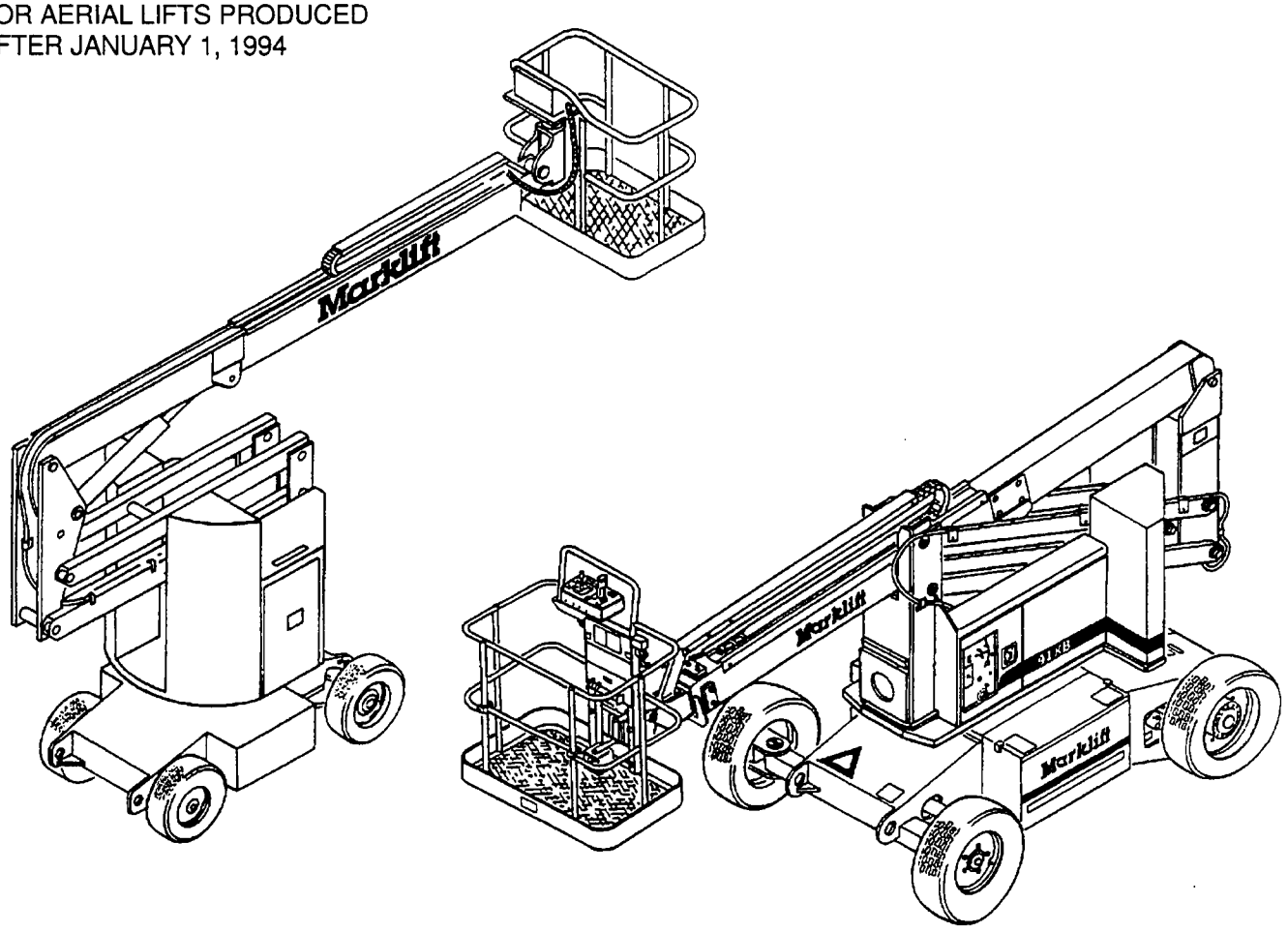
Mark Industries

SELF-PROPELLED KNUCKLE BOOM
MODELS: 30KBN II, 41KB

FOR AERIAL LIFTS PRODUCED
AFTER JANUARY 1, 1994



PARTS MANUAL

MARK INDUSTRIES
106 12th Street S.E.
Waverly, Iowa 50677
(319) 352-3920
(319) 352-5727 FAX

Issued: 1 Feb 94

P/N 17310

SECTION 1 CONTAINS:

PAGE	TITLE
1.1	NOTICE TO USERS
1.2	TABLE OF CONTENTS
1.3	HOW TO USE THE PARTS MANUAL
1.4	HOW TO ORDER PARTS

DISCLAIMER

MARK INDUSTRIES strives to include in the Parts Manual, information and illustrations that are accurate, complete, and current. Due to on-going changes and revisions by our many suppliers, it is often impossible to show all variations of a given assembly. Therefore, this information is subject to change without notice.

NOTICE

The Parts Manual, though sometimes helpful in the process of assembly / disassembly, is NOT intended to be assembly / disassembly instructions.

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Mark Industries

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PAGE	TITLE
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1.2	TABLE OF CONTENTS
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2.5	MANUAL HOLDER (30KBN & 41KB)
2.6	FINAL ASSEMBLY - 41KB
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2.14	PLATFORM ASSEMBLY
2.16	AERIAL CONTROL BOX ASSEMBLY
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3.13	STEERING CYLINDER - 41KB

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3.20	DRIVE MOTOR
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4.12	BOOM/RISER LIFT CYLINDER (TH) - 41KB
4.14	CONTROL VALVE ASSEMBLY
4.18	HYDRAULIC TANK - 41KB
4.19	BATTERY CHARGER - DOMESTIC
4.20	BATTERY CHARGER - INTERNATIONAL

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PAGE	TITLE
6.1	LIFTING LUG - 30KBN
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PAGE	TITLE
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SECTION 8 "NUMERICAL LIST" CONTAINS:

PAGE	TITLE
8.1	NUMERICAL PARTS LIST

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HOW TO USE THE PARTS MANUAL

Mark Industries

1

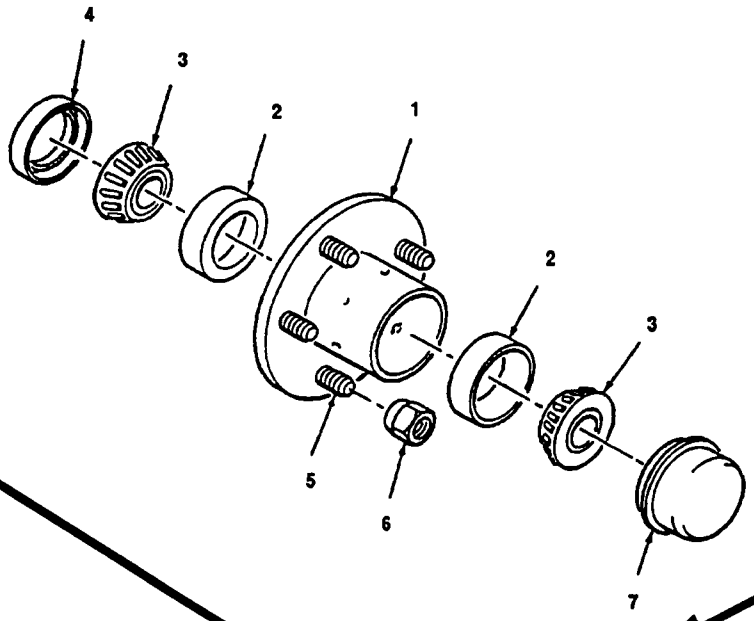
Mark Industries

HUB ASSEMBLY

Models 30KBN 41KB
Issued 2-94

3
3.11 Page

2



5
4
3
6
9
8

Ref.	Part No.	Description	Qty	Remarks
-	134	Assembly, Hub (Studs in Assembly are not used)	Ref.	Incl. items 1 thru 7 To order complete assembly, order P/N 134 Hub & 5 each of 160681 Stud.
1	65684	Hub	1	
2	65686	Race, Bearing	2	
3	65059	Bearing	2	
4	66113	Seal, Grease	1	
5	65685	Studs, Wheel (Not used on machine - See Note)	5	Replace with item 8.
6	61316	Nut, Lug	5	
7	137	Dust Cap	1	
8	160681	Studs, Wheel (Used on machine)	5	(Qty 10 per machine)

WHEN ORDERING PARTS, SPECIFY MODEL NUMBER, SERIAL NUMBER AND DESCRIPTION OF PART REQUIRED

PARTS MANUAL FORMAT

1. **SECTION** refers to the major divisions of the Parts Manual.

2. **PAGE** indicates the page number of the illustration or parts list.

3. The **REF.** number shown in the first column of the parts list, corresponds to the callout in the illustration on the same page or facing page.

4. The Mark Industries **PART NUMBER** is shown in the second colmun for items that are serviceable

5. **DESCRIPTION** of the part or assembly is shown in the third column.

6. **QUANTITY** indicates the quantity of items used in the assembly or sub-assembly directly above.

   A Ref. indicates the item is not serviceable or is part of another assembly.

   B. AR indicates the item is used as required. Some quantities may be specified "For Machine".

7. Indented Items are items that are included in the subassembly directly above. See the example below for the indenture system use in this manual.

   EXAMPLE:

Ref.	Part No.	Description	Qty
	123456	Assembly	Ref.
1	234567	Part of Assembly	1
2	345678	Subassembly	1
	456789	Part of Subassembly	2

8. Common abbreviations and symbols that are used throughout this manual are shown on page 1.10 for reference.

9. **REMARKS** are shown in the fifth or far right column. The Remark column will include page number references for more detailed breakdowns, keyed items included in Kits indicated by

HOW TO ORDER PARTS

Mark Industries

1B

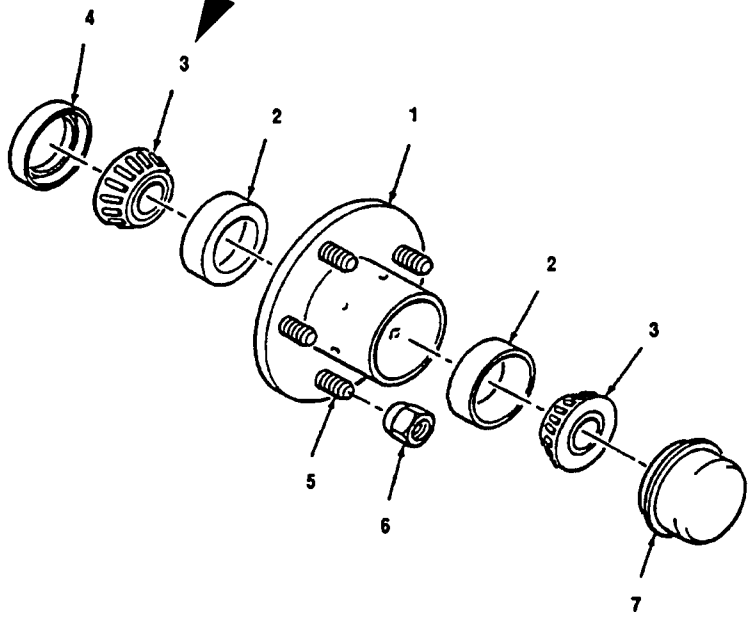
1A

Mark Industries

HUB ASSEMBLY

Models 30KBN 41KB
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3
3.11 Page



1D

1C

Ref.	Part No.	Description	Qty	Remarks
-	134	Assembly, Hub (Studs in Assembly are not used)	Ref.	Incl. items 1 thru 7 To order complete assembly, order P/N 134 Hub & 5 each of 160681 Stud.
1	65684	Hub	1	
2	65686	Race, Bearing	2	
3	65059	Bearing	2	
4	66113	Seal, Grease	1	
5	65685	Studs, Wheel (Not used on machine - See Note)	5	Replace with item 8.
6	61316	Nut, Lug	5	
7	137	Dust Cap	1	
8	160681	Studs, Wheel (Used on machine)	5	(Qty 10 per machine)

WHEN ORDERING PARTS, SPECIFY MODEL NUMBER, SERIAL NUMBER AND DESCRIPTION OF PART REQUIRED

1. Find the Mark Industries Part Number.

A. Using the Table of Contents, find the Section and Page Number.

B. Match the required part to the illustration and note the callout number.

C. Find the corresponding Reference number in the parts list below the illustration or on the facing page.

D. Use the Mark Industries Part Number listed next to the Ref. number when ordering.

E. Always include the complete part number, as shown in the Parts Manual, along withthe description of the part and specify the quantity of the part you wish to order.

F. Anticipate your spare parts requirements.

G. Place orders early in the day.

H. Keep a supply of normal maintenance and recommended spare parts in stock.

I. Obtain recommended parts stocking requirements from Mark Industries or your Mark Industries Distributor.

2. **Customer Ordering:**

Genuine Mark Industries parts are available worldwide and must be ordered through your local Mark Industries Distributor. For your nearest Mark Industries Distributor, contact the Parts Sales Center at the numbers listed below.

3. Distributor Ordering: Listed below in the respective order of preference, are the methods of ordering parts.

A.	ON LINE	(Preferred)
B.	FAX:	(615) 899-9819
C.	PHONE:	(615) 899-6362
D.	MAIL:	Parts Sales Center P.O. Box 24148 5959 Shallowford Road, Suite 229 Chattanooga, TN 37421

NOTE: If your Parts Department is not ON-LINE, contact the PARTS SALES CENTER for information on using this system.

4. Any errors, comments, or suggestions should be fowarded to the Director of Product Support at the following address:

Mark Industries
106 12th Street
Waverly, IA 50677

ABBREVIATONS AND SYMBOLS

AC	ALTERNATING CURRENT	"	INCHES
ADPTR	ADAPTER	INT	INTERNAL
AMP	AMPERE	INV	INVERTED
APPROX	APPROXIMATELY	LG	LENGTH
AR	AS REQUIRED	LH	LEFT HAND
ASSY	ASSEMBLY	MAX	MAXIMUM
AVAIL	AVAILABLE	MIN	MINIMUM
BRG	BEARING	MM	MILLIMETER
BRKT	BRACKET	MTG	MOUNTING
CCW	COUNTER CLOCKWISE	P/N	PART NUMBER
CFM	CUBIC FEET PER MINUTE	NO	NUMBER
CHRG	CHARGING	NSS	NOT SOLD SEPARATELY
CTSK	COUNTERSUNK	OD	OUTSIDE DIAMETER
CVR	COVER	PTO	POWER TAKE-OFF
CW	CLOCKWISE	#	POUND
CYL	CYLINDER	QTY	QUANTITY
°	DEGREE	RD	ROUND
DC	DIRECT CURRENT	REF	REFERENCE
DIA	DIAMETER	RH	RIGHT HAND
DRV	DRIVE	ROT	ROTATION
ENG	ENGINE	RPM	REVOLUTIONS PER MINUTE
EXH	EXHAUST	SL	SLOTTED
EXT	EXTERNAL	SM	SMALL
FT	FEET	SPD	SPEED
GAL	GALLON	STD	STANDARD
GR	GRADE	T	TOOTH
GSK	GASKET	THK	THICK
HD	HEAD	THRU	THROUGH
HEX	HEXAGON	TEMP	TEMPERATURE
HP	HORSEPOWER	V	VOLT
HSG	HOUSING	VAC	VOLTS ALTERNATING CURRENT
HT	HEAT TREATED	VARI	VARIABLE
HYD	HYDRAULIC	VS	VARIABLE SPEED
HZ	HERTZ	W/	WITH
ID	INSIDE DIAMETER	W/0	WITHOUT
INCL	INCLUDES		

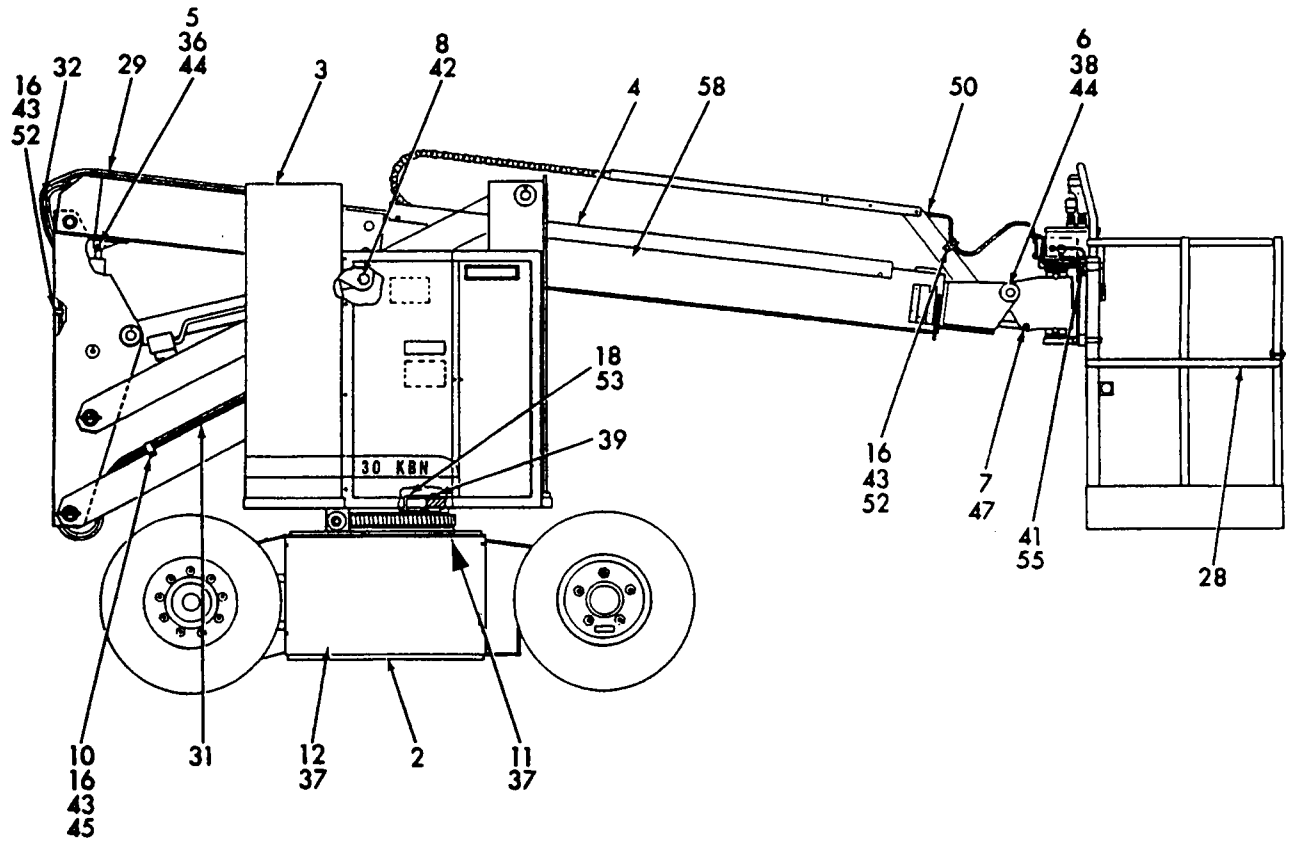
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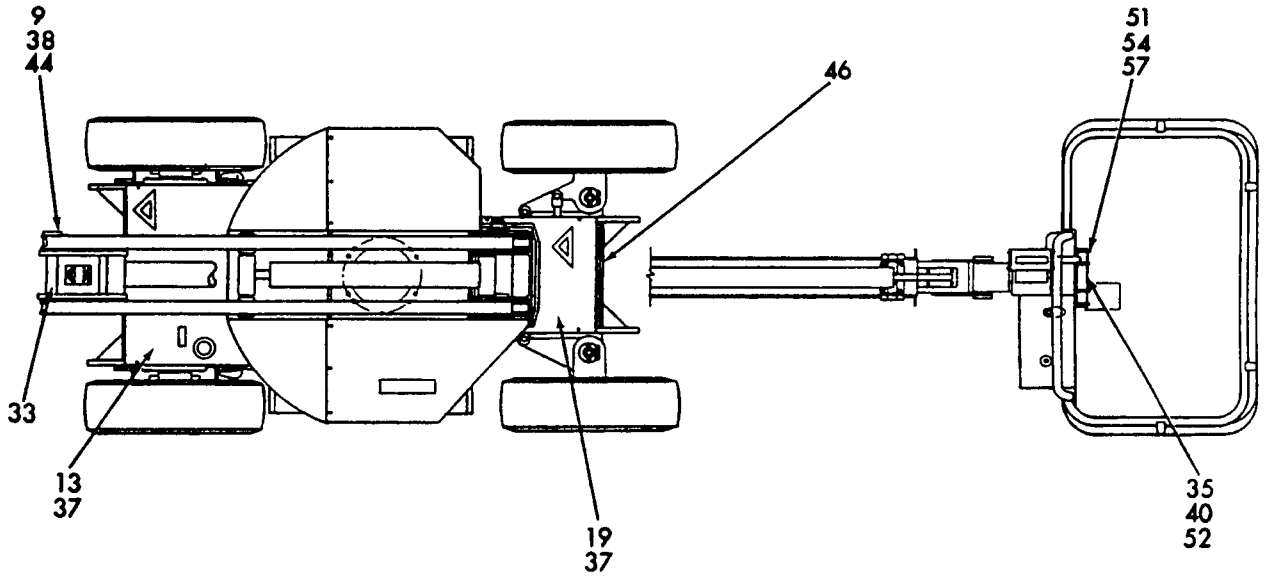
PAGE	TITLE
2.2	FINAL ASSEMBLY - 30KBN
2.5	MANUAL HOLDER (30KBN & 41KB)
2.6	FINAL ASSEMBLY - 41KB
2.10	DECAL SET - 30KBN
2.12	DECAL SET - 41KB
2.14	PLATFORM ASSEMBLY
2.16	AERIAL CONTROL BOX ASSEMBLY
2.20	GROUND CONTROL BOX ASSEMBLY
2.24	PLATFORM MANUAL ROTATOR ASSEMBLY
2.27	HYDRAULIC HOSE KIT DIAGRAM - 30KBN
2.28	HYDRAULIC HOSE KIT DIAGRAM - 41KB

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FINAL ASSEMBLY (30KBN)

Mark Industries





Ref.	Part No.	Description	Qty	Remarks
1	140008	Final Assembly - 30KBN	Ref.	
2	140920	Base Assembly	1	See Page 3.2 For Details
3	140990	Turret Assembly	1	See Page 4.2 For Details
4	140118	Boom Assembly	1	See Page 5.1 For Details
5	140431	Pin, Master Cylinder/Boom	1	
6	140436	Pin, Rotator	1	
7	140437	Pin, Slave Cylinder Rotator	1	
8	140489	Pin, Rod End-Boom Lift Cylinders	1	
9	140601	Pin, Boom Lift	1	
10	140602	Assembly, Clamp	6	
11	140987	Cover, Battery (Top)	2	
12	140988	Cover, Battery (Side)	2	
13	140989	Cover, Drive End	1	
14	141179	Weldment, Cover Drive End	1	Not Shown
15	141175	Weldment, Door	1	
16	140989	Cover, Drive End	1	
17	160198	Hinge, Continous	1	
18	140996	Bracket	1	
19	140997	Cover, Steering End	1	
20	140999	Kit, Sheet Metal	1	Not Shown
21	141007	Cover, Left Side	1	
22	141045	Weldment, Left Door	1	
23	141008	Cover, Right Side	1	
24	141049	Weldment, Right Door	1	
25	141047	Weldment, Lower Control Panel	1	
26	67819	Latch, R.H.	2	
27	67820	Latch, L.H.	1	
28	141000	Platform Assembly	1	See Page 2.14 For Details
29	141163	Kit, Diagram Hose	1	See Page 2.27 For Details
30	141165	Assembly, Ground Control Panel	1	See Page 2.20 For Details
31	255	Tie, Cable	50	
32	256	Tie, Cable	50	
33	27289	Tube	1	
34	60309	Capscrew	16	

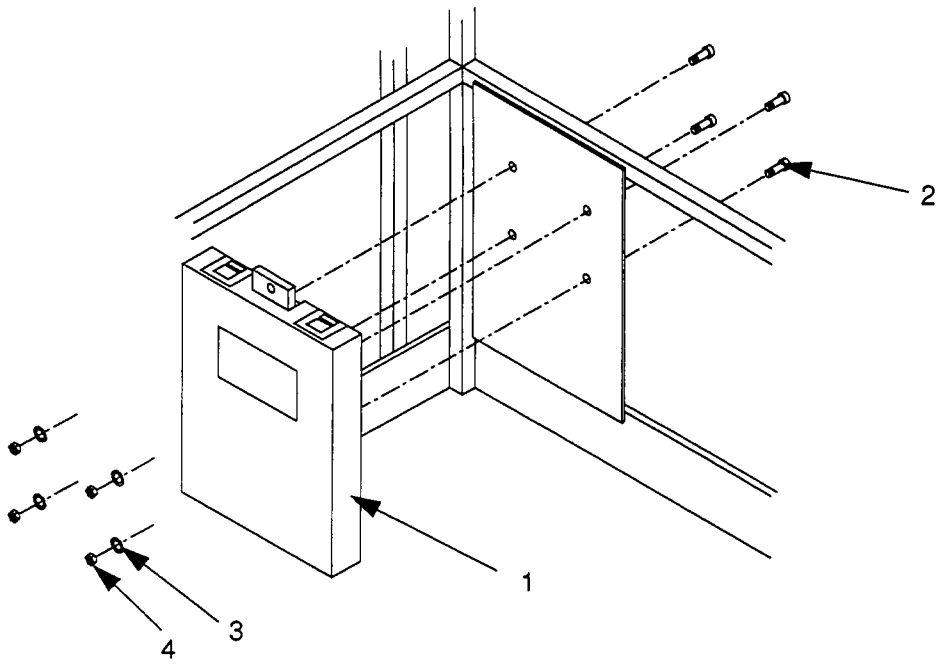
FINAL ASSEMBLY (30KBN)

Mark Industries

Ref.	Part No.	Description	Qty	Remarks
35	60315	Capscrew	2	
36	60325	Capscrew	1	
37	60338	Capscrew	24	
38	60343	Capscrew	2	
39	60636	Capscrew	18	
40	60711	Hex, Nut	2	
41	61921	Capscrew	2	
42	62234	Set Screw	1	
43	63301	Lockwasher	9	
44	63319	Lockwasher	1	
45	63433	Flat, Washer	6	
46	63654	Rivet, Pop	8	
47	64209	Pin, Roll	1	
48	65106	Oil, Gear (90 WT.)	1	Not Shown
49	65116	Oil, Hydraulic	10	Not Shown
50	65322	Coil, Protective Plastic	5	
51	65842	Cap, Anti-Roll	2	
52	16268	Clamp, Hose	5	
53	160017	Ubolt	2	
54	130927	Container, Plastic	1	
55	65867	Clamp, Rubber	2	
56	16608	Paint, White	2	Not Shown
57	17309	Manual, Operation & Maintenance	Ref.	
58	600245	Decal Set -30KBN	1	See Page 2.10 For Details

MANUAL BOX (30KBN & 41KB)

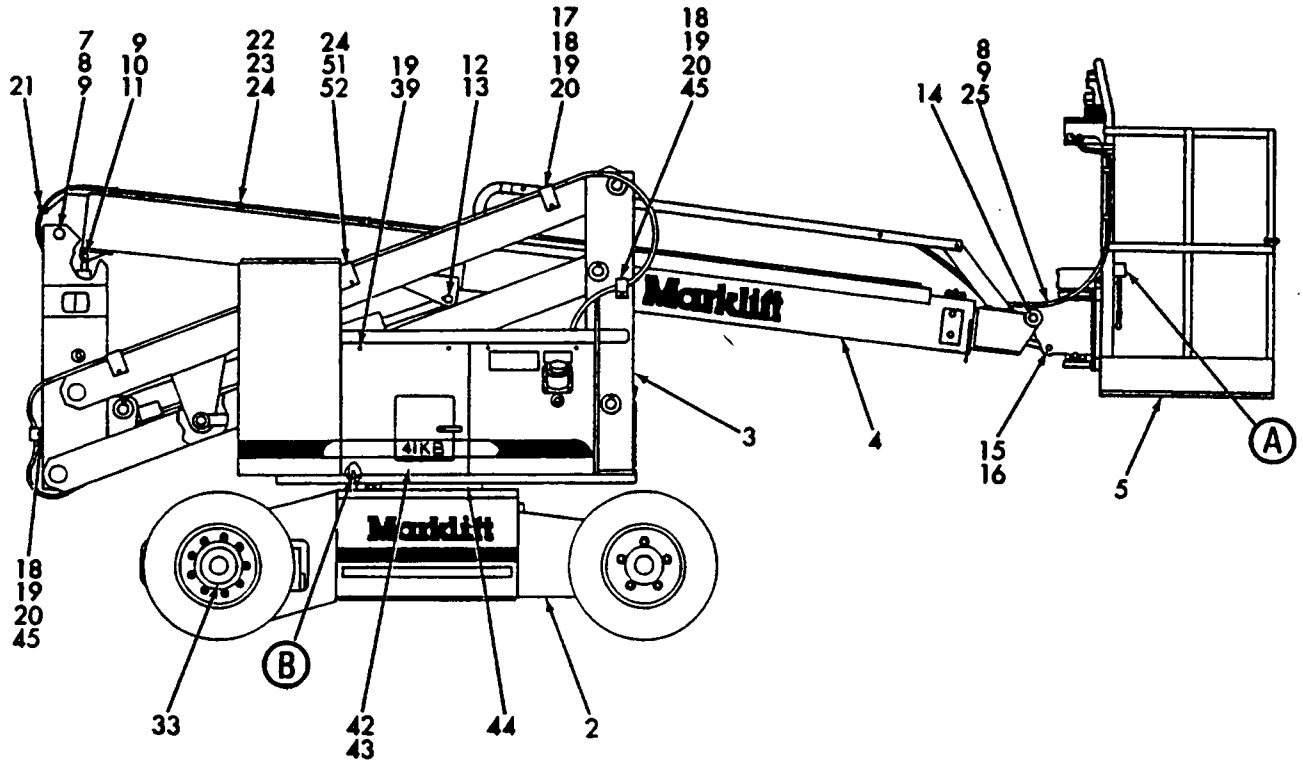
Models 30KBN
41KB
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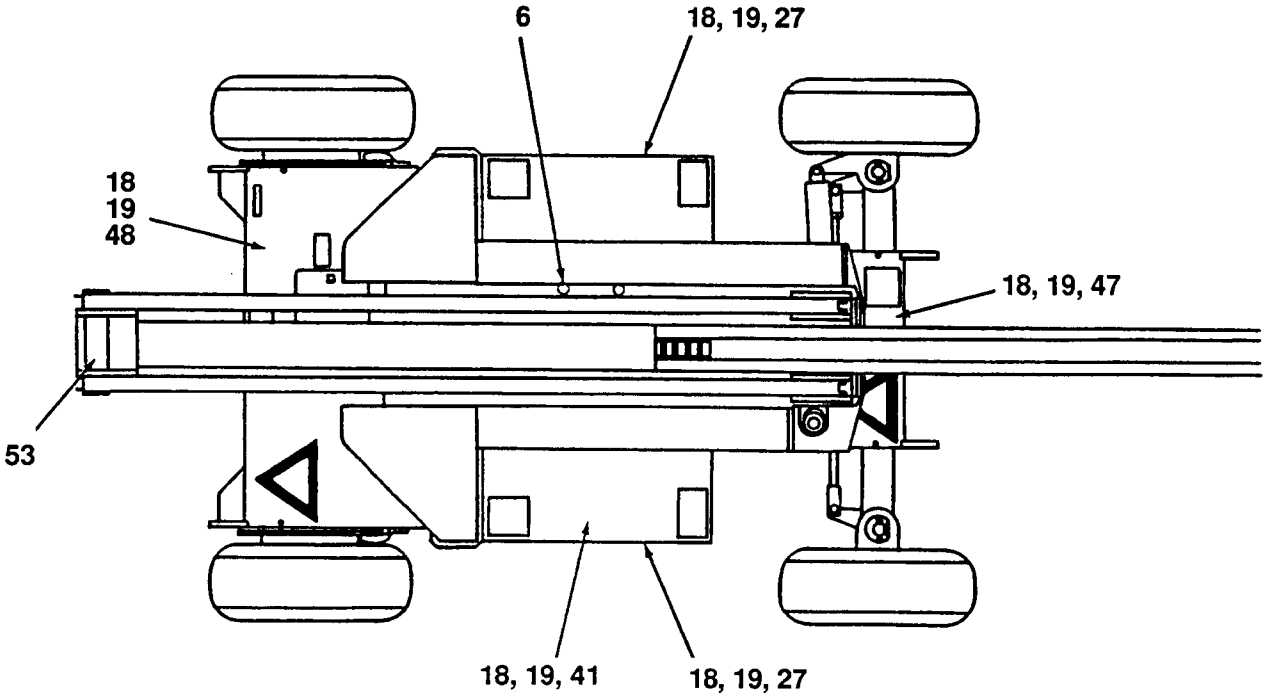


Ref.	Part No.	Description	Qty	Remarks
1	135322	Manual Box	1	
2	61921	Capscrew, 1/4C x 1/2	4	
3	1209-2	Washer	4	
4	1205-13	Nut	4	

FINAL ASSEMBLY (41KB)

