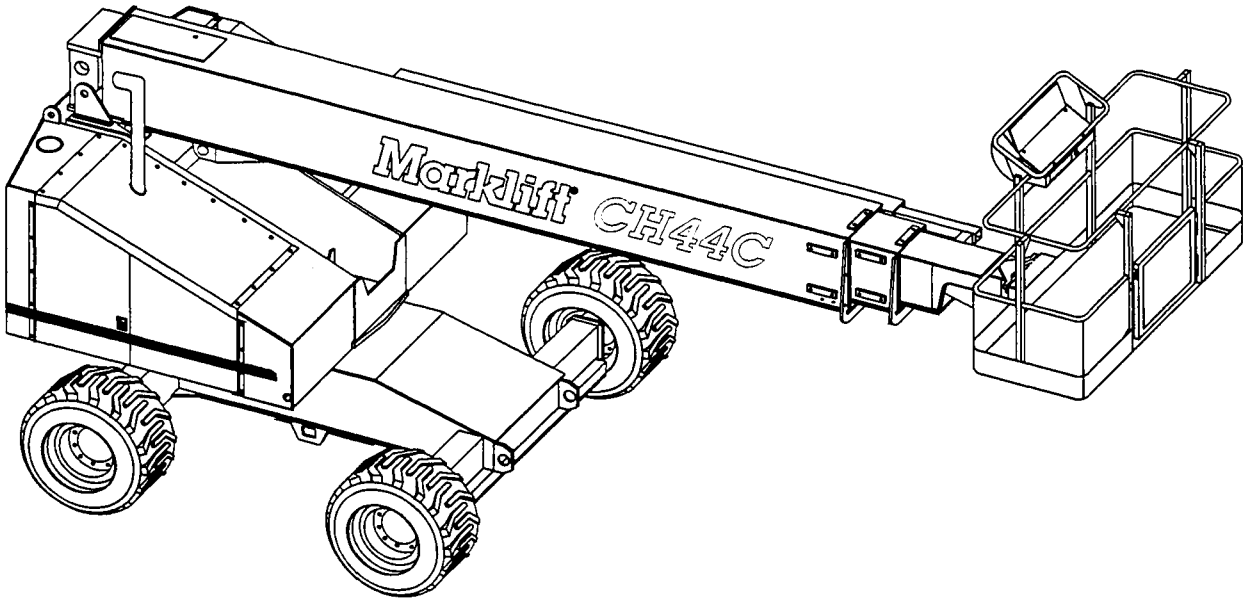
Mark Industries

SELF-PROPELLED BOOM
MODEL CH44C/CH50C



PARTS MANUAL

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

Issued: April 96
P/N 17142

SECTION 1 CONTAINS:

PAGE	TITLE
1.1	NOTICE TO USERS
1.2	TABLE OF CONTENTS
1.8	HOW TO USE THE PARTS MANUAL
1.10	HOW TO ORDER PARTS
1.12	ABBREVIATIONS AND SYMBOLS

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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2.2	SHEET METAL
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4.20	ENGINE (DEUTZ)
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8.1	ALPHABETICAL LIST

NOTES

HOW TO USE THE PARTS MANUAL

Mark Industries

1

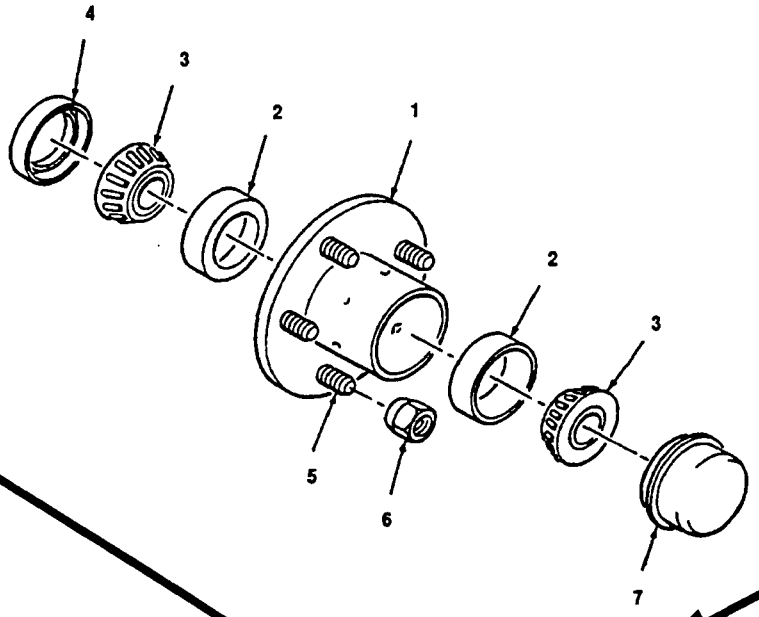
Mark Industries

HUB ASSEMBLY

Model CH80C
Issued 1-96

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2



5
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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 column 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 1.12 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 symbols * ^ , sizes and special information.

   EXAMPLE:

	Part No.	Description	Qty	Remarks

HOW TO ORDER PARTS

Mark Industries

1B

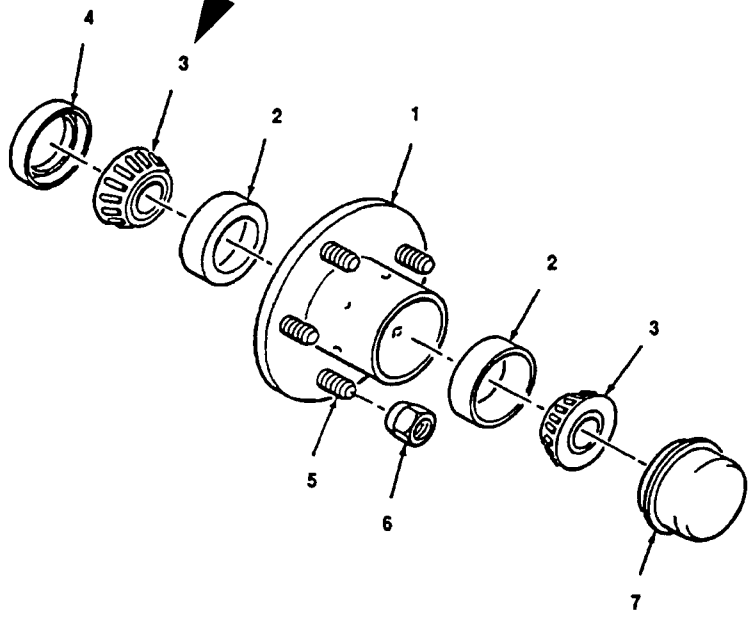
1A

Mark Industries

HUB ASSEMBLY

Model CH80C
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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 with the 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: (601) 393-1751

   C. PHONE: (601) 393-1351

   D. MAIL: Terex – Southaven
   8800 Rostin Road
   P.O. Box 923
   Southaven, MS 38671–0923

   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 S.E.
   Waverly, IA 50677–4207

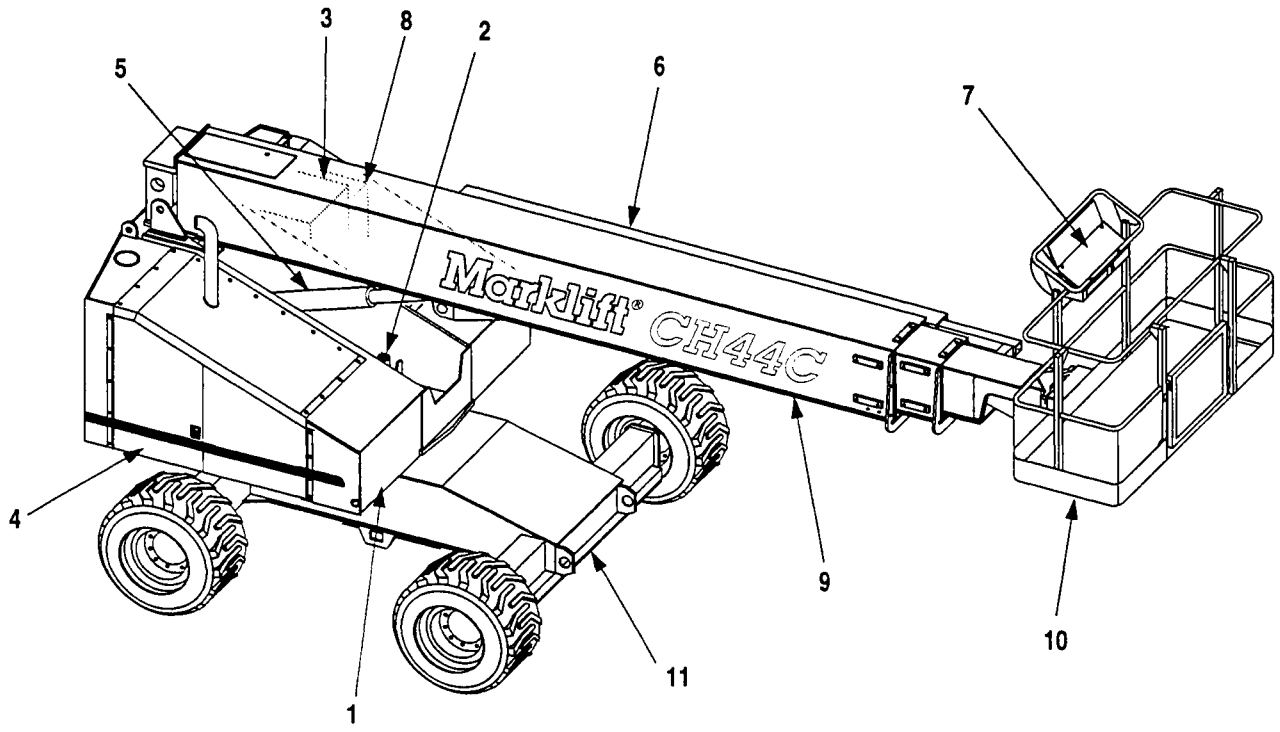
ABBREVIATONS AND SYMBOLS

Mark Industries

4WS	4 WHEEL STEER	"	INCHES
AC	ALTERNATING CURRENT	INT	INTERNAL
ADPTR	ADAPTER	INV	INVERTED
AMP	AMPERE	LG	LENGTH
APPROX	APPROXIMATELY	LH	LEFT HAND
AR	AS REQUIRED	MAX	MAXIMUM
ASSY	ASSEMBLY	MIN	MINIMUM
AVAIL	AVAILABLE	MM	MILLIMETER
BRG	BEARING	MTG	MOUNTING
BRKT	BRACKET	P/N	PART NUMBER
CCW	COUNTER CLOCKWISE	NO	NUMBER
CFM	CUBIC FEET PER MINUTE	NSS	NOT SOLD SEPARATELY
CHRG	CHARGING	OD	OUTSIDE DIAMETER
CTSK	COUNTERSUNK	OSC	OSCILLATING
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	SS	STAINLESS STEEL
GR	GRADE	STD	STANDARD
GSK	GASKET	T	TOOTH
HD	HEAD	THK	THICK
HEX	HEXAGON	THRU	THROUGH
HP	HORSEPOWER	TEMP	TEMPERATURE
HSG	HOUSING	V	VOLT
HT	HEAT TREATED	VAC	VOLTS ALTERNATING CURRENT
HYD	HYDRAULIC	VARI	VARIABLE
HZ	HERTZ	VS	VARIABLE SPEED
ID	INSIDE DIAMETER	W/	WITH
INCL	INCLUDES	W/0	WITHOUT

SECTION 2 "FINAL ASSEMBLY" CONTAINS:

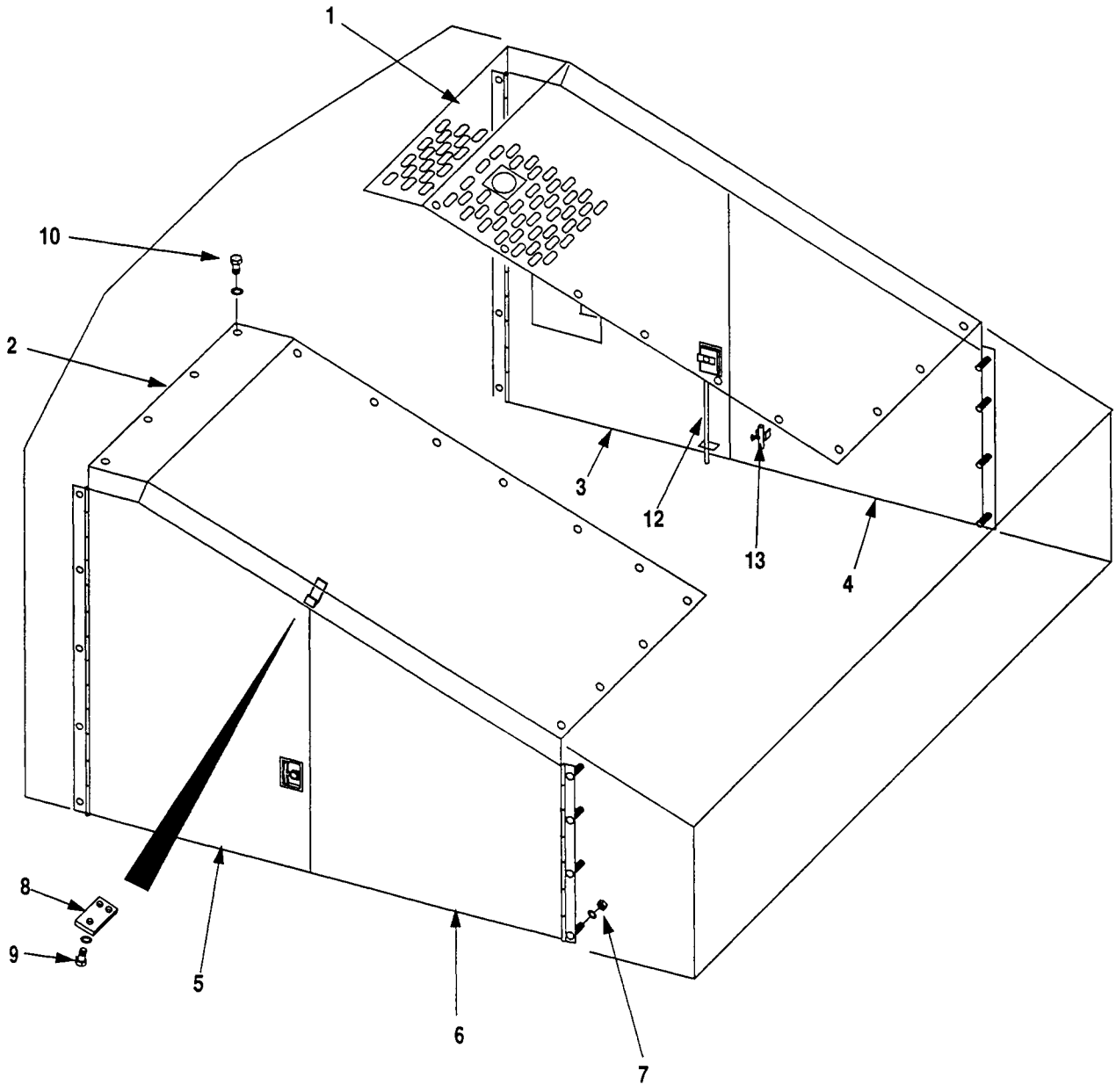
PAGE	TITLE
2.1	FINAL ASSEMBLY
2.2	SHEET METAL
2.4	DECALS & PAINT



Ref.	Part No.	Description	Qty	Remarks
	212600	Final Assembly (CH44C)	Ref.	Incl. Items 1 thru 12
	212861	Final Assembly (CH50C)	Ref.	Incl. Items 1 thru 12
1		Turret	1	See Section 4
2	212046	Swing Drive Ass'y	1	Page 4.2
3		Upper Hydraulic Ass'y	1	See Section 4
4	212624	Sheet Metal Ass'y	1	Page 2.2
5	212661	Boom Installation Ass'y	1	Page 5.2
6	212671	Power Track Ass'y	1	Page 5.20
7	212007	Aerial Control Box Ass'y	1	Page 6.4
8	211983	Ground Control Box	1	Page 4.31
9		Boom Ass'y	1	See Section 5
10		Platform Ass'y	1	See Section 6
11		Base Ass'y	1	See Section 3
12	212131	Turret Wiring Ass'y	1	Page 4.29

SHEET METAL

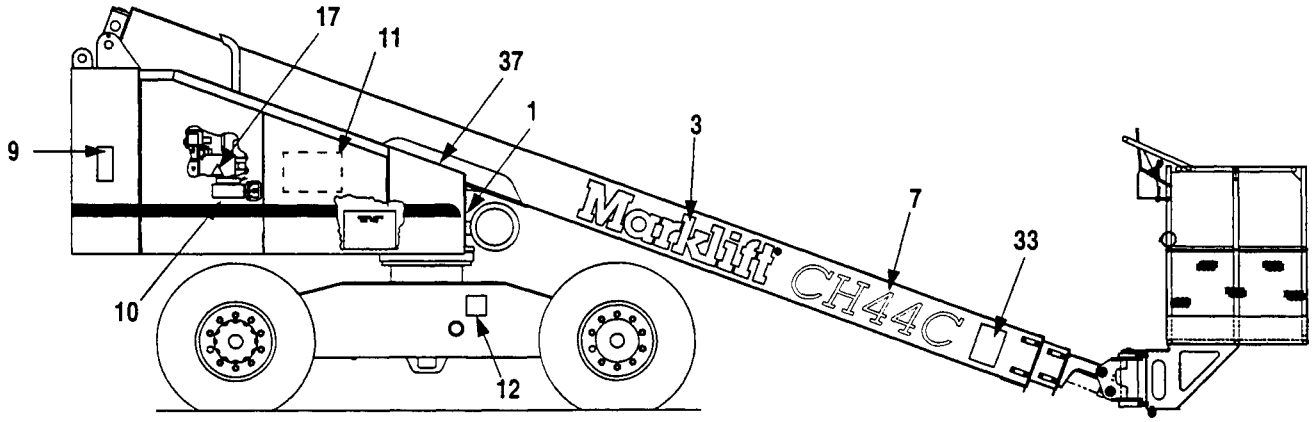
Mark Industries

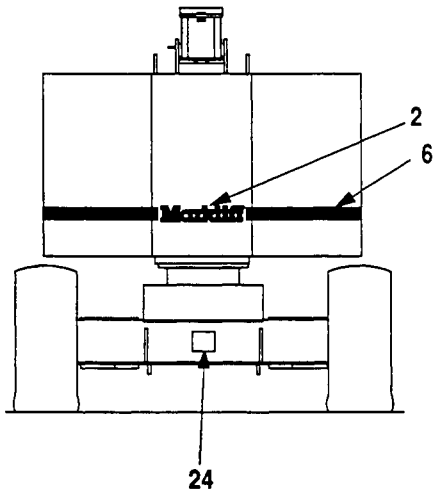


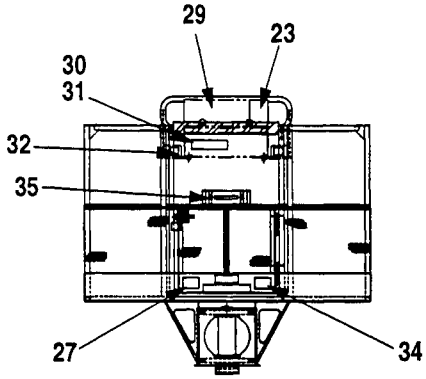
Ref.	Part No.	Description	Qty	Remarks
	212624	Sheet Metal Assembly	1	Incl. Items 1 thru 10
1	212629	Cover, Top Right	1	Incl. Item 11
2	212625	Cover, Top Left	1	
3	212627	Door, Right Front	1	Incl. Items 11 & 12
4	212628	Door, Right Rear	1	Incl. Item 13
5	212630	Door, Left Front	1	Incl. Items 11 & 12
6	212626	Door, Left Rear	1	Incl. Item 13
7	1205-45	Locknut, 3/8C	18	
	1209-89	Flatwasher	18	
8	211993	Plate, Latch	4	
9	1200-29	Capscrew, 5/16C x 3/4	8	
	1210-17	Lockwasher	8	
	1209-46	Flatwasher	8	
10	1211-12	Capscrew, 5/16C x 3/4 Self-Tapping	24	
	1209-24	Flatwasher	24	
12	69750	Latch, T-Handle	2	For Items 3 & 5
13	69751	Latch	2	For Items 4 & 6

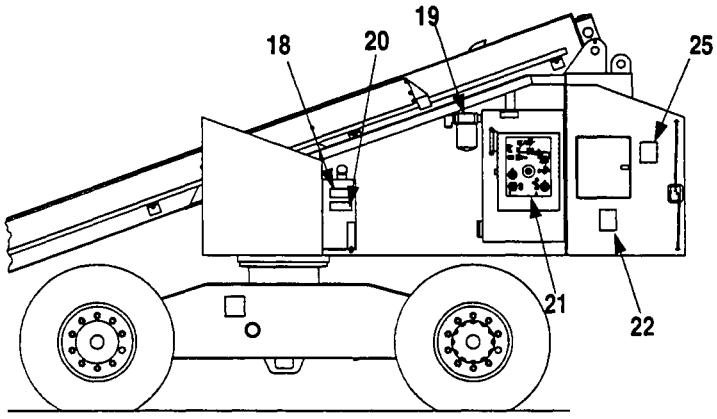
DECALS & PAINT

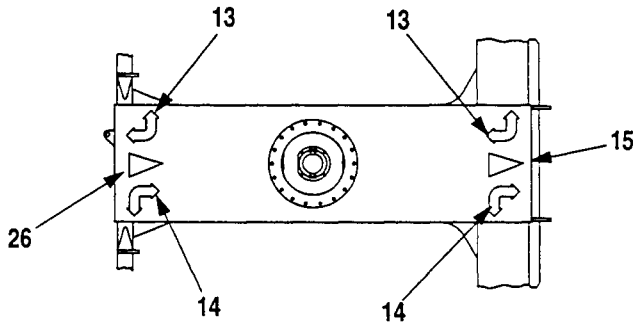
Mark Industries

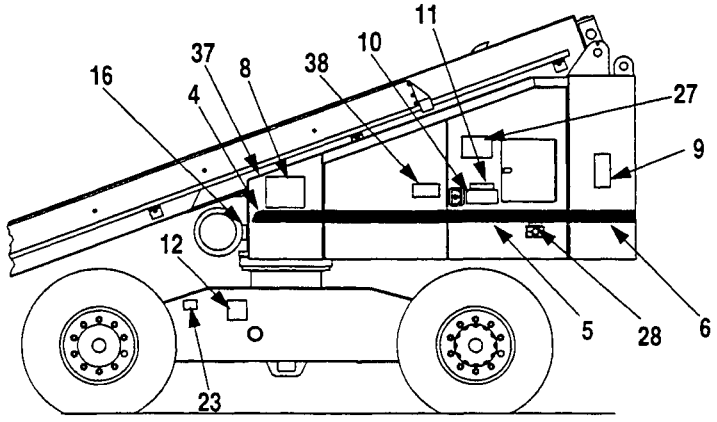












Ref.	Part No.	Description	Qty	Remarks
	212601	Marking Assembly (CH44C)	1	Incl. Items 1 thru 35
	212864	Marking Assembly (CH50C)		Incl. Items 1 thru 35
1	182821	Decal, Liquid Tank	1	(Dual Fuel Only)
2	181927-1	Decal, Marklift	1	
3	181927-3	Decal, Marklift	1	
4	181928	Decal, Stripe, Round End	1	
5	181929-1	Decal, Stripe, Square End	2	
6	181929-2	Decal, Stripe	4	
7	181977	Decal, CH44C	1	(CH44C Only)
	181979	Decal, CH50C	1	(CH50C Only)
8	12400-571	Decal, Pride/Flag	2	
9	12400-223	Decal, Danger, Tail Swing	2	
10	182122	Decal, Danger - Keep Clear	2	
11	12400-3	Decal, Booster Cable	1	
12	20508	Decal, Transportation	2	
13	182710	Decal, Direction Arrow (Blue)	2	
14	182709	Decal, Direction Arrow (Green)	2	
15	20462	Decal, Forward Arrow	1	
16	182121	Decal, Danger Crushing	1	
17	12260-701	Decal, Fan Warning	1	
18	2020	Decal, Gas/Petrol	1	(Gas and Dual Fuel)
	2033	Decal, Diesel	1	(Diesel)
19	183402	Decal, Hydraulic Fluid	2	
20	181321	Decal, No Smoking	1	
21	182817	Decal, Circuit Panel, Lower	1	
22	185702	Decal, Circuit Breaker - 110VAC	1	
23	183101	Decal, Tire Replacement	4	
24	181978	Decal, Name Plate	1	(CH44C Only)
	181981	Decal, Name Plate	1	(CH50C Only)
25	183405	Decal, General Checkout & Operation	1	
26	20461	Decal, Forward Arrow	1	
27	181320	Decal, Load Capacity (600 LBS)	2	(CH44C w/8' Basket)
	181321	Decal, Load Capacity (650 LBS)	2	(CH44C w/6' Basket)
	181322	Decal, Load Capacity (500 LBS)	2	(CH50C)
28	185707	Decal, Power - 110VAC	1	
29	182120	Decal, Operating Instructions	1	
30	182818	Decal, Aerial Control Panel	1	
31	182819	Decal, Aerial Control Panel	1	
32	181828	Decal, D-Ring, Attach Safety Belts Here	2	
33	181976	Decal, Terex Crown	1	
34	182307	Decal, Caution, Attach Safety Belt	1	
35	181113	Decal, Operation & Safety Handbook	1	
36	3900-146	Paint, White (Gallon)	AR	
	3900-115	Paint, White (Touch-Up)	AR	
	3900-130	Paint, Blue (Gallon)	AR	
	3900-131	Paint, Blue (Touch-Up)	AR	
37	12400-243	Decal, No Step	2	
38	181830	Decal, Diesel	1	(Diesel)
	181829	Decal, Gas	1	(Gas & Dual Fuel)

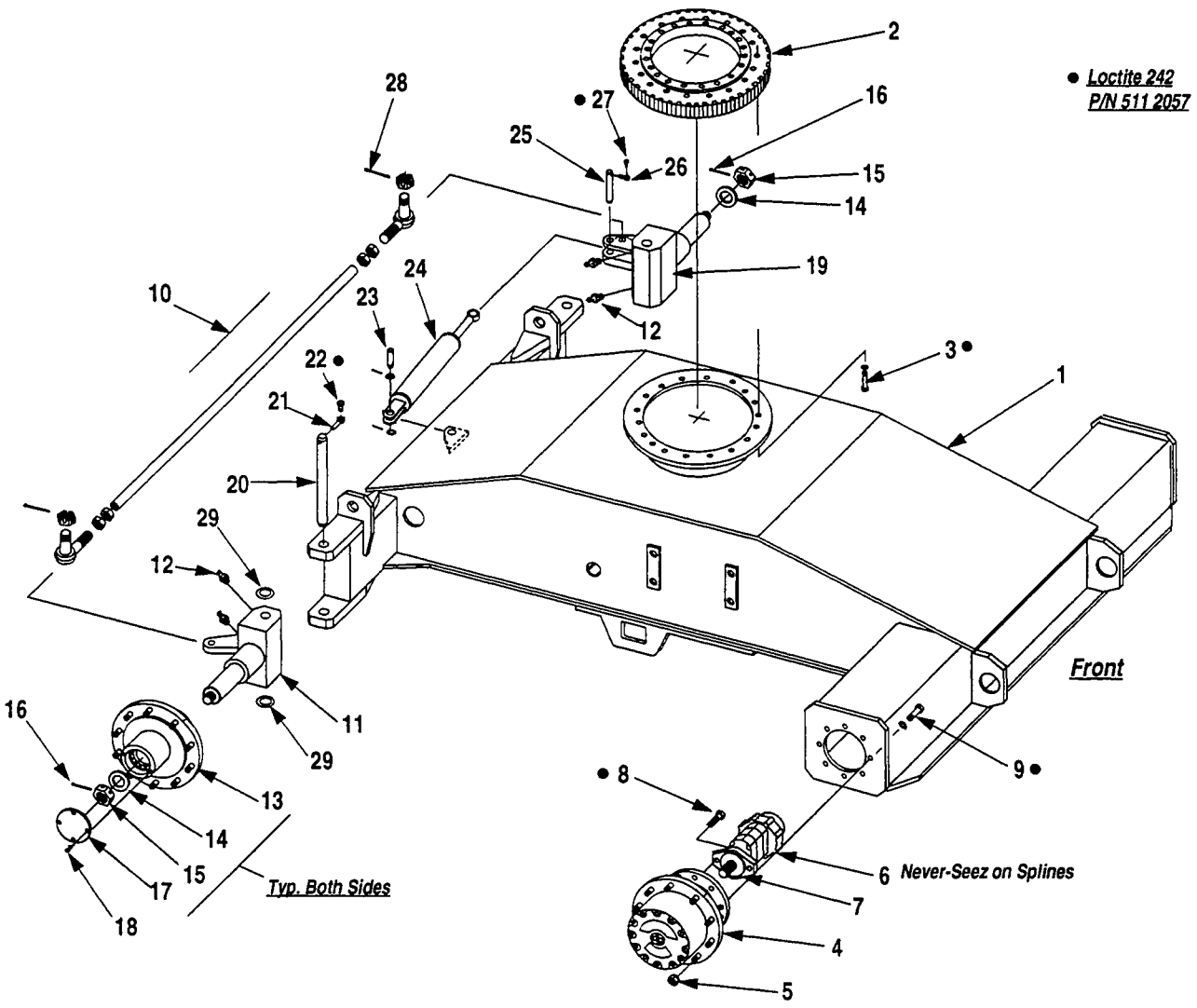
NOTES

SECTION 3 "BASE ASSEMBLY" CONTAINS:

PAGE	TITLE
3.2	BASE (Fixed Axle)
3.4	BASE HYDRAULICS (Fixed Axle)
3.6	TIE ROD ASSEMBLY
3.7	WHEEL HUB ASSEMBLY
3.8	TORQUE HUB
3.10	DRIVE MOTOR
3.12	PARKING BRAKE
3.13	WHEEL & TIRE
3.15	MASTER LEVELING CYLINDER

BASE
FIXED AXLE

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
	212605	Carriage Assembly	1	Incl. 1 thru 28
1	212802	Carriage Weldment	1	
2	211773	Bearing, Swing	1	
3	1242-94	Capscrew, 5/8C x 3-1/4 Gr. 8	18	To be loctited upon assembly
	1209-48	Flatwasher, 5/8 Gr. 8	18	
4	210859	Torque Hub	2	See Page 3.8
5	160724	Nut, Lug (Wheel)	36	
6	81393	Drive Motor & Parking Brake Ass'y	2	See Pages 3.10 & 3.12
7	460 6309	O-Ring (Motor to Torque Hub Seal)	2	.094 x 4.00
8	1203-220	Capscrew, 1/2C x 1-1/2 12 Pt. Gr. 8	4	Motor to Hub

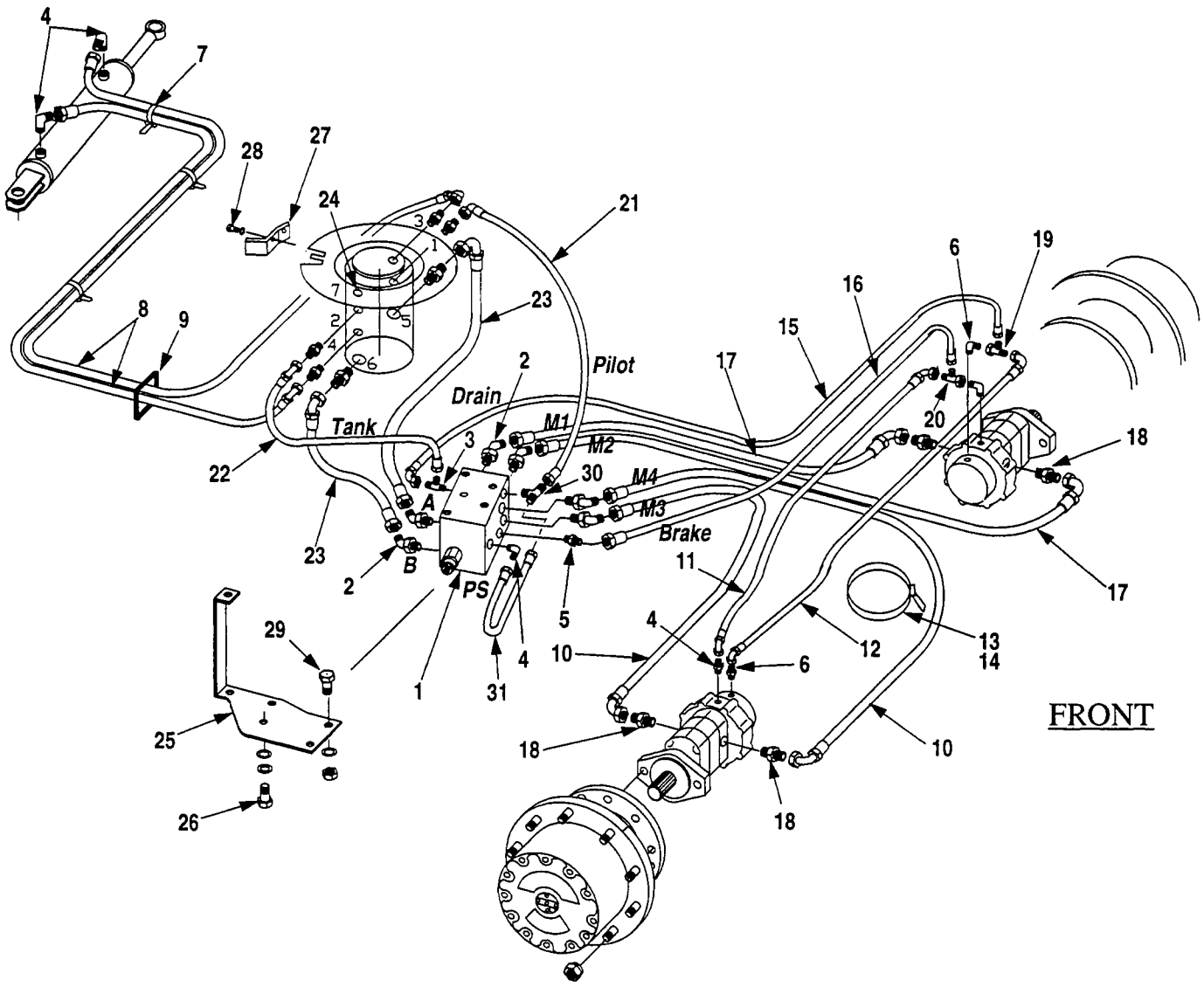
Ref.	Part No.	Description	Qty	Remarks
9	1242-45	Capscrew, 5/8C X 1-1/2 Gr. 8	18	Hub To Undercarriage
	1209-48	Flatwasher, 5/8C Gr. 8	18	
10	212346-4	Tie Rod Assembly	1	See Page 3.6
11	212650	Spindle, RH Rear	1	
	212169	Bushing	2	
12	1213-1	Zerk, Grease	4	
13	212647	Wheel Hub Assembly	2	See Page 3.7
14	211939	Washer, Thrust	2	
15	1205-143	Nut, 1-1/2F Slotted	2	
16	1207-44	Cotter Pin, 1/4 x 3	2	
17	211938	Cover, Wheel Hub	2	
18	1200-309	Capscrew, 1/4C x 1/2	4	
	1210-14	Lockwasher, 1/4	4	
19	212651	Spindle, LH Rear	1	
	212169	Bushing	2	
20	211914	King Pin	2	
21	706 9449	Rod End, Buck Pin	2	
22	1242-45	Capscrew, 5/8C x 1-1/2 Gr. 8	2	
23	211913	Pin	1	
	1209-30	Flatwasher	2	
	1207-40	Cotter Pin, 1/4 x 1-1/2	2	
24	211758	Cylinder, Steering (Slave Level Cylinder)	1	See Page 3.15
25	211912	Pin	1	Cylinder to LH Spindle
26	211779	Rod Eye	1	
27	1242-134	Capscrew, 3/8C x 1 Gr. 8	1	
28	1207-14	Cotter Pin, 1/8 x 1-1/2	2	Tie Rod
29	212170	Washer, Thrust	4	
30		Tire & Rim Ass'y (Not Shown)	4	See Page 3.13

Model CH44C
CH50C

Issued 4-96

BASE HYDRAULICS
(FIXED AXLE)

Mark Industries



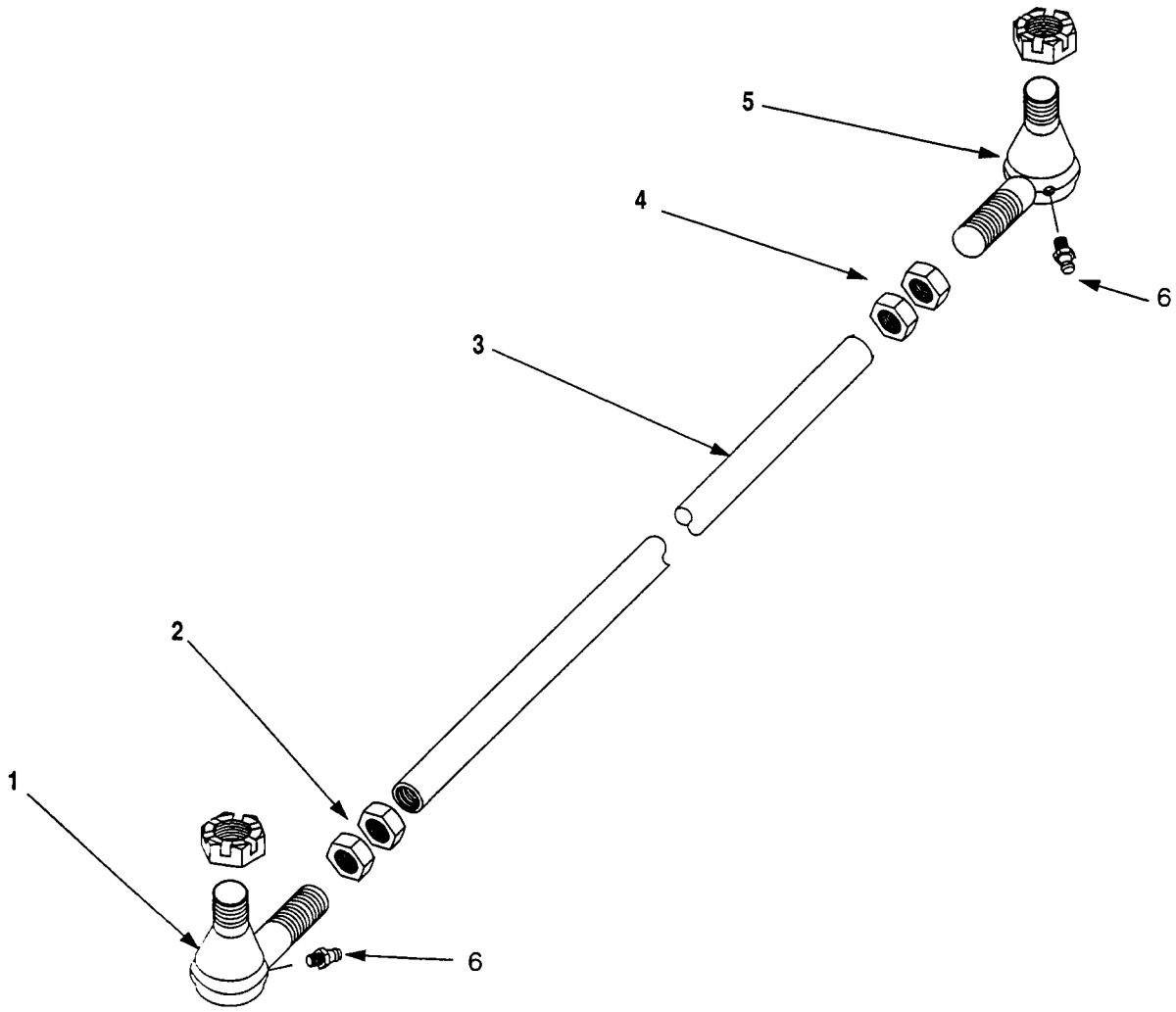
Ref.	Part No.	Description	Qty	Remarks
	212296	Lower Hydraulic Assembly	1	Incl. Items 1 thru 29
1	81445	Valve, Ground Drive	1	See Section 4
2	1219-663	Adapter	6	
3	1219-693	Adapter	1	
4	12019-548	Adapter	5	
5	1219-959	Adapter	1	
6	1219-776	Adapter	3	
7	1222-184	Tie Wrap	4	
8	212059-104	Hose	2	
9	12182-15	Trimlock	4	
10	212062-78	Hose	2	
11	212059-54	Hose	1	
12	212061-52	Hose	1	
13	200B2007-28	Clamp	1	
14	1205-36	Nut	1	
	1209-4	Flatwasher	1	
15	212061-58	Hose	1	
16	212059-68	Hose	1	
17	212062-78	Hose	2	
18	1219-389	Adapter	4	
19	12019-112	Tee	1	
20	12019-453	Tee	1	
21	212110-30	Hose	1	
22	212059-36	Hose	1	
23	212062-22	Hose	2	
24	1219-980	Plug	1	
25	212823	Bracket, Ground Drive Valve	1	
26	1200-59	Capscrew, 3/8C x 1	3	
	1210-20	Lockwasher	3	
	1209-4	Flatwasher	3	
27	212008	Plate, Rotary Manifold	1	
28	1200-59	Capscrew, 3/8C x 1	2	
	1209-4	Flatwasher	2	
29	1200-61	Capscrew, 3/8C x 1-1/4	3	
	1210-20	Lockwasher	3	
	1209-4	Flatwasher	3	
	1205-36	Nut, 3/8C	3	

Model CH44C
CH50C

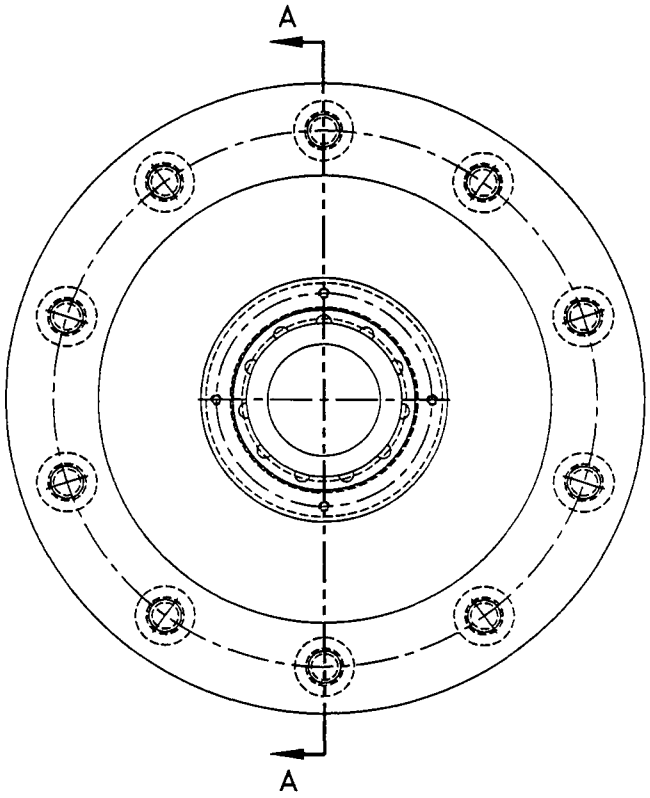
Issued 4-96

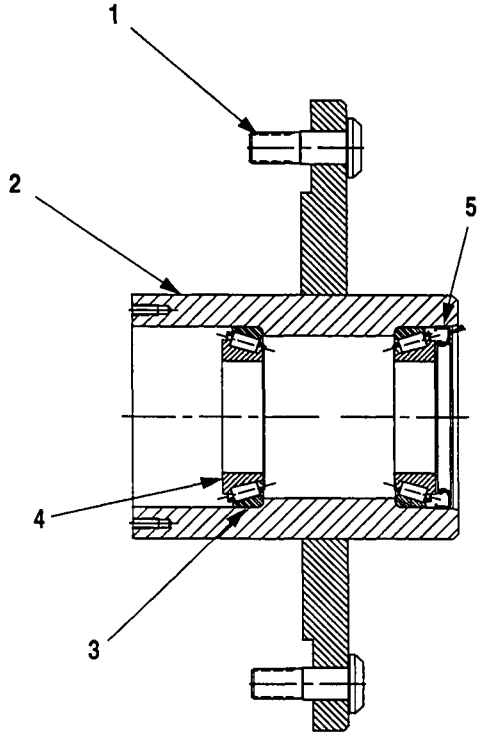
TIE ROD ASS'Y

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
	212346-4	Tie Rod Assembly (2WD Fixed Axle & 2WD OSC Axle)	1	Incl. Items 1 thru 6
	212346-3	Tie Rod Assembly (4WD OSC Axle & 4W Steer)	1	Incl. Items 1 thru 6
1	20569	End, LH	1	
2	20567	LH Jam Nut, 1-1/8 - 12	2	
3	212345	Tube	1	
4	20566	RH Jam Nut, 1-1/8 - 12	2	
5	20568	End, RH	1	
6	1213-1	Zerk, Grease	2	





