



**MANITOU NORTH AMERICA, INC.**

6401 IMPERIAL DRIVE  
Waco, TX 76712-6803

***NOTE:** Manitou Forklift Manuals are continually updated and subject to change without prior notice. If your Forklift Mast Model or parts are not found in this manual, please contact your dealer or the Manitou North America Parts Department for the latest information and parts availability.*

**3500 SERIES  
2 RAIL MAST**

2,500 - 8,000 LB. CAPACITY

MODELS K3501 THRU K3507

**PARTS MANUAL**

For Parts Orders contact your Manitou North America Dealer or call:  
**Manitou North America, Parts Dept.** 800-425-3727 or (254) 799-0232  
Parts Dept. Fax: (254) 867-6504 Website: [www.manitou-na.com](http://www.manitou-na.com)

## GENERAL INFORMATION

The purpose of this catalog is to provide illustrations for identifying and ordering Mast components/parts. Because of the multitude of Mast Models and components utilized, the illustrations provide a general description and therefore may not show the *exact* shape or detail of the components/parts represented.

The Mast parts are identified by an Item Number on the illustration or picture page. Find the Item Number for the part desired, then locate that Item Number under the "Items" column following the illustration. The Part Number will be located directly to the right of the Item Number. Also provided is a part Description, Quantity of parts required and the mast Model number.

Most important when ordering parts, is providing the correct serial number as assigned to the mast at the factory. Keep accurate records of all modifications or improvements made to the mast after manufacture. (All Mast modifications must be authorized by K-D Manitou.) Notify the Parts Dept. of any changes that may affect your parts order.

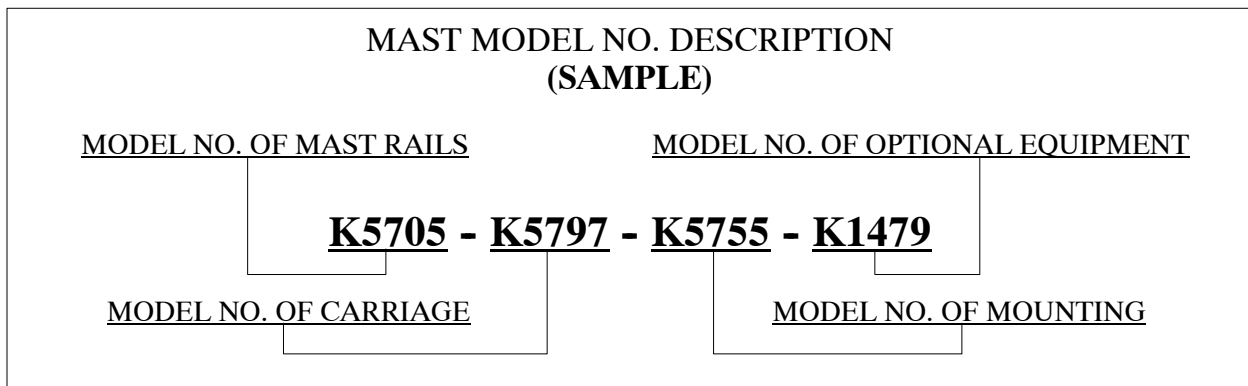
When ordering Mast parts or requesting technical information, the following numbers are required:

Mast Model Number: \_\_\_\_\_

Mast Serial Number: \_\_\_\_\_

*For quick reference it is recommended these numbers be recorded as soon as possible.*

The Mast Model Number is stamped on the Identification Plate located on the right side (as viewed from the driver's seat) of the Outer Rail, at or above eye level.



