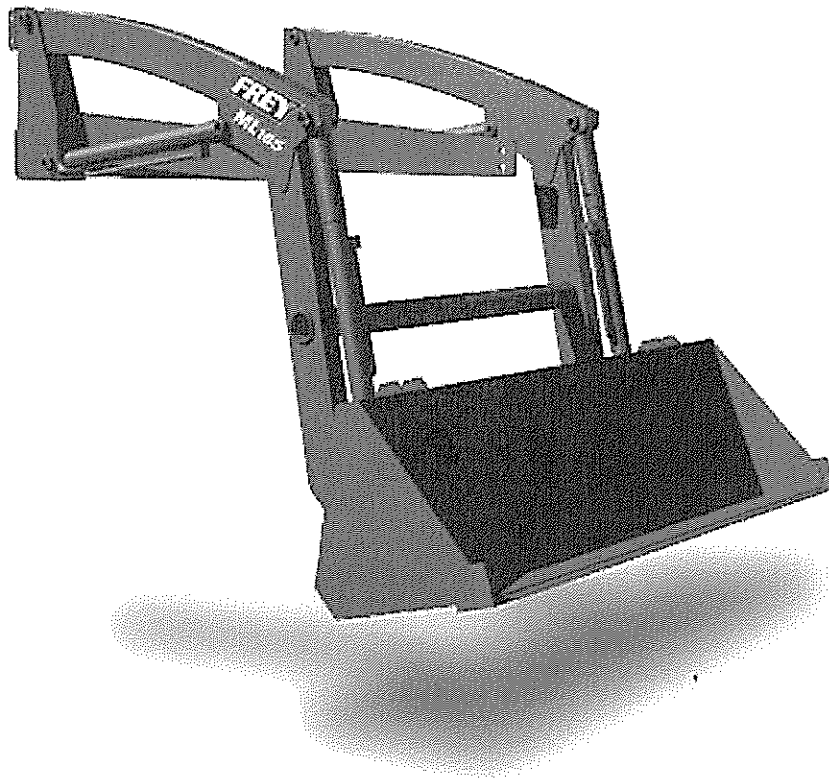


FREY



PARTS MANUAL

ML 165 LOADER

SERIAL # 09F019 -

TABLE OF CONTENTS

- SECTION 1: SAFETY & WARNINGS**
- SECTION 2: OPERATION & SERVICE**
- SECTION 3: WARRANTY**
- SECTION 4: ILLUSTRATIONS & PARTS GUIDE**

CAUTION

ALWAYS make sure the implement is LOCKED on the Tool Carrier before beginning loader operation.

This can be checked by observing the locking lever position and forcing the implement against the ground using the loader hydraulic cylinders.

Failure to properly install implement can cause the implement to come off the Tool Carrier resulting in serious injury to the operator or bystanders.

DANGER

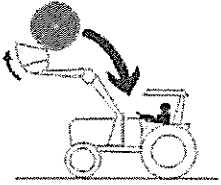


Serious injury or death can result from contact with electric lines.

DE23584
Caution Decal
 (make sure attachment are secure)

DE23581
Danger Decal
 (high voltage lines)

WARNING



To avoid injury or death caused by falling loads:

- Do not handle round bales unless loader is equipped with approved bale handling attachments.
- Lockout optional valve detents.
- Handle raised loads with caution.
- Carry loads low.

WARNING



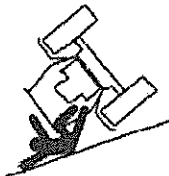
To avoid injury from falls:

- Do not work from or allow riders on loader or its attachments

DE23579
Warning Decal
 (bale roll down arms)

DE23583
Warning Decal
 (do not ride in bucket)

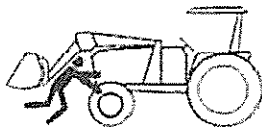
DANGER



Serious injury or death can result from rollovers.

- Use ropes and seatbelt at all times.
- Add required rear ballast.
- Move wheels to widest recommended setting.
- Operate tractor at low speeds.

WARNING



To avoid injury from falling loader:

- Do not walk or perform service under a raised loader
- Lower loader to ground when parked

DE23580
Danger Decal
 (tractor rollover)

DE23582
Warning Decal
 (under loader danger)



DECANADA
(made in Canada)

! CAUTION

Be sure to purge all the air from the hydraulic system before attempting to raise or lower this machine. Refer to owner's manual for further details.

