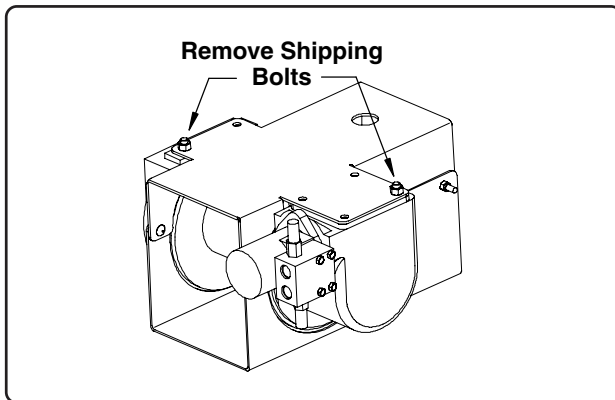


Fig. 3

2. Position the winch below the winch mounting plate on the bottom side of the auger housing. Attach the winch to the winch mount plate using six (6) 1/2" x 2 1/2" bolts and nylon locknuts.

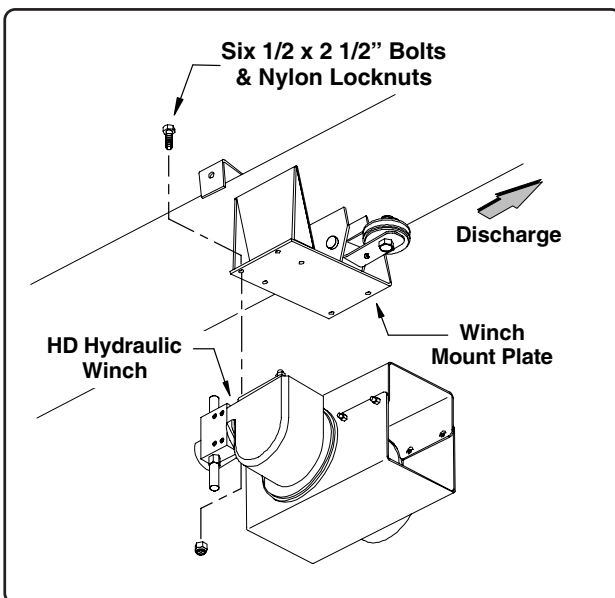


Fig. 4



WARNING! Hydraulic systems are highly pressurized. Do Not connect or disconnect hydraulic components when there is pressure within the system.



Escaping hydraulic oil, even an invisible pin hole leak can penetrate body tissues and cause serious injury.

Use a piece of wood or cardboard when searching for leaks, Never use your hands or other parts of your body.



If injured by hydraulic oil escaping under pressure, see a doctor immediately. Serious infection or reaction can occur if medical attention is not received at once.

IMPORTANT! Keep hydraulic hoses away from moving parts.

Allow hoses to coil in their original shape. Avoid pinching, crimping or twisting hoses that would otherwise restrict the flow of hydraulic oil.

3. Apply a thin coat of clean oil to the o-rings on the ends of the hydraulic hoses and attach the hoses to the relief valve (See Fig. 5).
4. Pass the ends of the hoses through the undercarriage mount and route the hoses down to the inlet end of the auger.

Note: Hydraulic hose routing may differ on various auger models. Refer to the Owner's & Operator's manual supplied with your auger for correct hose routing specific to your product.

Use the mounting brackets along the lower portion of the auger and secure the hoses to the brackets every few feet down the length of the auger until you reach the inlet hopper (**hose attachments are not furnished with this kit**).

After the hoses have been properly secured, it is always good practice to keep the excess length of hoses attached to the auger. This will help prevent damage to the hoses while in storage and during transport.

HYDRAULIC WINCH INSTALLATION (con't.)