Mark Industries





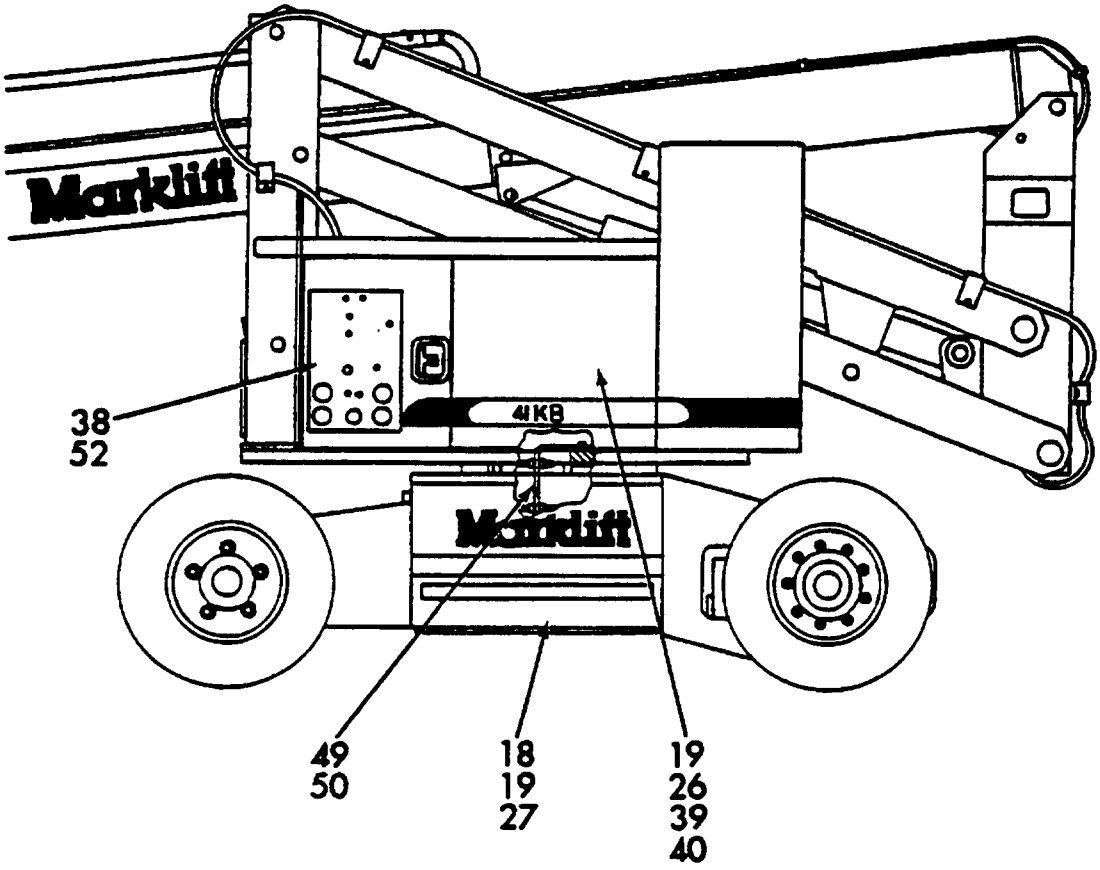
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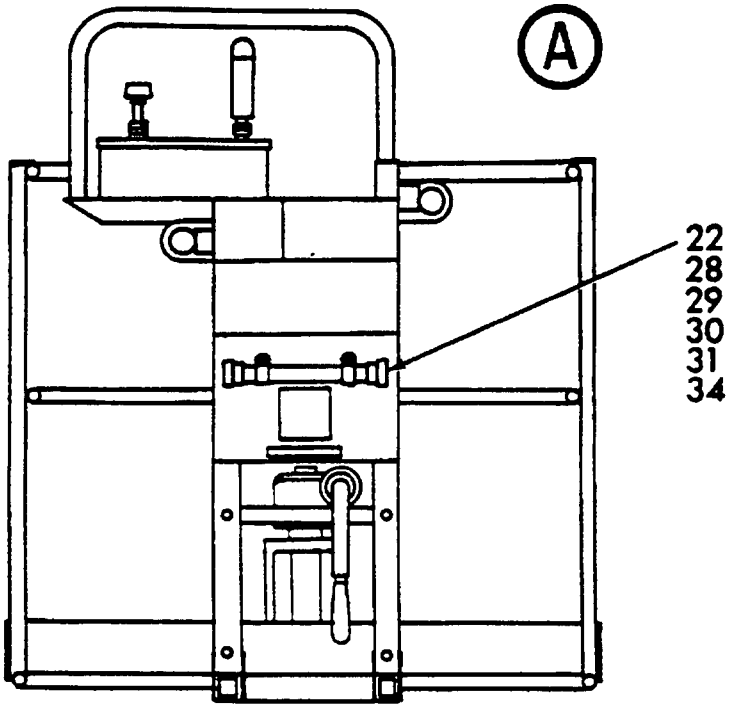
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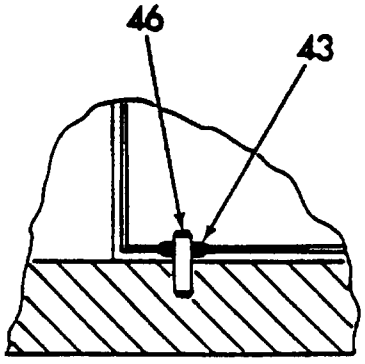
Ref.	Part No.	Description	Qty	Remarks
1	140012	Assembly, Final	Ref.	
2	141025	Base Assembly	1	See Page 3.8 For Details
3	141158	Turret Assembly	1	See Page 4.6 For Details
4	140122	Boom Assembly	1	See Page 5.6 For Details
5	141000	Platform Assembly	1	See Page 2.14 For Details
6	60636	Capscrew	18	
7	140601	Pin, Boom/Knuckle	1	
8	60343	Capscrew	2	
9	63319	Lockwasher	3	
10	140431	Pin, Master Cylinder/Boom	1	
11	60325	Capscrew	1	
12	140489	Pin, Lift Cylinder Rod End	1	
13	62229	Set Screw	2	
14	140436	Pin, Rotator	1	
15	140437	Pin, Slave Cylinder Rod End	1	
16	64209	Pin, Roll	1	
17	140602	Assembly, Clamp	4	
18	60322	Capscrew	24	
19	63302	Lockwasher	28	
20	63402	Flat Washer	24	
21	256	Tie, Cable	55	
22	16268	Clamp, Hose	8	
23	60353	Capscrew	6	
24	63301	Lockwasher	6	
25	65322	Coil, Plastic Protective	5	
26	141227	Panel, Turret	1	
27	140988	Cover, Battery Side	2	
28	130927	Container, Plastic	1	
29	65842	Cap, Anti-Roll	2	
30	60315	Capscrew	2	
31	60711	Hex Nut	2	
32	141246	Diagram, Hose Kit	1	See Page 2.28 For Details
33	65106	Oil, Gear (90 WT.)	1	
34	17309	Manual, Operation & Maintenance	Ref.	
35	65116	Oil, Hydraulic	10	Not Shown
36	16608	Paint, White Water-Base	2	Not Shown
37	63654	Rivot, Pop	8	
38	141216	Assembly, Ground Control & Door	1	See Page 2.20 For Details
39	61808	Capscrew	4	

FINAL ASSEMBLY (41KB)

Mark Industries







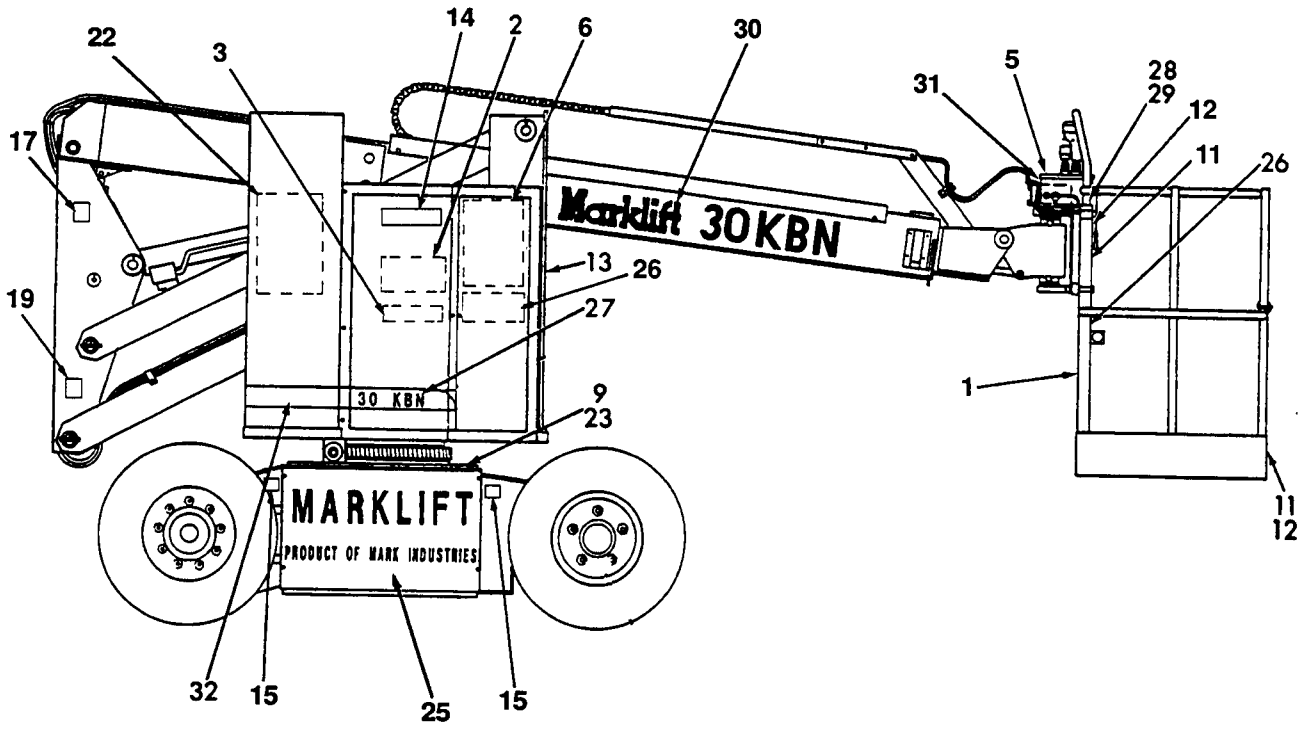
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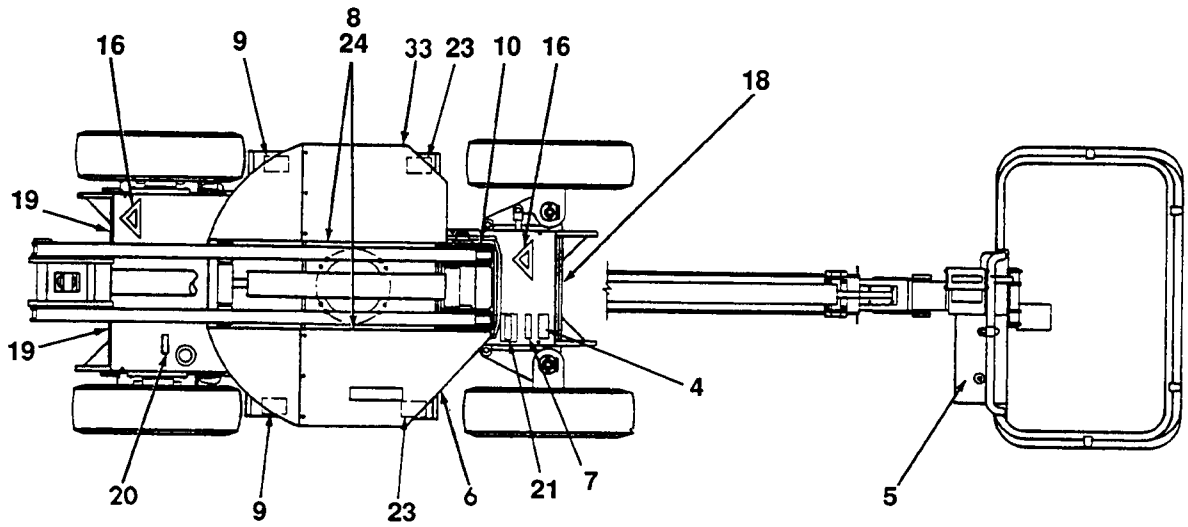
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40	160254	Nut, Lug	8	
41	140987	Cover, Battery Top	2	
42	141226	Panel, Turret R.H.	1	
43	160249	Grommet	4	
44	141333	Spacer, Turret Plate	1	
45	140612	Assembly, Arm Cable Clamp	4	
46	160305	Pin, Roll	4	
47	141187	Cover, Carriage (Steering End)	1	
48	141211	Cover, Carriage (Drive End)	1	
49	141321	Bracket, Power Twist	1	
50	160017	Ubolt	2	
51	140791	Guard, Arm Cable	2	
52	61921	Capscrew	9	
53	27289	Tube, Round	1	

Models 30KBN
41KB
Issued 2-94

DECAL SET (30KBN)

Mark Industries





DECAL SET (30KBN)

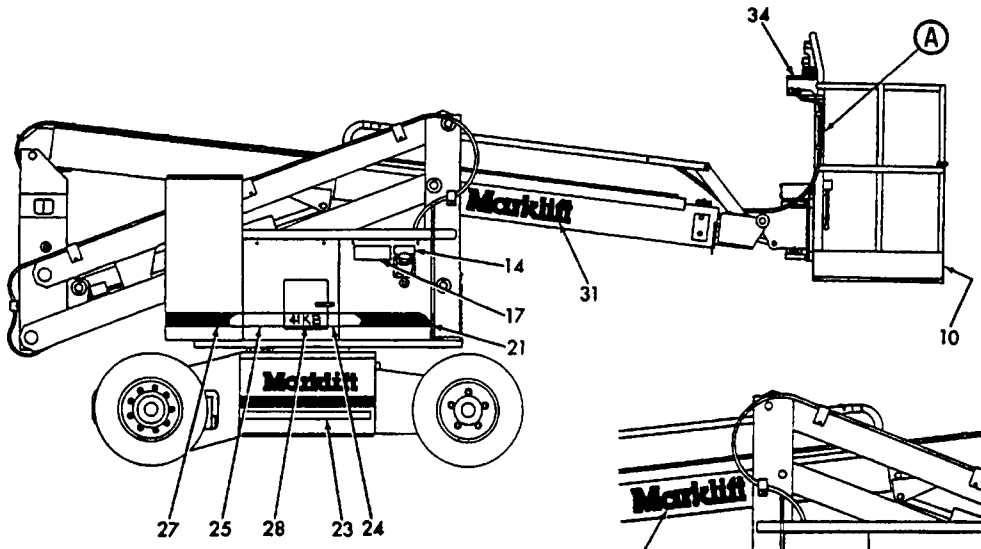
Models 30KBN
41KB
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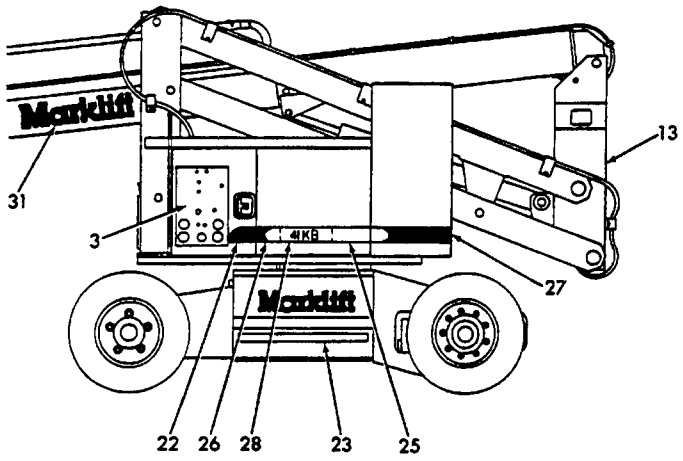
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1	181113	Decal, Operation & Maintenance Manual	1	
2	182107	Decal, Hand Pump Operation	1	
3	140496	Decal, Hand Pump	1	
4	181766	Decal, Tie Down Diagram	2	
5	182763	Decal, Upper Control	1	
6	182716	Decal, Ground Control	1	
7	183401	Decal, Drive Controller	1	
8	183302	Decal, Warning This Counterweight	2	
9	2003	Decal, Battery Water Level	2	
10	183402	Decal, Hydraulic System Fluid	1	
11	181322	Decal, Load Capacity 500 Lbs.	2	
12	22385	Decal, Warning Attach Your Safety Belt	2	
13	20410	Decal, Logo Mark Industries	1	
14	20419	Decal, Danger,Elect. Hazard Keep Clear	2	Both Sides
15	183101	Decal, Caution Monofilled Tires Only	4	Both Sides
16	182829	Decal, Forward Arrow	2	
17	12400-223	Decal, Danger, Keep Clear Of...	2	Both Sides
18	181957	Nameplate, Identification	1	
19	181328	Decal, Pinch Point	6	
20	20896	Decal, Brake	1	
21	183400	Decal, Battery Disconnect	1	
22	12400-570	Decal, Made in USA	1	
23	22449	Decal, No Smoking For Electrical Booms	2	
24	183301	Decal, Warning Lead & Paint for CTWT	2	
25	181766	Decal, Marklift A Product of	2	Both Sides
26	182125	Decal, Danger Breaking These Rules...	2	
27	181968	Decal, 30KBN	2	
	181773	Decal, Stripe L.H.	1	
28	22386	Decal, Safety Belt	2	
29	182124	Decal, Oper. Instructions	1	
30	181908	Decal, Marklift Boom	2	
31	185724	Decal, 110 VAC	2	
32	181772	Decal, Stripe	2	
33	181771	Decal, Stripe R.H.	1	

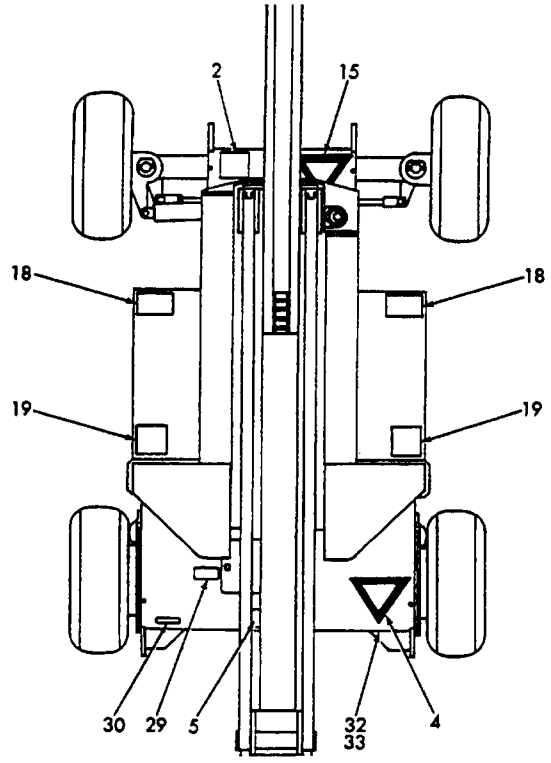
Models 30KBN
41KB
Issued 2-94

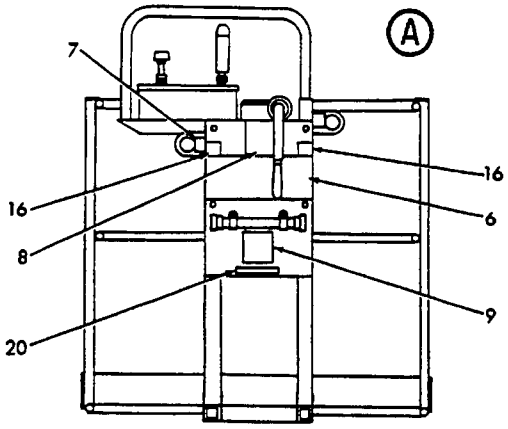
DECAL SET (41KB)

Mark Industries









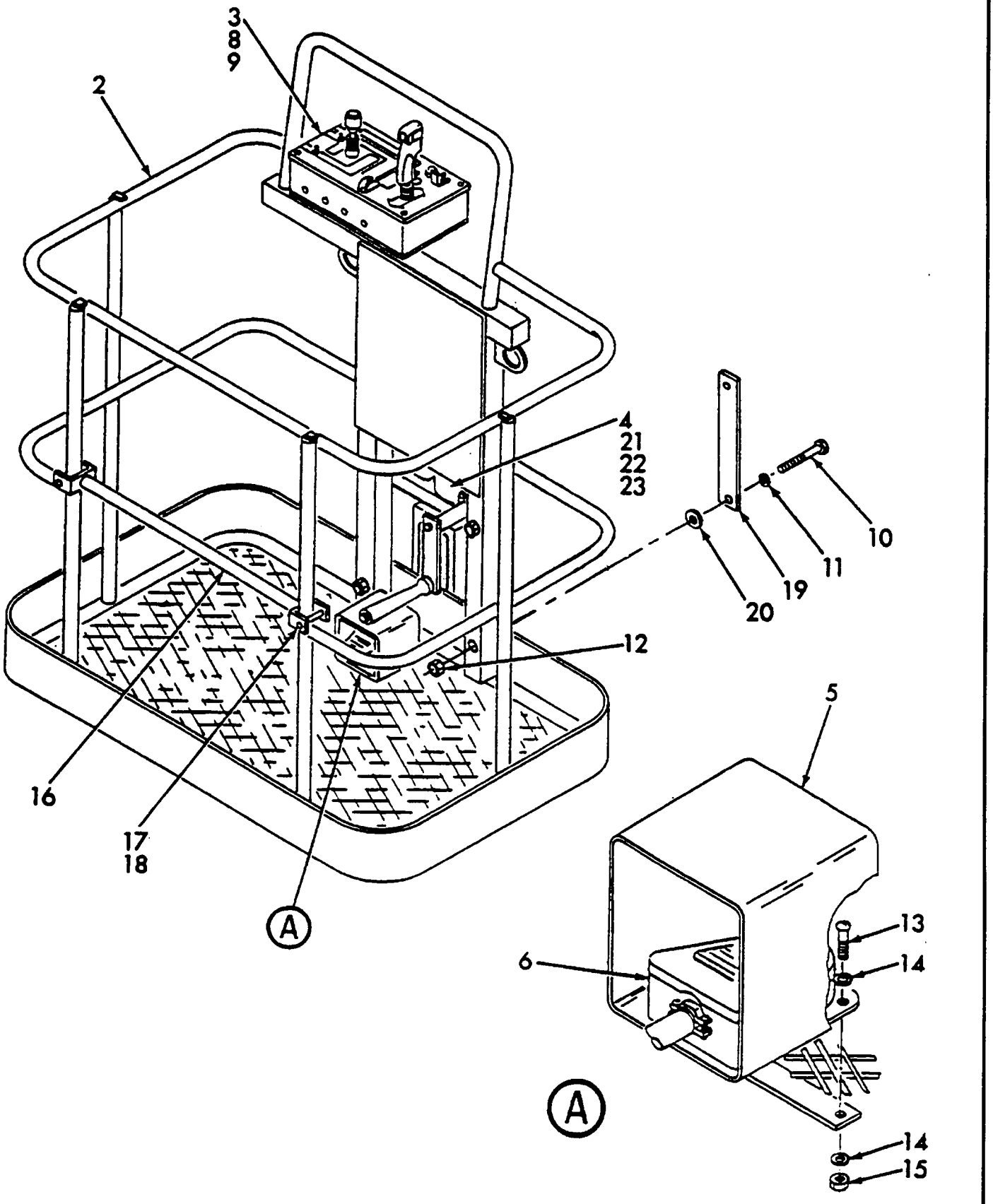
DECAL SET (41KB)

Ref.	Part No.	Description	Qty	Remarks
1	600181	Set, Decal	Ref.	
2	181766	Decal, Tie Down	1	
3	1812716	Decal, Ground Control	1	
4	20462	Decal, Forward Arrow	1	
5	20896	Decal, Brake	1	
6	182101	Decal, Danger & Aerial Operating Instr.	1	
7	22385	Decal, Caution Attach Safety Belt	2	
8	181103	Decal, Danger Obey The Following	2	
9	181102	Decal, Danger Do Not Operate	2	
10	2022	Decal, Load Capacity 500 Lbs.	1	
11	140496	Decal, Emergency Hand Pump	1	
12	140495	Decal, hand Pump Operation	1	
13	20410	Decal, Logo - Mark Industries	1	
14	2017	Decal, Hydraulic System Fluid	1	
15	20461	Decal, Forward/AFT Arrow	1	
16	22386	Decal, "D" Ring Attach Safety Belt	2	
17	20419	Decal, Danger Keep Clear	2	
18	22449	Decal, No Smoking For Electrical	2	
19	2003	Decal, Battery Water Level	2	
20	130820	Decal, Operation & Safety Handbook	1	
21	181752	Decal, Blue Stripe	1	
22	181754	Decal, Blue Stripe	1	
23	181755	Decal, Standard Marklift	2	
24	181757	Decal, Panel Stripe	2	
25	181763	Decal, Battery Chager Door	1	
26	181759	Decal, Panel Stripe	1	
27	181762	Decal, Cwt. Stripe	2	
28	181765	Decal, 41KB	2	
29	183400	Decal, Battery Disconnect	1	
30	183401	Decal, Drive Controller Cover	1	
31	181908	Decal, Marklift Boom	2	
32	20661	Plate, ANSI A92	1	
33	20660	Nameplate, Identification	1	
34	182747	Decal, Upper Control	1	

Models 30KBN
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PLATFORM ASSEMBLY

Mark Industries

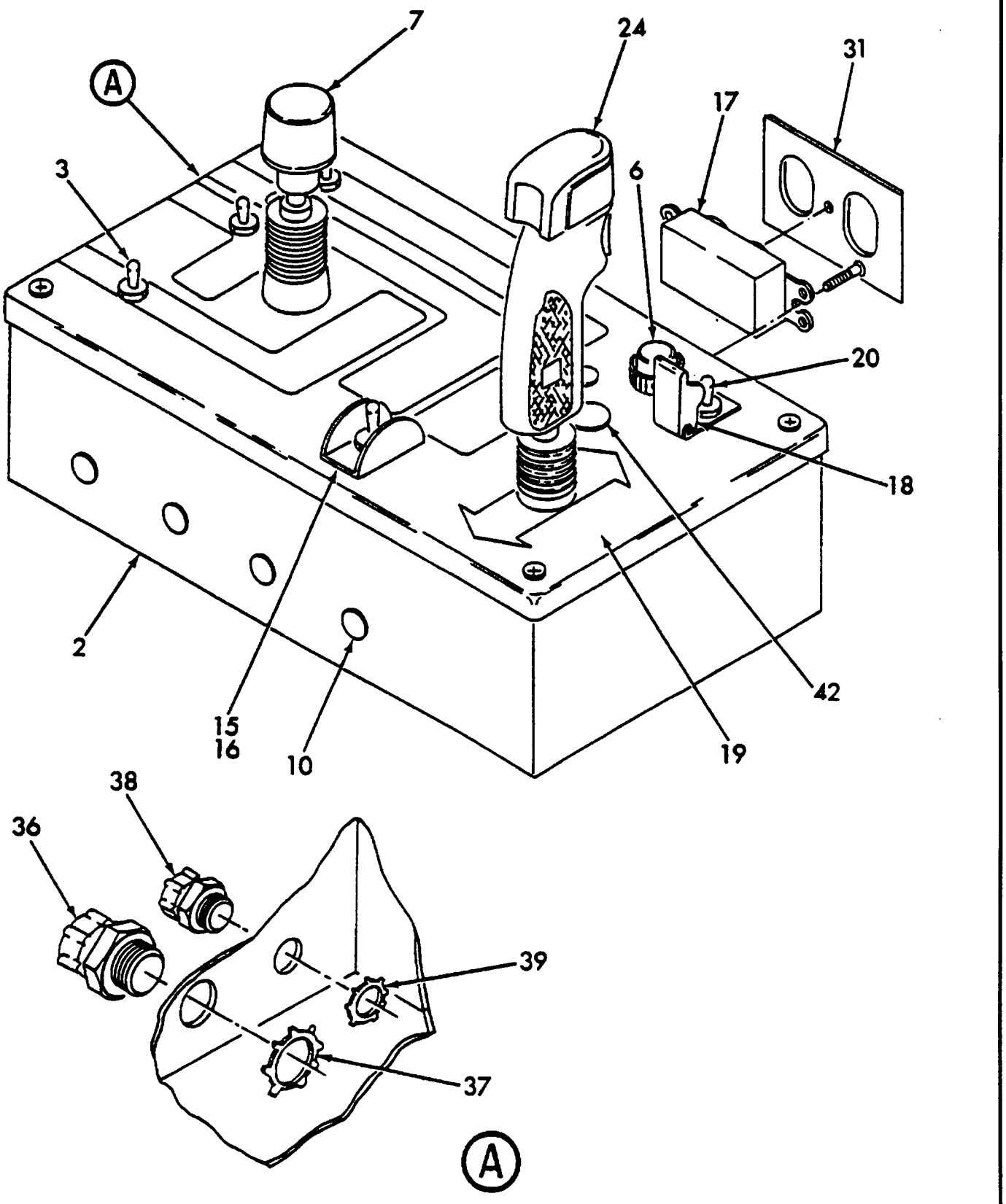


Ref.	Part No.	Description	Qty	Remarks
1	141000	Assembly, Platform	Ref.	
2	140964	Weldment, Platform	1	
3	140991	Assembly, Aerial Control Box	1	See Page 2.16 For Details
4	81373	Rotator, Manual	1	See Page 2.24 For Details
5	23846	Cover, Foot Switch	1	
6	92202	Switch, Foot	1	
7	66336	Microswitch	1	Not Shown
8	60353	Capscrew	4	
9	63401	Flatwasher	4	
10	60549	Capscrew	5	
11	63415	Flatwasher	4	
12	61242	Lock Nut	4	
13	62714	Machine, Screw	2	
14	63413	Flatwasher	2	
15	61241	Lock Nut	2	
16	141080	Weldment, Slide Bar	1	
17	160212	Pin, Clevis	2	
18	160213	Pin, Cotter	2	
19	141244	Weldment, Platform Rotation Stop	2	
20	141287	Washer, Platform/Rotator	4	
21	60325	Capscrew	2	
22	62319	Lockwasher	2	
23	60558	Capscrew	1	

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AERIAL CONTROL BOX

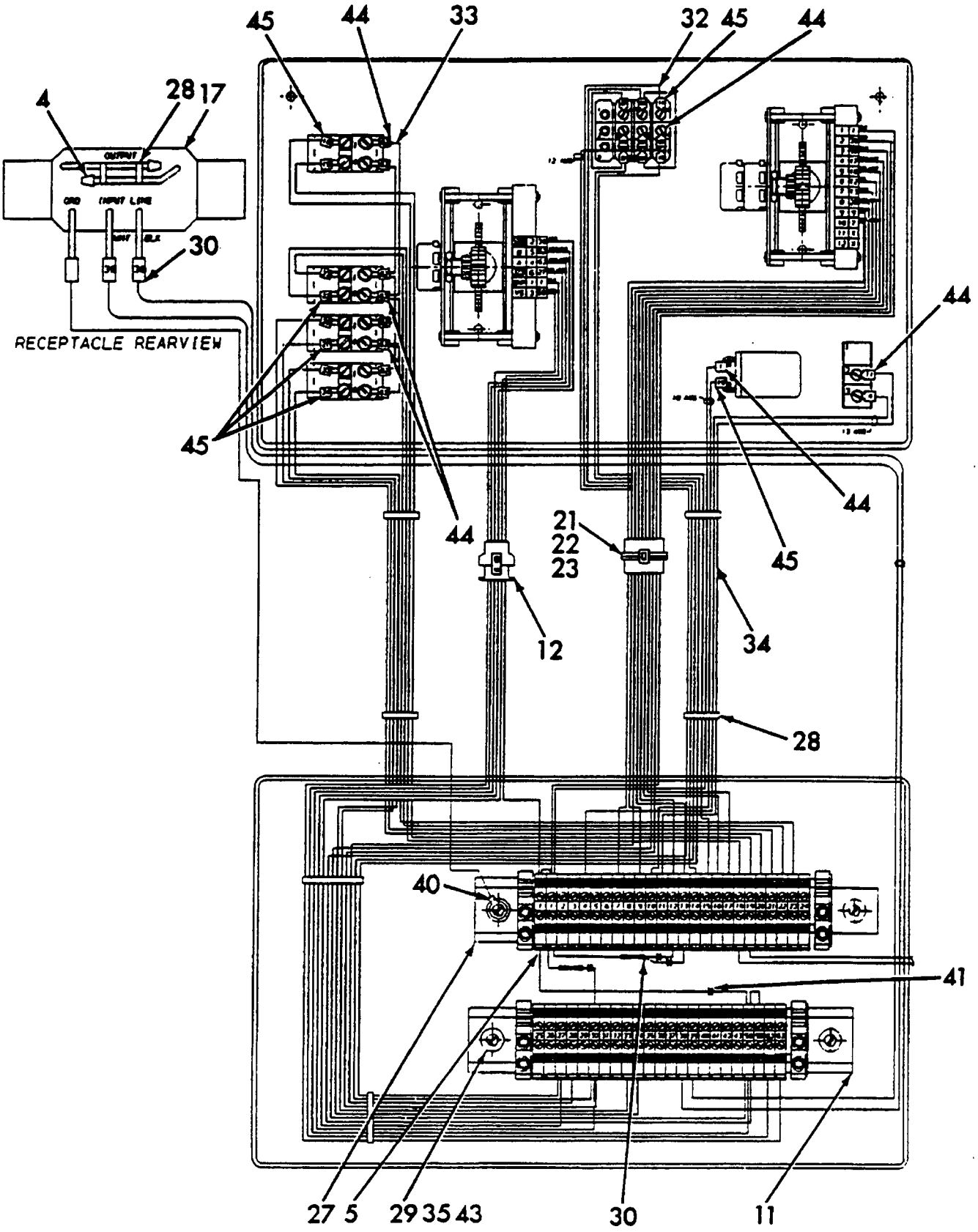
Mark Industries



Ref.	Part No.	Description	Qty	Remarks
1	140991	Assembly, Aerial Control Box	Ref.	
2	140965	Machining, Aerial Control Box	1	
3	70417	Switch, Toggle	4	
4	70394	Connector, Twist-On Wire	2	
5	70008	Wire, Yellow With Green	5	
6	66345	Buzzer, Alarm	1	
7	70488	Controller (Rotate)	1	
8	67812	Board, Encapsulated Controller	1	Not Shown
9	600006	Potentiometer (With Wires)	1	Not Shown
10	771	Plug	5	
11	141170	Assembly, Terminal Block	1	
12	141144	Assembly, Boom Function Wire Harness	1	
13	70502	Plug, Connector	1	Not Shown
14	70503	Pin	6	Not Shown
15	20884	Guard, Switch	1	
16	70383	Switch, Leveling	1	
17	70391	Receptacle	1	
18	70303	Switch, Guard	1	
19	182747	Decal, Upper Control	1	
20	4017	Switch, Toggle	1	
21	141147	Assembly, Drive Wire Harness	1	
22	70516	Plug, Connector	1	
23	70517	Pin	12	
24	70860	Controller (Drive)	1	
25	68771	Board, Encapsulated Controller	1	Not Shown
26	68773	Mechanical Assembly (Pistal Grip)	1	Not Shown
27	141172	Assembly, Terminal Block	1	
28	256	Tie, Cable	40	
29	62612	Machine Screw	4	
30	70162	Butt, Terminal	5	
31	70392	Cover, Receptacle	1	
32	2991	Wire, White (12 AWG Stranded)	10	
33	2990	Wire, White (18 AWG Stranded)	90	
34	70098	Wire, Yellow With Green Stripe	5	