DE22581
Caution Decal
(purge lines)

! CAUTION

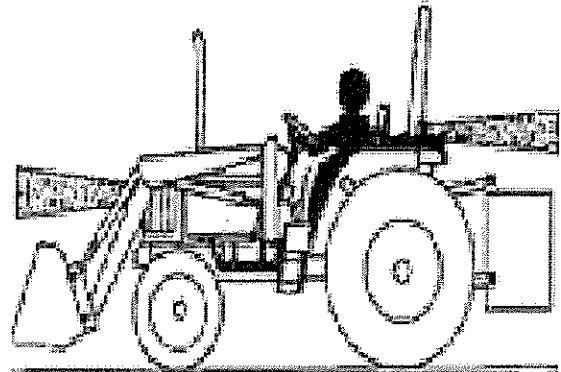
1. Read operator's manual (especially safety precautions) before operating this machine.
2. Move and turn tractor at low speeds.
3. Carry loader arms at a low position during transport.
4. Lower arms, stop engine, relieve all hydraulic pressure, and lock brakes before leaving operator's seat.
5. Add recommended wheel ballast or rear weight for stability.
6. Move wheels to widest recommended settings to increase stability.
7. A roll-over protective structure is recommended for a tractor equipped with a loader.
8. Before disconnecting hydraulic lines, relieve hydraulic pressure.
9. Escaping hydraulic oil under pressure can have sufficient force to penetrate the skin, causing serious personal injury. If injured by escaping fluid, obtain medical treatment immediately.
10. Do not use loader for handling large, loose or shiftable loads which might fall out of the bucket or roll down the loader arms onto the operator.
11. Make sure loader and attachments are properly secured before operating.

DE21703
Caution
(read manual)

Driving on Public Roads

While driving tractor and loader, follow these precautions:

- Carry loads close to the ground to aid visibility and to lower center of gravity.
- Allow for additional length of loader on tractor while turning.
- Balance loads so weight is evenly distributed and load is stable.
- Drive slowly if carrying materials. Rough conditions may cause material to spill.
- Avoid carrying materials wider than the bucket/attachment or tractor.



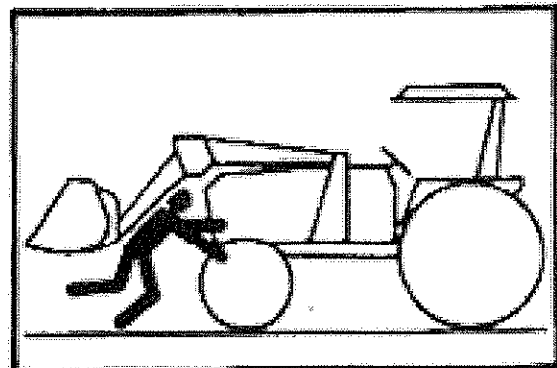
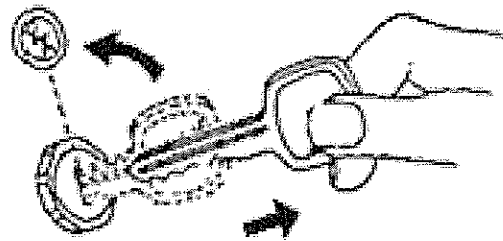
Service Loader Safely

Always engage parking brake or place transmission in Park, lower loader to the ground, shut off engine and remove key before servicing the loader.

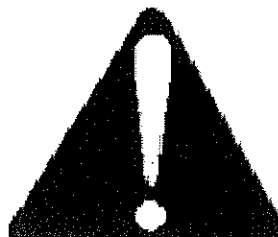
Do not walk or perform service under a raised loader, bucket or attachment unless it is securely blocked or held in position.

Keep all parts in good condition and properly installed. Repair any damage immediately and repair or replace any worn or broken parts.

Before disconnecting hydraulic hoses, relieve all hydraulic pressure.



This is a 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.



▲ WARNING

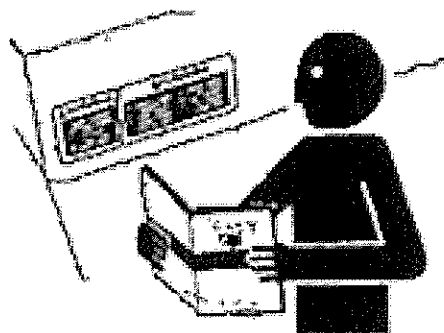
▲ CAUTION

Follow Safety Instructions

Carefully read all safety messages in the manual and on your loader safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available.

Learn how to operate the loader and how to use the controls properly. Do not let anyone operate without instruction.

Keep your loader in proper working condition. Unauthorized modifications to the loader may impair the function and/or safety and affect loader life. If you do not understand any part of this manual and need assistance, contact Frey Industries.