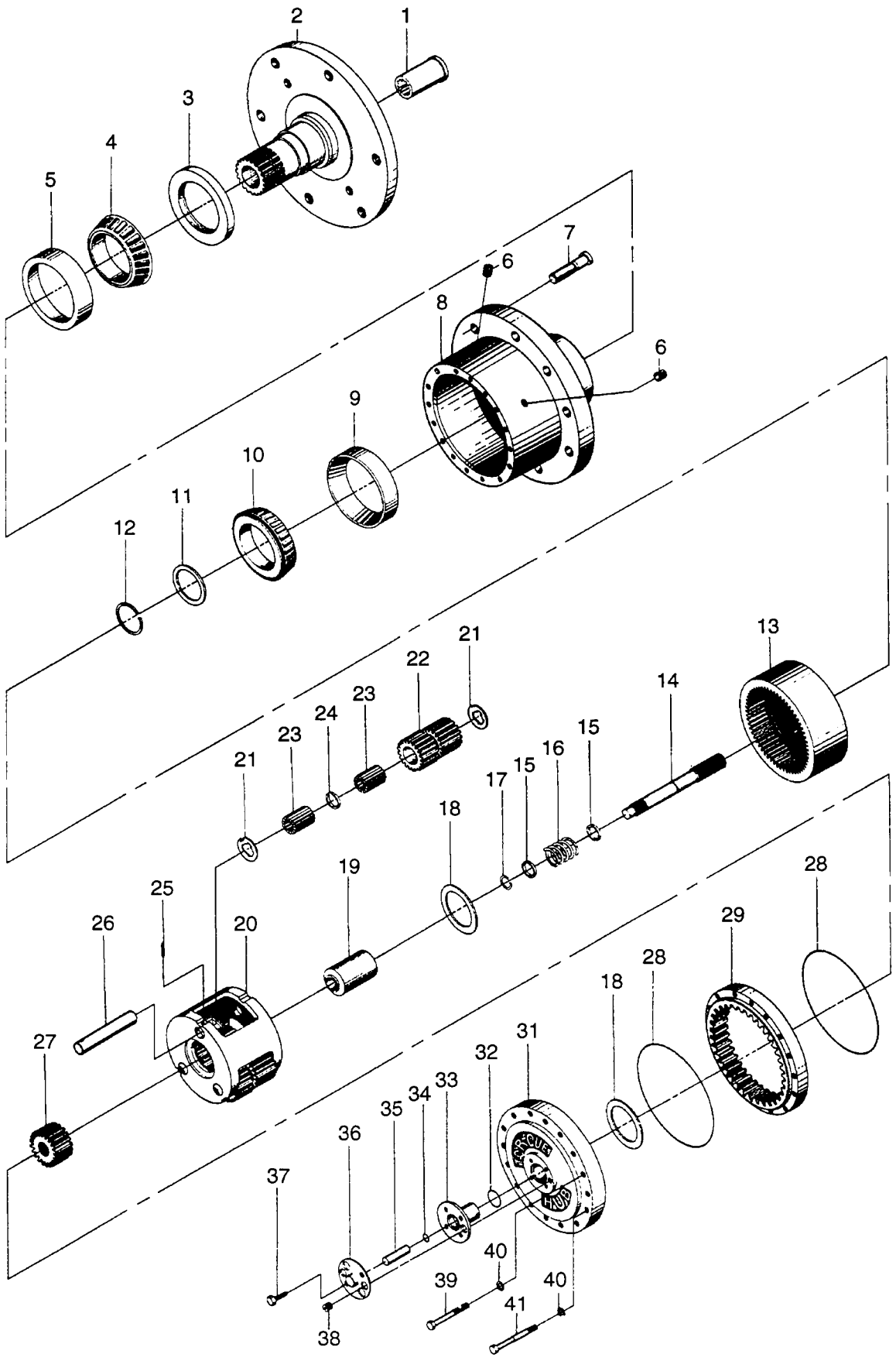
SECTION A–A

Ref.	Part No.	Description	Qty	Remarks
	212647	Wheel Hub Assembly (Incl. Items 1 thru 5)	1	2 Per Machine
1	160725	Stud, Wheel	10	
2	212646	Hub, Wheel	1	
3	211945	Cup, Bearing	2	
4	211944	Cone, Bearing	2	
5	211943	Seal	1	

Model CH44C
CH50C
Issued 4-96

TORQUE HUB

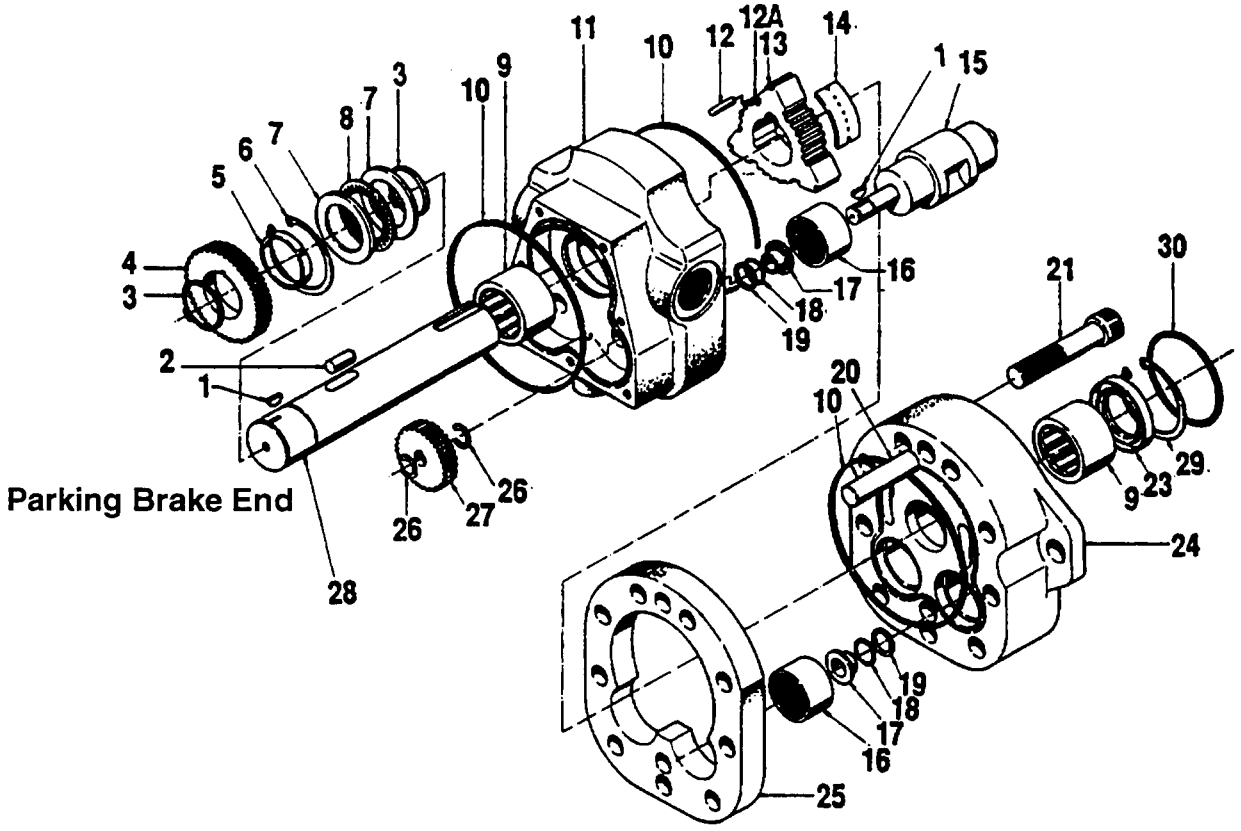
Mark Industries



Ref.	Part No.	Description	Qty	Remarks
-	210859	Torque Hub	Ref.	Incl. items 1 thru 41
	600219	Kit, Seal	1	Incl. items w/Asterisk *
	600120	Seal, Outboard		
1	68316	Coupling	1	
2	67872	Spindle	1	
3	68130	Seal	1	*
4	67922	Cone, Bearing	1	Use Set 600443
5	67914	Cup, Bearing	1	Use Set 600443
6	68303	Pipe Plug, 1/4 NPTF	2	
7	67885	Stud	9	
8	68305	Housing	1	
9	67915	Cup, Bearing	1	Use Set 600444
10	67923	Cone, Bearing	1	Use Set 600444
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	68327	Gear, Cluster	3	
23	67916	Roller, Needle	96	
24	67907	Spacer, Thrust	3	
25	68304	Pin, Roll	3	
26	68306	Shaft, Planet	3	
27	68326	Gear, Sun	1	
28	66428	O-Ring	2	*
29	68328	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	

DRIVE MOTOR

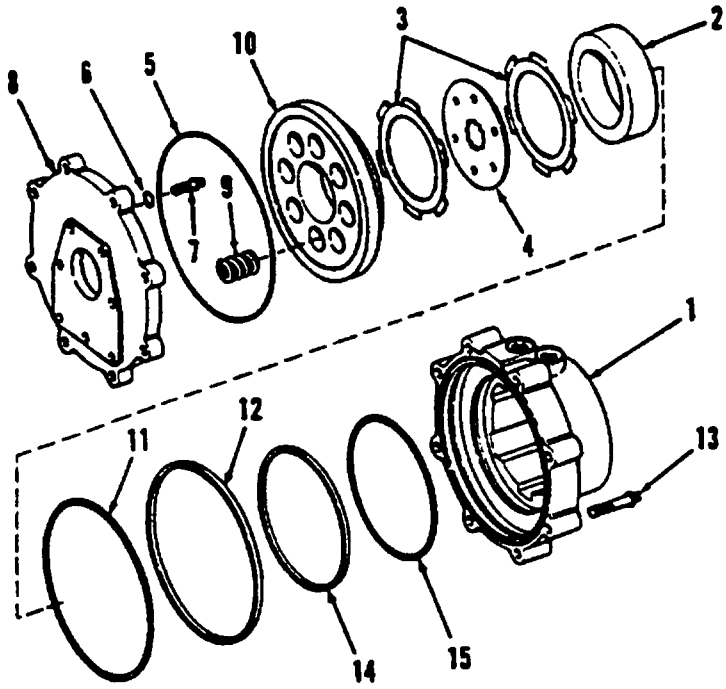
Mark Industries



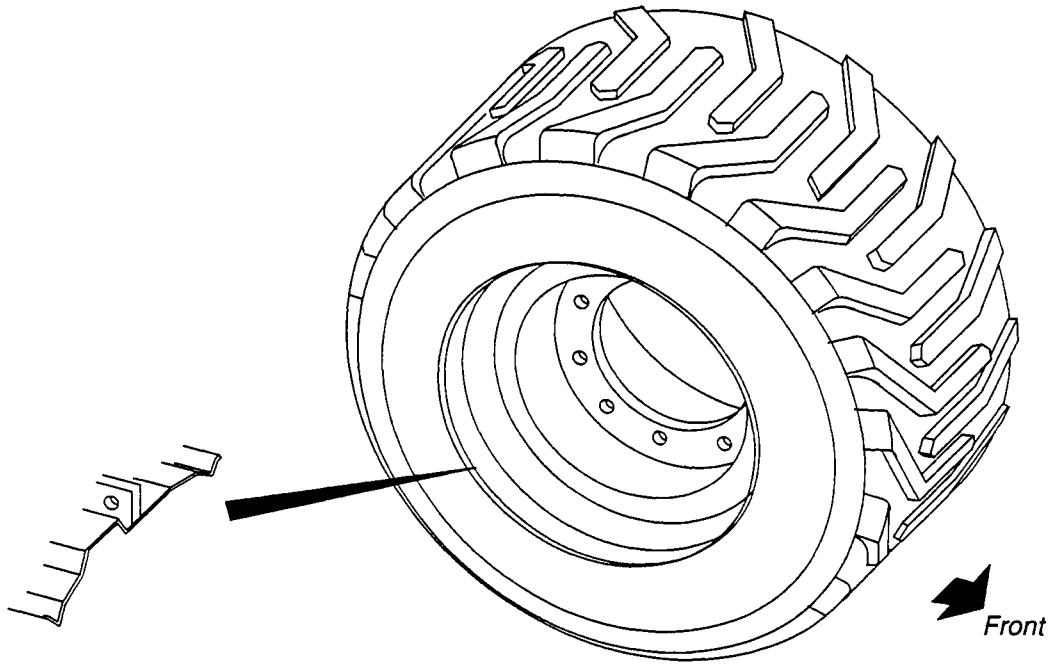
Ref.	Part No.	Description	Qty	Remarks
	81393	Hydraulic Motor w/Brake	2	Incl. Items 1 thru 31 & Items 1 thru 15 Page 3.12
	81394	Hydraulic Motor wo/Brake	1	Incl. Items 1 thru 31
	69684	Kit, Seal	1	Incl. Items w/Asterisk *
1	69685	Key, Woodruff	3	
2	69686	Pin, Drive	1	
3	69687	Ring, Retaining	2	
4	69688	Gear, Drive	1	
5	69689	Washer, Spacer	1	
6	69690	Ring, Retaining	1	
7	69691	Race, Bearing	2	
8	69692	Bearing, Thrust	1	
9	69693	Bearing, Needle	2	
10	69694	Oil Seal	3	*
11	69695	Cap, Rear End	1	
12	69696	Roller, Tip Seal	3	
12A	69697	Roller, Body Seal	18	
13	69698	Rotor	1	
14	69699	Plate, Seal	3	
15	69700	Valve, Abutment	2	
16	69701	Bearing, Needle	4	
17	69702	Bearing, Step	4	
18	69703	O-Ring	4	*
19	69704	Ring, Back-Up	4	*
20	69705	Pin, Dowel	2	
21	69706	Capscrew	9	
23	69707	Seal, Shaft	1	*
24	69708	Cap, Front End	1	
25	69709	Housing, Displacement	1	
26	69710	Ring, Retaining	4	
27	69711	Pinion, Gear	2	
28	69712	Shaft, Splined (13T)	1	
29	69713	Ring, Retaining	1	*
30	69714	O-Ring	1	
31	69715	Cap, Front Sealing	1	Not Shown

PARKING BRAKE

Mark Industries



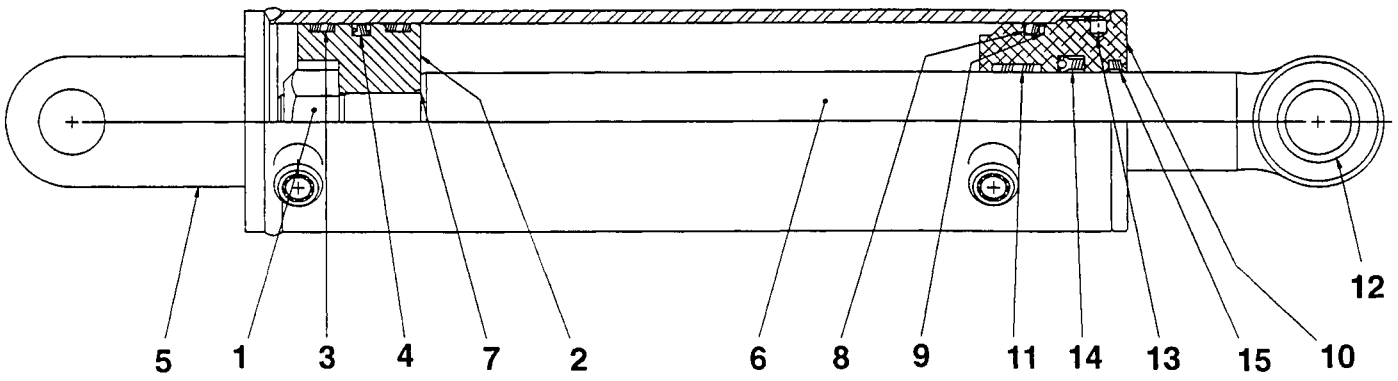
Ref.	Part No.	Description	Qty	Remarks
	69731	Brake, Parking	2	Incl. Items 1 thru 15
	68134	Kit, Seal	1	
1	69716	Housing	1	
2	69717	Ring, Spacer	1	
3	69718	Disc, Friction	5	
4	69719	Driver, Plate	4	
5	69720	O-Ring	1	
6	69721	Washer, Brass	7	
7	69722	Capscrew, Socket Head	7	
8	69723	Plate, Adapter	1	
9	69724	Spring, Die	8	
10	69725	Plate, Pressure	1	
11	69726	Ring, Back-Up	1	
12	69727	O-Ring	1	
13	69728	Capscrew, Socket Head	8	
14	69729	O-Ring	1	
15	69730	Ring, Back-Up	1	



Ref.	Part No.	Description	Qty	Remarks
	212537-1	Wheel & Tire Ass'y, Mono-fill - RH	2	Shown
	212537-2	Wheel & Tire Ass'y, Mono-fill - LH	2	Tread Opposite
		Tire & Wheel can only be purchased as an Assembly. Mono-Fill is necessary for machine stability and to prevent tire from deflating.		

NOTES

(STEERING CYLINDER)

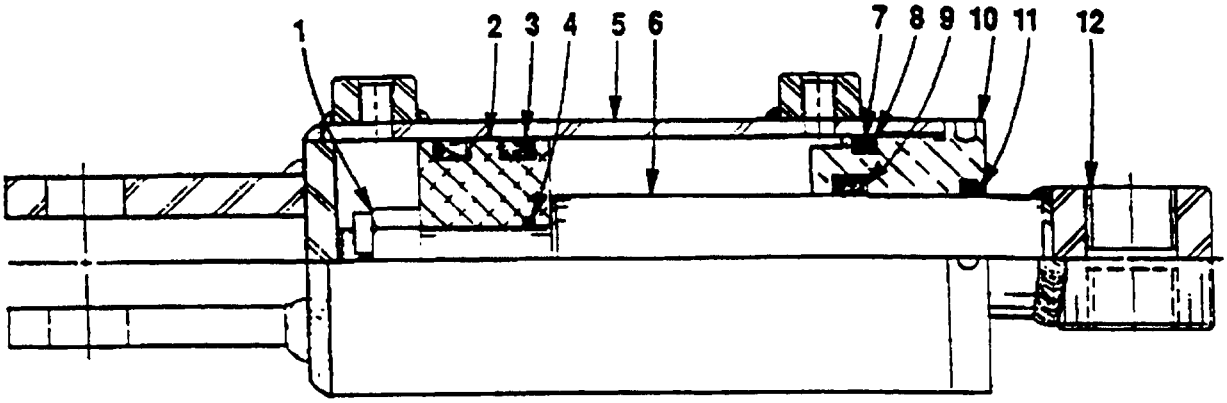


Ref.	Part No.	Description	Qty	Remarks
	211758	Cylinder, Steering & Master Leveling (Rosenboom)	2	Incl. Items 1 thru 12
	68954	Kit, Seal	1	Incl. Items w/Asterisk *
1	68956	Nut, Castle	1	
2	68957	Piston	1	
3	*	Wear Band	2	*
4	*	T-Seal	1	*
5	68955	Barrel	1	
6	68958	Rod, Piston	1	
7	*	O-Ring	1	*
8	*	O-Ring	1	*
9	*	Back Up Ring	1	*
10	68960	Nut, Gland	1	
11	*	Wear Band	1	*
12	68961	Bushing	1	
13	68959	Locking Insert	1	*
14	*	Polypak	1	*
15	*	Rod Wiper	1	*

MASTER LEVELING CYLINDER

Mark Industries

(STEERING CYLINDER)



Ref.	Part No.	Description	Qty	Remarks
	211758	Cylinder, Steering & Master Leveling (Best Metal Products)	2	Incl. Items 1 thru 12
	69652	Kit, Seal	1	Incl. Items w/Asterisk *
1	69653	Nut, Castle	1	
2	69654	Piston	1	
3	69655	Seal, Polypak	2	*
4	69656	O-Ring	1	*
5	69657	Barrel	1	
6	69658	Rod, Piston	1	
7	69659	O-Ring	1	*
8	69660	Back-Up Washer	1	*
9	69661	Seal, Polypak (Type B)	1	*
10	69662	Nut, Gland	1	
11	69663	Wiper	1	*
12	69664	Bushing	1	

SECTION 4 "TURRET ASSEMBLY" CONTAINS:

PAGE	TITLE
4.3	TURRET
4.5	TURRET ROTATION GEAR BOX
4.7	ROTATION MOTOR
	FORD ENGINE
4.9	ENGINE (FORD)
4.10	ENGINE (FORD GAS & LP)
4.12	RADIATOR & ENGINE (FORD)
4.13	AIR CLEANER (FORD)
4.14	FUEL TANK (FORD)
4.15	LP FUEL SYSTEM
4.17	BATTERY ASSEMBLY (FORD & DEUTZ)
4.18	ENGINE CONTROL PANEL (FORD)
	DEUTZ DIESEL ENGINE
4.20	ENGINE (DEUTZ)
4.25	FUEL TANK (DEUTZ)
4.27	ENGINE CONTROL PANEL (DEUTZ)

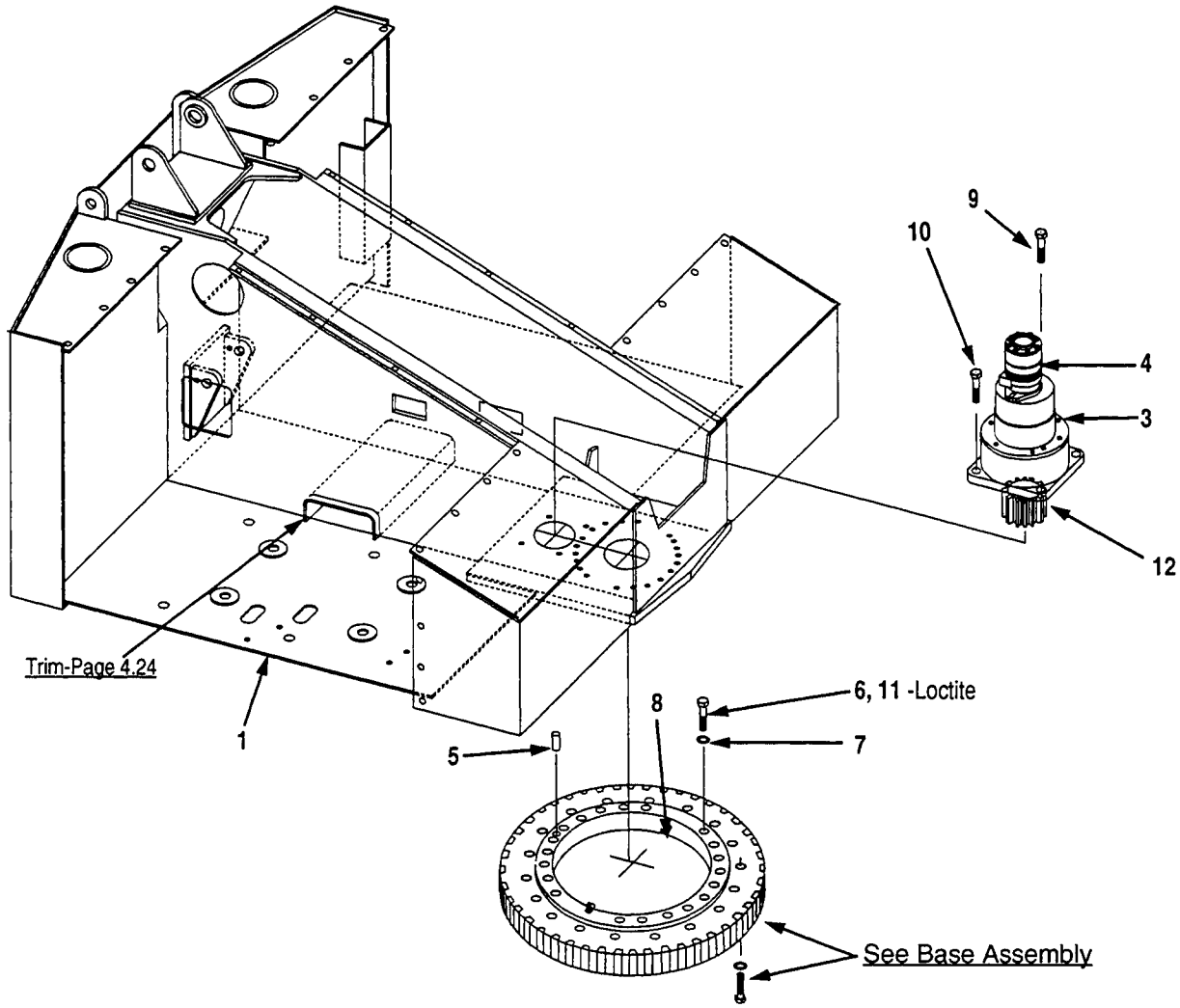
TURRET ASSEMBLY

SECTION 4 "TURRET ASSEMBLY" CONT'D.

PAGE	TITLE
4.29	TURRET WIRING
4.31	GROUND CONTROL BOX
4.33	TURRET HYDRAULICS
4.35	UPPER HYDRAULICS
4.37	HYDRAULIC RESERVOIR & FILTER
4.38	O-RINGS / CLAMPS
4.39	MAIN PUMP
4.41	MAIN PUMP CONTROL
4.42	EMERGENCY PUMP/MOTOR
4.43	MAIN VALVE
4.45	FUNCTION VALVE (4-WHEEL DRIVE)
4.47	FUNCTION VALVE (2-WHEEL DRIVE)
4.49	ROTARY MANIFOLD

TURRET

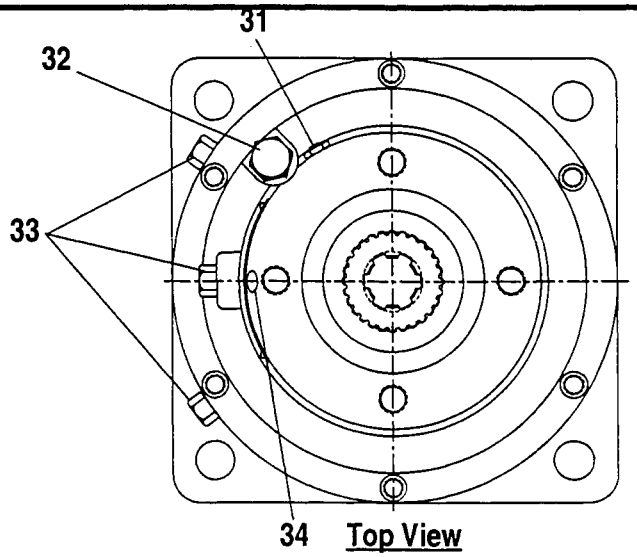
Mark Industries

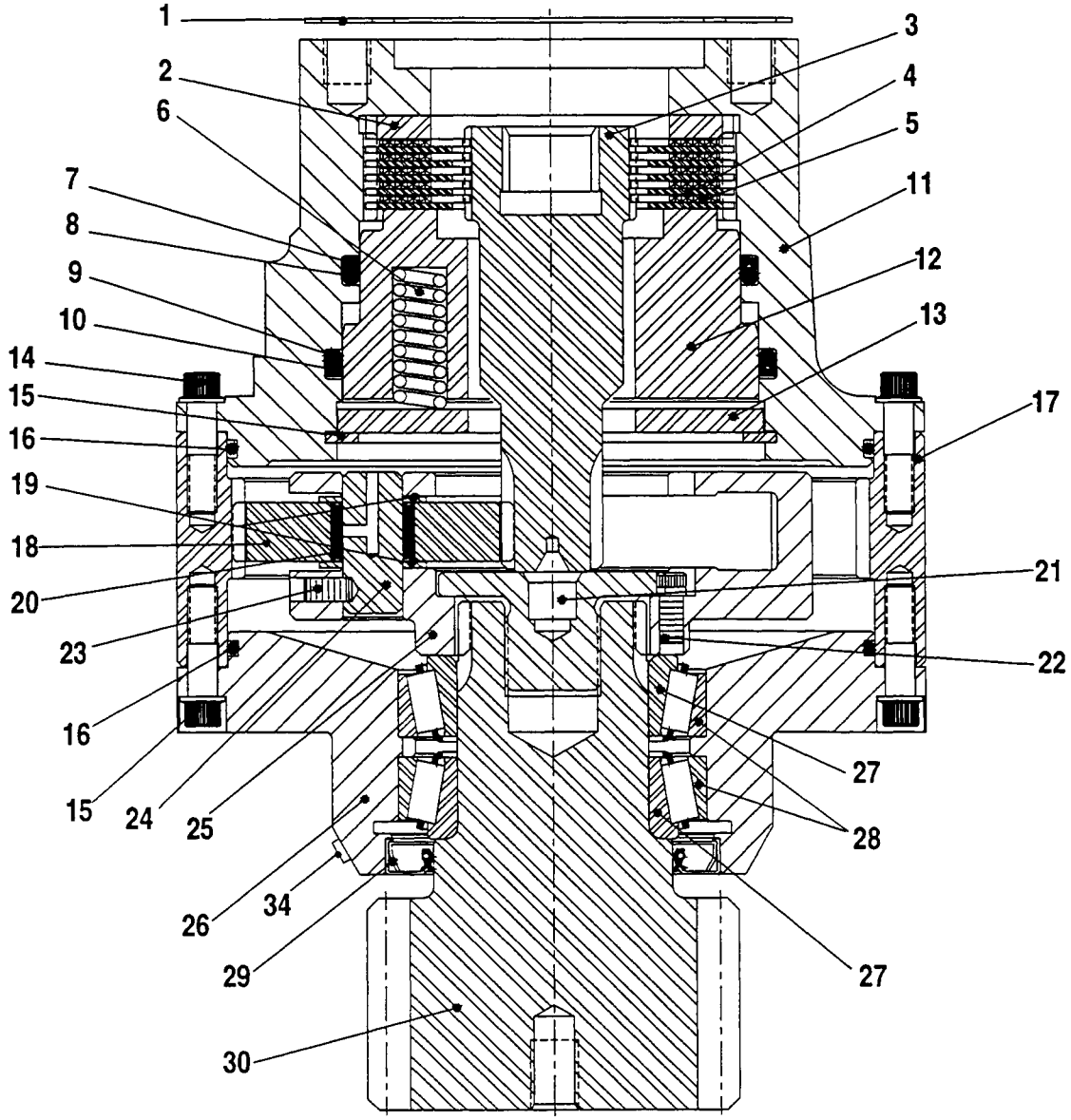


Ref.	Part No.	Description	Qty	Remarks
1	212591	Turret Weldment	1	
2	212046	Turret Rotation Gear Box Ass'y	1	Incl. Items 3 thru 12
3	211930	Rotation Gear Box	1	See Page 4.5
4	81539	Rotation Motor	1	See Page 4.7
5	200B0039-35	Dowel Pin	1	
6	1242-94	Capscrew, 5/8C x 3-1/2 Gr. 8	20	
7	1209-48	Flatwasher, 5/8 H.T.	20	
8	1213-6	Grease Zerk, 45 Deg	2	
9	1200-93	Capscrew, 1/2C x 3/4 12 Pt.	2	
10	316 2364	Capscrew, 5/8C x 1-1/2 12 Pt.	4	
11	511 2057	Loctite	AR	
12	211935	Ring	1	

TURRET ROTATION GEAR BOX

Mark Industries





TURRET ROTATION GEAR BOX

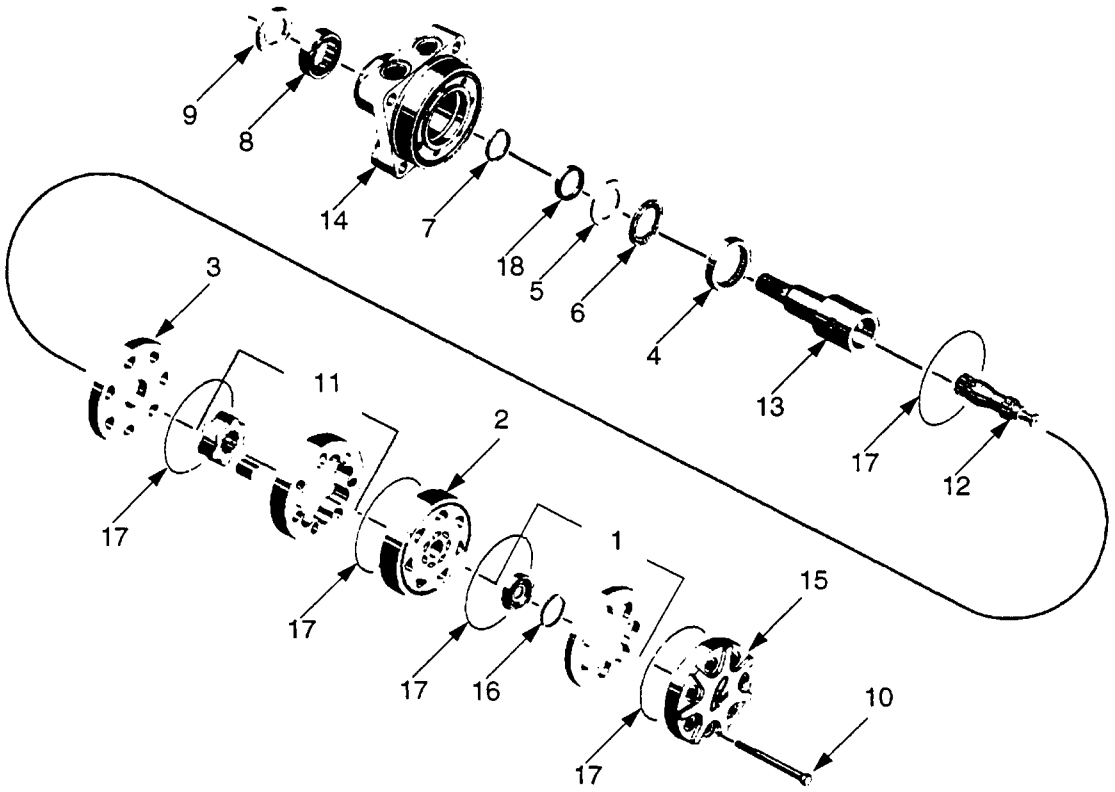
Model CH44C CH50C

Issued 4-96

Ref.	Part No.	Description	Qty	Remarks
	211930	Rotation Gear Box, Complete	1	Incl. Items 1 thru 34
1	69632	Gasket, Motor To Gear Box	1	1/32"
2	69637	Plate, Back-up	1	
3	69627	Gear, Input Sun	1	
4	69636	Disc, Brake	5	
5	69635	Disc, Reaction	5	
6	69633	Spring, Brake	11	
7	69649	Ring, Back-Up	1	
8	69648	O-Ring	1	
9	1218-194	O-Ring	1	
10	69650	Ring, Back-Up	1	
11	69628	Housing, Brake	1	
12	69634	Piston, Brake	1	
13	69625	Plate, Spring	1	
14	69645	Capscrew, Ferry, 5/16C x 1	22	
15	69643	Ring, Snap	1	
16	28950	O-Ring	2	
17	69622	Housing	1	
18	69626	Gear, Planet	3	
19	69641	Washer, Thrust	6	
20	69640	Roller, Bearing	54	
21	69624	Bolt, Special	1	
22	69646	Capscrew, Socket Head, 1/4C x 1/2	1	
23	69647	Setscrew, Socket Head, Full Point, 1/4C x 1/2	3	
24	69623	Shaft, Planet	3	
25	69630	Carrier, Planet	1	
26	69629	Base	1	
27	69638	Cone, Bearing	2	
28	69639	Cup, bearing	2	
29	69642	Seal	1	
30	69631	Shaft, Output	1	
31	69644	Plug, Vent	1	
32	1219-980	Plug, -6	1	
33	1219-763	Plug, -4	3	
34	69651	Plug	1	

ROTATION MOTOR

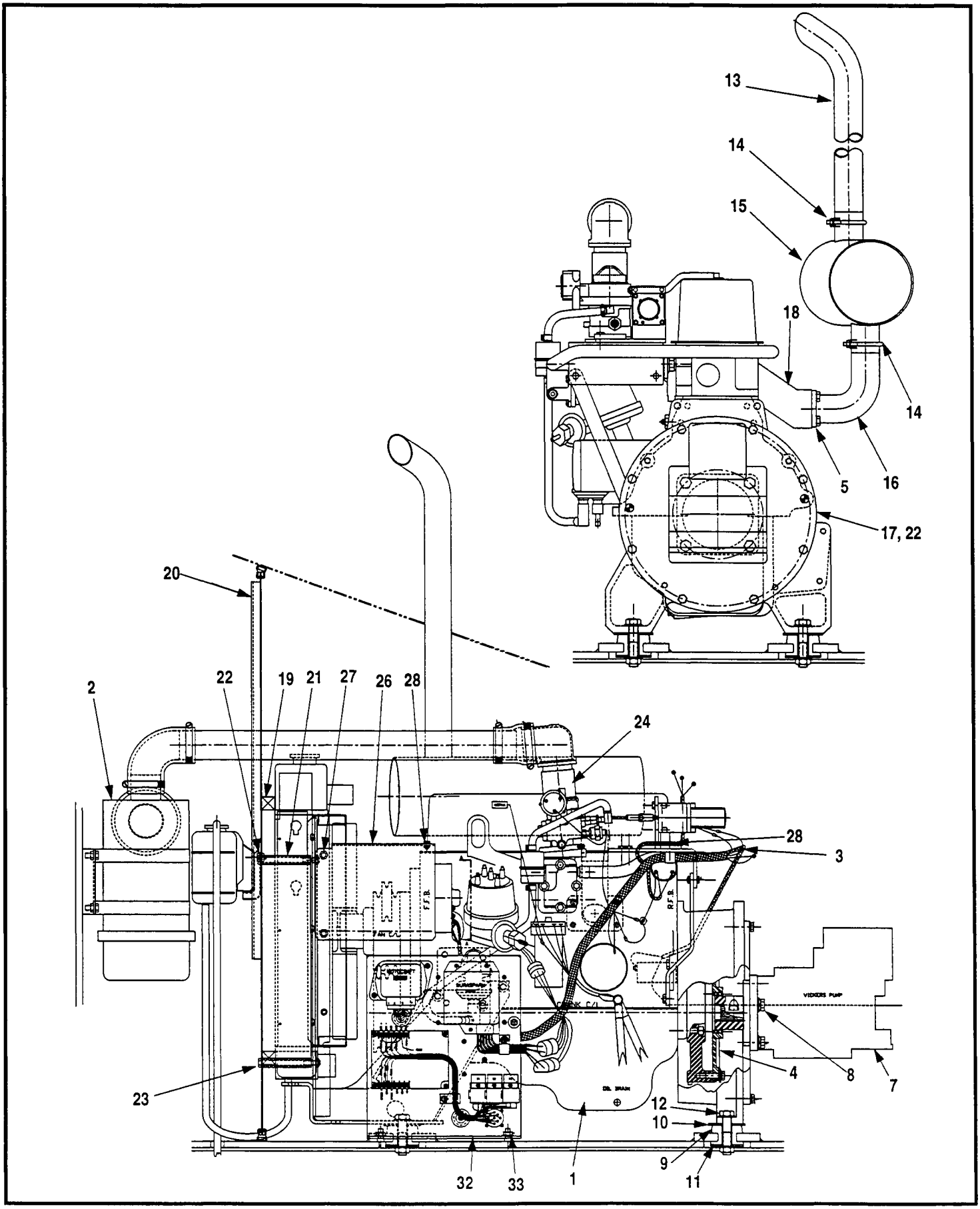
Mark Industries



Ref.	Part No.	Description	Qty	Remarks
	81539	Motor, Rotation	1	Incl. Items 1 thru 14
	600746	Kit, Seal	1	Incl. Items w/Asterisk
1	600733	Commutator and Ring Assembly	1	
2	600734	Manifold	1	
3	600735	Wear Plate	1	
4	600736	Bronze Bushing	1	
5	600737	Thrust Washer	1	
6	600738	Thrust Bearing	1	
7	*	Backup Washer	1	*
8	600739	"DU" Bearing	1	
9	*	Dirt and Water Seal	1	*
10	600740	Bolt	5	
11	600741	Rotor Set	1	
12	600742	Drive Link	1	
13	600743	Coupling Shaft	1	
14	600744	Housing	1	
15	600745	End Cover	1	
16	*	Commutator Seal	1	*
17	*	Seal Ring	5	*
18	*	Inner Seal	1	*

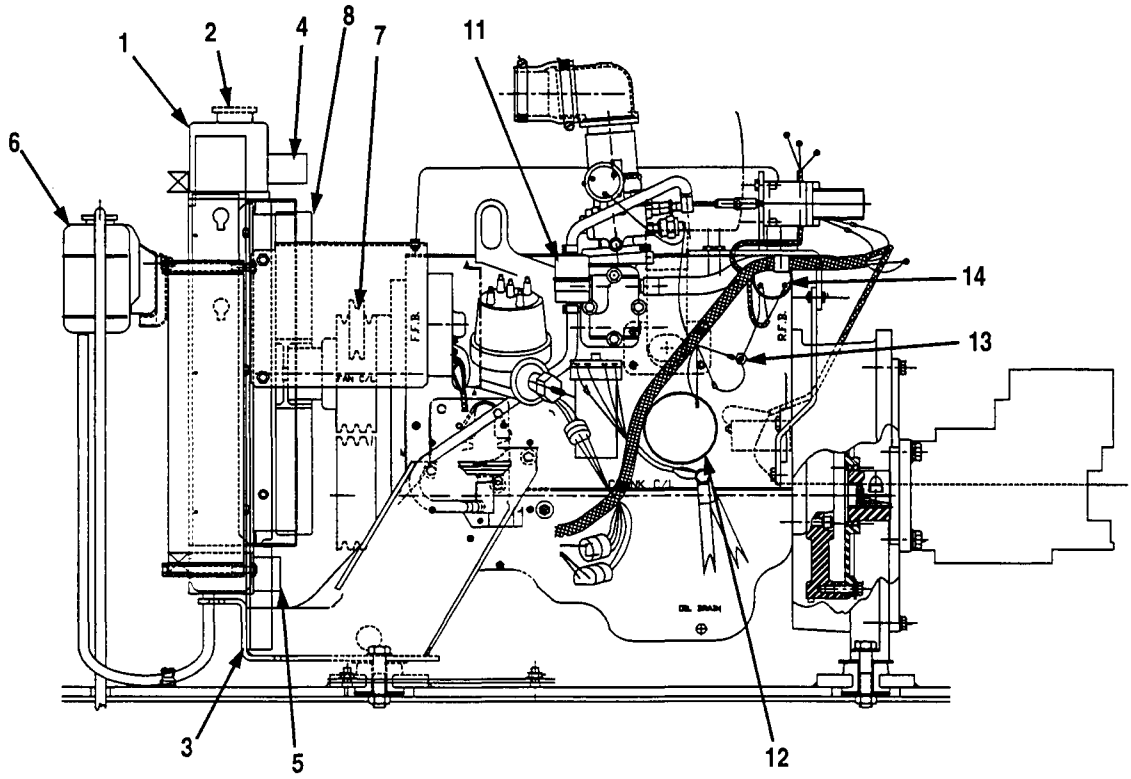
ENGINE
(FORD Gas & LP)

