



OWNER'S MANUAL

FOR: MAGLINER® MOBILE DOCK
MOBILE LOADING RAMP

Model No. #: ME208436

Serial No. #: 12-96-6818, 6819, 6820



CAUTION: It is important for all authorized operating personnel to carefully read and understand the instructions and rules for safe operation contained in this manual. This will help prevent accidents that might otherwise be caused by equipment misuse or improper applications.

**If you have any questions or require assistance, contact Magline's
Customer Service Department at 1-800-624-5463 (ext: 811)
· Voice Mail: (800) 344-3646**

www.magliner.com

Form No. B5667

Magline® Inc. Pinconning, MI 48650 USA · 1-800-624-5463 (In U.S. & Canada)
· (517) 879-2411 (Outside U.S. & Canada) · Fax: (517) 879-5399

TABLE OF CONTENTS

This manual consists of the following sections:

Section I.	Introduction	Page: 3
Section II.	Rules for Safe Operation	Page: 4
Section III.	Specifications & Data	Page: 6
Section IV.	Operating Instructions	Page: 8-10
Section V.	Maintenance & Repair Instructions	Page: 11
Section VI.	Replacement Parts List	Page: 13
Section VII.	Equipment & Parts Illustrations	Page: 14-19

- Figure 1.** General Arrangement
Figure 2. Wheel Yoke Assembly
Figure 3. Hydraulic Elevating System

SECTION I.

INTRODUCTION

The **MOBILE DOCK** mobile loading ramp is expertly engineered and constructed to provide a hydraulically operated elevating ramp for loading and unloading rail cars, trucks, trailers, and storage platforms, from grade or floor level, with the use of power lift trucks and similar materials handling devices.

This manual is provided to enable the user to understand the use, maintenance, and operation of the **MOBILE DOCK** according to the manufacturer's recommendations.

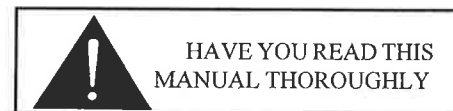
The information presented in this manual is important and essential to the safe operation by the user and for the efficient performance of the **MOBILE DOCK**. Keep this manual in a weatherproof location to assure it is readily available to anyone involved with the use or service of the **MOBILE DOCK**.

IT IS IMPERATIVE ALL OPERATORS HAVE READ AND UNDERSTAND THIS MANUAL PRIOR TO USE OF THE RAMP.

SECTION II.

RULES FOR SAFE OPERATION

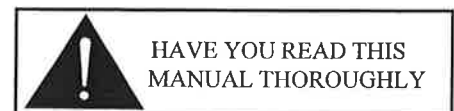
1. This owner's manual has been prepared to familiarize the owner and user of this equipment with the proper preparation before use, the overall operational procedures, safety precautions, and maintenance requirements. It is the owners responsibility to read and understand the information in this manual, and to allow only persons familiar with the safety rules to use the MOBILE DOCK.
2. Use of the MOBILE DOCK requires that both the upper and lower ends be supported for the full width of the unit. Allowing either or both sides of the ramp to overhang the supports may result in a personal injury and damage to both the MOBILE DOCK and lift truck being used. See page 14 of this manual for illustrations.
3. **Never use the MOBILE DOCK at its absolute minimum lowered height which would place its undercarriage or wheels in a load bearing condition.**
4. Never service the MOBILE DOCK without the upper (vehicle) end being supported and the unit secured to prevent movement away from the vehicle or support.
5. Never exceed the rated capacity of the MOBILE DOCK.
6. Caution must be taken when the lift truck used is being backed onto the upper end of the MOBILE DOCK so as not to allow the lift truck to contact the end of the safety curb or completely overrun the side of the safety curb. This condition could result in a personal injury, and/or cause lift truck and ramp damage.
7. Always check to insure that the top apron stops of the MOBILE DOCK are snug against the vehicle or dock being serviced.
8. Always check to insure that both safety chains are wrapped around a solid, non-movable structure of the item being serviced, that all slack is removed from the chains and they are properly secured with the grab hooks engaged between the chain links. While using the MOBILE DOCK, both safety chains should be inspected periodically by the operator to insure they remain secured and are without slack.
9. Always traverse the MOBILE DOCK with the load end of the lift truck toward the high end of the MOBILE DOCK. Keep the lift truck centered within the width of the MOBILE DOCK to avoid running the truck or its load into the side safety curbs which might cause structural damage and place undue stress on the safety anchor chains.
10. When approaching the MOBILE DOCK, always check to insure that the forks on the lift truck are raised high enough to avoid fork or cargo contact with the ramp deck and/or curbs.
11. Always have the hydraulic pump control valve in the "lower" position at all times except when elevating the high end of the MOBILE DOCK with the hydraulic system.
12. Always place the hydraulic pump handle in its storage tube when not being used.
13. Always check to assure that the T-lock handle is tightened securely and the lock washer is compressed when using either the tow bar or the fork hitch assembly for movement of the MOBILE DOCK.
14. Never service the air spring suspension (if so equipped) without reviewing the proper procedure for inflation.



SECTION II.

RULES FOR SAFE OPERATION (cont.)

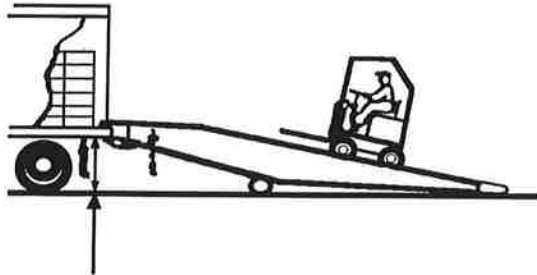
15. Frequently inspect and check the MOBILE DOCK for damaged, missing, or loose parts. Replace all damaged and missing parts and tighten all loose fasteners before using.
16. Always check the safety chains for loose fasteners and weakened or damaged chain components. Any damage must be properly repaired before using the MOBILE DOCK.
17. Always stow the MOBILE DOCK in a protected or secured area to prevent possible injury to non-authorized person not familiar with this equipment. Also, the MOBILE DOCK should be blocked to prevent movement by rolling or tilting about the wheels.
18. Although the MOBILE DOCK is designed for many years of service under normal loading and unloading conditions, some applications may put abnormally high stress on the ramp structure and its components. It is advisable to perform a monthly inspection of the MOBILE DOCK to insure the unit is in a safe operation condition.
19. These safety rules should be maintained in this manual to assure that they will be available at all times to operating and maintenance personnel.



SECTION III.

SPECIFICATIONS DATA (cont.)