DO'S

- Read this manual before operating the loader. It is important to become familiar with and follow all recommended safety precautions.
- Rollover protection is recommended for your tractor while operating the loader.
- Follow all mounting and operating instructions carefully.
- Move the wheels to the widest adjustment and add rear weight to insure maximum stability.
- Lower the loader to the lowest position, stop the engine, relieve the hydraulic system pressure and set the tractor brakes before leaving the operator's seat.
- When the tractor is in motion, keep the loader in a lower position. This will insure that your vision will not be hampered.
- Be sure to slow down when making turns with your tractor to prevent accidentally hitting objects with your loader arms.
- Before disconnecting the hydraulic hoses, release any hydraulic pressure from the system to prevent serious injury from rapidly escaping pressurized oil.
- Adjust your tractor speed when the loader is carrying a load according to the conditions and terrain.
- If you are operating the loader with a hydraulic valve, always be sure to use smooth motions when operating the lever (s) to prevent jerking of the loader and always be sure the lever (s) return to their neutral position. **Never Assume Anything!!!**

DO NOT'S

- Do not hesitate to contact your dealer for assistance in mounting and operation of your loader.
- Do not make drastic movements with the tractor or loader.
- Do not continue operation if tractor balance is affected.
- Do not exceed loader specifications.
- Do not use loader for moving large, shiftable or loose loads that are not properly secured to the attachment. This will prevent the load from falling off or rolling down the loader boom arms.
- Do not use the loader for lifting or carrying people for any reason.
- Do not stand, walk or work under a raised loader under any condition.
- Do not use the loader for backgrading. This improper use of the loader puts extreme stress on the latching device, which could cause it to fail.
- Do not run the loader into a mound of material at a rapid speed. This kind of action could cause serious damage to your loader or tractor or it could result in a serious injury.
- Do not strictly use the lift arms for lifting the load. The tilt cylinders should be used to assist you in lifting your load.
- **Very Important!!!** Never operate the loader without the safety pins installed on the main loader frame and attachments. Failure to do so could cause the loader or attachments to come unattached from the mounting frame.

Failure to comply with the above DO'S and DO NOT'S may result in equipment failure and / or personally injury!

Loader Operation/Maintenance

- Once the hydraulics have been hooked up, you must bleed the air from the hydraulic system before operation. Leaving air in the system could be very dangerous because it greatly affects the performance of the loader. Loosen the hyd. fittings on the lower cylinders and activate the tractor remote or auxiliary valve until clean, uncontaminated oil flows out. The loader will go up and down smoothly without jerking and there should be no unusual noises coming from the hydraulic system. Always be sure that all connections have been properly tightened.
- After completion of Item 1 above, recheck all mounting frame bolts for proper torque. Initial operation can cause loosening of the fasteners. Please double check again after the first hour of operation and again after 10 hours of operation.
- Our loader can be used in many different functions and will perform up to expectations, however, the loader **has not** been designed to be used in any type of digging and we highly recommend you refrain from this activity. **The loader warranty does not cover damage that occurs as a result of misuse.**
- There are two primary positions for the loader; the neutral position and the working position. When the loader is in the neutral position, there is no hydraulic oil movement in any of the loader's cylinders. If you are using the tractor remotes, the loader will remain in neutral until you open the remote by moving the remote lever on the tractor. If you are using an additional hydraulic valve the oil will pass through the valve and back to the tank until the lever on the valve is actuated and then the oil will travel to the lift or bucket cylinders. The loader is in the working position when you open the tractor remote or auxiliary valve by pushing or pulling the lever. This allows the oil to travel to the cylinders that activates their movement in either lifting or tilting function.
- The hydraulics can be hooked up to your tractor in many different ways. This is usually decided at the dealership where you purchased the loader. We recommend that you familiarize yourself on how your dealer hooked up your hydraulics. This can help us in the future if you are needing to check your system for hydraulic leaks or any other unseen problem. If you have purchased an auxiliary valve to operate your loader, be sure that you allow the hydraulic oil to warm up before operating the loader. If the hydraulic fluid has not warmed up, its viscosity will be too low; it will not move properly and could damage the hydraulic lines. After the hydraulic oil has reached its operating temperature, always limit the number of times you open and close your valve. By repeatedly opening and closing the valve you could experience overheating of your tractor hydraulic system.