AERIAL CONTROL BOX

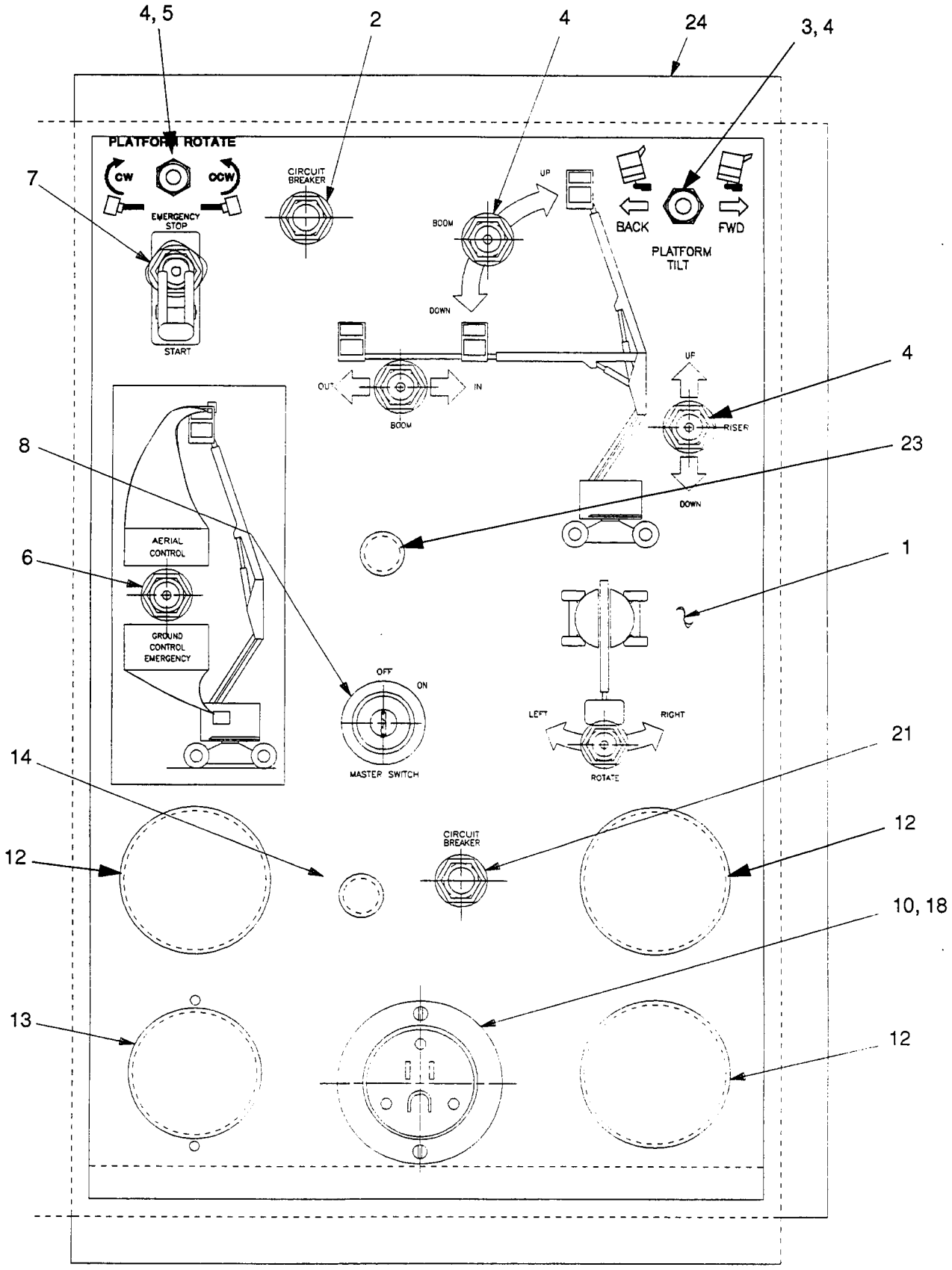
Mark Industries



Ref.	Part No.	Description	Qty	Remarks
35	63312	Lockwasher	4	
36	16215	Relief, Strain	1	
37	16105	Lock Nut	1	
38	2806	Relief, Strain	1	
39	2808	Lock Nut	1	
40	117-C	Ring, Connector	2	
41	70479	Diode (6 AMP/1000 Volt)	3	
42	772	Plug	1	
43	61502	Hex Nut	4	
44	117-B	Connector	14	
45	70149	Connector	13	
46	60008	Boot	1	
47	60007	Slide Lock Sleeve	1	

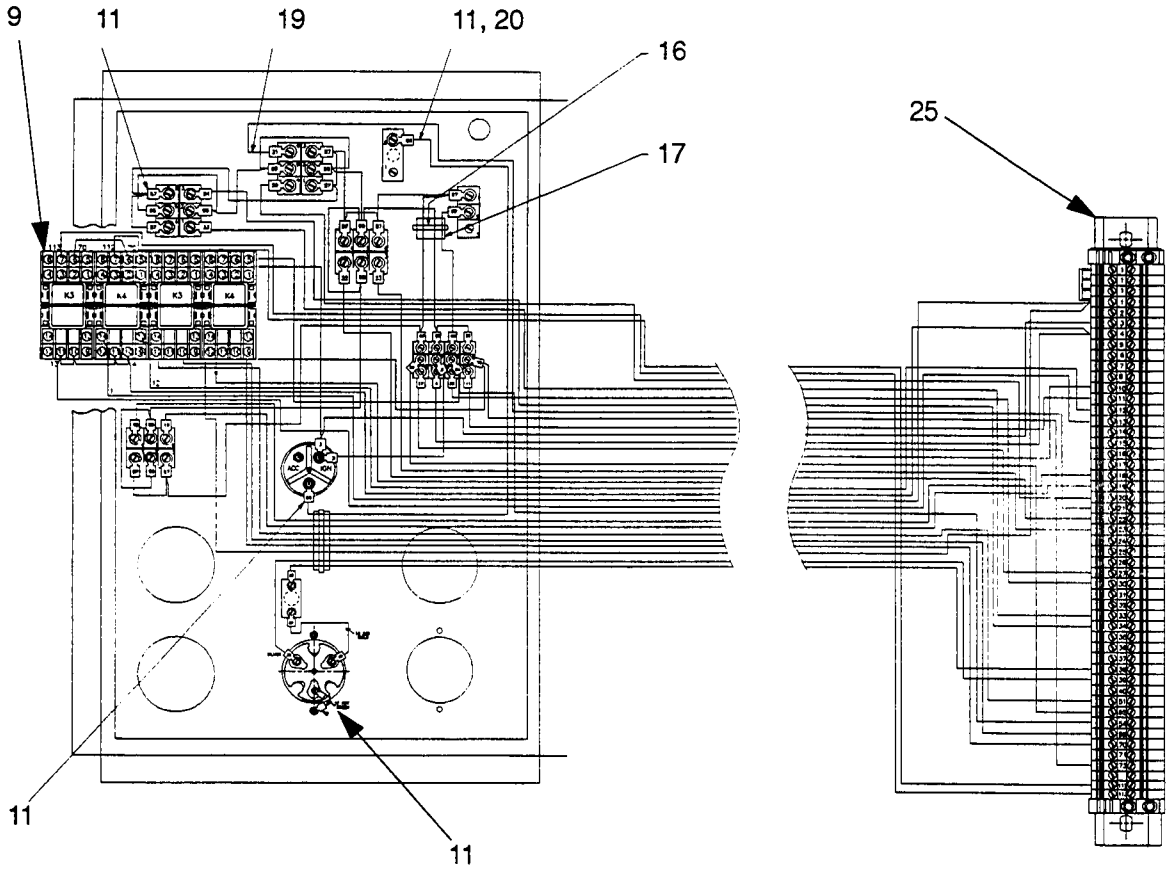
GROUND CONTROL PANEL

Mark Industries



GROUND CONTROL PANEL

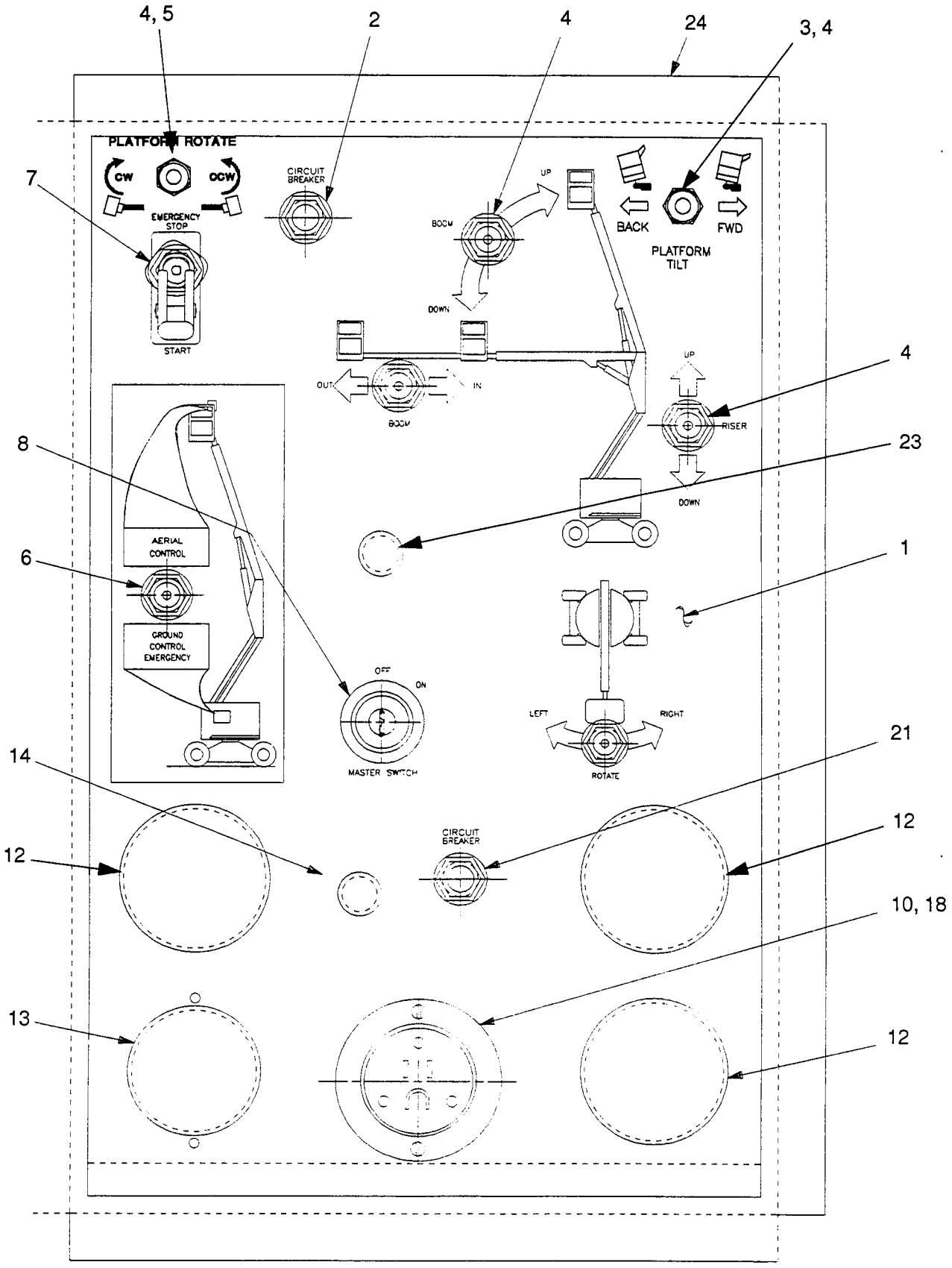
Models 30KBN
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Ref.	Part No.	Description	Qty	Remarks
	141216	Assembly, Control Panel	Ref.	
1	181716	Decal, Ground Control	1	
2	70361	Breaker, Circuit (10 AMP With Boot)	1	
3	182828	Decal		
4	20481	Switch, Toggle	4	
5	182827	Platform Rotate, Decal		
6	16260	Switch, Toggle	1	
7	4017	Switch, Toggle	1	
8	2717	Switch, Ignition	1	
9	70359	Spring	4	
	70593	Base, Relay	4	
	70606	Relay	4	
10	62636	Machine Screw	2	
	63312	Lockwasher	2	
	61502	Hex Nut	2	
11	117-C	Ring, Connector	60	
12	160493	Plug	3	
13	65243	Plug	1	

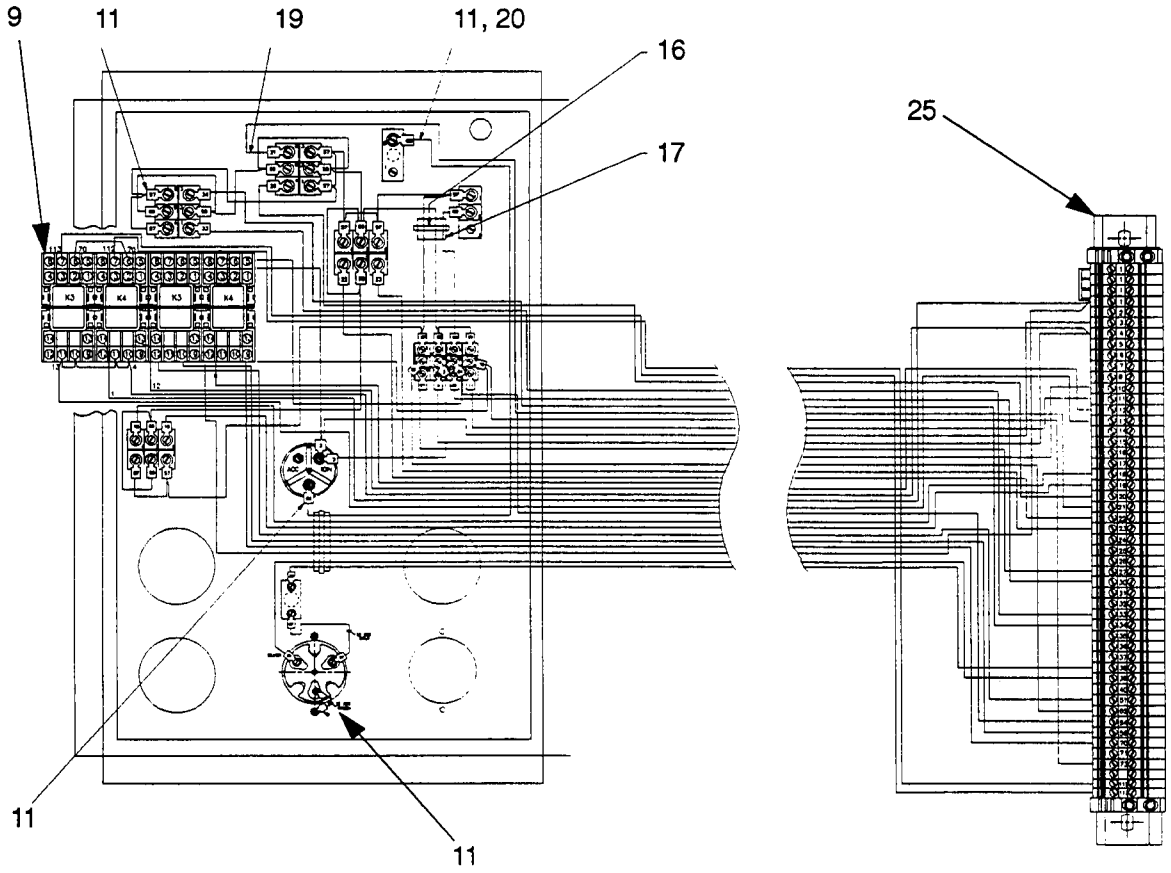
GROUND CONTROL PANEL

Mark Industries



GROUND CONTROL PANEL

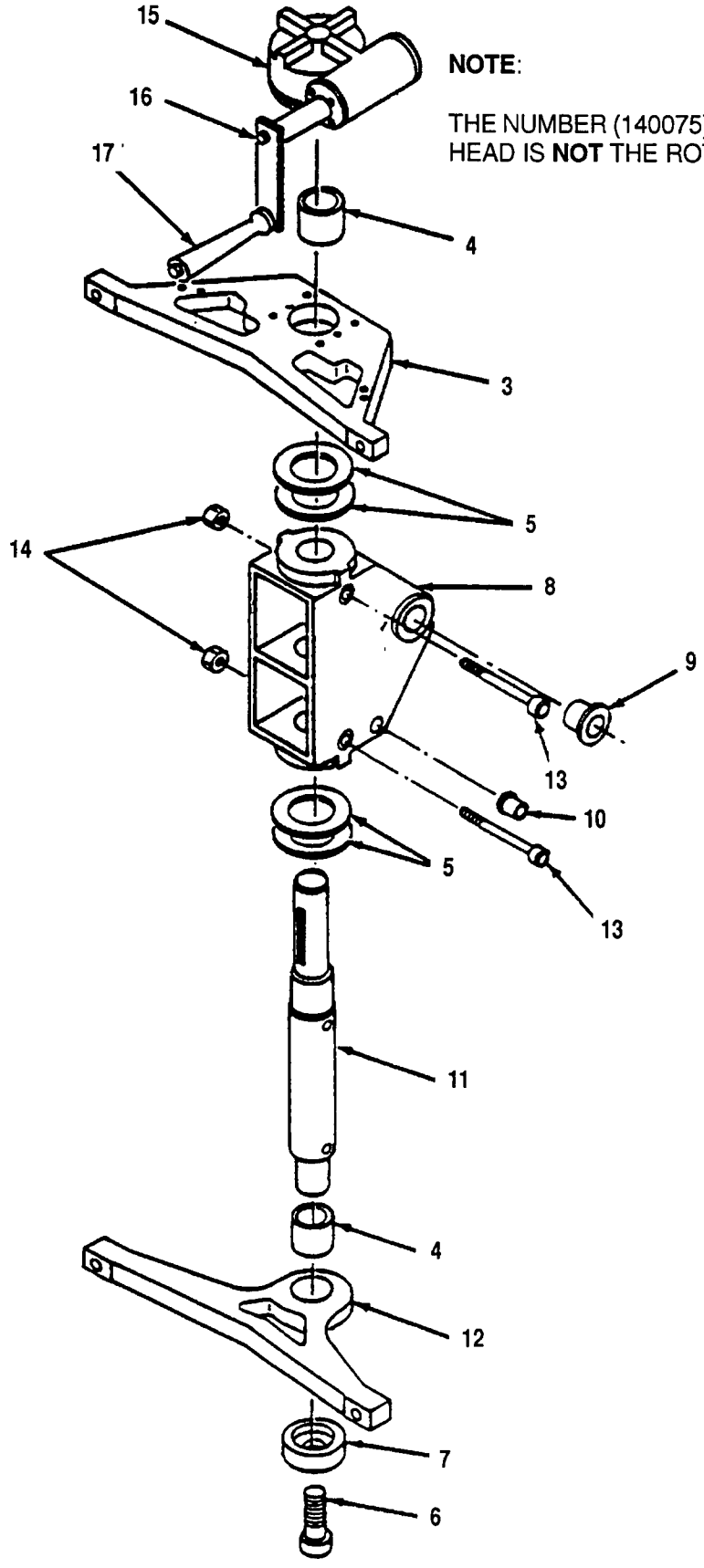
Models 30KBN
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Ref.	Part No.	Description	Qty	Remarks
14	160492	Plug	2	
15	70479	Diode (6 AMP/1000 Volt)	1	
16	256	Tie, Cable	45	
17	16214	Mount	8	
18	70409	Inlet, Flanged	1	
19	2990	Wire, White (18 AWG Stranded)	90	
20	2991	Wire, White (12 Stranded)	12	
21	20562	Breaker, Circuiit	1	
		Decal, Circuit Breaker 110 VAC	1	
22	61721	Screw, Sheet Metal	4	
23	775	Plug Hole	1	
24	141047	Weldment, Control Panel - 30KBN	1	
	141200	Weldment, Control Panel Door - 41KB	1	
25	141219	Assembly, Terminal Block	1	
	141453	Weldment, Relay/Spacer	1	
26	70406	Spring, Spade	3	Not Shown
27	70556	Spring, Spade (Red)	7	Not Shown
28	16213	Ring, Terminal - Yellow # 10 - 30KBN	1	Not Shown
29	61921	Capscrew, 25 - 20 x 50 - 41KB	5	Not Shown

PLATFORM MANUAL
ROTATOR ASSEMBLY

Mark Industries



NOTE:

THE NUMBER (140075) CAST IN THE ROTATOR HEAD IS **NOT** THE ROTATOR PART NUMBER.

PLATFORM MANUAL
ROTATOR ASSEMBLY

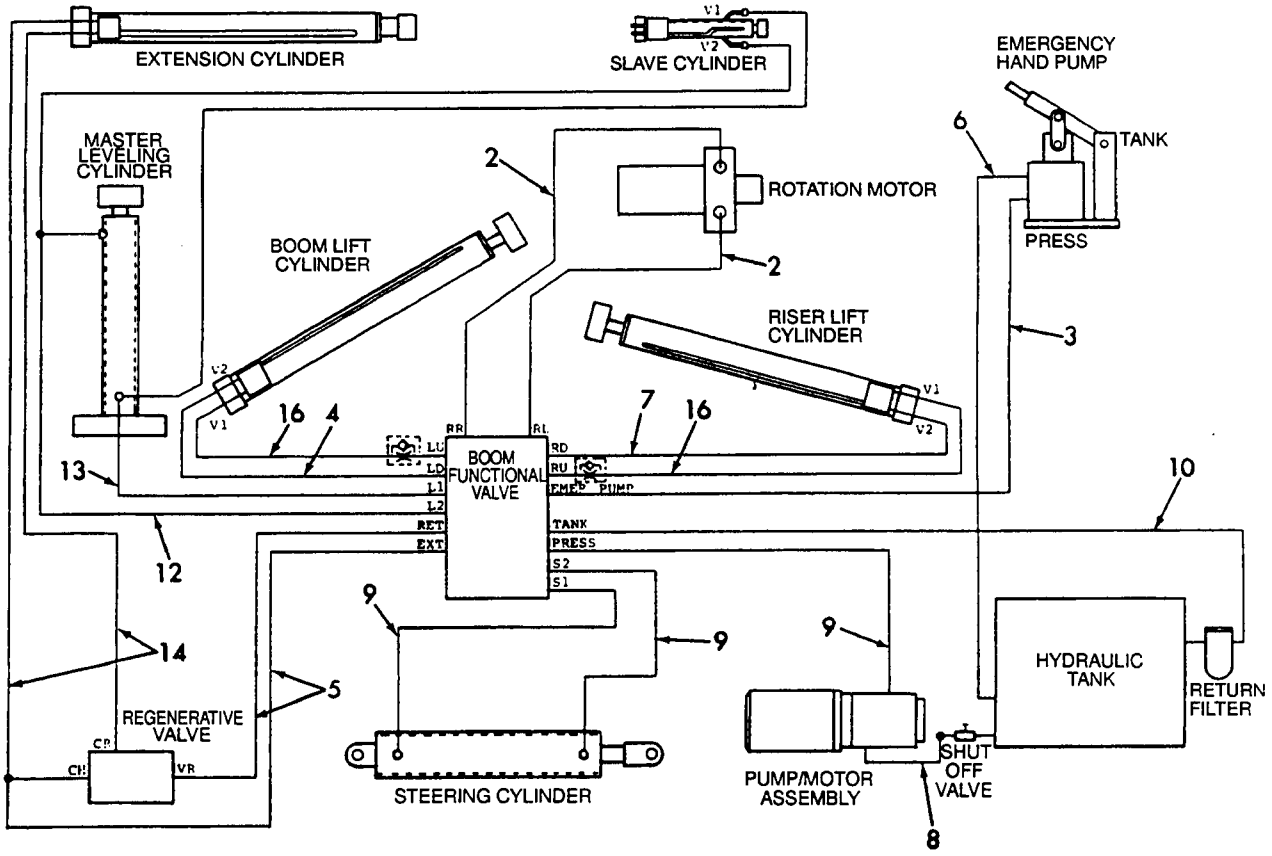
Ref.	Part No.	Description	Qty	Remarks
1	81373	Rotator, Manual	Ref.	
2	81369	Base, Rotator	Ref.	Not Shown
3	600221	Arm, Steel Top	1	
4	600222	Bushing	2	
5	600223	Washer, Thrust	4	
6	600224	Bolt	1	
7	600225	Washer. Retaining	1	
8	NSS	Yoke, Rotator	1	
9	68050	Bushing, Flanged	2	
10	68051	Bushing, Flanged	2	
11	600226	Pin, Main	1	
12	600227	Arm, Steel Bottom	1	
13	600187	Bolt	2	
14	600188	Nut (With Nylock)	2	
15	81374	Gearhead	1	
16	600191	Bolt	1	
17	600281	Handle, Crank	1	

NOTES

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HYDRAULIC ASSEMBLY (30KBN)

Models 30KBN 41KB
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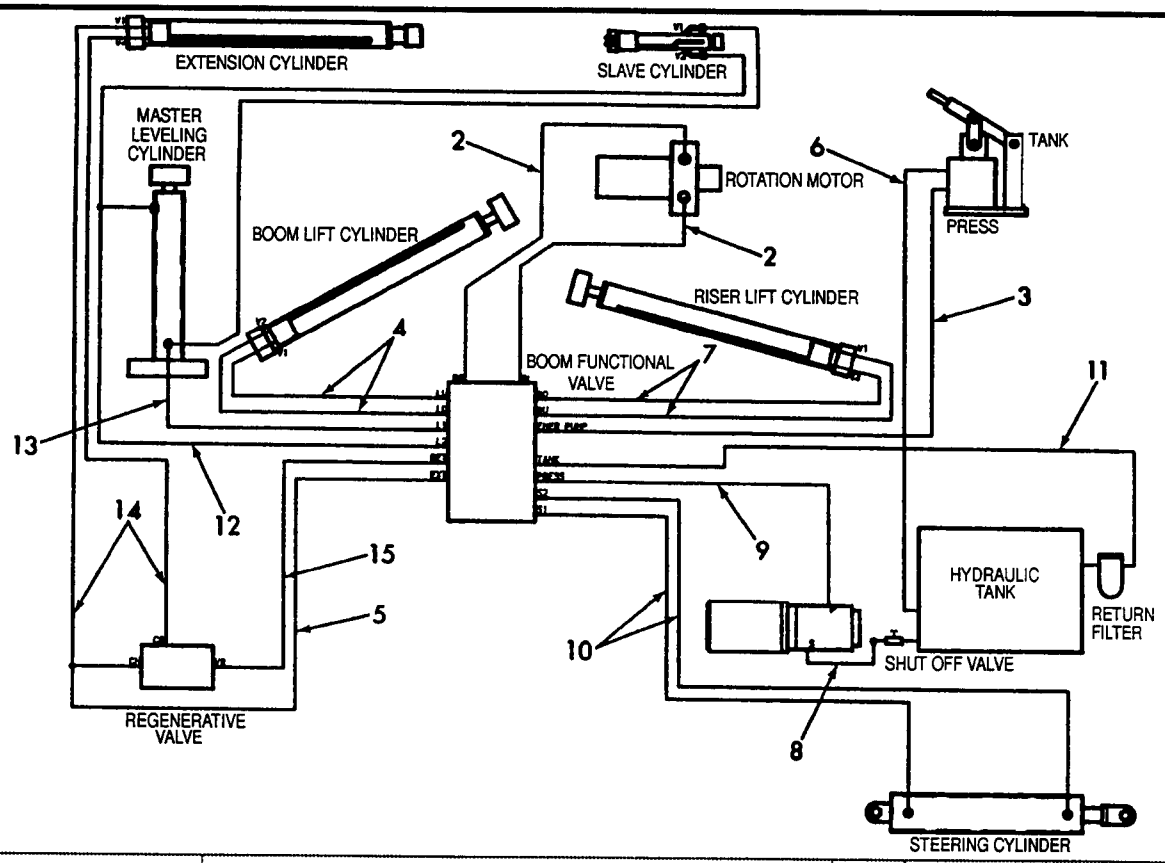


Ref.	Part No.	Description	Qty	Remarks
1	141163	Kit, Diagram Hose	Ref.	
2	13212-06-0400	Assembly, Hose	2	
3	13210-04-0160	Assembly, Hose	1	
4	13212-06-1730	Assembly, Hose	2	
5	13212-06-1640	Assembly, Hose	2	
6	13213-06-0210	Assembly, Hose	1	
7	13212-06-0600	Assembly, Hose	2	
8	13213-12-0130	Assembly, Hose	1	
9	13213-06-0170	Assembly, Hose	1	
10	13210-04-1300	Assembly, Hose	2	
11	13213-10-0240	Assembly, Hose	1	
12	13213-04-1860	Assembly, Hose	1	
13	13212-04-1710	Assembly, Hose	1	
14	13210-06-0340	Assembly, Hose	2	
15	13213-06-1730	Assembly, Hose	1	
16	13213-06-0600	Assembly, Hose	1	

Models 30KBN
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HYDRAULIC ASSEMBLY (41KB)

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
1	141246	Diagram, Hose Kit	Ref.	
2	13211-06-0800	Assembly, Hose	2	
3	13210-04-0250	Assembly, Hose	1	
4	13229-04-2160	Assembly, Hose	2	
5	13211-06-0290	Assembly, Hose	1	
6	13210-04-0100	Assembly, Hose	1	
7	13211-06-0420	Assembly, Hose	2	
8	13210-12-0370	Assembly, Hose	1	
9	13210-06-0140	Assembly, Hose	1	
10	13213-04-1360	Assembly, Hose	2	
11	13213-10-0230	Assembly, Hose	1	
12	13228-03-2600	Assembly, Hose	1	
13	13228-03-2500	Assembly, Hose	1	
14	13210-06-2890	Assembly, Hose	2	
15	13211-06-0260	Assembly, Hose	1	

SECTION 3 CONTAINS:

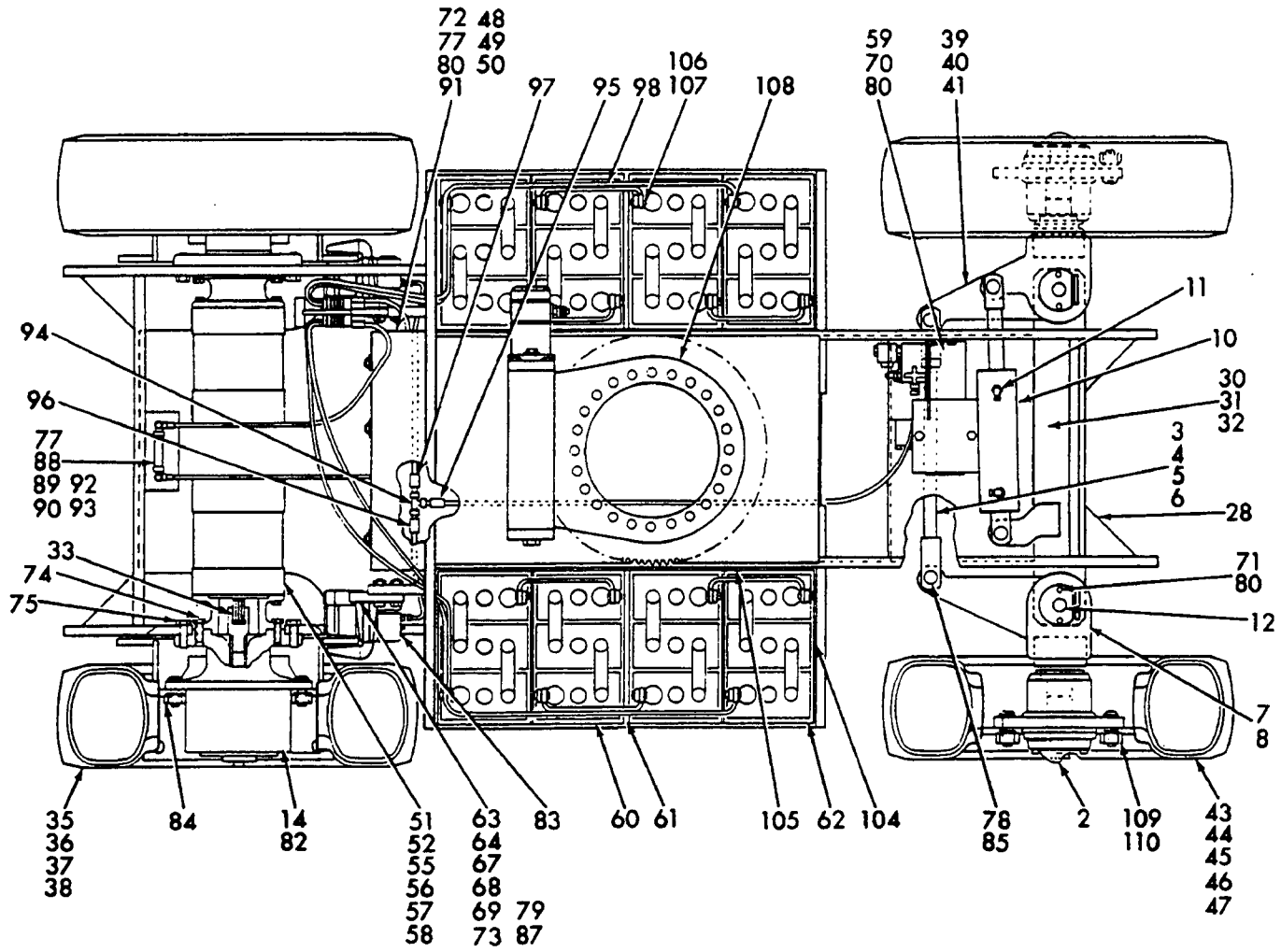
PAGE	TITLE
3.2	BASE ASSEMBLY - 30KBN
3.8	BASE ASSEMBLY - 41KB
3.11	STEERING CYLINDER - 30KBN
3.13	STEERING CYLINDER - 41KB
3.14	TRANSISTORIZED CONTROLLER
3.16	BRAKE RELEASE ASSEMBLY
3.18	TORQUE HUB
3.20	DRIVE MOTOR
3.22	CALIPER BRAKE

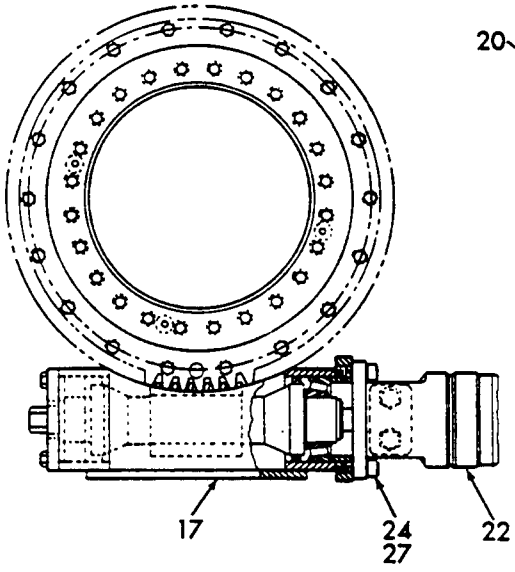
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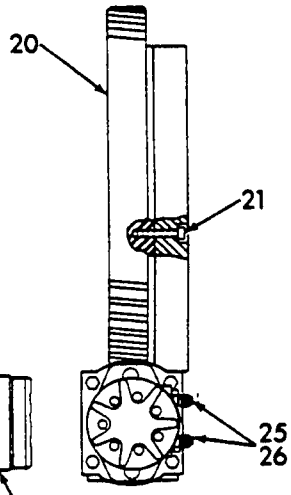
Models 30KBN
41KB
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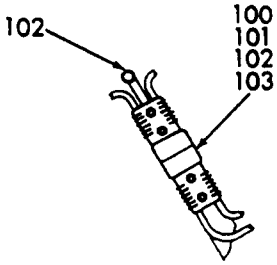
BASE ASSEMBLY (30KBN)

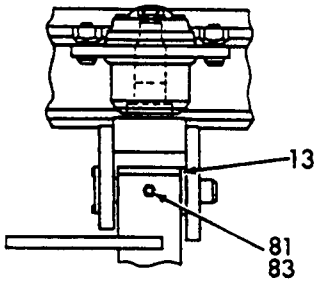
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BASE ASSEMBLY (30KBN)