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
	212622	Engine Assembly (Gas)	Ref.	Incl. Items 1 thru 33 - Less 25
	212621	Engine Assembly (Dual Fuel)	Ref.	Incl. Items 1 thru 33
1	212544	Engine (Ford LRG423) (Gas)	Ref.	See Ford for Parts & Service
	212543	Engine (Ford LRG423) (Dual Fuel)	Ref.	See Ford for Parts & Service
2		Air Cleaner	Ref.	See Page 4.13
3	212538	Harness, Engine	1	
4	600648	Pump Drive	1	
5	600755	Gasket, Exhaust Flange	1	
6	600757	Drain Cock	1	
7	81525	Pump	1	See Page 4.39
8	1200-98	Capscrew, 1/2C x 1-1/4	4	
	1210-27	Lockwasher	4	
	1209-6	Flatwasher	4	
9	160672	Bushing, Motor Mount	4	
10	160673	Washer	4	
11	160674	Washer	4	
12	1200-156	Capscrew, 5/8C x 3	4	
	1209-8	Flatwasher	8	
	1205-90	Locknut, 5/8C	4	
13	600753	Pipe, Exhaust Stack	1	
14	600754	Clamp, 2"	2	
15	600752	Muffler	1	
16	160669	Tube, Exhaust	1	
17	600758	Starter	1	
18	600760	Alternator	1	
19	12148-20	Gasket, Foam	4	1"x1"
20	212658	Baffle Plate Ass'y	1	
21	212550	Baffle Spacer	2	
22	600763	Starter Relay	1	
23	1200-87	Capscrew, 3/8C x 5	4	
	1205-45	Locknut, 3/8C	4	
24	600769	Carburetor	1	
25	600771	Beam Kit (Dual Fuel only) (Not Shown)	1	
32	212631	Control Panel	1	See Page 4.18
33	1205-45	Locknut, 3/8C	2	
	1209-4	Flatwasher	2	

NOTES



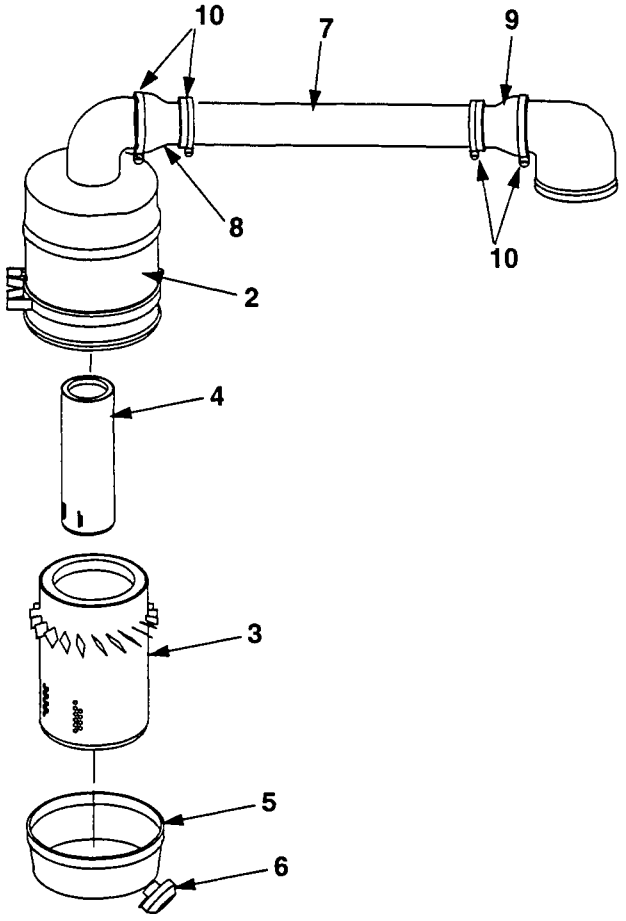
Ref.	Part No.	Description	Qty	Remarks
1	600762	Radiator	1	
2	600756	Cap, Radiator	1	
3	600761	Bracket, Radiator Support	1	
4	69778	Hose, Upper	1	
5	69779	Hose, Lower	1	
6	600770	Tank, Recovery	1	
7	69783	Belt, Fan	1	
8	600759	Fan	1	
11	600766	Filter, Fuel (Gasoline)	1	
12	69782	Filter, Oil	1	
13	600768	Temperature Switch	1	
	1219-214	Bushing	1	
14	600767	Switch, Oil Pressure	1	

Model CH44C CH50C

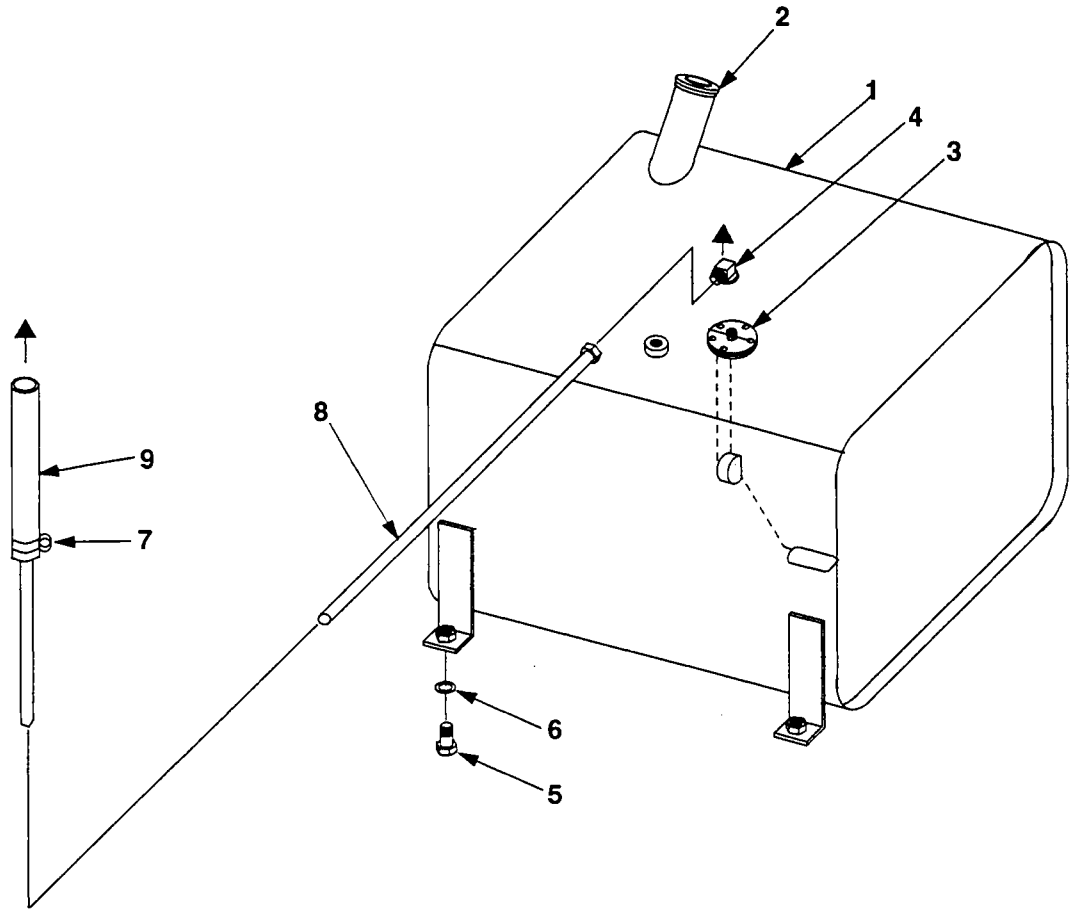
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AIR CLEANER
(FORD ENGINE)

Mark Industries



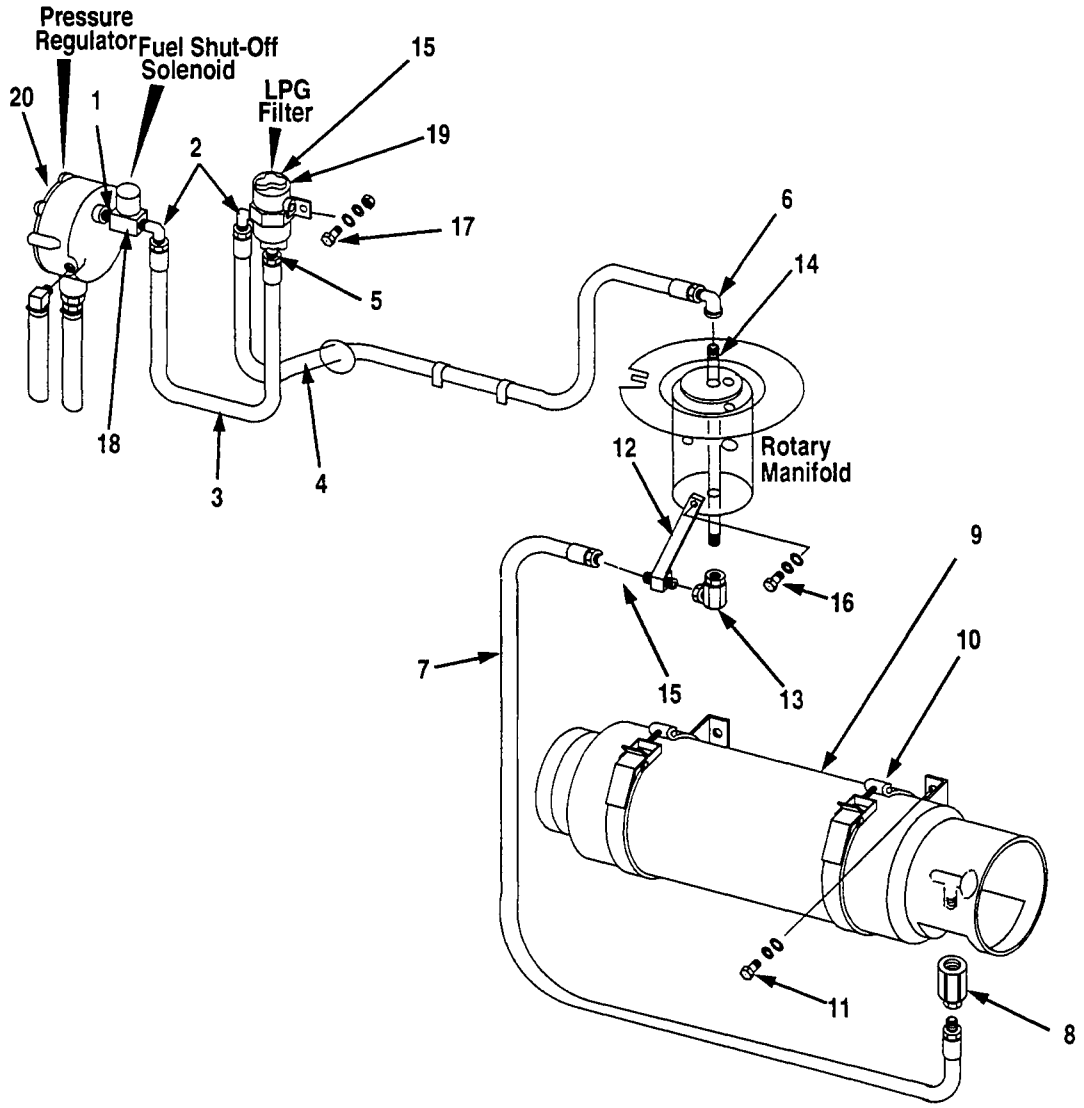
Ref.	Part No.	Description	Qty	Remarks
1	212657	Air Cleaner Complete	Ref.	Incl. Items 2 thru 6
2	600747	Body	1	
3	600748	Element, Primary	1	
4	600749	Element, Safety	1	
5	600750	Cover Assembly	1	
6	600751	Valve	1	
7	212811	Tube	1	
8	1243-37	Reducer	1	
9	160727	Hump Hose	1	
10	65435	Clamp	1	



Ref.	Part No.	Description	Qty	Remarks
	212656	Fuel Tank Assembly (Ford Engine) (Tankcraft)	1	Incl. Items 1 thru 10
1	212542	Tank, Fuel	1	25 Gal.
2	600730	Cap	1	
3	600732	Sender, Fuel	1	
4	600731	Tube	1	
5	1200-61	Capscrew, 3/8C x 1-1/4	4	
6	1209-89	Flatwasher	4	
7	1240-100	Clamp	2	
8	212863	Tube	1	
	200B2007-2	Clamp	4	
	1205-45	Locknut, 3/8	4	
	1209-4	Flatwasher, 3/8	4	
9	160091-.63	Hose	1	

LP FUEL SYSTEM

Mark Industries

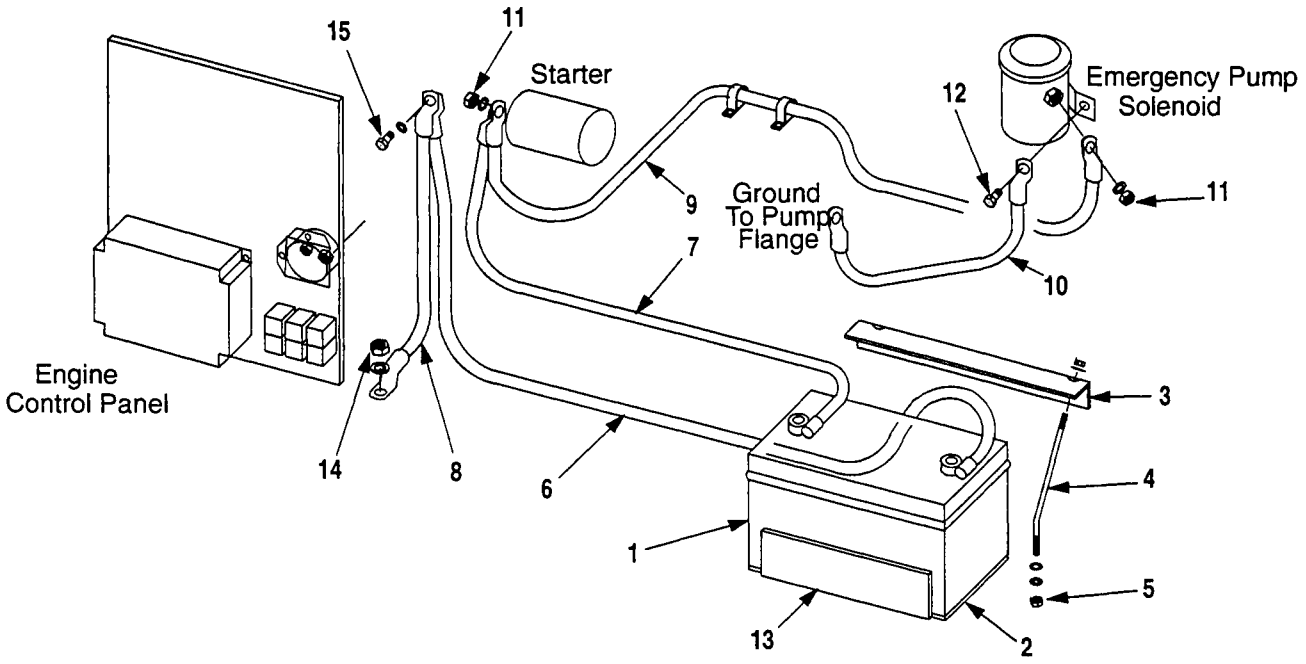


Ref.	Part No.	Description	Qty	Remarks
	212655	LP Fuel System	1	Incl. Items 1 thru 17
1	1219-512	Nipple, 1/4 NPT	1	
2	1219-351	Elbow	2	
3	212417-32	Hose	1	
4	212417-72	Hose	1	
5	1219-559	Adapter	1	
6	16506	Elbow, Female	1	
7	212640-144	Hose	2	
8	65142	Socket, Female	1	
9	65937	Tank, Propane	1	
10	486-B	Bracket, Mounting (2 piece)	1	
11	1200-95	Capscrew, 1/2C x 1	8	
	1210-26	Lockwasher	8	
	1209-6	Flatwasher	8	
12	21896	Bracket, LPG Swivel	1	
13	20815	Swivel, LPG	1	
14	65391	Nipple	1	
15	1219-120	Plug	1	
16	1200-335	Capscrew, 3/8C x 1/2	2	
	1210-20	Lockwasher	2	
	1209-4	Flatwasher	2	
17	1200-3	Capscrew, 1/4C x 1	2	
	1209-2	Flatwasher	2	
	1210-14	Lockwasher	2	
	1205-13	Nut, 1/4C	2	
18	69771	Filter, Fuel	1	
	69772	Element, Filter	1	
19	69773	Solenoid Valve, Fuel Shut-Off	1	
20	69774	Pressure Regulator	1	
	69775	Kit, Repair	1	

BATTERY ASSEMBLY

(FORD & DEUTZ ENGINES)

Mark Industries

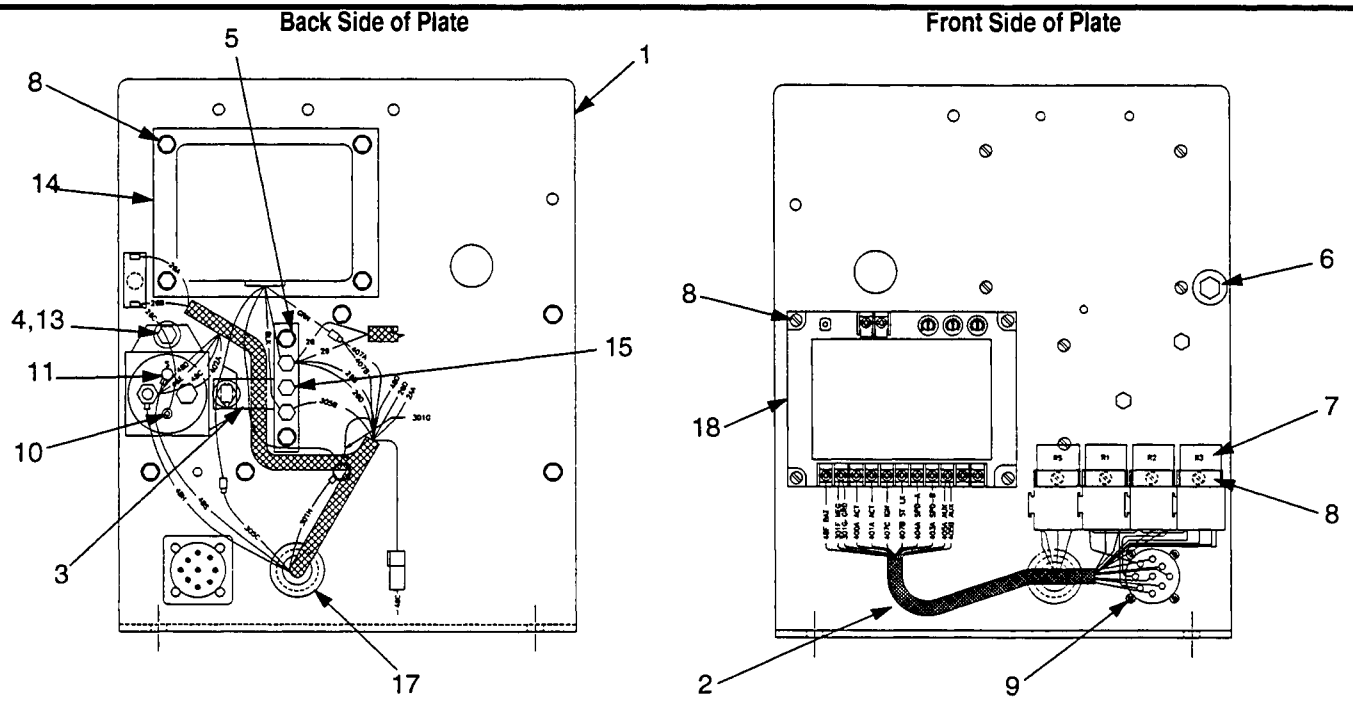


Ref.	Part No.	Description	Qty	Remarks
	212066	Battery Installation (Ford & Deutz)	1	Incl. Items 1 thru 15
1	1223-824	Battery	1	
2	706 8846	Plate, Masonite, Battery Isolation	1	
3	212541	Hold Down, Battery	1	
4	707 4375	Rod, Battery Hold-Down	2	
5	1205-34	Locknut, 5/16C	4	
	1209-3	Flatwasher	4	
6	70798	Cable, Battery (+)	1	
7	70797	Cable, Battery (-)	1	
8	70799	Cable, Engine Ground	1	
9	70800	Cable, Starter	1	
10	70851	Cable, Emergency Pump	1	
11	1205-199	Nut, 5/16C Brass	2	
	1210-17	Lockwasher	2	
12	1200-309	Capscrew, 1/4C x 1/2	1	
13	212210	Plate, Masonite	1	
14	1205-170	Nut, 3/8C Brass	1	
	1210-77	Washer, 7/16 Ext. Tooth	1	
	1210-20	Lockwasher, 3/8	1	
15	1200-57	Capscrew, 3/8C x 3/4	1	
	1210-20	Lockwasher	1	

ENGINE CONTROL PANEL (FORD ENGINE)

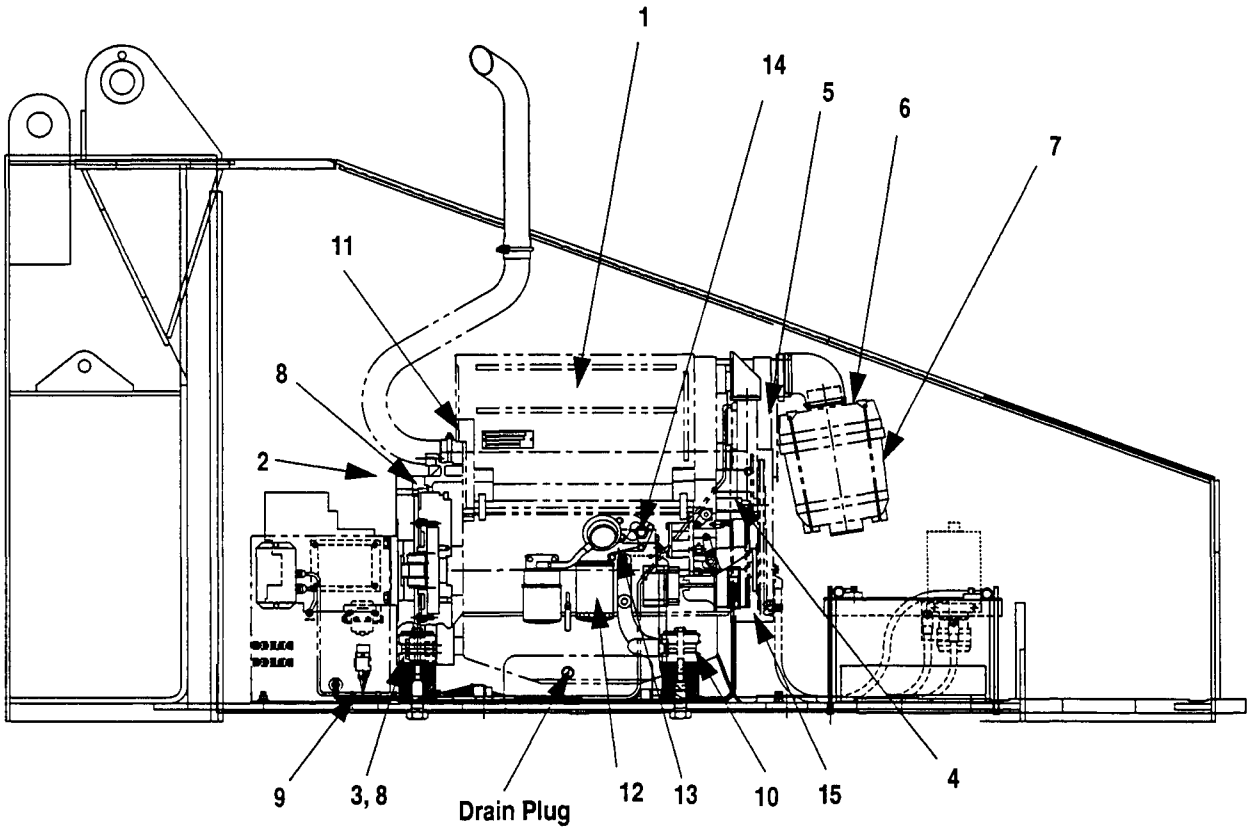
Model CH44C CH50C

Issued 4-96



Ref.	Part No.	Description	Qty	Remarks
	212631	Engine Control Panel Ass'y	1	Incl. Items 1 thru 18
1	212028	Plate	1	
2	212632	Harness, Control Panel	1	
3	200B2007-4	Clamp, 1/2"	1	
4	1200-1	Capscrew, 1/4 x .75	1	
	1205-13	1/4 Nut	1	
	1210-14	Lockwasher, 1/4	1	
5	117-C	Eyelet #10	2	
6	441 4026	Circuit Breaker (20A)	1	
	442 2399	Boot	1	
7	441 6828	Relay	3	
8	1202-6	Machine Screw, #10-24 x 3/4	13	
	1210-7	Lockwasher, #10	13	
	1205-5	Nut, #10-24	13	
9	1233-22	Machine Screw, #5-40 x 1/2	4	
	1230-11	Keps, #5-40	4	
10	1205-3	Nut #8-32	1	
11	1205-6	Nut #10-32	1	
13	1209-2	Flatwasher, 1/4	3	
14	70923	Starter Lockout	1	
15	7099	Block, Terminal	1	
17	1221-13	Grommet	2	
18	70919	Governor Control	1	

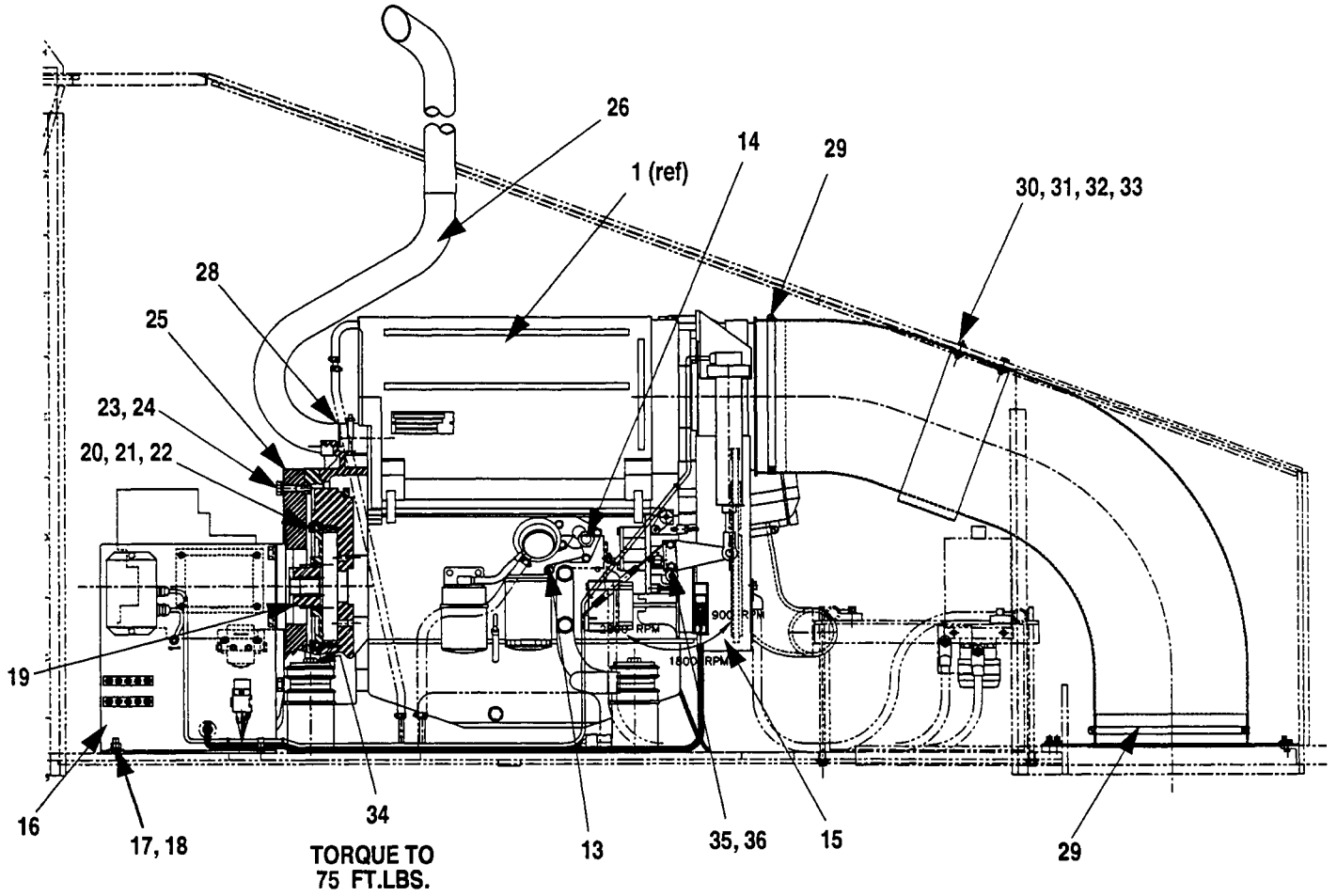
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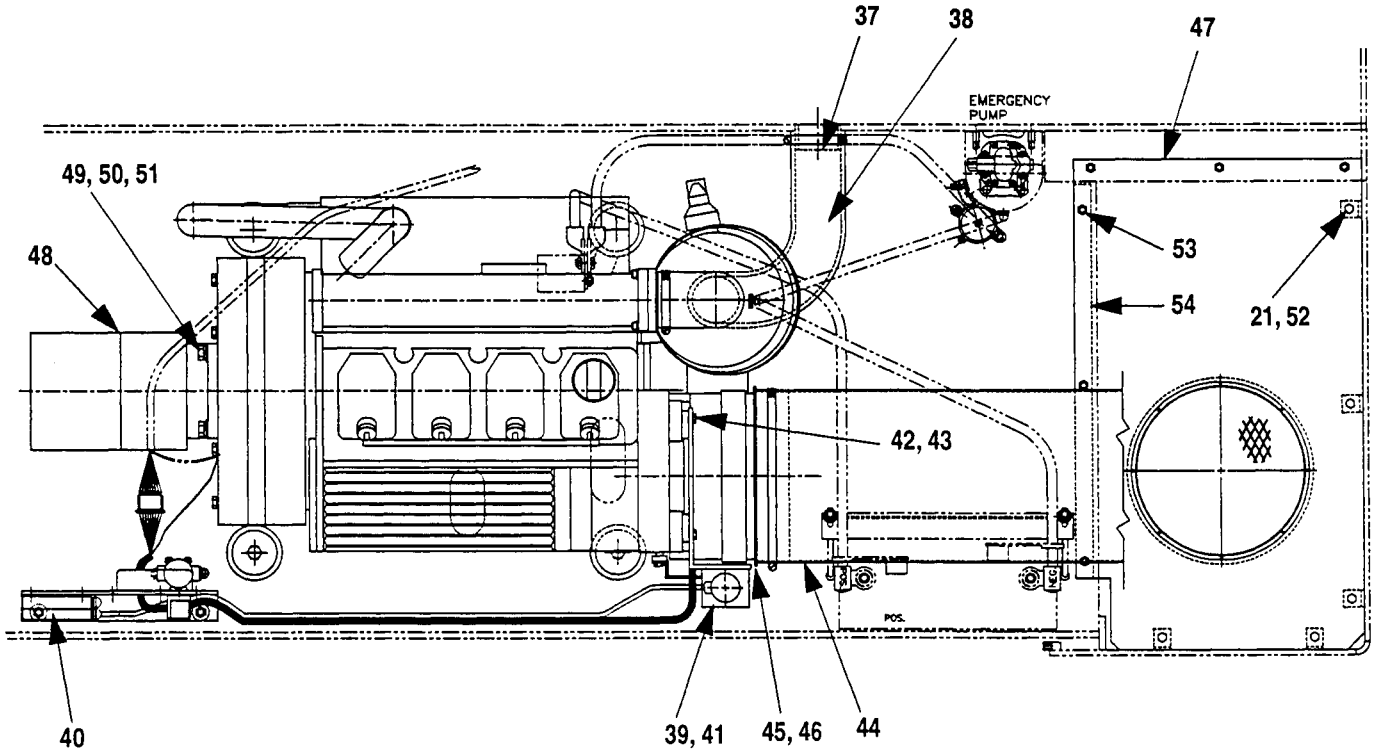


Ref.	Part No.	Description	Qty	Remarks
	212623	Engine Assembly, Deutz	Ref.	Incl. items 1 thru 54
1	212548	Engine, Deutz	1	See Deutz for Parts & Service
2	600675	Starter, 12 Volt	Ref.	
3	600676	Flywheel	Ref.	
4	68787	Solenoid, Shutdown	Ref.	
5	600668	Ring, Air Guide	Ref.	
6	68789	Service Indicator	Ref.	
7	160631	Assembly, Air Cleaner (dry type)	Ref.	
	68724	Element, Replacement	Ref.	
8	600664	Housing, Adapter	Ref.	
9	600670	Harness, Wiring	Ref.	
10	68792	Mount, Engine	Ref.	
11	68793	Muffler, Manifold	Ref.	
12	68794	Filter, Oil	Ref.	
13	600672	Switch, Oil Temp.	Ref.	

ENGINE, DIESEL (DEUTZ)

Mark Industries

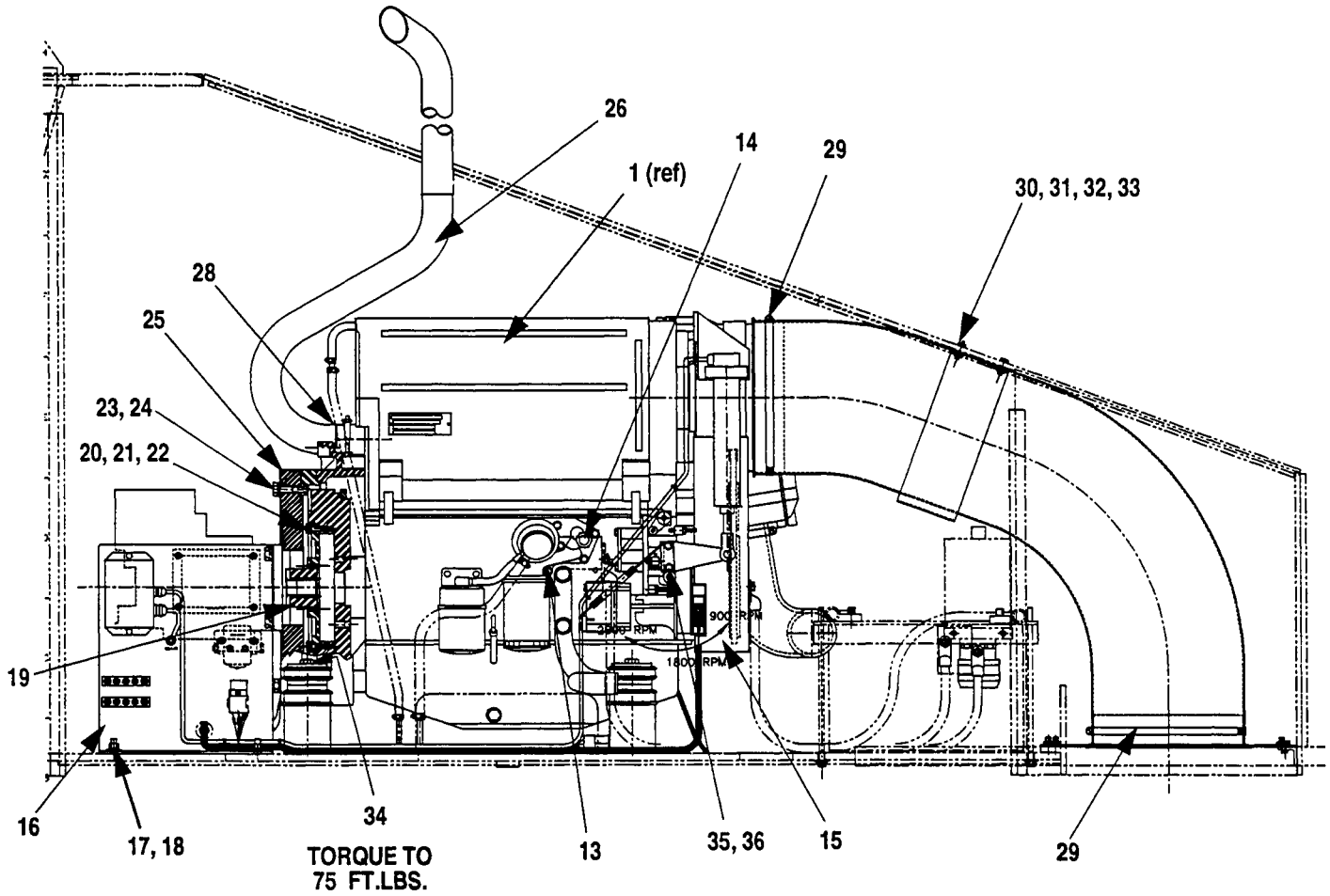


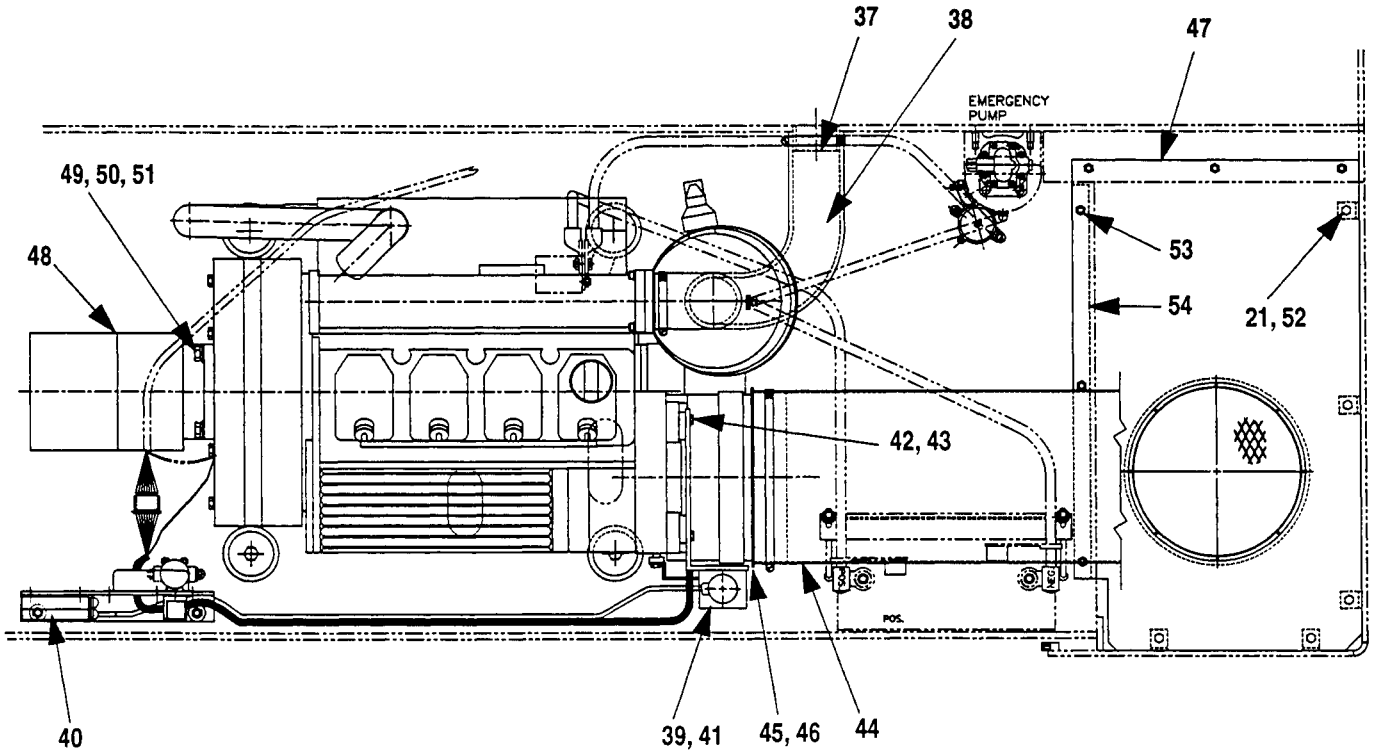


Ref.	Part No.	Description	Qty	Remarks
13	68795	Switch, Oil Temp	Ref.	
14	600673	Switch, Oil Pressure	Ref.	
15	160588	Guard, Fan Belt	Ref.	
16	212806	Control Panel (for Deutz Engine)	1	See Page 4.27
17	1205-45	Locknut, 3/8C	2	
18	1209-4	Flatwasher, 3/8	2	
19	600677	Pump Drive	1	
20	071 408 40	Capscrew, Hex Head M8 x 30	Ref.	
21	1210-17	Lockwasher, 5/16	Ref.	
22	1209-3	Flatwasher	Ref.	
23	071 310 20	Capscrew, Hex Head M10 x 50	8	
24	085 310 18	Lockwasher, 10mm	8	
25	212103	Plate, Pump Mounting	1	
26	212841	Tube, Exhaust	1	
28	16230	Clamp, 2"	1	
29	160682	Clamp, Hose	2	
30	1209-2	Flatwasher, 1/4	4	
31	1205-23	Locknut, 1/4C	4	
32	1200-3	Capscrew, 1/4C x 1	4	
33	212171	Hanger	1	
34	1200-136	Capscrew, 1/2-13 x 7.00	4	
35	071 406 16	Capscrew, M6 x 10	Ref.	
36	065 306 12	Lockwasher	Ref.	
37	16318	Clamp, Hose	2	
38	160255-13	Hose	Ref.	
39	70829	Actuator, Throttle	Ref.	
40	70830	Controller, Throttle	Ref.	
41	70831	Hardware, Mounting	Ref.	
42	071 406 16	Capscrew, M8 x 16	Ref.	
43	085 306 16	Lockwasher, M8	Ref.	
44	160543	Duct, Air Flex	1	
45	212853	Duct, Engine	1	
46	1211-24	Screw, #6 x 3/8	8	
47	212855	Baffle Assembly	1	
48	81525	Pump	1	See Page 4.39
49	1200-98	Capscrew, 1/2-13 x 1-1/4	4	
50	1209-6	Flatwasher, 1/2	4	
51	1210-27	Lockwasher, 1/2	4	