SERVICE

1. Check your tractor's hydraulic oil often and check the hydraulic fittings for any looseness that may occur after prolonged use.
2. If the control valve is making noise, it will need to be adjusted.
3. All grease points should be greased regularly especially if you use the loader often.
4. Please change the oil in the loader every 500 hours if it's being used in heavy work conditions, 800 hours if in normal working conditions and 1100 hours if being used in light applications.
5. If your loader is needing major service we highly recommend that you take it to your closest Frey dealer for repairs.
6. Frey will only honor warranties performed by qualified technicians approved by our company.
7. Replacement parts can be obtained at your nearest authorized Frey dealer.
8. **(VERY IMPORTANT)** When ordering parts it is essential that you give the model of your loader, serial number, date of purchase, what kind of tractor it is mounted on and the part number required. (Refer to the parts catalog at the back of the manual to find the part number you need.)
9. **NEVER** use any attachments that are not specifically designed for our loader. Doing so will void your warranty.

PROBLEM	REASON	SOLUTION
Oil Leaking	Loose hydraulic fittings	Tighten leaking fitting
	Damaged gaskets	Replace leaking gaskets
	Damaged hydraulic lines	Replace leaking line
	Damaged couplers	Replace leaking coupler
Loader jerks or makes excessive noise	Low oil level	Add oil to tractor
	Vibration in the pressure lines	Secure the lines
	Air in loader system	Bleed the air out
	Dirty Oil	Change oil
	Water in oil	Change oil
Movement of loader lift cylinder is uncontrolled	Air in cylinder	Bleed the hydraulic system
	Damaged seals	Change seals
	Deformed seals	Change cylinder
	Pressure isolation	Control & change isolation



Dear Customer:

Congratulations in purchasing the finest loader manufactured. Our loader will provide you with many years of service, but as with any product, proper operation and service must be maintained to insure its longevity. This manual contains all the pertinent information needed to operate and maintain your loader.

The FREY ML165 Loader is designed to fit agricultural tractors in the 15 to 25 HP range and are specifically designed to be used in agricultural and livestock businesses. The Loader has been manufactured to be user friendly as far as operating, mounting and dismounting.

It is very important that you take the time to read and familiarize yourself with this manual. Be sure that you have signed the loader WARRANTY REGISTRATION card and your dealer has sent it to our office for registration.

We at FREY Sincerely appreciate your business and our commitment is to customer satisfaction. Please contact your dealer or our customer service unit with any question about our loaders or any of our other products.

Thank You

OWNER RECORDS

Model: _____

Serial No: _____

Date Purchased: _____

Dealer: _____

Dealer phone: _____

Manufactured by:

TUBE•LINE™
MANUFACTURING LTD.

3928 Steffler Rd, R.R.#4, Elmira ON, N3B 2Z3

Toll Free: 888-856-6613 Phone: 519-664-0488 Fax: 519-664-0492

www.tubeline.ca

sales@tubeline.ca



WARRANTY

Frey warrants each item of farm equipment distributed by Frey to be free from defects from material and workmanship under reasonable use and service. The obligation of the Company under this warranty is limited to the repairing, the replacing, or the refunding of the purchase price, less reasonable depreciation, as the Company may elect, for part or parts which shall be returned to a Distributor or Dealer of the Company with transportation charges prepaid by the purchases, and as to which examination shall disclose to the Company's satisfaction to have been defective in material or workmanship, provided that such part or parts shall be reported to the Dealer or Distributor as being defective not later than twelve months from the date of the first use by the original purchaser. This warranty does not obligate Frey to bear the cost of labour in replacement of such defective parts.

This warranty shall not apply to equipment which has been altered, improperly maintained, or repaired so as in the Company's judgment, to have adversely affected its performance. The Company makes no warranty of any character with respect to electric motors, belts, hydraulic hoses, valves, cylinders, or other items not manufactured by the Company.

The Company's warranty and its obligation hereunder is in lieu of all other warranties, including without limitation, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE and all other representations to the Distributor, Dealer and original purchaser, that extend beyond the description of the equipment. The Company shall not be liable for incidental and consequential damages or either of them of any nature whether based on tort or contract. No person is authorized to give warranties or to assume any liabilities unless made in writing by an authorized representative of Frey.