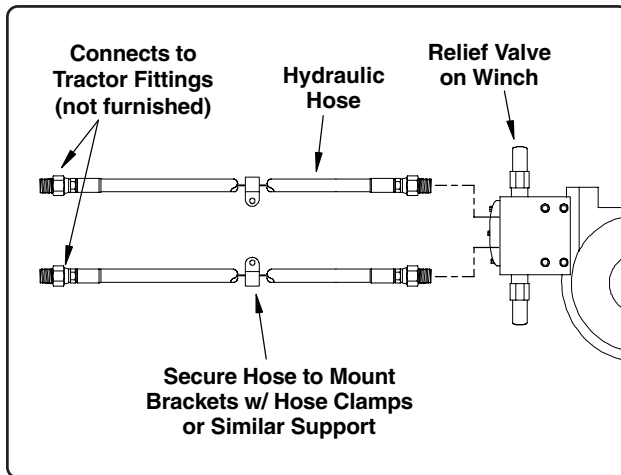


Fig. 5

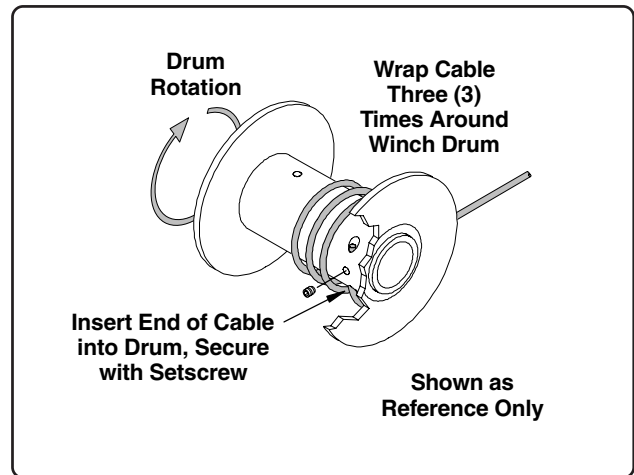


Fig. 6



CAUTION! Wear the proper personal protective gear when working with the cable. Gloves and eye protection should be worn to help prevent personal injury.

5. Attach the lift cable to the winch drum. Make three (3) wraps of cable around the winch drum, then insert the cable end into one of the larger holes in the drum (it may be necessary to loosen the setscrew to allow the cable to slide into the opening).

Make sure the cable is wrapped around the drum in the same direction as it was attached (See Fig. 6).

6. Tighten the setscrew to secure the cable to the winch drum. Keep a bit of tension on the cable to help it stay wrapped around the drum.

IMPORTANT! The cable anchor setscrew on the winch drum alone cannot support the weight of the auger.

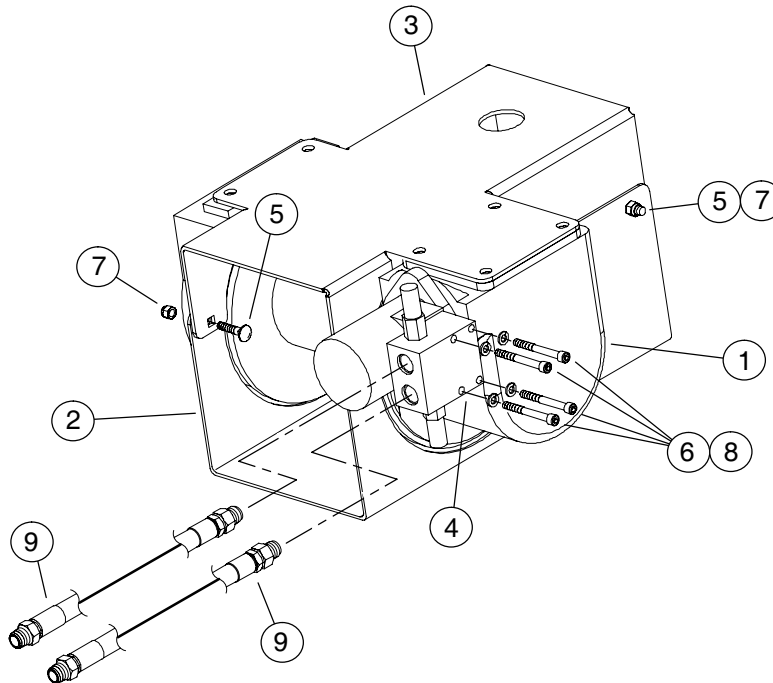
Always have at least 3 complete wraps of cable around the drum when the auger is in the full down position.