ENGINE, DIESEL (DEUTZ)

Mark Industries

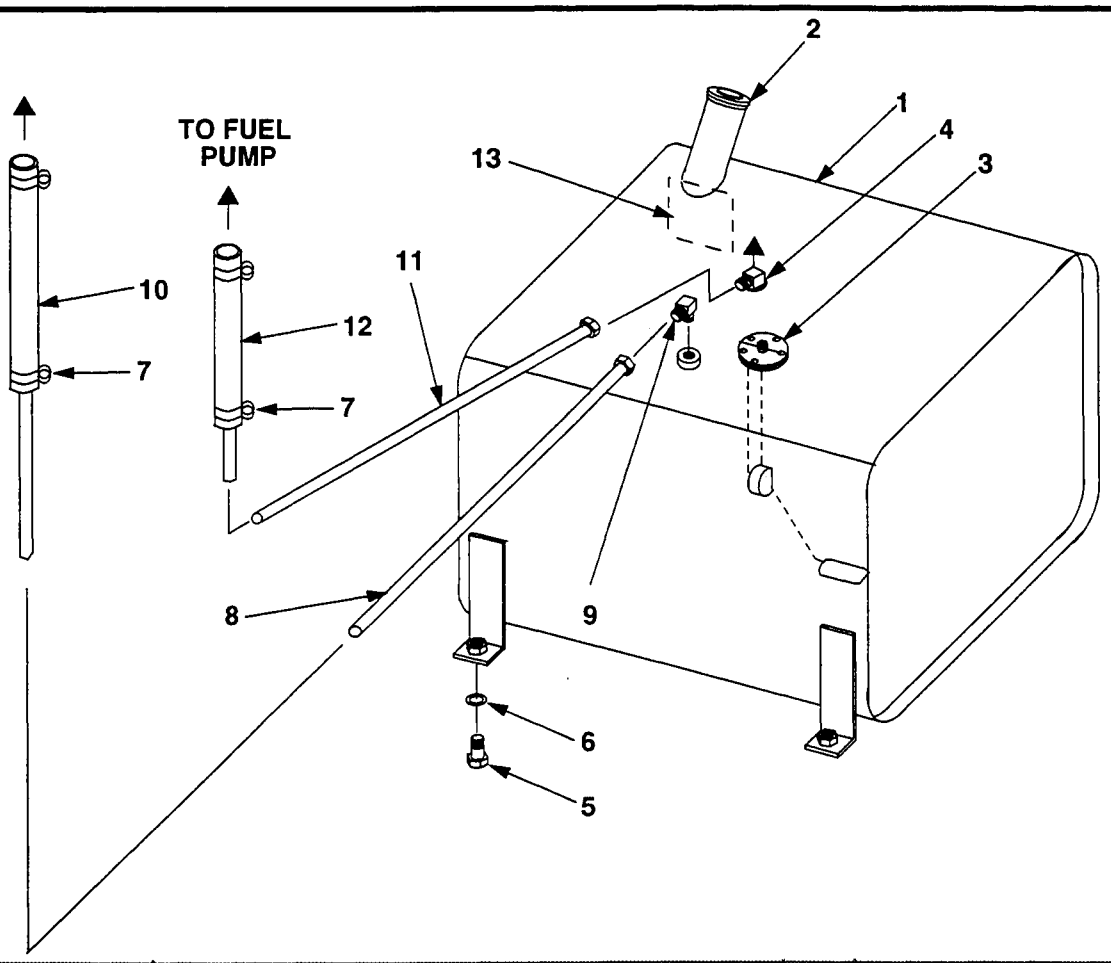




Ref.	Part No.	Description	Qty	Remarks
52	1200-319	Capscrew, 5/16C x 1/2	5	
53	1205-34	Locknut, 5/16C	6	
54	212166	Spacer	1	

FUEL TANK
(DEUTZ)

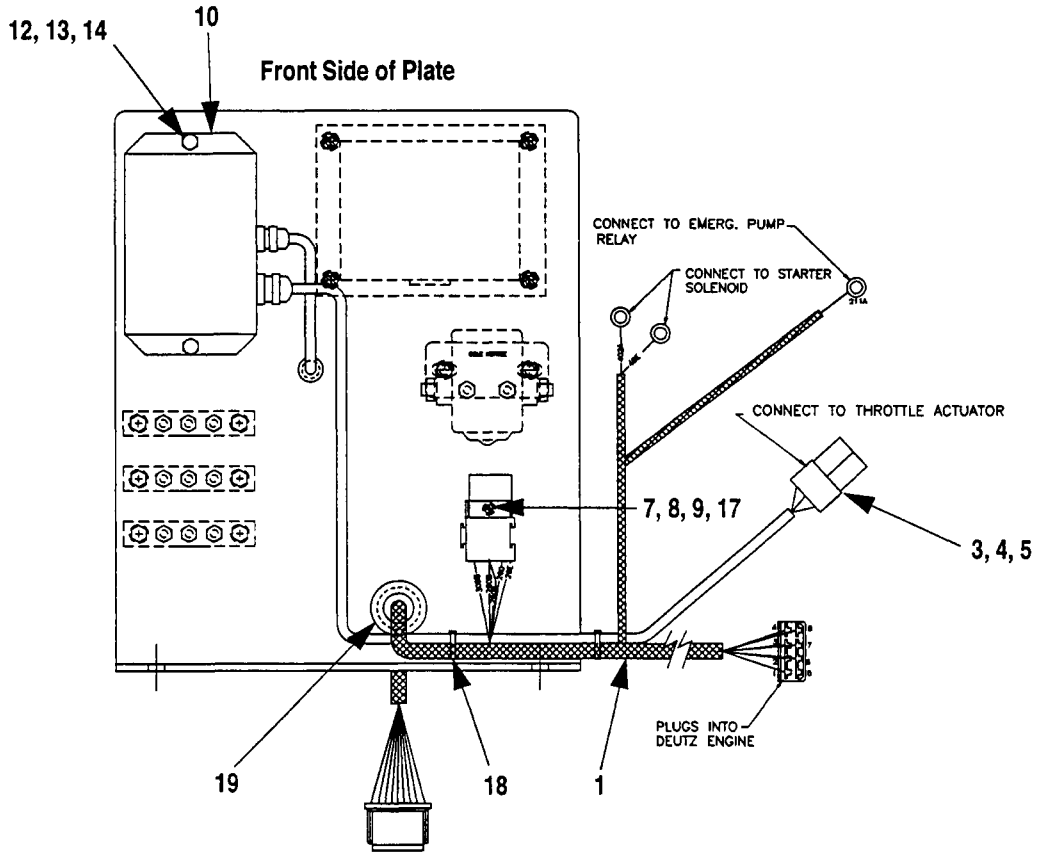
Mark Industries

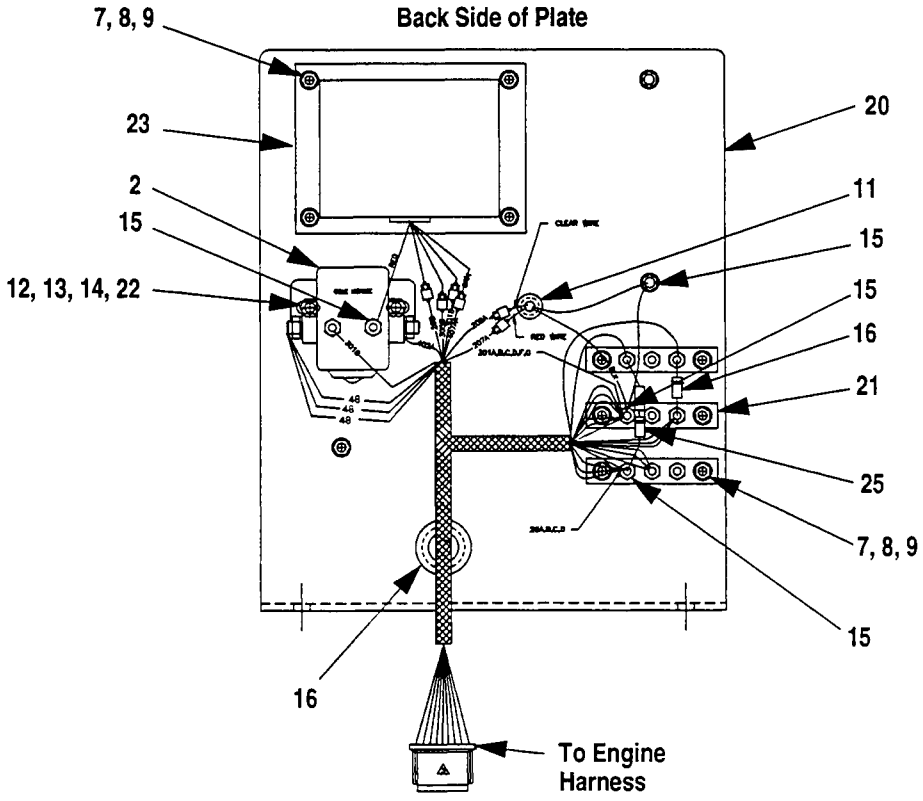


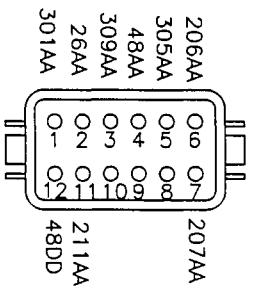
Ref.	Part No.	Description	Qty	Remarks
	212857	Fuel Tank Assembly (Deutz)	1	Incl. Items 1 thru 13
1	212542	Tank, Fuel	1	25 Gal.
2	600730	Cap	1	
3	600732	Sender, Fuel	1	
4	600731	Tube	1	
5	1200-61	Capscrew, 3/8C x 1-1/4	4	
6	1209-89	Flatwasher	4	
7	1240-100	Clamp	4	
8	212164	Tube, .31 OD (return line)	1	
	200B2007-2	Clamp	4	
	1205-45	Locknut, 3/8	2	
	1209-4	Flatwasher, 3/8	2	
9	1219-904	Adapter, 90°	1	
10	160091-.63	Hose, .31 ID x 24" (return)	1	
11	212090	Tube, .375 OD (supply line)	1	
	1219-559	Adapter	1	
	200B2007-2	Clamp	4	
	1205-45	Locknut, 3/8	2	
	1209-4	Flatwasher, 3/8	2	
12	12301-20	Hose, .38 ID x 20" (supply)	1	
13	181830	Decal, Diesel Fuel	1	

ENGINE CONTROL PANEL (DEUTZ)

Mark Industries





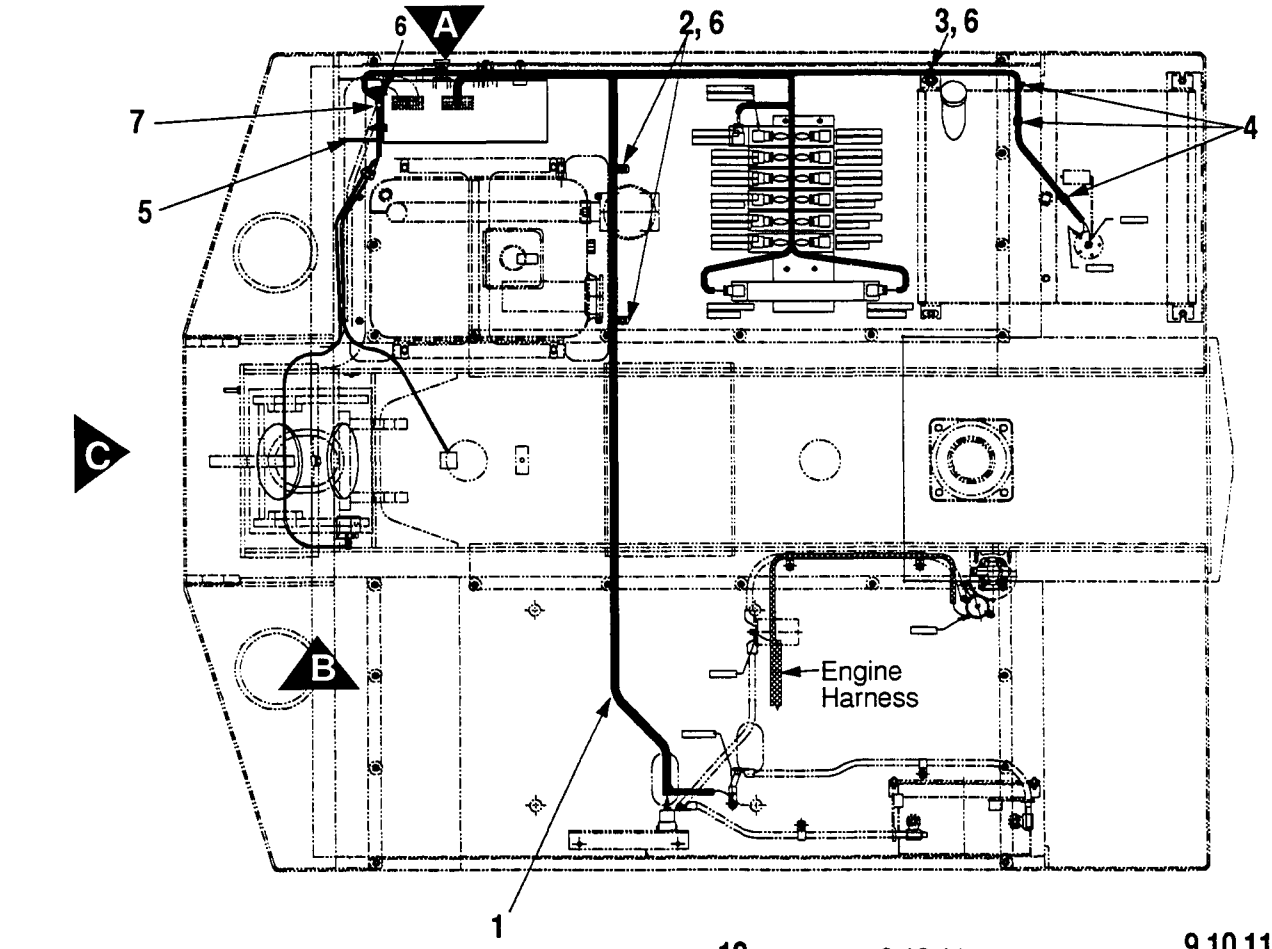


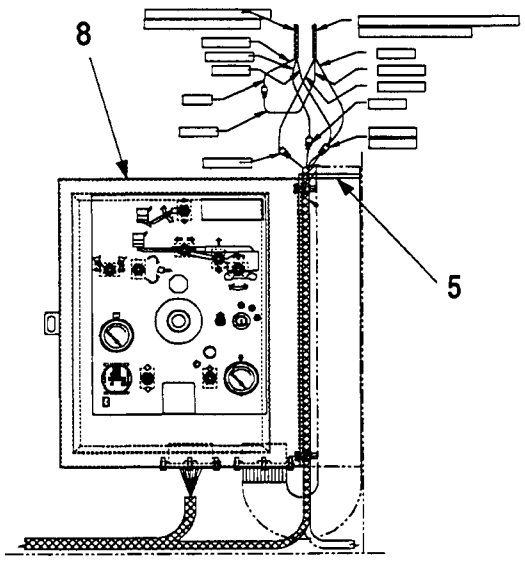
ENGINE CONTROL PANEL (DEUTZ)

Ref.	Part No.	Description	Qty	Remarks
	212806	Engine Control Panel Ass'y (Deutz & Cummins)	1	Incl. Items 1 thru 25
1	212804	Harness, Control Panel	1	
2	70209	Relay	1	
3	70915	Connector Plug	1	
4	70916	Wedge, Locking	1	
5	70807	Contact Socket	1	
7	1202-6	Machine Screw, #10-24 x 3/4	8	
8	1210-7	Lockwasher, #10	8	
9	1205-5	Nut, #10-24	8	
10	70830	Governor	Ref.	Part of Engine
11	1221-78	Grommet	1	
12	1202-15	Machine Screw, 1/4C x 3/4	4	
13	1210-14	Lockwasher, 1/4	4	
14	1205-13	Nut, 1/4C	4	
15	1223-428	Eyelet, #10	3	
16	70842	Diode Assembly	1	
17	441 6828	Relay	1	
18	1222-184	Tie, Cable	4	
19	1221-61	Grommet	1	
20	212161	Plate	1	
21	7099	Block, Terminal	3	
22	1209-2	Flatwasher, 1/4	2	
23	70923	Starter Lockout	1	
25	70843	Diode/Resistor Assembly	1	

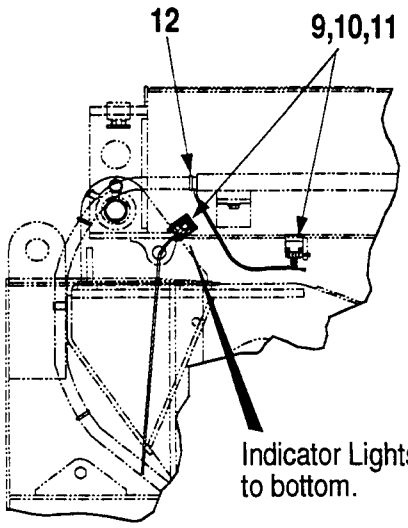
TURRET WIRING

Mark Industries

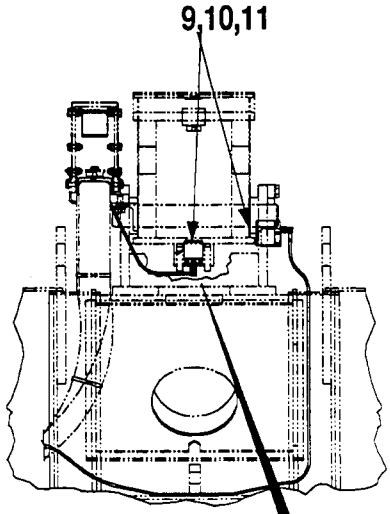




VIEW A



VIEW B



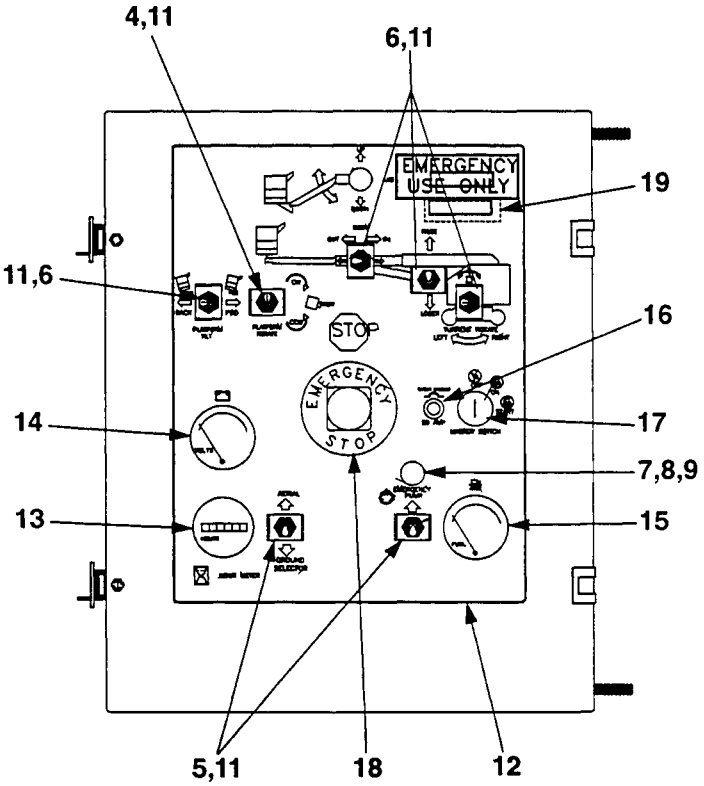
VEW C

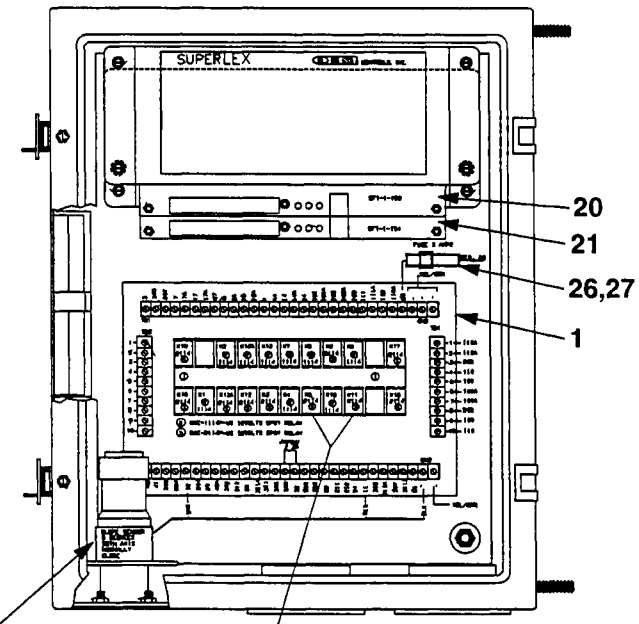
Ref.	Part No.	Description	Qty	Remarks
	212131	Turret Wiring Assembly	1	Incl. Items 1 thru 12
1	212539	Wire Harness, Turret	1	
2	200B2007-6	Clamp, 3/4"	2	
3	200B2007-4	Clamp, 1/2"	1	
4	16214	Pad, Tie	3	
	256	Tie, Cable	3	
5	12177-4	Trim, Flexible	1	
6	1205-36	Nut, 3/8C	7	
	1210-20	Lockwasher, 3/8	7	
	1209-4	Flatwasher, 3/8	7	
7	200B2007-56	Clamp, Double, 1/2"	2	
8	211983	Ground Control Box Ass'y	1	See Page 4.31
9	441 6834	Switch, Proximity	2	
10	441 6835	Cable w/Connector	2	
11	310 1507	Capscrew, #10-24C x 2 Socket Head	4	
	331 1000	Flatwasher, #10	4	
	340 1504	Locknut, #10-24C	4	
12	1222-202	Tie, Plastic	3	

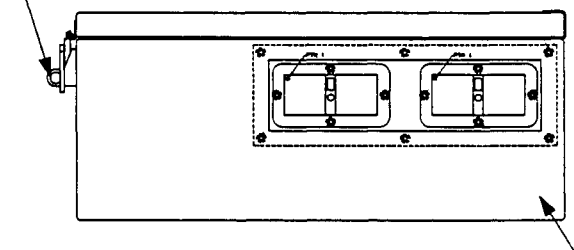
Model CH44C
CH50C
Issued 4-96

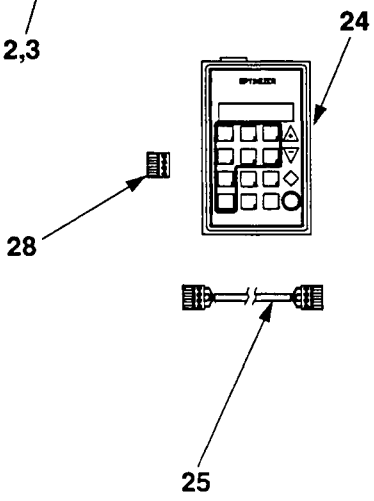
GROUND CONTROL BOX

Mark Industries





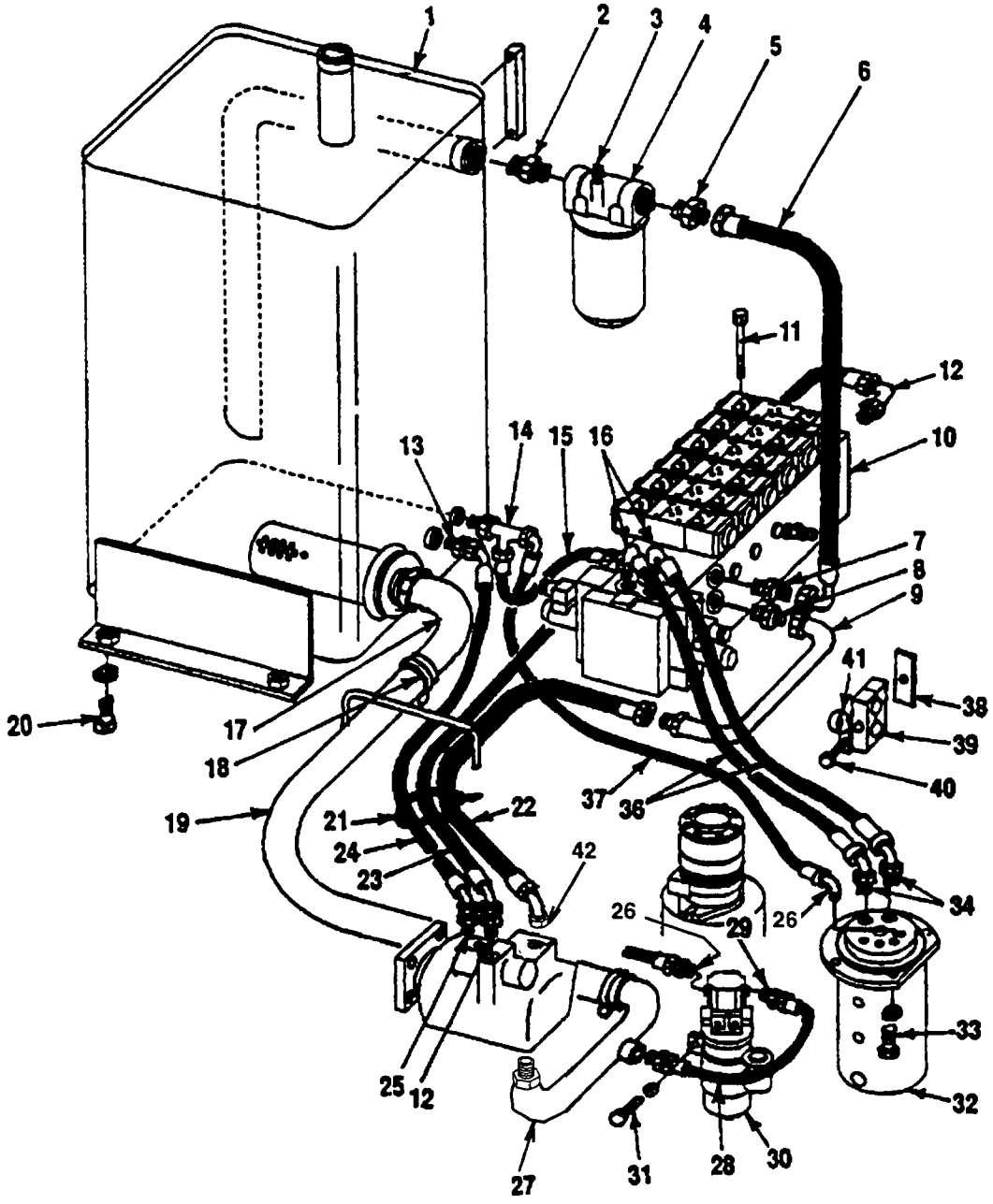




Ref.	Part No.	Description	Qty	Remarks
	211983	Ground Control Box Ass'y (OEM)	Ref.	Incl. Items 1 thru 28
1	69156	Relay Card w/Relays	1	
2	69256	Relay (K3,K5,K9,K11,K12,K12A, K15,K16,K17,K18)	10	
3	69257	Relay (K1,K2,K4,K6,K7,K8,K10,K13,K13A)	9	
4	69164	Switch	1	
5	69163	Switch	2	
6	69232	Switch	4	
7	69144	Lamp Base	1	
8	69254	Bulb	1	
9	69143	Lens	1	
10	441 6836	Slope Sensor	1	
11	70783	Switch Guard	7	
12	182817	Decal	1	
13	20571	Hour Meter	1	
14	69258	Volt Meter	1	
15	69259	Fuel Gauge	1	
16	69172	Circuit Breaker	1	
17	2717	Ignition Key Switch	1	
18	69166	Emergency Stop Switch	1	
19	69260	Resistor	1	
20	70827	Controller Board	1	
21	70826	Controller Board	1	
22	69261	Enclosure	1	
23	69262	Latch	1	
24	69263	Optimizer	1	
25	70841	Optimizer Cable	1	
26	69264	Fuse Holder	1	
27	69265	Fuse (3 Amp)	1	
28	69266	Connector	1	

TURRET HYDRAULICS

Mark Industries

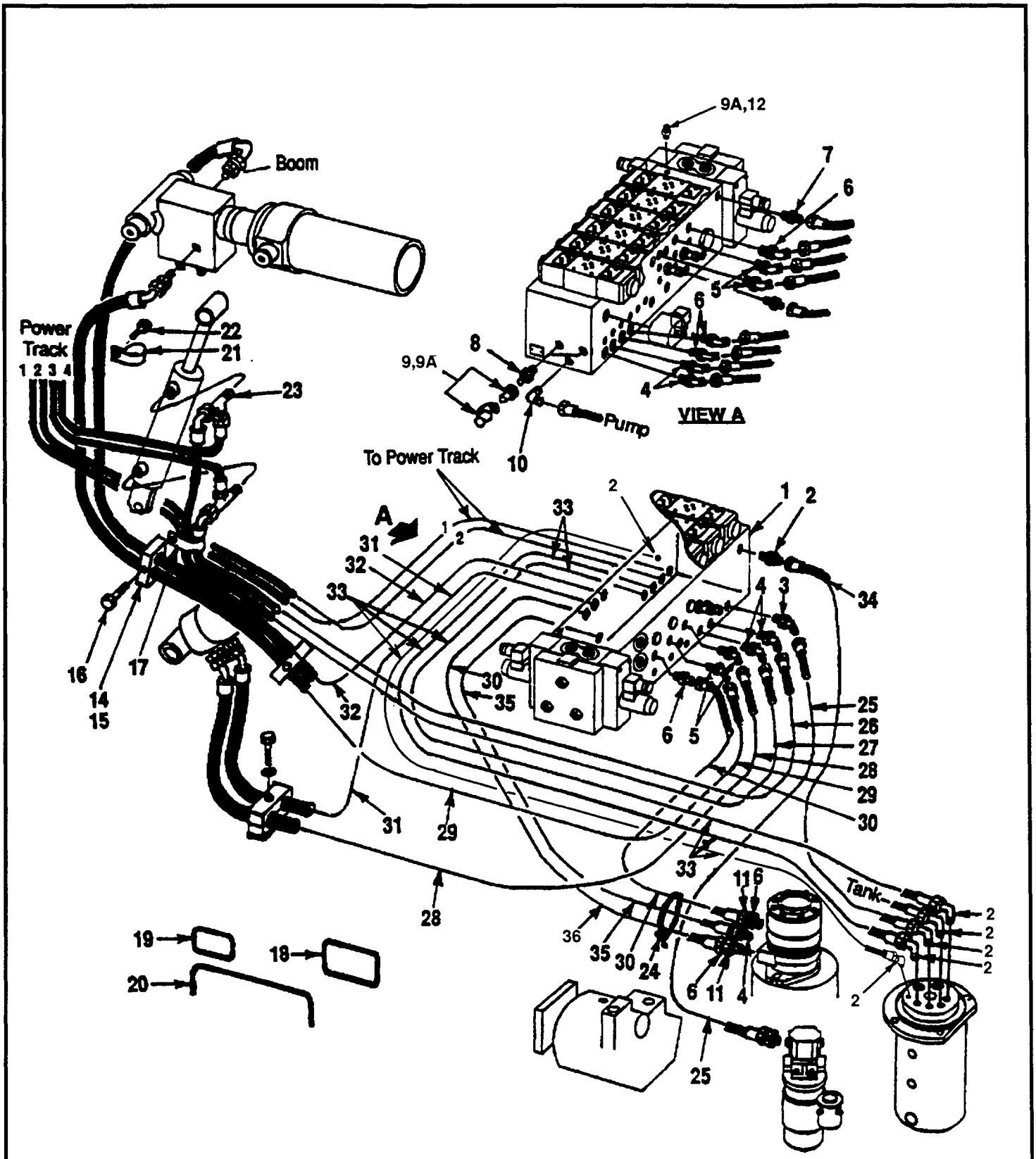


Ref.	Part No.	Description	Qty	Remarks
	212659	Turret Hydraulic Ass'y	1	Incl. Items Pages 4.33-4.36
1	81533	Hydraulic Tank	1	See Page 4.37
2	3624006	Adapter	1	
3	81448	Filter	1	See Page 4.37
4	430 3022	Drain Cock	1	
5	12019-153	Adapter	1	
6	709 5097-36	Hose	1	

Ref.	Part No.	Description	Qty	Remarks
7	1219-386	Adapter	1	
8	1219-282	Adapter	1	
9	707 4525	Tube	1	
10	81516	Valve	1	See Page 4.43
11	316 2346	Capscrew, 3/8C x	4	
	1209-89	Flatwasher	4	
	1205-194	Locknut, 3/8C	4	
12	1219-776	Adapter	2	
13	12019-447	Adapter	7	
14	1219-693	Tee	1	
15	212097-15	Hose	1	
16	1219-389	Adapter	2	
17	3630411	Beaded Insert	1	
18	378 0301	Clamp	2	
19	12368-58	Hose	1	
20	1200-100	Capscrew	4	
	1209-6	Flatwasher	4	
21	1222-202	Tie, Plastic	7	
22	212929-67	Hose	1	
23	212091-95	Hose	1	
24	212095-64	Hose	1	
25	1219-442	Adapter	1	
26	1219-605	Adapter	2	
27	81535	Tube	1	
28	212096-63	Hose	1	
29	1219-620	Adapter	2	
30	81505	Pump, Emergency	1	See Page 4.42
31	1200-59	Capscrew	2	
	1209-46	Flatwasher	2	
	1209-89	Flatwasher, 3/8"	2	
32	81530	Rotary Manifold	1	See Page 4.49
33	1200-33	Capscrew	4	
	1209-46	Flatwasher	4	
34	1219-663	Adapter	2	
36	212062-39	Hose	2	
37	212097-61	Hose	1	
38	1240-155	Plate, Cover	1	
39	365 0215	Clamp Half	2	
40	200B2007-11	Clamp	1	
41	1200-51	Capscrew	1	
	1209-24	Flatwasher	1	
	340 2113	Locknut	1	
42	1219-555	Adapter	1	

UPPER HYDRAULICS

Mark Industries

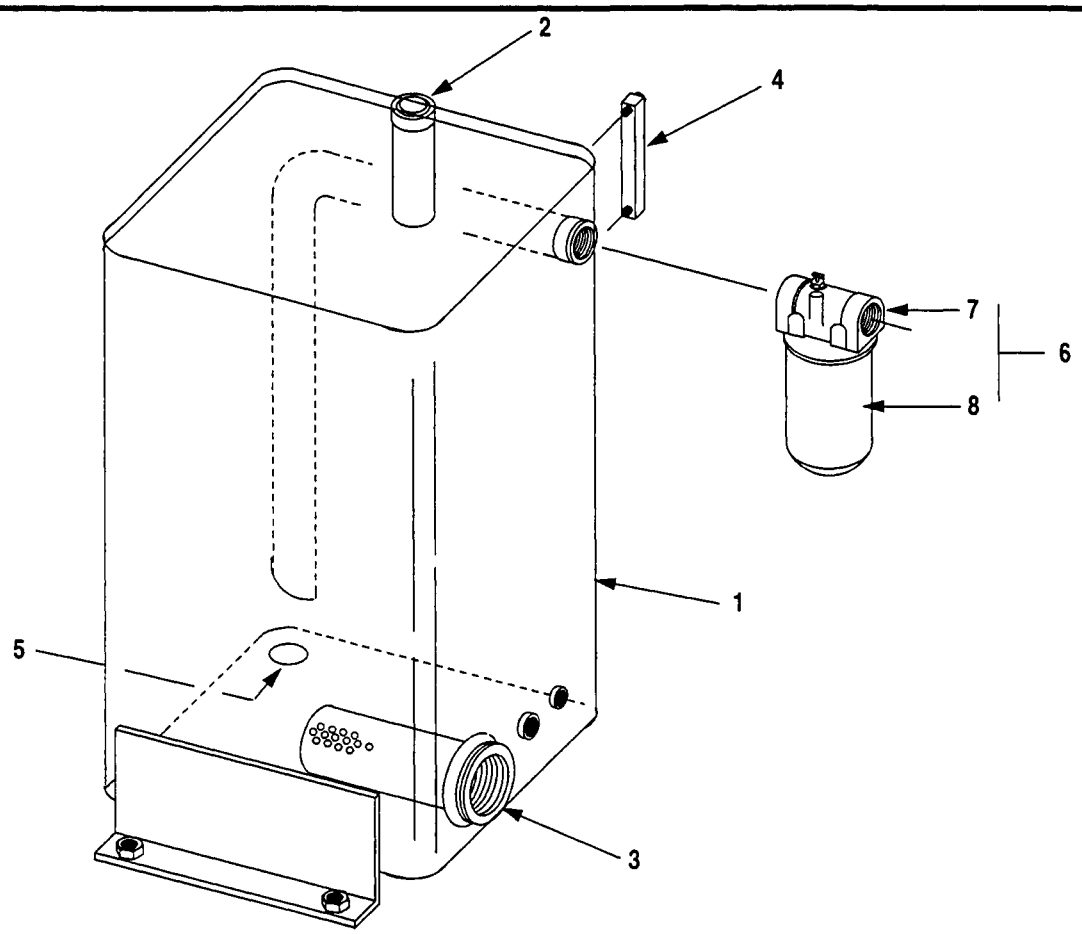


Ref.	Part No.	Description	Qty	Remarks
1	81516	Valve	1	See Page 4.43
2	1219-959	Adapter	7	
3	1219-982	Adapter	1	
4	80018-03	Adapter	7	
5	12019-447	Adapter	7	
6	12019-205	Adapter	6	
7	1219-605	Adapter	1	
8	375 5201	Adapter	1	
9	12019-557	Coupling	2	
9A	12019-558	Cap, Dust	2	
10	1219-776	Adapter	2	
11	375 0701	Adapter	2	
12	375 0400	Coupling	1	
14	1240-213	Clamp, Half	6	
15	1240-154	Plate, Cover	3	
16	1200-39	Capscrew	3	
17	200B2007-9	Clamp	2	
18	12169-25	Trimloc, 3/8 x 25"	1	
19	12169-17	Trimloc, 3/8" x 17"	1	
20	12182-20	Trimloc, 1/4" x 20"	2	
21	200B2007-15	Clamp	1	
22	1205-194	Locknut, 3/8C	1	
	1209-4	Flatwasher, 3/8	1	
23	12019-427	Tee	2	
24	1222-184	Tie, Plastic	3	
25	212091-77	Hose	1	
26	212059-82	Hose	1	
27	212059-104	Hose	1	
28	212092-76	Hose	1	
29	212930-112	Hose	1	
30	212059-33	Hose	1	
31	212092-61	Hose	1	
32	212930-93	Hose	1	
33	212060-66	Hose	3	
34	212059-64	Hose	1	
35	212059-36	Hose	1	
36	212059-38	Hose	1	

Model CH44C
CH50C
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HYDRAULIC RESERVOIR & FILTER

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
1	81533	Hydraulic Tank, Complete	1	Incl. Items 2 thru 5
2	600836	Cap, Fill/Breather	1	
3	600838	Strainer, Suction	1	
4	600837	Gauge, Sight	1	
5	69769	Magnetic Plug w/O-Ring	1	
	69770	O-Ring	1	
6	81448	Filter, Complete	1	Incl. Items 7 & 8
7	69620	Head	1	
8	69621	Cartridge, Spin-On	1	



O-RINGS FOR SAE ADAPTERS

O-RING PART NO.	SAE SIZE (-) 16ths Inch	FOR TUBE OD
1218-282, 460 0080	-4	1/4
1218-283	-5	5/16
1218-284, 460 0885	-6	3/8
1218-285, 460 0886	-8	1/2
1218-286, 460 0079	-10	5/8
1218-290, 460 0887	-12	3/4
1218-292, 460 0888	-14	7/8
1218-287, 460 0163	-16	1
1218-288, 460 0133	-20	1-1/4
1218-289, 460 0889	-24	1-1/2
1218-293, 460 0890	-32	2

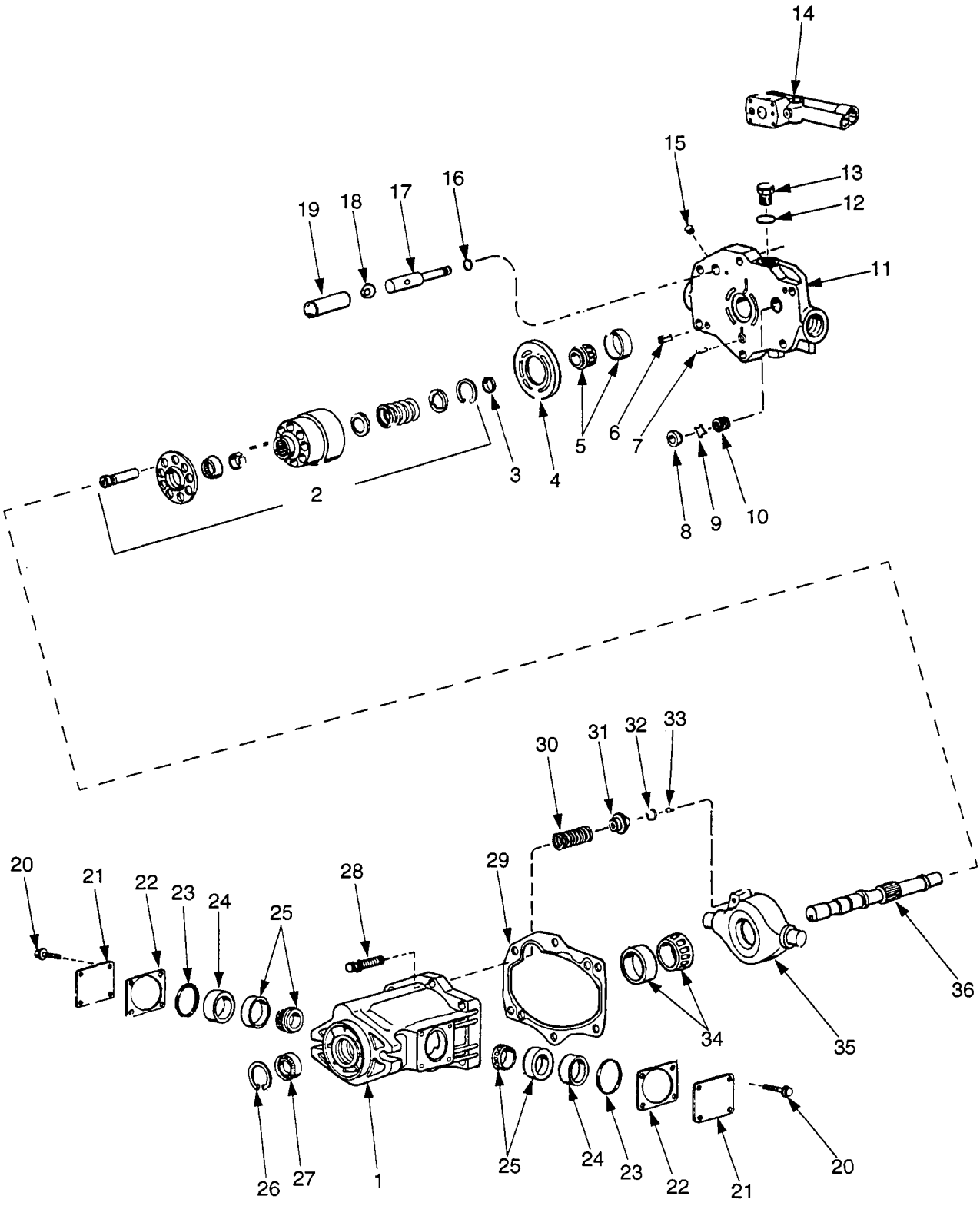


SPLIT FLANGE CLAMPS

Ref.	Part No.	Description	Qty	Remarks
	1219-665	Split Flange Clamp	2	For 1" OD Tube
	460 4112	Seal	1	
	1200-61	Capscrew	4	
	1210-20	Lockwasher	4	