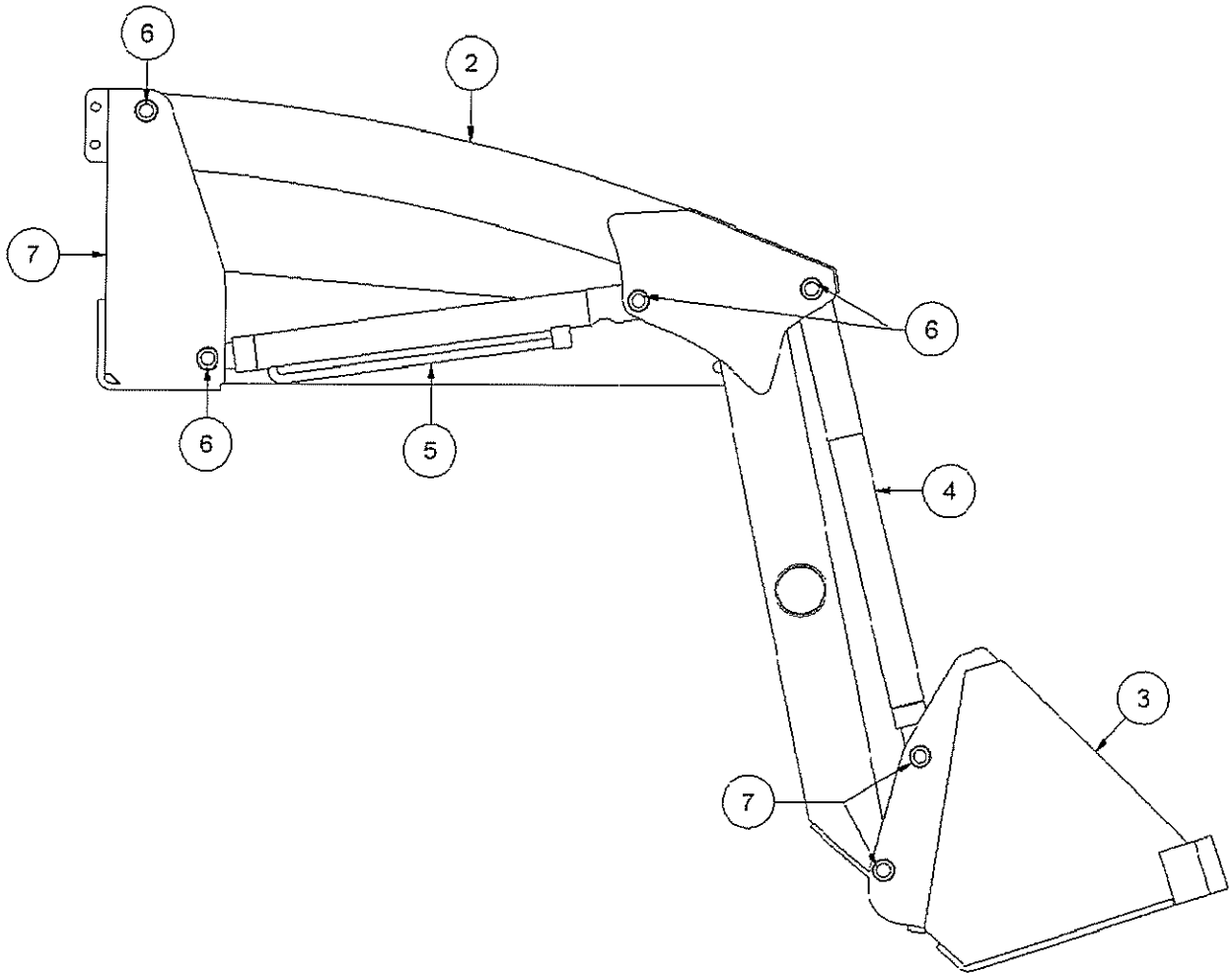
COMPLETE AND RETURN WARRANTY CARDS



ML 165

**ILLUSTRATIONS
&
PARTS GUIDE**

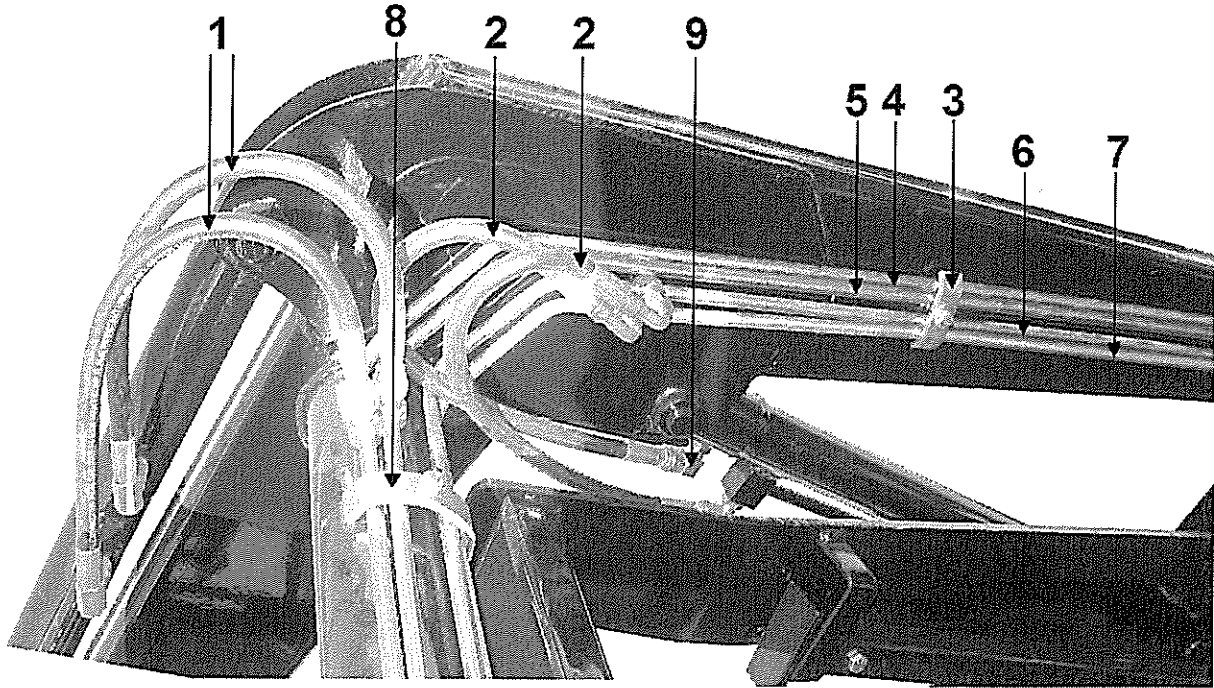
LOADER PARTS BREAKDOWN



ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	22778	Loader Post (left & right)
2	1	23878	Loader Boom
3	1	MB160P48	Standard Bucket - 48"