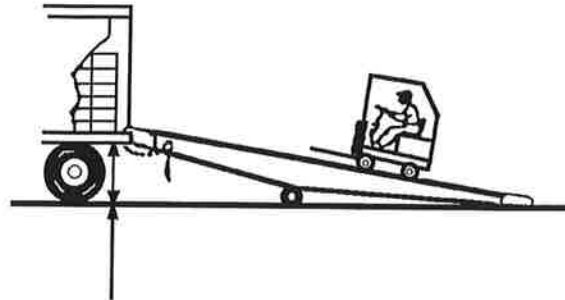
Magliner® Mobile Docks are available in three standard model styles as shown below:



Adjustable height 38" - 62"

6' Level-Off model...Permits level entry into carrier.

AVAILABLE ON 36' LONG MODELS



Adjustable height 38" - 62"

Straight model...inclined entry into carrier.

AVAILABLE ONLY IN 30' LONG MODELS

8' Level-Off model...Permits level entry into carrier.

AVAILABLE ON 38' LONG MODELS

All Magline® Mobile Docks are assembled and tested at the factory to assure their proper operating condition before shipment. At this time, all necessary adjustments are made and an overall physical inspection conducted. After the unit has been delivered, some final adjustments may be required as outlined in the operation or maintenance sections of this manual.

The main components of the Mobile Dock included as standard equipment are:

- A. Welded Frame Ramp Assembly.
- B. Grating (ramp surface), mechanically fastened and is replaceable.
- C. Wheel Yoke Assembly.
- D. Wheels - 2 each.
- E. Hydraulic Elevating (lift) System.
- F. Detachable Towing Bar.
- G. Safety Lock Chain Assembly - 2 each.

SECTION III.

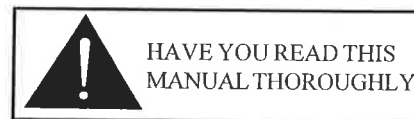
SPECIFICATIONS DATA (cont.)

Magliner® MOBILE DOCKS are available in several sizes and capacities. The capacity rating is a total capacity that requires the inclusion of the load being transported, the lift truck (or other vehicle being used), the operator, and any other miscellaneous weight that might be a part of the combined loads supported by the ramp.

The approximate weight of various power lift trucks is shown in the table below:

Fork Lift Rated Capacity (lbs.)	Approx. Combined Weight Of Fork Lift Fully Loaded To Rated Capacity (lbs.)
4,000	11,000
5,000	13,000
6,000	16,000
8,000 - 9,000	20,000
10,000	24,000

- **NOTE:** Care should be taken to note your model number and loading requirements to prevent exceeding the rated capacity of your MOBILE DOCK.



SECTION IV.

OPERATING INSTRUCTIONS

This section will familiarize you with the operating controls and devices of the MOBILE DOCK mobile loading ramp and provide necessary and sufficient instructions to enable you to use the ramp efficiently and safely. **FOR SAFE** and trouble-free operation, study the manual before placing the ramp into operation.

Certain items as listed require assembly to the MOBILE DOCK after it is received from the manufacturer. These items are banded to the ramp or packed in a separate carton securely attached to the ramp. Remove and open the carton, check the contents. The following items are included:

- Item 1:**
- (2) Safety chain and grab hook assemblies, (attached to ramp frame and banded to underside of ramp deck).
 - (2) Safety chain storage links with fasteners (in carton).

Attach and fasten securely one storage link on each side of the ramp. Holes in the ramp sides are provided. See Figure 1, Section VII, page 15 for exact location.

NOTE: The head of the bolt is placed against the storage link with the washer and nut on the inside ramp surface.

- Item 2:**
- (1) Towing Bar (banded to underside of ramp deck).
 - (2) Storage Brackets With Fasteners (in carton).

Attach the (2) brackets to the right side (standing at the ground end, looking up the ramp) as shown in Figure 1, Section VII, Page 15. Holes in the ramp side are provided.

- Item 3:**
- (1) Hydraulic Pump Handle (banded to top of ramp deck).

Storage for the pump handle is provided on the left side of the ramp next to the hydraulic pump.

- **NOTE: CARE & CAUTION** should be taken to insure that all fasteners and hardware are tight and secure to provide the proper attachment of the chain storage links and tow bar storage brackets.

SECTION IV.

OPERATING INSTRUCTIONS (cont.)

A. Safety Tips -

1. Avoid ramp downtime by observing the MOBILE DOCK maintenance instructions outlined in Section V.
2. Never exceed the rated load capacity.
3. Disconnect the ramp from vehicle being serviced and move the ramp a clear distance before allowing the vehicle to be moved. This is a safety precaution for personnel and will also prevent possible damage to the ramp.

B. Towing your MOBILE DOCK when it is not in use is easily done with the quick detaching tow bar which is stored on the right side of the ramp deck.

1. Raise and block up the ground end of the ramp and place the tow bar over the holes located in the center of the ramp deck.
2. After engaging the center tow bar clip in the 2" x 3" hole in the ramp deck, push the T-lock down through the 3/4" x 5 1/2" slotted hole in the ramp deck. **NOTE:** The T-lock should be threaded up as far as possible.
3. Rotate the T-lock handle 90 degrees and pull upward, engaging the ends of the clamp into the round holes on either side of the slot. Tighten lock handle securely.

CAUTION - It is necessary to fully compress the lock washer when tightening the T-lock handle. Check for tightness and compression of lock washer.

4. Attach the hitch eye of the tow bar to the towing vehicle.

CAUTION - The pump control valve must be in the "LOWER" released position while the ramp is being towed.

5. Reverse the procedure to remove the tow bar and place it on the storage brackets before putting the ramp into position for use.

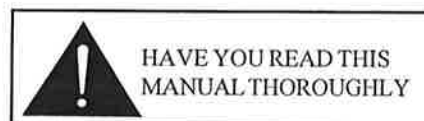
C. Elevate -

1. Move the high end of the ramp towards the vehicle or dock floor.
2. Remove the pump handle from the pump storage tube.
3. Insert the pump handle through the pump access port and into the pump beam.
4. Place the pump control valve in the RAISE position (page 12).
5. Pump up the high end of the ramp so that it is 2-3 inches above the work surface.

D. Position -

1. Position your ramp so that its forward apron overlaps the floor of the truck, rail car or platform that is being serviced.
2. The apron stops should be against the outer edges or door rails of the vehicle or platform.

CAUTION - DO NOT attempt to back the vehicle being serviced into the ramp, damage could result. The ramp is designed and balanced for easy positioning.



SECTION IV.

OPERATING INSTRUCTIONS (cont.)

E. Lower -

1. Place the pump control valve in the "LOWER" position (page 12). The ramp will then settle to rest upon the work surface.

CAUTION - Keep the pump control valve in the "LOWER" position while the ramp is being used. Failure to do so may cause excessive pressure in the hydraulic systems and on the wheels and axles causing extensive damage.

2. Place the pump handle back into the storage tube.

F. Adjustable Height -

- The total adjustable height range of the MOBILE DOCK is achieved by both hydraulic cylinders and a three position lower cylinder mount on the wheel yoke assembly.

The cylinders are set at the factory to raise the ramp from 38" - 39" through 61" - 62". At this setting, the approved minimum safe operating range is 42". Although the ramp can lower to 38", it must not be used below 42" minimum as it will put excessive pressure on the hydraulic system, wheels, and axles and could create an unsafe operating condition. If a 38" operating height is required, the cylinders must be re-located on the wheel yoke assembly as follows:

With the hydraulic system, raise the high end of the MOBILE DOCK and place a firm support under the apron end. Release the hydraulics so the ramp will settle and rest on this support. Then remove the two lower clevis pins, Item 6. Extend the cylinders so they align with the lower hole in the mounting bracket, reinstall the clevis pins, Item 6, and the cotter pins, Item 8. See wheel yoke assembly, Figure 2, Page 16.

This change will allow the ramp to lower to 34" - 35" and provide a minimum working height of 38" - 39".

CAUTION / IMPORTANT: The ramp undercarriage must not be in a load bearing condition when the ramp is being used for loading or unloading.

G. Secure/IMPORTANT -

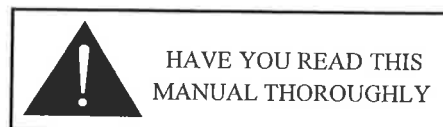
1. Be sure to secure your ramp in position with both safety chains. Loop the end of each safety chain around a solid non-movable structure of the item being serviced.
2. Remove all slack and secure by engaging the grab hook on each safety chain between the chain links. **IT IS IMPORTANT FOR THE OPERATOR TO PERIODICALLY CHECK TO INSURE THE CHAINS REMAIN SECURED AND ARE WITHOUT SLACK.**

H. Use of Ramp -

1. The load end of the power lift truck should always be toward the elevated end of the ramp and the lift raised high enough to avoid fork or cargo contact with the ramp deck and safety curbs.

I. Stowing Procedure -

1. Check to see that the trailer hitch is properly stored and ready for use.
2. Check to see that the hydraulic pump operating handle is properly stowed in the tubular recessed compartment.
3. Check safety chains to see that they are properly stowed and in working order.
4. Inspect the unit carefully for grease or hydraulic leaks and any visual signs of damaged components.
5. Block the high end, or secure by any other means, to prevent accidental tilting which may cause possible personnel injury.



SECTION V.

MAINTENANCE & REPAIR INSTRUCTIONS

Oil Reservoir

- Keep the oil reservoir filled with hydraulic fluid (the fill plug is located on the top of the pump). Always check the fluid level when the ramp is in the lowered position. Also, fill the reservoir in this same lowered position as the reservoir capacity is such that it will provide enough fluid to fully extend the cylinders. Never fill in the elevated position as the excess fluid would be forced into the reservoir by lowering of the ramp and pump damage could result. **USE ONLY HYDRAULIC FLUID, MIL-H-5606C OR EQUAL. NEVER USE BRAKE FLUID AS IT DISSOLVES THE PACKING MATERIALS AND LEAKAGE WILL OCCUR.**

Line Bleeding

- After filling the oil reservoir, it could be necessary to bleed the hydraulic system of air. Slightly loosen the hydraulic fitting at one of the cylinders and pump slowly until all traces of air in the oil disappear. Tighten the fitting and refill the reservoir. It may be necessary to repeat this operation several times to completely remove all air from the system.

Tire Inflation (Pneumatic Tires)

- The correct cold inflation air pressure for the 25"x7.5"x10" ply. pneumatic tires is 100lbs.

Wheel Bearings

- The wheels have been packed at the factory with weatherproof automotive grease. They should be greased moderately every six months. Care should be taken not to over fill with grease.

Wheel Nuts (Pneumatic Tires)

- The wheel nuts are torqued to 85-95 ft. lbs. when installed at the factory. If any maintenance requires the removal of the wheels, this 85-95 ft. lbs. must be achieved in the reassembly of the wheel nuts.

Air Spring Suspension

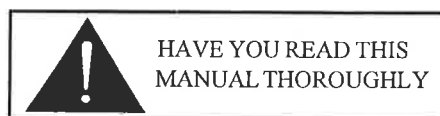
- Place the hydraulic pump control valve in the lower position to allow the ramp to settle with its weight on the air springs.

