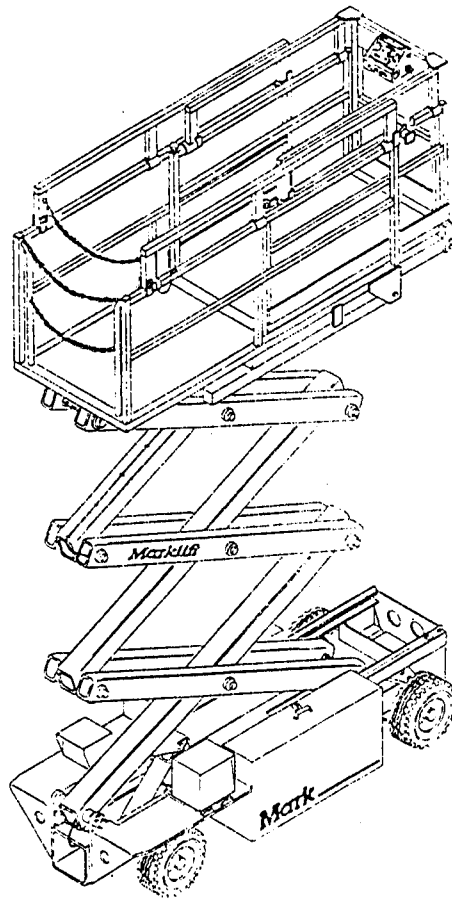


The Marklifts.®

A Product of Mark Industries

SELF-PROPELLED SCISSOR OPERATION MAINTENANCE AND PARTS MANUAL



Shown: J19EP

**MODELS:
J14, J19 & J19EP**

FIRST EDITION: October 1989



Mark Industries

P.O. Box 2255
Brea, California 92622
205 South Puente Street, Brea, California 92621
(714) 879-MARK, FAX (714) 879-8884

17218

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL



TITLE 8 DIVISION OF INDUSTRIAL SAFETY 358.38.113 (Register 73, No. 30—7-28-73)

Article 86. Provisions for Preventing Accidents Article 86. Provision for Preventing Accidents Due to Proximity to Overhead Lines

2946. Provisions for Preventing Accidents Due to Proximity to Overhead Lines.

(a) General. No person, firm, or corporation, or agent of same, shall require or permit any employee to perform any function in proximity to energized high-voltage lines; to enter upon any land, building, or other premises and thereto engage in any excavation, demolition, construction, repair, or other operation; or to erect, install, operate, or store in or upon such premises any tools, machinery, equipment, materials, or structures (including scaffolding, house moving, well drilling, pile driving, or hoisting equipment) unless and until danger from accidental contact with said high-voltage lines has been effectively guarded against.

(b) Clearances or Safeguards Required. Except where electrical distribution and transmission lines have been de-energized and visibly grounded or effective barriers have been erected to prevent physical and arcing contacts with the high-voltage lines, the following provisions shall be met:

(1) Over Lines. The operation, erection, or handling of tools, machinery, apparatus, supplies, or materials, or any part thereof, over energized high-voltage lines shall be prohibited.

(2) Equipment and Materials in Use. The operation, erection, or handling of tools, machinery, equipment, apparatus, materials, or supplies, or any part thereof within the minimum clearances from energized lines set forth in Table X shall be prohibited.

TABLE X Required Clearances from Overhead High-Voltage Lines. Table with 2 columns: Nominal Voltage (Phase to Phase) and Minimum Required Clearance (Feet). Rows include voltage ranges from 750-50,000 to over 550,000-1,000,000 with corresponding clearance values from 10 to 42 feet.

(3) TRANSPORTATION OR TRANSIT. The transportation or transit of any tool, machinery, equipment, or apparatus, or the moving of any house or other building in proximity to overhead high-voltage lines shall be expressly prohibited if at any time during such transportation or transit such tool, machinery, equipment, apparatus, or building, or any part thereof, can come closer to high-voltage lines than the minimum clearances set forth in Table Y.



1. **STARTING**

Turn power switch at ground control station to "ON". Position selector switch to "AERIAL". Enter the platform, **MAKE SURE ENTRY CHAIN OR BAR IS SECURE AFTER ENTERING PLATFORM.** Pull open the red emergency stop switch cover located on the top right of the aerial control box. Turn on power switch to activate aerial controls and warning devices.

2. **DRIVE**

Forward and reverse drive is done from the aerial control box only. The MARKLIFT is equipped with a high and low speed for both forward and reverse drive. Rotate the knob clockwise for reverse low or high speed. Rotate the knob counter clockwise for forward, low or high speed. Low speed will automatically cut in whenever the platform is raised over one half of its rated height.

3. **STEERING**

The unit may be steered from the aerial control panel only. Push the toggle switch to the left to turn the front wheels to the left. Pushing the switch to the right will cause the wheels to turn to the right. The toggle switch is a momentary switch which will automatically return to the off position when released. The wheels will remain at an angle until the toggle switch is moved in another direction.

4. **RAISE PLATFORM**

To raise or lower the platform from the ground control, set selector switch to the "Ground Control" position, then push the toggle switch up or down.

To operate from the aerial control box, position the selector switch to the "Aerial" position. Raise or lower the platform by operating the "Lift/Lower" toggle switch. The toggle switch is self centering. When it is released it will automatically set itself to center (the neutral position). The unit will remain stationary.



DRIVE MOTOR

Will not run.