4	2	P03-101	Bucket Cylinder 1.5 x 12.5
5	2	P03-102	Boom Cylinder 1.5 x 16
6	8	21590	Pin 0.75 x 4.0
7	4	21591	Pin 0.75 x 4.5

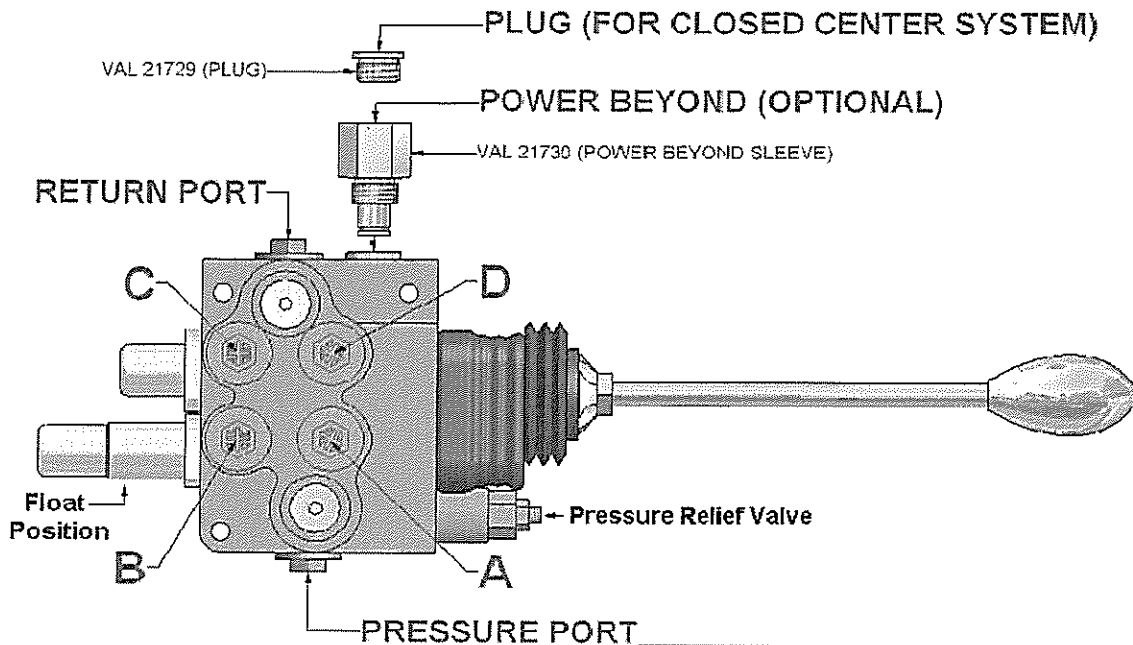
CYLINDER PART NUMBERS ARE STAMPED ON CYLINDER BARREL,
 SUPPLY CYLINDER PART NUMBERS WHEN ORDERING
 REPLACEMENT CYLINDERS OR SEAL KITS