Models 30KBN 41KB
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Ref.	Part No.	Description	Qty	Remarks
1	140920	Assembly, Base	Ref.	Not Shown
2	140089	Assembly, Hub	2	
	67140	Bearing Set, Inner	1	
	67139	Bearing Set, Outer	1	
	67137	Grease Seal	1	
	67136	Gasket	1	
	65943	Stud	5	
	67138	Nut	5	
3	140246	Assembly, Steering Tie Rod	1	
4	140270	Yoke, Adjusting	1	
5	60902	Nut, Jam	1	
6	140277	Weldment, Steering Tie Rod	1	
7	140249	Yoke & Spindle (L.H.)	1	
8	2265	Bushing, Sleeve, (Press Fit)	1	
9	140252	Assembly, Steering Cylinder	1	Not Shown
10	140148	Cylinder, Steering (GB)	1	See Page 3.11 For Details
11	80012-033	Elbow, Straight Thread	2	
12	140338	Pin, King	2	
13	140759	Spacer, (Steering Yoke)	2	
14	140891	Hub, Torque	2	See Page 3.18 For Details
15	600219	Kit, Seal	Ref.	Not Shown
16	600120	Seal, Outboard	Ref.	Not Shown
17	141271	Assembly, Motor (Rotator Slew Drive)	1	
18	141276	Assembly, Worm Box	1	
19	600431	Repair Kit	1	Inc. Seals Shims & Brgs.
20	600117	Shaft, (Worm Gear)	1	
21	62017	Capscrew	2	
22	81362	Motor, Hydraulic	1	Early Machines
	81382	Motor, Hydraulic	1	After Late 1990
23	600123	Kit, Seal (For P/N 81362)	1	Not Shown
	600471	Kit, Seal (For P/N 81382)	1	
24	62011	Capscrew	2	
25	80001-11	Connector, Male	2	
26	65781	Cap, Plug	2	
27	63305	Lockwasher	2	
28	140922	Weldment, Undercarriage	1	
29	140225	Machining, Steering Axle	1	Not Shown
30	64910	Bushing, Flange	2	
31	64932	Bearing, Sleeve	1	
32	64934	Bearing, Sleeve	2	
33	140923	Coupling, Adapter	2	

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BASE ASSEMBLY (30KBN)

Mark Industries

Ref.	Part No.	Description	Qty	Remarks
34	140948	Assembly, Drive Wheel	2	Not Shown
35	140332	Tire	2	
36	140935	Wheel, Drive	2	
37	140333	Tube, Inner	2	
38	160166	Monofill (62 Lbs.)	2	
39	140951	Yoke & Spindle (R.H.)	1	
40	64935	Bearing, Sleeve, Steering Cyl. Attachment	1	
41	2265	Bushing, Tie Rod Attachment	1	
42	140952	Assembly, Steering Monofilled Tire	2	Not Shown
43	140334	Assembly, Steer/Drive Tire	2	Not Shown
44	140332	Tire	2	
45	140181	Rim	2	
46	140333	Tube, Inner	2	
47	160166	Monofill (62 Lbs.)	2	
48	140998	Assembly, Transistorized Controller	1	See Page 3.14 For Details
49	141006	Cover, Transistorized Controller	1	
50	141017	Bracket, Wire Clamp	1	
51	141059	Assembly, Electric Motor & Adapter	2	
52	70480	Motor, Electric	2	See Page 3.20 For Details
55	140945	Machining, Motor/Torque Hub	2	
56	60618	Capscrew	8	
57	62319	Lockwasher	8	
58	141294	Gasket, Motor/Torque Hub	2	
59	141353	Assembly, Brake Release	1	See Page 3.14 For Details
60	141222	Pad, Battery	2	
61	141223	Separator, Battery	2'	
62	30297	Battery (6 Volt, 350 Amps)	8	
63	141237	Assembly, Caliper Brake	2	
64	30860	Brake, Caliper	2	See Page 3.22 For Details
65	600109	Kit, Seal Repair	Ref.	Not Shown
66	600108	Kit, Lining	Ref.	Not Shown
67	160236	Fitting, Grease	2	
68	80004-03	Connector, Straight Thread	2	
69	65366	Cap, Grease	2	
70	60322	Capscrew	3	
71	60338	Capscrew	4	
72	60343	Capscrew	4	
73	60393	Capscrew	8	
74	60602	Capscrew	4	
75	60604	Capscrew	12	
76	60636	Capscrew	18	

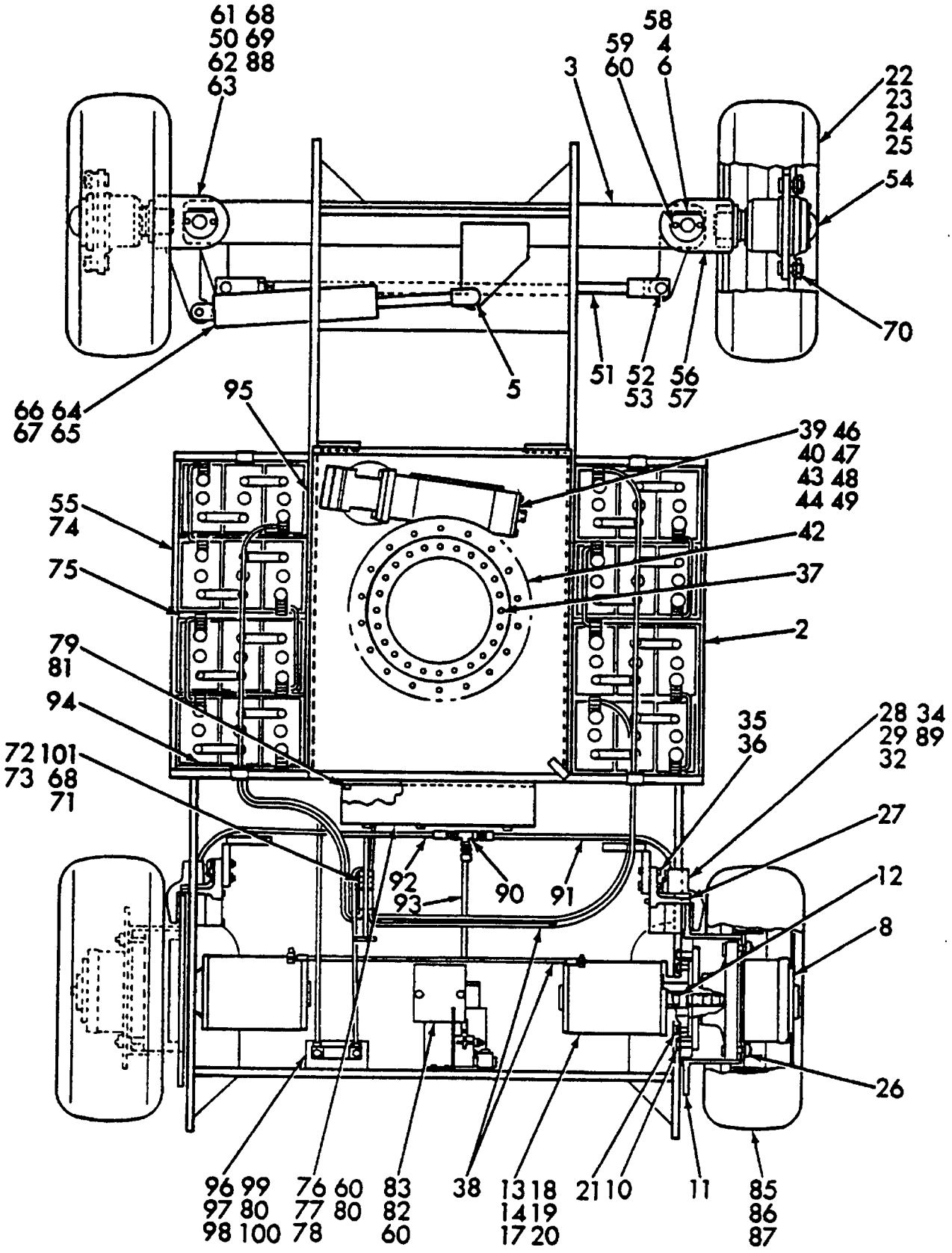
BASE ASSEMBLY (30KBN)

Ref.	Part No.	Description	Qty	Remarks
77	60702	Hex, Nut	9	
78	61236	Lock, Nut	2	
79	61305	Lock, Nut	8	
80	63302	Lockwasher	10	
81	65103	Fitting, Grease	2	
82	65106	Oil, Gear (90 Wt.)	2	
83	65366	Cap, Grease	2	
84	65945	Nut, Conical	18	
85	65966	Screw, Shoulder	2	
86	80004-10	Connector, Straight Thread	2	
87	160183	Bracket, Caliper Mounting	2	
88	141196	Terminal, Fuse Block	1	
89	70512	Fuse, 300 AMPS	1	
90	60339	Capscrew	2	
91	63303	Lockwasher	4	
92	63434	Flat Washer	2	
93	60149	Capscrew	2	
94	80031-03	Tee, Union	1	
95	13229-04-0660	Assembly, Hose	1	
96	13229-04-0090	Assembly, Hose	1	
97	13229-04-0220	Assembly, Hose	1	
98	141173	Kit, Battery Cable	1	
99	141189	Assembly, Double Disconnect	1	
100	60352	Capscrew	2	
101	60701	Hex Nut	2	
102	63301	Lockwasher	2	
103	70410	Connector, Battery	2	
104	28572	Metal, Sheet	4	
105	28573	Metal, Sheet	2	
106	63203	Capscrew	16	
107	61246	Lock Nut	16	
108	141333	Spacer, Turret Plate	1	
109	67138	Nut, Wheel	10	
110	65943	Bolt, Wheel	10	

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BASE ASSEMBLY (41KB)

Mark Industries



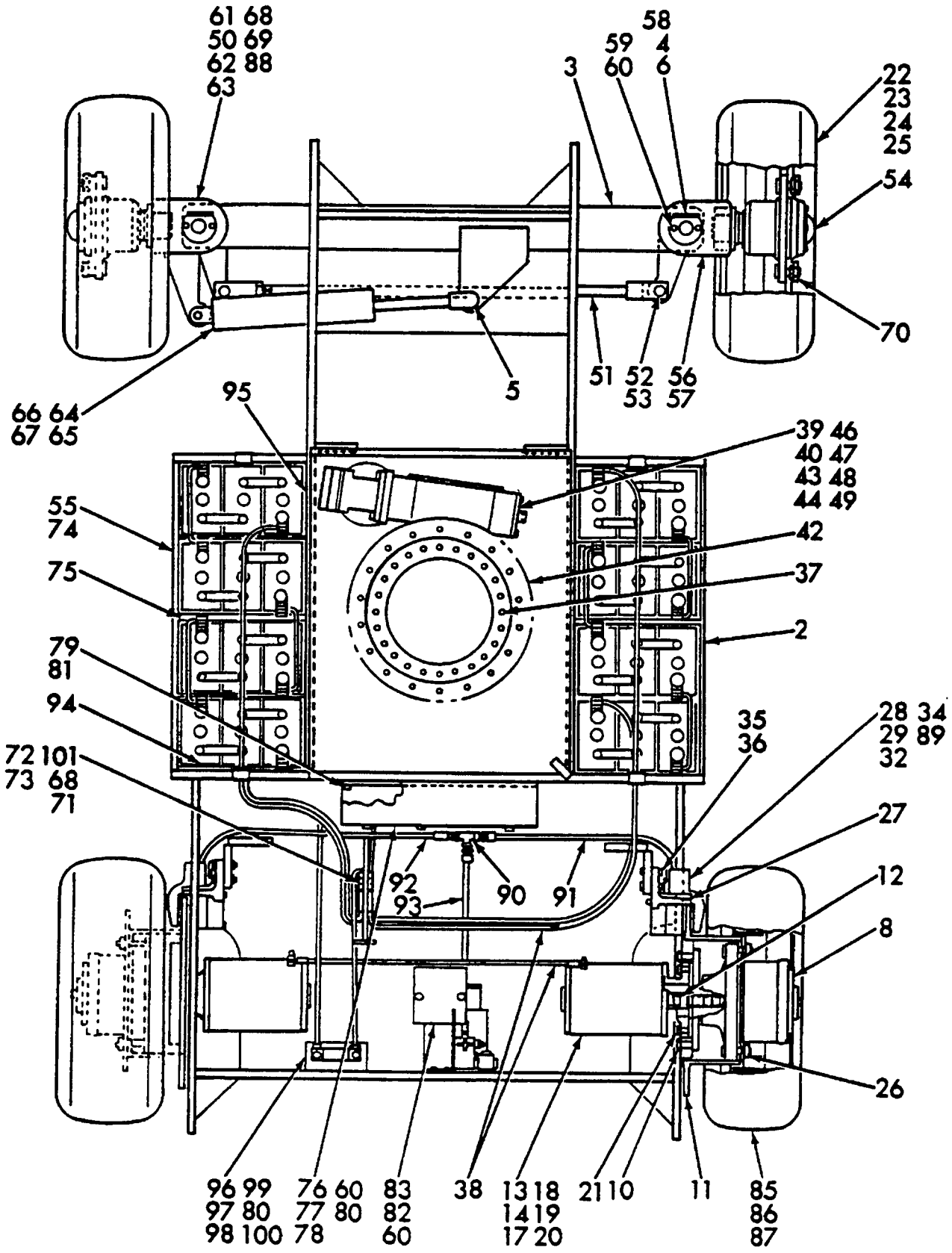
BASE ASSEMBLY (41KB)

Ref.	Part No.	Description	Qty	Remarks
1	141025	Assembly, Base - 41KB	Ref.	
2	141023	Weldment, Base	1	
3	140039	Machining, Steering Axle	1	
4	64910	Bushing, Flanged	2	
5	2265	Bushing	1	
6	64934	Bearing, Sleeve	2	
6	64934	Bearing, Sleeve	2	
7	141028	Spacer, Drive Mount	2	Not Shown
8	140891	Hub, Torque	2	See Page 3.18 For Details
9	600219	Kit, Seal	Ref.	Not Shown
10	60621	Capscrew	12	
11	141054	Machining, Brake Rotor	2	
12	140923	Coupling, Adapter	2	
13	141059	Assembly, Electric Motor & Adapter	2	
14	70480	Motor, Electric	2	See Page 3.21 For Details
15	600149	Seal, Shaft	1	Not Shown
16	600142	Brush & Parts	2	Not Shown
17	140945	Machining, Adapter	2	
18	60618	Capscrew	8	
19	62319	Lockwasher	8	
20	141294	Gasket, Motor/Torque Hub	2	
21	60602	Capscrew	4	
22	140167	Assembly, Wheel	2	
23	140040	Wheel	2	
24	140317	Valve	2	
25	140165	Tire	2	
26	65945	Nut, Conical	18	
27	160183	Bracket, Caliper Mounting	2	
28	141237	Assembly, Brake Caliper	2	See Page 3.22 For Details
29	30860	Brake, Disc	2	
30	600109	Kit, Seal Repair	1	Not Shown
31	600108	Kit, Lining	1	Not Shown
32	160236	Fitting, Grease	2	
33	80004-03	Connector, Straight Thread	2	
34	65366	Cap, Grease	2	
35	60393	Capscrew	8	
36	61305	Lock, Nut	8	
37	60636	Capscrew	24	
38	141252	Kit, Battery Cable	1	
39	141271	Assembly, Motor/Slew Drive Rotator	1	
40	141277	Assembly, Worm Box	1	
41	600120	Seal, Outboard	1	Not Shown
42	23722	Gear, Ring	1	
43	62017	Capscrew	2	

Models 30KBN
41KB
Issued 2-94

BASE ASSEMBLY (41KB)

Mark Industries



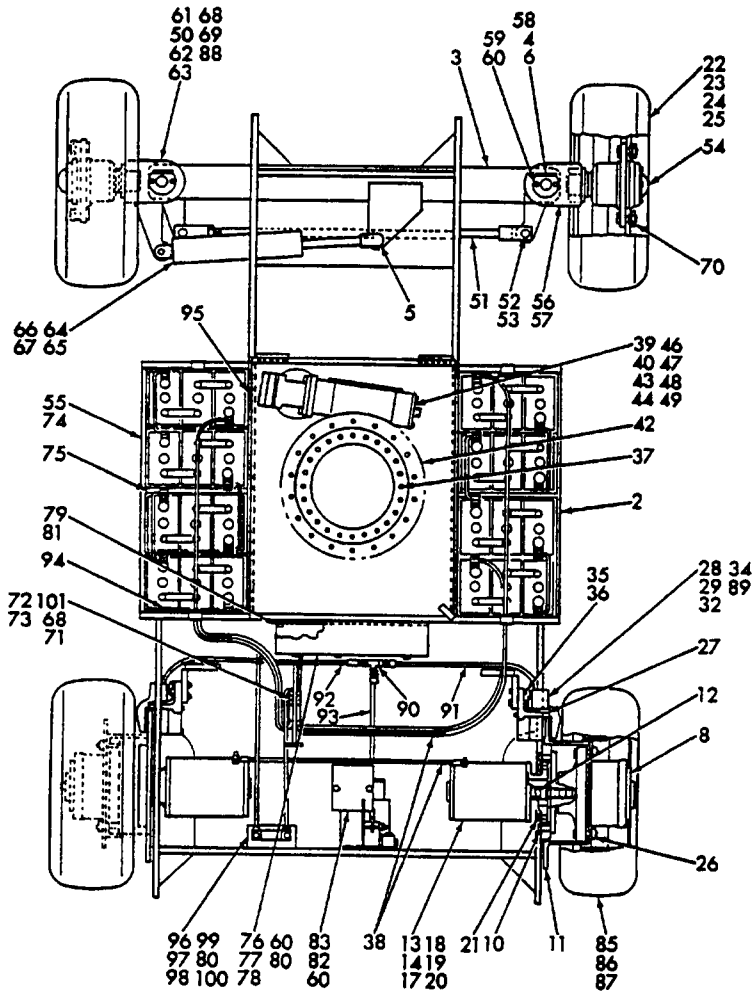
BASE ASSEMBLY (41KB)

Ref.	Part No.	Description	Qty	Remarks
44	81362	Motor, Hydraulic	1	
45	600123	Kit, Seal	1	Not Shown
46	62011	Capscrew	2	
47	80001-11	Connector, Male	2	
48	65781	Cap, Plug	2	
49	63305	Lockwasher	2	
50	65103	Fitting, Grease	2	
51	140237	Assembly, Steering Tie Rod	1	
52	65966	Screw, Shoulder	2	
53	61236	Lock, Nut	2	
54	140089	Assembly, Hub	2	
55	30297	Battery, 6 Volt	8	
56	140329	Assembly, L.H. Spindle & Yoke	1	
57	2265	Bushing	1	
58	140338	Pin, King	2	
59	60338	Capscrew	4	
60	63302	Lockwasher	11	
61	140328	Assembly, R.H. Spindel & Yoke	1	
62	2265	Bushing	1	
63	64935	Bearing, Sleeve	1	
64	140291	Assembly, Steering Cylinder	1	
65	140059	Cylinder, Steering	1	See Page 3.13 For Details
66	80004-03	Connector, Straight Thread	1	
67	80012-03	Elbow, Straight Thread	1	
68	63301	Lockwasher	2	
69	140759	Spacer (Steering Yoke)	2	
70	65117	Nut, Ball	10	
71	70410	Connector, Battery	2	
72	60352	Capscrew	2	
73	60701	Hex Nut	2	
74	141222	Pad, Battery	2	
75	141223	Separator, Battery	2	
76	140998	Assembly, Transistorized Controller	1	See Page 3.14 For Details
77	141006	Cover, Transistorized Controller	1	
78	141017	Bracket, Wire Clamp	1	
79	60343	Capscrew	4	
80	60702	Hex Nut	9	
81	63303	Lockwasher	4	
82	60322	Capscrew	3	
83	141353	Assembly, Brake Release	1	See Page 3.16 For Details
84	140166	Assembly, Front Axle Wheel	2	Not Shown
85	140280	Wheel, Front Axle	2	
86	140321	Valve	2	
87	140165	Tire	2	
88	65366	Cap, Grease	2	
89	80004-03	Connector, Straight Thread	2	

Models 30KBN
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Issued 2-94

BASE ASSEMBLY (41KB)

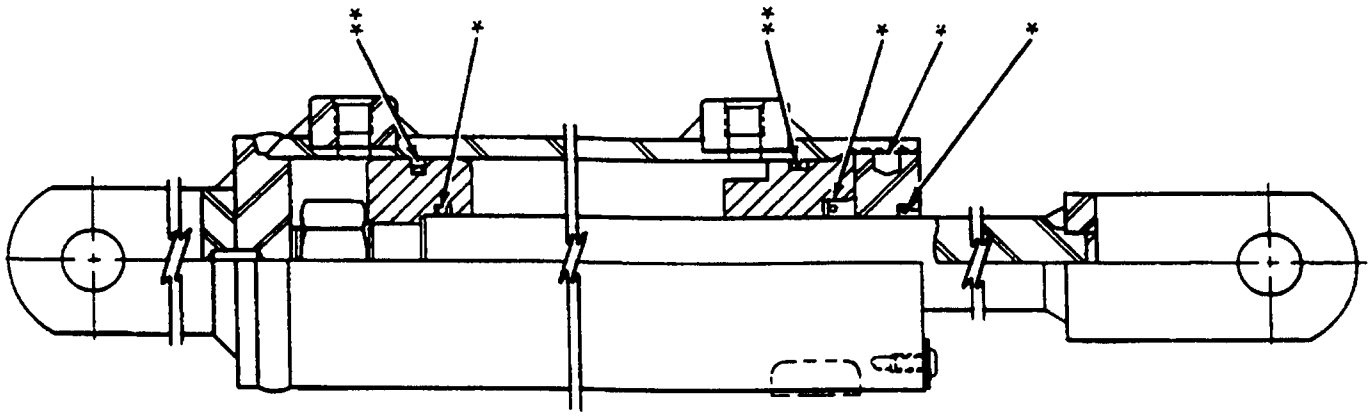
Mark Industries



Ref.	Part No.	Description	Qty	Remarks
90	80031-03	Tee	1	
91	13228-04-0150	Assembly, Hose	1	
92	13228-04-0410	Assembly, Hose	1	
93	13229-04-0390	Assembly, Hose	1	
94	28572	Sheet	2	
95	28573	Sheet	2	
96	141196	Terminal, Fuse Block	1	
97	70512	Fuse (300 AMPS)	1	
98	60339	Capscrew	2	
99	60355	Capscrew	3	
100	63434	Flat Washer	6	
101	141189	Assembly, Double Disconnect	1	
102	141183	Weldment, Battery Disconnect	1	Not Shown
103	70410	Connector, Battery	2	Not Shown
104	60352	Capscrew	2	Not Shown
105	60701	Hex Nut	2	Not Shown
106	63301	Lockwasher	2	Not Shown

STEERING CYLINDER (30KBN)

Models 30KBN 41KB
Issued 2-94



NOTE 1: DUE TO ONGOING VENDOR/MFG. REVISIONS, WHEN POSSIBLE, PROVIDE ALL NUMBERS FROM THE CYLINDER I.D. TAG.

NOTE 2: THE SEAL KIT INCLUDES ITEMS SHOWN WITH AN ANSTERISK (*).

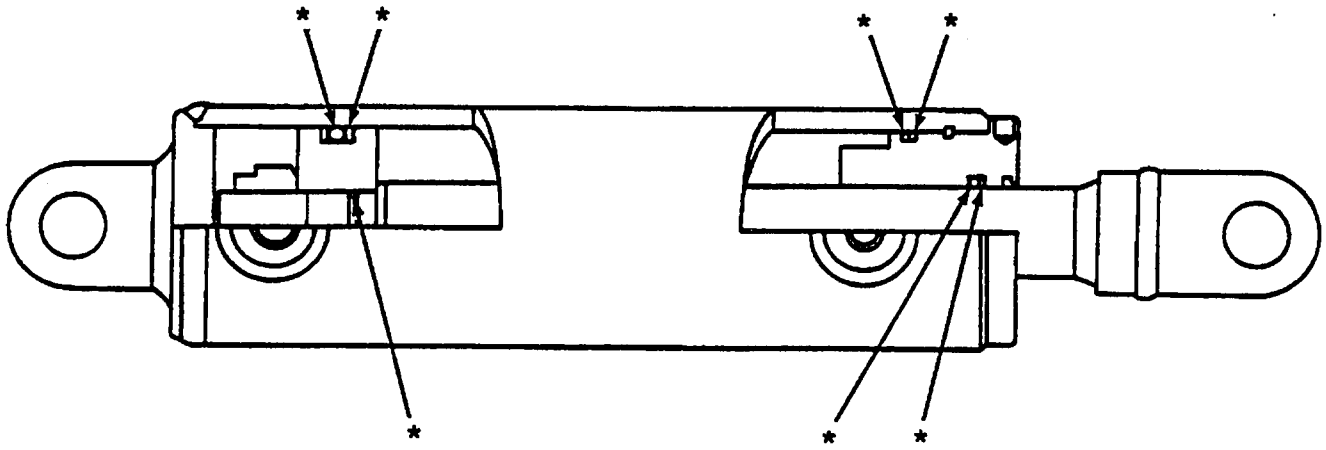
Ref.	Part No.	Description	Qty	Remarks
1	140148	Cylinder, Steering (GB) - 30KBN	Ref.	
2	600083	Kit, Seal (GB)	1	
3	64307	Pin, Cotter	4	
4	600312	Pin, Cylinder	2	

NOTE 3: INTERNAL SERVICE REPLACEMENT PARTS AVAILABLE ON A SPECIAL ORDER BASIS.

NOTES

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STEERING CYLINDER (41KB)



NOTE 1: DUE TO ONGOING VENDOR/MFG. REVISIONS, WHEN POSSIBLE, PROVIDE ALL NUMBERS FROM THE CYLINDER I.D. TAG.

NOTE 2: THE SEAL KIT INCLUDES ITEMS SHOWN WITH AN ANSTERISK (*).

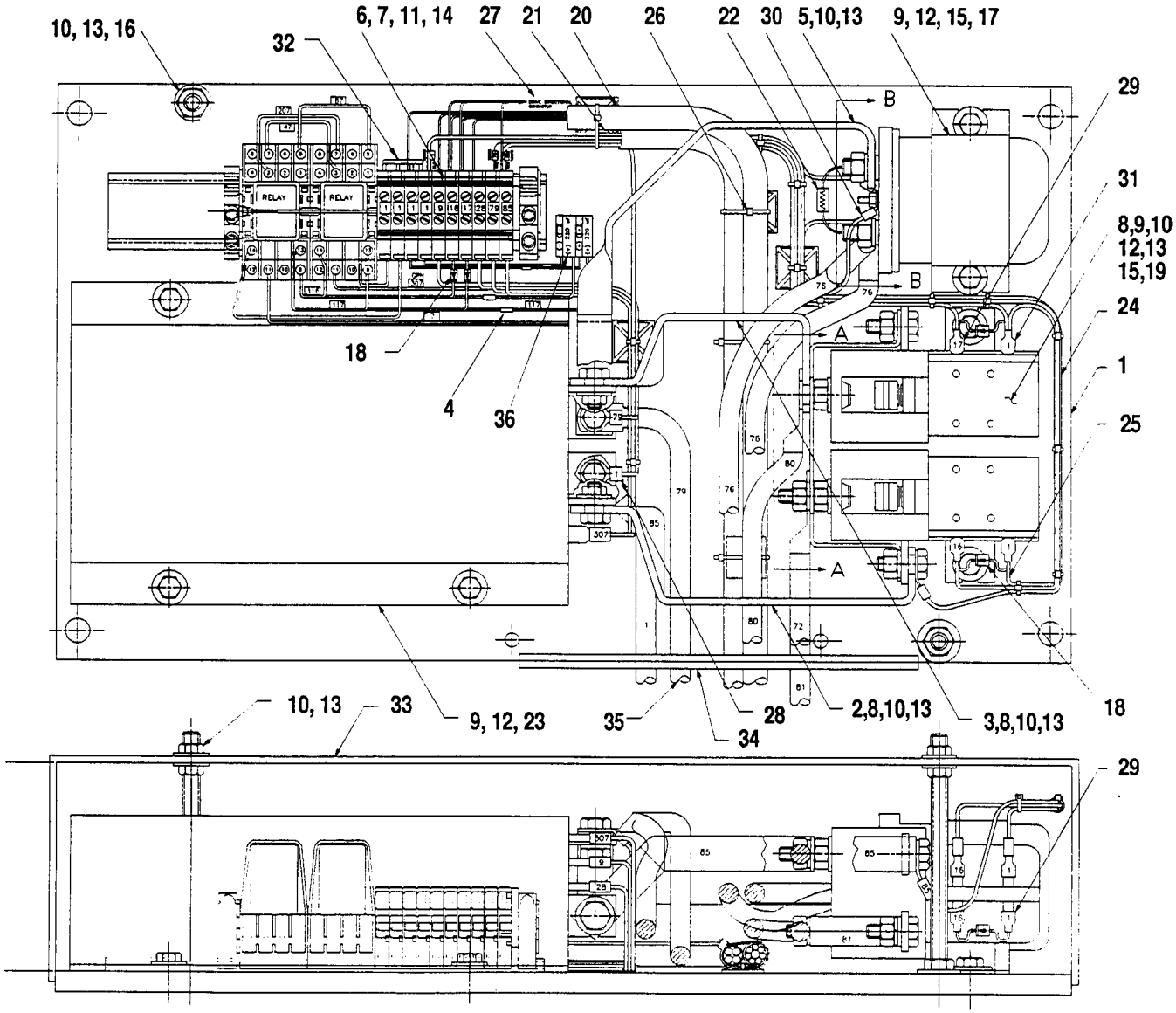
Ref.	Part No.	Description	Qty	Remarks
1	140059	Cylinder, Steering (TH) - 41KB	Ref.	
2	600033	Kit, Seal	1	Not Shown
3	68005	Pin, Clevis	2	Not Shown
4	68006	Pin, Cup	4	Not Shown

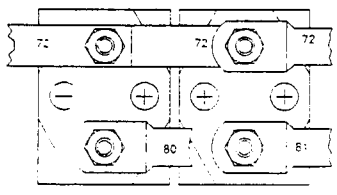
NOTE 3: INTERNAL SERVICE REPLACEMENT PARTS AVAILABLE ON A SPECIAL ORDER BASIS.

Models 30KBN
41KB
Issued 2-94

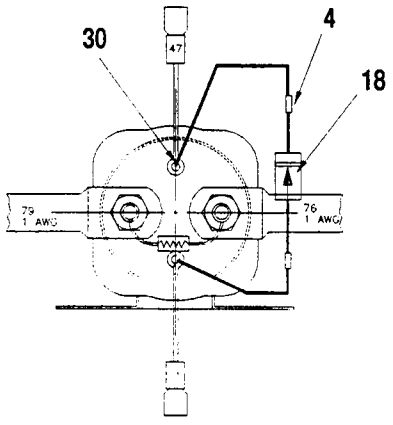
TRANSISTORIZED CONTROLLER

Mark Industries





VIEW A—A



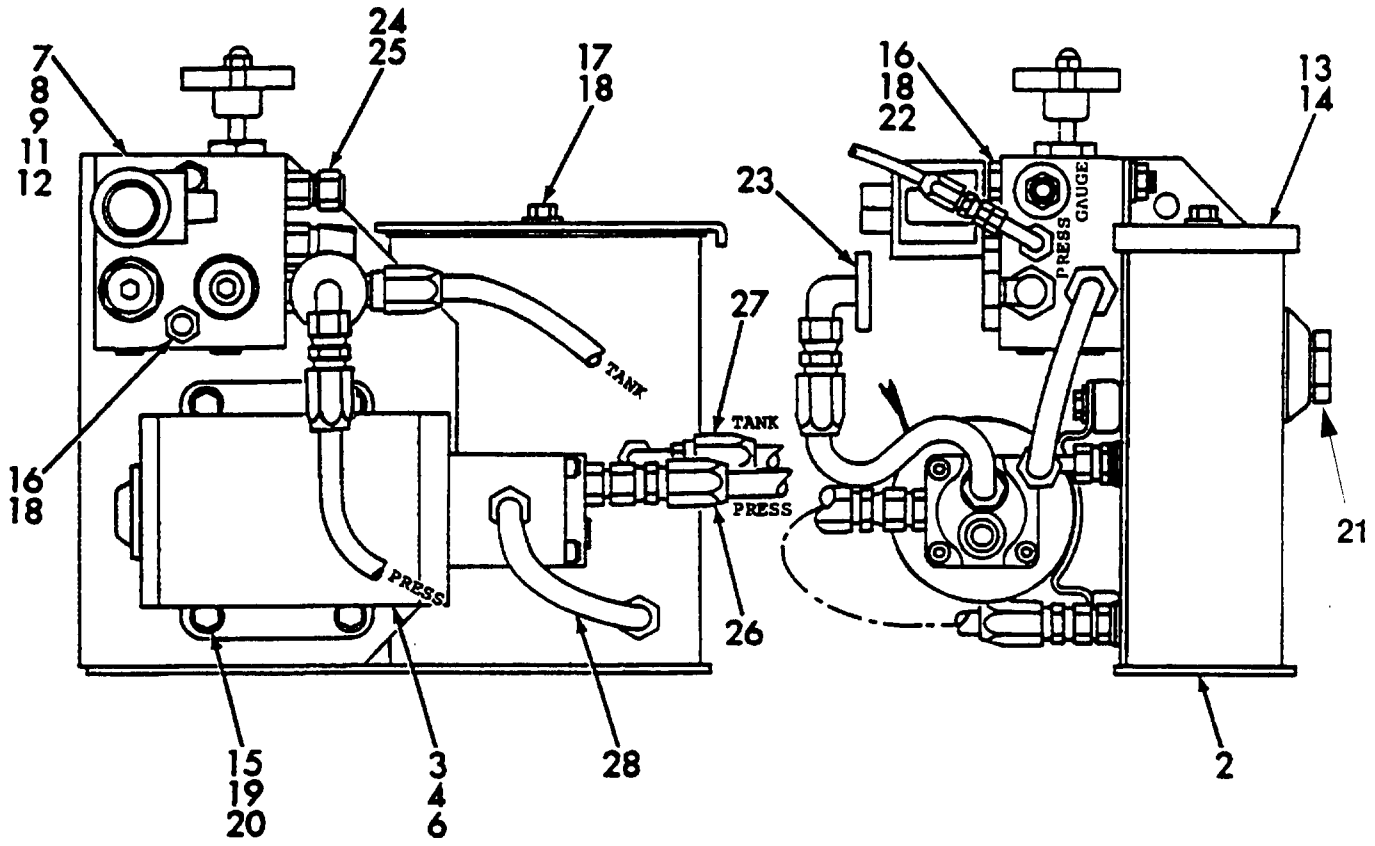
VIEW B—B

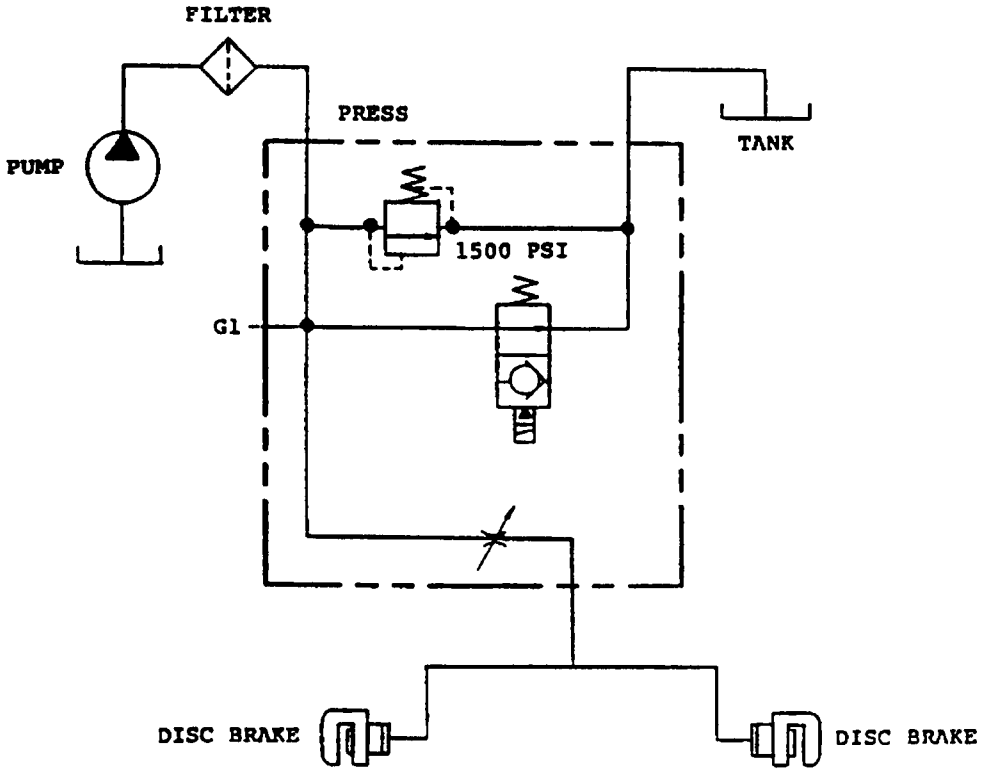
Ref.	Part No.	Description	Qty	Remarks
1	140998	Assembly, Transistorized Controller	Ref.	Incl. items 2 thru 36
2	140976	Plate, PMC Mounting	1	
3	141009	Bar, Bus	1	
4	70069	Connector, Butt (Red)	6	
5	141203	Bar, Bus	1	
6	141574	Assembly, Terminal Block	1	
7	63412	Flat Washer	2	
8	60338	Capscrew, Hex Head 6/16 - 18 UNC x 1	8	
9	60633	Capscrew, Hex Head 1/4 - 20 UNCX .5	8	
10	60702	Hex Nut 5/16 - 18	19	
11	62612	Machine Screw	3	
12	63301	Lockwasher, 5/16	8	
13	63429	Flat Washer, 5/16	14	
14	63312	Lockwasher, #8	3	
15	63401	Flat Washer, 1/4	4	
16	160339	Rod, Threaded	2	
17	70362	Relay, 24 VDC	1	
18	70479	Diode (6 AMP, 1000 Volt)	5	
19	70483	Contactor (2X SPDT)	1	
	600164	Kit, Spare Contact	1	
	600167	Assembly, Coil & Magnetic Frame	2	
20	70385	Cable (8 Conductor, 18 Gauge)	12'	
21	2912	Cable (18 Gauge)	12'	
22	70514	Resistor	1	
23	70484	Controller - No Trimpots	1	
24	2991	Wire, White (12 AWG Stranded	5'	
25	70008	Wire, Yellow Green (16 AWG)	5'	
26	256	Tie, Cable	27	
27	16214	Mount	5	
28	70255	Terminal (16-14 AWG)	3	
29	117-E	Terminal, Push-On	10	
30	117-C	Ring, Connector	5	
31	117-N	Connector	1	
32	70796	Jumper, 4 Bar	1	
33	141006	Cover, Transistorized Controller	1	
34	411-132	Mounting, Rubber	1	
35	141252	Kit, Battery Cable Kit	1	
36	70147	Capacitor	2	

Models 30KBN
41KB
Issued 2-94

BRAKE RELEASE ASSEMBLY

Mark Industries





BRAKE RELEASE ASSEMBLY

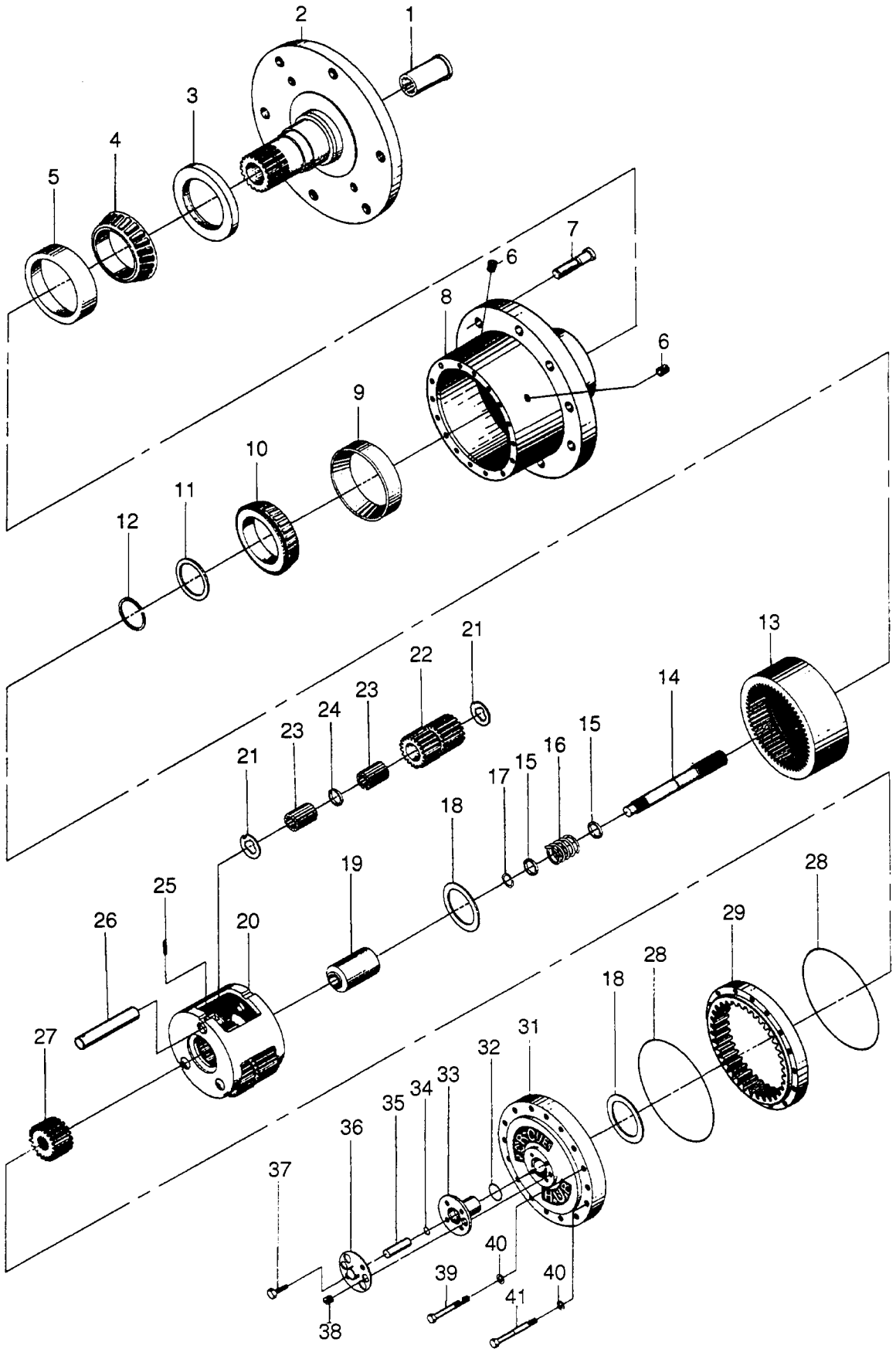
Models 30KBN
41KB
Issued 2-94

Ref.	Part No.	Description	Qty	Remarks
1	141353	Assembly, Brake Release	Ref.	
2	141354	Weldment, Brake Release Panel	1	
3	81299	Assembly, Pump/Motor	1	
4	600176	Pump	1	
5	600178	Kit, Seal	1	Not Shown
6	600177	Motor	1	
7	81300	Valve, Control Brake	1	
8	600106	Valve, Relief (Non-Adjustable)	1	
9	600107	Valve, Needle	1	
10	600032	Kit, Knob Extension	1	Not Shown
11	67986	Valve, Solenoid	1	
12	600028	Coil, 20 Volt (Round)	1	
13	141338	Cover, Reservoir Brake	1	
14	141339	Gasket, Brake Release Cover	1	
15	60323	Capscrew	4	
16	60355	Capscrew	2	
17	60338	Capscrew	1	
18	60702	Hex Nut	2	
19	63402	Flat Washer	4	
20	61246	Lock Nut	4	
21	160185	Plug, Liquid Level Sight	1	
22	63302	Lock Washer	3	
23	81340	Filter, Fitting	1	
24	80004-03	Connector, Straight Thread	3	
25	80059-03	Cap	1	
26	13229-03-0120	Assembly, Hose	1	
27	13229-03-0190	Assembly, Hose	1	
28	13228-03-0210	Assembly, Hose	1	

Models 30KBN
41KB
Issued 2-94

TORQUE HUB

Mark Industries

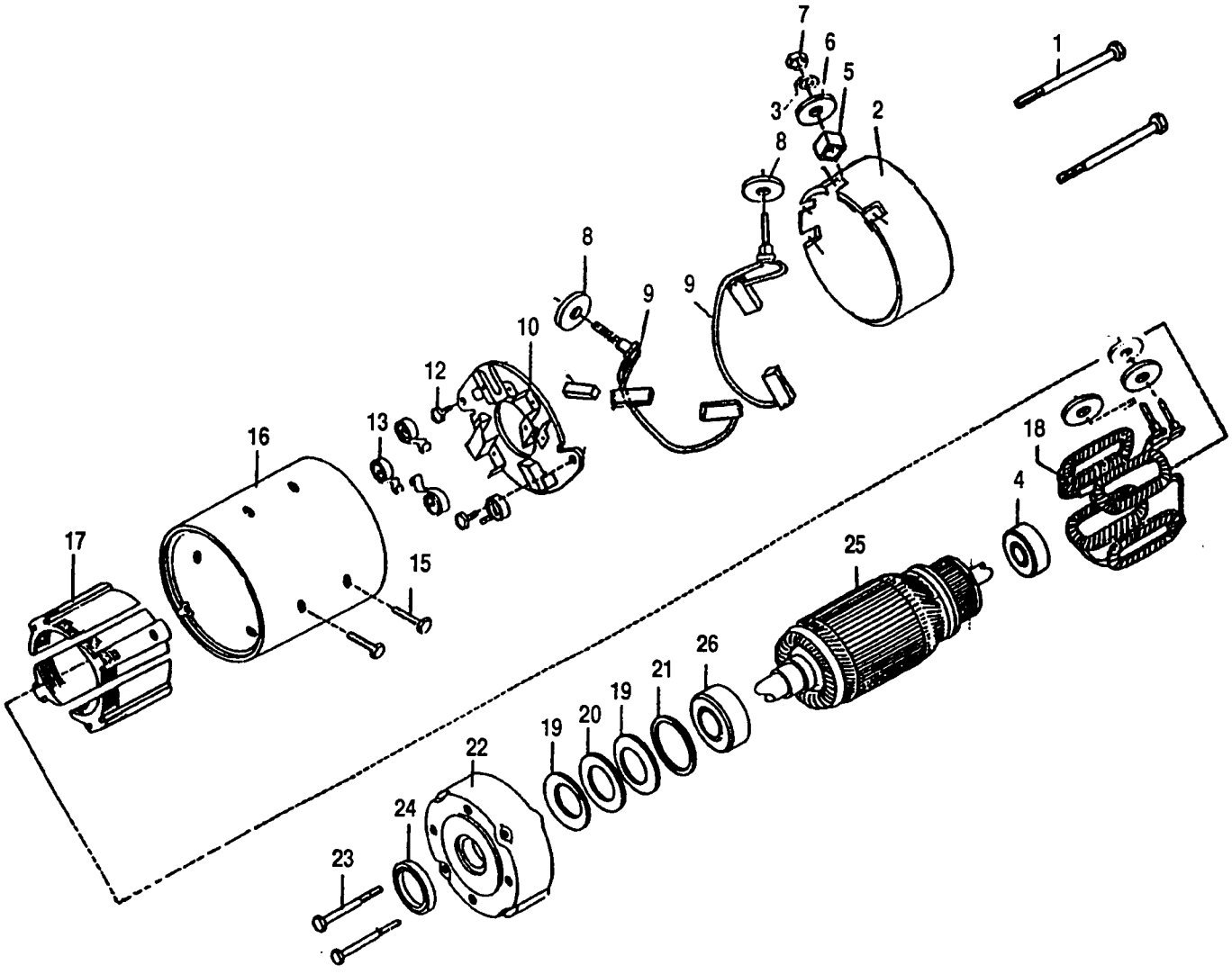


Ref.	Part No.	Description	Qty	Remarks
-	140891	Torque Hub	Ref.	Incl. items 1 thru 41
	600219	Kit, Seal	1	Incl. items w/Asterisk *
1	68316	Coupling	1	
2	67872	Spindle	1	
3	68130	Seal	1	*
4	67922	Cone, Bearing	1	
5	67914	Cup, Bearing	1	
6	68303	Pipe Plug, 1/4 NPTF	2	
7	67885	Stud	9	
8	68305	Housing	1	
9	67915	Cup, Bearing	1	
10	67923	Cone, Bearing	1	
11	67906	Washer, Thrust	1	
12	66510	Ring, Retaining	1	*
13	66521	Gear, Internal	1	
14	600448	Shaft, Input	1	
15	67907	Spacer, Thrust	2	
16	68311	Spring	1	
17	66509	Ring, Retaining	1	
18	68310	Washer, Thrust	2	*
19	67908	Spacer, Input	1	
20	66520	Carrier	1	
21	67895	Washer, Thrust	6	
22	68319	Gear, Cluster	3	
23	67916	Roller, Needle	96	
24	67907	Spacer, Thrust	3	
25	68304	Pin, Roll	3	
26	68306	Shaft, Planet	3	
27	68318	Gear, Sun	1	
28	66428	O-Ring	2	*
29	68320	Gear, Ring	1	
30	66425	Assembly, Cover	Ref.	Incl. items 31 thru 37
31	68312	Cover	1	
32	66713	O-Ring	1	*
33	68313	Cap, Cover	1	
34	66438	O-Ring	1	*
35	66186	Rod, Disconnect	1	
36	16265	Cap, Disconnect	1	
37	67928	Bolt, 1/4C x 3/4	4	
38	68287	Pipe Plug, 1/8 NPTF	1	
39	66427	Bolt, 5/16C x 2-1/4	12	
40	66424	Flatwasher	16	
41	66426	Bolt, Shoulder	4	

Models 30KBN
41KB
Issued 2-94

DRIVE MOTOR

Mark Industries



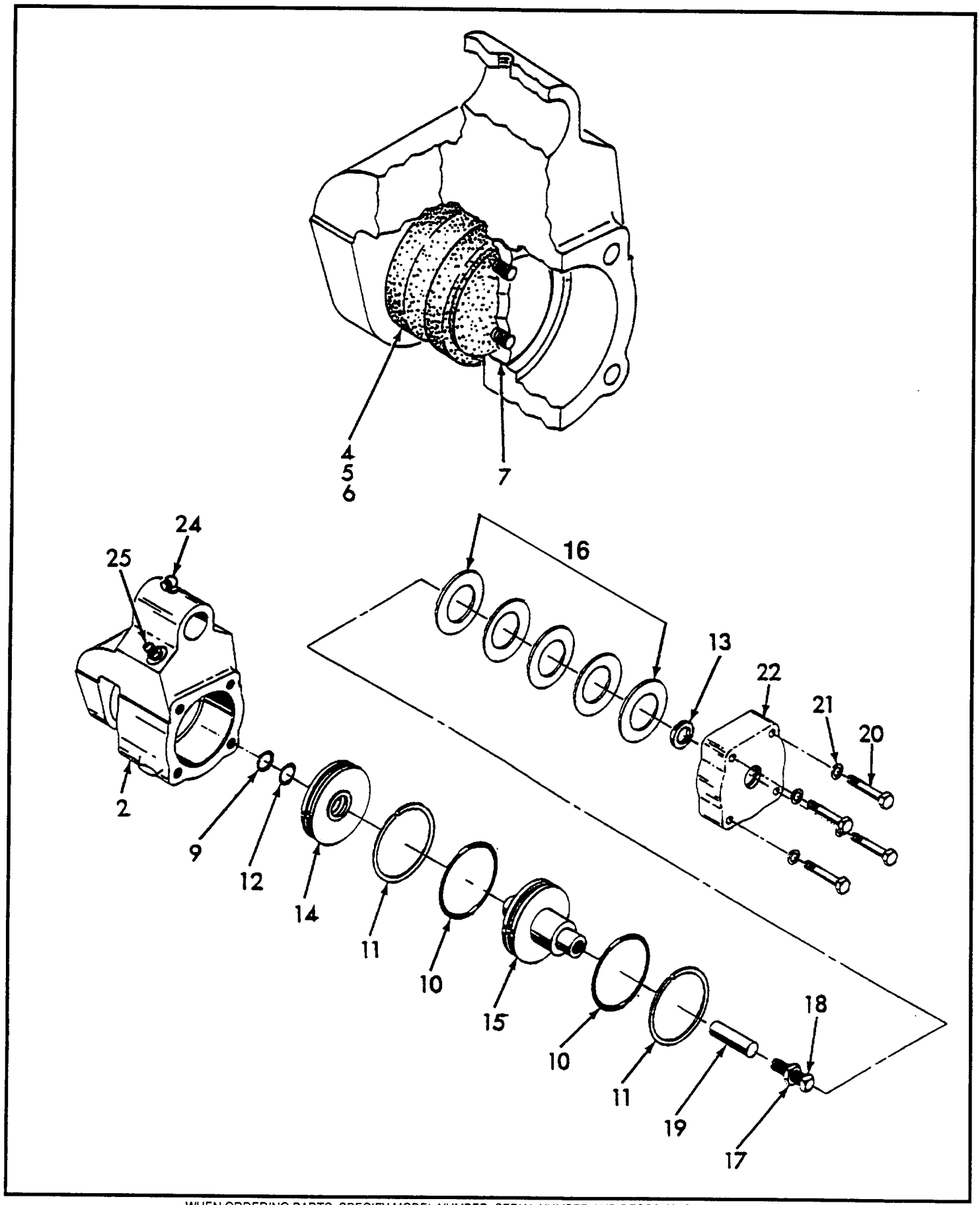
DRIVE MOTOR

Ref.	Part No.	Description	Qty	Remarks
-	70480	Assembly, Motor	Ref.	Incl. Items 1 Thru 26
1	NSS	Screw, Motor Clamp, CE	2	
2	NSS	Endshield, Commutator End, CE	1	
3	NSS	Washer	4	
4	600143	Ball Bearing, Commutator End	1	
5	600145	Bushing, Insulation For Studs	4	
6	600146	Washer, Insulation For Terminal Stud	4	
7		Terminal Stud Nut	4	
8	600147	Washer, Insulation For Terminal Stud	4	
9	600142	Brush & Parts	2	
10	600140	Brush Rigging & Parts	1	
11	NSS	Gasket	4	
12	NSS	Screw, Brush Rigging Mounting	2	
13	600141	Brush Spring (P/O Item 11)	4	
14	NSS	Stator (Complete)	1	Incl. Items 15 Thru 18
15	NSS	Screw, Pole Piece	8	
16	NSS	Shell, Stator	1	
17	NSS	Field Pole Piece	4	
18	600148	Field Coils (Set)	SET	
19	NSS	Conical Washer, PE	2	
20	NSS	Spacer Washer, PE	1	
21	NSS	Shim Washer, PE	AR	
22	NSS	Endshield, Pulley End (PE)	1	
23	NSS	Screw, Motor Clamp, PE	2	
24	NSS	Shaft Seal	1	
25	NSS	Armature	1	
26	600144	Ball Bearing, Output End	1	

Models 30KBN
41KB
Issued 2-94

CALIPER BRAKE

Mark Industries



CALIPER BRAKE

Models 30KBN
41KB
Issued 2-94

Ref.	Part No.	Description	Qty	Remarks
1	141237	Assembly, Caliper Brake	Ref.	
2	30860	Brake, Spring (Caliper)	2	
3	600108	Kit, Lining	1	Incl. items 4 thru 7
4	NSS	Screw	2	
5	NSS	Bushing	2	
6	NSS	Lining	1	
7	NSS	Assembly, Lining	1	
8	600109	Kit, Seal	1	Incl. items 9 thru 13
9	NSS	B/U Ring	1	
10	NSS	O-Ring	1	
11	NSS	B/U	2	
12	NSS	O-Ring	2	
13	NSS	Seal, Wiper	1	
14	66379	Piston	1	
15	66380	Piston	1	
16	66381	Spring, Bellville	5	
17	66384	Nut, Jam	1	
18	66385	Screw, Set	1	
19	66382	Rod, Push	1	
20	66383	Capscrew	4	
21	66393	Lockwasher	4	
22	66378	Cover	1	
23	66395	Screw, Bleeder	1	Not Shown
24	160236	ND Fitting, Grease (90 Deg.)	1	
25	80004-03	ND Connector, Straight Thread	1	
26	65366	Cap, Grease	1	

NOTES

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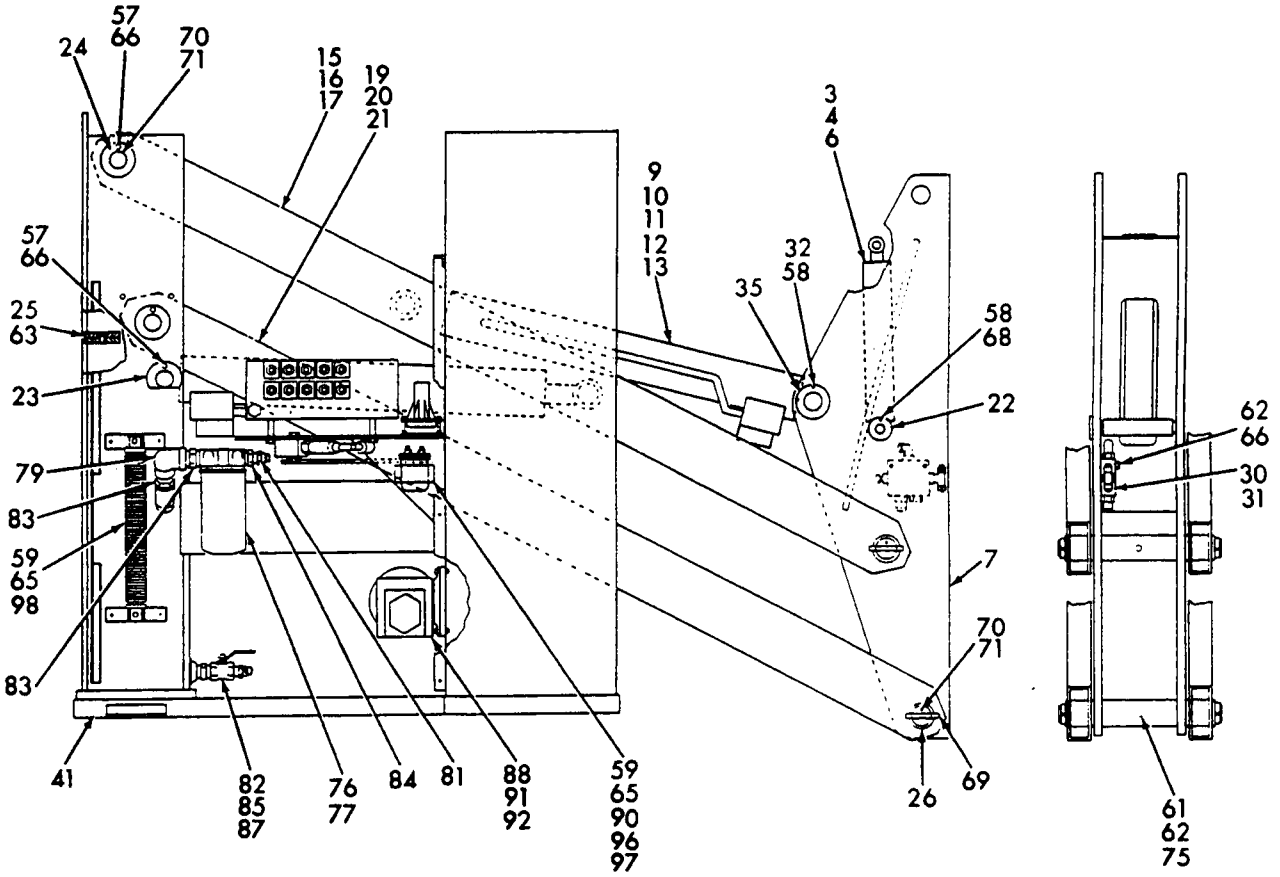
PAGE	TITLE
4.2	TURRET ASSEMBLY - 30KBN
4.6	TURRET ASSEMBLY - 41KB
4.10	BOOM/RISER LIFT CYLINDER - 30KBN
4.11	BOOM/RISER LIFT CYLINDER (SE) - 41KB
4.12	BOOM/RISER LIFT CYLINDER (TH) - 41KB
4.14	CONTROL VALVE ASSEMBLY
4.18	HYDRAULIC TANK - 41KB
4.19	BATTERY CHARGER - DOMESTIC
4.20	BATTERY CHARGER - INTERNATIONAL

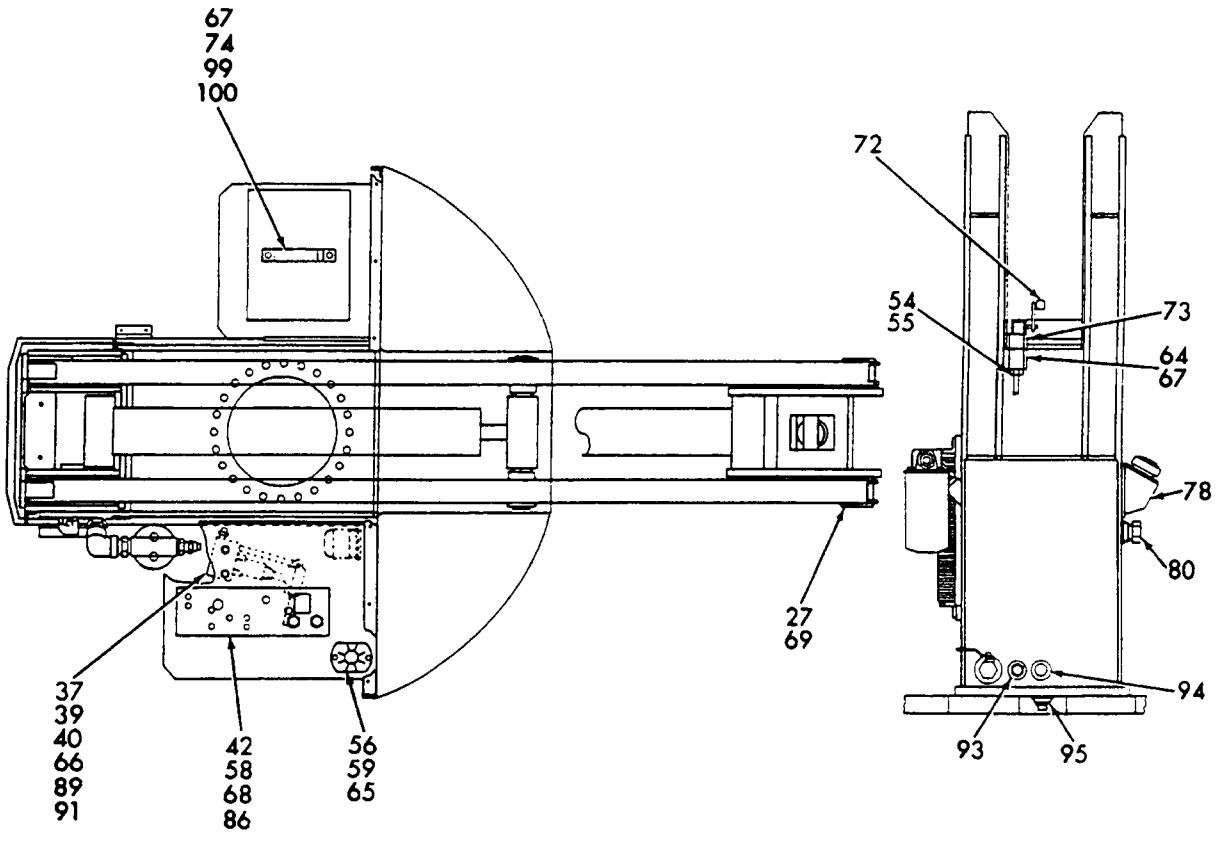
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Models 30KBN
41KB
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TURRET ASSEMBLY (30KBN)

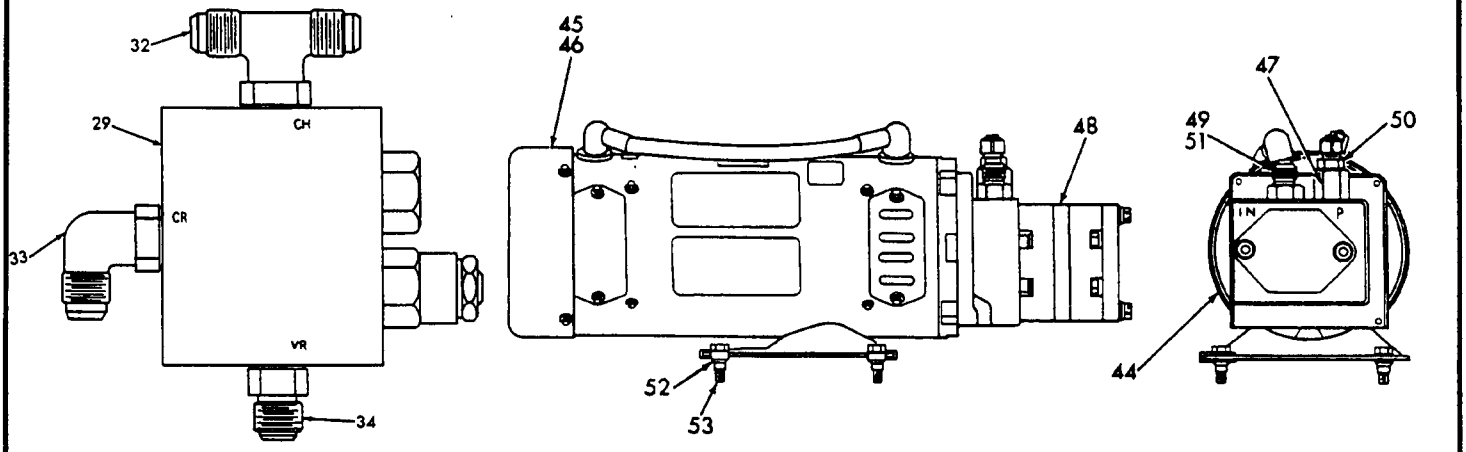
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TURRET ASSEMBLY (30KBN)

Models 30KBN 41KB
Issued 2-94



Ref.	Part No.	Description	Qty	Remarks
1	140990	Assembly, Turret	Ref.	Not Shown
2	140947	Assembly, Master Cylinder	1	Not Shown
3	140986	Cylinder, Master (TH)	1	
4	67999	Bushing	4	
5	67997	Kit, Seal (TH)	1	Not Shown
6	80036-03	Tee, Straight Thread	2	
7	140140	Machining, Riser	1	
8	140169	Sub-Assembly, Boom Lift Cylinder	2	Not Shown
9	140747	Cylinder, Lift	2	See Page 4.10 For Details
10	60319	Capscrew	6	
11	63301	Lockwasher	6	
12	80004-08	Connector, Straight Thread	4	
13	81205	Valve, Holding	2	
14	140390	Assembly, Cylinder Riser Arm	2	Not Shown
15	140106	Weldment, Cylinder Riser Arm	2	
16	140389	Bushing, Riser	2	
17	140388	Bushing, Column	2	
18	140391	Assembly, Riser Arm	2	Not Show
19	140101	Weldment, Riser Arm	2	
20	140389	Bushing, Riser	2	
21	140388	Bushing, Column	2	
22	140427	Pin, Master Cylinder/Riser	1	
23	140454	Pin, Rise Lift Cylinder (Cap End)	1	
24	140455	Pin, Riser Arm	4	
25	141238	Pad, Boom Rest	1	
26	140469	Pin, Arm/Riser	2	
27	140471	Pin, Arm/Cylinder	1	
28	140532	Sub-Assembly, Regenerative Valve	1	Not Shown

TURRET ASSEMBLY (30KBN)

Mark Industries

Ref.	Part No.	Description	Qty	Remarks
29	81222	Valve, Regenerative	1	
30	67360	Valve, Counterbalance	1	
31	67361	Valve, Check	1	
32	80036-10	Tee, Straight Thread	1	
33	80012-10	Elbow, Straight Thread	1	
34	80004-10	Connector, Straight Thread	1	
35	140601	Pin, Boom Lift	1	
36	140806	Assembly, Emergency Pump	1	Not Shown
37	81281	Pump, Emergency	1	
38	600031	Kit, Seal	1	Not Shown
39	80008-04	Elbow, Male	1	
40	80001-04	Connector, Male	1	
41	140939	Weldment, Turret	1	
42	140968	Assembly, Function Control Valve	1	See Page 4.14 For Details
43	140971	Assembly, Pump/Motor	1	Not Shown
44	70486	Pump/Motor	1	
45	600127	Motor	1	
46	600128	Brush	4	
47	600125	Valve, In-Line Check	1	
48	600124	Pump	1	
49	80004-20	Connector, Straight Thread	1	
50	80004-08	Connector, Straight Thread	1	
51	65804	Cap, Plug	1	
52	160254	Nut, Lug	4	
53	60346	Capscrew	4	
54	2806	Relief, Strain	1	
55	2912	Cable, Conductor (18 Gauge/4 Conductor)	8 Ft.	
56	21250	Sensor, Slope	1	
57	60322	Capscrew	14	
58	60325	Capscrew	8	
59	60342	Capscrew	21	
60	60360	Capscrew	2	
61	60388	Capscrew	2	
62	61305	Nut, Lock	2	
63	61824	Capscrew	2	
64	62708	Machine Screw	2	
65	63301	Lockwasher	12	
66	63302	Lockwasher	13	
67	63313	Lockwasher	4	
68	63319	Lockwasher	12	

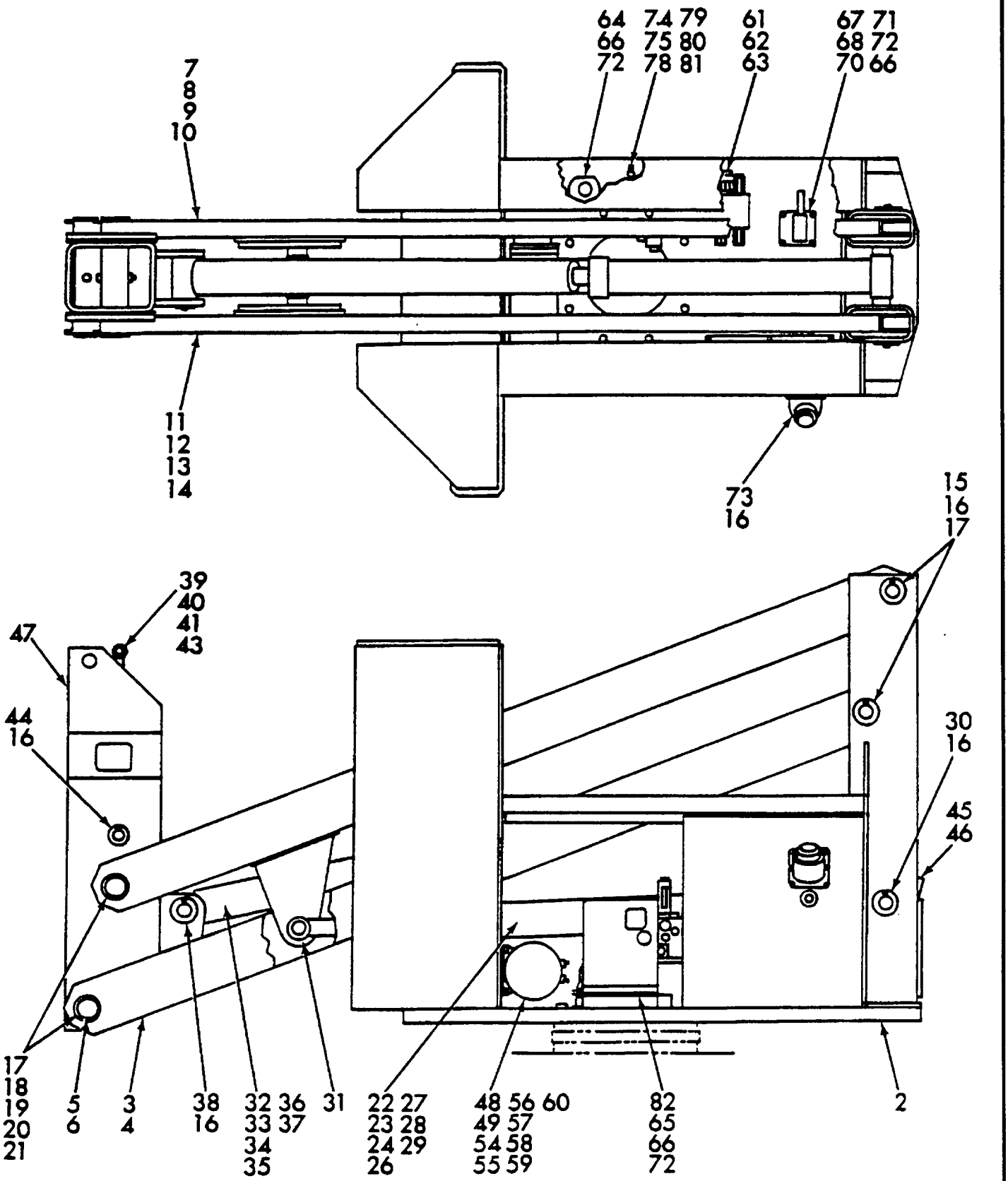
TURRET ASSEMBLY (30KBN)

Ref.	Part No.	Description	Qty	Remarks
69	64216	Pin, Roll	6	
70	65103	Fitting, Grease	8	
71	65366	Cap, Grease	8	
72	70148	Arm, Switch Lever	1	
73	70173	Switch, Limit	1	
74	70523	Charger, Battery (Domestic)	1	See Page 4.19 For Details
	70526	Charger, Battery (International)	1	See Page 4.20 For Details
75	90565	Flat Washer	10	
76	81209	Filter, Return	1	
77	67213	Cartridge, Filter	1	
78	81337	Filter/Breather	1	
79	160197	Elbow, Female	1	
80	160186	Gauge, Sight	1	
81	80001-14	Connector, Male	1	
82	2493	Nipple	1	
83	65802	Nipple	2	
84	80057-16	Reducer	1	
85	3033	Valve, Ball	1	
86	95472	Tube	4	
87	80001-19	Connector, Male	1	
88	60338	Capscrew	4	
89	60355	Capscrew	2	
90	60701	Hex Nut	4	
91	61246	Lock Nut	2	
92	63429	Flat Washer	4	
93	80001-05	Connector, Male	1	
94	80048-05	Plug, Hollow	1	
95	80048-06	Plug, Hollow	1	
96	70362	Relay, 24 VDC	1	
97	63401	Flat Washer	6	
98	141219	Assembly, Terminal Block	1	
99	60711	Hex Nut	4	
100	60309	Capscrew	4	

Models 30KBN
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Issued 2-94

TURRET ASSEMBLY (41KB)

Mark Industries



TURRET ASSEMBLY (41KB)

Ref.	Part No.	Description	Qty	Remarks
1	141158	Assembly, Turret	Ref.	Not Shown
2	141102	Weldment, Turret	1	
3	141168	Assembly, Riser Arm/Lower	2	
4	141167	Weldment, Riser Arm/Lower	2	
5	140385	Bushing, Riser	2	
6	140386	Bushing, column	2	
7	141091	Assembly, Riser Arm/Upper (L.H.)	1	
8	140385	Bushing, Riser	1	
9	140386	Bushing, Column	1	
10	141089	Weldment, Riser Arm/Upper (L.H.)	1	
11	141092	Assembly, Riser Arm/Upper (R.H.)	1	
12	140385	Bushing, Riser	1	
13	140386	Bushing, Column	1	
14	141090	Weldment, Riser Arm/Upper (R.H.)	1	
15	140423	Pin, Arm Column	4	
16	65984	Capscrew	9	
17	65103	Fitting, Grease	8	
18	140422	Pin, Arm/Riser	2	
19	60614	Capscrew	2	
20	61301	Lock Nut	2	
21	64216	Pin, Roll	6	
22	141085	Assembly, Riser Cylinder	1	
23	141084	Cylinder, Riser (TH)	1	
24	600062	Bushing	4	
25	600185	Kit, Seal	1	Not Shown
26	60319	Capscrew	3	
27	63301	Lockwasher	3	
28	80004-08	Connector, Straight Thread	2	
29	81205	Valve, Holding	1	
30	140421	Pin, Arm/Cylinder Column	1	
31	141113	Pin, Arm/Cylinder Rod End	1	
32	140814	Assembly, Riser Lift Cylinder	1	
33	140813	Cylinder Riser Lift	1	See Page 4.12 For Details
34	60319	Capscrew	3	
35	63301	Lockwasher	3	
36	80004-08	Connector, Straight Thread	2	
37	81205	Valve, Holding	1	

TURRET ASSEMBLY (41KB)

Mark Industries

Ref.	Part No.	Description	Qty	Remarks
38	140430	Pin, Boom Lift/Riser	1	
39	140947	Assembly, Master Cylinder	1	
40	140896	Cylinder, Master (TH)	1	
41	67999	Bushing	1'	
42	67997	Kit, Seal	1	Not Shown
43	80036-03	Tee, Branch	2	
44	140548	Pin, Master Cylinder/Riser	1	
45	141228	Pad, Boom Rest	1	
46	61830	Capscrew	2	
47	141082	Machining, Riser	1	
48	140971	Assembly, Pump/Motor	1	
49	60486	Motor/Pump	1	
50	600127	Motor	1	Not Shown
51	600128	Brush	4	Not Shown
52	600125	Valve, In-Line Check	1	Not Shown
53	600124	Pump	1	Not Shown
54	80004-20	Connector, Straight Thread	1	
55	80004-08	Connector, straight Thread	1	
56	65804	Cap, Plug	1	
57	160254	Nut, Lug	4	
58	60346	Capscrew	4	
59	63302	Lockwasher	6	
60	60702	Hex Nut	4	
61	140968	Assembly, Function Control Valve	1	See Page 4.14 For Details
62	60343	Capscrew	4	
63	63319	Lockwasher	4	
64	21250	Sensor, Slope	1	
65	60701	Hex Nut	4	
66	63301	Lockwasher	12	
67	140806	Assembly, Emergency Pump	1	
68	81281	Pump, Emergency	1	
69	600031	Kit, Seal	1	Not Shown
70	80008-04	Elbow, Male	1	
71	80001-04	Connector, Male	1	
72	60342	Capscrew	12	
73	141202	Assembly, Hydraulic Oil Tank	1	See Page 4.18 For Details
74	140532	Sub-Assembly, Regenerative Valve	1	
75	81222	Valve, Regenerative	1	

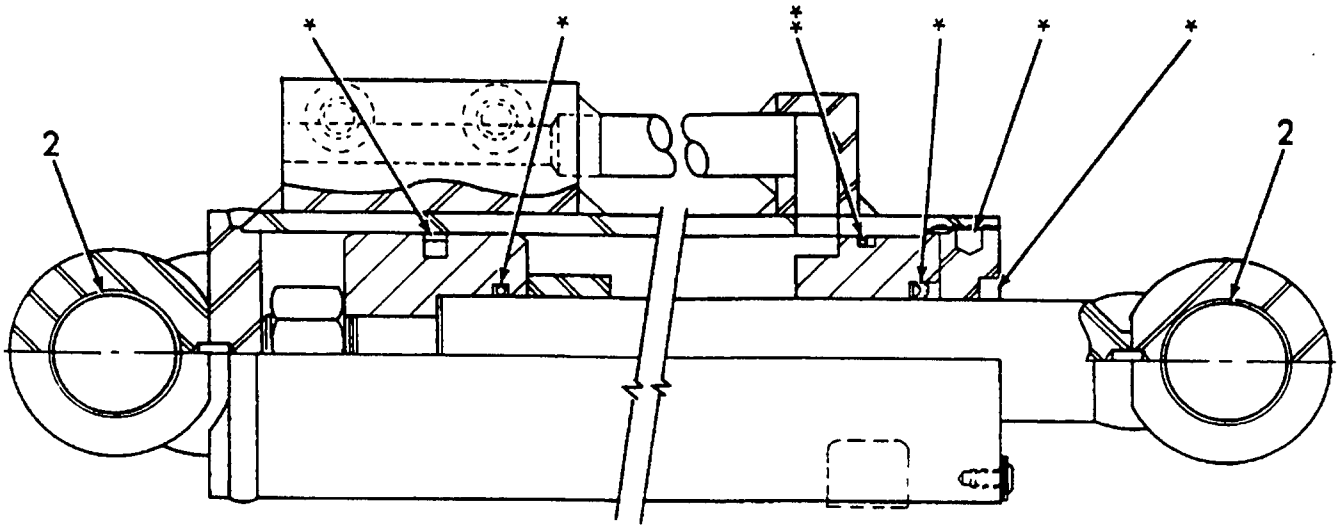
TURRET ASSEMBLY (41KB)

Ref.	Part No.	Description	Qty	Remarks
76	67360	Valve, Counterbalance	1	Not Shown
77	67361	Valve, Check	1	
78	80036-10	Tee, Branch	1	
79	80012-10	Elbow, Straight Thread	1	
80	80004-10	Connector, Straight Thread	1	
81	60360	Capscrew	2	
82	70523	Charger, Battery (Domestic)	1	See Page 4.19 For Details
83	70526	Charger, Battery (International)	1	See Page 4.20 For Details

Models 30KBN
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BOOM LIFT CYLINDER (30KBN)

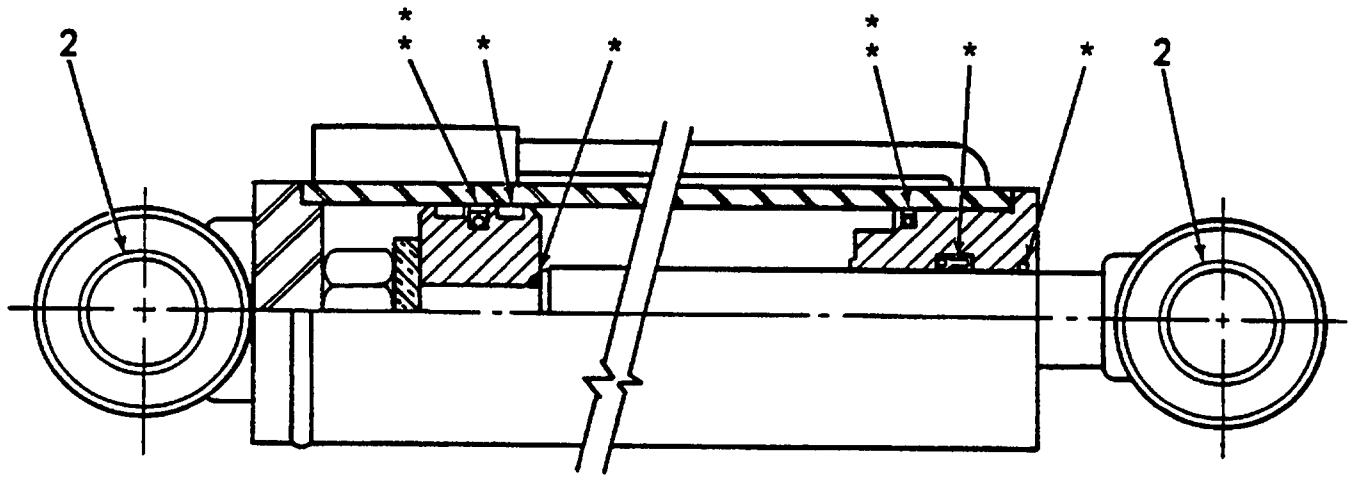
Mark Industries



NOTE 1: DUE TO ONGOING VENDOR/MFG. REVISIONS, WHEN POSSIBLE, PROVIDE ALL NUMBERS FROM THE CYLINDER I.D. TAG.

NOTE 2: THE SEAL KIT INCLUDES ITEMS SHOWN WITH AN ANSTERISK (*).

Ref.	Part No.	Description	Qty	Remarks
1	140747	Cylinder, Boom Lift (GB)	Ref.	Not Shown
2	66882	Bushing	4	
3	600082	Kit, Seal (GB)	1	
	NOTE:	INTERNAL SERVICE REPLACEMENT PARTS AVAILABLE ON A SPECIAL ORDER BASIS.		



NOTE 1: DUE TO ONGOING VENDOR/MFG. REVISIONS, WHEN POSSIBLE, PROVIDE ALL NUMBERS FROM THE CYLINDER I.D. TAG.

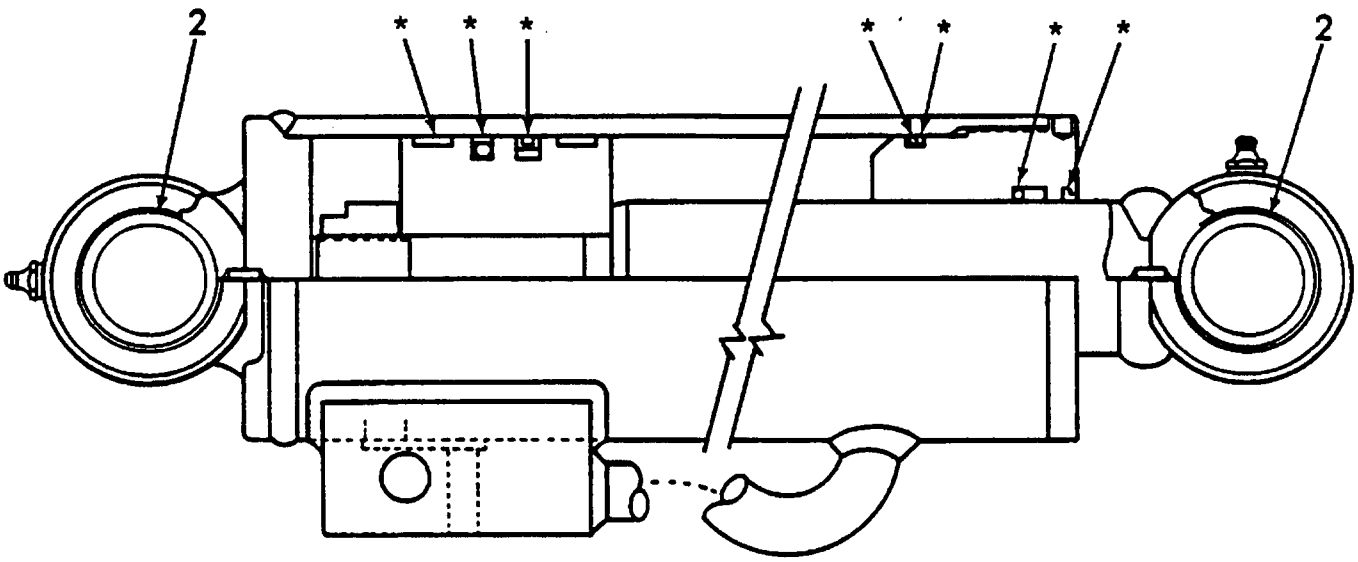
NOTE 2: THE SEAL KIT INCLUDES ITEMS SHOWN WITH AN ANSTERISK (*).

Ref.	Part No.	Description	Qty	Remarks
1	140813	Cylinder, Riser Lift (SE)	Ref.	Not Shown
2	66882	Bushing	4	
3	67230	Kit, Seal	1	Not Shown
	NOTE:	INTERNAL SERVICE REPLACEMENT PARTS AVAILABLE ON A SPECIAL ORDER BASIS.		

Models 30KBN
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Issued 2-94

BOOM LIFT CYLINDER (41KB)

Mark Industries



NOTE 1: DUE TO ONGOING VENDOR/MFG. REVISIONS, WHEN POSSIBLE, PROVIDE ALL NUMBERS FROM THE CYLINDER I.D. TAG.

NOTE 2: THE SEAL KIT INCLUDES ITEMS SHOWN WITH AN ANSTERISK (*).

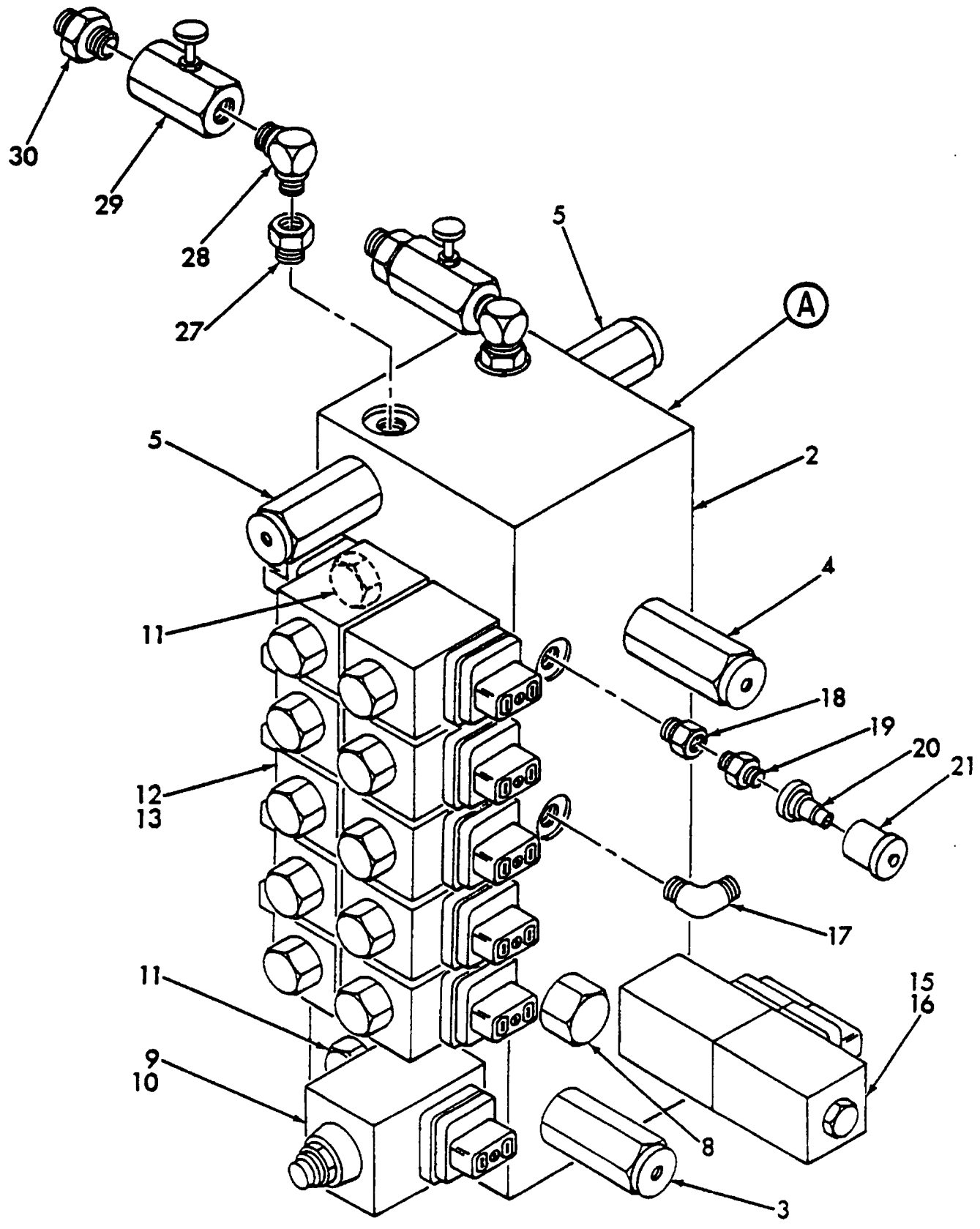
Ref.	Part No.	Description	Qty	Remarks
1	140813	Cylinder, riser Lift (TH)	Ref.	Not Shown
2	600062	Bushing	4	
3	600059	Kit, Seal	1	Not Shown
	NOTE:	INTERNAL SERVICE REPLACEMENT PARTS AVAILABLE ON A SPECIAL ORDER BASIS.		

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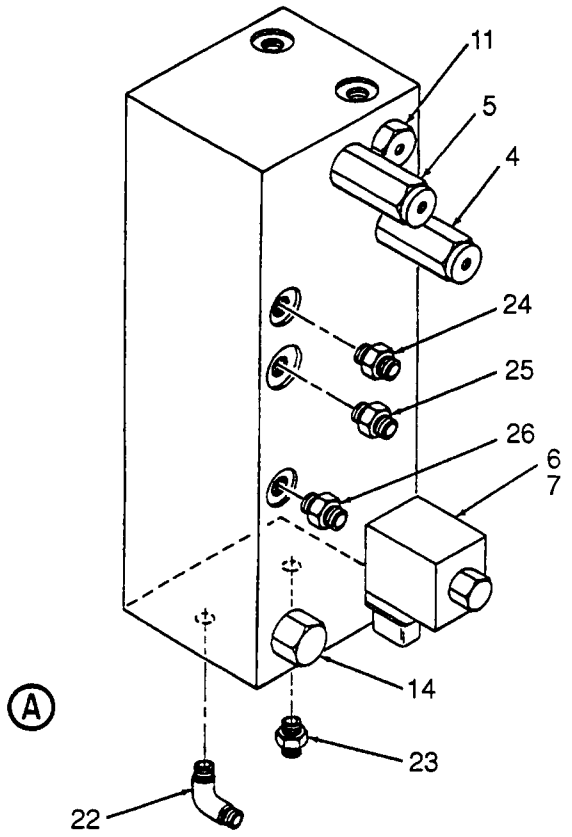
Models 30KBN
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CONTROL VALVE ASSEMBLY

Mark Industries



CONTROL VALVE ASSEMBLY

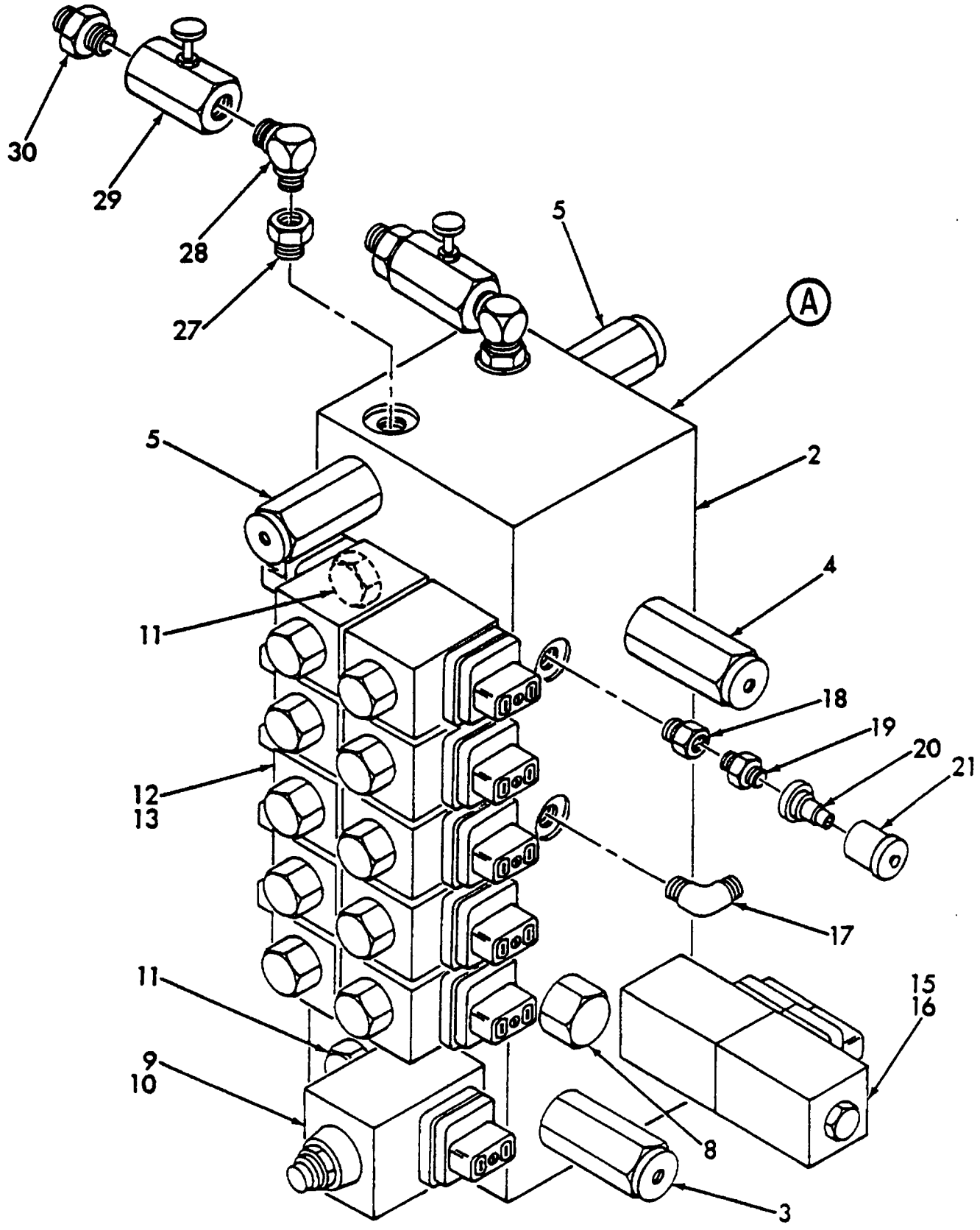


Ref.	Part No.	Description	Qty	Remarks
1	140968	Assembly, Function Control Valve	Ref.	Not Shown
2	81308	Valve, Function Control	1	
3	68060	Valve, Relief	1	
4	67218	Valve, Relief	1	
5	68057	Valve, Relief	1	
6	67000	Valve, Solenoid	1	
7	66865	Coil (20 Volt)	1	
8	67338	Valve, Differential Sensing	1	
9	67815	Solenoid, Proportional	1	
10	600113	Coil (24 Volt)	1	
11	66674	Valve, Check	1	
12	67346	Valve, Solenoid	10	
13	66865	Coil (20 Volt)	10	
14	67229	Regulator, Flow	1	
15	67341	Valve, 3-Position, 4-Way	1	
16	66865	Coil (20 Volt)	2	
17	80012-03	Elbow, Straight Thread	1	

Models 30KBN
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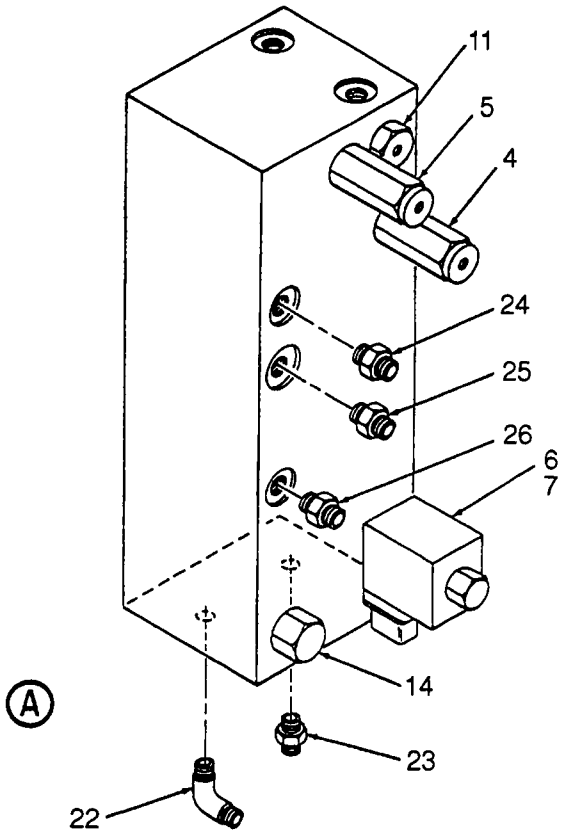
CONTROL VALVE ASSEMBLY

Mark Industries



CONTROL VALVE ASSEMBLY

Models 30KBN
41KB
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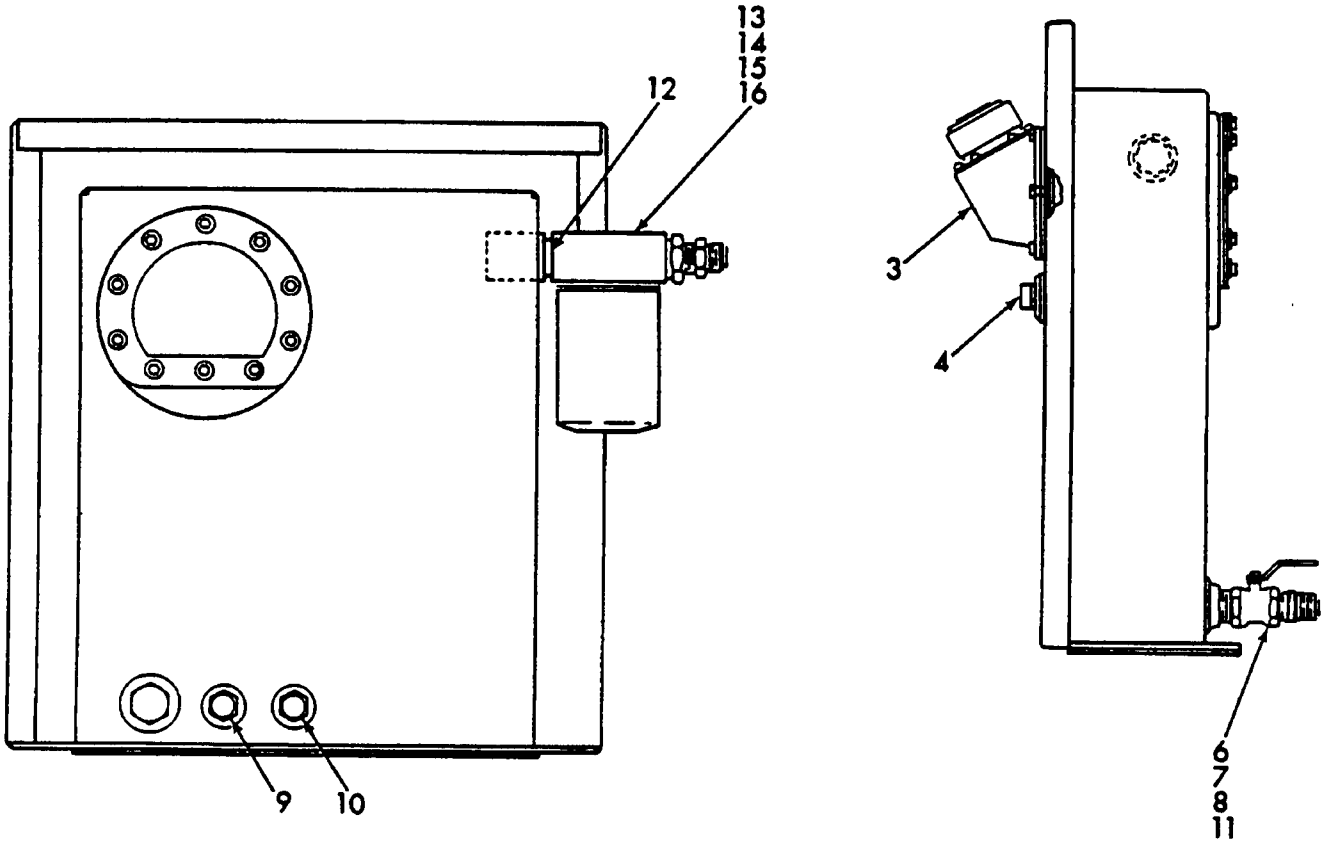


Ref.	Part No.	Description	Qty	Remarks
18	51903	Adapter, Female Pipe	1	
19	80052-03	Nipple, Pipe	1	
20	2527	Coupling, Quick Disconnect	1	
21	845	Cap, Quick Disconnect	1	
22	80012-08	Elbow, Straight Thread	3	
23	80004-16	Connector, Straight Thread	1	
24	80004-08	Connector, Straight Thread	8	
25	80004-09	Connector, Straight Thread	1	
26	140765	Connector, Modified Straight Thread	1	
27	80063-01	Adapter, Female Pipe	2	
28	80022-04	Elbow, Male	2	
29	20357	Valve, Needle	2	
I30	80001-04	Connector, Male	2	

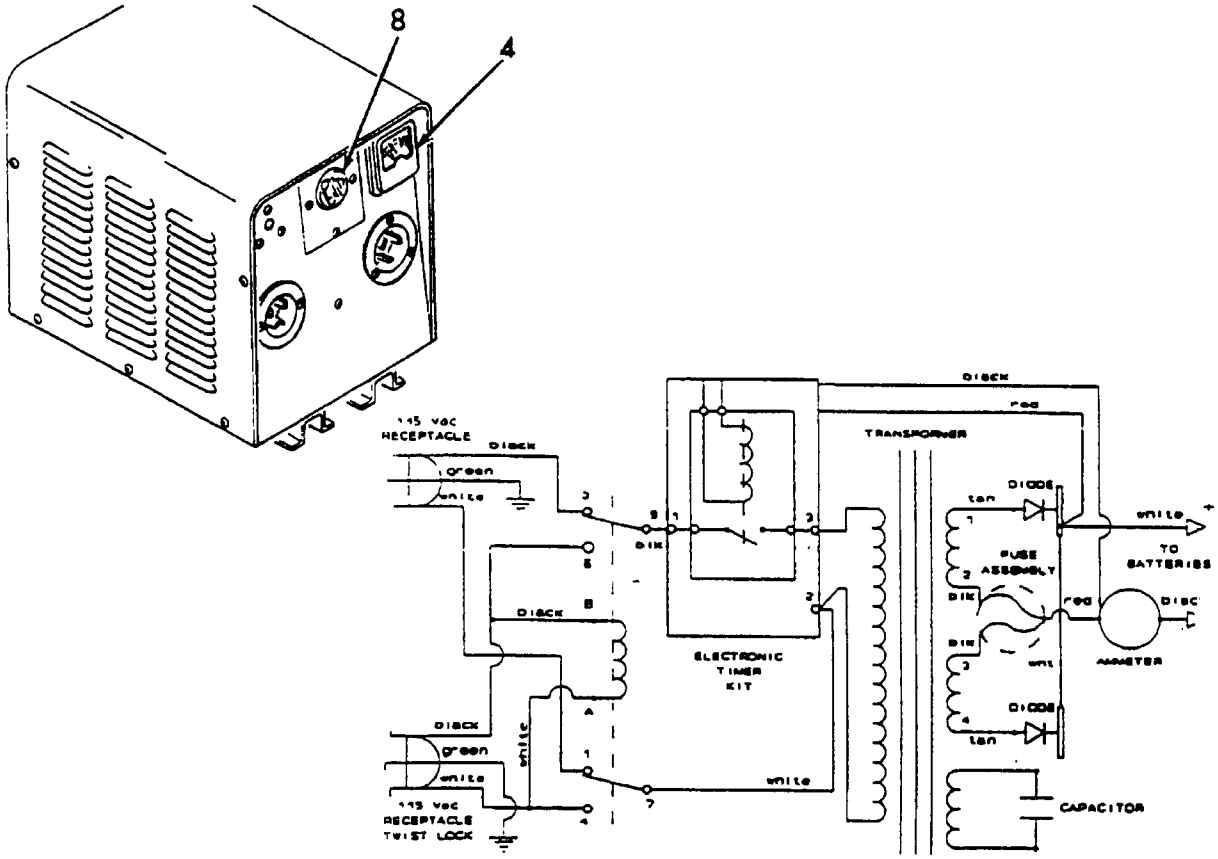
Models 30KBN
41KB
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HYDRAULIC TANK (41KB)

Mark Industries



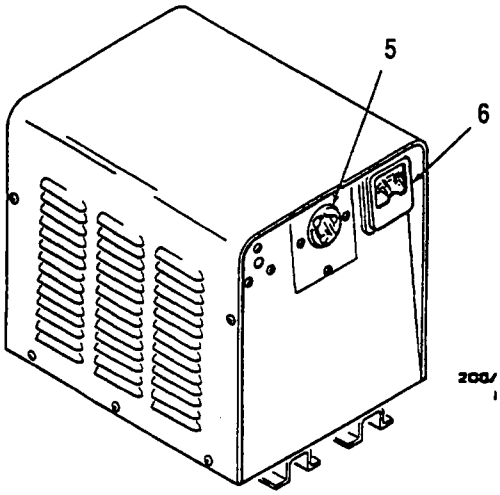
Ref.	Part No.	Description	Qty	Remarks
1	141202	Assembly, Hydraulic Oil Tank	Ref.	Not Shown
2	141201	Weldment, Hydraulic Oil Tank	1	
3	81337	Breather/Filter	1	
4	160186	Gauge, Sight	1	
5	160338	Compound, Gasket	1	Not Shown
6	2493	Nipple, Close	1	
7	3033	Valve, Ball	1	
8	80001-19	Connector, Male	1	
9	80001-05	Connector, Male	1	
10	80048-05	Plug, Hollow Hex	1	
11	65804	Cap, Plug	1	
12	160314	Nipple, Close	1	
13	81209	Filter, Return	1	
14	67213	Cartridge, Filter	1	
15	80057-16	Reducer, Pipe Thread	1	
16	80001-14	Connector, Male	1	

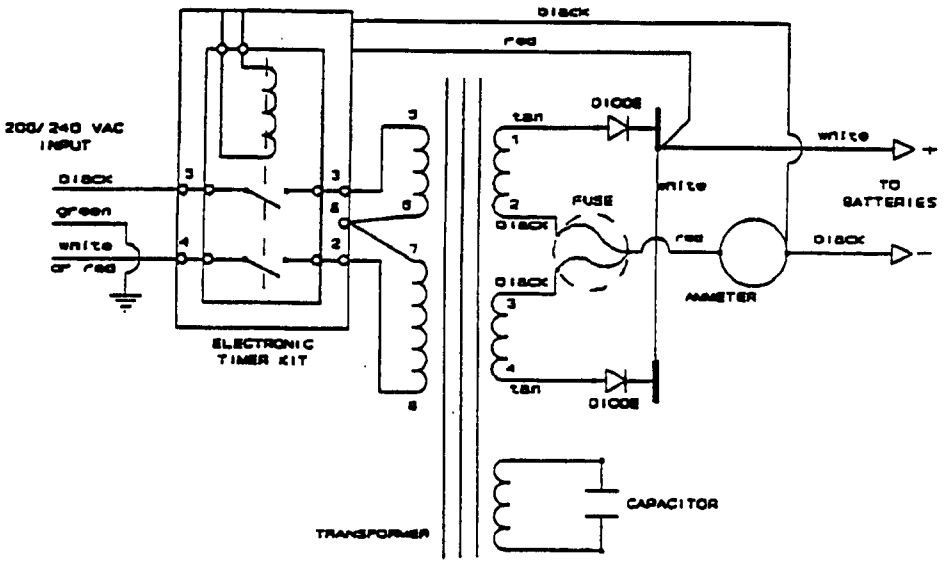


Ref.	Part No.	Description	Qty	Remarks
1	70523	Charger, Battery (Domestic)	Ref.	Not Shown
2	600135	Assembly, Transformer	1	Not Shown
3	600019	Assembly, Heat Sink (With Diodes)	1	Not Shown
4	600020	Ammeter	1	
5	600134	Assembly, Electronic Timer	1	Not Shown
6	66750	Capacitor (6 MFD, 660 VAC)	1	Not Shown
7	66728	Relay (120 VAC, DPDT, 15 AMP)	1	Not Shown
8	600136	Assembly, Fuse (With Panel)	1	

BATTERY CHARGER (INTERNATIONAL)

Mark Industries

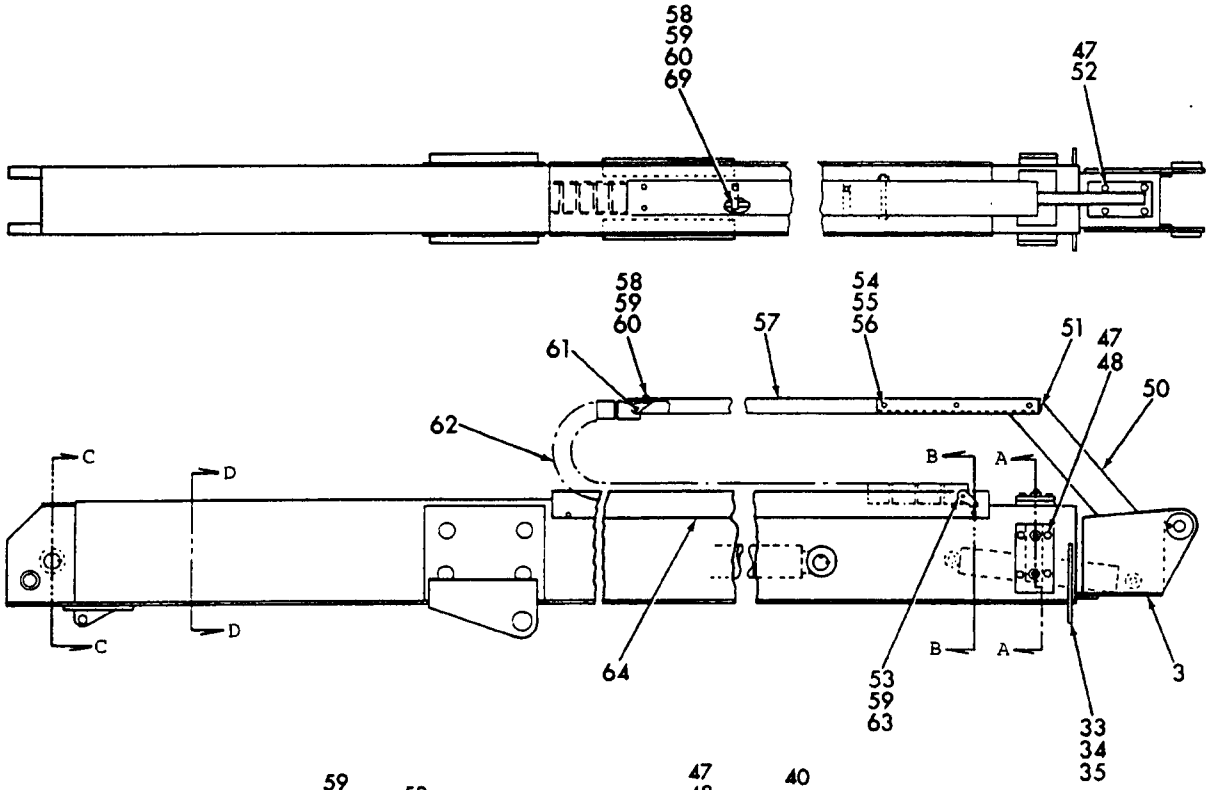


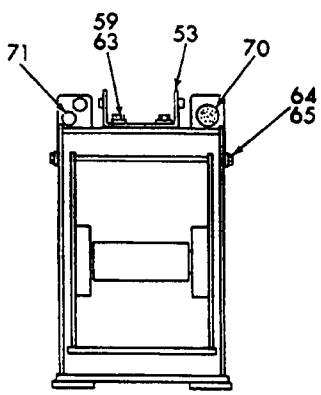


Ref.	Part No.	Description	Qty	Remarks
1	70526	Charger, Battery (International)	Ref.	Not Shown
2	600018	Assembly, Transformer	1	Not Shown
3	66750	Capacitor (6 MFD, 660 VAC)	1	Not Shown
4	600019	Assembly, Heat Sink (With Diodes)	1	Not Shown
5	600136	Assembly, Fuse (With Panel)	1	
6	600020	Ammeter	1	
7	600021	Kit, Electronic Timer	1	Not Shown
8	600022	Relay, Timer Kit	1	Not Shown

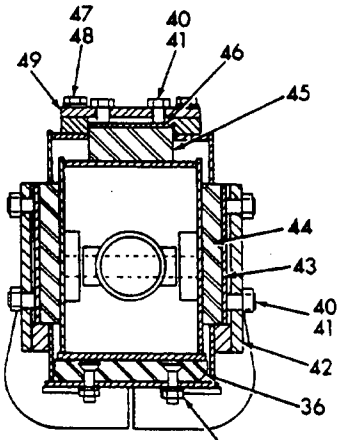
SECTION 5 CONTAINS:

PAGE	TITLE
5.1	BOOM ASSEMBLY - 30KBN
5.6	BOOM ASSEMBLY - 41KB
5.10	INNER BOOM ASSEMBLY - 41KB
5.12	EXTENSION CYLINDER - 30KBN
5.13	EXTENSION CYLINDER (SE) - 41KB
5.14	EXTENSION CYLINDER (GB) - 41KB



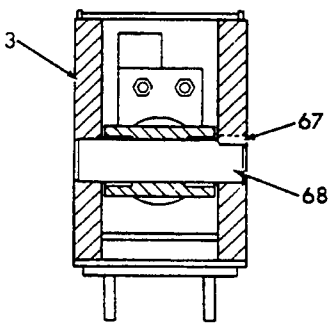


SECTION B-B

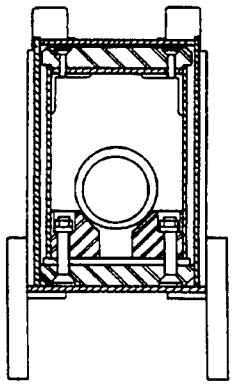


SECTION A-A

37
38
39



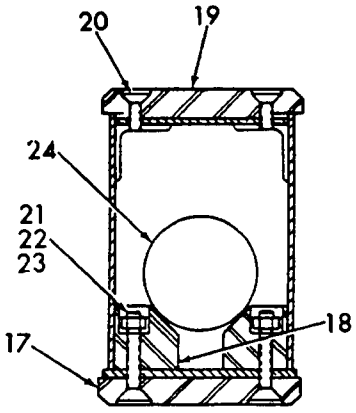
SECTION C-C



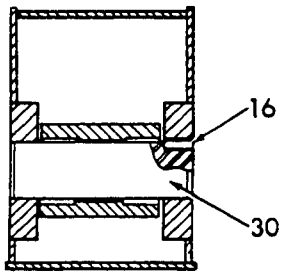
SECTION D-D

BOOM ASSEMBLY (30KBN)

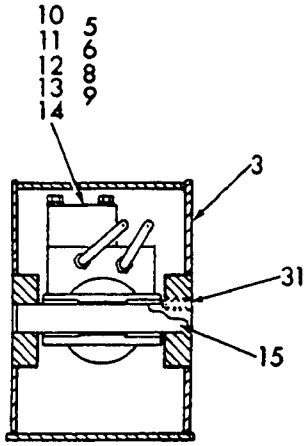
Mark Industries



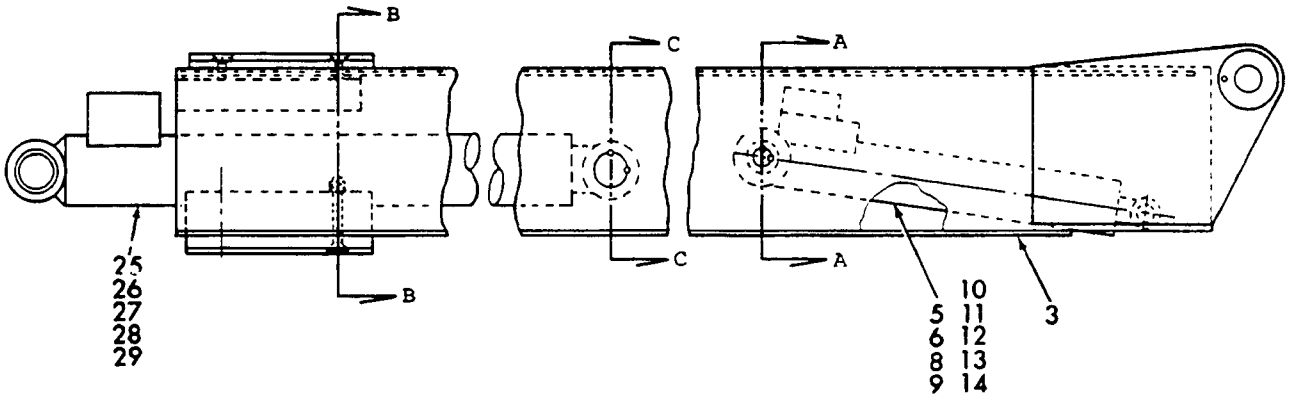
SECTION B-B



SECTION C-C



SECTION A-A

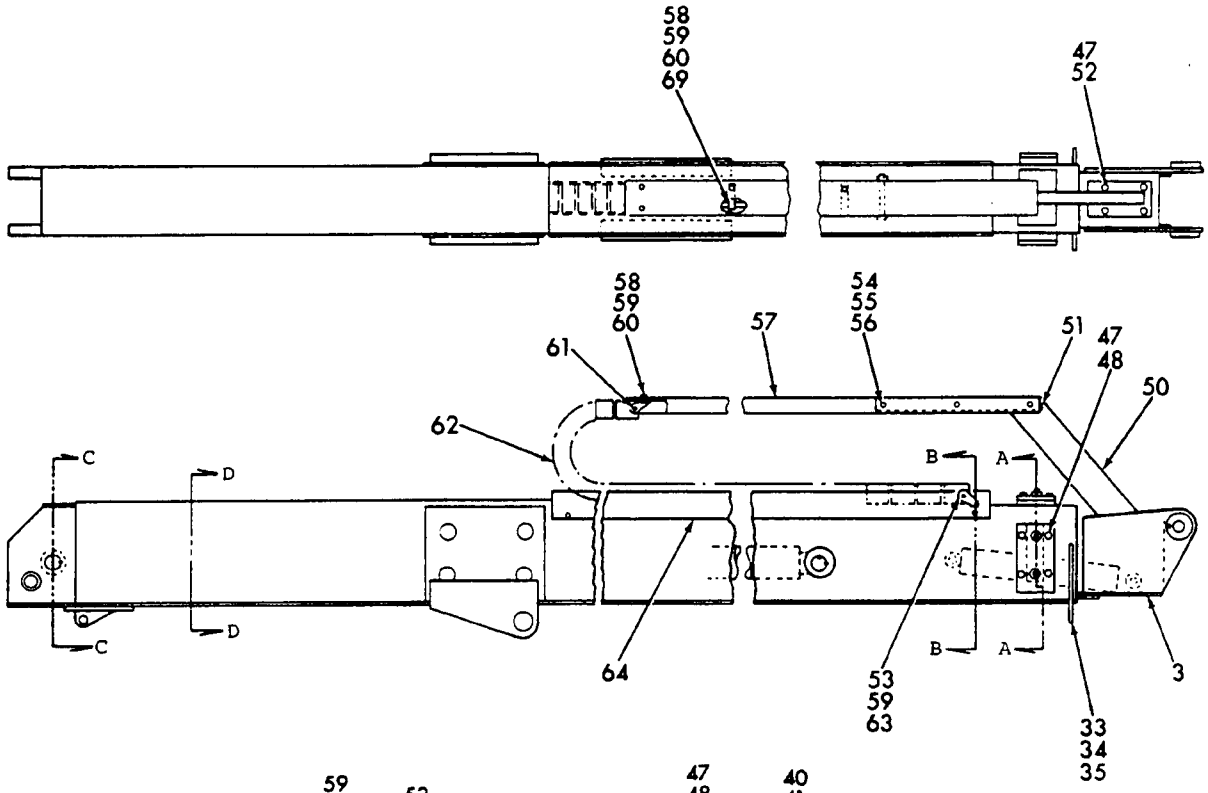


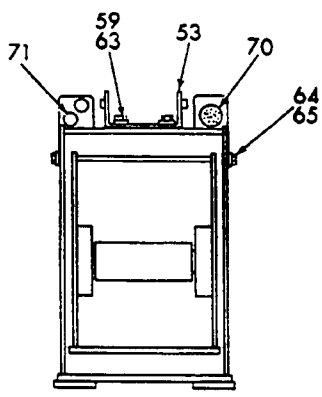
BOOM ASSEMBLY (30KBN)

Ref.	Part No.	Description	Qty	Remarks
1	140118	Assembly, Final Boom	Ref.	Not Shown
2	140119	Sub-Assembly, Inner Boom	1	
3	140095	Machining, Inner Boom	1	
4	140946	Sub-Assembly, Slave Cylinder	1	Not Shown
5	140890	Cylinder, Slave (TH)	1	
6	67999	Bushing	4	
7	67997	Kit, Seal (TH)	1	Not Shown
8	80004-03	Connector, Straight Thread	2	
9	81205	Valve, Holding	1	
10	60319	Capscrew	3	
11	63301	Lockwasher	3	
12	140058-6	Assembly, Tube	2	
13	65111	Strap	1	
14	80042-03	Connector, Union	2	
15	140415	Pin, End Cap (Slave Cylinder)	1	
16	62229	Screw, Set (Nylon Lock)	4	
17	140412	Pad, Inner Boom Wear (Bottom)	1	
18	140413	Pad, Inner Boom Wear (Side)	2	
19	140414	Pad, Inner Boom Wear (Top)	1	
20	61829	Capscrew	4	
21	61832	Capscrew	4	
22	61302	Hex Nut	4	
23	63319	Lockwasher	4	
24	140170	Sub-Assembly, Extension Cylinder	1	
25	140093	Cylinder, Extension,	1	See Page 5.12 For Details
26	81205	Valve, Holding	1	
27	60319	Capscrew	3	
28	63301	Lockwasher	3	
29	80004-08	Connector, Straight Thread	2	
30	140424	Pin, Extension Cylinder (Rod End)	1	
31	62201	Set, Screw	2	
32	140098	Machining, Outer Boom	1	Not Shown
33	140097	Weldment, Outer Boom	1	
34	141242	Pad, Boom Wear	2	
35	140099	Bushing	2	

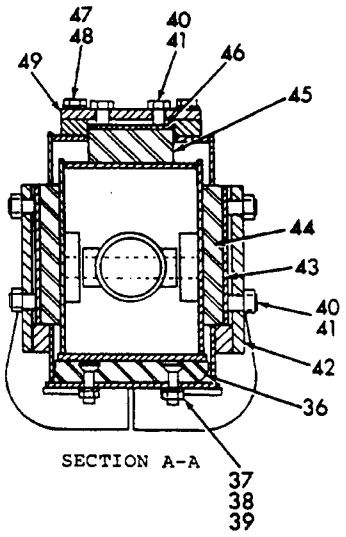
BOOM ASSEMBLY (30KBN)

Mark Industries

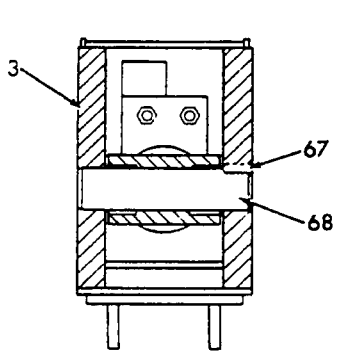




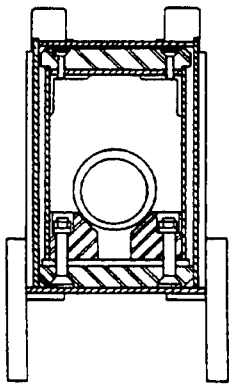
SECTION B-B



SECTION A-A



SECTION C-C



SECTION D-D

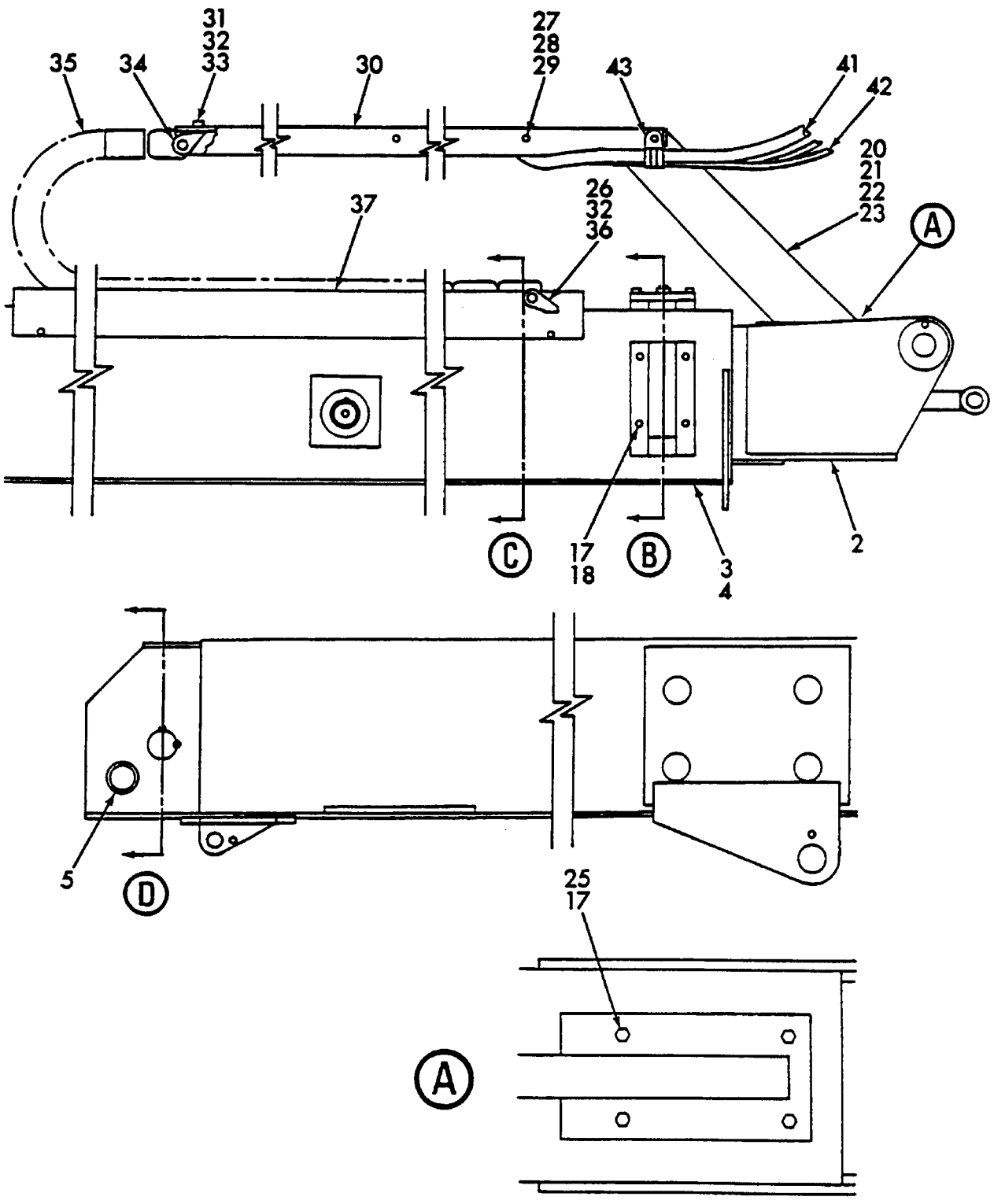
BOOM ASSEMBLY (30KBN)

Ref.	Part No.	Description	Qty	Remarks
36	140396	Pad, Wear (Outer Boom Bottom)	1	
37	61821	Capscrew	4	
38	63319	Lockwasher	4	
39	60703	Hex Nut	4	
40	62210	Set, Screw	6	
41	60901	Nut, Jam	6	
42	140402	Plate, Side Cover	2	
43	27247	Strip	2	
44	140403	Pad, Wear (Side)	2	
45	140405	Pad, Wear (Top)	1	
46	27250	Strip	1	
47	63302	Lockwasher	12	
48	60338	Capscrew	12	
49	140406	Plate, Top Cover	1	
50	140399	Weldment, Power Track Bracket	1	
51	65390	Plug	2	
52	60367	Capscrew	4	
53	23875	Bracket, Stationary (Male)	1	
54	60429	Capscrew	3	
55	61322	Nut, Lock	3	
56	63429	Washer, Flat	3	
57	140342	Support, Power Track	1	
58	60353	Capscrew	5	
59	63433	Washer, Flat	7	
60	60711	Hex Nut	5	
61	23874	Bracket, Movable (Female)	1	
62	23824	Power Track	34	
63	60422	Capscrew	2	
64	140201	Guide, Power Track	1	
65	61729	Machine Screw	4	
66	63313	Lockwasher	4	
67	62229	Screw, Set (Nylon Lock)	2	
68	140483	Pin, End Cap (Extension Cylinder	1	
69	65867	Clamp	3	
70	70528	Cable (40 Conductor With Braiding)	50	
71	2568-35	Hose, Hydraulic	2	

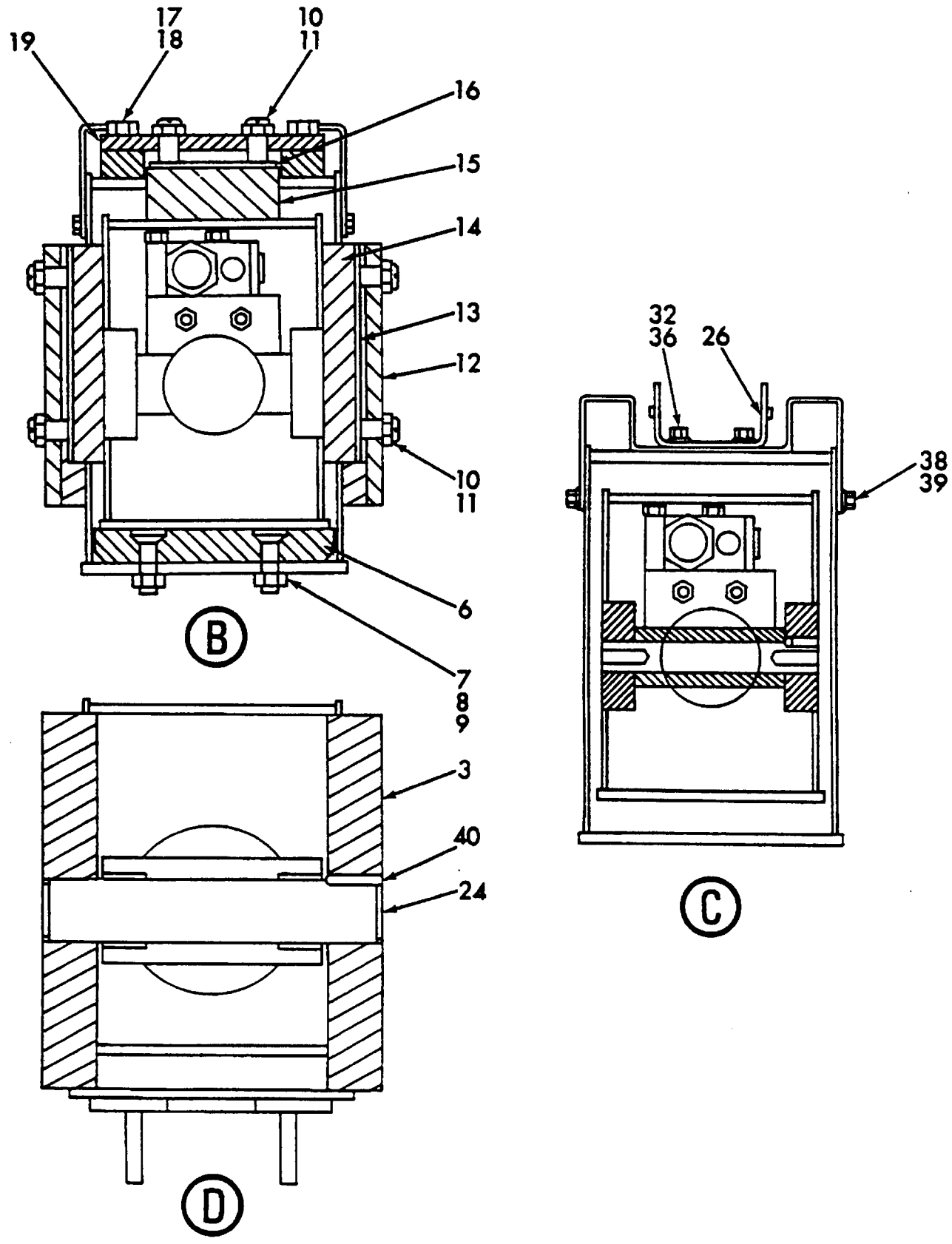
Models 30KBN
41KB
Issued 2-94

BOOM ASSEMBLY (41KB)

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BOOM ASSEMBLY (41KB)



Models 30KBN
41KB
Issued 2-94

BOOM ASSEMBLY (41KB)

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Ref.	Part No.	Description	Qty	Remarks
1	140122	Assembly, Final Boom	Ref.	Not Shown
2	140120	Assembly, Inner Boom	1	See Page 5.10 For Details
3	140029	Machining, Outer Boom	1	
4	140031	Weldment, Outer Boom	1	
5	140121	Bushing	2	
6	140396	Pad, Wear (Outer Boom Bottom)	1	
7	61821	Capscrew	4	
8	63319	Lockwasher	4	
9	60703	Hex Nut	4	
10	62210	Set Screw	6	
11	60901	Nut, Jam	6	
12	140402	Plate, Side Cover	2	
13	27258	Strip	2	
14	140403	Pad, Wear (Side)	2	
15	140405	Pad, Wear (Top)	1	
16	27259	Strip	1	
17	63302	Lockwasher	12	
18	60338	Capscrew	12	
19	140406	Plate, Top Cover	1	
20	140399	Weldment, Power Track Bracket	1	
21	140400	Spacer, Tube	1	
22	140784	Tube, Mounting	1	
23	140340	Bracket, Power Track	1	
24	140429	Pin, Extension Cylinder (Cap End)	1	
25	60367	Capscrew	4	
26	23875	Bracket, Stationary (Male)	1	
27	60429	Capscrew	3	
28	61322	Nut, Lock	3	
29	63429	Washer, Flat	3	
30	140347	Support, Power Track	1	
31	60353	Capscrew	2	
32	63433	Flat Washer	4	
33	60711	Lock Nut	2	
34	23874	Bracket, Moveable (Female)	1	
35	23824	Track, Power	45	
36	60422	Capscrew	2	
37	140201	Guide, Power Track	1	
38	61729	Screw, Machine	4	
39	63313	Lockwasher	4	

BOOM ASSEMBLY (41KB)

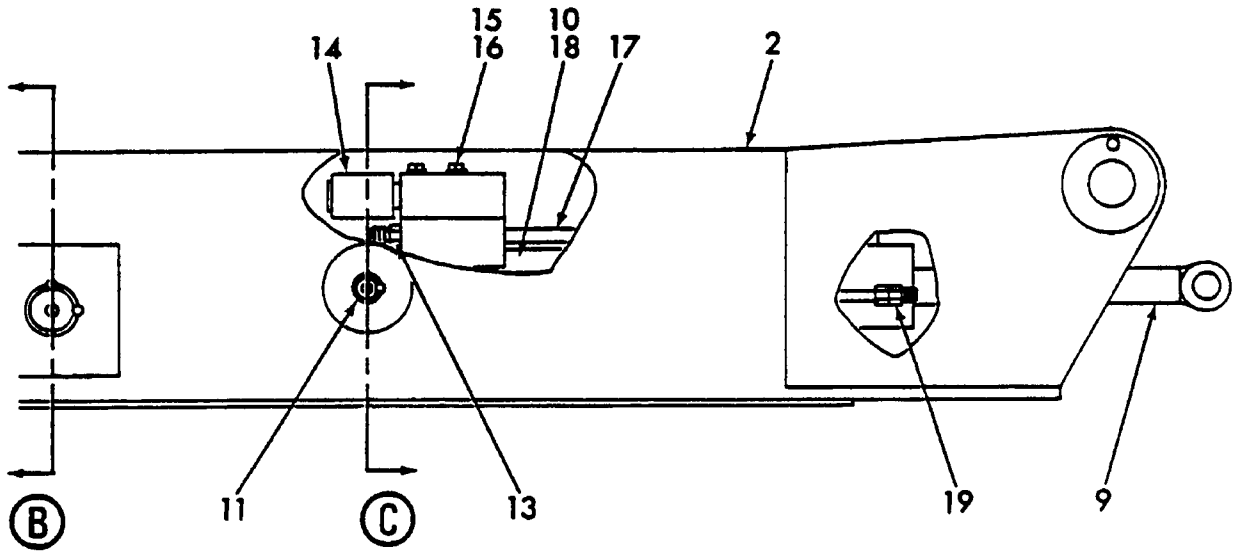
Ref.	Part No.	Description	Qty	Remarks
40	62229	Screw, Set	2	
41	70528	Cable, Conductor (65 Ft.)	1	
42	2568	Hose, Hydraulic (50 Ft.)	2	
43	65867	Clamp	3	

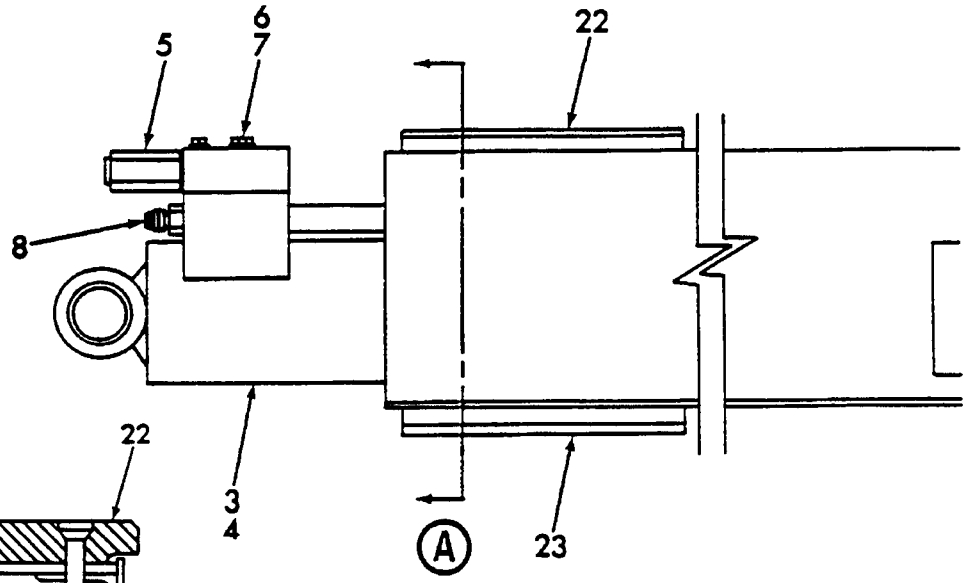
Models 30KBN
41KB

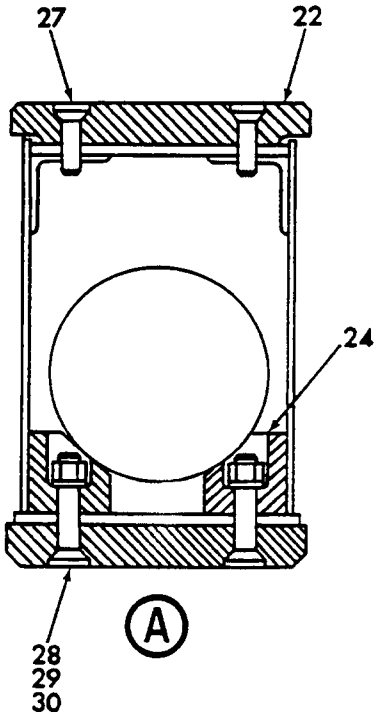
Issued 2-94

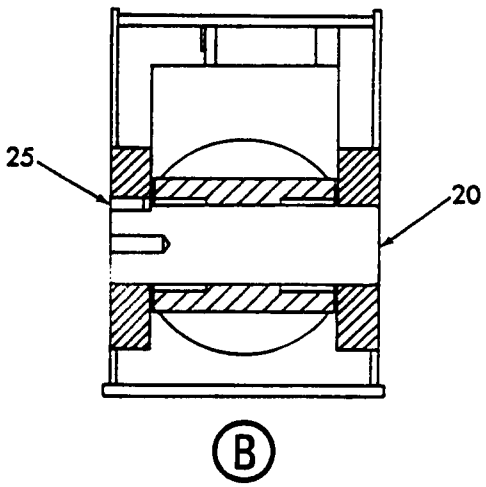
INNER BOOM ASSEMBLY (41KB)

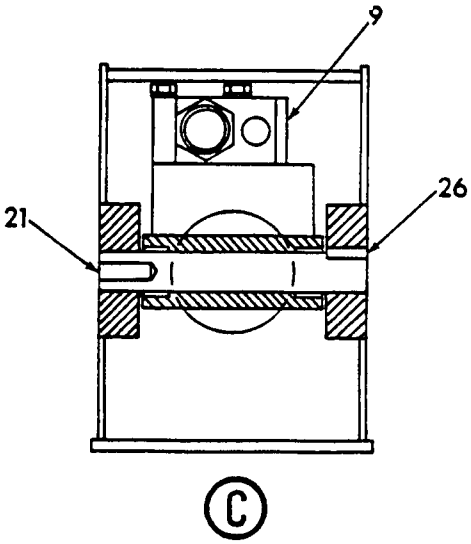
Mark Industries











INNER BOOM ASSEMBLY (41KB)

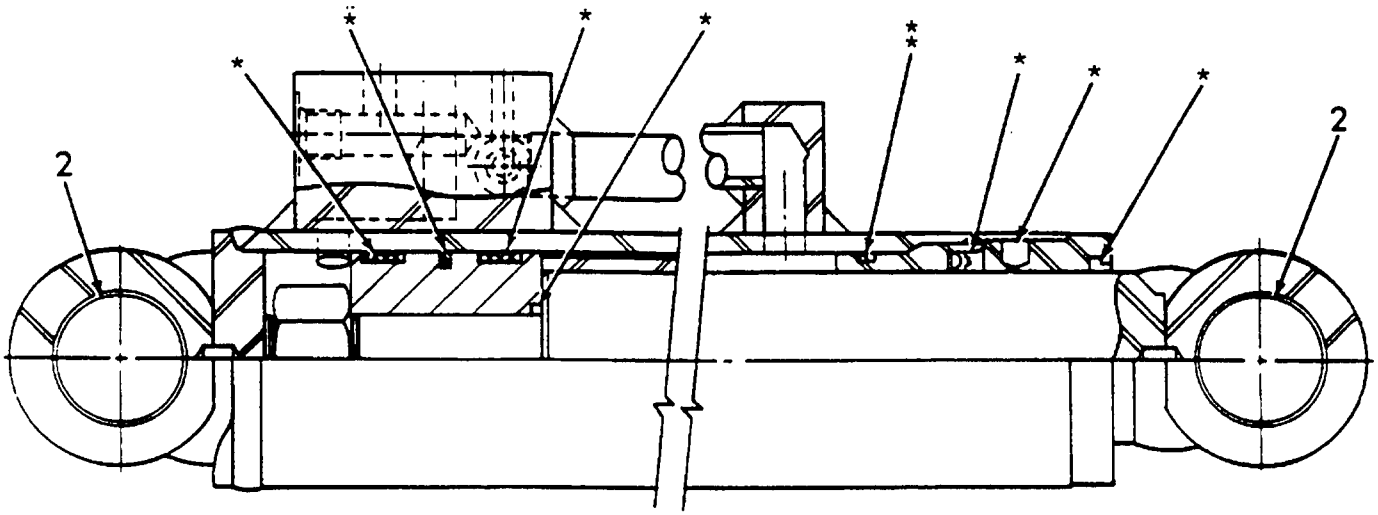
Models 30KBN 41KB
Issued 2-94

Ref.	Part No.	Description	Qty	Remarks
1	140120	Assembly, Inner Boom	Ref.	Not Shown
2	140124	Machining, Inner Boom	1	
3	140055	Assembly, Extension Cylinder	1	
4	140054	Cylinder, Extension	1	See Sect. 5, Fig. 3C & 3D
5	81205	Valve, Holding	1	
6	60319	Capscrew	3	
7	63301	Lockwasher	3	
8	80004-11	Connector, Straight Thread	2	
9	140946	Sub-Assembly, Slave Cylinder	1	
10	140890	Cylinder, Slave (TH)	1	
11	67999	Bushing	4	
12	67997	Kit, Seal	1	Not Shown
13	80004-03	Connector, Straight Thread	2	
14	81205	Valve, Holding	1	
15	60319	Capscrew	3	
16	63301	Lockwasher	3	
17	140058-6	Assembly, Tube	2	
18	65111	Strap	1	
19	80042-03	Connector, Union	2	
20	140424	Pin, Extension Cylinder (Rod End)	1	
21	140415	Pin, Slave Cylinder (Cap End)	1	
22	140398	Pad, Wear (Inner Boom Top)	1	
23	140397	Pad, Wear (Inner Boom Bottom)	1	
24	140395	Pad, Wear (Extension Cylinder)	2	
25	62239	Set Screw	2	
26	62235	Set Screw	2	
27	61829	Capscrew	4	
28	61824	Capscrew	4	
29	61318	Lock Nut	4	
30	63403	Flatwasher	4	

Models 30KBN
41KB
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EXTENSION CYLINDER (30KBN)

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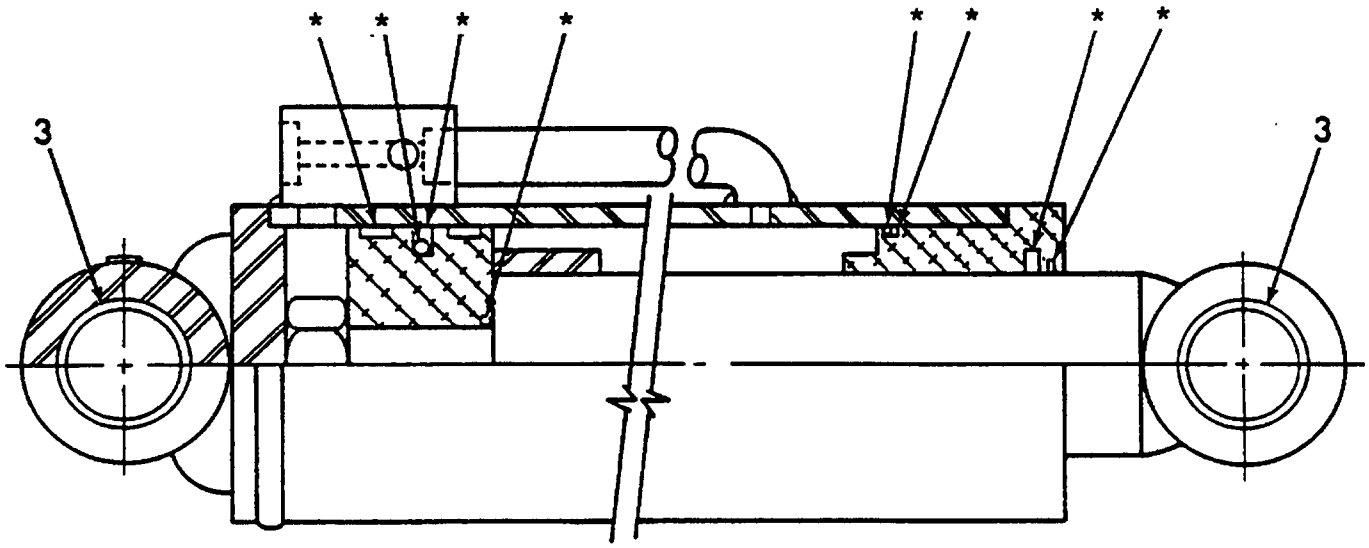
NOTE 1: DUE TO ONGOING VENDOR/MFG. REVISIONS, WHEN POSSIBLE, PROVIDE ALL NUMBERS FROM THE CYLINDER I.D. TAG.

NOTE 2: THE SEAL KIT INCLUDES ITEMS SHOWN WITH AN ANSTERISK (*).

Ref.	Part No.	Description	Qty	Remarks
1	140093	Cylinder, Extension (GB)	Ref.	Not Shown
2	66882	Bushing	4	
3	600087	Kit, Seal (GB)	1	Not Shown
	NOTE 3:	INTERNAL SERVICE REPLACEMENT PARTS AVAILABLE ON A SPECIAL ORDER BASIS.		

EXTENSION CYLINDER (41KB)

Models 30KBN 41KB
Issued 2-94



NOTE 1: DUE TO ONGOING VENDOR/MFG. REVISIONS, WHEN POSSIBLE, PROVIDE ALL NUMBERS FROM THE CYLINDER I.D. TAG.

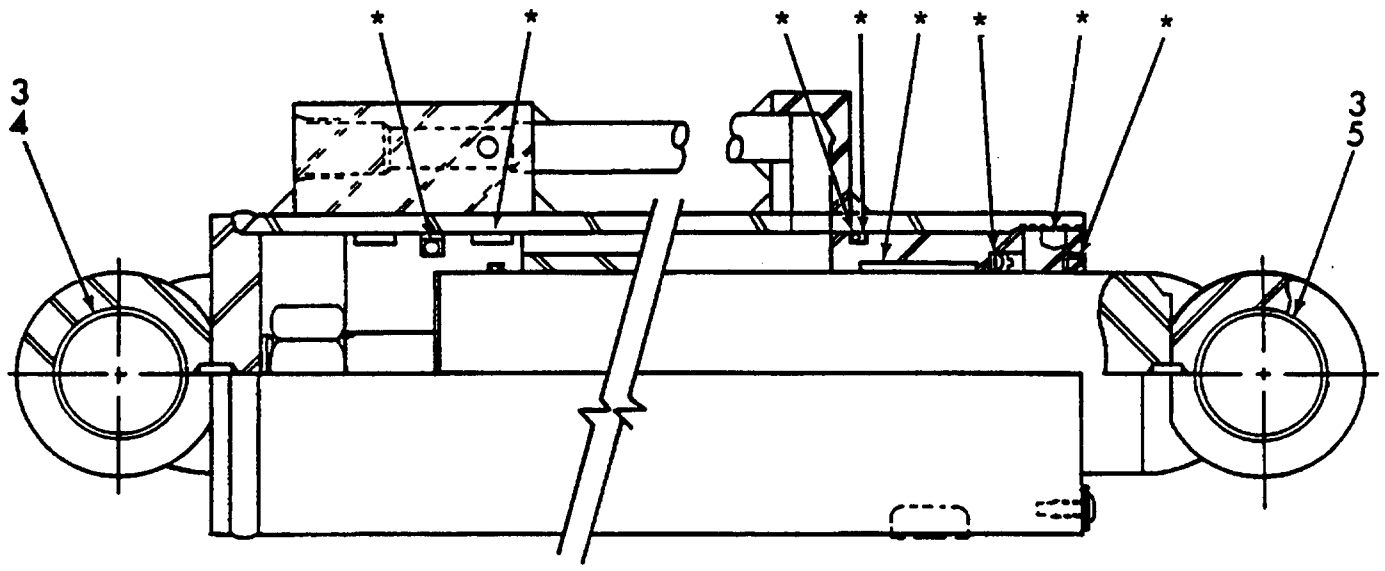
NOTE 2: THE SEAL KIT INCLUDES ITEMS SHOWN WITH AN ANSTERISK (*).

Ref.	Part No.	Description	Qty	Remarks
1	140054	Cylinder, Extension (SE)	Ref.	Not Shown
2	67186	Kit, Seal	1	Not Shown
3	67180	Bushing	4	
	NOTE:	INTERNAL SERVICE REPLACEMENT PARTS AVAILABLE ON A SPECIAL ORDER BASIS.		

Models 30KBN
41KB
Issued 2-94

EXTENSION CYLINDER (41KB)

Mark Industries



NOTE 1: DUE TO ONGOING VENDOR/MFG. REVISIONS, WHEN POSSIBLE, PROVIDE ALL NUMBERS FROM THE CYLINDER I.D. TAG.

NOTE 2: THE SEAL KIT INCLUDES ITEMS SHOWN WITH AN ANSTERISK (*).

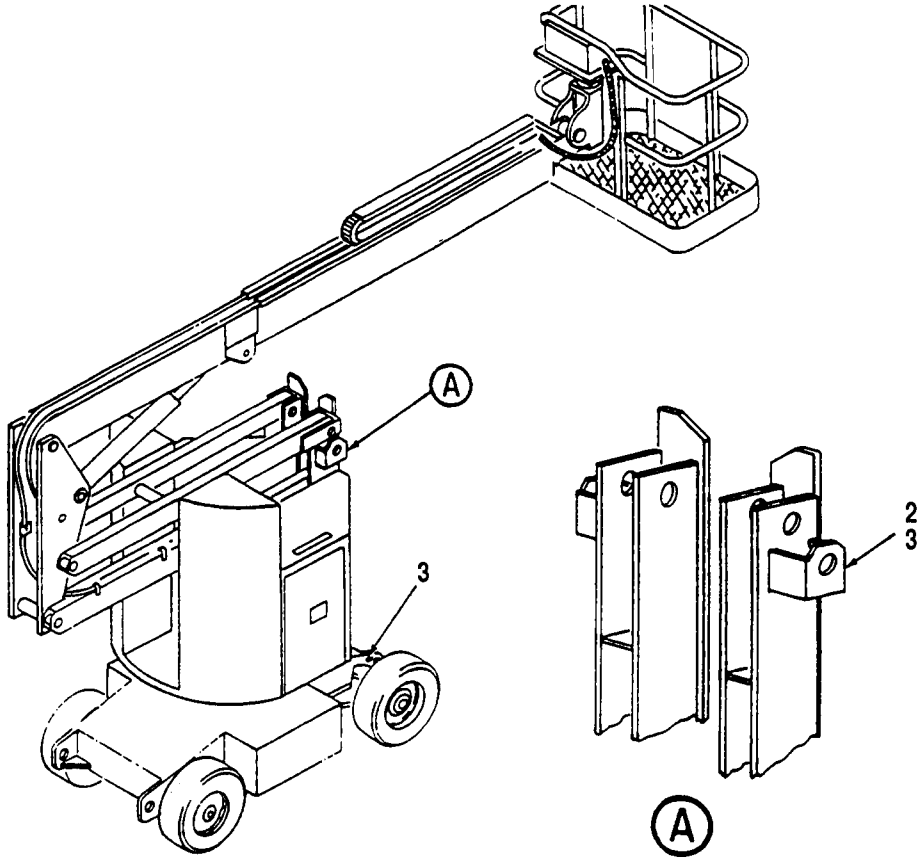
Ref.	Part No.	Description	Qty	Remarks
1	140054	Cylinder, Extension (GB)	Ref.	Not Shown
2	600084	Kit, Seal	1	Not Shown
3	67180	Bushing	4	
4	600160	Spacer, Pineye (Barrel End)	1	
5	600103	Spacer, Pineye (Rod End)	1	
	NOTE:	INTERNAL SERVICE REPLACEMENT PARTS AVAILABLE ON A SPECIAL ORDER BASIS.		

SECTION 6 CONTAINS:

PAGE	TITLE
6.1	LIFTING LUG - 30KBN
6.2	LIFTING LUG - 41KB
6.3	AIRLINE TO PLATFORM
6.4	ALL MOTION ALARM
6.5	TRAVEL WARNING HORN
6.6	HOURMETER
6.7	BATTERY CONDITION INDICATOR GAUGE
6.8	HYDRAULIC LINE TO PLATFORM - 41KB

LIFTING LUG (30KBN)

Models 30KBN
41KB
Issued 2-94

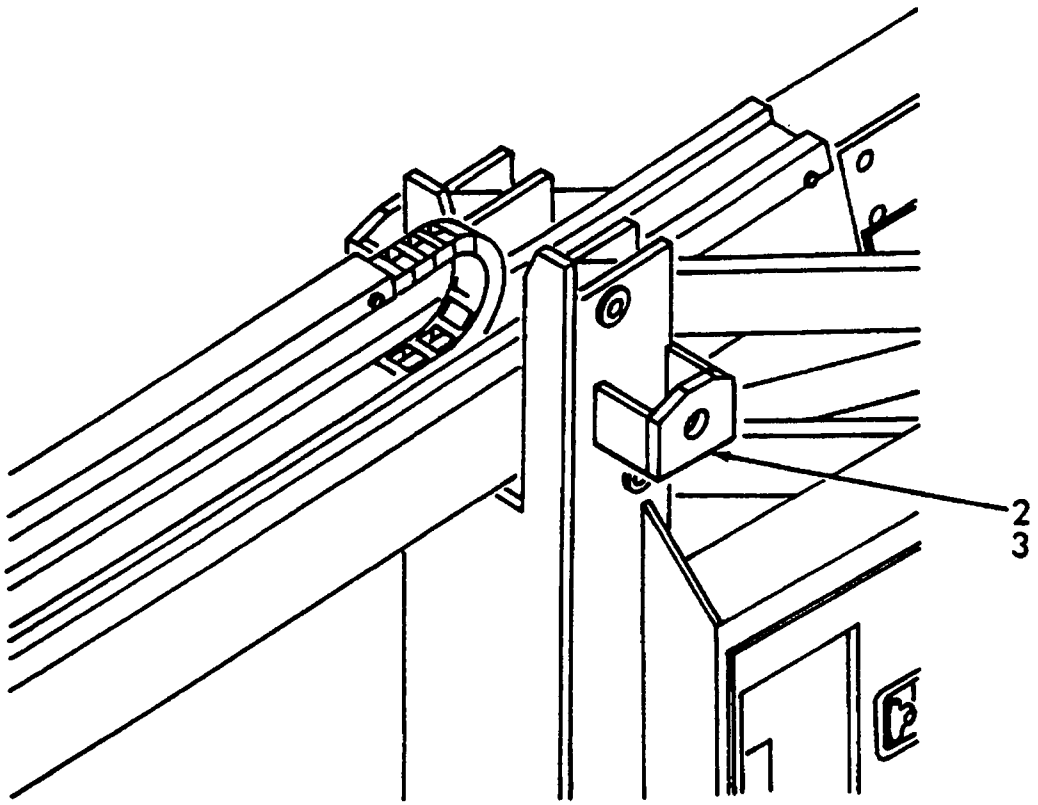


Ref.	Part No.	Description	Qty	Remarks
1	141317	Option, Lifting Lug	Ref.	Not Shown
2	140644	Weldment, Lifting Lug	2	
3	181501	Decal	2	

Models 30KBN
41KB
Issued 2-94

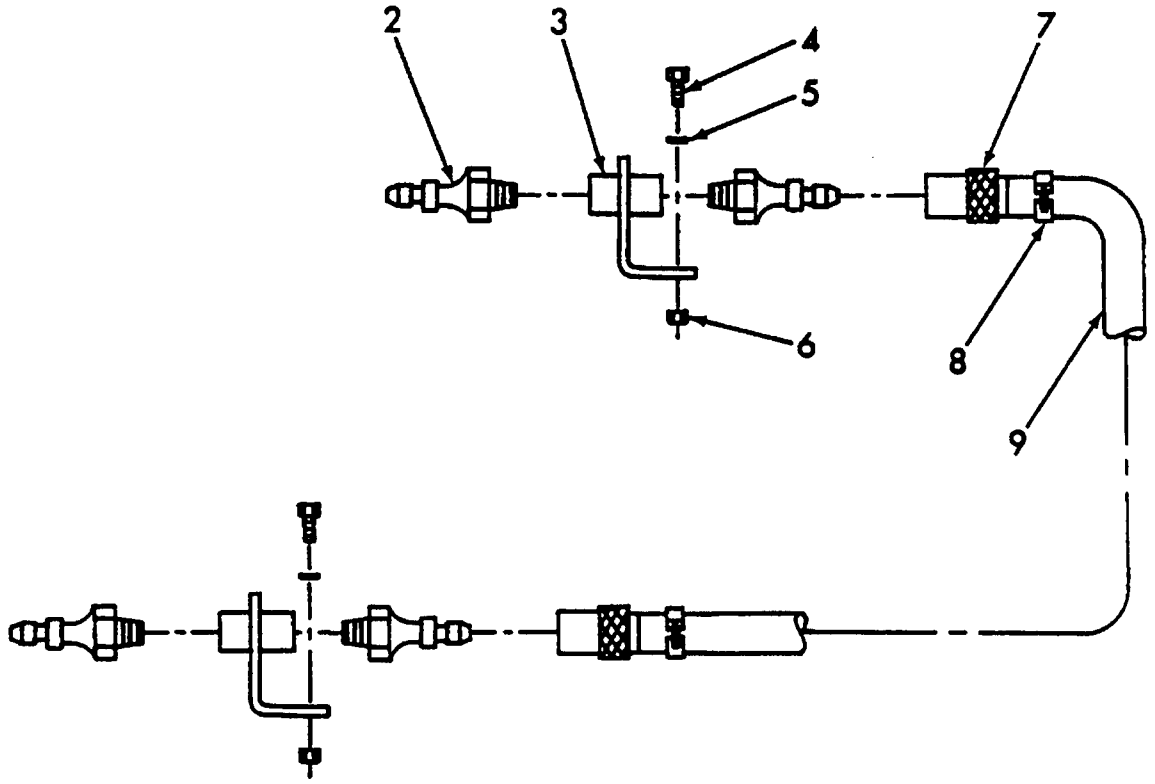
LIFTING LUG (41KB)

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
1	141224	Lug, Lifting	1	Not Shown
2	140644	Weldment, Lifting Lug	2	
3	181501	Decal, Caution Lifting Lugs	2	

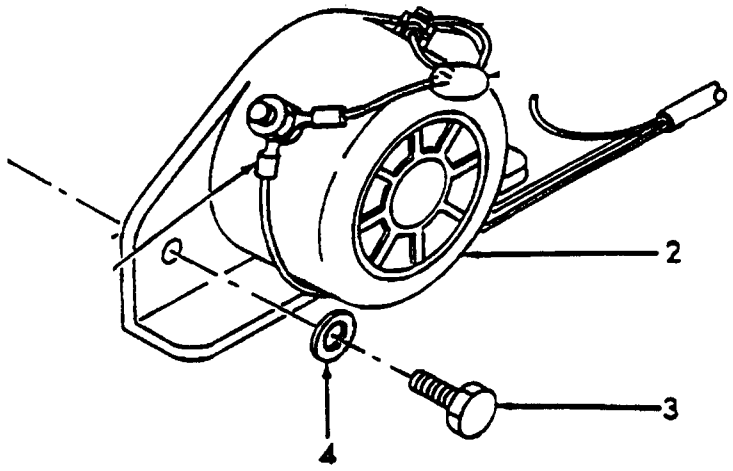
AIRLINE TO PLATFORM



Ref.	Part No.	Description	Qty	Remarks
1	140672	Platform, Airline To 30KBN	Ref.	
	140673	Platform, Airline To 41KB	Ref.	
2	160112	Plug, MPT (Air)	4	
3	140851	Weldment, Airline Bracket	2	
4	60312	Capscrew	4	
5	63301	Lockwasher	4	
6	60701	Hex Nut	4	
7	160111	Socket, Hose	2	
8	160113	Clamp, Hose	2	
9	160140	Hose, Air (50 Ft.) 30KBN	1	
		Hose, Air (61 Ft.) 41 KB	1	

ALL MOTION ALARM

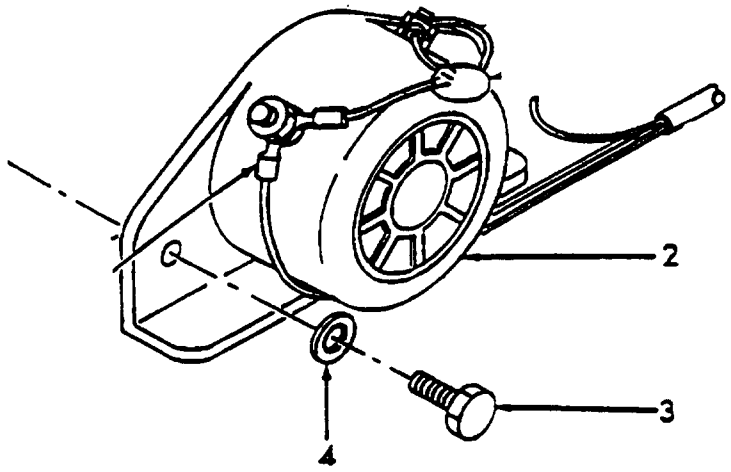
Mark Industries



Ref.	Part No.	Description	Qty	Remarks
1	140660	Alarm, All Motion	Ref.	
2	70053	Horn, Warning	1	
3	60312	Capscrew	2	
4	63301	Lockwasher	2	
5	60701	Hex Nut	2	Not Shown
6	4045	Diode, (6 amp, 200 volt)	2	Not Shown

TRAVEL WARNING HORN

Models 30KBN
41KB
Issued 2-94

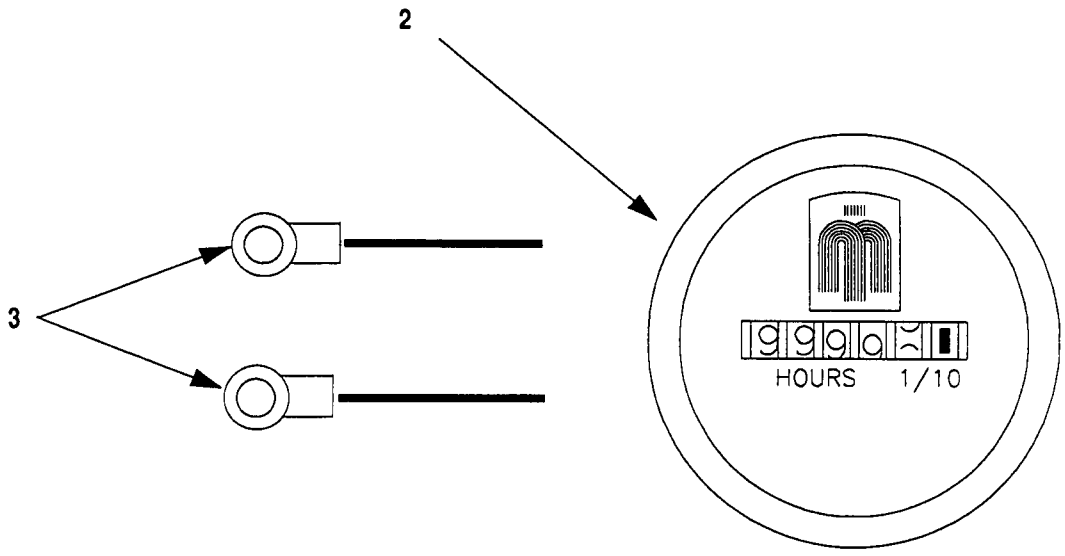


Ref.	Part No.	Description	Qty	Remarks
1	140657	Horn, Travel Warning	Ref.	
2	70053	Horn, Warning	2	
3	60312	Capscrew	2	
4	63301	Lockwasher	2	
5	60701	Hex Nut	2	Not Shown

Models 30KBN
41KB
Issued 2-94

HOURMETER

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
1	140680	Hourmeter	Ref.	
2	20571	Hourmeter	1	
3	66356	Terminal	2	

BATTERY CONDITION INDICATOR

Models 30KBN
41KB
Issued 2-94

ILLUSTRATION NOT AVAILABLE THIS PRINTING

Ref.	Part No.	Description	Qty	Remarks
1	140023	Gauge, Battery Condition Indicator	1	Not Shown
2	70497	Meter, Battery Voltage	1	Not Shown

Models 30KBN
41KB
Issued 2-94

HYDRAULIC LINE TO PLATFORM - 41KB

Mark Industries

ILLUSTRATION NOT AVAILABLE THIS PRINTING

Ref.	Part No.	Description	Qty	Remarks
1	140671	Platform, Hydraulic Line To - 41KB	1	Not Shown
2	2527	Coupling, Quick Disconnect	4	Not Shown
3	845	Cap, Quick Disconnect	4	Not Shown
4	140851	Weldment, Bracket	4	Not Shown
5	65564	Coupling, Full	4	Not Shown
6	60312	Capscrew	8	Not Shown
7	63301	Lockwasher	8	Not Shown
8	13232-04-6000	Assembly, Hose	2	Not Shown
9	80001-04	Connector, Male	4	Not Shown

SECTION 7 CONTAINS:

PAGE	TITLE
7.2	ALPHABETICAL PARTS LIST

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ALPHABETICAL LIST

Mark Industries

- A -

Aerial Control Box	2.15, 2.16
All-Motion Alarm	6.4
Airline to Platform (Option)	6.3

- B -

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Base - 41KB	2.7, 3.8
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Battery - 41KB	3.9
Battery Cable Kit - 30KBN	3.5
Battery Cable Kit - 41KB	3.7
Battery Charger (Domestic)	4.19
Battery Charger (International)	4.20
Boom - 30KBN	5.1
Boom - 41KB	5.6
Brake Release Assembly	3.16
Brake, Caliper	3.22

- C -

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Charger, Battery (International)	4.20
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Control Panel, Ground	2.20
Control Valve	4.14
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Cylinder, Extension - 41KB	5.13, 5.14
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Cylinder, Lift - 41KB	4.11, 4.12
Cylinder, Steering - 30KBN	3.11
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- D -

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- E -

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- F -

Filter, Hydraulic - 30KBN	4.5
Filter, Hydraulic - 41KB	4.18
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Final Assembly - 41KB	2.6

- G -

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- H -

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Hoses - 41KB	2.28
Hour Meter	6.3
Hydraulic Assembly - 30KBN	2.27
Hydraulic Assembly - 41KB	2.28
Hydraulic Line to Platform - 41KB	6.8
Hydraulic Tank - 41KB	4.18

- I,J,K -

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Kit, Battery Cable - 41KB	3.7

- L -

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Lifting Lugs - 30KBN	6.1
Lifting Lugs - 41KB	6.2

- M -

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Manual Rotator Assembly	2.24
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Motor (Pump/Motor)	3.17

- N,O -

Options	6.0

- P -

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Paint - 41KB	2.12
Platform	2.14
Platform Manual Rotator	2.24
Pump/Motor Assembly	3.17

- Q -

- R -

Riser	See Turret
Rotator Assembly, Manual	2.24

- S -

Steering Cylinder	See Cylinder

- T -

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Torque Hub	3.18
Touch-Up Paint - 31KBN	2.10
Touch-Up Paint - 41KB	2.12
Transistorized Controller	3.14
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Turret - 30KBN	4.2
Turret - 41KB	4.6

-U, V -

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- W -

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Wear Pads - 41KB	5.11
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- X,Y,Z -

NOTES

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SECTION 8 CONTAINS:

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8.1	NUMERICAL LIST

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12400-570	2.11
130820	2.13
130927	2.4
130927	2.7
13210-04-0100	2.28
13210-04-0160	2.27
13210-04-0250	2.28
13210-04-1300	2.27
13210-06-0140	2.28
13210-06-0340	2.27
13210-06-2890	2.28
13210-12-0370	2.28
13211-06-0260	2.28
13211-06-0290	2.28
13211-06-0420	2.28
13211-06-0800	2.28
13212-04-1710	2.27
13212-06-0400	2.27
13212-06-0600	2.27
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13212-06-1730	2.27
13213-04-1360	2.28
13213-04-1860	2.27
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13213-06-0210	2.27
13213-06-0600	2.27
13213-06-1730	2.27
13213-10-0230	2.28
13213-10-0240	2.27
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13228-03-2500	2.28
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13229-04-0090	3.5
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13229-04-2160	2.28
13232-04-6000	6.8
135322	2.5
140008	2.3
140012	2.7
140023	6.7
140029	5.8
140031	5.8
140039	3.7
140040	3.7
140054	5.11
140054	5.13
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