- A. Check ground control box circuit breaker.
- B. Check for low battery reading.
- C. Refer to your local service facility.

Unit will not go into high speed.

- A. Check for energizing hi speed solenoid valve.
- B. Refer to your local service facility.

Dies under load.

- A. Check hydraulic pressure.
- B. Refer to your local service facility.

DRIVE

- A. Make sure hydraulic system is up to recommended pressure.
- B. Refer to your local service facility.

HYDRAULIC WHEEL DRIVE MOTOR

Turns wheel while unloaded, but slows down or stops when load is applied.

- A. Check hydraulic high pressure port with 3000 PSI gauge.
- B. Refer to your local service facility.

HYDRAULIC PUMP

Pump producing excessive noise.

- A. Check suction hose from tank to pump for kinks.
- B. Check hydraulic oil level (slight gauge on tank.)
- C. Check suction line fittings for tightness.
- D. Check oil. See hydraulic fluid table.
- E. Refer to your local service facility.

LIFT

Functions will not operate from aerial control console.

- A. Check "Aerial/Ground" selector switch.
- B. Check for loose wire in aerial control box.
- C. Solenoid dump valve.

Functions will not operate from ground control box.

- A. Check position of "Aerial/Ground" box selector switch.
- B. Check for loose wire in ground control box.
- C. Refer to your local service facility.

THIS PARTS CHAPTER CONTAINS:

SECTION 1 THE MARKLIFT PARTS CATALOG

<u>PAGE NO.</u>	<u>TITLE</u>
1	TABLE OF CONTENTS (PARTS ONLY)
4	HOW TO USE PARTS CATALOG
7	HOW TO ORDER PARTS

SECTION 2 FINAL ASSEMBLY

<u>FIG. NO.</u>	<u>TITLE</u>
1	FINAL ASSEMBLY J14
1A	FINAL ASSEMBLY J19
1B	FINAL ASSEMBLY J19EP
2	DECAL SET J14
2A	DECAL SET J19
2B	DECAL SET J19EP
3	UPPER CONTROL BOX ASSEMBLY J14
3A	UPPER CONTROL BOX ASSEMBLY J19
3B	UPPER CONTROL BOX ASSEMBLY J19EP

SECTION 3 FRAME ASSEMBLIES

<u>FIG. NO.</u>	<u>TITLE</u>
1	FRAME ASSEMBLY J14
1A	FRAME ASSEMBLY J19, J19EP
2	DRIVE TIRE AND WHEEL ASSEMBLY J14
2A	DRIVE TIRE AND WHEEL ASSEMBLY J19, J19EP
3	IDLER TIRE AND WHEEL ASSEMBLY J14
3A	IDLER TIRE AND WHEEL ASSEMBLY J19, J19EP
4	BATTERY CHARGER ASSEMBLY
5	GROUND CONTROL ASSEMBLY
6	MOTOR AND PUMP ASSEMBLY
7	CONTROL VALVE ASSEMBLY
8	MOTOR DRIVE ASSEMBLY
9	TIE ROD ASSEMBLY J14
9A	TIE ROD ASSEMBLY J19, J19EP



Mark Industries

ILLUSTRATED

PARTS CATALOG

FINAL ASSEMBLY J14

PARTS
SECT. 2
FIG. 1
PAGE 3

ITEM	PART NUMBER	DESCRIPTION	UNIT PER ASSY.
		1234567	
-24	130199	.ELECTRICAL SCHEMATIC (See Schematic Section for Details)	1
-25	2673	.PAINT, SPRAY WHITE KITKOTE	1
-26	65368	.PAINT, SPRAY TRUE BLUE	1
-27	16608	.PAINT, WHITE	2 GAL.
-28	65389	.PAINT, BLUE	½ GAL.
-29	65116	.HYDRAULIC OIL	4.3 GAL.
30	131297	.ASSEMBLY, 110 VAC BOX (See Sec. 2, Fig. 4 For Details)	1



ITEM	PART NUMBER	DESCRIPTION	UNIT PER ASSY.
		1234567	
24	60353	.SCREW, HEX HEAD CAP (attaching part)	2
25	60711	.LOCKNUT (attaching part)	2
26	130927	.CONTAINER, PLASTIC	1
27	65867	.CLAMP (attaching part)	2
28	60353	.SCREW, HEX HEAD CAP (attaching part)	2
29	60711	.NUT, HEX (attaching part)	2
30	17410	.OPERATION AND SAFETY HANDBOOK	1
31	65842	.CAP, ANTI-ROLL	2
32	764	.CLAMP, RUBBER (attaching part)	9
33	60353	.SCREW, HEX HEAD CAP (attaching part)	9
34	70173	.SWITCH, LIMIT	1
35	62620	.SCREW, MACH.	2
36	70235	.LEVER, LIMIT SWITCH	1
37	70016	.GROMMET	1
-38	2673	.PAINT, STRAY KITKOTE	1
-39	65368	.PAINT, STRAY, TRUE BLUE	1
-40	16608	.PAINT, WHITE	2 GAL.
-41	65389	.PAINT, BLUE	½ GAL.
-42	130876	.ELECTRICAL SCHEMATIC (See Schematic Sect. for Details)	1
-43	130181	.HYDRAULIC SCHEMATIC (See Schematic Sect. for Details)	1
-44	65116	.HYDRAULIC OIL	6.5
-45	130331	.FOOT STEP, ANTI-SKID	2
-46	130595	.FOOT STEP, ANTI-SKID	2
-47	255	.CABLE TIE, LARGE	7
48	131297	.ASSEMBLY, 110 VAC BOX (See Sec. 2 Fig. 4 For Details)	1