LOADER HYDRAULICS BREAKDOWN



ITEM	Part Number	Description	QTY
1	22664	HH16 - 4AT1(6FJXH,6MBX90) HCL 16", ML165 Bucket	4
2	22665	HH18 - 4AT1(6FJXH,6FJX90) HCL 18", ML165 Lift	4
3	21356	Oil Line Clip	2
4	22639	Hyd. Tube, ML165, Top Line	1
5	22640	Hyd. Tube, ML165, 2nd Line Down	1
6	22641	Hyd. Tube, ML165, 3rd Line Down	1
7	22642	Hyd. Tube, ML165, Bottom Line	1
8	22789	Oil line Clip (with ends bent in)	2
9	HF 6801-6-6	Hyd. Fitting 90 Deg.0-ring to Jic	4

VALVOIL SD5 VALVE



- A - LOWER LOADER
- B - LIFT LOADER
- C - DUMP BUCKET
- D - ROLL BACK BUCKET

Part No.
Ports Up: ML1006-LCB3
Ports Down: ML1006-LCB1
Description: SD5 Valve

<u>Part Number</u>	<u>Description</u>
ML1006-LCB1	SD5 Valve with Ports Down
ML1006-LCB3	SD5 Valve with Ports Up
VAL 21730	Power Beyond Sleeve Optional
VAL 21729	Plug for Closed Center System
VAL V.13QN-SD5	Valvoil Float Detent Kit SD5 (New Style) with Long Cap
VAL 21737	Valvoil SD/5 Seal Kit
VAL 3CAP210370	Valvoil SD5/2 Short End Cap

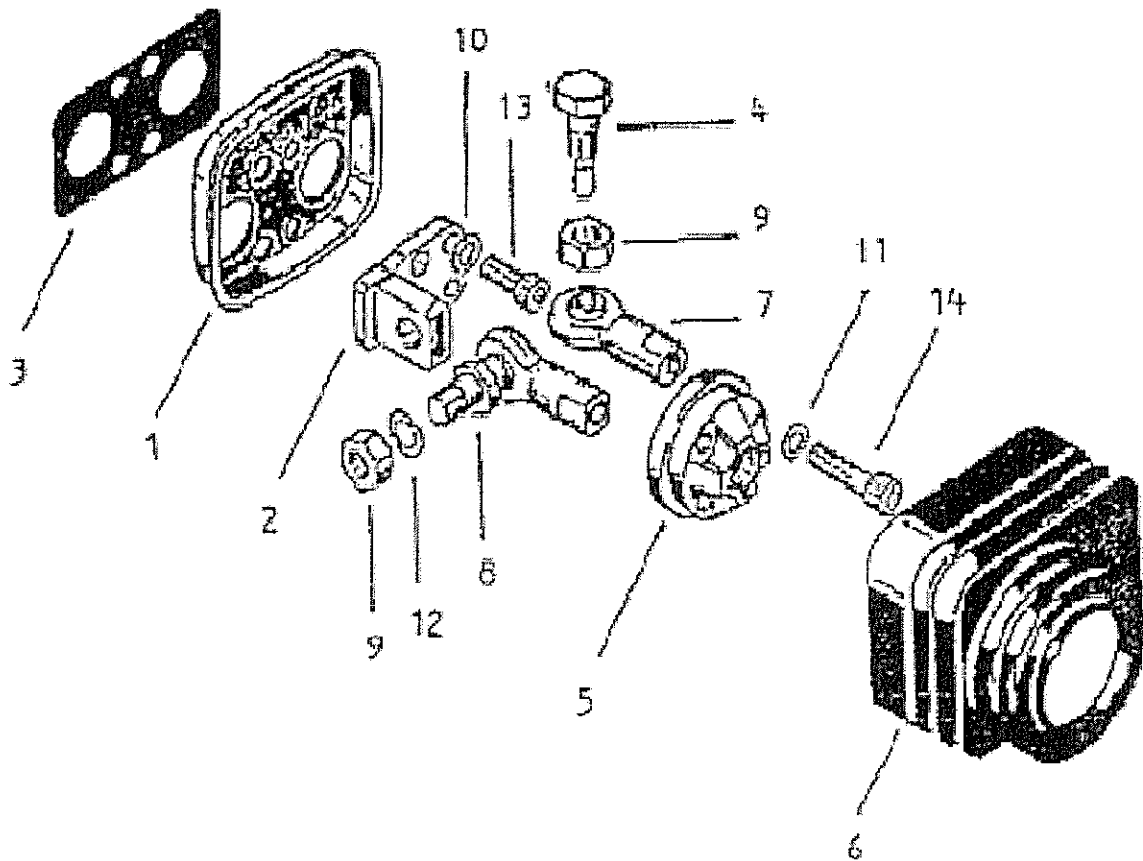
Warning:

Your new valve has a Float Position Identified by the Longer Spring Mechanism opposite the Joystick or Joystick Cable Connections.

After installation of hydraulic lines – move the joystick in the direction of the float position, the loader should lower.

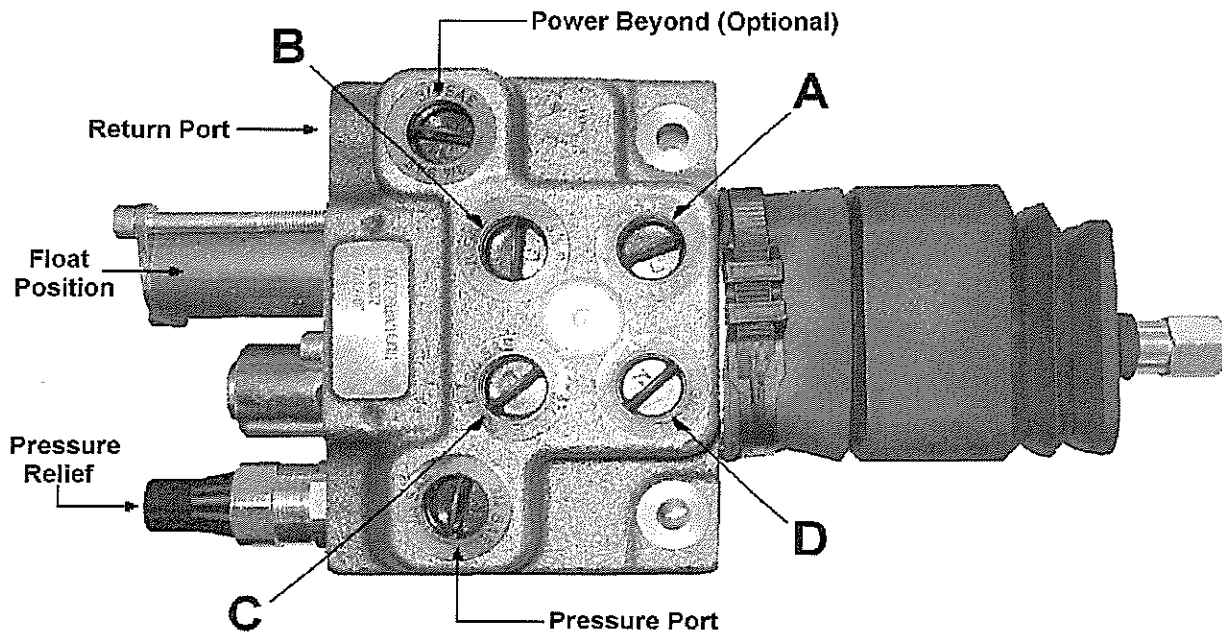
If it does not lower the loader, reverse the lines on the **A & B** ports.

SD5 VALVE JOYSTICK PARTS BREAKDOWN



ITEM	PART #	DESCRIPTION	ALTERNATE #	QTY
1	3FLA125100	FLANGE		1
2	3FUL220000	FULCRUM		1
3	3GUA167050	SEAL		1
4	3PER513340	PIN	21869	1
5	3POR340240	ARTICULATION BASE	21870	1
6	3SOF200590	RUBBER BELLOW	21868	1
7	4ART006000	TUTHILL	21867	1
8	4ART106000	CONNECTING ROD	21866	2
9	ADAD208125	M8 NUT		3
10	4ROS305312	WASHER		4
11	4ROS606407	WASHER		3
12	4ROS608408	WASHER		2
13	4VIT605014	M5 X 14 SCREW		4
14	4VIT606025	M6 X 25 SCREW		3

BONDIOLI VALVE



- A - LOWER LOADER
- B - LIFT LOADER
- C - DUMP BUCKET
- D - ROLL BACK BUCKET

Part No. ML1006-LCB3DN
Description: Bondioli

<u>Part Number</u>	<u>Description</u>
ML1006-LCB3DN	Bondioli Valve
VAL DN2-D034	Carry Over Fitting
58045NS03	Float Detent Kit
580660A02	Short End Cap
55513621	Kit, Ball Joint (Boot) actuator
535118012	Joystick Lever

Warning:

Your new valve has a Float Position Identified by the Longer Spring Mechanism opposite the Joystick or Joystick Cable Connections.

After installation of hydraulic lines – move the joystick in the direction of the float position, the loader should lower.

If it does not lower the loader, reverse the lines on the **A & B** ports.