PARTS LIST

HEAVY DUTY

HYDRAULIC WINCH ASSEMBLY

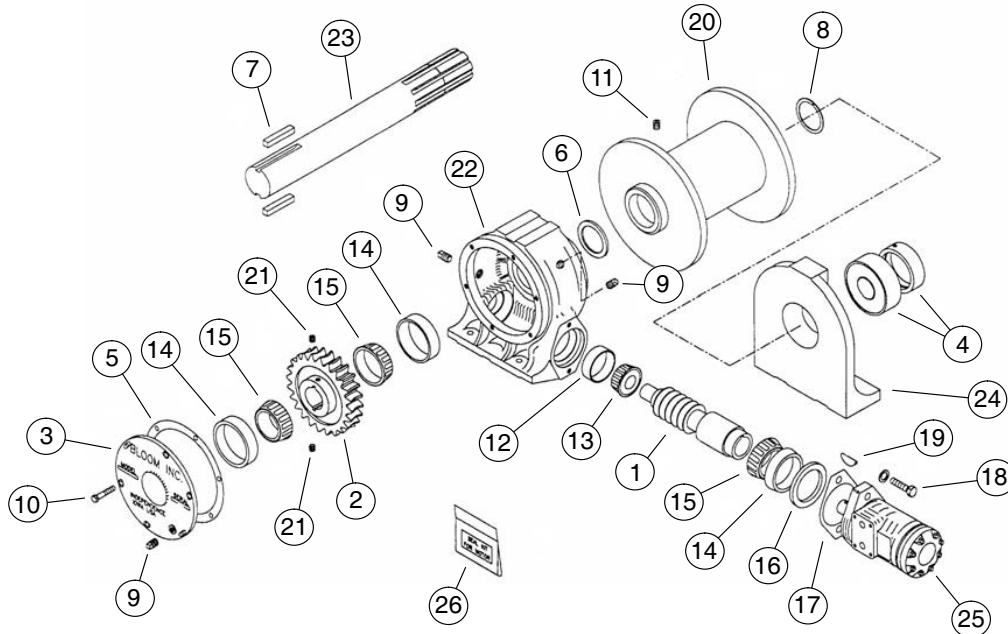
Complete Winch Assembly
Hutchinson/Mayrath Part No. 1021069



Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	1021162	Winch, Bloom Hydraulic HD	9	1032436	Hose, Hydraulic 3/8" x 28' long (10 mm x 8.53 m)
2	1021237	Cover, Lower Guard	(9)	1032438	Hose, Hydraulic 3/8" x 38' long (10 mm x 11.58 m)
3	1021242	Upper Guard Weldment	(9)	1032439	Hose, Hydraulic 3/8" x 42' long (10 mm x 12.80 m)
4	1032392	Valve, Hydr. Bypass Relief	*	1033976	O-Ring, Bypass Valve to Winch Body Connection
5	1002248	Bolt, 3/8-16 x 1 1/4" Carriage			
6	1021175	Bolt, 5/16-18 x 2 3/4" SCHS			
7	33136	Nut, 3/8-16 Nylon Lock			
8	33144	Washer, 5/16" Lock			

* Not Shown

HEAVY DUTY
HYDRAULIC WINCH COMPONENTS



The Part No's. Shown Below are Bloom Manufacturing Part No's.

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	W-202-1-25	Worm Shaft, 40:1 Ratio	15	W-235	Bearing Cone, 1 1/2" (LM29749)
2	10-203-1-25	Bronze Gear, 40:1 Ratio	16	W-236	Spacer, .270 - .275
3	10-206	Gear Case Cover	17	W-237K	Gasket Kit f/ Motor
4	12-208	End Bearing, 1 1/2" I.D. x 3 1/8" O.D.	18	W-249	Bolt, 7/16-17 NC x 1 1/2" HT & 7/16" Lock Washer
5	W-210K	Gear Case Cover Gasket Kit	19	W-250	Key, 1/4" x 1" Woodruff
6	10-216	Oil Seal	20	4853-1	Spec. Drum
7	10-217	Key, 3/8" sq. x 1 7/16" long	21	W-258	Setscrew, 3/8" x 1/2" Socket
8	10-220	Retaining Ring, External, 1 1/2"	22	10-265	Gear Case
9	W-226	Pipe Plug, 3/8"	23	10-269	Shaft, 1 1/2"
10	W-227	Bolt, 5/16-18 NC x 1" HT	24	10-278	End Housing
11	W-229	Setscrew, 1/2" x 1/2" Socket	25	10-4845	BM Motor Char-Lynn 101-1042
12	W-232	Bearing Cup, 3/4" (21212)	26	W-3231	Seal Kit, Char-Lynn H- Series 101-xxxx-009 (60540)
13	W-233	Bearing Cone, 3/4" (21075)			
14	W-234	Bearing Cup, 1 1/2" (LM29710)			

Parts can be ordered directly from Bloom Manufacturing, Inc.

When Ordering Parts, Specify Serial No. and Model Stamped on Winch Cover

Bloom Manufacturing, Inc.
Winch Division
Independence, IA 50644 USA
Phone: 319-827-1139 Fax: 319-827-1140

HUTCHINSON MAYRATH

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