Mark Industries

ILLUSTRATED

PARTS CATALOG

UPPER CONTROL BOX ASSEMBLY J14

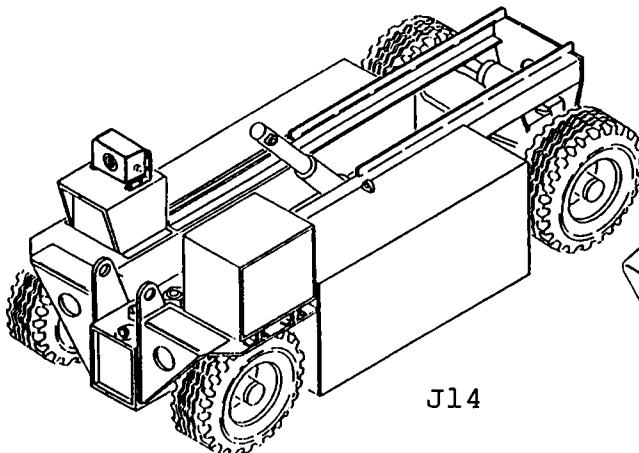
PARTS
SECT. 2
FIG. 3
PAGE 4

ITEM	PART NUMBER	DESCRIPTION	UNIT PER ASSY.
		1234567	
26	61711	.SCREW, SELF TAPPING	4
27	4045	.DIODE	2
28	117-D	.CONNECTOR, BUTT	1
29	117-C	.TERMINAL, RING	2
30	117-C	.TERMINAL, RING	10
31	117-C	.TERMINAL, RING	8
32	16228-1	.TERMINAL, RING	14
-33	70233	.WIRE	5 FT.
-34	255	.CABLE TIE, LARGE	2
-35	256	.CABLE TIE, SMALL	10

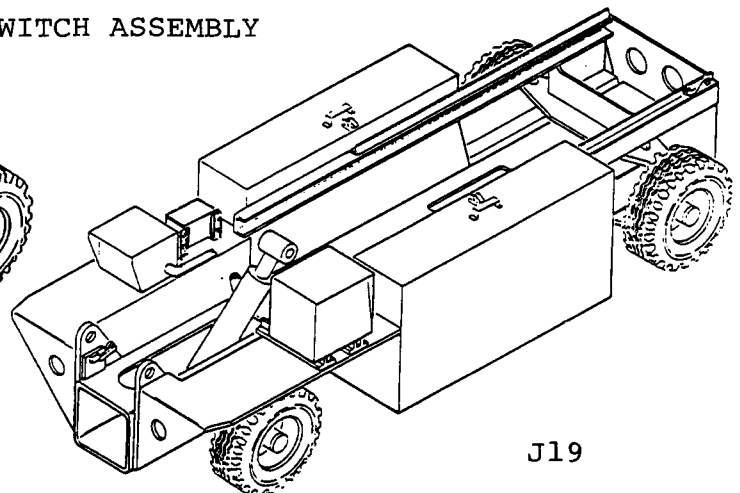
THE MARKLIFT FRAME ASSEMBLY

THIS SECTION 3 CONTAINS THE FOLLOWING FIGURES:

<u>FIGURE NO.</u>	<u>TITLE</u>
1	FRAME ASSEMBLY J14
1A	FRAME ASSEMBLY J19, J19EP
2	DRIVE TIRE AND WHEEL ASSEMBLY J14
2A	DRIVE TIRE AND WHEEL ASSEMBLY J19, J19EP
3	IDLER TIRE AND WHEEL ASSEMBLY J14
3A	IDLER TIRE AND WHEEL ASSEMBLY J19, J19EP
4	BATTERY CHARGER ASSEMBLY
5	GROUND CONTROL BOX ASSEMBLY
6	MOTOR AND PUMP ASSEMBLY
7	CONTROL VALVE ASSEMBLY
8	MOTOR DRIVE ASSEMBLY
9	TIE ROD ASSEMBLY J14
9A	TIE ROD ASSEMBLY J19, J19EP
10	STEERING CYLINDER ASSEMBLY J14
10A	STEERING CYLINDER ASSEMBLY J19, J19EP
11	DRIVE MOTOR AND PARKING BRAKE ASSEMBLY
12	LIFT CYLINDER ASSEMBLY
13	BATTERY CABLE KIT
14	HYDRAULIC HOSE DIAGRAM J14
14A	HYDRAULIC HOSE DIAGRAM J19, J19EP
15	110 VAC BOX ASSEMBLY
16	TILT SWITCH ASSEMBLY