To order Mast Parts, contact the ***K-D MANITOU DEALER*** in your area or

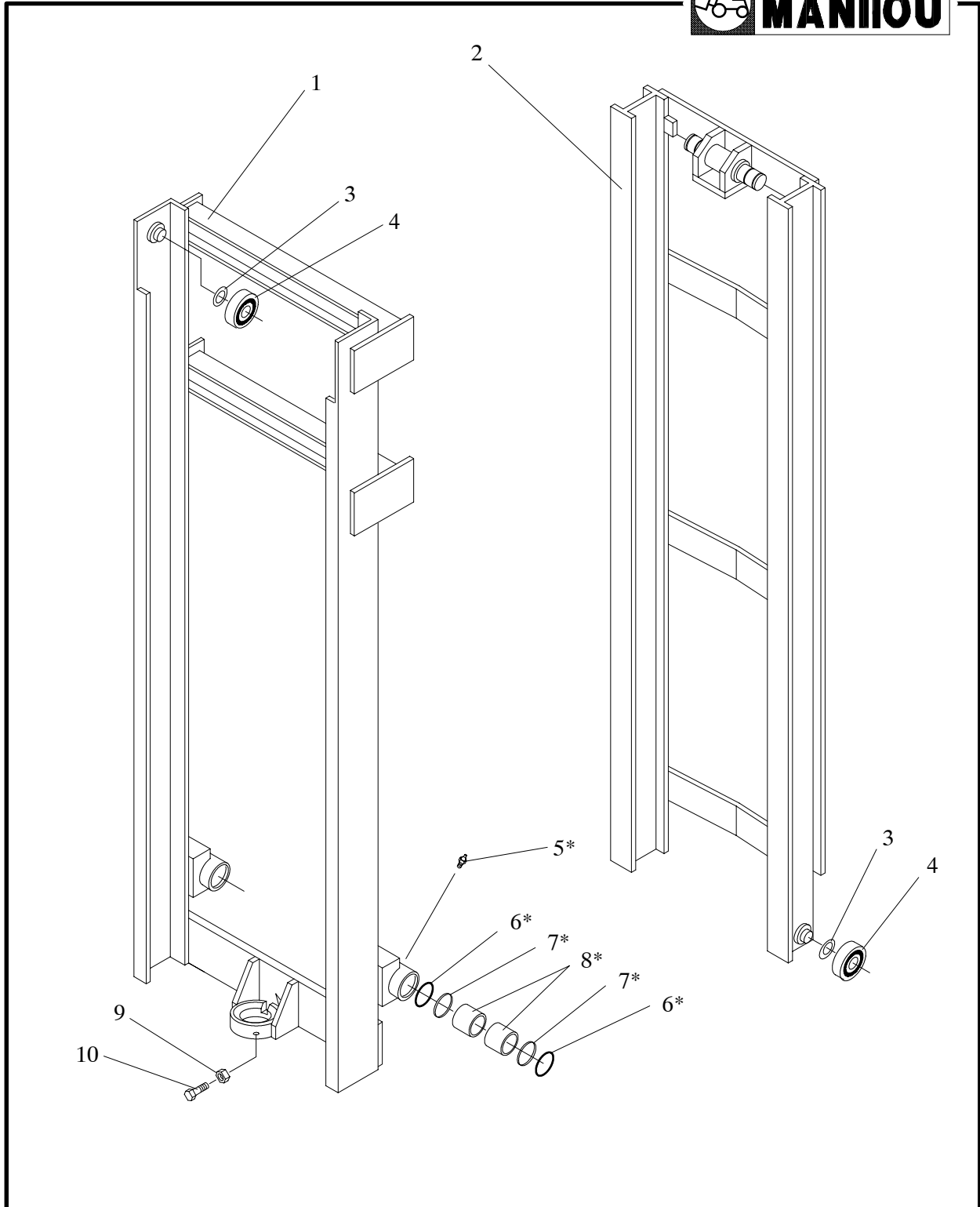
***K-D Manitou, Parts Division, Waco, Texas.