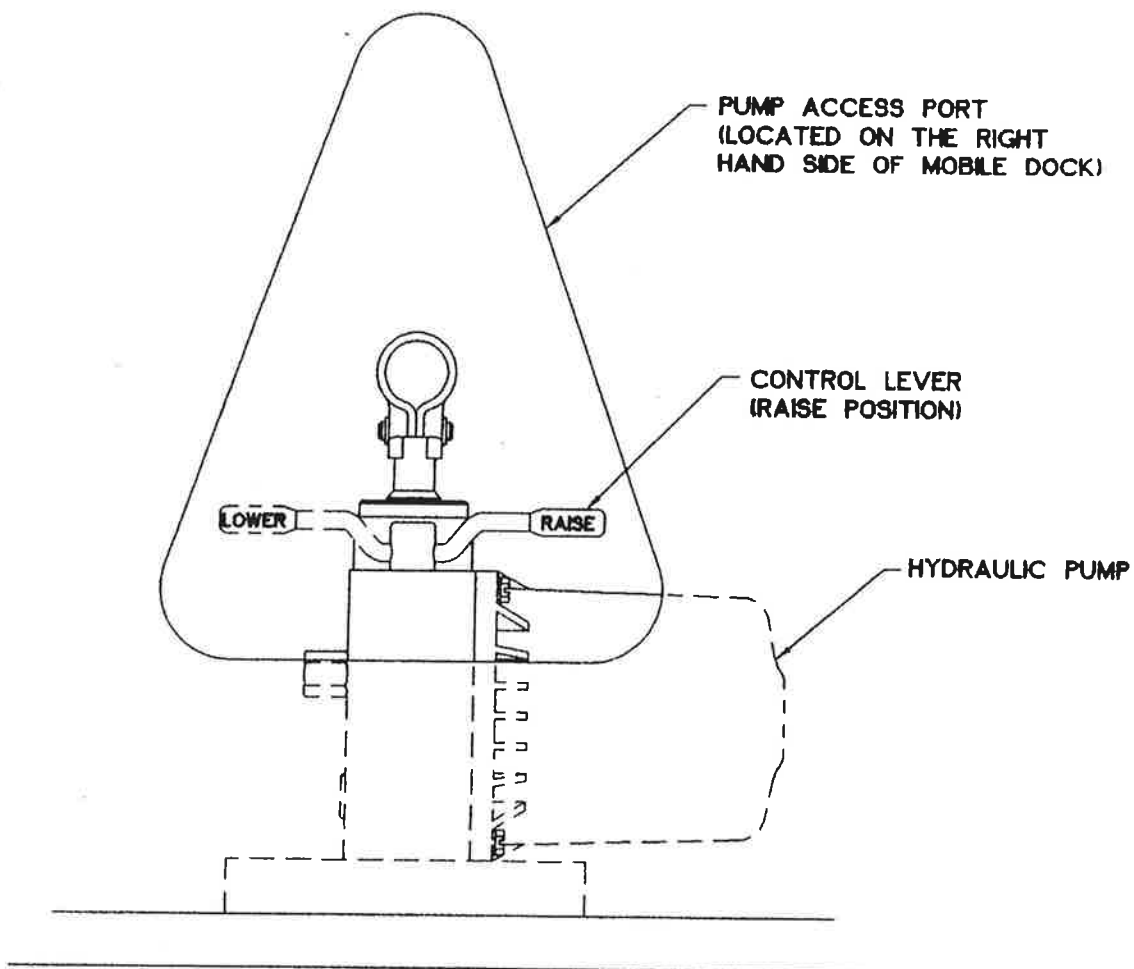
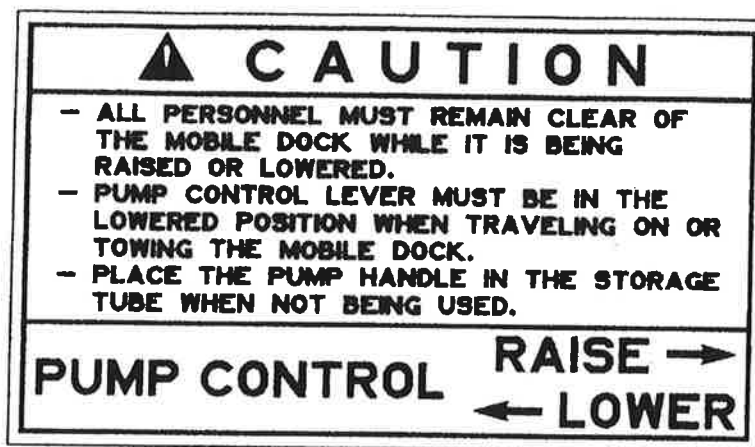
Do Not inflate either of the two air springs until inspected to assure that the weight of the ramp is on both springs. It is also necessary to make certain that the bottom plate of each air spring is in total contact with the support plate welded to the top of the undercarriage assembly.

The correct inflation pressure for the above condition is 45-50 psi.

WARNING: For maximum operator safety, inflate only when the air springs are supporting the ramp weight. Do not over-inflate.

If the pressure in the air springs is checked without the ramp weight upon them, the correct reading is 40-50 psi. Do not attempt to inflate in this condition. Lower the ramp per procedure detailed above.

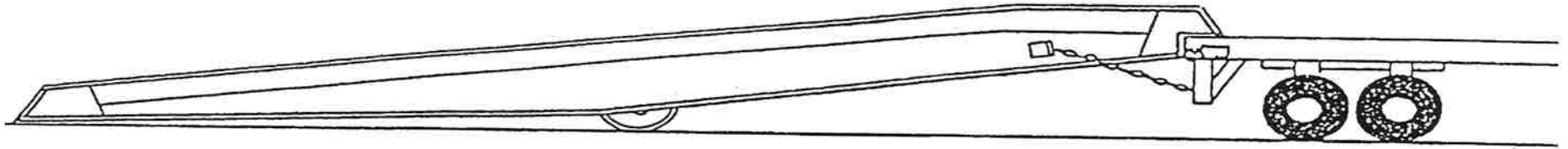




<p>Parts List Mobile Dock (ME, MG-8436)</p>

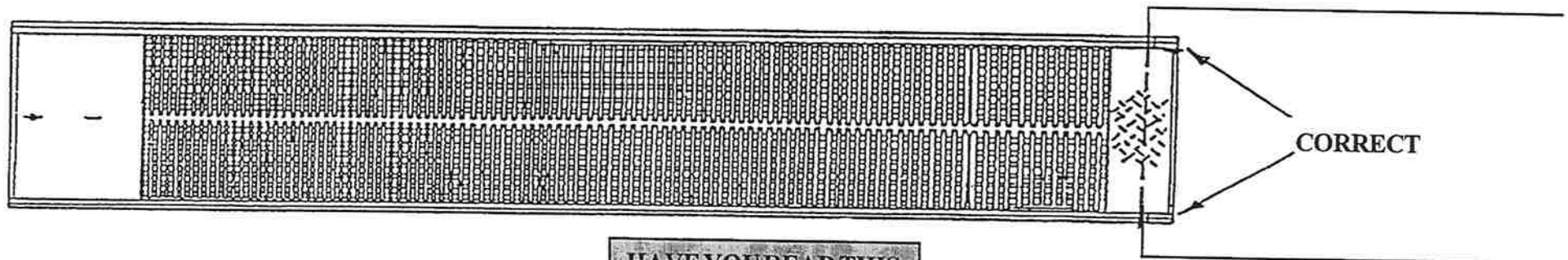
<u>Fig. No/Index No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Quantity</u>
I		Ramp Assembly	1
1-1 Galv.	311169	Grating 59" lg., GW175 x 36" Galv.	2
1-2 Galv.	76328	Grating 310" lg., GW175 x 36" Galv.	2
1-1 Epoxy	311165	Grating 59" lg., GW175 x 36" Epoxy	2
1-2 Epoxy	76327	Grating 310" lg., GW175 x 36" Epoxy	2
1-3A	410052	Tow Bar Assembly	1
1-3B	310135	Fork Hitch Assembly	1
1-4A	310163	Front Tow Bar Stor. Brkt.	1
1-4B	310162	Rear Tow Bar Stor. Brkt.	1
1-5	311298	Safety Chain Assy- Complete w/Hdwe.	2
1-6	310251	Grating Clamp (small) w/Hdwe.	45
2		Under Carriage/Wheel Yoke Assembly	1
2-1	311130	Wheel Yoke Weldment	1
2-2	13823	Wheel, 18" x 5" Mold On	2
2-3	80762	Washer, 1½" Flat	4
2-4	310133	Axle, 1½"	2
2-5	310134	Pivot Pin, 1½"	2
2-6	81087	Clevis Pin, 1" x 4½"	4
2-7	81073	Cotter Pin, ¼" x 2½"	8
2-8	81082	Cotter Pin, 3/16" x 1¾"	4
2-9	80762	Washer, 1½" Flat	4
2-10	310828	Yoke Mounting Block	4
2-11	80050	½-13 unc. x 2½" Hex Head Cap. Screw	8
2-12	80606	½-13 unc. Locknut	8
2-13	80704	Washer, ½" Plain	8
3		Hydraulic System	1
3-1	55501	Pump, #HP3004-41-14	1
3-2	55504	Hydraulic Cylinder	2
3-3	55507	Union, 90° Adapter, ¼"	3
3-4	55506	Union, 90° Adapter, 1/8" x ¼"	1
3-5	55508	Tee Female, ¼"	1
3-6	55502	Hose, Hydraulic, ¼" x 44"	1
3-7	55181	Hose, Hydraulic, ¼" x 26"	2
3-8	81026	Clamp, Hose	3
3-9	81006	Rivet	3
	80001*	Screw, ¼" unc. x 1"	3
	80601*	Nut, ¼" unc.	3

(* Replacement Parts for Item 9)



CAUTION NOTICE

Magliner Mobile Docks are designed to require full dock width contact and support at each end during the loading and unloading process. Under no circumstances should the ramp be used in any situation where the ramp width overhangs the surface being loaded to or from. Use of the Mobile Dock in an overhang situation can result in product failure and potential injury to users.



HAVE YOU READ THIS
MANUAL THOROUGHLY

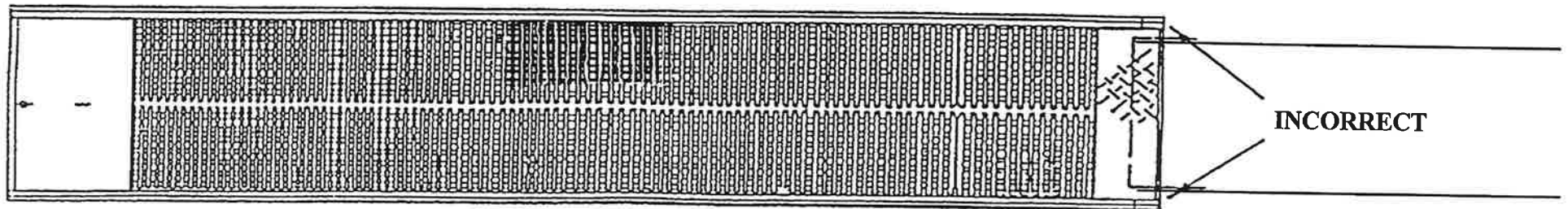
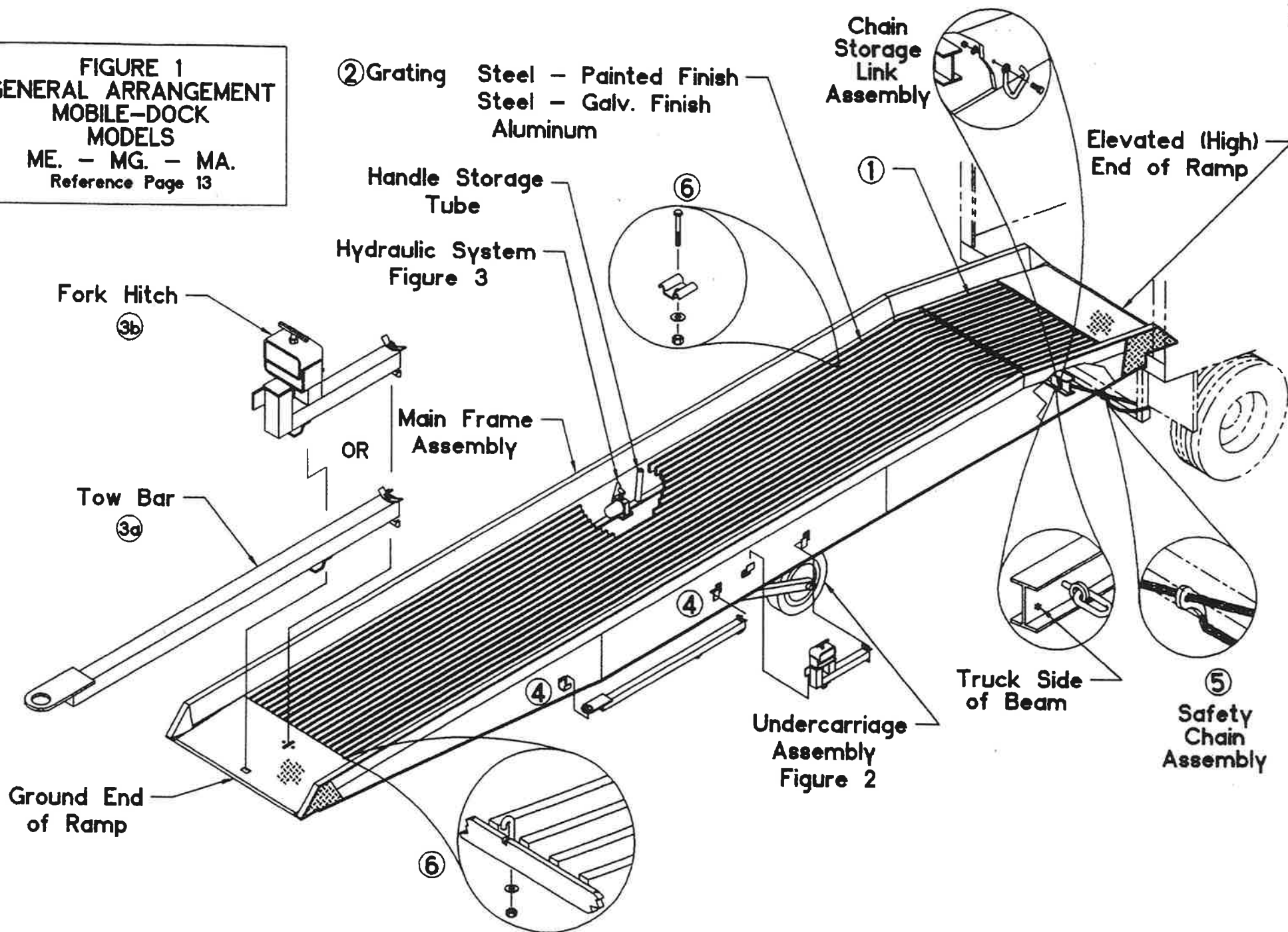
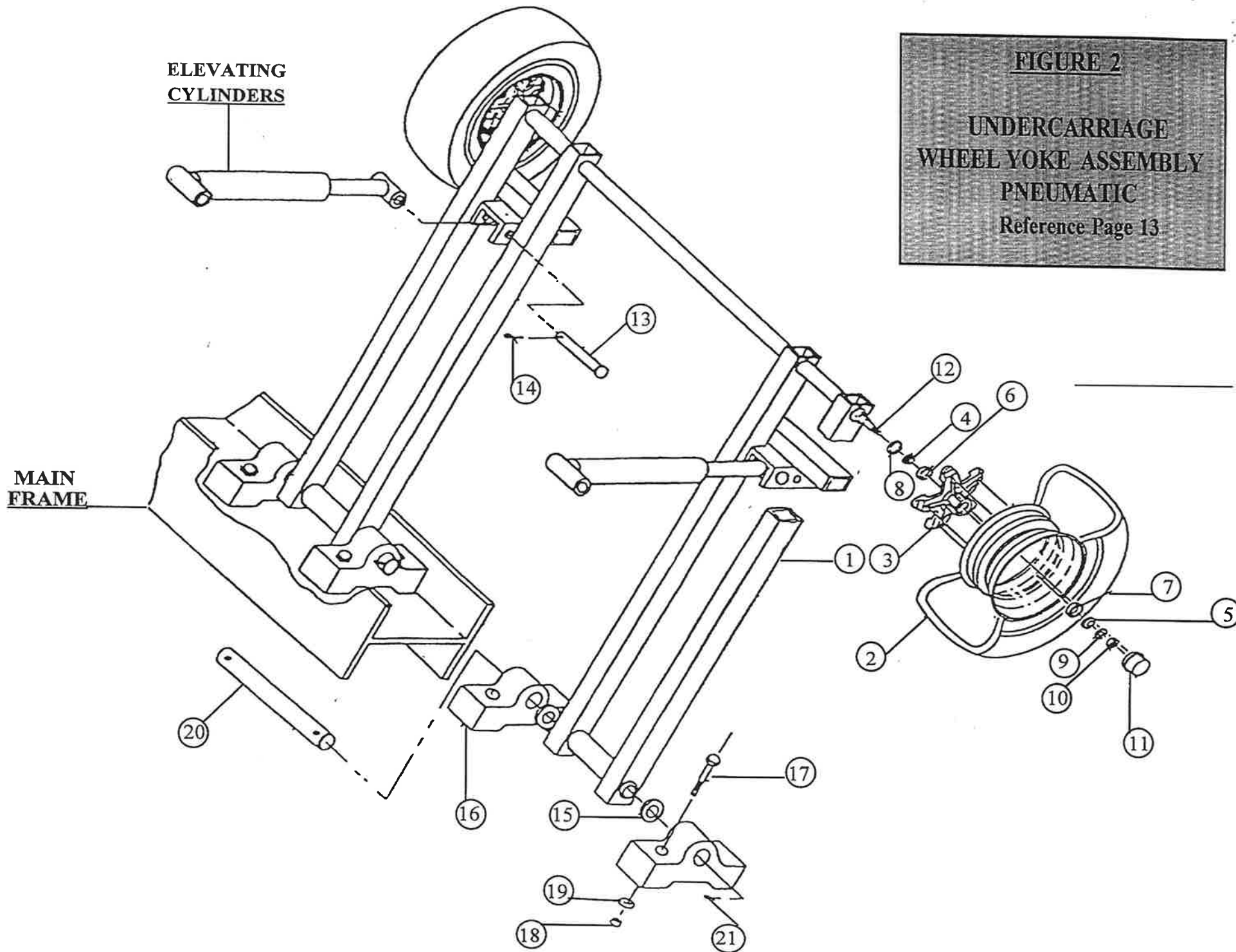