J14



J19

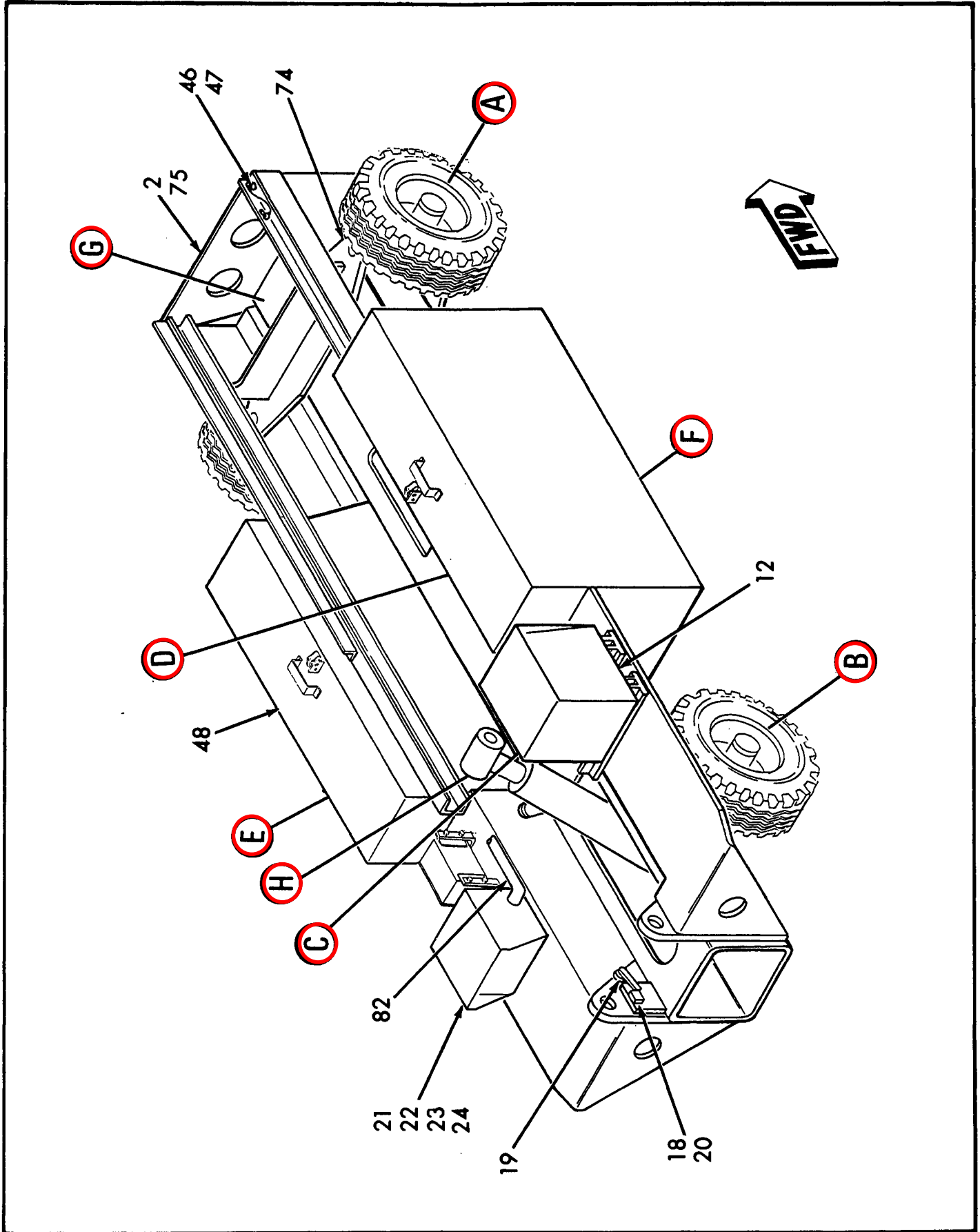


Mark Industries

ILLUSTRATED
PARTS CATALOG

FRAME ASSEMBLY J19, J19EP

PARTS
SECT. 3
FIG. 1A
PAGE 1



REV.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL



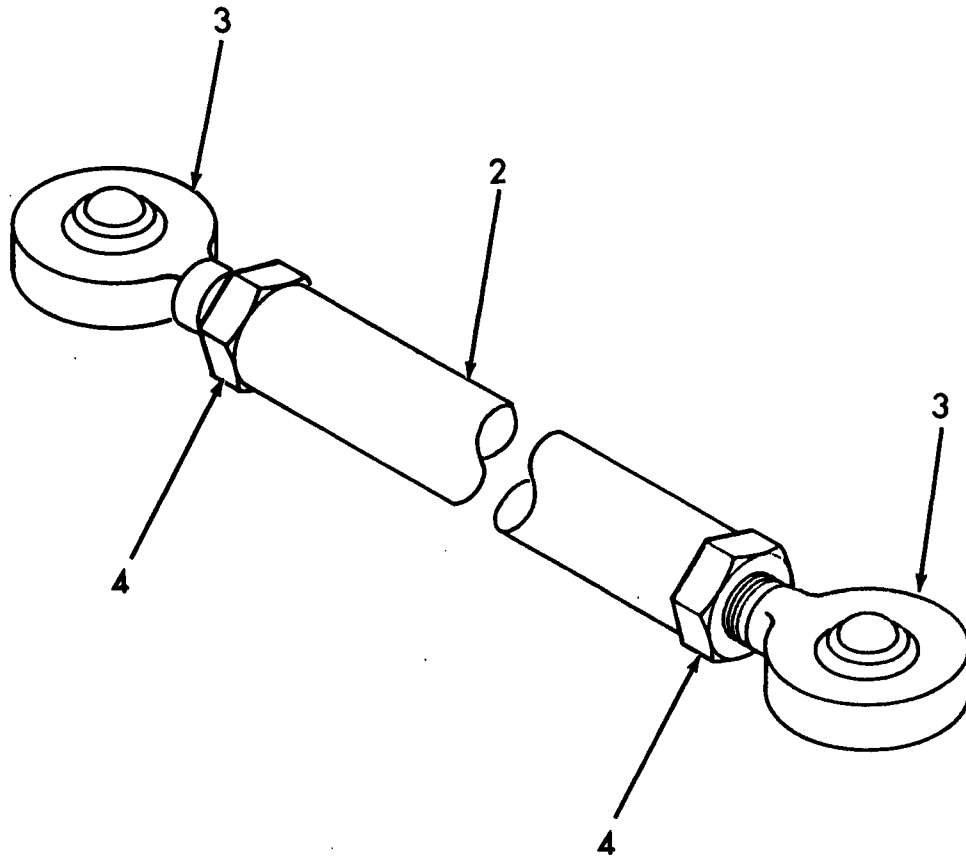
ITEM	PART NUMBER	DESCRIPTION 1234567	UNIT PER ASSY.
69	130583	.ASSEMBLY, LIFT CYLINDER (See Sect. 3, Fig. 12A for Details)	1
70	130231	.KIT, BATTERY CABLE (See Sect. 3, Fig. 13 for Details)	1
71	63302	.WASHER, LOCK (attaching part)	1
72	60324	.SCREW, CAP (attaching part)	1
73	61246	.NUT, LOCK (attaching part)	8
74	411-25	.RUBBER, MOLDING	2
75	130588	.DIAGRAM, HYDRAULIC HOSE (See Sect. 3, Fig. 14A for Details)	1
76	131092	.PIN, FRAME AND ARM	1
77	64206	.PIN, ROLL	1
78	130807	.SPACER, OUTER	1
79	61950	.SCREW, CAP (attaching part)	2
80	131094	.PLATE, LOCK	1
81	54200	.PLUG, MAGNETIC	1
82	130600-10	.CABLE, CONDUCTOR	1
83	63302	.WASHER, LOCK (attaching part)	2
84	65103	.FITTING, GREASE	1