***

1-800-425-3727

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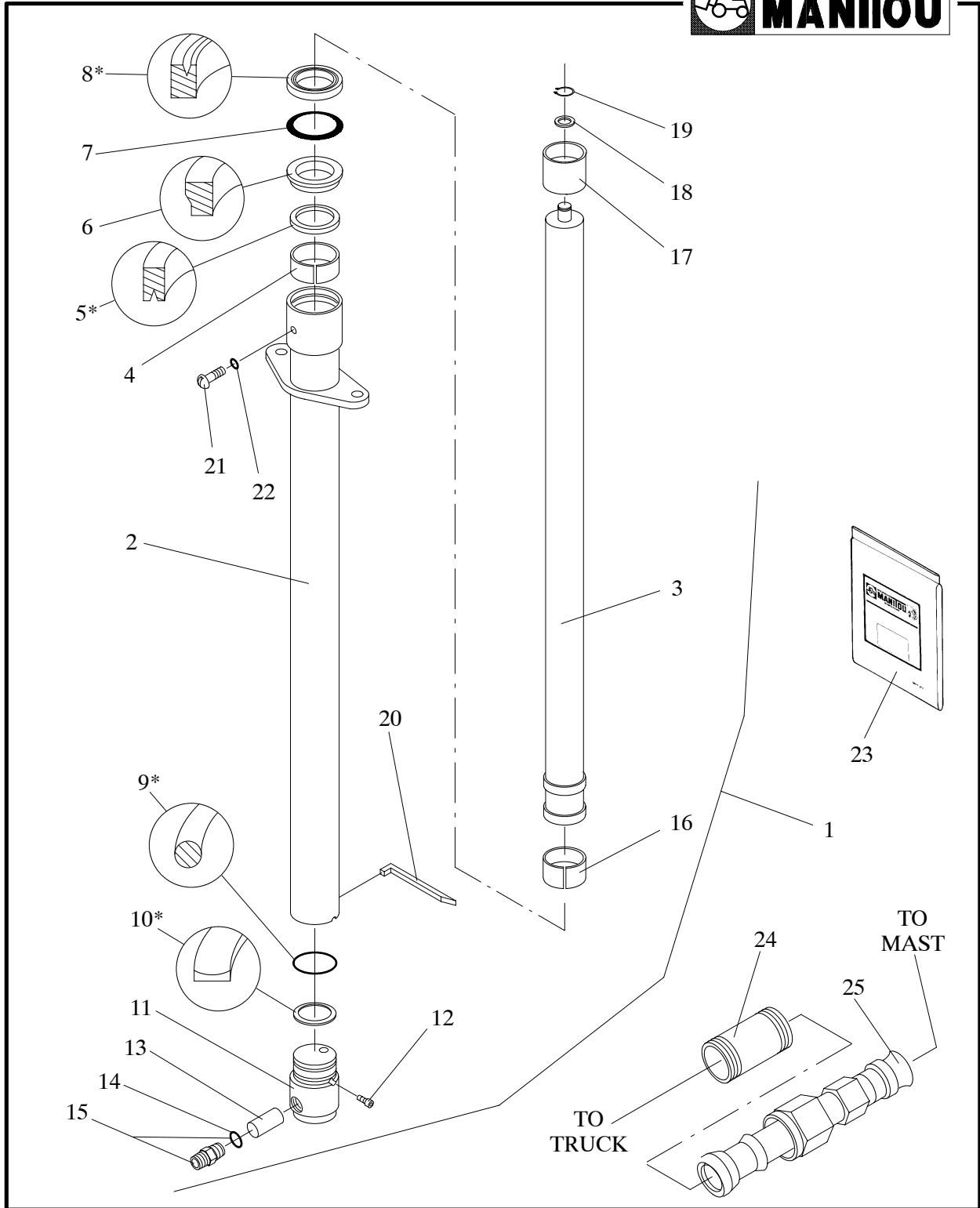
# MAST RAIL ASSEMBLIES