MAIN PUMP

Mark Industries



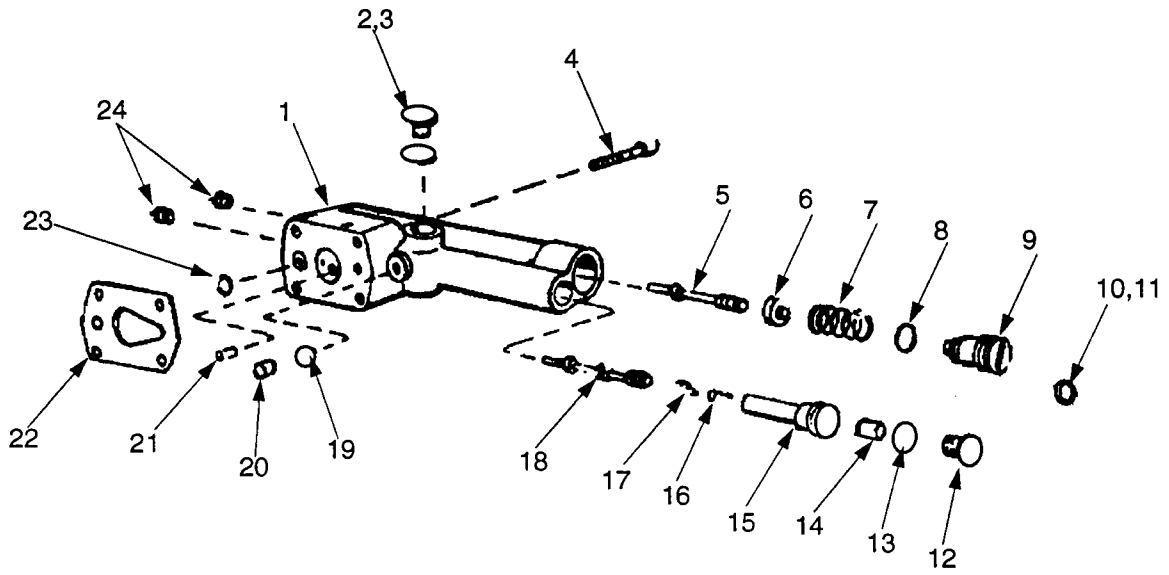
Ref.	Part No.	Description	Qty	Remarks
	81525	Pump, Complete	1	Incl. Items 1 thru 36
	600772	Kit, Seal	1	Incl. Items marked *
1	N.S.S.	Housing	1	
2	600773	Kit, Rotating Group	1	
3	600774	Spacer	1	
4	600775	Waffer Plate	1	
5	600776	Bearing	1	
6	600777	Pin	2	
7	600778	Pin	1	
8	600779	Seat	1	
9	600780	Valve	1	
10	600781	Spring	1	
11	N.S.S.	Cover	1	
12	*	O-Ring	1	*
13	600782	Plug	1	
14	600654	Compensator	1	See Page 4.41
15	600783	Plug	1	
16	*	O-Ring	1	
17	600784	Rod	1	
18	600785	Spacer	1	
19	600786	Piston	1	
20	600787	Screw	8	
21	600788	Cover	2	
22	600789	Shim Kit	2	
23	*	O-Ring	2	
24	600790	Spacer	2	
25	600791	Bearing	2	
26	600792	Retaining Ring	1	
27	*	Seal	1	
28	600793	Screw	6	See Kit Above
29	*	Gasket	1	
30	600794	Spring	1	
31	600795	Seat	1	
32	600796	Seat	1	
33	600797	Roll Pin	1	
34	600798	Bearing	1	
35	600799	Yoke	1	
36	600800	Shaft	1	

Model CH44C
CH50C

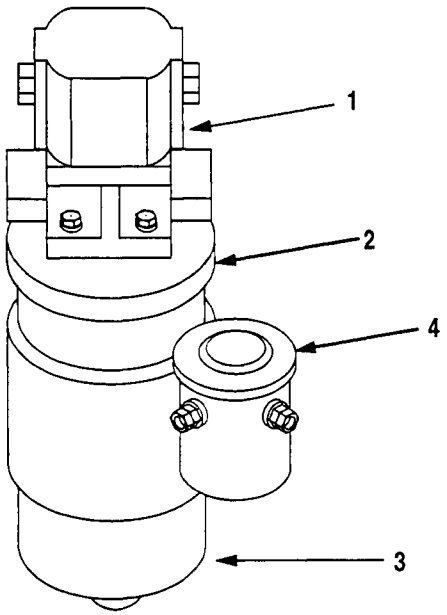
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MAIN PUMP CONTROL

Mark Industries



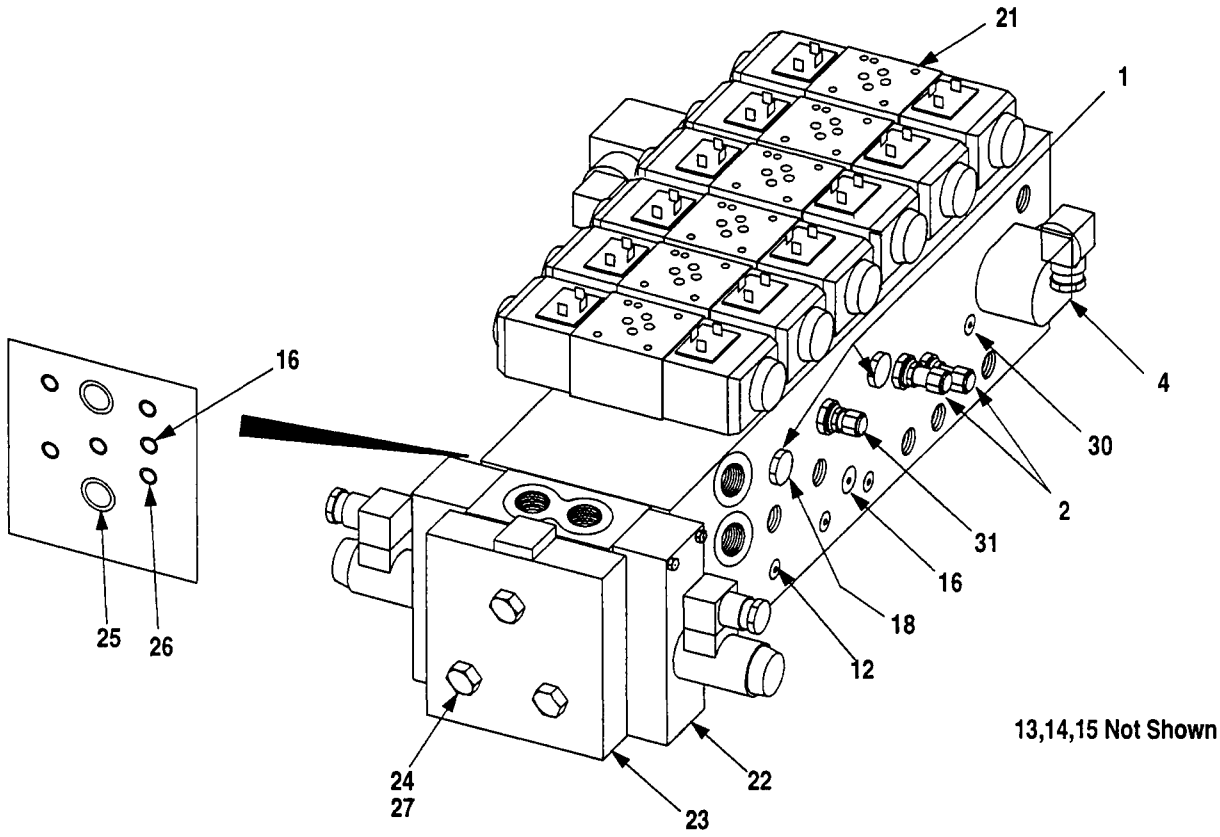
Ref.	Part No.	Description	Qty	Remarks
	600654	Load Sense & Pressure Compensator Control	1	Incl. Items 1 thru 19
1	NSS	Body	1	Items w/Asterisk * Included in Seal Kit on Page 4.40.
2	600801	Plug	1	
3	*	O-Ring	1	*
4	600802	Screw	4	
5	600803	Spool	1	
6	600804	Seat	1	
7	600805	Spring	1	
8	*	O-Ring	1	*
9	600818	Plug	1	
10	600806	Seal	1	
11	600807	Lockwire	1	
12	600808	Plug	1	
13	*	O-Ring	1	*
14	600809	Set Screw	1	
15	600810	Seat	2	
16	600811	Spring	2	
17	600812	Seat	1	
18	600813	Spool	1	
19	600814	Plug	1	
20	600815	Plug	1	
21	600816	Check Valve	1	
22	*	Gasket	1	*
23	*	O-Ring	1	*
24	600817	Plug	2	

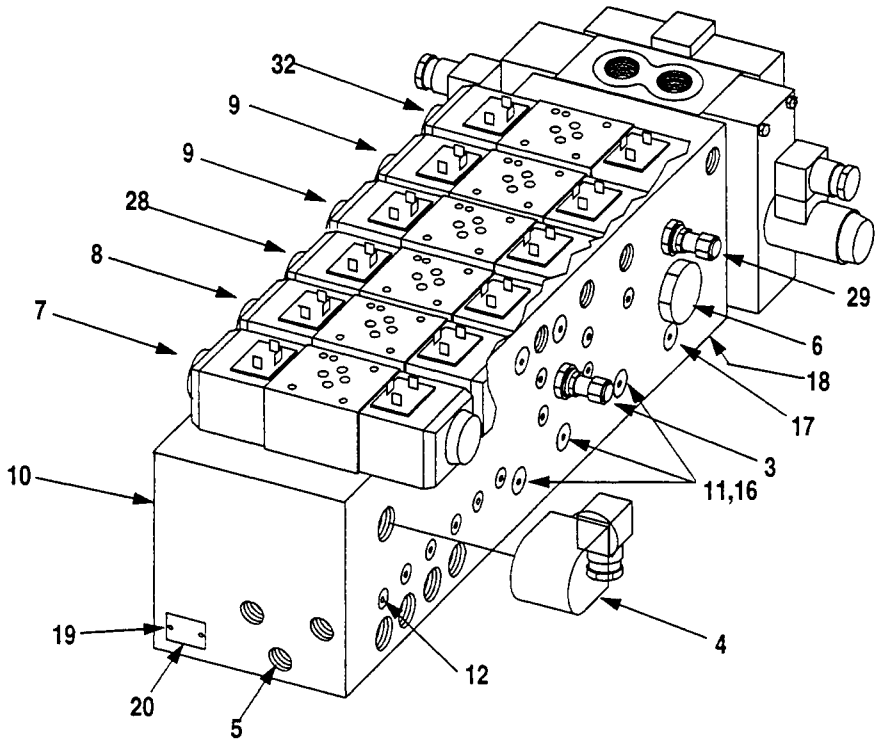


Ref.	Part No.	Description	Qty	Remarks
	81505	Emergency Pump / Motor Complete	1	Incl. Items 1 Thru 3
1	69045	Pump	1	
2	68129	Plate, Adapter	1	
3	66780	Motor	1	
4	68510	Relay	1	

MAIN VALVE

Mark Industries

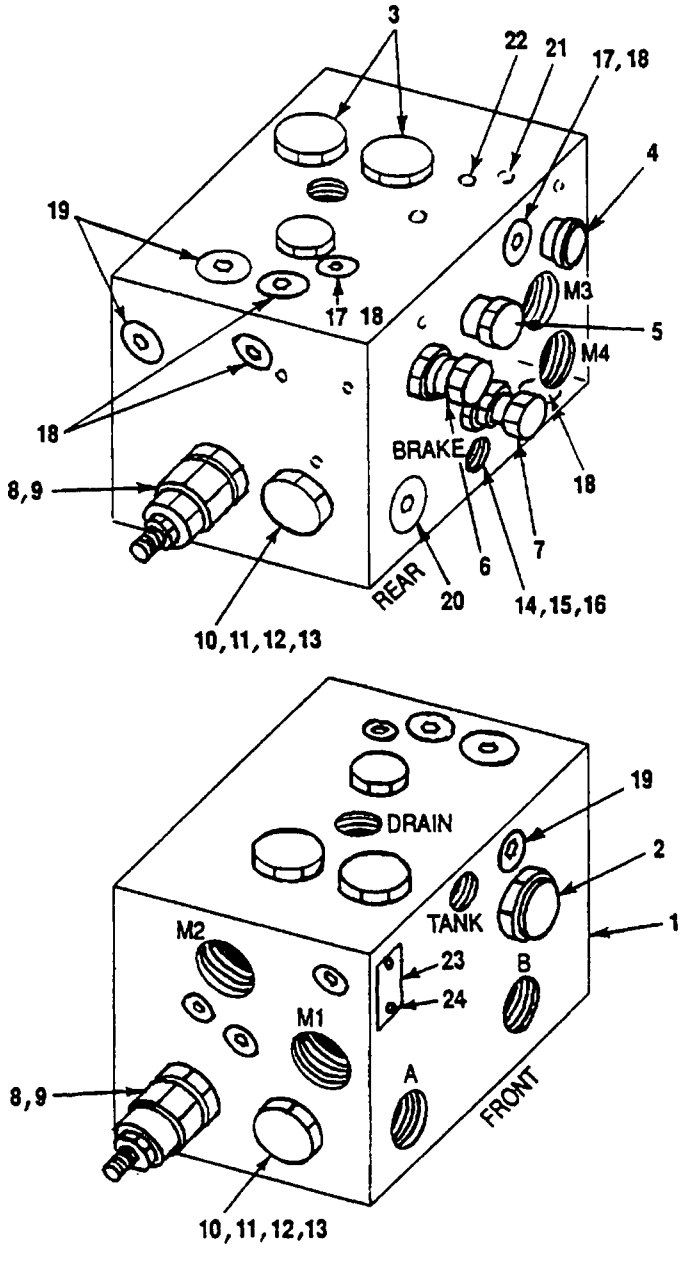




Ref.	Part No.	Description	Qty	Remarks
	81516	Main Valve, Complete	1	Incl. Items 1 thru 27
1	69556	Valve, Differential Pressure Sensing	2	
2	600823	Valve, Counterbalance	2	
3	600824	Valve, Relief	1	
4	69559	Valve, Solenoid	2	
5	69560	Plug, Orifice, .020	1	
6	69561	Valve, Check	1	
7	600825	Valve, Solenoid	1	
8	600826	Valve, Solenoid	1	
9	600827	Valve, Solenoid	2	
	69565	Coil only - For Items 7,8,9	AR	
10	600828	Manifold	1	
11	69595	Plug, Orifice, .031	3	
12	69568	Check, Sensing	15	
13	69569	Plug, Expander (Under Valves #9 & 32)	3	
14	69570	Plug, Expander	52	
15	69571	Plug, Expander (Bottom Side)	1	
16	NSS	Plug	11	SAE -6
17	NSS	Plug	10	SAE -8
18	600828	Orifice Disc	1	
19	NSS	Rivet	2	
20	NSS	Nameplate	1	
21	69572	Kit, Bolt	6	
22	600829	Valve, Solenoid	1	
23	69574	Cover	1	
24	600830	Capscrew	3	
25	69576	O-Ring	2	
26	69577	O-Ring	5	
27	600831	Lockwasher	3	
28	600832	Valve, Solenoid	1	
29	600833	Shuttle Valve	1	
30	NSS	Plug	4	SAE -4
31	600834	Diff. Pressure Sensing Valve	1	
32	600835	Valve, Solenoid	1	

FUNCTION VALVE
(4-WHEEL DRIVE)

Mark Industries



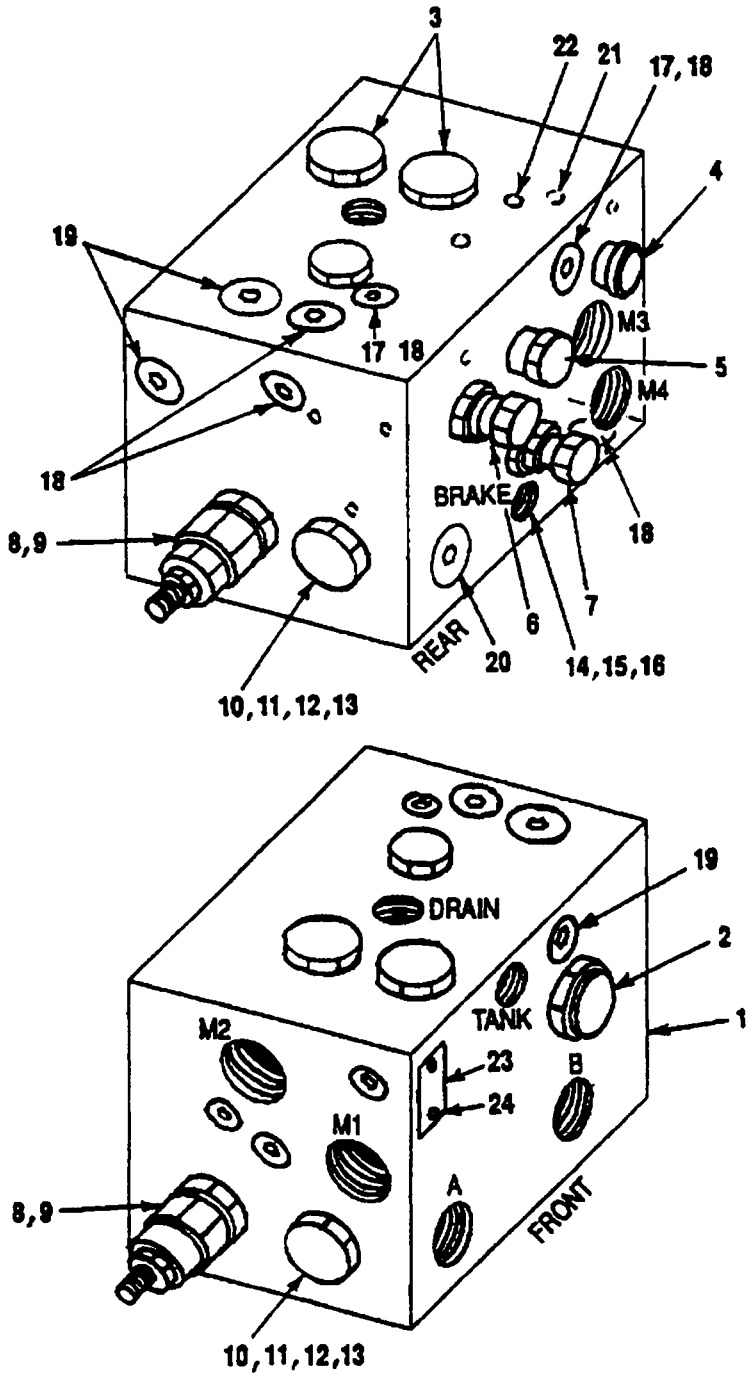
FUNCTION VALVE
(4-WHEEL DRIVE)

Ref.	Part No.	Description	Qty	Remarks
	81446	Propel Valve, Complete	1	Incl. Items 1 thru 24
1	600635	Manifold	1	
2	600633	Flow Divider/Combiner Valve	2	
3	69580	Differential Pressure Sensing Valve	4	
4	69581	Differential Pressure Sensing Valve	7	
5	69587	Pilot Operated Directional Valve	1	
6	69582	Relief Valve	1	
8	69582	Relief Valve	2	
9	600636	Pilot Piston	1	
10	69561	Check Valve	2	
11	69588	Ball	1	
12	69589	Seat	1	
13	69590	O-Ring	1	
14	69591	Orifice Disc	1	
15	69592	Spring	1	
16	69593	Setscrew	1	
18	NSS	Plug, SAE-6	8	
19	NSS	Plug, SAE-8	18	
20	NSS	Plug, SAE-10	1	
22	69570	Plug, Expander	36	
23	NSS	Nameplate	1	
24	NSS	Rivet	2	
25	600634	Flow Divider/ Combiner Valve	1	

FUNCTION VALVE

(2-WHEEL DRIVE)

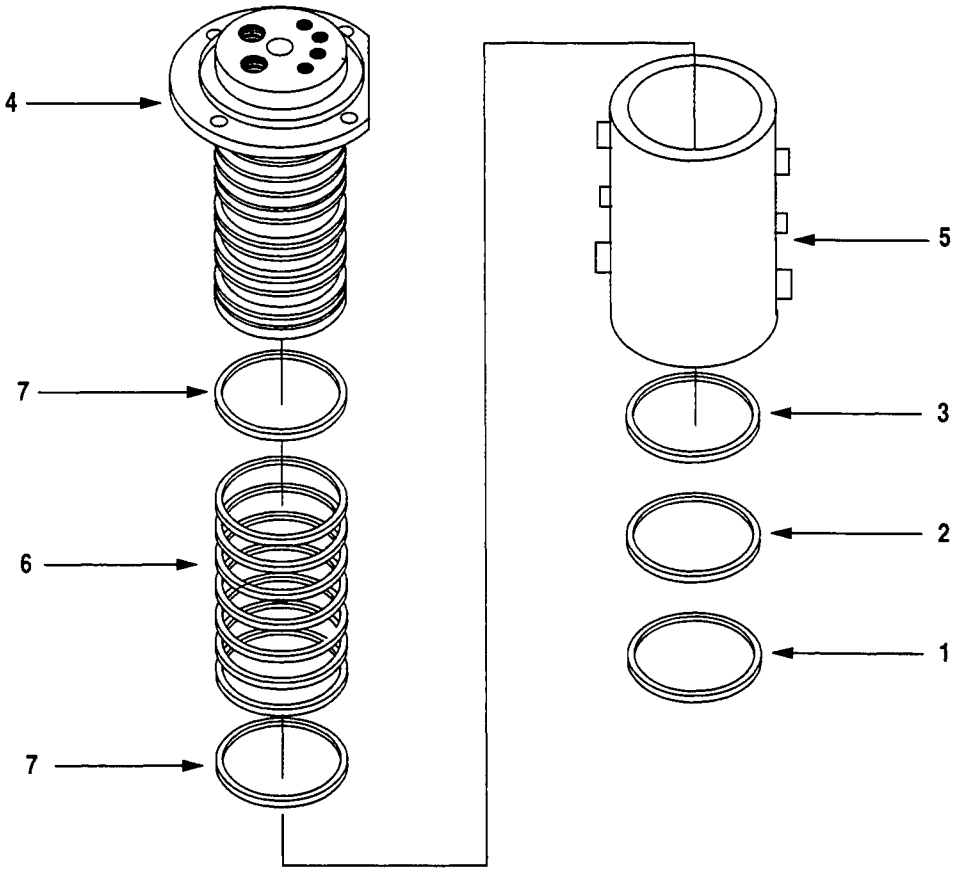
Mark Industries



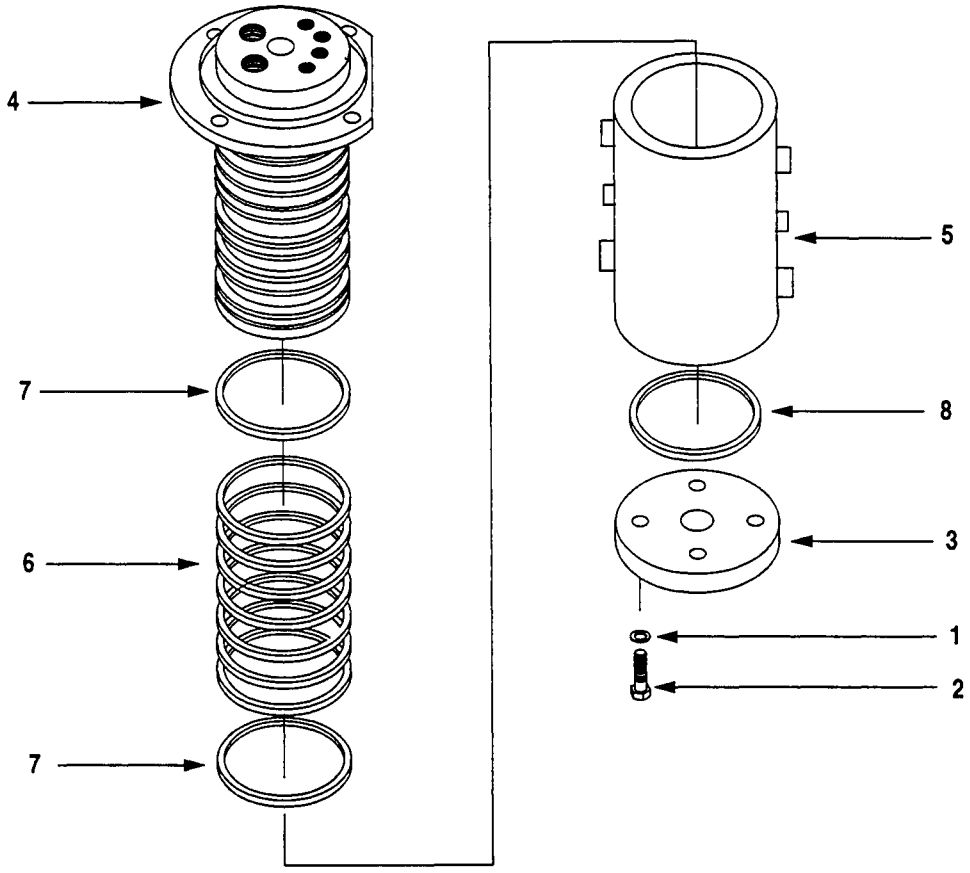
Ref.	Part No.	Description	Qty	Remarks
	81445	Propel Valve, Complete	1	Incl. Items 1 thru 24
1	69585	Manifold	1	
2	69579	Flow Divider/Combiner Valve	1	
3	69580	Differential Pressure Sensing Valve	2	
4	69581	Differential Pressure Sensing Valve	2	
5	69587	Pilot Operated Directional Valve	1	
6	69584	Relief Valve	1	
7	69594	Check Valve	1	
8	69582	Relief Valve	2	
9	69586	Pilot Piston	1	
10	69561	Check Valve	2	
11	69588	Ball	1	
12	69589	Seat	1	
13	69590	O-Ring	1	
14	69591	Orifice Disc	1	
15	69592	Spring	1	
16	69593	Setscrew	1	
17	69567	Orifice Plug, .031	4	
18		Plug, SAE-6	8	
19		Plug, SAE-8	3	
20		Plug, SAE-10	1	
21	69569	Plug, Expander	1	
22	69570	Plug, Expander	10	
23		Nameplate	1	
24		Rivet	2	

ROTARY MANIFOLD

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
	81530	Rotary Manifold, Complete (Texas Hydraulics)	1	Incl. Items 1 thru 11
	67817	Kit, Seal	1	Incl. Items 6,7
1	600722	Retaining Ring	1	
2	600718	Bearing Ring	1	
3	600721	Wear Ring	1	
4	600719	Spool	1	
5	600720	Housing	1	
6	*	Seal	8	*
7	*	Seal	2	*



Ref.	Part No.	Description	Qty	Remarks
	81530	Rotary Manifold, Complete (Hydra-Tool)	1	Incl. Items 1 thru 11
	600724	Kit, Seal	1	Incl. Items 6,7
1	600728	Lockwasher	4	
2	600727	Capscrew	4	
3	600725	Retainer, Spool	1	
4	600723	Spool	1	
5	600729	Housing	1	
6	*	Seal	8	
7	*	Seal	2	
8	600726	Thrust Washer	1	

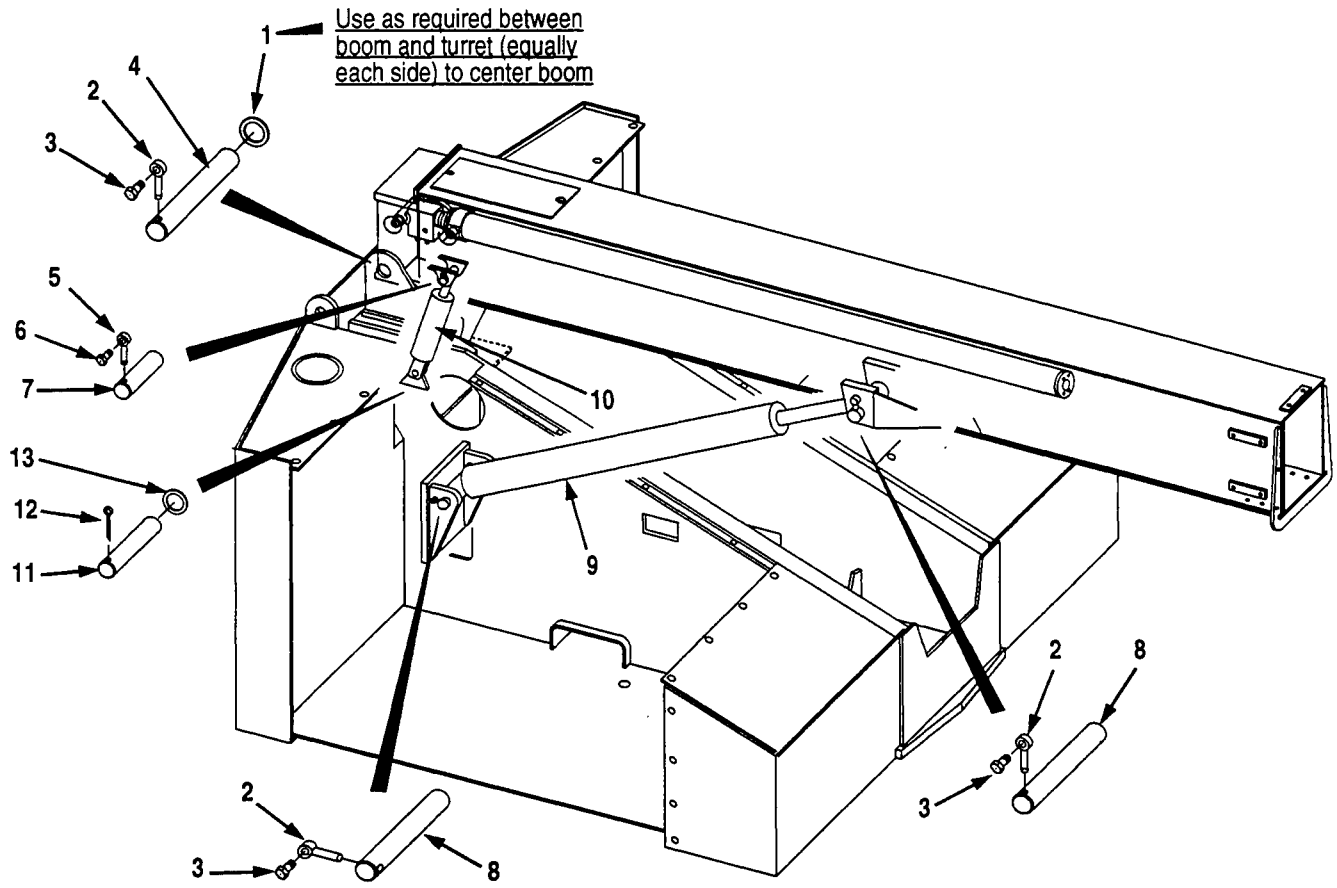
NOTES

SECTION 5 "BOOM ASSEMBLY" CONTAINS:

PAGE	TITLE
5.2	BOOM INSTALLATION
5.4	BOOM ASSEMBLY (CH44C)
5.8	BOOM ASSEMBLY (CH50C)
5.12	6' JIB ASSEMBLY
5.14	BOOM LIFT CYLINDER
5.15	JIB LEVELING CYLINDER
5.16	SLAVE LEVELING CYLINDER (ROSENBOOM)
5.17	SLAVE LEVELING CYLINDER (BEST METAL)
5.18	EXTEND CYLINDER
5.20	POWER TRACK

BOOM INSTALLATION

Mark Industries



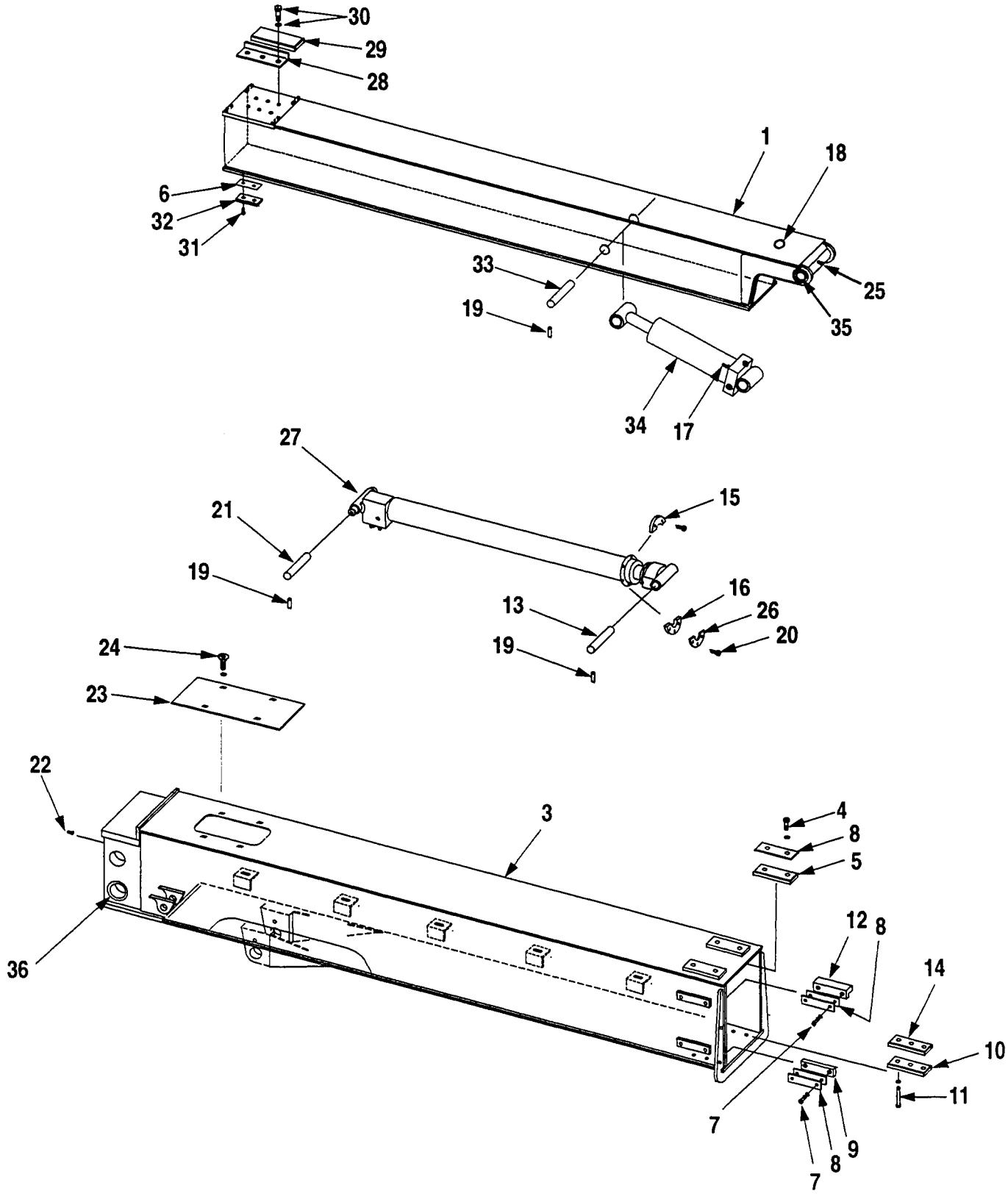
Ref.	Part No.	Description	Qty	Remarks
	212070	Boom Installation Ass'y	1	Incl. Items 1 thru 13
1	1208-57	Bushing, Machinery	2	
2	706 9449	Buck Pin	3	
3	1242-45	Capscrew, 5/8C x 1-1/2 Gr. 8	3	
4	212588	Pin, Boom Pivot	1	
5	211779	Buck Pin	1	
6	1242-134	Capscrew, 3/8C x 1 Gr. 8	1	
7	211912	Pin	1	
8	212562	Pin, Boom Hoist	2	
9	81531	Cylinder, Boom Lift	1	See Page 5.14
10	211758	Cylinder, Master Level	1	See Page 4.15
11	211913	Pin	1	
12	1207-40	Pin, Cotter	2	
13	1209-70	Flatwasher, 1 HT	2	

Model CH44C
CH50C

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BOOM ASSEMBLY (CH44C)

Mark Industries

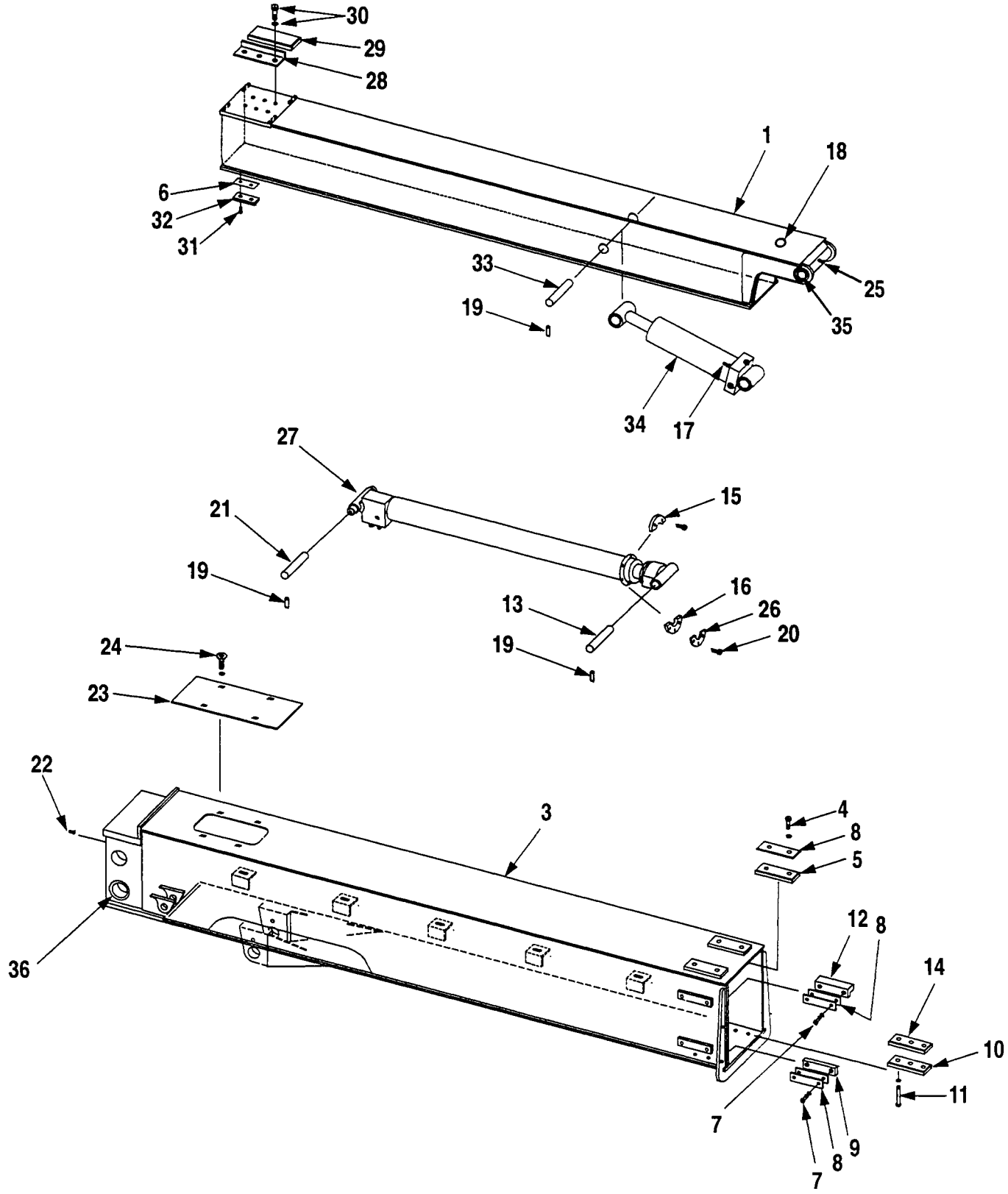


BOOM ASSEMBLY (CH44C)

Ref.	Part No.	Description	Qty	Remarks
	212609	Boom Assembly	Ref.	Incl. 1 thru 54
1	212749	Boom, Inner	1	Incl. 53
3	212748	Boom, Outer	1	
4	1200-314	Capscrew, 5/16C x 5/8	4	
	1210-17	Lockwasher	4	
5	211651	Pad, Wear	2	
6	211649	Shim, 16 Ga.	1AU	
	211650	Shim, 20 Ga.	1AU	
7	316 2338	Capscrew, 3/8C x 7/8	8	
	1210-20	Lockwasher	8	
8	211962	Shim, 16 Ga.	6AU	
	211963	Shim, 20 Ga.	6AU	
9	211956	Pad, Wear	2	
10	211609	Plate	2	
11	1200-61	Capscrew, 3/8C x 1.25	6	
	1210-20	Lockwasher	6	
12	212726	Wear Pad	2	
13	212731	Pin	1	
14	211652	Pad, Wear	2	
15	212752	Wear Pad	1	
	1209-63	Flatwasher, 3/8 HT	2	
16	212753	Wear Pad	1	
17	1219-959	Adapter	2	
18	1221-100	Grommet	1	
19	1227-261	Pin, Roll	6	
20	1200-73	Capscrew, 3/8 C x 2.75	5	
	1205-45	Nut, Lock	5	
21	212768	Pin	1	
22	1213-1	Grease Fitting	1	
23	212743	Cover	1	
24	1200-335	Capscrew, 3/8C x 1/2	4	
	1210-20	Lockwasher	4	
	1209-63	Flatwasher, 3/8 HT	4	
25	1213-6	Grease Fitting	1	
26	212838	Plate	1	

BOOM ASSEMBLY (CH44C)

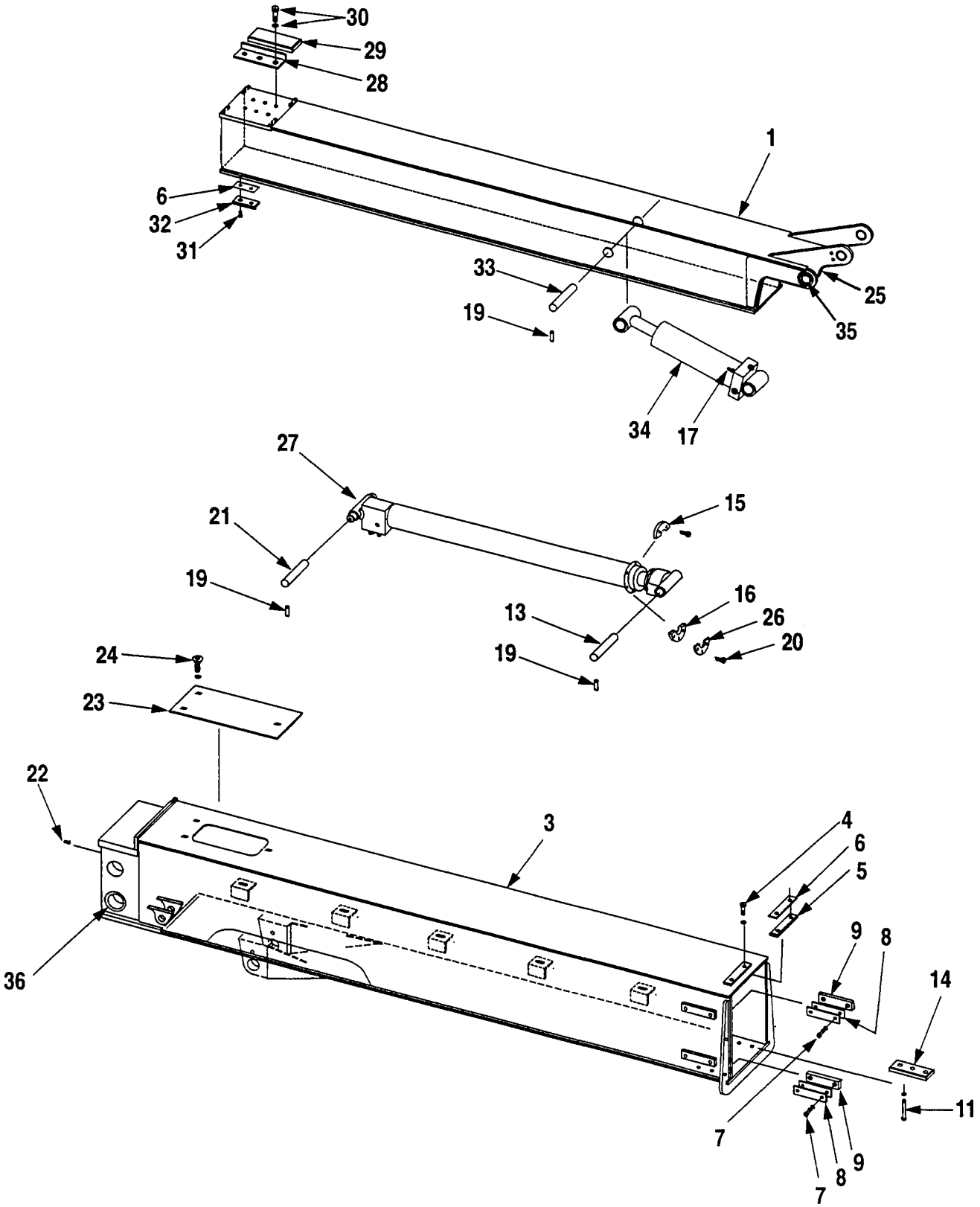
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Ref.	Part No.	Description	Qty	Remarks
27	81532	Cylinder, Boom Extend	1	See Page 5.18
28	212732	Plate	2	
29	211659	Pad, Wear	2	
30	1200-315	Capscrew, 3/8 C x 5/8	8	
	1209-63	Flatwasher, 3/8 HT	8	
31	1203-144	Capscrew, 3/8C x 3/4 Flat Head	2	
32	211957	Pad, Wear	1	
33	212730	Pin	1	
34	211729	Cylinder, Slave Leveling	1	See Page 5.16
35	401 2405	Bearing, Inner Boom Tip	2	
36	160723	Bushing	2	

BOOM ASSEMBLY (CH50C)

Mark Industries

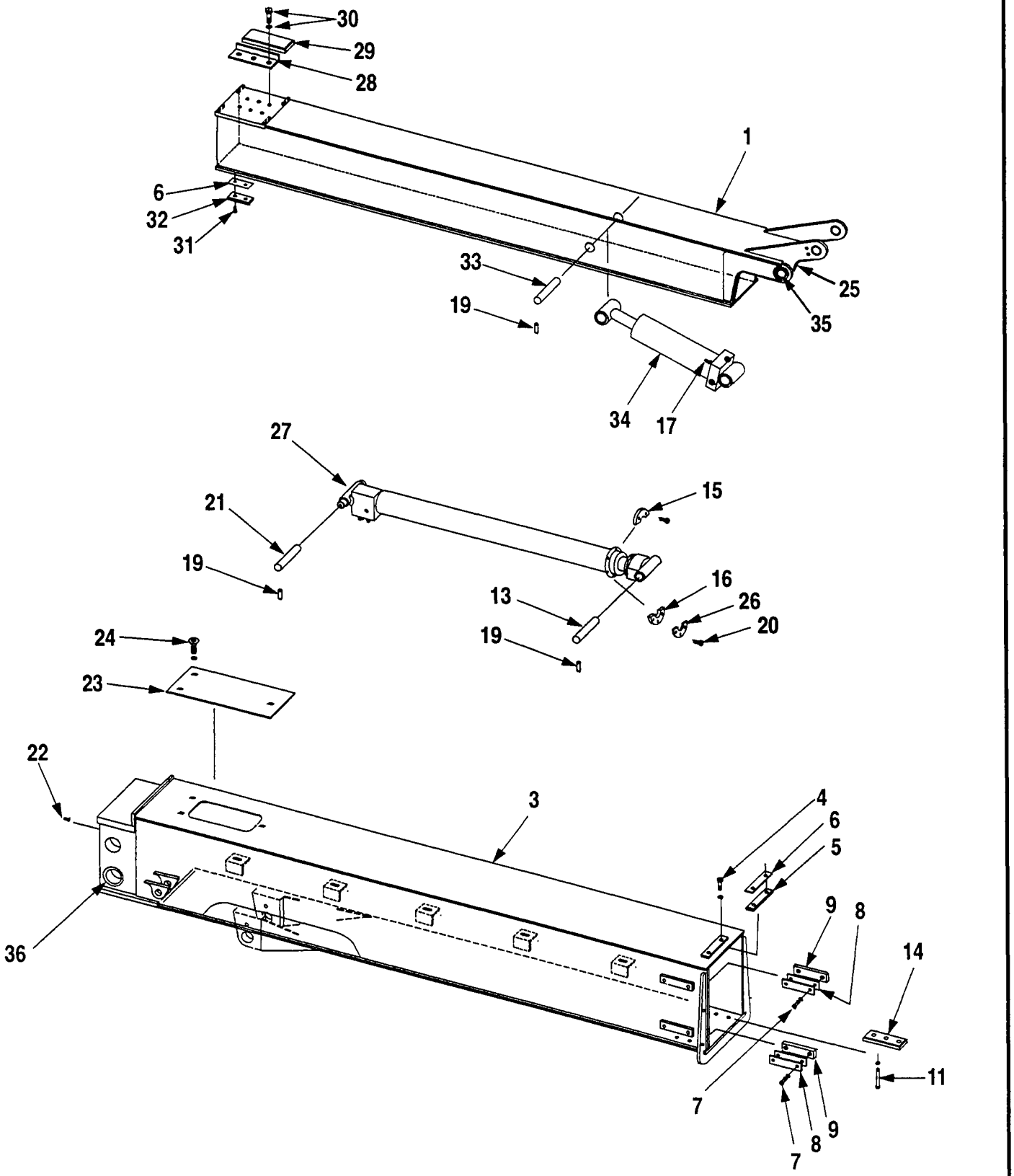


BOOM ASSEMBLY (CH50C)

Ref.	Part No.	Description	Qty	Remarks
	212792	Boom Assembly	Ref.	Incl. 1 thru 36
1	212783	Boom, Inner	1	
3	212790	Boom, Outer	1	Incl. 36
4	1200-31	Capscrew, 5/16C x 1	2	
	1210-17	Lockwasher	2	
5	211651	Pad, Wear	1	
6	211649	Shim, 16 Ga.	2AU	
	211650	Shim, 20 Ga.	2AU	
7	316 2338	Capscrew, 3/8C x 7/8	8	
	1210-20	Lockwasher	8	
8	211962	Shim, 16 Ga.	4AU	
	211963	Shim, 20 Ga.	4AU	
9	211956	Pad, Wear	4	
11	1200-315	Capscrew, 3/8C x .62	6	
	1210-20	Lockwasher	6	
13	212794	Pin	1	
14	211652	Pad, Wear	2	
15	212778	Wear Pad	1	
	331 2000	Flatwasher, 3/8 HT	2	
16	212796	Wear Pad	1	
17	1219-959	Adapter	2	
19	1227-261	Pin, Roll	4	
20	1200-73	Capscrew, 3/8 C x 2.75	5	
	1205-45	Nut, Lock	5	
21	212793	Pin	1	
22	1213-1	Grease Fitting	1	
23	212777	Cover	1	
24	1200-315	Capscrew, 3/8 C x 5/8	3	
	1210-20	Lockwasher	3	
	331 2000	Flatwasher, 3/8 HT	3	
25	1213-6	Grease Fitting	1	
26	212838	Plate	1	

BOOM ASSEMBLY (CH50C)

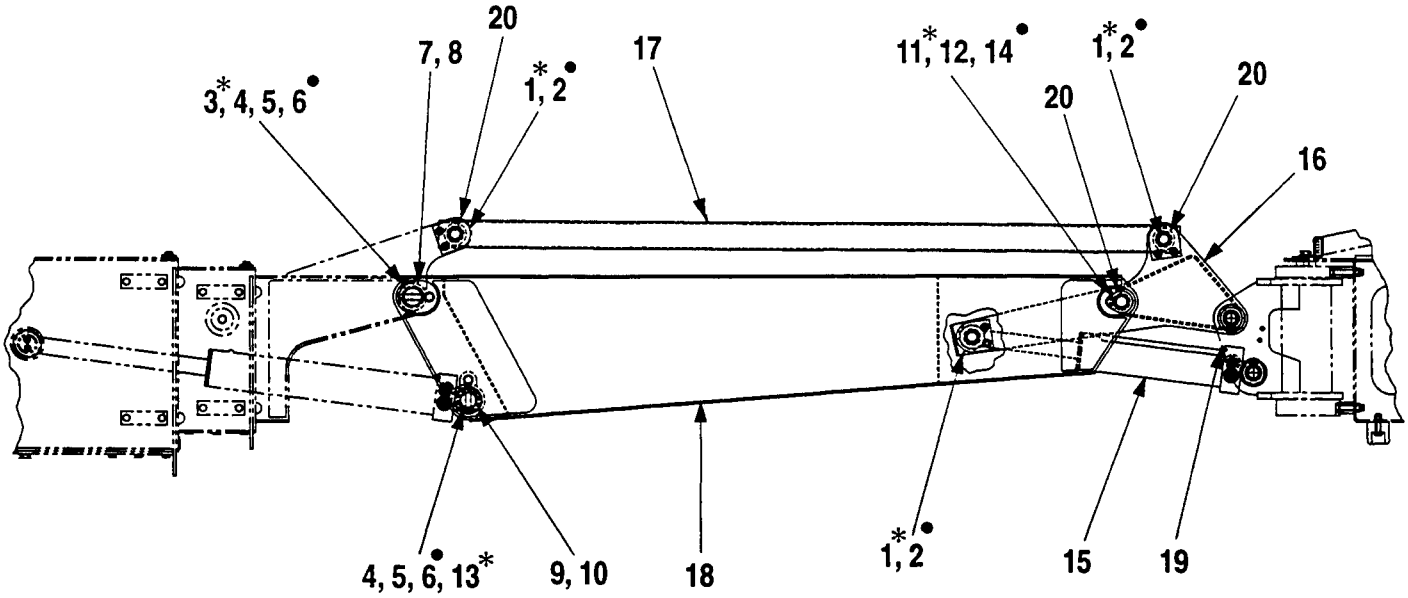
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Ref.	Part No.	Description	Qty	Remarks
27	81532	Cylinder, Boom Extend	1	See Page 5.18
28	211660	Plate	2	
29	211659	Pad, Wear	2	
30	1242-160	Capscrew, 7/16 x .75	6	
	1209-59	Flatwasher, 7/16 HT	6	
31	1203-144	Capscrew, 3/8C x 3/4 Flat Head	2	
32	211957	Pad, Wear	1	
33	212182	Pin	1	
34	212175	Cylinder, Jib Leveling	1	See Page 5.15
35	401 2405	Bearing, Inner Boom Tip	2	
36	160723	Bushing	2	

6' JIB ASSEMBLY

Mark Industries



• *Loctite 242*
P/N 511 2057

Apply Never-Seez to pin before installation

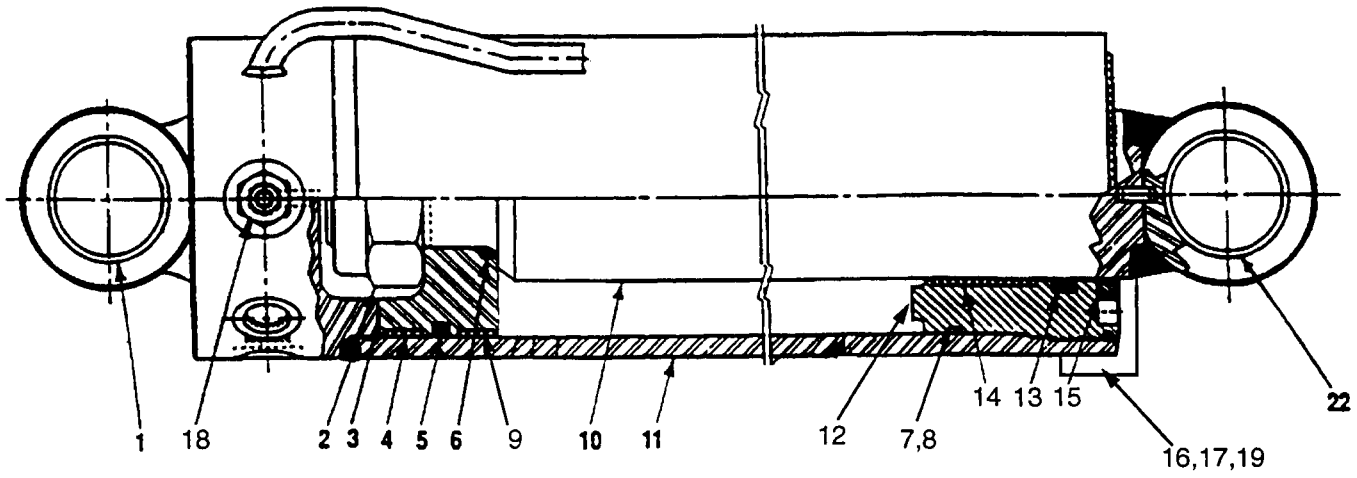
6' JIB ASSEMBLY

Ref.	Part No.	Description	Qty	Remarks
	212257	6' Jib Assembly	Ref.	Incl. items 1 thru 20
1	212178	Pin	3	
2	61828	Capscrew, 5/16C x 3/4 Socket Head	6	
3	212177	Pin	1	
4	709 1573	Rod End	2	
5	1209-59	Flatwasher, 7/16 HT	2	
6	1242-21	Capscrew, 7/16C x 1-1/2 Gr. 8	4	
7	1208-46	Bushing, 10 Gauge	2AU	AU=Average Usage
8	1208-48	Bushing, 18 Gauge	6AU	Average Usage
9	1208-36	Bushing, 10 Gauge	2AU	Average Usage
10	1208-38	Bushing, 18 Gauge	2AU	Average Usage
11	211710	Pin	1	
12	1209-63	Flatwasher, 3/8 HT	1	
13	212176	Pin	1	
14	1242-100	Capscrew, 3/8C x 3/4 Gr. 8	1	
15	211729	Cylinder, Slave Leveling	1	See Page 5.16
16	212192	Bracket	1	
17	212183	Link	1	
18	212207	Jib	1	
19	1219-959	Adapter	2	
20	1208-30	Bushing, 18 Gauge	12AU	Average Usage
21	511 2057	Loctite 242	AR	

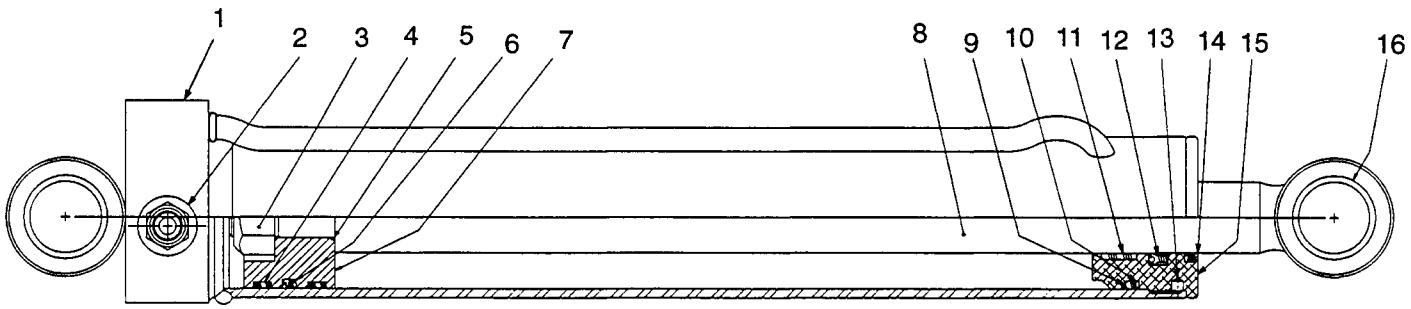
Model CH44C
CH50C
Issued 4-96

BOOM LIFT CYLINDER

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
	81531	Boom Cylinder, Complete	1	Incl. Items 1 thru 19
	69226	Kit, Seal	1	Incl. Items w/Asterisk *
1	600696	Bushing	4	
2	69058	Nut, Lock	1	
3	600692	Piston	1	
4	*	Wear Band	2	*
5	*	T-Seal	1	*
6	*	O-Ring	1	*
7	*	O-Ring	1	*
8	*	Back-Up Ring	1	*
9	*	Cast Ring	1	*
10	600693	Rod	1	
11	600690	Barrel	1	
12	600694	Head Gland	1	
13	*	Poly Pak	1	*
14	*	Wear Band	1	*
15	*	Rod Wiper	1	*
16	*	Locking Insert	1	*
17	600695	Head Gland Cap	1	
18	600691	Valve, Counterbalance	1	
19	68882	Set Screw	1	



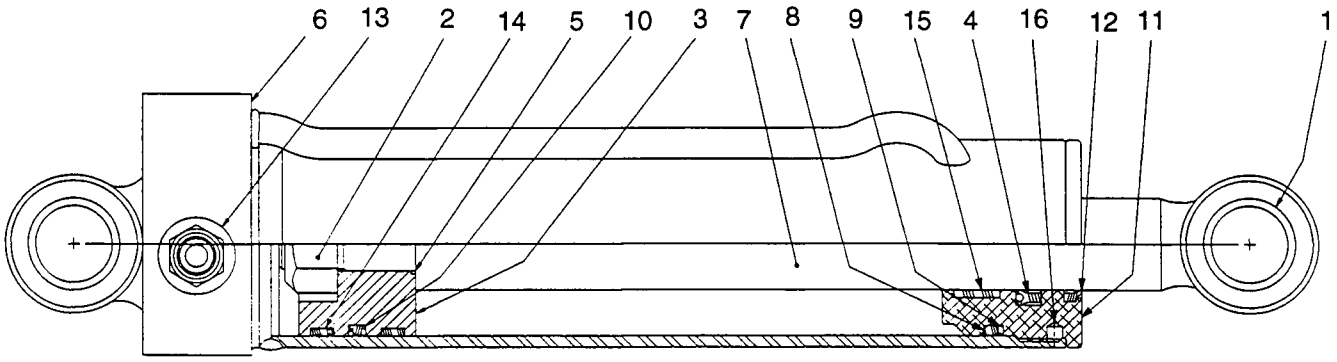
Ref.	Part No.	Description	Qty	Remarks
	212175	Cylinder, Jib Leveling (Rosenboom)	Ref.	Incl. items 1 thru 16
	69348	Kit, Seal	Ref.	Incl. items with asterisk
1	600684	Tube Weldment	1	
2	600685	Valve, Counterbalance	1	
3	68956	Nut, Lock	1	
4	*	Wear Band	2	*
5	*	O-Ring	1	*
6	*	T-Seal	1	*
7	68957	Piston	1	
8	600686	Rod Assembly	1	
9	*	O-Ring	1	*
10	*	Back Up Ring	1	*
11	*	Wearband	2	*
12	*	Polypak	1	*
13	68959	Locking Insert	1	
14	*	Rod Wiper	1	*
15	68960	Head Gland	1	
16	69349	Bearing	4	

Model CH44C
CH50C

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SLAVE LEVELING CYLINDER (ROSENBOOM)

Mark Industries

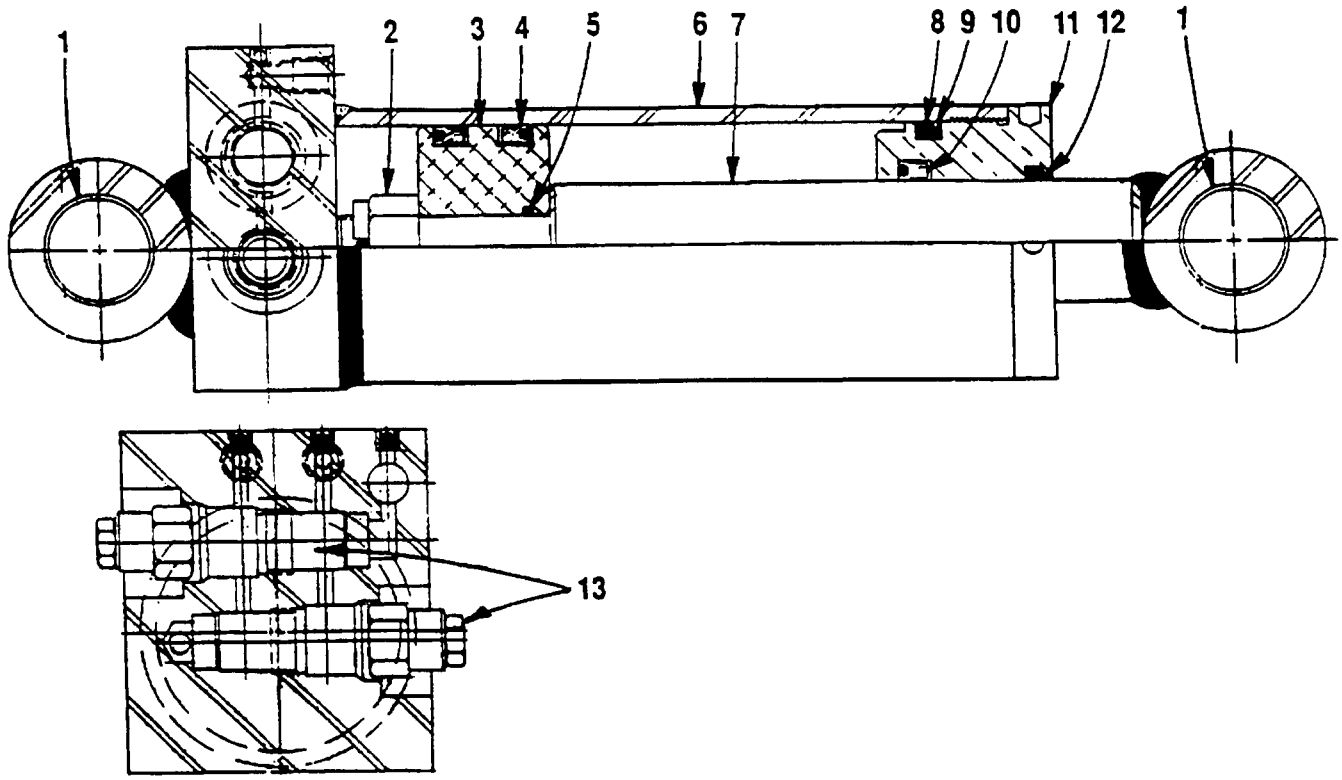


Ref.	Part No.	Description	Qty	Remarks
	211729	Slave Level Cylinder (Rosenboom)	1	Incl. Items 1 thru 16
	69348	Kit, Seal	1	Incl. Items w/Asterisk *
1	600689	Bushing	2	
2	68956	Nut, Castle	1	
3	68957	Piston	1	
4	*	Seal, Polypak	2	*
5	*	O-Ring	1	*
6	600687	Barrel	1	
7	600688	Rod, Piston	1	
8	*	O-Ring	1	*
9	*	Back-Up Ring	1	*
10	*	T-Seal	1	*
11	68960	Gland, Head	1	
12	*	Wiper	1	*
13	600685	Valve, Counterbalance	1	
14	*	Wearband	2	*
15	*	Wearband	2	*
16	68959	Locking Insert	1	

SLAVE LEVELING CYLINDER (BEST METAL)

Model CH44C CH50C

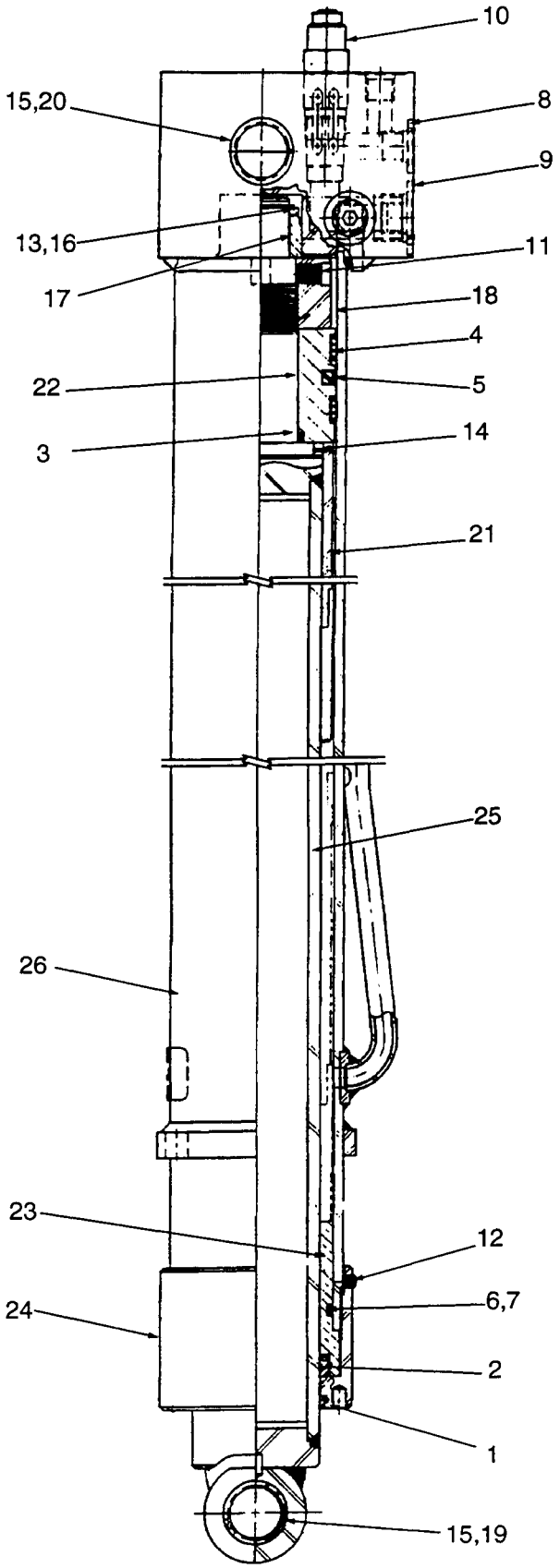
Issued 4-96



Ref.	Part No.	Description	Qty	Remarks
	211729	Slave Level Cylinder (Best Metal)	1	Incl. Items 1 thru 13
	69652	Kit, Seal	1	Incl. Items w/Asterisk *
1	69665	Bushing	2	
2	69653	Nut, Castle	1	
3	69654	Piston	1	
4	69655	Seal, Polypak	2	*
5	69656	O-Ring	1	*
6	69667	Barrel	1	
7	69785	Rod, Piston	1	
8	69659	O-Ring	1	*
9	69660	Back-Up Washer	1	*
10	69661	Seal, Polypak (Type B)	1	*
11	69662	Nut, Gland	1	
12	69663	Wiper	1	*
13	69666	Valve, Counterbalance	1	

BOOM EXTEND CYLINDER

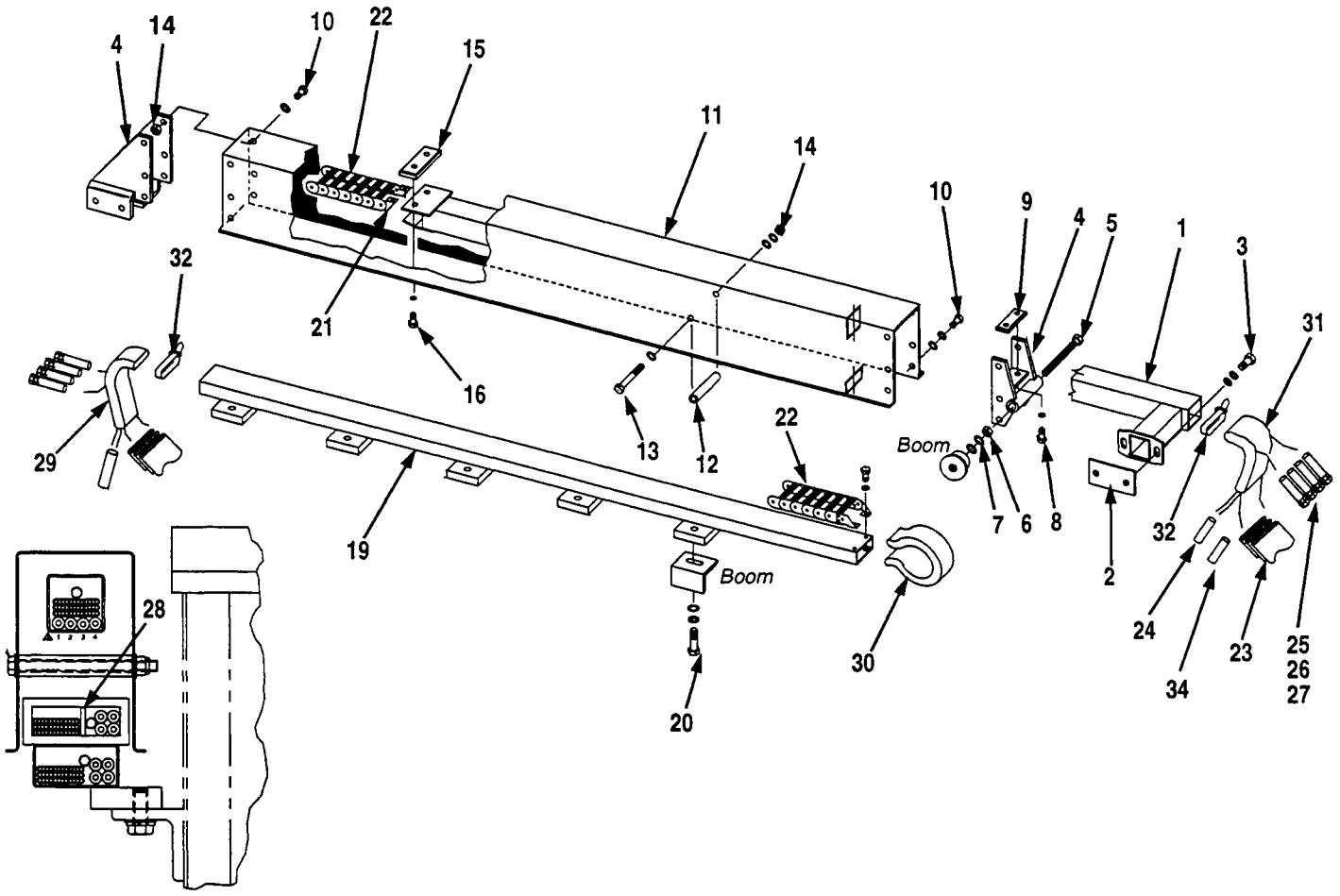
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Ref.	Part No.	Description	Qty	Remarks
	81532	Extend Cylinder, Complete (Great Bend)	1	Incl. Items 1 thru 24
	600698	Kit, Seal	1	Incl. Items w/asterisk *
1	*	Wiper	1	*
2	*	V-Ring	1	*
3	*	O-Ring	1	*
4	*	Wear Ring	2	*
5	*	Teflon Ring Ass'y	1	*
6	*	O-Ring	1	*
7	*	Back-up Ring	1	*
8	*	O-Ring	4	*
9	*	O-Ring	1	*
10	600700	Valve	1	
11	600701	Set Screw	1	
12	600702	Set Screw	1	
13	600703	Retaining Ring	1	
14	600704	Retaining Ring	1	
15	600705	Bushing	1	
16	600706	Washer	1	
17	600707	Bushing	1	
18	600708	Nut	1	
19	600709	Spacer	1	
20	600710	Spacer	1	
21	600711	Spacer Assembly	1	
22	600712	Piston	1	
23	600713	Bearing	1	
24	600714	Retainer	1	
25	600715	Rod Assembly	1	
26	600716	Tube Assembly	1	

POWER TRACK ASS'Y

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
	212671	Power Track Assembly (CH44C)		Incl. Items 1 thru 33
	212671-1	Power Track Assembly (CH50C)		Incl. Items 1 thru 33
1	212670	Track, Inner	1	
2	211735	Shim	2	
3	1200-59	Capscrew, 3/8C x 1	2	
	1210-20	Lockwasher	2	
	1209-63	Flatwasher, 3/8 HT	2	
4	211748	Bracket, Track	2	
5	1200-210	Capscrew, 3/4C x 5 1/2	2	
6	1205-96	Nut, 3/4C Jam	2	
7	1209-40	Flatwasher, 3/4	3	

Ref.	Part No.	Description	Qty.	Remarks
8	316 2338	Capscrew, 3/8C x 7/8	6	
	1209-63	Flatwasher, 3/8 HT	6	
9	211961	Pad, Wear	1	
10	1200-315	Capscrew, 3/8C x 5/8	12	
	1210-20	Lockwasher	12	
	1209-63	Flatwasher, 3/8 HT	12	
11	212663	Cover	1	
12	206F4693	Tube	8	
13	1200-380	Capscrew, 3/8C x 4 3/4	8	
	1210-20	Lockwasher	8	
	1209-63	Flatwasher	8	
14	1205-45	Locknut, 3/8C	14	
15	211960	Pad, Wear	1	
16	61921	Button Screw, 1/4C x 1/2	2	
	1209-44	Flatwasher	2	
19	212665	Bracket, Track	1	
20	1200-98	Capscrew, 1/2C x 1-1/4	5	
	1210-26	Lockwasher	5	
	1209-29	Flatwasher, 1/2 HT	5	
21	422 3023-2	Bracket, Female	1	
22	422 3025	Cable Carrier (1 Link)	121	
23	212098	Cable, Flat (CH44C)	1	
	212098-1	Cable, Flat (CH50C)	1	
24	70769	Cable, SJO	1	75' (CH44C), 85' (CH50C)
25	212135-790	Hose Ass'y (CH44C)	3	#1 #2 #3
	212135-882	Hose Ass'y (CH50C)	2	#1 #2
26	212135-770	Hose Ass'y (CH44C)	1	#4
	212135-846	Hose Ass'y (CH50C)	2	#3 #4
27	212135-798	Hose Ass'y (CH50C)	2	#5 #6
28	422 3026	Cable Separator (both ends & 30" intervals)	8	
29	12193-120	Nylon Sleeve	1	
30	12193-24	Nylon Sleeve	1	
31	12193-126	Nylon Sleeve (CH44C)	1	
	12193-216	Nylon Sleeve (CH50C)	1	
32	1222-202	Tie, Plastic	2	
33	511 2057	Loctite #242	AR	
34	2912	Cable	1	75' (CH44C), 85' (CH50C)

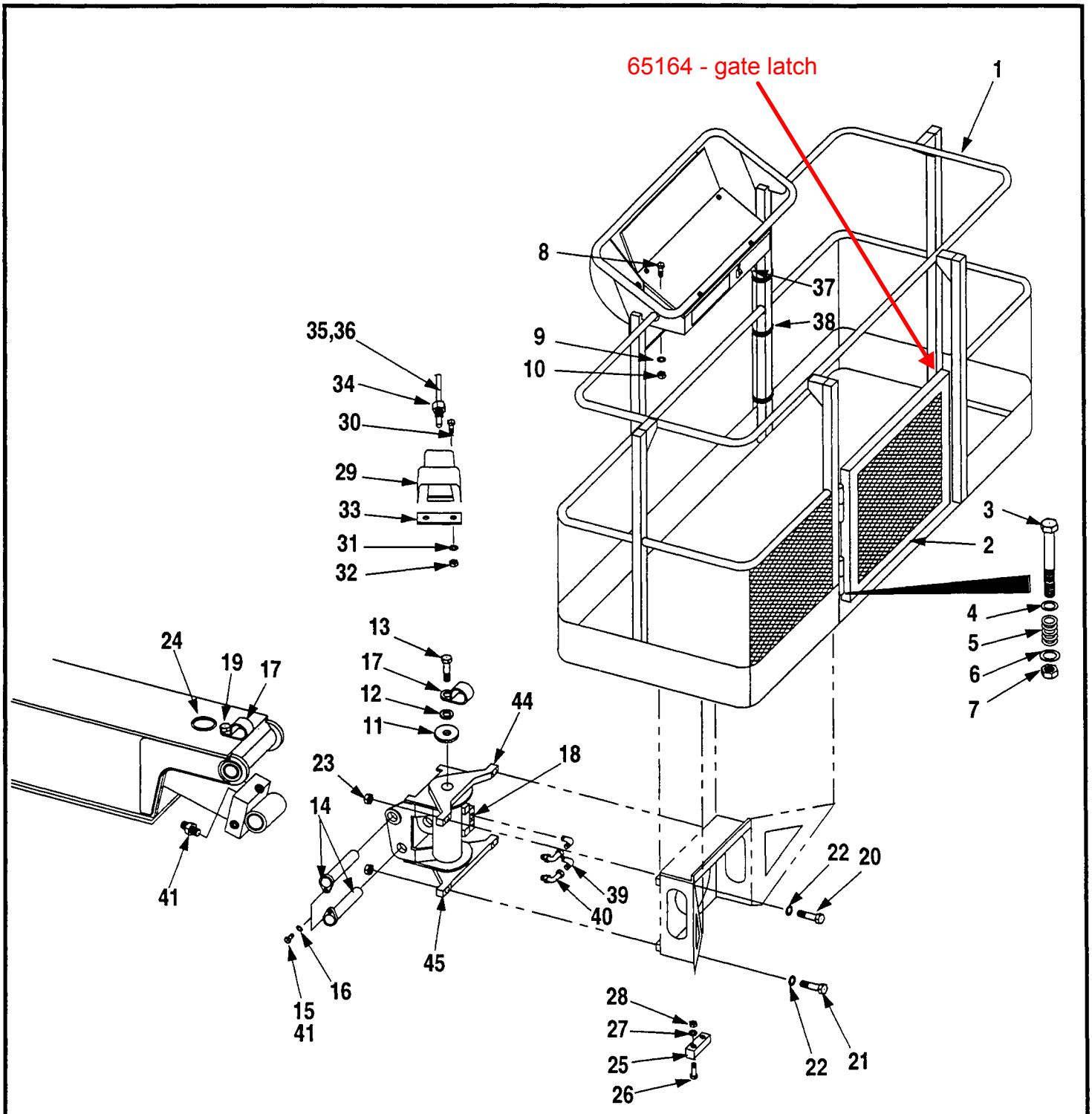
NOTES

SECTION 6 "PLATFORM" CONTAINS:

PAGE	TITLE
6.2	PLATFORM
6.4	AERIAL CONTROL BOX
6.6	PLATFORM ROTATOR
6.7	FOOT SWITCH
6.8	PLATFORM WIRING
6.9	JOYSTICKS

PLATFORM

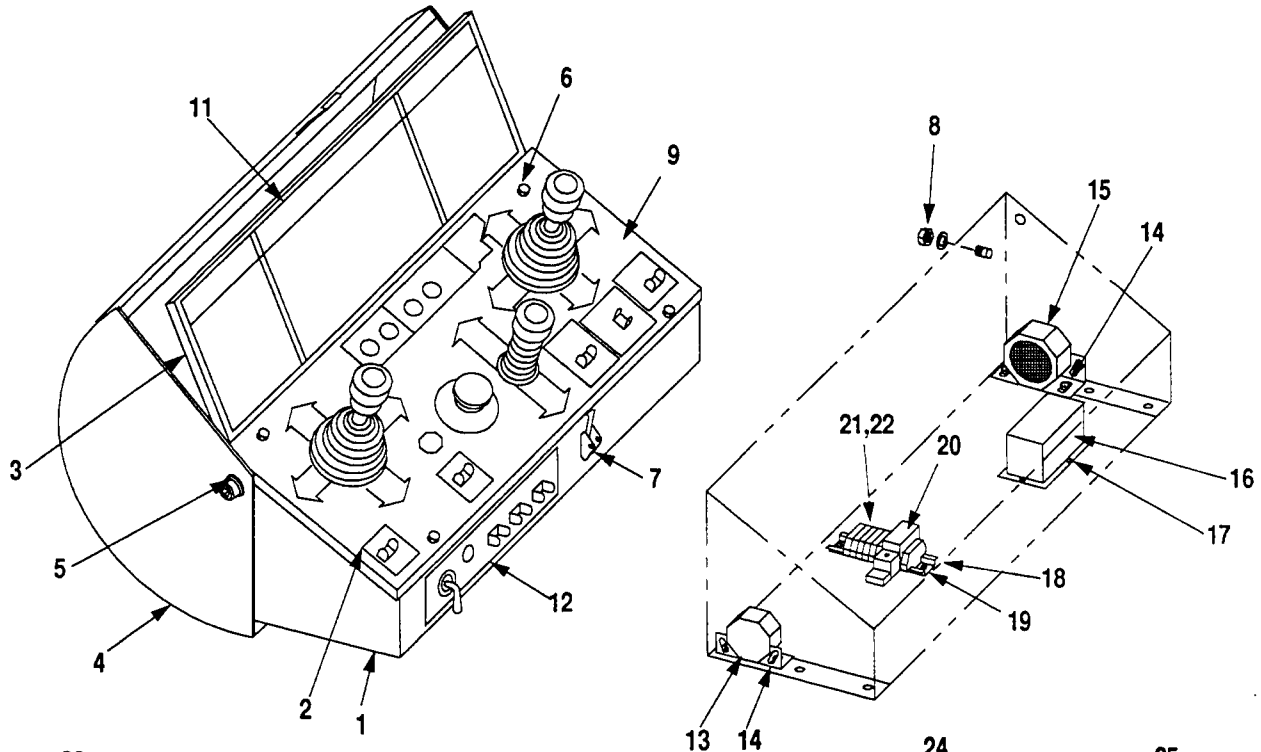
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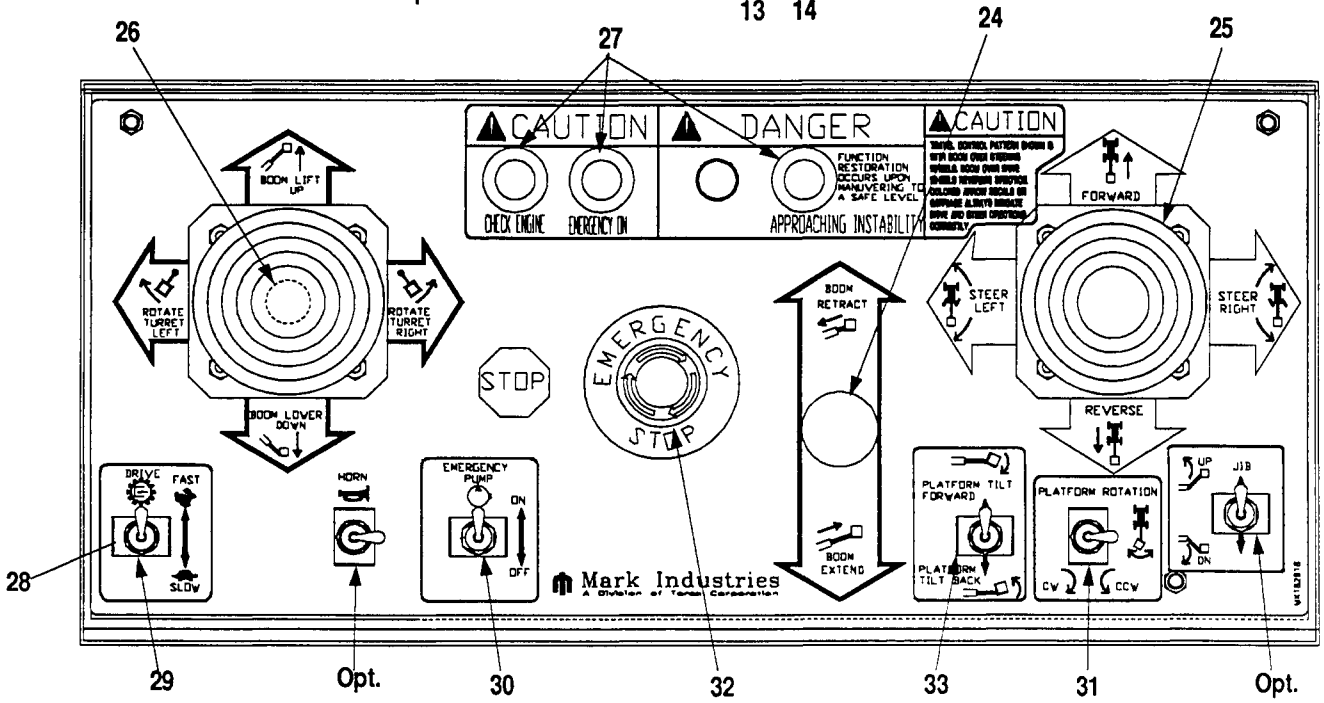


Ref.	Part No.	Description	Qty	Remarks
	212615-1	Platform Ass'y, 6'	1	]-Incl. Items 1 thru 45
	212615-2	Platform Ass'y, 8' (CH44C Only)	1	
1	212325	Platform, 6'	1	
	212326	Platform, 8' (CH44C Only)	1	
2	212324	Door	1	
3	1200-130	Capscrew, 1/2C x 6	2	
4	085 113 24	Flatwasher	4	
5	211816	Spring	2	
6	384 2200	Washer, Thrust	2	
7	1205-67	Locknut, 1/2C	2	
8	1200-61	Capscrew, 3/8C x 1-1/4	4	
9	1209-63	Flatwasher, 3/8 HT	8	
10	1205-45	Locknut, 3/8C	4	
11	212209	Washer, Special	1	
12	1210-26	Lockwasher, 1/2 Gr. 8	1	
13	1242-29	Capscrew, 1/2C x 1 Gr. 8	1	
14	211710	Pin, Boom	2	
15	1242-100	Capscrew, 3/8C x 3/4 Gr. 8	2	
16	1209-63	Flatwasher, 3/8 HT	2	
17	200B2007-52	Clamp	2	
18	81534	Rotator Assembly	1	See Page 6.6
19	1200-61	Capscrew 3/8C x 1-1/4	1	
	1209-4	Flatwasher	1	
	1205-45	Locknut, 3/8C	1	
20	1242-127	Capscrew, 1/2C x 3 Gr. 8	2	Top
21	1242-118	Capscrew, 1/2C x 2-1/2 Gr. 8	2	Bottom
22	1209-29	Flatwasher, 1/2 Gr. 8	4	
23	1205-67	Locknut, 1/2C	4	
24	1221-100	Grommet	1	
25	212064	Bumper	1	
26	1200-65	Capscrew, 3/8C x 1-3/4	2	
27	1209-63	Flatwasher, 3/8 HT	2	
28	1205-45	Locknut, 3/8C	2	
29	70212	Foot switch Ass'y	1	See Page 6.7
30	1200-5	Capscrew, 1/4C x 1/4	2	
31	1209-2	Flatwasher, 1/4	4	
32	1205-23	Locknut, 1/4C	2	
33	22742	Plate	1	
34	2531	Strain Relief	1	
35	70187	Cable, SJO 18/4	1	
36	70149	Terminal, Pink Ring	4	
37	70807	Socket	4	
	69835	Tool, Crimp	Opt.	For Socket Installation
38	1222-202	Tie, Plastic	3	
39	12019-264	Elbow, 90°	2	
40	2594	Fitting, 90°	2	
41	2562	Fitting, Straight	2	
42	511 2057	Loctite #242	AR	
43	70862	Connector	1	
44	212636	Mount	1	
45	212667	Mount	1	

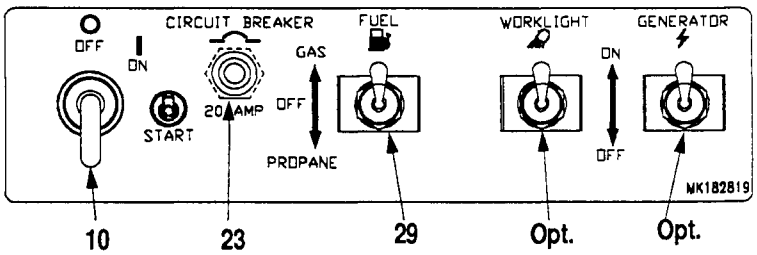
AERIAL CONTROL BOX

Mark Industries, Inc.





May Not be Available on all Models.



AERIAL CONTROL BOX

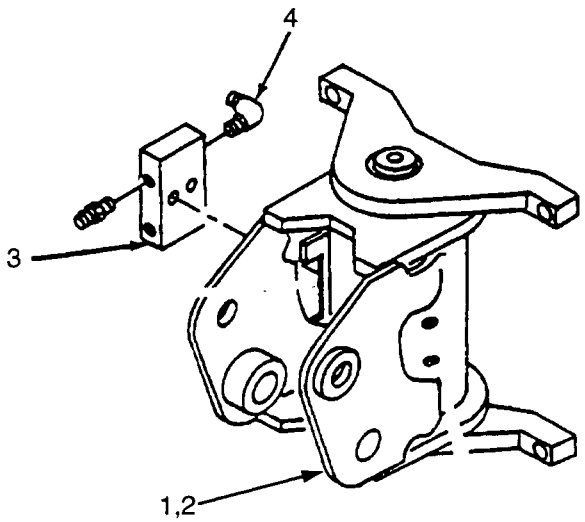
Model CH44C CH50C

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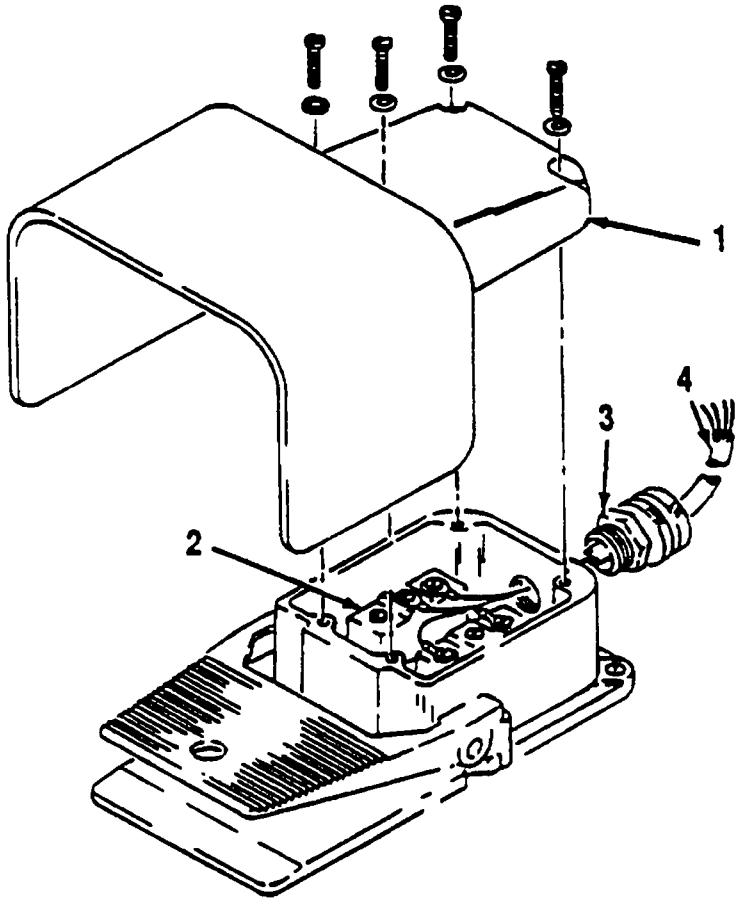
Ref.	Part No.	Description	Qty	Remarks
	212007	Aerial Control Box Ass'y (OEM)	Ref.	Incl. Items 1 thru 33
1	212005	Box	1	
2	212100	Lid, Box	1	
3	212088	Plate, Back	1	
4	212410	Cover	1	
5	1203-201	Shoulder Screw, 3/8 x 1/2 - 5/16C x 1/2	2	
	511 2057	Loctite	AR	
6	311 1956	Machine Screw, 1/4C x 1/2	4	
	A126739	Cage Nut, 1/4 J-Type	4	
	69117	Latch	1	
8	1205-13	Nut, 1/4C	3	
	1210-14	Lockwasher	3	
9	182818	Decal, Box (Top)	1	
10	69119	Switch, Ignition	1	
11	182120	Decal, Operation Instructions	1	
12	182819	Decal, Box (Front)	1	
13	441 6837	Alarm, Engine	1	
14	1205-13	Nut, 1/4C	4	
15	441 6838	Alarm, Stability	1	
16	70803	Connector, Receptacle	1	
17	1233-10	Machine Screw, #8-32 x 3/4	4	
	1205-3	Nut, #8-32	4	
	1210-5	Lockwasher, #8	4	
18	70580	Rail, Low Profile	1	
19	1233-5	Machine Screw, 1/4C x 1/2	2	
	1205-23	Locknut, 1/4C	2	
20	70459	Relay	1	
	70460	Base	1	
	70462	Clip, Relay Hold-Down	2	
21	441 6839	Terminal Block, Brown	4	
22	441 6840	Terminal Block, Y/G	2	
23	69172	Circuit Breaker	1	
24	70823	Joystick, Boom Extend	1	
25	70824	Joystick, Drive/Steer	1	
26	70825	Joystick, Lift/Rotate	1	
27	69144	Lamp Base	3	
	69254	Bulb	3	
	69143	Lens	3	
28	70783	Guard, Switch	5	
29	69162	Switch, Toggle	1	
30	69255	Switch, Toggle	1	
31	69164	Switch, Toggle	1	
32	69166	Emergency Stop Button	1	
33	69232	Switch, Toggle	1	

PLATFORM ROTATOR

Mark Industries



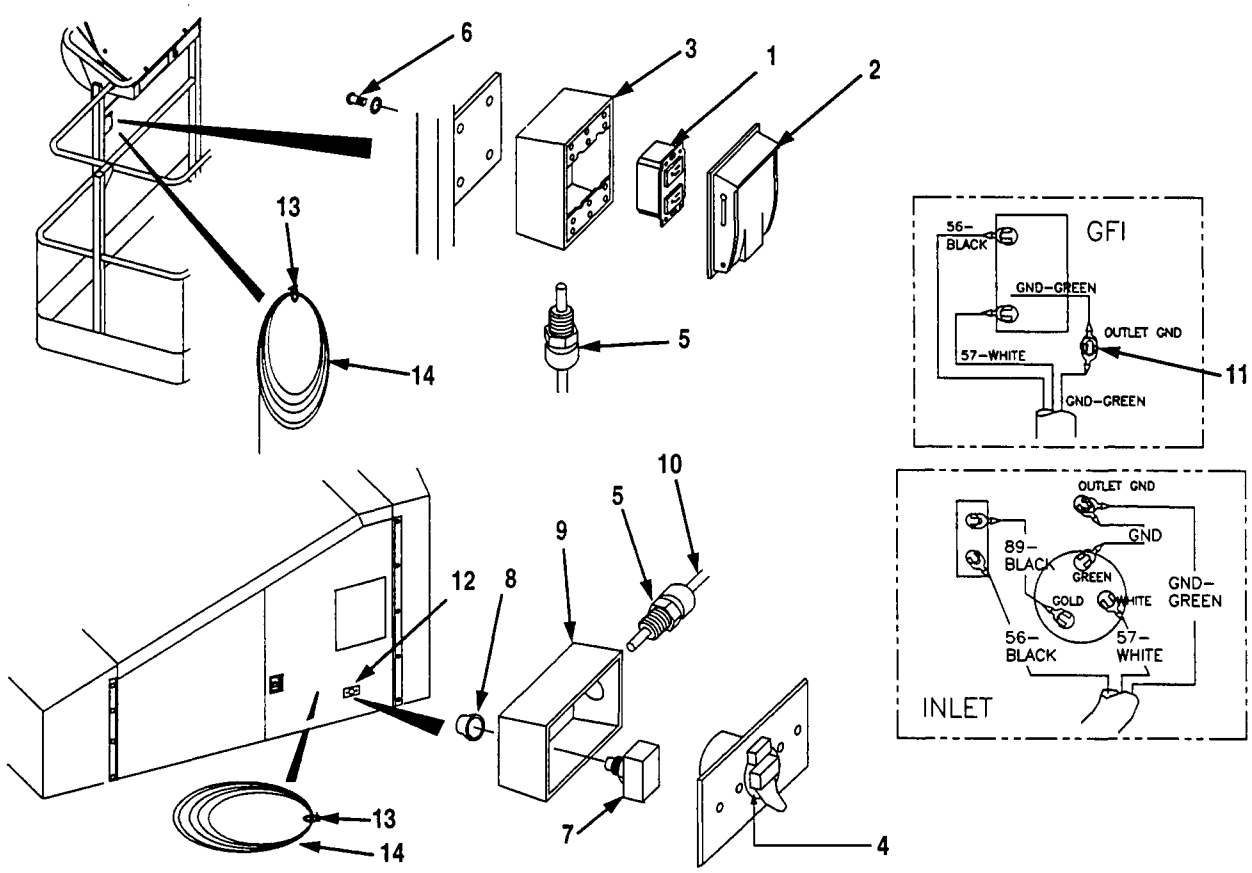
Ref.	Part No.	Description	Qty	Remarks
	81534	Platform Rotator Ass'y	1	Incl. Items 1 thru 4
1	600819	Kit, Seal	1	
2	600820	Kit, Bearing	1	
3	600821	Valve, Check	1	
4	80012-05	Elbow, Swivel	4	



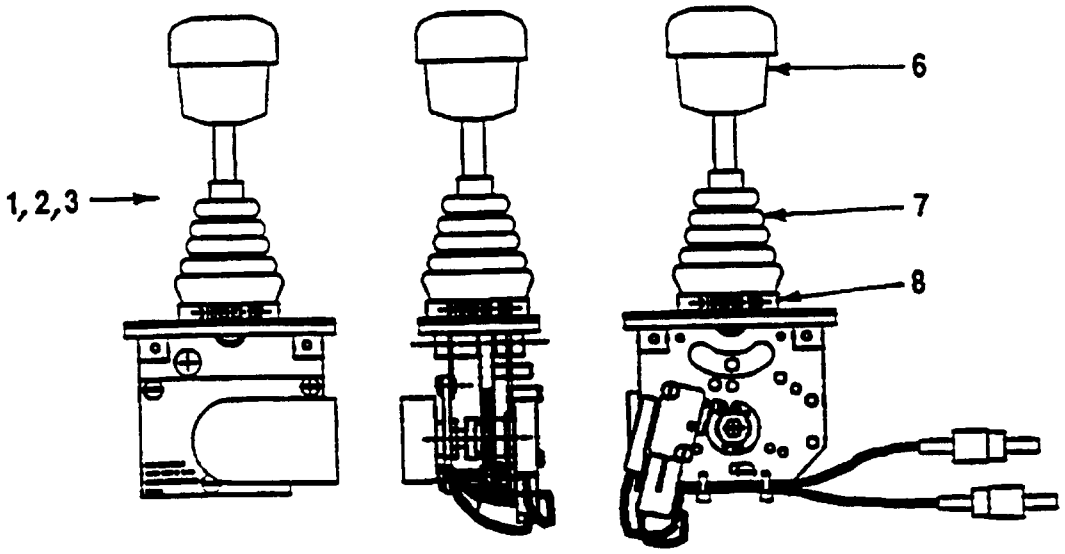
Ref.	Part No.	Description	Qty	Remarks
1	70212	Foot switch	1	Incl. Item 2
2	66336	Microswitch	2	
3	2511	Relief, Strain	1	
4	70187	Cable, SJO 18/4	1	

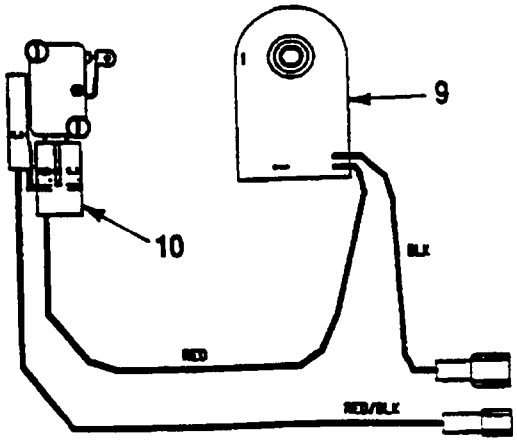
PLATFORM WIRING

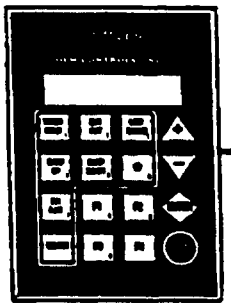
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Ref.	Part No.	Description	Qty	Remarks
	212162-1	Platform Wiring - 110 Volt	Opt.	Incl. Items 1 thru 11
	212162-2	Platform Wiring - 220 Volt	Opt.	Incl. Items 12 thru 14
1	70391	Receptacle, GFI	1	
2	70392	Cover, Receptacle	1	
3	70262	Box	1	
4	70119	Inlet w/Gasket	1	
5	2806	Strain Relief	2	
6	61720	Screw, #10-24 x 5/8 Self-Tapping	4	
7	441 4026	Circuit Breaker, 20A	1	
8	442 2399	Boot	1	
9	212133	Outlet Box	1	
10	70769	Cable, 12/3	Ref.	
11	117-C	Terminal	11	
12	902	Cover, Door	1	
13	1222-202	Tie, Plastic	2	
14	70423	Cable, TUV 12/3	Ref.	







Ref.	Part No.	Description	Qty	Remarks
	70775	Electronic Control System	Ref.	Incl. Items 1 thru 5
1	70823	Joystick, Boom Extend (Single Axis-Shown)	1	
2	70824	Joystick, Drive/Steer (Dual Axis)	1	Incl. Serviceable Items 6-11
3	70825	Joystick, Lift/Rotate (Dual Axis)	1	
4	70826	Controller, Drive / Boom Extend	1	Shown Page 4.31
5	70827	Controller, Boom Raise / Turret Rotate	1	Shown Page 4.31
6	600114	Knob	AR	
7	67496	Boot, Single Axis	AR	
		Boot, Dual Axis		
8	67495	Clamp, Single Axis	AR	
		Clamp, Dual Axis		
9		DigiSensor w/Wires	AR	
10	67486	Microswitch	AR	
11		Centering Spring, Dual Axis	AR	
12	212187	Optimizer Kit	Ref.	Contact Distributor

NOTES

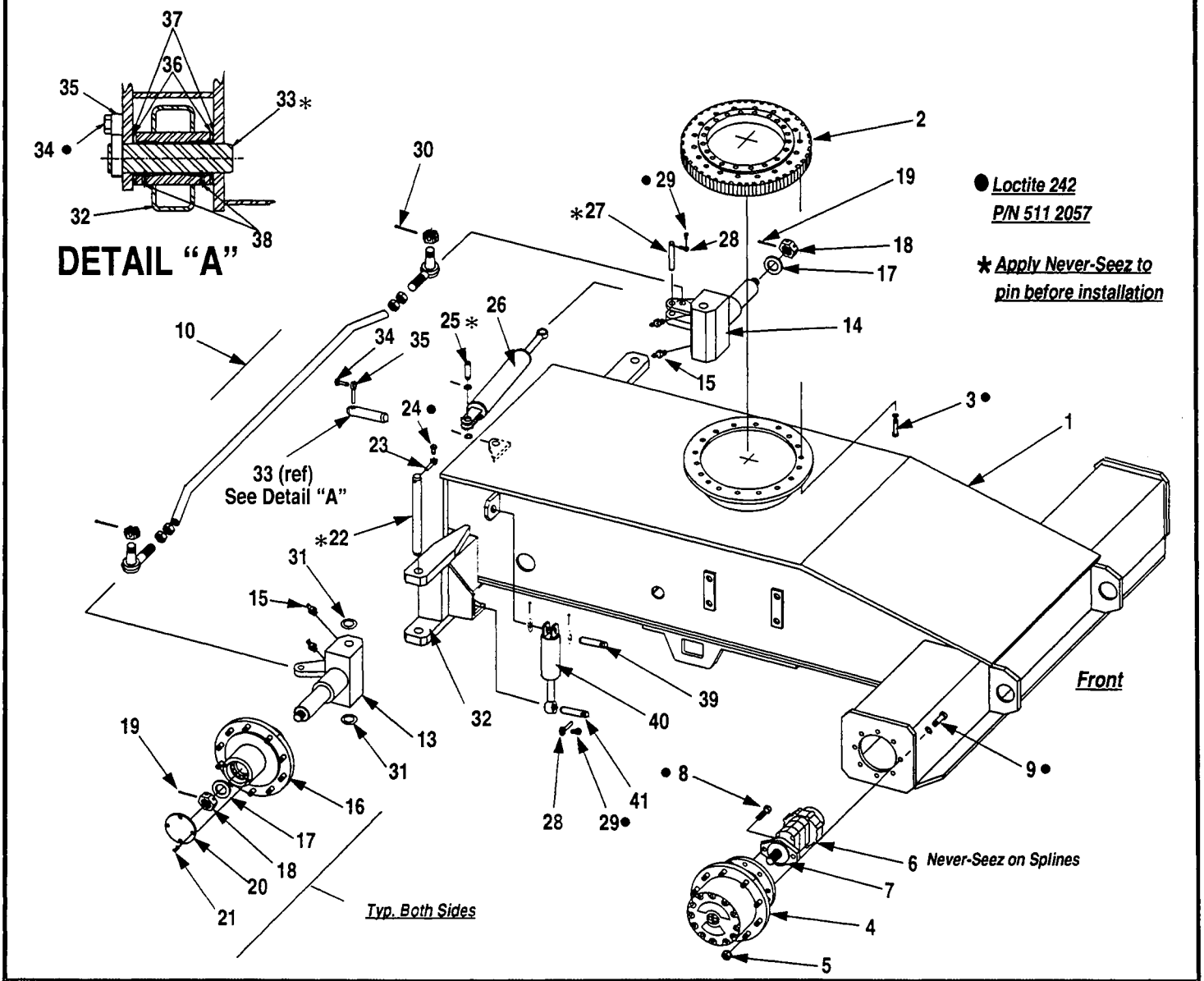
SECTION 7 "OPTIONS" CONTAINS:

PAGE	TITLE
7.2	OSCILLATING AXLE BASE (2WD)
7.4	BASE HYDRAULICS (2WD & OSCILLATING AXLE)
7.8	OSCILLATING AXLE BASE (4WD)
7.10	BASE HYDRAULICS (4WD & OSCILLATIING AXLE)
7.14	OSCILLATING AXLE BASE (4WD & STEERING)
7.16	BASE HYDRAULICS (4WD & OSC. AXLE & 4WS)
7.20	WARNING HORN
7.21	AMBER BEACON
7.22	ALL MOTION ALARM & TRAVEL WARNING ALARM
7.23	GENERATOR
7.24	OSCILLATING AXLE CYLINDER

Model CH44C
CH50C
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OSCILLATING AXLE BASE
(2WD)

Mark Industries



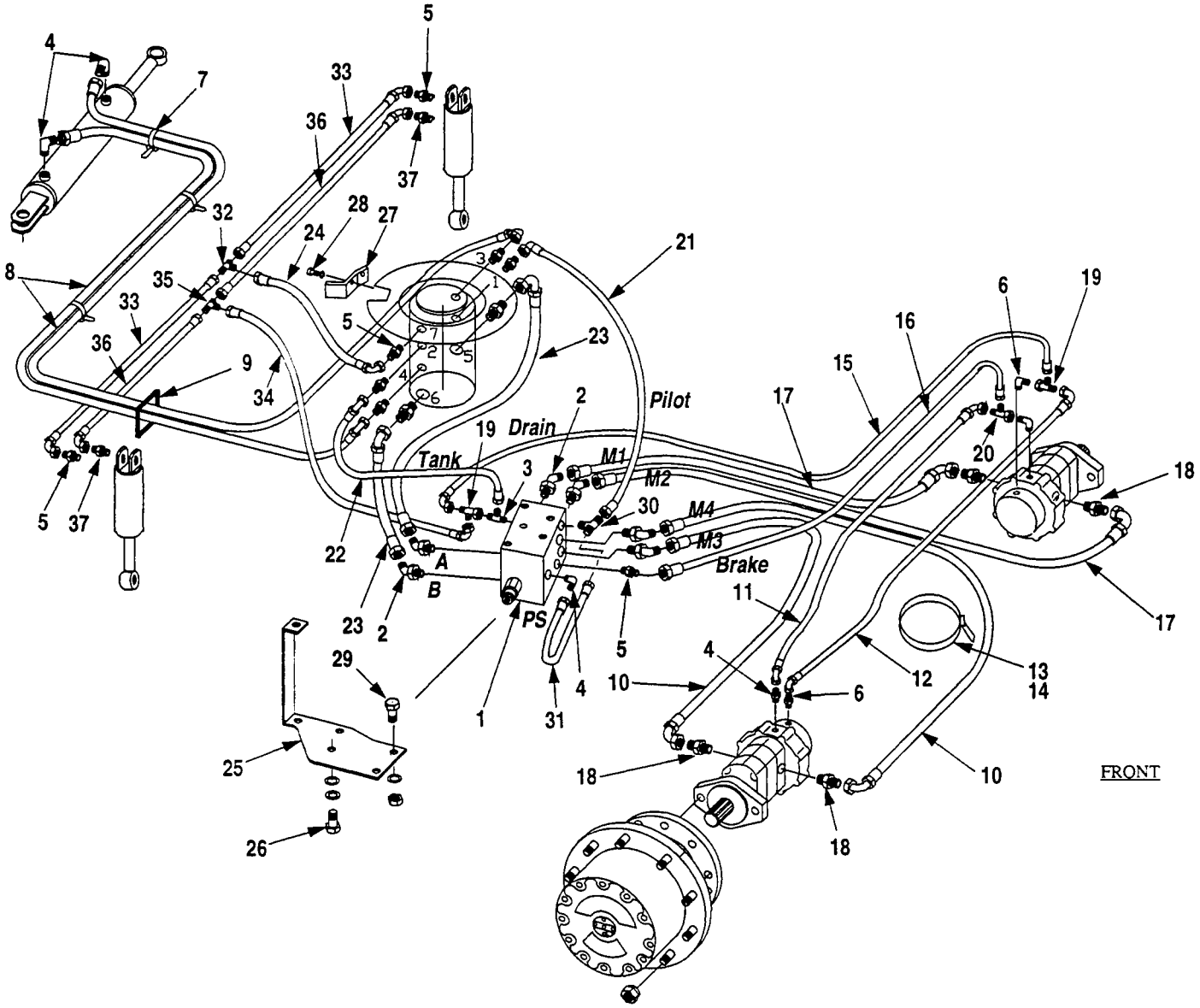
Ref.	Part No.	Description	Qty	Remarks
	212606	Carriage Ass'y, Oscillating Axle (CH44C)	1	Incl. 1 thru 42
	212606-1	Carriage Ass'y, Oscillating Axle (CH50C)	1	Incl. 1 thru 42
1	212510	Carriage Weldment (CH44C)	1	
	212510-1	Carriage Weldment (CH50C)	1	
2	211773	Bearing, Swing	1	
3	1242-94	Capscrew, 5/8C x 3-1/2 Gr. 8	18	To be loctited upon assembly
	1209-48	Flatwasher, 5/8 Gr. 8	18	
4	210859	Torque Hub	2	See Page 3.8
5	160724	Nut, Lug (Wheel)	36	
6	81393	Drive Motor & Parking Brake Ass'y	2	See Pages 3.10 & 3.12
7	460 6309	O-Ring (Motor to Torque Hub Seal)	2	.094 x 4.00
8	1203-220	Capscrew, 1/2C x 1-1/2 12 Pt. Gr. 8	4	Motor to Hub

Ref.	Part No.	Description	Qty	Remarks
9	1242-45	Capscrew, 5/8C X 1-1/2 Gr. 8	18	Hub To Undercarriage
	1209-48	Flatwasher, 5/8C Gr. 8	18	
10	212346-4	Tie Rod Assembly	1	See Page 3.6
13	212650	Spindle, RH Rear	1	
	212169	Bushing	2	
14	212651	Spindle, LH Rear	1	
	212169	Bushing	2	
15	1213-1	Zerk, Grease	4	
16	212647	Wheel Hub Assembly	2	See Page 3.7
17	211939	Washer, Thrust	2	
18	1205-143	Nut, 1-1/2F Slotted	2	
19	1207-44	Cotter Pin, 1/4 x 2-1/2	2	
20	211938	Cover, Wheel Hub	2	
21	1200-309	Capscrew, 1/4C x 1/2	4	
	1210-14	Lockwasher, 1/4	4	
22	211914	King Pin	2	
23	706 9449	Rod End, Buck Pin	2	
24	1242-45	Capscrew, 5/8C x 1-1/2 Gr. 8	2	
25	211913	Pin	1	
	1209-30	Flatwasher	2	
	1207-40	Cotter Pin, 1/4 x 1-1/2	2	
26	211758	Cylinder, Steering (Master Level Cylinder)	1	See Section 5
27	211912	Pin	1	Cylinder to LH Spindle
28	211779	Rod Eye	3	
29	1242-134	Capscrew, 3/8C x 1 Gr. 8	3	
30	1207-14	Cotter Pin, 1/8 x 1-1/2	2	Tie Rod
31	212170	Washer, Thrust	4	
32	212511	Weldment, Oscillating Axle	1	
33	212292	Pin, Oscillating Axle Pivot	1	
34	1200-268	Capscrew, 1C x 2-1/4 Gr.8	1	
35	709 1424	Rod Eye	1	
36	212277	Washer, Thrust	2	
37	212290	Shim	2	
38	1213-1	Zerk, Grease	2	
39	212294	Pin, Oscillating Cylinder Base	2	
	1209-31	Washer, Flat	4	
	1207-41	Cotter Pin, 1/4 x 1-3/4	4	
40	212260	Cylinder, Oscillating Axle	2	See Page 7.24
41	212295	Pin, Oscillating Cylinder Eye	2	
42	212819	Hydraulic Assembly, Oscillating Axle (2WD)	1	See Page 7.4
43		Tire & Rim Ass'y (Not Shown)	4	See Page 3.13

BASE HYDRAULICS

(2WD & OSC AXLE)

Mark Industries

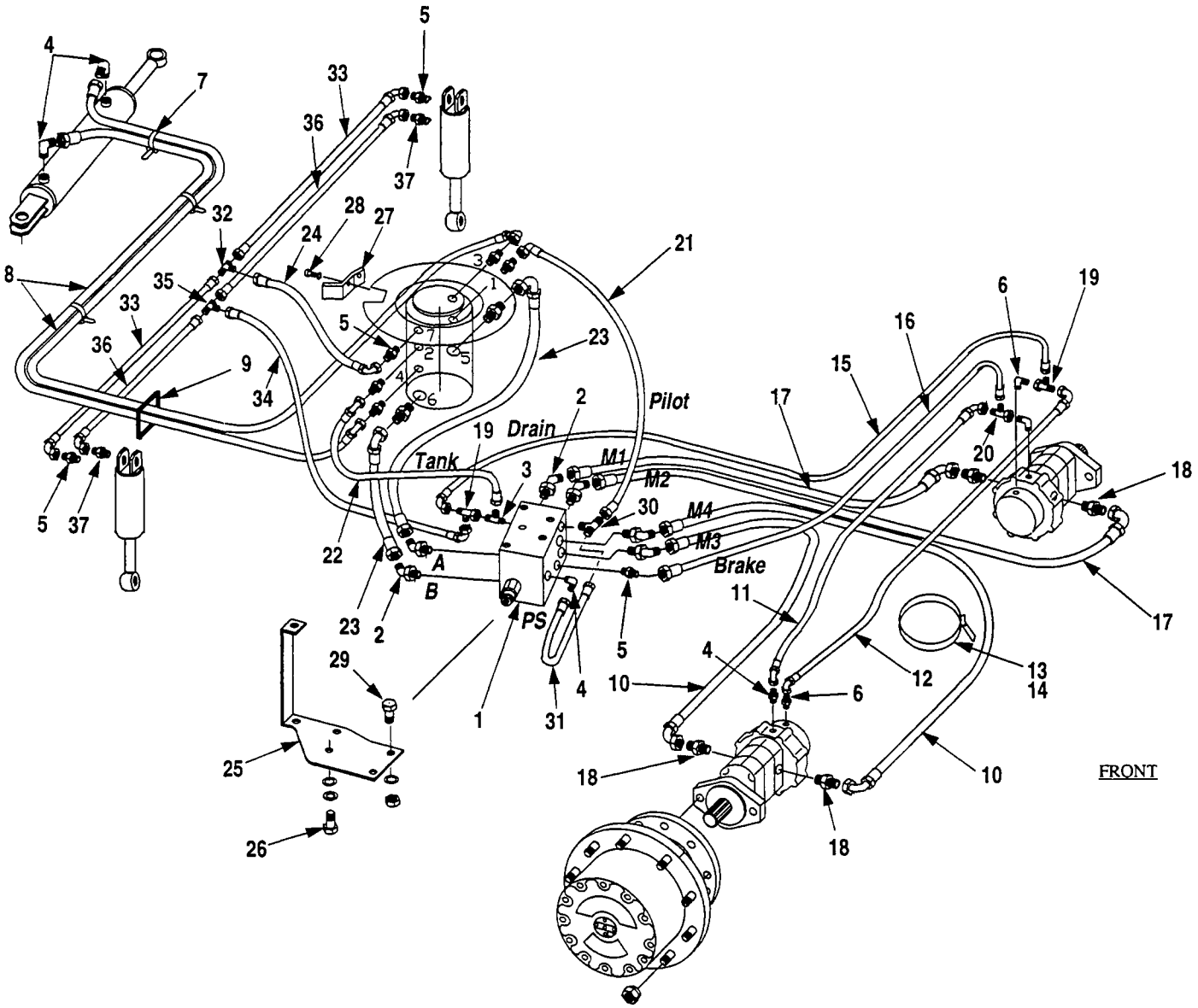


Ref.	Part No.	Description	Qty	Remarks
	212819	Lower Hydraulic Assembly	1	Incl. Items 1 thru 37
1	81445	Valve, Ground Drive	1	See Section 4
2	1219-663	Adapter	6	
3	1219-693	Adapter	1	
4	12019-548	Adapter	5	
5	1219-959	Adapter	4	
6	1219-776	Adapter	3	
7	1222-184	Tie Wrap	4	
8	212059-104	Hose	2	
9	12182-15	Trimlock	4	
10	212062-78	Hose	2	
11	212059-54	Hose	1	
12	212061-52	Hose	1	
13	200B2007-28	Clamp	1	
14	1205-36	Nut	1	
	1209-4	Flatwasher	1	
15	212061-58	Hose	1	
16	212059-68	Hose	1	
17	212062-78	Hose	2	
18	1219-389	Adapter	4	
19	12019-112	Tee	1	
20	12019-453	Tee	1	
21	212110-30	Hose	1	
22	212059-36	Hose	1	
23	212062-22	Hose	2	
24	212378-72	Hose	1	
25	212823	Bracket, Ground Drive Valve	1	
26	1200-59	Capscrew, 3/8C x 1	3	
	1210-20	Lockwasher	3	
	1209-4	Flatwasher	3	
27	212008	Plate, Rotary Manifold	1	
28	1200-59	Capscrew, 3/8C x 1	2	
	1209-4	Flatwasher	2	
29	1200-61	Capscrew, 3/8C x 1-1/4	3	
	1210-20	Lockwasher	3	
	1209-4	Flatwasher	3	
	1205-36	Nut, 3/8C	3	

BASE HYDRAULICS

(2WD & OSC AXLE)

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
30	362 3233	Tee	1	
31	212378-15	Hose	1	
32	12019-140	Tee	1	
33	212378-32	Hose	2	
34	212380-77	Hose	1	
35	12019-71	Tee	1	
36	212110-30	Hose	2	
37	1219-605	Adapter	2	

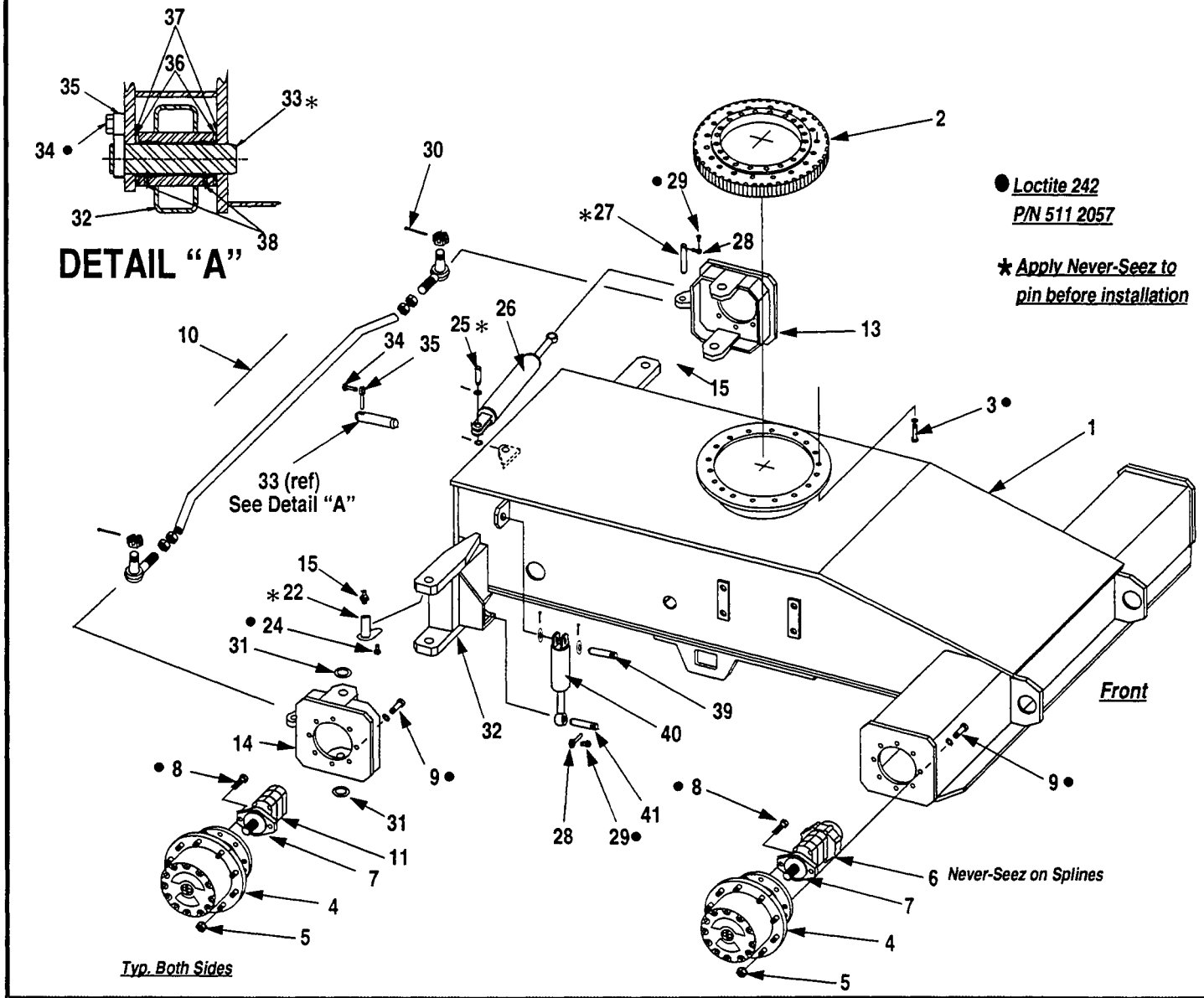
Model CH44C
CH50C

Issued 4-96

OSCILLATING AXLE BASE

(4WD)

Mark Industries



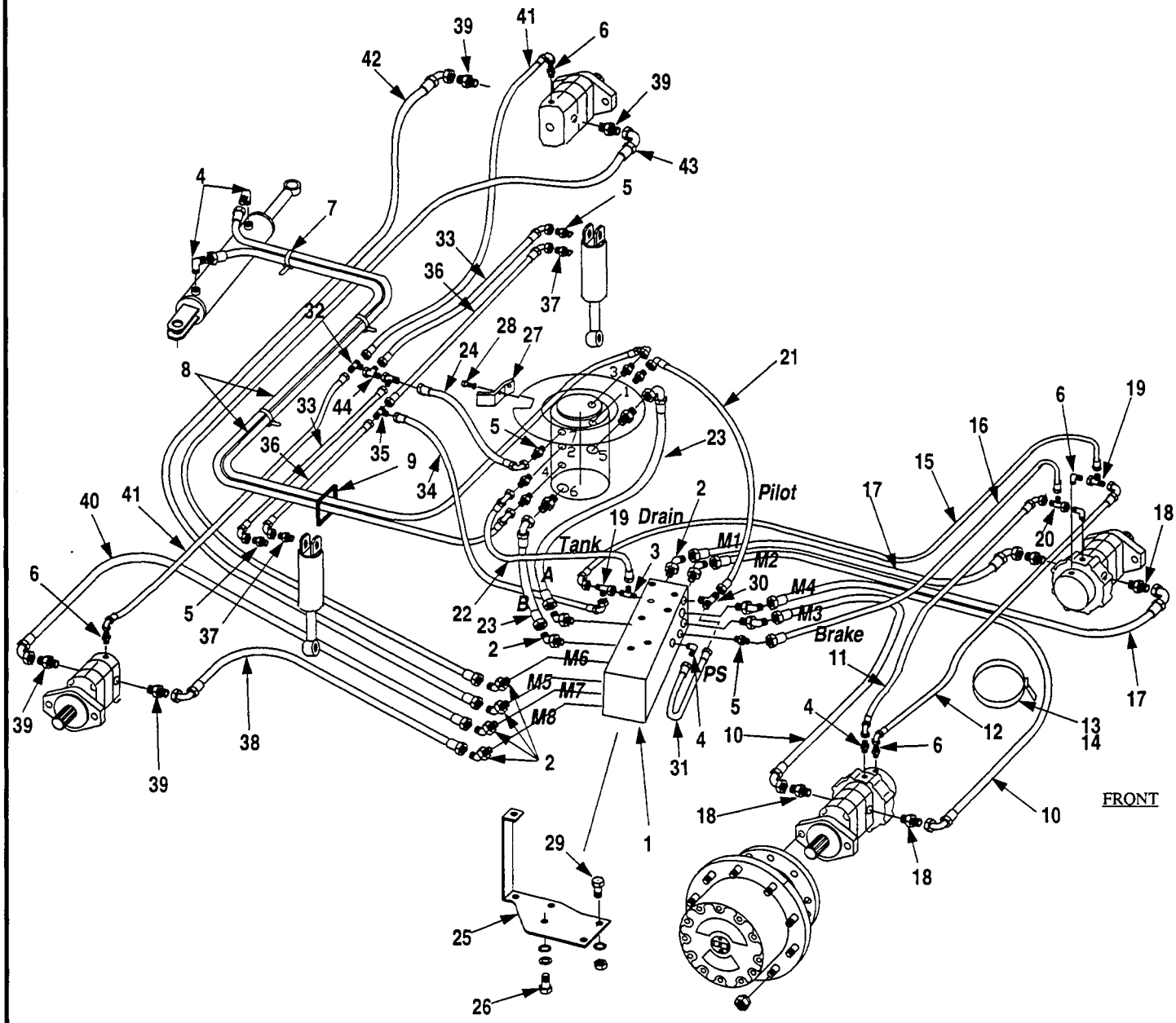
Ref.	Part No.	Description	Qty	Remarks
	212607	Carriage Ass'y, Oscillating Axle (CH44C)	1	Incl. 1 thru 42
	212607-1	Carriage Ass'y, Oscillating Axle (CH50C)	1	Incl. 1 thru 42
1	212510	Carriage Weldment (CH44C)	1	
	212510-1	Carriage Weldment (CH50C)	1	
2	211773	Bearing, Swing	1	
3	1242-94	Capscrew, 5/8C x 3-1/2 Gr. 8	18	To be loctited upon assembly
	1209-48	Flatwasher, 5/8 Gr. 8	18	
4	210859	Torque Hub	4	See Page 3.8
5	160724	Nut, Lug (Wheel)	36	
6	81393	Drive Motor & Parking Brake Ass'y	2	See Pages 3.10 & 3.12
7	460 6309	O-Ring (Motor to Torque Hub Seal)	2	.094 x 4.00
8	1203-220	Capscrew, 1/2C x 1-1/2 12 Pt. Gr. 8	4	Motor to Hub

Ref.	Part No.	Description	Qty	Remarks
9	1242-45	Capscrew, 5/8C X 1-1/2 Gr. 8	32	Hub To Undercarriage
	1209-48	Flatwasher, 5/8C Gr. 8	32	
10	212346-3	Tie Rod Assembly	1	See Page 3.6
11	81394	Drive Motor	2	See Page 3.10
13	212520	Bracket, LH Rear	1	
	212169	Bushing	2	
14	212519	Bracket, RH Rear	1	
	212169	Bushing	2	
15	1213-1	Zerk, Grease	4	
22	212423	King Pin	4	
24	1242-45	Capscrew, 5/8C x 1-1/2 Gr. 8	2	
25	211913	Pin	1	
	1209-30	Flatwasher	2	
	1207-40	Cotter Pin, 1/4 x 1-1/2	2	
26	211758	Cylinder, Steering (Master Level Cylinder)	1	See Section 5
27	211912	Pin	1	Cylinder to LH Spindle
28	211779	Rod Eye	3	
29	1242-134	Capscrew, 3/8C x 1 Gr. 8	3	
30	1207-14	Cotter Pin, 1/8 x 1-1/2	2	Tie Rod
31	212170	Washer, Thrust	4	
32	212511	Weldment, Oscillating Axle	1	
33	212292	Pin, Oscillating Axle Pivot	1	
34	1200-268	Capscrew, 1C x 2-1/4 Gr.8	1	
35	709 1424	Rod Eye	1	
36	212277	Washer, Thrust	2	
37	212290	Shim	2	
38	1213-1	Zerk, Grease	2	
39	212294	Pin, Oscillating Cylinder Base	2	
	1209-31	Washer, Flat	4	
	1207-41	Cotter Pin, 1/4 x 1-3/4	4	
40	212260	Cylinder, Oscillating Axle	2	See Page 7.24
41	212295	Pin, Oscillating Cylinder Eye	2	
42	212347	Hydraulic Assembly, Osc. Axle (4WD)	1	See Page 7.10
43		Tire & Rim Ass'y (Not Shown)	4	See Page 3.13

BASE HYDRAULICS

(4WD & OSC AXLE)

Mark Industries

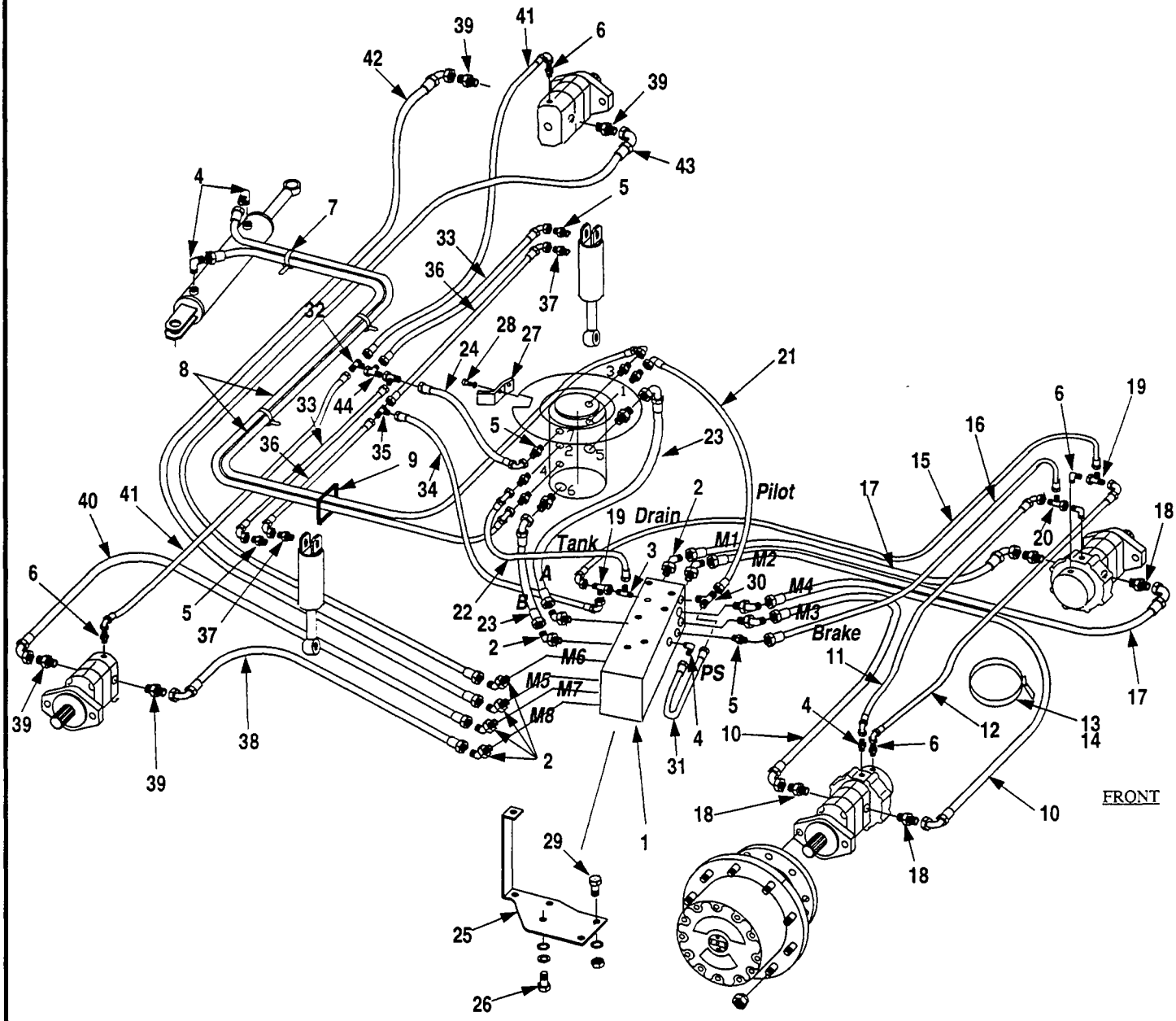


Ref.	Part No.	Description	Qty	Remarks
	212347	Lower Hydraulic Assembly	1	Incl. Items 1 thru 29
1	81446	Valve, Ground Drive	1	See Section 4
2	1219-663	Adapter	10	
3	1219-982	Adapter	1	
4	12019-548	Adapter	5	
5	1219-959	Adapter	1	
6	1219-776	Adapter	5	
7	1222-184	Tie Wrap	4	
8	212059-104	Hose	2	
9	12182-15	Trimlock	4	
10	212062-78	Hose	2	
11	212059-54	Hose	1	
12	212061-52	Hose	1	
13	200B2007-28	Clamp	1	
14	1205-36	Nut	1	
	1209-4	Flatwasher	1	
15	212061-58	Hose	1	
16	212059-68	Hose	1	
17	212062-62	Hose	2	
18	1219-389	Adapter	4	
19	12019-112	Tee	1	
20	12019-453	Tee	1	
21	212110-30	Hose	1	
22	212059-36	Hose	1	
23	212062-22	Hose	2	
24	212378-72	Hose	1	
25	212351	Bracket, Ground Drive Valve	1	
26	1200-59	Capscrew, 3/8C x 1	3	
	1210-20	Lockwasher	3	
	1209-4	Flatwasher	3	
27	212008	Plate, Rotary Manifold	1	
28	1200-59	Capscrew, 3/8C x 1	2	
	1209-4	Flatwasher	2	
29	1200-61	Capscrew, 3/8C x 1-1/4	3	
	1210-20	Lockwasher	3	
	1209-4	Flatwasher	3	
	1205-36	Nut, 3/8C	3	

BASE HYDRAULICS

(4WD & OSC AXLE)

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
30	362 3233	Tee	1	
31	212378-15	Hose	1	
32	12019-140	Tee	1	
33	212378-32	Hose	2	
34	212380-77	Hose	1	
35	12019-71	Tee	1	
36	212110-30	Hose	2	
37	1219-605	Adapter	2	
38	212382-106	Hose	1	
39	1219-802	Adapter	4	
40	212381-102	Hose	1	
41	212383-76	Hose	2	
42	212381-119	Hose	1	
43	212382-136	Hose	1	
44	12019-609	Tee	2	

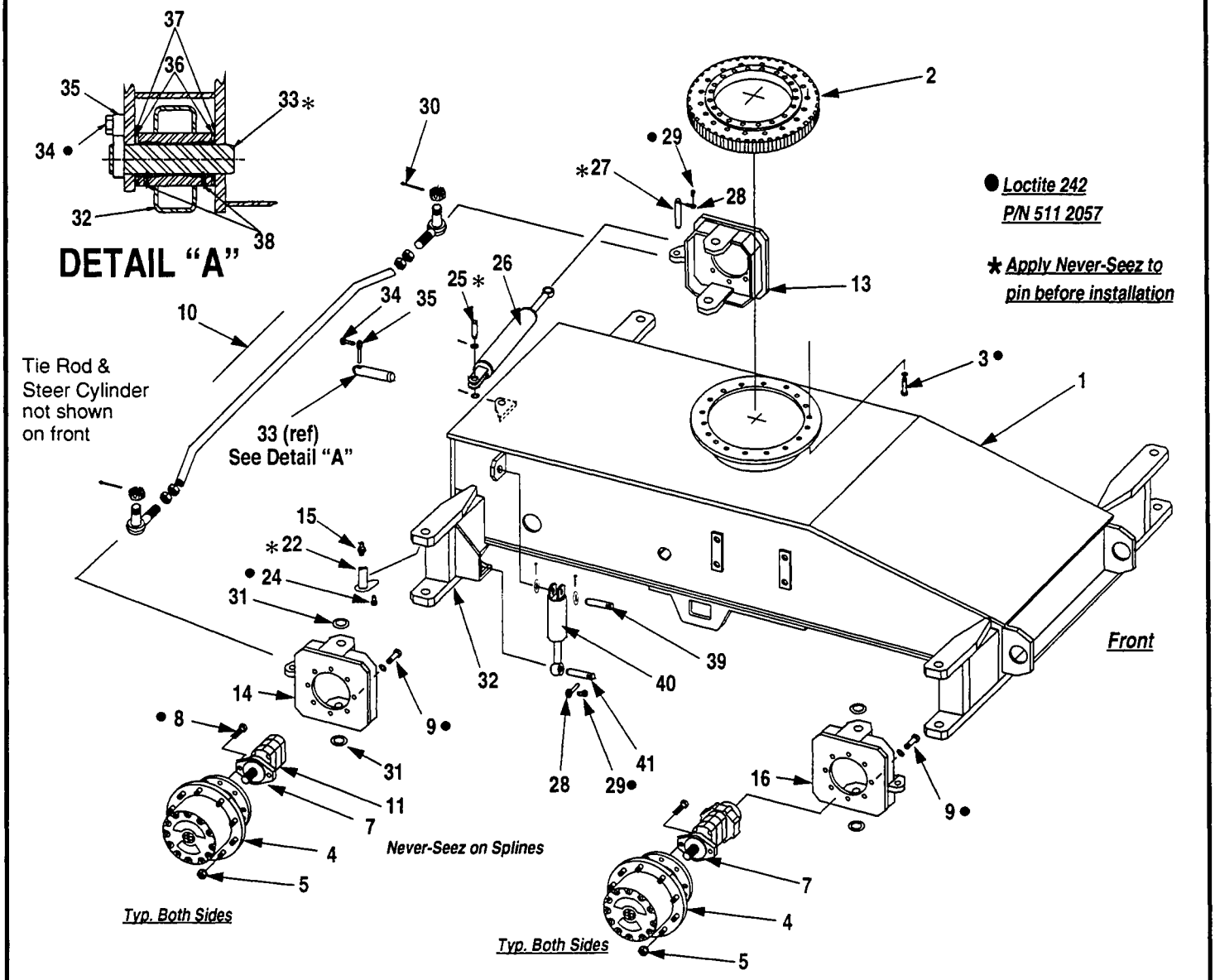
Model CH44C CH50C

Issued 4-96

OSCILLATING AXLE BASE

(4WD & STEER)

Mark Industries



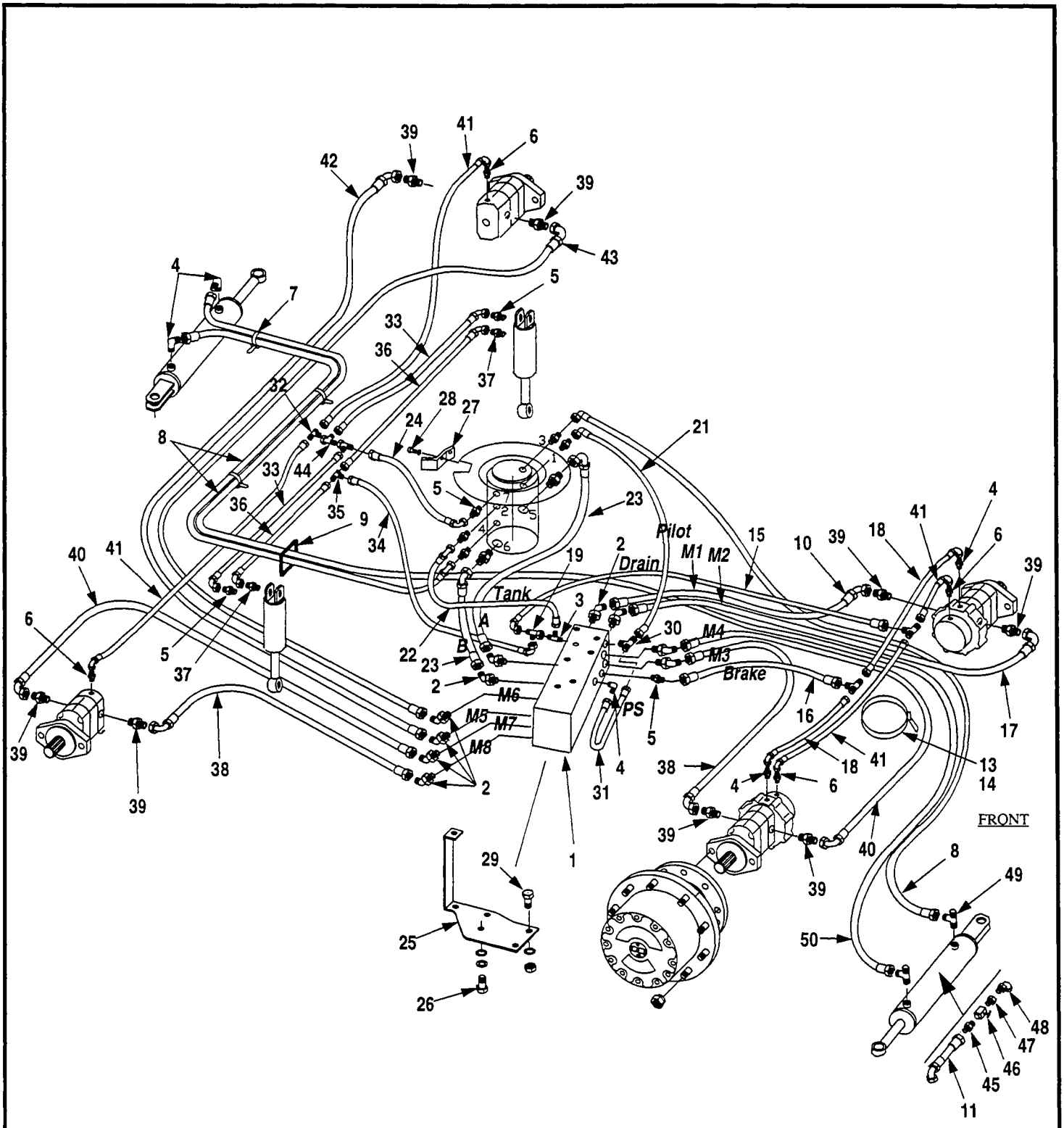
Ref.	Part No.	Description	Qty	Remarks
	212608	Carriage Ass'y, Oscillating Axle (CH44C)	1	Incl. 1 thru 42
	212608-1	Carriage Ass'y, Oscillating Axle (CH50C)	1	Incl. 1 thru 42
1	212837	Carriage Weldment (CH44C)	1	
	212837-1	Carriage Weldment (CH50C)	1	
2	211773	Bearing, Swing	1	
3	1242-94	Capscrew, 5/8C x 3-1/2 Gr. 8	18	To be loctited upon assembly
	1209-48	Flatwasher, 5/8 Gr. 8	18	
4	210859	Torque Hub	4	See Page 3.8
5	160724	Nut, Ball (Wheel)	36	
6	81393	Drive Motor & Parking Brake Ass'y	2	See Pages 3.10 & 3.12
7	460 6309	O-Ring (Motor to Torque Hub Seal)	2	.094 x 4.00
8	1203-220	Capscrew, 1/2C x 1-1/2 12 Pt. Gr. 8	4	Motor to Hub

Ref.	Part No.	Description	Qty	Remarks
9	1242-45	Capscrew, 5/8C X 1-1/2 Gr. 8	32	Hub To Undercarriage
	1209-48	Flatwasher, 5/8C Gr. 8	32	
10	212346-3	Tie Rod Assembly	2	See Page 3.6
11	81394	Drive Motor	2	See Page 3.10
13	212520	Bracket, LH Rear	1	
	212169	Bushing	2	
14	212519	Bracket, RH Rear, LH Front	1	
	212169	Bushing	2	
15	1213-1	Zerk, Grease	4	
16	212839	Bracket, RH Front	1	
	212169	Bushing	2	
22	212423	King Pin	8	
24	1242-45	Capscrew, 5/8C x 1-1/2 Gr. 8	2	
25	211913	Pin	2	
	1209-30	Flatwasher	2	
	1207-40	Cotter Pin, 1/4 x 1-1/2	2	
26	211758	Cylinder, Steering (Master Level Cylinder)	1	See Section 5
27	211912	Pin	2	Cylinder to LH Spindle
28	211779	Rod Eye	3	
29	1242-134	Capscrew, 3/8C x 1 Gr. 8	3	
30	1207-14	Cotter Pin, 1/8 x 1-1/2	2	Tie Rod
31	212170	Washer, Thrust	4	
32	212511	Weldment, Oscillating Axle	1	
33	212292	Pin, Oscillating Axle Pivot	1	
34	1200-268	Capscrew, 1C x 2-1/4 Gr.8	1	
35	709 1424	Rod Eye	1	
36	212277	Washer, Thrust	2	
37	212290	Shim	2	
38	1213-1	Zerk, Grease	2	
39	212294	Pin, Oscillating Cylinder Base	2	
	1209-31	Washer, Flat	4	
	1207-41	Cotter Pin, 1/4 x 1-3/4	4	
40	212260	Cylinder, Oscillating Axle	2	See Page 7.24
41	212295	Pin, Oscillating Cylinder Eye	2	
42	212949	Hydraulic Assembly, Osc. Axle (4WD & 4WS)	1	See Page 7.16
43		Tire & Rim Ass'y (Not Shown)	4	See Page 3.13

BASE HYDRAULICS

(4WD & OSC AXLE & 4WS)

Mark Industries

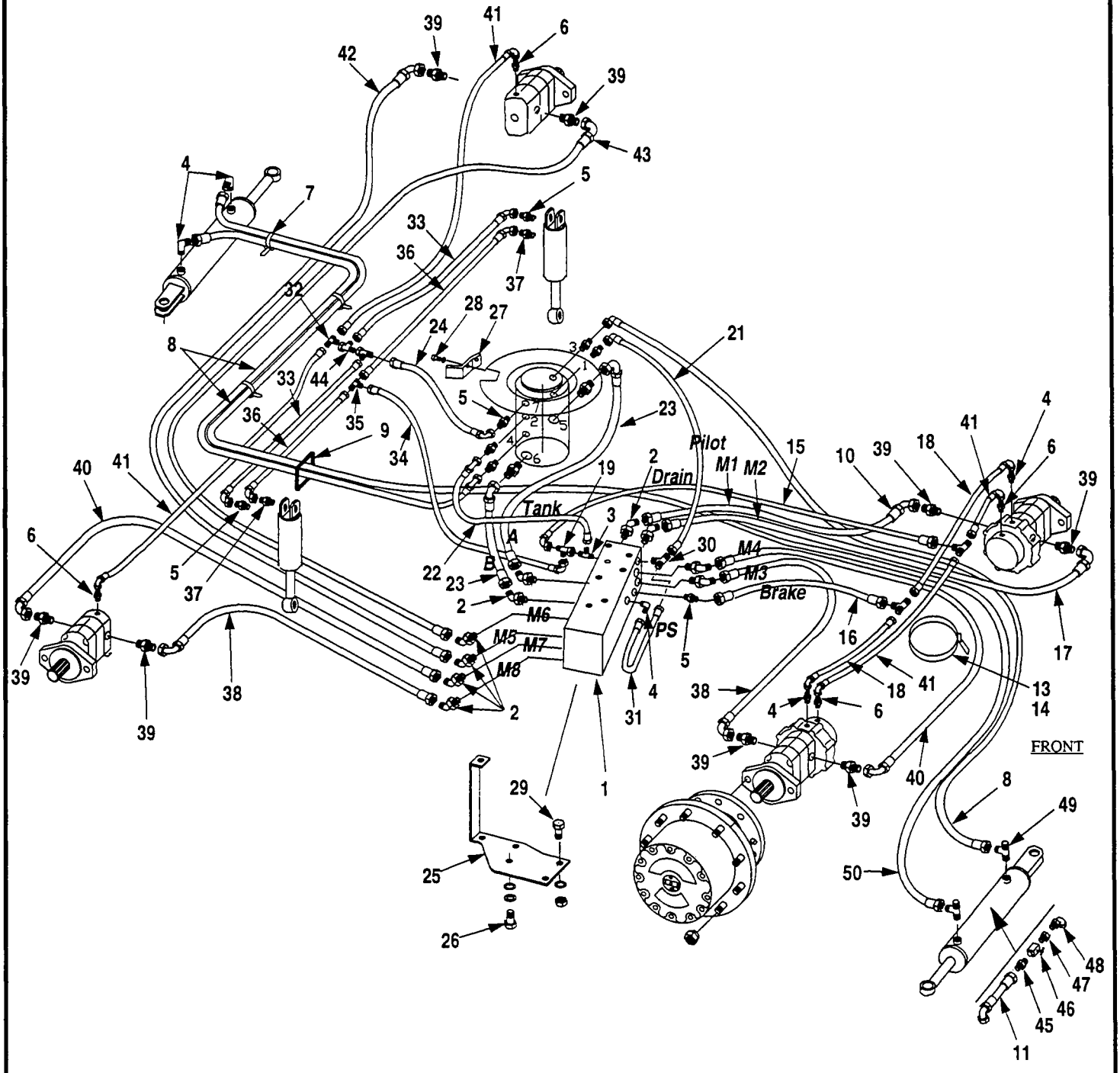


Ref.	Part No.	Description	Qty	Remarks
	212949	Lower Hydraulic Assembly	1	Incl. Items 1 thru 29
1	81446	Valve, Ground Drive	1	See Section 4
2	1219-663	Adapter	6	
3	1219-982	Adapter	1	
4	12019-548	Adapter	5	
5	1219-959	Adapter	1	
6	1219-776	Adapter	3	
7	1222-184	Tie Wrap	4	
8	212059-104	Hose	2	
9	12182-15	Trimlock	4	
10	212382-84	Hose	1	
11	212383-8	Hose	1	
12	212061-52	Hose	1	
13	200B2007-28	Clamp	1	
14	1205-36	Nut	1	
	1209-4	Flatwasher	1	
15	212061-58	Hose	1	
16	212060-54	Hose	1	
17	212381-88	Hose	1	
18	212378-77	Hose	2	
19	12019-112	Tee	1	
20	12019-453	Tee	1	
21	212110-30	Hose	1	
22	212059-36	Hose	1	
23	212062-22	Hose	2	
24	212062-28	Hose	1	
25	212351	Bracket, Ground Drive Valve	1	
26	1200-59	Capscrew, 3/8C x 1	3	
	1210-20	Lockwasher	3	
	1209-4	Flatwasher	3	
27	212008	Plate, Rotary Manifold	1	
28	1200-59	Capscrew, 3/8C x 1	2	
	1209-4	Flatwasher	2	
29	1200-61	Capscrew, 3/8C x 1-1/4	3	
	1210-20	Lockwasher	3	
	1209-4	Flatwasher	3	
	1205-36	Nut, 3/8C	3	

BASE HYDRAULICS

(4WD & OSC AXLE & 4WS)

Mark Industries

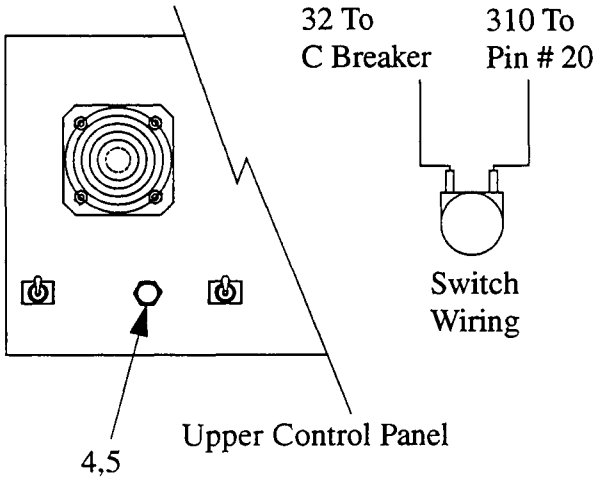


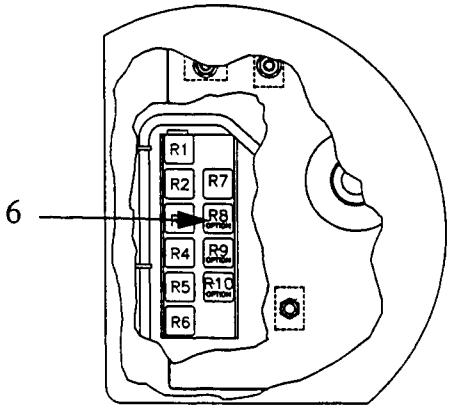
Ref.	Part No.	Description	Qty	Remarks
30	362 3233	Tee	1	
31	212378-15	Hose	1	
32	12019-140	Tee	1	
33	212378-32	Hose	2	
34	212380-77	Hose	1	
35	12019-71	Tee	1	
36	212110-30	Hose	2	
37	1219-605	Adapter	2	
38	212382-106	Hose	1	
39	1219-802	Adapter	8	
40	212381-102	Hose	1	
41	212383-76	Hose	4	
42	212381-119	Hose	1	
43	212382-136	Hose	1	
44	12019-609	Tee	2	
45	1219-801	Adapter	1	
46	20357	Valve	1	
47	12019-678	Adapter	1	
48	1219-887	Adapter	1	
49	12019-427	Tee	2	
50	212113-189	Hose	1	

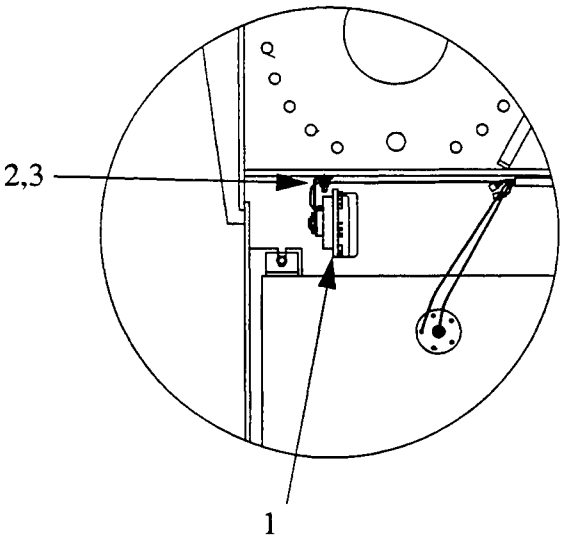
Model CH44C
CH50C
Issued 4-96

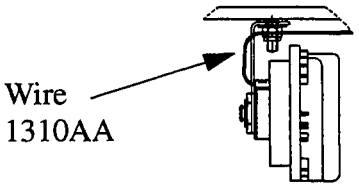
WARNING HORN

Mark Industries

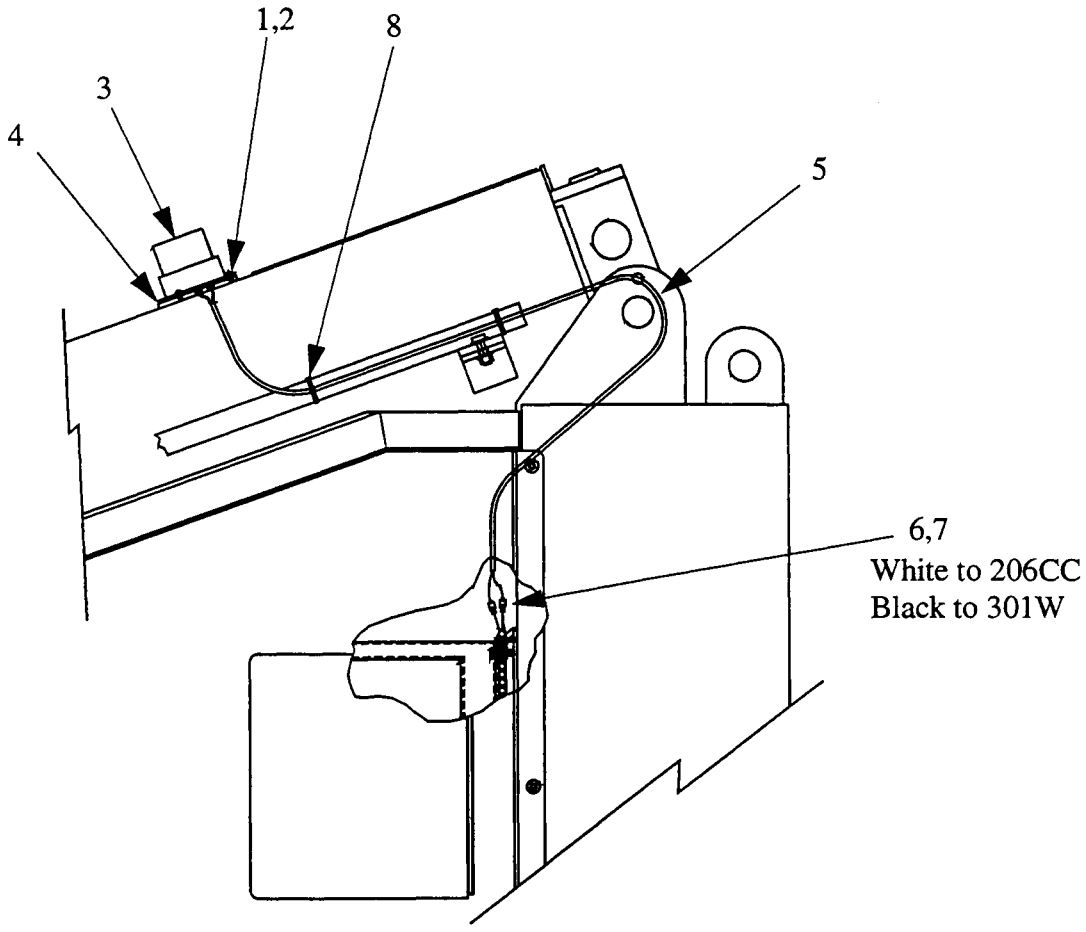








Ref.	Part No.	Description	Qty	Remarks
	212297-1	Warning Horn Assembly	Ref.	
1	70249	Horn	1	
2	1205-34	Nut, lock .31	1	
3	1209-3	Washer, plain .31	2	
4	4011	Push Button Switch	1	
5	70373	Push Button Boot	1	
6	441 6828	Relay	1	



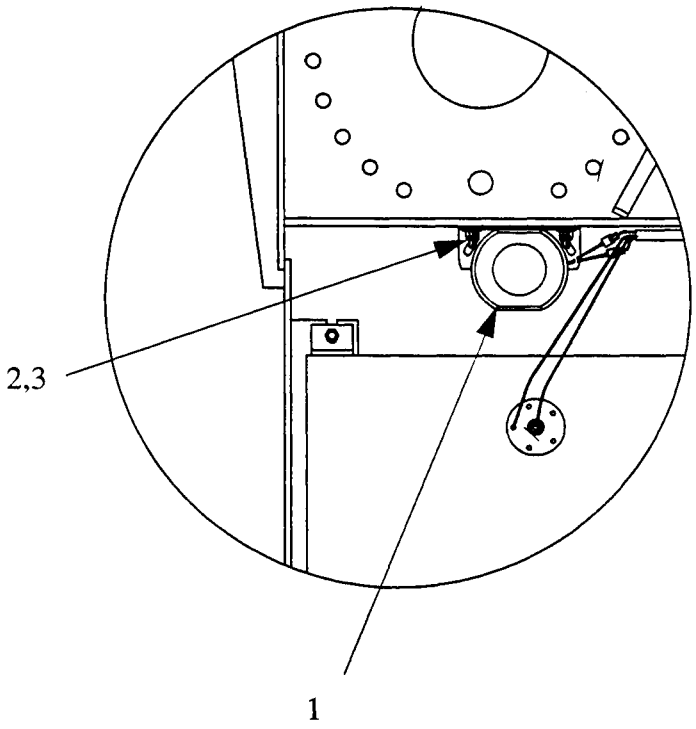
Ref.	Part No.	Description	Qty	Remarks
	212297-2	Amber Beacon Assembly	Ref.	
1	1210-7	Washer, Lock #10	3	
2	1202-4	Capscrew	3	
3	441 6844	Amber Beacon	1	
4	212293	Plate	1	
5	70767	Cable (10 feet)	1	
6	70500	Female Spade	2	
7	70501	Male Spade	2	
8	1222-202	Plastic Tie	2	

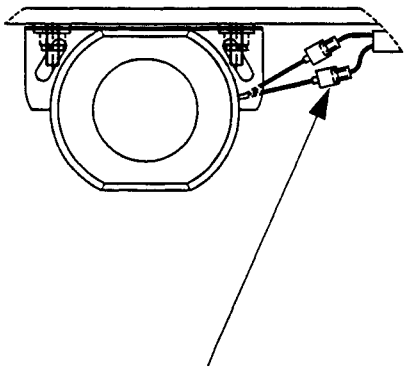
Model CH44C
CH50C

Issued 4-96

All Motion Alarm & Travel Warning Alarm

Mark Industries

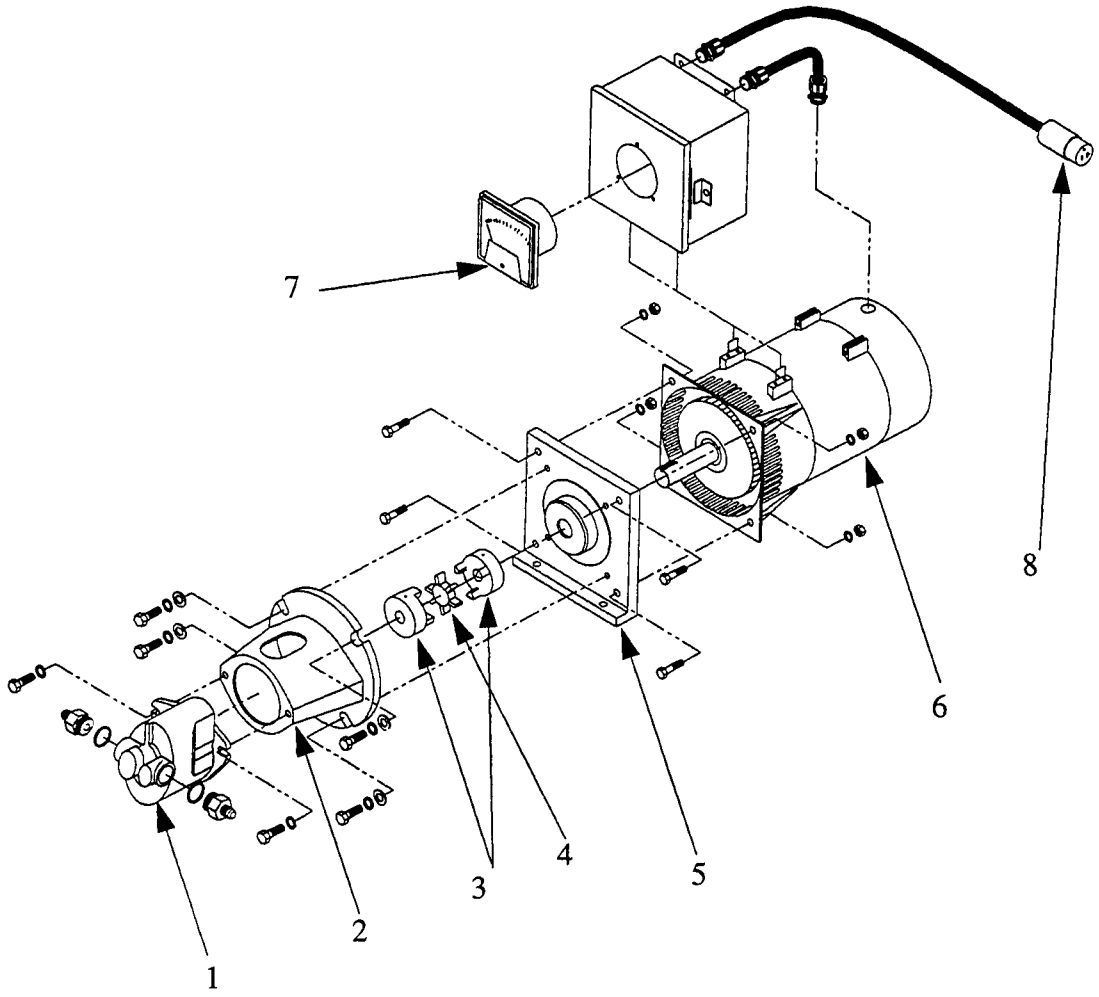




All Motion Alarm
Red to 28AA
Black to 301V

Travel Warning Alarm
Red to 206
Black to 301V

Ref.	Part No.	Description	Qty	Remarks
	212292-3	All Motion Alarm	Ref.	
	212292-4	Travel Warning Alarm	Ref.	
1	1223-716	Back-Up Alarm	1	
2	1205-34	Nut, Lock .31	2	
3	1209-3	Washer, Plain .31	4	



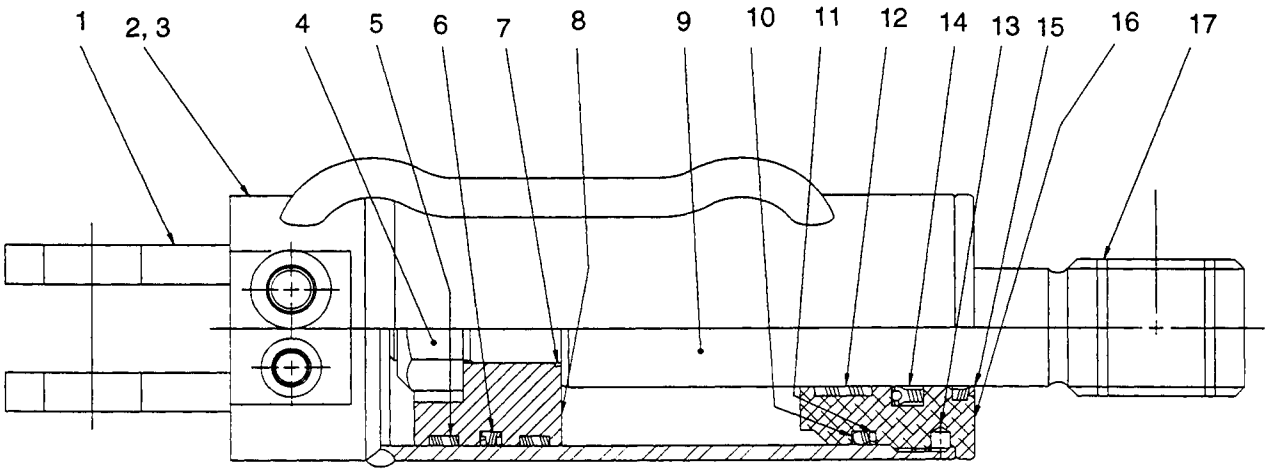
Ref.	Part No.	Description	Qty	Remarks
	212498	Generator Assembly	Ref.	
1	600841	Motor	1	
2	600842	Flange	1	
3	600843	Jaw	2	
4	600844	Spider	1	
5	600845	Adapter	1	
6	600846	Generator	1	
7	600847	Voltmeter	1	
8	600848	Receptical	1	

Model CH44C
CH50C

Issued 4-96

OSCILLATING AXLE CYLINDER

Mark Industries



Ref.	Part No.	Description	Qty	Remarks
	212260	Cylinder, Oscillating Axle (Rosenboom)	Ref.	Incl. items 1 thru 17
	69332	Seal Kit	Ref.	Incl. Items w/asterisk *
1	600680	Tube Weldment	1	
2	600681	Bleed Screw	1	
3	69333	Valve, Check	1	
4	68956	Nut, Lock	1	
5	*	Wear Band	2	*
6	*	T-Seal	1	*
7	*	O-Ring	1	*
8	68957	Piston	1	
9	600682	Rod Weldment	1	
10	*	O-Ring	1	*
11	*	Backup Ring	1	*
12	*	Wear Band	2	*
13	68959	Locking Insert	1	
14	*	Poly Pak	1	*
15	*	Rod Wiper	1	*
16	68960	Head Gland	1	*
17	600683	Super Oilite Bearing	1	

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ALPHABETICAL LIST

Mark Industries

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