GROUND CONTROL BOX ASSEMBLY

ITEM	PART NUMBER	DESCRIPTION	UNIT PER ASSY.
		1234567	
-1	130187	ASSEMBLY, GROUND CONTROL (See Sect. 3, Fig. 1 or 1A for NHA)	REF
2	130129	.MACHINING, GROUND CONTROL BOX	1
3	130128	.COVER	1
4	61711	.SCREW (attaching part)	8
5	130201	.DECAL, GROUND CONTROL BOX	1
6	2717	.SWITCH, IGNITION	1
7	20481	.SWITCH, TOGGLE	1
8	16260	.SWITCH, TOGGLE	1
9	20562	.BREAKER, CIRCUIT	1
10	130193	.ASSEMBLY, TILT SWITCH (See Sect. 3, Fig. 16 for Details)	1
11	60319	.SCREW, CAP (attaching part)	2
12	63301	.WASHER, LOCK (attaching part)	4
13	60701	.NUT, HEX (attaching part)	6
14	70306	.RELAY, DELAY	1
15	61728	.SCREW, SELF-TAPPING (attaching part)	1
16	496-A	.TERMINAL, PUSH-ON	4
17	4027	.BLOCK, TERMINAL	16
18	117-A	.END, TERMINAL BLOCK	2
19	62612	.SCREW, RD HD SLOTTED MACH. (attach. part)	3
20	61502	.NUT (attaching part)	4
21	63312	.WASHER, LOCK (attaching part)	4
22	117-K	.CONNECTOR, RING	4
23	117-C	.CONNECTOR, RING	21
-24	70233	.WIRE, WHITE (9 FT)	AR

TIE ROD ASSEMBLY J14



ITEM	PART NUMBER	DESCRIPTION	UNIT PER ASSY.
		1234567	
-1	130163	ASSEMBLY, TIE ROD (See Sect. 3, Fig. 1 for NHA)	REF
2	130303	.ROD, TIE	1
3	2274	.END, ROD	2
4	60901	.NUT, JAM	2