<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>MODEL</u>
1	R8360-5	Outer Rail Assembly	1	K3501
1	R8362-6	Outer Rail Assembly	1	K3502
1	R8360-7	Outer Rail Assembly	1	K3503
1	R8360-8	Outer Rail Assembly	1	K3504
1	R8360-16	Outer Rail Assembly	1	K3507
2	R65-2	Inner Rail Assembly	1	K3501
2	R65-3	Inner Rail Assembly	1	K3502
2	R65-4	Inner Rail Assembly	1	K3503
2	R65-5	Inner Rail Assembly	1	K3504
2	R65-16	Inner Rail Assembly	1	K3507
3	R22	Shim	A/R	ALL
4	R2	Roller	4	
5*	K87901	Fitting, Grease	2	
6*	R106	Ring, Retaining	4	
7*	R4584	Wiper	4	
8*	R7638	Bearing, Mast Mounting	4	
9	R63	Bolt, Cylinder Restraining	1	
10	K33845	Nut	1	

\* For use on Masts mounted to K-D Manitou M-Series Forklift Trucks only.

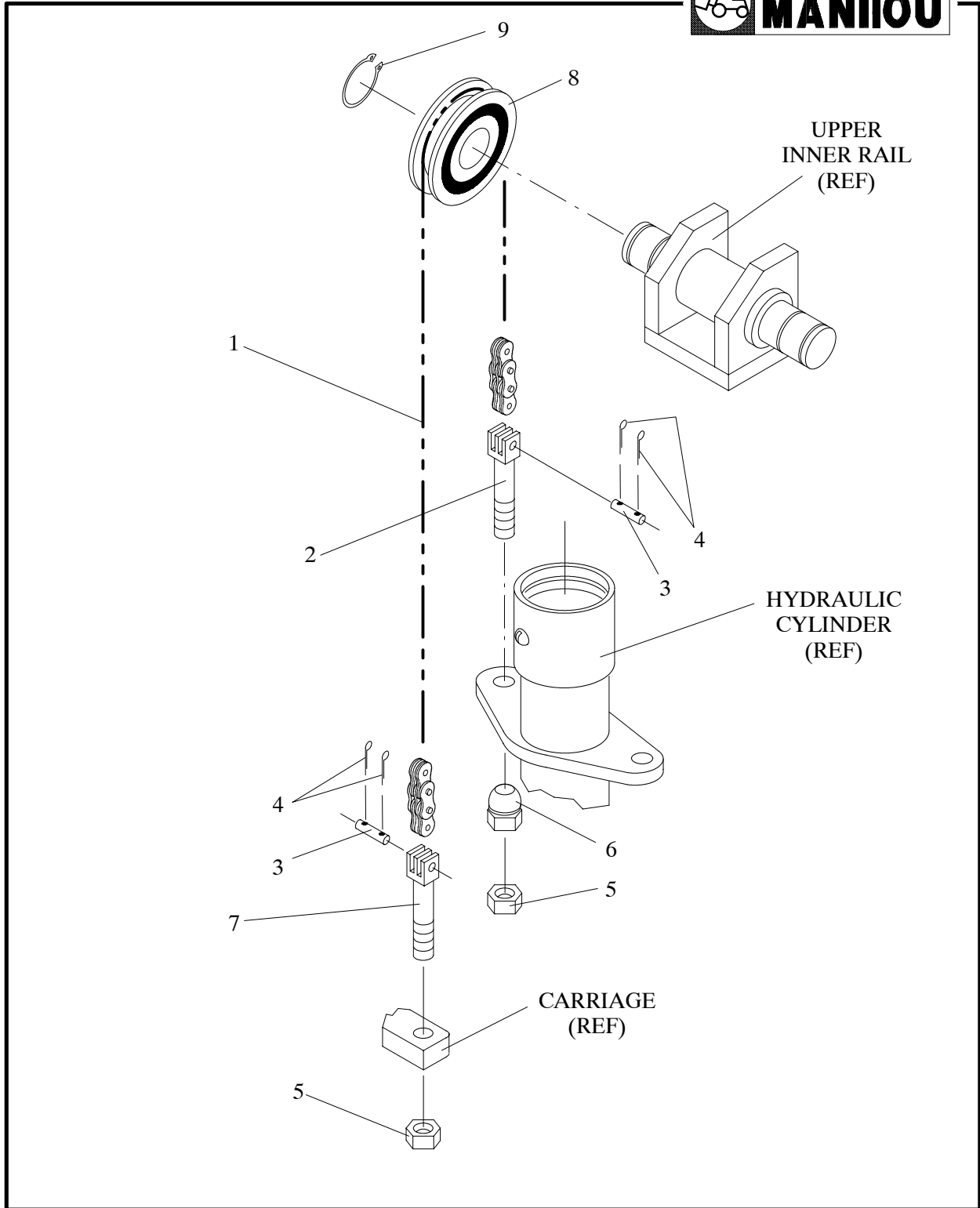
# CYLINDER ASSEMBLY



ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL	YEAR
1	R2150-1	Cylinder Assembly	1	K3501	
1	R2150-2	Cylinder Assembly	1	K3502	
1	R2150-3	Cylinder Assembly	1	K3503	
1	R2150-4	Cylinder Assembly	1	K3504	
1	R2150-12	Cylinder Assembly	1	K3507	
2	R2160-1	Barrel Assembly	1	K3501	
2	R2160-2	Barrel Assembly	1	K3502	
2	R2160-3	Barrel Assembly	1	K3503	
2	R2160-4	Barrel Assembly	1	K3504	
2	R2160-19	Barrel Assembly	1	K3507	
3	R2165-1	Piston Assembly	1	K3501	
3	R2165-2	Piston Assembly	1	K3502	
3	R2165-3	Piston Assembly	1	K3503	
3	R2165-4	Piston Assembly	1	K3504	
3	R2165-12	Piston Assembly	1	K3507	
4	R2554	Ring, Wear	1	ALL	
5*	-----	Seal	1		
6	R347	Retainer, Seal	1		
7	R346	Snap Ring	1		
8*	-----	Wiper	1		
9*	-----	O-Ring	1		
10*	-----	Ring, Back Up	1		
11	R2158	Plug	1		
12	K306401	Screw, Cap	1		
13	R348	Control, Flow	1		
14	K914	O-Ring	1		
15	K62-12-14	Adapter (Includes Item 14)	1		
16	R2156	Wear Ring	1		
17	R2233-1	Spacer	1	K3501, K3502	
17	R2233-2	Spacer	1	K3503	
17	R2233-3	Spacer	1	K3504	
17	R2233-15	Spacer	1	K3507	
18	R102	Washer	1		
19	R13453-1	Ring, Snap	1		
20	R2211-2	Lock Wire	1		
21	R2551	Screw, Button Hd	1		
22	R2552	Washer, Seal	1		
23	R2190	Seal Kit	1		
24	426210	Union	1	(M230/430CP, w/out 45 <sup>0</sup> tilt)	
25	426593	Tube Assembly	1	(M230/430CP, w/out 45 <sup>0</sup> tilt)	

\* Included in Seal Kit, Item 23.