FIGURE 1
GENERAL ARRANGEMENT
MOBILE-DOCK
MODELS

ME. — MG. — MA.
 Reference Page 13





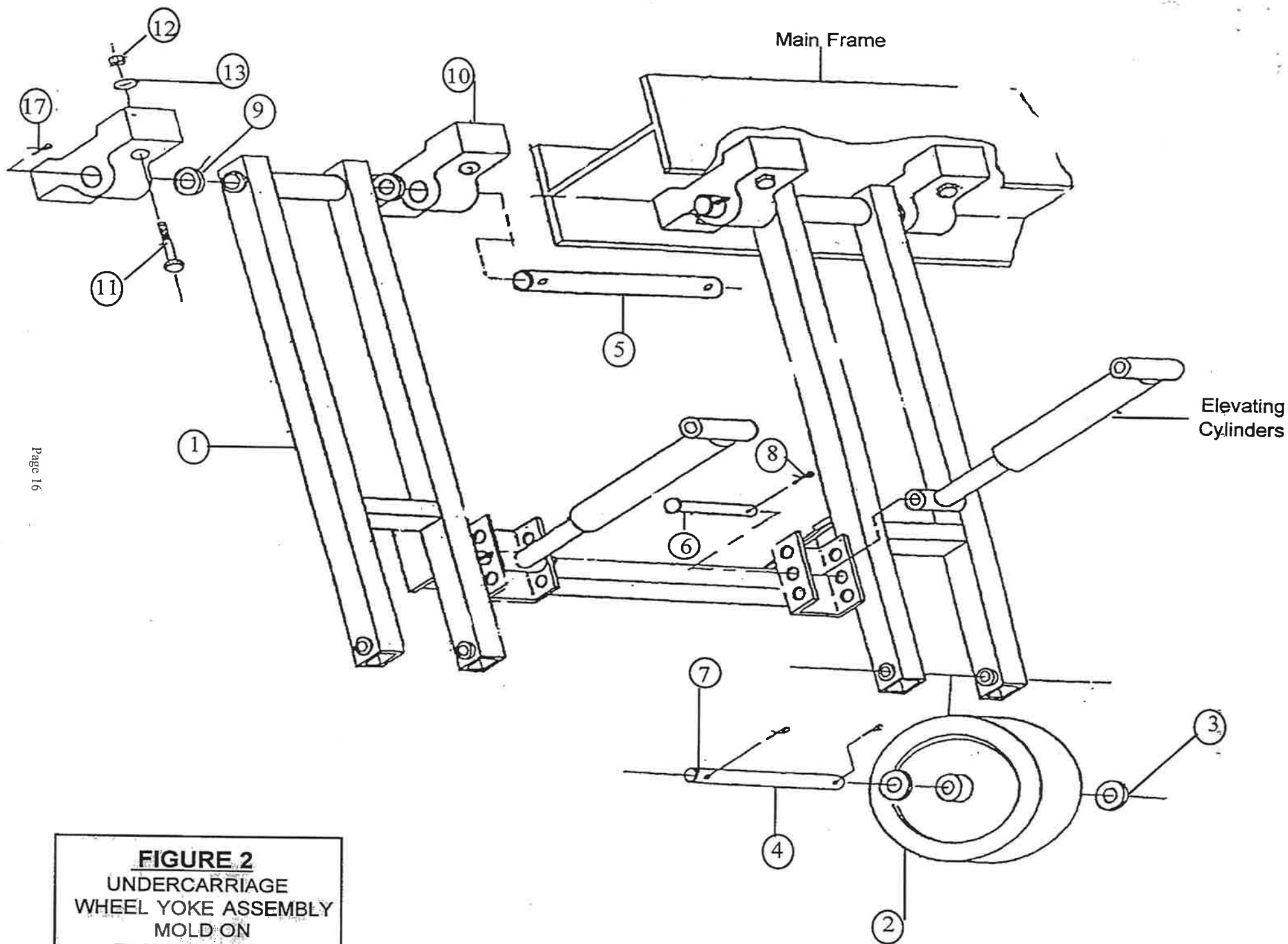
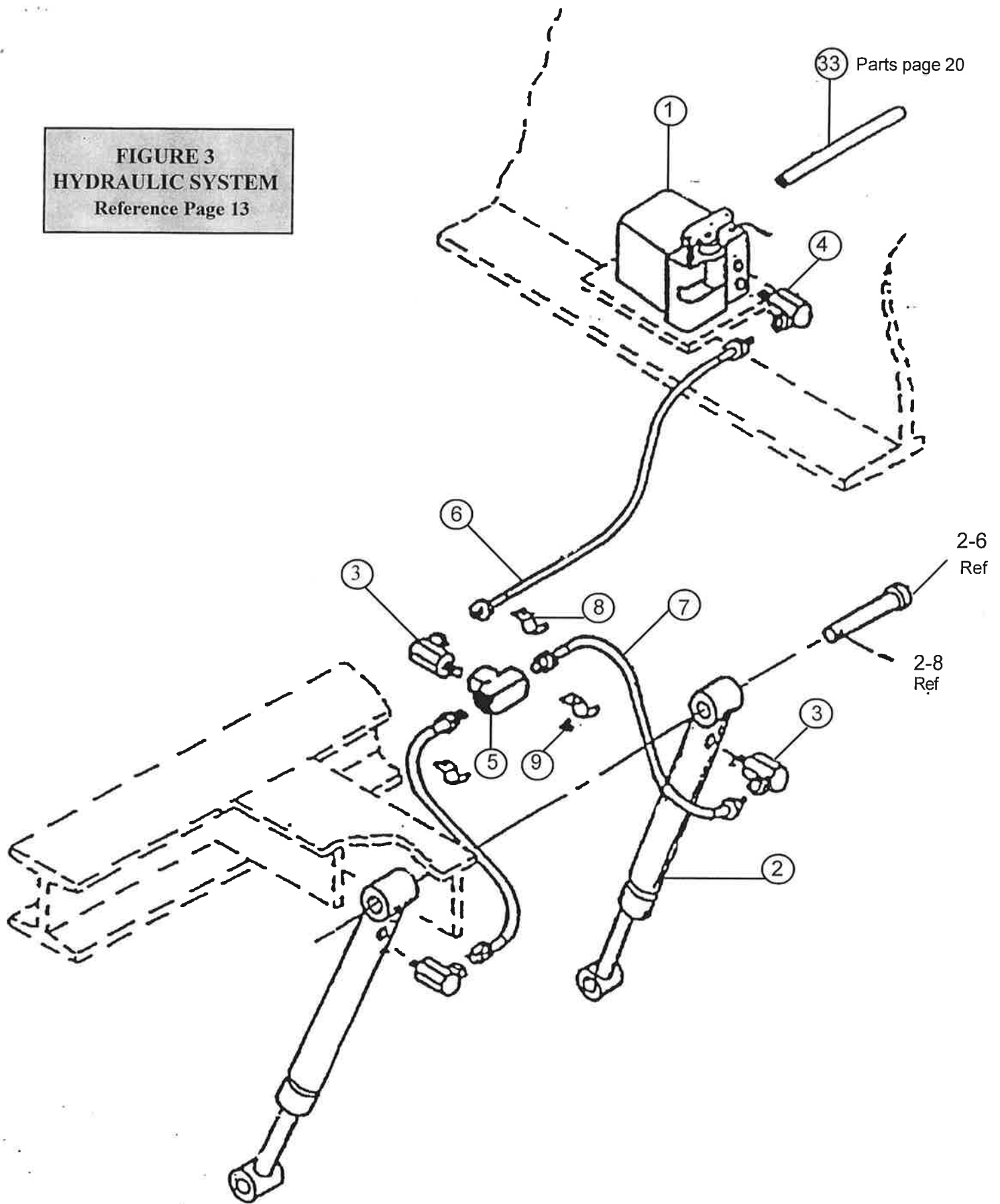
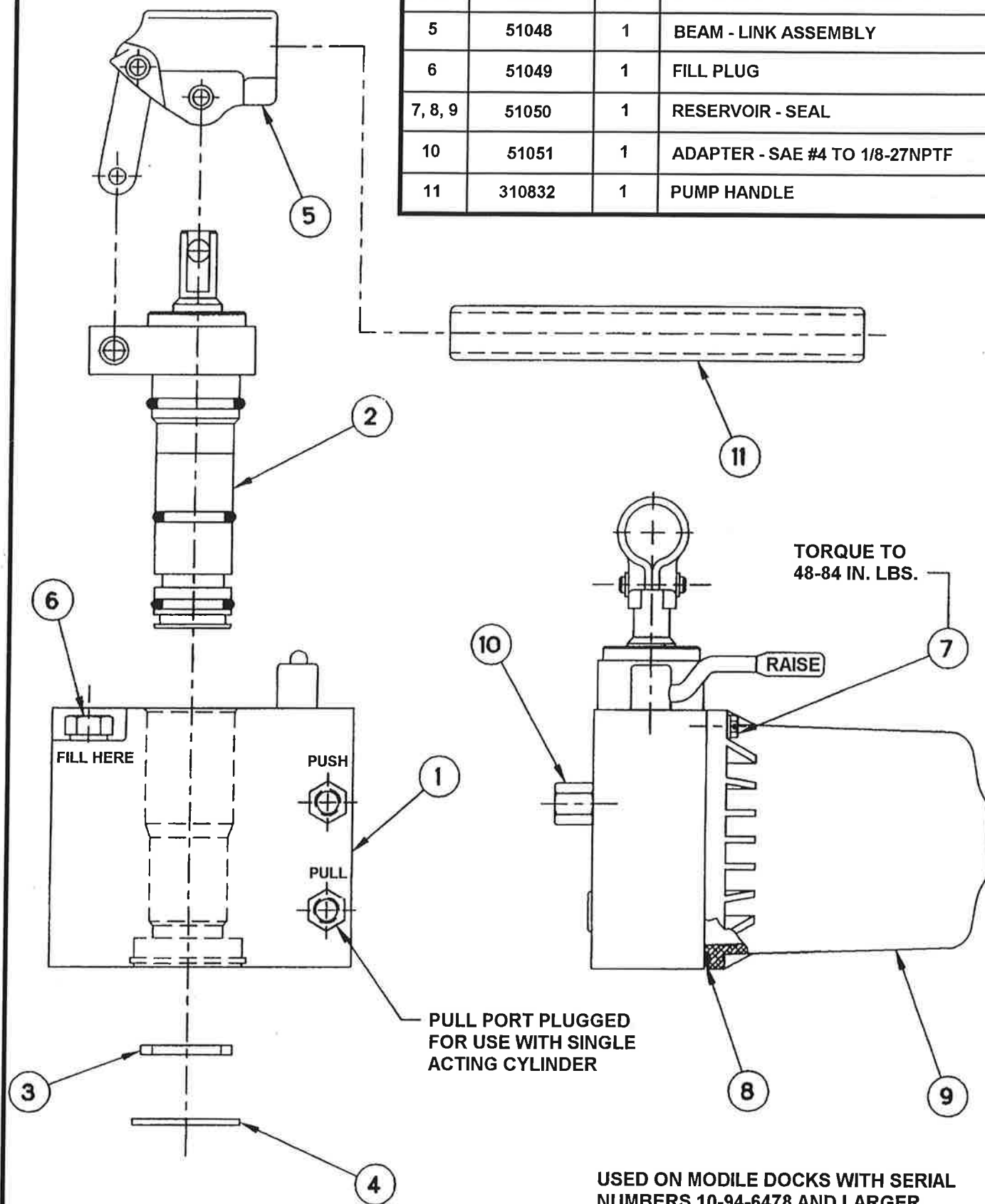


FIGURE 2
 UNDERCARRIAGE
 WHEEL YOKE ASSEMBLY
 MOLD ON
 Reference Page 13

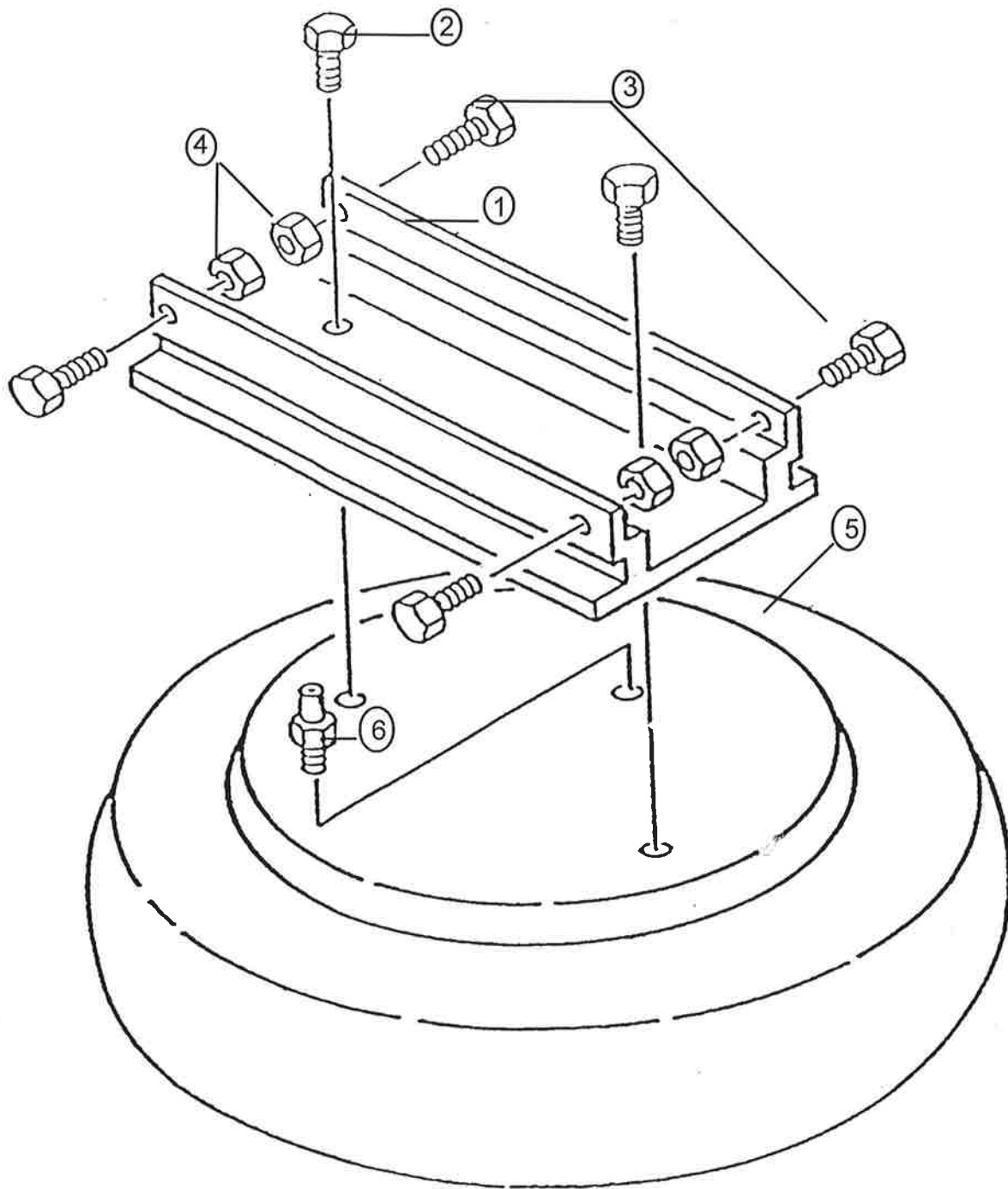
FIGURE 3
HYDRAULIC SYSTEM
Reference Page 13



ITEM	SERVICE KIT PART NO.	NO. REQ'D.	DESCRIPTION
1	NOT A SERVICE PART	1	PUMP BODY ASSEMBLY
2, 3, 4	51047	1	CYLINDER - INSERT ASSEMBLY
5	51048	1	BEAM - LINK ASSEMBLY
6	51049	1	FILL PLUG
7, 8, 9	51050	1	RESERVOIR - SEAL
10	51051	1	ADAPTER - SAE #4 TO 1/8-27NPTF
11	310832	1	PUMP HANDLE



AIR SPRING ASSEMBLY



1. 310829	HANGER, AIR SPRING.	2
2. 80025	CAPSCREW, Hex Hd., 3/8 16x 3/4 "COML".	.4
3. 80025	CAPSCREW, Hex Hd., 3/8 16x 1 "COML".	...8
4. 80603	LOCKNUT, Hex, 3/8 16 "COML".	...8
19060	AIR SPRING ASSEMBLY.	2
5. 19061	SPRING, Air (1B12-306) (73842).	2
6. 19047	VALVE, Air (1498P-8) (27783).	2

WARNING: INFLATE THE AIR SPRINGS IN ACCORDANCE WITH THE INSTRUCTIONS ON
PAGE 11. **DO NOT OVER INFLATE.**