Mark Industries

ILLUSTRATED

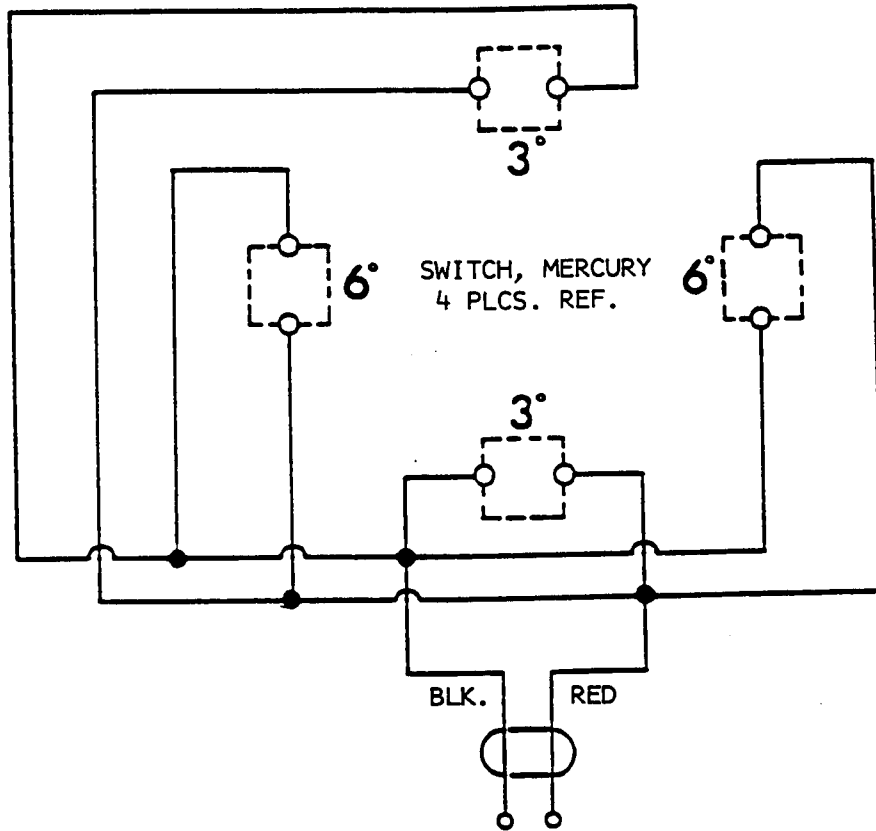
PARTS CATALOG

LIFT CYLINDER ASSEMBLY J14

PARTS
SECT. 3
FIG. 12
PAGE 3

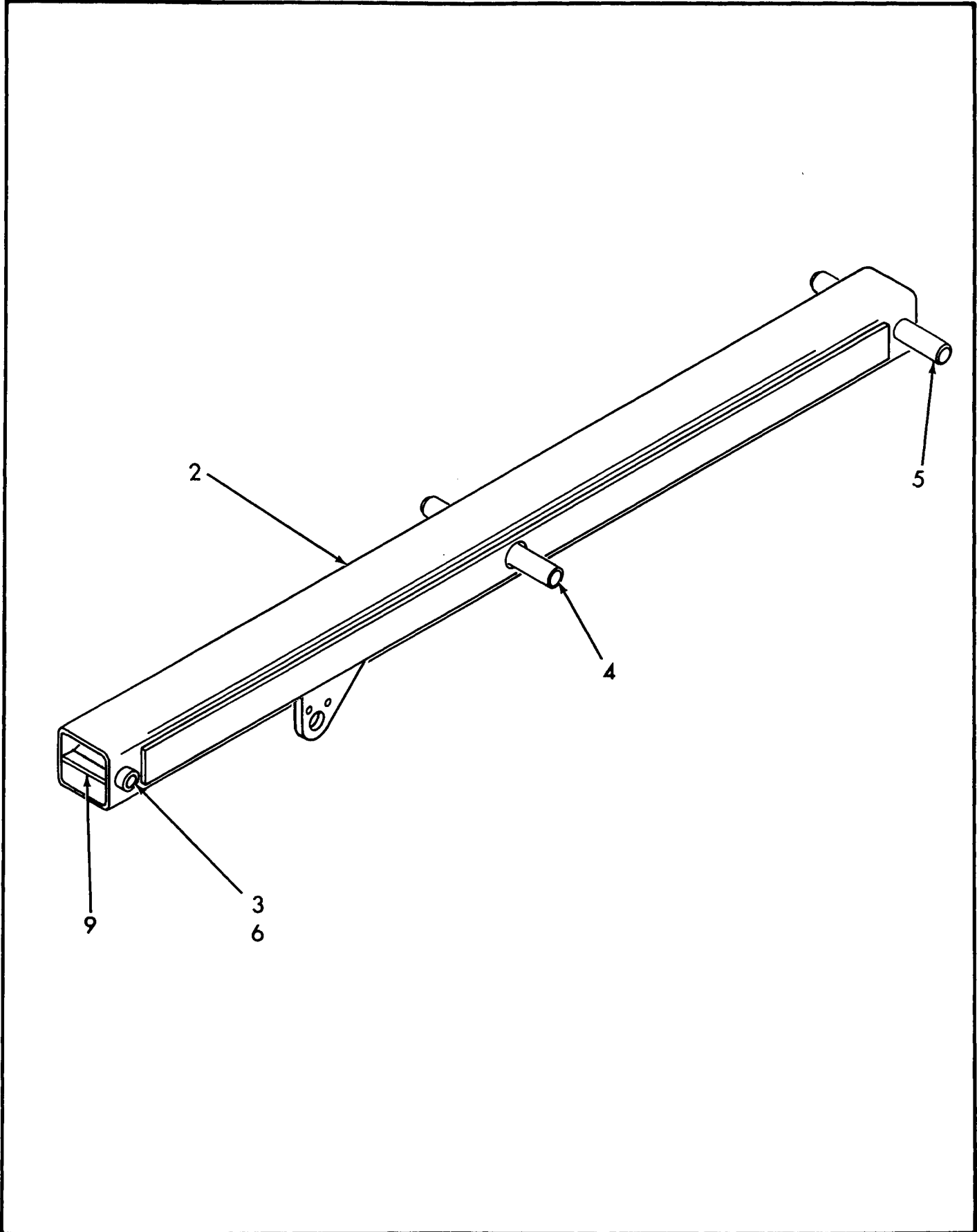
ITEM	PART NUMBER	DESCRIPTION	UNIT PER ASSY.
25	80056-02	1234567 .REDUCER, TUBE END	1
26	80060-06	.NUT	1