# CHAIN ASSEMBLY



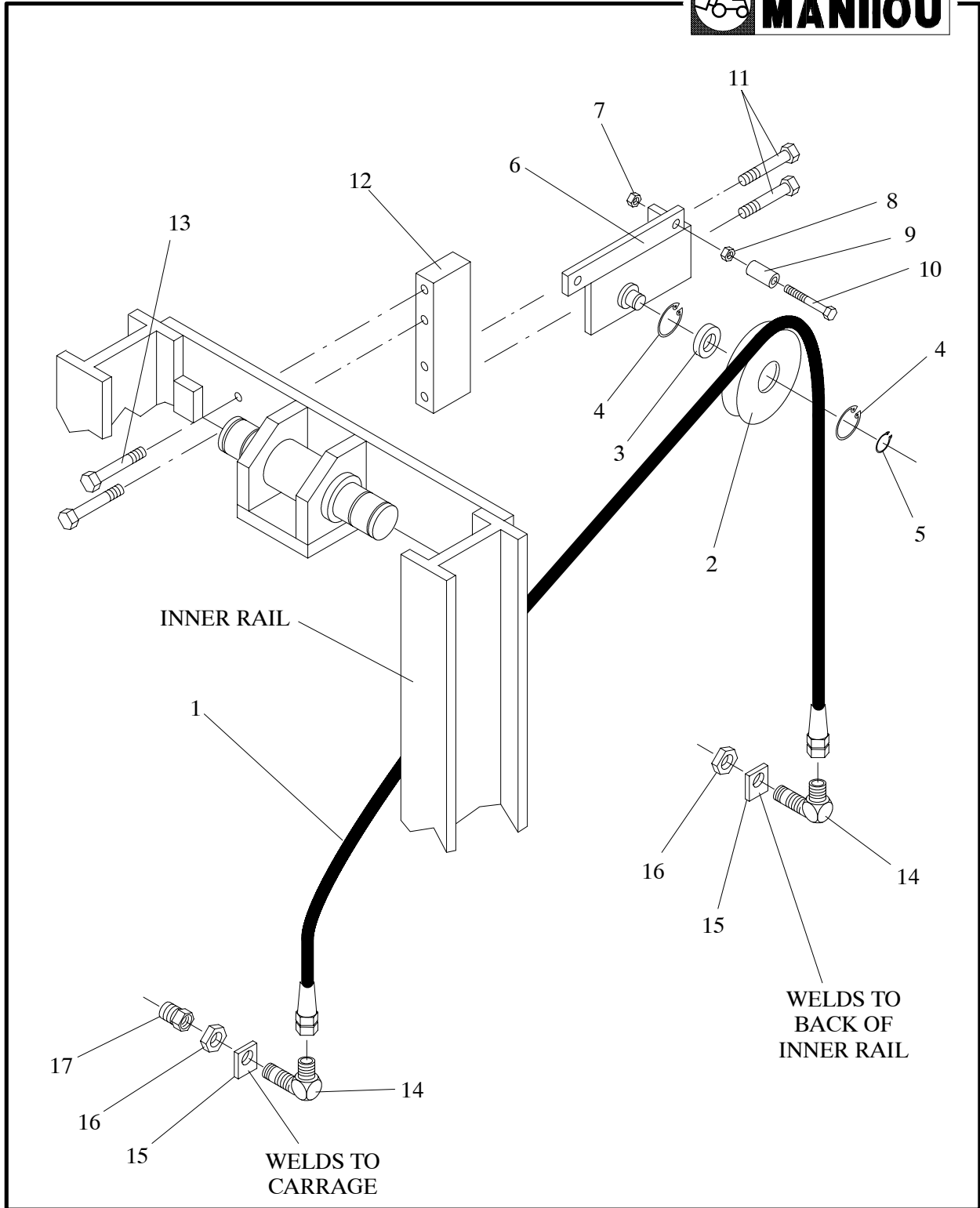


ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1*	R194-2	Chain Assembly (7 Leaf thickness)	2	K3501
1*	R194-3	Chain Assembly (7 Leaf thickness)	2	K3502
1*	R194-4	Chain Assembly (7 Leaf thickness)	2	K3503
1*	R194-5	Chain Assembly (7 Leaf thickness)	2	K3504
1**	R9481-26	Chain Assembly (8 Leaf thickness)	2	K3501
1**	R9481-32	Chain Assembly (8 Leaf thickness)	2	K3502
1**	R9481-38	Chain Assembly (8 Leaf thickness)	2	K3503
1**	R9481-44	Chain Assembly (8 Leaf thickness)	2	K3504
1**	R9481-66	Chain Assembly (8 Leaf thickness)	2	K3507
2*	R193	Anchor, Chain	2	
2**	R9482	Anchor, Chain	2	
3*	R189-2	Pin, Chain	4	
3**	R189-3	Pin, Chain	4	
4	K72016	Pin, Cotter	8	
5	R32	Nut, Hex Lock	4	
6	R213	Nut, Rocker	2	
7*	R192	Anchor, Chain	2	
7**	R9483	Anchor, Chain	2	
8	R186	Sheave	2	
9	K97541	Ring, Snap	2	

\* For use on Mast Serial No. R280-01 thru R280-86. Add additional 14" to chain length when supplying Item 1 Chain, if used with Carriage Model K3589.

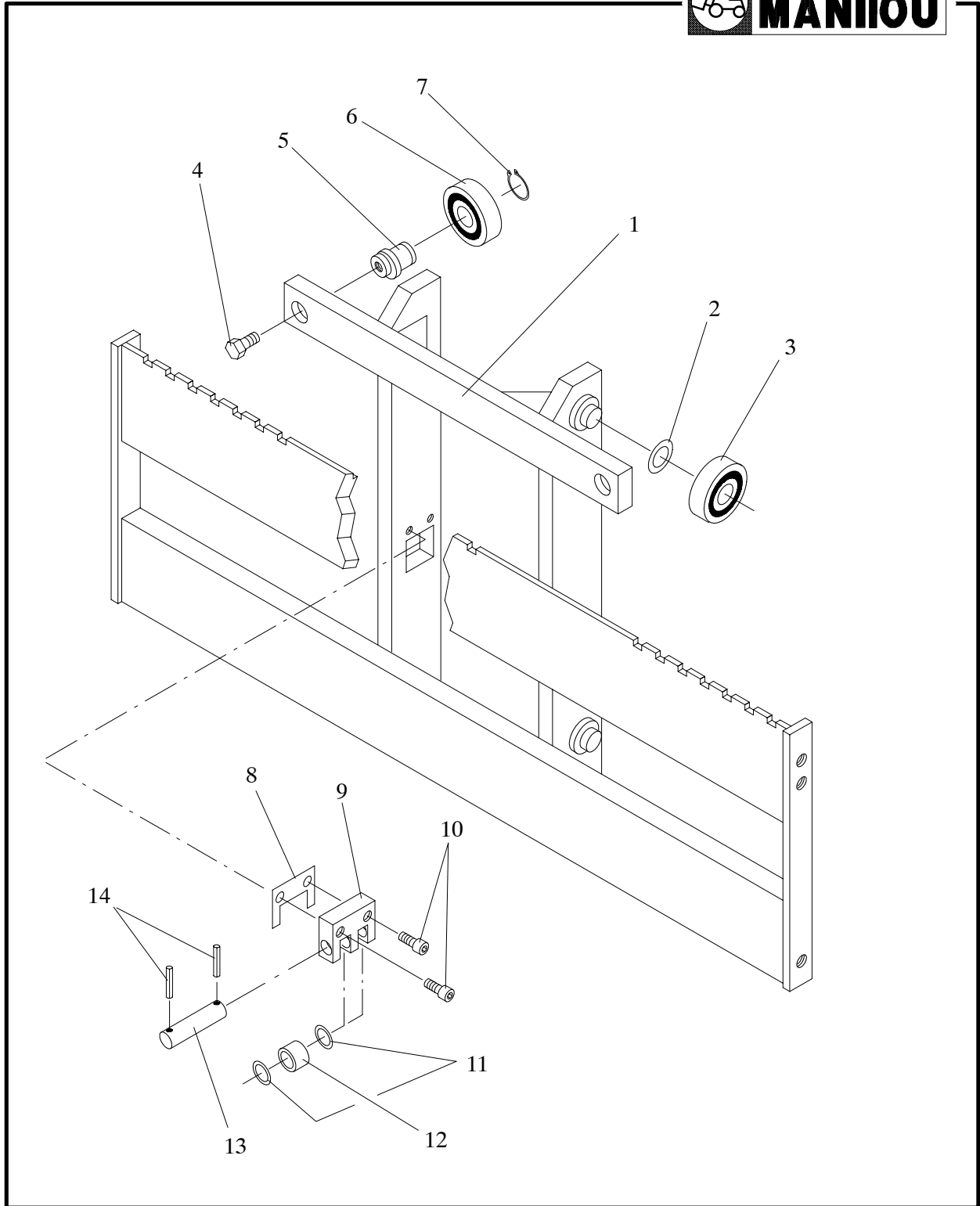
\*\* For use on Mast Serial No. R280-87 & above. Add additional 14" to chain length when supplying Item 1 Chain, if used with Carriage Model K3589.

# HOSE KITS



ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	B760-1734	Hose Assembly, R.H. (Shown)	1	Waco 'M' Series Trucks
1	B760-1733	Hose Assembly, L.H.	1	Waco 'M' Series Trucks
1	B760-989	Hose Assembly	2	K3561-1
1	B760-990	Hose Assembly	2	K3561-2
1	B760-991	Hose Assembly	2	K3561-3
1	B760-992	Hose Assembly	2	K3561-4
2	R9064	Sheave, Hose	2	ALL
3	R2362	Bearing	2	
4	R7332	Snap Ring, Internal	4	
5	R7333	Snap Ring, External	2	
6	R5271	Bracket Assembly, R.H. (Shown)	1	
6	R5272	Bracket Assembly, L.H.	1	
7	K33799	Nut, Hex	4	
8	K33924	Jam Nut, Hex	4	
9	R5283	Sleeve, Retainer	4	
10	K304796	Bolt, Hex	4	
11	K20472	Bolt, Hex	4	
12	R5284	Block	2	
13	K20526	Bolt, Hex	4	
14	K108-8	Fitting, Bulkhead	4	
15	R10413	Plate, Mounting	4	
16	K22-8	Nut, Lock	4	
17	R5268	Fitting, Adaptor	2	