TILT SWITCH ASSEMBLY



WIRING DIAGRAM

INNER BOTTOM ARM WELDMENT J19, J19EP



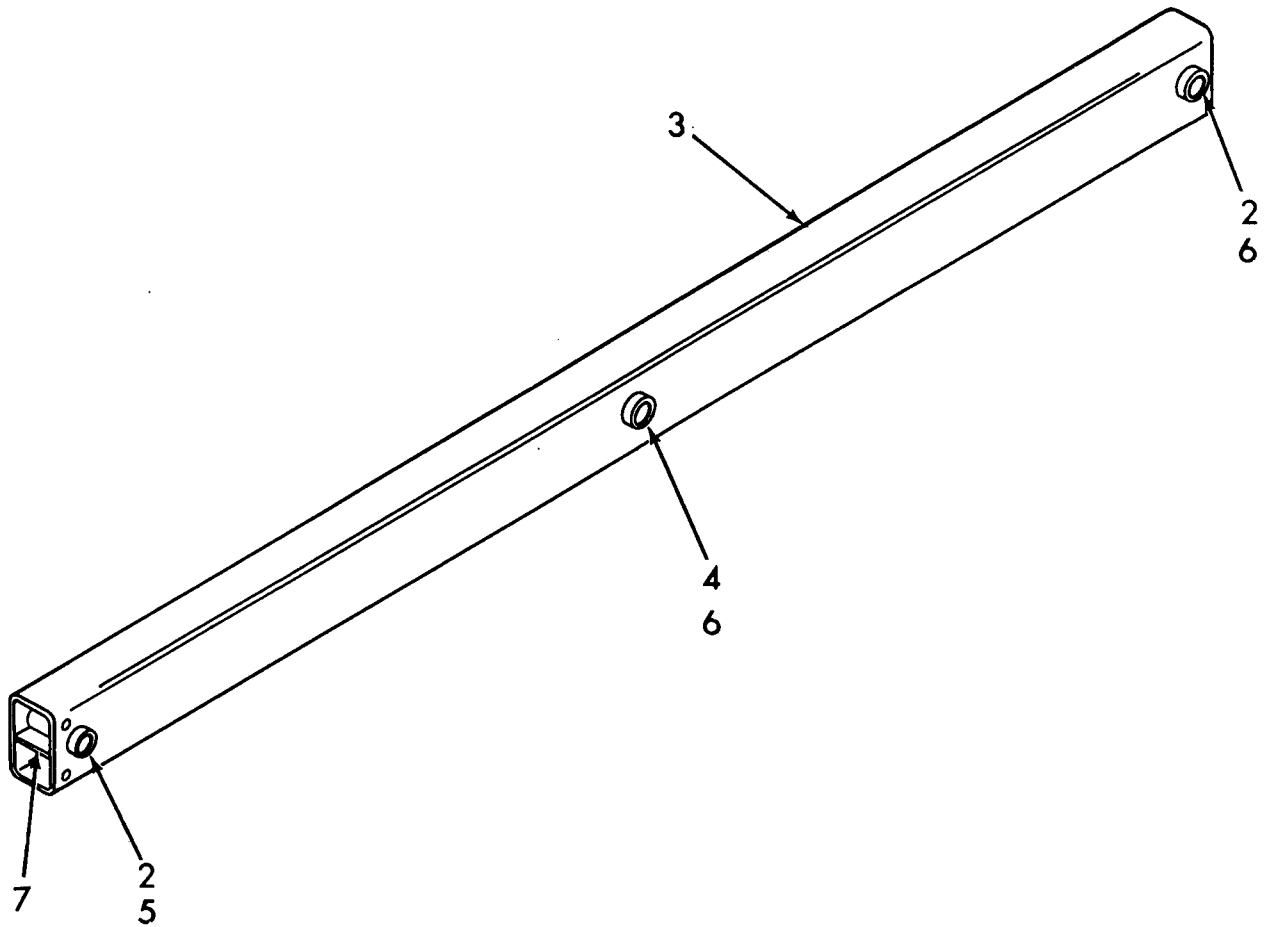


Mark Industries

ILLUSTRATED
PARTS CATALOG

OUTER TOP & MIDDLE ARM WELDMENT J19, J19EP

PARTS
SECT.4
FIG. 5A
PAGE 1



REV.