# CARRIAGE ASSEMBLY, 42", 60" & 72" HOOK

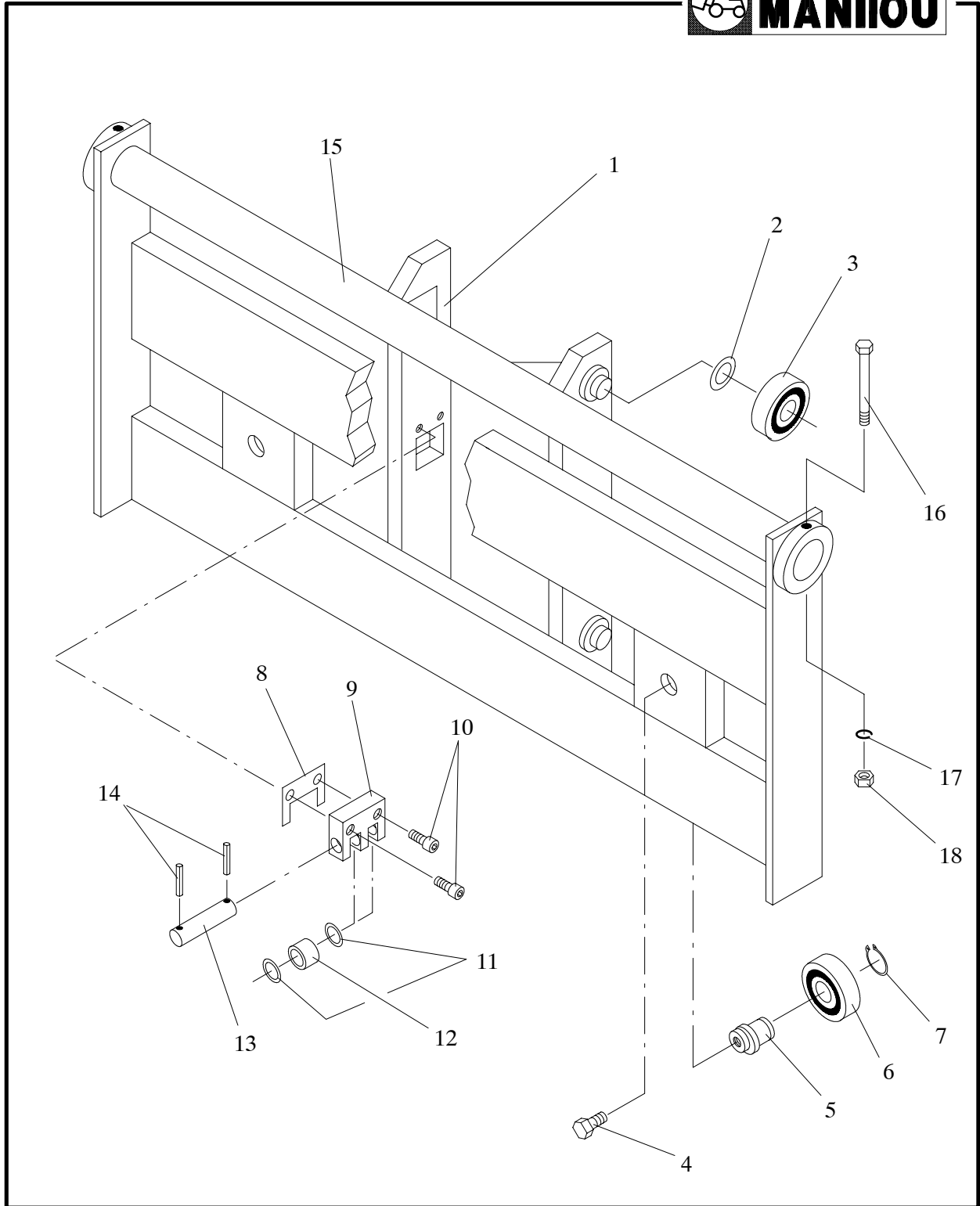


ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	R3825-1	Carriage Assembly, 42"	1	K3596
1	R23190-1	Carriage Assembly, 60"	1	K3595
1	R3825-3	Carriage Assembly, 72"	1	K3594
2	R22	Shim	A/R	ALL
3	R2*	Roller	4	
4	R3564	Bolt	2	
5	R3561	Shaft	2	
6	R1**	Roller	2	
7	K97535	Ring, Snap	2	
8	R3712	Shim	A/R	
9	R3711	Block, Thrust	2	
10	K302282	Screw, Socket Head Cap	4	
11	R2393	Washer	8	
12	R4095	Roller, Inside Thrust	4	
13	R4099	Shaft	2	
14	K305135	Pin, Roll	4	

\* Available for replacement of the R2 Roller is a 0.015" over-sized Roller, order Part No. R446.

\*\* Available for replacement of the R1 Roller is a 0.015" over-sized Roller, order Part No. R442.

# CARRIAGE ASSEMBLY, 42", 60" & 72" SHAFT

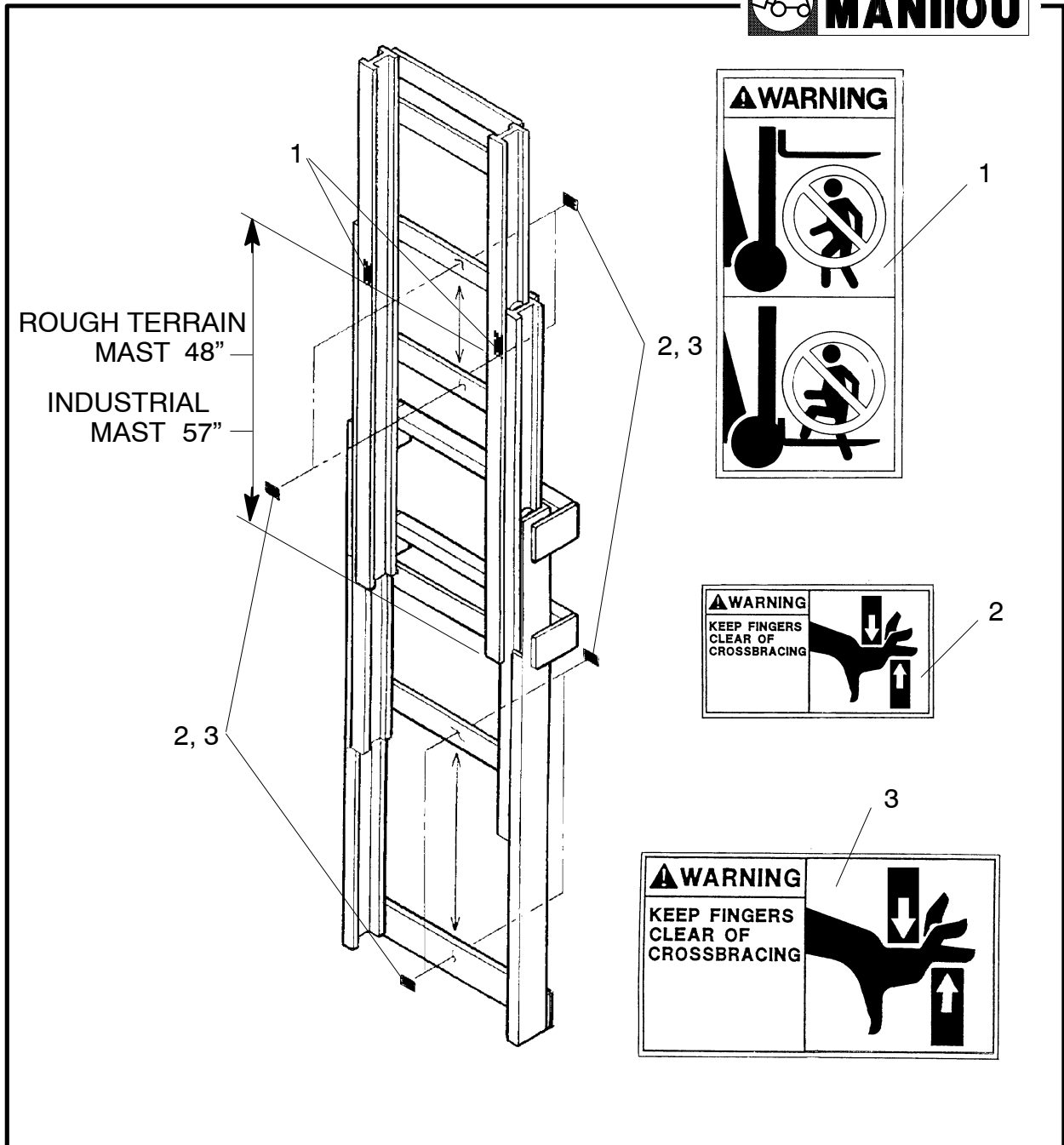


ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	R130	Carriage Assembly, 42"	1	K3599
1	R155	Carriage Assembly, 60"	1	K3598
1	R550	Carriage Assembly, 72"	1	K3597
2	R22	Shim	A/R	
3	R2*	Roller	4	
4	R3564	Bolt	2	
5	R3561	Shaft	2	
6	R1**	Roller	2	
7	K97535	Ring, Snap	2	
8	R3712	Shim	A/R	
9	R3711	Block, Thrust	2	
10	K302282	Screw, Socket Head Cap	4	
11	R2393	Washer	8	
12	R4095	Roller, Inside Thrust	4	
13	R4099	Shaft	2	
14	K305135	Pin, Roll	4	
15	R1187-1	Bar, Implement, 42"	1	
15	R1187-2	Bar, Implement, 60"	1	
15	R1187-3	Bar, Implement, 72"	1	
16	K45548	Bolt, Hex	1	
17	K34807	Washer, Lock	1	
18	K33799	Nut, Hex	1	

\* Available for replacement of the R2 Roller is a 0.015" over-sized Roller, order Part No. R446.

\*\* Available for replacement of the R1 Roller is a 0.015" over-sized Roller, order Part No. R442.

# DECALS



ITEM	PART NUMBER	DESCRIPTION	QTY	MODEL
1	426641	Decal, "Fork Safety"	2	ALL
2	426642	Decal, "Pinch Point" (Small)	A/R	
3	426643	Decal, "Pinch Point" (Large)	A/R	