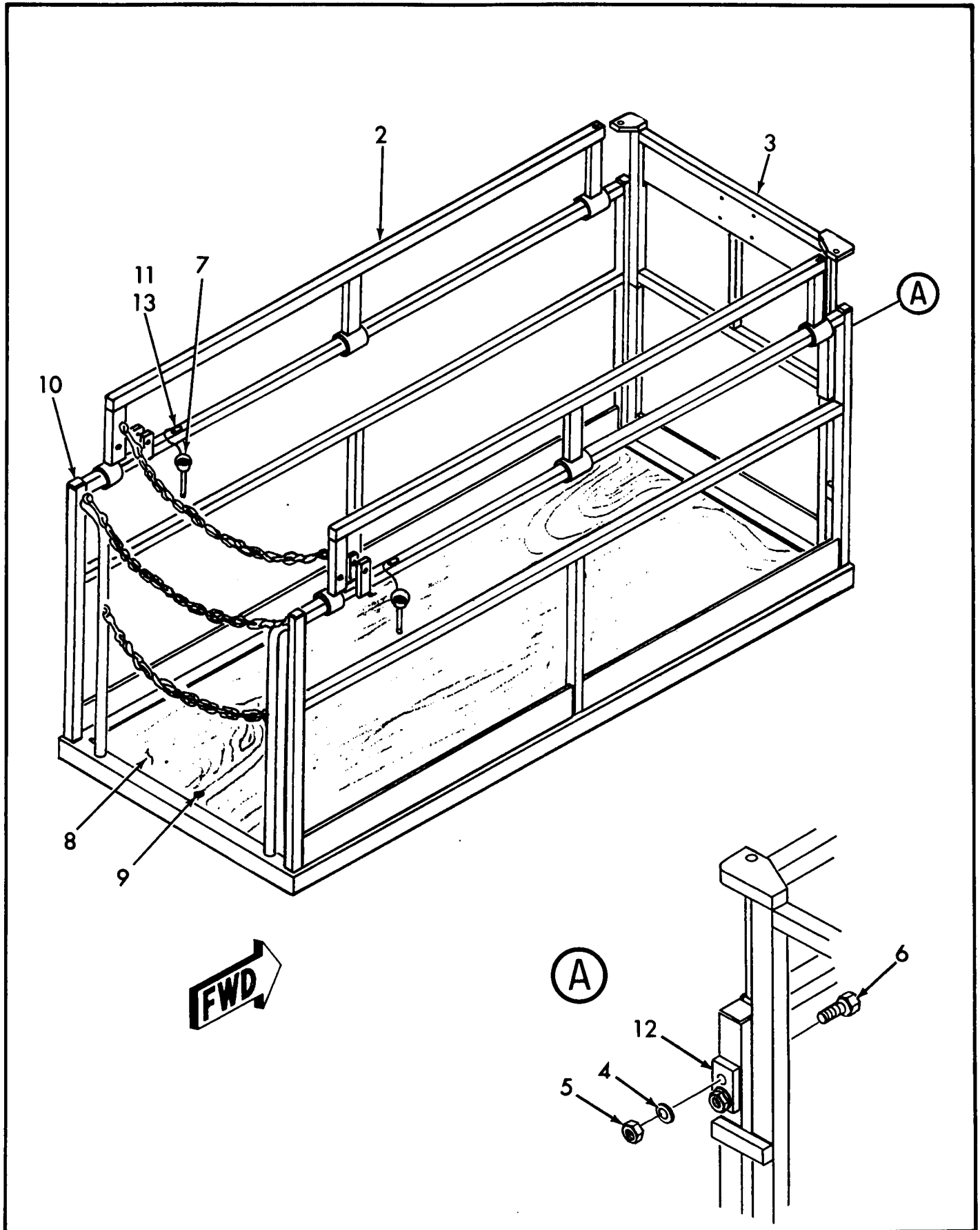


Mark Industries

ILLUSTRATED
PARTS CATALOG

PLATFORM ASSEMBLY J19

PARTS
SECT. 5
FIG. 1A
PAGE 1



REV.



ITEM	PART NUMBER	DESCRIPTION	UNIT PER ASSY.
		1234567	
-1		ASSEMBLIES, OPTIONAL	REF
2	130912	.ASSEMBLY, WARNING HORN (See Sect. 6, Fig. 2 for Details)	1
3	131065	.ASSEMBLY, HOURMETER (See Sect. 6, Fig. 3 for Details)	1
4	130683	.ASSEMBLY, REMOTE CONTROL (See Sect. 6, Fig. 4 for Details)	1
5	131927	.ASSEMBLY, WARNING BEACON (See Sect. 6, Fig. 5 for Details)	1
6	131976	.ASSEMBLY, FOLD DOWN SWING GATE J19 (See Sect. 6, Fig. 6A for Details)	1
-7	131928	.ASSEMBLY, 12 VOLT PLATFORM WORK LIGHT (See Sect. 6, Fig. 7 for Details)	1
-8	131900	.ASSEMBLY, ALL MOTION ALARM (See Sect. 6, Fig. 8 for Details)	1
-9	131955	.ASSEMBLY, FEMALE PLUG FOR REMOTE DRIVE (See Sect. 6, Fig. 9 for Details)	1
-10	131926	.ASSEMBLY, TUV PACKAGE (See Sect. 6, Fig. 10 for Details)	1



Mark Industries

ILLUSTRATED
PARTS CATALOG

REMOTE CONTROL ASSEMBLY

PARTS
SECT. 6
FIG. 4
PAGE 2

ITEM	PART NUMBER	DESCRIPTION	UNIT PER ASSY.
		1234567	
-1	130683	ASSEMBLY, REMOTE CONTROL (See Sect. 6, Fig. 1 for NHA)	REF
2	130902-02	.CONDUCTOR, CABLE	1
3	70261	.SOCKET, 7-POLE	1
4	62623	.SCREW, MACHINE (attaching part)	4
5	63312	.WASHER, LOCK (attaching part)	4
6	61532	.NUT, HEX (attaching part)	4
7	130903	.ASSEMBLY, REMOTE CONTROL	1
8	130901	..CONTROL, REMOTE	1
9	61726	..SCREW, (attaching part)	6
10	20481	..SWITCH, TOGGLE	2
11	20884	..GUARD, SWITCH	2
12	4011	..BUTTON, PUSH	1
13	2806	..RELIEF, STRAIN	1
14	2808	..NUT, LOCK (attaching part)	1
15	130902-08	..CABLE, CONDUCTOR	1
16	70260	..PLUG, 7-POLE	1
17	130906	..DECAL, DRIVE AND STEER	1
18	130907	..DECAL, SPEED	1

REV.



- ITEM NOT ILLUSTRATED



Mark Industries

ILLUSTRATED
PARTS CATALOG

ALL MOTION ALARM ASSEMBLY

PARTS
SECT. 6
FIG. 8
PAGE 1

THIS SECT. 6, FIG. 8 PART NUMBER 131900
ALL MOTION ALARM ASSEMBLY
IS NOT AVAILABLE THIS REVISION

REV.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL