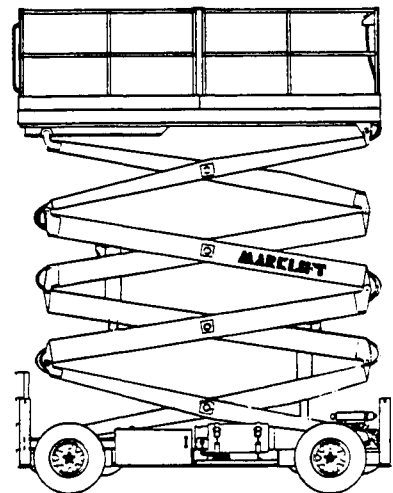


MARKLIFT®

SELF-PROPELLED SCISSOR (ROUGH TERRAIN MODELS)

OPERATION MAINTENANCE AND PARTS MANUAL



THIS TECHNICAL MANUAL APPLIES TO THE FOLLOWING ELECTRIC AND GAS MODELS:

RT26E RT31E RT40E RT25G RT26G RT31G SRT31G RT40G

MARK INDUSTRIES

P.O. Box 720 (90801)
2662 East Del Amo Blvd.
Carson, California 90746
(213) 639-9700 (800) 421-1826 TELEX: 677-361

REVISION 1
JANUARY 1983

INITIAL ISSUE
SEPTEMBER 1981

17012

TABLE OF CONTENTS

MARKLIFT SELF-PROPELLED SCISSOR (ROUGH TERRAIN MODELS) OPERATION MAINTENANCE AND PARTS MANUAL

	<u>PAGE</u>
INTRODUCTION	i
SPECIFICATIONS	ii
AVAILABLE OPTIONS	x
RECORD OF REVISIONS	xi
WARRANTY	xii
NEW EQUIPMENT CONDITION REPORT	xiii

OPERATION

UNLOADING AND TRANSPORTING	1
INSPECTION AND CHECKOUT	2
SAFETY	4
WARNING AND CAUTION DECALS	9
OPERATING INSTRUCTIONS	11
1. STARTING	11
2. STEERING	12
3. LIFT	12
4. TRAVEL	13
5. FREE WHEELING	13
6. WARNING HORN	14
7. WARNING LIGHT	14
8. HYDRAULIC SYSTEM PRESSURE	14

MAINTENANCE

HYDRAULIC FLUID TABLE	15
SERVICE TOOLS	15
TROUBLE SHOOTING	16
RECOMMENDED SPARE PARTS LIST	20
BATTERY MAINTENANCE	24

TABLE OF CONTENTS

MARKLIFT SELF-PROPELLED SCISSOR (ROUGH TERRAIN MODELS) OPERATION MAINTENANCE AND PARTS MANUAL

<u>MAINTENANCE</u>	<u>PAGE</u>
MARKLIFT SCISSOR MAINTENANCE CHECK LIST	26
MARKLIFT SERVICE MAINTENANCE RECORD	27

<u>SCHEMATICS</u>	
ELECTRICAL DIAGRAM (RT26E) (RT31E)	28
ELECTRICAL DIAGRAM (RT40E)	30
ELECTRICAL DIAGRAM (RT25G) (SRT31G)	32
ELECTRICAL DIAGRAM (RT26G) (RT31G)	34
ELECTRICAL DIAGRAM (RT40G)	36
HYDRAULIC SCHEMATIC (RT26E) (RT26G) (RT31E) (RT31G)	38
HYDRAULIC SCHEMATIC (RT25G) (SRT31G)	39
HYDRAULIC SCHEMATIC (RT40E) (RT40G)	40

<u>PARTS</u>	
ILLUSTRATED PARTS LIST INDEX	i

VENDOR

CHRISTIE BATTERY CHARGER
ONAN ENGINE
PRESTOLITE PUMP MOTOR
ROSS GEAR DRIVE MOTOR
TROJAN BATTERY

SERVICE BULLETINS

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)
OPERATION MAINTENANCE AND PARTS MANUAL

The purpose of this manual is to provide the customer with operation maintenance and parts information that will enhance the reliable performance of the Marklift. Schematic and vendor information is also furnished.

WARNING: IMPROPER USAGE OF THIS MACHINE MAY RESULT IN SERIOUS PERSONNEL INJURY. TO PROTECT YOURSELF AND THE EQUIPMENT, STUDY THIS MANUAL BEFORE STARTING OPERATIONS.

The model capacity, pressure settings and serial number can be found on the ID Plate mounted on the rear of the main frame.

The serial number should be used when ordering parts. This will help our parts department in giving prompt and accurate service.

If additional information or service is needed, we urge the customer to contact his local dealer. If this is not possible, please get in touch with the Mark Industries Service Department.

All Marklifts are tested and operated to assure their proper operating condition before shipment. At this time, all necessary adjustments are made and an overall physical inspection is conducted. After the unit is delivered, some final minor adjustments and inspections must be made prior to putting the unit in service. These functions are outlined in the inspection and checkout instructions in the operation section of this manual.

MARKLIFT SELF-PROPELLED SCISSOR

(ROUGH TERRAIN MODELS)

RT26E

<u>DESCRIPTION</u>	<u>ENGLISH</u>	<u>METRIC</u>
HEIGHT-WORKING (EXTENDED)	32'	9.75 m
HEIGHT-PLATFORM (EXTENDED)	26'	7.92 m
(LOWERED)	52"	1.32 m
LENGTH (OVERALL)	155"	3.93 m
WIDTH (OVERALL)	87.5"	2.22 m
PLATFORM-SIZE (INSIDE)	73 X 145"	1.85 m X 3.68 m
PLATFORM-SAFETY RAILS (REMOVABLE)	42"	1.06 m
PLATFORM-TOE PLATE	6"	.15 m
LIFT CAPACITY	2000#	907.20 kg.
WHEEL BASE	108.5"	2.75 m
WHEEL TRACK	77.5"	1.97 m
TURNING RADIUS (INSIDE)	14'10"	4.52 m
DRIVE SPEED--CREEP	.5 MPH	.8 km/hr.
DRIVE SPEED--LOW	1.5 MPH	2.4 km/hr.
DRIVE SPEED--HIGH	2.5 MPH	4.0 km/hr.
HIGH SPEED CUTOUT	12'	3.65 m
LIFT/LOWER SPEED	45/30 sec.	45/30 sec.
POWER SYSTEM	24 VDC	24 VDC
BATTERY VOLTAGE	6 VDC	6 VDC
CAPACITIES-BATTERY	250 AMP/HR (8)	250 AMP/HR (8)
CAPACITIES-HYDRAULIC TANK	18 GAL	67.51 l
CAPACITIES-FUEL TANK	---	---
ALTERNATOR	---	---
BATTERY CHARGER	40 AMP	40 AMP
TIRE SIZE	10 X 15 LT	---
OUTRIGGERS/STABILIZERS	MANUAL	MANUAL
SHIPPING WEIGHT	6120#	2776.03 kg.
SHIPPING CUBE	422.5 cu. ft.	11.96 cu. m

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)

RT31E

<u>DESCRIPTION</u>	<u>ENGLISH</u>	<u>METRIC</u>
HEIGHT-WORKING (EXTENDED)	37'	11.28 m
HEIGHT-PLATFORM (EXTENDED)	31'	9.45 m
(LOWERED)	54"	1.37 m
LENGTH (OVERALL)	155"	3.94 m
WIDTH (OVERALL)	87.5"	2.22 m
PLATFORM-SIZE (INSIDE)	73 X 145"	1.85 m X 3.68 m
PLATFORM-SAFETY RAILS (REMOVABLE)	42"	1.06 m
PLATFORM-TOE PLATE	6"	.15 m
LIFT CAPACITY	2000#	907.20 kg.
WHEEL BASE	108.5"	2.75 m
WHEEL TRACK	77.5"	1.97 m
TURNING RADIUS (INSIDE)	14'10"	4.52 m
DRIVE SPEED--CREEP	.5 MPH	.8 km/hr.
DRIVE SPEED--LOW	1.5 MPH	2.4 km/hr.
DRIVE SPEED--HIGH	2.5 MPH	4.0 km/hr.
HIGH SPEED CUTOUT	12'	3.65 m
LIFT/LOWER SPEED	65/45 sec.	65/45 sec.
POWER SYSTEM	24 VDC	24 VDC
BATTERY VOLTAGE	6 VDC	6 VDC
CAPACITIES-BATTERY	250 AMP/HR (8)	250 AMP/HR (8)
CAPACITIES-HYDRAULIC TANK	18 GAL	67.51 l
CAPACITIES-FUEL TANK	---	---
ALTERNATOR	---	---
BATTERY CHARGER	40 AMP	40 AMP
TIRE SIZE	10 X 15 LT	---
OUTRIGGERS/STABILIZERS	MANUAL	MANUAL
SHIPPING WEIGHT	6190#	2807.78 kg.
SHIPPING CUBE	422.5 cu. ft.	11.96 cu. m

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)
RT40E

<u>DESCRIPTION</u>	<u>ENGLISH</u>	<u>METRIC</u>
HEIGHT-WORKING (EXTENDED)	46'	14.02 m
HEIGHT-PLATFORM (EXTENDED)	40'	12.19 m
(LOWERED)	63"	1.60 m
LENGTH (OVERALL)	155"	3.94 m
WIDTH (OVERALL)	87.5"	2.22 m
PLATFORM-SIZE (INSIDE)	73 X 145"	1.85 m X 3.68 m
PLATFORM-SAFETY RAILS (REMOVABLE)	42"	1.06 m
PLATFORM-TOE PLATE	6"	.15 m
LIFT CAPACITY	1500#	680.4 kg.
WHEEL BASE	108.5"	2.75 m
WHEEL TRACK	77.5"	1.97 m
TURNING RADIUS (INSIDE)	14'10"	4.52 m
DRIVE SPEED--CREEP	.5	.8 km/hr.
DRIVE SPEED--LOW	2.0 MPH	3.2 km/hr.
DRIVE SPEED--HIGH	4.5 MPH	7.3 km/hr.
HIGH SPEED CUTOUT	12'	3.65 m
LIFT/LOWER SPEED	55/43 sec.	55/43 sec.
POWER SYSTEM	24 VDC	24 VDC
BATTERY VOLTAGE	6 VDC	6 VDC
CAPACITIES-BATTERY	375 AMP/HR (8)	375 AMP/HR (8)
CAPACITIES-HYDRAULIC TANK	18 GAL	67.51 l
CAPACITIES-FUEL TANK	---	---
ALTERNATOR	---	---
BATTERY CHARGER	40 AMP	40 AMP
TIRE SIZE	10 X 15 LT	---
OUTRIGGERS/STABILIZERS	HYDRAULIC	HYDRAULIC
SHIPPING WEIGHT	8390#	3805.64 kg.
SHIPPING CUBE	572 cu. ft.	16.20 cu. m

MARKLIFT SELF-PROPELLED SCISSOR

(ROUGH TERRAIN MODELS)

RT25G

<u>DESCRIPTION</u>	<u>ENGLISH</u>	<u>METRIC</u>
HEIGHT-WORKING (EXTENDED)	31'	9.45 m
HEIGHT-PLATFORM (EXTENDED)	25'	7.62 m
(LOWERED)	48.5"	1.23 m
LENGTH (OVERALL)	129"	3.28 m
WIDTH (OVERALL)	76.5"	1.94 m
PLATFORM-SIZE (INSIDE)	64 X 122"	1.62 m X 3.09 m
PLATFORM-SAFETY RAILS (REMOVABLE)	42"	1.06 m
PLATFORM-TOE PLATE	6"	.15 m
LIFT CAPACITY	1500#	680.39 kg.
WHEEL BASE	79.25"	2.01 m
WHEEL TRACK	64.5"	1.63 m
TURNING RADIUS (INSIDE)	11'	3.35 m
DRIVE SPEED--CREEP	---	---
DRIVE SPEED--LOW	1.0 MPH	1.6 km/hr.
DRIVE SPEED--HIGH	2.0 MPH	3.2 km/hr.
HIGH SPEED CUTOUT	12'	3.65 m
LIFT/LOWER SPEED	31/29 sec.	31/29 sec.
POWER SYSTEM	20 HP	20 HP
BATTERY VOLTAGE	12 VDC	12 VDC
CAPACITIES-BATTERY	100 AMP/HR	100 AMP/HR
CAPACITIES-HYDRAULIC TANK	10 GAL	37.8 l
CAPACITIES-FUEL TANK	15 GAL	56.78 l
ALTERNATOR	20 AMP	20 AMP
BATTERY CHARGER	---	---
TIRE SIZE	26 X 12 X 12	---
OUTRIGGERS/STABILIZERS	NOT REQ'D	NOT REQ'D
SHIPPING WEIGHT	4372#	2045.73 kg.
SHIPPING CUBE	332.72 cu. ft.	9.42 cu. m

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)
RT26G

<u>DESCRIPTION</u>	<u>ENGLISH</u>	<u>METRIC</u>
HEIGHT-WORKING (EXTENDED)	32'	9.75 m
HEIGHT-PLATFORM (EXTENDED)	26'	7.92 m
(LOWERED)	52"	1.32 m
LENGTH (OVERALL)	155"	3.93 m
WIDTH (OVERALL)	87.5"	2.22 m
PLATFORM-SIZE (INSIDE)	73 X 145"	1.85 m X 3.68 m
PLATFORM-SAFETY RAILS (REMOVABLE)	42"	1.06 m
PLATFORM-TOE PLATE	6"	.15 m
LIFT CAPACITY	2000#	907.20 kg.
WHEEL BASE	108.5"	2.76 m
WHEEL TRACK	77.5"	1.97 m
TURNING RADIUS (INSIDE)	14'10"	4.52 m
DRIVE SPEED--CREEP	.5 MPH	.8 km/hr.
DRIVE SPEED--LOW	1.5 MPH	2.4 km/hr.
DRIVE SPEED--HIGH	3.5 MPH	5.6 km/hr.
HIGH SPEED CUTOUT	12'	3.65 m
LIFT/LOWER SPEED	34/30 sec.	34/30 sec.
POWER SYSTEM	20 HP	20 HP
BATTERY VOLTAGE	12 VDC	12 VDC
CAPACITIES-BATTERY	100 AMP/HR	100 AMP/HR
CAPACITIES-HYDRAULIC TANK	18 GAL	67.51 l
CAPACITIES-FUEL TANK	15 GAL	37.8 l
ALTERNATOR	20 AMP	20 AMP
BATTERY CHARGER	---	---
TIRE SIZE	10 X 15 LT	---
OUTRIGGERS/STABILIZERS	MANUAL	MANUAL
SHIPPING WEIGHT	5620#	2549.23 kg.
SHIPPING CUBE	422.5 cu. ft.	11.96 cu. m

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)
RT26G

<u>DESCRIPTION</u>	<u>ENGLISH</u>	<u>METRIC</u>
HEIGHT-WORKING (EXTENDED)	32'	9.75 m
HEIGHT-PLATFORM (EXTENDED)	26'	7.92 m
(LOWERED)	52"	1.32 m
LENGTH (OVERALL)	155"	3.93 m
WIDTH (OVERALL)	87.5"	2.22 m
PLATFORM-SIZE (INSIDE)	73 X 145"	1.85 m X 3.68 m
PLATFORM-SAFETY RAILS (REMOVABLE)	42"	1.06 m
PLATFORM-TOE PLATE	6"	.15 m
LIFT CAPACITY	2000#	907.20 kg.
WHEEL BASE	108.5"	2.76 m
WHEEL TRACK	77.5"	1.97 m
TURNING RADIUS (INSIDE)	14'10"	4.52 m
DRIVE SPEED--CREEP	.5 MPH	.8 km/hr.
DRIVE SPEED--LOW	1.5 MPH	2.4 km/hr.
DRIVE SPEED--HIGH	3.5 MPH	5.6 km/hr.
HIGH SPEED CUTOUT	12'	3.65 m
LIFT/LOWER SPEED	34/30 sec.	34/30 sec.
POWER SYSTEM	20 HP	20 HP
BATTERY VOLTAGE	12 VDC	12 VDC
CAPACITIES-BATTERY	100 AMP/HR	100 AMP/HR
CAPACITIES-HYDRAULIC TANK	18 GAL	67.51 l
CAPACITIES-FUEL TANK	15 GAL	37.8 l
ALTERNATOR	20 AMP	20 AMP
BATTERY CHARGER	---	---
TIRE SIZE	10 X 15 LT	---
OUTRIGGERS/STABILIZERS	MANUAL	MANUAL
SHIPPING WEIGHT	5620#	2549.23 kg.
SHIPPING CUBE	422.5 cu. ft.	11.96 cu. m

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)
RT31G

<u>DESCRIPTION</u>	<u>ENGLISH</u>	<u>METRIC</u>
HEIGHT-WORKING (EXTENDED)	37'	11.28 m
HEIGHT-PLATFORM (EXTENDED)	31'	9.45 m
(LOWERED)	52"	1.32 m
LENGTH (OVERALL)	155"	3.94 m
WIDTH (OVERALL)	87.5"	2.22 m
PLATFORM-SIZE (INSIDE)	73 X 145"	1.85 m X 3.68 m
PLATFORM-SAFETY RAILS (REMOVABLE)	42"	1.06 m
PLATFORM-TOE PLATE	6"	.15 m
LIFT CAPACITY	2000#	907.20 kg.
WHEEL BASE	108.5"	2.76 m
WHEEL TRACK	77.5"	1.97 m
TURNING RADIUS (INSIDE)	14'10"	4.52 m
DRIVE SPEED--CREEP	.5 MPH	.8 km/hr.
DRIVE SPEED--LOW	1.5 MPH	2.4 km/hr.
DRIVE SPEED--HIGH	3.5 MPH	5.6 km/hr.
HIGH SPEED CUTOUT	12'	3.65 m
LIFT/LOWER SPEED	48/45 sec.	48/45 sec.
POWER SYSTEM	20 HP	20 HP
BATTERY VOLTAGE	12 VDC	12 VDC
CAPACITIES-BATTERY	100 AMP/HR	100 AMP/HR
CAPACITIES-HYDRAULIC TANK	18 GAL	67.51 l
CAPACITIES-FUEL TANK	15 GAL	56.78 l
ALTERNATOR	20 AMP	20 AMP
BATTERY CHARGER	---	---
TIRE SIZE	10 X 15 LT	---
OUTRIGGERS/STABILIZERS	MANUAL	MANUAL
SHIPPING WEIGHT	5640#	2558.26 kg.
SHIPPING CUBE	422.5 cu. ft.	11.96 cu. m

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)

SRT31G

<u>DESCRIPTION</u>	<u>ENGLISH</u>	<u>METRIC</u>
HEIGHT-WORKING (EXTENDED)	37'	11.28 m
HEIGHT-PLATFORM (EXTENDED)	31'	9.45 m
(LOWERED)	54"	1.37 m
LENGTH (OVERALL)	155"	3.94 m
WIDTH (OVERALL)	84"	2.13 m
PLATFORM-SIZE (INSIDE)	73 X 145"	1.85 m X 3.68 m
PLATFORM-SAFETY RAILS (REMOVABLE)	42"	1.06 m
PLATFORM-TOE PLATE	6"	.15 m
LIFT CAPACITY	2000#	907.20 kg.
WHEEL BASE	108.50"	2.75 m
WHEEL TRACK	68.25"	1.73 m
TURNING RADIUS (INSIDE)	14'10"	4.52 m
DRIVE SPEED--CREEP	---	---
DRIVE SPEED--LOW	1.0 MPH	1.6 km/hr.
DRIVE SPEED--HIGH	2.0 MPH	3.2 km/hr.
HIGH SPEED CUTOUT	12'	3.65 m
LIFT/LOWER SPEED	48/45 sec.	48/45 sec.
POWER SYSTEM	20 HP	20 HP
BATTERY VOLTAGE	12 VDC	12 VDC
CAPACITIES-BATTERY	100 AMP/HR	100 AMP/HR
CAPACITIES-HYDRAULIC TANK	18 GAL	67.51 l
CAPACITIES-FUEL TANK	15 GAL	56.78 l
ALTERNATOR	20 AMP	20 AMP
BATTERY CHARGER	---	---
TIRE SIZE	FRONT 11L X 15 REAR 29 X 12 X 15	---
OUTRIGGERS/STABILIZERS	HYDRAULIC	HYDRAULIC
SHIPPING WEIGHT	6250#	2834.95 kg.
SHIPPING CUBE	510.52 cu. ft.	14.46 cu. m

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)
RT40G

<u>DESCRIPTION</u>	<u>ENGLISH</u>	<u>METRIC</u>
HEIGHT-WORKING (EXTENDED)	46'	14.02 m
HEIGHT-PLATFORM (EXTENDED)	40'	12.19 m
(LOWERED)	63"	1.60 m
LENGTH (OVERALL)	155"	3.94 m
WIDTH (OVERALL)	87.5"	2.22 m
PLATFORM-SIZE (INSIDE)	73 X 145"	1.85 m X 3.68 m
PLATFORM-SAFETY RAILS (REMOVABLE)	42"	1.06 m
PLATFORM-TOE PLATE	6"	.15 m
LIFT CAPACITY	1500#	680.39 kg.
WHEEL BASE	108.5"	2.76 m
WHEEL TRACK	77.5"	1.97 m
TURNING RADIUS (INSIDE)	14'10"	4.52 m
DRIVE SPEED--CREEP	.5 MPH	.8 kms/hr.
DRIVE SPEED--LOW	2.0 MPH	3.2 km/hr.
DRIVE SPEED--HIGH	4.5 MPH	7.3 km/hr.
HIGH SPEED CUTOUT	12'	3.65 m
LIFT/LOWER SPEED	47/43 sec.	47/43 sec.
POWER SYSTEM	20 HP	20 HP
BATTERY VOLTAGE	12 VDC	12 VDC
CAPACITIES-BATTERY	100 AMP/HR	100 AMP/HR
CAPACITIES-HYDRAULIC TANK	18 GAL	67.51 l
CAPACITIES-FUEL TANK	15 GAL	56.78 l
ALTERNATOR	20 AMP	20 AMP
BATTERY CHARGER	---	---
TIRE SIZE	10 X 15 LT	---
OUTRIGGERS/STABILIZERS	HYDRAULIC	HYDRAULIC
SHIPPING WEIGHT	7510#	3406.47 kg.
SHIPPING CUBE	572 cu. ft.	16.20 cu. m

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)

<u>OPTION</u>	<u>TITLE</u>
1.	ROTATING AMBER BEACON
2.	TRAVEL WARNING HORN
3.	MOVEMENT WARNING HORN
4.	DECK EXTENSION-BOLT
5.	SWING DECK
6.	2000 WATT GENERATOR, 110 VAC
7.	HOURLMETER
8.	HYDRAULIC OUTRIGGERS
9.	MANUAL STABILIZERS

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)
OPERATION MAINTENANCE AND PARTS MANUAL

When a revision is added to this manual, enter date inserted and initial.

REV. DATE	PAGE NUMBERS	DATE INSERTED	BY	REV. DATE	PAGE NUMBERS	DATE INSERTED	BY
REV.1 1-83	FRONT				89,89.1,90,		
	TITLE PAGE				91,92,92.1		
	v,xi,xi.i				THRU 92.25		
	SCHEM.				93,93.1,94		
	40				THRU 108		
	PARTS INDEX				108.1 THRU		
	i THRU vii				108.4,109		
	3,5,7,8,9				THRU 123		
	11,12,25,				123.1 THRU		
	27,28,29,				123.4,124		
	31,32,33,				THRU 149		
	35,36,38				149.1 THRU		
	40,45 THRU				149.10,150		
	56,63 THRU				THRU 162		
	71,71.1,72				162.1,162.2		
	THRU 80,				163,164,		
	80.1,81				164.1 THRU		
	THRU 86,				164.4,165		
	86.1,87,88,				THRU 170		

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)
OPERATION MAINTENANCE AND PARTS MANUAL

When a revision is added to this manual, enter date inserted and initial.

REV. DATE	PAGE NUMBERS	DATE INSERTED	BY	REV. DATE	PAGE NUMBERS	DATE INSERTED	BY
	170.1,171				THRU 204		
	THRU 174						
	174.1,175						
	176,176.1						
	THRU 176.4						
	177 THRU						
	183,183.1,						
	183.2,184,						
	185,185.1						
	THRU 185.6						
	186,186.1						
	186.2,187						
	187.1,187.2						
	188,189,190						
	190.1,191						
	THRU 194						
	194.1 THRU						
	194.3,195						
	195.1,197						

MANUFACTURERS' LIMITED WARRANTY

Mark Industries makes no warranty, express or implied, on any product manufactured or sold by Mark Industries except for the following limited warranty against defects in materials and workmanship on products manufactured by Mark Industries.

Mark Industries warrants the products manufactured by Mark Industries to be free from defects in material and workmanship under normal use and service for a period of six (6) months from the date of shipment. This limited warranty does not extend to any product of another manufacturer or to any part, component, accessory or attachment not manufactured by Mark Industries. The warranty, if any, with respect to any product of another manufacturer or to any part, component, accessory or attachment not manufactured by Mark Industries is limited to the warranty, if any, extended to Mark Industries by the manufacturer of the other product, part, component, accessory or attachment.

This limited warranty does not extend to any product (or any part or parts of any product) which has been subject to improper use or application, misuse, abuse, operation beyond its rated capacity, repair or maintenance except in accordance with the sales and service manuals and special instructions of Mark Industries, or modification without the prior written authorization of Mark Industries (whether by the substitution of nonapproved parts or otherwise).

The sole obligation and liability of Mark Industries under this limited warranty (and the exclusive remedy for any purchaser, owner or user of Mark Industries products) is limited to the repair or replacement, at the option of Mark Industries, of any product (or any part or parts of any product) manufactured by Mark Industries which, within six (6) months from the date of shipment, shall have been returned to the Mark Industries facility in Carson, California (or any other location within the United States as shall be designated by Mark Industries), at no expense to Mark Industries, and demonstrated to the satisfaction of Mark Industries as being defective in material or workmanship.

To make a claim under this limited warranty, contact Mark Industries or the Mark Industries distributor from whom the product was originally purchased. A statement giving the model and serial number of the allegedly defective product, the date and a description of the alleged defect, the date of the purchase and proof of the purchase and purchase date must accompany the returned product (or any part or parts of any product). Any product (or any part or parts of any product) determined by Mark Industries to be defective will be repaired or replaced, at the option of Mark Industries, free of charge, f.o.b. Carson, California. No credit will be given for any allegedly defective product (or any part or parts of any product) not returned to Mark Industries.

There are no other warranties, express or implied, in addition to this limited warranty. **This limited warranty is exclusive and in lieu of all other warranties, express or implied (in fact or by operation of law or otherwise), including the implied warranties of merchantability and fitness for a particular purpose.**

Mark Industries shall not be liable for any special, indirect or consequential damages. Further, no representation or warranty made by any person, including any representative of Mark Industries, which is inconsistent or in conflict with, or in addition to the terms of the foregoing limited warranty (or the limitations of the liability of Mark Industries as set forth above) shall be binding upon Mark Industries unless reduced to writing and approved by an officer of Mark Industries.

Tires, batteries, filter elements and electrical components are specifically excluded from this limited warranty.



Mark Industries
P.O. Box 720 • Long Beach, CA 90801
213-639-9700 • 800-421-1826 • TELEX 677-361

This is a reduced copy of the actual report that is sent with each Machine.

NEW EQUIPMENT CONDITION REPORT

(WARRANTY REGISTRATION)

BOOMS	YES	NO	SCISSORS	YES	NO
1 CAPACITY DECAL IS _____			1 CAPACITY DECAL IS _____		
2 ALL APPLICABLE WARNING DECALS ARE INSTALLED			2 ALL APPLICABLE WARNING DECALS ARE INSTALLED		
3 EMERGENCY DESCENT VALVE FUNCTIONS PROPERLY			3 EMERGENCY DESCENT VALVE FUNCTIONS PROPERLY		
4 OPERATORS INSTRUCTIONS ARE PROPERLY INSTALLED			4 OPERATORS INSTRUCTIONS ARE PROPERLY INSTALLED		
5 OPERATORS GUIDE RECEIVED			5 OPERATORS GUIDE RECEIVED		
6 ELECTRIC SCHEMATIC RECEIVED			6 ELECTRICAL SCHEMATIC RECEIVED		
7 ALL CONTROLS (UPPER & LOWER) ARE IDENTIFIED & OPERATE PROPERLY			7 ALL CONTROLS (UPPER & LOWER) ARE IDENTIFIED AND OPERATE PROPERLY		
8 STOP SWITCHES OPERATE PROPERLY (UPPER & LOWER)			8 PLATFORM GUARD RAILS IN GOOD CONDITION AND ATTACHMENT BOLTS INCLUDED		
9 CONDITION OF PLATFORM GUARD RAILS			9 PLATFORM ACCESS GATE WORKS PROPERLY		
10 BASKET ACCESS GATE WORKS PROPERLY			10 HORN/BEACON OPERATES PROPERLY (OPTIONAL)		
11 HORN/BEACON OPERATE PROPERLY (OPTIONAL)			11 BRAKES (IF INSTALLED) OPERATE PROPERLY		
12 BRAKES ARE ADJUSTED AND OPERATE PROPERLY			12 CIRCUIT BREAKER OPERATES PROPERLY		
13 CIRCUIT BREAKERS OPERATE PROPERLY			13 ENGINE RPM'S ARE _____ RPM'S		
14 ENGINE RPM'S ARE _____ RPM'S			14 SCISSOR ARM SHAFT COLLARS ARE IN PLACE AND ARE TIGHT		
15 ALL HYDRAULIC CYLINDERS ARE FREE OF LEAKS			15 LIFT CYLINDER IS FREE OF LEAKS		
16 ALL HYDRAULIC CYLINDER RODS ARE FREE OF PAINT/SCRATCHES			16 110V INVERTER OPERATES PROPERLY (OPTIONAL)		
17 110V GENERATOR OPERATES PROPERLY (OPTIONAL)			17 110V GENERATOR OPERATES PROPERLY (OPTIONAL)		
18 HYDRAULIC PUMP IS FREE OF LEAKS			18 HYDRAULIC PUMP IS FREE OF LEAKS		
19 DRIVE MOTORS ARE FREE OF LEAKS			19 SYSTEM PRESSURE IS SET AT _____ PSIG		
20 ROTATION GEAR BOX OIL LEVEL IS _____			20 DRIVE MOTORS ARE FREE OF LEAKS		
21 ROTATION RING GEAR BOLTS (UNDERCARRIAGE) ARE TORQUED AT _____ FT. LBS.			21 DRIVE GEAR BOX OIL LEVEL (SRT MODELS)		
22 LUG NUTS ON WHEELS ARE TORQUED AT _____ FT. LBS.			22 ALL NUTS & BOLTS ARE TIGHT		
23 BATTERY FLUID LEVEL IS FULL			23 (2) WHEEL NUTS ARE TORQUED AT _____ FT. LBS.		
24 HYDRAULIC HOSES & FITTINGS ARE TIGHT & FREE OF LEAKS			24 LUG NUTS ON THE WHEELS ARE _____ FT. LBS.		
25 AIR PRESSURE IN TIRES IS _____ PSI			25 BATTERY FLUID LEVEL IS CORRECT		
26 HYDRAULIC OIL LEVEL IS _____			26 HYDRAULIC HOSES AND FITTINGS ARE FREE OF LEAKS		
27 SYSTEM PRESSURE IS _____ PSIG			27 AIR PRESSURE IN TIRES IS _____ PSI		
28 PILOT PRESSURE IS _____ PSIG			28 HYDRAULIC OIL LEVEL _____		
29 FUEL TANK AND FITTINGS ARE FREE OF LEAKS			29 FUEL TANK & FITTINGS ARE FREE OF LEAKS		
30 HYDRAULIC TANK AND FITTINGS FREE OF LEAKS			30 HYDRAULIC OIL TANK & FITTINGS ARE FREE OF LEAKS		
31 MANUAL OVERRIDES OPERATE PROPERLY			31 STEERING CYLINDER IS FREE OF LEAKS		
32 MUFFLER TIGHT AND FREE OF LEAKS			32 MANUAL OVERRIDE ON VALVES OPERATE PROPERLY		
33 ENGINE OIL LEVEL IS FULL			33 MUFFLER TIGHT & FREE OF LEAKS		
34 ENGINE OIL FILTER IS FREE OF LEAKS			34 ENGINE OIL LEVEL FULL		
35 ALL ELECTRICAL CONNECTIONS ARE TIGHT			35 ENGINE OIL FILTER FREE OF LEAKS		
36 ENGINE ALTERNATOR FUNCTIONING PROPERLY			36 ALL ELECTRICAL CONNECTIONS ARE TIGHT		
37 VALVE MANIFOLD & FITTINGS ARE FREE OF LEAKS			37 ENGINE ALTERNATOR FUNCTIONS PROPERLY		
38 PROPER OIL LEVEL IN DRIVE WHEEL TORQUE HUB			38 CHARGER FUNCTIONS PROPERLY (ELECT. MACH.)		
39 CABLE TENSION _____			39 VALVE MANIFOLD & FITTINGS ARE FREE OF LEAKS		

MODEL NUMBER _____ SERIAL NUMBER _____

OPTIONS _____

INSPECTOR # _____

PURCHASER	_____		
	COMPANY NAME		

	ADDRESS		

	CITY	STATE	ZIP CODE
	()		
	AREA CODE	TELEPHONE NUMBER	

DATE OF INVOICE _____ DATE SHIPMENT RECEIVED _____

DATE UNIT PUT INTO SERVICE

- ☐ UNIT WILL BE USED IN RENTAL FLEET
- ☐ UNIT WILL BE SOLD; THE INITIAL WORK APPLICATION WILL BE:

INSPECTION _____	GEN'L MAINTENANCE _____	PAINTING/SANDBLASTING _____
MINING _____	HEATING/AIR COND. _____	STEEL FABRICATION _____
WELDING _____	CARPENTRY _____	RIGGING _____
CONSTRUCTION _____	PLUMBING _____	ROOFING _____
SCAFFOLDING _____	ELECTRICAL _____	GLAZING _____
MECHANICAL _____	SPRINKLER _____	OTHER _____

COMMENTS:

INSPECTION COMPLETED BY:

(Please print legibly)

WARRANTY WILL BE VOID UNLESS THIS INSPECTION REPORT IS POSTMARKED TO MARK INDUSTRIES
NOT MORE THAN 14 DAYS FROM DATE SHIPMENT RECEIVED.

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)

UNLOADING

Before unloading the Marklift, inspect for any physical damage. Note any such damage on the freight bill and report same to carrier.

When a loading dock is unavailable and a fork lift must be used, make sure that the fork lift used has forks as long as the Marklift is wide. Do not attempt to lift the machine from under either the front or rear cross members. ALWAYS LIFT THE MACHINE FROM THE SIDE.

If a rollback truck with a winch is used, attach the winch cable to the tie down brackets and pull the unit onto the truck.

TRANSPORTING

The Marklift may be free wheeled for very short distances at a speed no greater than 5 mph. To transport the Marklift over long distances a truck or trailer must be used.

When securing the Marklift to the truck, put the chains or straps through the tie down brackets ONLY. DO NOT CHAIN OR STRAP OVER THE PLATFORM OR GUARD RAILS. Severe damage to the scissor arms may result from excess pressure due to securing the machine over the top of the platform.

Note: The emergency lowering valve must be OPEN whenever the Marklift is transported. This will prevent damage to the unit if a short occurs in the electrical system.

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)

All Marklift units are tested and operated to assure their proper operating condition before shipment.

At this time, all necessary adjustments are made and an overall physical inspection is conducted. After the unit is delivered, some minor adjustments and inspections must be made before putting the unit into service.

The following items should be reviewed:

1. Check gasoline power units.
 - A. Engine oil level
 - B. Air filter
 - C. Fuel filter
 - D. Fuel level
 - E. Fuel lines and valves
2. Check electrical system by plugging hand control box into platform receptacle.

A. Forward	C. Left	E. up
B. Reverse	D. Right	F. Down
3. Inspect all electrical connections.

A. See	B. Feel	C. Tighten
--------	---------	------------
4. Check hydraulic system.
 - A. Hydraulic Fluid Level
 - B. In-Line Pressure Valve Filter
 - C. Hydraulic Lines
 - D. Hydraulic Pump
 - E. Hydraulic Cylinders
 - F. Emergency Lowering Valve

5. Check Tires & Wheels.
 - A. For Cuts
 - B. Correct pressure
 - C. Tight Lugs
6. Structural connections and fittings.
 - A. Check all nuts and bolts for tightness.
7. Brakes.
 - A. Check for holding on incline up to four (4) degrees.

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)

Every operator of the Marklift must know, understand and follow the safety rules set forth herein.

1. The Marklift self-propelled aerial work platform is a personnel lifting device, and it is essential that it be properly maintained and operated to perform all functions with maximum safety and efficiency.
2. The operation of any new and unfamiliar equipment can be hazardous in the hands of untrained operators. Only trained operators must be assigned to operate the Marklift.
3. It is the responsibility of the operator to be familiar with this manual and to follow all recommendations made. Never exceed manufacturer's recommended platform load capacity.
4. Although the Marklift conforms to specified ANSI & OSHA requirements, it is the responsibility of the owner to instruct the operators with safety requirements made not only by Mark Industries, but by the various safety boards in your area, as well as additional requirements set forth by ANSI & OSHA.
5. The Marklift is a non-insulated personnel carrier and must not be operated within 10 feet of a 50,000 volt line. (See page 7 & 8 articles)
6. Remember, the load capacity of the Marklift is total combined weight of personnel and tools, fixtures, accessories, etc.

7. Always distribute load evenly over platform floor area.
8. Make sure platform rail holding bolts are secured.
9. It is recommended that head gear (Hard Hats) be worn by all personnel in the work platform.
10. Under no conditions should horseplay be tolerated. Report any misuse of equipment to the proper personnel
11. The Marklift structure must not be used as a welding ground. Disconnect both battery leads prior to performing any welding operations.
12. Do not lean over platform guard railings to perform work.
13. Do not use ladders or scaffolding on the platform to obtain greater height.
14. Battery sulphuric acid can cause a serious burn. Flush away acid with water.
15. Hydrogen and oxygen gases are produced during normal battery operation. This gas mixture can explode if flames or sparks are near battery vents.
16. Monitor battery during charging. Do Not allow battery to overcharge and boil.
17. Do not override any hydraulic, mechanical, or electrical safety devices.

18. Do not drive on uneven, sloping or soft terrain, as this is hazardous and must be avoided.
19. Do not work on platform if your physical condition is such that you feel dizzy or unsteady in any way.
20. Do not jump start other vehicles using Marklift battery.
21. When machine is not in use, remove hand control box to prevent unauthorized use.

TITLE 8 **DIVISION OF INDUSTRIAL SAFETY**
(Register 73, No. 30—7-23-73)

358.38.113

Article 86. Provisions for Preventing Accidents

Article 86. Provisions 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

<i>Nominal voltage (Phase to Phase)</i>	<i>Minimum Required Clearance (Feet)</i>
750 - 50,000	10
over 50,000 - 75,000	11
over 75,000 - 125,000	13
over 125,000 - 175,000	15
over 175,000 - 250,000	17
over 250,000 - 370,000	21
over 370,000 - 550,000	27
over 550,000 - 1,000,000	42

(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.

358.38.114

INDUSTRIAL RELATIONS

TITLE 8

(Register 73, No. 30—7-28-73)

Article 86. Provisions for Preventing Accidents

Except where the boom of boom-type equipment is lowered and no load is imposed thereon, the equipment in transit shall conform to the minimum required clearances set forth in Table X.

Table Y
Required Clearances from Energized High-Voltage Conductors
(While in Transit)

Nominal Voltage (Phase to Phase)	Minimum Required Clearance (Feet)
750— 50,000	6
over 50,000— 345,000	10
over 345,000— 750,000	16
over 750,000— 1,000,000	20

(4) **Storage.** The storage of tools, machinery, equipment, supplies, materials, or apparatus under, by, or near energized high-voltage lines is hereby expressly prohibited if at any time during such handling or other manipulation it is possible to bring such tools, machinery, equipment, supplies, materials, or apparatus, or any part thereof, within the minimum required clearances from high-voltage lines as set forth in Table X.

(c) The specified clearance shall not be reduced by movement due to any strains impressed (by attachments or otherwise) upon the structures supporting the high-voltage line or upon any equipment, fixtures, or attachments thereon.

(d) Insulated cage-type boom guards, boom stops, insulating links, or proximity warning devices may be used on cranes, but the use of such devices shall not alter the required clearances set forth in Table X.

(e) Any overhead conductor shall be considered to be energized unless and until the person owning or operating such line verifies that the line is not energized, and the line is visibly grounded at the work site.

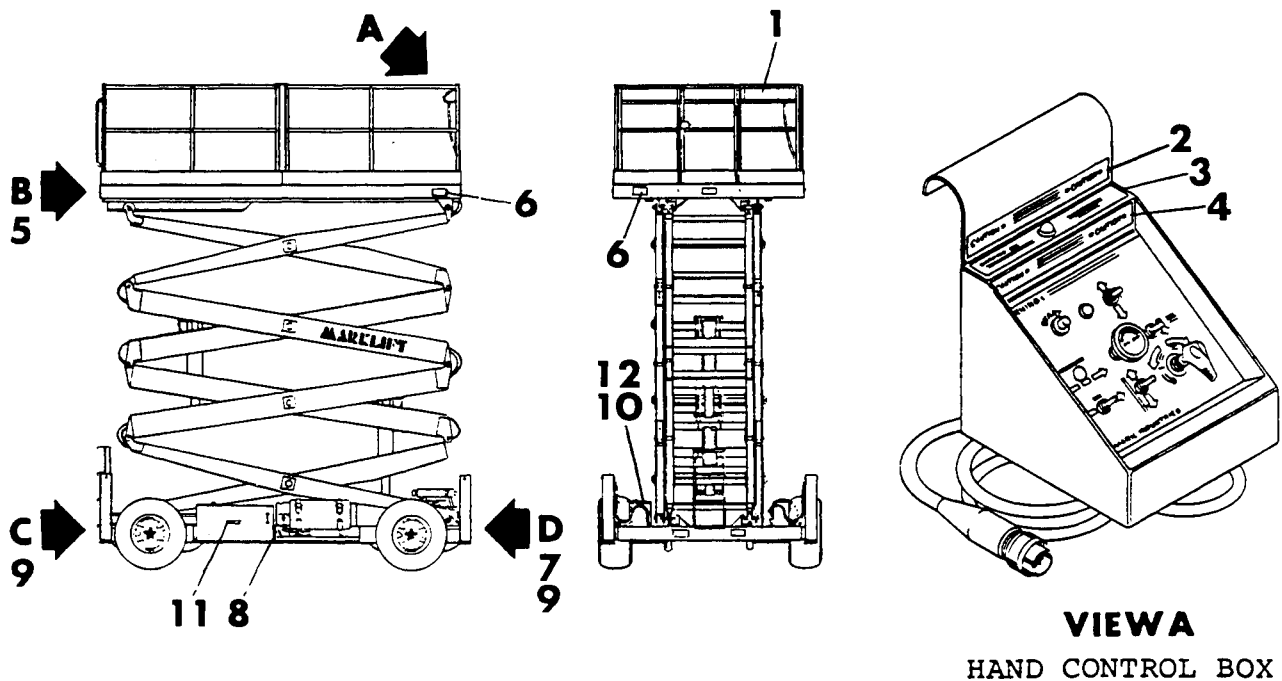
2947. Warning Signs Required. The owner, agent, or employer responsible for the operations of equipment shall post and maintain in plain view of the operator and driver on each crane, derrick, power shovel, drilling rig, hay loader, hay stacker, pile driver, or similar apparatus, a durable warning sign legible at 12 feet reading: "Unlawful To Operate This Equipment Within 10 Feet Of High-Voltage Lines of 50,000 Volts Or Less."

In addition to the above wording, the following statement in small lettering shall be provided on the warning sign: "For Minimum Clearances of High-Voltage Lines In Excess of 50,000 Volts, See Article 86, Title 8, High-Voltage Electrical Safety Orders."

MARKLIFT SELF-PROPELLED SCISSOR (ROUGH TERRAIN MODELS)

Be completely familiar with all warning and caution decals that are posted on the unit.

Keep in mind to be alert and use common sense and judgment in responding to dangerous situations and conditions that might develop during unit operation.



VIEW A
HAND CONTROL BOX

1

MARK INDUSTRIES

OPERATION SHEET

1500 LB. PLATFORM HEIGHT: 11000 POUNDS CAPACITY

WARNING: DO NOT EXCEED LOAD LIMITS EVENLY DISTRIBUTED ON PLATFORM FOR SPECIFIC MODEL.

CAUTION: UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN 100 FEET OF HIGH VOLTAGE LINES.

CAUTION: PLATFORM MUST NOT BE RAISED UNLESS OUTRIGGERS ARE EXTENDED AND STABILIZERS DOWN.

WARNING: MACHINE IS TO BE USED ON LEVEL GROUND ONLY.

1. TO START MACHINE:

- Activate MASTER POWER SWITCH on control panel.
- Push EMERGENCY STOP SWITCH on control panel.
- Push master battery switch on control panel.
- Push master battery switch on control panel.

2. TO STOP MACHINE:

- Push EMERGENCY STOP SWITCH on control panel.
- Push master battery switch on control panel.

3. TO SAVE AND LOWER PLATFORM:

- Push EMERGENCY STOP SWITCH on control panel.
- Push master battery switch on control panel.

4. FORWARD AND REVERSE TRAVEL:

- Push forward/reverse switch on control panel.
- Push master battery switch on control platform.

5. TO STOP MACHINE:

- Push EMERGENCY STOP SWITCH on control panel.
- Push master battery switch on control platform.

6. CREEP SPEED:

- Push CREEP SPEED SWITCH on control panel.
- Push master battery switch on control platform.

7. FUSE WHEELING:

- Push FUSE WHEELING SWITCH on control panel.
- Push master battery switch on control platform.

8. HYDRAULIC OUTRIGGERS:

- Push HYDRAULIC OUTRIGGER SWITCH on control panel.
- Push master battery switch on control platform.

9. ELECTRIC BRAKE:

- Push ELECTRIC BRAKE SWITCH on control panel.
- Push master battery switch on control platform.

10. WARNING LIGHT:

- Push WARNING LIGHT SWITCH on control panel.
- Push master battery switch on control platform.

11. HYDRAULIC SYSTEM PRESSURE:

- Push HYDRAULIC SYSTEM PRESSURE SWITCH on control panel.
- Push master battery switch on control platform.

12. HYDRAULIC SYSTEM PRESSURE:

- Push HYDRAULIC SYSTEM PRESSURE SWITCH on control panel.
- Push master battery switch on control platform.

OPTIONAL WARNING HORN:

- Push WARNING HORN SWITCH on control panel.
- Push master battery switch on control platform.

WARNING: WHEN MACHINE IS NOT IN USE, ALWAYS HAND CONTROL, SEE TO PREVENT UNAUTHORIZED USE.

2

CAUTION PLATFORM MUST NOT BE RAISED UNLESS OUTRIGGERS ARE EXTENDED TO FULL WIDTH AND STABILIZERS ARE DOWN **CAUTION**

3 **WARNING: LIGHT**
INDICATES UNSTABLE CONDITION  **PLATFORM WILL LOWER**
AUTOMATICALLY 2015

4 **- CAUTION -** UNLAWFUL TO OPERATE THIS EQUIPMENT
WITHIN 10 FEET OF HIGH VOLTAGE LINES **- CAUTION -** 2014

8 **USE VAPOR**
TANK ONLY 1

5 This machine has been
designed and tested
to meet these standards:
ANSI A92.2 1969
ANSI A92.3 1973
OSHA GISO 1910.67 2018-1

VIEW B

7 **IMPORTANT**
CHECK BATTERY
WATER LEVEL
AT LEAST
ONCE A WEEK. 2011

VIEW D

6 **LOAD CAPACITY** **LBS.**
(EVENLY DISTRIBUTED LOAD)

9 **DO NOT LIFT**
FROM THIS END 2011

VIEW C & D

10 **EMERGENCY LOWERING VALVE**
 **OPEN VALVE TO LOWER PLATFORM**

11 **THE HYDRAULIC SYSTEM**
OF THIS MACHINE IS DESIGNED
TO USE G.M. TRANSMISSION FLUID
TYPE "B" WITH DEXRON 2017

12 **- WARNING -**
DO NOT WORK UNDERNEATH THIS LIFT
UNLESS IT IS MECHANICALLY LOCKED.

see service manual for location
and use of mechanical locks 2015

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)

It shall be the responsibility of all users of the Marklift to read and comply with the following operating instructions. They are designed to promote safety and a better understanding of the operation of the self-propelled aerial platform.

1. STARTING

The Marklift can be started from either the hand control box or the switch panel located in the component box on the side of the machine. Before either position will function the Selector Switch must be activated. Push the Selector Switch in the component box to the left to activate the hand control box -- to the right to activate the component box switch panel.

A. HAND CONTROL BOX

After the Select Switch has been turned to the left, pull out the emergency ON/OFF button located in the middle of the hand control box. Electric models are now operational. For gas models, push the start button until the engine starts.

B. COMPONENT BOX SWITCH PANEL

After the Select Switch has been turned to the right, electric models are immediately operational. For gas models, push the start button on the component box switch panel until the engine starts. NOTE: The only functions that can be operated from the component box are ON/OFF and the lift circuit.

2. STEERING

The steering of the machine is done from the hand control box only. When the engine is running, by pushing the toggle switch for the steering to the left, the front wheels will go left. Pushing the switch to the right, the front wheels will go to the right. Because a momentary type switch is used, when the operator releases the switch it will automatically return to the off position. The wheels will remain at an angle until returned, by pushing the toggle switch in the opposite direction.

3. LIFT

Raising and lowering of the platform is done from either the hand control box or the switch panel in the component box. A momentary switch has been positioned so that in order to raise the platform the operator must push the switch to the up position, and to lower the platform the operator must push the switch to the down position. When the switch is released, it will automatically return to the off position, and the platform will remain stationary.

There is an emergency lowering valve which can be reached through the hole in the front cover of the component box. This valve, as part of the hydraulic system, can be used to safely lower the platform if there is a loss of electrical power, or if the operator is injured while on the fully extended platform. Before the platform will lift again the emergency lowering valve must be closed.

4. TRAVEL

Forward and reverse travel of the machine is done from the hand control box only. The machine is capable of three speeds for both forward and reverse travel: Low speed, high speed and creep speed. Low and high speed travel is activated with a rotary switch. Turning the switch to forward travel; first position is low speed; second position is high speed. Turning the switch to reverse travel; the first position is low speed; second position is high speed.

A. CREEP SPEED

Creep speed will automatically cut-in when the platform is raised over one half of its rated height. The hand control box has a creep speed switch in the middle right side. If creep speed is needed before the platform reaches one half of its extended height, the operator can manually activate the creep speed by pushing the switch to the up position. NOTE: If creep speed is left on, NORMAL, HIGH and LOW speed will not operate.

5. FREE WHEELING

In order to move the machine in a free wheeling condition for loading, unloading and positioning, make sure that the component box selector switch is in the OFF position. The Marklift can be free-wheeled at a low speed (5 mph maximum) without damage to any of the components or structure.

6. WARNING HORN (OPTION)

For some industrial applications, and to meet certain particular safety requirements, a warning horn may be needed. The warning horn option on the Marklift can be used as an automatic movement indicator, or manually activated, as required. The horn is activated by a 3-position switch on the hand control box. The middle position is OFF. When the switch is pushed to the right the horn will sound when either the drive or lift function is activated (forward and reverse up and down).

7. WARNING LIGHT

As a safety feature the Marklift has been equipped with a series of mercury switches that will cut-out the lift circuit whenever the unit is in an unstable condition. An unstable condition consists of a tilt of three (3) degrees side and six (6) degrees forward and aft. the platform is extended it will automatically descend. If the platform is already in the down position, it cannot be raised. This unstable condition is indicated by a light located in the top center of the control box.

8. HYDRAULIC SYSTEM PRESSURE

MARK INDUSTRIES has incorporated an integrated hydraulic system in all models. To prevent damage to either the pumps or any other part of the hydraulic system, the pump settings should be as follows:

Maximum pressure is 2300 PSIG for (RT) models.

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)

HYDRAULIC FLUID TABLE

Oil Company	Chevron	Gulf	Shell	Union
Brand Name	ATF Dexron 11	ATF Dexron 11	Donax-T6	ATF Dexron
Viscosity -				
Sus @ 100°F	187.4	195	200	200
Sus @ 210°F	49.2	50.4	50	52.3
Viscosity				
Index typical	153°	155°	160°	172°
Flash Point°F	400°	405°	390°	395°
Pour Point°F	-40°	-50°	-50°	-45°

SERVICE TOOLS

To properly and efficiently service your Marklift, several basic tools are required. The following list of tools should be available.

1. Volt/Ohm Meter
2. Hydraulic Pressure Guage (0-3000 PSI)
3. Female Quick Disconnect Coupler (P/N 842)
4. Battery Hydrometer
5. Battery Load Tester
6. Standard Mechanics Hand Tools
7. Scissor Arm Supports
8. Fuel Pump vac./pres. Gauge (Automotive Type)
9. Electrical Test Light
10. Hydraulic Pressure Gauge (0-1000 PSI)

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)

INTRODUCTION

Whenever trouble shooting any problem the initial consideration MUST be to "Check the basics".

Check the basics, means to insure that the batteries are in good shape, and have at least a three quarter charge, determined by use of a hydrometer, and battery maintenance instructions (page 24)

A large percentage of electrical problems can be attributed to insufficiently charged or defective batteries.

(Some Helpful Hints)

ELECTRICAL

1. If problem seems to be electrical, utilize your applicable schematic, and test light to trace power flow (electrical current) starting at battery and continuing through system until the problem is located.
2. Keep in mind, if you DO NOT have a good ground to a valve coil, relay etc., then even if you have proper electrical current to the coil or relay, the item will not function properly.
3. Diodes can be thought of as "One way electrical check valves" they permit current flow in one direction and stop it in the opposite direction.

Current Flow.



ACTUAL



SCHEMATIC

4. The basic purpose of a relay is to maintain full electrical current. When sending an electrical signal to the relay coil, the electrical current flows through relay contacts and to the desired valve coil.

HYDRAULIC

1. For the various functions the system pressure is utilized. If a slower drive speed is needed, a portion of the hydraulic fluid is dumped to tank by the creep or low speed valve.
2. Directional valves (Outriggers, Steering, Drive) have two opposite electrical coils with a moveable spool between the coils.
3. One way valves (Lift, Descent, Dump, Creep) can be both N/C (Normally Closed) or N/O (Normally Open) depending on if flow is desired or not.

(Trouble Shooting Check List)

LIFT

1. Will not lift. All other functions work.
 - A. Emergency lowering valve is open.
 - B. Loose electrical connections.
 - C. Descent valve stuck open.
 - D. Pressure limit switch out of adjustment.
 - E. Tilt switches out of adjustment.
2. Will not lift rated load.
 - A. Low system pressure.
 - B. Pressure limit switch out of adjustment.
 - C. Internal seal leaking in cylinder.

4. The basic purpose of a relay is to maintain full electrical current. When sending an electrical signal to the relay coil, the electrical current flows through relay contacts and to the desired valve coil.

HYDRAULIC

1. For the various functions the system pressure is utilized. If a slower drive speed is needed, a portion of the hydraulic fluid is dumped to tank by the creep or low speed valve.
2. Directional valves (Outriggers, Steering, Drive) have two opposite electrical coils with a moveable spool between the coils.
3. One way valves (Lift, Descent, Dump, Creep) can be both N/C (Normally Closed) or N/O (Normally Open) depending on if flow is desired or not.

(Trouble Shooting Check List)

LIFT

1. Will not lift. All other functions work.
 - A. Emergency lowering valve is open.
 - B. Loose electrical connections.
 - C. Descent valve stuck open.
 - D. Pressure limit switch out of adjustment.
 - E. Tilt switches out of adjustment.
2. Will not lift rated load.
 - A. Low system pressure.
 - B. Pressure limit switch out of adjustment.
 - C. Internal seal leaking in cylinder.

STEERING

1. Steers in one direction only.
 - A. Loose electrical connection.
 - B. Loss of ground to coil on affected direction.
 - C. Spool sticking in one direction.
 - D. Faulty steering switch in hand control box.
 - E. Flow control valve to steering cylinder out of adjustment.
 - F. Faulty diode.

DRIVE

1. Will drive forward. No reverse.
 - A. Loose electrical connection in reverse circuit.
 - B. Faulty drive switch.
 - C. Valve spool sticking in one direction.
 - D. Faulty diode.
2. No forward or reverse drive.
 - A. Free wheeling valve open.
 - B. Faulty drive switch
 - C. Both forward and reverse diodes inoperative on terminal strip.
 - D. Stuck valve spool
 - E. Drive cut out switch in outrigger inoperative.
3. No high speed.
 - A. Loose electrical connections.
 - B. Low speed relay inoperative.
 - C. High speed dump valve inoperative.
 - D. High speed valve inoperative (3 speed machines only).
4. No creep speed.
 - A. Loose electrical connections.
 - B. Creep speed relay inoperative.
 - C. Faulty creep switch.

- D. Faulty creep dump valve.
 - E. Creep or low speed flow valve out of adjustment.
5. No functions working.
- A. Faulty circuit breaker.
 - B. Loose power connections.
 - C. Power relay inoperative (Electric Machines Only).
 - D. Dump relay.
 - E. Dump valve inoperative.
6. No system pressure.
- A. No hydraulic oil.
 - B. Hydraulic tank valve is in "OFF" position.
 - C. Loose electrical connections in dump circuit.
 - D. Dump relay inoperative.
 - E. Dump valve inoperative.
 - F. Pressure relief valve inoperative.
 - G. Hydraulic pump inoperative.
7. Low System pressure.
- A. Pressure relief valve out of adjustment.
 - B. Dump valve faulty.
 - C. Low speed dump valve faulty.
 - D. Hydraulic pump faulty.
 - E. Hydraulic tank sump filter obstructed.

If this trouble shooting check list does not help to solve your problem, contact your local MARKLIFT representative or the MARK INDUSTRIES Service Department.

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)COMMON

<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
2	4014	MERCURY SWITCH
4	4045	6 AMP DIODE
2	16947	RETURN FILTER ELEMENT
1	3004	SUMP FILTER
1	66063	LIFT LOWER VALVE
1	66082	DUMP/CREEP VALVE-EXCEPT RT25
4	4032	6 VOLT RELAY
1	4073	6 VOLT SHORT COIL
1	4074	6 VOLT LONG COIL
3	4021	MOMENTARY SWITCH
1	4106	DRIVE SWITCH
2	65151	DRIVE SWITCH KNOB
1	4018	EMERGENCY ON/OFF SWITCH
2	5300	EMERGENCY ON/OFF KNOB
2	3006A	LIFT CYLINDER SEAL KIT-RT31 & 40
2	3065A	LIFT CYLINDER SEAL KIT-RT25
2	66017	LIFT CYLINDER SEAL KIT-RT25 AFTER JANUARY, 1981
2	3008A	LIFT CYLINDER SEAL KIT-RT26
1	2730	CONTROL CABLE
1	784A	RELAY BASE
2	20523	TIME DELAY RELAY
1	410	DUMP VALVE RT25
1	3045	HIGH SPEED VALVE-RT25
2	331B	STEERING CYLINDER SEAL KIT

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)

COMMON

<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
2	44A	CUSHION CYLINDER SEAL KIT
2	4019	ON/OFF SWITCH
2	4020	P.B. START SWITCH-GAS ONLY

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)
ELECTRIC

<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	3015-1	HYDRAULIC PUMP
1	4083	400 AMP RELAY
2	63D	BATTERY CHARGER FUSE
2	63E	BATTERY CHARGER DIODE
1	63F	BATTERY CHARGER AMP METER
2	63G	BATTERY CHARGER KNOB
1	237A	BATTERY CHARGER TIMER
1	853	BATTERY CHARGER PIGTAIL
2	16321	PUMP TO MOTOR COUPLING

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)GAS

<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
2	16919	MICRO VAC REPAIR KIT
1	16965	REGULATOR REPAIR KIT
1	16925	FILTER LOCK
1	16955	MICRO BON FILTER
1	20832	FUEL SHUT OFF VALVE
1	20930	SPIDER COUPLER
1	70015	FUEL SELECTION SWITCH
2	4011	P.B. SWITCH (RED)-RT40
2	4012	P.B. SWITCH (BLACK)-RT40
1	3035	HYDRAULIC PUMP-RT25G & RT26G
1	3038	HYDRAULIC PUMP-RT31G & RT40G

MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)

A new fully charged battery will have a specific gravity of 1.260 or 1.280 at 80° F.

The tables (on page 25) show the specific gravity as a function of percentage battery charge.

1.260 Sp. Gr.	1.280	100% charged
1.230	1.250	75% charged
1.200	1.220	50% charged
1.170	1.190	25% charged
1.40	1.160	Very little useful capacity
1.110	1.130	Discharged

The percentage charge of a battery should be checked with a good hydrometer that has a thermometer and temperature correction scale built into it. This allows a temperature correction to be made readily. A correction of .04 points in gravity shall be made for each ten degrees either above or below 80° F. For every 10° F below 80° F, subtract .04 points; and for every 10° above 80° F, add .04 points.

Within every thirty day period, the cell of each battery should be checked to determine the percentage charge. If any cell has a hydrometer reading of more than .020 less than the other cells in the battery, that cell is bad and the battery should be removed from service.

Periodic checks by hydrometer after charging, but prior to any discharge, is recommended to determine if batteries are receiving a full charge.

Either excessive overcharge or moderate undercharge can shorten battery life.

With proper attention to water level and charging time, compared to hydrometer reading, the batteries should give a long useful life.

TEMPERATURE/SPECIFIC GRAVITY CORRECTION TABLE FOR BATTERIES

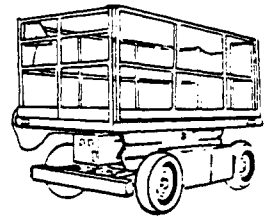
Actual Hydrometer Reading at Actual Temperature*

80°F (27°C)	0°F (-18°C)	-10°F (-23°C)	-20°F (-29°C)	-30°F (-34°C)	-45°F (-43°C)	-65°F (-54°C)	Approx. State of Charge In %
1.280	1.312	1.316	1.320	1.324	1.330	1.338	100
1.250	1.282	1.286	1.290	1.294	1.300	1.308	75
1.220	1.252	1.256	1.260	1.264	1.270	1.278	50
1.190	1.222	1.226	1.230	1.234	1.240	1.248	25
1.160	1.192	1.196	1.200	1.204	1.210	1.218	0

Specific Gravity
Corrected to 80°F (17°C)

Freezing Temperature

1.280	-90°F	-68°C
1.250	-62°F	-52°C
1.200	-16°F	-27°C
1.150	+ 5°F	-15°C
1.000	+19°F	- 7°C



MARK INDUSTRIES

MARKLIFT SCISSOR
MAINTENANCE CHECK LIST

Model: _____ Serial No. _____
 Date: _____ Equip. No. _____
 Location: _____ Mechanic: _____

ITEM	CODE	COMMENTS	ITEM	CODE	COMMENTS
1 Engine Oil			26 Safety Cut-outs		
2 Engine Oil Filter			27 Bushing		
3 Air Filter			28 Rollers		
4 Fuel Filter			29 Front End Assy.		
5 Tune-up			30 Tire Pressure		
6 Choke			31 Tire Condition		
7 Engine RPM			32 Lug Nuts		
8 Chargin System			33 Wheel Bearing		
9 Fuel System LPG-GAS			34 Nut & Bolts		
10 Batteries			35 Guard Rails		
11 Battery Terminals			36 Lubrication		
12 Motor Brushes			37 Warning Decals		
13 Hydraulic Fluid			38 Operation Sheet		
14 Hyd. Oil Filter			39 General Decals		
15 Hydraulic System			40 Paint		
16 Hydraulic Pressure			41 All Operations		
17 Hydraulic Hoses			42 Lift		
18 Cylinders			43 Steering		
19 Drive Motors			44 Creep Drive		
20 Brakes			45 Low Drive		
21 Emergency Lowering Valve			46 High Drive		
22 Hand Control Box			47 Tilt Switches		
23 Lower Controls			48 Fuel Level		
24 Relays			49 Literature		
25 Wire Connections			50 Options		

CODE

F - Filled
 R - Repaired
 C - Checked
 A - Adjusted
 X - Needs Repair

Other Comments:



MARKLIFT SERVICE MAINTENANCE RECORD

MODEL: _____
SER. NO.: _____
DATE SOLD _____

CODE:

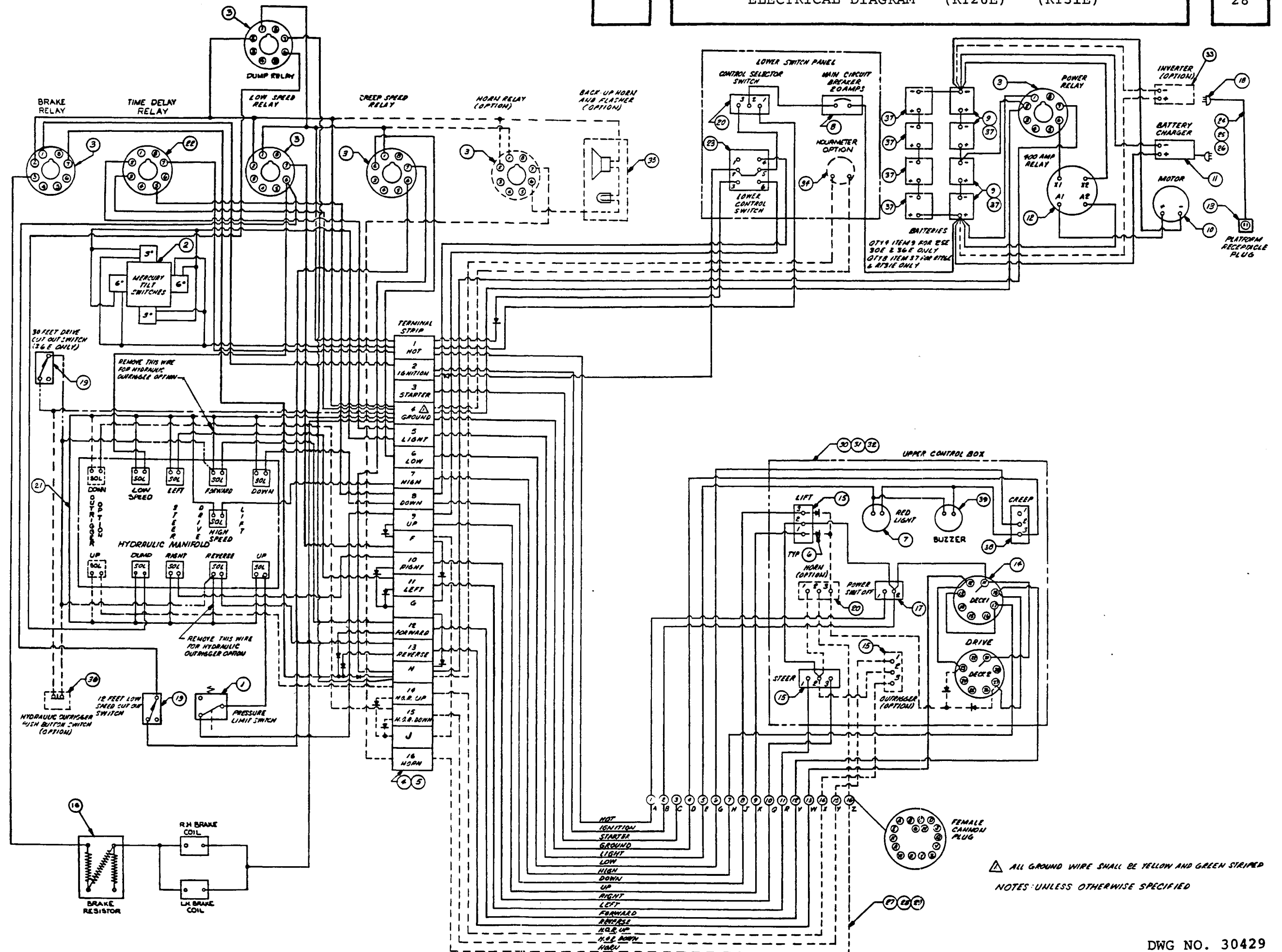
C--CHECKED
A--ADJUSTED
R--REPAIRED
N--NEW PART
X--NEEDS
REPAIR

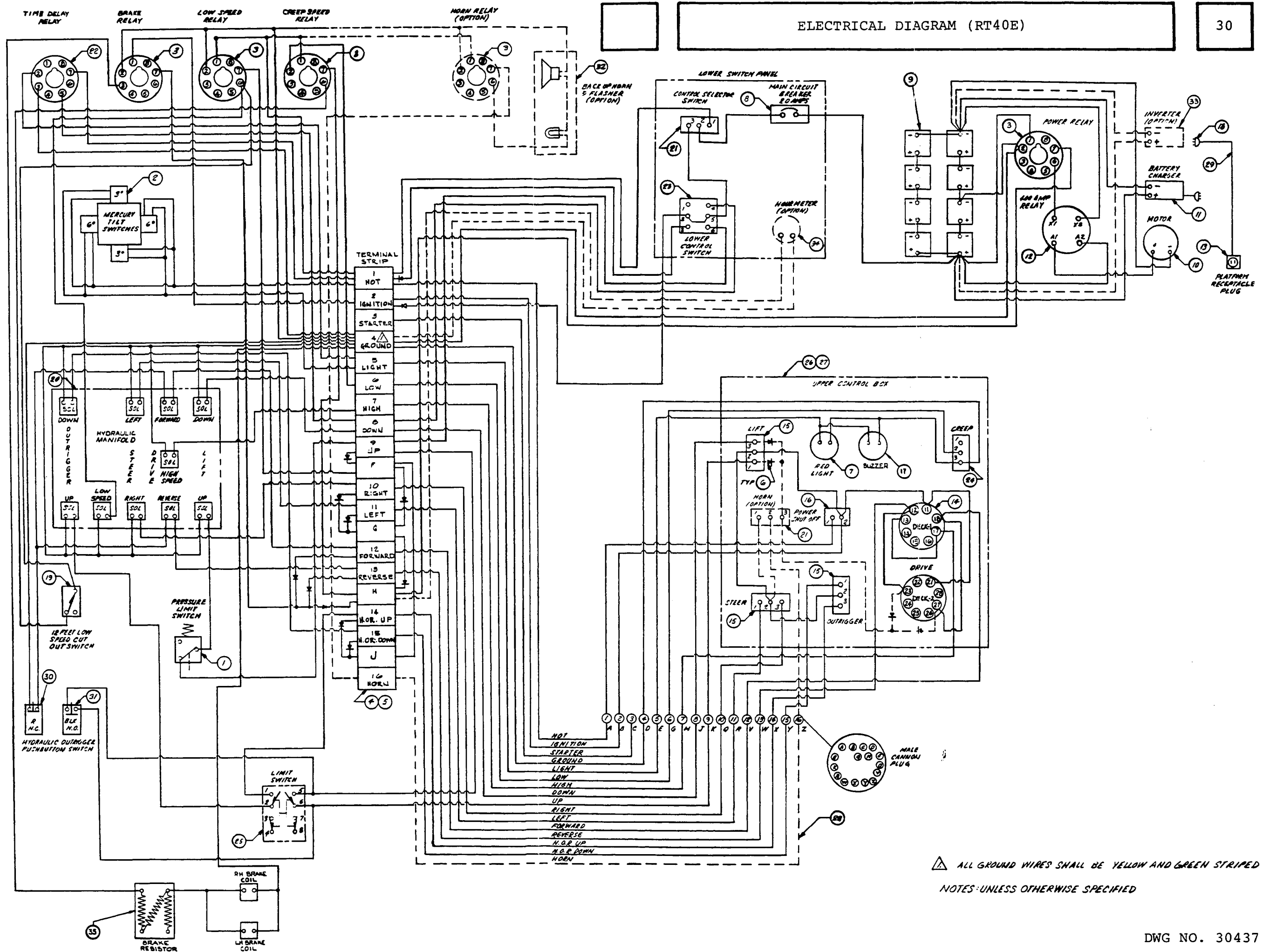
OPTIONS

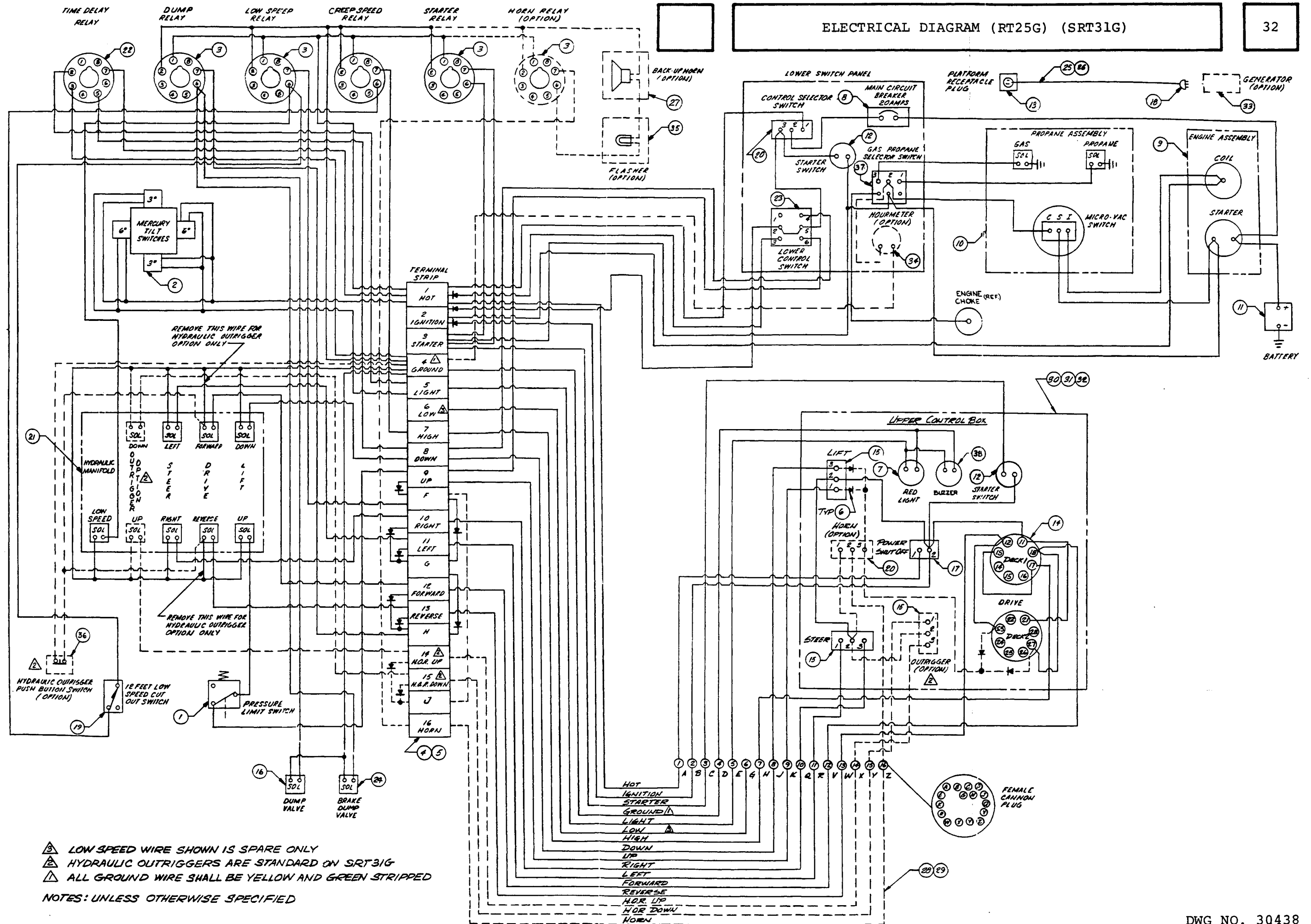
WARRANTY PERIOD _____

[illegible]

DATE	REMARKS	DATE	REMARKS	AGENCY

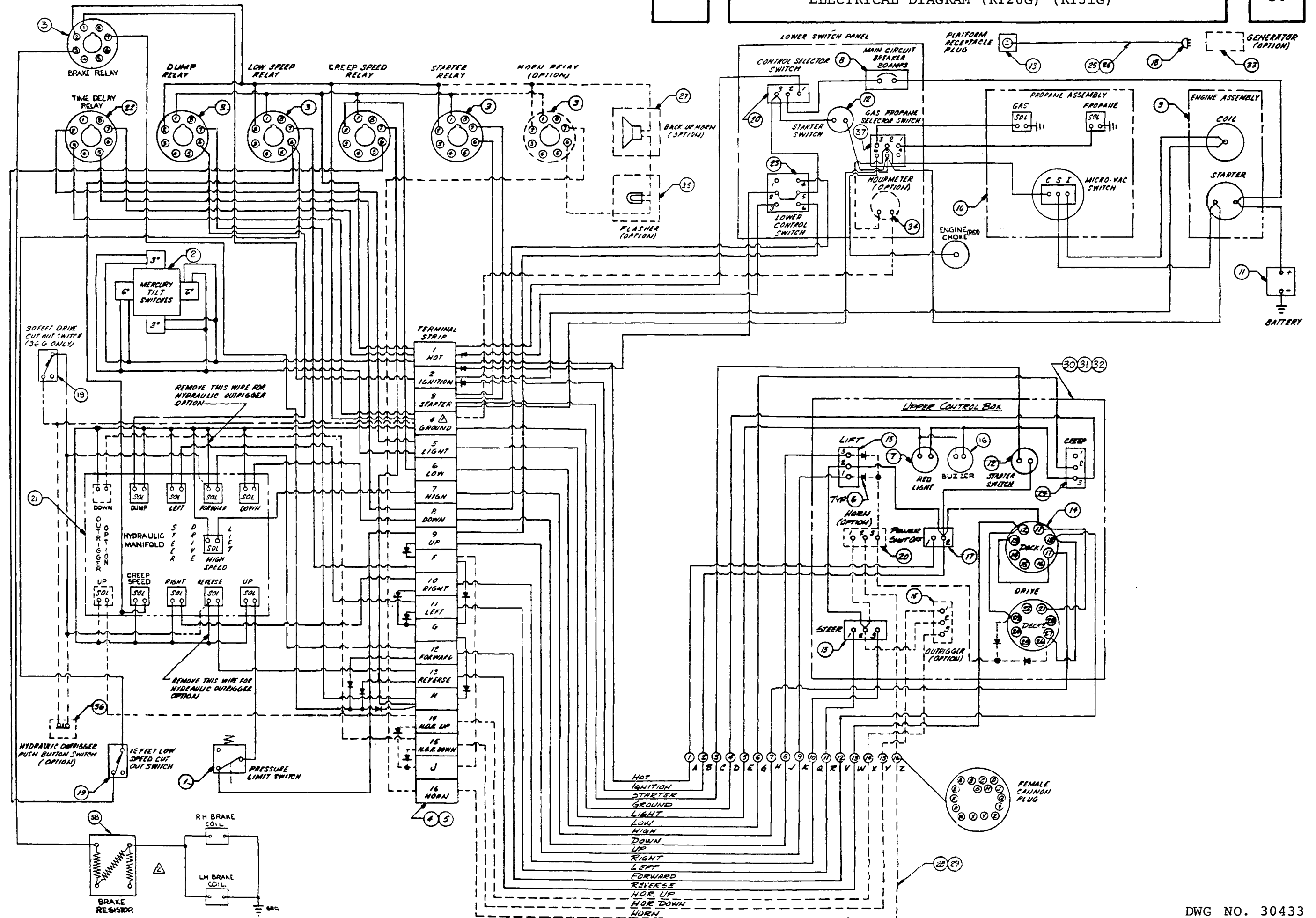






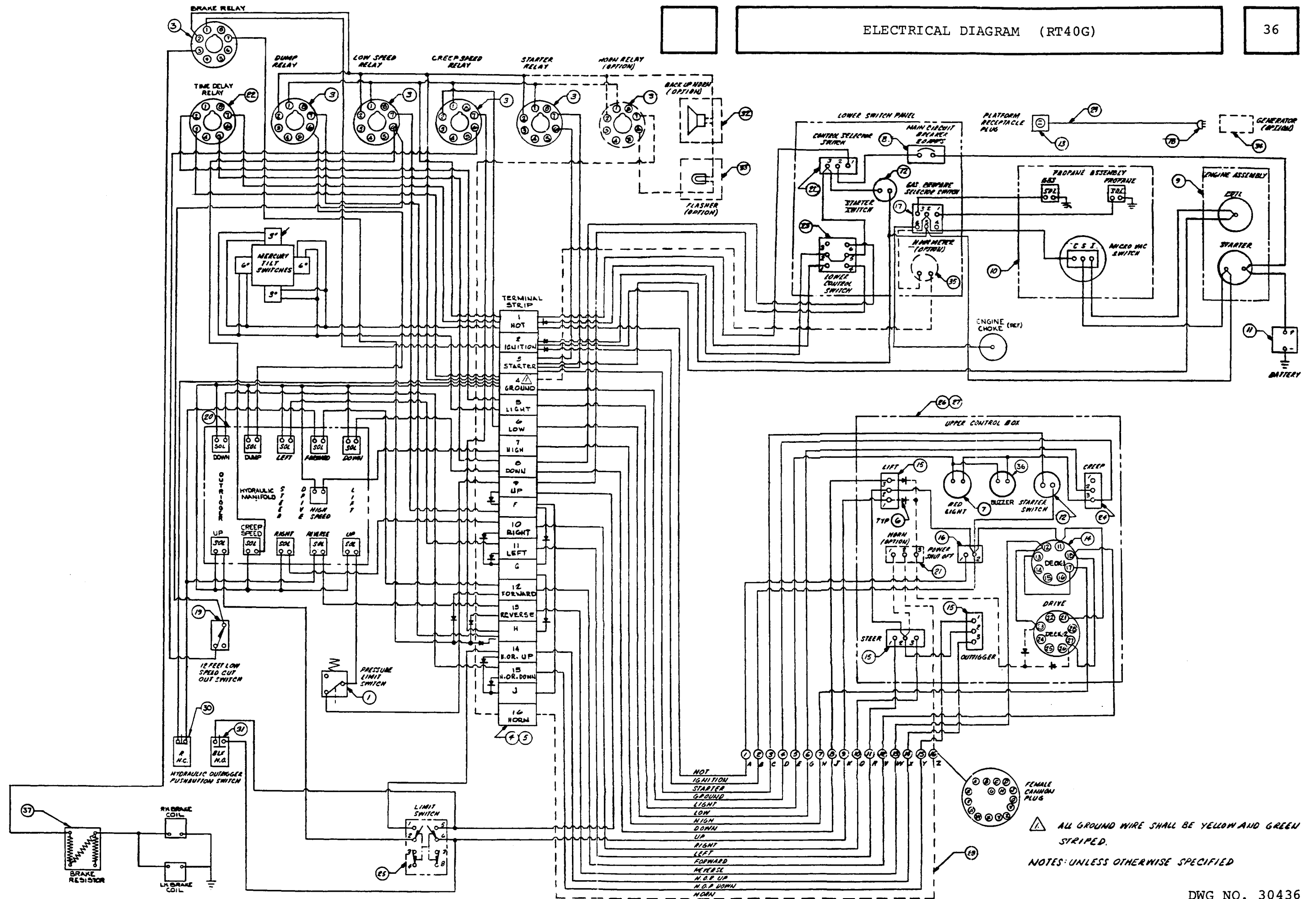
BILL OF MATERIAL IS FOR REFERENCE ONLY

							1	38		BUZZER	
							1	37	70015	GAS - PROPANE SELECTOR SWITCH	
			1		1			36	4011	PUSH BUTTON SWITCH	
				1				35	4029	FLASHER	
		1						34	20571	HOURMETER	
			1					33	4070	GENERATOR	
				1		1		32	8325-5	UPPER CONTROL BOX ASSEMBLY	
					1			31	8325-3	UPPER CONTROL BOX ASSEMBLY	
						1		30	8325-1	UPPER CONTROL BOX ASSEMBLY	
					1			29	4033-	CABLE HARNESS ASSEMBLY	
						1		28	4033-	CABLE HARNESS ASSEMBLY	
				1				27	4028	BACK UP HORN	
					1			26	4034-	CABLE	3 CONDUCTOR
						1		25	4034-	CABLE	3 CONDUCTOR
					1	1		24	30460	3 WAY VALVE	
						1	1	23	20481	ON OFF SWITCH	
						1	1	22	20523	TIME DELAY RELAY	
						1	1	21		HYDRAULIC MANIFOLD	
				1	1	1		20	4019	ON OFF SWITCH	
					1	1		19	20803	LIMIT SWITCH	
					1	1		18	2624	PLUG 3 PRONG	
					1	1		17	4018	EMERGENCY ON OFF SWITCH	
					1	1		16	410	DUMP VALVE	
			1		3	2		15	4021	MOMENTARY SWITCH	
					1	1		14	4106	DRIVE SWITCH	
					1	1		13	4060	RECEPTACLE	
						2	2	12	4020	STARTER SWITCH	
						1	1	11	4030	BATTERY	12V 95 AMPS
						1	1	10	30226	PROPANE ASSEMBLY	
						1	1	9	20506	ENGINE ASSEMBLY	
						1	1	8	20562	CIRCUIT BREAKER	20 AMPS
						1	1	7	4031	LIGHT	RED
			2	4	12	10		6	4045	DIODE	6 AMPS
						1	1	5	117A	TERMINAL BLOCK END	
						20	20	4	4027	TERMINAL BLOCK	
					1	4	4	3	4032	RELAY	
						1	1	2	30387	FILT SWITCH ASSEMBLY	
						1	1	1	2297	PRESSURE LIMIT SWITCH	
		11050	11022	11045	11011	SRT31G	RT25G	ITEM NO.	PART OR IDENTIFYING NO.	DESCRIPTION	DATA: SPECIFICATIONS SIZES, NOTES, SUPPLIERS.
QTY PER OPTION						QTY PER STD. MACHINE		BILL OF MATERIAL DWG NO. 30438			



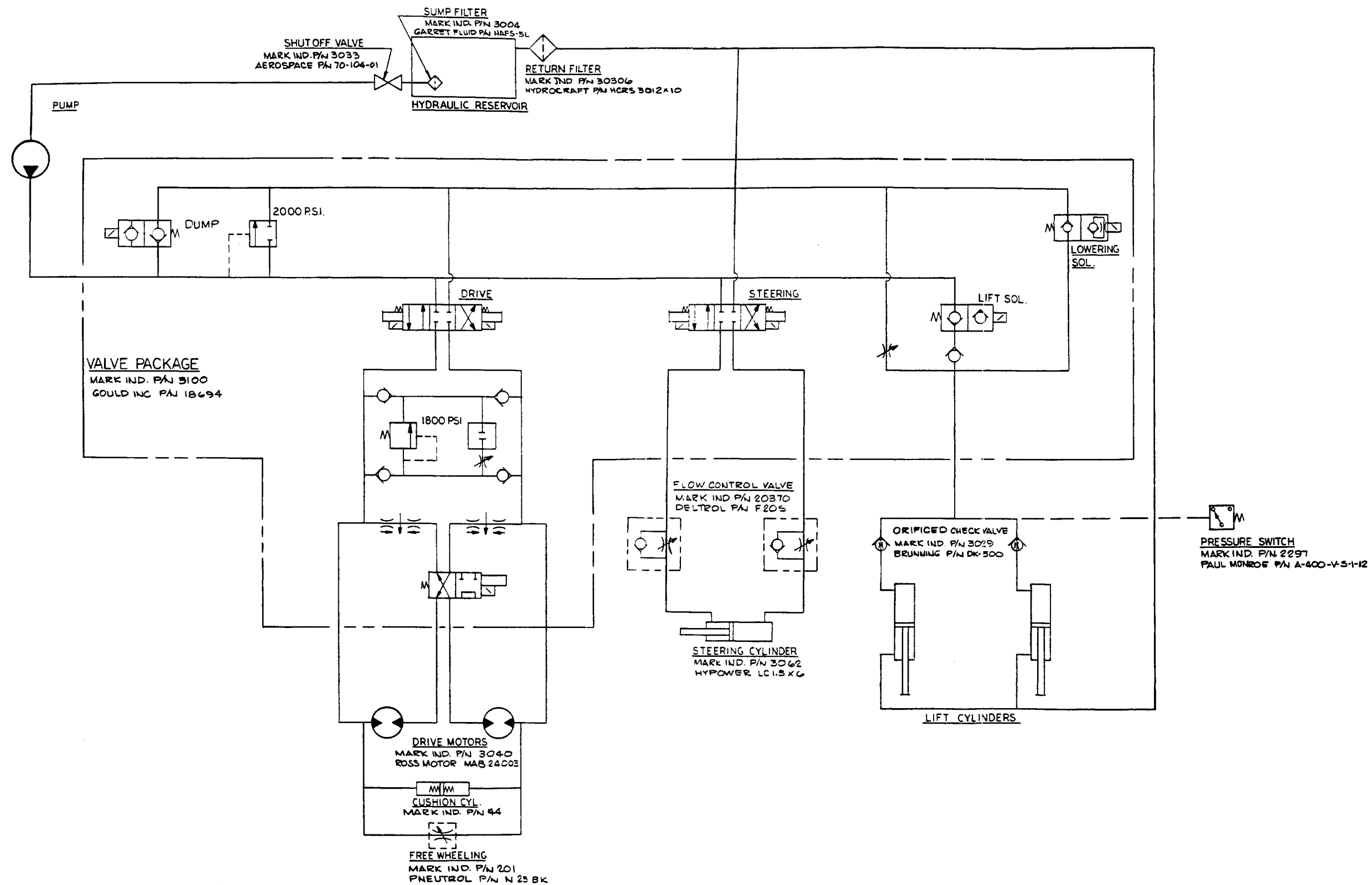
BILL OF MATERIAL IS FOR REFERENCE ONLY

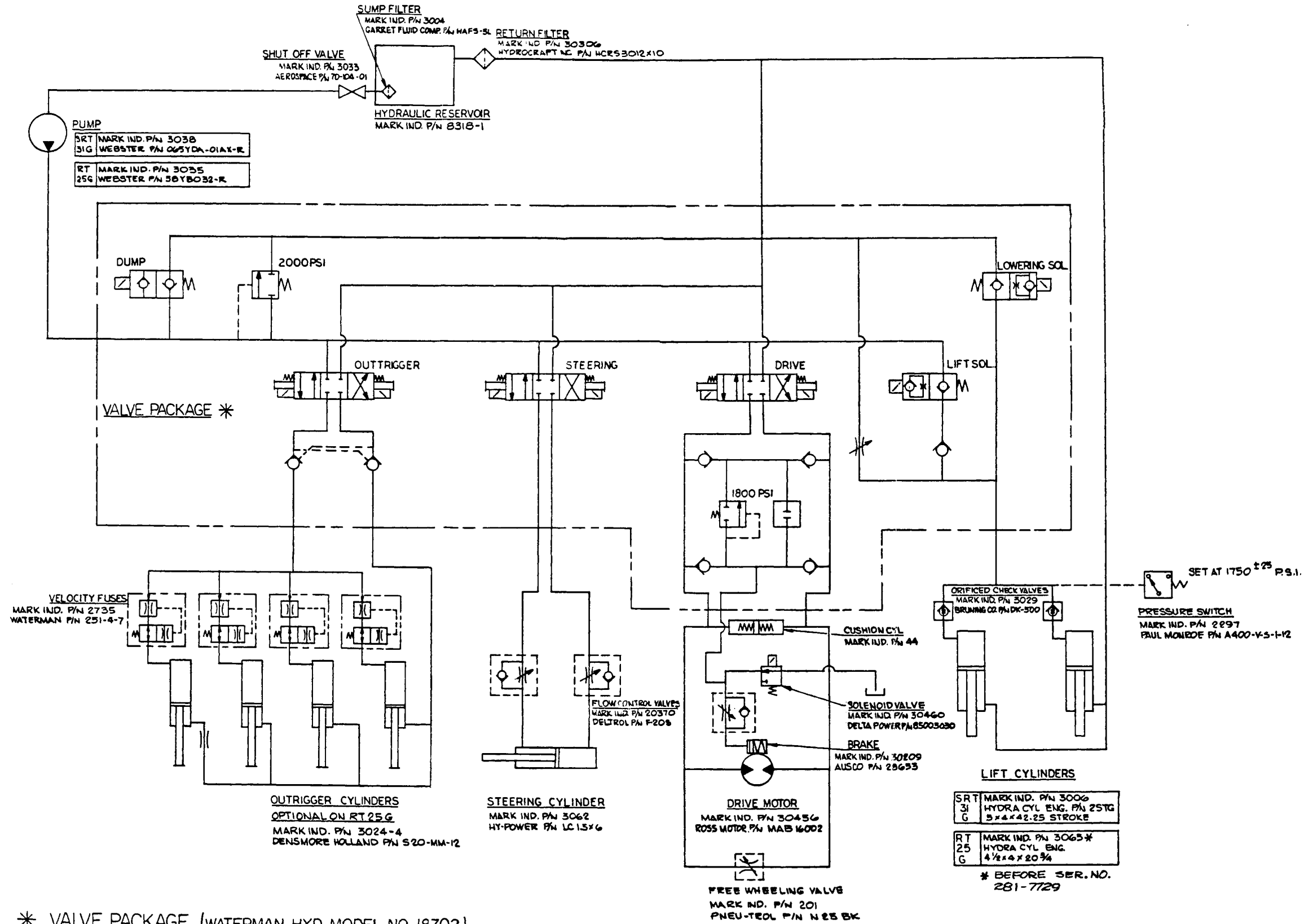
				1	1	38		BRAKE RESISTOR	
				1	1	37	70015	GAS - PROPANE SELECTOR SWITCH	
		1				36	4011	PUSH BUTTON SWITCH	
			1			35	4029	FLASHER	
1						34	20571	HOURMETER	
	1					33	4070	GENERATOR	
		1				32	4068-5	UPPER CONTROL BOX ASSEMBLY	
			1			31	4068-3	UPPER CONTROL BOX ASSEMBLY	
				1	1	30	4068-1	UPPER CONTROL BOX ASSEMBLY	
						29	4039-	CABLE HARNESS ASSEMBLY	
				1	1	28	4033-	CABLE HARNESS ASSEMBLY	
			1			27	4028	BACK UP HORN	
						26	4034-	CABLE	3 CONDUCTOR
				1	1	25	4034-	CABLE	3 CONDUCTOR
				1	1	24	4017	ON OFF SWITCH	
				1	1	23	20481	ON OFF SWITCH	
				1	1	22	20523	TIME DELAY RELAY	
				1	1	21	30713	HYDRAULIC MANIFOLD ASSY	
			1	1	1	20	4019	ON OFF SWITCH	
				1	1	19	20803	LIMIT SWITCH	
				1	1	18	2624	PLUG 3 PRONG	
				1	1	17	4018	EMERGENCY ON OFF SWITCH	
				1	1	16		BUZZER	
	1		2	2	15	4021		MOMENTARY SWITCH	
				1	1	14	4106	DRIVE SWITCH	
				1	1	13	4060	RECEPTACLE	
				2	2	12	4080	STARTER SWITCH	
				1	1	11	4030	BATTERY	12V 95 AMPS
				1	1	10	30226	PROPANE ASSEMBLY	
				1	1	9	20506	ENGINE ASSEMBLY	
				1	1	8	20562	CIRCUIT BREAKER	80 AMPS
				1	1	7	4031	LIGHT	RED
	2	4	13	13	6	4045		DIODE	6 AMPS
				1	1	5	117A	TERMINAL BLOCK END	
				20	20	4	4027	TERMINAL BLOCK	
				1	5	5	4032	RELAY	
				1	1	2	30387	TILT SWITCH ASSEMBLY	
				1	1	1	2297	PRESSURE LIMIT SWITCH	
1050	1002	1005	1011	RT26	RT31	ITEM NO.	PART OR IDENTIFYING NO.	DESCRIPTION	DATA: SPECIFICATIONS SIZES, NOTES, SUPPLIERS.
QTY PER OPTION				STD MACHINE		BILL OF MATERIAL DWG NO. 30433			



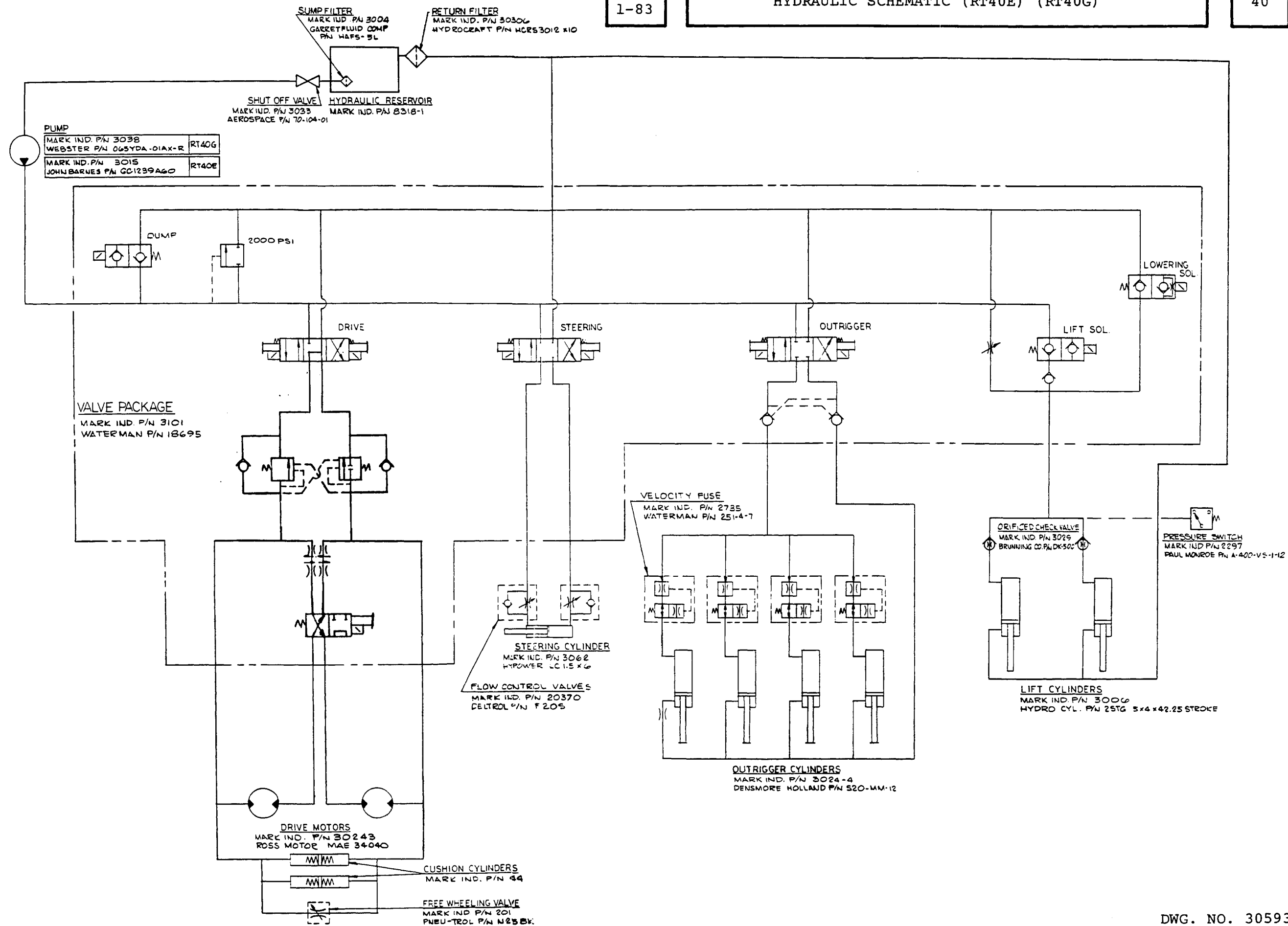
BILL OF MATERIAL IS FOR REFERENCE ONLY

			1	37		BRAKE RESISTOR	
			1	36		BUZZER	
1				95	20571	HOURMETER	
	1			34	4070	GENERATOR	
		1		33	4029	FLASHER	
		1		32	4028	BACK UP HORN	
			1	31	4010	PUSH BUTTON SWITCH	BLACK
			1	30	4011	PUSH BUTTON SWITCH	RED
			1	29	4038 -	CABLE	9 CONDUCTOR
			1	28	4033 -	CABLE HARNESS ASSEMBLY	
		1		27	4068-7	UPPER CONTROL BOX ASSEMBLY	
			1	26	4068-5	UPPER CONTROL BOX ASSEMBLY	
			1	25	20373	LIMIT SWITCH	
			1	24	4017	ON OFF SWITCH	
			1	23	20481	ON OFF SWITCH	
			1	22	20523	TIME DELAY RELAY	
		1	1	21	4019	ON OFF SWITCH	
			1	20		HYDRAULIC MANIFOLD	
			1	19	20803	LIMIT SWITCH	
			1	18	2624	PLUG 3 PRONG	
			1	17	70015	GAS - PROPANE SELECTOR SWITCH	
			1	16	4018	EMERGENCY ON OFF SWITCH	
			3	15	4021	MOMENTARY SWITCH	
			1	14	4106	DRIVE SWITCH	
			1	13	4060	RECEPTACLE	
			2	12	4020	STARTER SWITCH	
			1	11	4030	BATTERY	12V 95 AMPS
			1	10	30226	PROPANE ASSEMBLY	
			1	9	20506	ENGINE ASSEMBLY	
			1	8	20562	CIRCUIT BREAKER	20 AMPS
			1	7	4031	LIGHT	RED
		4	13	6	4085	DIODE	6 AMPS
			1	5	117A	TERMINAL BLOCK END	
			20	4	4027	TERMINAL BLOCK	
		1	5	3	4032	RELAY	
			1	2	30387	TILT SWITCH ASSEMBLY	
			1	1	2297	PRESSURE LIMIT SWITCH	
11050	11012	11011	QTY. REQD.	ITEM NO.	PART OR IDENTIFYING NO.	DESCRIPTION	DATA: SPECIFICATIONS, DIMS, NOTES, SUPPLIERS.
QTY PER OPTION			BILL OF MATERIAL DWG NO. 30436				





* VALVE PACKAGE (WATERMAN HYD. MODEL NO. 18702)
USE MARK IND. P/N 3069/3043 (WITH OUTTRIGGER VALVE) FOR SRT 31G
USE MARK IND. P/N 3069 (WITH OUT OUTTRIGGER VALVE) FOR RT 25G



MARKLIFT SELF-PROPELLED SCISSOR
(ROUGH TERRAIN MODELS)INDEX

<u>FIG. NO.</u>	<u>TITLE & MODEL</u>	<u>PAGE</u>
1	FINAL ASSEMBLY (RT26E)	1
1A	FINAL ASSEMBLY (RT31E)	5
1B	FINAL ASSEMBLY (RT40E)	9
1C	FINAL ASSEMBLY (RT25G)	13
1D	FINAL ASSEMBLY (RT25G) (1981)	17
1E	FINAL ASSEMBLY (RT26G)	21
1F	FINAL ASSEMBLY (RT31G)	25
1G	FINAL ASSEMBLY (SRT31G)	29
1H	FINAL ASSEMBLY (RT40G)	33
2	DECK ASSEMBLY (RT25G)	37
2A	DECK ASSEMBLY (RT25G) (1981)	39
2B	DECK ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G)	41
2C	DECK ASSEMBLY (RT40E) (RT40G)	43
3	HAND CONTROL BOX ASSEMBLY (RT26E) (RT31E).	45
3A	HAND CONTROL BOX ASSEMBLY (RT40E)	47
3B	HAND CONTROL BOX ASSEMBLY (RT25G)	49
3C	HAND CONTROL BOX ASSEMBLY (RT26G) (RT31G).	51
3D	HAND CONTROL BOX ASSEMBLY (SRT31G)	53
3E	HAND CONTROL BOX ASSEMBLY (RT40G)	55
4	SCISSOR ASSEMBLY (RT25G)	57
4A	SCISSOR ASSEMBLY (RT25G) (1981)	60
4B	SCISSOR ASSEMBLY (RT26E) (RT26G)	64
4C	SCISSOR ASSEMBLY (RT31E) (RT31G) (SRT31G).	66
4D	SCISSOR ASSEMBLY (RT40E) (RT40G)	68
5	FRAME ASSEMBLY (RT25G) (BEFORE JAN 1981)	72
5A	FRAME ASSEMBLY (RT25G) (BEGINNING JAN 1981)	75
5B	FRAME ASSEMBLY (RT26E) (RT31E)	78
5C	FRAME ASSEMBLY (RT26G) (RT31G)	81
5D	FRAME ASSEMBLY (SRT31G)	84

<u>FIG. NO.</u>	<u>TITLE & MODEL</u>	<u>PAGE</u>
5E	FRAME ASSEMBLY (RT40E)	87
5F	FRAME ASSEMBLY (RT40G)	90
5G	STEERING ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (BEGINNING JULY 1980)	92.1
5H	STEERING ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (BEFORE JULY 1980)	92.4
5J	FRAME ASSEMBLY (RT26E) (RT31E) (BEGINNING JULY 1982)	92.6
5K	FRAME ASSEMBLY (RT26G) (RT31G) (BEGINNING JULY 1982)	92.11
5L	FRAME ASSEMBLY (RT40E) (BEGINNING JULY 1982)	92.16
5M	FRAME ASSEMBLY (RT40G) (BEGINNING JULY 1982)	92.21
6	MAIN LIFT CYLINDER (RT25G) (BEFORE JAN 1981)	93
6A	MAIN LIFT CYLINDER - REAR (RT25G) (BEGINNING JAN 1981)	94
6B	MAIN LIFT CYLINDER - FRONT (RT25G) (BEGINNING JAN 1981)	95
6C	MAIN LIFT RAM CYLINDER (RT26E) (RT26G) . .	96
6D	MAIN LIFT CYLINDER (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G)	97
7	COMPONENT BOX ASSEMBLY (RT25G) (BEFORE MARCH 1980)	98
7A	COMPONENT BOX ASSEMBLY (RT25G) (BEGINNING MARCH 1980)	102
7B	COMPONENT BOX ASSEMBLY (RT26E) (RT31E) (BEGINNING MARCH 1980)	106
7B.1	COMPONENT BOX ASSEMBLY (RT26E & G) (RT31E & G) (RT40E & G) (BEFORE MARCH 1980)	108.1
7C	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL (RT26E) (RT31E) (OPTION (BEGINNING MARCH 1980)	109

<u>FIG. NO.</u>	<u>TITLE & MODEL</u>	<u>PAGE</u>
7D	COMPONENT BOX ASSEMBLY (RT26G) (RT31G) . . (BEGINNING MARCH 1980)	113
7E	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL (RT26G) (RT31G) (OPTION) (BEGINNING MARCH 1980)	116
7F	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL (SRT31G) (BEGINNING MARCH 1980) .	120
7F.1	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL (SRT31G) (BEFORE MARCH 1980) . . .	123.1
7G	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL (RT40E) (BEGINNING MARCH 1980) . .	124
7H	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL (RT40G) (BEGINNING MARCH 1980) . .	128
7J	COMPONENT BOX CONTROL PANEL ASSEMBLY (RT26E) (RT31E) (RT40E) (BEGINNING MARCH 1980)	132
7K	COMPONENT BOX CONTROL PANEL ASSEMBLY (RT25G) (RT26G) (RT31G) (SRT31G) (RT40G) (BEGINNING MARCH 1980)	134
8	MANIFOLD ASSEMBLY (RT25G)	136
8A	MANIFOLD ASSEMBLY WITH OUTRIGGER CONTROL (RT25G) (OPTION)	138
8B	MANIFOLD ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (BEGINNING MARCH 1980)	140
8C	MANIFOLD ASSEMBLY WITH OUTRIGGER CONTROL (RT26E) (RT26G) (RT31E) (RT31G) (OPTION . (BEGINNING MARCH 1980)	142
8D	MANIFOLD ASSEMBLY WITH OUTRIGGER CONTROL (SRT31G) (BEGINNING MARCH 1980)	144
8E	MANIFOLD ASSEMBLY WITH OUTRIGGER CONTROL (RT40E) (RT40G) (BEGINNING MARCH 1980) . .	146
8F	MANIFOLD PACKAGE (RT25G)	148
8F.1	MANIFOLD PACKAGE WITH OUTRIGGER CONTROL (RT25G)	149.1
8F.2	MANIFOLD PACKAGE (SRT31G) (BEGINNING MARCH 1980)	149.3

<u>FIG. NO.</u>	<u>TITLE & MODEL</u>	<u>PAGE</u>
8F.3	MANIFOLD PACKAGE (SRT31G) (BEFORE MARCH 1980)	149.5
8F.4	MANIFOLD PACKAGE WITH OUTRIGGER CONTROL (RT26E) (RT26G) (RT31E) (RT31G) (RT40E) (RT40G) (BEFORE MARCH 1980)	149.7
8F.5	MANIFOLD PACKAGE (RT26E) (RT26G) (RT31E) (RT31G) (BEFORE MARCH 1980)	149.9
8G	MANIFOLD PACKAGE (RT26E) (RT26G) (RT31E) (RT31G) (BEGINNING MARCH 1980)	150
8H	MANIFOLD PACKAGE WITH OUTRIGGER CONTROL (RT26E) (RT26G) (RT31E) (RT31G) (OPTION).	153
8J	MANIFOLD PACKAGE WITH OUTRIGGER CONTROL (RT40E) (RT40G)	156
9	TILT SWITCH ASSEMBLY & INSTALLATION (ALL MODELS)	159
10	PRESSURE LIMIT SWITCH ASSEMBLY (ALL MODELS)	161
11	HYDRAULIC TANK ASSEMBLY (RT25G) (BEFORE MARCH 1980)	162
11A	HYDRAULIC TANK (RT25G) (BEFORE MARCH 1980)	162.1
11A.1	HYDRAULIC TANK ASSEMBLY (RT25G)	162.2
11A.2	HYDRAULIC TANK (RT25G)	163
11B	HYDRAULIC TANK ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (BEGINNING MAY 1977 AND STILL BEING USED)	164
11B.1	HYDRAULIC TANK ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (BEGINNING MARCH 1980)	164.1
11B.2	HYDRAULIC TANK ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (BEFORE MARCH 1980)	164.3
12	GAS TANK ASSEMBLY (RT25G)	165
12A	GAS TANK ASSEMBLY (RT26G) (RT31G) (SRT31G) (RT40G)	166

<u>FIG. NO.</u>	<u>TITLE & MODEL</u>	<u>PAGE</u>
13	DUAL FUEL ENGINE & PUMP ASSEMBLY (RT25G)	167
13A	DUAL FUEL ENGINE & PUMP ASSEMBLY (RT26G) (RT31G) (SRT31G) (RT40G) . . .	171
14	BATTERY BOX ASSEMBLY (RT26E) (RT31E) (RT40E) (BEGINNING MAY 1977)	175
14.1	BATTERY BOX ASSEMBLY (RT40E) (BEFORE MARCH 1980)	176.1
14.2	BATTERY BOX ASSEMBLY (RT40E) (BEGINNING MARCH 1980)	176.3
14A	BATTERY BOX INSTALLATION (RT25G) (RT26G) (RT31G) (SRT31G) (RT40G) (BEGINNING MAY 1977)	177
15	HYDRAULIC OUTRIGGER ASSEMBLY WITH SWITCH (SRT31G) (RT40E) (RT40G) (STANDARD) (RT25G) (RT26E) (RT26G) (RT31E) (RT31G) (OPTION)	178
15A	HYDRAULIC OUTRIGGER ASSEMBLY (SRT31G) (RT40E) (RT40G) (STANDARD) (RT25G) (RT26E) (RT26G) (RT31E) (RT31G) (OPTION)	180
15B	MANUAL STABILIZER ASSEMBLY (RT25G) (RT26E) (RT26G) (RT31E) (RT31G)	182
16	FRONT AXLE ASSEMBLY (ARTROX) (RT25G) (BEGINNING JAN 1981)	183
16.1	FRONT AXLE ASSEMBLY (HADCO) (RT25G) (BEFORE MARCH 1980)	183.1
16.2	FRONT AXLE ASSEMBLY (PRIOR) (RT25G) (MARCH TO DECEMBER 1980)	183.2
16A	FRONT AXLE ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (BEGINNING JULY 1980)	184
16A.1	FRONT AXLE ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (BEFORE JULY 1980)	185.1
16A.2	FRONT HUB AND WHEEL INSTALLATION (RT25G) (BEFORE MARCH 1980)	185.3

<u>FIG. NO.</u>	<u>TITLE & MODEL</u>	<u>PAGE</u>
16A.3	FRONT HUB AND WHEEL INSTALLATION (RT25G) (BEGINNING MARCH 1980)	185.5
17	FRONT HUB ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (BEGINNING JULY 1980)	186
17.1	FRONT HUB ASSEMBLY (SRT31G) (BEFORE JULY 1980)	186.1
17A	FRONT HUB AND DRUM ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (RT40E) (RT40G) (BEGINNING JULY 1980)	187
17A.1	FRONT HUB AND DRUM ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (RT40E) (RT40G) (BEFORE JULY 1980)	187.1
18	STEERING TIRE & RIM ASSEMBLY (RT25G) .	188
18A	DRIVE TIRE & RIM ASSEMBLY (RT25G) . .	189
18B	STEERING AND DRIVE TIRE & WHEEL ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (BEFORE JULY 1980)	190
18B.1	STEERING TIRE AND RIM ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (RT40E) (RT40G) (BEGINNING JULY 1980)	190.1
18C	DRIVE TIRE & RIM ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (RT40E) (RT40G)	191
18D	STEERING TIRE ASSEMBLY (SRT31G) . . .	192
18E	DRIVE TIRE ASSEMBLY (SRT31G)	193
19	STEERING CYLINDER (RT25G)	194
19.1	STEERING CYLINDER (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (BEFORE NOV 1979)	194.2
19A	STEERING CYLINDER (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (BEGINNING NOV 1979)	195
20	CUSHION CYLINDER ASSEMBLY (ALL MODELS)	196
21	CUSHION CYLINDER (ALL MODELS)	197
22	BELL CRANK ASSEMBLY (RT26G) (RT31G) (SRT31G) (RT40E) (RT40G)	198

<u>FIG. NO.</u>	<u>TITLE & MODEL</u>	<u>PAGE</u>
23	TIE ROD ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (AFTER JAN 1980)	199
24	TIE ROD ASSEMBLY (RT26E) (RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G) (BEFORE JAN 1980)	200
25	CALIPER DISC BRAKE (RT26E) (RT26G) (RT31E) (RT31G) (RT40E) (RT40G) (BEGINNING JULY 1982)	201
25A	DISC BRAKE INTENSIFIER (RT26E) (RT26G) (RT31E) (RT31G) (RT40E) (RT40G) (BEGINNING JULY 1982)	203

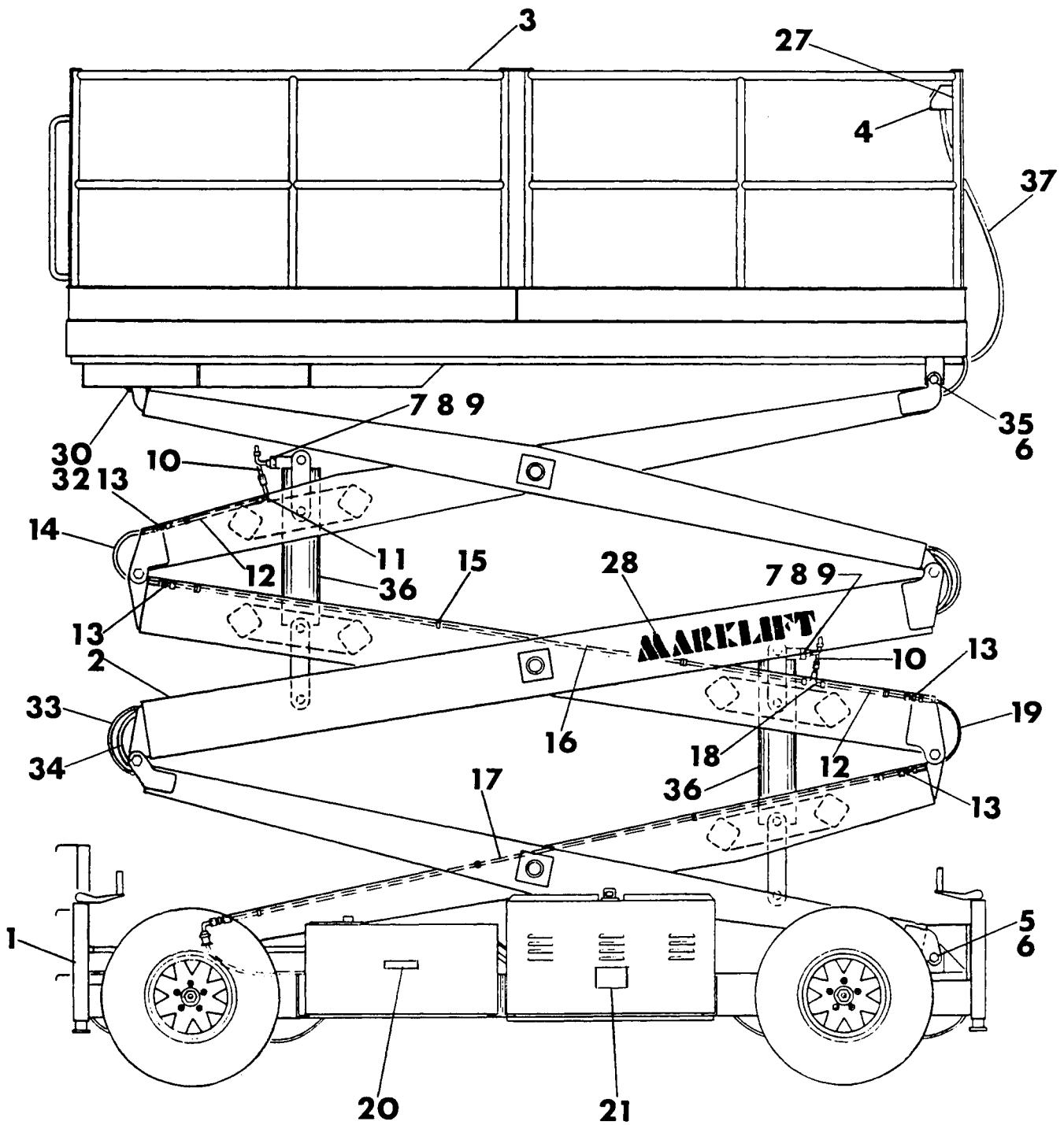
NOTE:

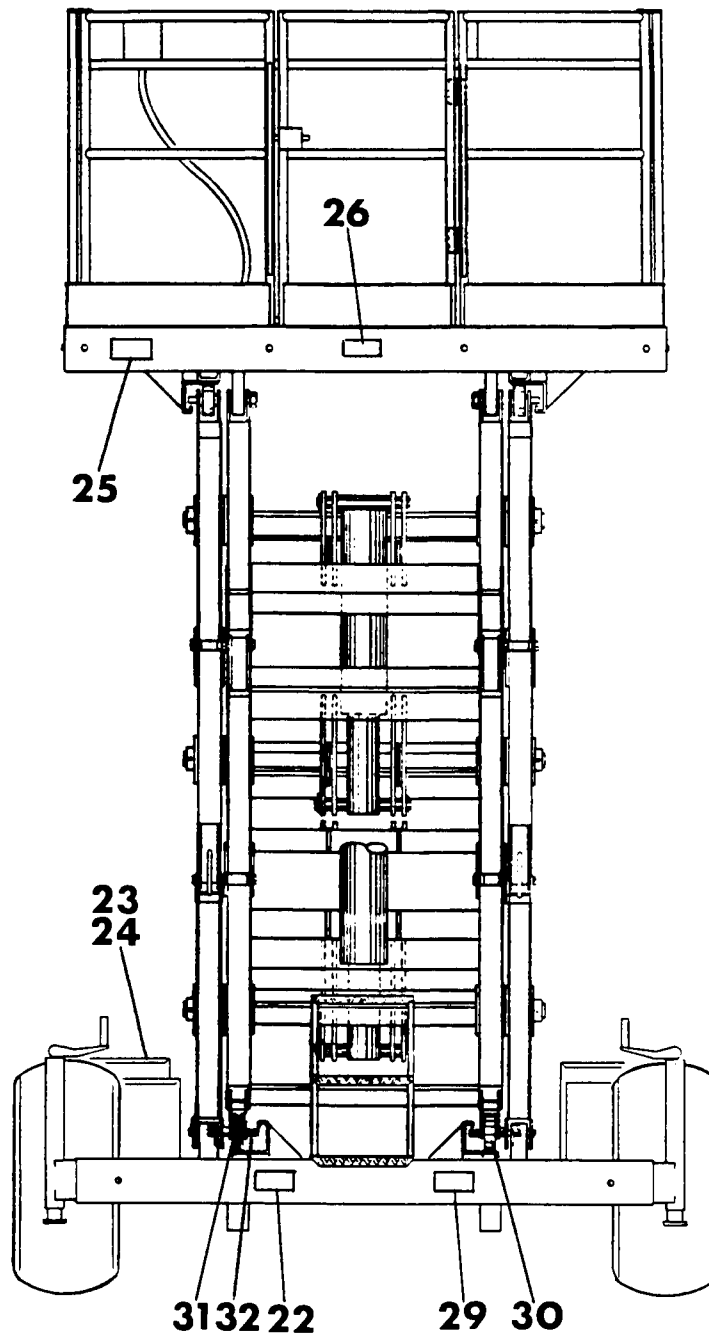
1. ALL NUMBERS LISTED IN THE FOLLOWING PARTS LIST "PART NUMBER" COLUMNS ARE MARK INDUSTRIES PART NUMBERS.
2. MODEL SERIAL NUMBER EFFECTIVITIES ARE INDICATED ON FIRST PAGE OF EACH FINAL ASSEMBLY FIGURE.

FIGURE 1 - FINAL ASSEMBLY (RT26E)

1

SERIAL NUMBER EFFECTIVITY IS 577-2009 ON



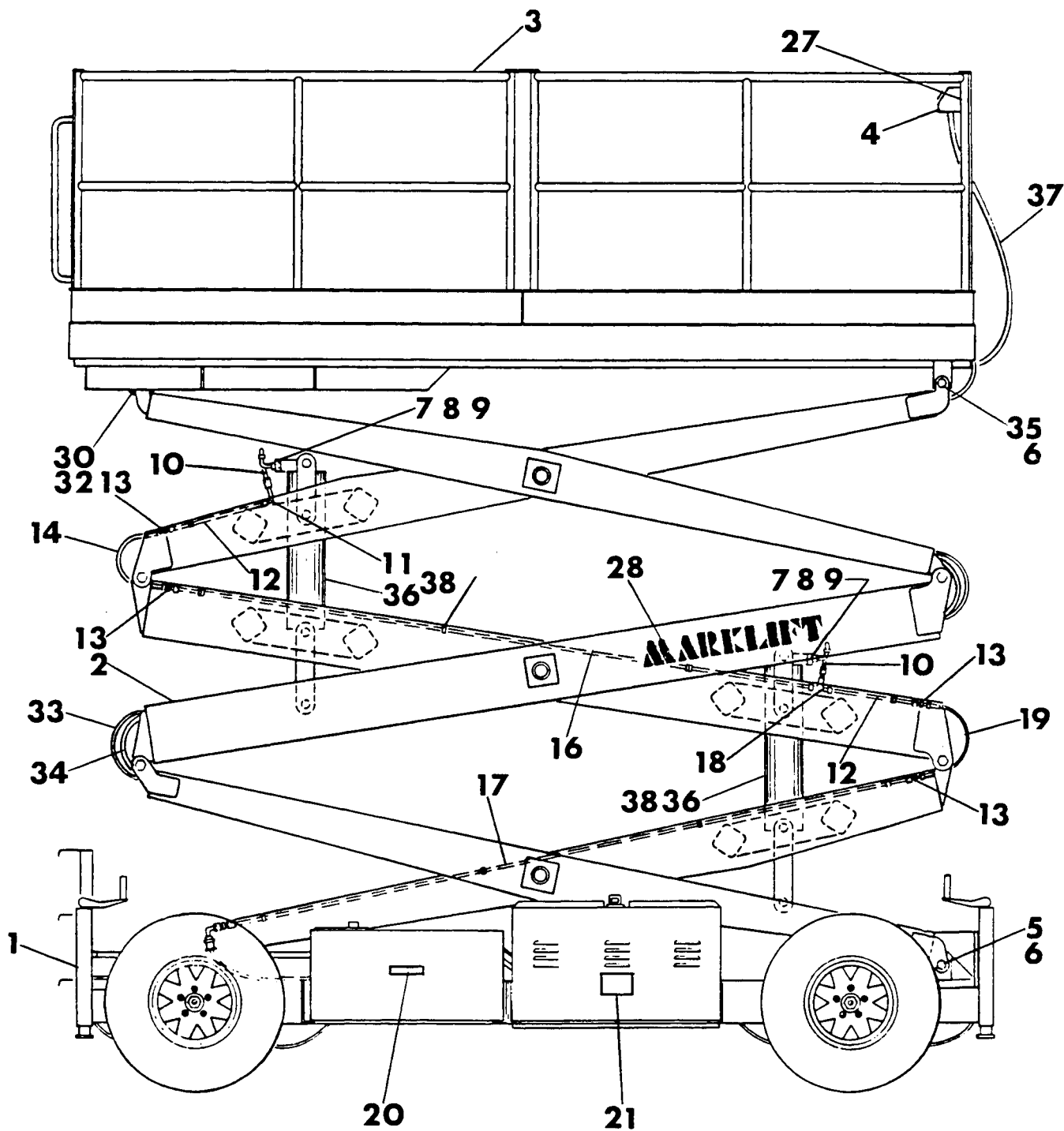


ITEM	PART NUMBER	DESCRIPTION	QTY
1-	30010	FINAL ASSEMBLY	1
-1	8111	FRAME ASSEMBLY (SEE FIG.5B)	1
-2	8028	SCISSOR ASSEMBLY (SEE FIG.4B)	1
-3	30556	DECK ASSEMBLY (SEE FIG.2B)	1
-4	4069-1	HAND CONTROL BOX ASSEMBLY (SEE FIG.3)	1
-5	60336	EAR PIVOT BOLT	2
-6	61310	NUT	4
-7	780	ADAPTER	2
-8	3023-1	SPACER	2
-9	3059	CHECK VALVE	2
-10	339-186-186B	HOSE ASSEMBLY - 16"	2
-11	2457	90° ELBOW	1
-12	235-2500-2501	TUBE ASSEMBLY - ½ X 18	2
-13	2470	UNION	4
-14	339-186B-186B	HOSE ASSEMBLY - 27"	1
-15	764	TUBE CLAMP	13
-16	235-250-2501	TUBE ASSEMBLY - ½ X 10'	1
-17	235-250-2501	TUBE ASSEMBLY - ½ X 10'	1
-18	2432	TEE	1
-19	339-186B-186B	HOSE ASSEMBLY - 31"	1
-20	2017	DECAL - HYDRAULIC FLUID SPEC.	2
-21	2003	DECAL - BATTERY WATER LEVEL	1
-22	2041	DECAL - "DO NOT LIFT FROM THIS END"	2
-23	2019	DECAL - "EMERGENCY LOWERING VALVE"	1
-24	2016	DECAL - "WARNING DO NOT WORK UNDERNEATH ETC."	1
-25	2027	DECAL - "LOAD CAPACITY 2000 LBS."	4
-26	2018	DECAL - ANSI & OSHA SPEC.	1
-27	30416	DECAL - OPERATING INSTRUCTIONS	1
-28	2049	DECAL - MARKLIFT	2
-29	2012	PLATE - MODEL/SERIAL NUMBER	1
-30	2361	DECK ROLLER	3
-31	2362	"V" DECK ROLLER	1
-32	2364	ROLLER PIN	4

ITEM	PART NUMBER	DESCRIPTION	QTY
1-	30010	FINAL ASSEMBLY	1
-1	8111	FRAME ASSEMBLY (SEE FIG.5B)	1
-2	8028	SCISSOR ASSEMBLY (SEE FIG.4B)	1
-3	30556	DECK ASSEMBLY (SEE FIG.2B)	1
-4	4069-1	HAND CONTROL BOX ASSEMBLY (SEE FIG.3)	1
-5	60336	EAR PIVOT BOLT	2
-6	61310	NUT	4
-7	780	ADAPTER	2
-8	3023-1	SPACER	2
-9	3059	CHECK VALVE	2
-10	339-186-186B	HOSE ASSEMBLY - 16"	2
-11	2457	90° ELBOW	1
-12	235-2500-2501	TUBE ASSEMBLY - ½ X 18	2
-13	2470	UNION	4
-14	339-186B-186B	HOSE ASSEMBLY - 27"	1
-15	764	TUBE CLAMP	13
-16	235-250-2501	TUBE ASSEMBLY - ½ X 10'	1
-17	235-250-2501	TUBE ASSEMBLY - ½ X 10'	1
-18	2432	TEE	1
-19	339-186B-186B	HOSE ASSEMBLY - 31"	1
-20	2017	DECAL - HYDRAULIC FLUID SPEC.	2
-21	2003	DECAL - BATTERY WATER LEVEL	1
-22	2041	DECAL - "DO NOT LIFT FROM THIS END"	2
-23	2019	DECAL - "EMERGENCY LOWERING VALVE"	1
-24	2016	DECAL - "WARNING DO NOT WORK UNDERNEATH ETC."	1
-25	2027	DECAL - "LOAD CAPACITY 2000 LBS."	4
-26	2018	DECAL - ANSI & OSHA SPEC.	1
-27	30416	DECAL - OPERATING INSTRUCTIONS	1
-28	2049	DECAL - MARKLIFT	2
-29	2012	PLATE - MODEL/SERIAL NUMBER	1
-30	2361	DECK ROLLER	3
-31	2362	"V" DECK ROLLER	1
-32	2364	ROLLER PIN	4

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	4034	POWER TO PLATFORM CABLE	1
-34	30392	ARM CONTROL CABLE ASSEMBLY	1
-35	60350	EAR PIVOT BOLT	2
-36	3008	MAIN LIFT RAM CYLINDER (SEE FIG.6C)	2
-37	2730	CONTROL CABLE ASSEMBLY	1

SERIAL NUMBER EFFECTIVITY IS 577-2000 ON



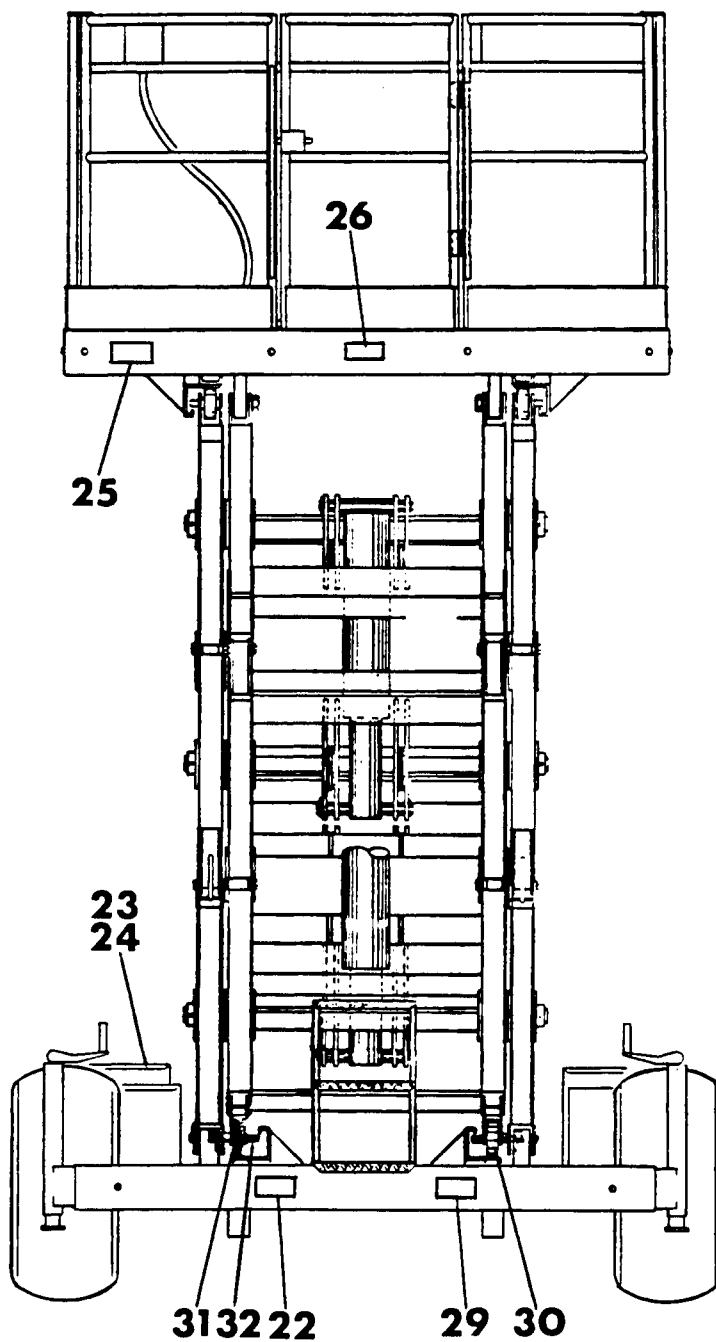
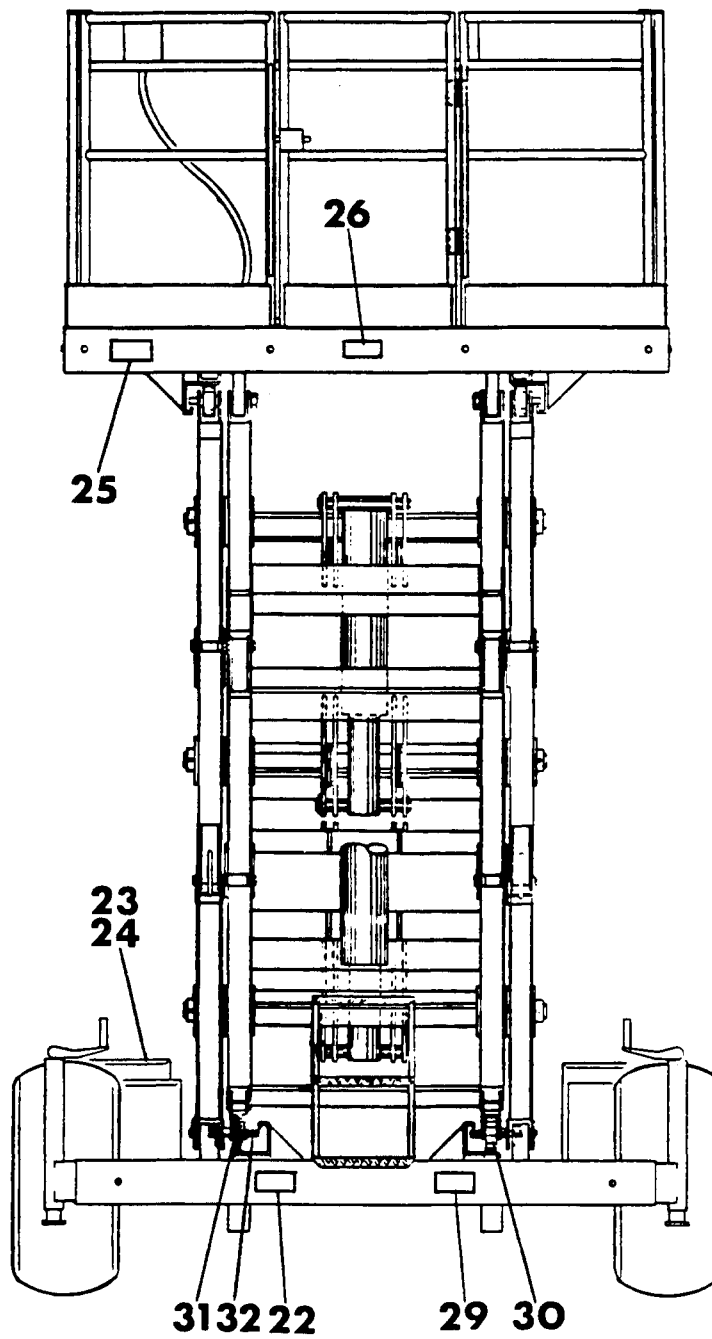


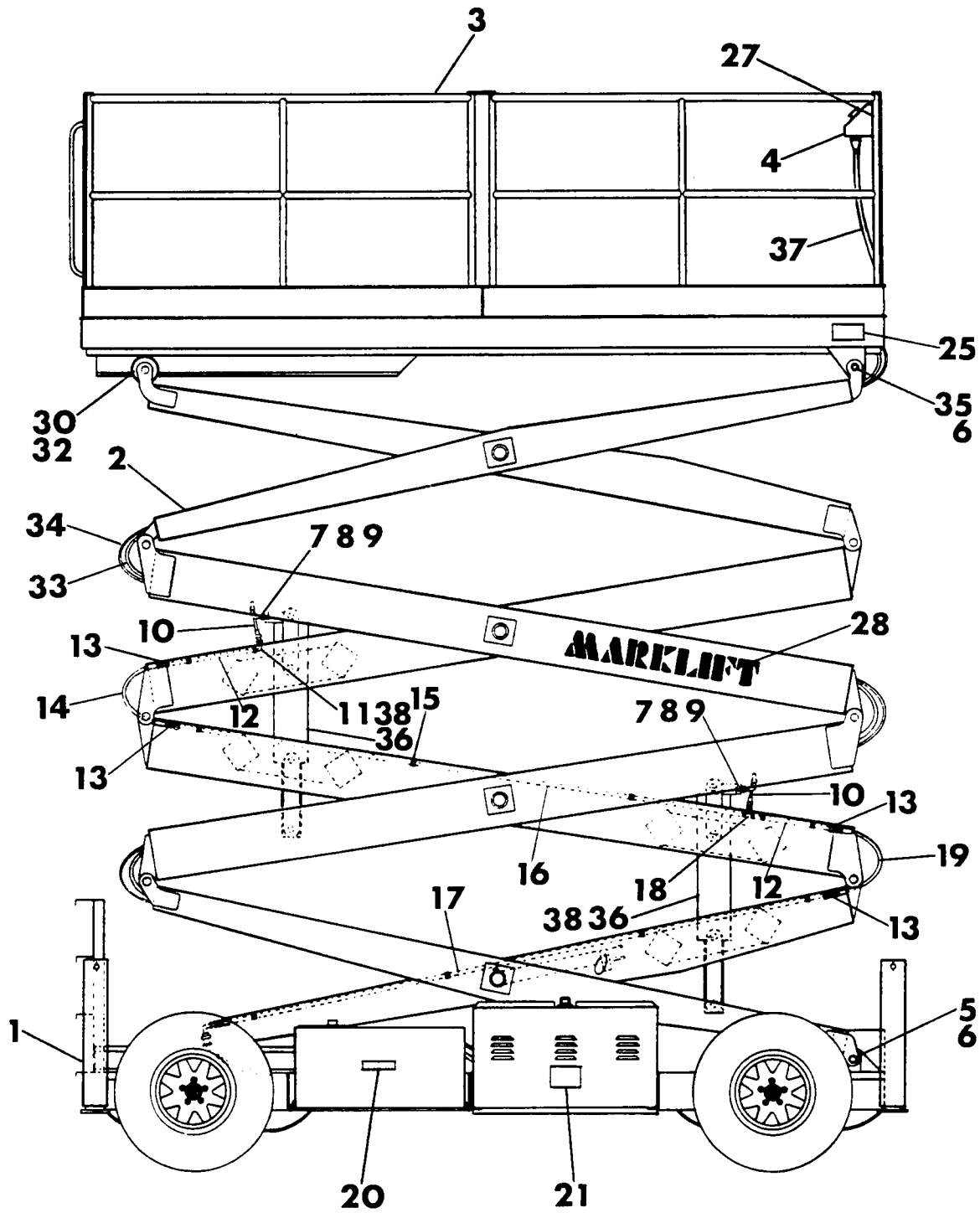
FIGURE 1A - FINAL ASSEMBLY (RT31E)

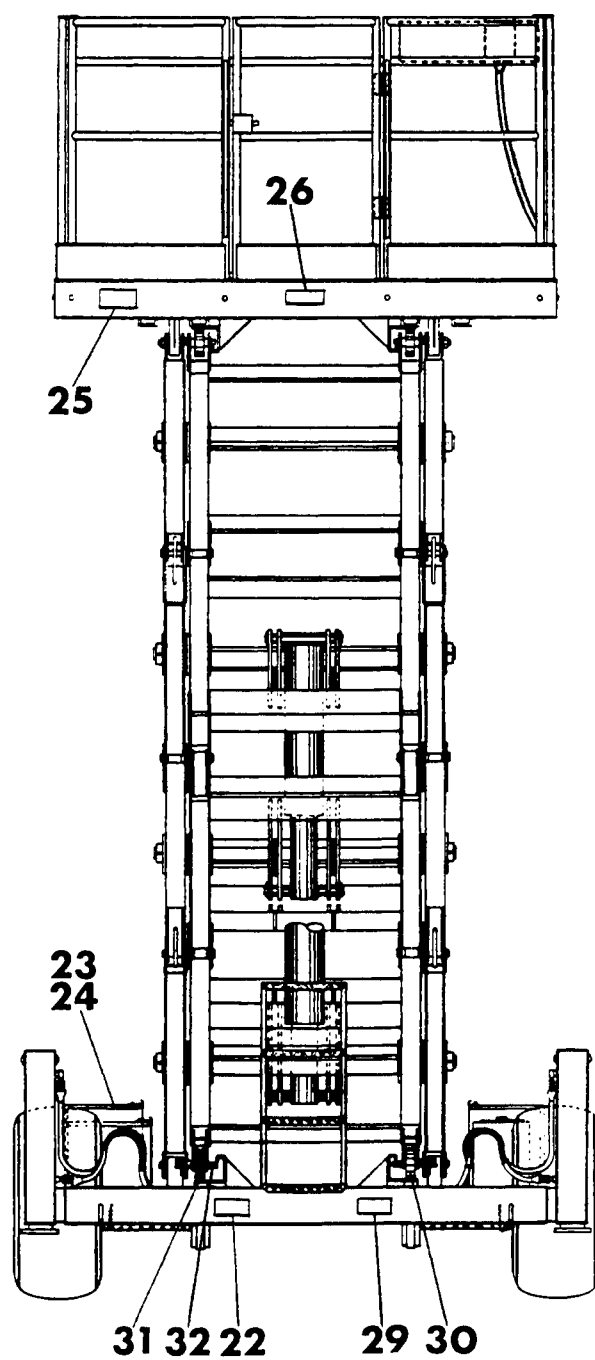


ITEM	PART NUMBER	DESCRIPTION	QTY
1A-	30005	FINAL ASSEMBLY	1
-1	8111	FRAME ASSEMBLY (SEE FIG.5B)	1
-2	8115	SCISSOR ASSEMBLY (SEE FIG.4C)	1
-3	30556	DECK ASSEMBLY (SEE FIG.2B)	1
-4	4069-1	HAND CONTROL BOX ASSEMBLY (SEE FIG.3)	1
-5	60336	EAR PIVOT BOLT	2
-6	61310	NUT	4
-7	780	ADAPTER	2
-8	3023-1	SPACER	2
-9	3059	CHECK VALVE	2
-10	339-186-186B	HOSE ASSEMBLY - 16"	2
-11	2457	90° ELBOW	1
-12	235-2500-2501	TUBE ASSEMBLY - ½ X 18	2
-13	2470	UNION	4
-14	339-186B-186B	HOSE ASSEMBLY - 27"	1
-15	764	TUBE CLAMP	13
-16	235-2500-2501	TUBE ASSEMBLY - ½ X 10'	1
-17	235-2500-2501	TUBE ASSEMBLY - ½ X 10'	1
-18	2432	TEE	1
-19	339-186B-186B	HOSE ASSEMBLY - 31"	1
-20	2017	DECAL - HYDRAULIC FLUID SPEC.	2
-21	2003	DECAL - BATTERY WATER LEVEL	1
-22	2041	DECAL - "DO NOT LIFT FROM THIS END"	2
-23	2019	DECAL - "EMERGENCY LOWERING VALVE"	1
-24	2016	DECAL - "WARNING DO NOT WORK UNDERNEATH ETC."	1
-25	2027	DECAL - "LOAD CAPACITY 2000 LBS."	4
-26	2018	DECAL - ANSI & OSHA SPEC.	1
-27	30416	DECAL - OPERATING INSTRUCTIONS	1
-28	2049	DECAL - MARKLIFT	2
-29	2012	PLATE - MODEL/SERIAL NUMBER	1
-30	2361	DECK ROLLER	3
-31	2362	"V" DECK ROLLER	1
-32	2364	ROLLER PIN	4

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	4034	POWER TO PLATFORM CABLE	1
-34	30392	ARM CONTROL CABLE ASSEMBLY	1
-35	60350	EAR PIVOT BOLT	2
-36	3006	MAIN LIFT CYLINDER (SEE FIG.6D)	2
-37	2730	CONTROL CABLE ASSEMBLY	1
-38	30809	MAIN LIFT CYLINDER (BEGINNING NOVEMBER 1981) (SEE FIG. 6D)	2

SERIAL NUMBER EFFECTIVITY IS 777-2082 ON

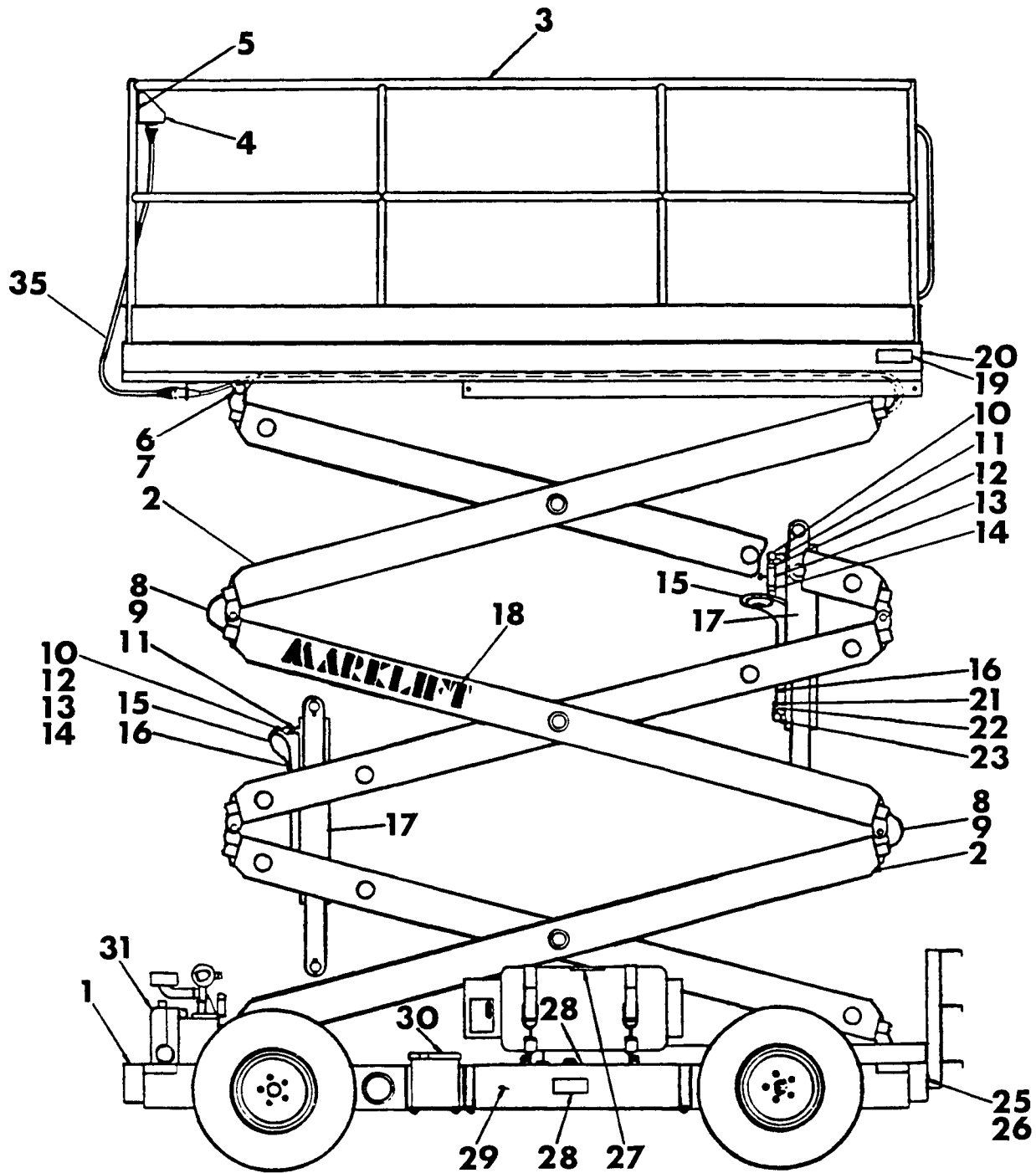


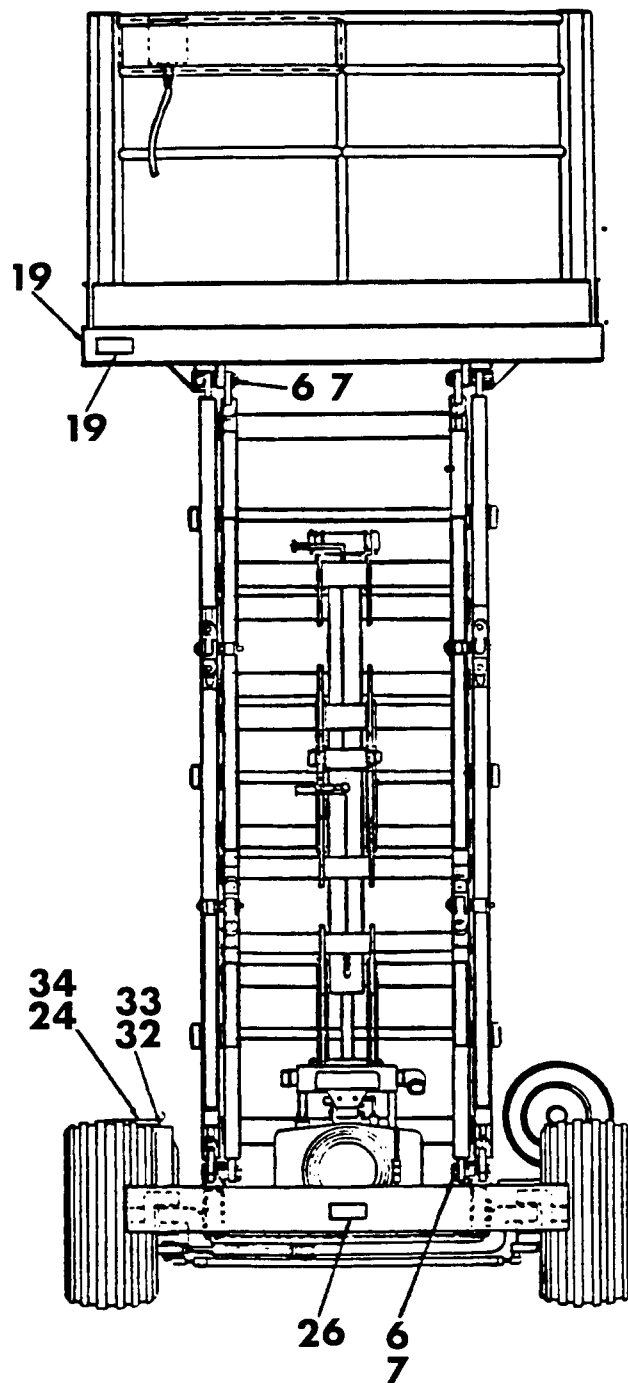


ITEM	PART NUMBER	DESCRIPTION	QTY
1B-	30001	FINAL ASSEMBLY	1
-1	8114	FRAME ASSEMBLY (SEE FIG.5E)	1
-2	8029	SCISSOR ASSEMBLY (SEE FIG.4D)	1
-3	30555	DECK ASSEMBLY (SEE FIG.2C)	1
-4	4069-5	HAND CONTROL BOX ASSEMBLY (SEE FIG.3A)	1
-5	60336	EAR PIVOT BOLT	2
-6	61310	NUT	4
-7	780	ADAPTER	2
-8	3023-1	SPACER	2
-9	3059	CHECK VALVE	2
-10	339-186-186B	HOSE ASSEMBLY - 16"	2
-11	2457	90° ELBOW	1
-12	235-2500-2501	TUBE ASSEMBLY - ½ X 18	2
-13	2470	UNION	4
-14	339-186B-186B	HOSE ASSEMBLY - 27"	1
-15	764	TUBE CLAMP	13
-16	235-2500-2501	TUBE ASSEMBLY - ½	1
-17	235-2500-2501	TUBE ASSEMBLY - ½	1
-18	2432	TEE	1
-19	339-186B-186B	HOSE ASSEMBLY - 31"	1
-20	2017	DECAL - HYDRAULIC FLUID SPEC.	2
-21	2003	DECAL - BATTERY WATER LEVEL	1
-22	2041	DECAL - "DO NOT LIFT FROM THIS END"	2
-23	2019	DECAL - "EMERGENCY LOWERING VALVE"	1
-24	2016	DECAL - "WARNING DO NOT WORK UNDERNEATH ETC."	1
-25	2026	DECAL - "LOAD CAPACITY 1500 LBS."	4
-26	2018	DECAL - ANSI & OSHA SPEC.	1
-27	30417	DECAL - OPERATING INSTRUCTIONS	1
-28	2049	DECAL - MARKLIFT	2
-29	2012	PLATE - MODEL/SERIAL NUMBER	1
-30	2361	DECK ROLLER	3
-31	2362	"V" DECK ROLLER	1

ITEM	PART NUMBER	DESCRIPTION	QTY
-32	2364	ROLLER PIN	4
-33	4034	POWER TO PLATFORM CABLE	1
-34	30392	ARM CONTROL CABLE ASSEMBLY	1
-35	60350	EAR PIVOT BOLT	2
-36	3006	MAIN LIFT CYLINDER (SEE FIG.6D)	2
-37	2730	CONTROL CABLE ASSEMBLY	1
-38	30809	MAIN LIFT CYLINDER (BEGINNING NOVEMBER 1981) (SEE FIG. 6D)	2

SERIAL NUMBER EFFECTIVITY IS 1277-2509 ON

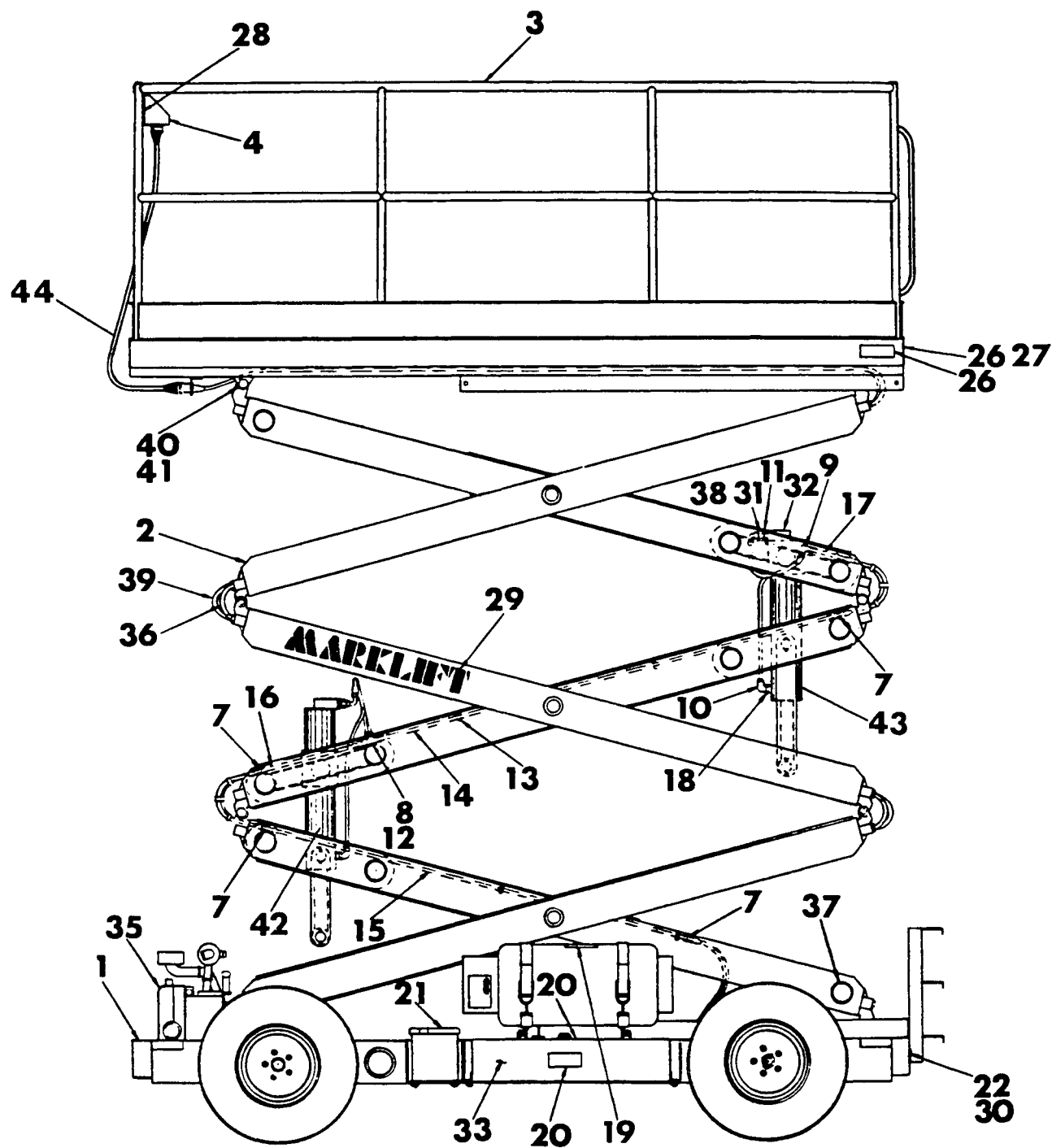


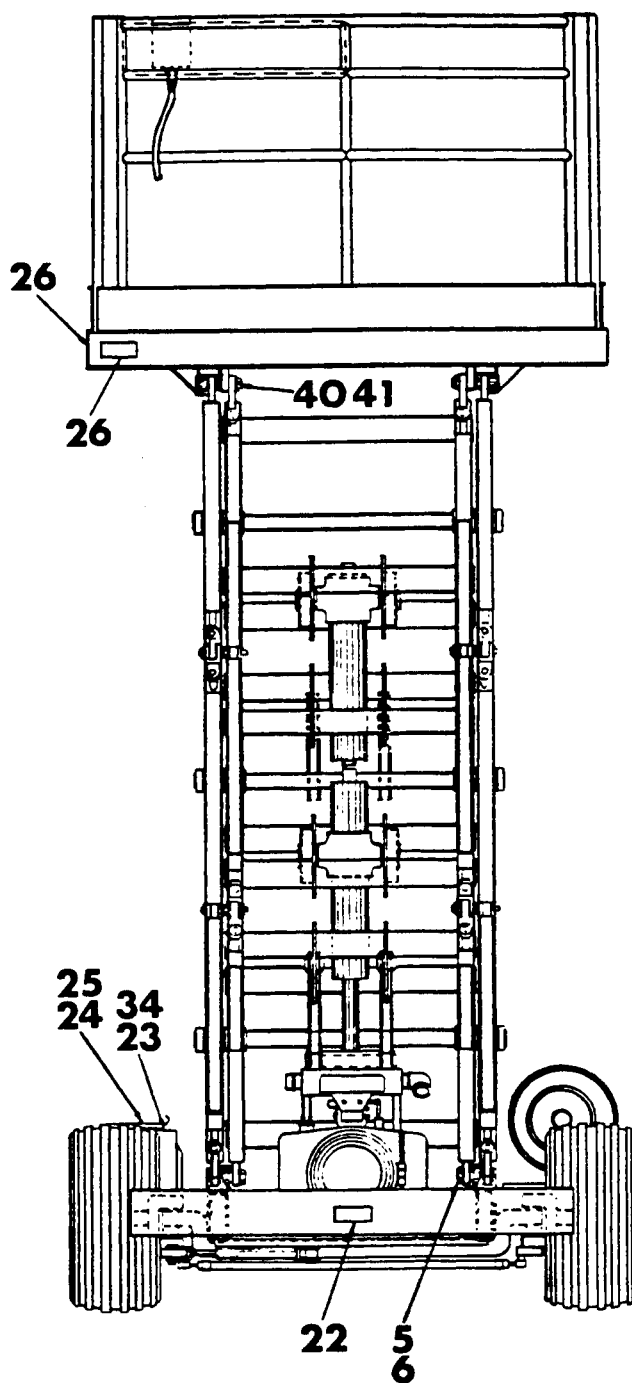


ITEM	PART NUMBER	DESCRIPTION	QTY
1C-	30011	FINAL ASSEMBLY	1
-1	30656	FRAME ASSEMBLY (SEE FIG.5)	1
-2	30174	SCISSOR ASSEMBLY (SEE FIG.4)	1
-3	30615	DECK ASSEMBLY (SEE FIG.2)	1
-4	8325-1	HAND CONTROL BOX ASSEMBLY (SEE FIG.3B)	1
-5	30416	DECAL - OPERATING INSTRUCTIONS	1
-6	2375	EAR PIVOT BOLT	4
-7	61304	LOCK NUT 3/4-10	4
-8	30343	ARM CONTROL CABLE ASSEMBLY	1
-9		CABLE (3 COND.12 AWG X 57 FT.)	1
-10	2450	90° STREET ELBOW	2
-11	2477	REDUCER	2
-12	2498	ADAPTER	2
-13	750	CHECK VALVE	2
-14	2474	ADAPTER	2
-15		HOSE ASSEMBLY - LIFT CYLINDER	2
-16		HOSE ASSEMBLY - RETURN	2
-17	3065	MAIN LIFT CYLINDER (SEE FIG.6)	2
-18	2048	DECAL - MARKLIFT	2
-19	2026	DECAL - "LOAD CAPACITY 1500 LBS."	4
-20	2018	DECAL - ANSI & OSHA SPEC.	1
-21	2496	TUBE END REDUCER	2
-22	2539	NUT	2
-23	2478	90° ELBOW	2
-24	2016	DECAL - "WARNING DO NOT WORK UNDERNEATH"	1
-25	2041	DECAL - "DO NOT LIFT FROM THIS END"	2
-26	2012	PLATE - MODEL/SERIAL NUMBER	1
-27	2004	DECAL - VAPOR TANK	1
-28	2020	DECAL - GASOLINE OR PETROL	2
-29	65114	GASOLINE - 5 GAL.	A/R
-30	2003	DECAL - BATTERY WATER LEVEL	1
-31	2996	MOTOR OIL - 30 WT X 6 QT.	A/R
-32	2019	DECAL - "EMERGENCY LOWERING VALVE"	1

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	65116	HYDRAULIC OIL - 10 GAL.	A/R
-34	2017	DECAL - HYDRAULIC FLUID SPEC.	2
-35	2730	CONTROL CABLE ASSEMBLY	1

SERIAL NUMBER EFFECTIVITY IS 281-7729 ON

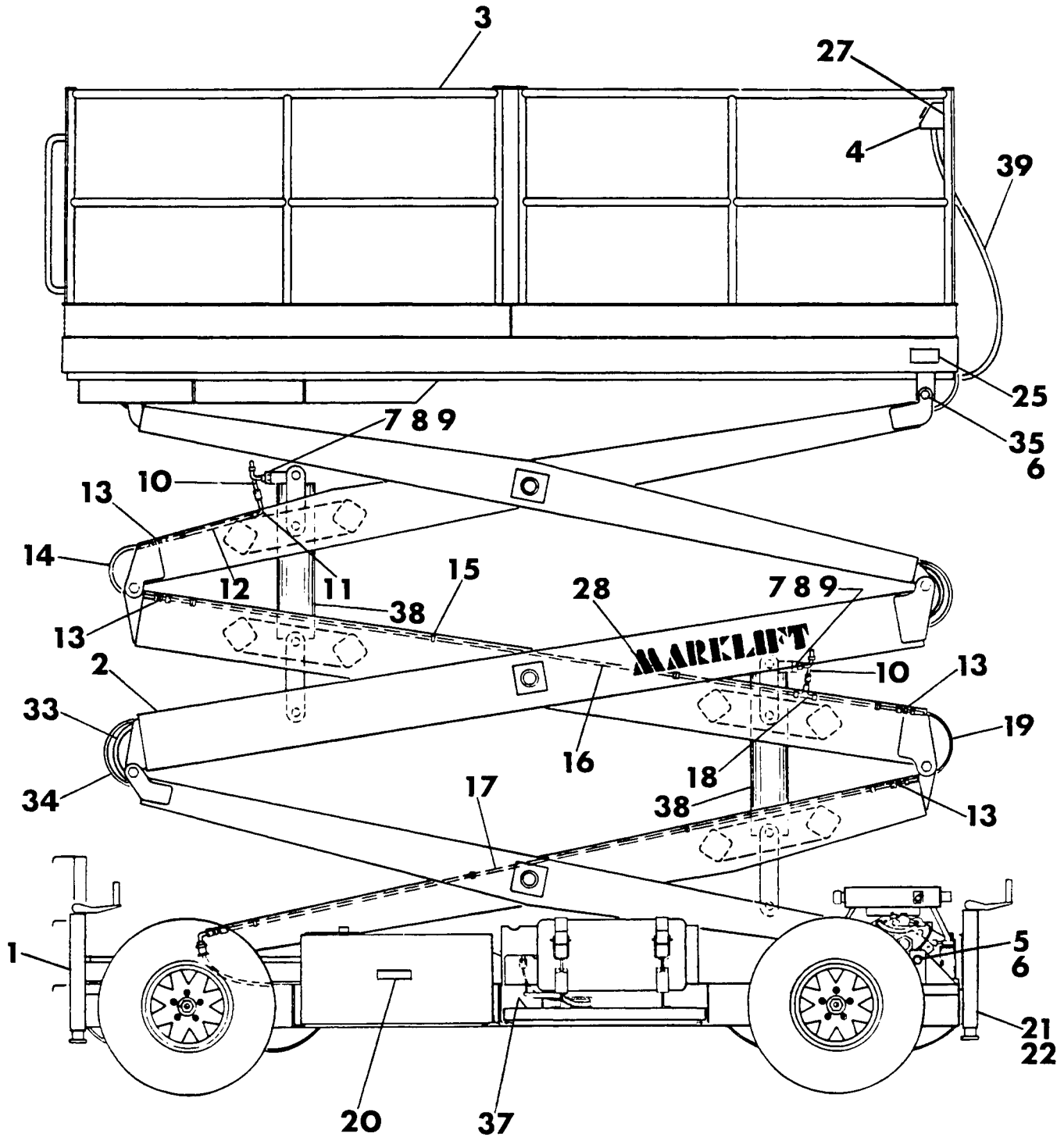


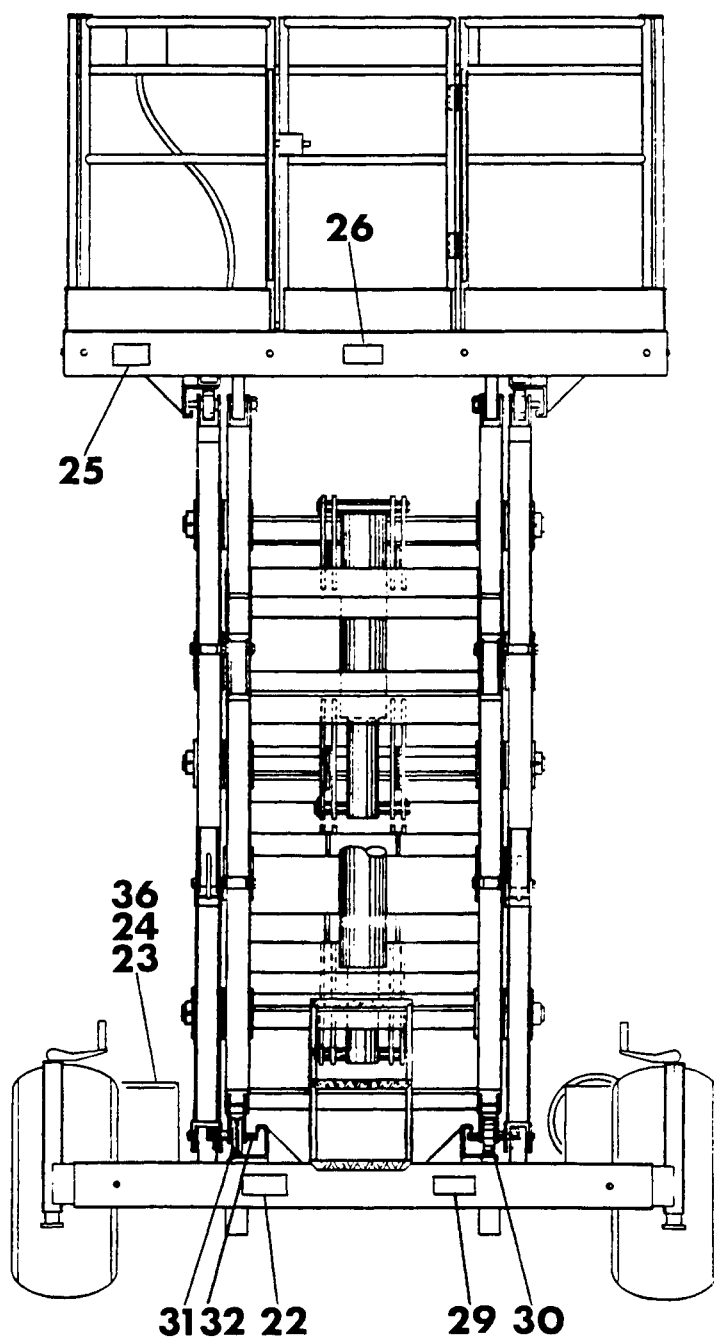


ITEM	PART NUMBER	DESCRIPTION	QTY
1D-	30011	FINAL ASSEMBLY	1
-1	30656	FRAME ASSEMBLY (SEE FIG.5A)	1
-2	30665	SCISSOR ASSEMBLY (SEE FIG.4A)	1
-3	30657	DECK ASSEMBLY (SEE FIG.2A)	1
-4	8325-1	HAND CONTROL BOX ASSEMBLY (SEE FIG.3B)	1
-5	2766	EAR PIVOT BOLT	2
-6	61304	LOCK NUT	2
-7	2505	COUPLING	5
-8	2421	TEE	1
-9	2436	90° ELBOW	1
-10	2435	90° ELBOW	2
-11	780	ADAPTER	2
-12	2417	TEE	1
-13	765	HOSE CLAMP	11
-14		TUBE ASSEMBLY - 3/8	1
-15		TUBE ASSEMBLY - 3/8	1
-16		TUBE ASSEMBLY - 3/8	1
-17		TUBE ASSEMBLY - 3/8	1
-18	2600	REDUCER	1
-19	2004	DECAL - VAPOR TANK	1
-20	2020	DECAL - GASOLINE OR PETROL	2
-21	2003	DECAL - BATTERY WATER LEVEL	1
-22	2041	DECAL - "DO NOT LIFT FROM THIS END"	2
-23	2019	DECAL - "EMERGENCY LOWERING VALVE"	1
-24	2016	DECAL - "WARNING DO NOT WORK UNDERNEATH ETC."	1
-25	2017	DECAL - HYDRAULIC FLUID SPEC.	2
-26	2026	DECAL - "LOAD CAPACITY 1500 LBS."	4
-27	2018	DECAL - ANSI & OSHA SPEC.	1
-28	30416	DECAL - OPERATING INSTRUCTIONS	1
-29	2049	DECAL - MARKLIFT	2
-30	2012	PLATE - MODEL/SERIAL NUMBER	1
-31	2578	REDUCER	2
-32	3059	CHECK VALVE	2

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	65114	GASOLINE - 5 GAL.	A/R
-34	65116	HYDRAULIC OIL - 10 GAL.	A/R
-35	2996	MOTOR OIL - 30 WT X 6 QT.	A/R
-36	4034	POWER TO PLATFORM CABLE	1
-37	65188	ACTUATOR TUBE PLUG	20
-38	2501	NUT - 8-BTX-S	1
-39	30392	ARM CONTROL CABLE ASSEMBLY	1
-40		EAR PIVOT BOLT	2
-41	60706	NUT - 5/8-11 UNC (GRADE 5)	2
-42	30283	MAIN LIFT CYLINDER - FRONT (SEE FIG.6B)	1
-43	30284	MAIN LIFT CYLINDER - REAR (SEE FIG.6A)	1
-44	2730	CONTROL CABLE ASSEMBLY	1

SERIAL NUMBER EFFECTIVITY IS 477-1002 ON





ITEM	PART NUMBER	DESCRIPTION	QTY
1E-	30009	FINAL ASSEMBLY	1
-1	8112	FRAME ASSEMBLY (SEE FIG.5C)	1
-2	8028	SCISSOR ASSEMBLY (SEE FIG.4B)	1
-3	30556	DECK ASSEMBLY (SEE FIG.2B)	1
-4	4068-1	HAND CONTROL BOX ASSEMBLY (SEE FIG.3C)	1
-5	60336	EAR PIVOT BOLT	2
-6	61310	NUT	4
-7	780	ADAPTER	2
-8	3023-1	SPACER	2
-9	3059	CHECK VALVE	2
-10	339-186-186B	HOSE ASSEMBLY - 16"	2
-11	2457	90° ELBOW	1
-12	235-2500-2501	TUBE ASSEMBLY - ½ X 18	2
-13	2470	UNION	4
-14	339-186B-186B	HOSE ASSEMBLY - 27"	1
-15	764	TUBE CLAMP	13
-16	235-2500-2501	TUBE ASSEMBLY - ½ X 10'	1
-17	235-2500-2501	TUBE ASSEMBLY - ½ X 10'	1
-18	2432	TEE	1
-19	339-186B-186B	HOSE ASSEMBLY - 31"	1
-20	2017	DECAL - HYDRAULIC FLUID SPEC.	2
-21	2003	DECAL - BATTERY WATER LEVEL	1
-22	2041	DECAL - "DO NOT LIFT FROM THIS END"	2
-23	2019	DECAL - "EMERGENCY LOWERING VALVE"	1
-24	2016	DECAL - "WARNING DO NOT WORK UNDERNEATH ETC."	1
-25	2027	DECAL - "LOAD CAPACITY 2000 LBS."	4
-26	2018	DECAL - ANSI & OSHA SPEC.	1
-27	30416	DECAL - OPERATING INSTRUCTIONS	1
-28	2049	DECAL - MARKLIFT	2
-29	2012	PLATE - MODEL/SERIAL NUMBER	1
-30	2361	DECK ROLLER	3
-31	2362	"V" DECK ROLLER	1
-32	2364	ROLLER PIN	4

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	4034	POWER TO PLATFORM CABLE	1
-34	30392	ARM CONTROL CABLE ASSEMBLY	1
-35	60350	EAR PIVOT BOLT	2
-36	2020	DECAL - "GASOLINE OR PETROL"	1
-37	2004	DECAL - "USE VAPOR TANK ONLY"	1
-38	3008	MAIN LIFT RAM CYLINDER (SEE FIG.6C)	2
-39	2730	CONTROL CABLE ASSEMBLY	1

SERIAL NUMBER EFFECTIVITY IS 577-2022 ON

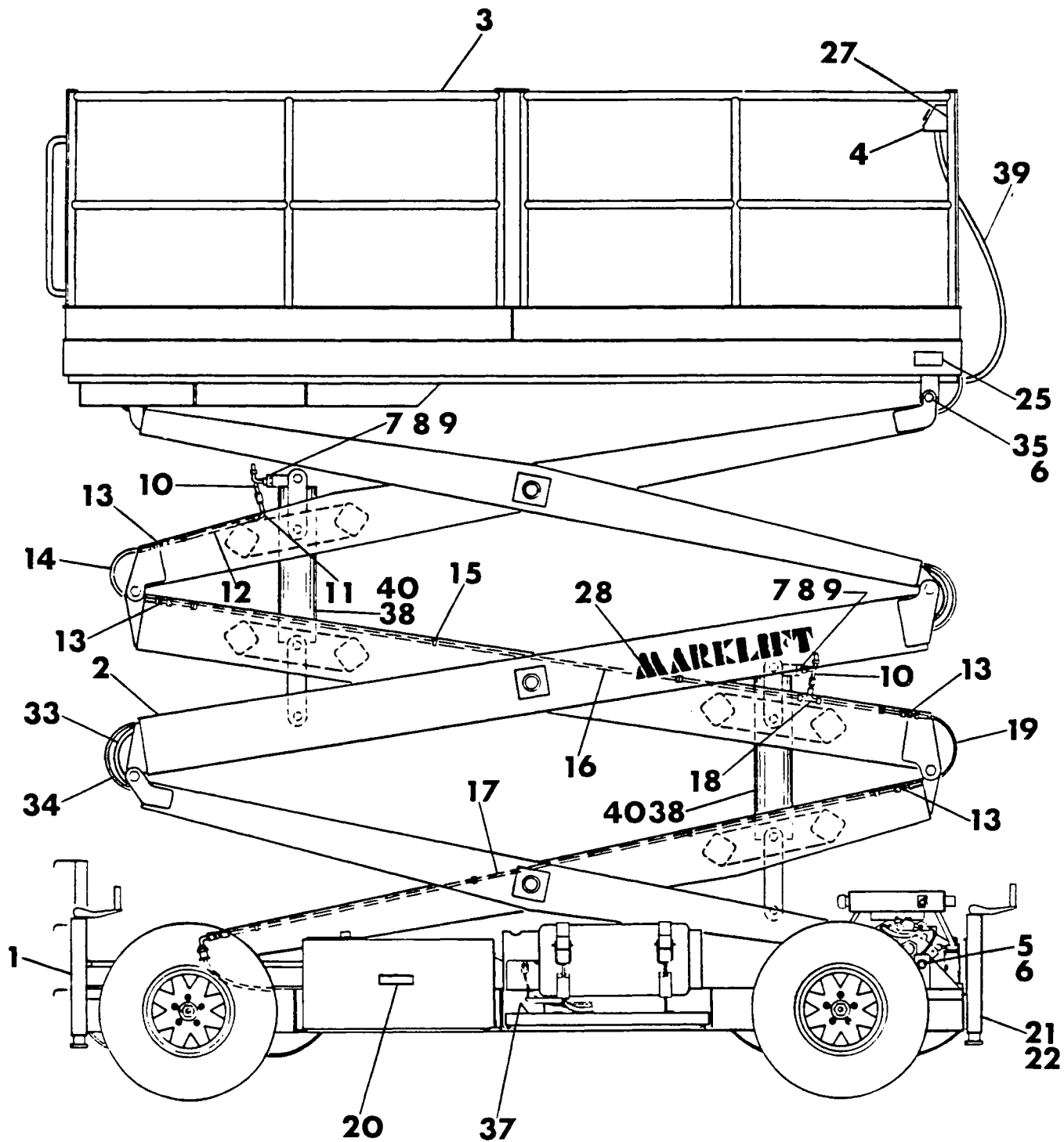
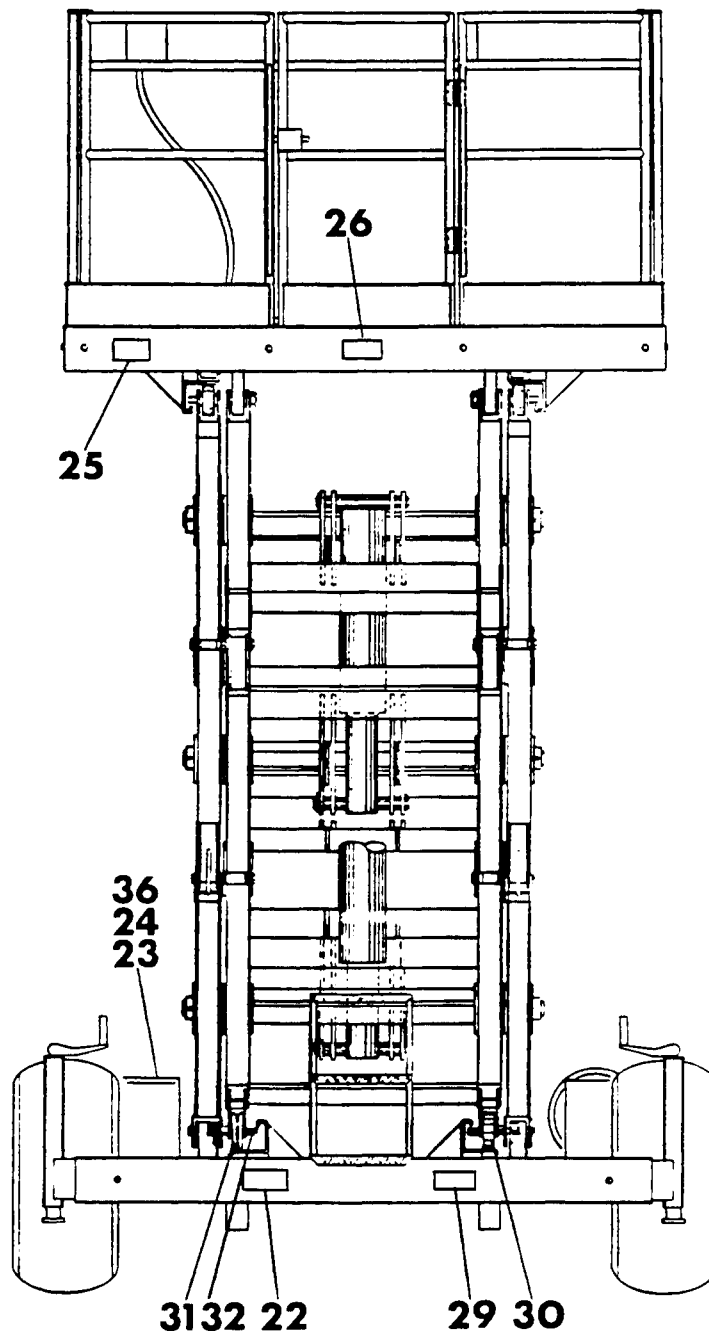


FIGURE 1F - FINAL ASSEMBLY (RT31G)

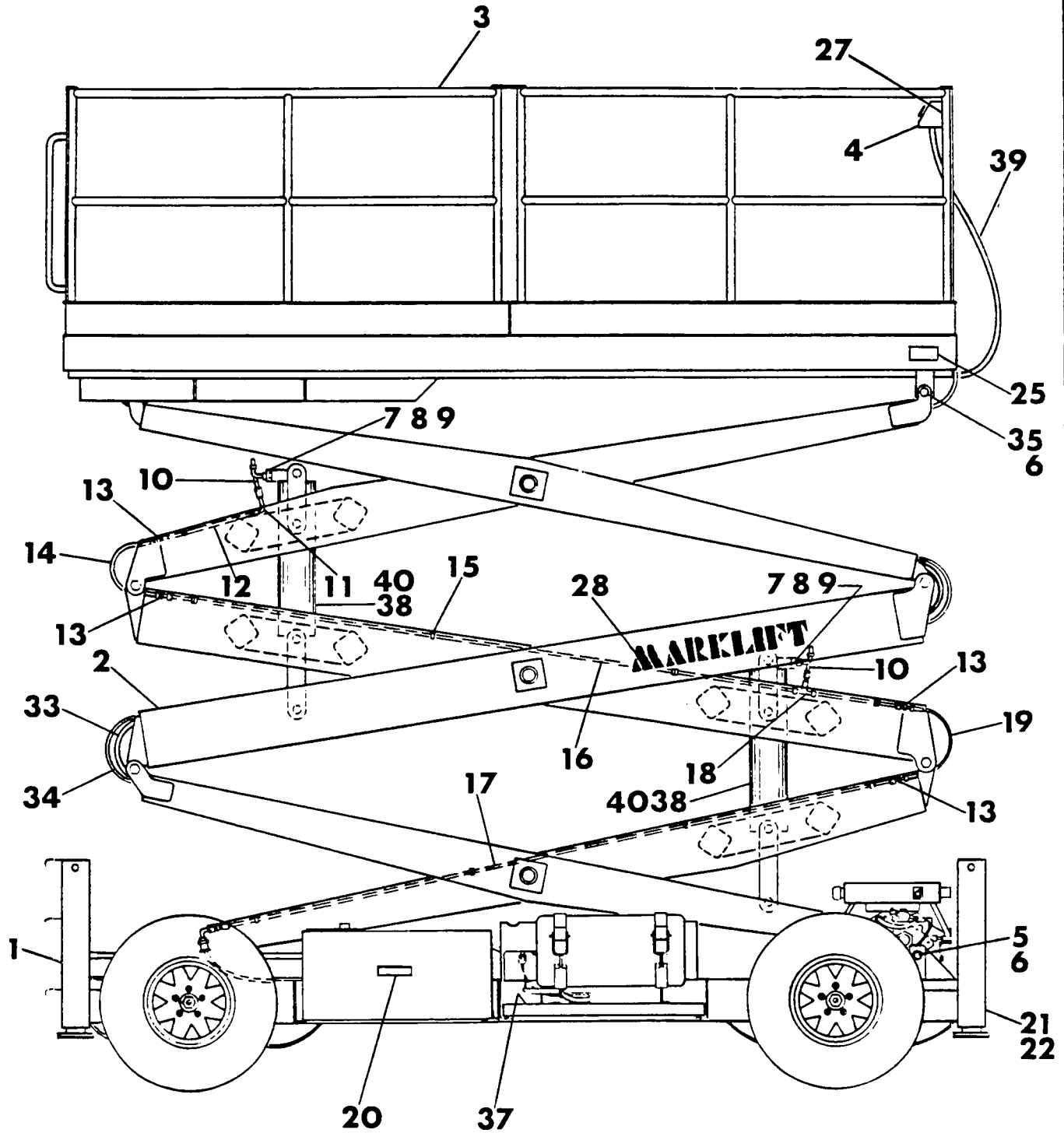
26

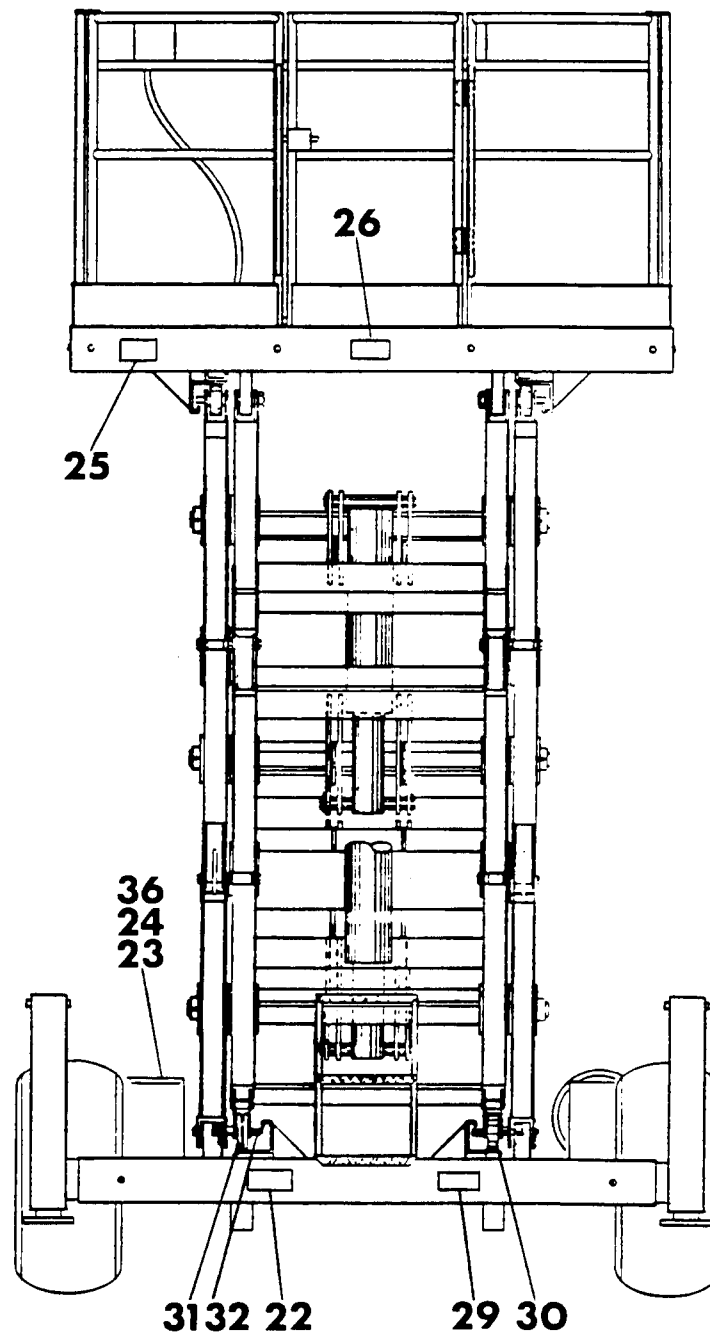


ITEM	PART NUMBER	DESCRIPTION	QTY
1F-	30004	FINAL ASSEMBLY	1
-1	8112	FRAME ASSEMBLY (SEE FIG.5C)	1
-2	8115	SCISSOR ASSEMBLY (SEE FIG.4C)	1
-3	30556	DECK ASSEMBLY (SEE FIG.2B)	1
-4	4068-1	HAND CONTROL BOX ASSEMBLY (SEE FIG.3C)	1
-5	60336	EAR PIVOT BOLT	2
-6	61310	NUT	4
-7	780	ADAPTER	2
-8	3023-1	SPACER	2
-9	3059	CHECK VALVE	2
-10	339-186-186B	HOSE ASSEMBLY - 16"	2
-11	2457	90° ELBOW	1
-12	235-2500-2501	TUBE ASSEMBLY - ½ X 18	2
-13	2470	UNION	4
-14	339-186B-186B	HOSE ASSEMBLY - 27"	1
-15	764	TUBE CLAMP	13
-16	235-2500-2501	TUBE ASSEMBLY - ½ X 10'	1
-17	235-2500-2501	TUBE ASSEMBLY - ½ X 10'	1
-18	2432	TEE	1
-19	339-186B-186B	HOSE ASSEMBLY - 31"	1
-20	2017	DECAL - HYDRAULIC FLUID SPEC.	2
-21	2003	DECAL - BATTERY WATER LEVEL	1
-22	2041	DECAL - "DO NOT LIFT FROM THIS END"	2
-23	2019	DECAL - "EMERGENCY LOWERING VALVE"	1
-24	2016	DECAL - "WARNING DO NOT WORK UNDERNEATH ETC."	1
-25	2027	DECAL - "LOAD CAPACITY 2000 LBS."	4
-26	2018	DECAL - ANSI & OSHA SPEC.	1
-27	30416	DECAL - OPERATING INSTRUCTIONS	1
-28	2049	DECAL - MARKLIFT	2
-29	2012	PLATE - MODEL/SERIAL NUMBER	1
-30	2361	DECK ROLLER	3
-31	2362	"V" DECK ROLLER	1
-32	2364	ROLLER PIN	4

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	4034	POWER TO PLATFORM CABLE	1
-34	30392	ARM CONTROL CABLE ASSEMBLY	1
-35	60350	EAR PIVOT BOLT	2
-36	2020	DECAL - "GASOLINE OR PETROL"	1
-37	2004	DECAL - "USE VAPOR TANK ONLY"	1
-38	3006	MAIN LIFT CYLINDER (SEE FIG.6D)	2
-39	2730	CONTROL CABLE ASSEMBLY	1
-40	30809	MAIN LIFT CYLINDER (BEGINNING NOVEMBER 1981) (SEE FIG. 6D)	2

SERIAL NUMBER EFFECTIVITY IS 577-2020 ON

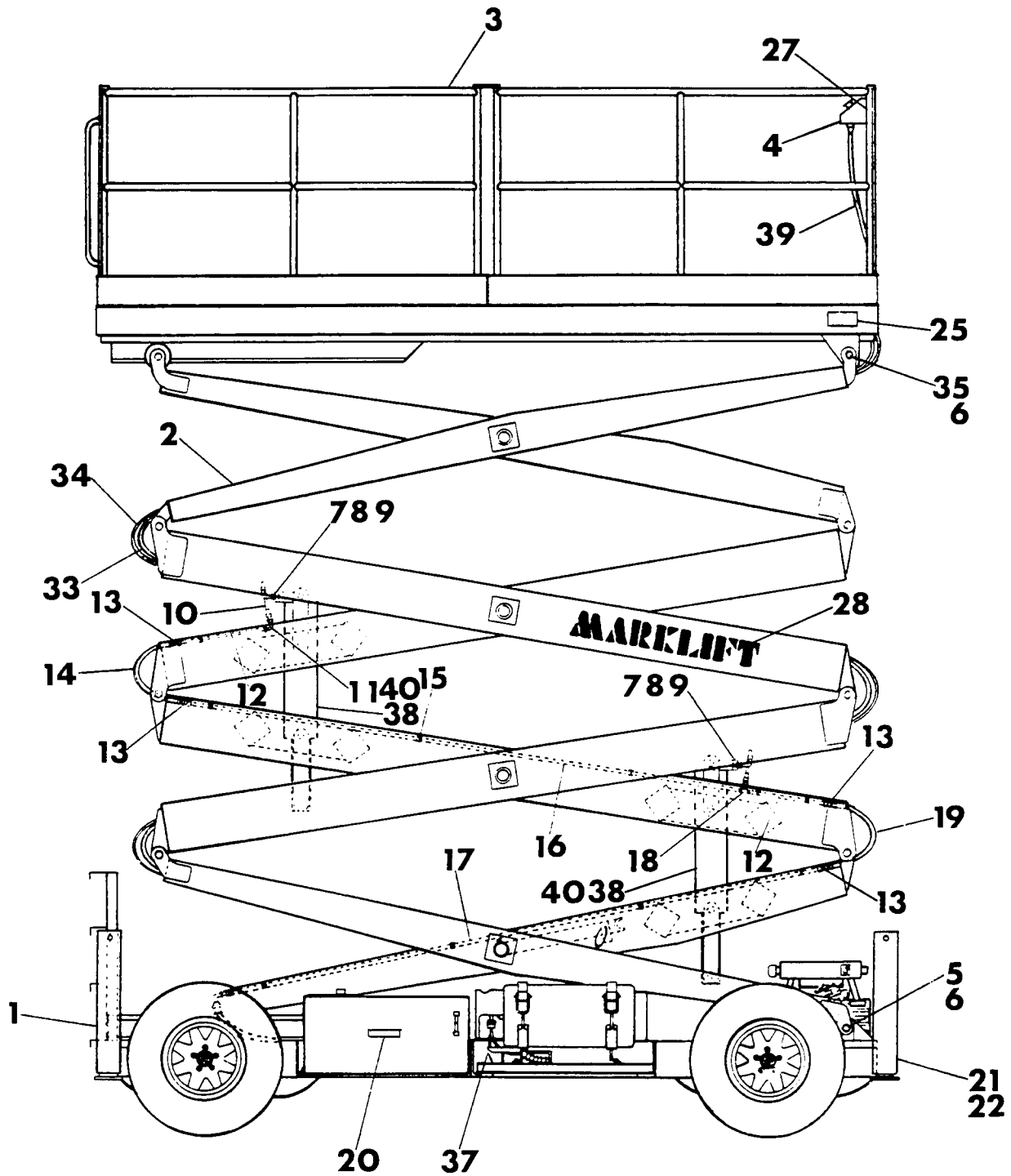


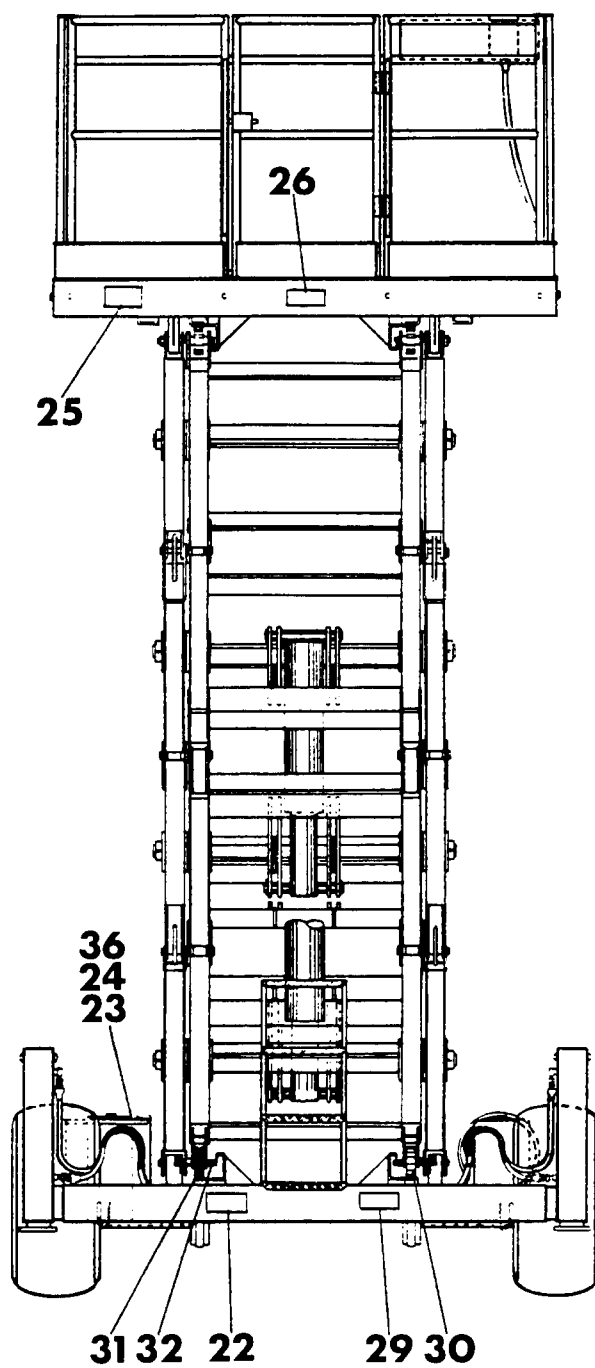


ITEM	PART NUMBER	DESCRIPTION	QTY
1G-	30006	FINAL ASSEMBLY	1
-1	8113	FRAME ASSEMBLY (SEE FIG.5D)	1
-2	8115	SCISSOR ASSEMBLY (SEE FIG.4C)	1
-3	30556	DECK ASSEMBLY (SEE FIG.2B)	1
-4	8325-5	HAND CONTROL BOX ASSEMBLY (SEE FIG.3D)	1
-5	60336	EAR PIVOT BOLT	2
-6	61310	NUT	4
-7	780	ADAPTER	2
-8	3023-1	SPACER	2
-9	3059	CHECK VALVE (O-RING FOR CHECK VALVE 8-80)	2
-10	339-186-186B	HOSE ASSEMBLY - 16"	2
-11	2457	90° ELBOW	1
-12	235-2500-2501	TUBE ASSEMBLY - ½ X 18	2
-13	2470	UNION	4
-14	339-186B-186B	HOSE ASSEMBLY - 27"	1
-15	764	TUBE CLAMP	13
-16	235-2500-2501	TUBE ASSEMBLY - ½ X 10'	1
-17	235-2500-2501	TUBE ASSEMBLY - ½ X 10'	1
-18	2432	TEE	1
-19	339-186B-186B	HOSE ASSEMBLY - 31"	1
-20	2017	DECAL - HYDRAULIC FLUID SPEC.	2
-21	2003	DECAL - BATTERY WATER LEVEL	1
-22	2041	DECAL - "DO NOT LIFT FROM THIS END"	2
-23	2019	DECAL - "EMERGENCY LOWERING VALVE"	1
-24	2016	DECAL - "WARNING DO NOT WORK UNDERNEATH ETC."	1
-25	2027	DECAL - "LOAD CAPACITY 2000 LBS."	4
-26	2018	DECAL - ANSI & OSHA SPEC.	1
-27	30416	DECAL - OPERATING INSTRUCTIONS	1
-28	2049	DECAL - MARKLIFT	2
-29	2012	PLATE - MODEL/SERIAL NUMBER	1
-30	2361	DECK ROLLER	3
-31	2362	"V" DECK ROLLER	1
-32	2364	ROLLER PIN	4

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	4034	POWER TO PLATFORM CABLE	1
-34	30392	ARM CONTROL CABLE ASSEMBLY	1
-35	60350	EAR PIVOT BOLT	2
-36	2020	DECAL - "GASOLINE OR PETROL"	1
-37	2004	DECAL - "USE VAPOR TANK ONLY"	1
-38	3006	MAIN LIFT CYLINDER (SEE FIG.6D)	2
-39	2730	CONTROL CABLE ASSEMBLY	1
-40	30809	MAIN LIFT CYLINDER (BEGINNING NOVEMBER 1981) (SEE FIG. 6D)	2

SERIAL NUMBER EFFECTIVITY IS 677-2060 ON



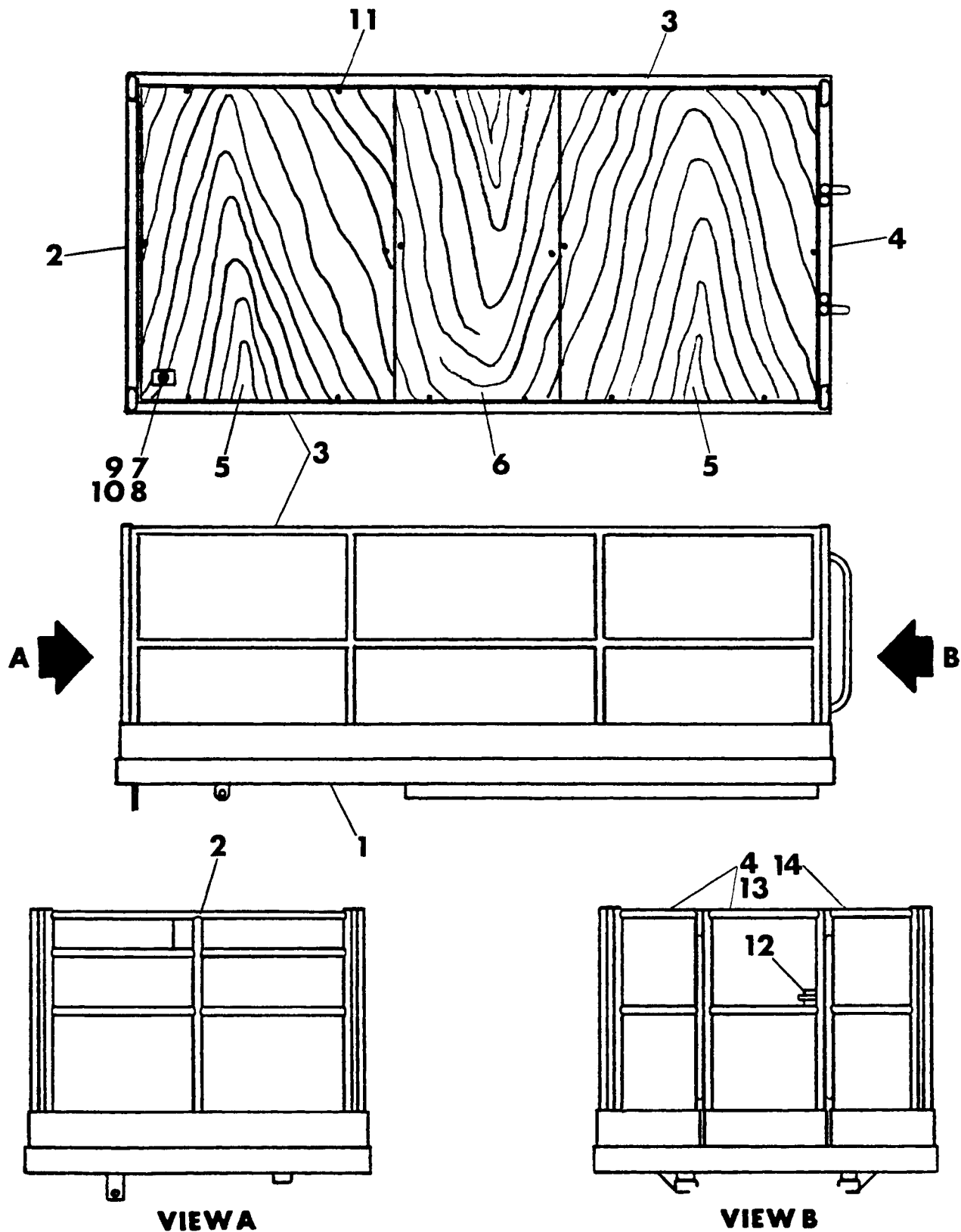


ITEM	PART NUMBER	DESCRIPTION	QTY
1H-	30000	FINAL ASSEMBLY	1
-1	8110	FRAME ASSEMBLY (SEE FIG.5F)	1
-2	8029	SCISSOR ASSEMBLY (SEE FIG.4D)	1
-3	30555	DECK ASSEMBLY (SEE FIG.2C)	1
-4	4068-5	HAND CONTROL BOX ASSEMBLY (SEE FIG.3E)	1
-5	60336	EAR PIVOT BOLT	2
-6	61310	NUT	4
-7	780	ADAPTER	2
-8	3023-1	SPACER	2
-9	3059	CHECK VALVE	2
-10	339-186-186B	HOSE ASSEMBLY - 16"	2
-11	2457	90° ELBOW	1
-12	235-2500-2501	TUBE ASSEMBLY - ½ X 18	2
-13	2470	UNION	4
-14	339-186B-186B	HOSE ASSEMBLY - 27"	1
-15	764	TUBE CLAMP	13
-16	235-2500-2501	TUBE ASSEMBLY - ½	1
-17	235-2500-2501	TUBE ASSEMBLY - ½	1
-18	2432	TEE	1
-19	339-186B-186B	HOSE ASSEMBLY - 31"	1
-20	2017	DECAL - HYDRAULIC FLUID SPEC.	2
-21	2003	DECAL - BATTERY WATER LEVEL	1
-22	2041	DECAL - "DO NOT LIFT FROM THIS END"	2
-23	2019	DECAL - "EMERGENCY LOWERING VALVE"	1
-24	2016	DECAL - "WARNING DO NOT WORK UNDERNEATH ETC."	1
-25	2026	DECAL - "LOAD CAPACITY 1500 LBS."	4
-26	2018	DECAL - ANSI & OSHA SPEC.	1
-27	30417	DECAL - OPERATING INSTRUCTIONS	1
-28	2049	DECAL - MARKLIFT	2
-29	2012	PLATE - MODEL/SERIAL NUMBER	1
-30	2361	DECK ROLLER	3
-31	2362	"V" DECK ROLLER	1
-32	2364	ROLLER PIN	4

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	4034	POWER TO PLATFORM CABLE	1
-34	30392	ARM CONTROL CABLE ASSEMBLY	1
-35	60350	EAR PIVOT BOLT	2
-36	2020	DECAL - "GASOLINE OR PETROL"	1
-37	2004	DECAL - "USE VAPOR TANK ONLY"	1
-38	3006	MAIN LIFT CYLINDER (SEE FIG.6D)	2
-39	2730	CONTROL CABLE ASSEMBLY	1
-40	30809	MAIN LIFT CYLINDER (BEGINNING NOVEMBER 1981) (SEE FIG. 6D)	2

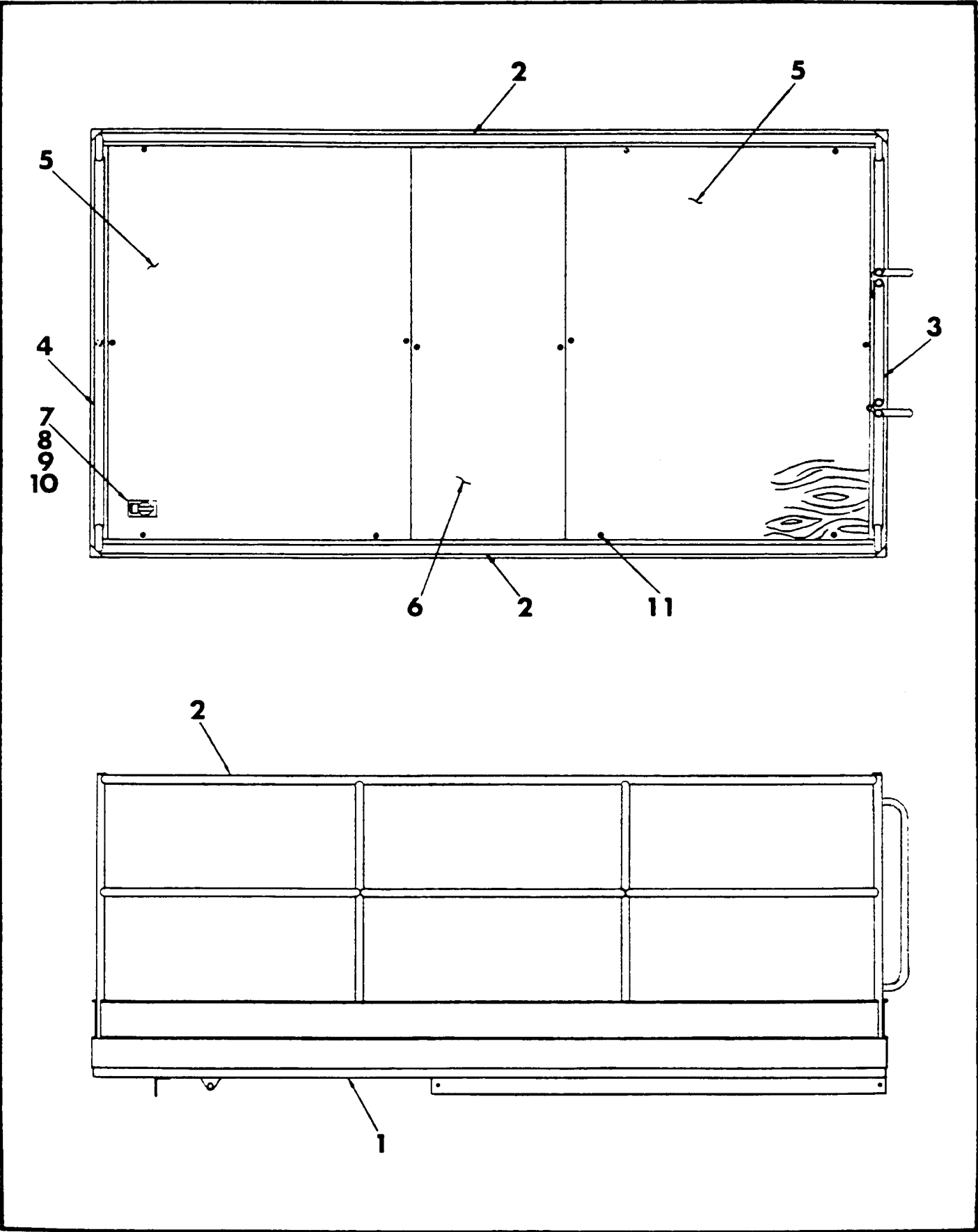
FIGURE 2 - DECK ASSEMBLY (RT25G)

37



ITEM	PART NUMBER	DESCRIPTION	QTY
2-	30615	DECK ASSEMBLY	1
-1	30116	DECK WELDMENT	1
-2	30145	GUARD RAIL ASSEMBLY-FRONT	1
-3	30146	GUARD RAIL ASSEMBLY-SIDE	2
-4	30668	REAR GUARD RAIL WITH GATE	1
-5	2248-A	PLYWOOD FLOOR SECTION-3/4 X 48 X 54	2
-6	2248-B	PLYWOOD FLOOR SECTION-3/4 X 24 X 54	1
-7	355	BELL BOX	1
-8	356	BELL BOX COVER	1
-9	4060	RECEPTACLE (REPLACED BY PART NO. 20515)	1
-10	117G	ROMEX CONNECTOR	1
-11	61708	SELF TAPPING FLAT HEAD SCREW- $\frac{1}{2}$ X $1\frac{1}{2}$	18
-12	16231	LATCH BOLT	1
-13	12005	GATE SPRING HINGE	2
-14	30669	REAR GUARD RAIL	1

FIGURE 2A - DECK ASSEMBLY (RT25G) (1981)



REV.1
1-83

FIGURE 2A - DECK ASSEMBLY (RT25G) (1981)

40

ITEM	PART NUMBER	DESCRIPTION	QTY
2A-	30657	DECK ASSEMBLY	1
-1	30654	DECK WELDMENT	1
-2	30146	GUARD RAIL ASSEMBLY - SIDE	2
-3	30281	GUARD RAIL ASSEMBLY - REAR	1
-4	30280	GUARD RAIL ASSEMBLY - FRONT	1
-5	30643	PLYWOOD FLOOR SECTION - 3/4 X 48x62 3/8	2
-6	30644	PLYWOOD FLOOR SECTION - 3/4 X 24 3/8 X 62 3/8	1
-7	4060	RECEPTACLE (REPLACED BY PART NO. 20515)	1
-8	355	BELL BOX COVER	1
-9	355	BELL BOX	1
-10	117G	ROMEX CONNECTOR	1
-11	61706	FLAT HEAD SELF TAPPING SCREW - 1/2 X 1 1/2	18

FIGURE 2B - DECK ASSEMBLY (RT26E) (RT26G)
(RT31E) (RT31G) (SRT31G)

41

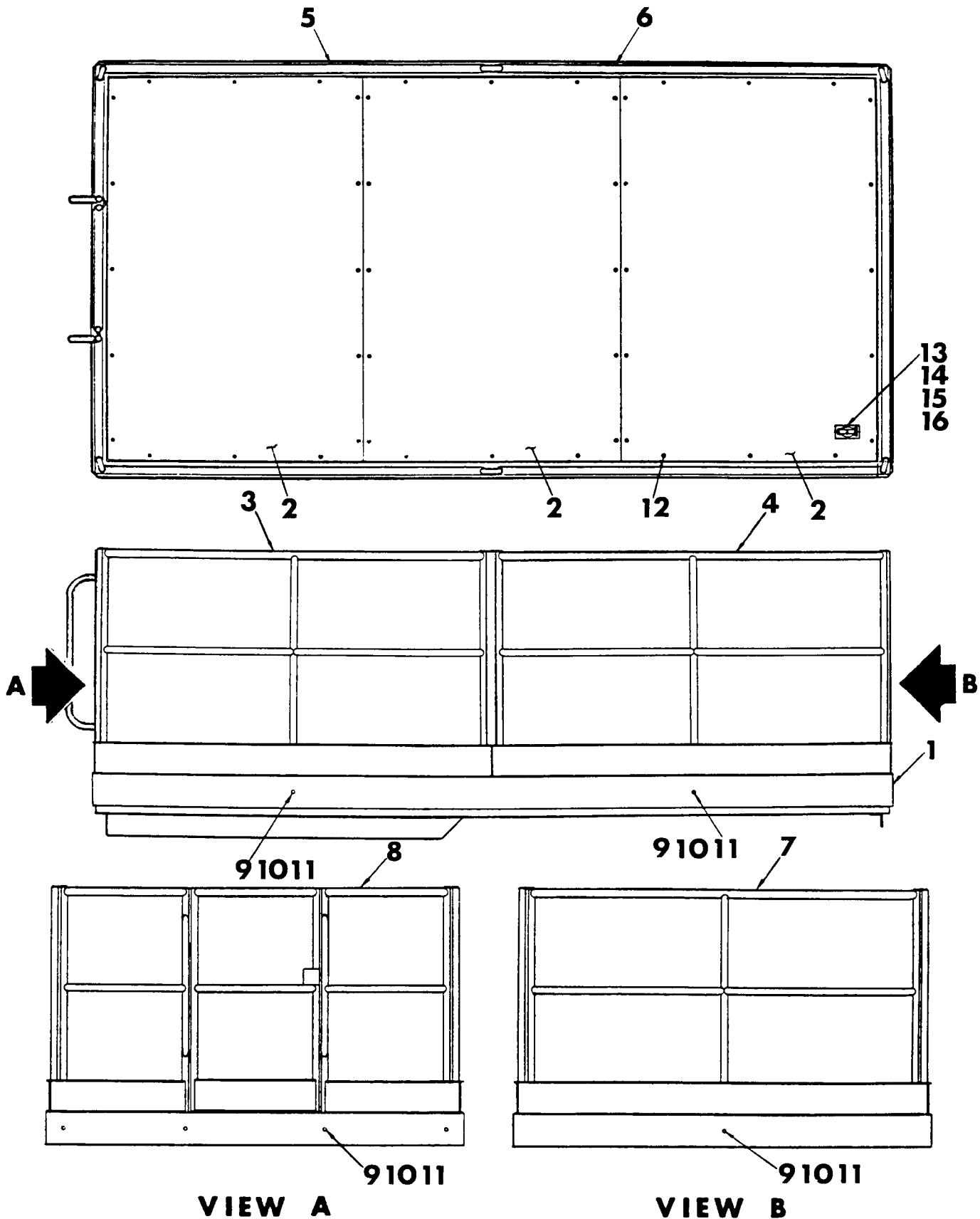
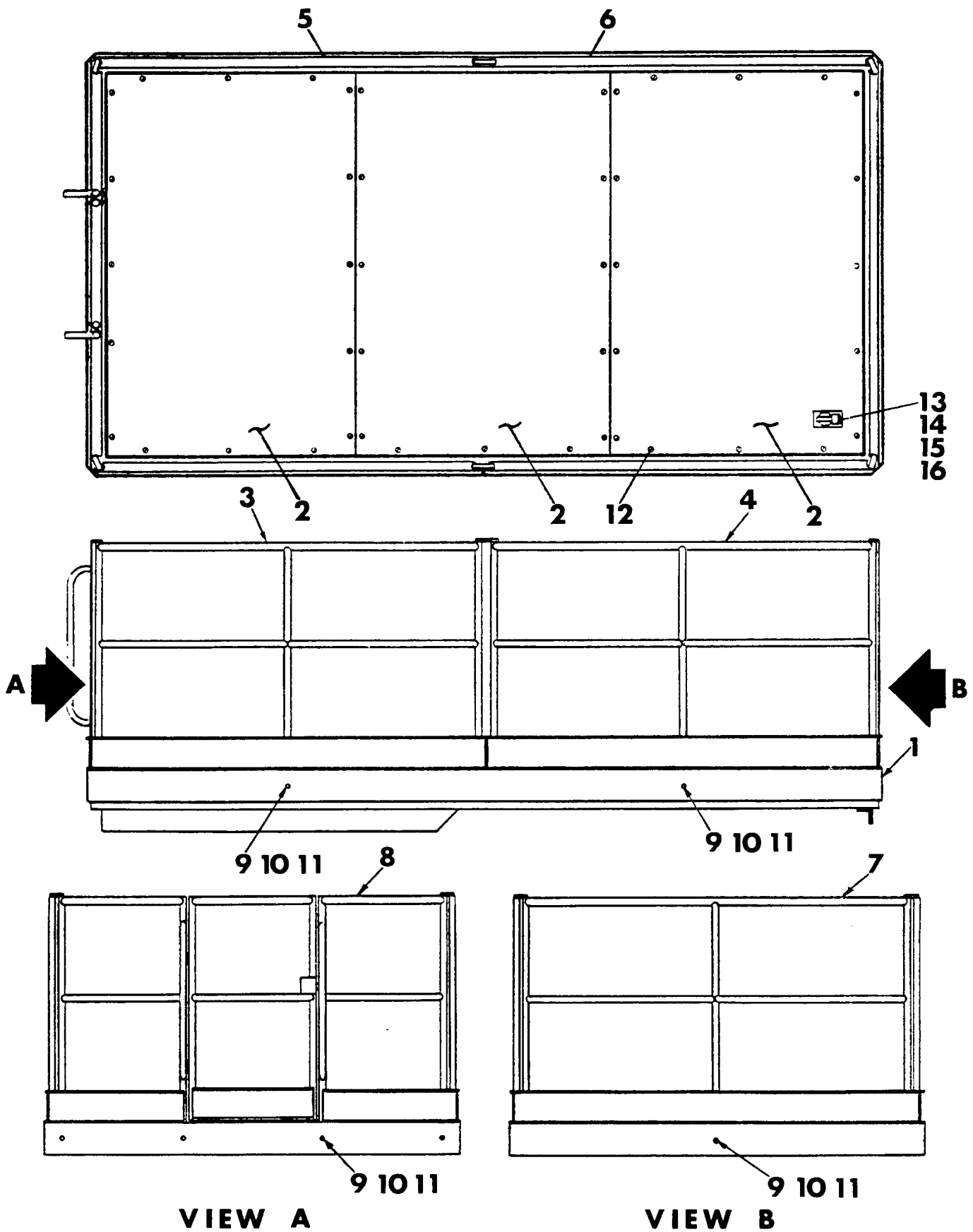


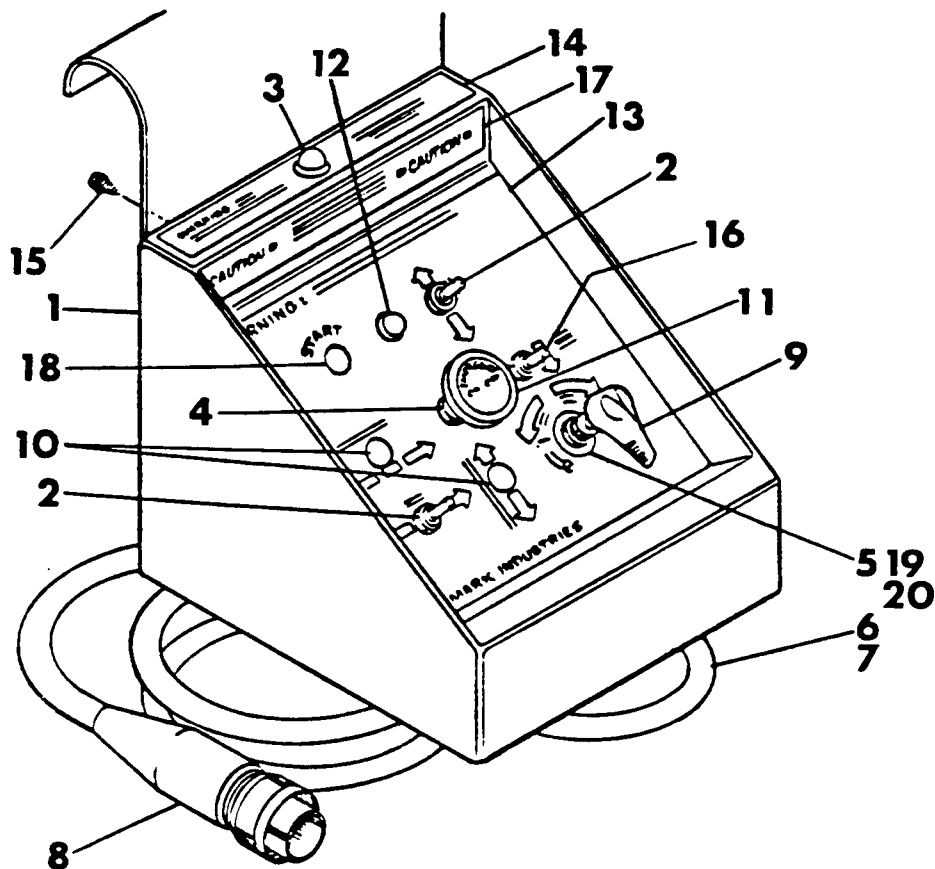
FIGURE 2B - DECK ASSEMBLY (RT26E) (RT26G)
(RT31E) (RT31G) (SRT31G)

42

ITEM	PART NUMBER	DESCRIPTION	QTY
2B-	30556	DECK ASSEMBLY	1
-1	30507	DECK WELDMENT	1
-2	30553	PLYWOOD FLOOR SECTION	3
-3	30568	GUARD RAIL - R.H. SIDE - REAR	1
-4	30569	GUARD RAIL - R.H. SIDE - FORWARD	1
-5	30566	GUARD RAIL - L.H. SIDE - REAR	1
-6	30567	GUARD RAIL - L.H. SIDE - FORWARD	1
-7	30541	GUARD RAIL - FORWARD	1
-8	30561	GUARD RAIL - SWING GATE ASSEMBLY	1
-9	60154	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X 2 $\frac{3}{4}$	9
-10	63301	LOCKWASHER - $\frac{1}{4}$	9
-11	60701	HEX NUT - $\frac{1}{4}$ -20 UNC	9
-12	61706	SELF TAPPING FLAT SLOTTED HEAD CAPSCREW $\frac{1}{4}$ -20 UNC X 1 $\frac{1}{2}$	48
-13	20515	RECEPTACLE	1
-14	355	BELL BOX COVER	1
-15	355	BELL BOX	1
-16	62614	ROUND HEAD MACHINE SCREW - 6-32 UNCx1 $\frac{1}{2}$	2



ITEM	PART NUMBER	DESCRIPTION	QTY
2C-	30555	DECK ASSEMBLY	1
-1	30506	DECK WELDMENT	1
-2	30553	PLYWOOD FLOOR SECTION	3
-3	30568	GUARD RAIL - R.H. SIDE - REAR	1
-4	30569	GUARD RAIL - R.H. SIDE - FORWARD	1
-5	30566	GUARD RAIL - L.H. SIDE - REAR	1
-6	30567	GUARD RAIL - L.H. SIDE - FORWARD	1
-7	30541	GUARD RAIL - FORWARD	1
-8	30561	GUARD RAIL - SWING GATE ASSEMBLY	1
-9	60154	HEX HEAD CAPSCREW - 1/4 20 UNC X 2 3/4	9
-10	63301	LOCKWASHER - 1/4	9
-11	60701	HEX NUT - 1/4-20 UNC	9
-12	61706	SELF TAPPING FLAT SLOTTED HEAD CAPSCREW 1/4-20 UNC X 1 1/2	48
-13	20515	RECEPTACLE	1
-14	355	BELL BOX COVER	1
-15	355	BELL BOX	1
-16	62614	ROUND HEAD MACHINE SCREW - 6-32 UNC X 1 1/2	2



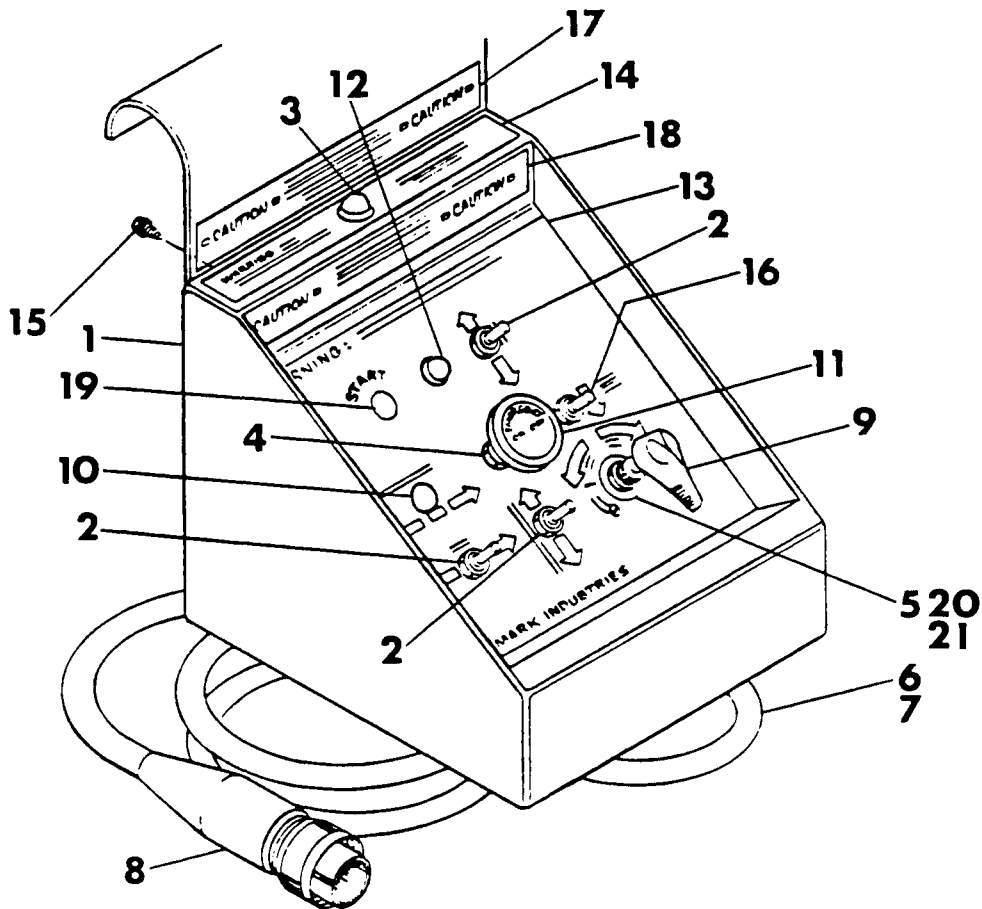
ITEM	PART NUMBER	DESCRIPTION	QTY
3-	4069-1	HAND CONTROL BOX ASSEMBLY	1
-1	8309	CONTROL BOX	1
-2	4021	MOMENTARY SWITCH	2
-3	4031	WARNING LIGHT - RED	1
-4	4018	EMERGENCY ON-OFF SWITCH	1
-5	4106	5 POSITION SPRING RETURN SWITCH-DRIVE	1
-6	2730	CONTROL CABLE ASSEMBLY	1
-7	117G	STRAIN RELIEF	1
-8	4026-1	CANNON PLUG - MALE	1
-9	65151	KNOB	1
-10	772	HOLE PLUG	2
-11	5300	KNOB - EMERGENCY ON-OFF	1
-12	4107	POWER-ON LIGHT-GREEN	1
-13	2008	DECAL - CONTROL BOX	1

REV.1
1-83

FIGURE 3 - HAND CONTROL BOX ASSEMBLY
(RT26E) (RT31E)

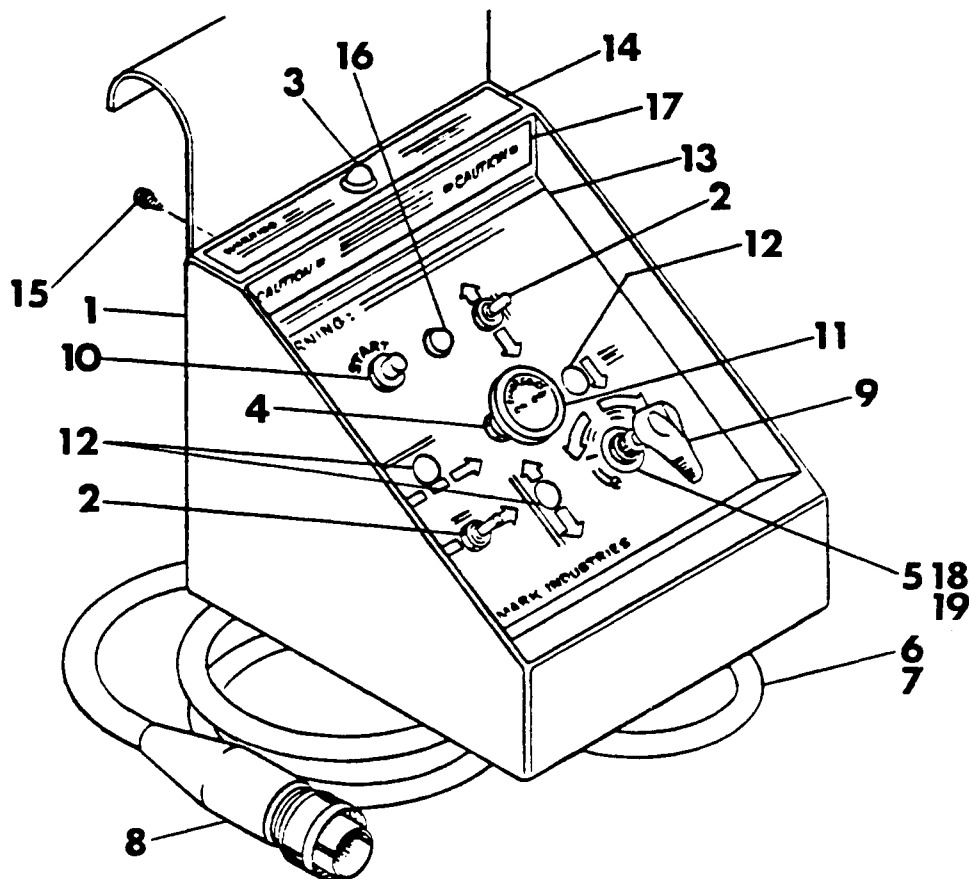
46

ITEM	PART NUMBER	DESCRIPTION	QTY
-14	2015	DECAL - WARNING UNSTABLE CONDITION	1
-15	2720	HEX HEAD SELF TAPPING SCREW-NO.6-32 X 3/8	6
-16	4017	TOGGLE SWITCH - CREEP SPEED	1
-17	2014	DECAL - WARNING HIGH VOLTAGE	1
-18	775	HOLE PLUG	1
-19	65189	O-RING	1
-20	65131	SEALING NUT	1



ITEM	PART NUMBER	DESCRIPTION	QTY
3A-	4069-5	HAND CONTROL BOX ASSEMBLY	1
-1	8309	CONTROL BOX	1
-2	4021	MOMENTARY SWITCH	3
-3	4031	WARNING LIGHT - RED	1
-4	4018	EMERGENCY ON-OFF SWITCH	1
-5	4106	5 POSITION SPRING RETURN SWITCH - DRIVE	1
-6	2730	CONTROL CABLE ASSEMBLY	1
-7	117G	STRAIN RELIEF	1
-8	4026	CANNON PLUG - MALE	1
-9	65151	KNOB	1
-10	772	HOLE PLUG	1
-11	5300	KNOB EMERGENCY ON-OFF	1
-12	4107	POWER-ON LIGHT-GREEN	1
-13	2008	DECAL - CONTROL BOX	1

ITEM	PART NUMBER	DESCRIPTION	QTY
-14	2015	DECAL - WARNING UNSTABLE CONDITION	1
-15	2720	HEX HEAD SELF TAPPING SCREW - NO.6-32 X 3/8	6
-16	4017	TOGGLE SWITCH - CREEP SPEED	1
-17	2013	DECAL - HYDRAULIC OUTRIGGER CAUTION	1
-18	2014	DECAL - WARNING HIGH VOLTAGE HOLE PLUG	1
-19	775	HOLE PLUG	1
-20	65189	O-RING	1
-21	65131	SEALING NUT	1



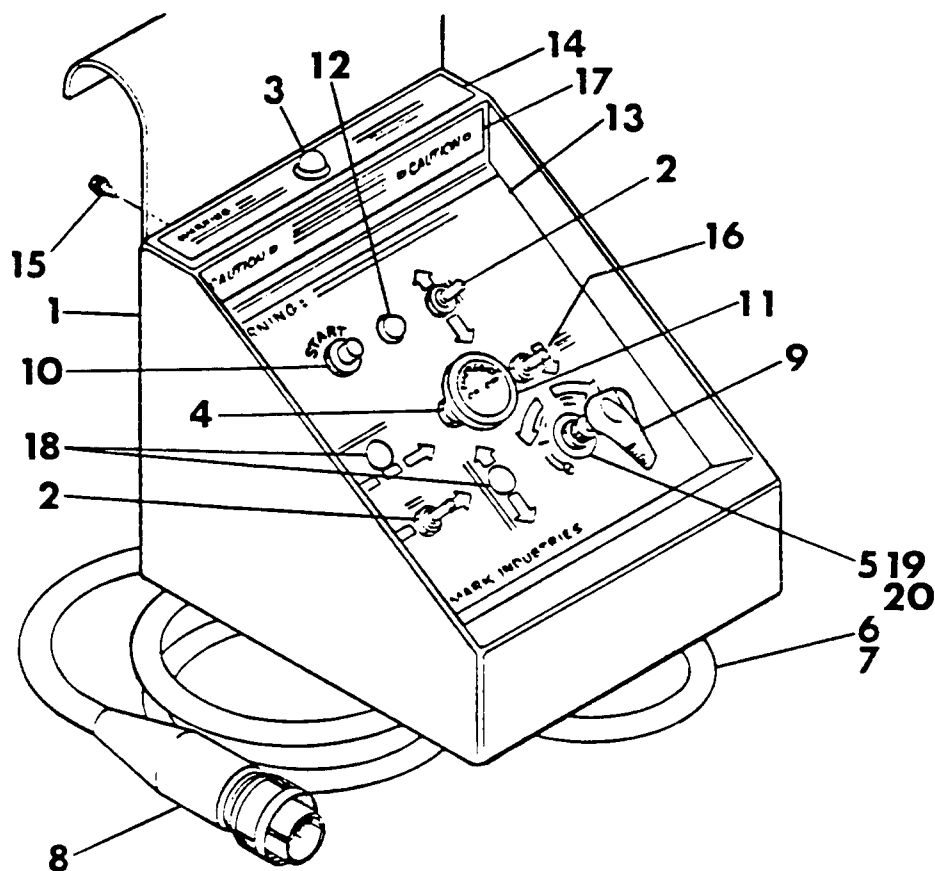
ITEM	PART NUMBER	DESCRIPTION	QTY
3B-	8325-1	HAND CONTROL BOX ASSEMBLY	1
-1	8309	CONTROL BOX	1
-2	4021	MOMENTARY SWITCH	2
-3	4031	WARNING LIGHT - RED	1
-4	4018	EMERGENCY ON-OFF SWITCH	1
-5	4106	5 POSITION SPRING RETURN SWITCH - DRIVE	1
-6	2730	CONTROL CABLE ASSEMBLY	1
-7	117G	STRAIN RELIEF	1
-8	4026-1	CANNON PLUG - MALE	1
-9	65151	KNOB	1
-10	4020	PUSH BUTTON START SWITCH	1
-11	5300	KNOB - EMERGENCY ON-OFF	1
-12	772	HOLE PLUG	3
-13	2008	DECAL - CONTROL BOX	1

REV.1
1-83

FIGURE 3B - HAND CONTROL BOX ASSEMBLY (RT25G)

50

ITEM	PART NUMBER	DESCRIPTION	QTY
-14	2015	DECAL - WARNING UNSTABLE CONDITION	1
-15	2720	HEX HEAD SELF TAPPING SCREW - NO. 6-32 X 3/8	6
-16	4107	POWER - ON LIGHT - GREEN	1
-17	2014	DECAL - WARNING HIGH VOLTAGE	1
-18	65189	O-RING	1
-19	65131	SEALING NUT	1



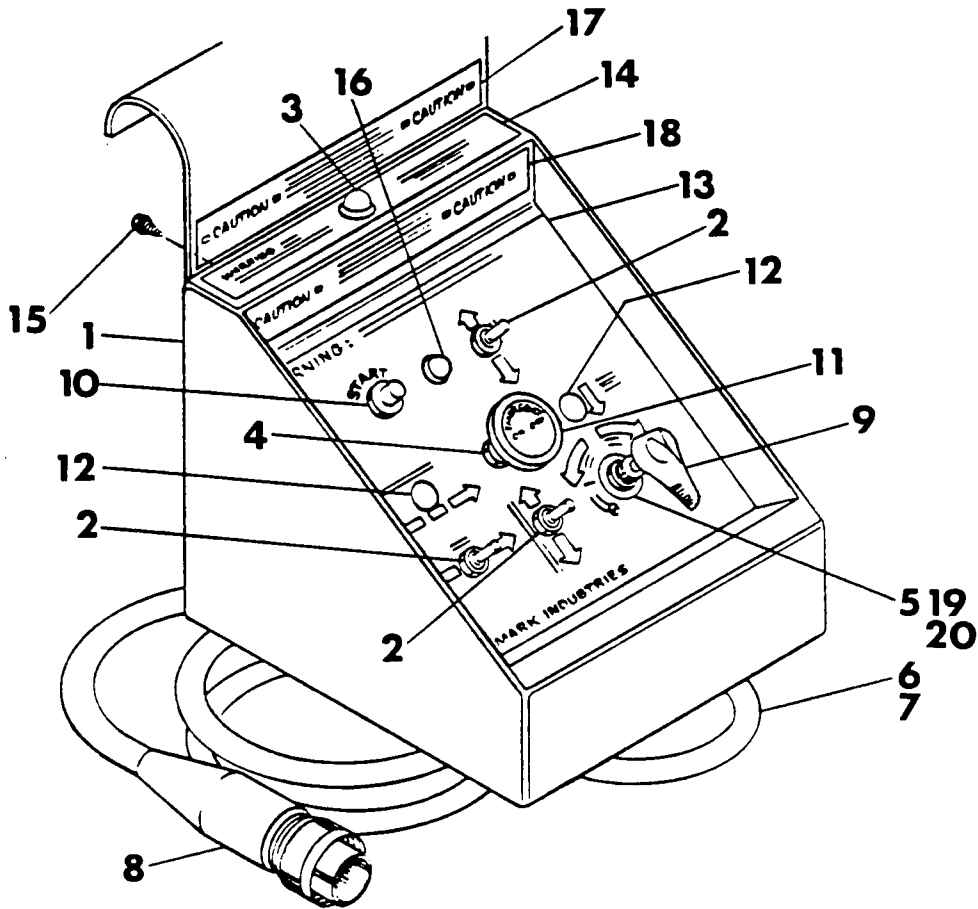
ITEM	PART NUMBER	DESCRIPTION	QTY
3C-	4068-1	HAND CONTROL BOX ASSEMBLY	1
-1	8309	CONTROL BOX	1
-2	4021	MOMENTARY SWITCH	2
-3	4031	WARNING LIGHT - RED	1
-4	4018	EMERGENCY ON-OFF SWITCH	1
-5	4106	5 POSITION SPRING RETURN SWITCH - DRIVE	1
-6	2730	CONTROL CABLE ASSEMBLY	1
-7	117G	STRAIN RELIEF	1
-8	4026-1	CANNON PLUG - MALE	1
-9	65151	KNOB	1
-10	4020	PUSH BUTTON START SWITCH	1
-11	5300	KNOB - EMERGENCY ON-OFF	1
-12	4107	POWER-ON LIGHT-GREEN	1
-13	2008	DECAL - CONTROL BOX	1

REV.1
1-83

FIGURE 3C - HAND CONTROL BOX ASSEMBLY
(RT26G) (RT31G)

52

ITEM	PART NUMBER	DESCRIPTION	QTY
-14	2015	DECAL - WARNING UNSTABLE CONDITION	1
-15	2720	HEX HEAD SELF TAPPING SCREW - NO.6-3/8	6
-16	4017	TOGGLE SWITCH - CREEP SPEED	1
-17	2014	DECAL - WARNING HIGH VOLTAGE	1
-18	772	HOLE PLUG	2
-19	65189	O-RING	1
-20	65131	SEALING NUT	1



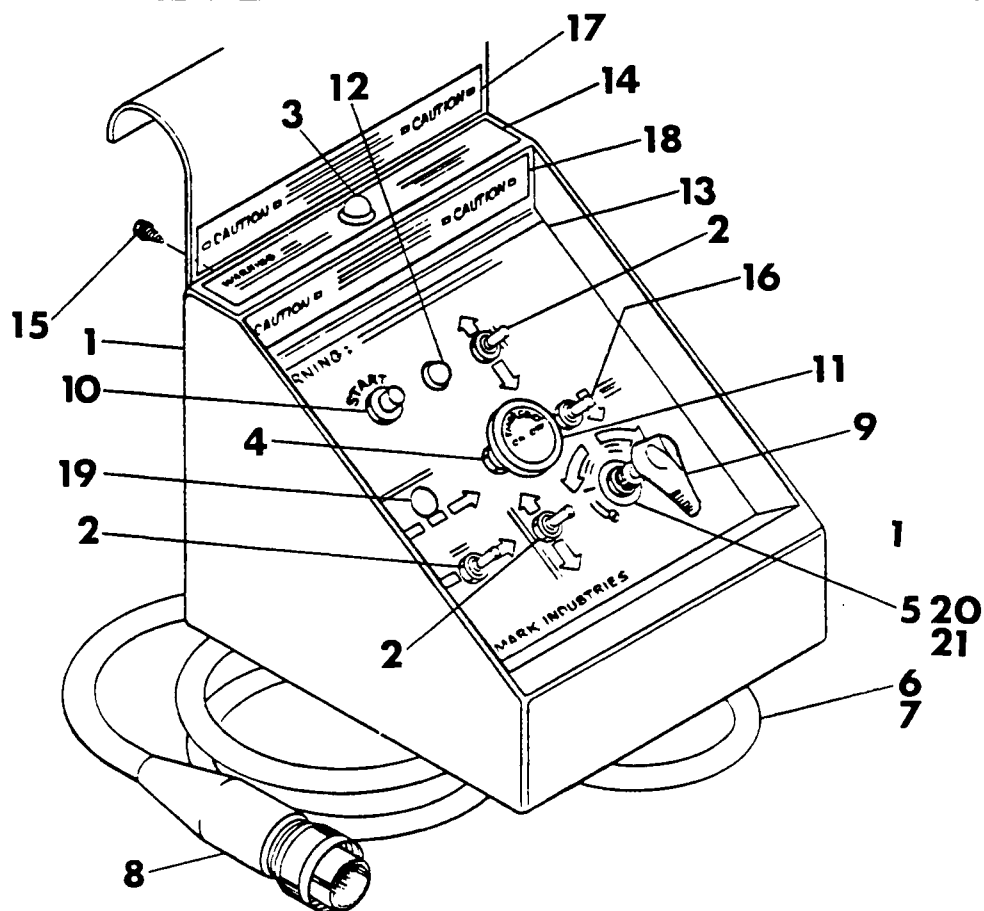
ITEM	PART NUMBER	DESCRIPTION	QTY
3D-	8325-5	HAND CONTROL BOX ASSEMBLY	1
-1	8309	CONTROL BOX	1
-2	4021	MOMENTARY SWITCH	3
-3	4031	WARNING LIGHT	1
-4	4018	EMERGENCY ON-OFF SWITCH	1
-5	4106	5 POSITION SPRING RETURN SWITCH - DRIVE	1
-6	2730	CONTROL CABLE ASSEMBLY	1
-7	117G	STRAIN RELIEF	1
-8	4026-1	CANNON PLUG - MALE	1
-9	65151	KNOB	1
-10	4020	PUSH BUTTON START SWITCH	1
-11	5300	KNOB - EMERGENCY ON-OFF	1
-12	772	HOLE PLUG	2
-13	2008	DECAL - CONTROL BOX	1

REV.1
1-83

FIGURE 3D - HAND CONTROL BOX ASSEMBLY
(SRT31G)

54

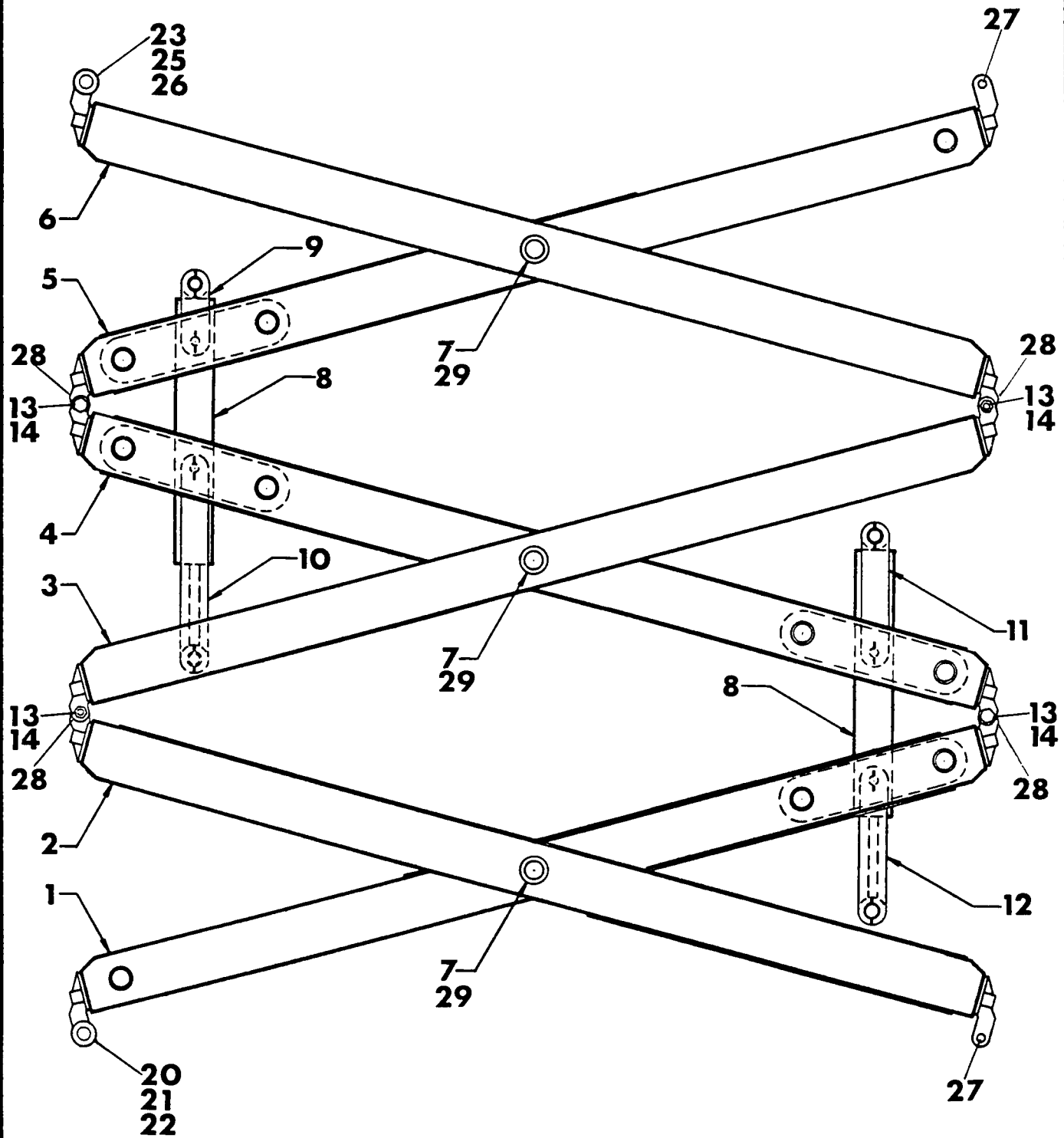
ITEM	PART NUMBER	DESCRIPTION	QTY
-14	2015	DECAL - WARNING UNSTABLE CONDITION	1
-15	2720	HEX HEAD SELF TAPPING SCREW NO.6-32 X 3/8	6
-16	4107	POWER - ON LIGHT - GREEN	1
-17	2013	DECAL - HYDRAULIC OUTRIGGER CAUTION	1
-18	2014	DECAL - WARNING HIGH VOLTAGE	1
-19	65189	O-RING	1
-20	65131	SEALING NUT	1

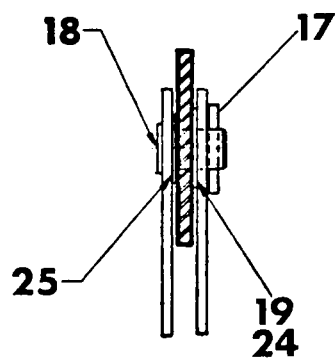
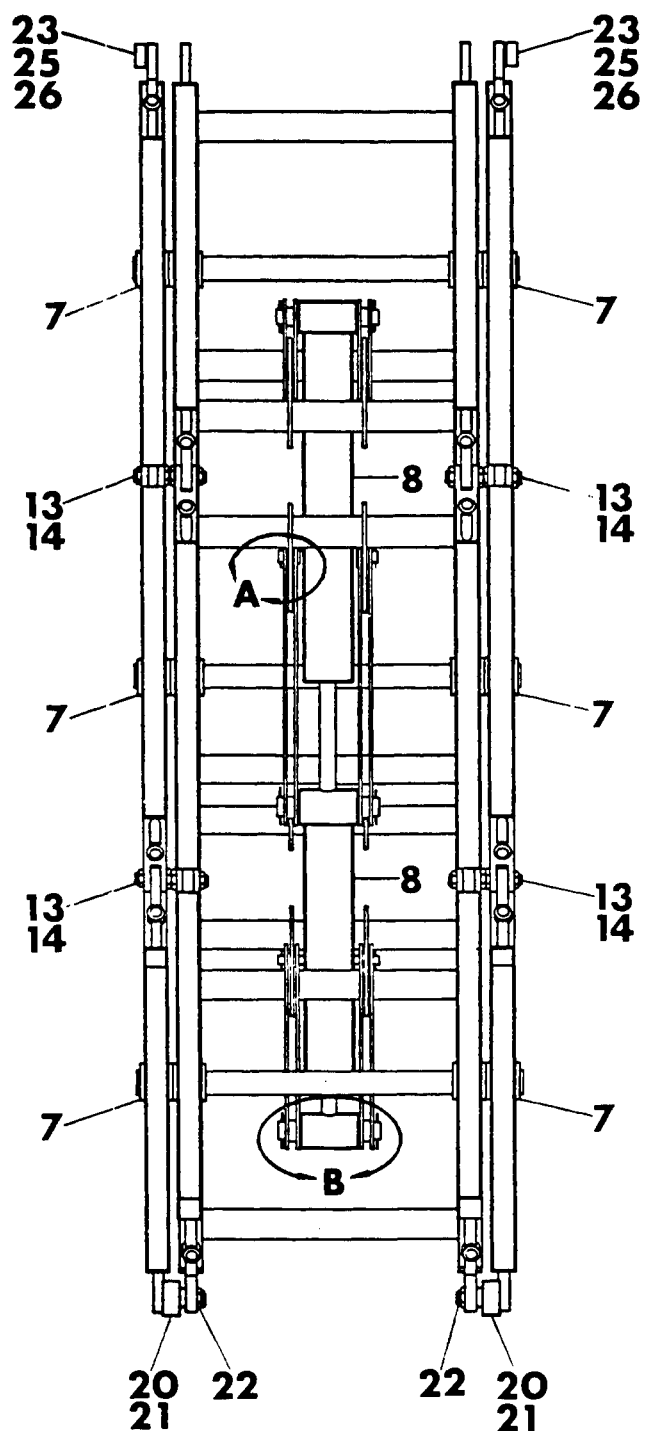


ITEM	PART NUMBER	DESCRIPTION	QTY
3E-	4068-5	HAND CONTROL BOX ASSEMBLY	1
-1	8309	CONTROL BOX	1
-2	4021	MOMENTARY SWITCH	3
-3	4031	WARNING LIGHT - RED	1
-4	4018	EMERGENCY ON-OFF SWITCH	1
-5	4106	5 POSITION SPRING RETURN SWITCH - DRIVE	1
-6	2730	CONTROL CABLE ASSEMBLY	1
-7	117G	STRAIN RELIEF	1
-8	4026	CANNON PLUG - MALE	1
-9	65151	KNOB	1
-10	4020	PUSH BUTTON START SWITCH	1
-11	5300	KNOB - EMERGENCY ON-OFF	1
-12	4107	POWER-ON LIGHT-GREEN	1
-13	2008	DECAL - CONTROL BOX	1

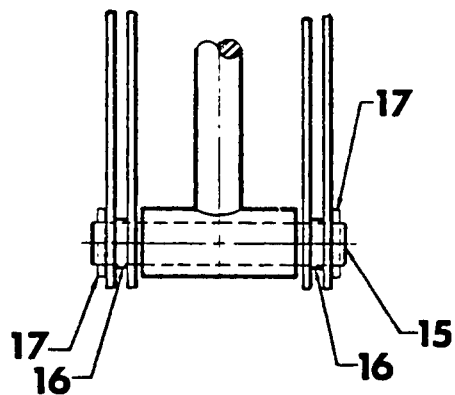
ITEM	PART NUMBER	DESCRIPTION	QTY
-14	2015	DECAL - WARNING UNSTABLE CONDITION	1
-15	2720	HEX HEAD SELF TAPPING SCREW-NO.6-32×3/8	6
-16	4017	TOGGLE SWITCH - CREEP SPEED	1
-17	2013	DECAL - HYDRAULIC OUTRIGGER CAUTION	1
-18	2014	DECAL - WARNING HIGH VOLTAGE	1
-19	772	HOLE PLUG	1
-20	65189	O-RING	1
-21	65131	SEALING NUT	1

FIGURE 4 - SCISSOR ASSEMBLY (RT25G)



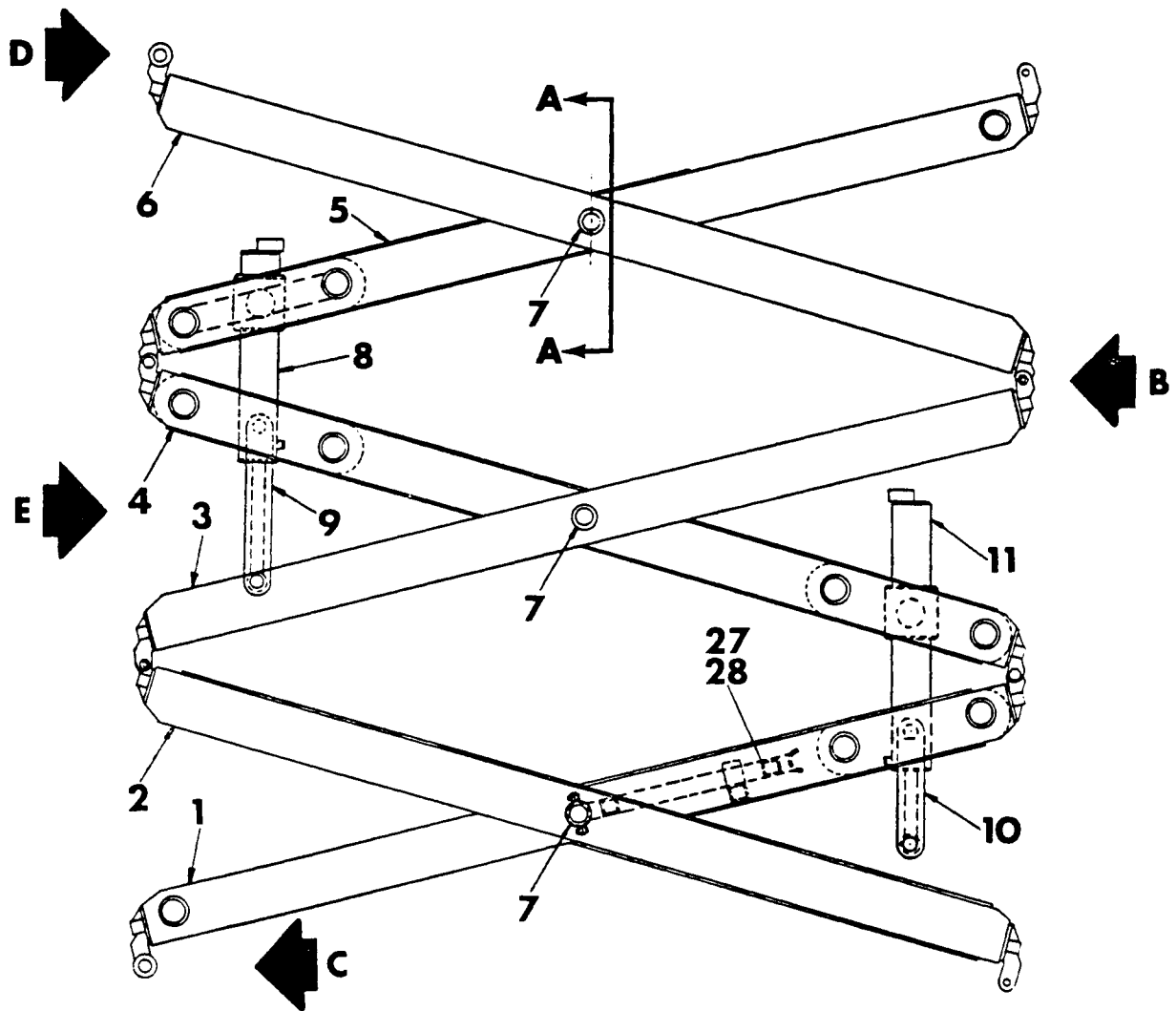


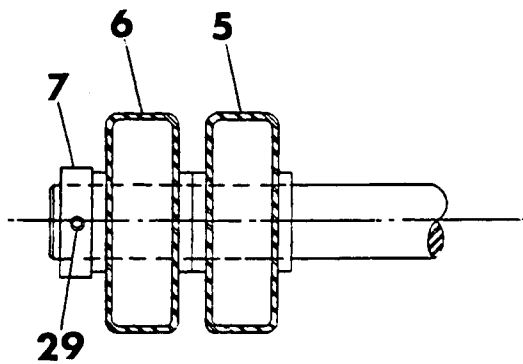
DETAIL A



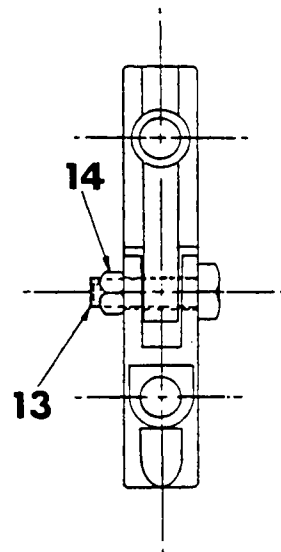
DETAIL B

ITEM	PART NUMBER	DESCRIPTION	QTY
4-	30174	SCISSOR ASSEMBLY	1
-1	30168	LOWER INNER ARM ASSEMBLY	1
-2	30165	LOWER OUTER ARM ASSEMBLY	2
-3	30166	MIDDLE OUTER ARM ASSEMBLY	2
-4	30169	MIDDLE INNER ARM ASSEMBLY	1
-5	30170	UPPER INNER ARM ASSEMBLY	1
-6	30167	UPPER OUTER ARM ASSEMBLY	2
-7	2214	SHAFT COLLAR	6
-8	3065	MAIN LIFT CYLINDER (SEE FIG.6)	2
-9	9030-3	ACTUATOR STRAP-UPPER REAR	2
-10	9030-4	ACTUATOR STRAP-LOWER REAR	2
-11	9030-1	ACTUATOR STRAP-UPPER FRONT	2
-12	9030-2	ACTUATOR STRAP-LOWER FRONT	2
-13	2375	EAR PIVOT BOLT	8
-14	61304	HEX LOCK NUT 3/4-10 UNC	8
-15	9034	CYLINDER PIVOT PIN	4
-16	9032-2	CYLINDER STRAP SPACER	4
-17	377	ROLL PIN (REPLACED BY PART NO. 64206)	16
-18	9033	CYLINDER STRAP PIVOT PIN	8
-19	918	FLAT WASHER-LARGE	8
-20	2380	FRAME ROLLER	2
-21	9040	ROLLER SPACER	2
-22	16113	NYLON INSERT HEX LOCK NUT	2
-23	2273	DECK ROLLER	2
-24	913	FLANGE BUSHING	8
-25	2285	FLAT WASHER-SMALL	10
-26	6328-A	HEX LOCK NUT-5/8-18 UNF	2
-27	30172	BUSHING	4
-28	916	BUSHING	8
-29	30171	PIVOT SHAFT BUSHING	6

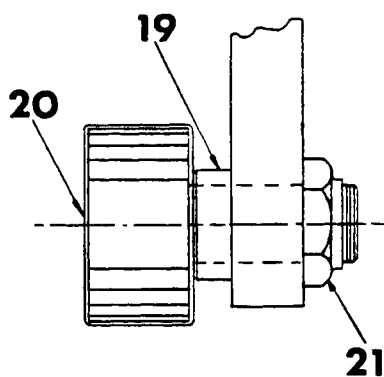




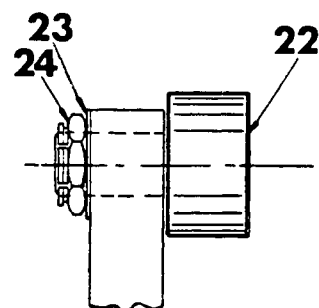
SECTION A



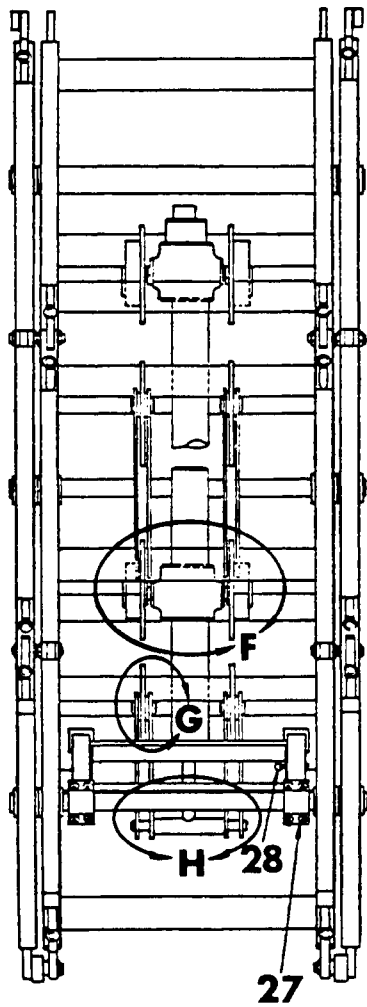
VIEW B



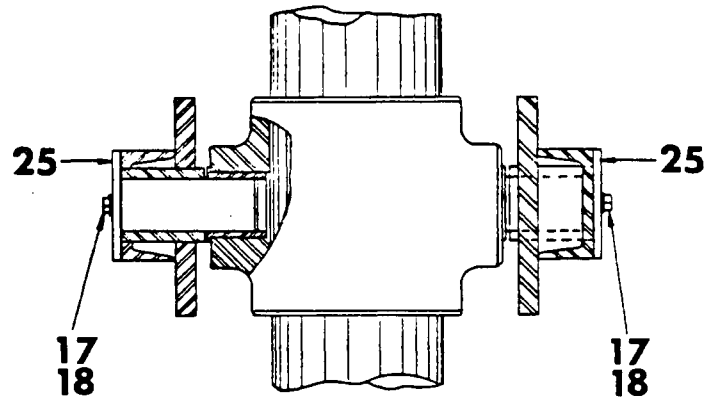
VIEW C



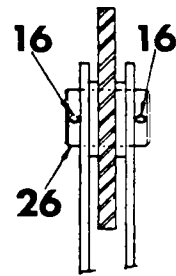
VIEW D



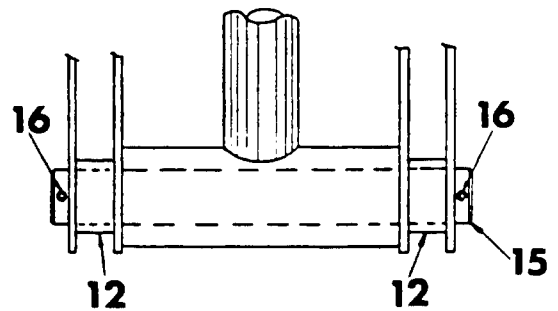
VIEW E



DETAIL F

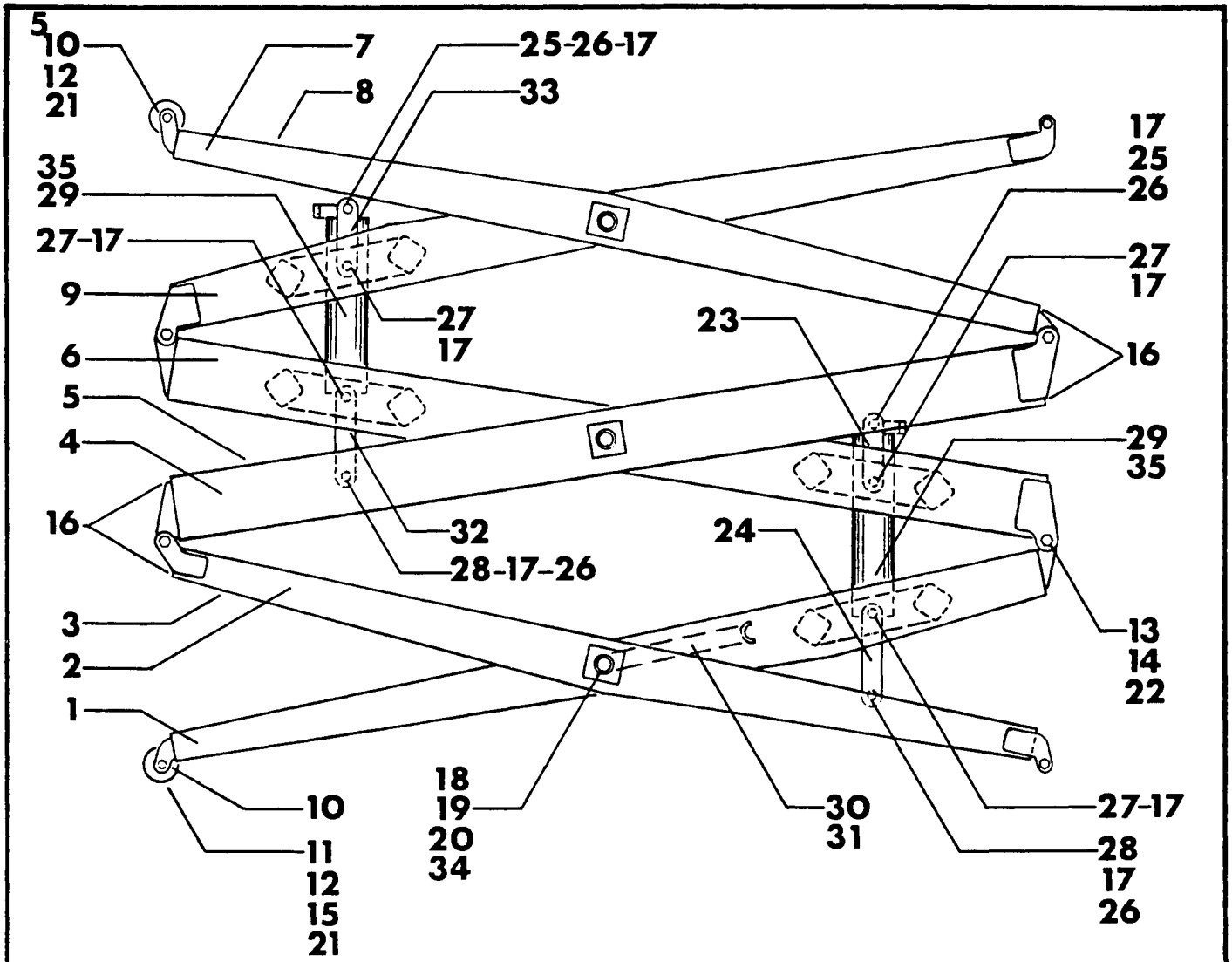


DETAIL G



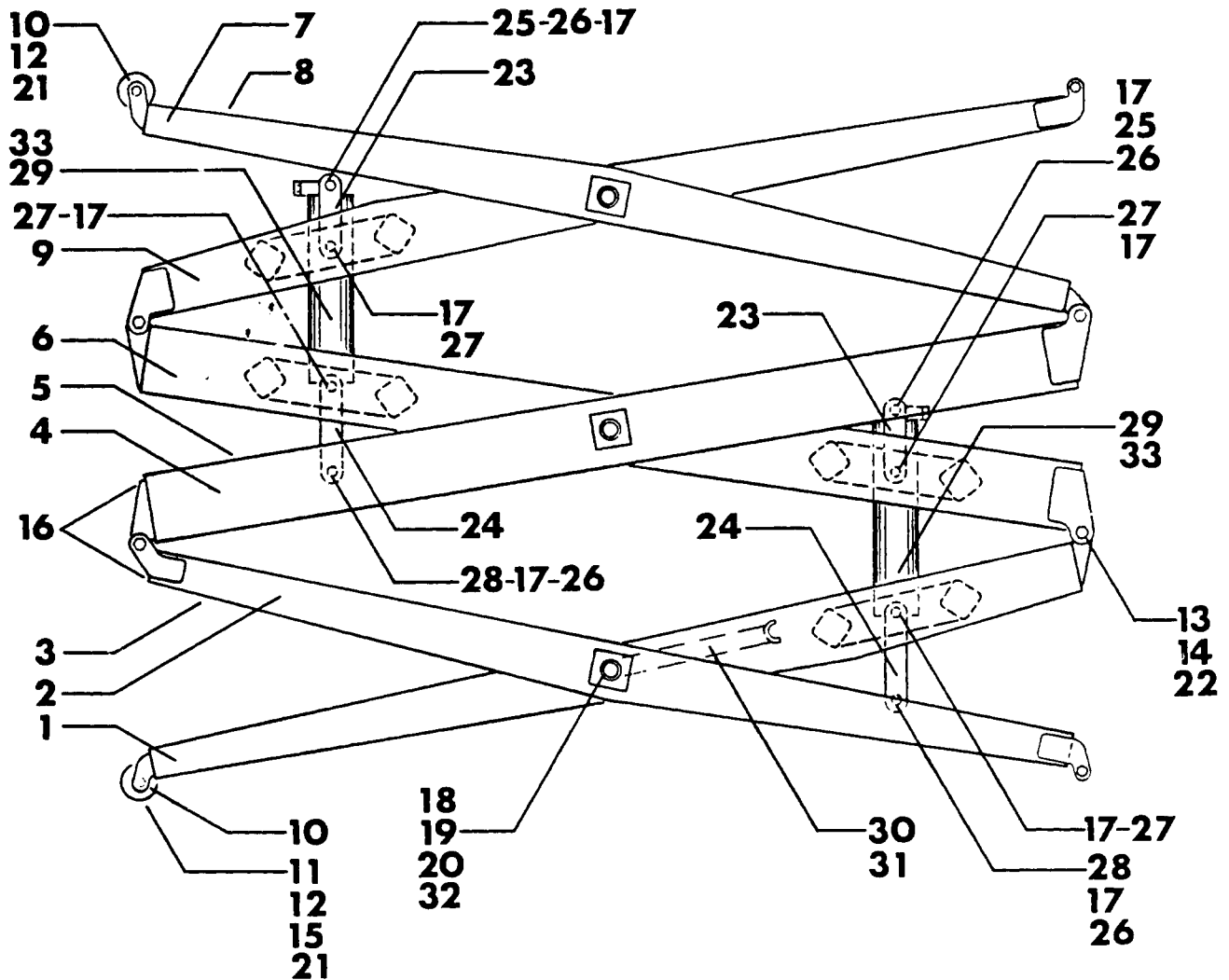
DETAIL H

ITEM	PART NUMBER	DESCRIPTION	QTY
4A-	30665	SCISSOR ASSEMBLY	1
-1	30640	LOWER INNER ARM ASSEMBLY	1
-2	30165	LOWER OUTER ARM ASSEMBLY	2
-3	30166	MIDDLE OUTER ARM ASSEMBLY	2
-4	30639	MIDDLE INNER ARM ASSEMBLY	1
-5	30638	UPPER INNER ARM ASSEMBLY	1
-6	30167	UPPER OUTER ARM ASSEMBLY	2
-7	2214	SHAFT COLLAR	6
-8	30284	MAIN LIFT CYLINDER-REAR (SEE FIG.6A)	1
-9	30664	ACTUATOR STRAP-REAR	4
-10	30663	ACTUATOR STRAP-FRONT	4
-11	30283	MAIN LIFT CYLINDER-FRONT (SEE FIG.6B)	1
-12	30474	CYLINDER STRAP SPACER	4
-13	2375	EAR PIVOT BOLT	8
-14	61304	HEX LOCK NUT-3/4-10 UNC	8
-15	30196	CYLINDER PIVOT PIN	2
-16	64206	ROLL PIN - $\frac{1}{4}$ DIA. X $2\frac{1}{2}$	12
-17	60160	HEX HEAD CAP SCREW - 5/16-18 UNC-2B X $\frac{5}{8}$	4
-18	63302	LOCK WASHER - 5/16	4
-19	30475	ROLLER SPACER	2
-20	2380	FRAME ROLLER	2
-21	16113	NYLON INSERT HEX LOCK NUT	2
-22	2273	DECK ROLLER	2
-23	2285	THRUST WASHER	2
-24	61306	HEX LOCK NUT - 5/8-18 UNF	2
-25	30151	TRUNNION PIN	4
-26	30195	CYLINDER STRAP PIVOT PIN	4
-27	30338	INNER ARM SUPPORT ASSEMBLY	1
-28	30701	QUICK RELEASE PIN	1
-29	62207	SHAFT COLLAR SET SCREW	6



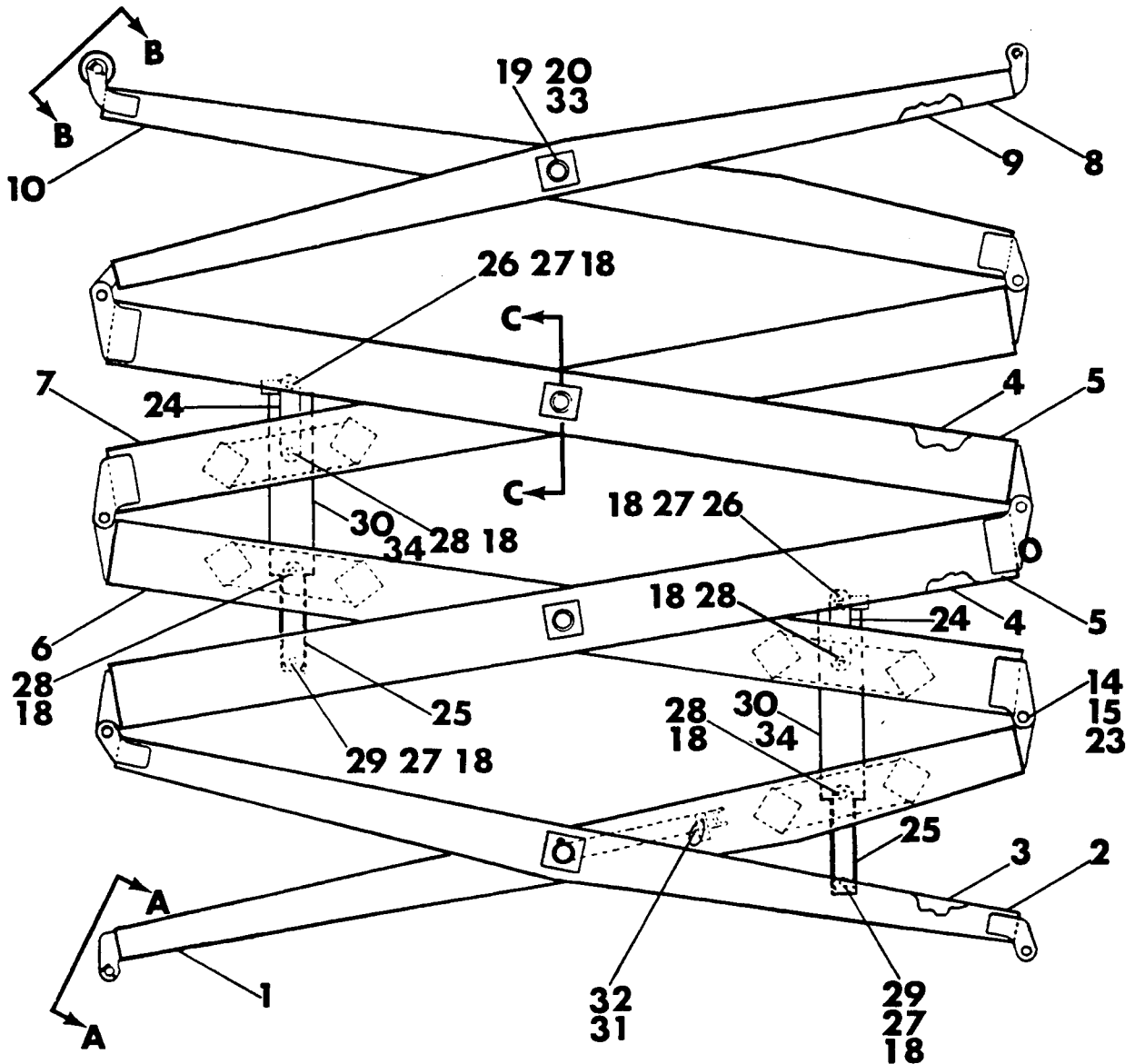
ITEM	PART NUMBER	DESCRIPTION	QTY
4B-	8028	SCISSOR ASSEMBLY	1
-1	8023	LOWER INNER ARM ASSEMBLY	1
-2	8027-1	LOWER OUTER ARM ASSEMBLY	1
-3	8027-2	LOWER OUTER ARM ASSEMBLY	1
-4	8026-1	MIDDLE OUTER ARM ASSEMBLY	1
-5	8026-2	MIDDLE OUTER ARM ASSEMBLY	1
-6	8022	MIDDLE INNER ARM ASSEMBLY	1
-7	8025-1	UPPER OUTER ARM ASSEMBLY	1
-8	8025-2	UPPER OUTER ARM ASSEMBLY	1
-9	8021	UPPER INNER ARM ASSEMBLY	1
-10	2361	DECK ROLLER	3

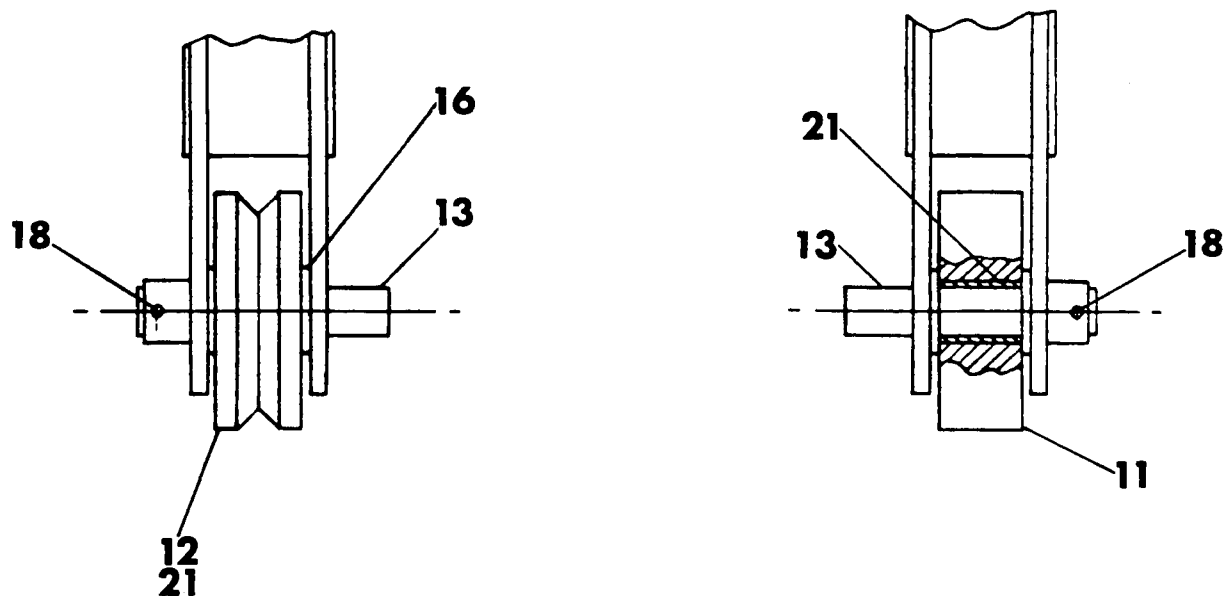
ITEM	PART NUMBER	DESCRIPTION	QTY
-11	2362	"V" DECK ROLLER	1
-12	2364	ROLLER PIN	4
-13	60336	EAR PIVOT BOLT- 1.00-8 X 3.5 GRIP-4 3/4 LG GR5	8
-14	61310	HEX LOCK NUT 1.00-8 GRIPCO	8
-15	63416	FLAT WASHER - 3/32 THICK	4
-16	117G	STRAIN RELIEF CONNECTOR	12
-17	377	FOLL PIN - .250 DIA. X 1½ (NEW PART NO.64206)	20
-18	2214	SHAFT COLLAR	6
-19	2283	FLANGED BEARING	12
-20	2287	SLEEVE BEARING	4
-21	35384	SPACER	4
-22	2284	SLEEVE BEARING	8
-23	8307	CYLINDER STRAP (FRONT UPPER)	4
-24	8308	CYLINDER STRAP (FRONT LOWER)	4
-25	8303	CYLINDER PIVOT PIN	2
-26	8321	SPACER	8
-27	9033	CYLINDER STRAP PIVOT PIN	8
-28	8302	CYLINDER PIVOT PIN	2
-29	3008	MAIN LIFT RAM CYLINDER (SEE FIG.6C)	2
-30	30339	INNER ARM SUPPORT ASSEMBLY	1
-31	30701	QUICK RELEASE PIN	1
-32	8306	CYLINDER STRAP (REAR LOWER)	4
-33	8304	CYLINDER STRAP (REAR UPPER)	4
-34	62207	SHAFT COLLAR SET SCREW	6
-35	30809	MAIN LIFT CYLINDER (BEGINNING NOVEMBER 1981)	2



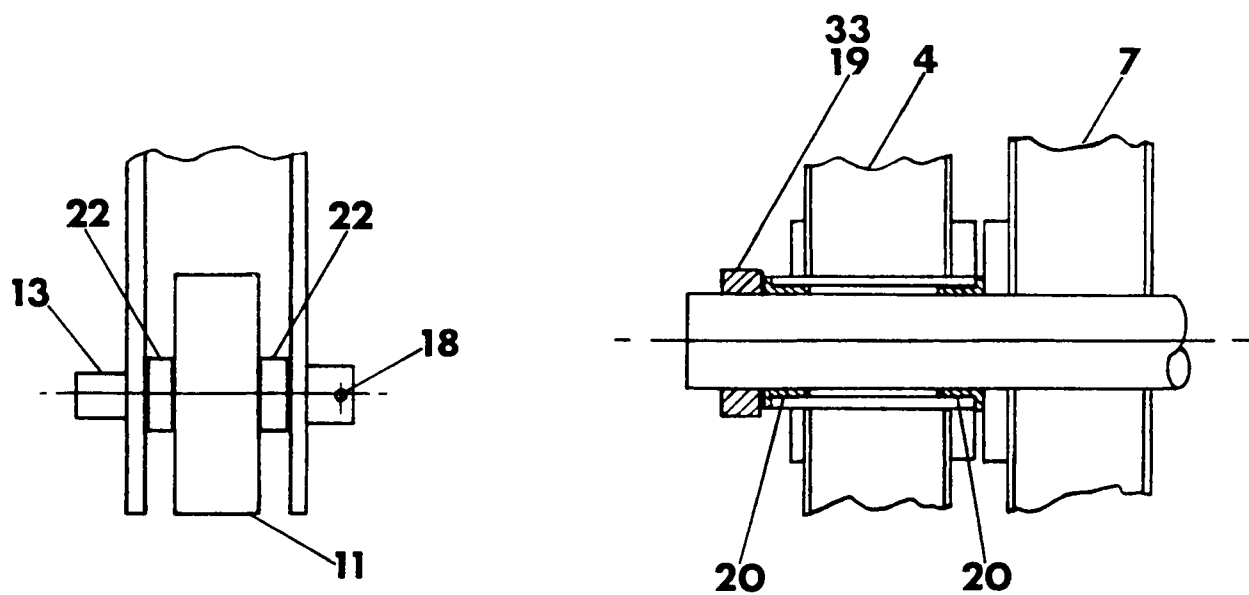
ITEM	PART NUMBER	DESCRIPTION	QTY
4C-	8115	SCISSOR ASSEMBLY	1
-1	8023	LOWER INNER ARM ASSEMBLY	1
-2	8027-1	LOWER OUTER ARM ASSEMBLY	1
-3	8027-2	LOWER OUTER ARM ASSEMBLY	1
-4	8026-1	MIDDLE OUTER ARM ASSEMBLY	1
-5	8026-2	MIDDLE OUTER ARM ASSEMBLY	1
-6	8022	MIDDLE INNER ARM ASSEMBLY	1
-7	8025-1	UPPER OUTER ARM ASSEMBLY	1
-8	8025-2	UPPER OUTER ARM ASSEMBLY	1
-9	8021	UPPER INNER ARM ASSEMBLY	1
-10	2361	DECK ROLLER	3

ITEM	PART NUMBER	DESCRIPTION	QTY
-11	2362	"V" DECK ROLLER	1
-12	2364	ROLLER PIN	4
-13	60336	EAR PIVOT BOLT- 1.00-8 X 3.5 GRIP-4 3/4 LG	8
-14	61310	HEX LOCK NUT - 1.00-8 GRIPCO GR5	8
-15	63416	FLAT WASHER - 3/32 THICK	4
-16	117G	STRAIN RELIEF CONNECTOR	12
-17	377	ROLL PIN - .250 DIA X 1½ (NEW PART NO.64206)	20
-18	2214	SHAFT COLLAR	6
-19	2283	FLANGED BEARING	12
-20	2287	SLEEVE BEARING	4
-21	35384	SPACER	4
-22	2284	SLEEVE BEARING	8
-23	8304	CYLINDER STRAP	8
-24	8305	CYLINDER STRAP	8
-25	8303	CYLINDER PIVOT PIN	2
-26	8321	SPACER	8
-27	9033	CYLINDER STRAP PIVOT PIN	8
-28	8302	CYLINDER PIVOT PIN	2
-29	3006	MAIN LIFT CYLINDER (SEE FIG.6D)	2
-30	30339	INNER ARM SUPPORT ASSEMBLY	1
-31	30701	QUICK RELEASE PIN	1
-32	62207	SHAFT COLLAR SET SCREW	6
-33	30809	MAIN LIFT CYLINDER (BEGINNING NOVEMBER 1981) (SEE FIG. 6D)	2



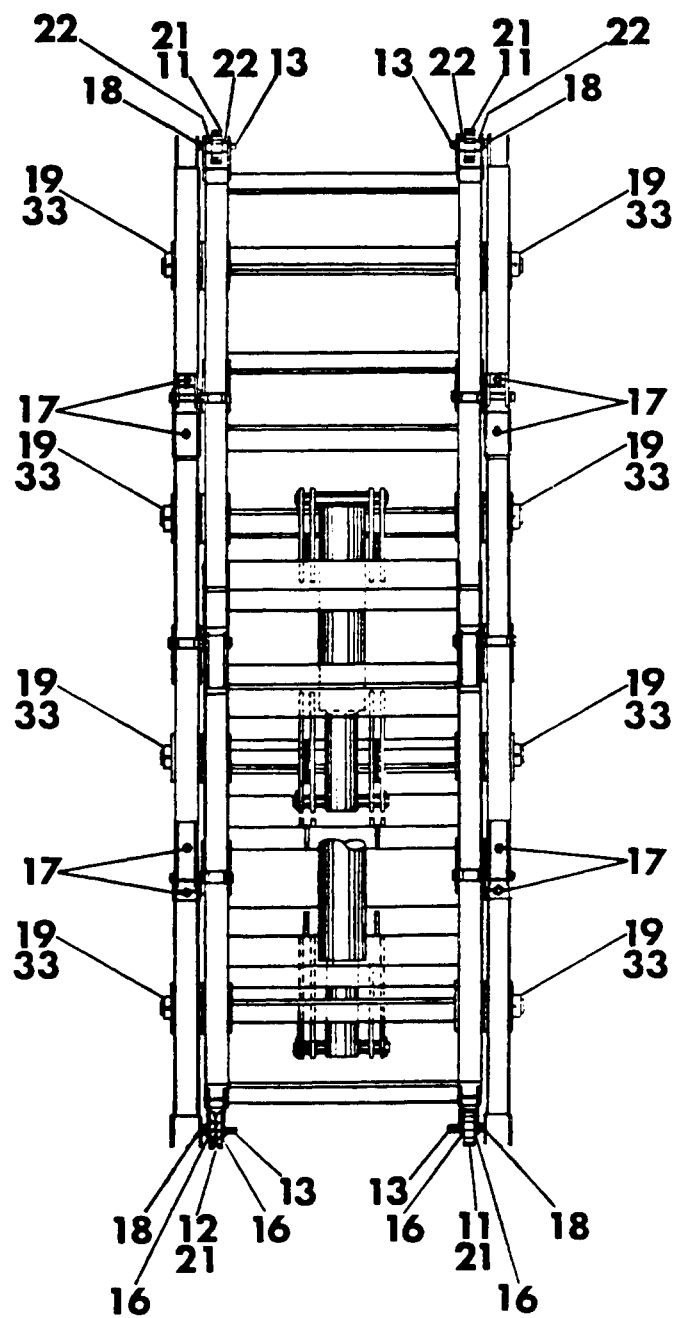


VIEW A



VIEW B

SECTION C



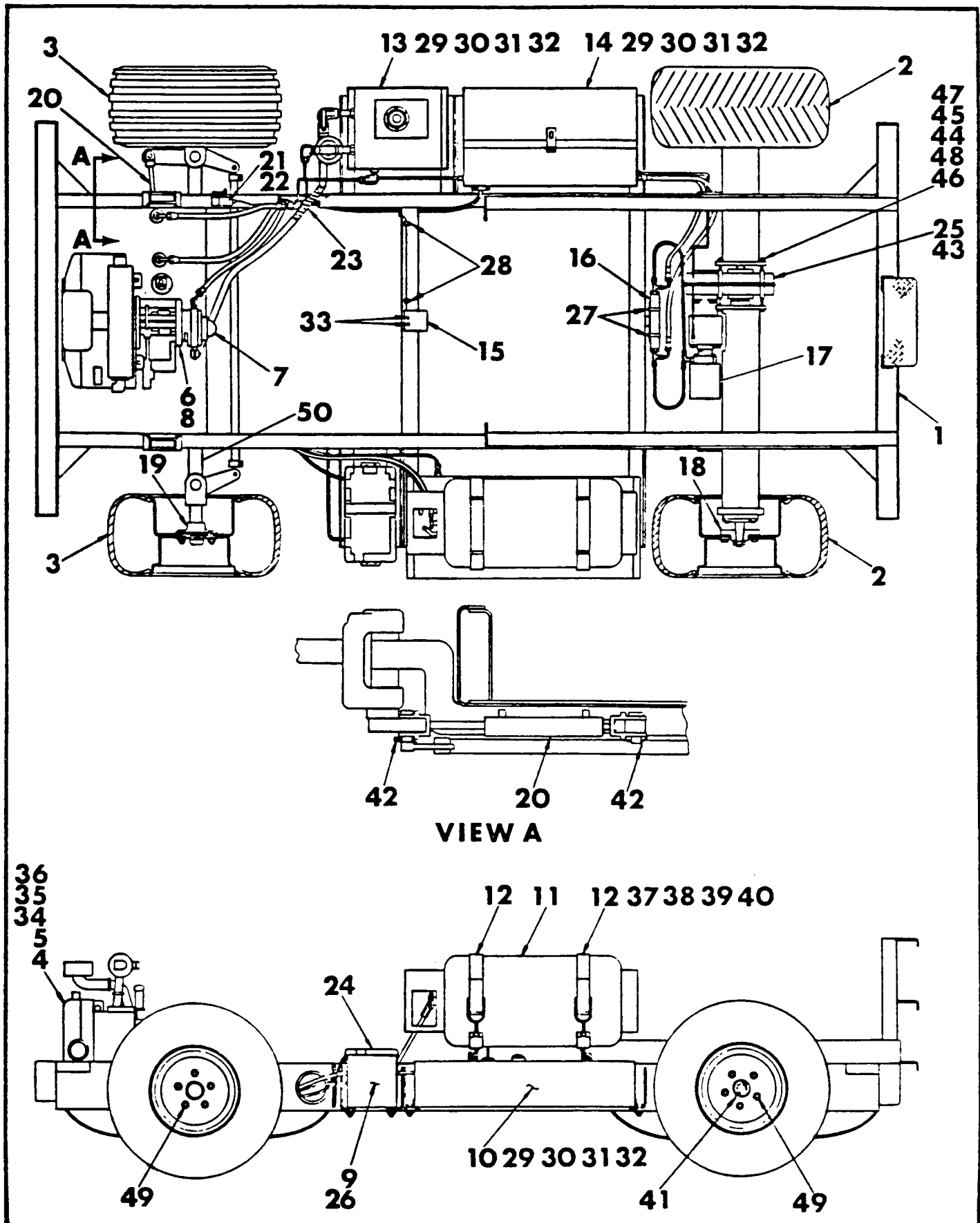
ITEM	PART NUMBER	DESCRIPTION	QTY
4D-	8029	SCISSOR ASSEMBLY	1
-1	8060	LOWER INNER ARM ASSEMBLY	1
-2	8062-1	LOWER OUTER ARM ASSEMBLY	1
-3	8062-2	LOWER OUTER ARM ASSEMBLY	1
-4	8063-1	MIDDLE LOWER UPPER OUTER ARM ASSEMBLY	2
-5	8063-2	MIDDLE LOWER UPPER OUTER ARM ASSEMBLY	2
-6	8064	MIDDLE LOWER INNER ARM ASSEMBLY	1
-7	8066	MIDDLE UPPER INNER ARM ASSEMBLY	1
-8	8067-1	UPPER OUTER ARM ASSEMBLY	1
-9	8067-2	UPPER OUTER ARM ASSEMBLY	1
-10	8068	UPPER INNER ARM ASSEMBLY	1
-11	2361	DECK ROLLER	3
-12	2362	"V" DECK ROLLER	1
-13	2364	ROLLER PIN	4
-14	60336	EAR PIVOT BOLT-1.00 - 8 X 3.5 GRIP-4 3/4 LG	12
-15	61310	LOCK NUT - 1.00 - 8 FINISHED HEX GR5	12
-16	63416	FLAT WASHER - 3/32 THICK	4
-17	117G	STRAIN RELIEF CONNECTOR	16
-18	377	ROLL PIN - .250 DIA 1½ (NEW PART NO.64206)	20
-19	2214	SHAFT COLLAR	8
-20	2283	FLANGED BEARING	16
-21	2287	SLEEVE BEARING	4
-22	35384	SPACER	4
-23	2284	SLEEVE BEARING	12
-24	8304	CYLINDER STRAP	8
-25	8305	CYLINDER STRAP	8
-26	8303	CYLINDER PIVOT PIN	2
-27	8321	SPACER	8
-28	9033	CYLINDER STRAP PIVOT PIN	8
-29	8302	CYLINDER PIVOT PIN	2
-30	3006	MAIN LIFT CYLINDER (SEE FIG.6D)	2
-31	30701	QUIK RELEASE PIN	1
-32	30338	INNER ARM SUPPORT ASSEMBLY	1

REV.1
1-83

FIGURE 4D - SCISSOR ASSEMBLY (RT40E) (RT40G)

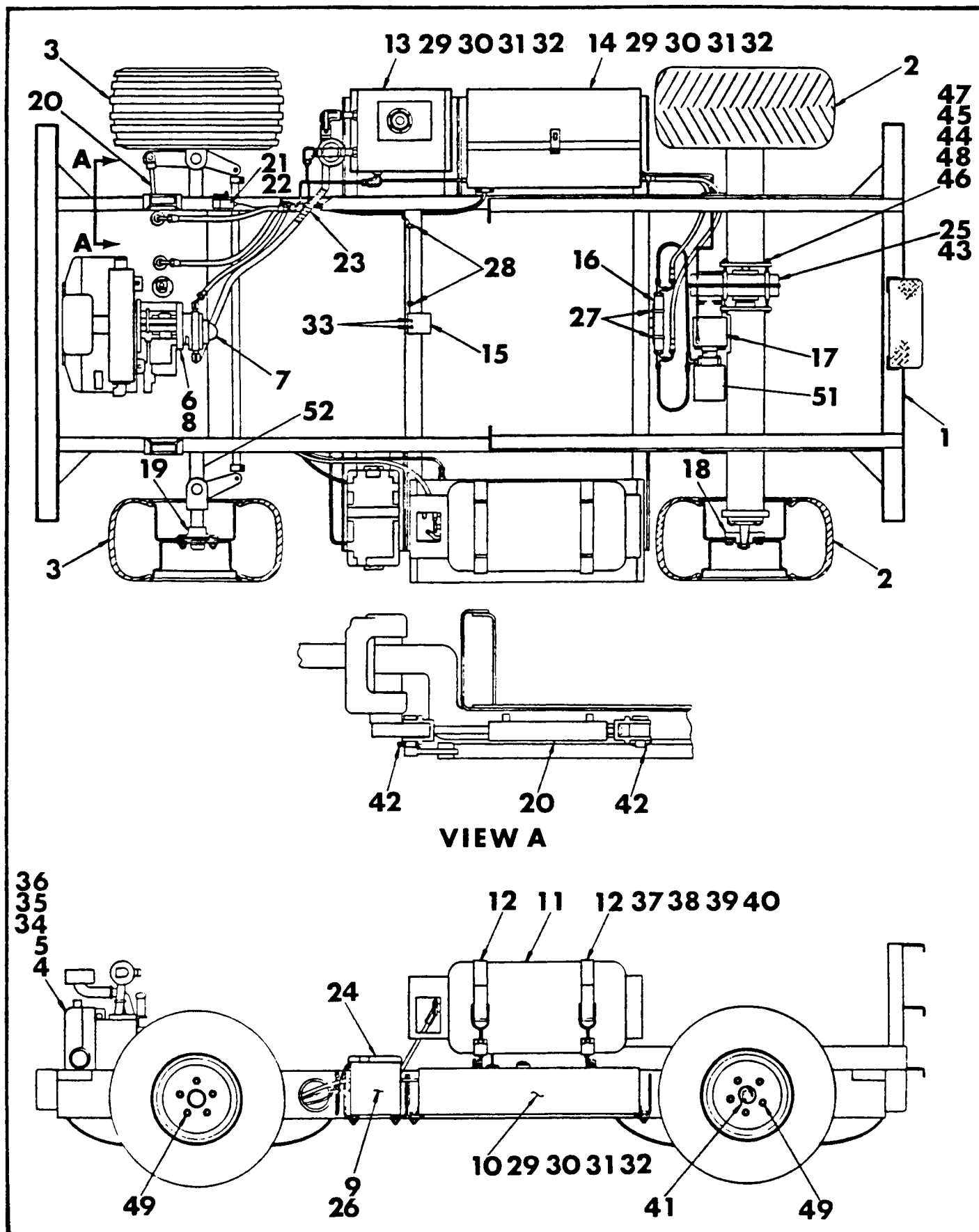
71.1

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	62207	SHAFT COLLAR SET SCREW	8
-34	30809	MAIN LIFT CYLINDER (BEGINNING NOVEMBER 1981) (SEE FIG. 6D)	2



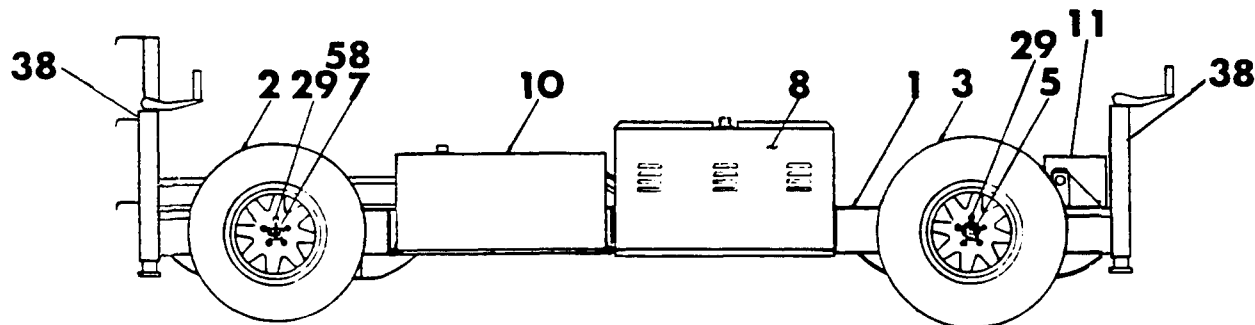
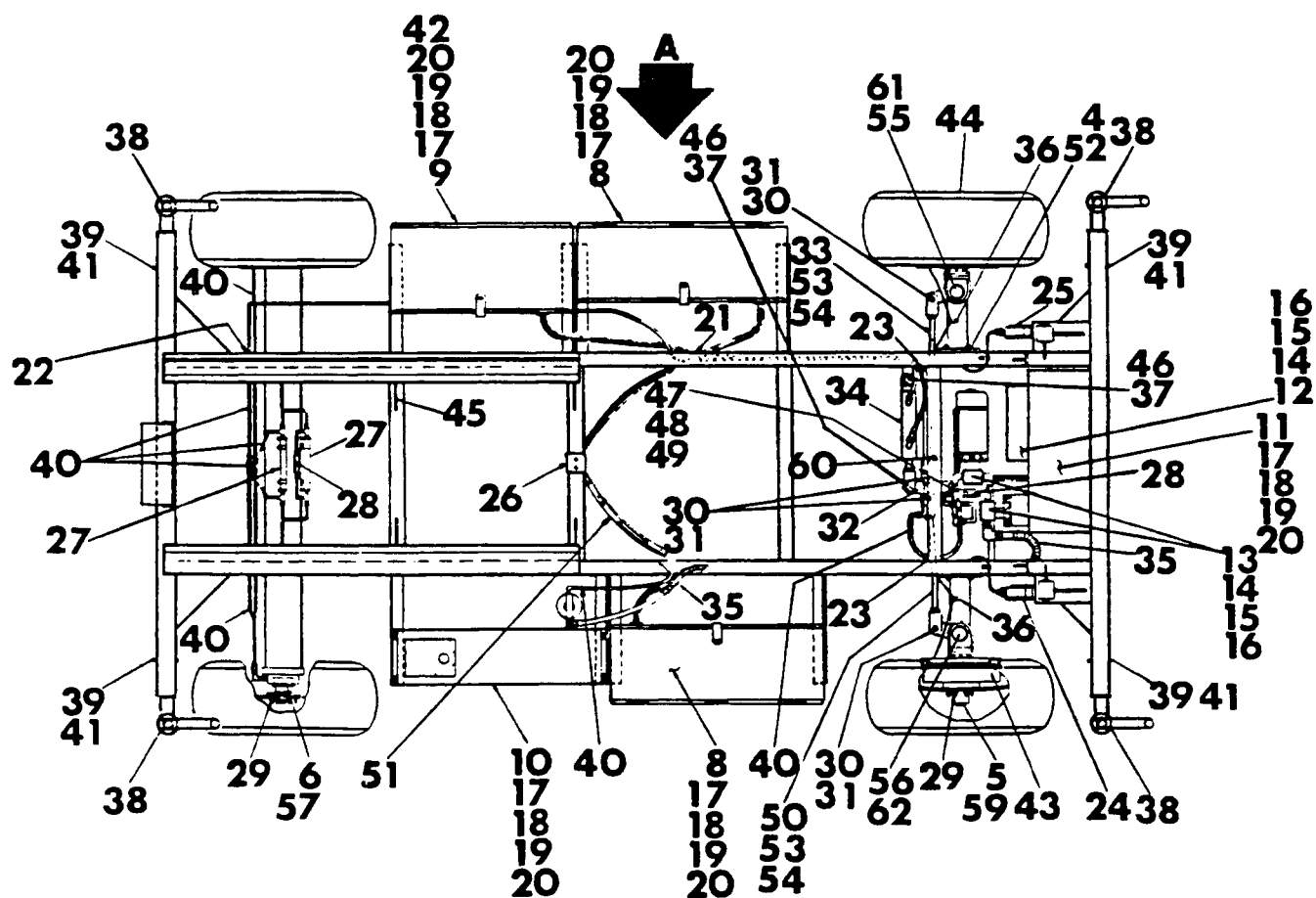
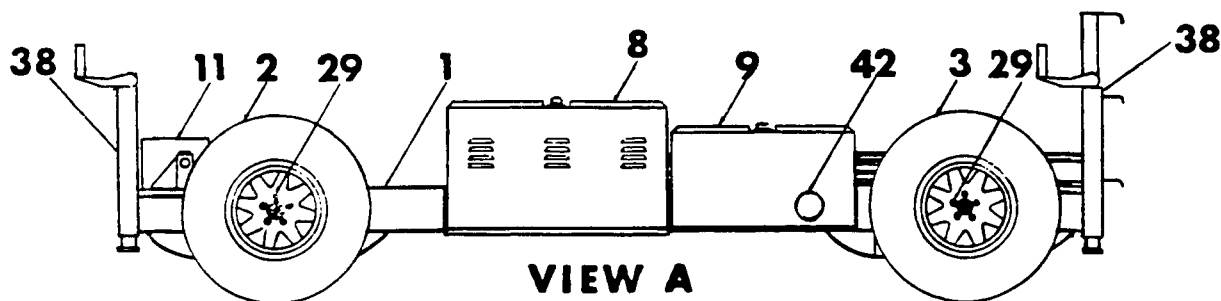
ITEM	PART NUMBER	DESCRIPTION	QTY
5-	30656	FRAME ASSEMBLY	1
-1	30659	FRAME WELDMENT	1
-2	30781	DRIVE TIRE & RIM ASSEMBLY (SEE FIG.18A)	2
-3	30782	STEERING TIRE & RIM ASSEMBLY (SEE FIG.18)	2
-4	30233	DUAL FUEL ENGINE & PUMP ASSEMBLY (SEE FIG.13)	1
-5	30226	DUAL FUEL KIT (SEE FIG.13)	1
-6	9066-2	HYDRAULIC PUMP BRACKET	1
-7	3035	HYDRAULIC PUMP	1
-8	156-A	COUPLING (SEE FIG. 13 FOR NEW PART NO'S)	1
-9	9064	BATTERY BOX INSTALLATION (SEE FIG.14A)	1
-10	30285	GAS TANK	1
-11	486	PROPANE TANK	1
-12	486-A	CYLINDER MOUNTING BRACKET KIT	2
-13	30329	HYDRAULIC TANK ASSEMBLY (SEE FIG.11)	1
-14	30481	COMPONENT BOX ASSEMBLY (SEE FIG.7)	1
-15	30387	TILT SWITCH ASSEMBLY & INSTALLATION (SEE FIG.9)	1
-16	30496	CUSHION CYLINDER ASSEMBLY (SEE FIG.20)	1
-17	3036	DRIVE MOTOR	1
-18	2206-1	REAR HUB	2
-19	9057	FRONT HUB	2
-20	3062	STEERING CYLINDER (SEE FIG.19)	1
-21	20803	LIMIT SWITCH	1
-22	20807	LIMIT SWITCH ARM	1
-23	862	SPRING	1
-24	16934	BATTERY BOX COVER	1
-25	417	GEAR REDUCTION BOX	1
-26	4030	BATTERY	1
-27	55	CLAMP	2
-28	764	CLAMP	5
-29	60123	CAP SCREW - $\frac{1}{4}$ -20 UNC X 3/4	12
-30	60701	NUT - $\frac{1}{4}$ -20 UNC	12
-31	63301	LOCK WASHER - $\frac{1}{4}$	12

ITEM	PART NUMBER	DESCRIPTION	QTY
-32	63402	FLAT WASHER - 5/16	12
-33	60159	CAP SCREW - $\frac{1}{4}$ -20 UNC X 2	2
-34	60308	CAP SCREW - $\frac{1}{2}$ -13 UNC X $1\frac{1}{2}$ (GRADE 5)	4
-35	60075	NUT - $\frac{1}{2}$ -13 UNC	4
-36	63305	LOCK WASHER - $\frac{1}{2}$	4
-37	60102	CAP SCREW - 3/8-16 UNC X 1	8
-38	60703	NUT - 3/8-16 UNC	8
-39	63303	LOCK WASHER - 3/8	8
-40	63403	FLAT WASHER - 3/8	8
-41	64304	COTTER PIN - 3/32 X 2	2
-42	64309	COTTER PIN - 3/16 X $1\frac{1}{2}$	2
-43	1159	REAR AXLE	1
-44	35283	SPACER	4
-45	35282	SPACER	4
-46	60163	HEX HEAD BOLT	4
-47	60705	NUT	4
-48	63305	LOCK WASHER	8
-49	2221	CONE BOLT	20
-50	9070 OR 30143	FRONT AXLE ASSEMBLY (SEE FIG. 16.1 OR 16.2)	1
NOTE: IF MACHINE HAS AN AUSCO BRAKE, IT WILL TAKE A PART NO. 30456 DRIVE MOTOR.			



ITEM	PART NUMBER	DESCRIPTION	QTY
5A-	30656	FRAME ASSEMBLY	1
-1	30659	FRAME WELDMENT	1
-2	30781	DRIVE TIRE & RIM ASSEMBLY (SEE FIG.18A)	2
-3	30782	STEERING & RIM ASSEMBLY (SEE FIG.18)	2
-4	30233	DUAL FUEL ENGINE & PUMP ASSEMBLY (SEE FIG.13)	1
-5	30226	DUAL FUEL KIT (SEE FIG.13)	1
-6	9066-2	HYDRAULIC PUMP BRACKET	1
-7	3035	HYDRAULIC PUMP	1
-8	156-A	COUPLING	1
-9	9064	BATTERY BOX INSTALLATION (SEE FIG.14A)	1
-10	30285	GAS TANK	1
-11	486	PROPANE TANK	1
-12	486-A	CYLINDER MOUNTING BRACKET KIT	2
-13	30329	HYDRAULIC TANK ASSEMBLY (SEE FIG.11)	1
-14	30725	COMPONENT BOX ASSEMBLY (SEE FIG.7A)	1
-15	30387	TILT SWITCH ASSEMBLY & INSTALLATION (SEE FIG.9)	1
-16	30496	CUSHION CYLINDER ASSEMBLY (SEE FIG.20)	1
-17	30318	BRAKE TO GEAR BOX	1
-18	2206-1	REAR HUB	2
-19	30410	FRONT HUB	2
-20	3062	STEERING CYLINDER (SEE FIG.19)	1
-21	20803	LIMIT SWITCH	1
-22	20807	LIMIT SWITCH ARM	1
-23	862	SPRING	1
-24	16934	BATTERY BOX COVER	1
-25	417	GEAR REDUCTION BOX	1
-26	4030	BATTERY	1
-27	55	CLAMP	2
-28	764	CLAMP	5
-29	60123	CAP SCREW - $\frac{1}{4}$ -20 UNC X $\frac{3}{4}$	12
-30	60701	NUT - $\frac{1}{4}$ -20 UNC	12
-31	63301	LOCK WASHER - $\frac{1}{2}$	12

ITEM	PART NUMBER	DESCRIPTION	QTY
-32	63402	FLAT WASHER - 5/16	12
-33	60159	CAP SCREW - $\frac{1}{4}$ -20 UNC X 2	2
-34	60308	CAP SCREW - $\frac{1}{2}$ -13 UNC X $1\frac{1}{2}$ (GRADE 5)	4
-35	60075	NUT - $\frac{1}{2}$ -13 UNC	4
-36	63305	LOCK WASHER - $\frac{1}{2}$	4
-37	60102	CAP SCREW - 3/8-16 UNC X 1	8
-38	60703	NUT - 3/8-16 UNC	8
-39	63303	LOCK WASHER - 3/8	8
-40	63403	FLAT WASHER - 3/8	8
-41	64304	COTTER PIN - 3/32 X 2	2
-42	64309	COTTER PIN - 3/16 X $1\frac{1}{2}$	2
-43	1159	REAR AXLE	1
-44	35283	SPACER	4
-45	35282	SPACER	4
-46	60163	HEX HEAD BOLT	4
-47	60705	NUT	4
-48	63305	LOCK WASHER	8
-49	60801	WHEEL NUT - $\frac{1}{2}$ -20 UNF	20
-50	4030	BATTERY	1
-51	30456	DRIVE MOTOR	1
-52	30143	FRONT AXLE ASSEMBLY (SEE FIG. 16)	1



ITEM	PART NUMBER	DESCRIPTION	QTY
5E-	8111	FRAME ASSEMBLY	1
-1	30394	FRAME WELDMENT	1
-2	30783	DRIVE TIRE & RIM ASSEMBLY (SEE FIG. 18C)	
-3	30784	STEERING TIRE & RIM ASSEMBLY (SEE FIG. 18B)	2
-4	61319	CRUSH TYPE LOCK NUT - 5/8-11 UNC (GRADE 5)	8
-5	30482	FRONT HUB & DRUM ASSEMBLY (SEE FIG. 17A)	2
-6	30243	HYDRAULIC MOTOR	2
-7	30294	DRIVE HUB	2
-8	30466	BATTERY BOX ASSEMBLY (SEE FIG. 14)	2
-9	30766	COMPONENT BOX ASSEMBLY (SEE FIG. 7B)	1
-10	8318-2	HYDRAULIC TANK ASSEMBLY (SEE FIG. 11B)	1
-11	8326	INVERTER BRACKET	1
-12	4006	BATTERY CHARGER	1
-13	3015	PUMP MOTOR (3015-1-PUMP ONLY, 3015-2) MOTOR ONLY)	1
-14	882	SHOCK MOUNT	12
-15	63302	LOCK WASHER - 5/16	24
-16	60702	HEX NUT - 5/16-18 UNC	24
-17	64302	FLAT WASHER - 5/16	20
-18	63301	LOCK WASHER - $\frac{1}{4}$	20
-19	60701	HEX NUT - $\frac{1}{4}$ -20 UNC	20
-20	60131	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X 1	20
-21	411	RUBBER MOULDING - 20 $\frac{1}{4}$	2
-22	411	RUBBER MOULDING - 13 $\frac{1}{4}$	2
-23	411	RUBBER MOULDING - 5 $\frac{1}{2}$	8
-24	70107	LIMIT SWITCH (P/N 20803 MAY BE SUBSTITUTE)	1
-25	20807	LIMIT SWITCH ARM	1
-26	30387	TILT SWITCH ASSEMBLY & INSTALLATION (SEE FIG. 9)	1
-27	30496	CUSHION CYLINDER ASSEMBLY (SEE FIG. 20)	2
-28	201	FLOW VALVE	1
-29	157-B	WHEEL NUT	20

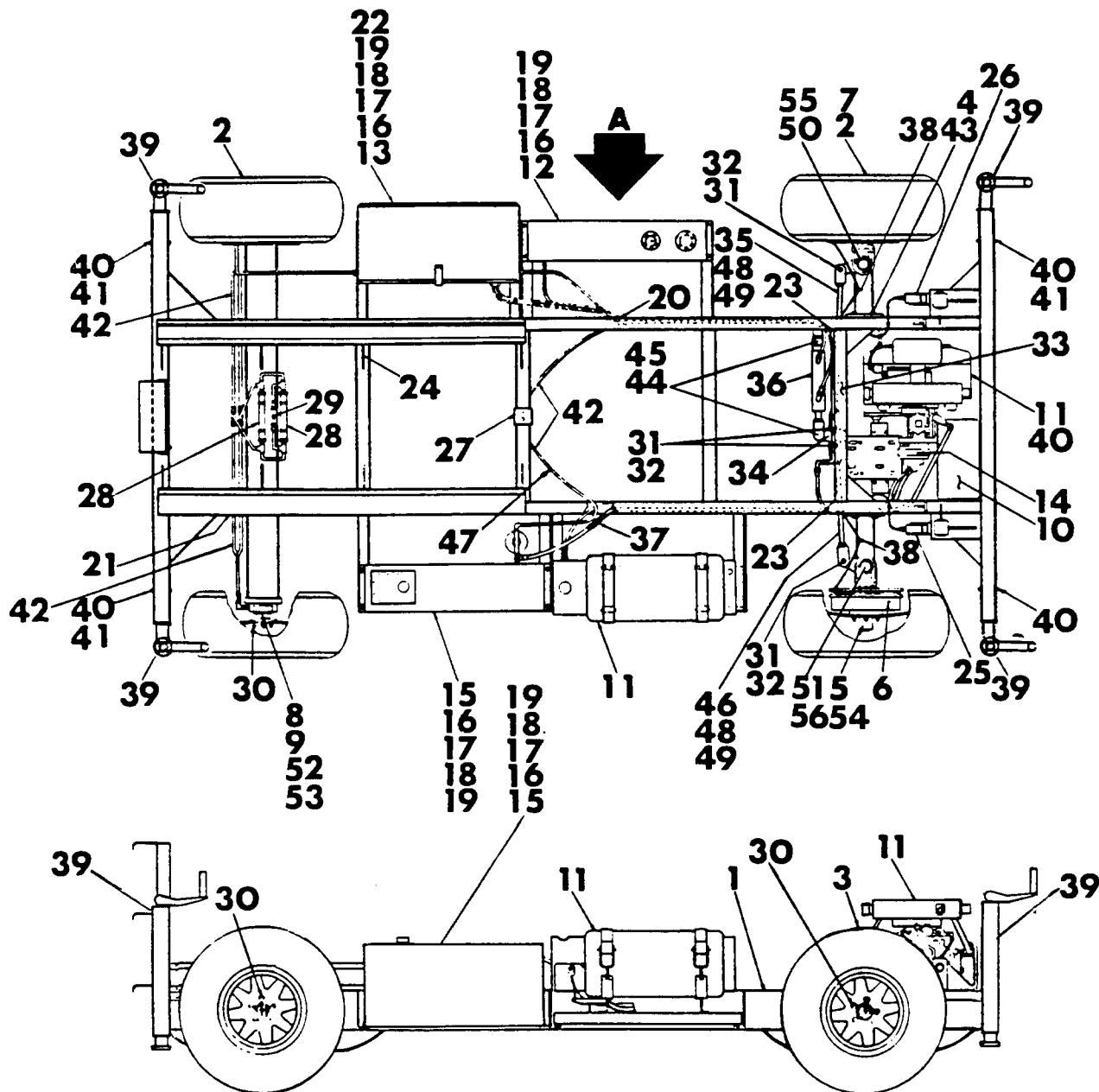
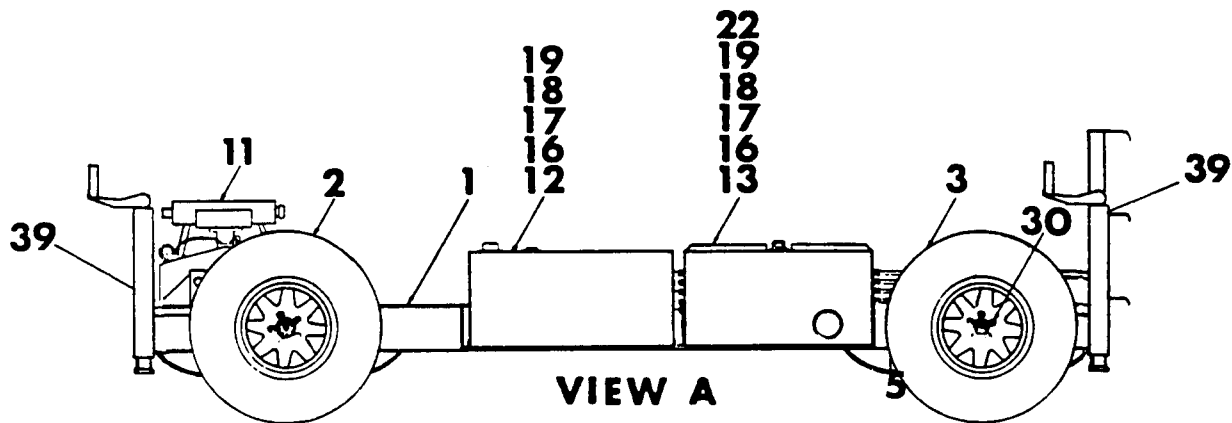
ITEM	PART NUMBER	DESCRIPTION	QTY
-30	64102	CLEVIS PIN - 5/8 DIA. X 3	4
-31	64307	COTTER PIN - 1/8 DIA. X 1¼	4
-32	8044	BELL CRANK ASSEMBLY (SEE FIG. 22)	1
-33	30302	TIE ROD ASSEMBLY (SEE FIG. 23 & 24)	1
-34	3013	STEERING CYLINDER (SEE FIG. 19A)	1
-35	863	SPRING GUARD	2
-36	764	CLAMP	5
-37	3013-2	CLEVIS PIN (NEW PART NO. 66039, 2356 & 64101)	2
-38	9059-1	MANUAL STABILIZER ASSEMBLY (SEE FIG. 15B)	4
-39	60142	BOLT - 5/8-11 UNC X 4	4
-40	30721	HYDRAULIC TUBING KIT	1
-41	63105	LOCK NUT - 5/8-11 UNC	4
-42	411	RUBBER MOULDING - 12½	1
-43	2238-1	ELECTRIC BRAKE - LEFT HAND	1
-44	2238-2	ELECTRIC BRAKE - RIGHT HAND	1
-45	165	RUBBER MOULDING - SUCTION HOSE - 4	3
-46	64303	COTTER PIN	2
-47	20796	STEERING PIN	1
-48	60603	CAP SCREW - 5/16-18 UNC X 3/4	1
-49	63302	LOCK WASHER - 5/16 SPLIT	1
-50	30301	TIE ROD ASSEMBLY (SEE FIG. 23 & 24)	1
-51	30601	HOSE KIT	1
-52	60514	HEX HEAD CAP SCREW - 5/8-11 UNC X 2	8
-53	60903	JAM NUT - 1-4 UNS -(L.H.)	2
-54	60902	JAM NUT - 1-14 UNS -(R.H.)	2
-55	30492	FRONT AXLE ASSEMBLY (L.H.) (SEE FIG. 16A)	1
-56	30493	FRONT AXLE ASSEMBLY (R.H.) (SEE FIG. 16A)	1
-57	3034	DRIVE MOTOR (BEFORE JULY 1980)	2
-58	30299	DRIVE HUB (BEFORE JULY 1980)	2
-59	2240	FRONT HUB & DRUM ASSEMBLY (BEFORE JULY 1980) (SEE FIG. 17A.1)	2

REV.1
1-83

FIGURE 5B - FRAME ASSEMBLY (RT26E) (RT31E)

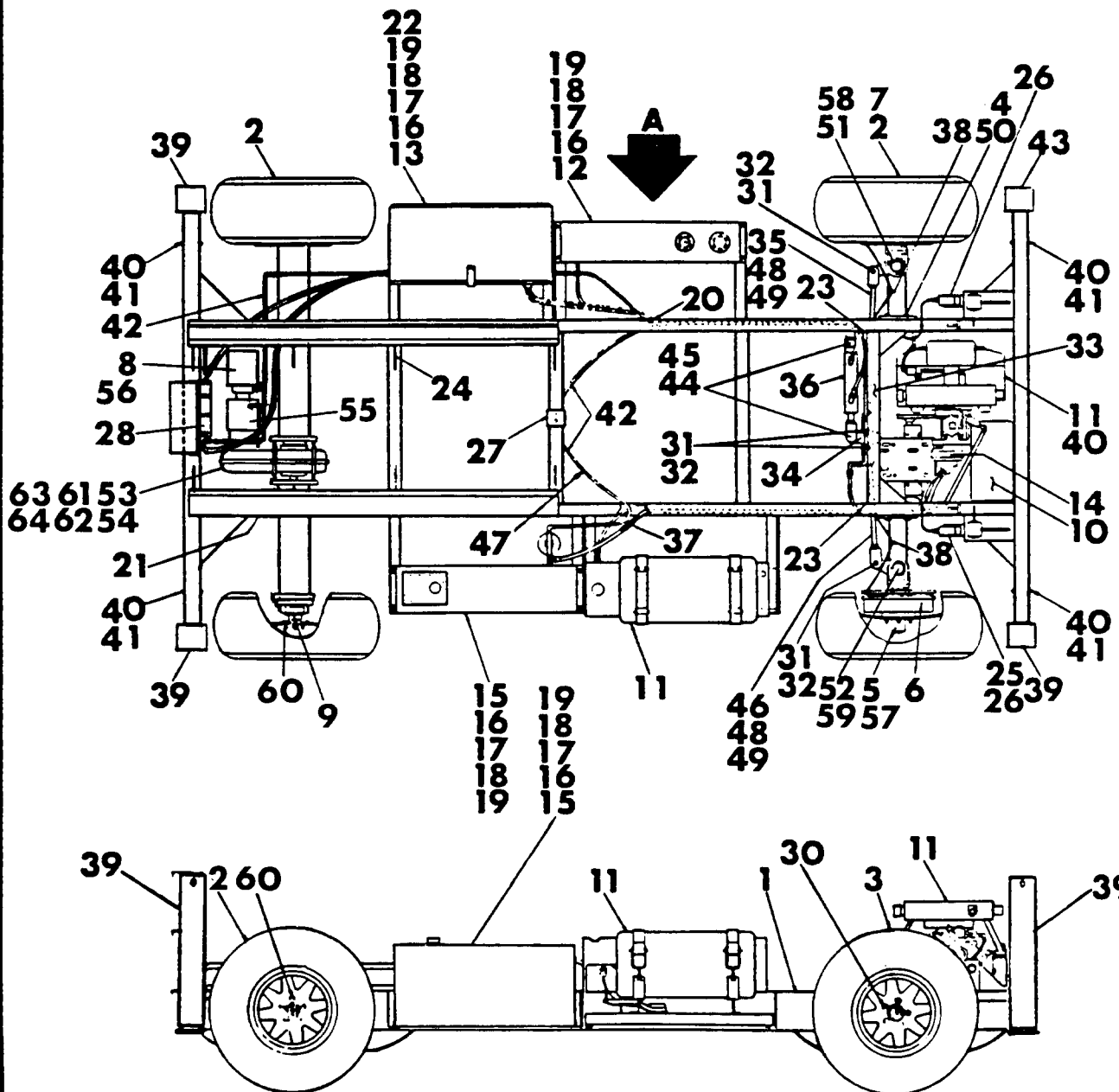
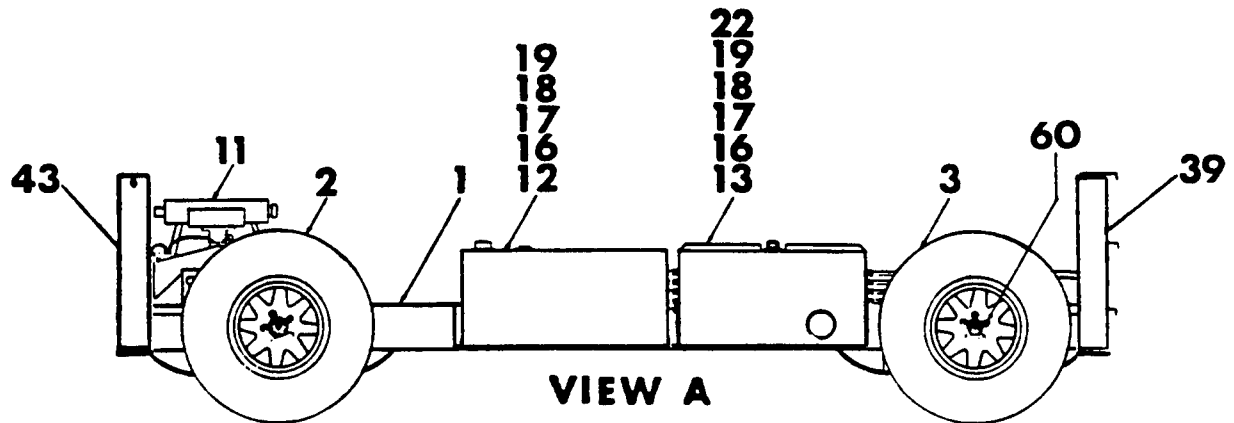
80.1

ITEM	PART NUMBER	DESCRIPTION	QTY
-60	20796	BELL CRANK PIN	1
-61	6313-2	FRONT AXLE ASSEMBLY -(L.H.) (SEE FIG. 16A.1)	1
-62	6313-1	FRONT AXLE ASSEMBLY -(R.H.) (SEE FIG. 16A.1) (BEFORE JULY 1980)	1



ITEM	PART NUMBER	DESCRIPTION	QTY
5C-	8112	FRAME ASSEMBLY	1
-1	30398	FRAME WELDMENT	1
-2	30783	DRIVE TIRE & RIM ASSEMBLY (SEE FIG.18C)	2
-3	30784	STEERING TIRE & RIM ASSEMBLY (SEE FIG.18B)	2
-4	61311	CRUSH TYPE LOCK NUT-5/8-11 UNC (GRADE 5)	8
-5	30482	FRONT HUB ASSEMBLY (SEE FIG.17A)	2
-6	2238-1	ELECTRIC BRAKE - LEFT HAND	1
-7	2238-2	ELECTRIC BRAKE - RIGHT HAND	1
-8	30234	HYDRAULIC MOTOR	2
-9	30294	DRIVE HUB	2
-10	9064	BATTERY BOX INSTALLATION (SEE FIG.14A)	1
-11	30235	DUAL FUEL ENGINE INSTALLATION (SEE FIG.13A)	1
-12	8316	GAS TANK ASSEMBLY (SEE FIG.12A)	1
-13	30723	COMPONENT BOX ASSEMBLY (SEE FIG.7D)	1
-14	3038	HYDRAULIC PUMP	1
-15	8318-2	HYDRAULIC TANK ASSEMBLY (SEE FIG.11B)	1
-16	63301	LOCK WASHER - $\frac{1}{2}$	12
-17	60701	HEX NUT - $\frac{1}{2}$ -20 UNC	12
-18	60302	FLAT WASHER - 5/16	12
-19	60131	HEX HEAD CAPSCREW - $\frac{1}{2}$ -20 UNC X 1	12
-20	411	RUBBER MOULDING - 20 $\frac{1}{2}$	2
-21	411	RUBBER MOULDING - 13 $\frac{1}{2}$	2
-22	411	RUBBER MOULDING - 12 $\frac{1}{2}$	1
-23	411	RUBBER MOULDING - 5 $\frac{1}{2}$	8
-24	165	RUBBER MOULDING - SUCTION HOSE - 4	3
-25	70107	LIMIT SWITCH (P/N NO. 20803 MAY BE SUB)	1
-26	20807	LIMIT SWITCH ARM	1
-27	30387	TILT SWITCH ASSEMBLY & INSTALLATION (SEE FIG.9)	1
-28	30496	CUSHION CYLINDER ASSEMBLY (SEE FIG.20)	2
-29	201	FLOW VALVE	3
-30	157-B	WHEEL NUT	20
-31	64102	CLEVIS PIN - 5/8 DIA. X 3	4

ITEM	PART NUMBER	DESCRIPTION	QTY
-32	64307	COTTER PIN - 1/8 DIA. X 1½	1
-33	20796	BELL CRANK PIN	1
-34	8044	BELL CRANK ASSEMBLY (SEE FIG. 22)	1
-35	30302	TIE ROD ASSEMBLY (SEE FIG. 23 & 24)	1
-36	3013	STEERING CYLINDER (SEE FIG. 19A)	1
-37	863	SPRING GUARD	1
-38	764	CLAMP	5
-39	9059-1	MANUAL STABILIZER ASSEMBLY (SEE FIG. 15B)	4
-40	60142	BOLT - 5/8-11 UNC X 4	4
-41	63105	LOCK NUT - 5/8-11 UNC	4
-42	30720	HYDRAULIC TUBING KIT	1
-43	60514	HEX HEAD CAPSCREW - 5/8-11 UNC X 2	8
-44	3013-2	CLEVIS PIN (NEW PART NO. 66039, 2356 & 64101)	2
-45	64303	COTTER PIN	2
-46	30301	TIE ROD ASSEMBLY (SEE FIG. 23 & 24)	1
-47	30600	HOSE KIT	1
-48	60903	JAM NUT - 1-14 UNS -(L.H.)	2
-49	60902	JAM NUT - 1-4 UNS -(R.H.)	2
-50	30492	FRONT AXLE ASSEMBLY (L.H.) (SEE FIG. 16A)	1
-51	30493	FRONT AXLE ASSEMBLY (R.H.) (SEE FIG. 16A)	1
-52	3034	DRIVE MOTOR (BEFORE JULY 1980)	2
-53	30299	DRIVE HUB (BEFORE JULY 1980)	2
-54	2204	FRONT DRUM & HUB (BEFORE JULY 1980) (SEE FIG. 17A.1)	2
-55	6313-2	FRONT AXLE ASSEMBLY (L.H.) (BEFORE JULY 1980) (SEE FIG. 16A.1)	1
-56	6313-1	FRONT AXLE ASSEMBLY (R.H.) (BEFORE JULY 1980) (SEE FIG. 16A.1)	1



ITEM	PART NUMBER	DESCRIPTION	QTY
5D-	8113	FRAME ASSEMBLY	1
-1	30395	FRAME WELDMENT	1
-2	30796	DRIVE TIRE & RIM ASSEMBLY (SEE FIG.18E)	2
-3	30795	STEERING TIRE & RIM ASSEMBLY (SEE FIG.18D)	2
-4	61319	CRUSH TYPE LOCK NUT-5/8-11 UNC (GRADE 5)	8
-5	30472	FRONT HUB ASSEMBLY (SEE FIG.17)	2
-6	2238-1	ELECTRIC BRAKE - LEFT HAND	1
-7	2238-2	ELECTRIC BRAKE - RIGHT HAND	1
-8	30456	HYDRAULIC MOTOR	2
-9	1558	DRIVE HUB	2
-10	9064	BATTERY BOX INSTALLATION (SEE FIG.14A)	1
-11	30235	DUAL FUEL ENGINE INSTALLATION (SEE FIG.13A)	1
-12	8316	GAS TANK ASSEMBLY (SEE FIG.12A)	1
-13	30726	COMPONENT BOX ASSEMBLY (SEE FIG.7F)	1
-14	3038	HYDRAULIC PUMP	1
-15	8318-2	HYDRAULIC TANK ASSEMBLY (SEE FIG.11B)	1
-16	63301	LOCK WASHER - $\frac{1}{4}$	12
-17	60701	HEX NUT - $\frac{1}{4}$ -20 UNC	12
-18	60302	FLAT WASHER - 5/16	12
-19	60131	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X 1	12
-20	411	RUBBER MOULDING - 20 $\frac{1}{4}$	2
-21	411	RUBBER MOULDING - 13 $\frac{1}{4}$	2
-22	411	RUBBER MOULDING - 12 $\frac{1}{2}$	1
-23	411	RUBBER MOULDING - 5 $\frac{1}{2}$	8
-24	165	RUBBER MOULDING - SUCTION HOSE - 4	3
-25	70107	LIMIT SWITCH (P/N NO. 20803 MAY BE SUB)	1
-26	20807	LIMIT SWITCH ARM	1
-27	30387	TILT SWITCH ASSEMBLY & INSTALLATION (SEE FIG.9)	1
-28	30496	CUSHION CYLINDER ASSEMBLY (SEE FIG.20)	1
-29	2521	FLOW VALVE	3
-30	157-B	WHEEL NUT	20
-31	64102	CLEVIS PIN - 5/8 DIA. X 3	4

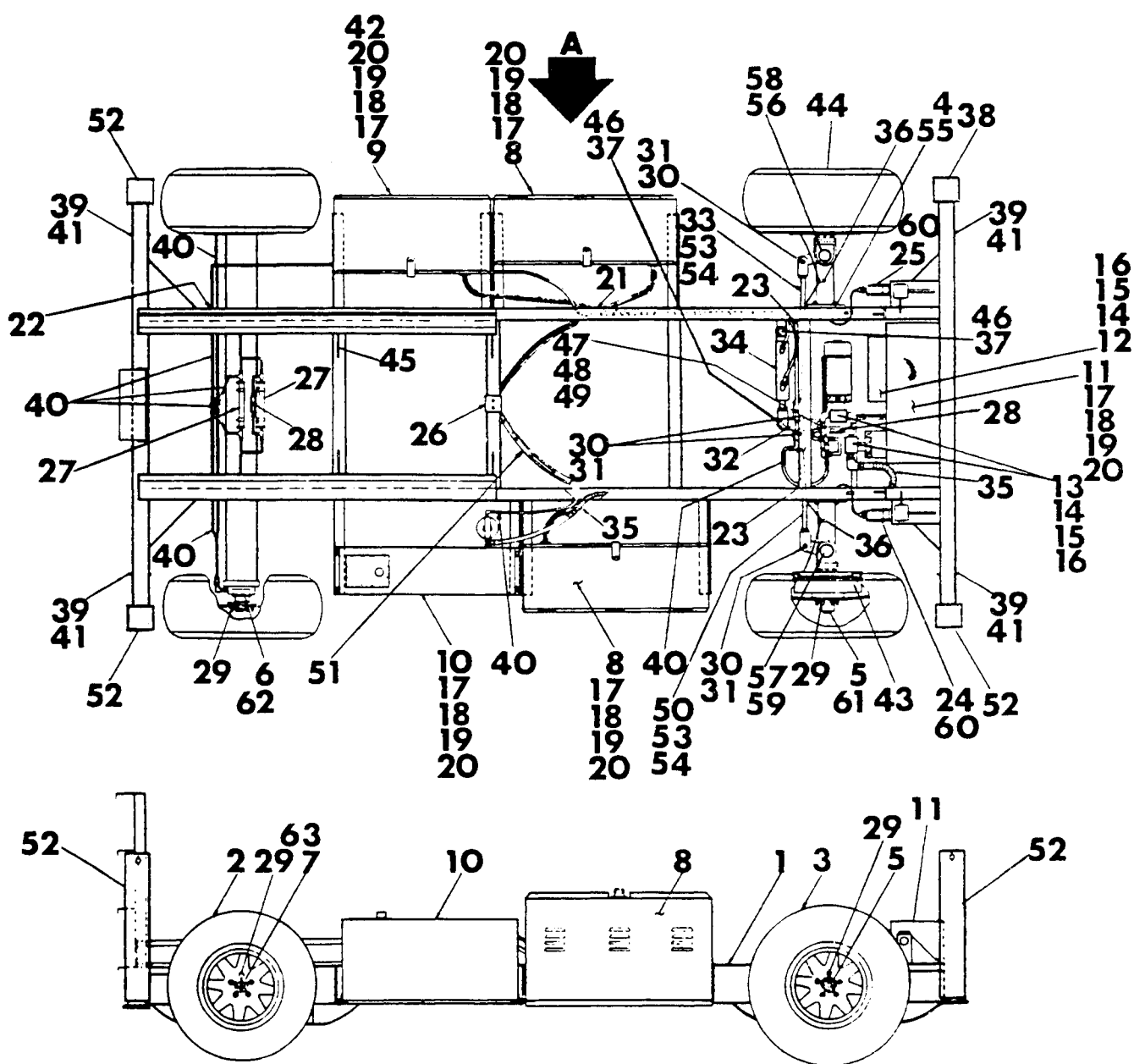
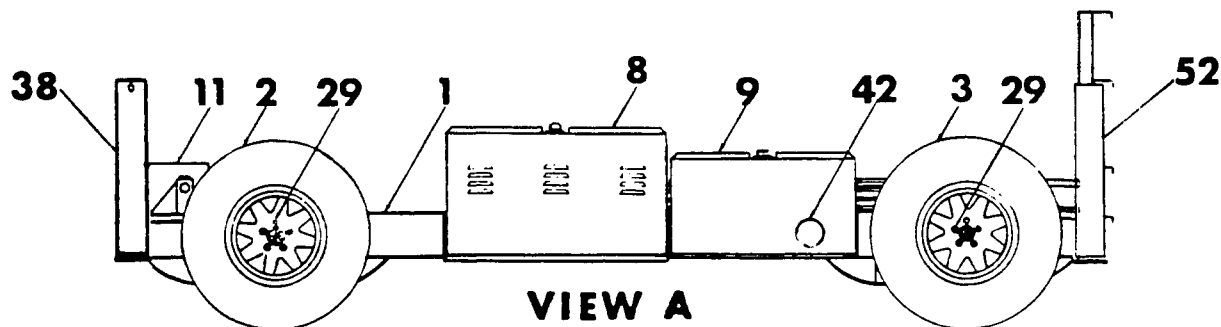
ITEM	PART NUMBER	DESCRIPTION	QTY
-32	64307	COTTER PIN - 1/8 DIA. X 1½	4
-33	20796	BELL CRANK PIN	1
-34	8044	BELL CRANK ASSEMBLY (SEE FIG. 22)	1
-35	30302	TIE ROD ASSEMBLY (SEE FIG. 23 & 24)	1
-36	3013	STEERING CYLINDER (SEE FIG. 19A)	1
-37	863	SPRING GUARD	1
-38	764	CLAMP	5
-39	3026	HYDRAULIC OUTRIGGER ASSEMBLY (SEE FIG. 15A)	3
-40	29-B	PIN WITH CHAIN	4
-41	721	PIN	4
-42	30720	HYDRAULIC TUBING KIT	1
-43	3024	HYDRAULIC OUTRIGGER ASSEMBLY WITH SWITCH (SEE FIG. 15)	1
-44	3013-2	CLEVIS PIN (NEW PART NO. 66039, 2356 & 64101)	2
-45	64303	COTTER PIN	2
-46	30301	TIE ROD ASSEMBLY (SEE FIG. 23 & 24)	1
-47	30600	HOSE KIT	1
-48	60903	JAM NUT - 1-14 UNS (L.H.)	2
-49	60902	JAM NUT - 1-14 UNS (R.H.)	2
-50	60514	HEX HEAD CAPSCREW - 5/8-11 UNC X 2	8
-51	30492	FRONT AXLE ASSEMBLY (L.H.) (SEE FIG. 16A)	1
-52	30493	FRONT AXLE ASSEMBLY (R.H.) (SEE FIG. 16A)	1
-53	483	GEAR REDUCTION BOX	1
-54	6096	REAR AXLE	1
-55	30318	BRAKE TO GEAR BOX (BEGINNING MARCH 1980)	1
-56	3036	DRIVE MOTOR (BEFORE MARCH 1980)	1
-57	2240	DRUM & HUB (BEFORE JULY 1980) (SEE FIG. 17A.1)	2
-58	6313-2	FRONT AXLE ASSEMBLY (L.H.) (BEFORE JULY 1980) (SEE FIG. 16A.1)	1
-59	6313-1	FRONT AXLE ASSEMBLY (R.H.) (BEFORE JULY 1980) (SEE FIG. 16A.1)	1

REV.1
1-83

FIGURE 5D - FRAME ASSEMBLY (SRT31G)

86.1

ITEM	PART NUMBER	DESCRIPTION	QTY
-60	2221	CONE BOLT	10
-61	35150	SPACER	4
-62	35149	SPACER	4
-63	60155	HEX HEAD CAP SCREW - 1/2-13 UNC X 11	4
-64	60705	HEX NUT - 1/2-13 UNC	4
NOTE: IF MACHINE HAS AUSCO BRAKE IT WILL TAKE A PART NUMBER 30456 DRIVE MOTOR.			



ITEM	PART NUMBER	DESCRIPTION	QTY
5E-	8114	FRAME ASSEMBLY	1
-1	30230	FRAME WELDMENT	1
-2	30783	DRIVE TIRE & RIM ASSEMBLY (SEE FIG.18C)	2
-3	30784	STEERING TIRE & RIM ASSEMBLY (SEE FIG.18B)	2
-4	61319	CRUSH TYPE LOCK NUT-5/8-11 UNC (GRADE 5)	8
-5	30482	FRONT HUB & DRUM ASSEMBLY (SEE FIG.17A)	2
-6	30243	HYDRAULIC MOTOR	2
-7	30294	DRIVE HUB	2
-8	30466	BATTERY BOX ASSEMBLY (SEE FIG.14)	2
-9	30765	COMPONENT BOX ASSEMBLY (FIG.7G)	1
-10	8318-2	HYDRAULIC TANK ASSEMBLY (SEE FIG.11B)	1
-11	8326	INVERTER BRACKET	1
-12	4006	BATTERY CHARGER	1
-13	3015	PUMP MOTOR (3015-1 PUMP, 3015-2 MTR. ONLY)	2
-14	882	SHOCK MOUNT	12
-15	63302	LOCK WASHER - 5/16	24
-16	60702	HEX NUT - 5/16-18 UNC	24
-17	64302	FLAT WASHER - 5/16	20
-18	63301	LOCK WASHER - ½	20
-19	60701	HEX NUT - ½-20 UNC	20
-20	60131	HEX HEAD CAPSCREW - ½-20 UNC X 1	20
-21	411	RUBBER MOULDING - 20½	2
-22	411	RUBBER MOULDING - 13½	2
-23	411	RUBBER MOULDING - 5½	8
-24	20803	LIMIT SWITCH (LIFT AND OUTRIGGER)	1
-25	70107	LIMIT SWITCH (HIGH SPEED DRIVE)	1
-26	30387	TILT SWITCH ASSEMBLY & INSTALLATION (SEE FIG.9)	1
-27	30496	CUSHION CYLINDER ASSEMBLY (SEE FIG.20)	2
-28	201	FLOW VALVE	3
-29	157-B	WHEEL NUT	20
-30	64102	CLEVIS PIN - 5/8 DIA. X 3	4
-31	64307	COTTER PIN - 1/8 DIA. X 1½	4
-32	8044	BELL CRANK ASSEMBLY (SEE FIG. 22)	1

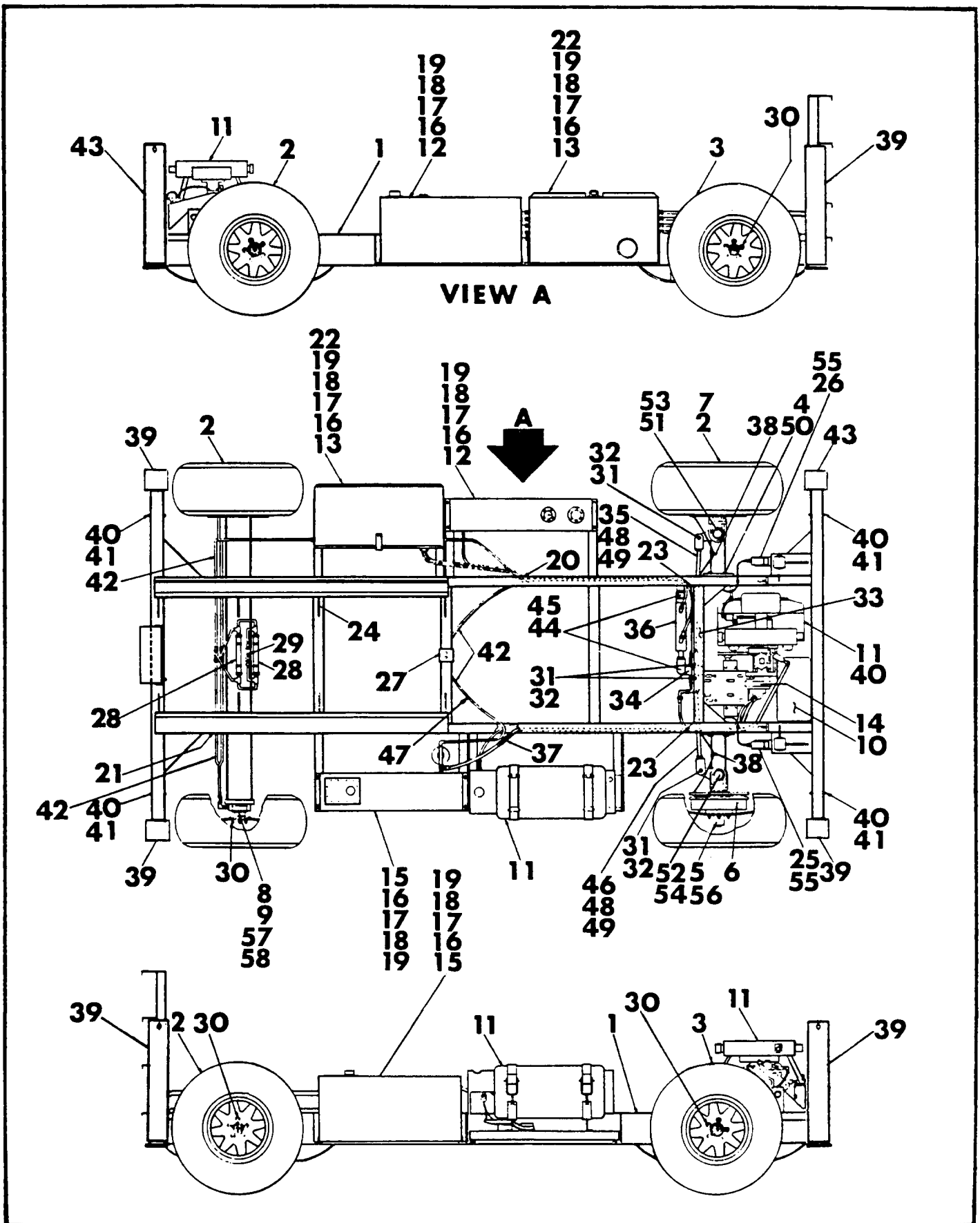
ITEM	PART NUMBER	DESCRIPTION	QTY
-33	30302	TIE ROD ASSEMBLY	1
-34	3013	STEERING CYLINDER (SEE FIG. 19A)	1
-35	863	SPRING GUARD	2
-36	764	CLAMP	5
-37	3013-2	CLEVIS PIN (NEW PART NO. 66039, 2356 & 64101)	2
-38	3024	HYDRAULIC OUTRIGGER ASSEMBLY WITH SWITCH (SEE FIG. 15)	1
-39	29-B	PIN WITH CHAIN	4
-40	30721	HYDRAULIC TUBING KIT	1
-41	721	PIN	4
-42	411	RUBBER MOULDING - 12½	1
-43	2238-1	ELECTRIC BRAKE - LEFT HAND	1
-44	2238-2	ELECTRIC BRAKE - RIGHT HAND	1
-45	165	RUBBER MOULDING - SUCTION HOSE - 4	3
-46	64303	COTTER PIN	2
-47	20796	STEERING PIN	1
-48	60603	CAPSCREW - 5/16-18 UNC X 3/4	1
-49	63302	LOCK WASHER - 5/16 SPLIT	1
-50	30301	TIE ROD ASSEMBLY (SEE FIG. 23 & 24)	1
-51	30601	HOSE KIT	1
-52	3026	HYDRAULIC OUTRIGGER ASSEMBLY (SEE FIG. 15A)	3
-53	60903	JAM NUT - 1-14 UNS -(L.H.)	2
-54	60902	JAM NUT - 1-14 UNS -(R.H.)	2
-55	60514	HEX HEAD CAPSCREW - 5/8-11 UNC X 2	8
-56	30492	FRONT AXLE ASSEMBLY (L.H.)	1
-57	30493	FRONT AXLE ASSEMBLY (R.H.) (BEGINNING JULY 1980) (SEE FIG. 16A)	1
-58	6313-2	FRONT AXLE ASSEMBLY (L.H.) (BEFORE JULY 1980) (SEE FIG. 16A.1)	1
-59	6313-1	FRONT AXLE ASSEMBLY (R.H.) (BEFORE JULY 1980) (SEE FIG. 16A.1)	1
-60	20807	LIMIT SWITCH ARM	2
-61	2240	FRONT HUB & DRUM (SEE FIG. 17A.1)	2

REV.1
1-83

FIGURE 5E - FRAME ASSEMBLY (RT40E)

89.1

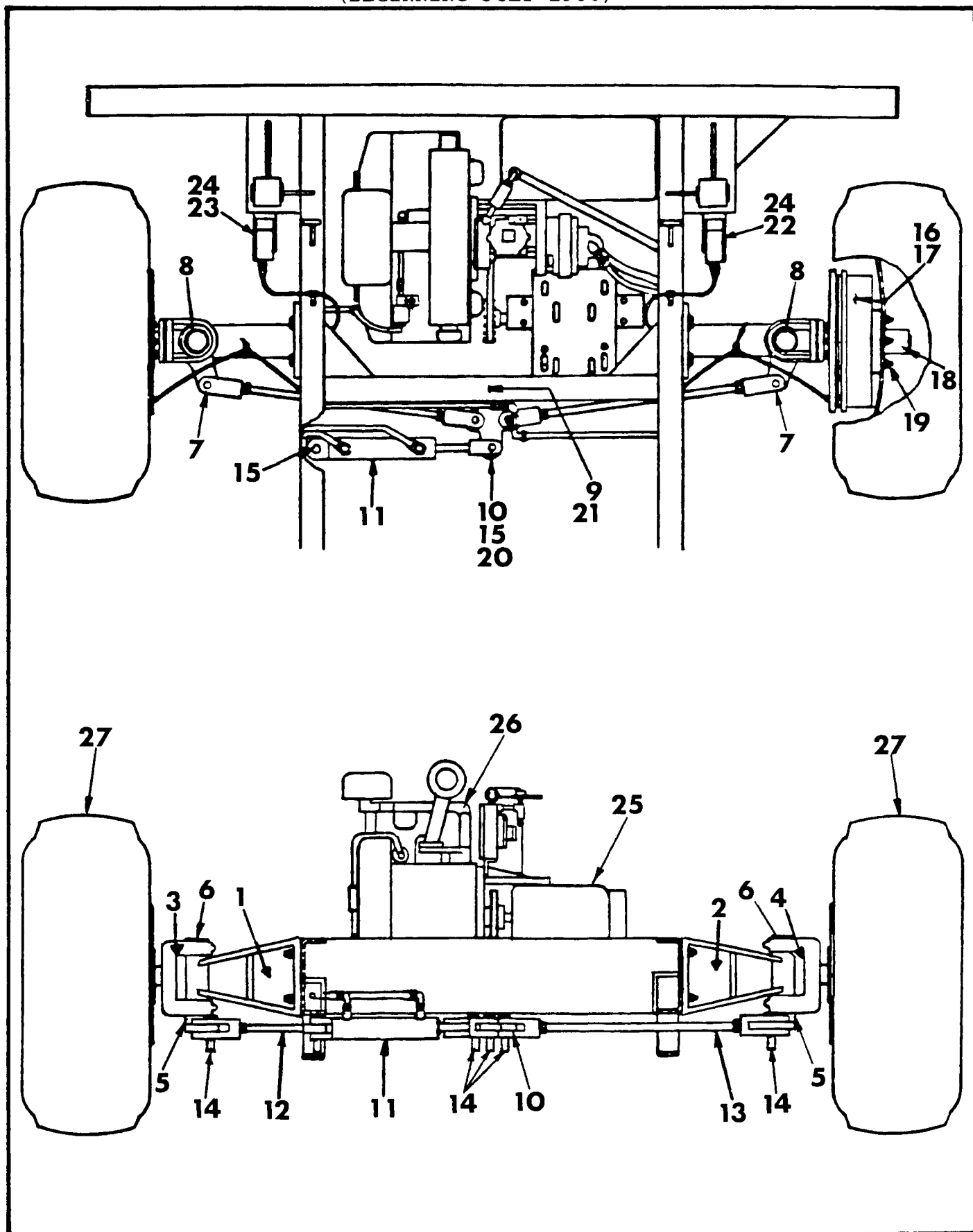
ITEM	PART NUMBER	DESCRIPTION	QTY
-62	3034	DRIVE MOTOR (BEFORE JULY 1980)	2
-63	30299	DRIVE HUB (BEFORE JULY 1980)	2



ITEM	PART NUMBER	DESCRIPTION	QTY
5F-	8110	FRAME ASSEMBLY	1
-1	30399	FRAME WELDMENT	1
-2	30783	DRIVE TIRE & RIM ASSEMBLY (SEE FIG.18C)	2
-3	30784	STEERING TIRE & RIM ASSEMBLY (SEE FIG.18B)	2
-4	61319	CRUSH TYPE LOCK NUT-5/8-11 UNC (GRADE 5)	8
-5	30482	FRONT HUB ASSEMBLY (SEE FIG.17A)	2
-6	2238-1	ELECTRIC BRAKE - LEFT HAND	1
-7	2238-2	ELECTRIC BRAKE - RIGHT HAND	1
-8	30234	HYDRAULIC MOTOR	2
-9	30294	DRIVE HUB	2
-10	9064	BATTERY BOX INSTALLATION (SEE FIG.14A)	1
-11	30235	DUAL FUEL ENGINE INSTALLATION (SEE FIG.13A)	1
-12	8316	GAS TANK ASSEMBLY (SEE FIG.12A)	1
-13	30722	COMPONENT BOX ASSEMBLY (SEE FIG.7H)	1
-14	3038	HYDRAULIC PUMP	1
-15	8318-2	HYDRAULIC TANK ASSEMBLY (SEE FIG.11B)	1
-16	63301	LOCK WASHER - $\frac{1}{4}$	12
-17	60701	HEX NUT - $\frac{1}{4}$ -20 UNC	12
-18	60302	FLAT WASHER - 5/16	12
-19	60131	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X 1	12
-20	411	RUBBER MOULDING - 20 $\frac{1}{4}$	2
-21	411	RUBBER MOULDING - 13 $\frac{1}{4}$	2
-22	411	RUBBER MOULDING - 12 $\frac{1}{2}$	1
-23	411	RUBBER MOULDING - 5 $\frac{1}{2}$	8
-24	165	RUBBER MOULDING - SUCTION HOSE - 4	3
-25	20803	LIMIT SWITCH (LIFT & OUTRIGGER)	1
-26	70107	LIMIT SWITCH (HIGH SPEED DRIVE)	1
-27	30387	TILT SWITCH ASSEMBLY & INSTALLATION (SEE FIG.9)	1
-28	30496	CUSHION CYLINDER ASSEMBLY (SEE FIG.20)	2
-29	2521	FLOW VALVE	3
-30	157-B	WHEEL NUT	20
-31	64102	CLEVIS PIN - 5/8 DIA. X 3	4

ITEM	PART NUMBER	DESCRIPTION	QTY
-32	64307	COTTER PIN - 1/8 DIA. X 1½	4
-33	20796	BELL CRANK PIN	1
-34	8044	BELL CRANK ASSEMBLY (SEE FIG. 22)	1
-35	30302	TIE ROD ASSEMBLY	1
-36	3013	STEERING CYLINDER (SEE FIG. 19A)	1
-37	863	SPRING GUARD	1
-38	764	CLAMP	5
-39	3026	HYDRAULIC OUTRIGGER ASSEMBLY (SEE FIG. 15A)	3
-40	29-B	PIN WITH CHAIN	4
-41	721	PIN	4
-42	30720	HYDRAULIC TUBING KIT	1
-43	3024	HYDRAULIC OUTRIGGER ASSEMBLY WITH SWITCH (SEE FIG. 15)	1
-44	3013-2	CLEVIS PIN (NEW P/N 66039,2356 & 64101)	2
-45	64303	COTTER PIN	2
-46	30301	TIE ROD ASSEMBLY (SEE FIG. 23 & 24)	1
-47	30600	HOSE KIT	1
-48	60903	JAM NUT - 1-4 UNS (L.H.)	2
-49	90902	JAM NUT - 1-14 UNS (R.H.)	2
-50	60514	HEX HEAD CAPSCREW - 5/8-11 UNC X 2	8
-51	30492	FRONT AXLE ASSEMBLY (L.H.)	1
-52	30493	FRONT AXLE ASSEMBLY (R.H.) (BEGINNING JULY 1980) (SEE FIG. 16A)	1
-53	6313-2	FRONT AXLE ASSEMBLY (L.H.) (BEFORE JULY 1980) (SEE FIG. 17A.1)	1
-54	6313-1	FRONT AXLE ASSEMBLY (R.H.) (BEFORE JULY 1980) (SEE FIG. 17A.1)	1
-55	20807	LIMIT SWITCH ARM	2
-56	2240	FRONT HUB & DRUM (BEFORE JULY 1980) (SEE FIG. 17A.1)	2
-57	3034	DRIVE MOTOR (BEFORE JULY 1980)	2
-58	30299	DRIVE HUB (BEFORE JULY 1980 - IF NOT UPDATED TO 30243 & 30294)	2

(BEGINNING JULY 1980)



(BEGINNING JULY 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
-1	30492	AXLE ASSEMBLY - LEFT SIDE (SEE FIG. 16A)	1
-2	30493	AXLE ASSEMBLY - RIGHT SIDE (SEE FIG. 16A)	1
-3	30239	YOKE AND SPINDLE ASSEMBLY - LEFT SIDE (SEE FIG. 16A)	1
-4	30238	YOKE AND SPINDLE ASSEMBLY - RIGHT SIDE (SEE FIG. 16A)	1
-5	30242	BOTTOM FLANGE BUSHING - YOKE ASSEMBLY (SEE FIG. 16A)	2
-6	20322	TOP BUSHING - YOKE ASSEMBLY (SEE FIG. 16A)	2
-7	30332	SLEEVE BUSHING - TIE ROD END (SEE FIG. 16A)	2
-8	20321	KING PIN (SEE FIG. 16A)	2
-9	20796	PIVOT PIN - BELL CRANK	1
-10	8044	BELL CRANK ASSEMBLY (SEE FIG. 22)	1
-11	3013	STEERING CYLINDER (SEE FIG. 19A)	1
-12	30302	TIE ROD ASSEMBLY - LEFT SIDE - 30 IN. LONG (SEE FIG. 23)	1
-13	30301	TIE ROD ASSEMBLY - RIGHT SIDE - 19 IN. LONG (SEE FIG. 23)	1
-14	64102	TIE ROD PIN	4
-15	3013-2	CLEVIS PIN	2
-16	2238-1	ELECTRIC BRAKE SET - LEFT SIDE	1
-17	2238-2	ELECTRIC BRAKE SET - RIGHT SIDE	1
-18	30482	DRUM AND HUB ASSEMBLY (SEE FIG. 17A)	2
-19	157B	LUG NUT	10
-20	2278	BUSHING-BELL CRANK CYLINDER PIN (SEE FIG. 22)	1
-21	2269	BUSHING-PIVOT END (SEE FIG. 22)	1
-22	70107	LIMIT SWITCH	1
-23	20803	LIMIT SWITCH (USED ON 40 ONLY)	1
-24	20807	LIMIT SWITCH ARM	1
-25	782	BATTERY BOX(GAS ONLY)	1

REV.1
1-33

FIGURE 5G - STEERING ASSEMBLY (RT26E) (RT26G)
(RT31E) (RT31G) *(SRT31G) (RT40E) (RT40G)

92.3

(BEGINNING JULY 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
-26	20506	ENGINE (SEE FIG. 13A)	1
-27	30782	TIRE & WHEEL ASSEMBLY (SEE FIG. 18B.1)	2
*NOTE: WHEN USED FOR SRT31G, DELETE ITEMS NO. 16,17,18 & 27. ON ITEM NO. 18, USE PART NUMBER 30472 (SEE FIGURE 17).			

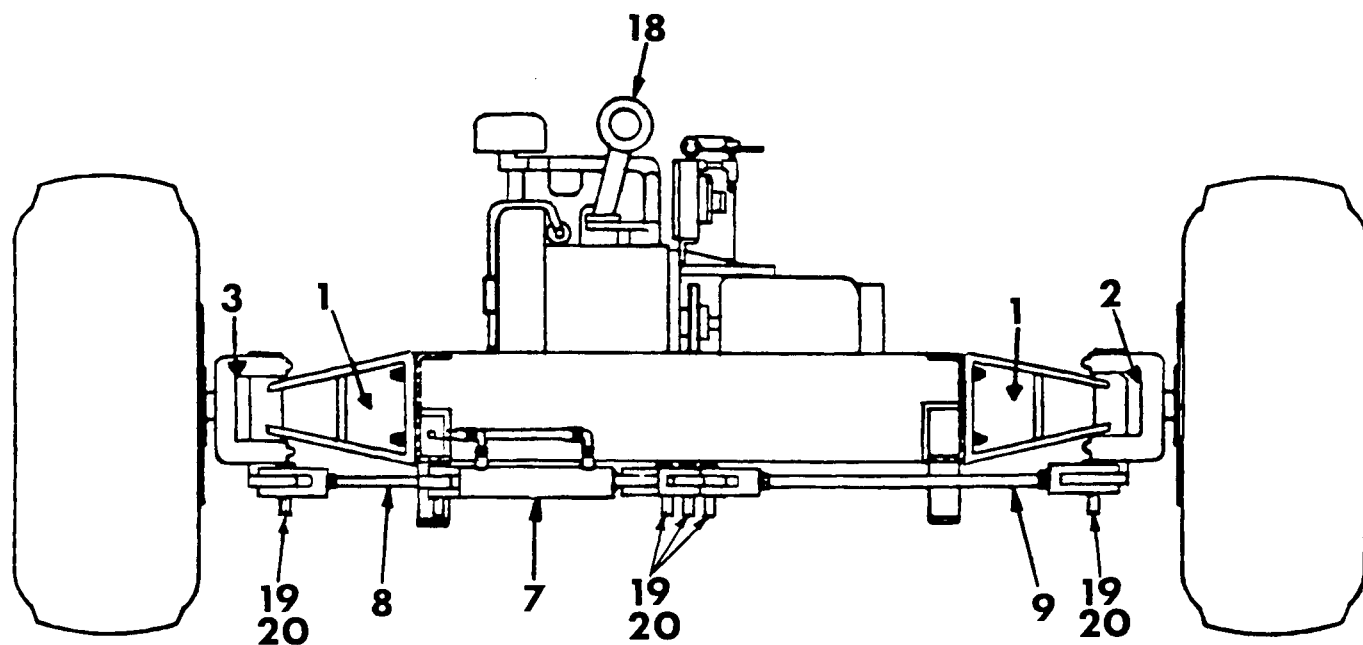
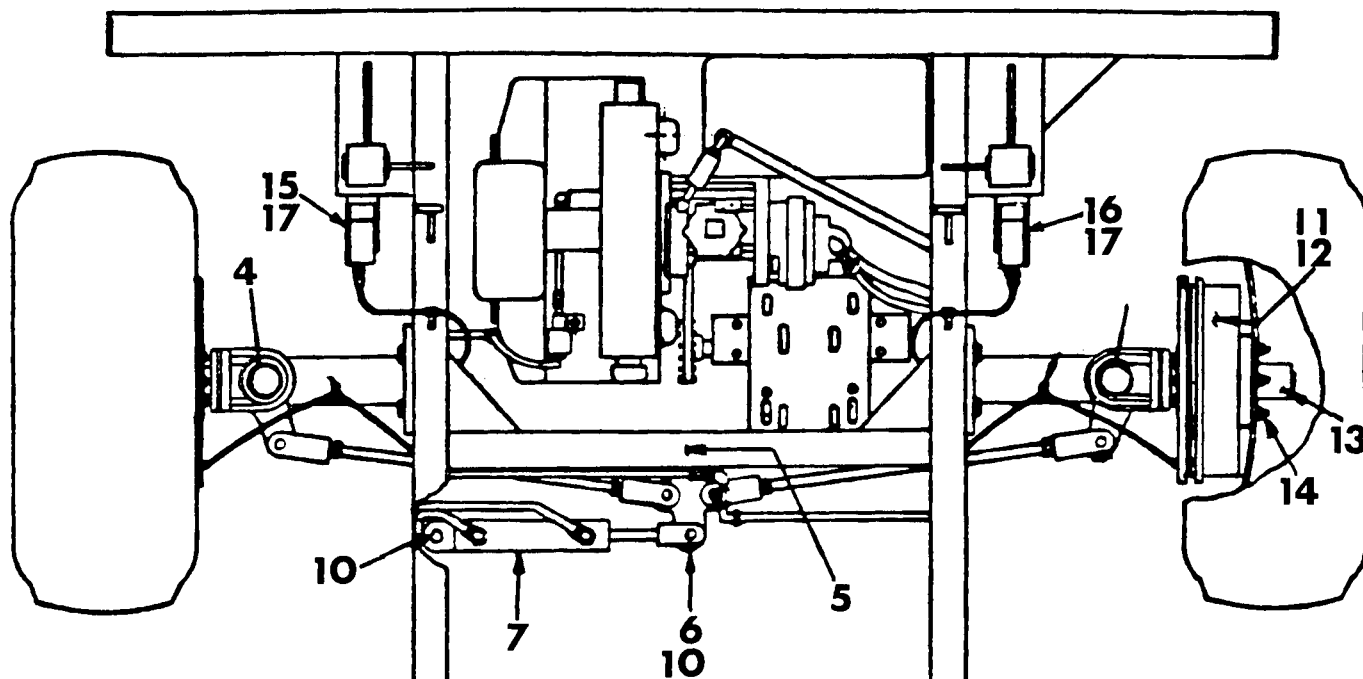
The image contains two technical drawings of a vehicle chassis, labeled as front and rear views. The top drawing is a front view, showing the engine, transmission, and front suspension components. The bottom drawing is a rear view, showing the rear suspension and drivetrain components. Both drawings include numbered callouts for specific parts.

Front View (Top):

- 15, 17: Front suspension components (upper control arms).
- 16, 17: Front suspension components (lower control arms).
- 4: Front suspension component (steering knuckle).
- 11, 12, 13, 14: Front suspension components (steering knuckle and tie rod).
- 10, 7, 6, 10, 5: Front suspension components (lower control arms and steering knuckle).

Rear View (Bottom):

- 18: Rear suspension component (steering knuckle).
- 1, 1, 2: Rear suspension components (steering knuckle and tie rod).
- 3, 19, 20, 8, 7, 19, 20, 9, 19, 20: Rear suspension components (lower control arms and steering knuckle).



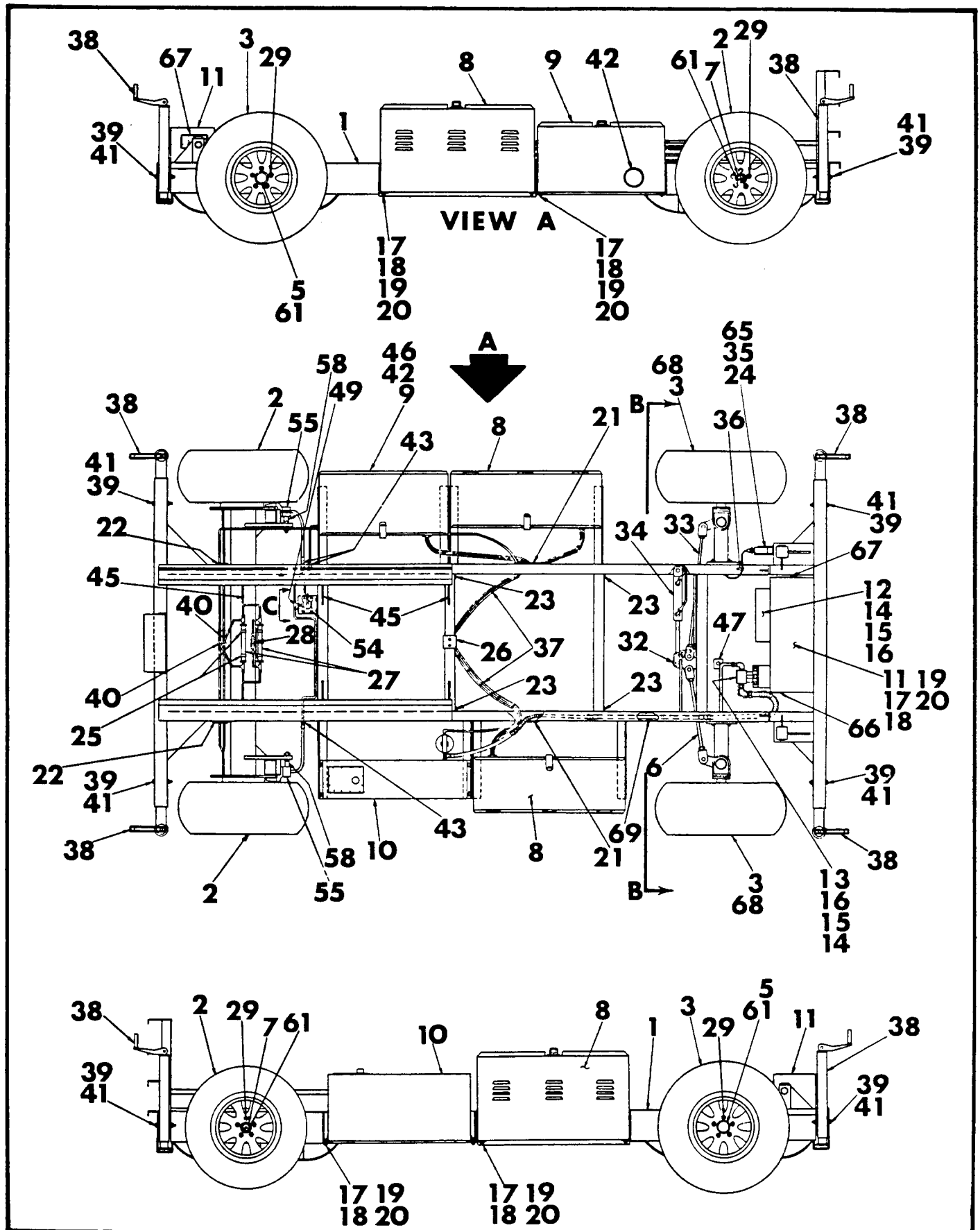
REV.1
1-83

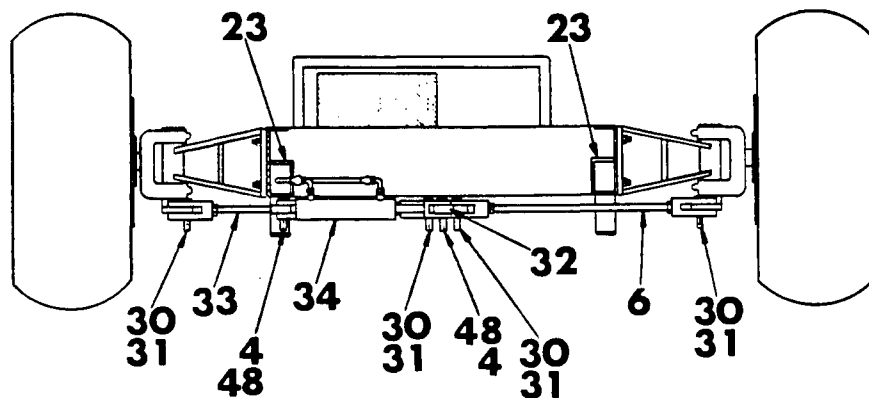
FIGURE 5H - STEERING ASSEMBLY (RT26E) (RT26G)
(RT31E) (RT31G) (SRT31G) (RT40E) (RT40G)

92.5

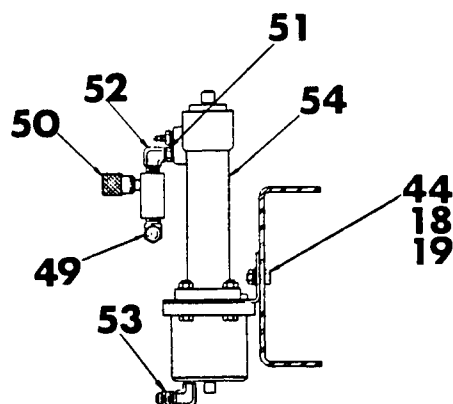
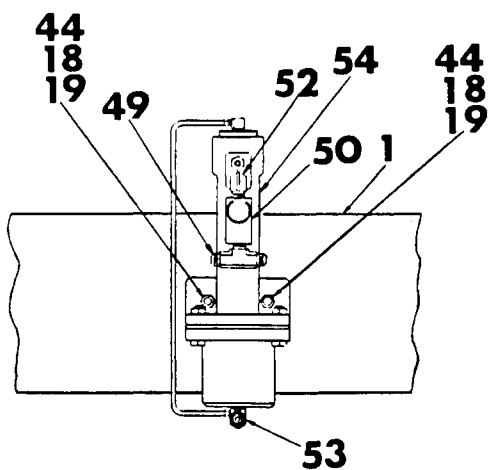
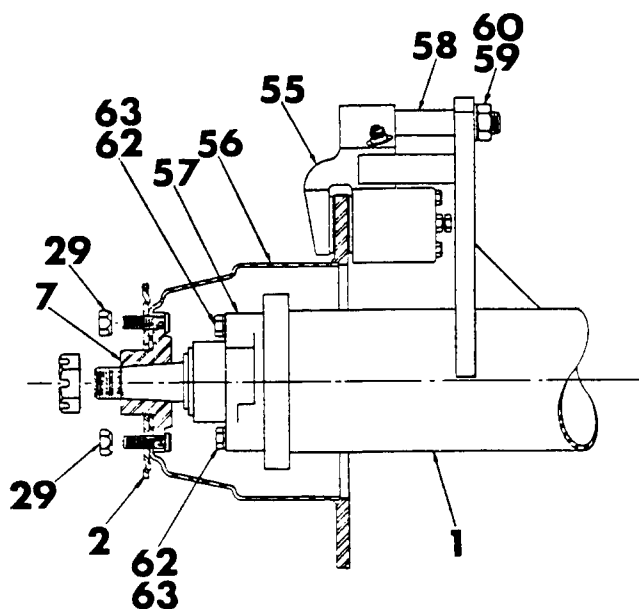
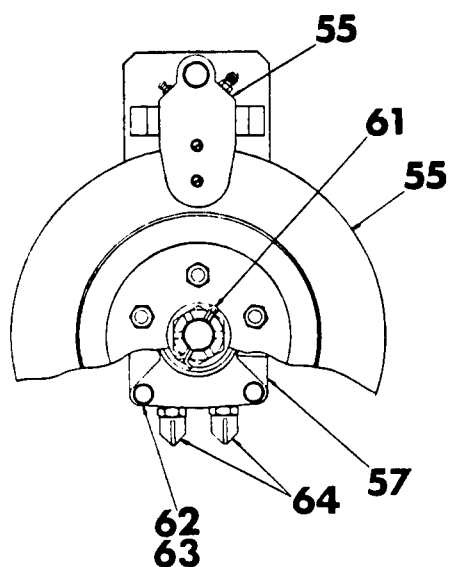
(BEFORE JULY 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
-1	30257	AXLE ONLY (SEE FIG. 16A.1)	2
-2	6313-1	YOKE AND SPINDLE ASSEMBLY - RIGHT HAND (SEE FIG. 16A.1)	1
-3	6313-2	YOKE AND SPINDLE ASSEMBLY - LEFT HAND (SEE FIG. 16A.1)	1
-4	20321	KING PIN	2
-5	20796	PIVOT PIN BELL CRANK	1
-6	8044	BELL CRANK (SEE FIG. 22)	1
-7	3013	STEERING CYLINDER (SEE FIG. 19)	1
-8	6333-1	TIE ROD ASSEMBLY - LEFT HAND (SEE FIG. 24)	1
-9	6333-2	TIE ROD ASSEMBLY - RIGHT HAND (SEE FIG. 24)	1
-10	3012-1	CLEVIS PIN	2
-11	2238-1	ELECTRIC BRAKE SET - LEFT HAND	1
-12	2238-2	ELECTRIC BRAKE SET - RIGHT HAND	1
-13	2240	DRUM AND HUB (SEE FIG. 17A.1)	2
-14	157B	LUG NUT	10
-15	20803	LIMIT SWITCH (RT40 ONLY)	1
-16	70107	LIMIT SWITCH	1
-17	20807	LIMIT SWITCH ARM	2
-18	20506	CCKB 20 H.P. ENGINE	1
-19	61215	5/8 X 16 LOCK NUT	4
-20	60519	5/8 X 16 X 2 1/2" BOLT	4





SECTION B



VIEW C

ITEM	PART NUMBER	DESCRIPTION	QTY
5J-	30857	FRAME ASSEMBLY	1
-1	30394	FRAME WELDMENT	1
-2	30783	DRIVE TIRE & RIM ASSEMBLY (SEE FIG. 18C)	2
-3	30784	STEERING TIRE & RIM ASSEMBLY (SEE FIG. 18B.1)	2
-4	64101	CLEVIS PIN - 1 DIA. X 2 5/8	2
-5	30472	FRONT HUB ASSEMBLY (SEE FIG. 17)	2
-6	30301	TIE ROD ASSEMBLY (L.H.) (SEE FIG. 23)	1
-7	30294	DRIVE HUB	2
-8	30861	BATTERY BOX ASSEMBLY (SEE FIG. 14)	2
-9	30766	COMPONENT BOX ASSEMBLY (SEE FIG. 7B)	1
-10	30583	HYDRAULIC TANK ASSEMBLY (SEE FIG. 11B.1)	1
-11	8326	INVERTER BRACKET	1
-12	4006	BATTERY CHARGER	1
-13	3015	MOTOR-PUMP	1
-14	882	SHOCK MOUNT	8
-15	63302	SPLIT LOCKWASHER - 5/16	16
-16	60702	HEX NUT - 5/16-18 UNC	16
-17	63401	FLAT WASHER - 1/4	20
-18	63301	SPLIT LOCKWASHER - 1/4	22
-19	60701	HEX NUT - 1/4-20 UNC	22
-20	60123	HEX HEAD CAP SCREW - 1/2-20 UNC X 3/4	20
-21	411	RUBBER MOULDING - 20 1/4	2
-22	411	RUBBER MOULDING - 13 1/4	2
-23	411	RUBBER MOULDING - 5 1/2	8
-24	20373	LIMIT SWITCH	1
-25	55	CLAMP	4
-26	30387	TILT SWITCH ASSEMBLY & INSTALLATION (SEE FIG. 9)	1
-27	30496	CUSHION CYLINDER ASSEMBLY (SEE FIG. 20)	2
-28	201	FLOW VALVE	1
-29	65156	WHEEL NUT	20
-30	64102	CLEVIS PIN - 5/8 X 3	4

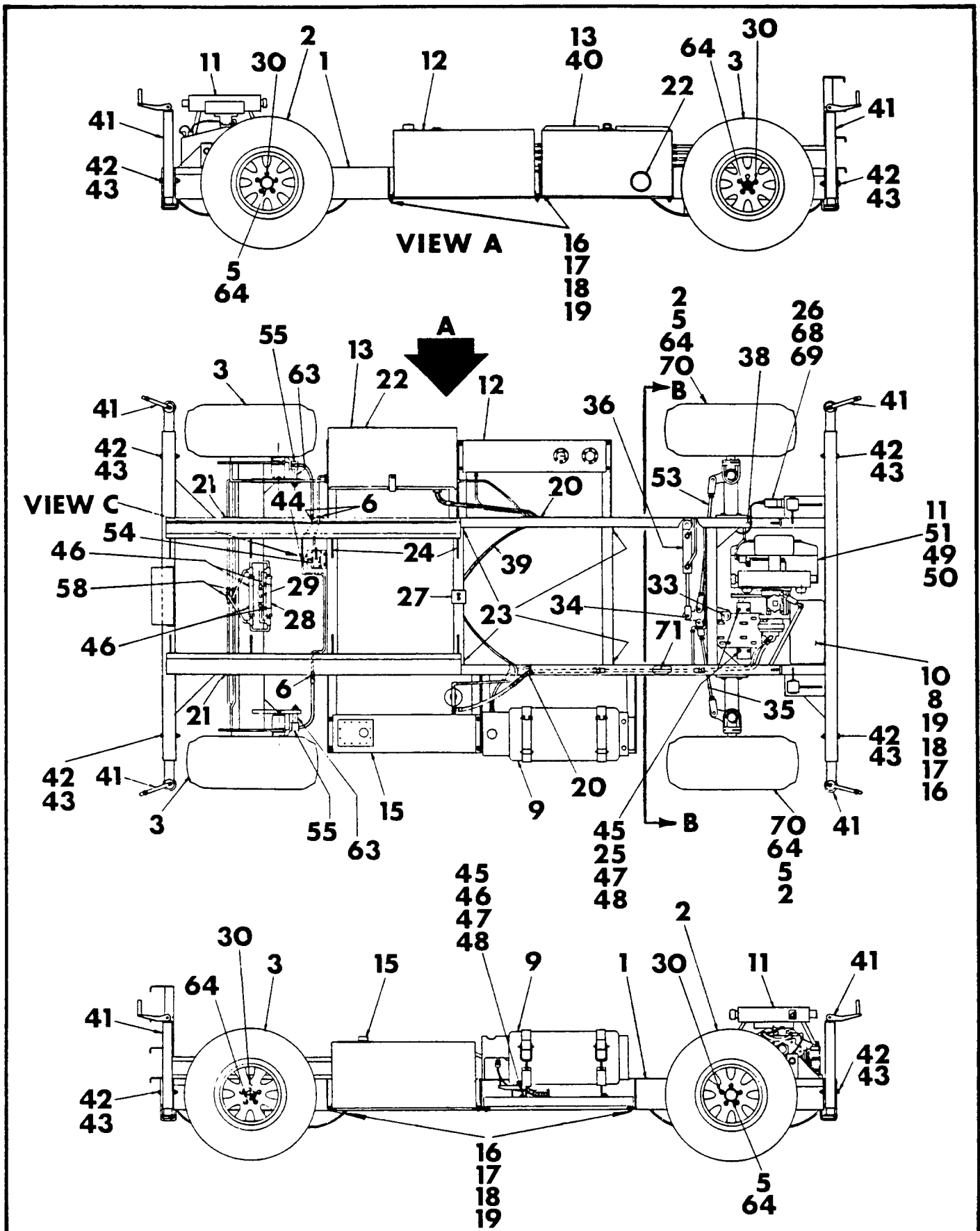
ITEM	PART NUMBER	DESCRIPTION	QTY
-31	64307	COTTER PIN - 1/8 X 1 1/4	4
-32	8044	BELL CRANK ASSEMBLY (SEE FIG. 22)	1
-33	30302	TIE ROD ASSEMBLY (R.H.) (SEE FIG. 23)	1
-34	3013	STEERING CYLINDER (SEE FIG. 19A)	1
-35	62708	ROUND HEAD CAPSCREW - NO. 10-32 UNF X 1 3/4	2
-36	764	CLAMP	A/R
-37	255	TIE RAP	A/R
-38	9059-1	MANUAL STABILIZER ASSEMBLY (SEE FIG. 15B)	4
-39	60378	HEX HEAD CAP SCREW - 5/8-11 UNC X 4	4
-40	2432	UNION TEE	2
-41	60706	HEX NUT - 5/8-11 UNC	4
-42	411	RUBBER MOULDING - 12 1/2	1
-43	16408	BULKHEAD UNION	3
-44	60131	HEX HEAD CAP SCREW - 114-20 UNC X 1	2
-45	165	RUBBER MOULDING (SUCTION HOSE)	3
-46	256	TIE RAP	A/R
-47	20796	BELL CRANK PIN - 3/4 DIA.	1
-48	16316	COTTER PIN - 3/16 X 2	2
-49	2492	UNION TEE	1
-50	30884	FLOW VALVE	1
-51	51005	MALE CONNECTOR	1
-52	52308	STREET ELBOW	1
-53	2434	90° ELBOW	1
-54	30829	INTENSIFIER (SEE FIG. 25A)	1
-55	30860	CALIPER DISC BRAKE (SEE FIG. 25)	2
-56	30876	DRUM & DISC WELDMENT	2
-57	30243	DRIVE MOTOR	2
-58	30866	CALIPER PIVOT PIN	2
-59	60707	HEX NUT - 3/4-10 UNC	2
-60	63307	SPLIT LOCKWASHER - 3/4	2
-61	64310	COTTER PIN - 1/8 X 2	4
-62	60512	HEX HEAD CAP SCREW - 1/2-13 UNC X 2 1/2	8

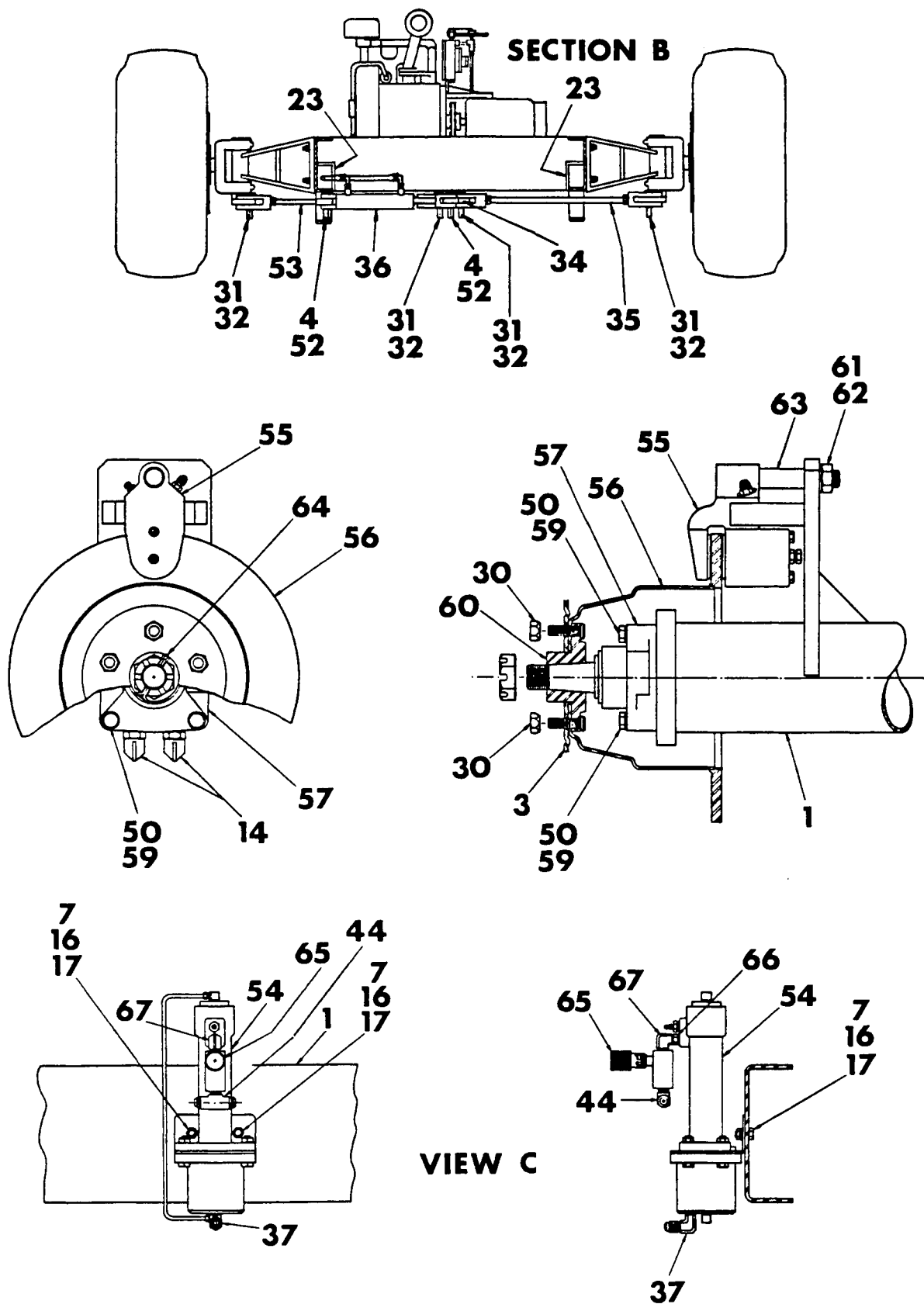
REV.1
1-83

FIGURE 5J - FRAME ASSEMBLY (RT26E)
(RT31E) (BEGINNING JULY 1982)

92.10

ITEM	PART NUMBER	DESCRIPTION	QTY
-63	63305	SPLIT LOCKWASHER - 1/2	8
-64	16511	STRAIGHT THREAD ELBOW	4
-65	70032	LIMIT SWITCH ARM	1
-66	411	RUBBER MOULDING - 8 3/4	1
-67	411	RUBBER MOULDING - 18	1
-68	30813	FRONT RIM SPACER	2
-69	30883	HYDRAULIC PIPE ASSEMBLY	1





ITEM	PART NUMBER	DESCRIPTION	QTY
5K-	30856	FRAME ASSEMBLY	1
-1	30398	FRAME WELDMENT	1
-2	30784	STEERING TIRE & RIM ASSEMBLY (SEE FIG. 18B.1)	2
-3	30783	DRIVE TIRE & RIM ASSEMBLY (SEE FIG. 18C)	2
-4	64101	CLEVIS PIN 1" DIA. X 2 5/8	2
-5	30472	FRONT HUB ASSEMBLY (SEE FIG. 17)	2
-6	16408	BULKHEAD UNION	3
-7	60131	HEX HEAD CAP SCREW - 1/4-20 UNC X 1	2
-8	4030	BATTERY (12 VOLT)	1
-9	486-C	PROPANE TANK ASSEMBLY	1
-10	782	BATTERY BOX	1
-11	30235	ENGINE ASSEMBLY	1
-12	8316	GAS TANK ASSEMBLY (SEE FIG. 12A)	1
-13	30723	COMPONENT BOX ASSEMBLY (SEE FIG. 7D)	1
-14	16511	STRAIGHT THREAD ELBOW	4
-15	30583	HYDRAULIC TANK ASSEMBLY (SEE FIG. 11B.1)	1
-16	63301	SPLIT LOCK WASHER - 1/4	20
-17	60701	HEX NUT - 1/4-20 UNC	20
-18	63401	FLAT WASHER - 1/4	18
-19	60123	HEX HEAD CAP SCREW - 1/4-20 UNC X 3/4	18
-20	411	RUBBER MOULDING - 20 1/4	2
-21	411	RUBBER MOULDING - 13 1/4	2
-22	411	RUBBER MOULDING - 12 1/2	1
-23	411	RUBBER MOULDING - 5 1/2	8
-24	165	RUBBER MOULDING - 4	3
-25	63402	FLAT WASHER - 5/16	8
-26	20373	LIMIT SWITCH	1
-27	30387	TILT SWITCH ASSEMBLY & INSTALLATION (SEE FIG. 9)	1
-28	30496	CUSHION CYLINDER ASSEMBLY (SEE FIG. 20)	2
-29	201	NEEDLE VALVE	1
-30	65156	WHEEL NUT - 1/2-20 UNF	20

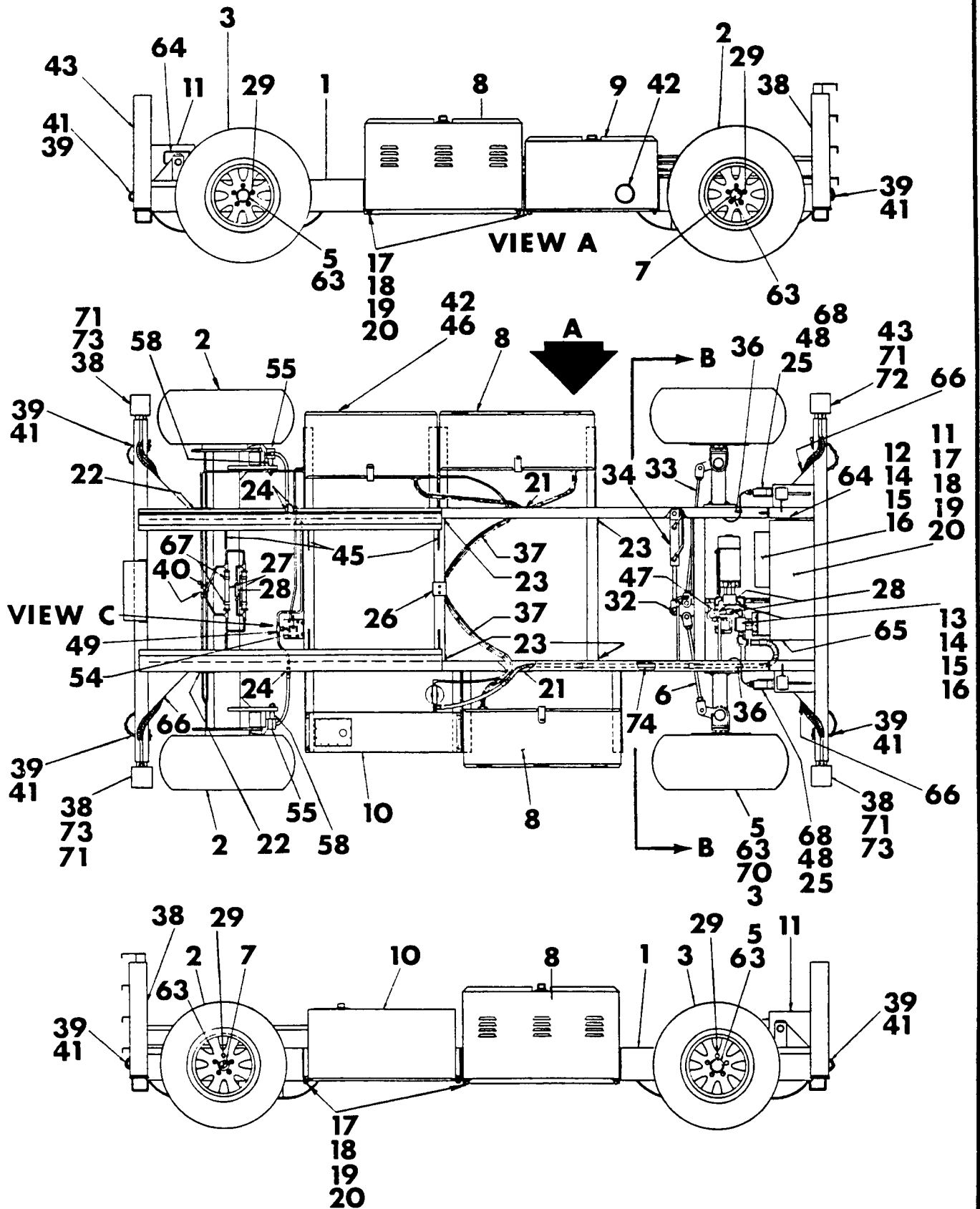
ITEM	PART NUMBER	DESCRIPTION	QTY
-31	64102	CLEVIS PIN - 5/8 X 3	4
-32	64307	COTTER PIN - 1/8 X 1 1/4	4
-33	20796	BELL CRANK PIN	1
-34	8044	BELL CRANK ASSEMBLY (SEE FIG. 22)	1
-35	30301	TIE ROD ASSEMBLY (L.H.) (SEE FIG. 23)	1
-36	3013	STEERING CYLINDER (SEE FIG. 19A)	1
-37	2434	MALE ELBOW	1
-38	764	CLAMP	A/R
-39	255	TIE RAP	A/R
-40	256	TIE RAP	A/R
-41	9059	MANUAL STABILIZER ASSEMBLY (SEE FIG. 15B)	4
-42	60378	HEX HEAD CAPSCREW - 5/8-11 UNC X 4	4
-43	60706	HEX NUT - 5/8-11 UNC	4
-44	2492	UNION TEE	1
-45	60338	HEX HEAD CAP SCREW - 5/16-18 UNC X 1	8
-46	55	CLAMP	4
-47	63302	SPLIT LOCK WASHER - 5/16	8
-48	60702	HEX NUT - 5/16-18 UNC	8
-49	60308	CAP SCREW - 1/2-13 UNC X 1 1/2 (GRD. 5)	4
-50	63305	SPLIT LOCK WASHER - 1/2	12
-51	60705	HEX NUT - 1/2-13 UNC	4
-52	16316	COTTER PIN - 3/16 X 2 (R.H.)	2
-53	30302	TIE ROD ASSEMBLY (SEE FIG. 23)	1
-54	30829	INTENSIFIER ASSEMBLY (SEE FIG. 25A)	1
-55	30860	CALIPER DISC BRAKE (SEE FIG. 25)	2
-56	30876	DRUM & DISC WELDMENT	2
-57	30243	DRIVE MOTOR	2
-58	2432	UNION TEE	2
-59	60512	CAP SCREW - 1/2-13 UNC X 2 1/2 (GRD. 8)	8
-60	30294	DRIVE HUB	2
-61	60707	HEX NUT - 3/4-10 UNC	2
-62	63307	SPLIT LOCK WASHER - 3/4	2

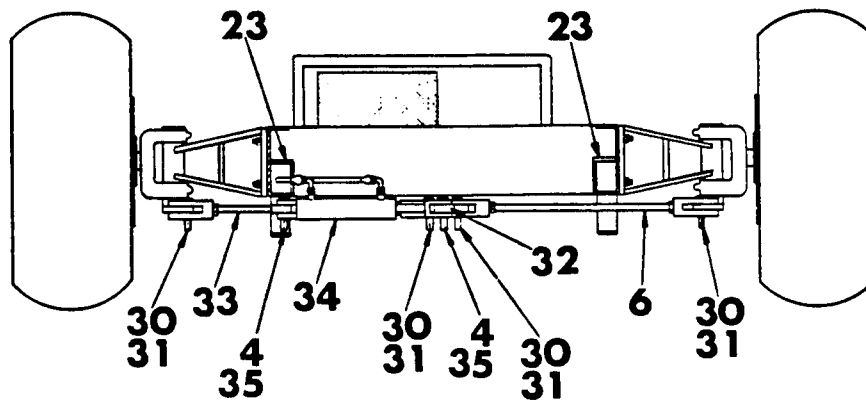
REV.1
1-83

FIGURE 5K - FRAME ASSEMBLY (RT26G)
(RT31G) (BEGINNING JULY 1982)

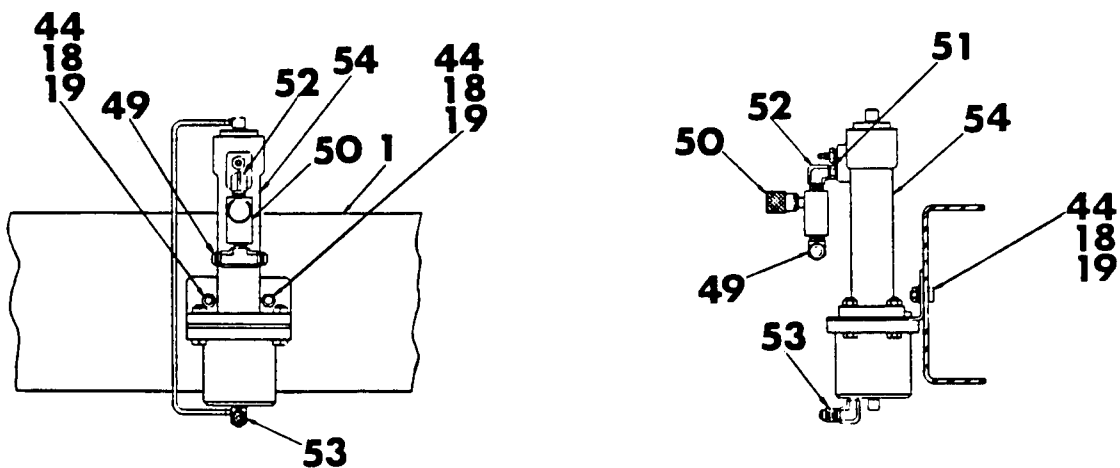
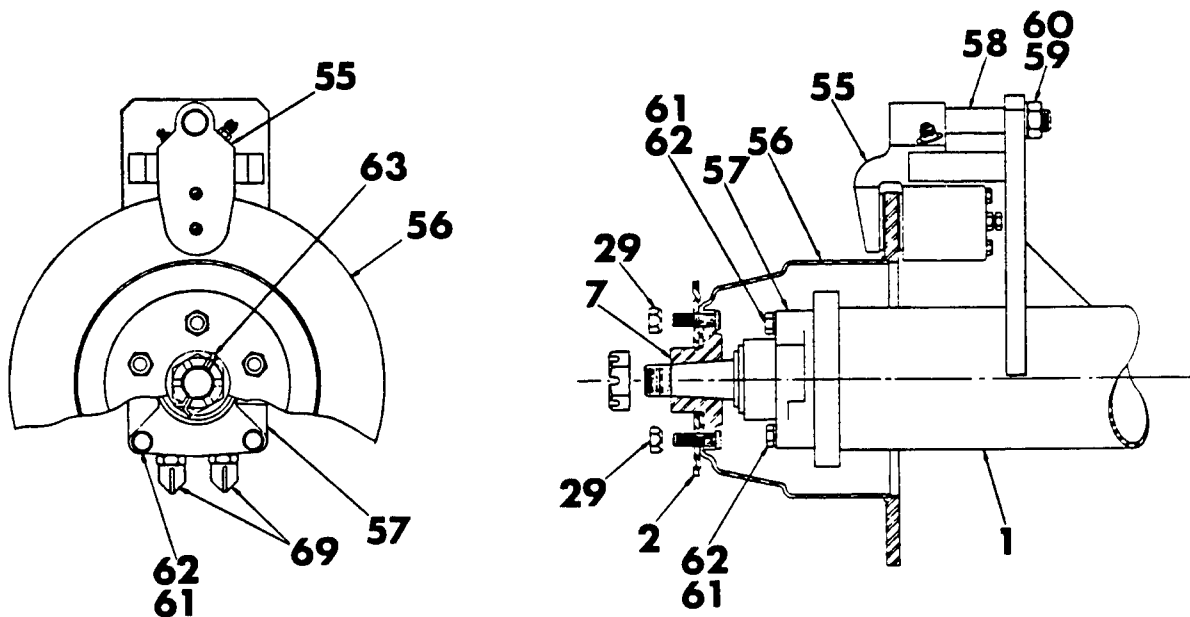
92.15

ITEM	PART NUMBER	DESCRIPTION	QTY
-63	30866	CALIPER PIVOT PIN	2
-64	64310	COTTER PIN - 1/8 X 2	4
-65	30884	FLOW VALVE	1
-66	51005	MALE CONNECTOR	1
-67	52308	STREET ELBOW	1
-68	62708	ROUND HEAD CAP SCREW - NO. 10-32 UNF X 1 3/4	2
-69	70032	LIMIT SWITCH ARM	1
-70	30856	FRONT RIM SPACER	2
-71	30883	HYDRAULIC PIPE ASSEMBLY	1





SECTION B



VIEW C

ITEM	PART NUMBER	DESCRIPTION	QTY
5L-	30859	FRAME ASSEMBLY	1
-1	30230	FRAME WELDMENT	1
-2	30783	DRIVE TIRE & RIM ASSEMBLY (SEE FIG. 18C)	2
-3	30784	STEERING TIRE & RIM ASSEMBLY (SEE FIG. 18B.1)	2
-4	64101	CLEVIS PIN	2
-5	30472	FRONT HUB ASSEMBLY (SEE FIG. 17)	2
-6	30301	TIE ROD ASSEMBLY (L.H.) (SEE FIG. 23)	1
-7	30294	DRIVE HUB	2
-8	30466	BATTERY BOX ASSEMBLY (SEE FIG. 14.2)	2
-9	30765	COMPONENT BOX ASSEMBLY (SEE FIG. 7G)	1
-10	30583	HYDRAULIC TANK ASSEMBLY (SEE FIG. 11B.1)	1
-11	8326	INVERTER BRACKET	1
-12	4006	BATTERY CHARGER	1
-13	3015	PUMP MOTOR	2
-14	882	SHOCK MOUNT	12
-15	63302	SPLIT LOCK WASHER - 5/16	24
-16	60702	HEX NUT - 5/16-18 UNC	24
-17	63401	FLAT WASHER - 1/4	20
-18	63301	SPLIT LOCK WASHER - 1/4	22
-19	60701	HEX NUT - 1/4-20 UNC	22
-20	60123	HEX HEAD CAP SCREW - 1/4-20 UNC X 3/4	20
-21	411	RUBBER MOULDING - 20 1/4	2
-22	411	RUBBER MOULDING - 13 1/4	2
-23	411	RUBBER MOULDING - 5 1/2	8
-24	16408	BULKHEAD UNION	3
-25	20373	LIMIT SWITCH	2
-26	30387	TILT SWITCH ASSEMBLY (SEE FIG. 9)	1
-27	30496	CUSHION CYLINDER ASSEMBLY (SEE FIG. 20)	2
-28	201	NEEDLE VALVE	3
-29	65156	WHEEL NUT	20
-30	64102	CLEVIS PIN - 5/8 DIA. X 3	4
-31	64307	COTTER PIN - 1/8 X 1 1/4	4

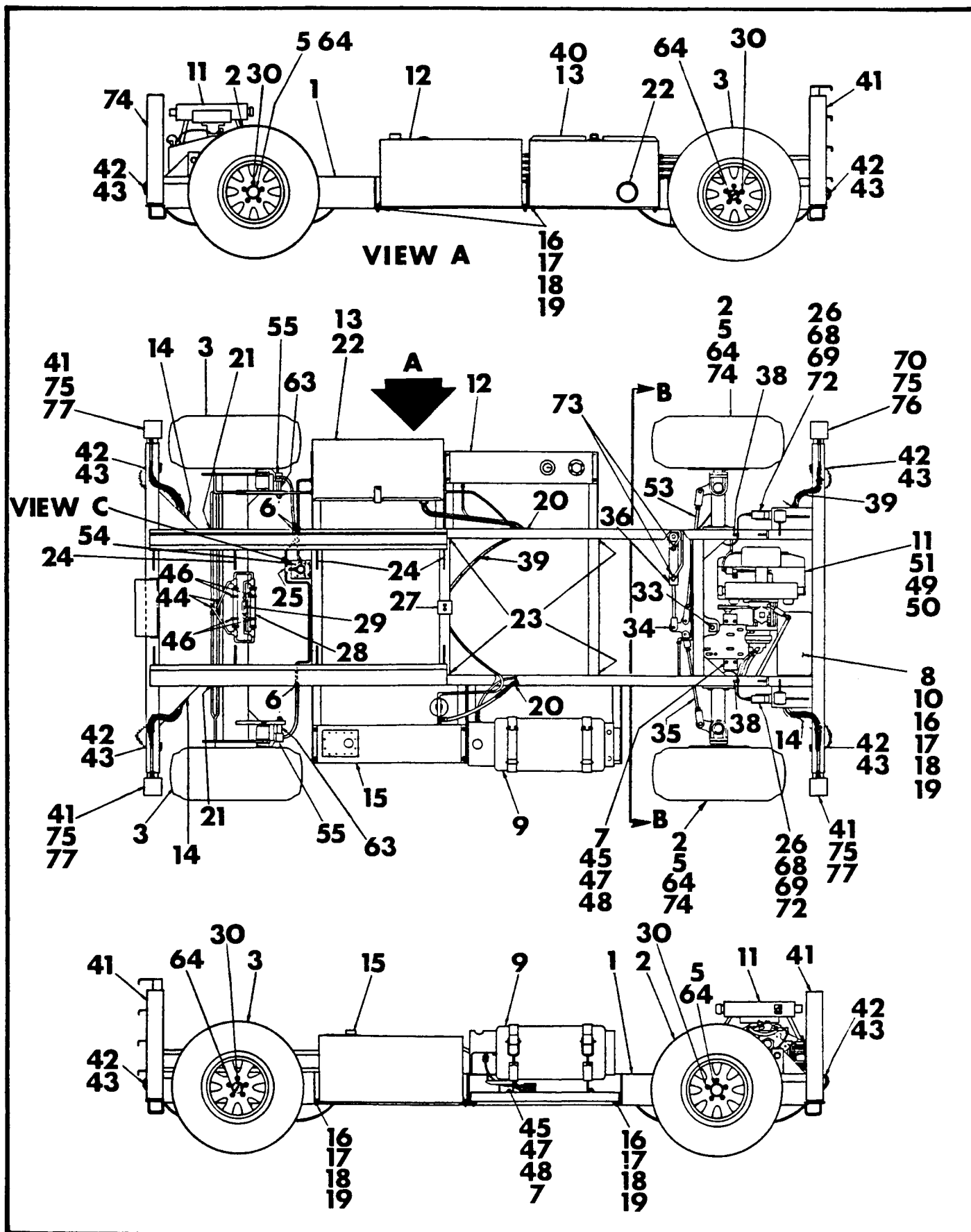
ITEM	PART NUMBER	DESCRIPTION	QTY
-32	8044	BELL CRANK ASSEMBLY (SEE FIG. 22)	1
-33	30302	TIE ROD ASSEMBLY (R.H.) (SEE FIG. 23)	1
-34	3013	STEERING CYLINDER (SEE FIG. 19A)	1
-35	16316	COTTER PIN - 3/16 X 2	2
-36	764	CLAMP	A/R
-37	255	TIE RAP	A/R
-38	30910 OR 3026	OUTRIGGER ASSEMBLY (SEE FIG. 15A)	3
-39	29-B	PIN WITH CHAIN	4
-40	2432	UNION TEE	2
-41	721	COTTER HAIR PIN	4
-42	411	RUBBER MOULDING - 12 1/2	1
-43	30915 OR 3024	OUTRIGGER ASSEMBLY WITH SWITCH (SEE FIG. 15)	1
-44	60131	HEX HEAD CAP SCREW - 1/4-20 UNC X 1	2
-45	165	RUBBER MOULDING (SUCTION HOSE) - 4	3
-46	256	TIE RAP	A/R
-47	20796	BELL CRANK PIN	1
-48	62708	ROUND HEAD CAP SCREW - 10-32 UNF X 1 3/4	4
-49	2492	UNION TEE	1
-50	30884	FLOW VALVE	1
-51	51005	MALE CONNECTOR	1
-52	52308	STREET ELBOW	1
-53	2434	MALE ELBOW	1
-54	30829	INTENSIFIER (SEE FIG. 25A)	1
-55	30860	CALIPER DISC BRAKE (SEE FIG. 25)	2
-56	30876	DRUM & DISC WELDMENT	2
-57	30243	DRIVE MOTOR	2
-58	30866	CALIPER PIVOT PIN	2
-59	60707	HEX NUT - 3/4-10 UNC	2
-60	63307	SPLIT LOCK WASHER - 3/4	2
-61	60512	CAP SCREW - 1/2-13 UNC X 2 1/2 (GR. 8)	8
-62	63305	SPLIT LOCK WASHER - 1/2	8
-63	64310	COTTER PIN - 1/8 X 2	4

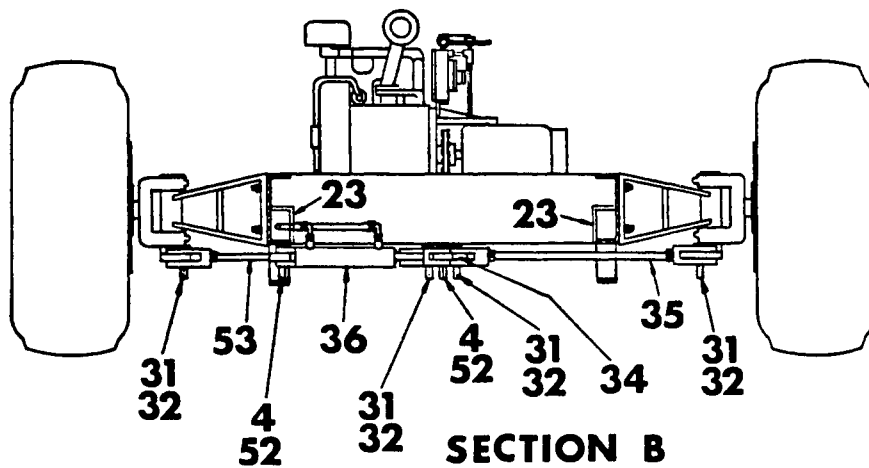
REV.1
1-83

FIGURE 5L - FRAME ASSEMBLY (RT40E)
(BEGINNING JULY 1982)

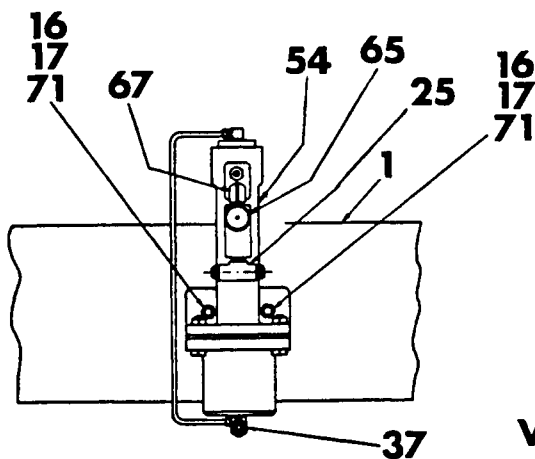
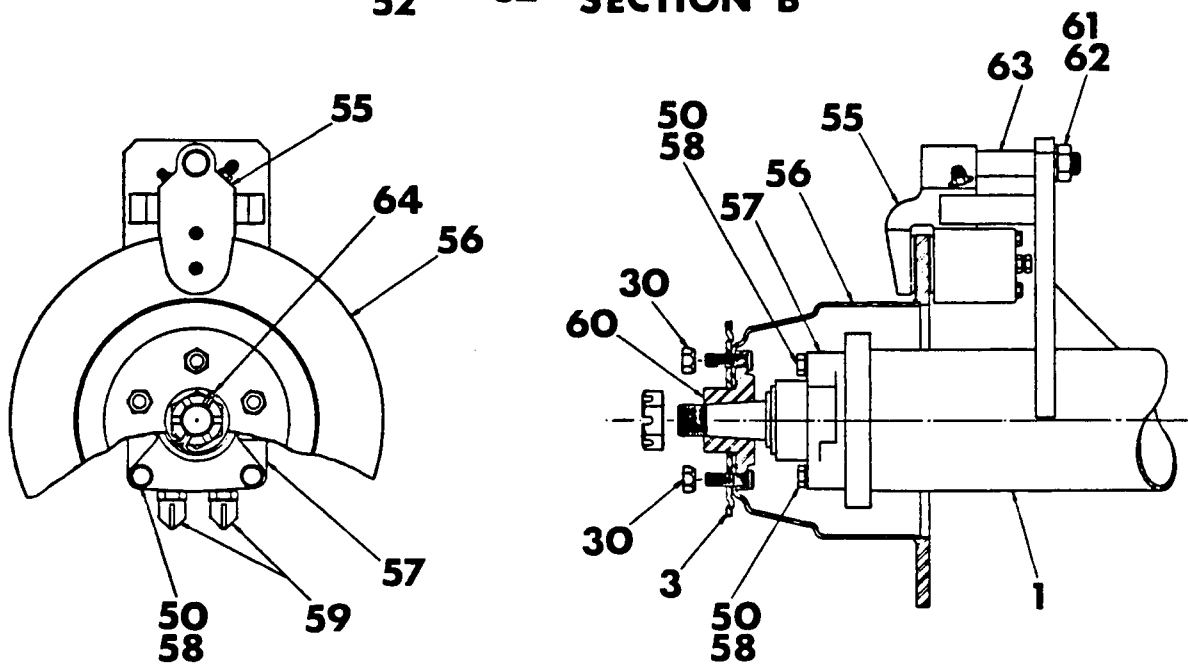
92.20

ITEM	PART NUMBER	DESCRIPTION	QTY
-64	411	RUBBER MOULDING - 18	1
-65	411	RUBBER MOULDING - 8 3/4	1
-66	22	CLAMP	4
-67	55	CLAMP	4
-68	70032	LIMIT SWITCH ARM	2
-69	16511	STRIAGHT THREAD ELBOW	4
-70	30813	FRONT RIM SPACER	2
-71	2437	MALE ELBOW (EXTRA LONG)	4
-72	2592	LONG MALE CONNECTOR (ORIFICED)	1
-73	2487	CONNECTOR	3
-74	30883	HYDRAULIC PIPE ASSEMBLY	1

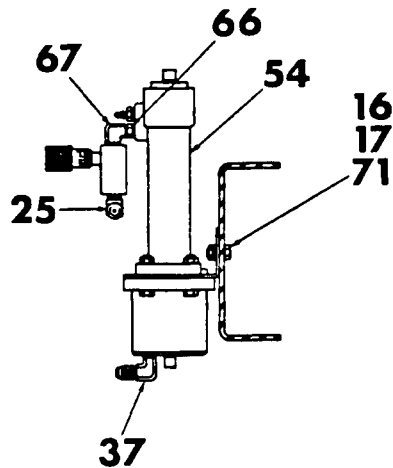




SECTION B



VIEW C



ITEM	PART NUMBER	DESCRIPTION	QTY
5M-	30858	FRAME ASSEMBLY	1
-1	30399	FRAME WELDMENT	1
-2	30784	STEERING TIRE & RIM ASSEMBLY (SEE FIG. 18B.1)	2
-3	30783	DRIVE TIRE & RIM ASSEMBLY (SEE FIG. 18C)	2
-4	64101	CLEVIS PIN - 1" DIA. X 2 5/8	2
-5	30472	FRONT HUB ASSEMBLY (SEE FIG. 17)	2
-6	16408	BULKHEAD UNION	3
-7	63402	FLAT WASHER - 5/16	8
-8	4030	BATTERY - 12 V	1
-9	486-C	PROPANE TANK ASSEMBLY	1
-10	782	BATTERY BOX	1
-11	30235	ENGINE ASSEMBLY	1
-12	8316	GAS TANK ASSEMBLY (SEE FIG. 12A)	1
-13	30722	COMPONENT BOX ASSEMBLY (SEE FIG. 7H)	1
-14	22	CLAMP	6
-15	30583	HYDRAULIC TANK ASSEMBLY (SEE FIG. 11B.1)	1
-16	63301	SPLIT LOCK WASHER - 1/4	20
-17	60701	HEX NUT - 1/4-20 UNC	20
-18	63401	FLAT WASHER - 1/4	18
-19	60123	HEX HEAD CAP SCREW - 1/4-20 UNC X 3/4	18
-20	411	RUBBER MOULDING - 20 1/4	2
-21	411	RUBBER MOULDING - 13 1/4	2
-22	411	RUBBER MOULDING - 12 1/2	1
-23	411	RUBBER MOULDING - 5 1/2	8
-24	165	RUBBER MOULDING - 4	3
-25	2492	UNION TEE	1
-26	20373	LIMIT SWITCH	2
-27	30387	SWITCH ASSEMBLY (SEE FIG. 9)	1
-28	30496	CUSHION CYLINDER ASSEMBLY (SEE FIG. 20)	2
-29	201	NEEDLE VALVE	1
-30	65156	WHEEL NUT - 1/2-20 UNF	20
-31	64102	CLEVIS PIN - 5/8 X 3	4

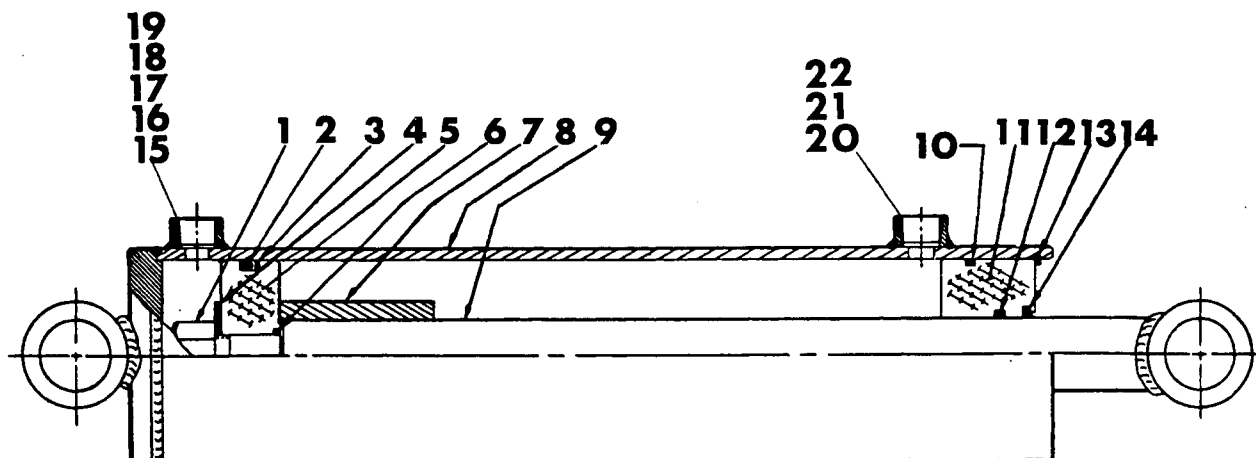
ITEM	PART NUMBER	DESCRIPTION	QTY
-32	64307	COTTER PIN - 1/8 X 1 1/4	4
-33	20796	BELL CRANK PIN	1
-34	8044	BELL CRANK ASSEMBLY (SEE FIG. 22)	1
-35	30301	TIE ROD ASSEMBLY (L.H.) (SEE FIG. 23)	1
-36	3013	STEERING CYLINDER (SEE FIG. 19A)	1
-37	2434	MALE ELBOW	1
-38	764	CLAMP	12
-39	255	TIE RAP	50
-40	256	TIE RAP	50
-41	30910 OR 3026	OUTRIGGER ASSEMBLY (SEE FIG. 15A)	3
-42	29-B	CHAIN PIN	4
-43	721	COTTER PIN	4
-44	2432	UNION TEE	2
-45	60338	HEX HEAD CAP SCREW - 5/16-18UNC X 1	8
-46	55	CLAMP	4
-47	63302	SPLIT LOCK WASHER - 5/16	8
-48	60702	HEX NUT - 5/16-18 UNC	8
-49	60308	CAP SCREW - 1/2-13 UNC X 1 1/2 (GRD.5)	4
-50	63305	SPLIT LOCK WASHER - 1/2	12
-51	60705	HEX NUT - 1/2-13 UNC	4
-52	16316	COTTER PIN - 3/16 X 2	2
-53	30302	TIE ROD ASSEMBLY (R.H.) (SEE FIG. 23)	1
-54	30829	INTENSIFIER (SEE FIG. 25A)	1
-55	30860	CALIPER DISC BRAKE (SEE FIG. 25)	2
-56	30876	DRUM & DISC WELDMENT	2
-57	30243	DRIVE MOTOR	2
-58	60512	HEX HEAD CAP SCREW - 1/2-13 UNC X 2 1/2	8
-59	16511	STRAIGHT THREAD ELBOW	4
-60	30294	DRIVE HUB	2
-61	60707	HEX NUT - 3/4-10 UNC	2
-62	63307	SPLIT LOCK WASHER - 3/4	2
-63	30866	CALIPER PIVOT PIN	2
-64	64310	COTTER PIN - 1/8 X 2	4

REV.1
1-83

FIGURE 5M - FRAME ASSEMBLY (RT40G)
(BEGINNING JULY 1982)

92.25

ITEM	PART NUMBER	DESCRIPTION	QTY
-65	30884	FLOW VALVE	1
-66	51005	MALE CONNECTOR	1
-67	52308	STREET ELBOW	1
-68	70032	LIMIT SWITCH ARM	2
-69	62708	ROUND HEAD CAP SCREW NO. 10-32 UNF X 1 3/4	4
-70	30915 OR 3024	OUTRIGGER ASSEMBLY WITH SWITCH (SEE FIG. 15)	1
-71	60131	CAP SCREW - 1/4 X 20 UNC X 1	2
-72	70032	LIMIT SWITCH ARM	2
-73	2478	MALE CONNECTOR	2
-74	30813	FRONT RIM SPACER	2
-75	2437	MALE ELBOW (EXTRA LONG)	4
-76	2592	LONG MALE CONNECTOR (ORIFICED)	1
-77	2487	CONNECTOR	3



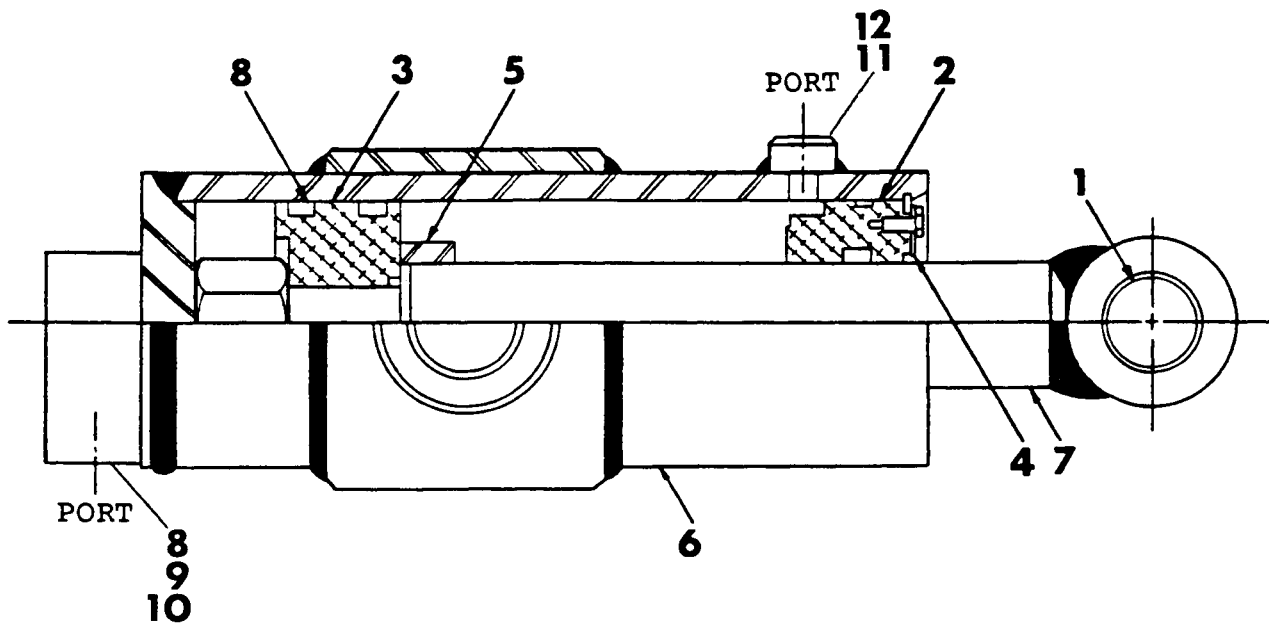
ITEM	PART NUMBER	DESCRIPTION	QTY
6-	3065	MAIN LIFT CYLINDER (HCE)	1
-1		LOCK NUT 7814NF	1
-2		O-RING 15342	1
-3		BACK-UP RING 16342	1
-4		WASHER 78USS	1
-5		PISTON 54102	1
-6		O-RING 15118	1
-7		STOP TUBE 85141	1
-8		CYLINDER HOUSING 840200	1
-9		ROD ASSEMBLY 714200	1
-10		O-RING 15240	1
-11		GLAND 44108	1
-12		O-RING 15222	1
-13		RETAINER RING 30400-3	1
-14		EXCLUDER 10017	1
-15	2450	90° STREET ELBOW	1
-16	2477	REDUCER	1
-17	2498	ADAPTER	1
-18	750	CHECK VALVE	1
-19	2475	ADAPTER	1

REV.1
1-83

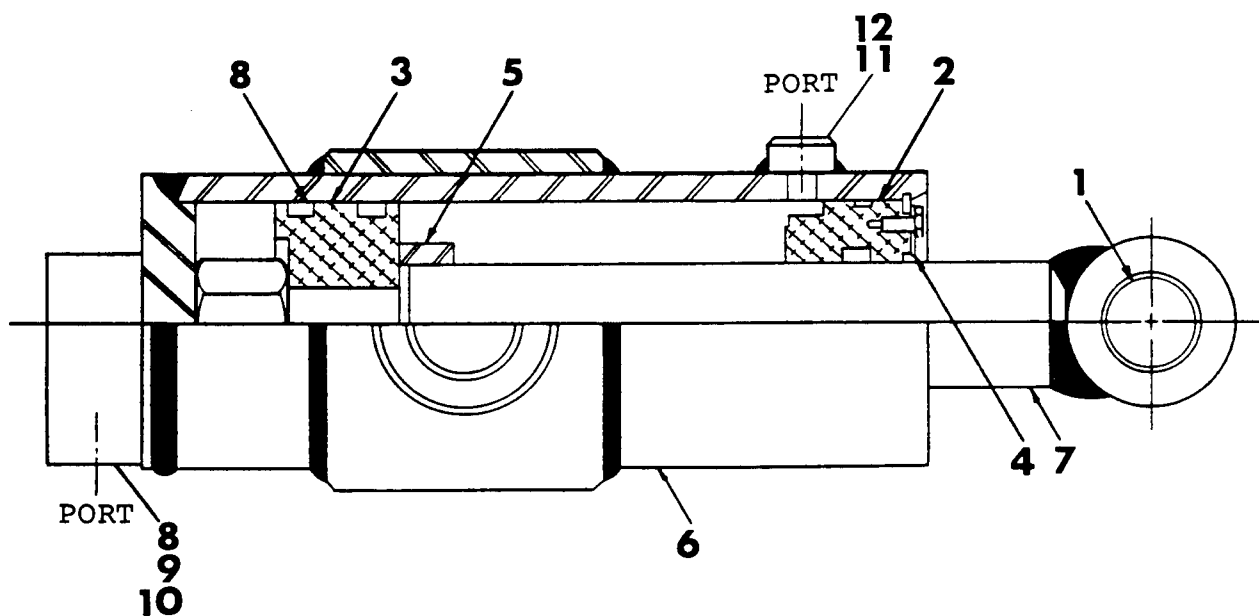
FIGURE 6 - MAIN LIFT CYLINDER (RT25G)
(BEFORE JANUARY 1981)

93.1

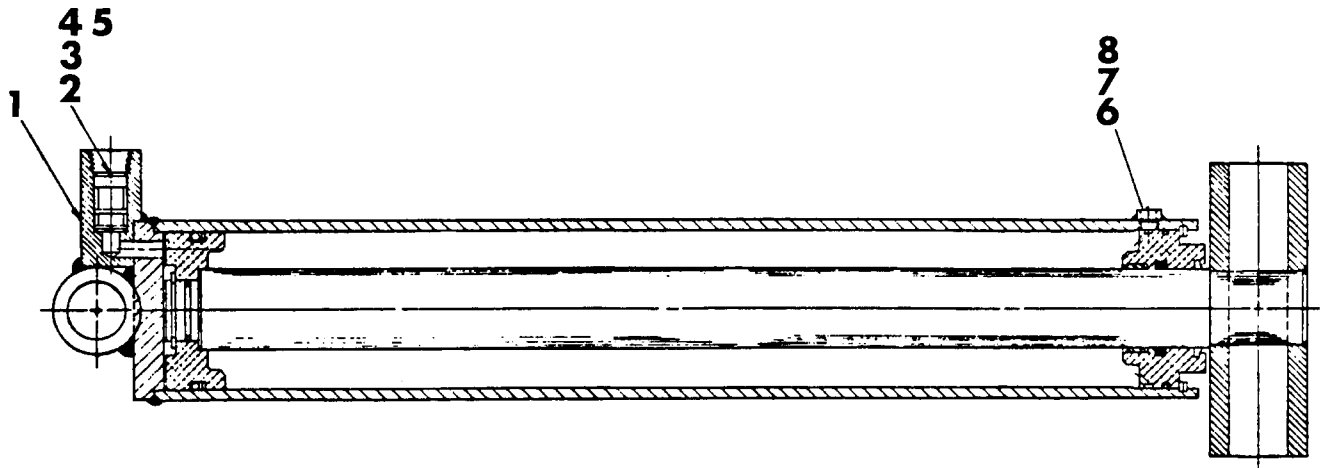
ITEM	PART NUMBER	DESCRIPTION	QTY
-20	2496	TUBE END REDUCER	1
-21	2539	TUBE NUT	1
-22	2478	90° ELBOW	1
-23	3065A	SEAL KIT (NEW PART NO. 3065-1)	1



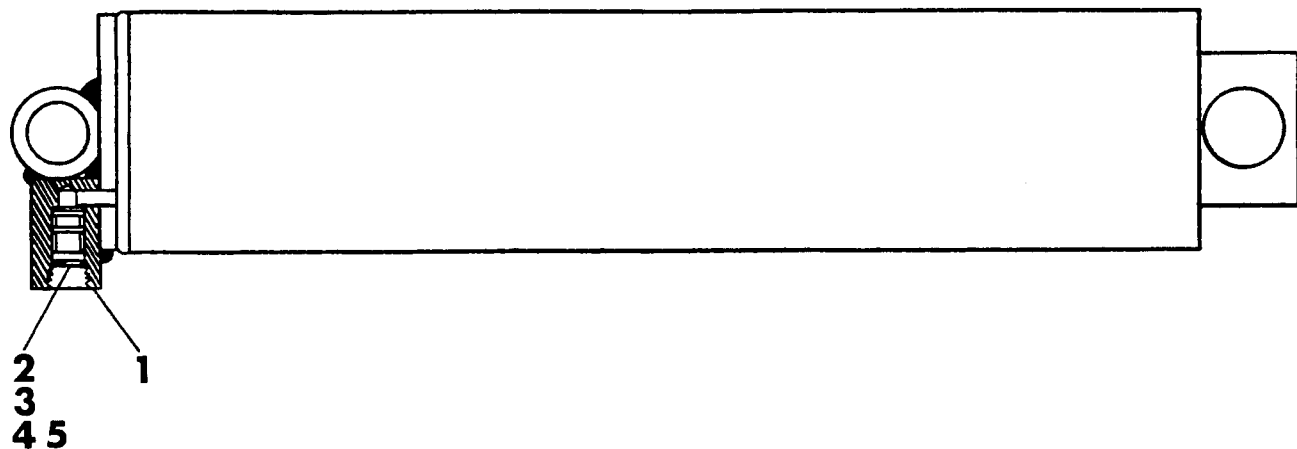
ITEM	PART NUMBER	DESCRIPTION	QTY
6A-	30284	MAIN LIFT CYLINDER-REAR (SE)	1
-1		BRONZE BUSHING - 9625	2
-2		HEAD - 13028	1
-3		PISTON - 14117	1
-4		RETAINING PLATE - 15020	1
-5		STOP TUBE - 18622	1
-6		BARREL ASSEMBLY - SE30284BA (EARLY BARRELS HAVE BOTH PORTS AT ROD END)	1
-7		ROD ASSEMBLY - SE30284RA	1
-8	3059	CHECK VALVE	1
-9	880	O-RING	1
-10	3023-1	SPACER	1
-11	2435	90° ELBOW	1
-12	2600	REDUCER	1
-13	66017	SEAL KIT - 25120	1



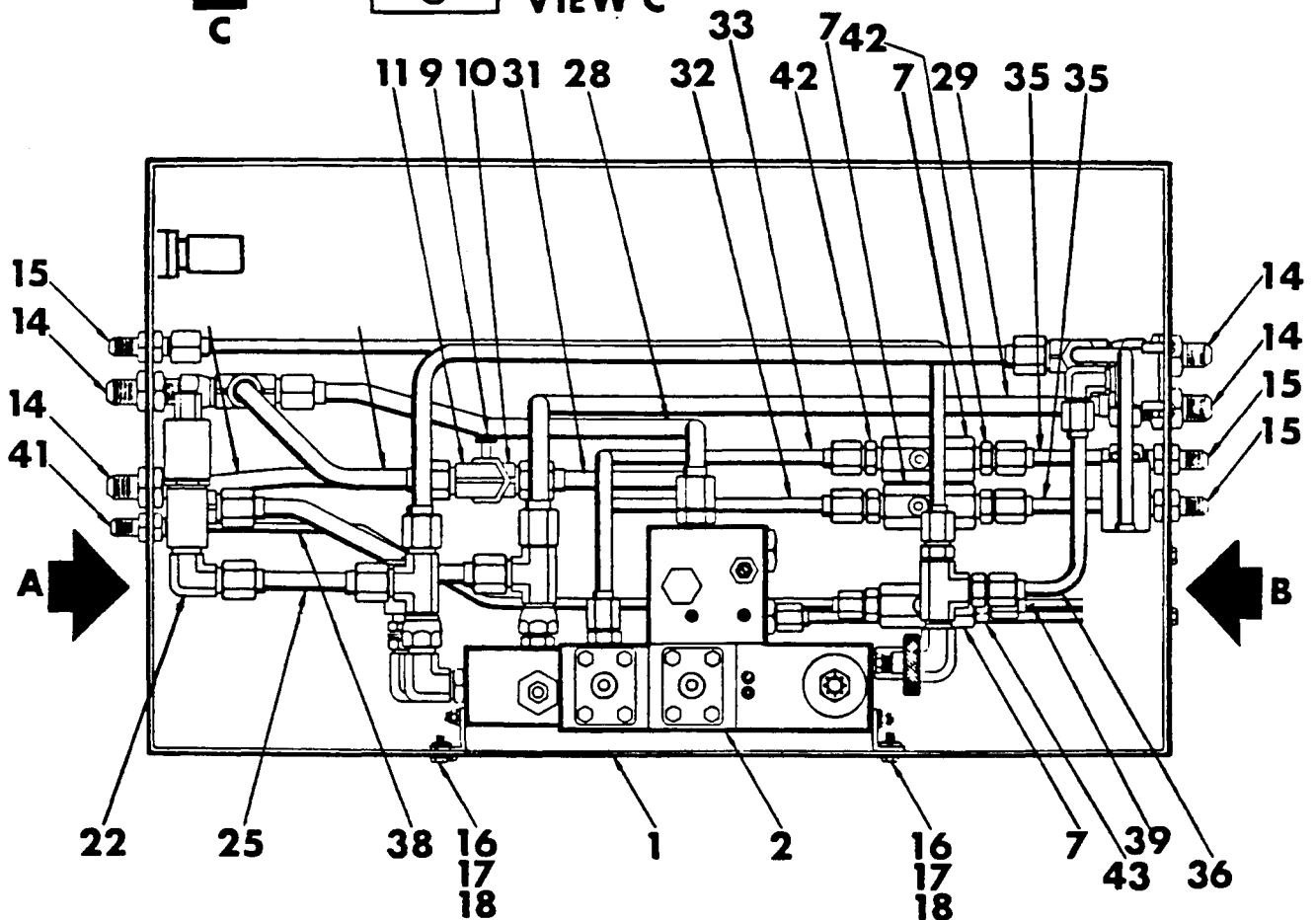
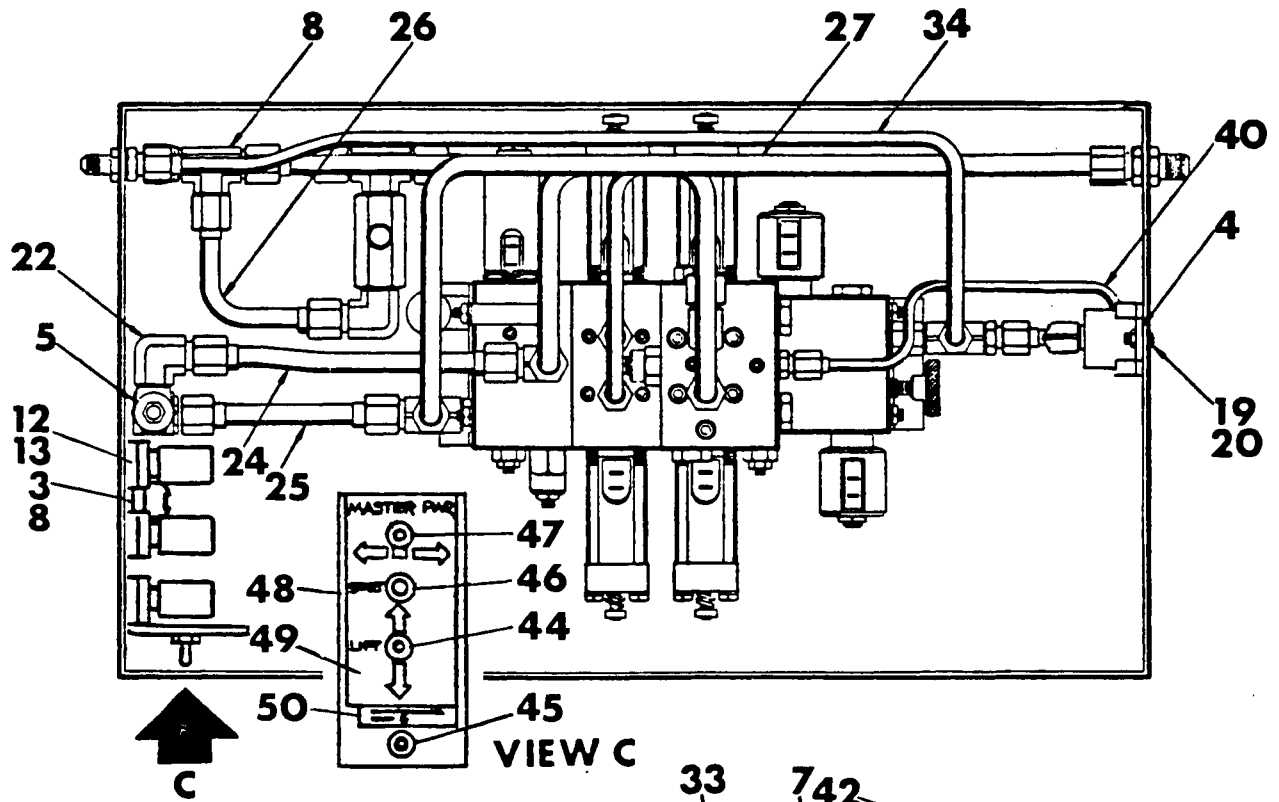
ITEM	PART NUMBER	DESCRIPTION	QTY
6B-	30283	MAIN LIFT CYLINDER-FRONT (SE)	1
-1		BRONZE BUSHING - 9625	2
-2		HEAC - 13028	1
-3		PISTON - 14117	1
-4		RETAINING PLATE - 15020	1
-5		STOP TUBE - 18622	1
-6		BARREL ASSEMBLY - SE30283BA (EARLY BARRELS HAVE BOTH PORTS AT ROD END)	1
-7		ROD ASSEMBLY - SE30283RA	1
-8	3059	CHECK VALVE	1
-9	880	O-RING	1
-10	3023-1	SPACER	1
-11	2435	90° ELBOW	1
-12	2600	REDUCER	1
-13	66017	SEAL KIT - 25120	1

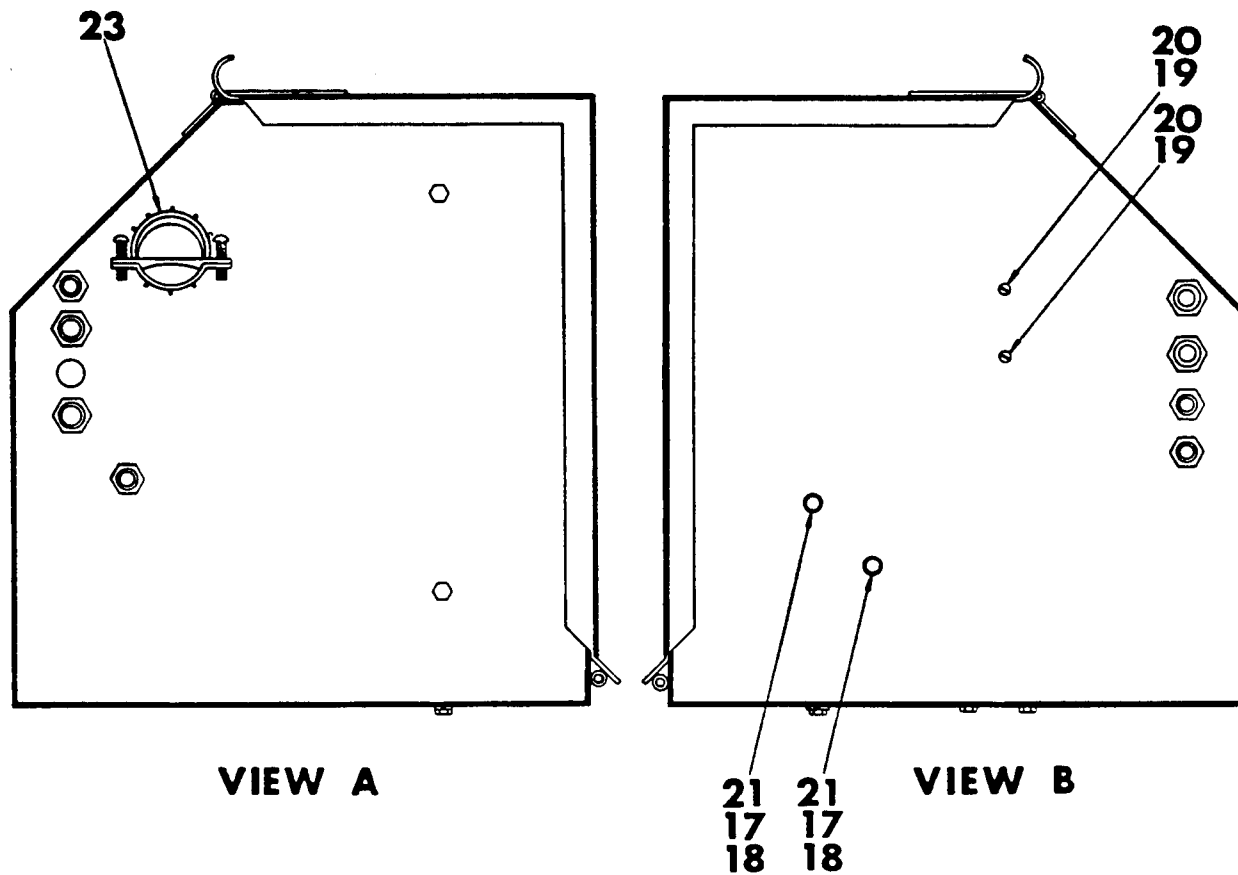


ITEM	PART NUMBER	DESCRIPTION	QTY
6C-	3008	MAIN LIFT RAM CYLINDER (HCE)	1
-1	3023	HOUSING - CHECK VALVE	1
-2	3059	VALVE CARTRIDGE - DK-500	1
-3	880	O-RING A-017 (B46)	1
-4	3023-1	SPACER	1
-5	780	ADAPTER	1
-6	2478	90° ELBOW	1
-7	2496	TUBE END ADAPTER	1
-8	2539	TUBE NUT	1
-9	3008-A	SEAL KIT (HCE)	1



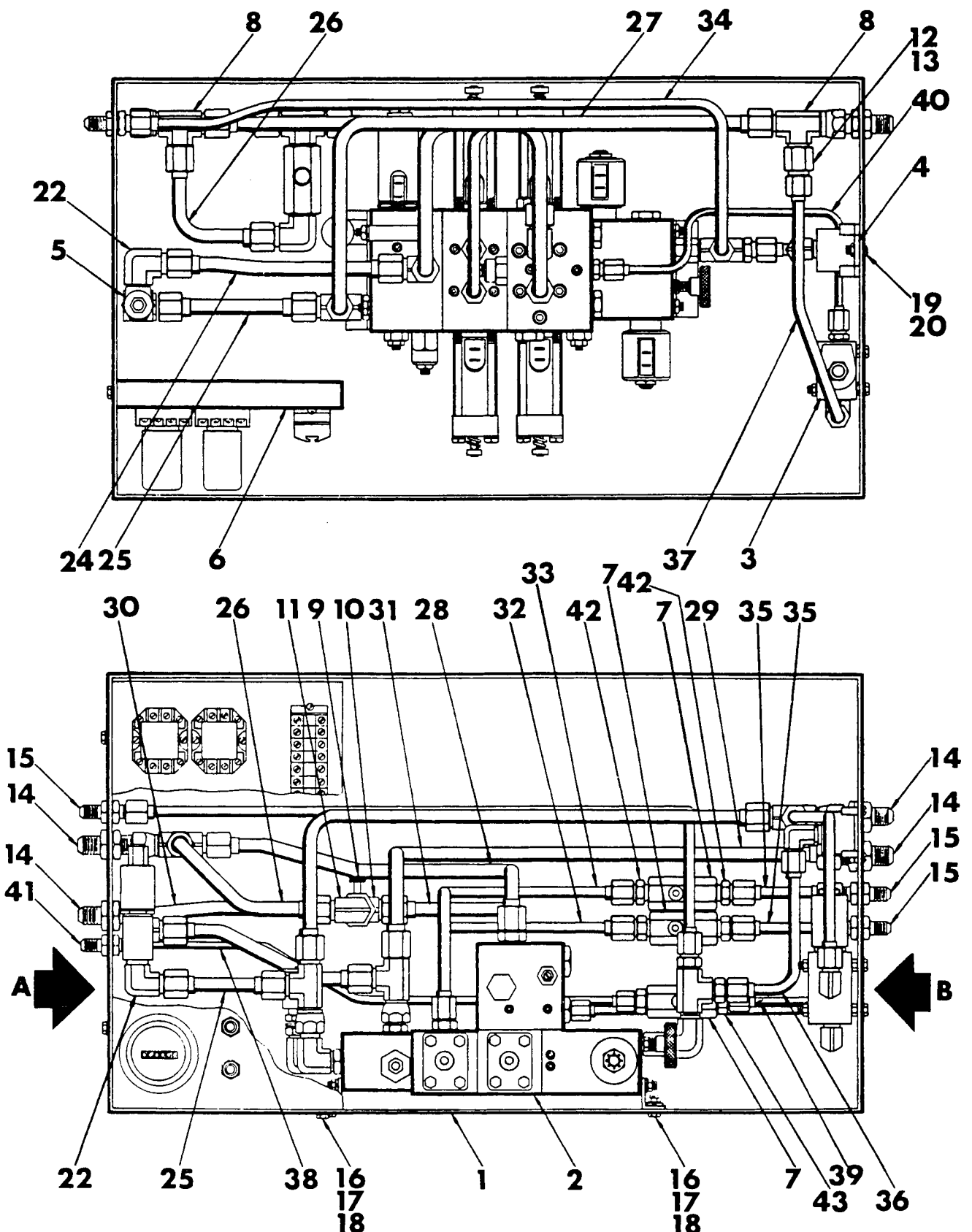
ITEM	PART NUMBER	DESCRIPTION	QTY
6D-	3006	MAIN LIFT CYLINDER (HCE)	1
	30809	MAIN LIFT CYLINDER (BEGINNING NOV 1981)	1
-1	3023	HOUSING - CHECK VALVE (WELDED ON CYL.)	1
-2	3059	VALVE CARTRIDGE - DK-500	1
-3	880	O-RING A-017 (B46)	1
-4	3023-1	SPACER	1
-5	780	ADAPTER	1
-6	3006-A	SEAL KIT FOR 3006 CYLINDER	1
-7	66258	SEAL KIT FOR 30809 CYLINDER	1

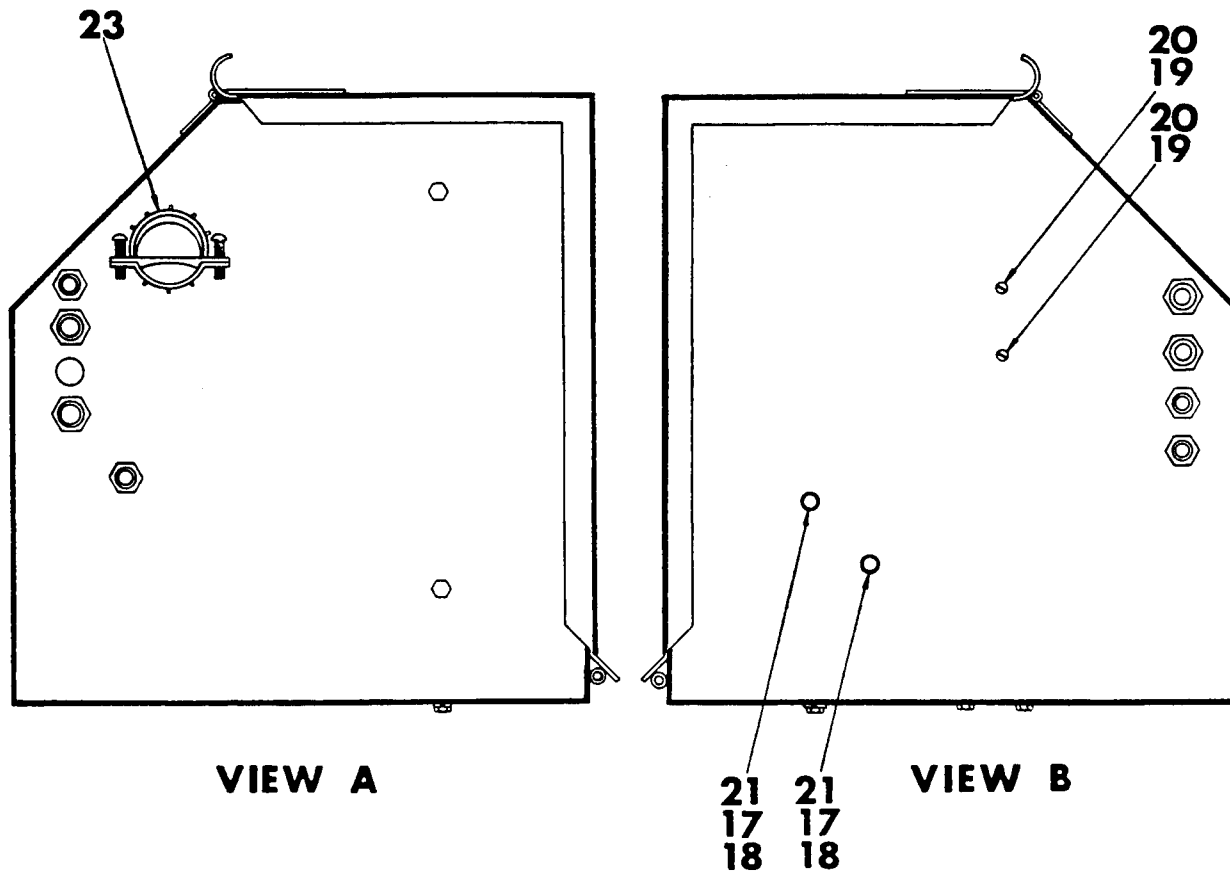




ITEM	PART NUMBER	DESCRIPTION	QTY
7 -	30481	COMPONENT BOX ASSEMBLY	1
-1	30288	COMPONENT BOX WELDMENT	1
-2	30714	MANIFOLD ASSEMBLY (SEE FIG.8)	1
-3	4027	TERMINAL BLOCK	20
-4	30495	PRESSURE LIMIT SWITCH ASSEMBLY (SEE FIG.10)	1
-5	410	FLUID CONTROL VALVE	1
-6	30770	COMPONENT BOX PANEL ASSEMBLY (SEE FIG.7K)	1
-7	3037	FLOW VALVE	3
-8	117A	TERMINAL BLOCK END	1
-9	201	CHECK VALVE	1
-10	2431	MALE BRANCH TEE	1
-11	2456	ELBOW	1
-12	784A	RELAY BASE	1
-13	4032	6 VOLT RELAY	1
-14	2484	BULKHEAD UNION	4
-15	2486	BULKHEAD UNION	3
-16	60150	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $\frac{1}{2}$	7
-17	63301	LOCK WASHER - $\frac{1}{4}$	9
-18	60701	HEX NUT - $\frac{1}{4}$ -20 UNC	
-19	62612	ROUND HEAD CAPSCREW - NO.8 - 32 UNC X $\frac{1}{2}$	2
-20	61502	HEX NUT - NO.8 - 32 UNC	20
-21	60352	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $2\frac{1}{2}$	2
-22	2454	90° ELBOW	2
-23	213	ROMEX CONNECTOR	1
-24		TUBE ASSEMBLY - $\frac{1}{2}$	1
-25		TUBE ASSEMBLY - $\frac{1}{2}$	1
-26		TUBE ASSEMBLY - $\frac{1}{2}$	1
-27		TUBE ASSEMBLY - $\frac{1}{2}$	1
-28		TUBE ASSEMBLY - $\frac{1}{2}$	1
-29		TUBE ASSEMBLY - $\frac{1}{2}$	1
-30		TUBE ASSEMBLY - $\frac{1}{2}$	1
-31		TUBE ASSEMBLY - $\frac{1}{2}$	1
-32		TUBE ASSEMBLY - 3/8	1

ITEM	PART NUMBER	DESCRIPTION	QTY
-33		TUBE ASSEMBLY - 3/8	1
-34		TUBE ASSEMBLY - 3/8	1
-35		TUBE ASSEMBLY - 3/8	2
-36		TUBE ASSEMBLY - 3/8	1
-37		TUBE ASSEMBLY - 3/8	1
-38		TUBE ASSEMBLY - 1/4	1
-39		TUBE ASSEMBLY - 1/4	1
-40		TUBE ASSEMBLY - 1/4	1
-41	16408	BULKHEAD UNION	1
-42	2476	CONNECTOR	4
-43	2415	FITTING	2
-44	4021	MOMENTARY SWITCH	1
-45	4019	ON/OFF SWITCH (3 WAY)	1
-46	4020	STARTER SWITCH	1
-47	4019	ON/OFF SWITCH (3 WAY)	1
-48	2204	SWITCH MOUNTING PLATE	1
-49	2010	DECAL - MASTER POWER	1
-50	2035	DECAL - FUEL SELECTOR	1





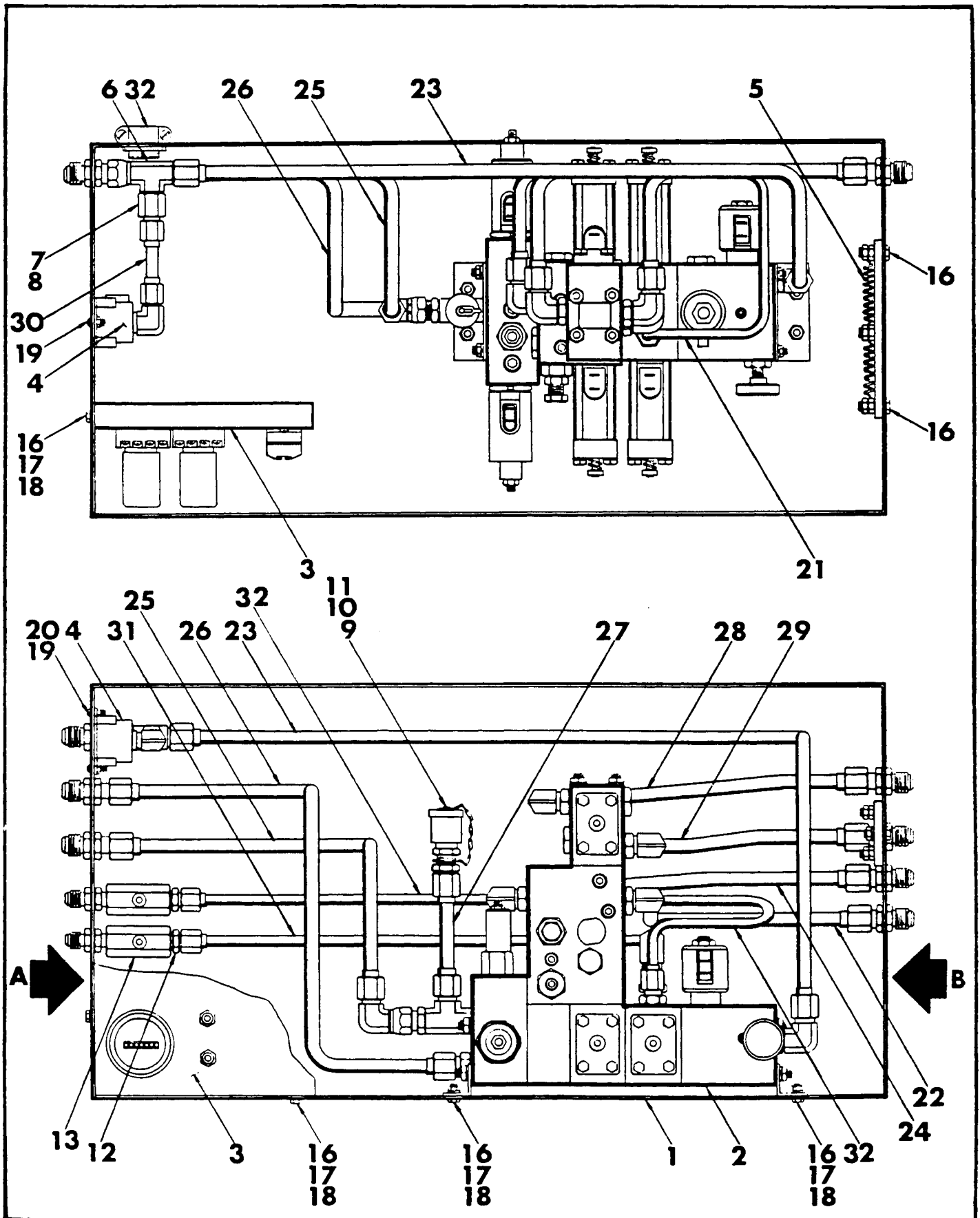
ITEM	PART NUMBER	DESCRIPTION	QTY
7A-	30725	COMPONENT BOX ASSEMBLY	1
-1	30288	COMPONENT BOX WELDMENT	1
-2	30714	MANIFOLD ASSEMBLY (SEE FIG.8)	1
-3	30330	SOLENOID VALVE ASSEMBLY	1
-4	30495	PRESSURE LIMIT SWITCH ASSEMBLY (SEE FIG.10)	1
-5	410	FLUID CONTROL VALVE	1
-6	30770	COMPONENT BOX PANEL ASSEMBLY (SEE FIG.7K)	1
-7	20370	NEEDLE VALVE	3
-8	2428	SWIVEL NUT RUN TEE	2
-9	201	CHECK VALVE	1
-10	2431	MALE BRANCH TEE	1
-11	2456	ELBOW	1
-12	2501	"B" NUT	1
-13	2578	TUBE END REDUCER	1
-14	2484	BULKHEAD UNION	4
-15	2486	BULKHEAD UNION	3
-16	60150	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $\frac{1}{2}$	7
-17	63301	LOCK WASHER - $\frac{1}{4}$	9
-18	60701	HEX NUT - $\frac{1}{4}$ -20 UNC	
-19	62612	ROUND HEAD CAPSCREW - NO.8 - 32 UNC X $\frac{1}{2}$	2
-20	61502	HEX NUT - NO.8 - 32 UNC	20
-21	60352	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $2\frac{1}{2}$	2
-22	2454	90° ELBOW	2
-23	213	ROMEX CONNECTOR	1
-24		TUBE ASSEMBLY - $\frac{1}{2}$	1
-25		TUBE ASSEMBLY - $\frac{1}{2}$	1
-26		TUBE ASSEMBLY - $\frac{1}{2}$	1
-27		TUBE ASSEMBLY - $\frac{1}{2}$	1
-28		TUBE ASSEMBLY - $\frac{1}{2}$	1
-29		TUBE ASSEMBLY - $\frac{1}{2}$	1
-30		TUBE ASSEMBLY - $\frac{1}{2}$	1
-31		TUBE ASSEMBLY - $\frac{1}{2}$	1
-32		TUBE ASSEMBLY - 3/8	1

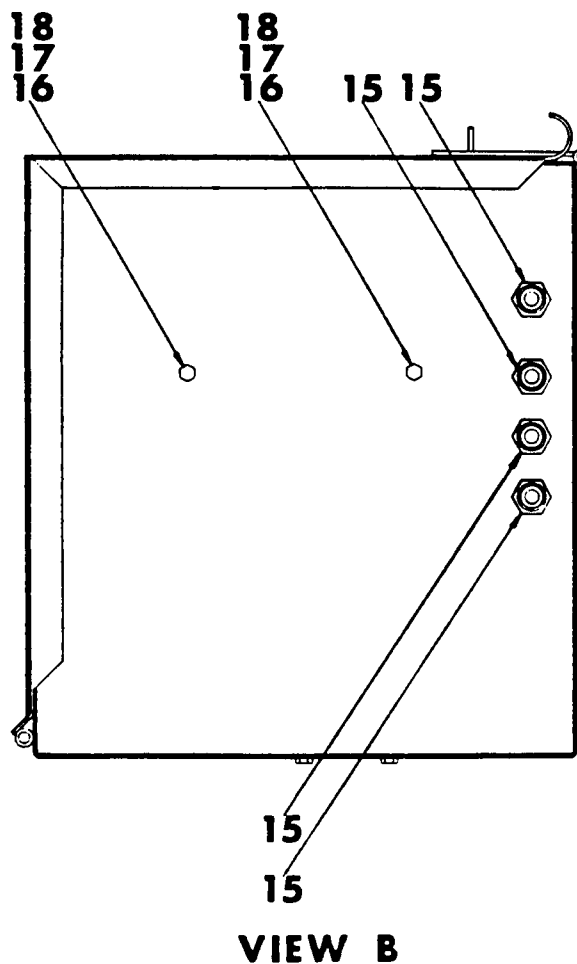
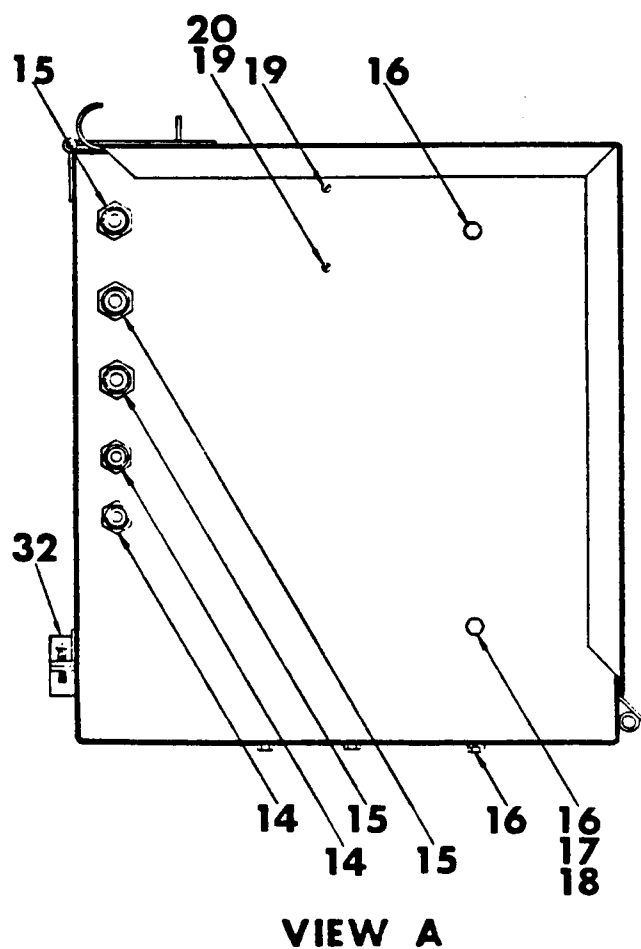
REV.1
1-83

FIGURE 7A - COMPONENT BOX ASSEMBLY
(RT25G) (BEGINNING MARCH 1980)

105

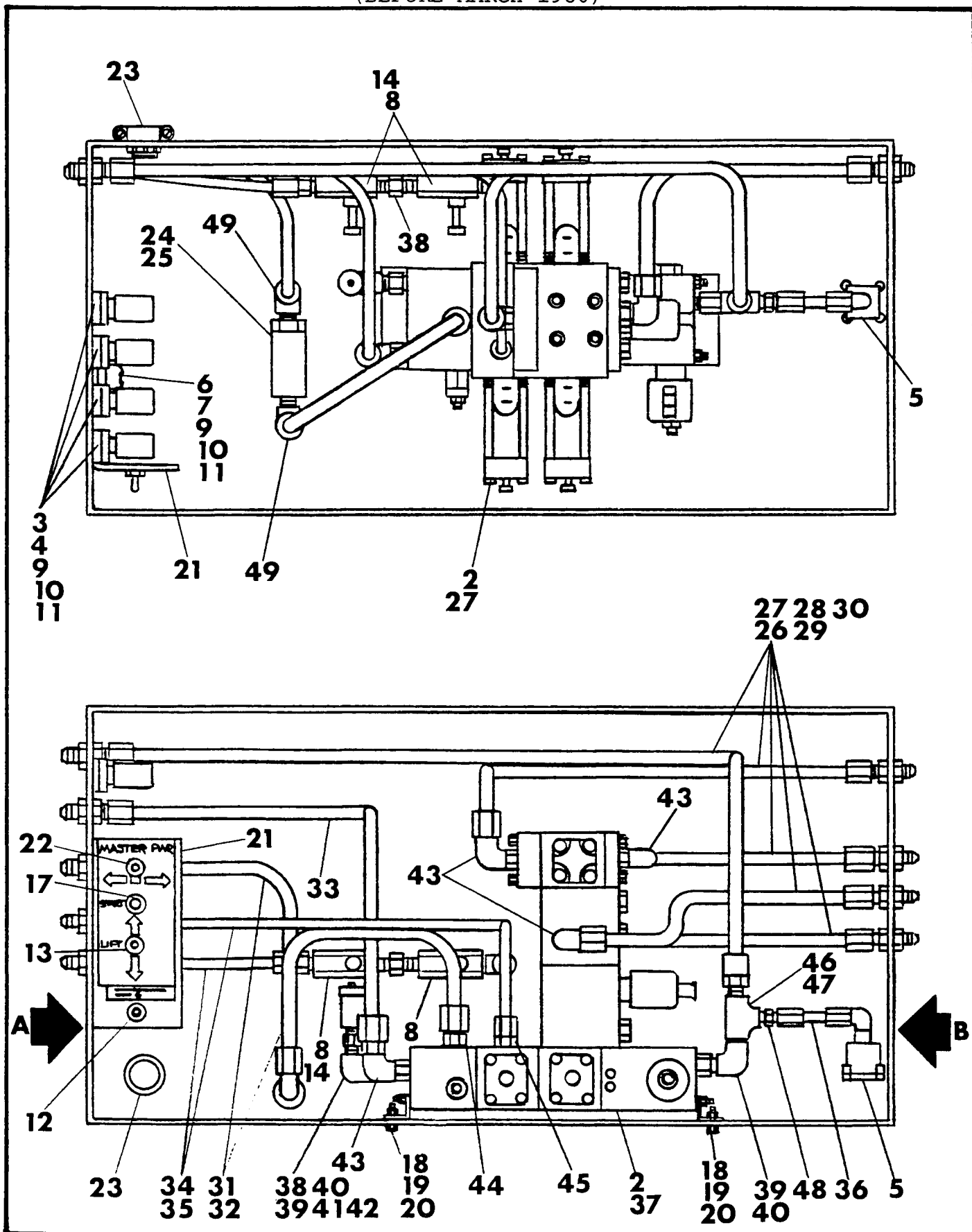
ITEM	PART NUMBER	DESCRIPTION	QTY
-33		TUBE ASSEMBLY - 3/8	1
-34		TUBE ASSEMBLY - 3/8	1
-35		TUBE ASSEMBLY - 3/8	2
-36		TUBE ASSEMBLY - 3/8	1
-37		TUBE ASSEMBLY - 3/8	1
-38		TUBE ASSEMBLY - 1/4	1
-39		TUBE ASSEMBLY - 1/4	1
-40		TUBE ASSEMBLY - 1/4	1
-41	16408	BULKHEAD UNION	1
-42	2476	CONNECTOR	4
-43	2415	FITTING	2



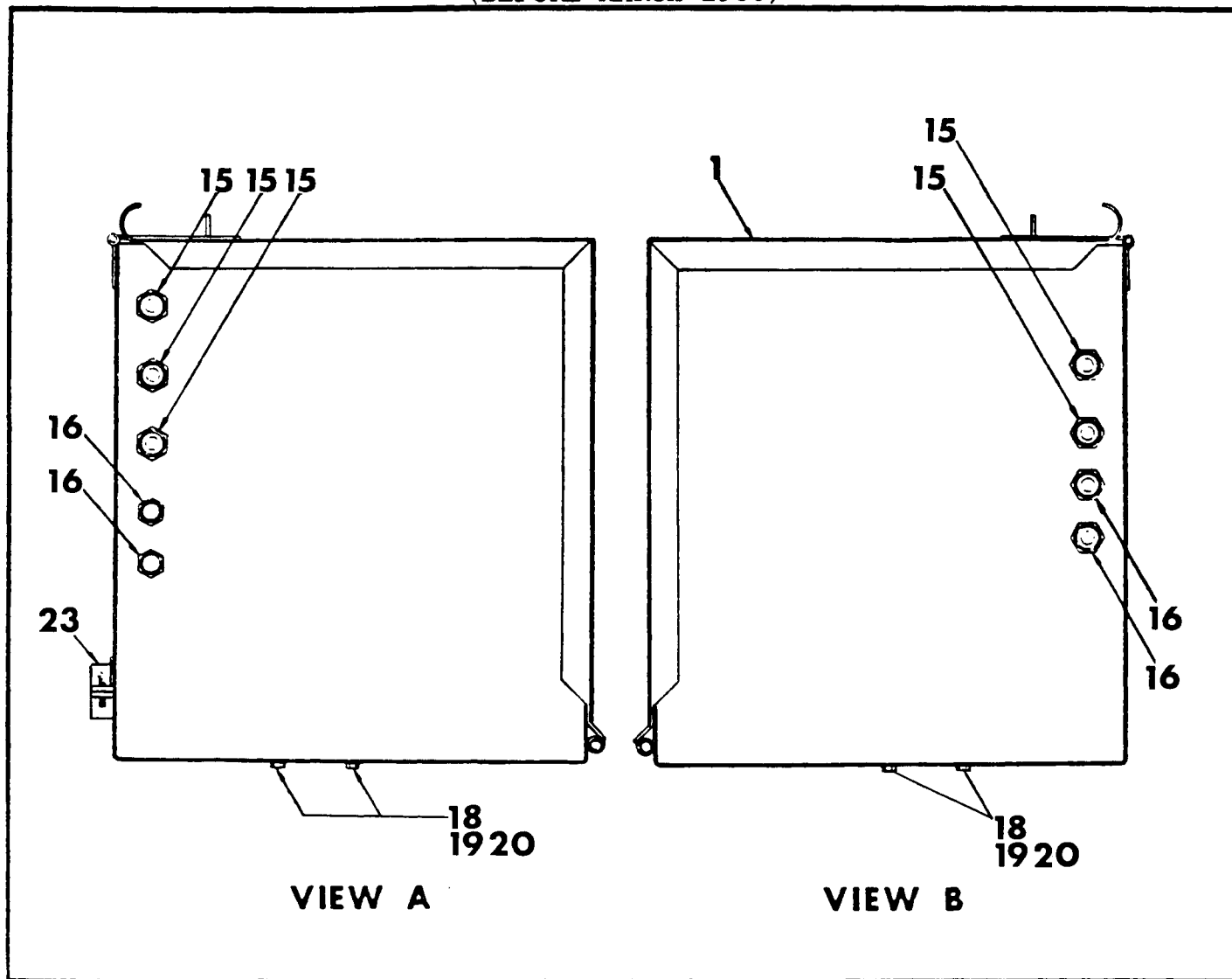


ITEM	PART NUMBER	DESCRIPTION	QTY
7B	30766	COMPONENT BOX ASSEMBLY	1
-1	8315	COMPONENT BOX	1
-2	30713	MANIFOLD ASSEMBLY (SEE FIG.8B)	1
-3	30652	PANEL ASSEMBLY (SEE FIG.7J)	1
-4	30495	PRESSURE LIMIT SWITCH ASSEMBLY (SEE FIG.10)	1
-5	4050	BRAKE RESISTOR	1
-6	2428	SWIVEL NUT RUN TEE	1
-7	2501	NUT	1
-8	2578	TUBE END REDUCER	1
-9	845	CAP	1
-10	2527	QUICK DISCONNECT	1
-11	2508	MALE FITTING	1
-12	2476	FITTING	2
-13	20370	NEEDLE VALVE	2
-14	50207	BULKHEAD UNION	2
-15	2484	BULKHEAD UNION	7
-16	60123	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $\frac{3}{4}$	9
-17	63301	LOCK WASHER - $\frac{1}{2}$	9
-18	60701	NUT - $\frac{1}{4}$ -20 UNC	9
-19	62612	ROUND HEAD CAPSCREW - NO.8 - 32 UNC X $\frac{1}{2}$	2
-20	61502	NUT - NO.8 - 32 UNC	2
-21		TUBE ASSEMBLY - $\frac{3}{8}$	1
-22		TUBE ASSEMBLY - $\frac{1}{2}$	1
-23		TUBE ASSEMBLY - $\frac{1}{2}$	1
-24		TUBE ASSEMBLY - $\frac{1}{2}$	1
-25		TUBE ASSEMBLY - $\frac{1}{2}$	1
-26		TUBE ASSEMBLY - $\frac{1}{2}$	1
-27		TUBE ASSEMBLY - $\frac{1}{2}$	1
-28		TUBE ASSEMBLY - $\frac{1}{2}$	1
-29		TUBE ASSEMBLY - $\frac{1}{2}$	1
-30		TUBE ASSEMBLY - $\frac{3}{8}$	1
-31		TUBE ASSEMBLY - $\frac{3}{8}$	1
-32	213	ROMEX CONNECTOR	1

(BEFORE MARCH 1980)



(BEFORE MARCH 1980)



REV.1
1-83

FIGURE 7B.1 - COMPONENT BOX ASSEMBLY (RT26E & G)
(RT31E & G) (SRT31G) (RT40E & G)

108.3

(BEFORE MARCH 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
7B.1-		COMPONENT BOX ASSEMBLY	1
-1	8315	COMPONENT BOX	1
-2	3021 & 9390	MANIFOLD PACKAGE (SEE FIG. 8F.4 & 8F.5)	1
-3	784A	RELAY BASE	4
-4	4032	RELAY	4
-5	30495	PRESSURE LIMIT SWITCH ASSEMBLY (SEE FIG. 10)	1
-6	117A	TERMINAL BLOCK END	1
-7	4027	TERMINAL BLOCK	16
-8	3037	FLOW VALVE	2
-9	61502	HEX NUT	10
-10	62623	ROUND HEAD CAP SCREW	10
-11	63312	LOCK WASHER	10
-12	70015	FUEL SELECTOR SWITCH	1
-13	4021	MOMENTARY SWITCH	1
-14	2476	CONNECTOR	2
-15	2484	BULKHEAD UNION	5
-16	2486	BULKHEAD UNION	4
-17	4020	STARTER SWITCH	1
-18	60123	HEX HEAD CAP SCREW - 1/2 X 20 X 3/4	6
-19	63301	LOCK WASHER - 1/4	6
-20	60701	HEX NUT - 1/4 X 20	6
-21	2204	SWITCH MOUNT PLATE	1
-22	4019	SELECTOR SWITCH	1
-23	213	ROMEX CONNECTOR	1
-24	3007	IN LINE FILTER - 1/2	1
-25	3007-1	ELEMENT FOR 3007 FILTER	1
-26		TUBE ASSEMBLY - 1/2	1
-27		TUBE ASSEMBLY - 1/2	1
-28		TUBE ASSEMBLY - 1/2	1
-29		TUBE ASSEMBLY - 1/2	1
-30		TUBE ASSEMBLY - 1/2	1
-31		TUBE ASSEMBLY - 1/2	1

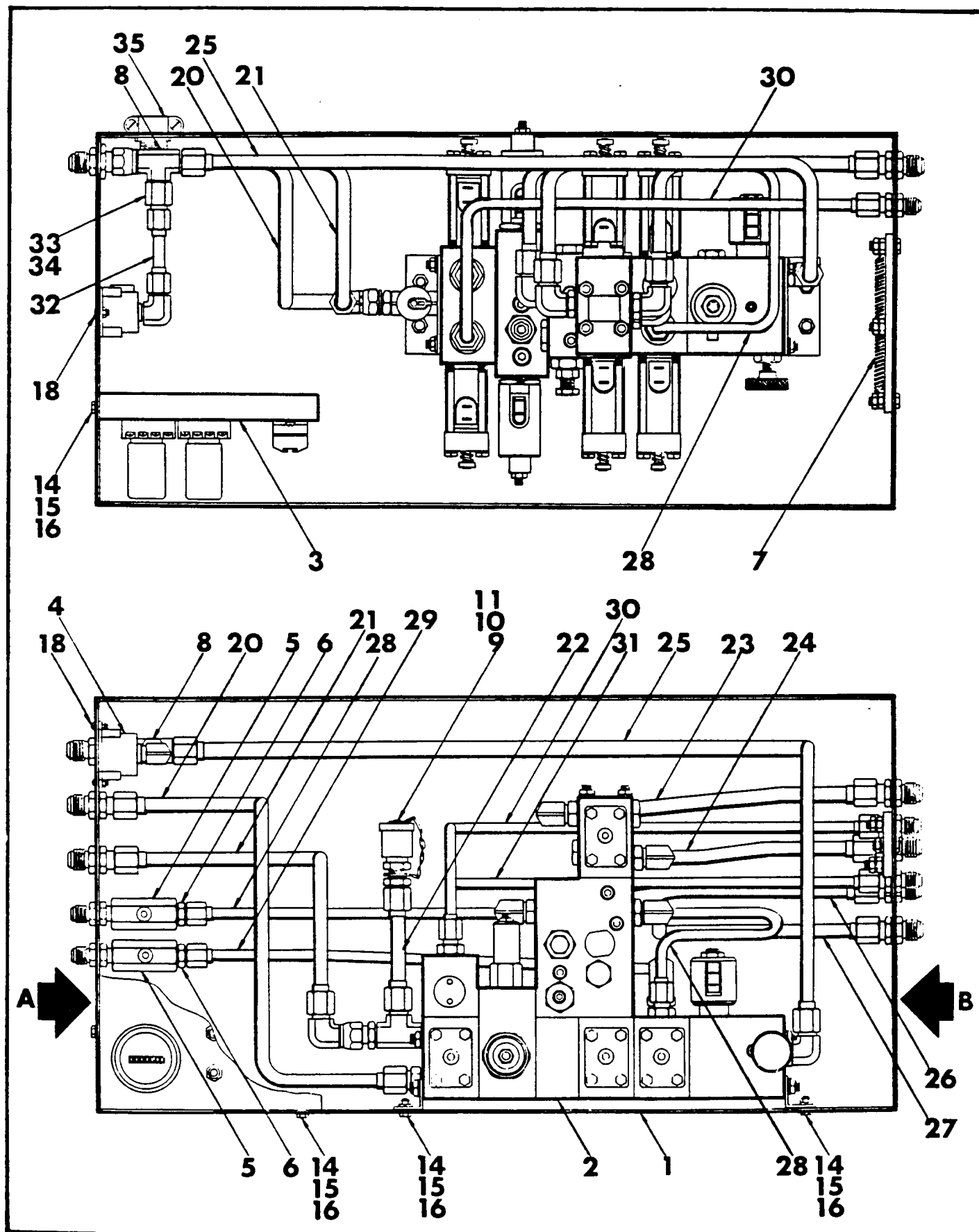
REV.1
1-83

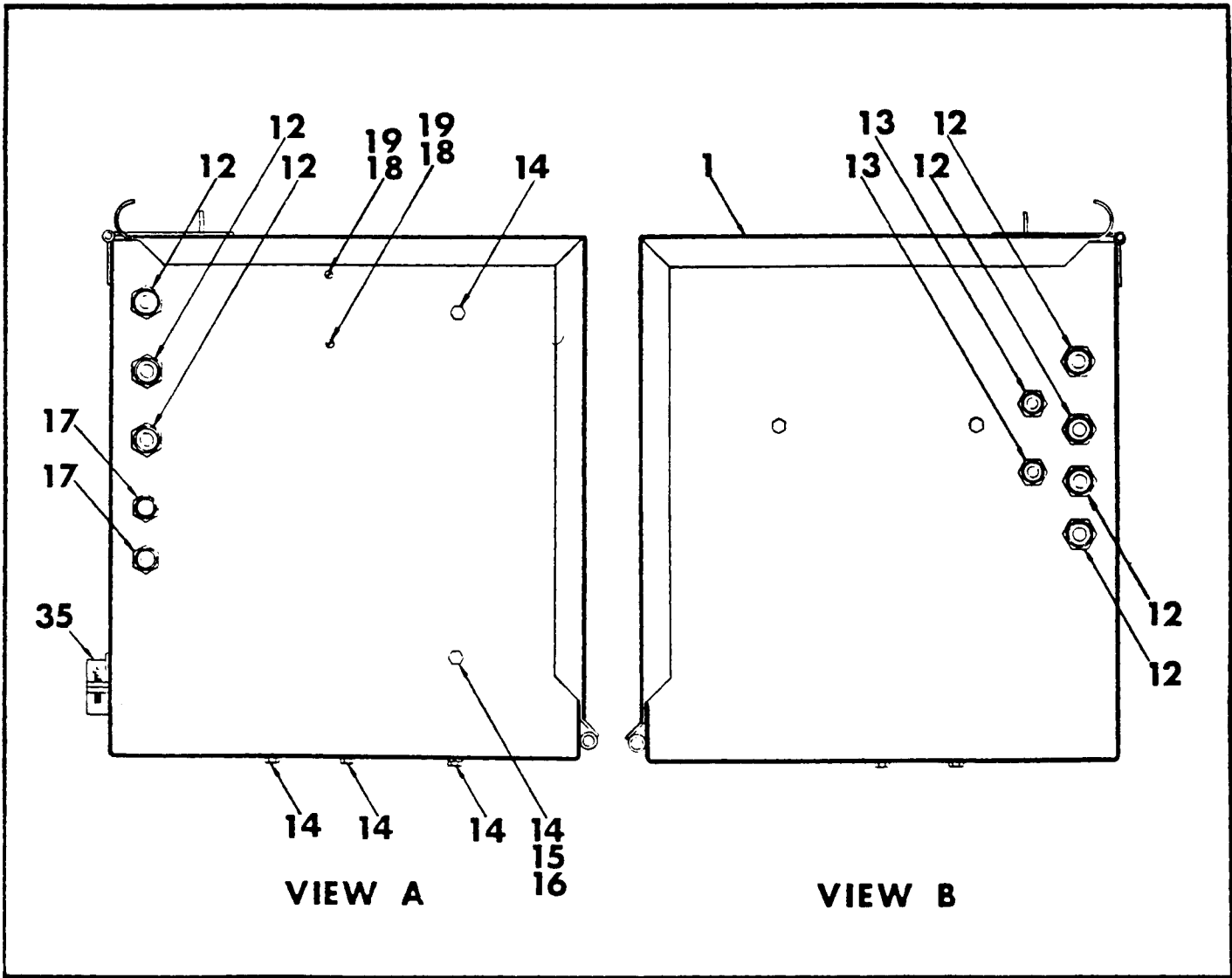
FIGURE 7B.1 - COMPONENT BOX ASSEMBLY (RT26E & G)
(RT31E & G) (SRT31G) (RT40E & G)

108.4

(BEFORE MARCH 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
-32		TUBE ASSEMBLY - 1/2	1
-33		TUBE ASSEMBLY - 3/8	1
-34		TUBE ASSEMBLY - 3/8	1
-35		TUBE ASSEMBLY - 3/8	1
-36		TUBE ASSEMBLY - 1/4	1
-37	3019-3043	MANIFOLD PACKAGE FOR SRT31G (SEE FIG. 8F.3)	1
-38	2475	PIPE NIPPLE	2
-39	2498	FEMALE PIPE ADAPTOR	1
-40	2450	STREET ELBOW	2
-41	2527	MALE QUICK DISCONNECT	1
-42	845	CAP	1
-43	2438	STRAIGHT THREAD ELBOW	5
-44	2509	STRAIGHT THREAD CONNECTOR	1
-45	2474	STRAIGHT THREAD CONNECTOR	2
-46	2420	STREET TEE	1
-47	2508	MALE CONNECTOR	1
-48	2476	MALE CONNECTOR	1
-49	2451	STREET ELBOW	2





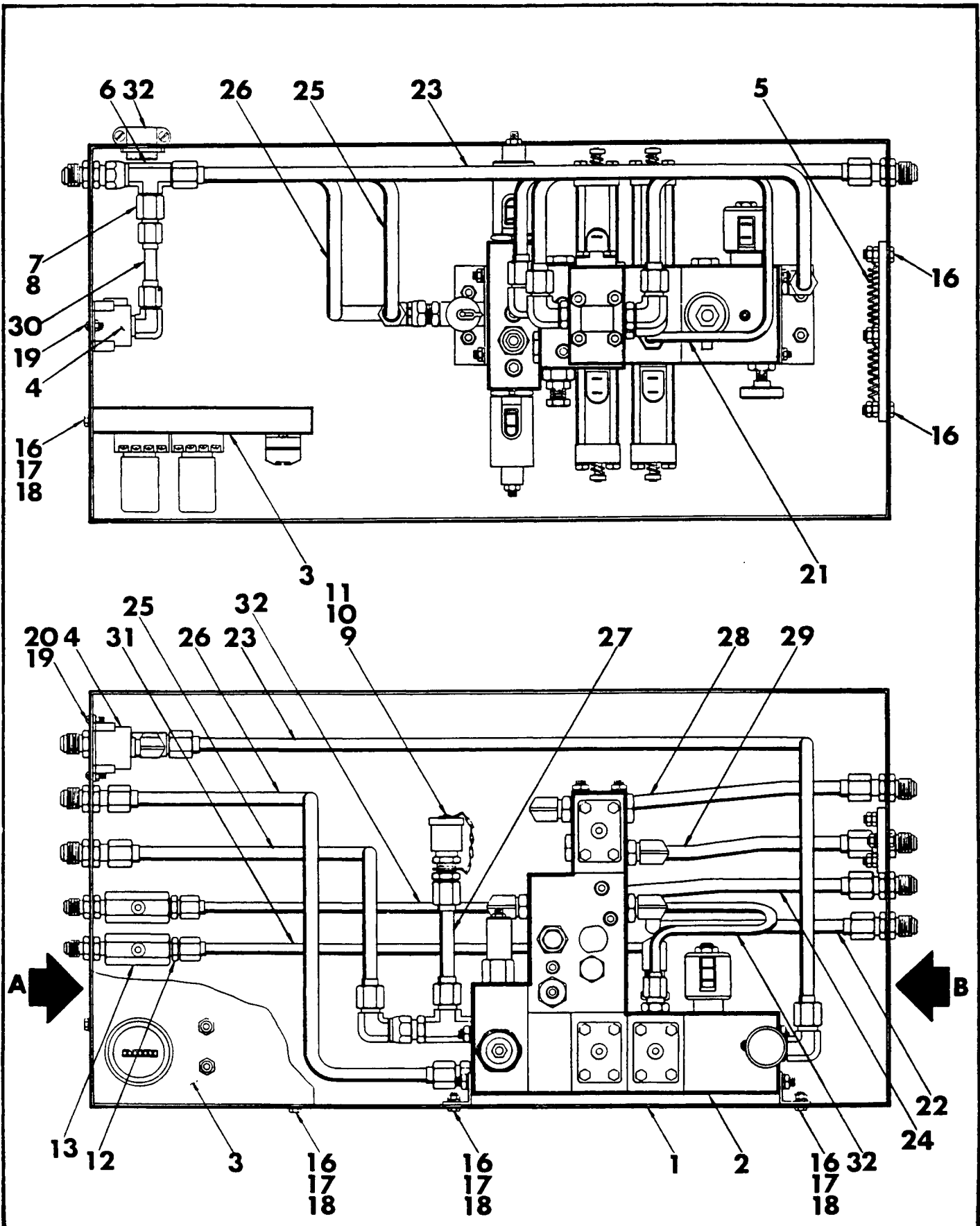
ITEM	PART NUMBER	DESCRIPTION	QTY
7C-	30765	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL	1
-1	8315	COMPONENT BOX	1
-2	30712	MANIFOLD ASSEMBLY (SEE FIG.8C)	1
-3	30652	CONTROL PANEL ASSEMBLY (SEE FIG.7J)	1
-4	30495	PRESSURE LIMIT SWITCH ASSEMBLY (SEE FIG.10)	1
-5	20370	NEEDLE VALVE	2
-6	2476	CONNECTOR	2
-7	4050	BRAKE RESISTOR	1
-8	2428	SWIVEL NUT RUN TEE	1
-9	845	CAP	1
-10	2527	QUICK DISCONNECT	1
-11	2508	MALE FITTING	1
-12	2484	BULKHEAD UNION	7
-13	2486	BULKHEAD UNION	2
-14	60123	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $\frac{3}{4}$	8
-15	63301	LOCK WASHER - $\frac{1}{4}$	9
-16	60701	HEX NUT - $\frac{1}{4}$ -20 UNC	9
-17	50207	BULKHEAD UNION	2
-18	62612	ROUND HEAD CAPSCREW - NO.8 - 32 UNC X $\frac{1}{2}$	2
-19	61502	HEX NUT - NO.8 - 32 UNC	2
-20		TUBE ASSEMBLY - $\frac{1}{2}$	1
-21		TUBE ASSEMBLY - $\frac{1}{2}$	1
-22		TUBE ASSEMBLY - $\frac{1}{2}$	1
-23		TUBE ASSEMBLY - $\frac{1}{2}$	1
-24		TUBE ASSEMBLY - $\frac{1}{2}$	1
-25		TUBE ASSEMBLY - $\frac{1}{2}$	1
-26		TUBE ASSEMBLY - $\frac{1}{2}$	1
-27		TUBE ASSEMBLY - $\frac{1}{2}$	1
-28		TUBE ASSEMBLY - $\frac{3}{8}$	1
-29		TUBE ASSEMBLY - $\frac{3}{8}$	1
-30		TUBE ASSEMBLY - $\frac{3}{8}$	1
-31		TUBE ASSEMBLY - $\frac{3}{8}$	1
-32		TUBE ASSEMBLY - $\frac{3}{8}$	1

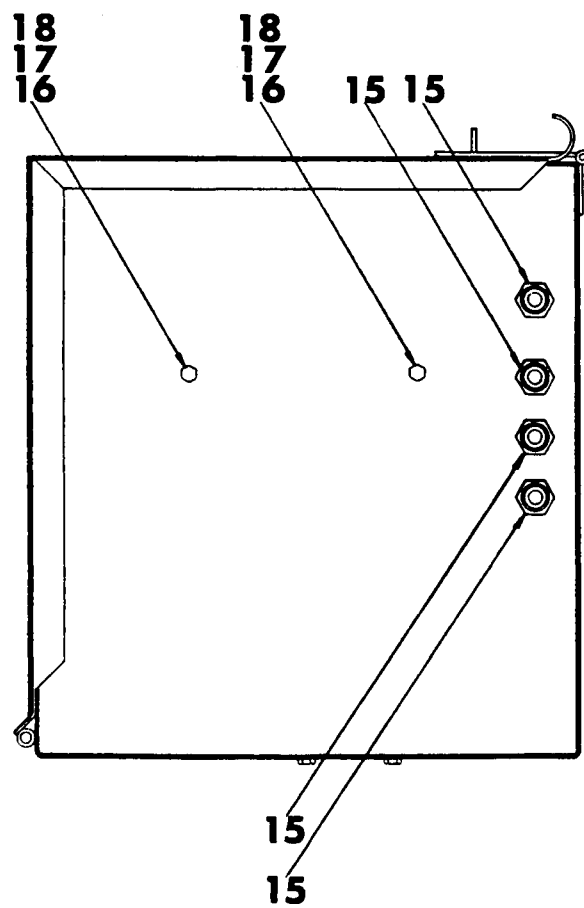
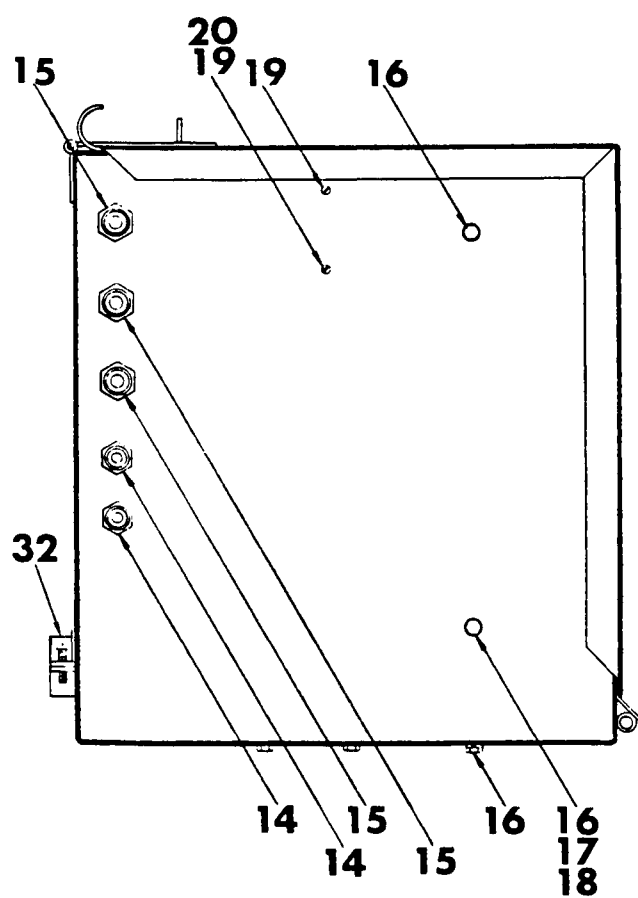
PEV.1
1-83

FIGURE 7C - COMPONENT BOX ASSEMBLY WITH OUTRIGGER
CONTROL (RT26E) (RT31E) (OPTION) (BEGINNING MARCH 1980)

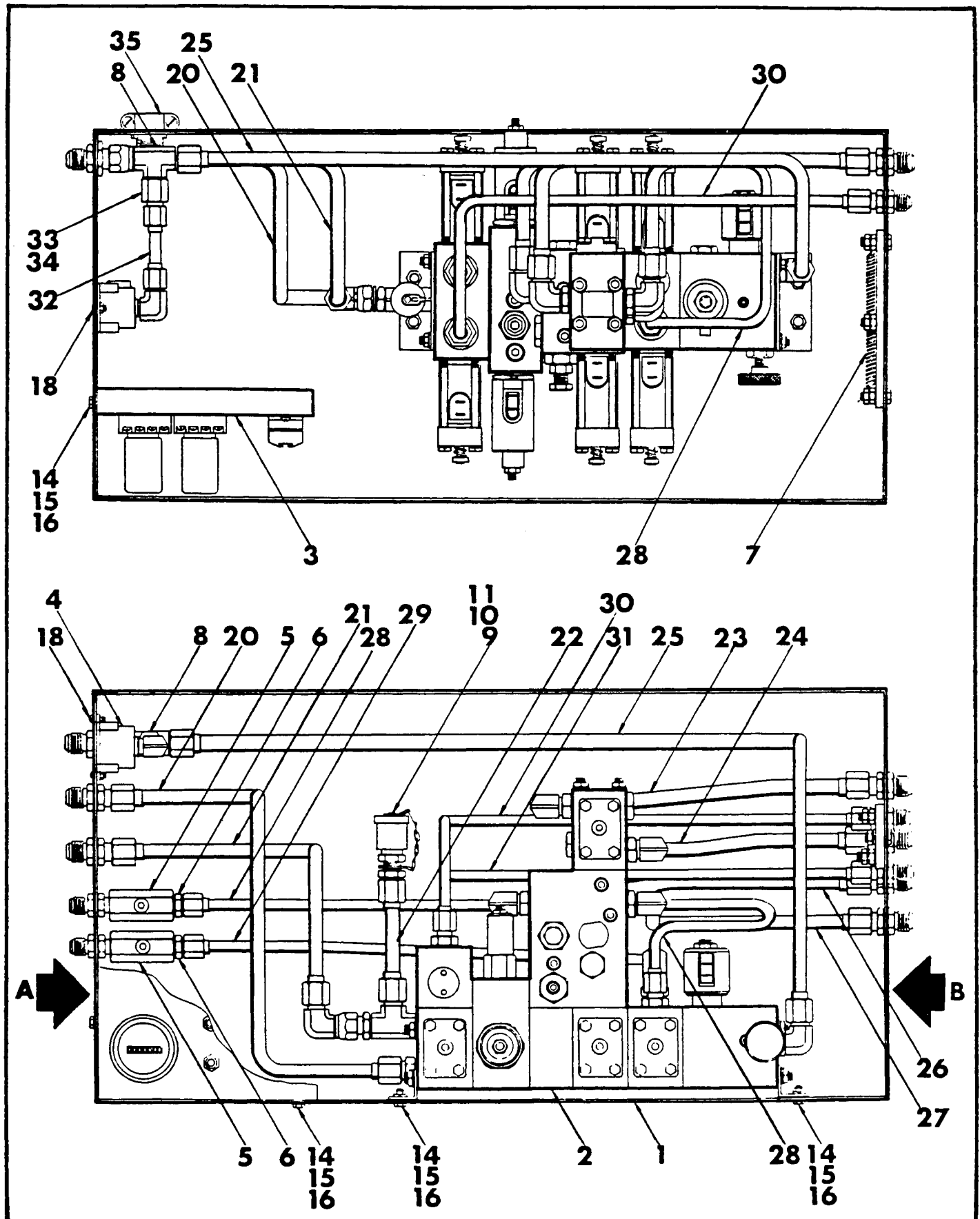
112

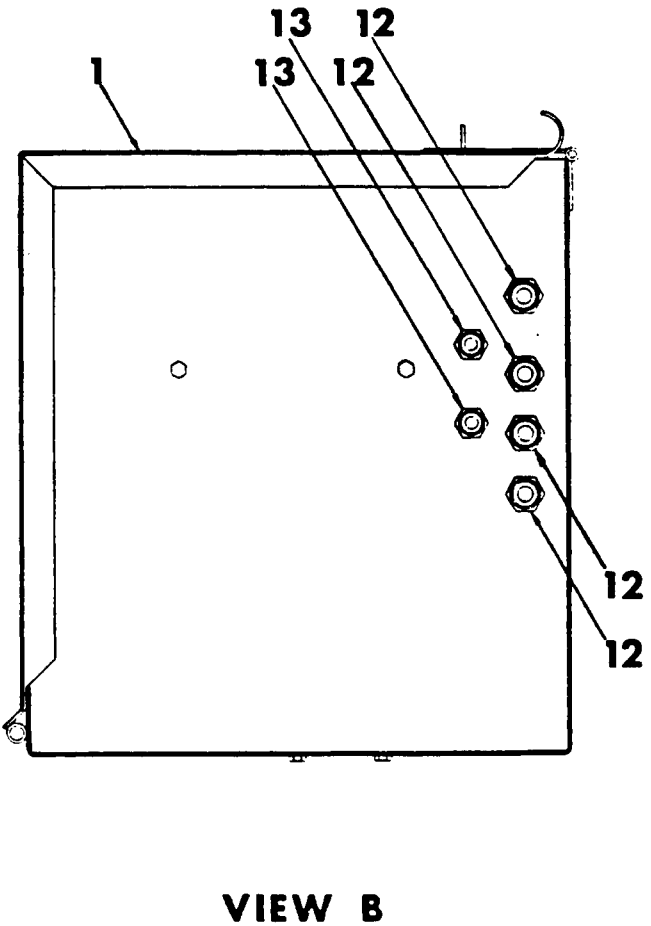
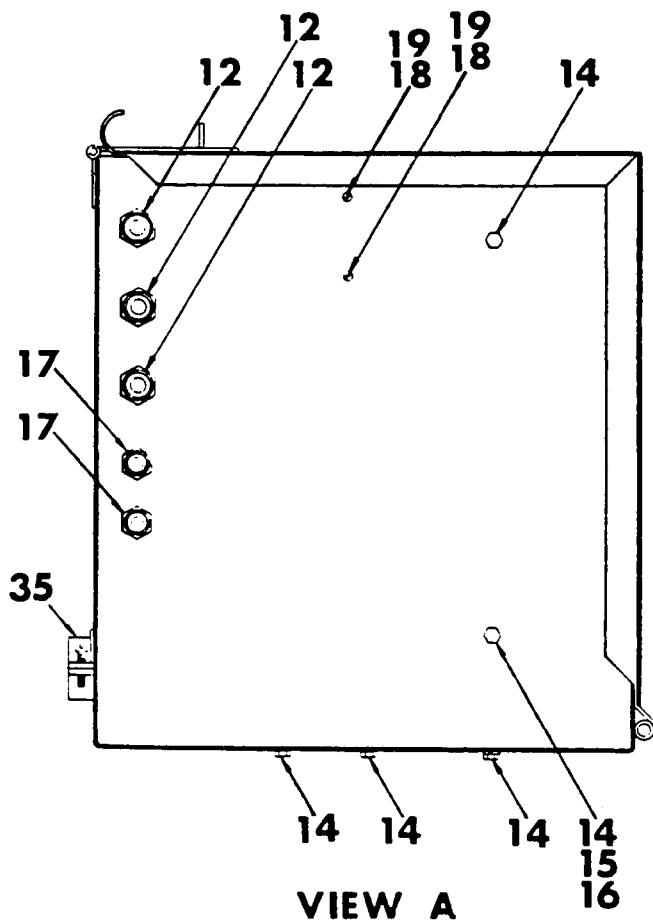
ITEM	PART NUMBER	DESCRIPTION	QTY
-33	2501	"B" NUT	1
-34	2578	TUBE END REDUCER	1
-35	213	ROMEX CONNECTOR	1





ITEM	PART NUMBER	DESCRIPTION	QTY
7D-	30723	COMPONENT BOX ASSEMBLY	1
-1	8315	COMPONENT BOX	1
-2	30713	MANIFOLD ASSEMBLY (SEE FIG.8B)	1
-3	30651	PANEL ASSEMBLY (SEE FIG.7K)	1
-4	30495	PRESSURE LIMIT SWITCH ASSEMBLY (SEE FIG.10)	1
-5	4050	BRAKE RESISTOR	1
-6	2428	SWIVEL NUT RUN TEE	1
-7	2501	NUT	1
-8	2578	TUBE END REDUCER	1
-9	845	CAP	1
-10	2527	QUICK DISCONNECT	1
-11	2508	MALE FITTING	1
-12	2476	FITTING	2
-13	20370	NEEDLE VALVE	2
-14	50207	BULKHEAD UNION	2
-15	2484	BULKHEAD UNION	7
-16	60123	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $\frac{3}{4}$	9
-17	63301	LOCK WASHER - $\frac{1}{4}$	9
-18	60701	NUT - $\frac{1}{4}$ -20 UNC	9
-19	62612	ROUND HEAD CAPSCREW - NO.8 - 32 UNC X $\frac{1}{2}$	2
-20	61502	NUT - NO.8 - 32 UNC	2
-21		TUBE ASSEMBLY - $\frac{3}{8}$	1
-22		TUBE ASSEMBLY - $\frac{1}{2}$	1
-23		TUBE ASSEMBLY - $\frac{1}{2}$	1
-24		TUBE ASSEMBLY - $\frac{1}{2}$	1
-25		TUBE ASSEMBLY - $\frac{1}{2}$	1
-26		TUBE ASSEMBLY - $\frac{1}{2}$	1
-27		TUBE ASSEMBLY - $\frac{1}{2}$	1
-28		TUBE ASSEMBLY - $\frac{1}{2}$	1
-29		TUBE ASSEMBLY - $\frac{1}{2}$	1
-30		TUBE ASSEMBLY - $\frac{3}{8}$	1
-31		TUBE ASSEMBLY - $\frac{3}{8}$	1
-32	213	ROMEX CONNECTOR	1





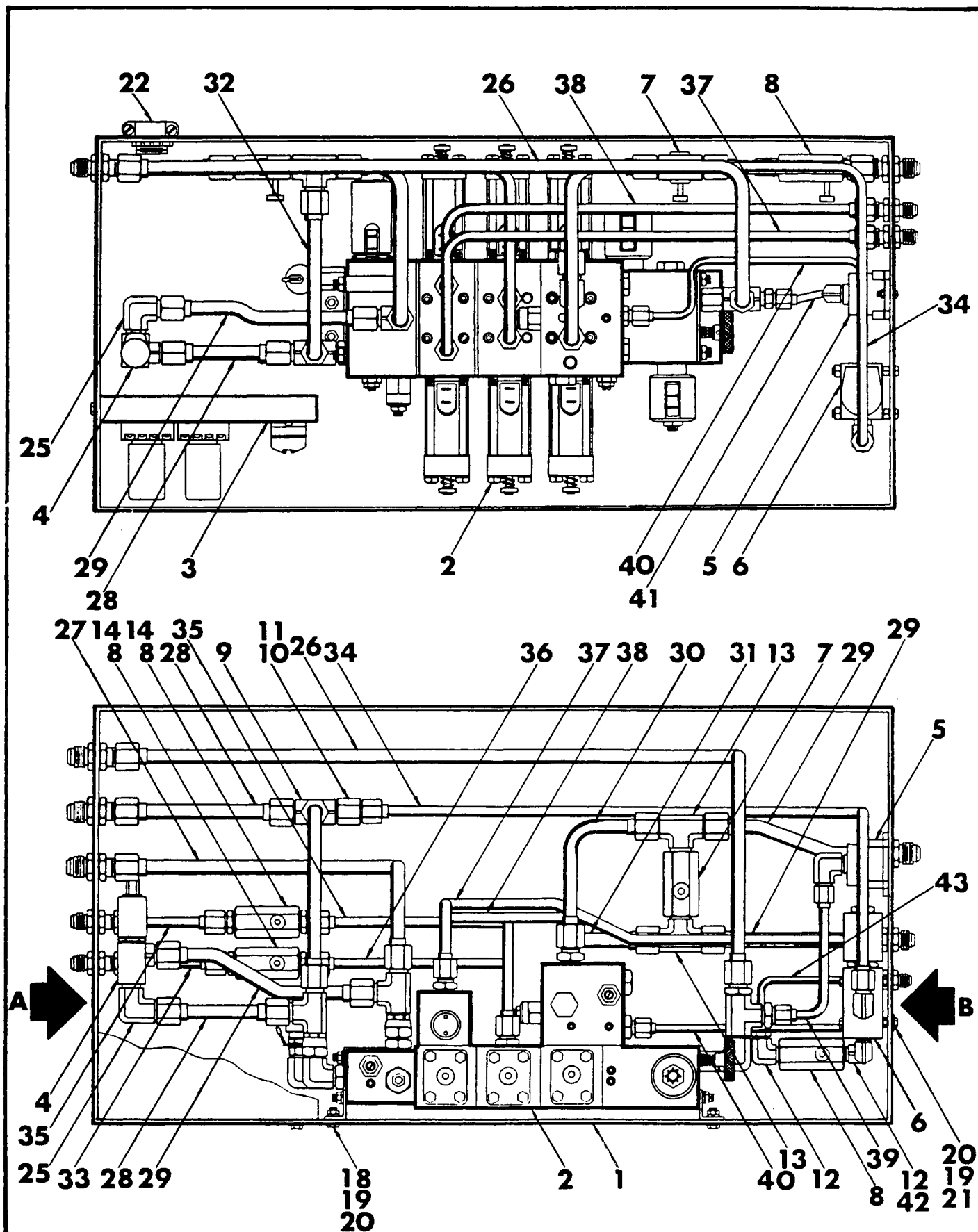
ITEM	PART NUMBER	DESCRIPTION	QTY
7H-	30722	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL	1
-1	8315	COMPONENT BOX	1
-2	30712	MANIFOLD ASSEMBLY (SEE FIG.8C)	1
-3	30651	CONTROL PANEL ASSEMBLY (SEE FIG.7K)	1
-4	30495	PRESSURE LIMIT SWITCH ASSEMBLY (SEE FIG.10)	1
-5	20370	NEEDLE VALVE	2
-6	2476	CONNECTOR	2
-7	4050	BRAKE RESISTOR	1
-8	2428	SWIVEL NUT RUN TEE	1
-9	845	CAP	1
-10	2527	QUICK DISCONNECT	1
-11	2508	MALE FITTING	1
-12	2484	BULKHEAD UNION	7
-13	2486	BULKHEAD UNION	2
-14	60123	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $\frac{3}{4}$	8
-15	63301	LOCK WASHER - $\frac{1}{4}$	9
-16	60701	HEX NUT - $\frac{1}{4}$ -20 UNC	9
-17	50207	BULKHEAD UNION	2
-18	62612	ROUND HEAD CAPSCREW - NO.8 - 32 UNC X $\frac{1}{2}$	2
-19	61502	HEX NUT - NO.8 - 32 UNC	2
-20		TUBE ASSEMBLY - $\frac{1}{2}$	1
-21		TUBE ASSEMBLY - $\frac{1}{2}$	1
-22		TUBE ASSEMBLY - $\frac{1}{2}$	1
-23		TUBE ASSEMBLY - $\frac{1}{2}$	1
-24		TUBE ASSEMBLY - $\frac{1}{2}$	1
-25		TUBE ASSEMBLY - $\frac{1}{2}$	1
-26		TUBE ASSEMBLY - $\frac{1}{2}$	1
-27		TUBE ASSEMBLY - $\frac{1}{2}$	1
-28		TUBE ASSEMBLY - $\frac{3}{8}$	1
-29		TUBE ASSEMBLY - $\frac{3}{8}$	1
-30		TUBE ASSEMBLY - $\frac{3}{8}$	1
-31		TUBE ASSEMBLY - $\frac{3}{8}$	1
-32		TUBE ASSEMBLY - $\frac{3}{8}$	1

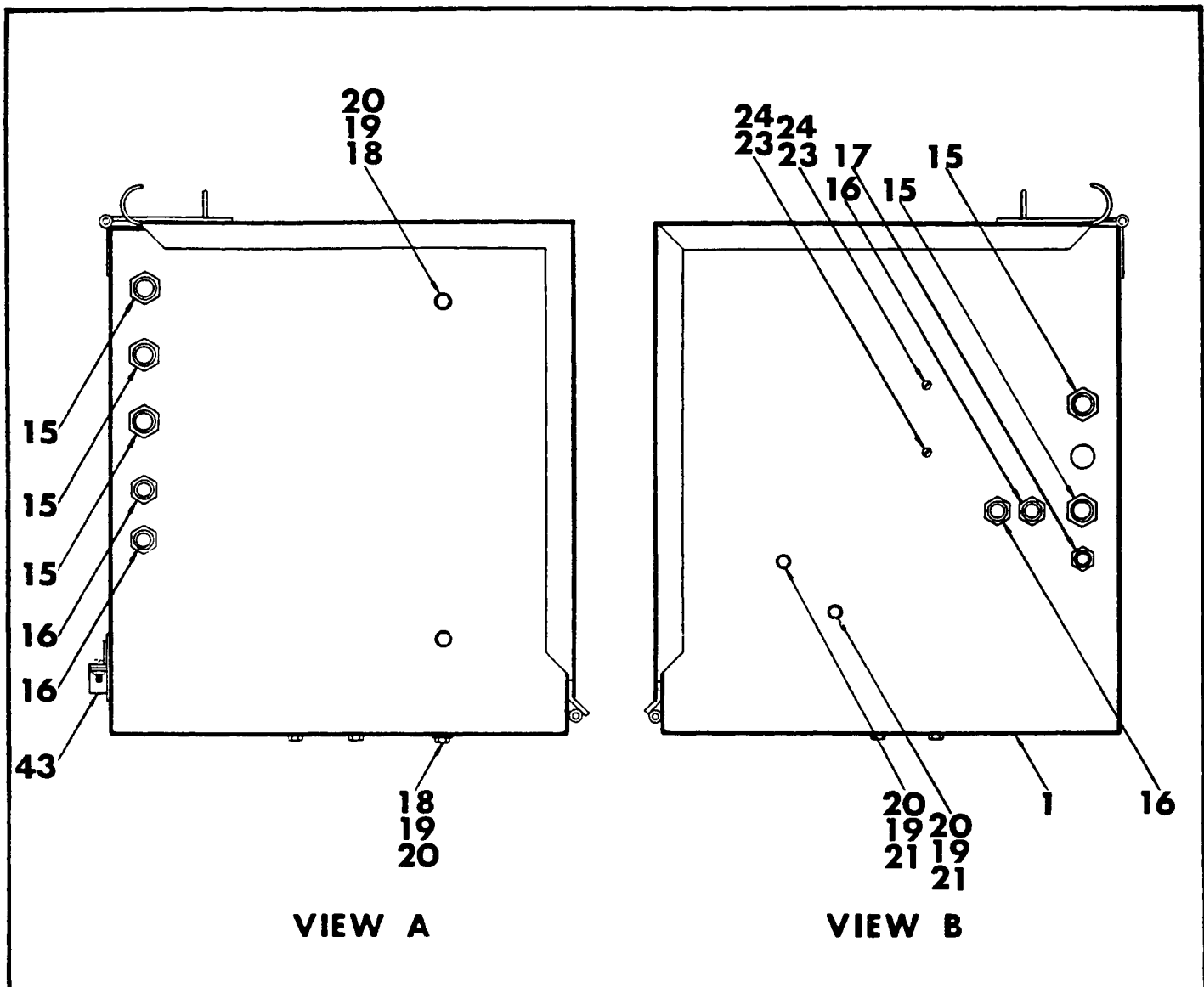
REV.1
1-83

FIGURE 7E - COMPONENT BOX ASSEMBLY WITH OUTRIGGER
CONTROL (RT26G) (RT31G) (OPTION) (BEGINNING MARCH 1980)

119

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	2501	"B" NUT	1
-34	2578	TUBE END REDUCER	1
-35	213	ROMEX CONNECTOR	1





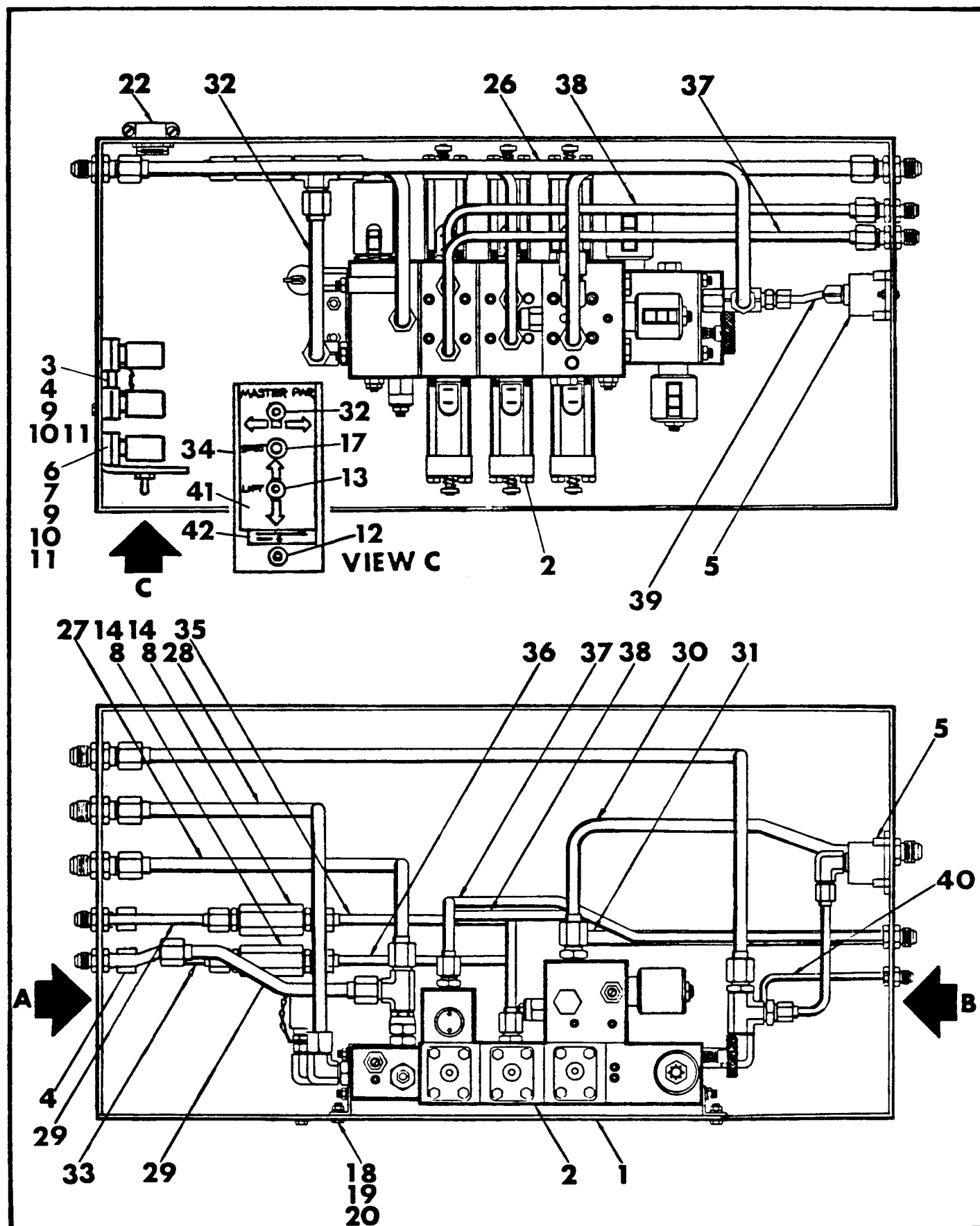
ITEM	PART NUMBER	DESCRIPTION	QTY
7F-	30726	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL	1
-1	8315	COMPONENT BOX	1
-2	30711	MANIFOLD ASSEMBLY (SEE FIG.8D)	1
-3	30653	CONTROL PANEL ASSEMBLY (SEE FIG.7K)	1
-4	410	FLUID CONTROL VALVE	1
-5	30495	PRESSURE LIMIT SWITCH ASSEMBLY (SEE FIG.10)	1
-6	30330	SOLENOID VALVE ASSEMBLY	1
-7	201	CHECK VALVE	1
-8	20370	NEEDLE VALVE	3
-9	2432	TEE	1
-10	2501	NUT	1
-11	2578	TUBE END REDUCER	1
-12	2435	ELBOW	2
-13	2431	TEE	2
-14	2476	CONNECTOR	4
-15	2484	BULKHEAD UNION	5
-16	2486	BULKHEAD UNION	4
-17	16408	BULKHEAD UNION	1
-18	60123	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $\frac{3}{4}$	7
-19	63301	LOCK WASHER - $\frac{1}{4}$	9
-20	60701	NUT - $\frac{1}{4}$ -20 UNC	9
-21	60352	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $2\frac{1}{2}$	2
-22	213	ROMEX CONNECTOR	1
-23	62612	ROUND HEAD CAPSCREW - NO.8 - 32 UNC X $\frac{1}{2}$	2
-24	61502	NUT - NO.8 - 32 UNC	2
-25	2454	90° ELBOW	2
-26		TUBE ASSEMBLY - $\frac{1}{2}$	1
-27		TUBE ASSEMBLY - $\frac{1}{2}$	1
-28		TUBE ASSEMBLY - $\frac{1}{2}$	2
-29		TUBE ASSEMBLY - $\frac{1}{2}$	2
-30		TUBE ASSEMBLY - $\frac{1}{2}$	1
-31		TUBE ASSEMBLY - $\frac{1}{2}$	1

REV.1
1-83

FIGURE 7F - COMPONENT BOX ASSEMBLY WITH OUTRIGGER
CONTROL (SRT31G) (BEGINNING MARCH 1980)

123

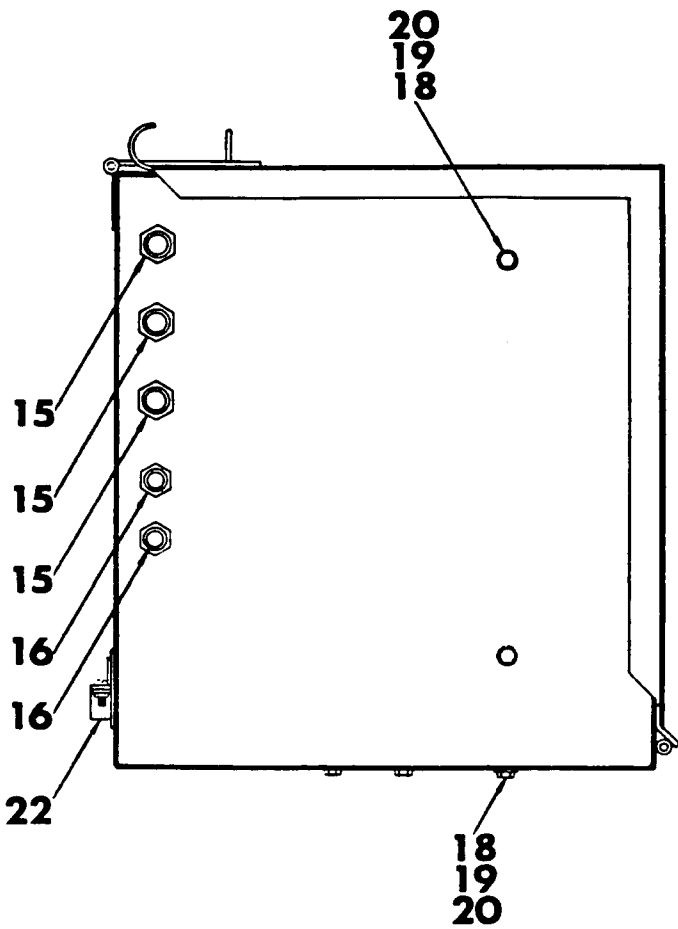
ITEM	PART NUMBER	DESCRIPTION	QTY
-32		TUBE ASSEMBLY - $\frac{1}{2}$	1
-33		TUBE ASSEMBLY - $\frac{1}{2}$	1
-34		TUBE ASSEMBLY - $\frac{3}{8}$	1
-35		TUBE ASSEMBLY - $\frac{3}{8}$	1
-36		TUBE ASSEMBLY - $\frac{3}{8}$	1
-37		TUBE ASSEMBLY - $\frac{3}{8}$	1
-38		TUBE ASSEMBLY - $\frac{3}{8}$	1
-39		TUBE ASSEMBLY - $\frac{3}{8}$	1
-40		TUBE ASSEMBLY - $\frac{1}{4}$	1
-41		TUBE ASSEMBLY - $\frac{1}{4}$	1
-42		TUBE ASSEMBLY - $\frac{1}{4}$	1
-43		TUBE ASSEMBLY - $\frac{1}{4}$	1



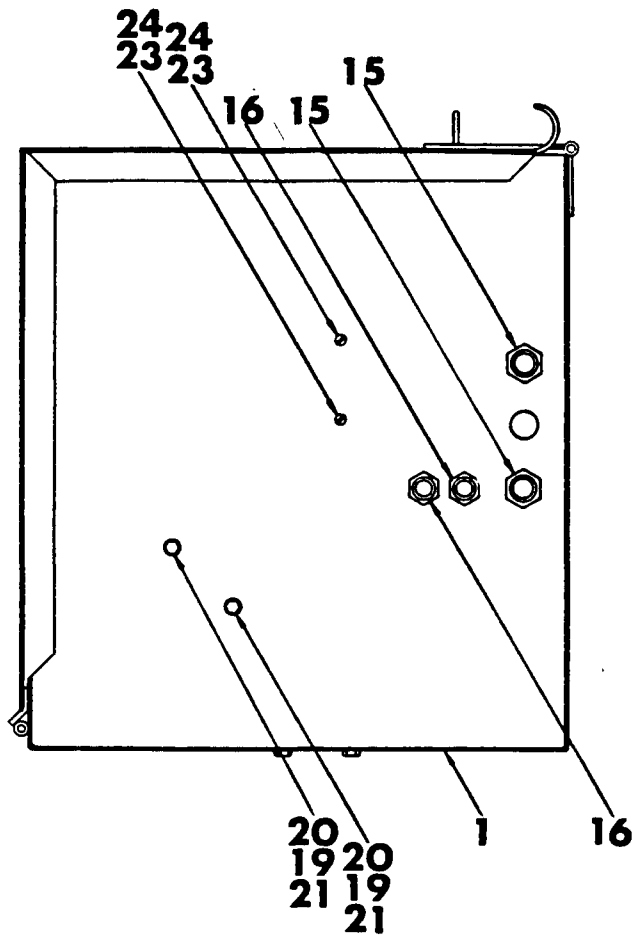
REV.1
1-83

FIGURE 7F.1-COMPONENT BOX ASSEMBLY WITH OUTRIGGER
CONTROL (SRT31G) (BEFORE MARCH 1980)

123.2



VIEW A



VIEW B

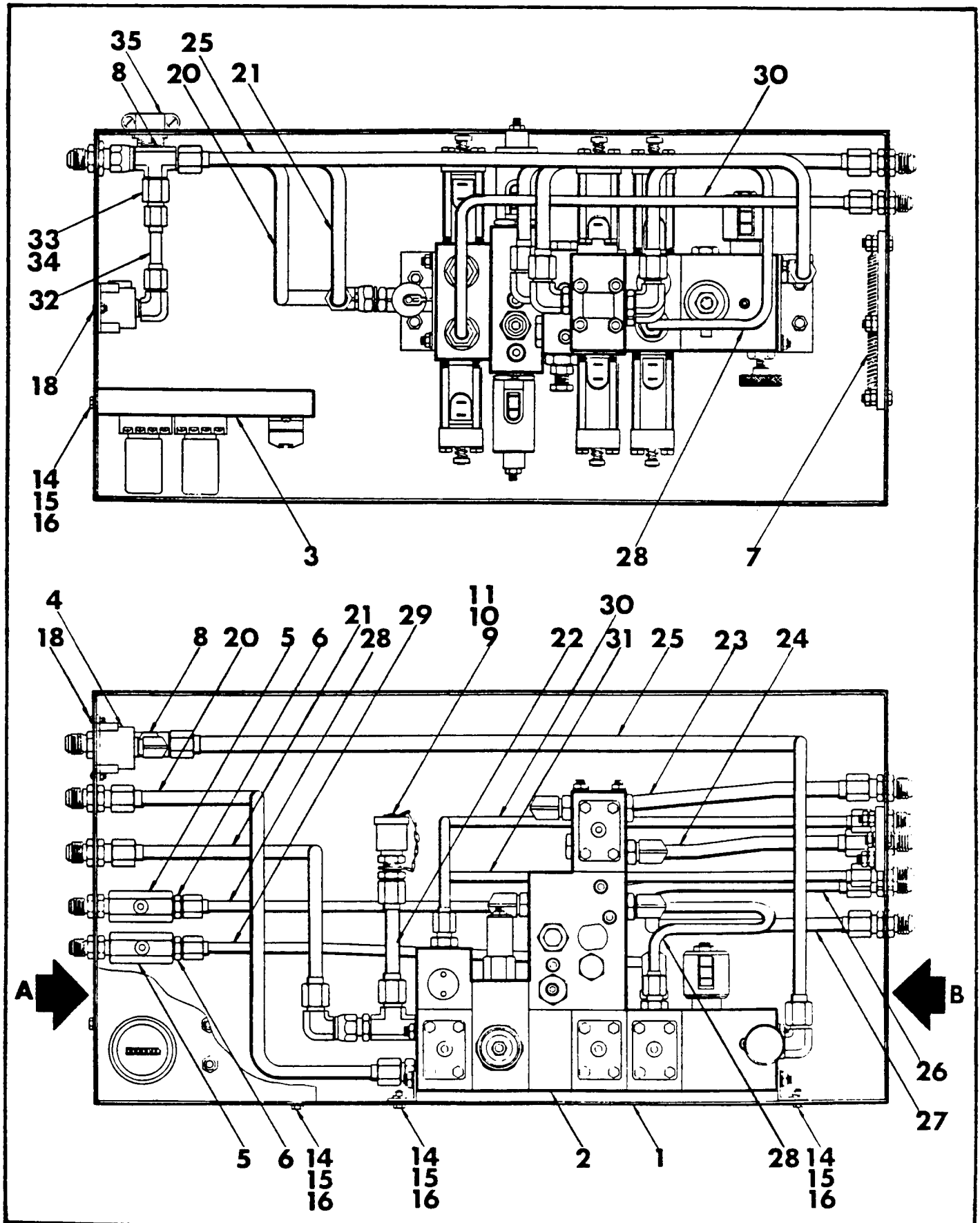
ITEM	PART NUMBER	DESCRIPTION	QTY
7F-	30726	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL	1
-1	8315	COMPONENT BOX	1
-2	30711	MANIFOLD ASSEMBLY (SEE FIG. 8D)	1
-3	784A	RELAY BASE	3
-4	4032	6 VOLT RELAY	3
-5	30495	PRESSURE LIMIT SWITCH ASSEMBLY (SEE FIG. 10)	1
-6	117A	TERMINAL BLOCK END	1
-7	4027	TERMINAL BLOCK	20
-8	3037	FLOW VALVE	2
-9	61502	HEX HEAD NUT	8
-10	62623	ROUND HEAD CAPSCREW	8
-11	63312	LOCK WASHER	8
-12	70015	FUEL SELECTOR SWITCH	1
-13	4021	MOMENTARY SWITCH	1
-14	2476	CONNECTOR	4
-15	2484	BULKHEAD UNION	5
-16	2486	BULKHEAD UNION	4
-17	4020	STARTER SWITCH	1
-18	60123	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $\frac{3}{4}$	7
-19	63301	LOCK WASHER - $\frac{1}{2}$	9
-20	60701	NUT - $\frac{1}{4}$ -20 UNC	9
-21	60352	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $2\frac{1}{2}$	2
-22	213	ROMEX CONNECTOR	1
-23	62612	ROUND HEAD CAPSCREW - NO. 8 - 32 UNC X $\frac{1}{2}$	2
-24	61502	NUT - NO. 8 - 32 UNC	2
-25	2454	90° ELBOW	2
-26		TUBE ASSEMBLY - $\frac{1}{2}$	1
-27		TUBE ASSEMBLY - $\frac{1}{2}$	1
-28		TUBE ASSEMBLY - $\frac{1}{2}$	2
-29		TUBE ASSEMBLY - $\frac{1}{2}$	2
-30		TUBE ASSEMBLY - $\frac{1}{2}$	1

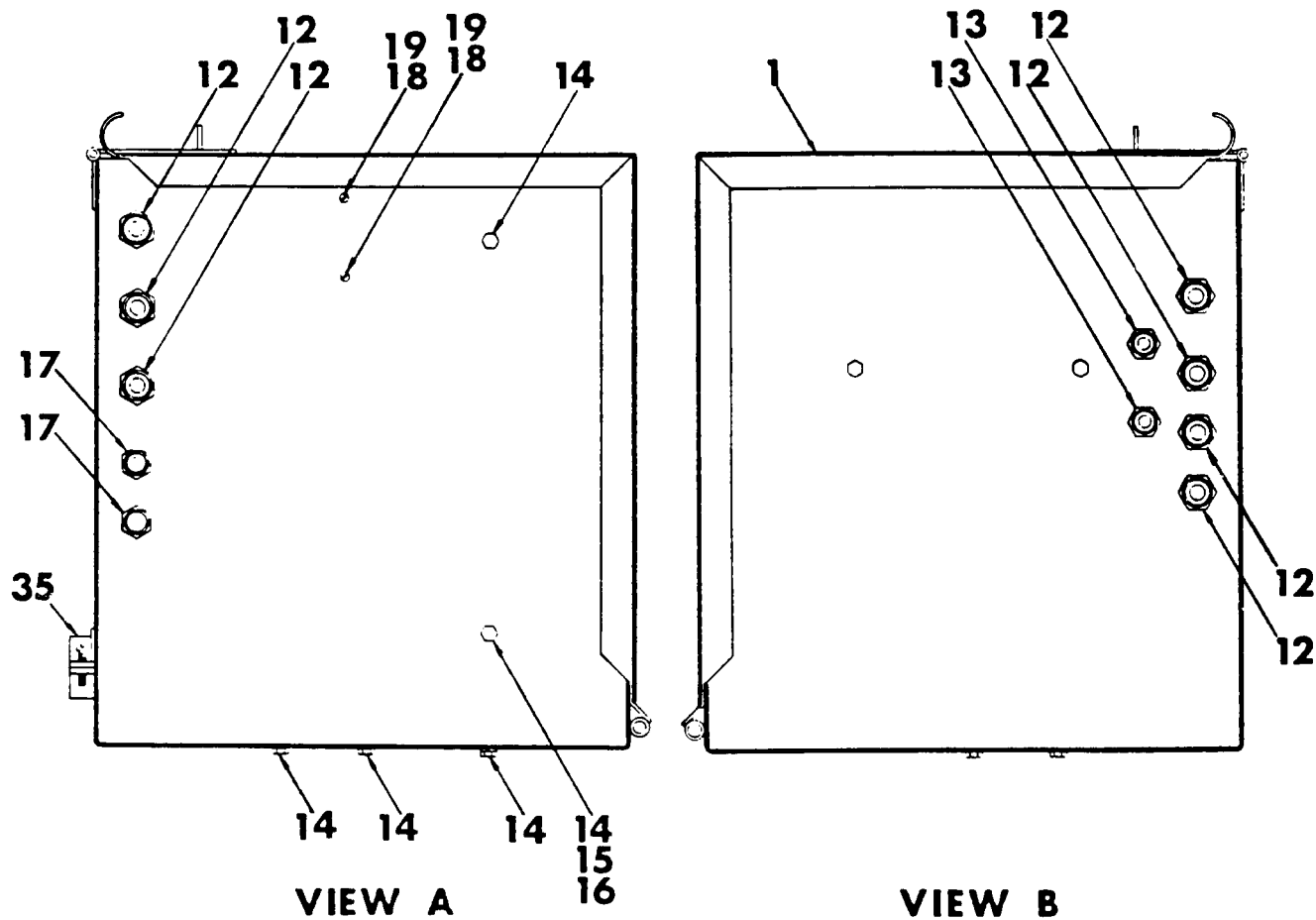
REV.1
1-83

FIGURE 7F.1 - COMPONENT BOX ASSEMBLY WITH OUTRIGGER
CONTROL (SRT31G) (BEFORE MARCH 1980)

123.4

ITEM	PART NUMBER	DESCRIPTION	QTY
-31	4019	TUBE ASSEMBLY - $\frac{1}{2}$	1
-32		SELECTOR SWITCH	1
-33	2204	TUBE ASSEMBLY - $\frac{1}{2}$	1
-34		SWITCH MOUNTING PLATE	1
-35		TUBE ASSEMBLY - $\frac{3}{8}$	1
-36		TUBE ASSEMBLY - $\frac{3}{8}$	1
-37		TUBE ASSEMBLY - $\frac{3}{8}$	1
-38		TUBE ASSEMBLY - $\frac{3}{8}$	1
-39		TUBE ASSEMBLY - $\frac{1}{4}$	1
-40		TUBE ASSEMBLY - $\frac{1}{4}$	1
-41	2010	DECAL - MASTER POWER	1
-42	2035	DECAL - FUEL SELECTOR	1





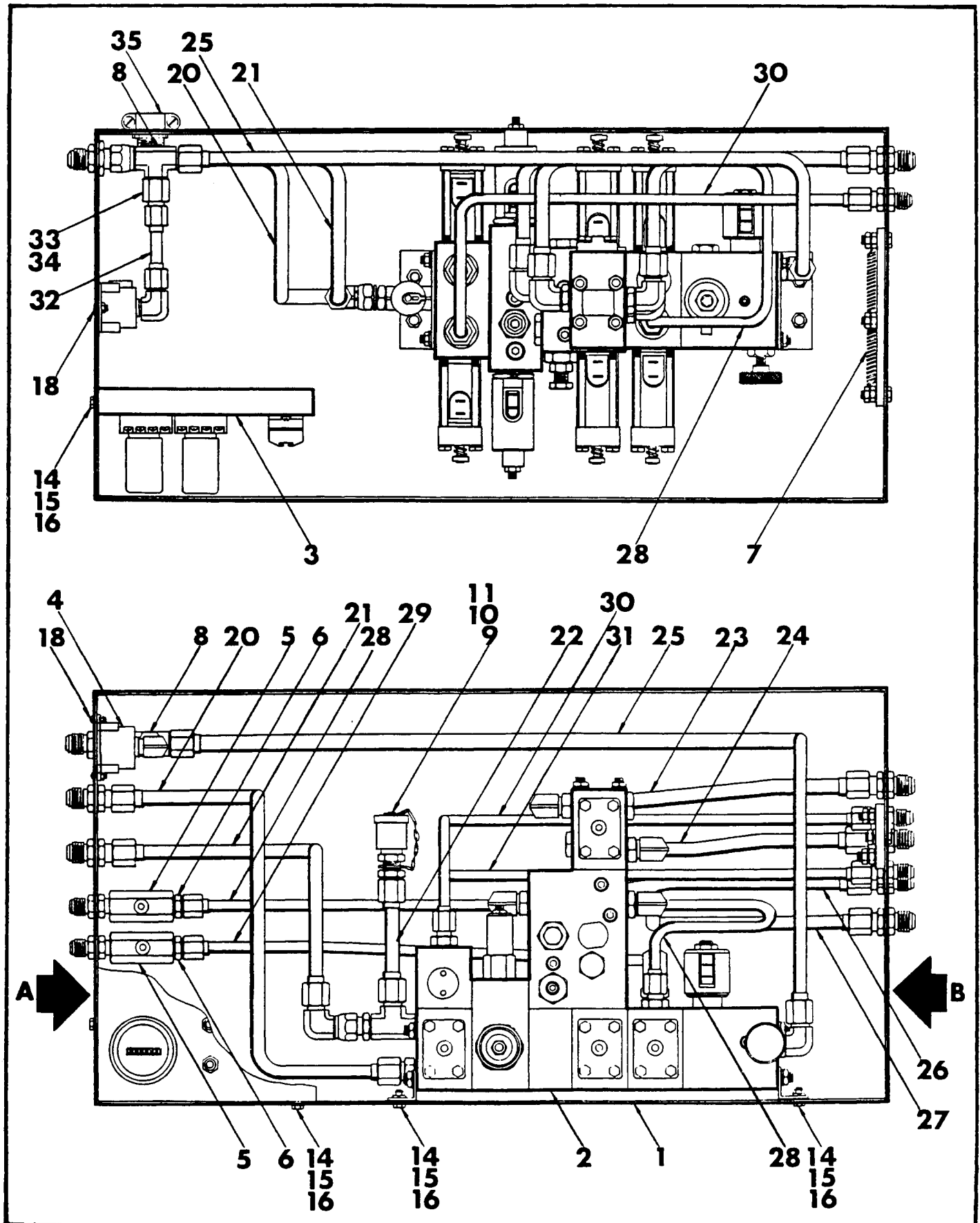
ITEM	PART NUMBER	DESCRIPTION	QTY
7H-	30765	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL	1
-1	8315	COMPONENT BOX	1
-2	30712	MANIFOLD ASSEMBLY (SEE FIG.8E)	1
-3	30650	CONTROL PANEL ASSEMBLY (SEE FIG.7J)	1
-4	30495	PRESSURE LIMIT SWITCH ASSEMBLY (SEE FIG.10)	1
-5	20370	NEEDLE VALVE	2
-6	2476	CONNECTOR	2
-7	4050	BRAKE RESISTOR	1
-8	2428	SWIVEL NUT RUN TEE	1
-9	845	CAP	1
-10	2527	QUICK DISCONNECT	1
-11	2508	MALE FITTING	1
-12	2484	BULKHEAD UNION	7
-13	2486	BULKHEAD UNION	2
-14	60123	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $\frac{3}{4}$	8
-15	63301	LOCK WASHER - $\frac{1}{2}$	9
-16	60701	HEX NUT - $\frac{1}{4}$ -20 UNC	9
-17	50207	BULKHEAD UNION	2
-18	62612	ROUND HEAD CAPSCREW - NO.8 - 32 UNC X $\frac{1}{2}$	2
-19	61502	HEX NUT - NO.8 - 32 UNC	2
-20		TUBE ASSEMBLY - $\frac{1}{2}$	1
-21		TUBE ASSEMBLY - $\frac{1}{2}$	1
-22		TUBE ASSEMBLY - $\frac{1}{2}$	1
-23		TUBE ASSEMBLY - $\frac{1}{2}$	1
-24		TUBE ASSEMBLY - $\frac{1}{2}$	1
-25		TUBE ASSEMBLY - $\frac{1}{2}$	1
-26		TUBE ASSEMBLY - $\frac{1}{2}$	1
-27		TUBE ASSEMBLY - $\frac{1}{2}$	1
-28		TUBE ASSEMBLY - $\frac{3}{8}$	1
-29		TUBE ASSEMBLY - $\frac{3}{8}$	1
-30		TUBE ASSEMBLY - $\frac{3}{8}$	1
-31		TUBE ASSEMBLY - $\frac{3}{8}$	1
-32		TUBE ASSEMBLY - $\frac{3}{8}$	1

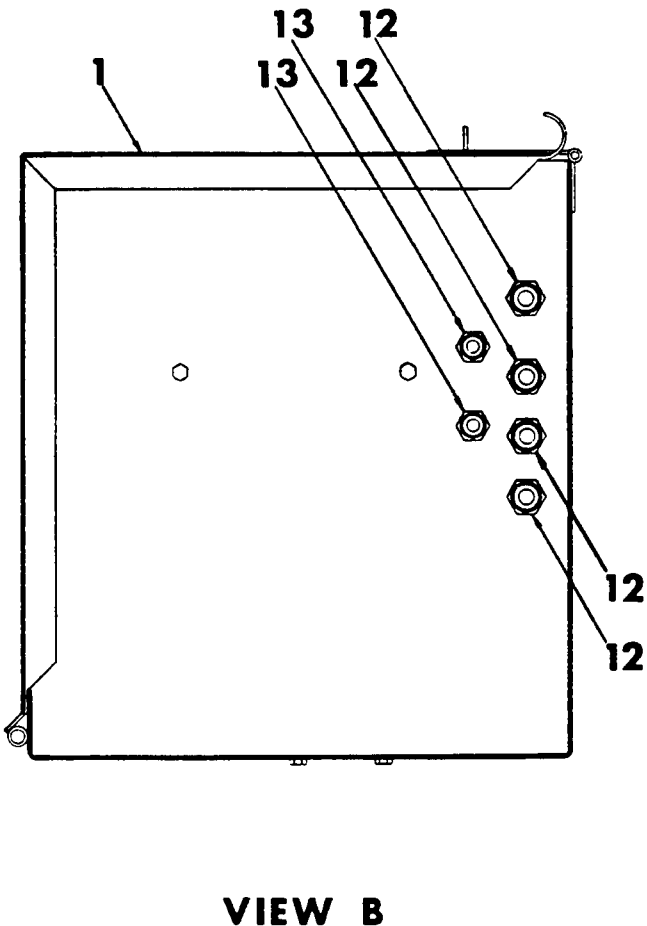
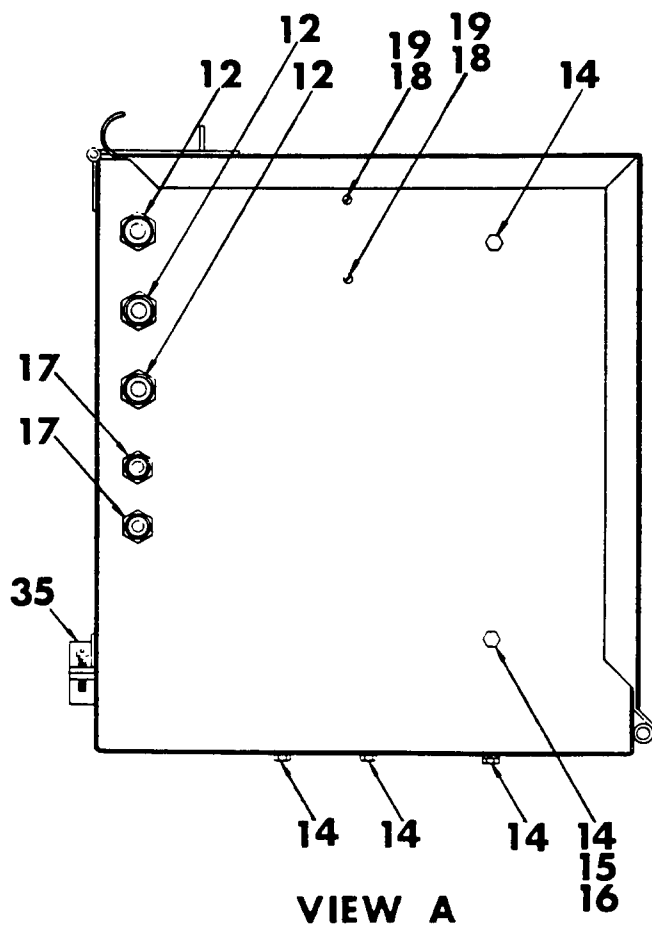
REV. 1
1-83

FIGURE 7G - COMPONENT BOX ASSEMBLY WITH OUTRIGGER
CONTROL (RT40E) (BEGINNING MARCH 1980)

127

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	2501	"B" NUT	1
-34	2578	TUBE END REDUCER	1
-35	213	ROMEX CONNECTOR	1





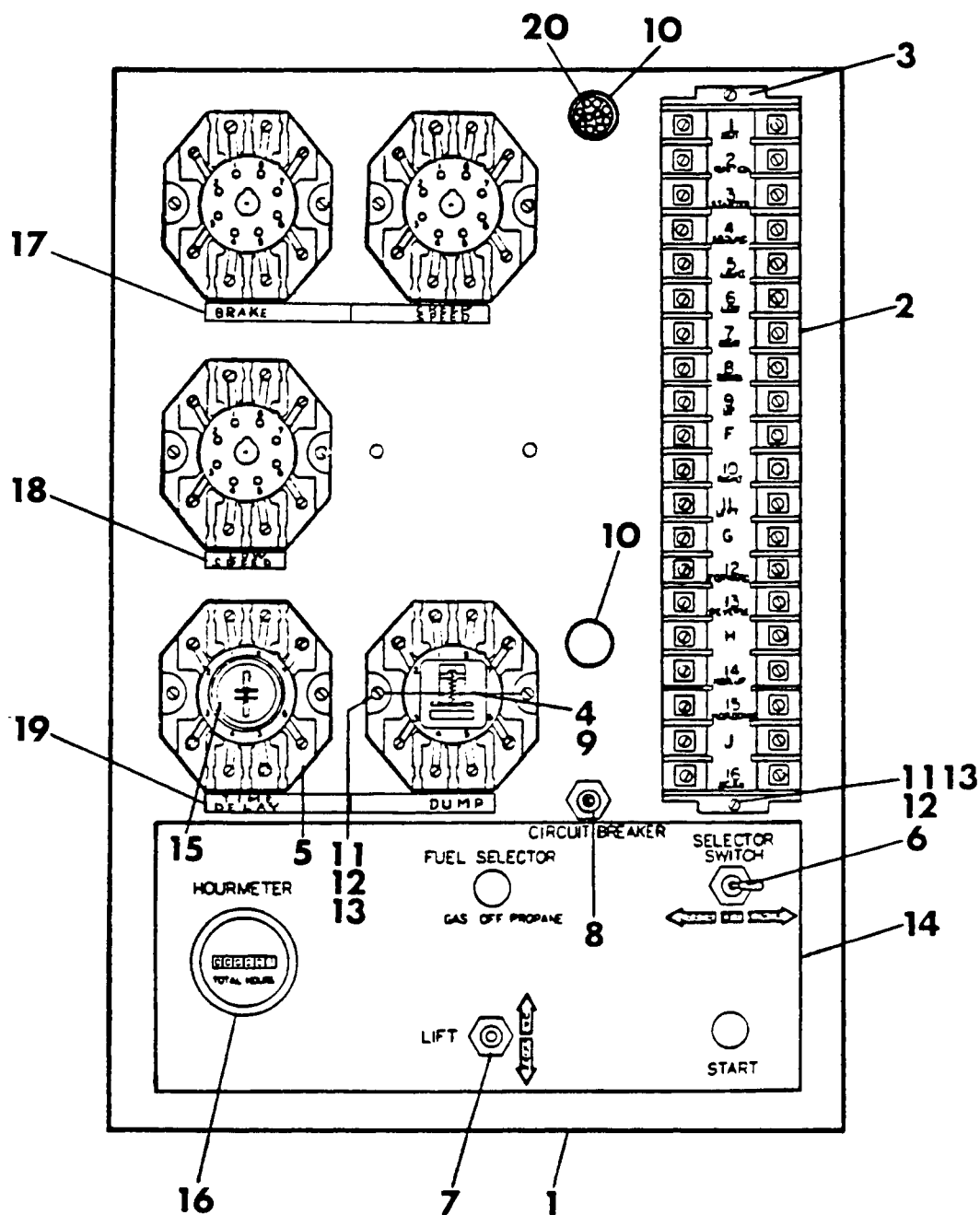
ITEM	PART NUMBER	DESCRIPTION	QTY
7H-	30722	COMPONENT BOX ASSEMBLY WITH OUTRIGGER CONTROL	1
-1	8315	COMPONENT BOX	1
-2	30712	MANIFOLD ASSEMBLY (SEE FIG.8E)	1
-3	30313	CONTROL PANEL ASSEMBLY (SEE FIG.7K)	1
-4	30495	PRESSURE LIMIT SWITCH ASSEMBLY (SEE FIG.10)	1
-5	20370	NEEDLE VALVE	2
-6	2476	CONNECTOR	2
-7	4050	BRAKE RESISTOR	1
-8	2428	SWIVEL NUT RUN TEE	1
-9	845	CAP	1
-10	2527	QUICK DISCONNECT	1
-11	2508	MALE FITTING	1
-12	2484	BULKHEAD UNION	7
-13	2486	BULKHEAD UNION	2
-14	60123	HEX HEAD CAPSCREW - $\frac{1}{4}$ -20 UNC X $\frac{3}{4}$	8
-15	63301	LOCK WASHER - $\frac{1}{2}$	9
-16	60701	HEX NUT - $\frac{1}{4}$ -20 UNC	9
-17	50207	BULKHEAD UNION	2
-18	62612	ROUND HEAD CAPSCREW - NO.8 - 32 UNC X $\frac{1}{2}$	2
-19	61502	HEX NUT - NO.8 - 32 UNC	2
-20		TUBE ASSEMBLY - $\frac{1}{2}$	1
-21		TUBE ASSEMBLY - $\frac{1}{2}$	1
-22		TUBE ASSEMBLY - $\frac{1}{2}$	1
-23		TUBE ASSEMBLY - $\frac{1}{2}$	1
-24		TUBE ASSEMBLY - $\frac{1}{2}$	1
-25		TUBE ASSEMBLY - $\frac{1}{2}$	1
-26		TUBE ASSEMBLY - $\frac{1}{2}$	1
-27		TUBE ASSEMBLY - $\frac{1}{2}$	1
-28		TUBE ASSEMBLY - $\frac{3}{8}$	1
-29		TUBE ASSEMBLY - $\frac{3}{8}$	1
-30		TUBE ASSEMBLY - $\frac{3}{8}$	1
-31		TUBE ASSEMBLY - $\frac{3}{8}$	1
-32		TUBE ASSEMBLY - $\frac{3}{8}$	1

REV.1
1-83

FIGURE 7H - COMPONENT BOX ASSEMBLY WITH OUTRIGGER
CONTROL (RT40G) (BEGINNING MARCH 1980)

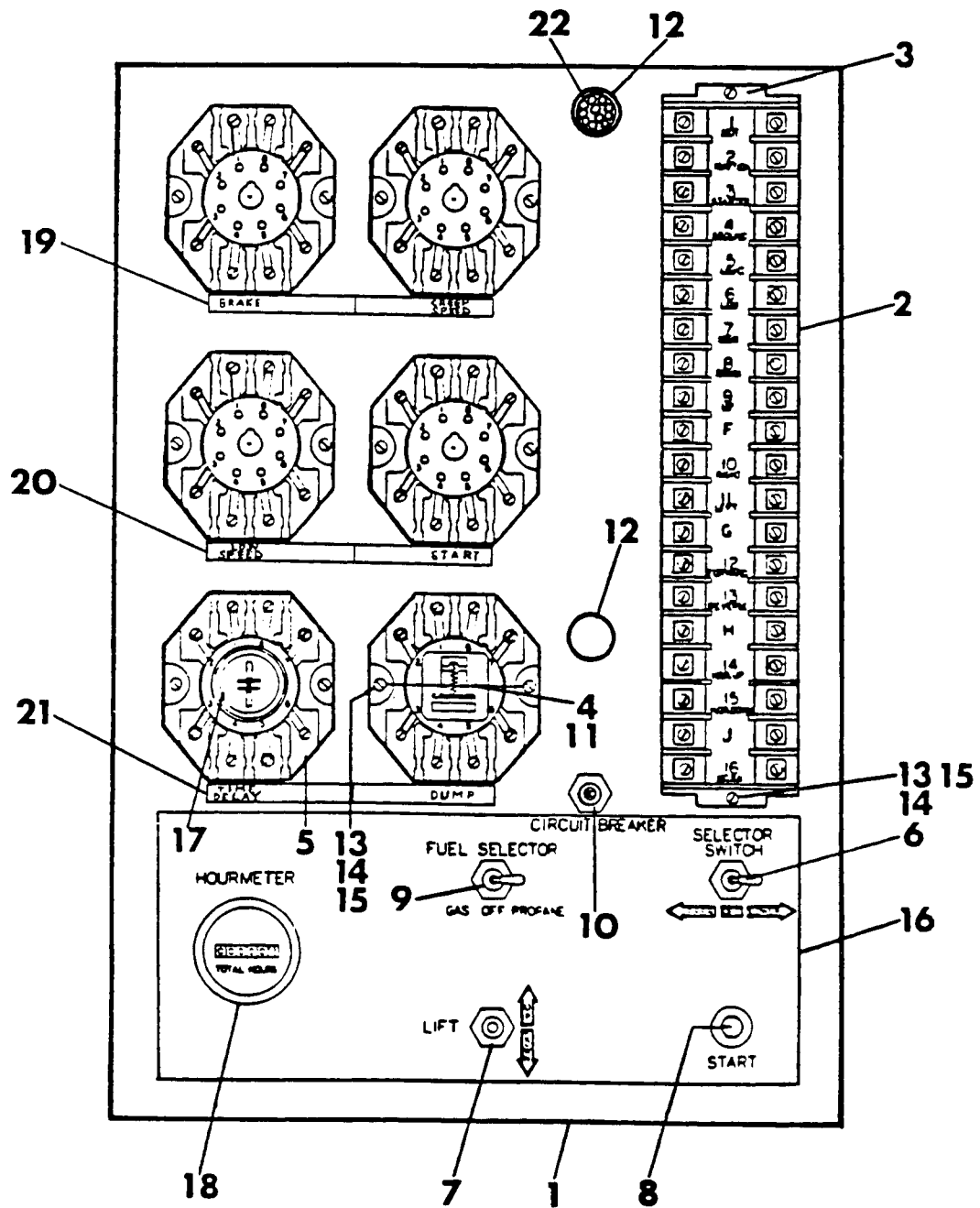
131

ITEM	PART NUMBER	DESCRIPTION	QTY
-33	2501	"B" NUT	1
-34	2578	TUBE END REDUCER	1
-35	213	ROMEX CONNECTOR	1



ITEM	PART NUMBER	DESCRIPTION	QTY
7J-	30652	COMPONENT BOX CONTROL PANEL ASSEMBLY (RT26E) (RT31E)	
	30650	COMPONENT BOX CONTROL PANEL ASSEMBLY (RT40E)	1
-1	30312	RELAY MOUNTING BRACKET	1
-2	4027	TERMINAL BLOCK	20
-3	117A	TERMINAL BLOCK END	1
-4	4032	RELAY	4
-5	784A	8 PIN SOCKET	5
-6	4019	SELECTOR SWITCH	1
-7	20481	LIFT SWITCH	1
-8	20562	CIRCUIT BREAKER	1
-9	30215	RELAY HOLD DOWN	4
-10	70016	GROMMET	2
-11	62623	SLOTTED ROUND HEAD SCREW - NO.8 - 32 UNC X 3/4	13
-12	61502	HEX NUT - NO.8 - 32 UNC	13
-13	63312	LOCK WASHER - NO.8	13
-14	30310	DECAL - PANEL SWITCHES	1
-15	20523	TIME DELAY RELAY	1
-16	20571	HOUR METER (OPTION)	1
-17	30572	RELAY DECAL - BRAKE - CREEP SPEED	1
-18	30314	RELAY DECAL - LOW SPEED	1
-19	30315	RELAY DECAL - TIME DELAY - DUMP	1
-20	30632	MANIFOLD HARNESS ASSEMBLY (RT26E) (RT31E)	1
	30634	MANIFOLD HARNESS ASSEMBLY (RT40E)	1

FIGURE 7K - COMPONENT BOX CONTROL PANEL ASSEMBLY
(RT25G) (RT26G) (RT31G) (SRT31G) (RT40G)
(BEGINNING MARCH 1980)



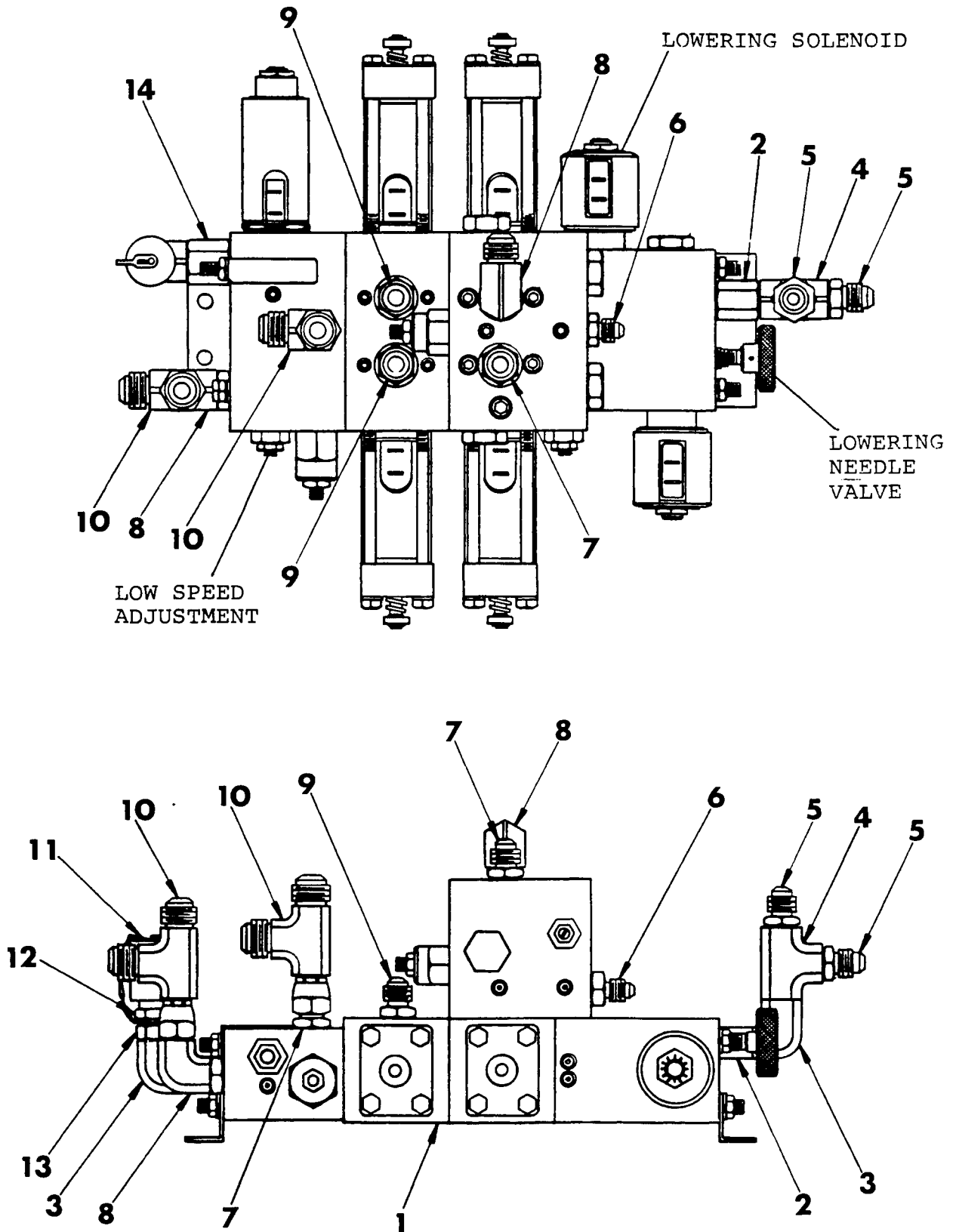
REV.1
1-83

FIGURE 7K - COMPONENT BOX CONTROL PANEL ASSEMBLY
(RT25G) (RT26G) (RT31G) (SRT31G) (RT40G)

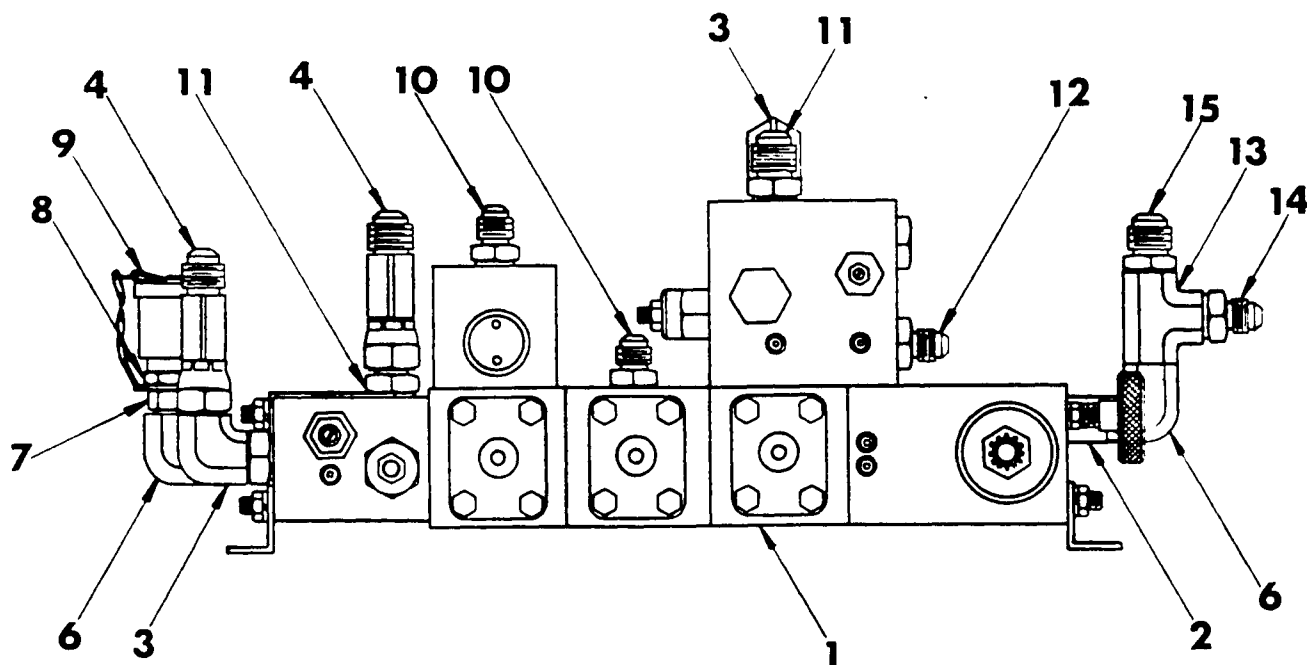
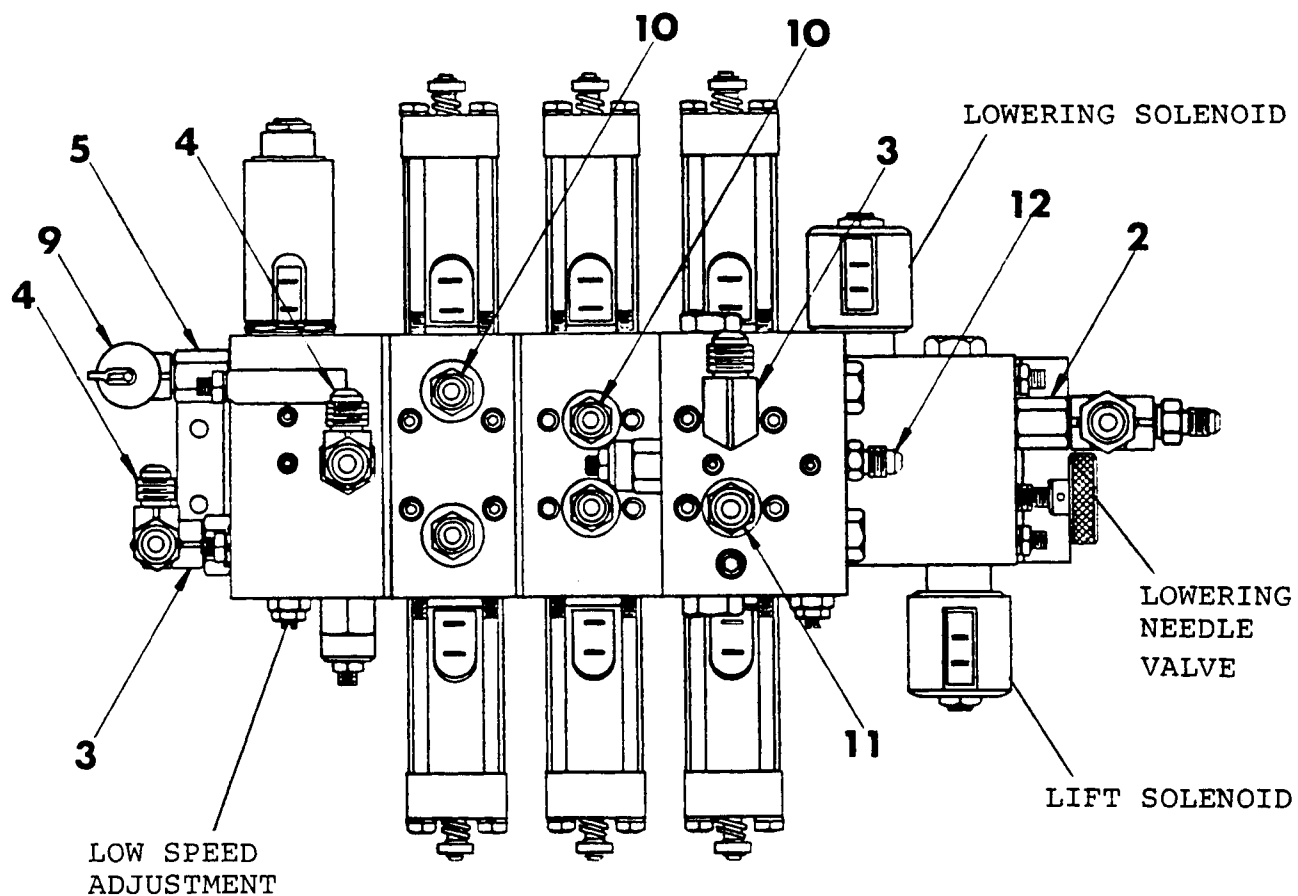
135

(BEGINNING MARCH 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
-7K	30770	COMPONENT BOX CONTROL PANEL ASSEMBLY (RT25G)	1
	30651	COMPONENT BOX CONTROL PANEL ASSEMBLY (RT26G) (RT31G)	1
	30653	COMPONENT BOX CONTROL PANEL ASSEMBLY (SRT31G)	1
	30313	COMPONENT BOX CONTROL PANEL ASSEMBLY (RT40G)	1
-1	30312	RELAY MOUNTING BRACKET	1
-2	4027	TERMINAL BLOCK	20
-3	117A	TERMINAL BLOCK END	1
-4	4032	RELAY	5
-5	784A	8 PIN SOCKET	6
-6	4019	SELECTOR SWITCH	1
-7	20481	LIFT SWITCH	1
-8	4020	START SWITCH	1
-9	70015	FUEL SELECTOR SWITCH	1
-10	20562	CIRCUIT BREAKER	1
-11	30215	RELAY HOLD DOWN	5
-12	70016	GROMMET	2
-13	62623	SLOTTED ROUND HEAD SCREW - NO.8 - 32 UNC X 3/4	15
-14	61502	HEX NUT - NO.8 - 32 UNC	15
-15	63312	LOCK WASHER - NO.8	15
-16	30310	DECAL - PANEL SWITCHES	1
-17	20523	TIME DELAY RELAY	1
-18	20571	HOURLY METER (OPTION)	1
-19	30572	RELAY DECAL - BRAKE - CREEP SPEED	1
-20	30314	RELAY DECAL - LOW SPEED - START	1
-21	30315	RELAY DECAL - TIME DELAY - DUMP	1
-22	30631	MANIFOLD HARNESS ASSEMBLY (RT25G)	1
	30633	MANIFOLD HARNESS ASSEMBLY (RT26G) (RT31G)	1
	30794	MANIFOLD HARNESS ASSEMBLY (SRT31G)	1
	30791	MANIFOLD HARNESS ASSEMBLY (RT40G)	1



ITEM	PART NUMBER	DESCRIPTION	QTY
8-	30714	MANIFOLD ASSEMBLY	1
-1	3069 (6355A)	MANIFOLD PACKAGE (SEE FIG.8F)	1
-2	2498	FEMALE PIPE ADAPTER	1
-3	2450	STREET ELBOW	2
-4	2420	STREET TEE	1
-5	2476	MALE CONNECTOR	2
-6	2581	STRAIGHT THREAD CONECTOR	1
-7	2509	STRAIGHT THREAD CONECTOR	2
-8	2438	STRAIGHT THREAD ELBOW	2
-9	2474	STRAIGHT THREAD CONNECTOR	2
-10	2428	SWIVEL NUT RUN TEE	2
-11	845	CAP	1
-12	2527	MALE QUICK DISCONNECT	1
-13	2475	PIPE NIPPLE	1
-14	2530	CONNECTOR	1

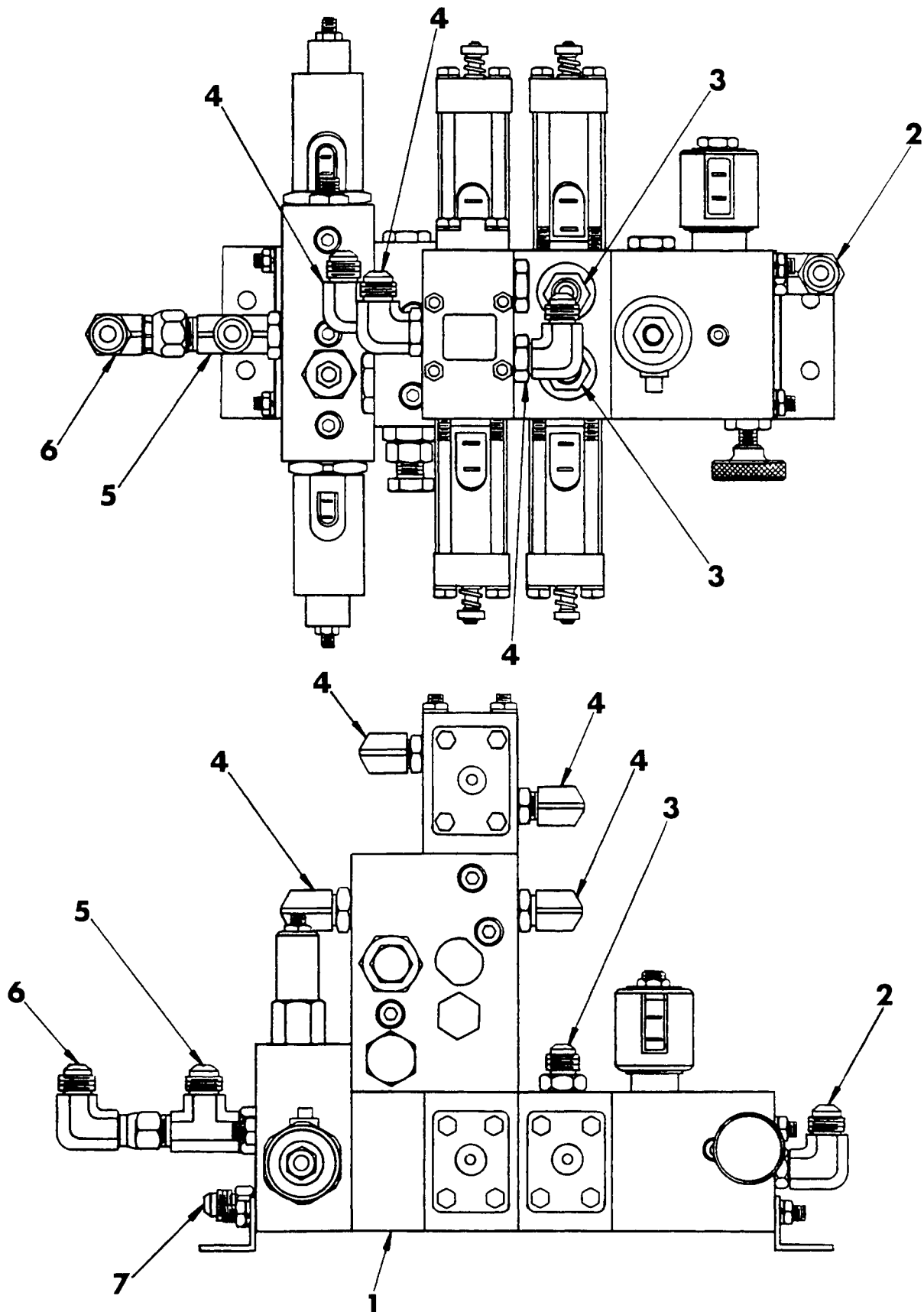


REV.1
1-83

FIGURE 8A - MANIFOLD ASSEMBLY WITH OUTRIGGER CONTROL
(RT25G) (OPTION) (SAME ON ALL RT25S WITH OUTRIGGERS)

139

ITEM	PART NUMBER	DESCRIPTION	QTY
8A-	30711	MANIFOLD ASSEMBLY WITH OUTRIGGER CONTROL	1
-1	3069/3043	MANIFOLD PACKAGE WITH OUTRIGGER CONTROL VALVE	1
-2	2498	FEMALE PIPE ADAPTER	1
-3	2438	STRAIGHT THREAD ELBOW	2
-4	2428	SWIVEL NUT RUN TEE	2
-5	2530	FEMALE CONNECTOR	1
-6	2450	STREET ELBOW	2
-7	2475	PIPE NIPPLE	1
-8	2527	MALE QUICK DISCONNECT	1
-9	845	CAP	1
-10	2474	STRAIGHT THREAD CONNECTOR	4
-11	2509	STRAIGHT THREAD CONNECTOR	1
-12	2581	STRAIGHT THREAD CONNECTOR	1
-13	2420	STREET TEE	1
-14	2476	MALE CONNECTOR	1
-15	2508	MALE CONNECTOR	1



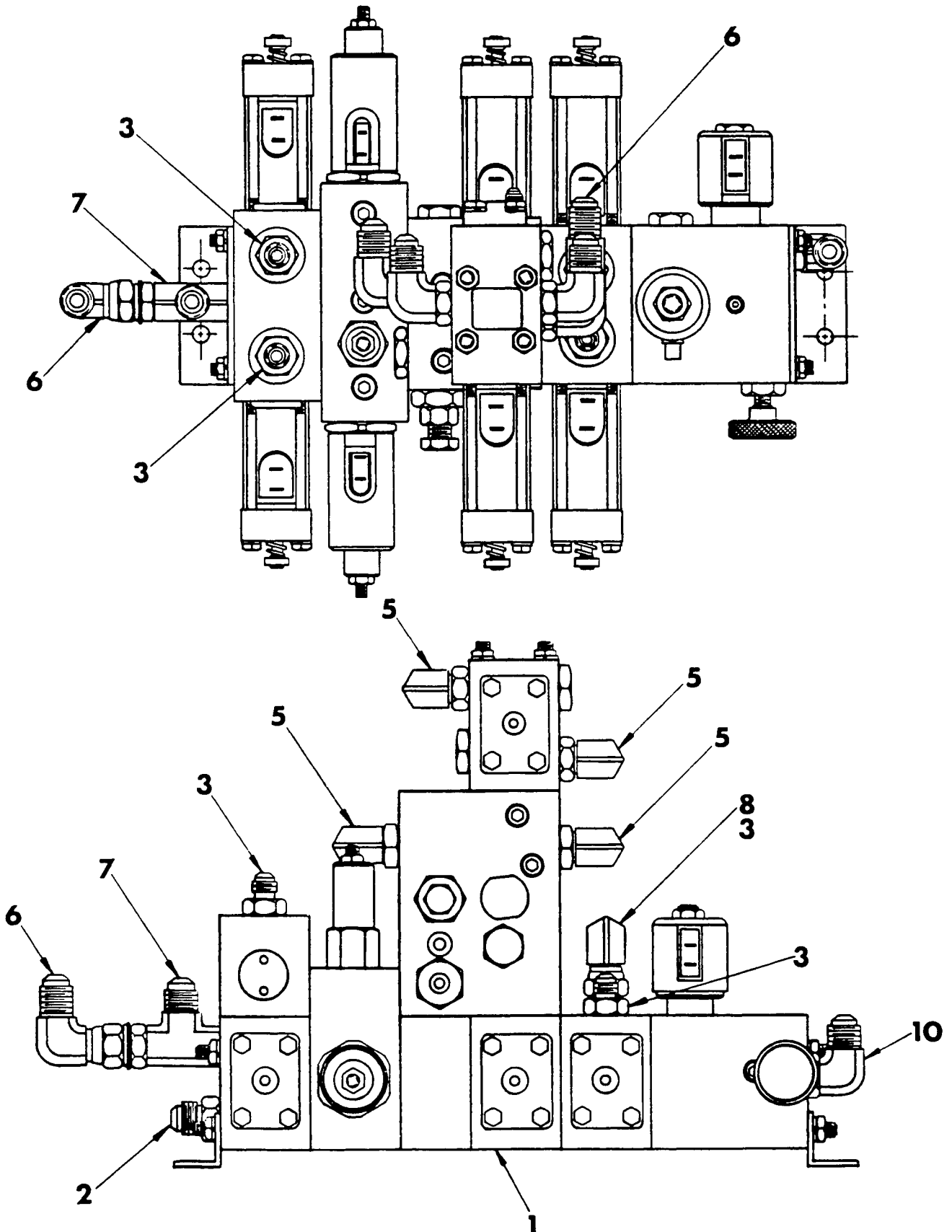
REV.1
1-83

FIGURE 8B - MANIFOLD ASSEMBLY (RT26E) (RT26G)
(RT31E) (RT31G) (BEGINNING MARCH 1980)

141

ITEM	PART NUMBER	DESCRIPTION	QTY
8B-	30713	MANIFOLD ASSEMBLY	1
-1	3100	MANIFOLD PACKAGE (SEE FIG.8G)	
-2	2438	STRAIGHT THREAD ELBOW	1
-3	2511	STRAIGHT THREAD CONNETOR	2
-4	2523	STRAIGHT THREAD ELBOW	4
-5	2576	STRAIGHT THREAD RUN TEE	1
-6	2441	SWIVEL NUT ELBOW	1
-7	2542	STRAIGHT THREAD CONNECTOR	1

(BEGINNING MARCH 1980)



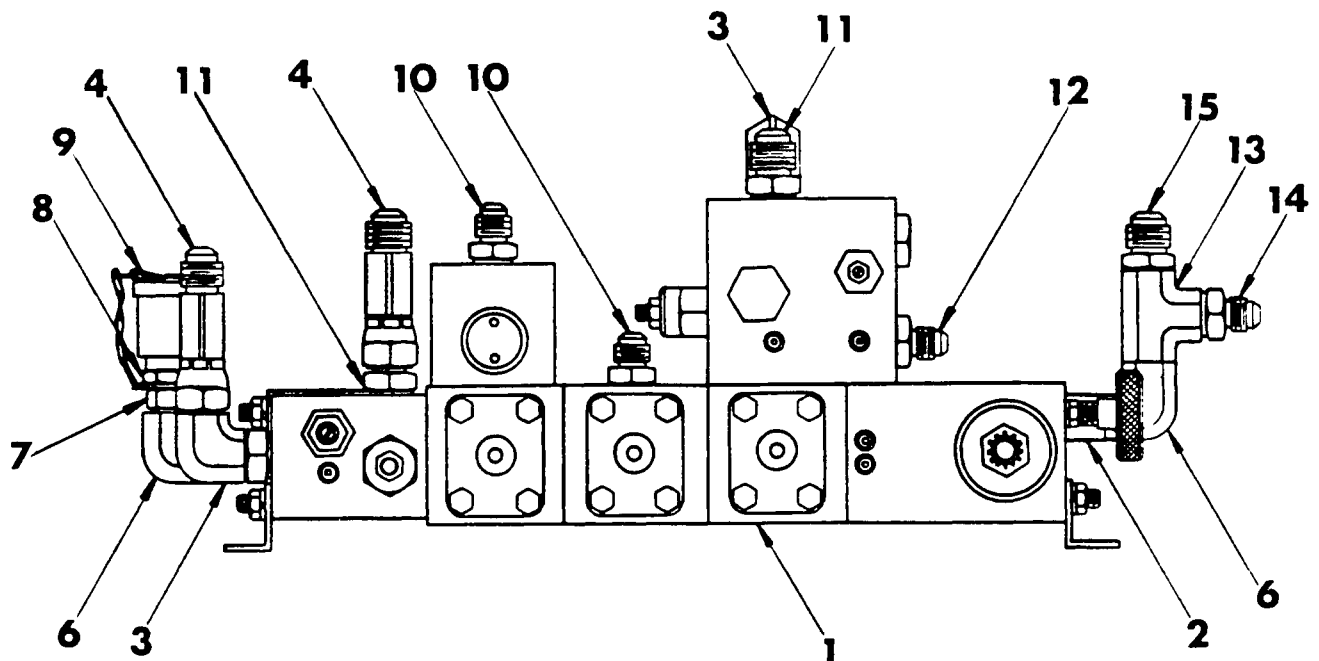
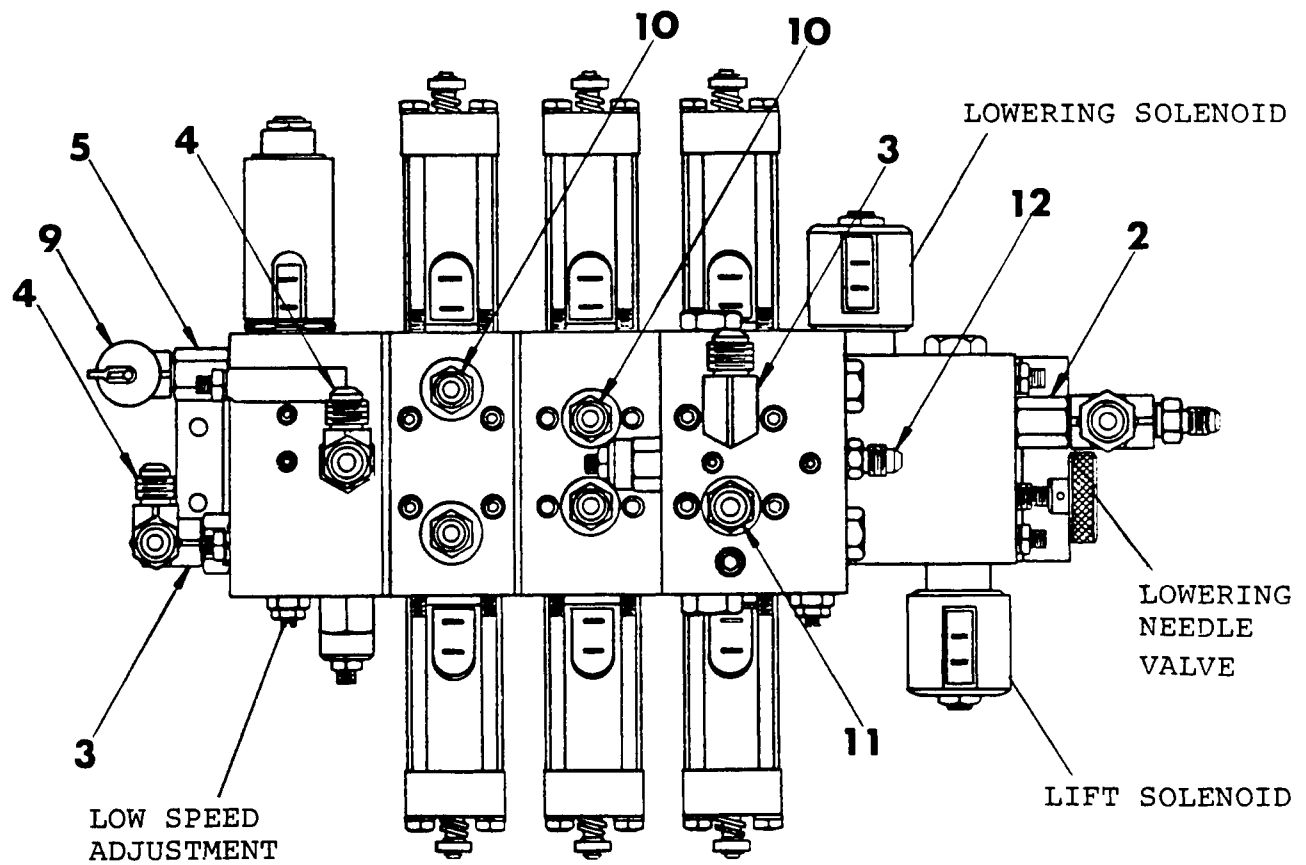
REV.1
1-83

FIGURE 8C - MANIFOLD ASSEMBLY WITH OUTRIGGER
CONTROL (RT25E) (RT26G) (RT31E) (RT31G) (OPTION

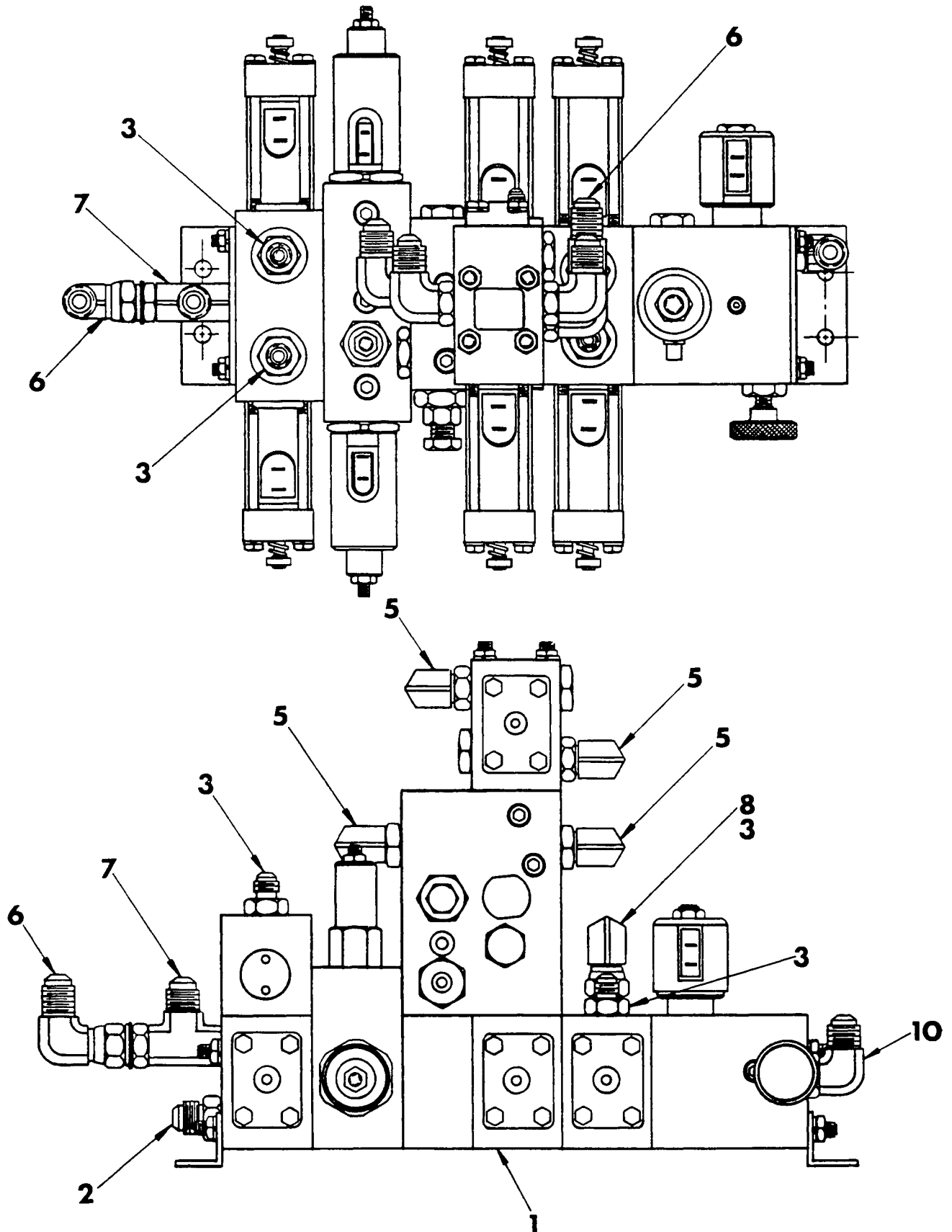
143

(BEGINNING MARCH 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
8C-	30712	MANIFOLD ASSEMBLY	1
-1	3101	MANIFOLD PACKAGE (SEE FIG.8H)	1
-2	2542	STRAIGHT THREAD CONNECTOR	1
-3	2511	MALE CONNECTOR	4
-4	2608	MALE CONNECTOR	1
-5	2523	STRAIGHT THREAD ELBOW	4
-6	2441	SWIVEL NUT ELBOW	1
-7	2576	STRAIGHT THREAD RUN TEE	1
-8	2538	SWIVEL NUT ELBOW	1
-9	2411	CAP	1
-10	2438	STRAIGHT THREAD ELBOW	1



ITEM	PART NUMBER	DESCRIPTION	QTY
8D-	30711	MANIFOLD ASSEMBLY WITH OUTRIGGER CONTROL	1
-1	3069/3043	MANIFOLD PACKAGE WITH OUTRIGGER CONTROL VALVE	1
-2	2498	FEMALE PIPE ADAPTER	1
-3	2438	STRAIGHT THREAD ELBOW	2
-4	2428	SWIVEL NUT RUN TEE	2
-5	2530	FEMALE CONNECTOR	1
-6	2450	STREET ELBOW	2
-7	2475	PIPE NIPPLE	1
-8	2527	MALE QUICK DISCONNECT	1
-9	845	CAP	1
-10	2474	STRAIGHT THREAD CONNECTOR	4
-11	2509	STRAIGHT THREAD CONNECTOR	1
-12	2581	STRAIGHT THREAD CONNECTOR	1
-13	2420	STREET TEE	1
-14	2476	MALE CONNECTOR	1
-15	2508	MALE CONNECTOR	1

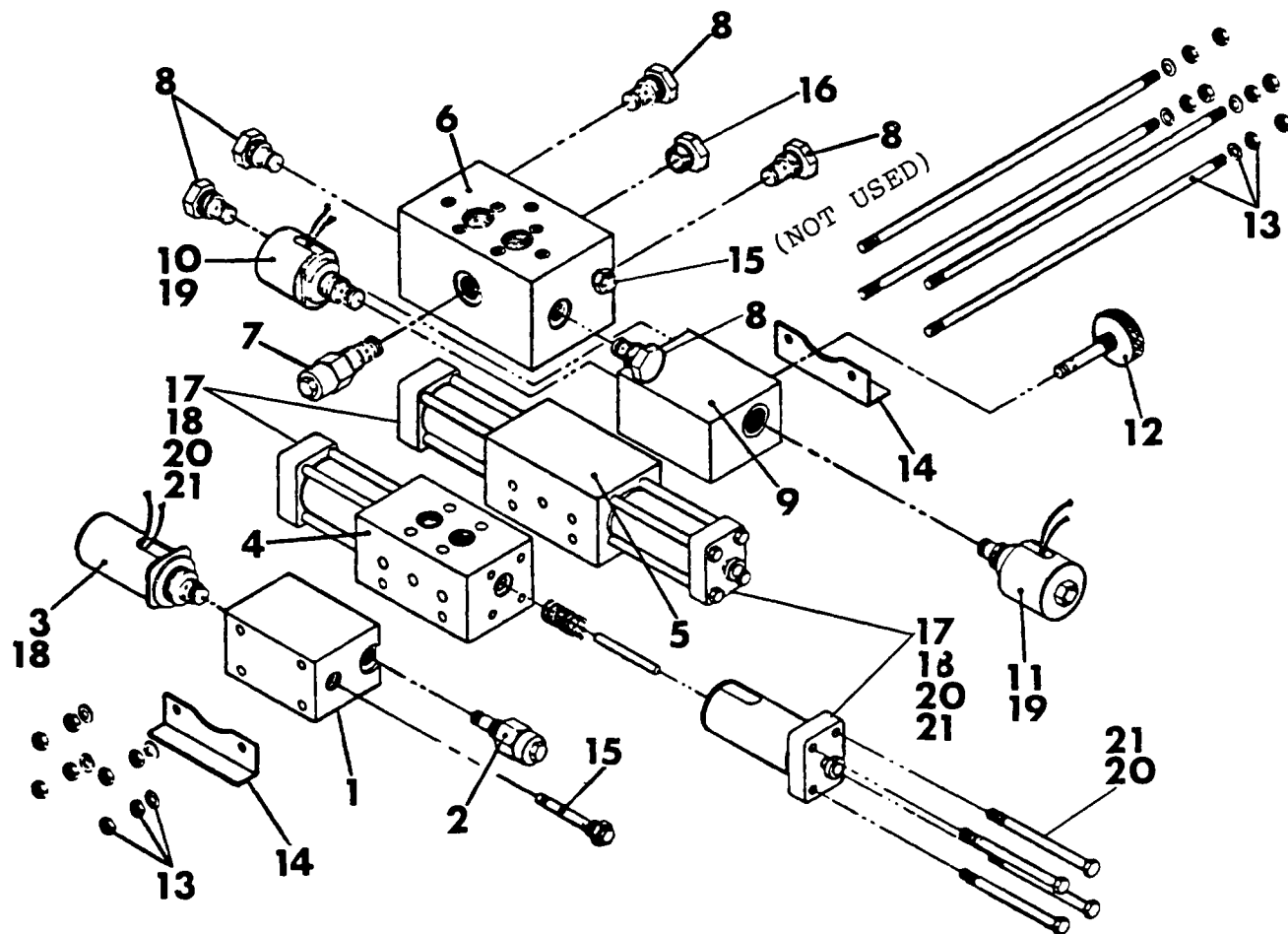


REV.1
1-83

FIGURE 8E - MANIFOLD ASSEMBLY WITH OUTRIGGER
CONTROL (RT40E) (RT40G) (BEGINNING MARCH 1980)

147

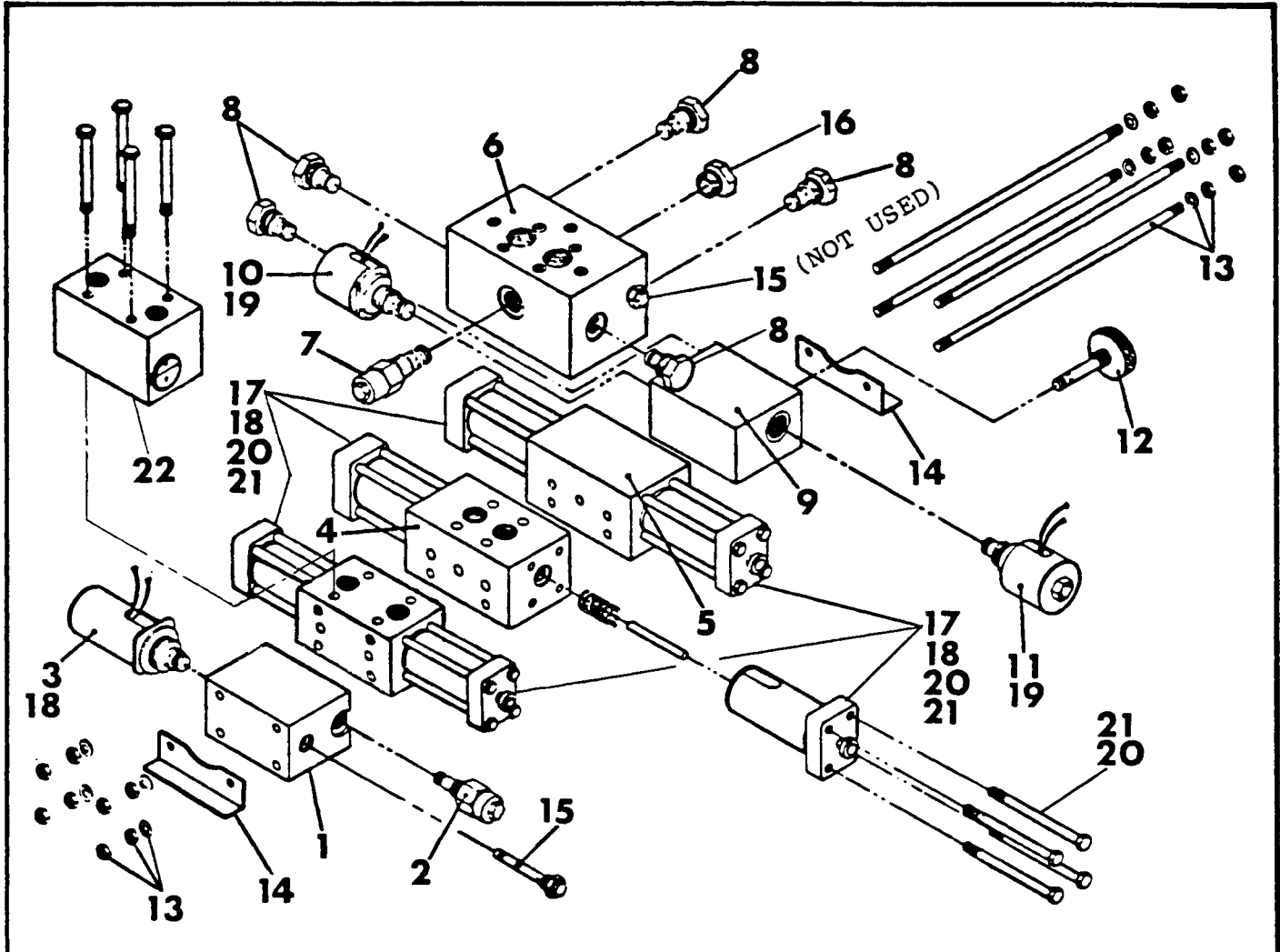
ITEM	PART NUMBER	DESCRIPTION	QTY
8E-	30712	MANIFOLD ASSEMBLY	1
-1	3101	MANIFOLD PACKAGE (SEE FIG.8J)	1
-2	2542	STRAIGHT THREAD CONECTOR	1
-3	2511	MALE CONNECTOR	4
-4	2608	MALE CONNECTOR	1
-5	2523	STRAIGHT THREAD ELBOW	4
-6	2441	SWIVEL NUT ELBOW	1
-7	2576	STRAIGHT THREAD RUN TEE	1
-8	2538	SWIVEL NUT ELBOW	1
-9	2411	CAP	1
-10	2438	STRAIGHT THREAD ELBOW	1



ITEM	PART NUMBER	DESCRIPTION	QTY
8F-	3069 (6355A)	MANIFOLD PACKAGE	1
-1	3064	HIGH SPEED/RELIEF VALVE (BLOCK ONLY)	1
-2	3044	RELIEF VALVE	1
-3	3045	HIGH SPEED VALVE	1
-4	3019-2	STEERING VALVE ASSEMBLY	1
-5	3019-3	DRIVE VALVE ASSEMBLY	1
-6	3019-4	LOW SPEED-CUSHION VALVE ASSEMBLY	1
-7	3046	CUSHION RELIEF VALVE	1
-8	3048	CHECK VALVE	5
-9	3019-5	LIFT/LOWER VALVE BLCCK ASSEMBLY	1
-10	3051	LOWERING VALVE (NEW PART NO. 66063)	1
-11	3051	LIFT VALVE (NEW PART NO. 66063)	1
-12	3053	EMERGENCY LOWERING VALVE	1

ITEM	PART NUMBER	DESCRIPTION	QTY
-13	3054	TIE RODS - WITH WASHERS & NUTS	4
-14	3019-6	FOOT	2
-15	3050	CONTROL ORIFICE (LOW SPEED)	1
-16	N/A	PLUG	1
-17	66055	END CAP OVERRIDE	4
-18	4073	6 VOLT LONG COIL (ONLY) (NEW PART NO. 66073)	5
-19	4074	6 VOLT SHORT COIL (ONLY) (NEW PART NO. 66064)	2
-20	66056	1/4" HEX HEAD CAPSCREWS	16
-21	63301	1/4" LOCK WASHER	16

(USED ON ALL RT25S WITH HYDRAULIC OUTRIGGERS)



ITEM	PART NUMBER	DESCRIPTION	QTY
8F.1-	3069 (6355A)	MANIFOLD PACKAGE WITH OUTRIGGER CONTROL	1
-1	3064	HIGH SPEED/RELIEF BLOCK(ONLY)	1
-2	3044	RELIEF VALVE	1
-3	3045	HIGH SPEED VALVE	1
-4	3019-2	STEERING VALVE ASSEMBLY	1
-5	3019-3	DRIVE VALVE ASSEMBLY	1
-6	3019-4	LOW SPEED - CUSHION VALVE ASSEMBLY	1
-7	3046	CUSHION RELIEF VALVE	1
-8	3048	CHECK VALVE	5
-9	3019-5	LIFT/LOWER VALVE BLOCK ASSEMBLY	1
-10	3051	LOWERING VALVE (NEW PART NO. 66063)	1
-11	3051	LIFT VALVE (NEW PART NO. 66063)	1

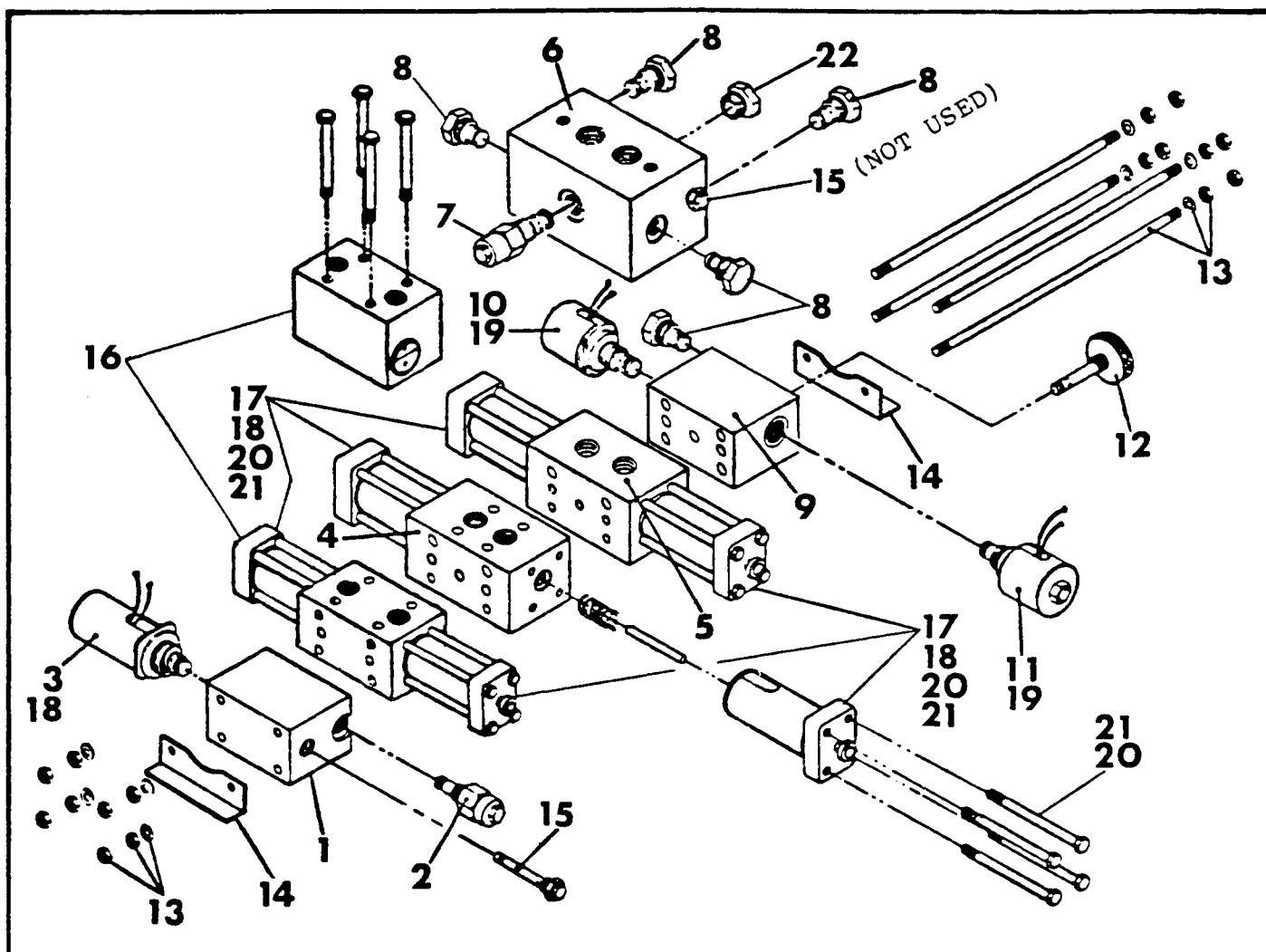
REV.1
1-83

FIGURE 8F.1 - MANIFOLD PACKAGE WITH OUTRIGGER
CONTROL (RT25G)

149.2

(USED ON ALL RT25S WITH HYDRAULIC OUTRIGGERS)

ITEM	PART NUMBER	DESCRIPTION	QTY
-12	3053	EMERGENCY LOWERING VALVE	1
-13	66093	TIE RODS - WITH WASHERS & NUTS	4
-14	3019-6	FOOT	2
-15	3050	CONTROL ORIFICE (LOW SPEED)	1
-16	N/A	PLUG	1
-17	66055	END CAP OVER RIDE	6
-18	4073	6 VOLT LONG COIL (ONLY) (NEW PART NO. 66073)	7
-19	4074	6 VOLT SHORT COIL (ONLY) (NEW PART NO. 66064)	2
-20	66056	1/4" HEX HEAD CAP SCREWS	24
-21	63301	1/4" LOCK WASHER	24
-22	3043	OUTRIGGER VALVE WITH HOLDING VALVE	1



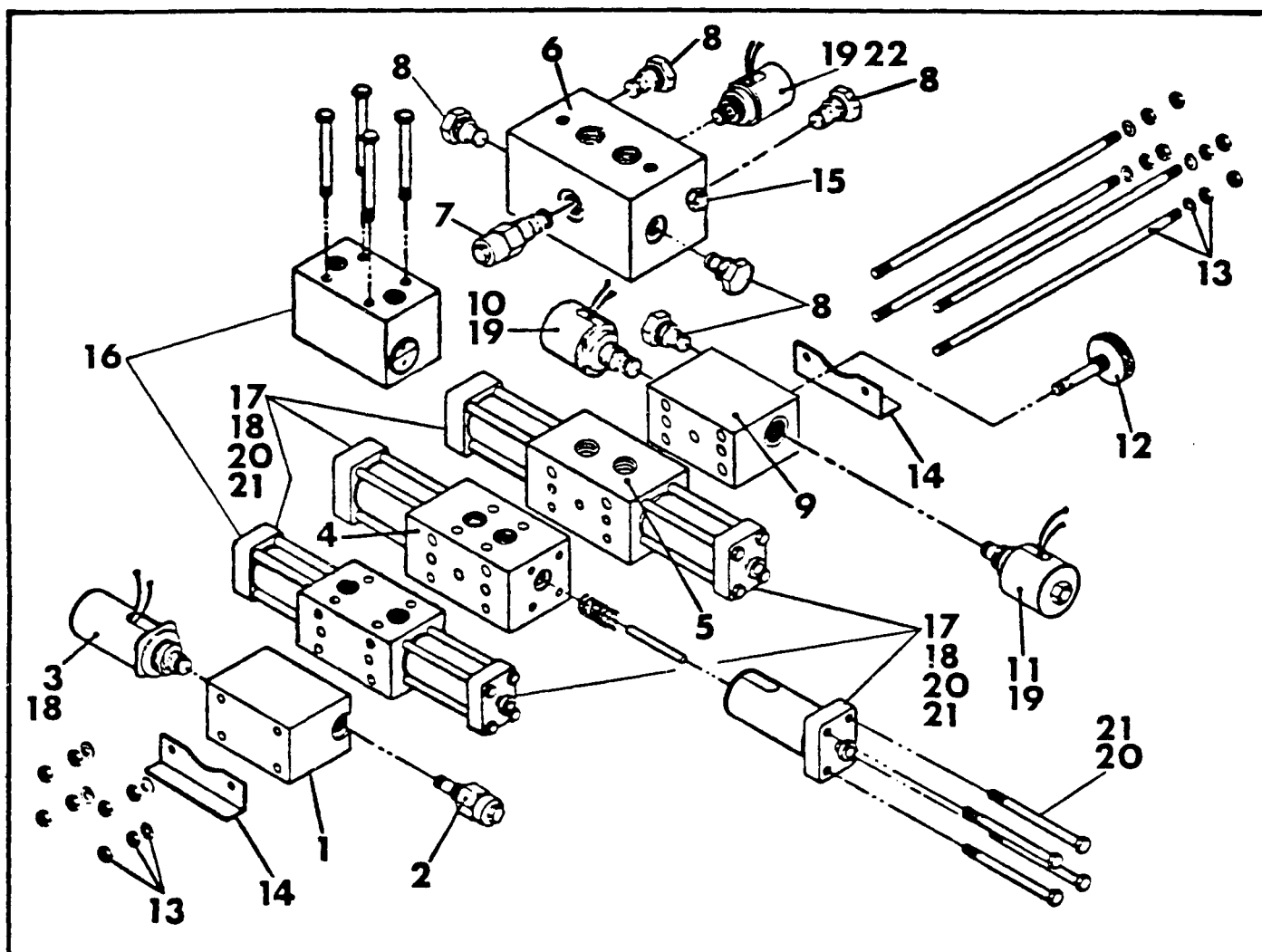
ITEM	PART NUMBER	DESCRIPTION	QTY
8F.2-	30711	MANIFOLD PACKAGE	1
-1	3064	HIGH SPEED/RELIEF BLOCK (ONLY)	1
-2	3044	RELIEF VALVE	1
-3	3045	HIGH SPEED VALVE ASSEMBLY	1
-4	3019-2	STEERING VALVE ASSEMBLY	1
-5	3019-3	DRIVE VALVE ASSEMBLY	1
-6	3019-4	CUSHION VALVE ASSEMBLY WITH PLUG	1
-7	3046	CUSHION RELIEF VALVE	1
-8	3048	CHECK VALVE	5
-9	3019-5	LIFT/LOWER VALVE BLOCK ASSEMBLY	1
-10	3051	LOWERING VALVE	1
-11	3051	LIFT VALVE	1

REV.1
1-83

FIGURE 8F.2 - MANIFOLD PACKAGE (SRT31G)
(BEGINNING MARCH 1980)

149.4

ITEM	PART NUMBER	DESCRIPTION	QTY
-12	3053	EMERGENCY LOWERING VALVE	1
-13	66093	TIE ROD WITH WASHERS & NUTS	4
-14	3019-6	FOOT	2
-15	3050	CONTROL ORIFICE (LOW SPEED)	1
-16	3043	OUTRIGGER VALVE ASSEMBLY WITH LOCK VALVE	1
-17	66055	END CAP OVER RIDE	6
-18	4073	6 VOLT LONG COIL ONLY (NEW PART NO. 66073)	7
-19	4074	6 VOLT SHORT COIL ONLY (NEW PART NO. 66064)	2
-20	66056	1/4" HEX HEAD CAP SCREW	24
-21	63301	1/4" LOCK WASHER	24
-22	N/A	PLUG	1
NOTE: THIS PACKAGE USED WITH AUSCO PARKING BRAKE.			



ITEM	PART NUMBER	DESCRIPTION	QTY
8F.3-	3019-3043	MANIFOLD PACKAGE	1
-1	3064	DUMP/RELIEF BLOCK (ONLY)	1
-2	3044	RELIEF VALVE	1
-3	3045	HIGH SPEED VALVE ASSEMBLY	1
-4	3019-2	STEERING VALVE ASSEMBLY	1
-5	3019-3	DRIVE VALVE ASSEMBLY	1
-6	3019-4	LOW SPEED - CUSHION VALVE ASSEMBLY	1
-7	3046	CUSHION RELIEF VALVE	1
-8	3048	CHECK VALVE	5
-9	3019-5	LIFT/LOWER VALVE BLOCK ASSEMBLY	1
-10	3051	LOWERING VALVE	1
-11	3051	LIFT VALVE	1

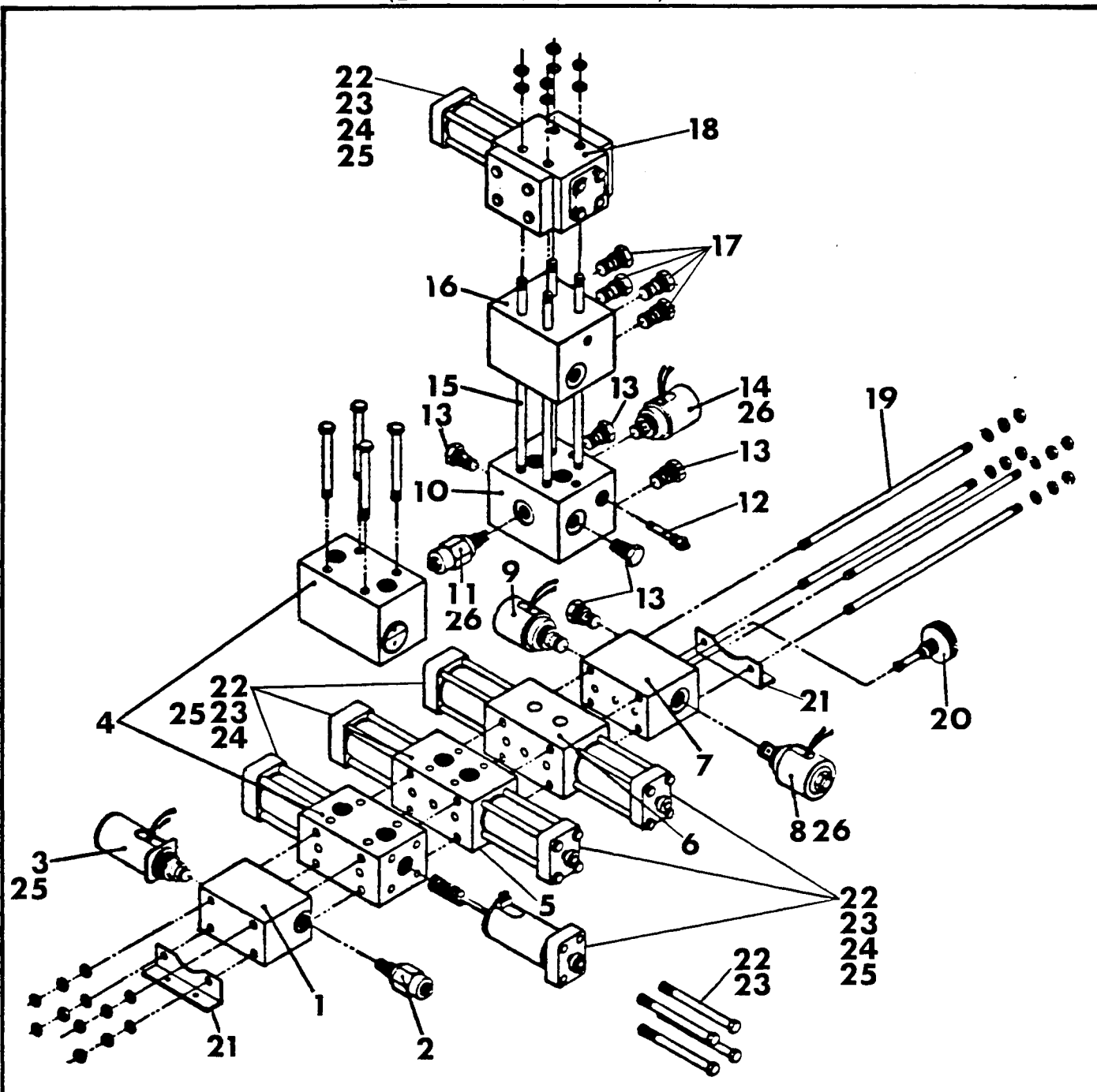
REV.1
1-83

FIGURE 8F.3 - MANIFOLD PACKAGE (SRT31G)
(BEFORE MARCH 1980)

149.6

ITEM	PART NUMBER	DESCRIPTION	QTY
-12	3053	EMERGENCY LOWERING VALVE	1
-13	66093	TIE RODS - WASHERS & NUTS	4
-14	3019-6	FOOT	2
-15	3050	CONTROL ORIFICE (LOW SPEED)	1
-16	3043	OUTRIGGER VALVE ASSEMBLY WITH LOCK VALVE	1
-17	66055	END CAP OVER RIDE	6
-18	4073	6 VOLT LONG COIL ONLY (NEW PART NO. 66073)	7
-19	4074	6 VOLT SHORT COIL ONLY (NEW PART NO. 66064)	3
-20	66056	1/4" HEX HEAD CAP SCREW	24
-21	63301	1/4" LOCK WASHER	24
-22	3047	CREEP/LOW SPEED VALVE	1

(BEFORE MARCH 1980)



ITEM	PART NUMBER	DESCRIPTION	QTY
8F.4-	3021	MANIFOLD PACKAGE WITH OUTRIGGER CONTROL	1
-1	3019-1	DUMP/RELIEF VALVE ASSEMBLY	1
-2	3044	RELIEF VALVE	1
-3	3045	DUMP VALVE	1

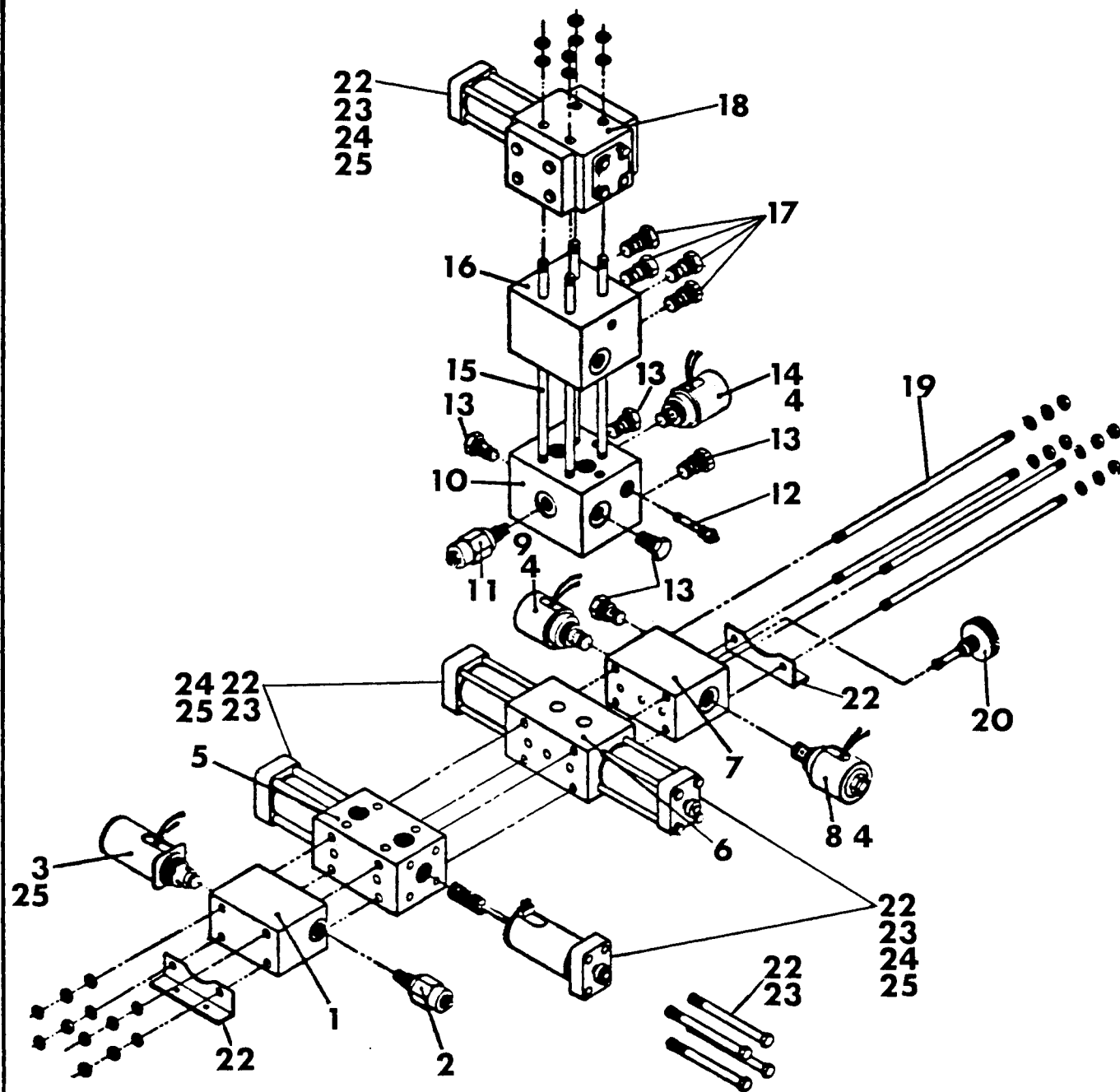
REV.1
1-83

FIGURE 8F.4 - MANIFOLD PACKAGE WITH OUTRIGGER CONTROL
(RT26E) (RT26G) (RT31E) (RT31G) (RT40E) (RT40G)

149.8

(BEFORE MARCH 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
-4	3043	OUTRIGGER VALVE WITH HOLDING VALVE	1
-5	3019-2	STEERING VALVE	1
-6	3019-3	DRIVE VALVE ASSEMBLY	1
-7	3019-5	LIFT/LOWER VALVE ASSEMBLY	1
-8	3051	LIFT VALVE (NEW PART NO. 66063)	1
-9	3051	LOWERING VALVE (NEW PART NO. 66063)	1
-10	3020	LOW SPEED/CREEP VALVE ASSEMBLY	1
-11	3044	CUSHION RELIEF VALVE	1
-12	3050	CONTROL ORIFICE (CREEP ADJUSTMENT)	1
-13	3048	CHECK VALVE	5
-14	3047	CREEP/LOW SPEED VALVE	1
-15	3056	TIE ROD BOLTS WITH NUTS & WASHERS	4
-16	3020-1	FLOW REGULATOR VALVE ASSEMBLY	1
-17	3057	FLOW REGULATOR VALVE	4
-18	3020-2	HIGH SPEED VALVE ASSEMBLY	1
-19	3055	TIE ROD BOLTS WITH NUTS & WASHERS	4
-20	3053	EMERGENCY LOWERING VALVE	1
-21	66012	FOOT	2
-22	66056	HEX HEAD CAP SCREW	28
-23	63301	1/4" LOCK WASHER	28
-24	66055	MANUAL RELEASE ASSEMBLY	7
-25	4073	6 VOLT LONG COIL (NEW PART NO. 66073)	8
-26	4074	6 VOLT SHORT COIL (NEW PART NO. 66064)	3



ITEM	PART NUMBER	DESCRIPTION	QTY
8F.5-	9390	MANIFOLD PACKAGE	1
-1	3019-1	DUMP/RELIEF VALVE ASSEMBLY	1
-2	3044	RELIEF VALVE	1
-3	3045	DUMP VALVE	1

REV.1
1-83

FIGURE 8F.5 - MANIFOLD PACKAGE (RT26E) (RT26G)
(RT31E) (RT31G) (BEFORE MARCH 1980)

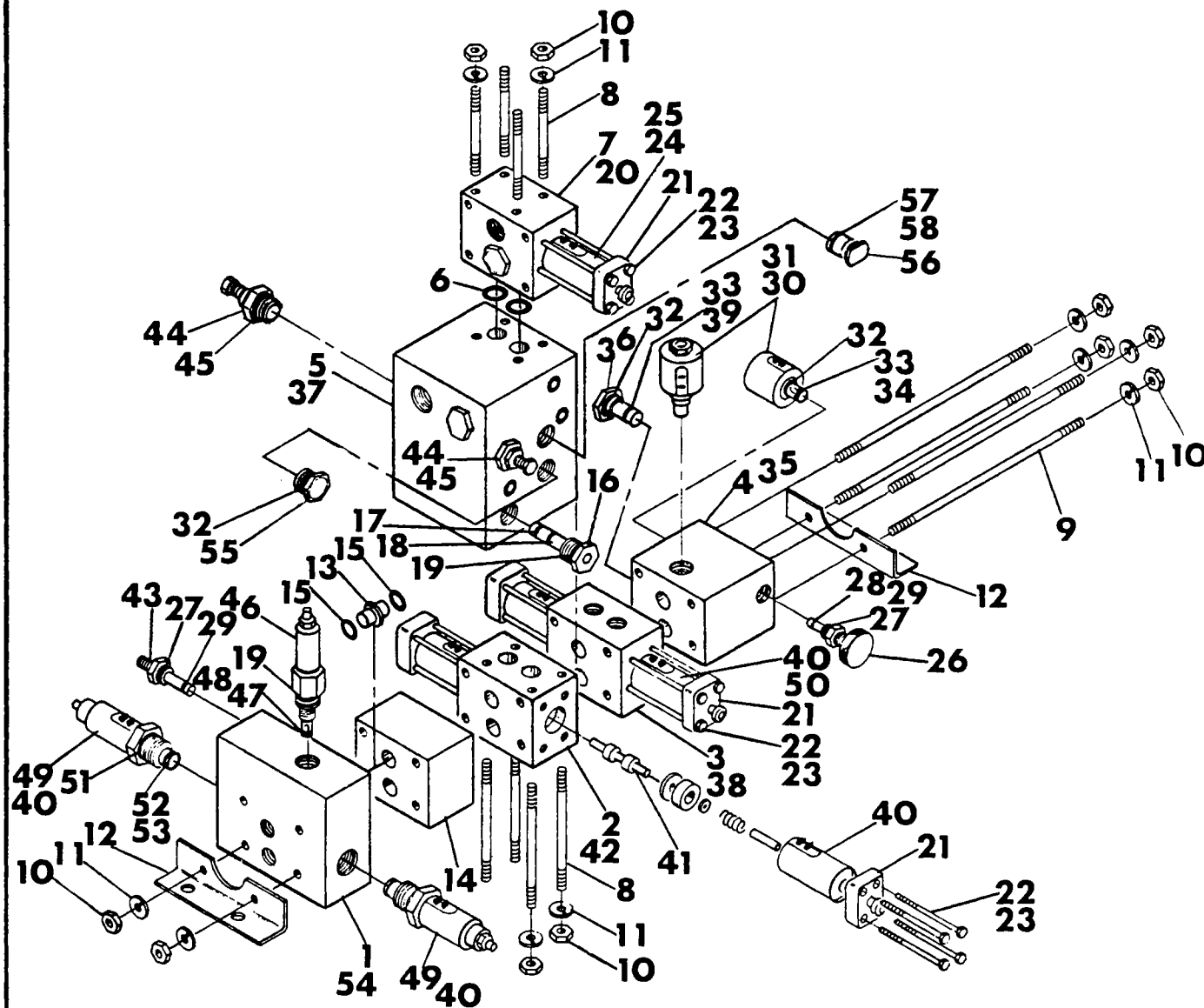
149.10

ITEM	PART NUMBER	DESCRIPTION	QTY
-4	4074	6 VOLT SHORT COIL (NEW PART NO. 66064)	3
-5	3019-2	STEERING VALVE	1
-6	3019-3	DRIVE VALVE ASSEMBLY	1
-7	3019-5	LIFT/LOWER VALVE ASSEMBLY	1
-8	3051	LIFT VALVE (NEW PART NO. 66063)	1
-9	3051	LOWERING VALVE (NEW PART NO. 66063)	1
-10	3020	LOW SPEED/CREEP VALVE ASSEMBLY	1
-11	3044	CUSHION RELIEF VALVE	1
-12	3050	CONTROL ORIFICE (CREEP ADJUSTMENT)	1
-13	3048	CHECK VALVE	5
-14	3047	CREEP/LOW SPEED VALVE	1
-15	3056	TIE ROD BOLTS WITH NUTS & WASHERS	4
-16	3020-1	FLOW REGULATOR VALVE ASSEMBLY	1
-17	3057	FLOW REGULATOR VALVE	4
-18	3020-2	HIGH SPEED VALVE ASSEMBLY	1
-19	3055	TIE ROD BOLTS WITH NUTS & WASHERS	4
-20	3053	EMERGENCY LOWERING VALVE	1
-21	66012	FOOT	2
-22	66056	HEX HEAD CAP SCREW	28
-23	63301	1/4" LOCK WASHER	28
-24	66055	MANUAL RELEASE ASSEMBLY	7
-25	4073	6 VOLT LONG COIL (NEW PART NO. 66073)	8

FIGURE 8G - MANIFOLD PACKAGE (RT26E)
(RT26G) (RT31E) (RT31G)

150

(BEGINNING MARCH 1980)



ITEM	PART NUMBER	DESCRIPTION	QTY
8G-	3100	MANIFOLD PACKAGE	1
-1	66001	DUMP VALVE SUB-ASSEMBLY	1
-2	66002	SOLENOID VALVE-DRIVE	1
-3	66003	SOLENOID VALVE-STEERING	1
-4	66004	LIFT CONTROL ASSEMBLY	1
-5	66005	DRIVE PACKAGE	1
-6	66006	O-RING	4
-7	66007	SOLENOID VALVE-HI SPEED	1
-8	66008	TIE ROD (3 3/4 LONG)	8
-9	66009	TIE ROD	4

FIGURE 8G - MANIFOLD PACKAGE (RT26E)
(RT26G) (RT31E) (RT31G)

151

(BEGINNING MARCH 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
-10	66010	HEX JAM NUT	16
-11	66011	LOCKWASHER	16
-12	66012	FOOT	2
-13	66013	BANKING SEAL	8
-14	66014	SPACER BLOCK	1
-15	66016	O-RING	16
-16	66050	SHUTTLE VALVE CARTRIGE	1
-17	66051	O-RING (A-112)	1
-18	66052	O-RING (A-113)	1
-19	66053	O-RING GASKET	2
-20	66054	BLOCK	1
-21	66055	MANUAL RELEASE ASSEMBLY	5
-22	66056	HEX HEAD CAP SCREW	20
-23	63301	LOCKWASHER (MED) $\frac{1}{4}$	20
-24	66057	COIL	1
-25	66058	SPOOL ASSEMBLY	1
-26	66059	NEEDLE VALVE-EMERGENCY LOWERING	1
-27	66060	O-RING	2
-28	66061	BACK-UP RING	2
-29	66062	O-RING	2
-30	66063 or 3051	SOLENOID VALVE CARTRIDGE-LIFT/LOWERING	2
-31	66064 or 4074	COIL-SHORT	2
-32	66065	O-RING GASKET	5
-33	66066	O-RING	3
-34	66067	BACK-UP RING	2
-35	66068	BLOCK	1
-36	66069	CHECK VALVE	1
-37	66070	BLOCK	1
-38	66071	BLOCK	1
-39	66072	BACK-UP RING	1
-40	66073 or 4073	COIL-LONG	6
-41	66074	SPOOL-DRIVE	1
-42	66075	BLOCK	1
-43	66076	NEEDLE VALVE	1

FIGURE 8G - MANIFOLD PACKAGE (RT26E)
(RT26G) (RT31E) (RT31G)

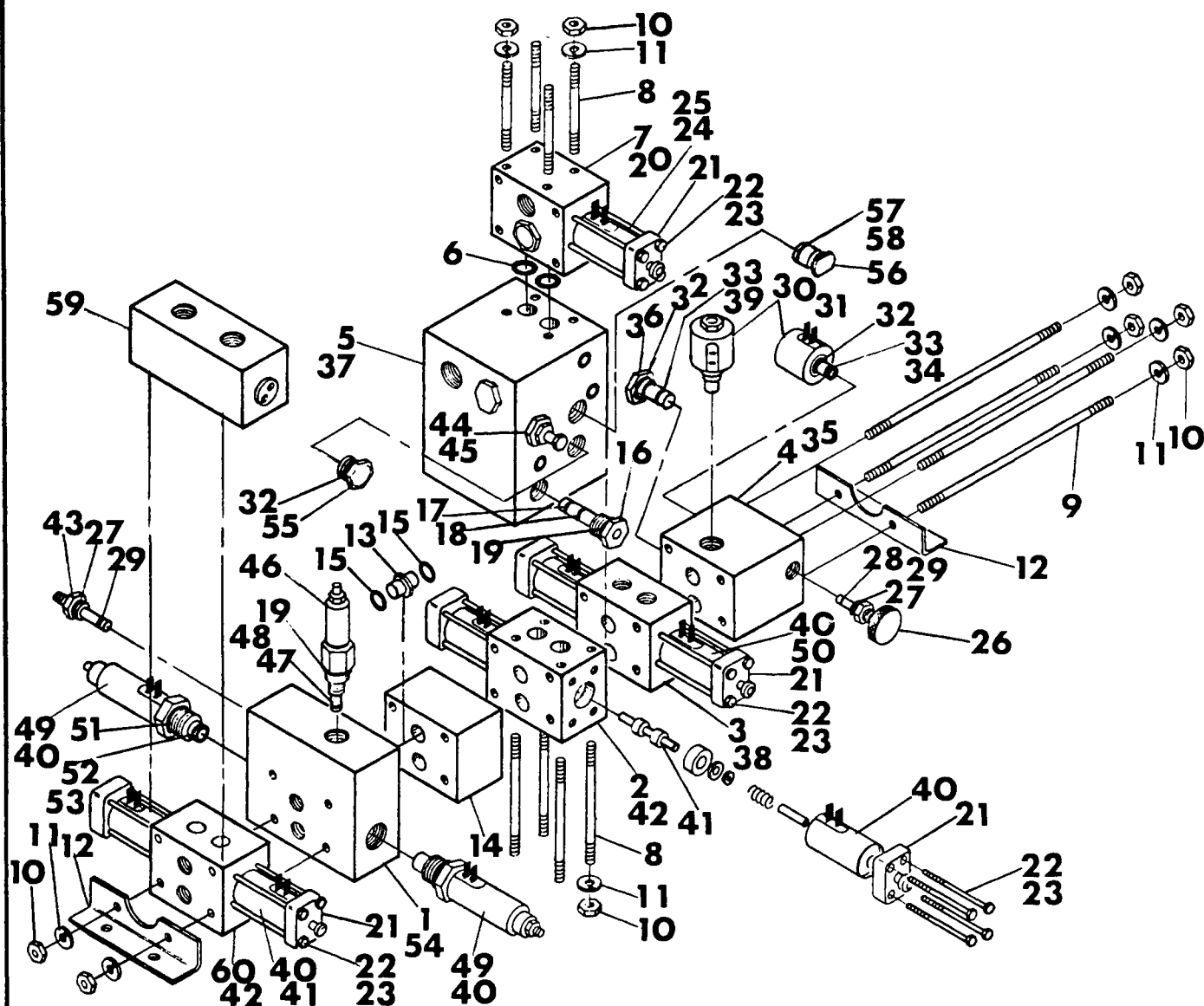
152

(BEGINNING MARCH 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
-44	66077	ADJUSTMENT HOUSING-DYNAMIC BRAKE	2
-45	66078	O-RING (A-117)	2
-46	66079	RELIEF VALVE CARTRIDGE-(MAIN SYS. PRESS. ADJ.)	1
-47	66080	O-RING	1
-48	66081	BACK-UP RING	1
-49	66082	SOLENOID VALVE-DUMP/CREEP	2
-50	66083	SPOOL	1
-51	66084	O-RING GASKET	2
-52	66085	O-RING	2
-53	66086	BACK-UP RING	2
-54	66087	BLOCK	1
-55	66088	TUBE PLUG	2
-56	66089	PLUG	2
-57	66090	O-RING	2
-58	66091	BACK-UP RING	2

FIGURE 8H - MANIFOLD PACKAGE-WITH OUTRIGGER
CONTROL (RT26E) (RT26G) (RT31E) (RT31G) (OPTION)

153



ITEM	PART NUMBER	DESCRIPTION	QTY
8H-	3101	MANIFOLD PACKAGE-WITH OURIGGER CONTROL	1
-1	66001	DUMP VALVE SUB-ASSEMBLY	1
-2	66002	SOLENOID VALVE-DRIVE	1
-3	66003	SOLENOID VALVE-STEERING	1
-4	66004	LIFT CONTROL ASSEMBLY	1
-5	66005	DRIVE PACKAGE	1
-6	66006	O-RING	6
-7	66007	SOLENOID VALVE-HI SPEED	1
-8	66008	TIE ROD (3 3/4 LONG)	8
-9	66093	TIE ROD	4

**FIGURE 8H - MANIFOLD PACKAGE-WITH OUTRIGGER
CONTROL (RT26E) (RT26G) (RT31E) (RT31G) (OPTION)**

154

ITEM	PART NUMBER	DESCRIPTION	QTY
-10	66010	HEX JAM NUT	20
-11	66011	LOCKWASHER	20
-12	66012	FOOT	2
-13	66013	BANKING SEAL	10
-14	66014	SPACER BLOCK	1
-15	66016	O-RING	20
-16	66050	SHUTTLE VALVE CARTRIGE	1
-17	66051	O-RING (A-112)	1
-18	66052	O-RING (A-113)	1
-19	66053	O-RING GASKET	2
-20	66054	BLOCK	1
-21	66055	MANUAL RELEASE ASSEMBLY	7
-22	66056	HEX HEAD CAP SCREW	28
-23	63301	LOCKWASHER (MED) $\frac{1}{4}$	28
-24	66057	COIL	1
-25	66058	SPOOL ASSEMBLY	1
-26	66059	NEEDLE VALVE-EMERGENCY LOWERING	1
-27	66060	O-RING	2
-28	66061	BACK-UP RING	2
-29	66062	O-RING	2
-30	66063 or 3051	SOLENOID VALVE CARTRIDGE-LIFT/LOWERING	2
-31	66064 or 4074	COIL-SHORT	2
-32	66065	O-RING GASKET	5
-33	66066	O-RING	3
-34	66067	BACK-UP RING	2
-35	66068	BLOCK	1
-36	66069	CHECK VALVE	1
-37	66070	BLOCK	1
-38	66071	BLOCK	1
-39	66072	BACK-UP RING	1
-40	66073 or 4073	COIL-LONG	8
-41	66074	SPOOL-DRIVE	2
-42	66075	BLOCK	2
-43	66076	NEEDLE VALVE	1

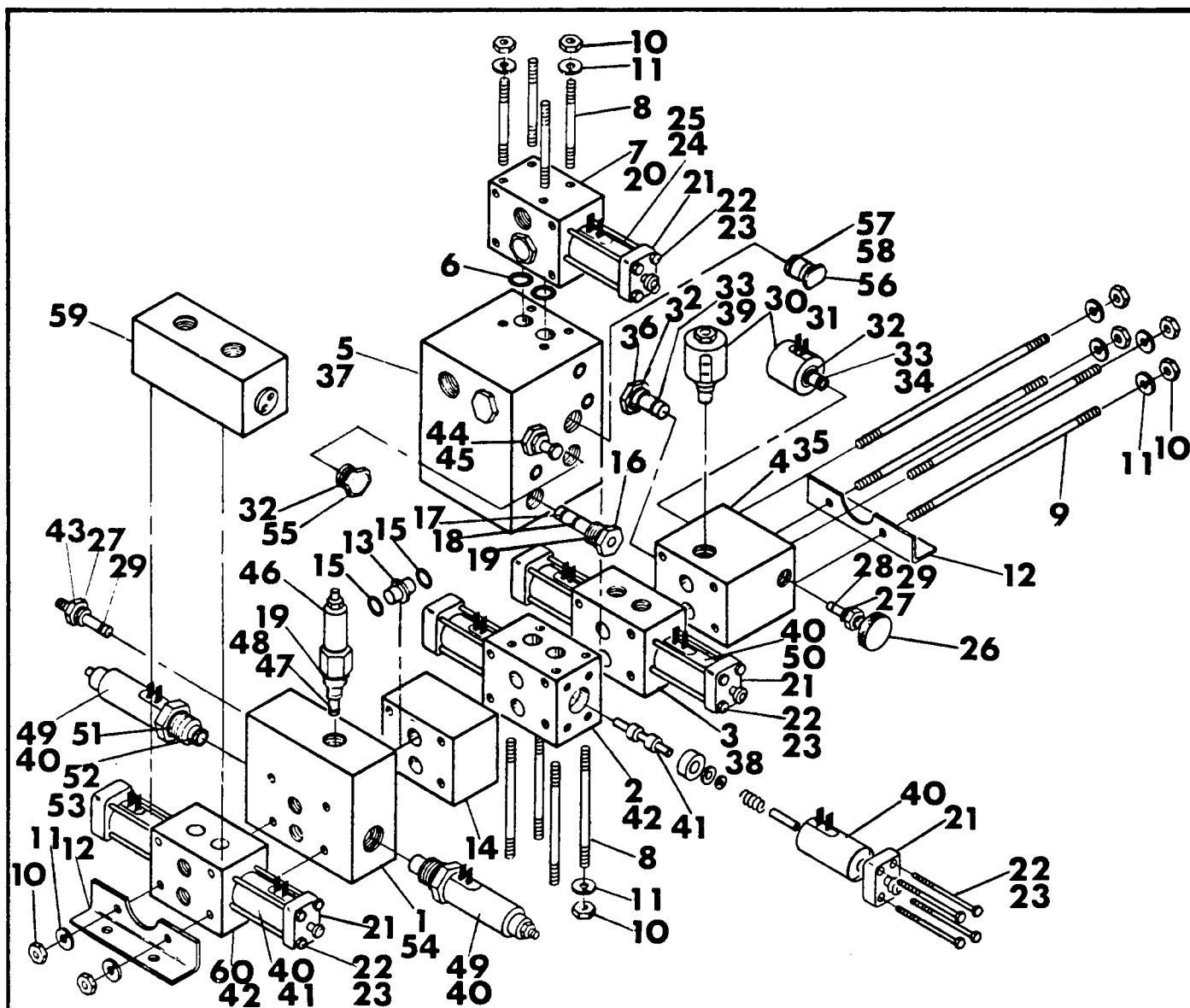
FIGURE 8H - MANIFOLD PACKAGE-WITH OUTRIGGER
CONTROL (RT26E) (RT26G) (RT31E) (RT31G) (OPTION)

155

ITEM	PART NUMBER	DESCRIPTION	QTY
-44	66077	ADJUSTMENT HOUSING-DYNAMIC BRAKE	2
-45	66078	O-RING (A-117)	2
-46	66079	RELIEF VALVE CARTRIDGE-(MAIN SYS. PRESS.	1
-47	66080	O-RING ADJ.)	1
-48	66081	BACK-UP RING	1
-49	66082	SOLENOID VALVE-DUMP/CREEP	2
-50	66083	SPOOL	1
-51	66084	O-RING GASKET	2
-52	66085	O-RING	2
-53	66086	BACK-UP RING	2
-54	66087	BLOCK	1
-55	66088	TUBE PLUG	2
-56	66089	PLUG	2
-57	66090	O-RING	2
-58	66091	BACK-UP RING	2
-59	66094	LOCK VALVE	1
-60	66095	SOLENOID VALVE-OUTRIGGER	1

FIGURE 8J - MANIFOLD PACKAGE-WITH OUTRIGGER
CONTROL (RT40E) (RT40G)

156



ITEM	PART NUMBER	DESCRIPTION	QTY
8J-	3101	MANIFOLD PACKAGE-WITH OURIGGER CONTROL	1
-1	66001	DUMP VALVE SUB-ASSEMBLY	1
-2	66002	SOLENOID VALVE-DRIVE	1
-3	66003	SOLENOID VALVE-STEERING	1
-4	66004	LIFT CONTROL ASSEMBLY	1
-5	66005	DRIVE PACKAGE	1
-6	66006	O-RING	6
-7	66007	SOLENOID VALVE-HI SPEED	1
-8	66008	TIE ROD (3 3/4 LONG)	8
-9	66093	TIE ROD	4

FIGURE 8J - MANIFOLD PACKAGE-WITH OUTRIGGER
CONTROL (RT40E) (RT40G)

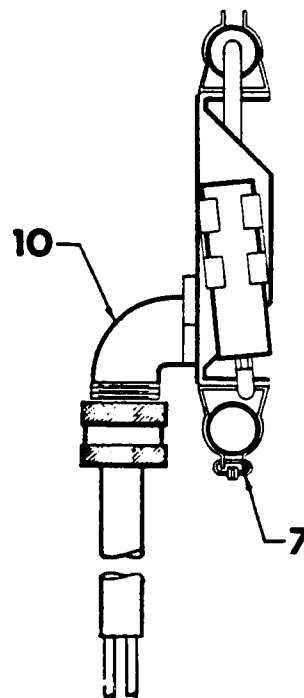
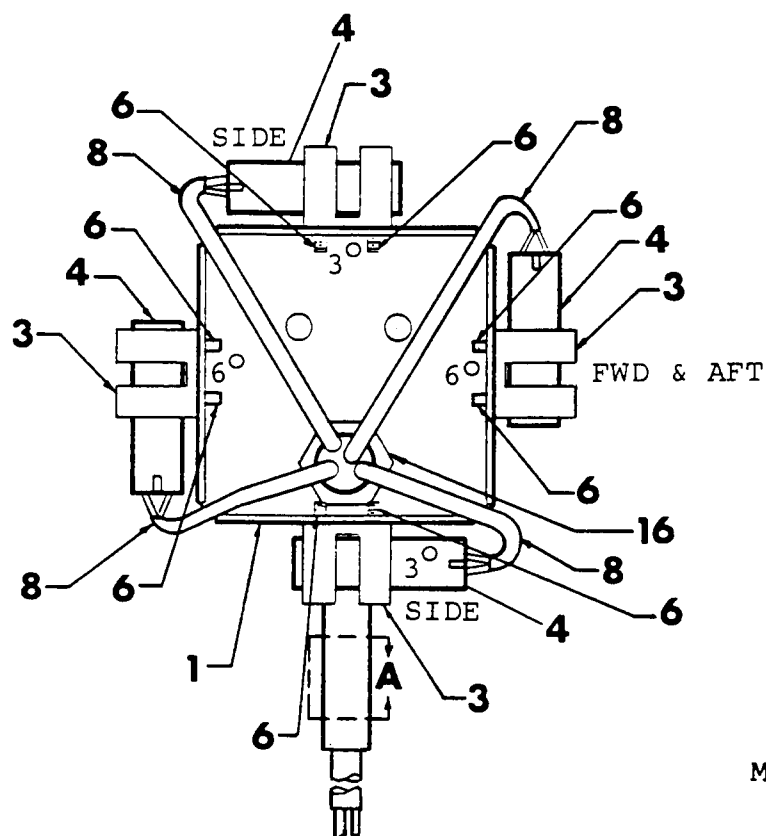
157

ITEM	PART NUMBER	DESCRIPTION	QTY
-10	66010	HEX JAM NUT	20
-11	66011	LOCKWASHER	20
-12	66012	FOOT	2
-13	66013	BANKING SEAL	10
-14	66014	SPACER BLOCK	1
-15	66016	O-RING	20
-16	66050	SHUTTLE VALVE CARTRIGE	1
-17	66051	O-RING (A-112)	1
-18	66052	O-RING (A-113)	1
-19	66053	O-RING GASKET	2
-20	66054	BLOCK	1
-21	66055	MANUAL RELEASE ASSEMBLY	7
-22	66056	HEX HEAD CAP SCREW	28
-23	63301	LOCKWASHER (MED) $\frac{1}{2}$	28
-24	66057	COIL	1
-25	66058	SPOOL ASSEMBLY	1
-26	66059	NEEDLE VALVE-EMERGENCY LOWERING	1
-27	66060	O-RING	2
-28	66061	BACK-UP RING	2
-29	66062	O-RING	2
-30	66063 or 3051	SOLENOID VALVE CARTRIDGE-LIFT/LOWERING	2
-31	66064 or 4074	COIL-SHORT	2
-32	66065	O-RING GASKET	5
-33	66066	O-RING	3
-34	66067	BACK-UP RING	2
-35	66068	BLOCK	1
-36	66069	CHECK VALVE	1
-37	66070	BLOCK	1
-38	66071	BLOCK	1
-39	66072	BACK-UP RING	1
-40	66073 or 4073	COIL-LONG	8
-41	66074	SPOOL-DRIVE	2
-42	66075	BLOCK	2
-43	66076	NEEDLE VALVE	1

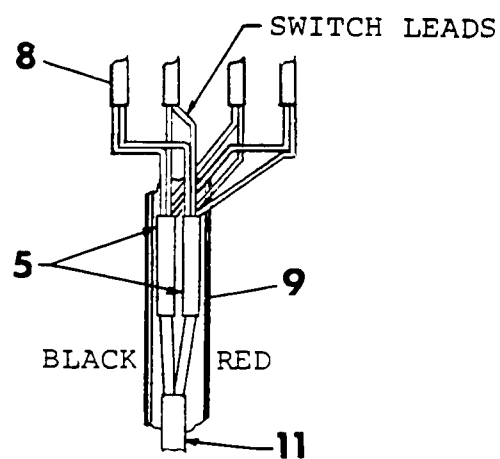
FIGURE 8J - MANIFOLD PACKAGE-WITH OUTRIGGER
CONTROL (RT40E) (RT40G)

158

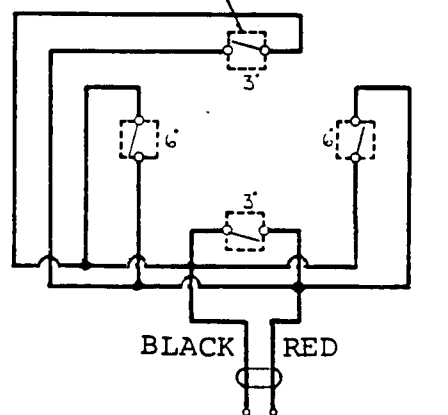
ITEM	PART NUMBER	DESCRIPTION	QTY
-44	66077	ADJUSTMENT HOUSING-DYNAMIC BRAKE	2
-45	66078	O-RING (A-117)	2
-46	66079	RELIEF VALVE CARTRIDGE-(MAIN SYS. PRESS.	1
-47	66080	O-RING ADJ.)	1
-48	66081	BACK-UP RING	1
-49	66082	SOLENOID VALVE-DUMP/CREEP	2
-50	66083	SPOOL	1
-51	66084	O-RING GASKET	2
-52	66085	O-RING	2
-53	66086	BACK-UP RING	2
-54	66087	BLOCK	1
-55	66088	TUBE PLUG	2
-56	66089	PLUG	2
-57	66090	O-RING	2
-58	66091	BACK-UP RING	2
-59	66094	LOCK VALVE	1
-60	66095	SOLENOID VALVE-OUTRIGGER	1



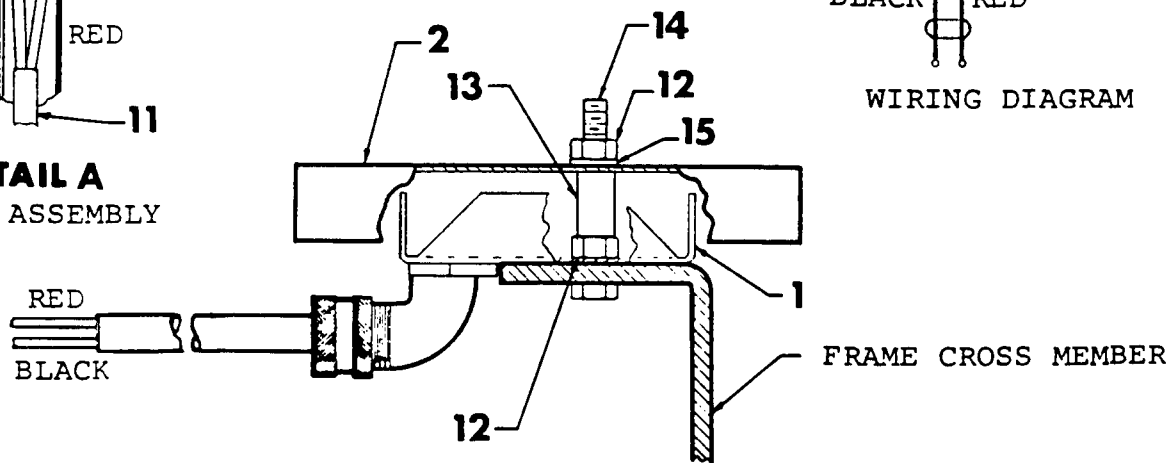
MERCURY SWITCH 4 PLCS.



DETAIL A
WIRING ASSEMBLY



WIRING DIAGRAM



TILT SWITCH INSTALLATION

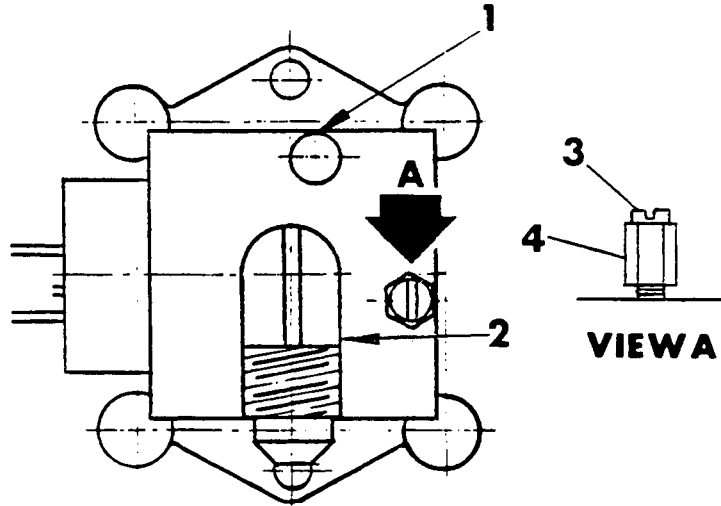
**FIGURE 9 - TILT SWITCH ASSEMBLY
& INSTALLATION (ALL MODELS)**

160

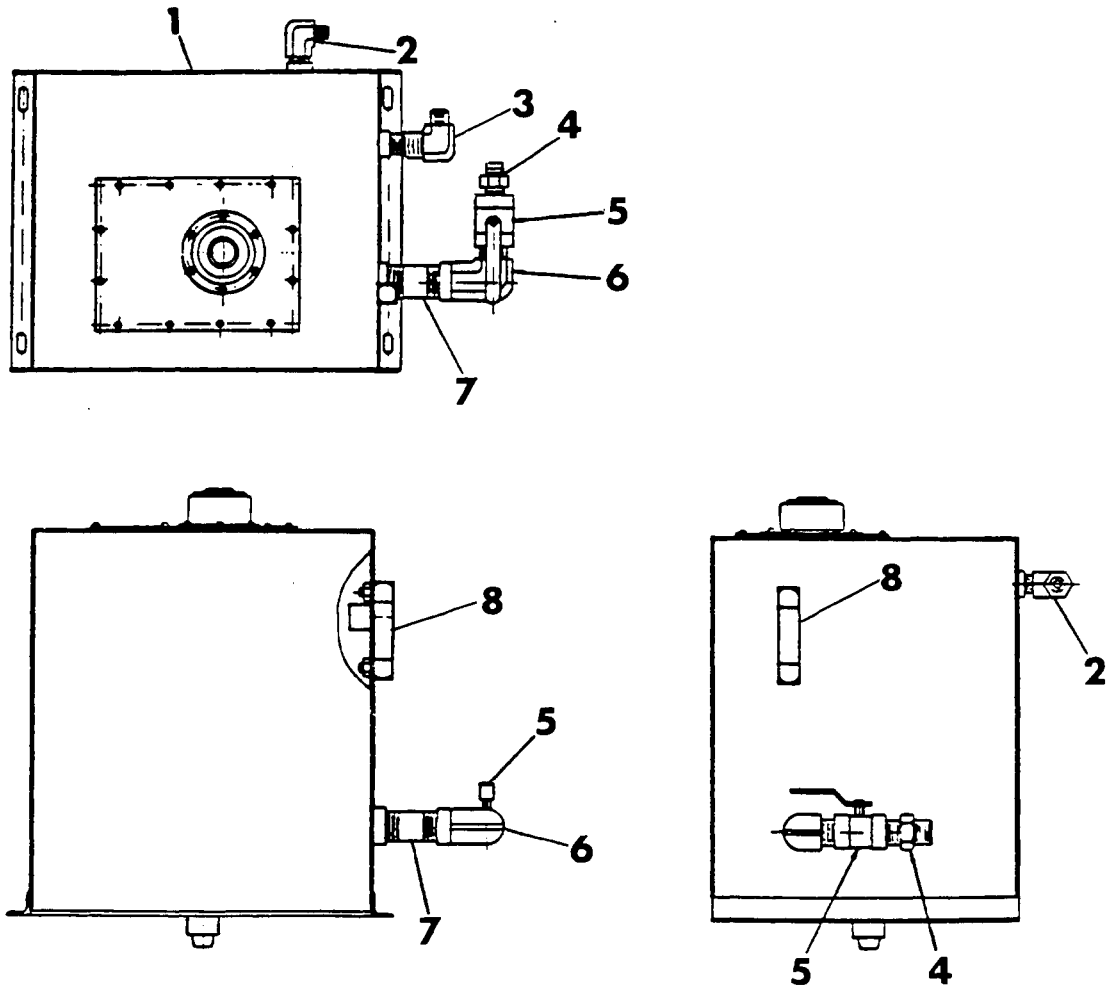
ITEM	PART NUMBER	DESCRIPTION	QTY
9-	30387	TILT SWITCH ASSEMBLY	1
-1	30385	TILT SWITCH BRACKET	1
-2	30386	TILT SWITCH COVER	1
-3	199 A	SWITCH BRACKET	4
-4	4014	MERCURY SWITCH	4
-5	117-D	BUTT CONNECTOR	2
-6	62605	ROUND HEAD SCREW 4-40 X ½	8
-7		SAFETY WIRE	8
-8		ELECTRICAL SLEEVING	4
-9		ELECTRICAL SLEEVING	2
-10	16308	90° CONNECTOR	1
-11		ELECTRIC CABLE - 2 conductor X 16 AWG	1
-12	60701	HEX NUT ½-20	4
-13	35158	SPACER 3/8 O.D. X ½ I.D. X 3/4	2
-14	60319	HEX BOLT ½ - 20 X 1 3/4	2
-15	63301	LOCK WASHER ½	2
-16	65129	HEX LOCK NUT - ½ BL 50 BONDING TYPE	1

FIGURE 10 - PRESSURE LIMIT SWITCH
ASSEMBLY (ALL MODELS)

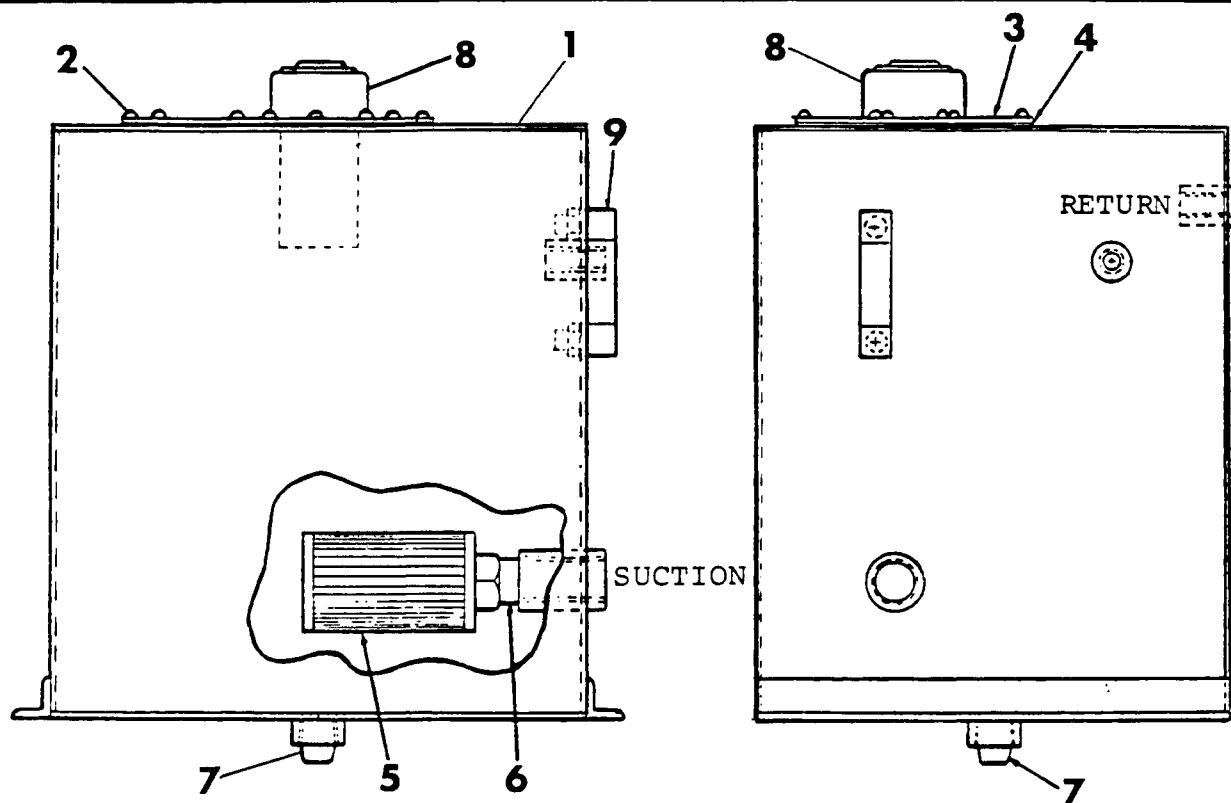
161



ITEM	PART NUMBER	DESCRIPTION	QTY
10-	30495	PRESSURE LIMIT SWITCH ASSEMBLY	1
-1	2297	PRESSURE SWITCH	1
-2	2407	90° MALE ELBOW	1
-3		ADJUSTMENT SCREW (REF.)	1
-4		LOCKING NUT (REF.)	1



ITEM	PART NUMBER	DESCRIPTION	QTY
11-	6311	HYDRAULIC TANK ASSEMBLY	1
-1	6311-1	HYDRAULIC TANK (SEE FIG.11A)	1
-2	2451	90° ELBOW	1
-3	2442	90° STREET ELBOW	1
-4	2510	MALE CONNECTOR	1
-5	3033	SHUT OFF VALVE	1
-6	2459	90° STREET ELBOW	1
-7	2494	NIPPLE	1
-8	3018	SIGHT GAUGE	1

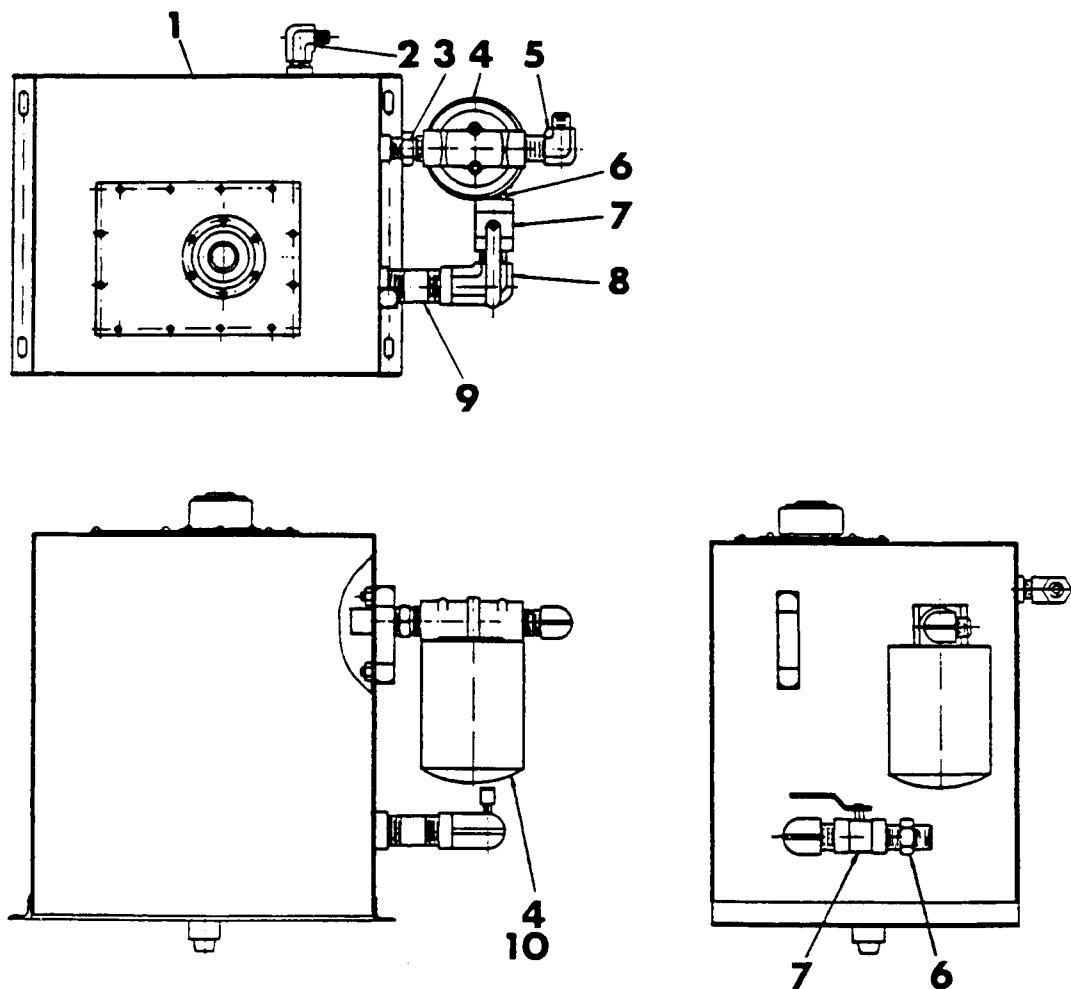


ITEM	PART NUMBER	DESCRIPTION	QTY
-1	6311-1	HYDRAULIC TANK (ONLY)	1
-2	61703	SLOTTED HEAD SELF TAPPING SCREW 10/32 X 1/2	12
-3	8319	COVER - INSPECTION	1
-4	8320	COVER - GASKET	1
-5	3004	SUMP FILTER	1
-6	2493	NIPPLE	1
-7	3027	MAGNETIC PLUG	1
-8	3005	BREATHER CAP	1
-9	3018	SIGHT GAUGE	1

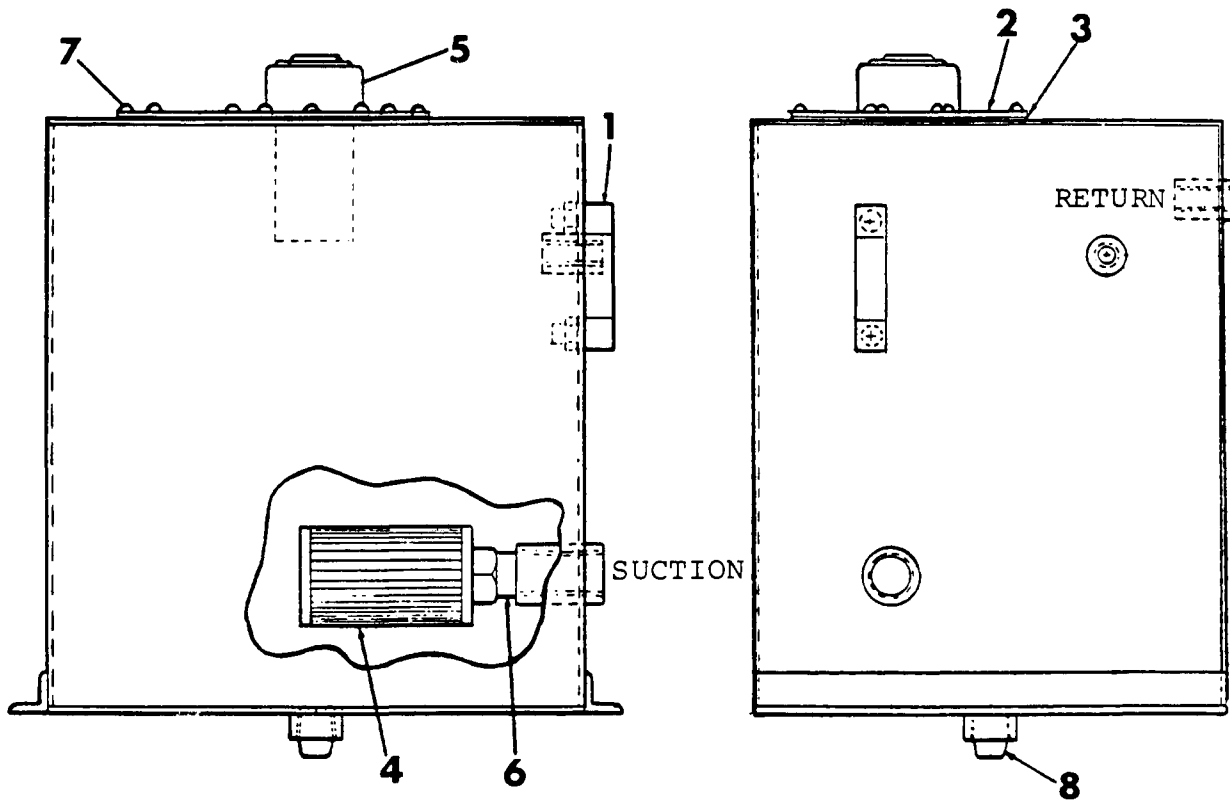
REV.1
1-93

FIGURE 11A.1 - HYDRAULIC TANK ASSEMBLY (RT25G)
(BEGINNING MARCH 1980)

162.2

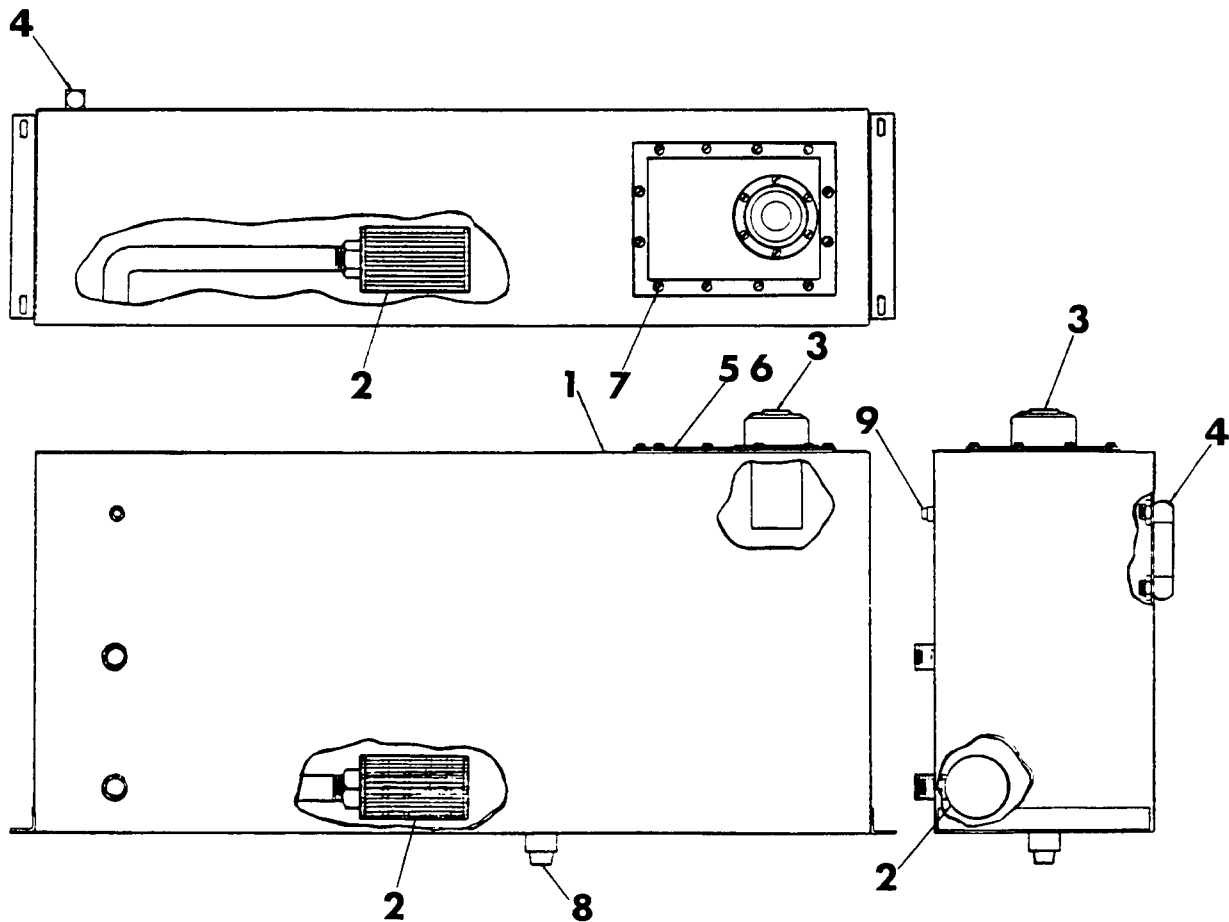


ITEM	PART NUMBER	DESCRIPTION	QTY
11A.1	30329	HYDRAULIC TANK ASSEMBLY	1
-1	30286	HYDRAULIC TANK (SEE FIG.11A.2)	1
-2	2451	90° ELBOW	1
-3	2483	MALE CONNECTOR	1
-4	30306	RETURN LINE FILTER	1
-5	2442	90° STREET ELBOW	1
-6	2510	MALE CONNECTOR	1
-7	3033	SHUT OFF VALVE	1
-8	2459	90° STREET ELBOW	1
-9	2494	NIPPLE	1
-10	16947	RETURN LINE FILTER ELEMENT	1



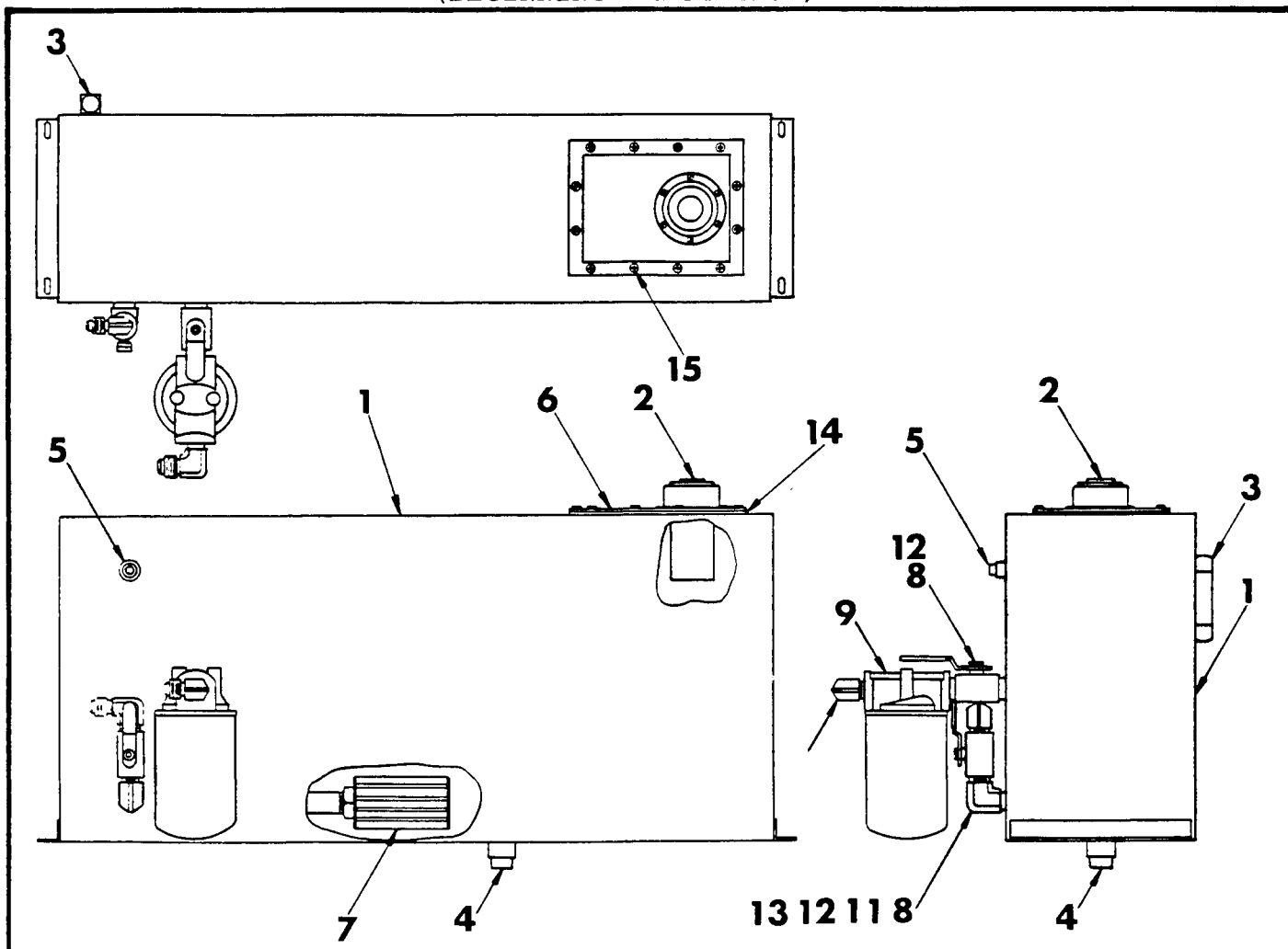
ITEM	PART NUMBER	DESCRIPTION	QTY
11A.2	30286	HYDRAULIC TANK (10 GAL)	1
-1	3018	SIGHT GAUGE	1
-2	8319	COVER-INSPECTION	1
-3	8320	GASKET	1
-4	3004	SUMP FILTER	1
-5	3005	BREATHER CAP	1
-6	2493	NIPPLE	1
-7	61703	SLOTTED HEAD SELF-TAPPING SCREW-10-32X $\frac{1}{2}$	12
-8	3027	MAGNETIC PLUG	1

FIGURE 11B - HYDRAULIC TANK ASSEMBLY (RT26E)
(RT26G) (RT31E) RT31G) (SRT31G) (RT40E) (RT40G)
(BEGINNING MAY 1977 AND STILL BEING USED)



ITEM	PART NUMBER	DESCRIPTION	QTY
11B-	8318-2	HYDRAULIC TANK ASSEMBLY	1
-1	8318-1	HYDRAULIC TANK	1
-2	3004	SUCTION FILTER	1
-3	3005	BREATHER CAP	1
-4	3018	SIGHT GAUGE	1
-5	8319	HYDRAULIC TANK COVER	1
-6	8320	HYDRAULIC TANK GASKET	1
-7		PAN HEAD SELF TAPPING SCREW 10-32 X ½	12
-8	3027	MAGNETIC DRAIN PLUG	1
-9		ALLEN PLUG - 1/8 NPT	1

(BEGINNING MARCH 1980)



ITEM	PART NUMBER	DESCRIPTION	QTY
11B.1	30583	HYDRAULIC TANK ASSEMBLY	1
-1	30582 OR 8318-1	HYDRAULIC TANK WELDMENT (SEE FIG. 11B.2)	1
-2	3005	BREATHER CAP	1
-3	3018	SIGHT GAUGE	1
-4	3027	MAGNETIC DRAIN PLUG	1
-5	16703	ALLEN PLUG	1
-6	8319	HYDRAULIC TANK COVER	1
-7	3004	SUCTION FILTER	1
-8	3033	SHUT OFF VALVE	2
-9	30306	FILTER	1
-10	2442	90° ELBOW	1

REV.1
1-83

FIGURE 11B.1 - HYDRAULIC TANK ASSEMBLY (RT26E)
(RT26G) (RT31E) (RT31G) (SRT31G) (RT40E) (RT40G)

164.2

(BEGINNING MARCH 1980)

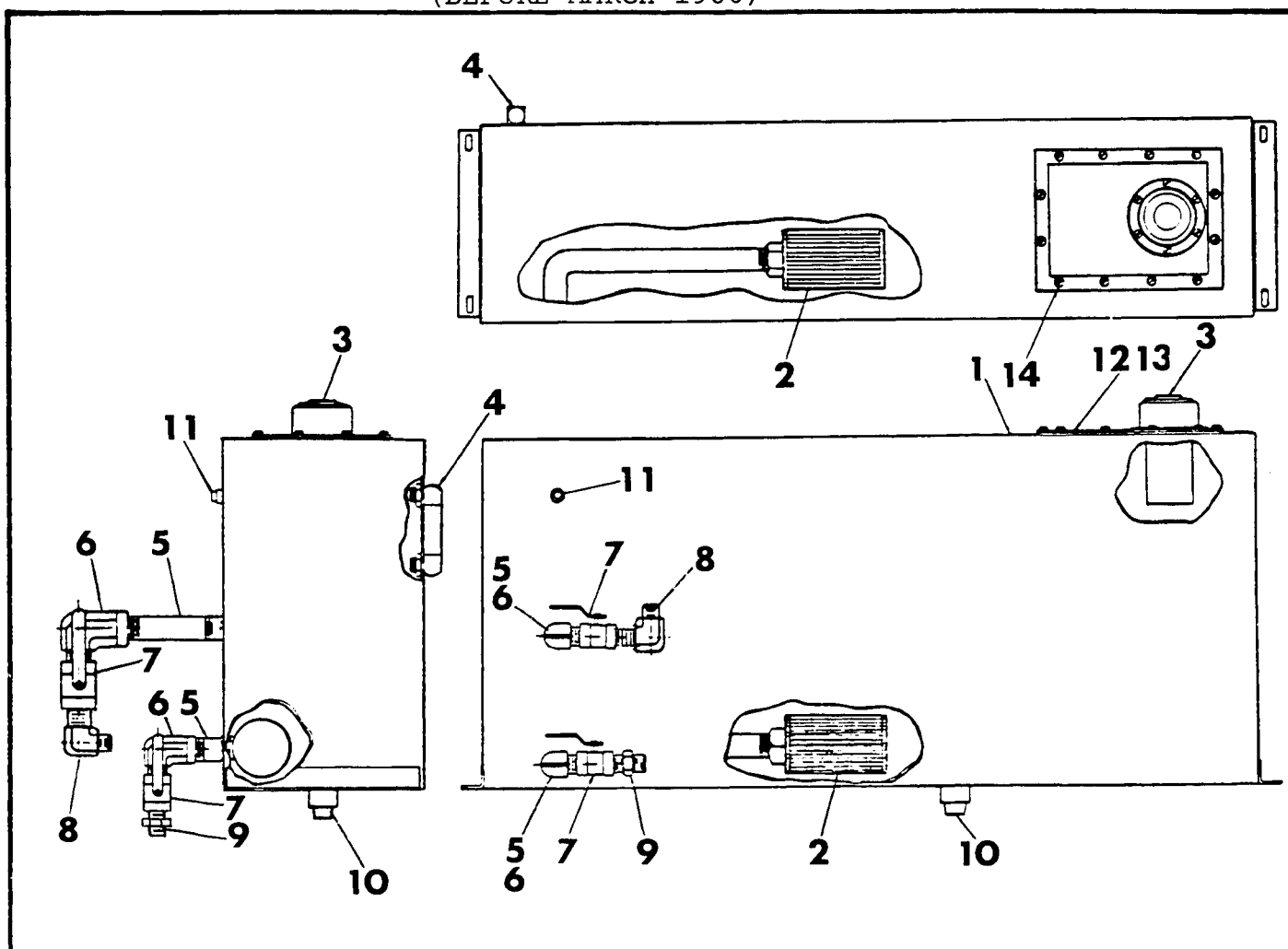
ITEM	PART NUMBER	DESCRIPTION	QTY
-11	2459	90° ELBOW	1
-12	2493	CLOSE NIPPLE	2
-13	2455	90° ELBOW	1
-14	8320	HYDRAULIC TANK GASKET	1
-15	61718	SELF TAPPING PHILLIP HEAD CAP SCREW - NO. 10-32 UNF X 1/2	12

REV.1
1-83

FIGURE 11B.2 - HYDRAULIC TANK ASSEMBLY (RT26E) (RT26G)
(RT31E) (RT31G) (SRT31G) (RT40E) (RT40G)

164.3

(BEFORE MARCH 1980)



ITEM	PART NUMBER	DESCRIPTION	QTY
11B.2-	8318-2	HYDRAULIC TANK ASSEMBLY	1
-1	8318-1	HYDRAULIC TANK ONLY	1
-2	3004	SUMP FILTER	1
-3	3005	BREATHER CAP	1
-4	3018	SIGHT GAUGE	1
-5	2494	NIPPLE	2
-6	2459	90° STREET ELBOW	2
-7	3033	SHUT OFF VALVE	2
-8	2442	90° STREET ELBOW	1
-9	2510	MALE CONNECTOR	1
-10	3027	MAGNETIC PLUG	1
-11	16703	ALLEN PLUG - 1/8 NPT	1

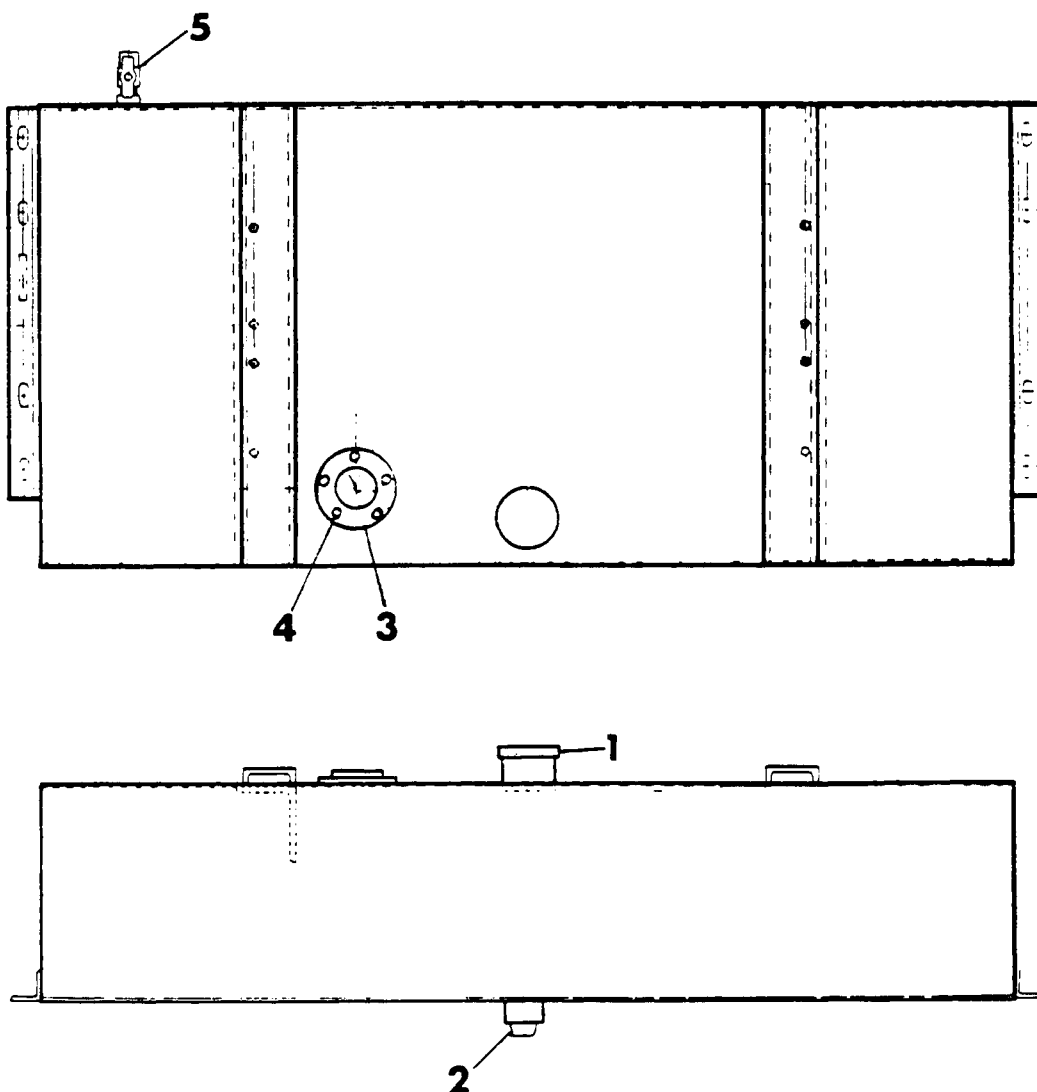
REV.1
1-83

FIGURE 11B.2 - HYDRAULIC TANK ASSEMBLY (RT26E) (RT26G)
(RT31E) (RT31G) (SRT31G) (RT40E) (RT40G)

164.4

(BEFORE MARCH 1980)

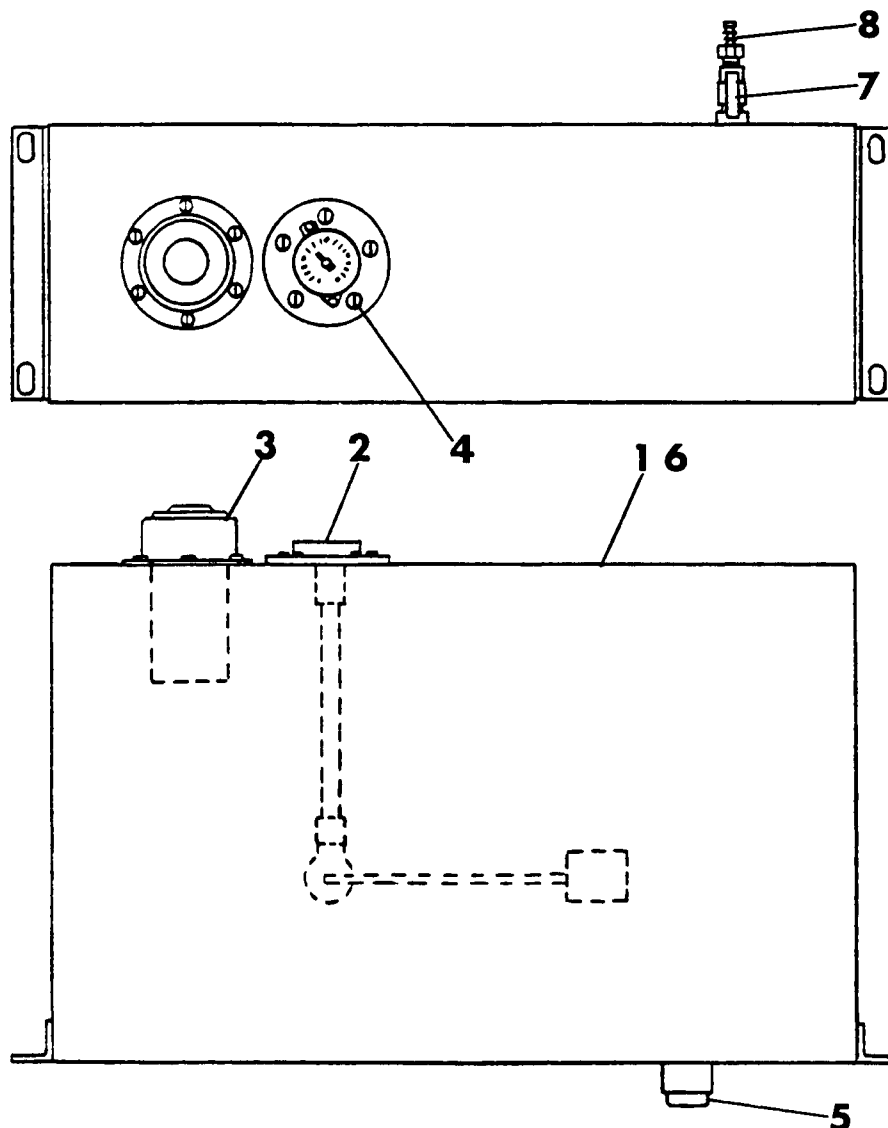
ITEM	PART NUMBER	DESCRIPTION	QTY
-12	8319	INSPECTION COVER	1
-13	8320	COVER GASKET	1
-14	61703	SLOTTED HEAD SELF TAPPING SCREW 10/32 - 1/2	12



ITEM	PART NUMBER	DESCRIPTION	QTY
12-	30285	GAS TANK ASSEMBLY (15 GAL)	1
-1	3005	BREATHER CAP	1
-2	3027	MAGNETIC PLUG - 3/4 NPT	1
-3	12002	LIQUID LEVEL GAUGE	1
-4	16703	SLOT HD. SELF TAPPING SCREW 10-32 X 1/2	11
-5	12000	NEEDLE SHUT OFF VALVE	1
-6	864	HOSE BARB	1
-7	30285-2	GAS TANK (ONLY)	1

FIGURE 12A - GAS TANK ASSEMBLY
(RT26G) (RT31G) (SRT31G) (RT40G)

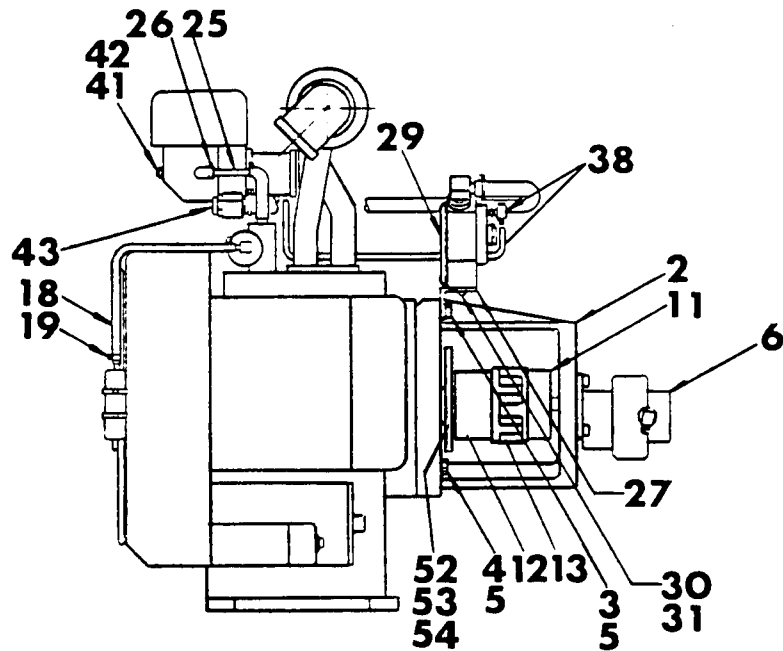
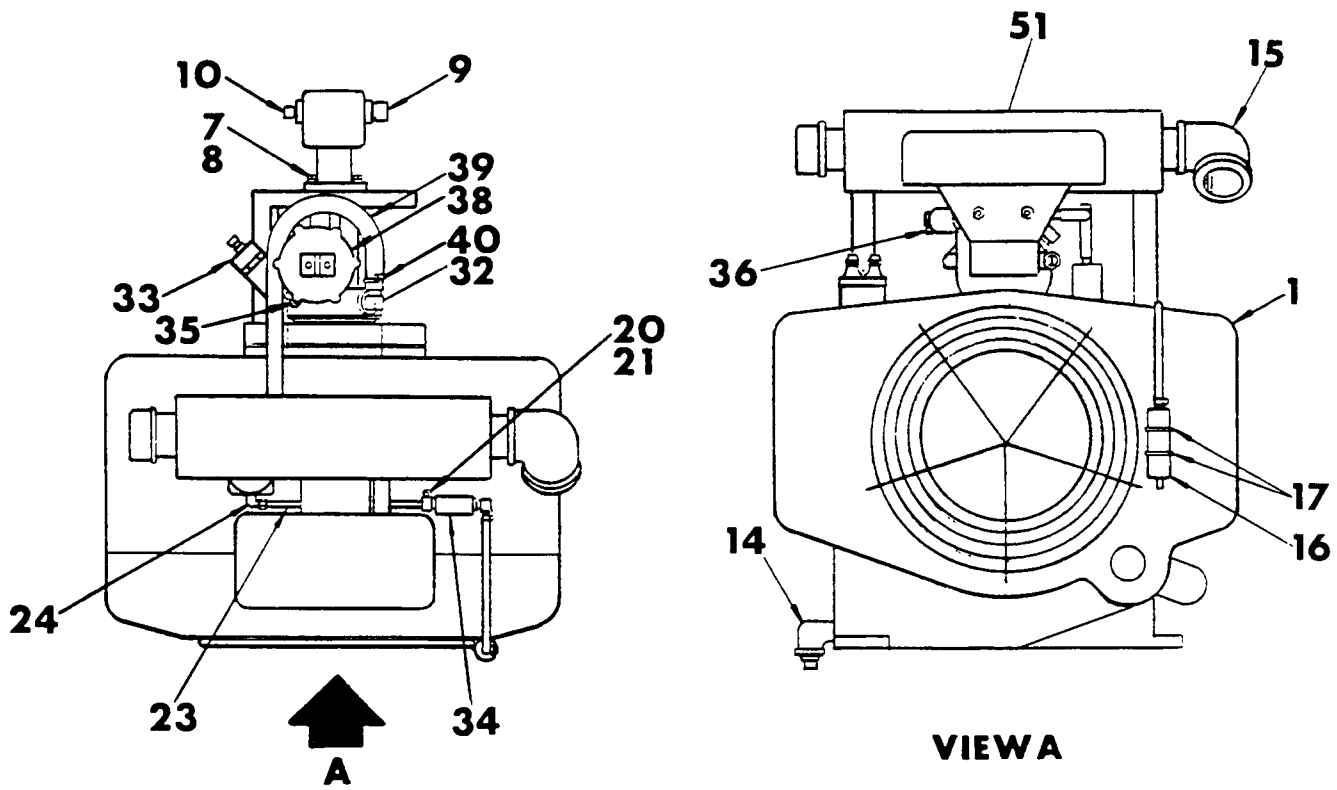
166

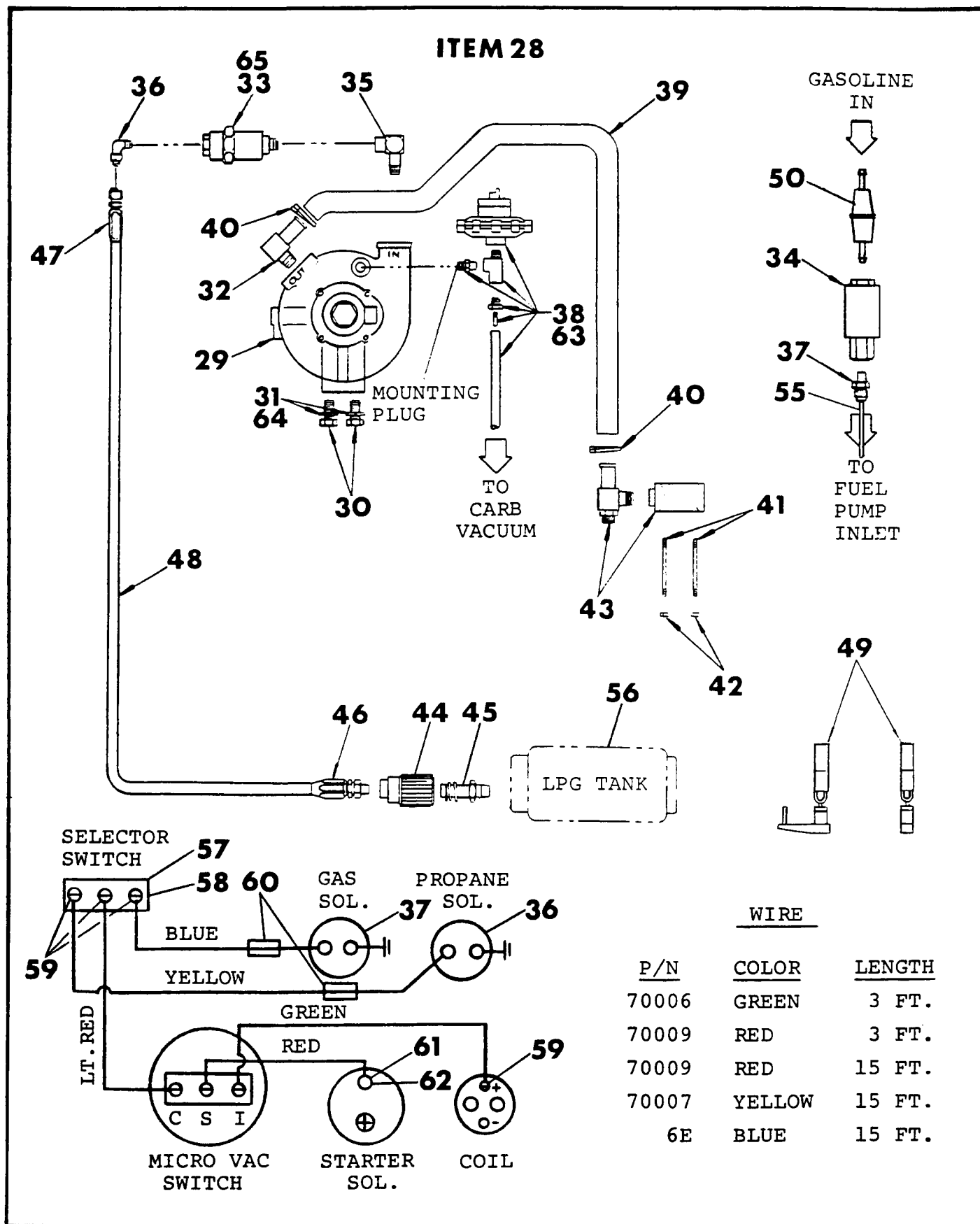


ITEM	PART NUMBER	DESCRIPTION	QTY
12A-	8316	GAS TANK ASSEMBLY	1
-1	8316-1	GAS TANK	1
-2	3017	FUEL GAUGE	1
-3	3005	BREATHER CAP	1
-4		PAN HEAD SELF TAPPING SCREW - 10-32 X 1/2	5
-5	3027	MAGNETIC DRAIN PLUG	1
-6	8316-11	GAS TANK	1
-7	2000	NEEDLE VALVE	1
-8	864	HOSE BARB	1

FIGURE 13 - DUAL FUEL ENGINE & PUMP ASSEMBLY
(RT25G)

167





ITEM	PART NUMBER	DESCRIPTION	QTY
13-	30233	DUAL FUEL ENGINE & PUMP ASSEMBLY	1
-1	20506	ENGINE - 20 H.P.	1
-2	9066-2	PUMP ADAPTER	1
-3	60141	HEX HEAD CAPSCREW-3/8-16 UNC X 1 3/4 (GRADE 5)	2
-4	60122	HEX HEAD CAPSCREW-3/8-16 UNC X 1 1/2 (GRADE 5)	2
-5	63303	LOCKWASHER - 3/8 MED.	4
-6	3035	HYDRAULIC PUMP	1
-7	60322	HEX HEAD CAPSCREW-5/16-18 UNC X 3/4 (GRADE 5)	4
-8	63302	LOCKWASHER-5/16	4
-9	2452	90° ELBOW-PUMP INLET	1
-10	2456	90° ELBOW-PUMP OUTLET	1
-11	30573	HALF JAW COUPLING - PUMP SIDE	1
-12	20929	HALF JAW COUPLING - ENGINE SIDE	1
-13	20930	SPIDER	1
-14	52300	90° STREET ELBOW - 1/2 NPT	1
-15	52301	90° ELBOW - 1 1/2 NPT	1
-16	160	GASOLINE FILTER	1
-17	255	CABLE TIE	2
-18	160 B	FUEL HOSE - 1/2 I.D.	1
-19	161 A	HOSE CLAMP	2
-20	22	RIGID CLAMP	1
-21	374	BLIND RIVET	1
-22	2414	STRAIGHT ADAPTER	1
-23	30237	FUEL TUBE	1
-24	2434	90° ADAPTER	1
-25	235	STEEL TUBING - 1/2	1
-26	161A	HOSE CLAMP	2
-27	9086	REGULATOR MOUNTING BRACKET	1
-28	30226	DUAL FUEL KIT	1
-29	16921	REGULATOR - 50 E	1
-30	60107	HEX HEAD CAPSCREW- 462010-H 1/4-20 UNC X 5/8	2

ITEM	PART NUMBER	DESCRIPTION	QTY
-31	63301	LOCKWASHER - W46-L ½ MED.	2
-32	66143	90° ELBOW-3H-3052 5/8 HOSE X 3/8 NPT	1
-33	16925	FILTER LOCK FL-21812 V	1
-34	20832	GASOLINE SHUT-OFF VALVE-GT-622-6-12V	1
-35	16519	90° STREET ELBOW - 3401-4 SPECIAL LONG ½ NPT	1
-36	66144	90° ELBOW - 49X6 3/8 FLARE X ½ NPT	1
-37	2434	ADAPTER	1
-38	16923	VACUUM SAFETY SWITCH-1501-PA	1
-39	66146	HOSE - H-703 5/8 I.D. X 2 PT	1
-40	66147	HOSE CLAMP-CC-11S 5/8 I.D. HOSE	2
-41	16956	CARB ADAPTER STUD - 3S - 501	1
-42	16958	LOCK NUT - N - 1032 - NTC	2
-43	16922	CARB ADAPTER - 1431 A - 26	1
-44	16927	QUICK DISCONNECT SOCKET - 7141 - F	1
-45	16928	QUICK DISCONNECT NIPPLE - 7141 - M	1
-46	16425	HOSE FITTING - 2F - 238 5/16 HOSE X ½ NPT	1
-47	66148	HOSE FITTING -2F - 237 5/16 HOSE	1
-48	66149	HIGH PRESSURE HOSE - H-501 VL LPG FUEL	1
-49	486-A	TANK BRACKET-33½ LB. ICC TANK	1PR
-50	160	GAS FILTER-AC GF 453	1
-51	16280	MUFFLER	1
-52	498	PULLEY	1
-53	169	BELT	1
-54	117	TAPER BUSHING	1
-55	30237	STEEL TUBING ASSEMBLY-1/4 X 5 3/8	1
-56	486C	PROPANE TANK	1
-57	4019	ON-OFF SWITCH	1
-58	20543	DECAL	1
-59	117B	I CONNECTOR	4
-60	117D	BUTT CONNECTOR	3
-61	16332	ELECT. CONNECTOR	1
-62	117E	SPADE CONNECTOR	1

REV.1
1-83

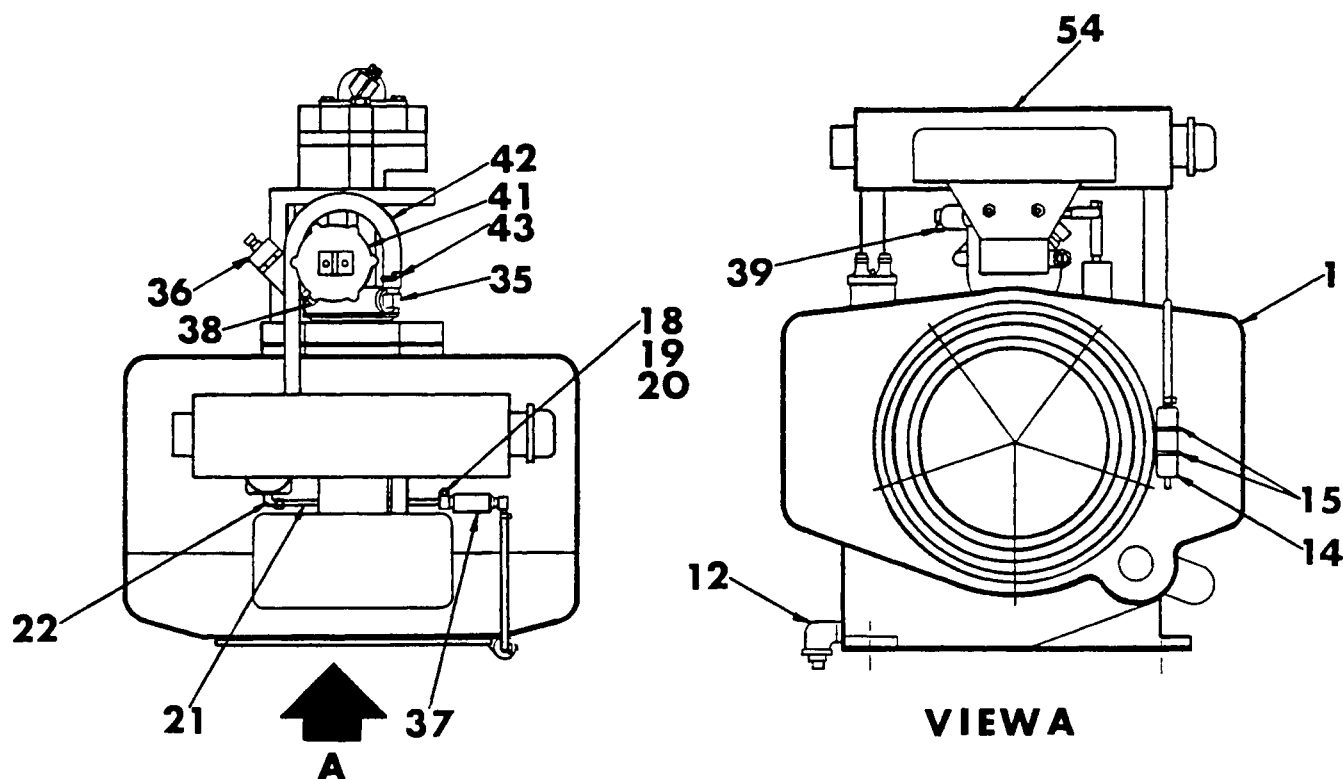
FIGURE 13 - DUAL FUEL ENGINE & PUMP ASSEMBLY
(RT25G)

170.1

ITEM	PART NUMBER	DESCRIPTION	QTY
-63	16919	MICRO VAC REPAIR KIT FOR VACUUM SAFETY SWITCH NO. 16923	1
-64	16965	REGULATOR REPAIR KIT FOR PROPANE REGULATOR NO. 16921	1
-65	16955	MICROBON FILTER FOR PROPANE FILTER LOCK NO. 16925	1

FIGURE 13A - DUAL FUEL ENGINE & PUMP ASSEMBLY
(RT26G) (RT31G) (SRT31G) (RT40G)

171



ITEM 26

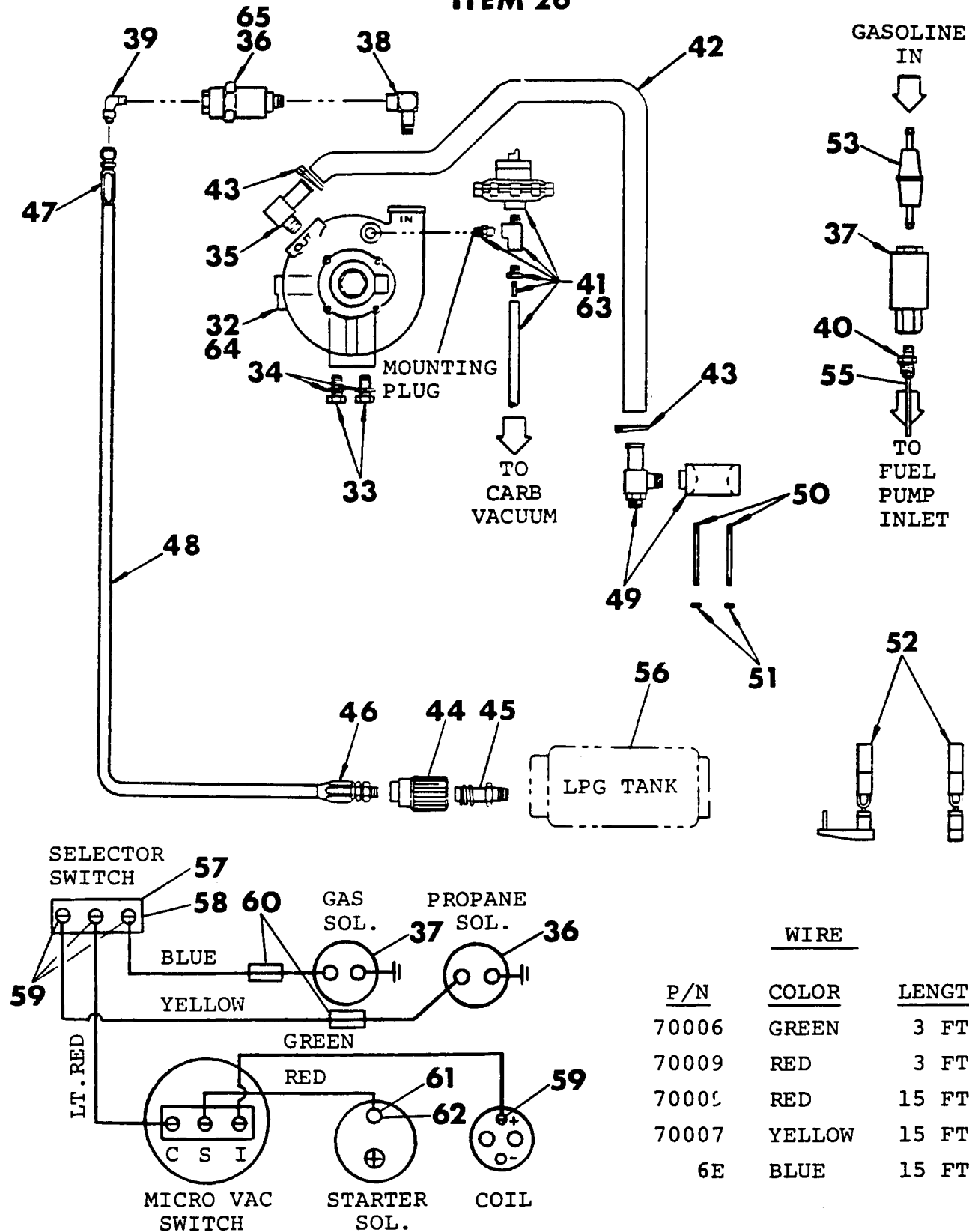


FIGURE 13A - DUAL FUEL ENGINE & PUMP ASSEMBLY
(RT26G) (RT31G) (SRT31G) (RT40G)

173

ITEM	PART NUMBER	DESCRIPTION	QTY
13A-	30235	DUAL FUEL ENGINE & PUMP ASSEMBLY	1
-1	20506	ENGINE - 20 H.P.	1
-2	9066-1	PUMP ADAPTER	1
-3	60321	HEX HEAD CAPSCREW - 3/8-16 UNC X 1 3/4 (GRADE 5)	2
-4	60307	HEX HEAD CAPSCREW - 3/8-16 UNC X 1½ (GRADE 5)	2
-5	63303	LOCKWASHER - 3/8 MED.	6
-6	3038	HYDRAULIC PUMP	1
-7	352-C	BELT	1
-8	498	PULLEY	1
-9	711	TAPER BUSHING	1
-10	20929	HALF JAW COUPLING - ENGINE SIDE	1
-11	2493	CLOSE NIPPLE - 3/4	1
-12	52300	90° STREET ELBOW - ½ NPT	1
-13	854	BUSHING	1
-14	160	GASOLINE FILTER	1
-15	255	CABLE TIE	2
-16	160B	FUEL HOSE - ½ I.D.	1
-17	161A	HOSE CLAMP	2
-18	22	RIGID CLAMP	1
-19	374	BLIND RIVET	1
-20	2414	STRAIGHT ADAPTER	1
-21	30237	FUEL TUBE	1
-22	2434	90° ELBOW	1
-23	235	STEEL TUBING-1/2	1
-24	161A	HOSE CLAMP	2
-25	9086	REGULATOR MOUNTING BRACKET	1
-26	30226	DUAL FUEL KIT	1
-27	2455	90° ELBOW	1
-28	2442	90° ELBOW	1
-29	60306	HEX HEAD CAPSCREW - 3/8-16 UNC X 3/4	2
-30	30574	HALF JAW COUPLING - PUMP SIDE	1
-31	20930	SPIDER - RUBBER	1

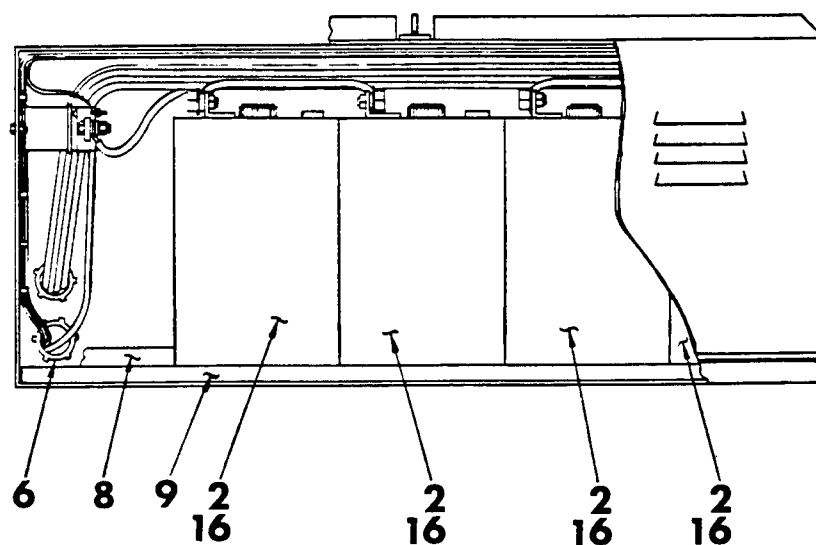
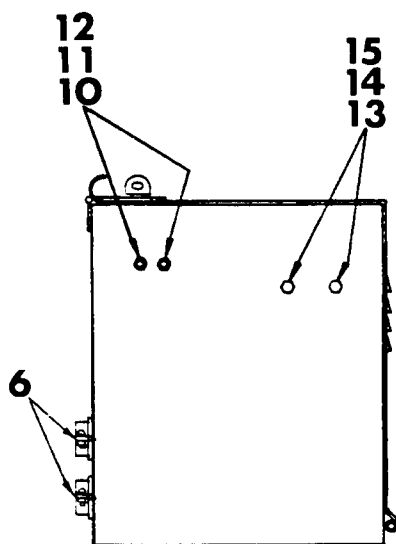
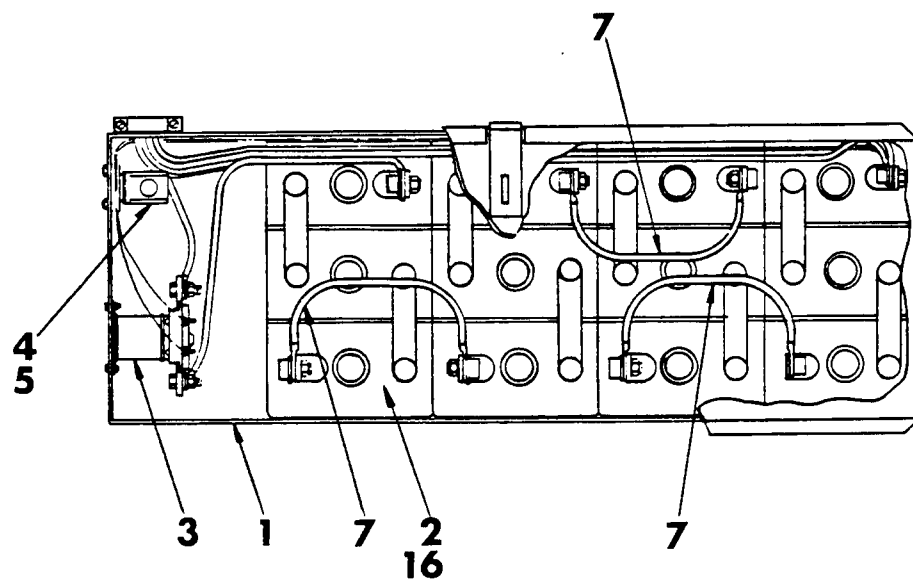
ITEM	PART NUMBER	DESCRIPTION	QTY
-32	16921	REGULATOR - 50E	
-33	60107	HEX HEAD CAPSCREW - 462010-H 1/4-20 UNC X 5/8	2
-34	63301	LOCKWASHER - W46-L 1/2 MED.	2
-35	66143	90° ELBOW - 3H-3052 5/8 HOSE X 3/8 NPT	1
-36	16925	FILTER LOCK - FL-218 12V	1
-37	20832	GASOLINE SHUT - OFF VALVE-GT-622-6-12V	1
-38	16519	90° STREET ELBOW - 3401-4 SPECIAL LONG 1/4 NPT	1
-39	66144	90° ELBOW - 49 X 6 3/8 FLARE X 1/4 NPT	1
-40	2434	ADAPTER	1
-41	16923	VACUUM SAFETY SWITCH-1501-PA	1
-42	66146	HOSE - H703 5/8 I.D. X 2 FT.	1
-43	66147	HOSE CLAMP - CC-115 5/8 I.D. HOSE	1
-44	16927	QUICK DISCONNECT SOCKET 7141-F	1
-45	16928	QUICK DISCONNECT NIPPLE 7141-M	1
-46	16425	HOSE FITTING - 2F-238 5/16 HOSE X 1/4 NPT	1
-47	66148	HOSE FITTING - 2F-237 5/16 HOSE X 3/8 FLARE	1
-48	66149	HIGH PRESSURE HOSE - H-501 VL LPG FUEL	1
-49	16922	CARB ADAPTER - 1431A-26	1
-50	16956	CARB ADAPTER STUD - 3S-501	2
-51	16958	LOCK NUT - N-1032-HTC	2
-52	486-A	TANK BRACKET - 33 1/2 LB. ICC TANK	1 PR
-53	160	GAS FILTER - AC GF 453	1
-54	16280	MUFFLER	1
-55	30287	STEEL TUBING ASSEMBLY-1/4 X 5 3/8	1
-56	486C	PROPANE TANK	1
-57	4019	ON-OFF SWITCH	1
-58	20543	DECAL	1
-59	117B	I CONNECTOR	4
-60	117D	BUTT CONNECTOR	3
-61	16332	ELECT. CONNECTOR	1
-62	117E	SPADE CONNECTOR	1

REV.1
1-83

FIGURE 13A - DUAL FUEL ENGINE & PUMP ASSEMBLY
(RT26G) (RT31G) (SRT31G) (RT40G)

174.1

ITEM	PART NUMBER	DESCRIPTION	QTY
-63	16919	MICRO VAC REPAIR KIT FOR VACUUM SAFETY SWITCH NO. 16923	1
-64	16965	REGULATOR REPAIR KIT FOR PROPANE REGULATOR NO. 16921	1
-65	16955	MICROBON FILTER FOR PROPANE FILTER LOCK NO. 16925	1

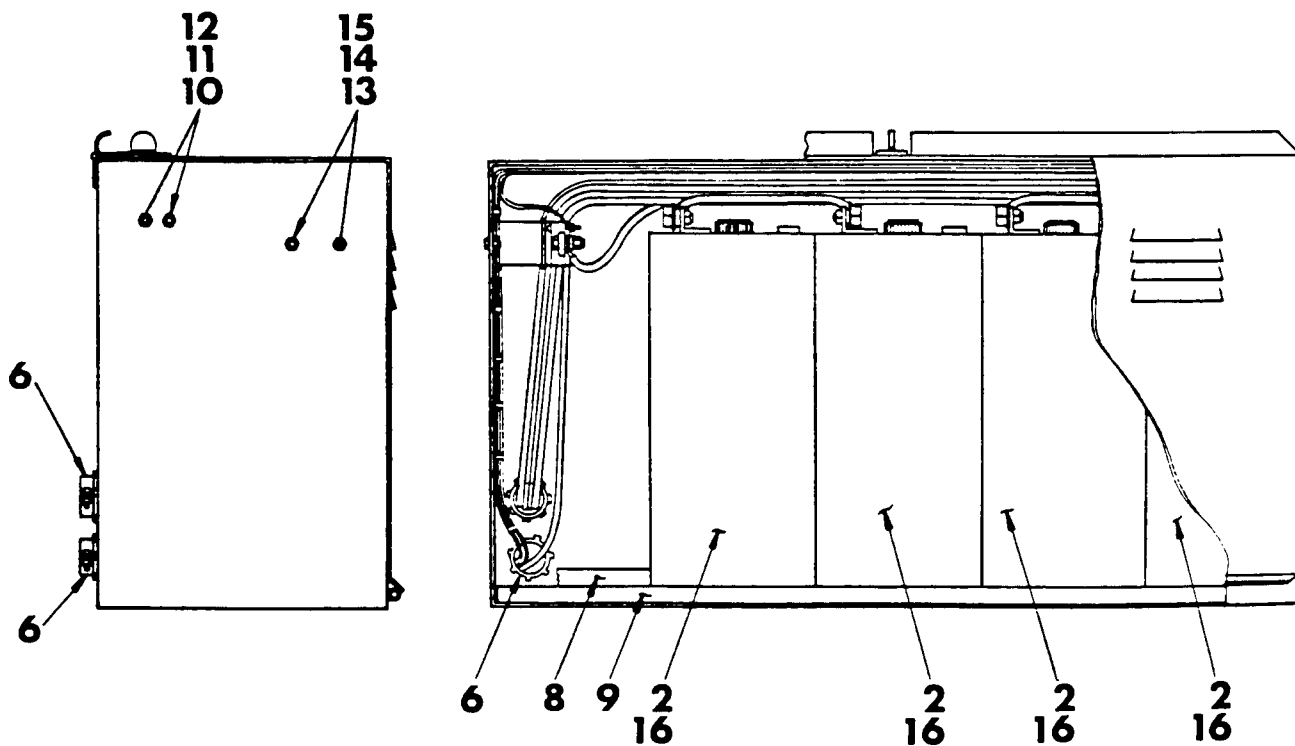
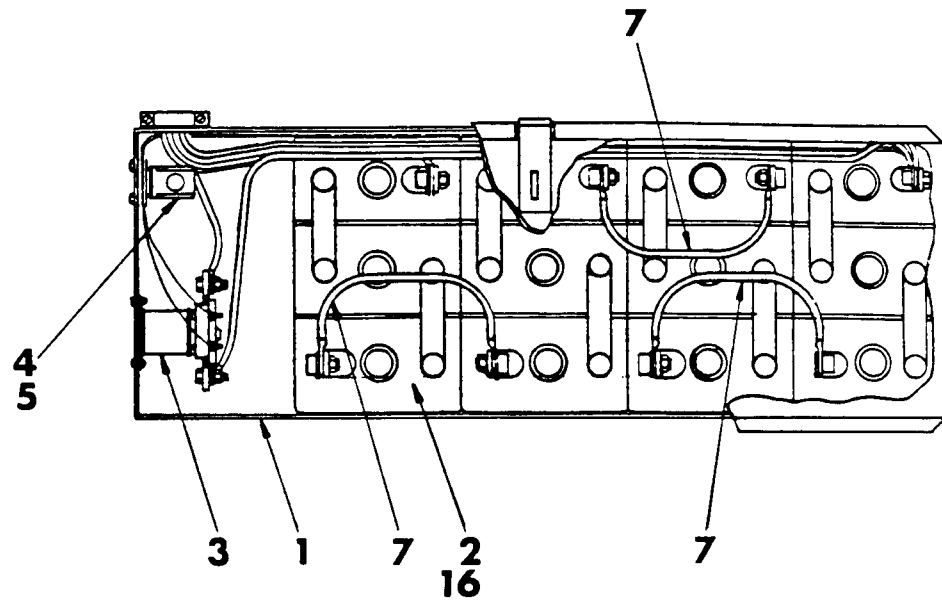


REV.1
1-83

FIGURE 14 - BATTERY BOX ASSEMBLY (RT26E)
(RT31E) (RT40E) (BEGINNING MAY 1977)

176

ITEM	PART NUMBER	DESCRIPTION	QTY
14-	30861	BATTERY BOX ASSEMBLY	1
-1	8317	BATTERY BOX	1
-2	4007	BATTERY - 6 VOLT J250 W 11 5/8 X 7 X 11 1/2	4
-3	4083	RELAY - 400 AMP	1
-4	784A	RELAY SOCKET (8 PIN)	1
-5	4032	RELAY - 6 VOLT	1
-6	213	ROMEX CONNECTOR	2
-7	13226-0120 OR 63A	BATTERY CABLE - 12"	3
-8	65139	PLYWOOD - 3/4 X 5 1/2 X 8	1
-9	65277	PLYWOOD - 3/4 X 11 3/4 X 33 1/2	1
-10	62609	SLOTTED ROUND HEAD SCREW NO. 6-32 UNC X 1/2	2
-11	61501	HEX NUT - NO. 6-32 UNC	2
-12	63311	LOCK WASHER - NO. 6	2
-13	60158	HEX HEAD CAP SCREW - 1/4-20 UNC X 3/8	2
-14	60701	HEX NUT - 1/4-20 UNC	2
-15	63301	LOCK WASHER - 1/4	2
-16	4007A	BATTERY - 6 VOLT DRY	8

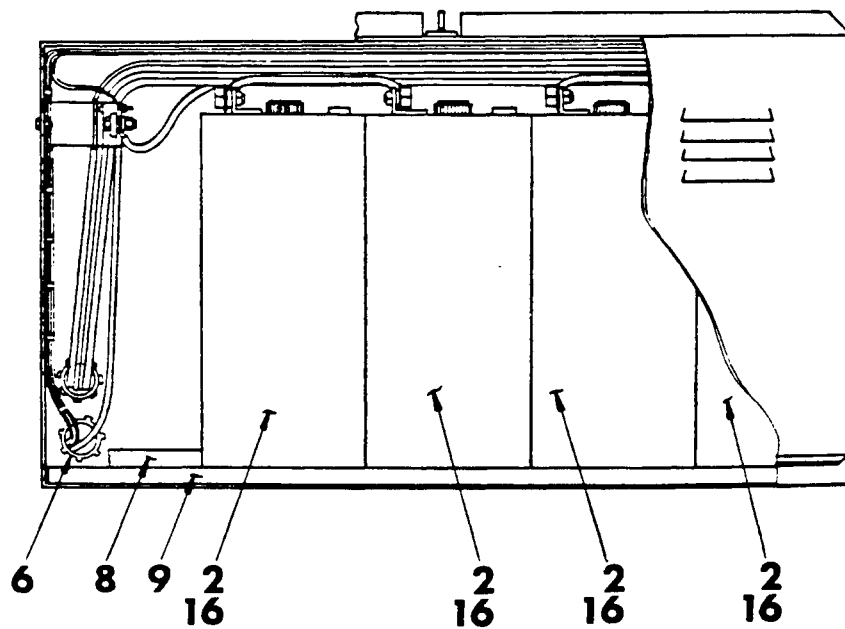
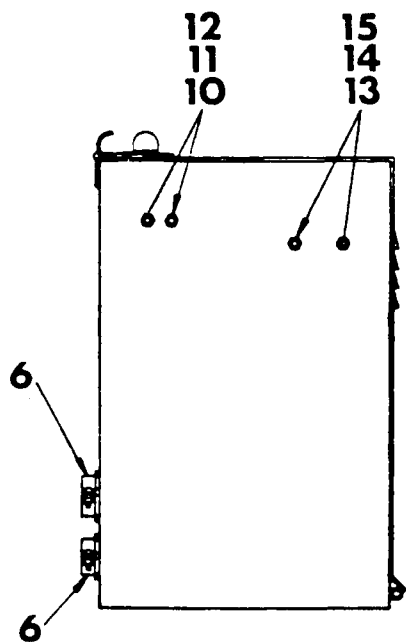
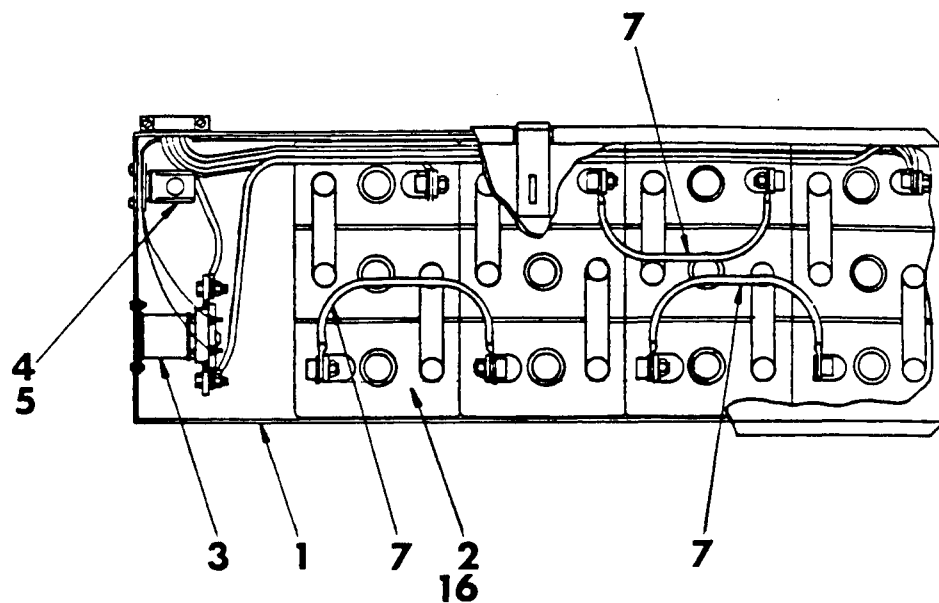


REV.1
1-83

FIGURE 14.1 - BATTERY BOX ASSEMBLY (RT40E)
(BEFORE MARCH 1980)

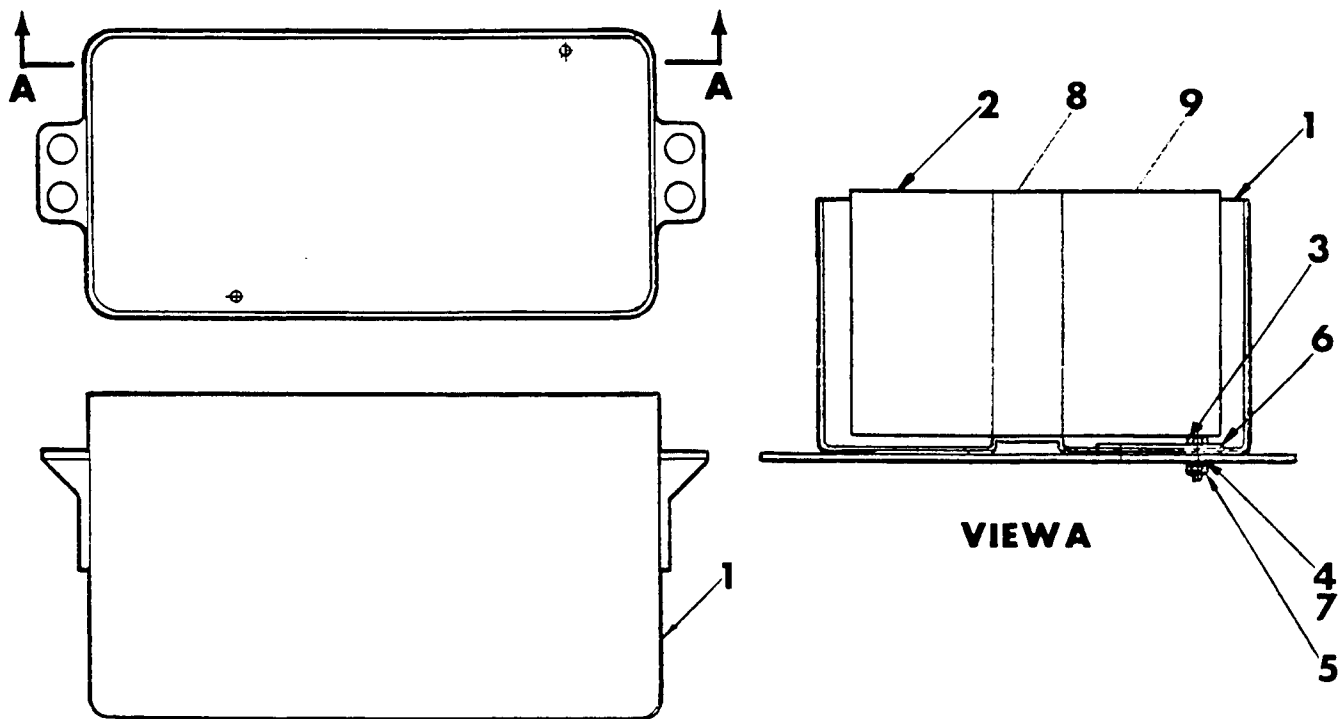
176.2

ITEM	PART NUMBER	DESCRIPTION	QTY
-1	8317	BATTERY BOX	3
-2	4007	BATTERY - 6 VOLT J-250 11 5/8 X 7 X 11 1/2	12
-3	4083	RELAY - 400 AMP	1
-4	784A	RELAY SOCKET (8-PIN)	1
-5	4032	RELAY - 6 VOLT	1
-6	213	ROMEX CONNECTOR	6
-7	63A	BATTERY CABLE 12"	9
-8	65139	PLYWOOD 3/4 X 5 1/2 X 8	3
-9	4J	PLYWOOD 3/4 X 11 3/4 X 33 1/2	3
-10	62609	SLOTTED RD. HEAD SCREW NO. 6-32 UNC X 1/2 LG.	2
-11	61501	HEX NUT NO. 6-32 UNC	2
-12	63311	LOCK WASHER NO. 6	2
-13	60158	HEX HEAD CAPSCREW 1/4-20 UNC X 3/8 LG.	2
-14	60701	HEX NUT 1/4-20 UNC	2
-15	63301	LOCK WASHER 1/4	2
-16	*4007A	BATTERY - 6 VOLT DRY	12
* NOTE: CAN ONLY BE PURCHASED IN MINIMUM QUANTITIES OF 9 OR MORE.			



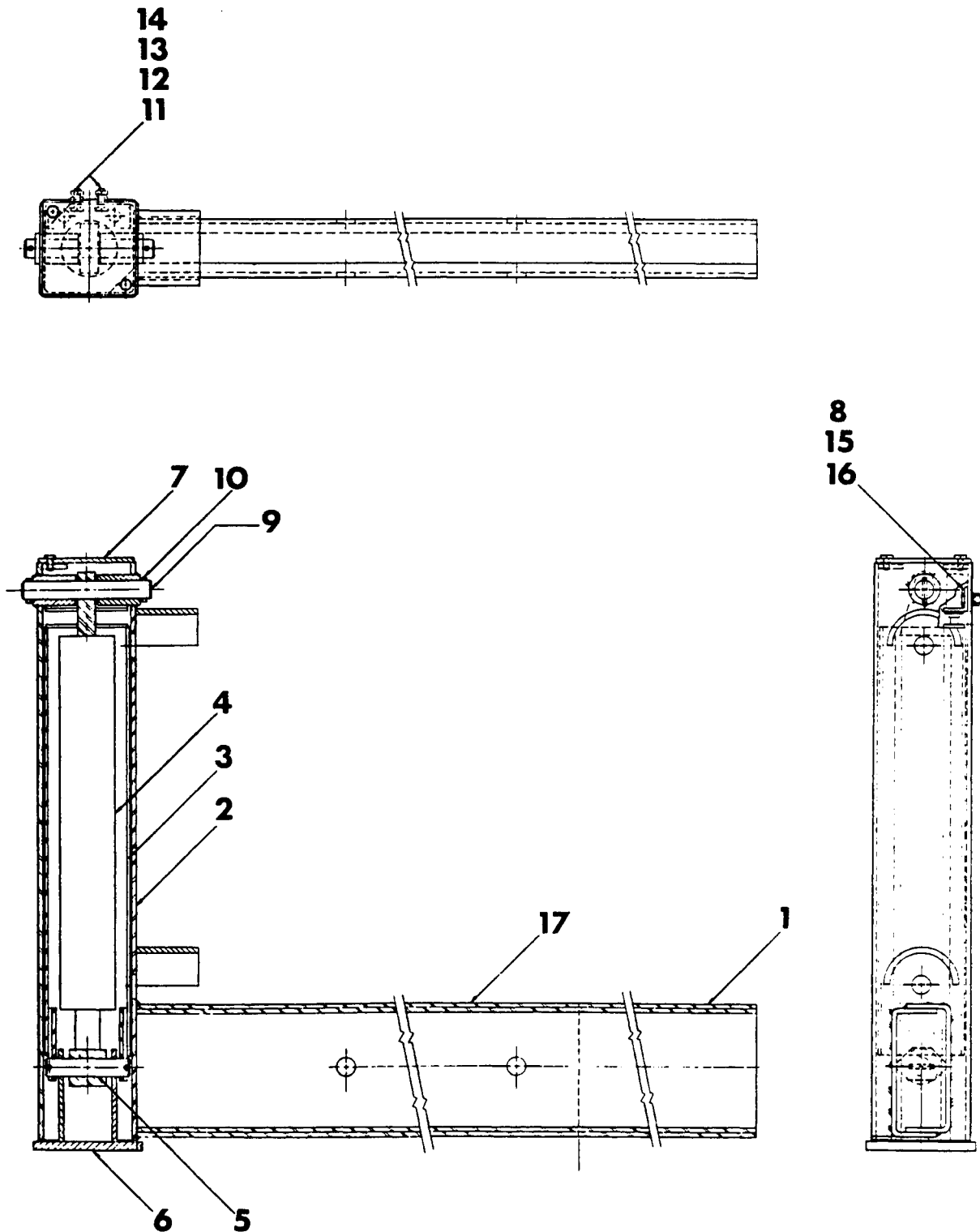
ITEM	PART NUMBER	DESCRIPTION	QTY
14.2-	30466	BATTERY BOX ASSEMBLY	
-1	30287	BATTERY BOX	2
-2	30297	BATTERY - 6 VOLT L-16 TROJAN (7 X 11½ X 15)	8
-3	4083	RELAY - 400 AMP	1
-4	784A	RELAY SOCKET (8-PIN)	1
-5	4032	RELAY - 6 VOLT	1
-6	213	ROMEX CONNECTOR	4
-7	13226-0120	BATTERY CABLE 12"	6
-8	65139	PLYWOOD 3/4 X 5½ X 8	2
-9	65277	PLYWOOD 3/4 X 11 3/4 X 33½	2
-10	62609	SLOTTED RD. HEAD SCREW NO. 6-32 UNC X 1/2 LG.	2
-11	61501	HEX NUT NO. 6-32 UNC	2
-12	63311	LOCK WASHER NO. 6	2
-13	60158	HEX HEAD CAPSCREW ¼-20 UNC X 3/8	2
-14	60701	HEX NUT ¼-20 UNC	2
-15	63301	LOCK WASHER - ¼	2
-16	*30297	BATTERY - 6 VOLT DRY	8
* NOTE: CAN ONLY BE PURCHASED IN MINIMUM QUANTITIES OF 9 OR MORE.			

FIGURE 14A - BATTERY BOX INSTALLATION
(RT25G) (RT26G) (RT31G) (SRT31G) (RT40G)
(BEGINNING MAY 1977)



ITEM	PART NUMBER	DESCRIPTION	QTY
14A-	9064	BATTERY BOX INSTALLATION	1
-1	782	BATTERY BOX ASSY. (INCLUDES ITEMS 8 & 9)	1
-2	4030	BATTERY-12V RV27-P-VT	1
-3	60131	HEX HEAD CAPSCREW $\frac{1}{4}$ - 20 X 1	2
-4	63301	LOCK WASHER $\frac{1}{4}$	2
-5	60701	HEX NUT $\frac{1}{4}$ -20	2
-6	9080	BATTERY BOX BAR	2
-7	63041	FLAT WASHER $\frac{1}{4}$	4
-8	16935	BATTERY BOX STRAP (ONLY)	1
-9	16934	BATTERY BOX TOP (ONLY)	1

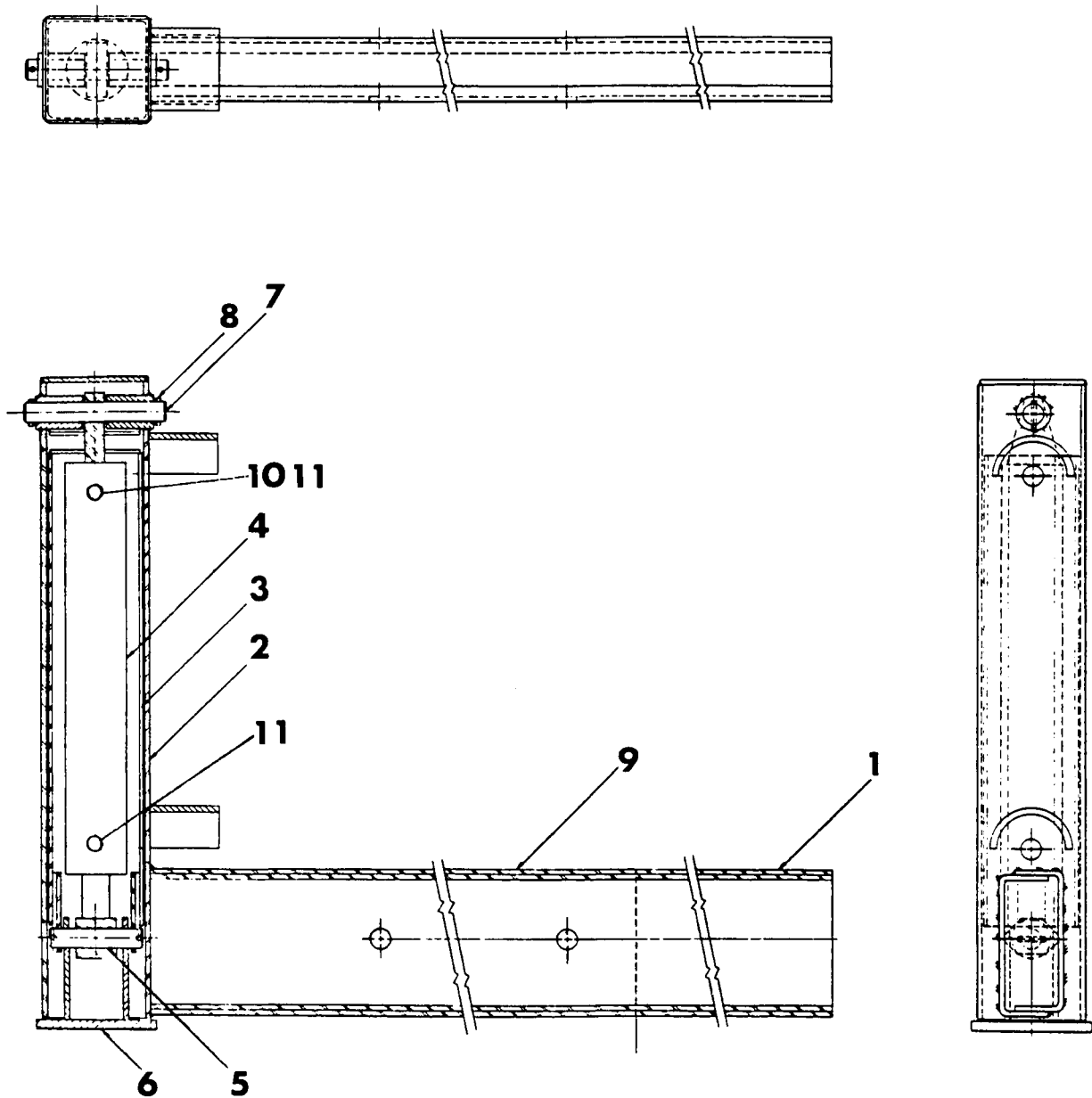
(RT25G) (RT26E) (RT26G) (RT31E) (RT31G) (OPTION)



(RT26E) (RT26G) (RT31E) (RT31G) (OPTION)

ITEM	PART NUMBER	DESCRIPTION	QTY
15-	3024	HYDRAULIC OUTRIGGER ASSEMBLY WITH SWITCH (RT40E) (RT40G) (NEW PART NO. 30915)	1
	3024-10	HYDRAULIC OUTRIGGER ASSEMBLY WITH SWITCH (SRT31G)	1
-1	3024-1	HYDRAULIC OUTRIGGER SUPPORT (RT40E) (RT40G) (NEW PART NO. 30919)	1
-2	3024-2	HYDRAULIC OUTRIGGER HOUSING	1
-3	3024-3	SLIDING TUBE (NEW PART NO. 30917)	1
-4	3024-4	HYDRAULIC OUTRIGGER CYLINDER (NEW PART NO. 30908)	1
-5	3024-5	LOWER PIN (NEW PART NO. 30904)	1
-6	3024-6	SLIDING TUBE SUPPORT (NEW PART NO. 30903)	1
-7	3024-7	END CAP (NEW PART NO. 30900)	1
-8	3024-8	SWITCH BRACKET (NEW PART NO. 30901)	1
-9	3024-9	UPPER PIN (NEW PART NO. 30902)	1
-10	16220	ROLL PIN - 5/32 O.D. X 1	4
-11	60309	HEX HEAD CAP SCREW - 1/4-20 UNC X 3/4	4
-12	63401	FLAT WASHER - 1/4	2
-13	63301	LOCK WASHER - 1/4	2
-14	60701	HEX NUT - 1/4-20 UNC	2
-15	4012	SWITCH N.C. (RT40E) (RT40G)	1
-16	4011	SWITCH N.O. (RT40E) (RT40G) (SRT31G)	1
-17	3024-15	HYDRAULIC OUTRIGGER SUPPORT (SRT31G)	1
-18	2607	ELBOW WITH ORIFICE (RT40E) (RT40G)	1
-19	2487	CONNECTOR (SRT31G) (RT40E) (RT40G)	1
-20	2592	CONNECTOR WITH ORIFICE (SRT31G)	1

(RT25G) (RT26E) (RT26G) (RT31E) (RT31G) (OPTION)



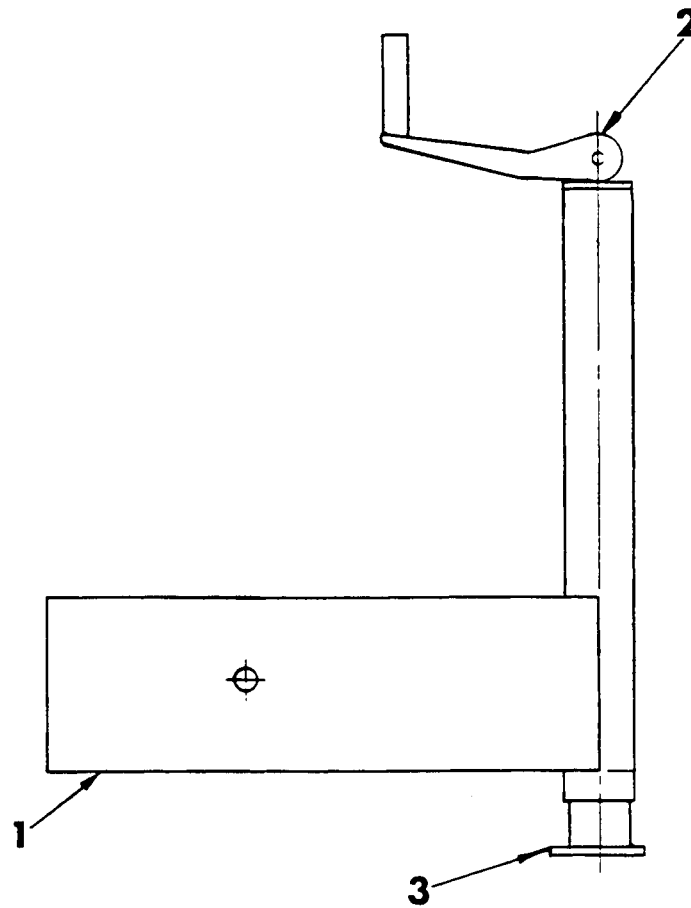
REV.1
1-83

FIGURE 15A - HYDRAULIC OUTRIGGER ASSEMBLY
(SRT31G) (RT40E) (RT40G) (STANDARD)

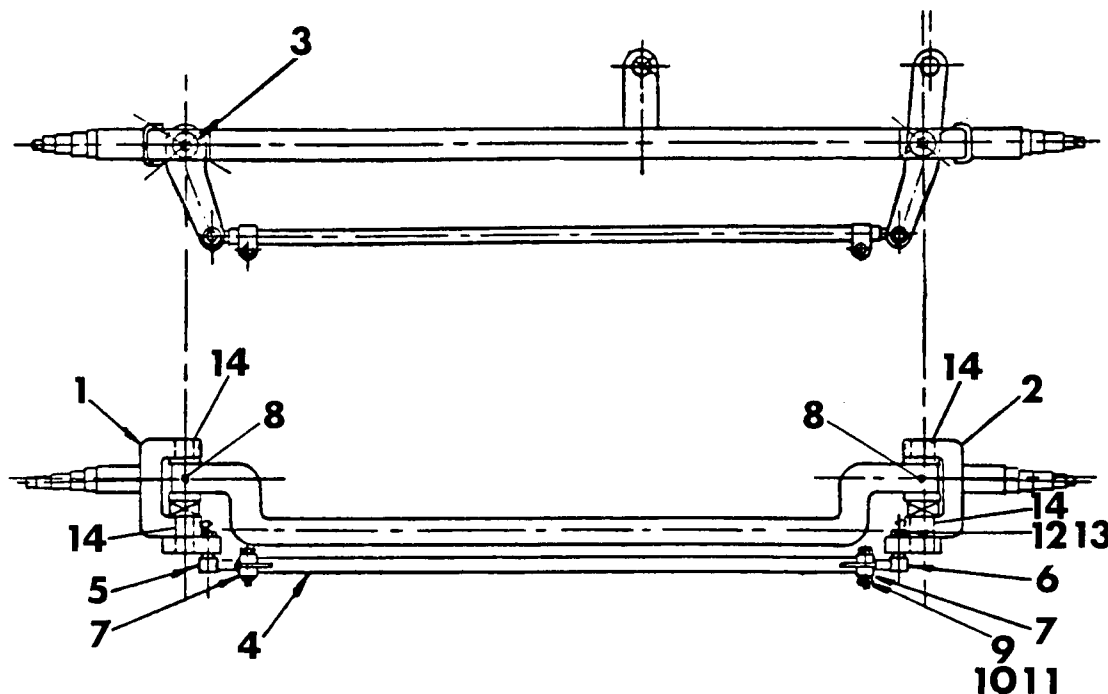
181

(RT25G) (RT26E) (RT26G) (RT31E) (RT31G) (OPTION)

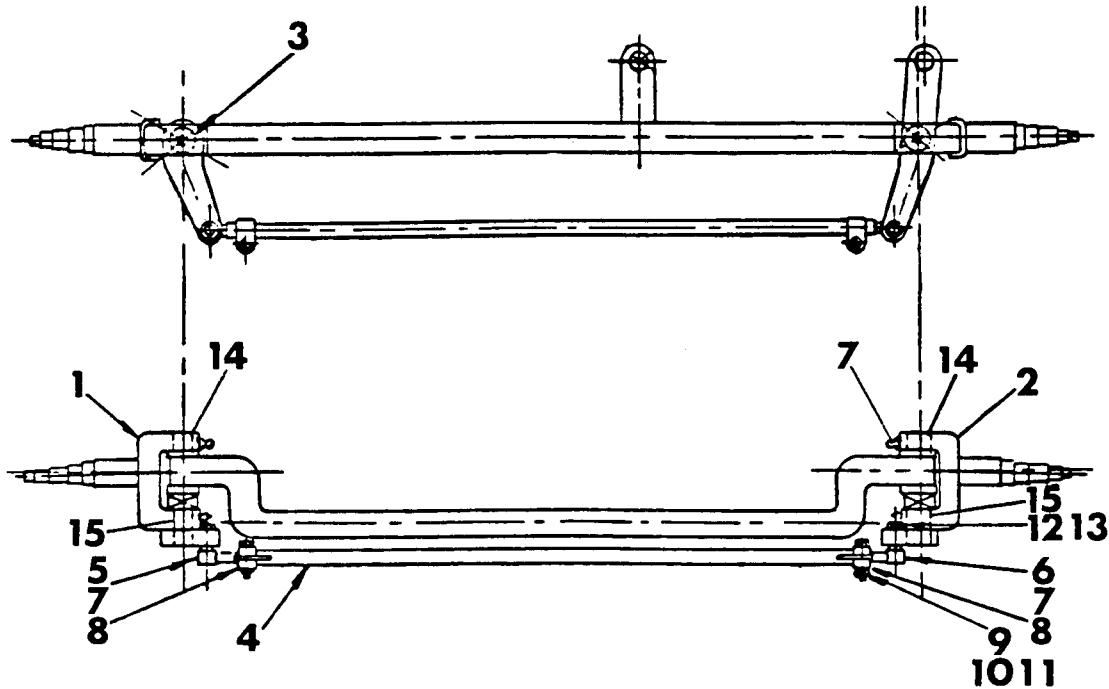
ITEM	PART NUMBER	DESCRIPTION	QTY
15A-	3026	HYDRAULIC OUTRIGGER ASSEMBLY (RT40E) (RT40G) (NEW PART NO. 30910)	1
	3026-3	HYDRAULIC OUTRIGGER ASSEMBLY (SRT31G)	1
-1	3024-1	HYDRAULIC OUTRIGGER SUPPORT (RT40E) (RT40G) (NEW PART NO. 30911)	1
-2	3026-1	HYDRAULIC OUTRIGGER HOUSING	1
-3	3026-2	SLIDING TUBE (NEW PART NO. 30748)	1
-4	3024-4	HYDRAULIC OUTRIGGER CYLINDER (NEW PART NO. 30908)	1
-5	3024-5	LOWER PIN (NEW PART NO. 30904)	1
-6	3024-6	SLIDING TUBE (NEW PART NO. 30903)	1
-7	3024-9	UPPER PIN (NEW PART NO. 30902)	1
-8	16220	ROLL PIN - 5/32 O.D. X 1	4
-9	3024-15	HYDRAULIC OUTRIGGER SUPPORT (SRT31G)	1
-10	2437	ELBOW (RT40E) (RT40G)	3
-11	2487	CONNECTOR (SRT31G)	4



ITEM	PART NUMBER	DESCRIPTION	QTY
15B-	9059-1	MANUAL STABILIZER ASSEMBLY	1
-1	9065	MANUAL STABILIZER FORMED TUBE	1
-2	2215	MANUAL STABILIZER	1
-3	2215-1	STABILIZER PAD	1



ITEM	PART NUMBER	DESCRIPTION	QTY
16-	30143	FRONT AXLE ASSEMBLY (ARTROX)	1
-1	66101	STEERING YOKE WELDMENT (L.H.)	1
-2	66099	STEERING YOKE WELDMENT (R.H.)	1
-3	66035	KING PIN	2
-4	66036	TIE ROD	1
-5	66037	TIE ROD END (L.H.) (OLD PART NO. 791)	1
-6	66038	TIE ROD END (R.H.) (OLD PART NO. 792)	1
-7		CLAMP 1" I.D.	2
-8		ROLL PIN (ARTROX ONLY)	2
-9	60204	HEX HEAD CAPSCREW-3/8-24 UNF X 2	2
-10	60803	HEX NUT-3/8-24 UNF	2
-11	63303	LOCK WASHER-3/8	2
-12	61016	CASTLE NUT	2
-13	64307	COTTER PIN	2
-14	64904	FLANGE BUSHING	4

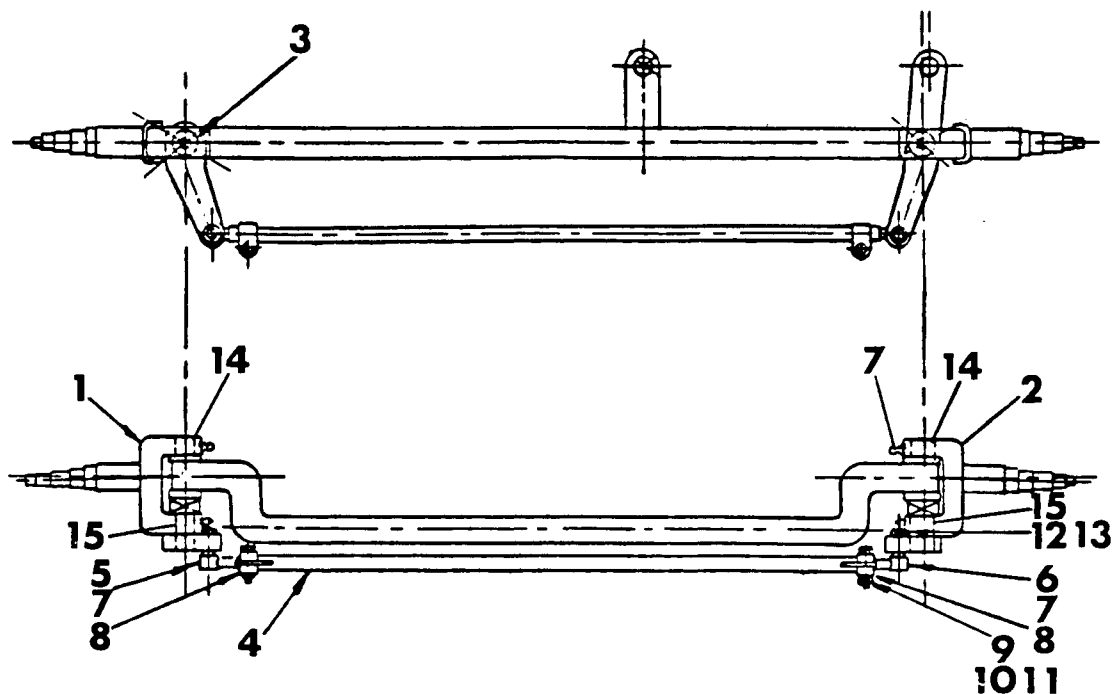


ITEM	PART NUMBER	DESCRIPTION	QTY
16.1	9070	FRONT AXLE ASSEMBLY (HADCO)	1
-1	N/A	YOKE & SPINDLE ASSEMBLY - LEFT HAND	1
-2	N/A	YOKE & SPINDLE ASSEMBLY - RIGHT HAND	1
-3	424	KING PIN	1
-4	16223	TIE ROD (TUBE ONLY)	1
-5	791	TIE ROD END (L.H.) (NEW PART NO. 66037)	1
-6	792	TIE ROD END (R.H.) (NEW PART NO. 66038)	1
-7	16261	GREASE FITTING	6
-8	N/A	TIE ROD CLAMP 1" I.D.	2
-9	60204	HEX HEAD CAPSCREW-3/8-24 UNF X 2	2
-10	60803	HEX NUT-3/8-24 UNF	2
-11	63303	LOCK WASHER-3/8	2
-12	61016	CASTLE NUT	2
-13	64307	COTTER PIN	2
-14	N/A	BUSHING (SUPPLIED WITH KING PIN SET)	2
-15	N/A	BUSHING (SUPPLIED WITH KING PIN SET)	2

REV.1
1-83

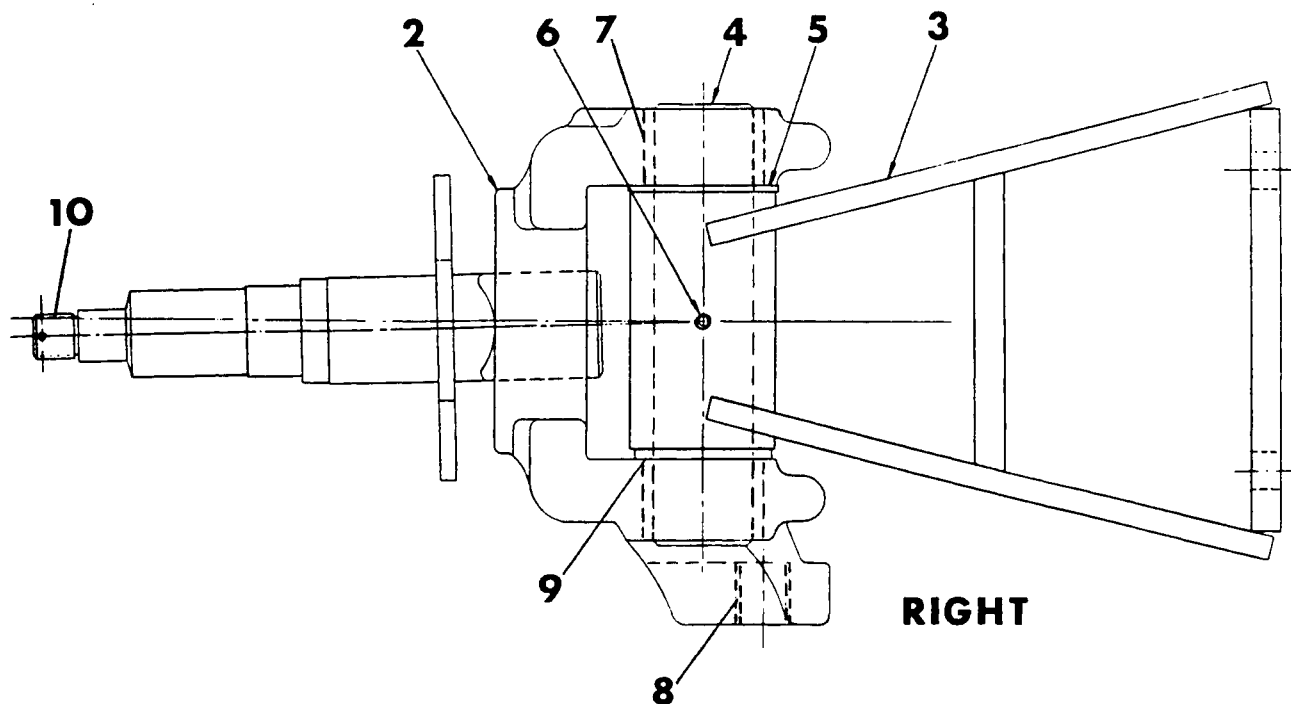
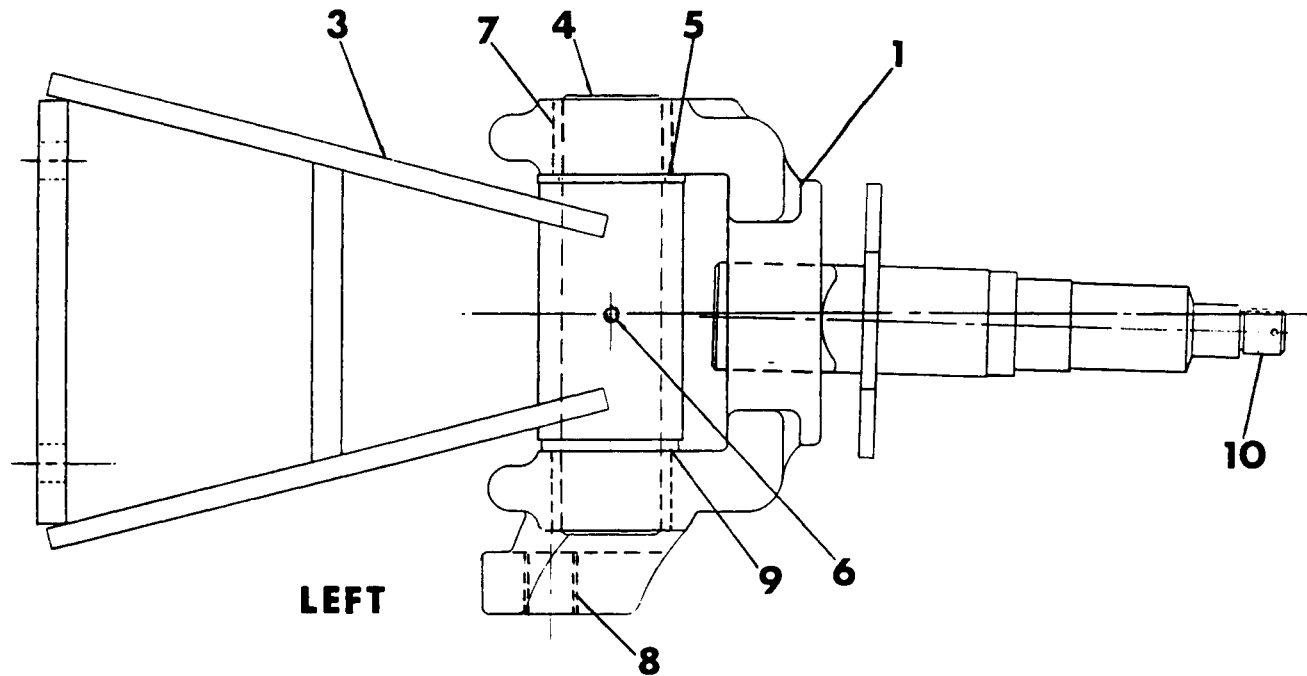
FIGURE 16.2 - FRONT AXLE ASSEMBLY (PRIOR)
(RT25G) (MARCH TO DECEMBER 1980)

183.2



ITEM	PART NUMBER	DESCRIPTION	QTY
16.2-	30143	FRONT AXLE ASSEMBLY (ARTROX)	1
-1	66100	STEERING YOKE WELDMENT (L.H.)	1
-2	66049	STEERING YOKE WELDMENT (R.H.)	1
-3	66102	KING PIN	2
-4	66096	TIE ROD	1
-5	66097	TIE ROD END (L.H.)	1
-6	66098	TIE ROD END (R.H.)	1
-7	16261	LUBE FITTING (PRIOR ONLY)	6
-8		CLAMP - 1" I.D.	2
-9	60204	HEX HEAD CAPSCREW-3/8-24 UNF X 2	2
-10	60803	HEX NUT-3/8-24 UNF	2
-11	63303	LOCK WASHER-3/8	2
-12	61016	CASTLE NUT	2
-13	64307	COTTER PIN	2
-14	66103	BUSHING (SHORT)	2
-15	66104	BUSHING (LONG)	2

(BEGINNING JULY 1980)



REV.1
1-83

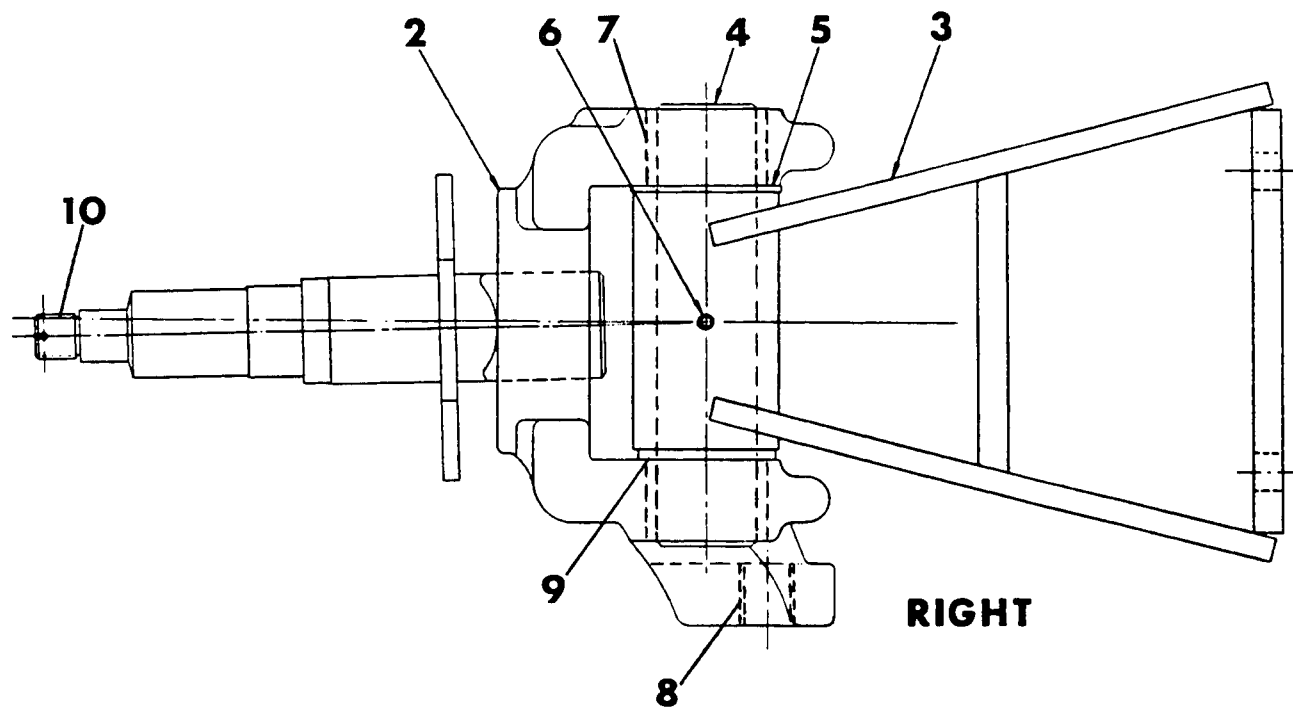
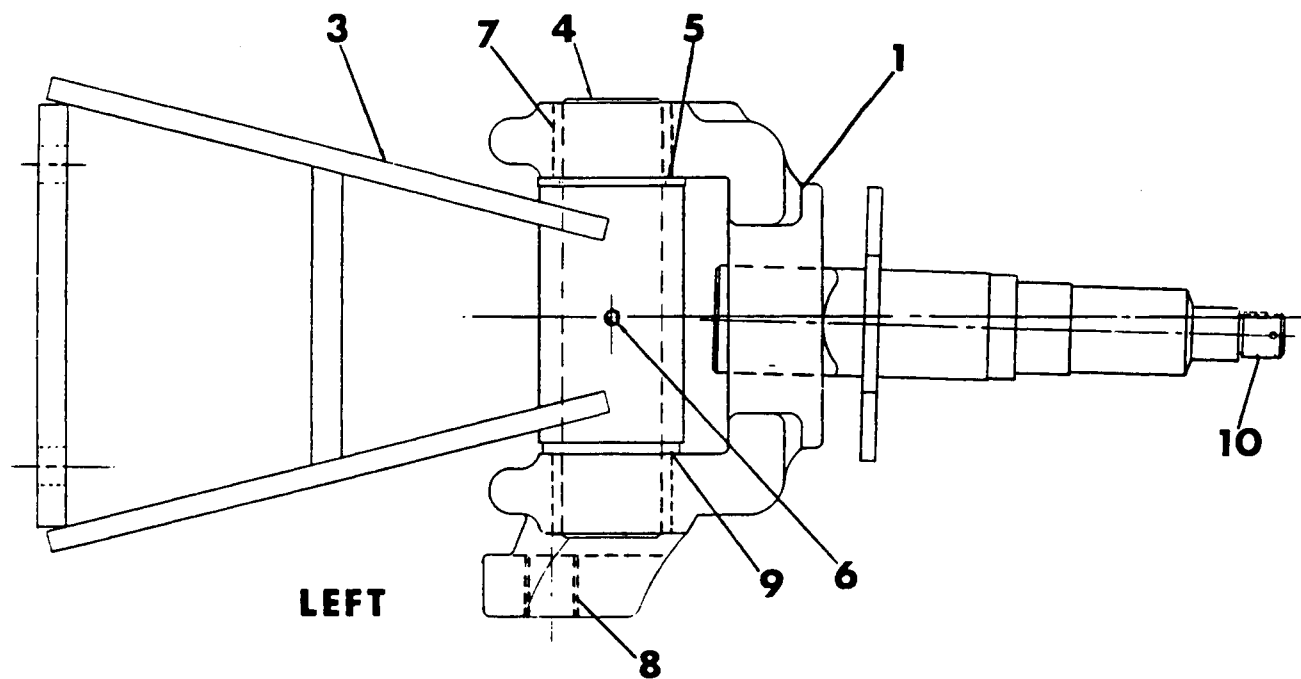
FIGURE 16A - FRONT AXLE ASSEMBLY (RT26E) (RT26G)
(RT31E) (RT31G) (SRT31G) (RT40E) (RT40G)

185

(BEGINNING JULY 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
16A-	30492	FRONT AXLE ASSEMBLY (L.H.)	1
	30493	FRONT AXLE ASSEMBLY (R.H.)	1
-1	30239	YOKE ASSEMBLY (L.H.)	1
-2	30238	YOKE ASSEMBLY (R.H.)	1
-3	30257	AXLE	1
-4	20321	KING PIN	1
-5	30269	THRUST BEARING	1
-6	64206	ROLL PIN - $\frac{1}{4}$ O.D. X $2\frac{1}{4}$	1
-7	20322	SLEEVE BUSHING	1
-8	30332	SLEEVE BUSHING	1
-9	30242	FLANGED BUSHING	1
-10	66142 OR 16115	SPINDLE NUT	2

(BEFORE JULY 1980)



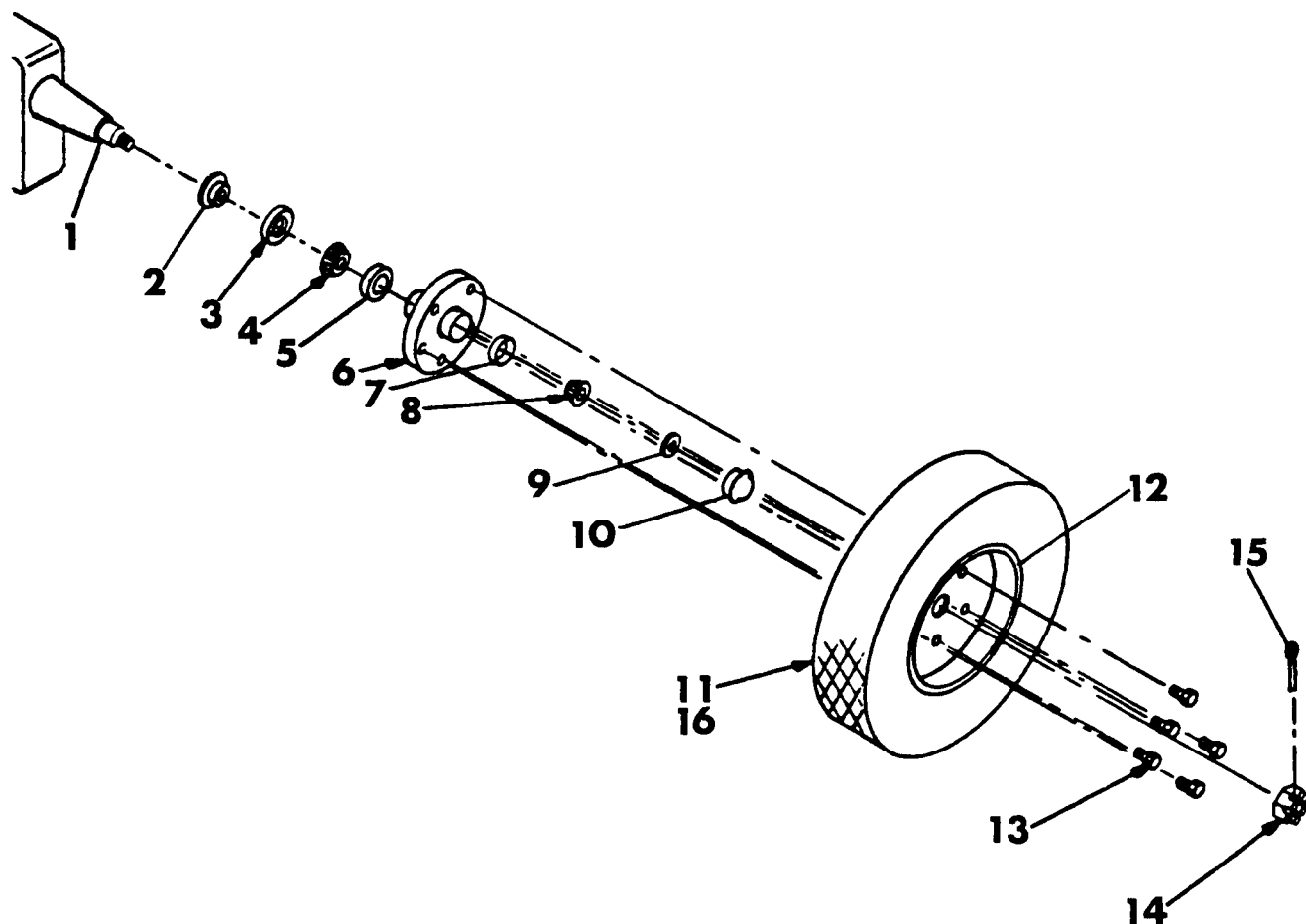
REV.1
1-83

FIGURE 16A.1 - FRONT AXLE ASSEMBLY (RT26E) (RT26G)
(RT13E) (RT31G) (SRT31G) (RT40E) (RT40G)

185.2

(BEFORE JULY 1980)

ITEM	PART NUMBER	DESCRIPTION	QTY
-1	6313-2	YOKE ASSEMBLY (L.H.) (USES ROUND HUB)	1
-2	6313-1	YOKE ASSEMBLY (R.H.) (USES ROUND HUB)	1
-3	30257	AXLE	1
-4	20321	KING PIN	1
-5	2281	THRUST BEARING (NEW PART NO. 30269)	2
-6	64206	ROLL PIN - $\frac{1}{4}$ O.D. X $2\frac{1}{2}$	1
-7	20322	SLEEVE BUSHING	2
-8	30332	SLEEVE BUSHING	1
-9	30242	FLANGED BUSHING(MAY BE USED IN PLACE OF ONE ITEM #5 & 7)	1
-10	16115	SPINDLE NUT (NEW PART NO. 66142)	1
NOTE: SOME UNITS MAY BE UPDATED TO LARGE SPINDLE PART NUMBER 30238 & 30239. ASK IF THEY HAVE A ROUND OR FLOWER SHAPED HUB.			



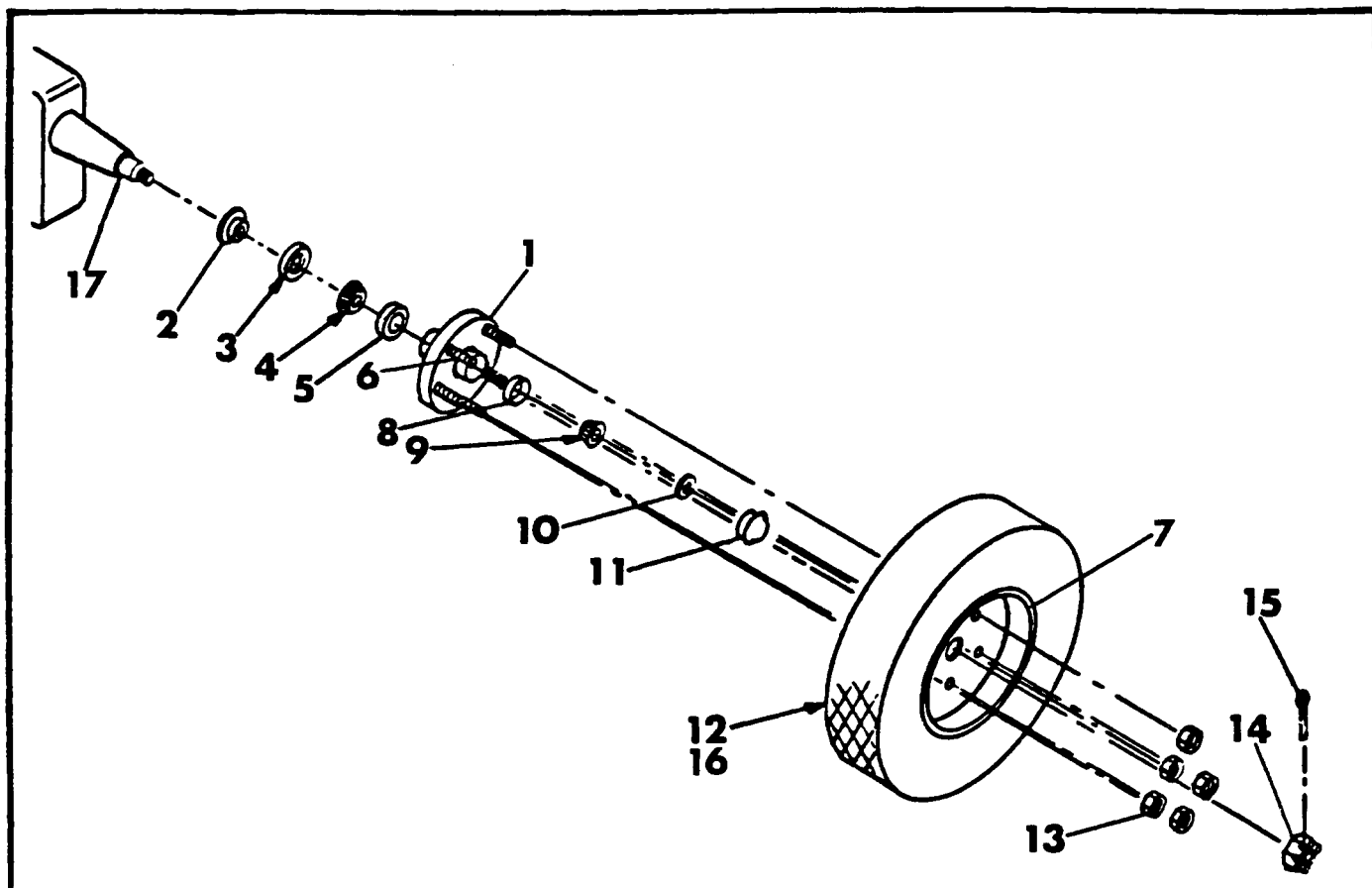
ITEM	PART NUMBER	DESCRIPTION	QTY
-1	9070	FRONT AXLE	1
-2	66133	RETAINER RING	2
-3	66134	GREASE SEAL	2
-4	65058	INNER BEARING (NEW PART NO. 66135)	2
-5	66136	INNER CUP	2
-6	9057	FRONT HUB	2
-7	66138	OUTER CUP	2
-8	65056	OUTER BEARING (NEW PART NO. 66139)	2
-9	66140	KEY WASHER	2
-10	66141	DUST CAP	2
-11	466	TIRE/WHEEL ASSEMBLY (NEW PART NO. 30728)	2
-12	466A	WHEEL (ONLY) (NEW PART NO. 30802)	2
-13	2221	CONE BOLT (10 IN REAR HUB)	20

REV.1
1-83

FIGURE 16A.2 - FRONT HUB AND WHEEL INSTALLATION
(RT25G) (BEFORE MARCH 1980)

185.4

ITEM	PART NUMBER	DESCRIPTION	QTY
-14	16115	SLOTTED NUT (NEW PART NO. 66142)	2
-15	16278	COTTER KEY (NEW PART NO. 64304)	2
-16	460	TIRE ONLY (NEW PART NO. 30797)	2



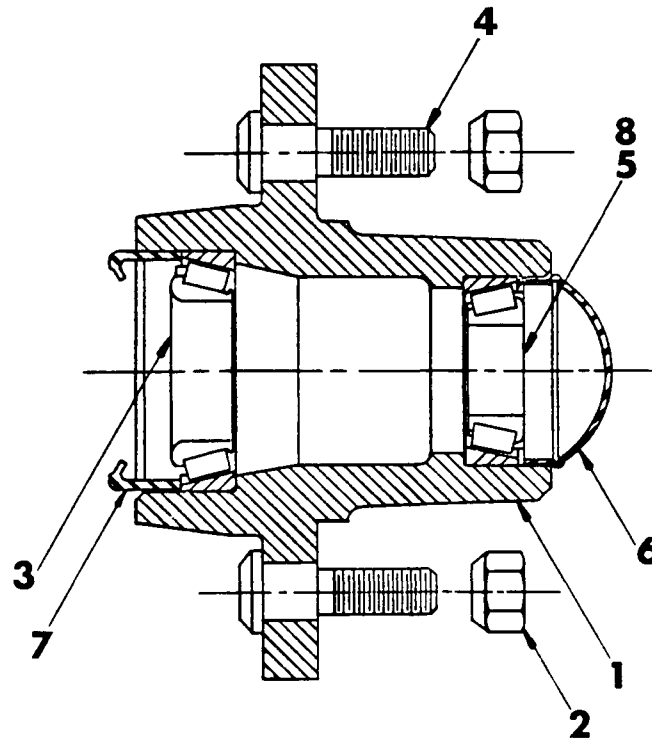
ITEM	PART NUMBER	DESCRIPTION	QTY
16A.3-	30709	FRONT HUB ASSEMBLY	2
-1	30410	FRONT HUB (ONLY)	2
-2	66133	RETAINER RING	2
-3	66134	GREASE SEAL	2
-4	65058	INNER BEARING (NEW PART NO. 66135)	2
-5	66136	INNER CUP	2
-6	66150	STUD	10
-7	466A	WHEEL (ONLY)	2
-8	66138	OUTER CUP	2
-9	66139	OUTER BEARING	2
-10	66140	KEY WASHER	2
-11	66141	DUST CAP	2
-12	466	TIRE & WHEEL (NEW PART NO. 30728)	2
-13	157B	LUG NUT	10
-14	16115	SPINDLE NUT (NEW PART NO. 66142)	2

REV. 1
1-83

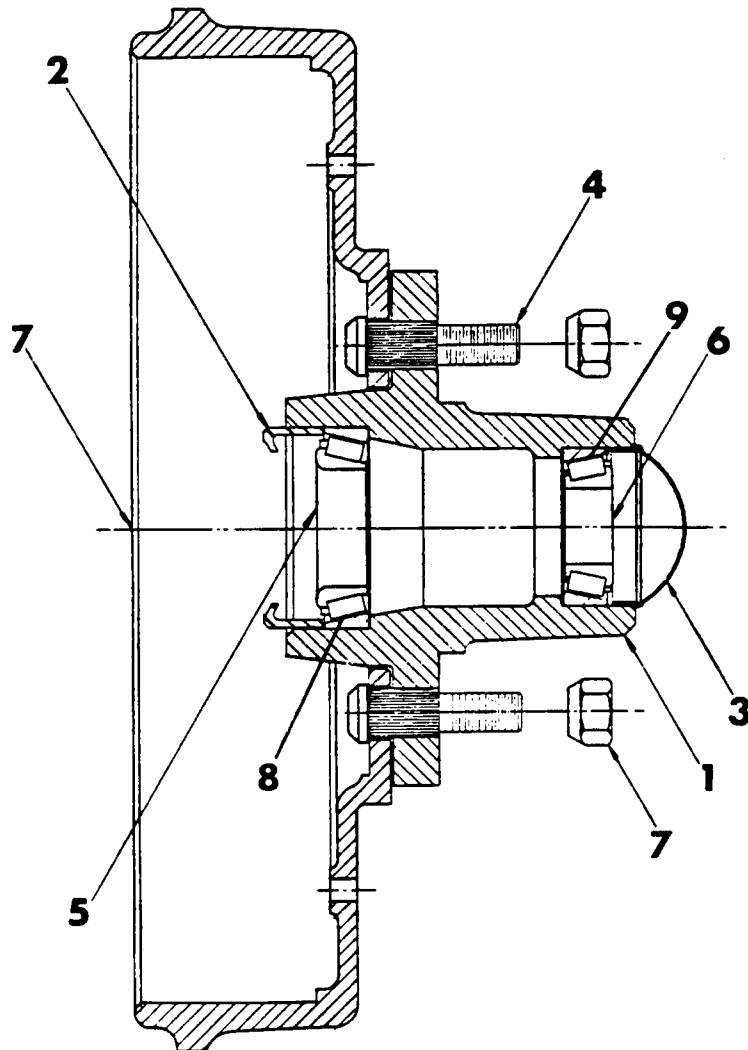
FIGURE 16A.3 - FRONT HUB AND WHEEL INSTALLATION
(RT25G) (BEGINNING MARCH 1980)

185.6

ITEM	PART NUMBER	DESCRIPTION	QTY
-15	16278	COTTER KEY (NEW PART NO. 64304)	2
-16	460	TIRE ONLY (NEW PART NO. 30797)	2
-17		AXLE (SEE FIGURE 16 & 16A.1)	



ITEM	PART NUMBER	DESCRIPTION	QTY
17-	30472	FRONT HUB ASSEMBLY (HADCO)	1
-1	30716	HUB - MACHINED	1
-2	157B	CONE NUT	5
-3	65058	INNER BEARING CONE - 523079	1
-4		WHEEL BOLT	5
-5	65056	OUTER BEARING CONE - 523039	1
-6	65216	GREASE CAP - 523045	1
-7	66114	GREASE SEAL - 523085	1
-8	16115 OR 66142	CASTLE NUT - 3/4 X 16	1



ITEM	PART NUMBER	DESCRIPTION	QTY
17.1-	2240	FRONT HUB & DRUM ASSEMBLY (HADCO)	1
-1	30410	HUB-MACHINED	1
-2	66134	GREASE SEAL	1
-3	66141	GREASE CAP	1
-4	65105	WHEEL BOLT	5
-5	65058	INNER BEARING CONE (NEW PART NO. 66135)	1
-6	65056	OUTER BEARING CONE (NEW PART NO. 66139)	1
-7	157B	CONE NUT - 523434	5
-8	66136	INNER CUP	1

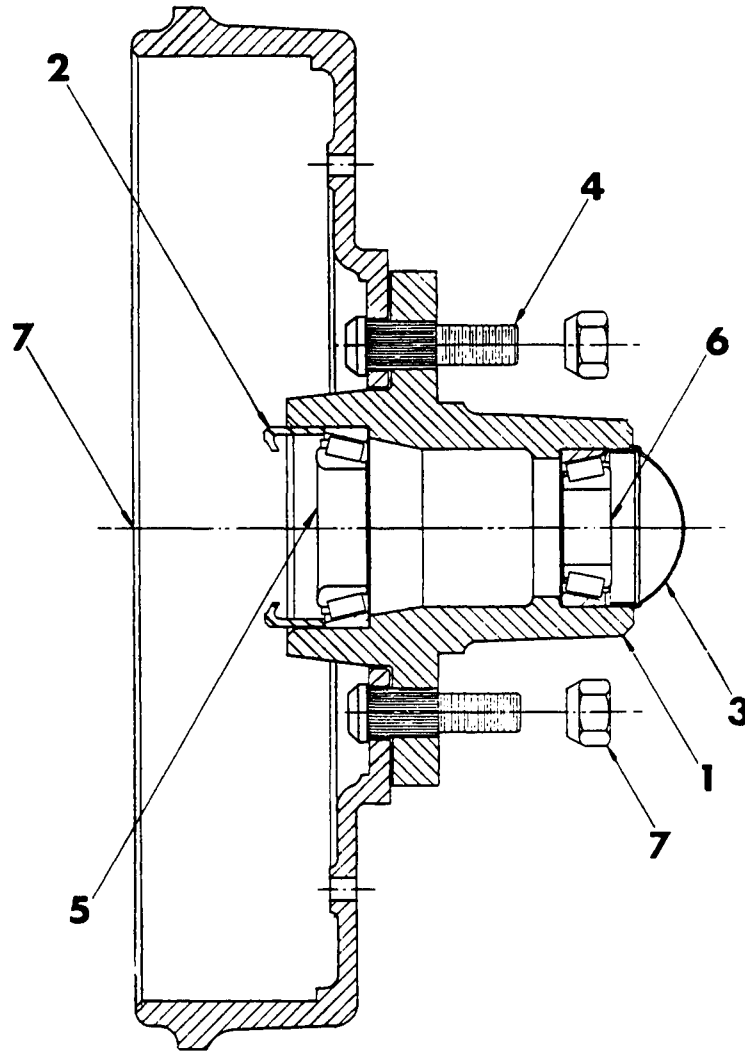
REV.1
1-83

FIGURE 17.1 - FRONT HUB ASSEMBLY (SRT31G)
(BEFORE JULY 1980)

186.2

ITEM	PART NUMBER	DESCRIPTION	QTY
-9	66138	OUTER CUP NOTE: SOME UNITS MAY BE UPDATED TO LARGE SPINDLE PART NO. 30238 AND 30239. ASK IF THEY HAVE ROUND OR FLOWER SHAPED HUB.	1

(BEGINNING JULY 1980)



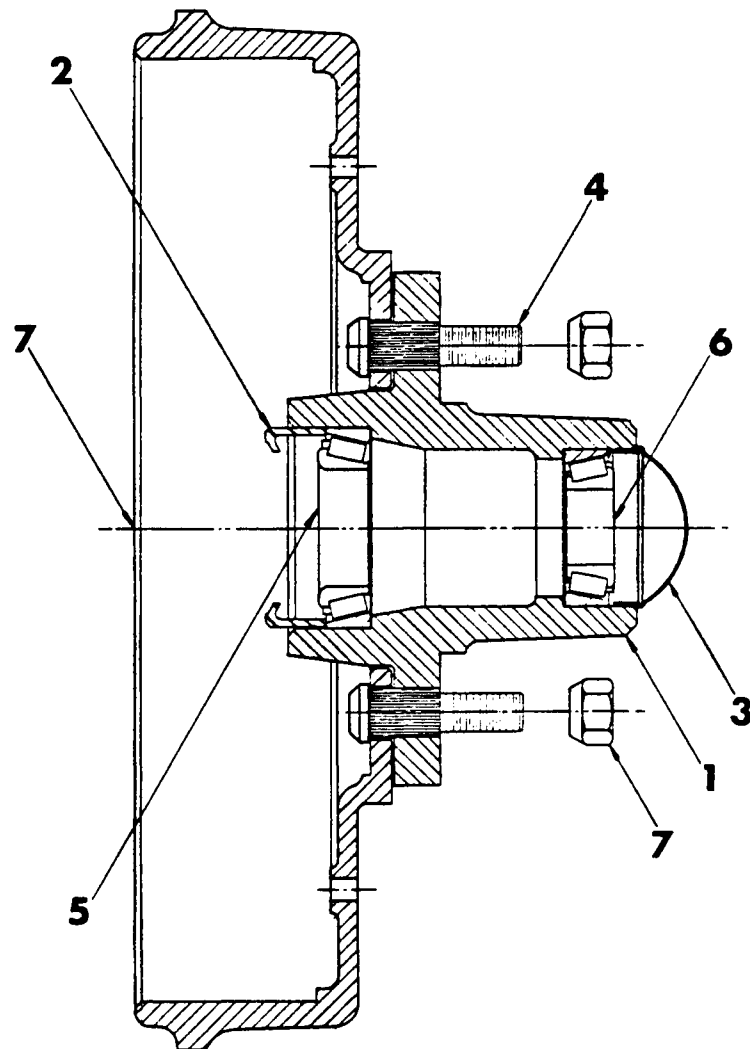
ITEM	PART NUMBER	DESCRIPTION	QTY
17A-	30482	FRONT HUB & DRUM ASSEMBLY (HADCO)	1
-1	30716	HUB-MACHINED	1
-2	66114	GREASE SEAL - 523085	1
-3	65126	GREASE CAP	1
-4	66233	WHEEL BOLT - 523742	5
-5	65058	INNER BEARING CONE - 523079	1
-6	65056	OUTER BEARING CONE - 523039	1
-7	157B	CONE NUT - 523434	5

REV.1
1-83

FIGURE 17A.1 - FRONT HUB & DRUM ASSEMBLY (RT26E)
(RT26G) (RT31E) (RT31G) (RT40E) (RT40G)

187.1

(BEFORE JULY 1980)



ITEM	PART NUMBER	DESCRIPTION	QTY
17A.1	2240	FRONT HUB & DRUM ASSEMBLY (HADCO)	1
-1	30410	HUB-MACHINED ROUND HUB	1
-2	66134	GREASE SEAL	1
-3	66141	GREASE CAP	1
-4	65105	WHEEL BOLT	5
-5	65058	INNER BEARING CONE (NEW PART NO. 66135)	1
-6	65056	OUTER BEARING CONE (NEW PART NO. 66139)	1
-7	157B	CONE NUT	5
-8	66136	INNER CUP	1

REV.1
1-83

FIGURE 17A.1 - FRONT HUB & DRUM ASSEMBLY (RT26E)
(RT26G) (RT31E) (RT31G) (RT40E) (RT40G)

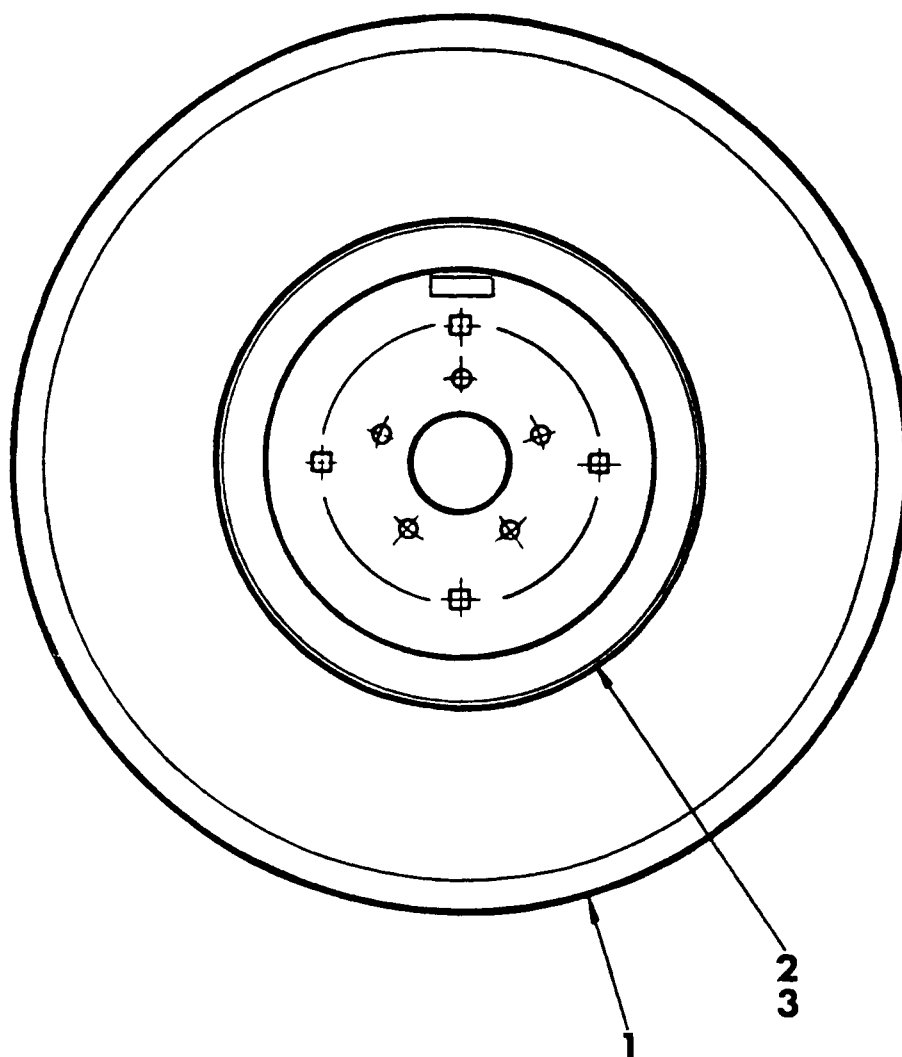
187.2

(BEFORE JULY 1980)

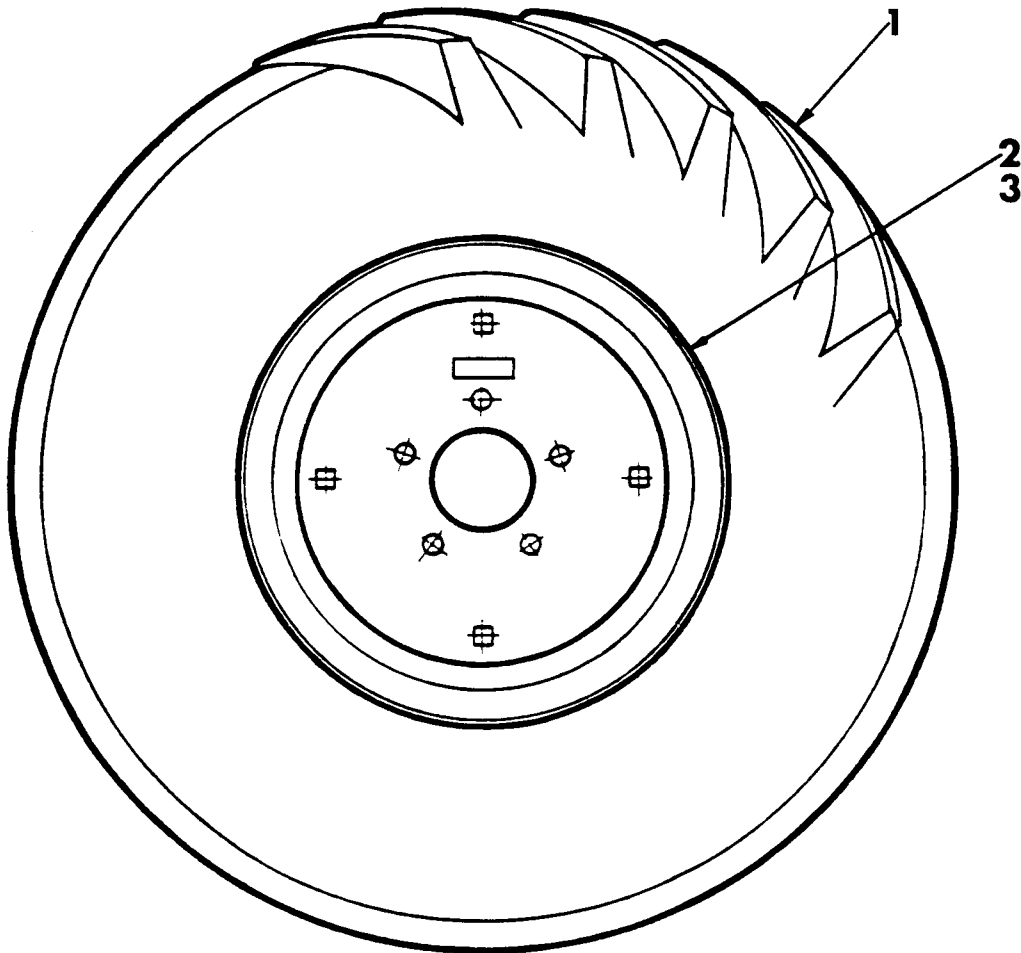
ITEM	PART NUMBER	DESCRIPTION	QTY
-9	66138	OUTER CUP NOTE: SOME UNITS MAY BE UPDATED TO LARGE SPINDLE PART NO. 30238 AND 30239. ASK IF THEY HAVE ROUND OR FLOWER SHAPED HUB.	1

FIGURE 18 - STEERING TIRE & RIM ASSEMBLY (RT25G)

188



ITEM	PART NUMBER	DESCRIPTION	QTY
18-	30782 OR 466	STEERING TIRE & RIM ASSEMBLY	1
-1	30797 OR 460	TIRE	
-2	30802 OR 466A	RIM	1
-3	2252	VALVE STEM	1



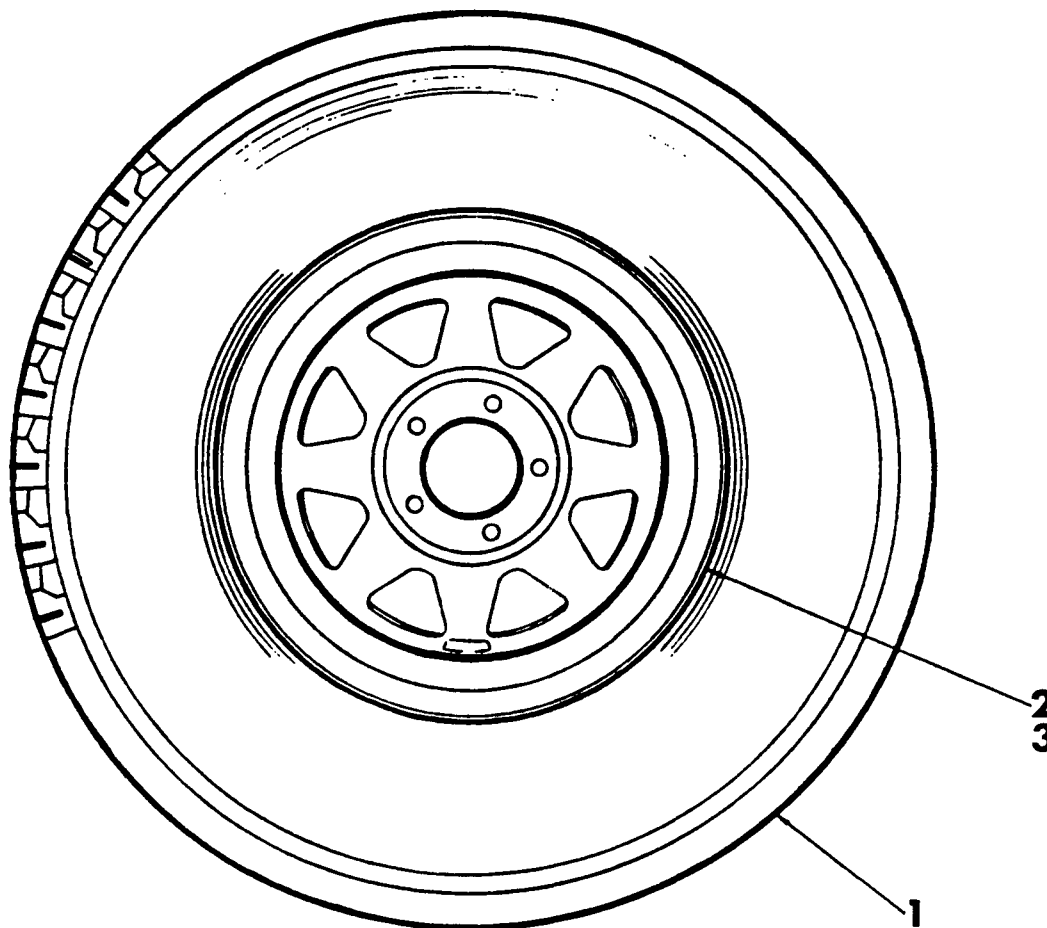
ITEM	PART NUMBER	DESCRIPTION	QTY
18A-	30781 OR 467	DRIVE TIRE & RIM ASSEMBLY	1
-1	30798	TIRE	1
-2	30802 OR 466A	RIM	1
-3	2252	VALVE STEM	1

REV.1
1-83

FIGURE 18B - STEERING AND DRIVE TIRE & WHEEL ASSEMBLY
(RT26E) (RT26G) (RT31E) (RT31G)

190

(BEFORE JULY 1980)



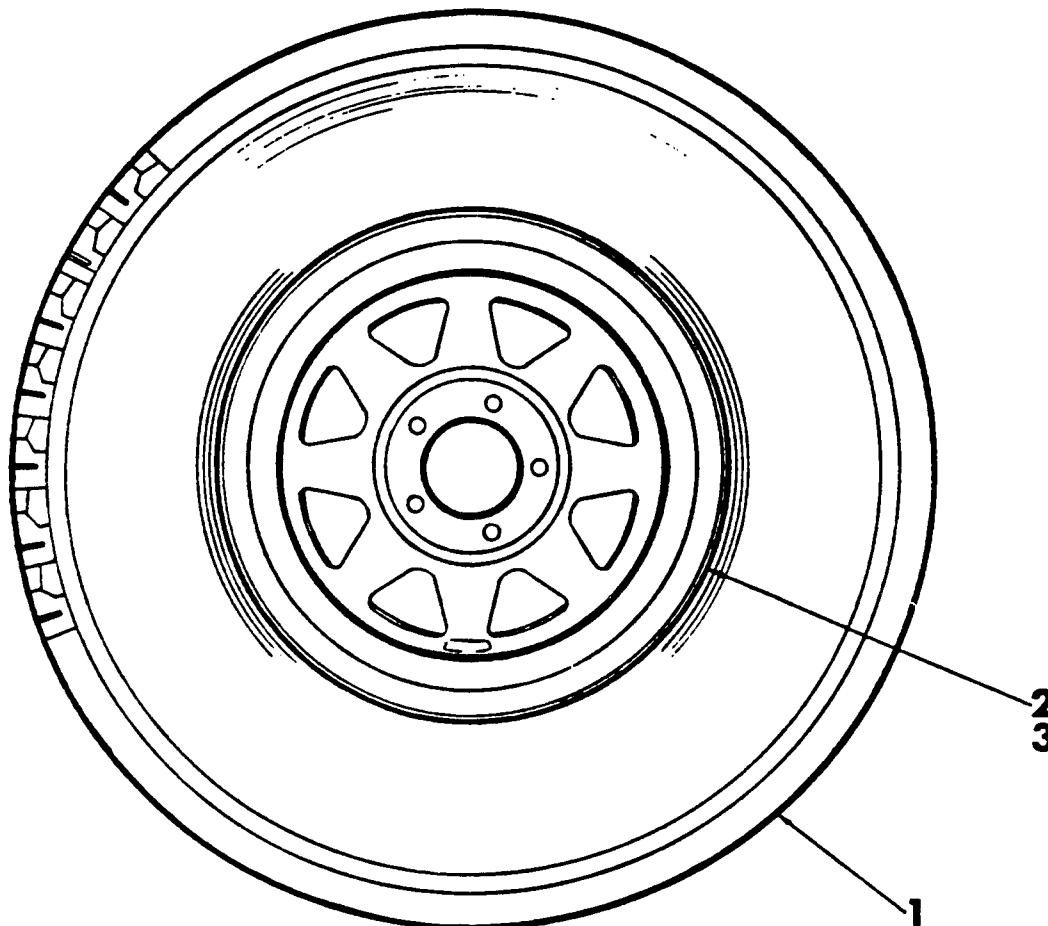
ITEM	PART NUMBER	DESCRIPTION	QTY
18B-	N/A	STEERING AND DRIVE TIRE & WHEEL ASSY	1
-1	157	TIRE	1
-2	157A	WHEEL	1
-3	2252	VALVE STEM	1

REV.1
1-83

FIGURE 18B.1 - STEERING TIRE & RIM ASSEMBLY (RT26E)
(RT26G) (RT31E) (RT31G) (RT40E) (RT40G)

190.1

(BEGINNING JULY 1980)

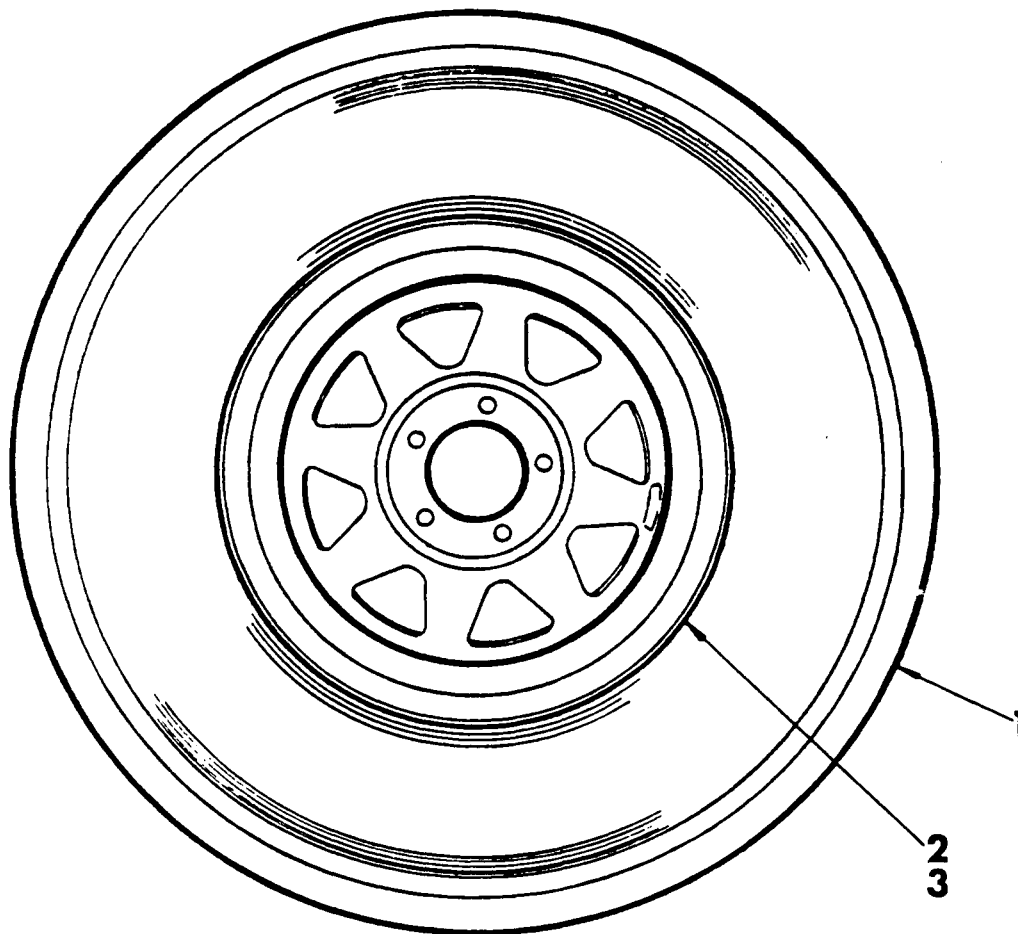


ITEM	PART NUMBER	DESCRIPTION	QTY
18B.1-	30784	STEERING TIRE & RIM ASSEMBLY	1
-1	30800	TIRE (OLD PART NO. 482)	1
-2	479	WHEEL	1
-3	2252	VALVE STEM	1
NOTE: USED ON ALL RT40E & G'S.			

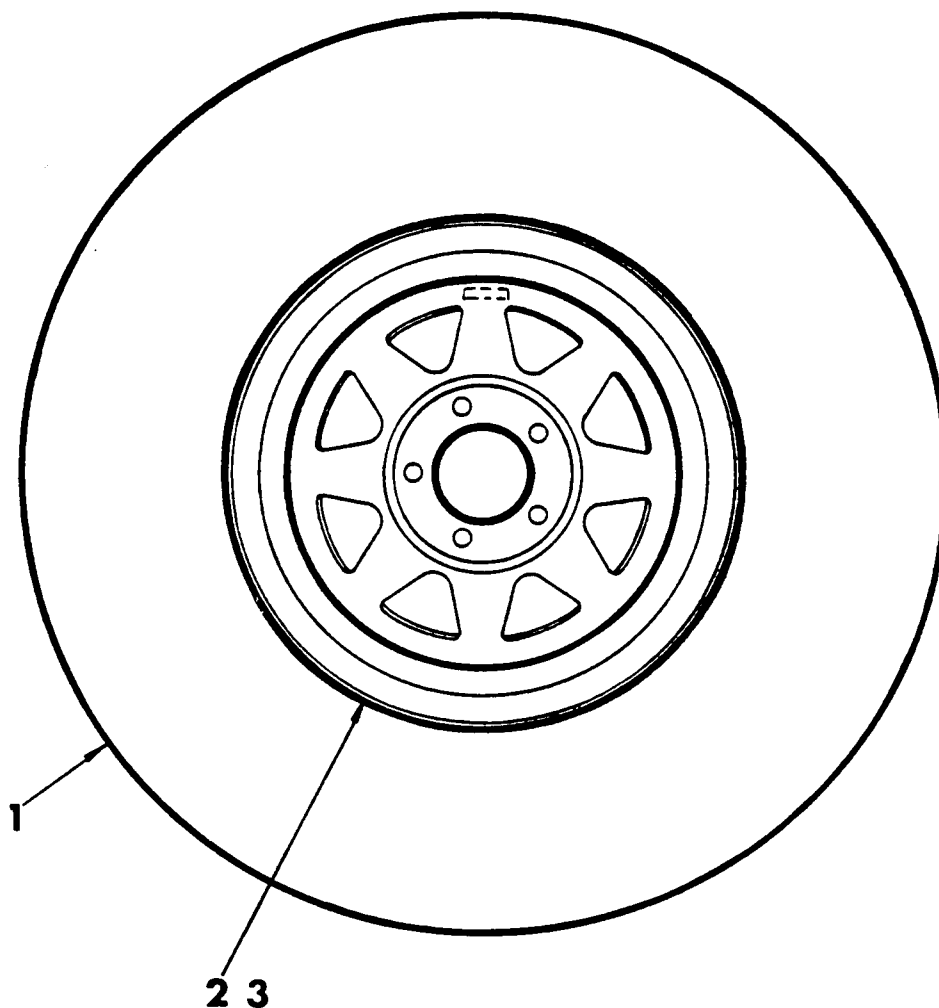
REV.1
1-83

FIGURE 18C - DRIVE TIRE & RIM ASSEMBLY (RT26E)
(RT26G) (RT31E) (RT31G) (RT40E) (RT40G)

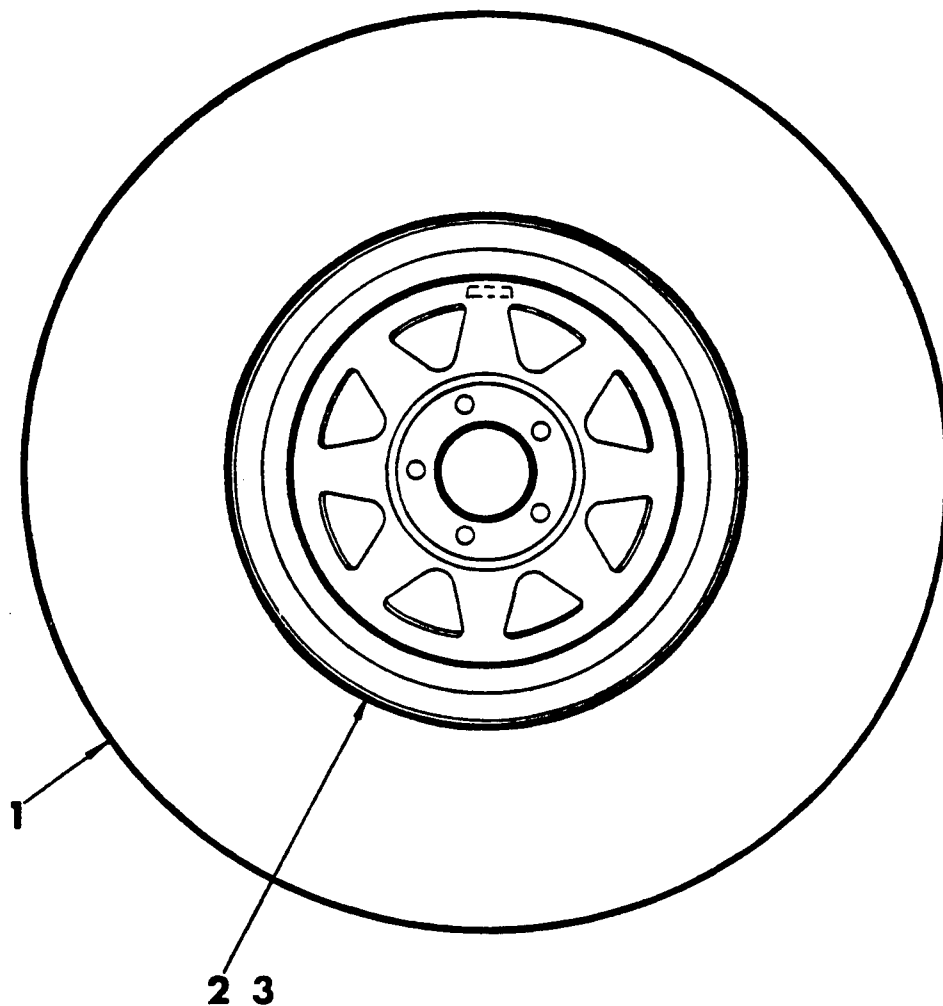
191



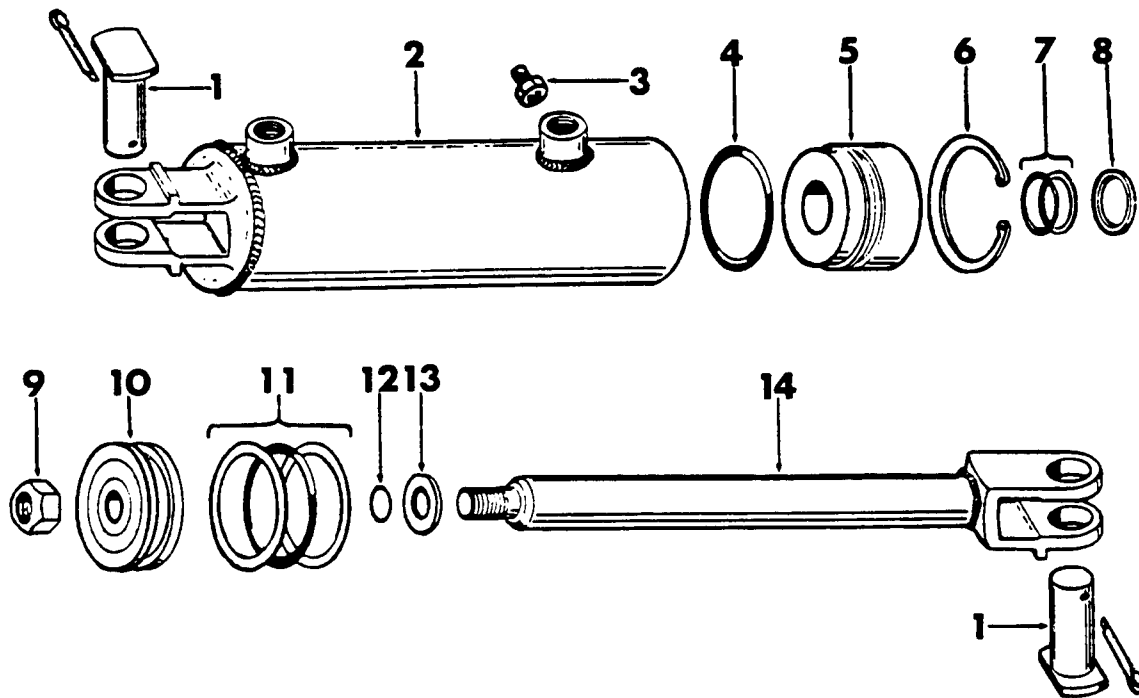
ITEM	PART NUMBER	DESCRIPTION	QTY
18C-	30783	DRIVE TIRE & RIM ASSEMBLY	1
-1	30800	TIRE (OLD PART NO. 482)	1
-2	478	WHEEL	1
-3	2252	VALVE STEM	1
NOTE: USED ON ALL RT40E & G'S.			



ITEM	PART NUMBER	DESCRIPTION	QTY
18D-	30795	STEERING TIRE ASSEMBLY	1
-1	30801	TIRE (OLD PART NO. 480)	1
-2	479	WHEEL	1
-3	2252	VALVE STEM	1



ITEM	PART NUMBER	DESCRIPTION	QTY
18E-	30796	DRIVE TIRE ASSEMBLY	1
-1	481	TIRE (OLD PART NO. 481A)	1
-2	479	WHEEL	1
-3	2252	VALVE STEM	1
NOTE: WHEN ORDERING ASSEMBLY, SPECIFY RIGHT OR LEFT.			



ITEM	PART NUMBER	DESCRIPTION	QTY
19-	3062	STEERING CYLINDER (HPWR)	1
-1	2356	CLEVIS PIN - 1" DIA. X 2 5/8	2
-2		TUBE ASSEMBLY - LC 1.5 X 6	1
-3		HEAD SET SCREW	1
-4		HEAD O-RING	1
-5	16929	HEAD (STOCK ITEM)	1
-6		LOCK RING	1
-7		SHAFT PACKING SET	1
-8		ROD WIPER	1
-9		PISTON LOCK NUT	
-10	16940	PISTON (STOCK ITEM)	1
-11		PISTON O-RING ASSEMBLY	1
-12		SMALL O-RING	1
-13		STEEL WASHER	1
-14	N/A	SHAFT ASSEMBLY (STOCK ITEM)	1
			1

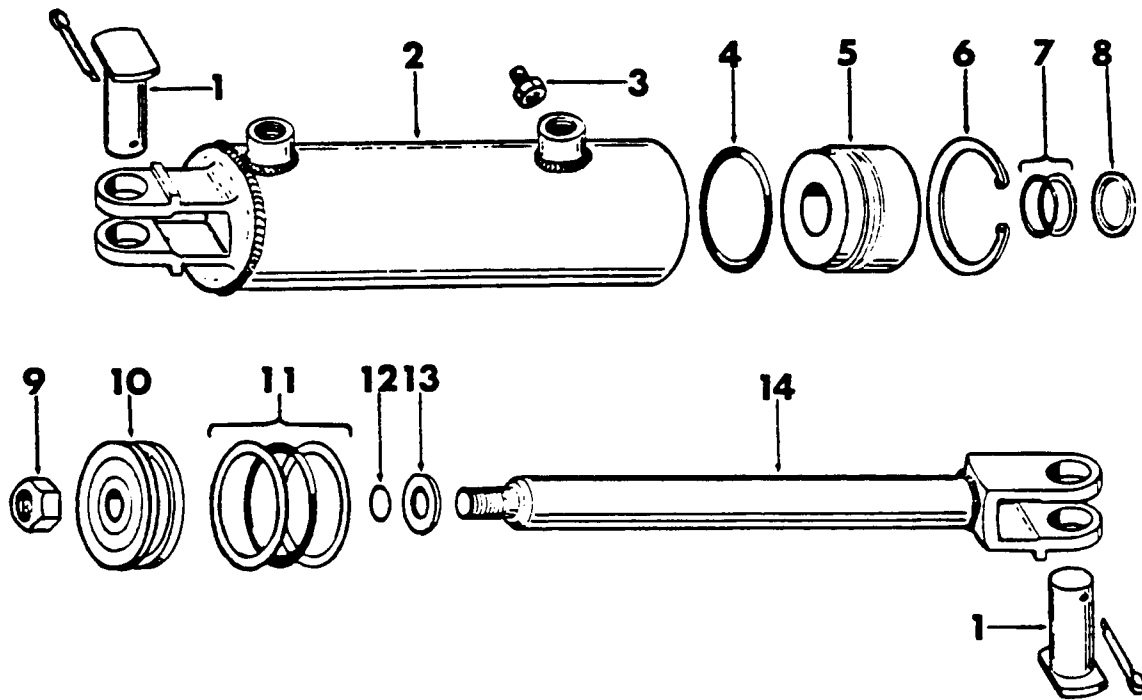
REV.1
1-83

FIGURE 19 - STEERING CYLINDER (RT25G)

194.1

ITEM	PART NUMBER	DESCRIPTION	QTY
-15	3062-1	SEAL KIT (HPWR) (ITEMS #4-7-8-11 & 12) NOTE: SOME UNITS MAY HAVE A 2" CYLIN- DER - PART NO. 3013. CHECK TUBE SIZE OF ITEM NO. 2 BEFORE ORDER- ING.	

(BEFORE NOVEMBER 1979)



ITEM	PART NUMBER	DESCRIPTION	QTY
19-	3062	STEERING CYLINDER (HPWR)	1
-1	2356	CLEVIS PIN - 1" DIA. X 2 5/8	2
-2		TUBE ASSEMBLY - LC 1.5 X 6	1
-3		HEAD SET SCREW	1
-4		HEAD O-RING	1
-5	16929	HEAD (STOCK ITEM)	1
-6		LOCK RING	1
-7		SHAFT PACKING SET	1
-8		ROD WIPER	1
-9		PISTON LOCK NUT	1
-10	16940	PISTON (STOCK ITEM)	1
-11		PISTON O-RING ASSEMBLY	1
-12		SMALL O-RING	1
-13		STEEL WASHER	1
-14		SHAFT ASSEMBLY (STOCK ITEM)	1
			1

REV.1
1-83

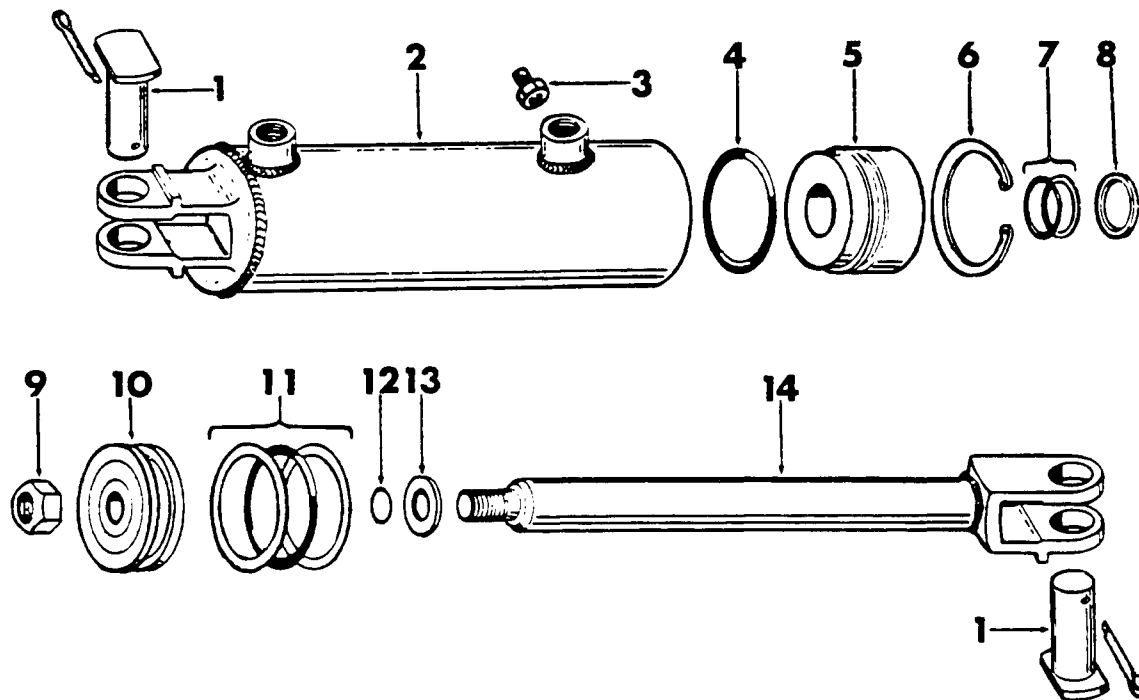
FIGURE 19.1 - STEERING CYLINDER (RT26E) (RT26G)
(RT31E) (RT31G) (SRT31G) (RT40E) (RT40G)

194.3

(BEFORE NOVEMBER 1979)

ITEM	PART NUMBER	DESCRIPTION	QTY
-15	3062-1	SEAL KIT (HPWR) (ITEM #4-7-8-11-12) NOTE: SOME UNITS MAY HAVE 2" CYLINDER PART NO. 3013. CHECK TUBE SIZE OF ITEM NO. 2 BEFORE ORDERING SEAL KIT.	1

(BEGINNING NOVEMBER 1979)



ITEM	PART NUMBER	DESCRIPTION	QTY
19A-	3013	STEERING CYLINDER (HPWR)	1
-1	2356	CLEVIS PIN - 1" DIA. X 2 5/8	2
-2		TUBE ASSEMBLY - LC 1.5 X 6	1
-3		HEAD SET SCREW	1
-4		HEAD O-RING	1
-5	16941	HEAD (STOCK ITEM)	1
-6		LOCK RING	1
-7		SHAFT PACKING SET	1
-8		ROD WIPER	1
-9		PISTON LOCK NUT	
-10	16942	PISTON (STOCK ITEM)	1
-11		PISTON O-RING ASSEMBLY	1
-12		SMALL O-RING	1
-13		STEEL WASHER	1
-14		SHAFT ASSEMBLY	1
			1

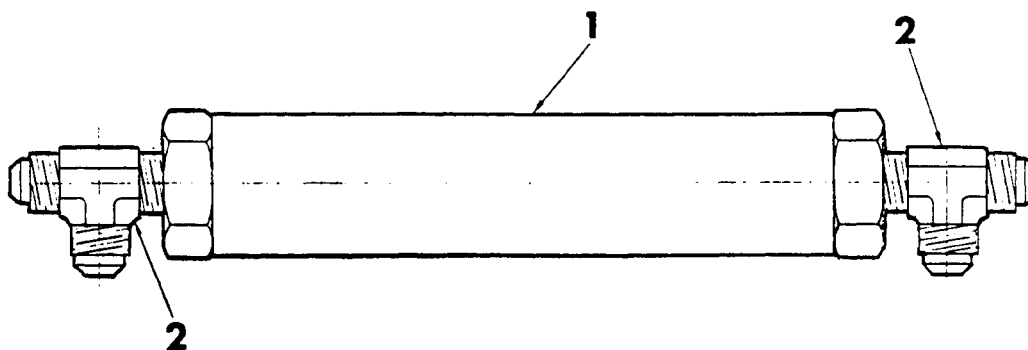
REV.1
1-83

FIGURE 19A - STEERING CYLINDER (RT26E) (RT26G)
(RT31E) (RT31G) (SRT31G) (RT40E) (RT40G)

195.1

(BEGINNING NOVEMBER 1979)

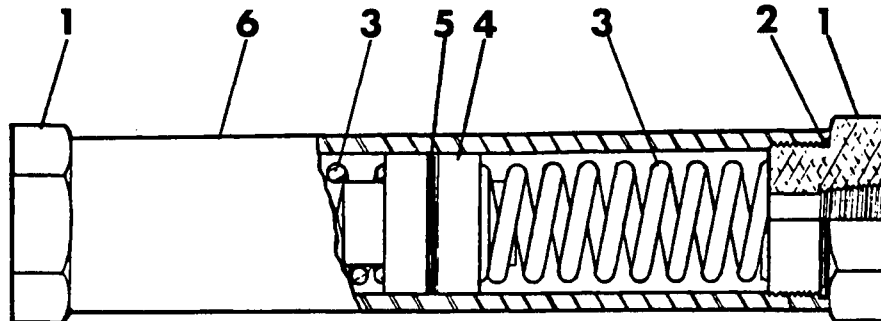
ITEM	PART NUMBER	DESCRIPTION	QTY
-15	331B	SEAL KIT (HPWR) NOTE: SOME UNITS MAY HAVE A 1.5" CYLINDER - PART NO. 3062. CHECK TUBE SIZE OF ITEM NO. 2 BEFORE ORDERING SEAL KIT.	1



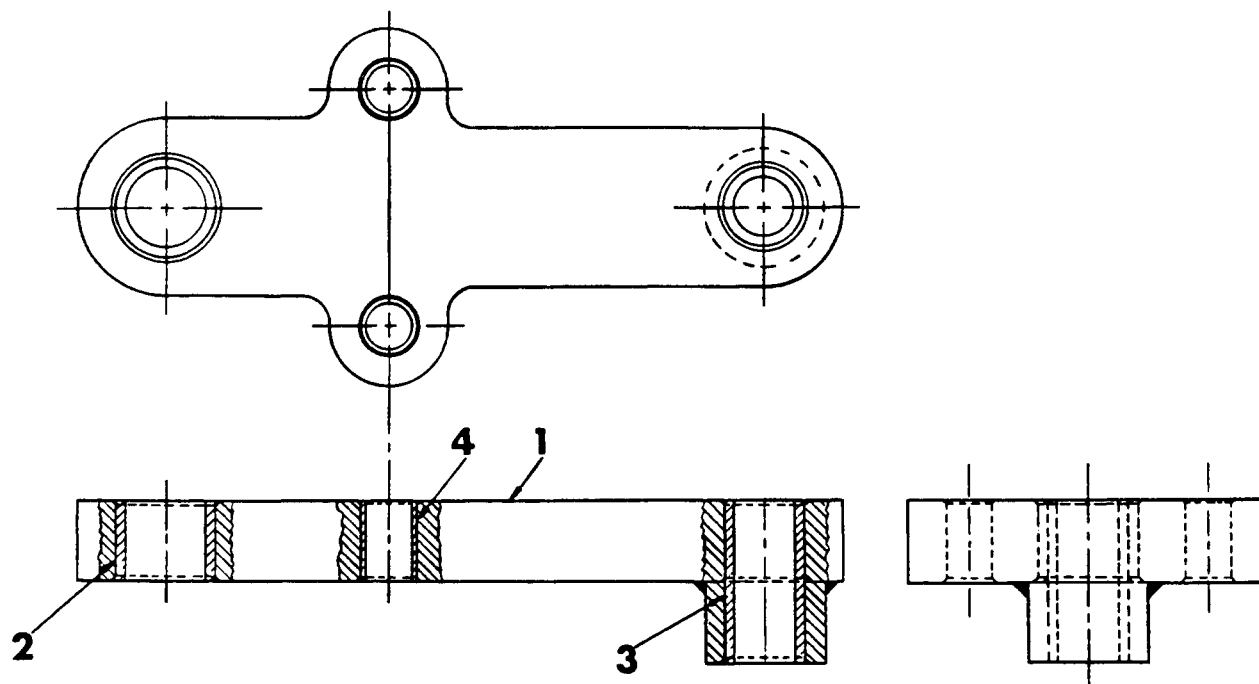
ITEM	PART NUMBER	DESCRIPTION	QTY
20-	30496	CUSHION CYLINDER ASSEMBLY	1
-1	44	CUSHION CYLINDER (SEE FIG. 21)	1
-2	2590	MALE RUN TEE	2

FIGURE 21 - CUSHION CYLINDER (ALL MODELS)

197

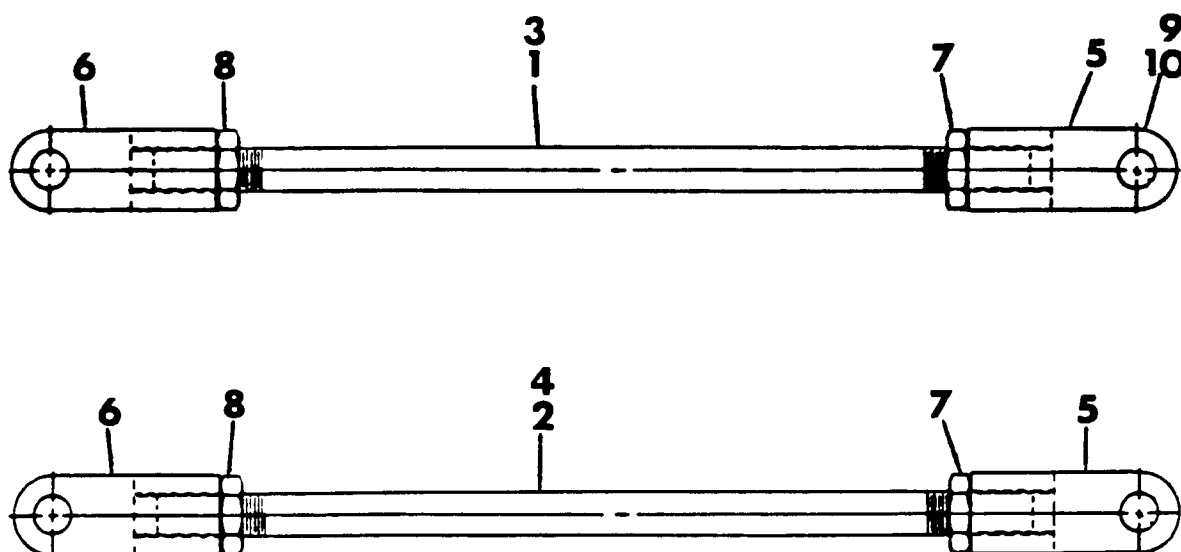


ITEM	PART NUMBER	DESCRIPTION	QTY
21-	44	CUSHION CYLINDER (CE)	1
-1		END PLUG - 7392-020P	2
-2		END PLUG - O-RING-7392-0920	2
-3	44B	SPRING - 7392-060	2
-4		PISTON - 7392-15P	1
-5		QUAD RING - 7392-8214	1
-6		CYLINDER - 7392-1875150	1
-7	44A	SEAL KIT (CE)	1



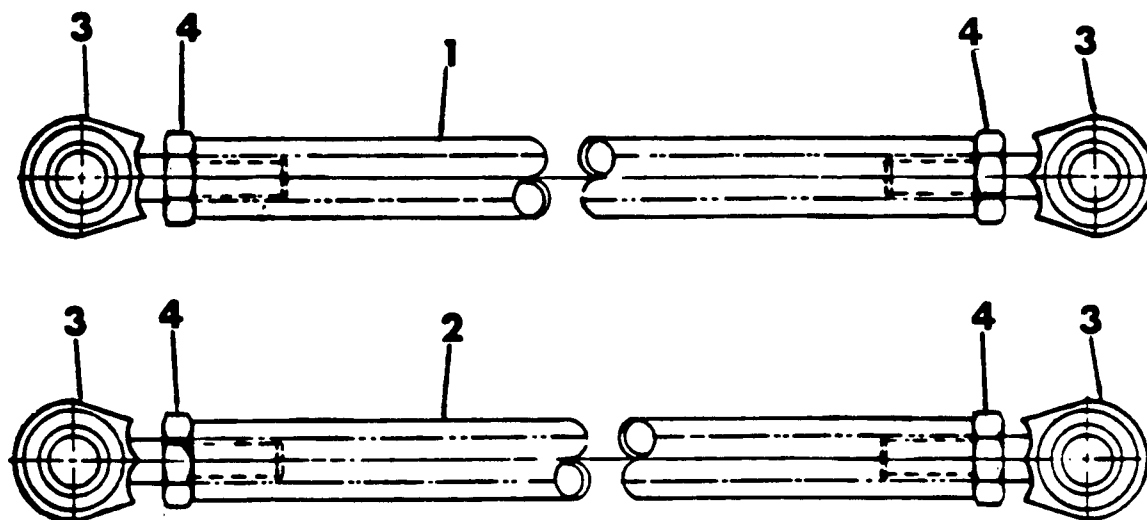
ITEM	PART NUMBER	DESCRIPTION	QTY
22-	8044	BELL CRANK ASSEMBLY	1
-1	8040	BELL CRANK	1
-2	2269	SLEEVE BEARING	1
-3	2278	SLEEVE BEARING	1
-4	8053	JOURNAL BEARING	2

(AFTER JAN 1980)



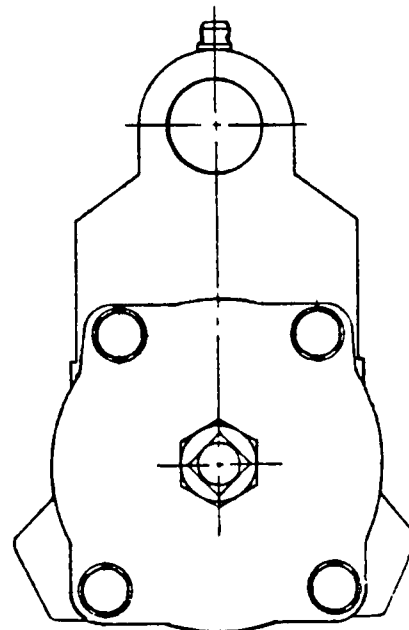
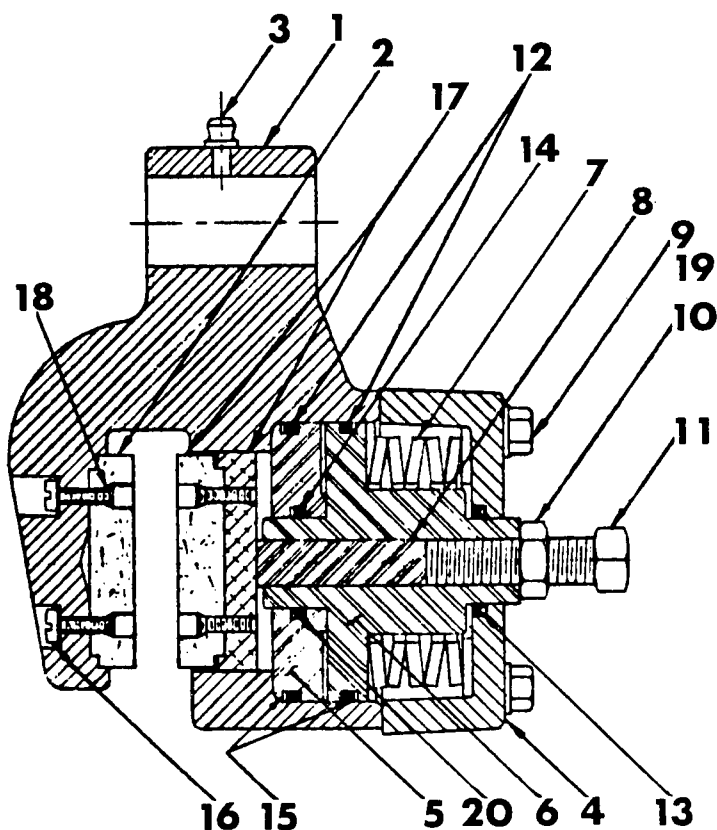
ITEM	PART NUMBER	DESCRIPTION	QTY
-1	30301	TIE ROD ASSEMBLY - (LEFT HAND) (SHORT SIDE)	1
-2	30302	TIE ROD ASSEMBLY - (RIGHT HAND) (LONG SIDE)	1
-3	30771	TIE ROD ONLY (SHORT SIDE)	1
-4	30772	TIE ROD ONLY (LONG SIDE)	1
-5	30774	TIE ROD CLEVIS END - (RIGHT HAND THREAD)	2
-6	30773	TIE ROD CLEVIS END - (LEFT HAND THREAD)	2
-7	60902	JAM NUT - (RIGHT HAND THREAD)	2
-8	60903	JAM NUT - (LEFT HAND THREAD)	2
-9	64102	CLEVIS PIN (REF.)	4
-10	64307	COTTER PIN (REF.)	4

(BEFORE JAN 1980)



ITEM	PART NUMBER	DESCRIPTION	QTY
-1	6333-1	TIE ROD TUBE ONLY - (LEFT HAND) (LONG SIDE)	1
-2	6333-2	TIE ROD TUBE ONLY - (RIGHT HAND) (SHORT SIDE)	1
-3	2275	TIE ROD END	4
-4	60806	JAM NUT - 5/8 X 18	4
NOTE: NO ASSEMBLY NUMBER AVAILABLE. ORDER BY PART NUMBER ONLY. SOME UNITS MAY BE UPDATED TO NEW TYPE TIE ROD ASSEMBLY PART NUMBER 30301 AND 30302. PLEASE CHECK FOR BALL JOINT OR CLEVIS TIE ROD ENDS.			

(BEGINNING JULY 1982)



ITEM	PART NUMBER	DESCRIPTION	QTY
25-	30860	CALIPER DISC BRAKE (SERIES 530 - SPRING APPLY)	1
-1	66375	HOUSING	1
-2	66376	LINING PAD	1
-3	66377	FITTING	1
-4	66378	COVER	1
-5	66379	PISTON	1
-6	66380	PISTON	1
-7	66381	BELLEVILLE SPRING	5
-8	66382	PUSH ROD	1
-9	66383	HEX HEAD CAP SCREW	4
-10	66384	JAM NUT	1
-11	66385	SET SCREW	1
-12	66386	O-RING	2
-13	66387	WIPER SEAL	1

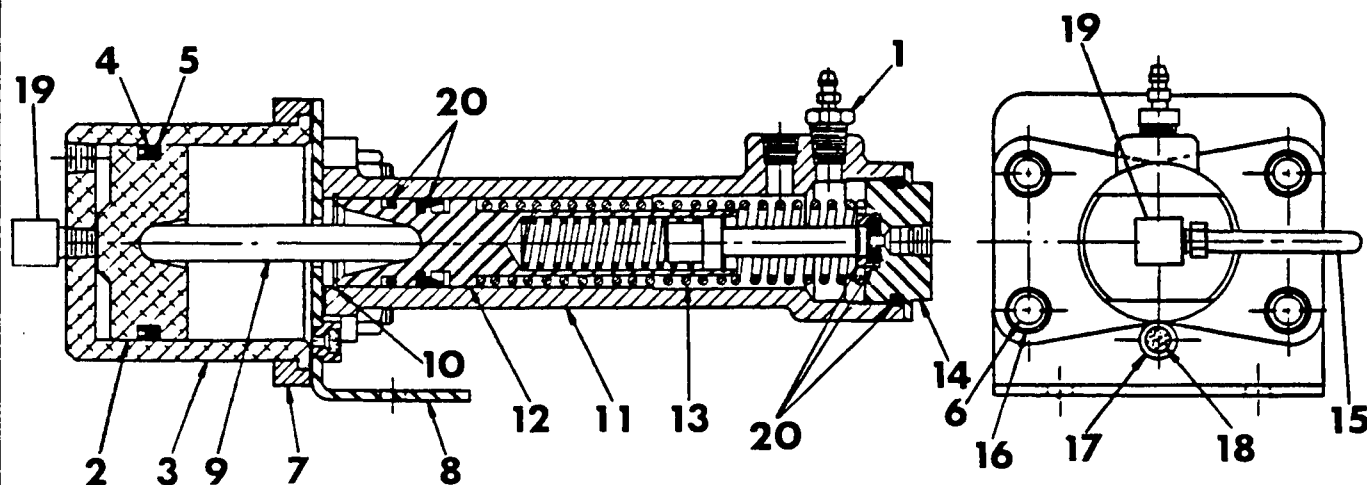
REV.1
1-83

FIGURE 25 - CALIPER DISC BRAKE (RT26E)
(RT26G) (RT31E) (RT31G) (RT40E) (RT40G)

202

ITEM	PART NUMBER	DESCRIPTION	QTY
-14	66388	O-RING	1
-15	66389	BACK-UP RING	2
-16	66390	SCREW	2
-17	66391	LINING ASSEMBLY	1
-18	66392	INSERT	2
-19	66393	LOCK WASHER	4
-20	66394	BACK-UP RING	1
-21	66395	BLEEDER SCREW (NOT SHOWN)	1
-22	66396	CONNECTOR (NOT SHOWN)	2

(BEGINNING JULY 1982)



ITEM	PART NUMBER	DESCRIPTION	QTY
25A-	30829	DISC BRAKE INTENSIFIER ASSEMBLY	1
-1	66303	BLEEDER SCREW ASSEMBLY	1
-2	66304	PISTON	1
-3	66305	HOUSING	1
-4	66306	SEAL	1
-5	66307	BACK-UP WASHER	1
-6	66308	SCREW	4
-7	66309	RETAINER	1
-8	66310	BRACKET	1
-9	66311	PUSH ROD	1
-10	66312	SNAP RING	1
-11	66313	HOUSING	1
-12	66314	PISTON ASSEMBLY	1
-13	66315	SPRING	1
-14	66316	END PLUG ASSEMBLY	1
-15		TUBE ASSEMBLY	1
-16	66318	LOCK NUT	4
-17	66319	ADAPTOR	1
-18	66320	SNUBBER	1

REV.1
1-83

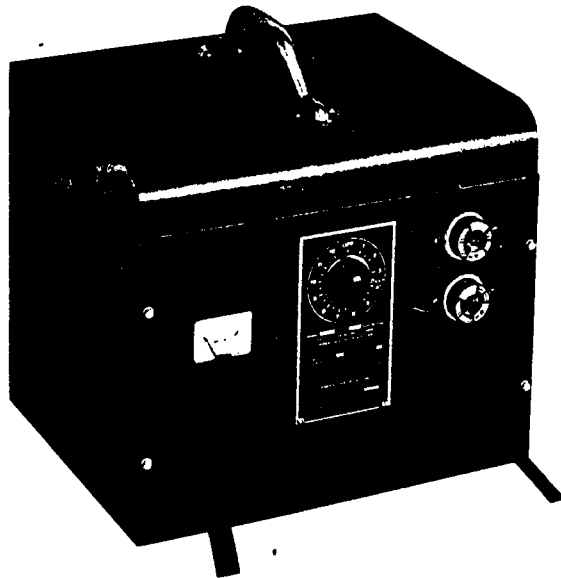
FIGURE 25A - DISC BRAKE INTENSIFIER (RT26E)
(RT26G) (RT31E) (RT31G) (RT40E) (RT40G)

204

(BEGINNING JULY 1982)

ITEM	PART NUMBER	DESCRIPTION	QTY
-19	66332	ELBOW	2
-20		REPAIR KIT (INCLUDES ITEMS 2, 4 & 5)	1

OPERATING & SERVICING HANDBOOK



SINCE 1929
CHRISTIE
ELECTRIC CORP.

SERIES "L" BATTERY CHARGERS

INTRODUCTION

This handbook describes the installation, operation, trouble shooting, and repair of the CHRISTIE Series L portable and built-in battery chargers. These units are self-contained, fully automatic, ruggedized, commercial battery chargers, designed for operation on the normal electrical service. The output of the Series L charger is regulated by use of a resonance transformer. The built-in model is permanently mounted on the battery powered vehicle.

SPECIFICATIONS

INPUT POWER	115 Volts; 60 Hz
OUTPUT VOLTAGE	12, 24 or 36 volts, DC
OUTPUT CURRENT	25 to 40 Amp
OUTPUT MONITOR	Ammeter
OUTPUT CONTROL	12 or 24 hour Automatic Timer
TRANSFORMER PROTECTION	D-C output fuses
PERSONNEL PROTECTION	Grounded cabinet (3rd wire)

INSPECTION AND INSTALLATION

Inspect the exterior of the shipping container for visual signs of rough handling during shipment

Remove the charger from the shipping container and inspect the exterior of the unit for damage (broken glass, cracked knobs, etc.). CLAIMS FOR SHIPPING DAMAGE SHOULD BE FILED WITH THE CARRIER.

Install the charger on any suitable working surface so that there is free access to the front (control) panel and at least six (6) inches of free clearance on each side. There should be at least two (2) inches of clearance on the top of the charger. (The charger may be suspended overhead by the handle.) The clearance is required to allow proper flow of air through the side and top louvers for cooling.

There must be a separately fused, three-wire, single-phase, 115 volt, power receptacle sufficient rating (see A-C Amp in table on back page) within reach of the AC input cord of the charger.

OPERATING INSTRUCTION.

1. Connect the AC plug to a suitable power receptacle.
2. Connect the DC plug to the battery receptacle (permanently connected on built-in models).

NOTE

Check the output plug for the correct polarity.
The WHITE or RED lead must be connected to the POSITIVE terminal
The BLACK lead must be connected to the NEGATIVE terminal

3. Turn the charger ON by setting the timer to the desired charging time (See Charging Time Chart).
4. Verify that the OUTPUT METER indicates a charging current. (If it does not, see TROUBLE SHOOTING SECTION.)
5. The timer control will turn off the charger (positive turn-off feature) at the completion of the charge cycle.
6. Disconnect the battery from the charger (on built-in model disconnect the AC cord).
7. Using a hydrometer, verify that the battery has been properly charged.

TROUBLE SHOOTING & REPAIR INSTRUCTIONS

LOW OR NO CHARGING CURRENT

1. Verify that the battery being charged has no open or dead cells. Check jumper cables between batteries for tight and clean connections, and also verify that the battery is not already fully charged.
2. Check the output fuses of the charger.
3. Verify that the AC receptacle has power by plugging in an electrical appliance.
4. Turn the charger ON and verify that the transformer hums. If no hum is heard, proceed with step 4.1.
 - 4.1 Remove the cabinet cover to gain access to the interior of the charger.
 - 4.2 On larger chargers furnished with a power relay (see wiring diagram) verify that the relay actuates when charger is turned on. If relay does not close, check continuity across relay coil. Also check for burned or damaged relay contacts
 - 4.3 Disconnect the transformer primary leads from the timer assembly or power relay. Check for continuity between the primary input leads of the transformer on the terminal board. If no continuity is found, replace the transformer. If continuity is found proceed as follows:
 - 4.4 With the timer switch ON, check for continuity across the switch. If the switch is open with the timer on, replace the timer assembly.

CHARGING TIME CHART

The following chart provides useful information for determining the minimum charging time needed to restore a battery to a full charge condition. In addition to normal charging, the cells of the batteries should be equalized twice each month. This is done by charging the batteries an additional seven (7) hours after a normal charge cycle. The current indications of the ammeter will be low during cell equalization.

<u>Specific Gravity Reading</u>	<u>Condition of Battery</u>	<u>Hours Needed, to Charge</u>
1100	fully discharged	12
1125	10% charged	10
1150	20% charged	8
1175	30% charged	7
1200	60% charged	4
1225	75% charged	2
1250	95% charged	1/2
1260	fully charged	0

*Charging time will vary with the AH capacity of the battery.

INSPECTION OF BATTERIES AND ASSOCIATED CIRCUITS

An inspection of batteries and associated circuits is required often to assure that the batteries are capable of being fully charged. This inspection requires the use of a single-cell voltmeter, a hydrometer and a continuity tester.

1. Verify that all connections within the unit to be charged are clean and tight.
2. Check each battery for loose terminal posts.
3. Test for continuity between all battery terminals and the charging receptacle.
4. Verify that the top of each battery is free of moisture, grease and acid films which may cause a current leakage.
5. Test each individual cell in each battery after recharging with the hydrometer to verify that all specific gravity readings are within 10 points of one another.
6. Using the hydrometer, pull out acid from a cell and then vigorously expel the acid back into the cell to cause a violent stirring action. Immediately draw out another sample of acid and visually inspect it to see if it contains a brownish sediment (indicates positive plates are deteriorated).

IMPORTANT FACTS ON BATTERIES AND CHARGERS

Do not discard a good battery as being defective because its specific gravity does not show an increase immediately upon applying a charge. Many good batteries require a charging period as long as three (3) hours before they show any increase in the specific gravity.

Do not charge a battery if the electrolyte temperature could rise above 120°F. This could damage both battery and charger. As a rule of thumb, the electrolyte temperature during normal charging is about 25°F above the local air temperature.

There are only two test methods to determine if a discharged battery is defective without applying a charge. These tests are given in steps 5 and 6 of the INSPECTION OF BATTERIES AND ASSOCIATED CIRCUITS. Voltage testing methods without fully charging or made while charging have no relationship to battery defectiveness.

Failure to keep the battery electrolyte to the proper level will result in a crumbling (abnormal sulfation) of the plates and cause failure of the battery. Distilled water must be added to the battery regularly to make up for the loss due to evaporation, especially during periods of high charging rates. Add water only to fully charged batteries.

Both overcharging and undercharging can cause a premature failure of a battery. Overcharging destroys the positive plates. Consistent undercharging causes a buckling of the plates.

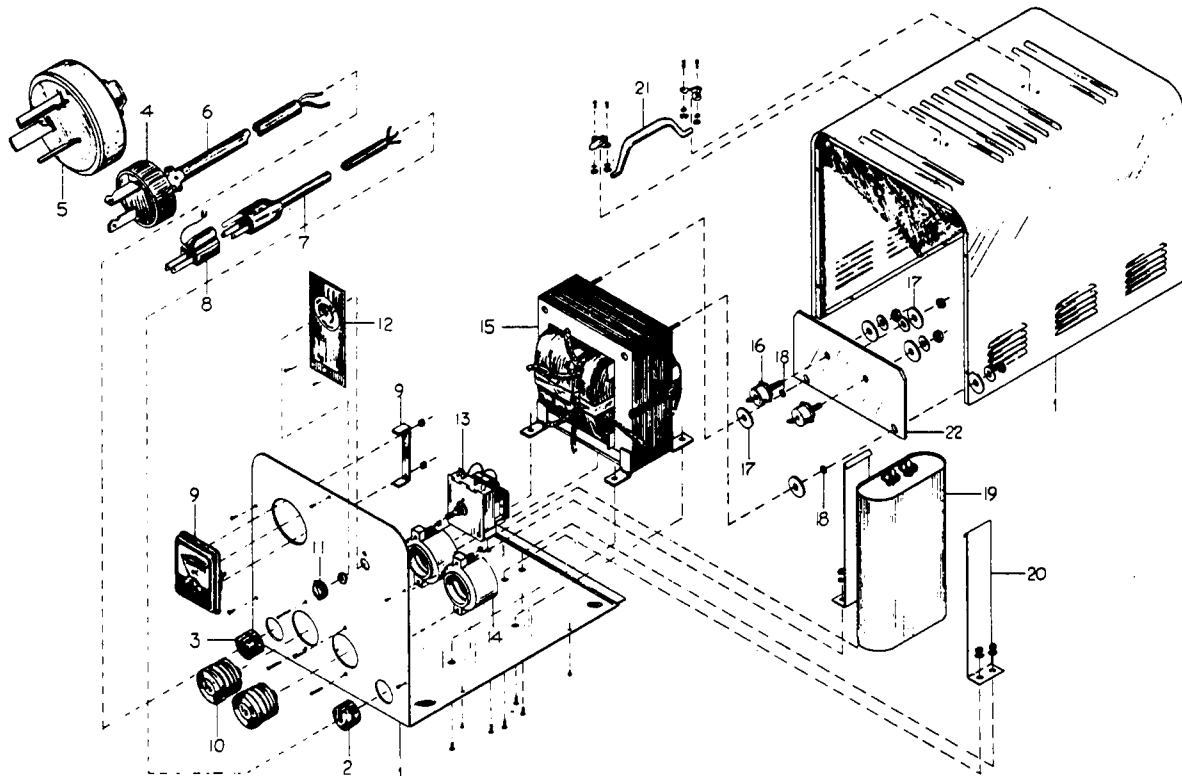
OUTPUT FUSES BLOW

7. Verify that the circuit under charge is not shorted by disconnecting the charger and operating it disconnected.
8. If fuses continue to blow, test the charger as per steps 5.1 through 5.13.

TIMER DOES NOT TURN UNIT OFF

9. Indicates that timer motor or switch is faulty. Replace timer assembly.

EXPLODED DIAGRAM (Typical Charger)



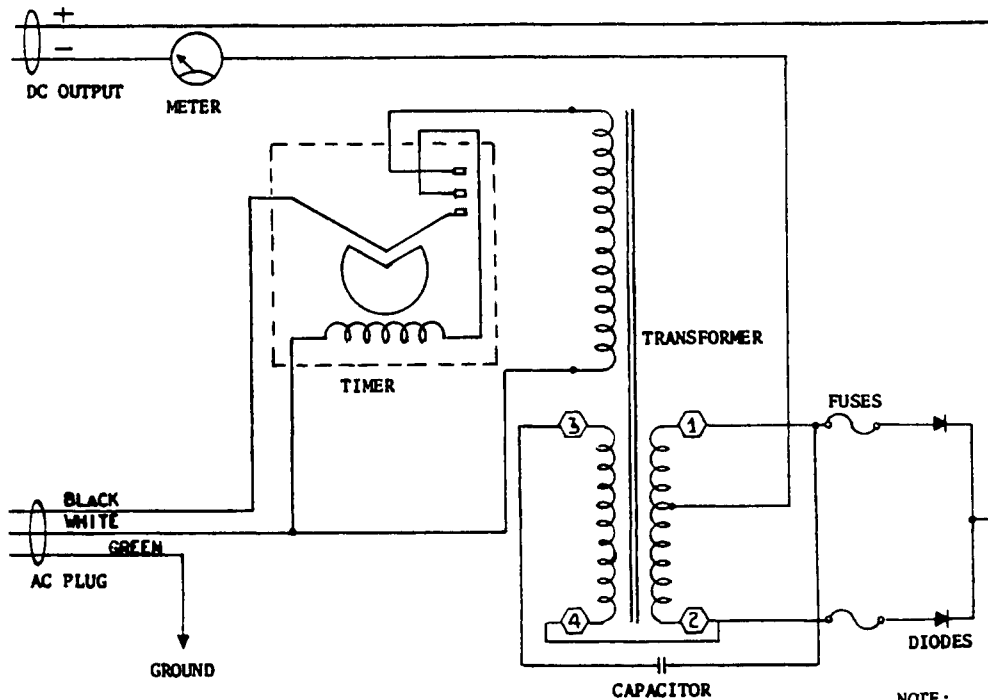
CHRISTIE SERIES "L" BATTERY CHARGERS

PARTS LIST

Item	Item	Item
1 Portable Cabinet	9 Ammeter	18 Washer Assembly (3/8")
2 Bushing (AC)	10 Fuse	19 Capacitor
3 Bushing (DC)	11 Control knob	20 Bracket Set
4 DC Plug (2 prongs)	12 Timer Dial	21 Handle Assembly
5 DC Plug (3 prongs)	13 Timer Assembly (12 hr.)	22 Heat Sink
6 Output Cord	13 Timer Assembly (24 hr.)	
7 AC Cord and Plug (portable)	14 Fuse Holder	
7 Recessed Male Plug (built-in model)	15 Transformer	
8 Adaptor	16 Diode	
	17 Washer Assembly (3/4")	

When ordering parts, please specify both serial number and model.

Wiring Diagram Models 1225L, 2425L and 3625L
(Separate appropriate diagram is furnished for other models)



NOTE
1) Make voltage checks with capacitor disconnected.

Test Voltages (tp 1 & 2)

Model	Vac
1225	22
2425	42

Test Voltages (tp 3 & 4)

Model	Vac
1225	180
2425	180

NOTE:
SCHEMATIC SHOWS DIAGRAM FOR TIMER
MANUFACTURED BY MALLORY TIMERS AND
USED ON CHGRS MANUFACTURED AFTER 4/1/76.

CHRISTIE SERIES "L" CHARGERS

- 4.5 If all of the foregoing checks indicate continuity, but the transformer does not hum, check for loose or broken leads between the AC plug, timer assembly, and terminal board.
5. If the transformer hums, proceed as follows:
 - 5.1 Check the output fuses to insure they are good. Inspect the fuse holders for damage or a blackened appearance. (If the fuse holder is blackened it indicates oxidation and should be replaced.)
 - 5.2 Remove the cabinet cover to gain access to the interior of the charger.
 - 5.3 Disconnect the capacitor or capacitors for the following test:
 - 5.4 Remove one of the output fuses. With the timer switch OFF, check for continuity across the DC output, connecting the continuity indicator first in one direction and then in the other. The indicator should show an open in one direction and continuity in the other.
 - 5.5 Repeat step 5.4 interchanging the condition of the two output fuses.
 - 5.6 If the indications obtained in steps 5.4 and 5.5 are normal, the secondary of the transformer is shorted, and it should be replaced. If a short is measured in both directions in either step 5.4 or 5.5, the diode associated with the installed fuse is defective and should be replaced. If the indications in both directions in either step 5.4 or 5.5 are open, then the diode or transformer secondary may be open.
 - 5.7 To isolate the defective part with one of the output fuses installed, check for continuity between its fuse holder and both terminals of the output ammeter. If continuity exists between the fuse holder and one of the meter terminals but not the other, the meter and the shunt are defective and must be replaced.
 - 5.8 If continuity exists, repeat step 5.7 by interchanging fuses and connecting the continuity meter to the other fuse holder.
 - 5.9 If continuity does not exist in either step 5.7 or 5.8, the transformer secondary may be open. Check for continuity directly across the transformer secondary with both output fuses removed.
 - 5.10 If all indications to this point are normal, test the entire DC output circuitry for continuity by progressing from the +DC output terminal to the -DC terminal in incremental test sections, checking for open circuits and poor connections.
 - 5.11 Test the resonance transformer for continuity between test points (3) and (4). If open replace transformer.
 - 5.12 Test the resonance transformer under operating conditions by making the voltage measurements noted in the schematic diagram. Replace the transformer if these voltages are not normal.
 - 5.13 Remove one lead from capacitor. Check across capacitor for continuity. If continuity exists, replace capacitor.

AC LINE FUSES BLOW

6. With unit unplugged and timer turned ON, check for continuity between each input prong of the AC plug and the ground prong. If all indications are open, the transformer or timer is shorted. Operate the timer with the transformer disconnected to isolate the faulty item. If continuity is found, a short circuit exists and must be found and removed.

CHRISTIE BATTERY CHARGER REFERENCE CHART

Model		AC Volts	AC Amp	Battery* Amp Hours	DC Volts	DC Amp
Portable	Built-in					
1225L	1225LC	115	4	130/220	12	25
1240L	1240LC	115	5	170/250	12	40
2425L	2425LC 2425LB	115	7	130/220	24	25
2440L	2440LC	115	12	170/250	24	40
3625L	3625LC	115	12	130/220	36	25
3640L	3640LC	115	18	170/250	36	40

*Higher capacity batteries may be charged if longer than 12 hours recharge time is available.
Some units are furnished with 24 hr. timers for this purpose.

WARRANTY

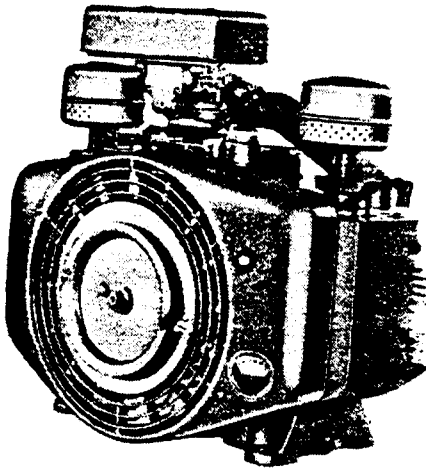
CHRISTIE ELECTRIC CORP. agrees to correct any defects in workmanship or material which may develop under proper and normal use by repair or replacement, F.O.B. Los Angeles, California, for a period of one year from date of purchase. The purchaser assumes full responsibility for proper installation and installation adjustments. Parts or equipment claimed defective must be returned to the factory, transportation prepaid, for inspection. If found defective, parts or equipment will be repaired or replaced and returned, transportation collect, to the purchaser. We undertake no responsibility for work done, or expense incurred in connection with repairs or replacements except on specific authority from Christie Electric Corp.

In no event does Christie Electric Corp. assume any liability for consequential damages, or for loss, damage or expense directly or indirectly arising from the use of these products. There are no warranties, either expressed or implied other than those provided herein.

SINCE 1929
CHRISTIE
 ELECTRIC CORP.



OPERATING AND MAINTENANCE INSTRUCTIONS



CCKB ENGINE

ONAN

1400 73RD AVENUE N.E. • MINNEAPOLIS, MINNESOTA 55432
A DIVISION OF ONAN CORPORATION

Printed in U.S.A.

FORM NUMBER
927-0151

ISSUE DATE
5-77
(SPEC J)

ENGINE SAFETY PRECAUTIONS

It is recommended that you read your engine manual and become thoroughly acquainted with your equipment before you start the engine.

WARNING

This symbol is used throughout this manual to warn of possible serious personal injury.

CAUTION

This symbol refers to possible equipment damage.

Fuels, electrical equipment, batteries, exhaust gases and moving parts present potential hazards that could result in serious, personal injury. Take care in following these recommended procedures.

Safety Codes

- All local, state and federal codes should be consulted and complied with.

General

- Provide appropriate fire extinguishers and install them in convenient locations. Use an extinguisher rated ABC by NFPA.
- Make sure that all fasteners on the engine are secure. Tighten supports and clamps, keep guards in position over fans, driving belts, etc.
- If it is necessary to make adjustments while the engine is running, use extreme caution when close to hot exhausts, moving parts, etc.

Protect Against Moving Parts

- Do not wear loose clothing in the vicinity of moving parts, such as PTO shafts, flywheels, blowers, couplings, fans, belts, etc.
- Keep your hands away from moving parts.

Batteries

- Before starting work on the engine, disconnect batteries to prevent inadvertent starting of the engine.
- **DO NOT SMOKE** while servicing batteries. Lead acid batteries give off a highly explosive hydrogen gas which can be ignited by flame, electrical arcing or by smoking.
- Verify battery polarity before connecting battery cables. Connect negative cable last.

Fuel System

- **DO NOT** fill fuel tanks while engine is running, unless tanks are outside engine compartment.

- **DO NOT** smoke or use an open flame in the vicinity of the engine or fuel tank. Internal combustion engine fuels are highly flammable.
- Fuel lines must be of steel piping, adequately secured, and free from leaks. Piping at the engine should be approved flexible line. Do not use copper piping on flexible lines as copper will work harden and become brittle enough to break.
- Be sure all fuel supplies have a positive shutoff valve.

Exhaust System

- Exhaust products of any internal combustion engine are toxic and can cause injury, or death if inhaled. All engine installations, especially those within a confine, should be equipped with an exhaust system to discharge gases to the atmosphere.
- Do not use exhaust gases to heat a compartment.
- Make sure that your exhaust system is free of leaks. Ensure that exhaust manifolds are secure and are not warped by bolts unevenly torqued.

Engine Exhaust Gas (Carbon Monoxide) is Deadly!

Carbon monoxide is an odorless, colorless gas formed by incomplete combustion of hydrocarbon fuels. Carbon monoxide is a dangerous gas that can cause unconsciousness and is potentially lethal. Some of the symptoms or signs of carbon monoxide inhalation are:

- Dizziness
- Vomiting
- Intense Headache
- Muscular Twitching
- Weakness and Sleepiness
- Throbbing in Temples

If you experience any of the above symptoms, get out into fresh air immediately.

The best protection against carbon monoxide inhalation is a regular inspection of the complete exhaust system. If you notice a change in the sound or appearance of exhaust system, shut the unit down immediately and have it inspected and repaired at once by a competent mechanic.

Cooling System

- Coolants under pressure have a higher boiling point than water. **DO NOT** open a radiator pressure cap while the engine is running. Bleed the system pressure first.

Keep the Unit and Surrounding Area Clean

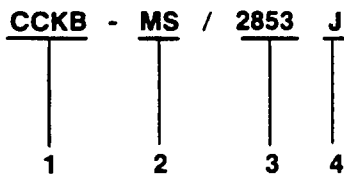
- Make sure that oily rags are not left on or near the engine.
- Remove all oil deposits. Remove all unnecessary grease and oil from the unit. Accumulated grease and oil can cause overheating and subsequent engine damage and may present a potential fire hazard.

GENERAL INFORMATION

ENGINE MODEL REFERENCE

Identify your model by referring to the MODEL and SPEC (specification) NO. as shown on the unit nameplate. Always use this number and the engine serial number when making reference to your engine.

How to interpret MODEL and SPEC NO.



1. Factory code for general identification purposes.
2. Specific Type:
S - MANUAL STARTING
MS - ELECTRIC STARTING
3. Factory code for optional equipment supplied.
4. Specification (Spec Letter) advances with factory production modification.

If your engine needs service or repair, contact an Onan Service Center. Trained mechanics will assure expert repair service on your Onan engine.

SPECIFICATIONS

Engine Design..... Opposed two cylinder,
four cycle, L head and air cooled
Bore 3-1/4 inch (82.55 mm)
Stroke 3 inch (76.20 mm)
Displacement..... 49.8 cu inch (816.22 cm³)
H.P. - Garden Tractor Service 19-1/2 hp
@ 3600 rpm; 20 hp max. @ 3900 rpm
Oil Capacity with Filter Change ... 4 qts. (3.78 lit)
Oil Capacity without Filter
Change 3-1/2 qts. (3.31 lit)

TUNE-UP SPECIFICATIONS

Spark Plug Gap (Gasoline)..... .025 (0.69 mm)
Spark Plug Gap (LPG)018 (0.46 mm)
Breaker Point Gap020 (0.51 mm)
Valve Lash,
Intake..... .006 to .008 (0.152 to 0.203 mm)
Exhaust015 to .017 (0.381 to 0.432 mm)
Ignition Timing:
Standard Electric Start (Stopped
or Running) 20° BTC
Manual Start with Spark
Advance 1° ATDC (Stopped)
24° BTC (Running)
Electric Start with Magneto and
Spark Advance 5° (Stopped)
24° BTC (Running)

OUT-OF-SERVICE PROTECTION

Protect an engine that will be out-of-service for more than 30 days as follows:

1. Run engine until thoroughly warm (5 to 10 minutes).
2. Turn off fuel supply and run until engine stops.
3. Drain oil from oil base while still warm. Refill and attach a warning tag stating oil viscosity used.
4. Remove spark plugs. Pour one ounce (two tablespoons) of rust inhibitor (or SAE #50 oil) into the cylinders. Crank engine over a few times. Install spark plugs.
5. Service air cleaner.
6. Clean governor linkage and protect by wrapping with a clean cloth.
7. Plug exhaust outlet to prevent entrance of moisture, dirt, bugs, etc.
8. Wipe entire unit. Coat rustable parts with a light film of grease or oil.
9. Provide a suitable cover for the entire unit.
10. If battery is used, disconnect and follow standard battery storage procedure.

RUNNING REPLACEMENT PARTS

Oil Filter	122-0323
Air Filter	140-0636
Spark Plugs—Non-Resistor	167-0241
Spark Plugs—Resistor	167-0237
Breaker Points	160-0002
Condenser (Breaker Box)	312-0069
Coil.....	166-0535

WARNING

ENGINE EXHAUST GAS (CARBON MONOXIDE) IS DEADLY!

Carbon monoxide is an odorless, colorless gas formed by incomplete combustion of hydrocarbon fuels. Carbon monoxide is a dangerous gas that can cause unconsciousness and is potentially lethal. Some of the symptoms or signs of carbon monoxide inhalation are:

- Dizziness
- Intense Headache
- Weakness and Sleepiness
- Vomiting
- Muscular Twitching
- Throbbing in Temples

If you experience any of the above symptoms, get out into fresh air immediately.

The best protection against carbon monoxide inhalation is a regular inspection of the complete exhaust system. If you notice a change in the sound or appearance of exhaust system, shut the unit down immediately and have it inspected and repaired at once by a competent mechanic.

PRE-START

BEFORE STARTING

Check the engine to make sure it has been filled with oil and fuel. The chart below lists oil and fuel recommendations.

Crankcase Oil: Fill the crankcase with a good quality oil that meets the API (American Petroleum Institute) service designation SE or SE/CC. Recommended oil numbers for expected ambient temperatures are as follows:

TEMPERATURE	GRADE
Below 0° F (18° C)	SAE 5W30
Below 32° F (0° C)	SAE 5W30 or 10W40
Above 32° F (0° C)	SAE 30

Fill to "Full" mark on dipstick.

CAUTION Do not overfill crankcase. Do not use service DS oil. Do not mix brands nor grades of motor oil.

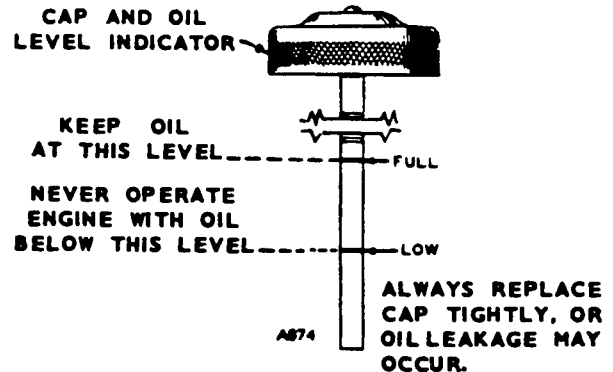
Refer to *Periodic Service* section for recommended oil change intervals.

Recommended Fuel: Use clean, fresh, non-leaded or regular grade, automotive gasoline. Do not use highly leaded premium types.

For new engines, the most satisfactory results are obtained by using nonleaded gasoline. For older engines that have previously used leaded gasoline, heads must be taken off and all lead deposits removed from engine before switching to nonleaded gasoline.

WARNING

Never check oil level while engine is running. Hot oil discharged from the engine could cause personal injury.



CRANKCASE OIL FILL

CAUTION

If lead deposits are not removed from engine before switching from leaded to nonleaded gasoline, preignition could occur, causing severe damage to the engine.

WARNING

Never fill the fuel tank when the engine is running. Gasoline could ignite, causing a serious injury.

Inspection: Inspect the engine visually before starting. Check for loose or missing parts and any damage which may have occurred in shipment.

STARTING

If your engine has a START-RUN-STOP switch, press switch toggle to START, then release to RUN when engine starts. Press toggle to STOP, to stop engine.

1. Turn on ignition switch, pull the choke lever way out (for a cold engine) and push the start switch. When the engine starts, gradually push the choke lever in until the engine runs smoothly.
2. Black smoke from the exhaust and a rough running engine usually indicate over-choking.
3. To stop engine, turn ignition switch to off position.

OPERATION

BREAK-IN PROCEDURE

Controlled break-in with proper oil and a conscientiously applied maintenance program will help assure satisfactory service for many hours from your Onan engine.

Break-in or ideal fitting of all internal moving metal parts can best be achieved by maintaining proper cooling and correct lubrication during the running-in period. Run the engine at about half load for the first three hours with intermittent periods of full load to control engine break-in. Engine damage can be caused by using the wrong grade and weight of oil and high engine operating temperatures during break-in.

Check the oil level at least every five operating hours. Add oil to keep it at the proper level, but never overfill as overfilling may cause the oil to foam and enter the breather system.

HOT WEATHER OPERATION

When operating the engine in temperatures above 75° F (24° C) pay particular attention to the following items to prevent damage:

1. Keep the engine cooling fins clean and free of

obstruction which would decrease air flow to and from the engine.

2. See that nothing obstructs air flow to and from the engine.
3. Ensure that you are using the proper grade and weight of oil for the temperature the engine is being used in. Check the oil level each time you fill the fuel tank.
4. Check the battery water level more frequently than every 50 hours which is recommended under normal conditions. High temperatures cause faster evaporation.

COLD WEATHER OPERATION

When the engine is being used in temperatures below 32° F (0° C), check the following items closely:

1. Use the correct grade and weight of oil for the temperature conditions. Change the oil only when the engine is warm. If an unexpected temperature drop occurs when the engine is filled with summer oil, move to a warm location until the oil will flow freely before starting the engine.
2. Use fresh fuel. Fill the fuel tank after each days use to protect against moisture condensation.
3. Keep battery in a well-charged condition.

MAINTENANCE

Oil Level: Check oil level at least every eight hours of operation. Check more frequently on a new or overhauled engine as oil consumption is higher until piston rings seat properly.

Oil Change: Change crankcase oil after the first 25 hours of operation; change every 50 hours after that. If operating in extremely dusty conditions, change oil more frequently.

Oil Filter (If Used): Replace oil filter every 100 hours; replace more often in dusty conditions. Tighten the filter finger-tight plus one quarter to one half turn. Be sure to replace rubber ring around filter.

Crankcase Breather: This engine uses a crankcase breather valve for maintaining crankcase vacuum. No maintenance is generally required. If the crankcase becomes pressurized as evidenced by oil leaks at the seals, clean the crankcase breather cap and valve assembly, and the breather tube baffle in suitable solvent. To remove breather cap and valve assembly, remove the breather hose clamp and breather tube clamp.

Moistened Foam Air Cleaner: This air cleaner consists of a synthetic sponge over a metal retainer. The base and cover are similar to those of the dry paper kind. Wash the sponge periodically, moisten in oil and squeeze dry.

Cooling System: Check and clean cooling fins at least every 50 hours. Remove any dust, dirt or oil which may have accumulated.



Plugged or clogged cooling fins can cause overheating and engine damage.

Spark Plugs: Check, clean and reset spark plugs every 100 operating hours. Replace spark plugs that show signs of fouling or electrode erosion. Replace plugs every 250 operating hours.

Breaker Points: Check, clean and reset breaker points every 200 operating hours. Replace points if they are pitted or burned. See *ADJUSTMENT* section.

ADJUSTMENTS

CARBURETOR

The carburetor has an idle jet and a main jet. The idle jet which is adjustable, affects engine operation at low speed. The main jet usually affects operation under load (high speed). Under normal circumstances, factory carburetor adjustments should not be disturbed. If the idle adjustment has been disturbed, turn the needle (counterclockwise) off its seat 1 to 1-1/2 turns to permit starting the engine, then readjust as follows:

Carburetor Idle Adjustment

1. Allow the engine to run at least 10 minutes to warm it up.
2. Move engine speed control to SLOW position. The engine should run at about 1300 rpm.
3. Turn the idle needle out (counterclockwise) until engine begins to slow down or run unevenly. Remember this position.
4. Turn needle in (clockwise) past the position where the engine runs smoothly until it begins to slow down or run unevenly.

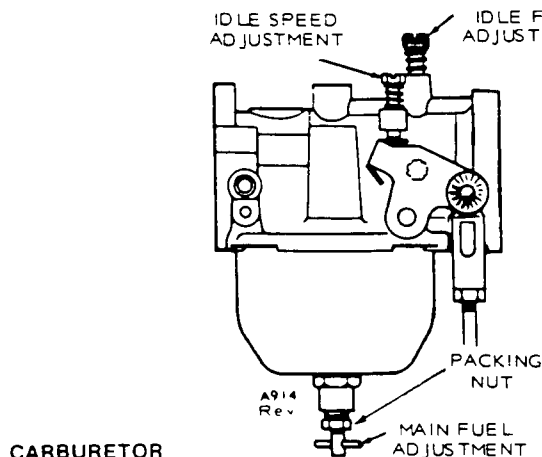
CAUTION

Do not force the needle against its seat; doing so will damage it.

5. Back the needle out to a position approximately halfway between the two positions. This should provide a smooth running idle.

CAUTION

Loosen the packing nut before making main fuel adjustment and then tighten the nut to a snug fit after the adjustment has been made. This procedure makes it easier to use the carburetor adjusting tool and prevents fuel leaks around the packing nut. Fuel leaks cause hard starting because the float level becomes lower than normal.



CARBURETOR ADJUSTMENTS

Carburetor Main (Load) Adjustment

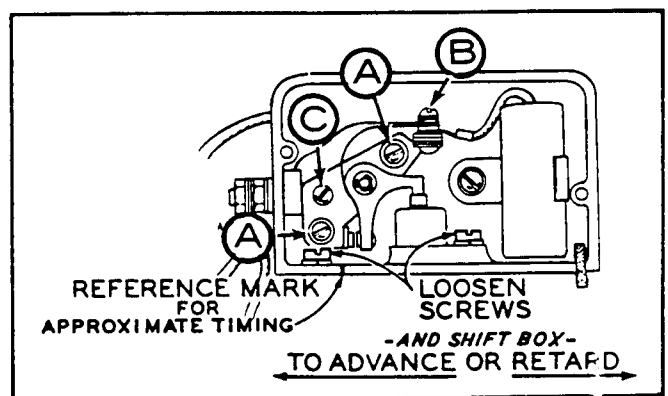
If engine runs unevenly at half or full load due to faulty carburetion, the main adjusting needle needs readjustment. For initial start-up, turn main adjustment 1 to 1-1/2 turns (counterclockwise) off its seat.

1. Start engine and allow it to warm up.
2. Push in on the governor mechanism to slow the unit down to about 400-500 rpm.
3. Set idle adjustment so engine runs smoothly.
4. Release governor mechanism to allow engine to accelerate. If engine accelerates evenly and without hesitation, main adjustment is correct. If not, turn needle outward about 1/2 turn and again slow the engine down and release the mechanism. Continue until the engine accelerates evenly and without hesitation after releasing the governor.
5. If engine tends to hunt (alternate increase and decrease of speed), open the main adjusting needle a little more. Do not open more than 1/2 turn beyond the maximum power point.

BREAKER POINTS

To maintain maximum efficiency from the engine, check condition of the breaker points every 200 hours of operation. Proceed as follows:

1. Remove the two screws and the cover on the breaker box.
2. Remove both spark plugs so engine can be easily rotated by hand. If plugs have not been changed within the last 100 hours, clean and regap or replace them with new ones after setting the breaker points.
3. Remove the two mounting screws (A) and pull the points out of the box just far enough so screw (B) can be removed. Replace points with a new set (if needed) but do not completely tighten mounting screws (A).
4. Rotate the engine clockwise (facing flywheel) by hand until TC mark on gear cover aligns with TC mark on flywheel. Turn screw (C) until point gap measures .020" (0.508 mm) with a flat thickness gauge.
5. Tighten mounting screws and recheck gap.



BREAKER POINT ADJUSTMENT

PERIODIC SERVICE GUIDE

Regularly scheduled maintenance is the key to lower operating costs and longer service life for the unit. The following schedule can be used as a guide. However, actual operating conditions under which a unit is run should be the determining factor in establishing a maintenance schedule. When operating in very dusty or dirty conditions, some of the service periods may have to be reduced. Check

the condition of the crankcase oil, the filters, cooling fins, etc. frequently until the proper service time periods can be established.

For any abnormalities in operation, unusual noises from engine or accessories, loss of power, overheating, etc., contact your nearest Onan Service Center.

PERIODIC MAINTENANCE SCHEDULE

SERVICE THESE ITEMS	AFTER EACH CYCLE OF INDICATED HOURS					
	8	50	100	200	400	1000
Inspect Engine Generally	x ³					
Check Oil Level	x					
Service Air Cleaner		x ¹				
Change Crankcase Oil		x ¹				
Check Battery Electrolyte Level		x				
Clean Cooling Fins		x				
Clean and Regap Spark Plugs (Replace at 250 hours)			x			
Replace Oil Filter			x ¹			
Clean Breather Valve				x		
Check Breaker Points				x		
Replace Air Cleaner Element				x ¹		
Check Valve Clearance					x ²	
Remove Carbon and Lead Deposits					x ²	
Inspect Valves, Grind If Necessary						x ²
Complete Reconditioning (If Required)						x ²

x¹ - Perform more often in extremely dusty conditions.

x² - For detailed maintenance, contact an Onan Service Center.

x³ - Check for fuel leaks, exhaust leaks, etc.

**FOR MAJOR SERVICE AND
OVERHAUL CONTACT YOUR
NEAREST ONAN SERVICE
CENTER.**



prestolite.

ASSY. NO. MBD-5007

SERVICE PARTS LIST

PUMP MOTOR
issued I-8-79

Application J.S. Barnes

<u>ITEM</u>	<u>SERVICE PART NO.</u>	<u>NO. USED</u>	<u>PART DESCRIPTION</u>
1	MBD-2525	1	ARMATURE
12	MBD-1468A	1	BAND, COVER
5	X-3991	1	BEARING, BALL, SEALED, #201, C.E.
7	X-3990	1	BEARING, BALL, SHIELDED, #203, D.E.
11	MBD-1427	1	FAN
3	MBD-1005PS	1	FIELD COIL PKG. (POLE SCREWS INCL.)
4	MBD-502	1	HEAD, COMM. END
6	MBD-423B	1	HEAD, DRIVE END
8	MBD-1564	1	PLATE ASSEMBLY, BRUSH
9	MBD-19S	1	SPRING SET, BRUSH
2	MBD-1512S	1	BRUSH SET, SERVICE
10	90-2591 +	1	TERMINAL STUD PKG. (HDWE. INCL.)
13	90-701	1	THRUST WASHER PACKAGE

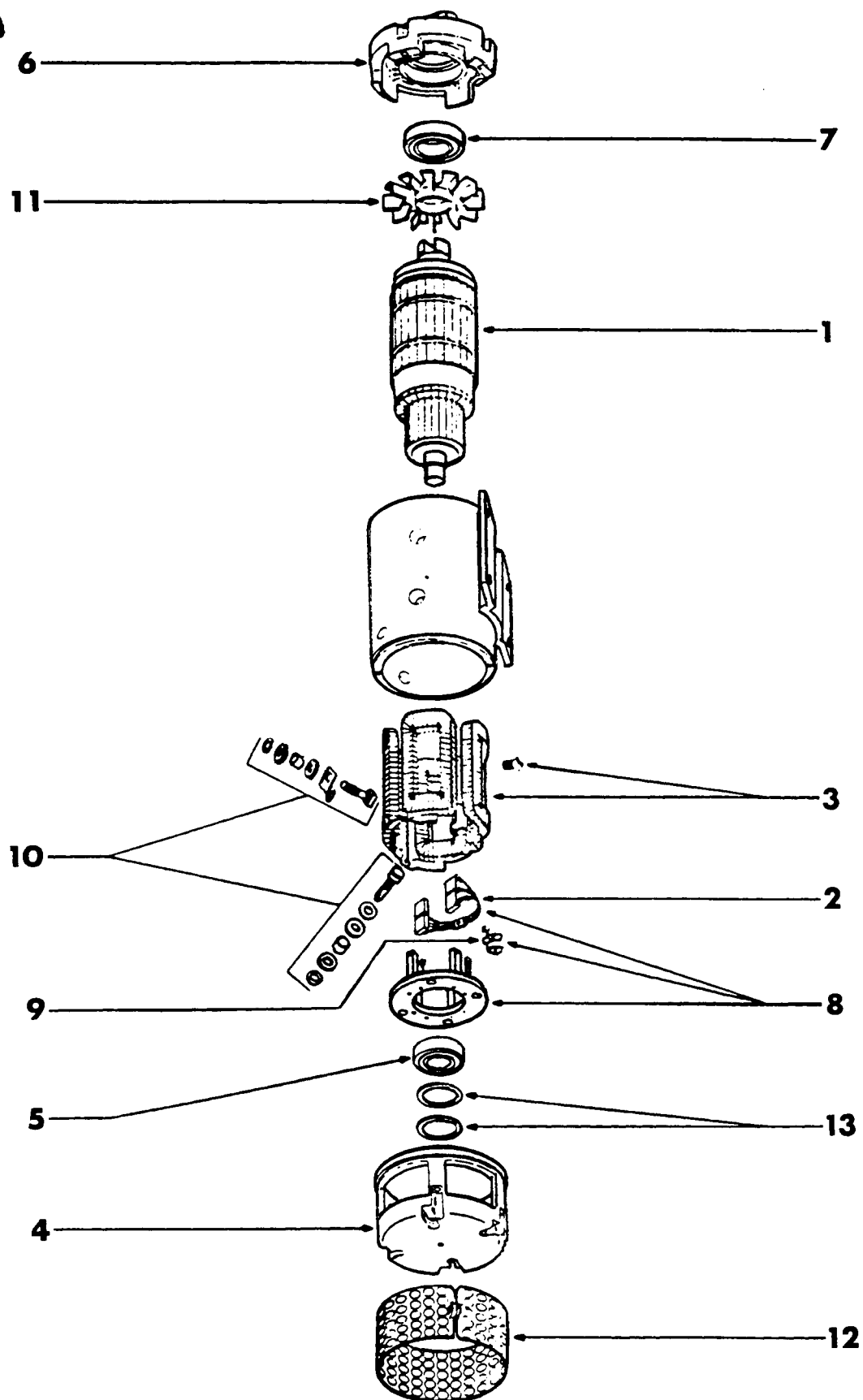
+ Contains additional parts to service
other applications.

Note: This is a Ventilated Motor; for totally
enclosed version use SP-6058 (70-42) Enclosing Kit.



prestolite.

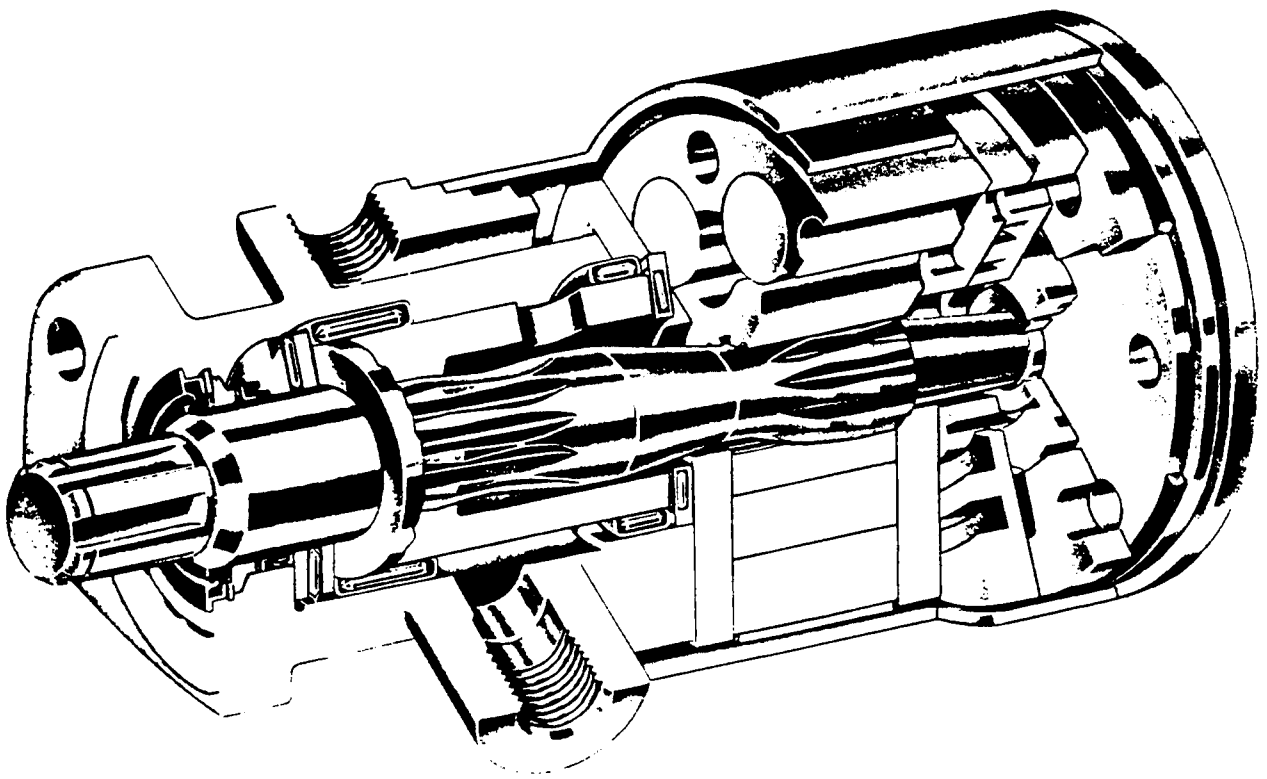
ASSY. NO. MBD-5007
PUMP MOTOR



TORQMOTOR[®]

SERVICE PROCEDURE

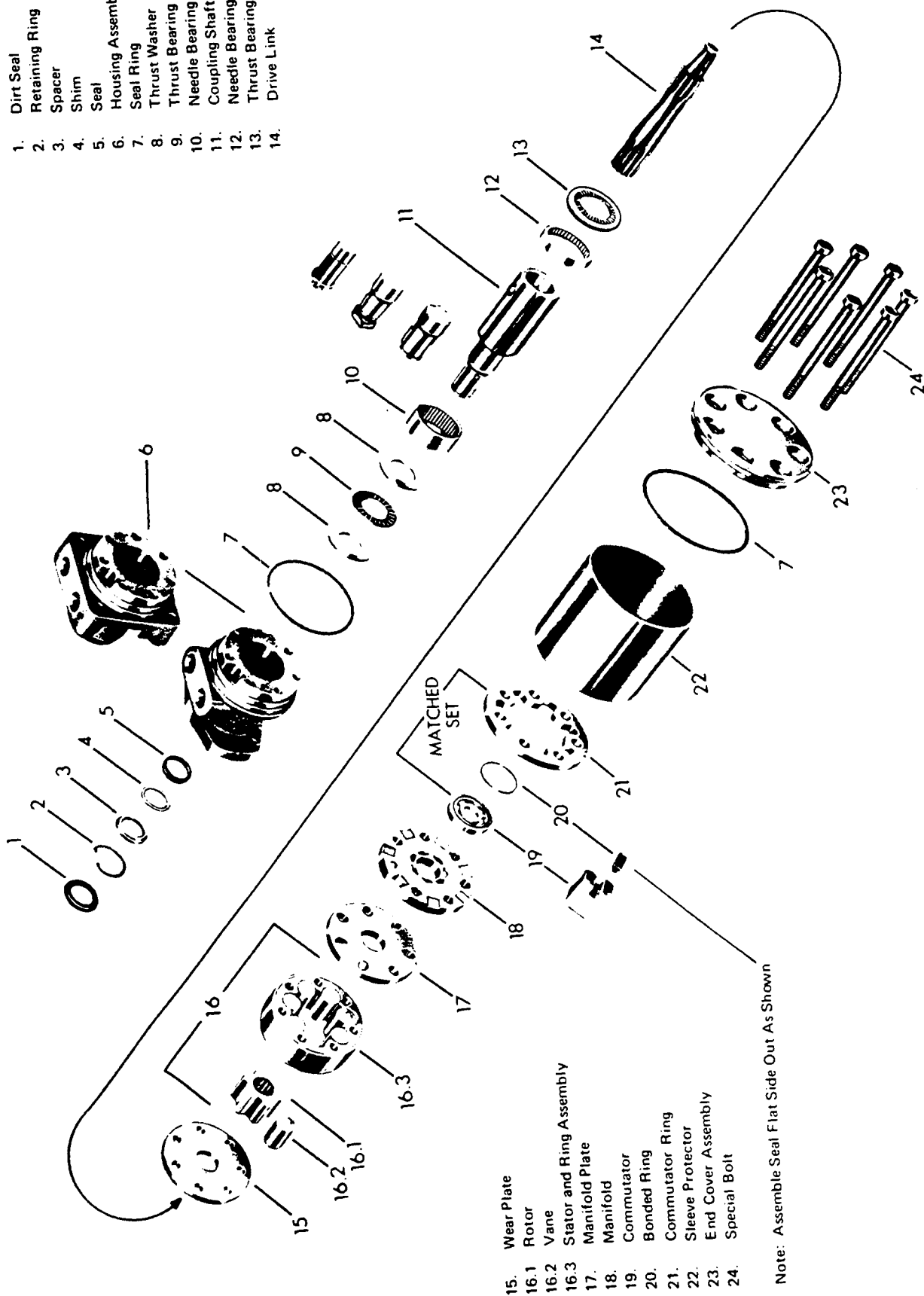
MAB SERIES



The *MAB* TORQMOTOR

- Low Speed,
- High Torque
- Hydraulic Motor.

1. Dirt Seal
2. Retaining Ring
3. Spacer
4. Shim
5. Seal
6. Housing Assembly
7. Seal Ring
8. Thrust Washer
9. Thrust Bearing
10. Needle Bearing
11. Coupling Shaft
12. Needle Bearing
13. Thrust Bearing
14. Drive Link



15. Wear Plate
- 16.1 Rotor
- 16.2 Vane
- 16.3 Stator and Ring Assembly
17. Manifold Plate
18. Manifold
19. Commutator
20. Bonded Ring
21. Commutator Ring
22. Sleeve Protector
23. End Cover Assembly
24. Special Bolt

Note: Assemble Seal Flat Side Out As Shown

FIGURE MAB-200.2

SERVICE PROCEDURE

Preparation Before Disassembly

Remove port hole plugs before attempting to rotate shaft. Drain the motor assembly by turning the output shaft. Wash the complete motor in solvent and remove all particles of dirt from the exterior and blow dry before placing on work bench.

Clean Work Conditions

If it is necessary to disassemble the TORQMOTOR, make certain to use a clean work bench (a piece of clean wrapping paper makes an excellent and disposable top). The hands and tools of the repairman should be clean, and the operation should be carried out in a sheltered area free from drafts that may carry foreign material into the disassembled pieces. (Precision fits in the TORQMOTOR needs "white room" type care.)

Caution: Avoid wiping parts with a cloth, as lint and foreign particles may adhere to the working parts of the TORQMOTOR.

Handling

Care must be taken in handling the close fitting parts, as nicks and mutilations will result in serious damage.

REPLACEMENT OF HIGH PRESSURE SEAL (5) IN TORQMOTOR

(Reference Figure MAB-200-2)

1. Remove dirt seal (1) and retaining ring (2), if burr exists on retaining ring groove, remove with a scraping tool.
2. Set the motor with coupling shaft (11) down in a suitable clean can. Plug "A" port and connect "B" port to 120 psi air hose, or use a piston type hydraulic hand pump. Note: The air connection should be made with provisions for quick shut-off after the spacer (3), shim (4) and seal (5) have been ejected.
3. Apply clean grease to new seal (5) and assemble into housing assembly (6) with lip side inward.
4. Assemble shim (4), spacer (3) and retaining ring (2), be sure the rounded edge of the retaining ring is faced inward. Apply a small amount of clean grease to the back side of new dirt seal (1) and assemble into housing assembly (6).

TORQMOTOR DISASSEMBLY

(Reference Figure MAB-200-2)

1. In a vise, clamp down on the housing assembly (6) port bosses with the coupling shaft (11) pointed down.
2. Using wrench with a 12 point 9/16" socket, remove the seven special bolts (24) and place them on the work bench.
3. Remove the end cover assembly (23) and seal ring (7) by inserting screw driver between end cover assembly (23) and sleeve protector (22). Pry up end cover assembly (23) and lift from unit with seal ring (7) attached.

4. Remove seal ring (7) from end cover assembly (23) and discard.
5. Remove the commutator ring (21), commutator (19), bonded ring (20) and manifold (18) by using two of the special bolts (24) as a lifting tool, insert the two special bolts (24) into two holes and lift out the previously mentioned parts.
6. Remove bonded ring (20) from commutator (19) by using an air hose, blow air down into ring groove until bonded ring (20) is lifted out and discard.
7. Inspect manifold (18) for cracks and replace with new manifold if cracks are visible.
8. Remove manifold plate (17) by using the two special bolts (24) and method previously mentioned.
9. Remove rotor assembly (16), wear plate (15) and drive link (14) by using the two special bolts (24) and method previously mentioned.
10. Remove vanes (16.2) and rotor (16.1) from rotor assembly (16). Use caution not to drop these parts when handling.
11. Inspect rotor (16.1) outside lobes for pits and marks. If pits or wear marks are visible, discard rotor (16.1) and replace complete rotor assembly (16) with a new rotor assembly.
12. Remove thrust bearing (13).
13. Remove coupling shaft (11).
14. Remove sleeve protector (22) by inserting screw driver between sleeve protector (22) and housing assembly (6) and pry up. If rust exists on ends of sleeve protector (22), remove by sanding lightly.
15. Remove seal ring (7) from housing assembly (6) and discard.
16. Remove housing assembly (6) from vise, turn over and reclamp housing assembly in vise so that dirt seal (1) is pointed upward.
17. Remove dirt seal (1), retaining ring (2), spacer (3), shim (4) and seal (5) from housing assembly (6). Discard dirt seal (1) and seal (5). If burr exists on retaining ring groove, remove with a scraping tool.
18. Do not remove thrust washers (8), thrust bearing (9) and needle bearings (10) and (12) unless there is absolute evidence of damage. Needle bearings should be free to rotate and not show signs of surface breakdown. If needle bearing (10) requires replacement, use a 1.490 maximum diameter shaft and press out thrust washers (8), thrust bearing (9) and needle bearings (10) and (12). The housing assembly face should be placed on a block of wood during the pressing operation to protect it. Discard thrust washers, thrust bearing and needle bearings and replace with new parts as parts may have been damaged when being pressed out.
If needle bearing (12) needs replacement use a bearing puller to remove needle bearing, care should be taken to not damage the housing assembly (6) face with the bearing puller.

TORQMOTOR ASSEMBLY

(Reference Figure MAB-200-2)

Important: Before starting assembly, clean all parts with a clean petroleum base solvent and air dry. **Do not wipe dry with rags.** Be sure all dried paint lips have been removed from edges of lapped surfaces. Unless otherwise indicated, do not oil or grease parts before assembly. **Note:** Lubricate **All Seals** before assembly with SAE 10W-40 SD oil or clean grease.

1. In a vise, clamp down on the housing assembly (6) port bosses with the small bore end pointed up. Assemble new seal (5) with lip side inward, assemble shim (4), spacer (3) and retaining ring (2). Be sure the rounded edge of the retaining ring (2) is faced inward.
2. Apply a small amount of clean grease to the back side of new dirt seal (1) and assemble into housing assembly (6).
3. Remove housing assembly (6) from vise, turn over and reclamp in vise with large bore end up.
(*** See Note.)
4. Apply "Scotch" tape around splines or keyway on coupling shaft (11) to prevent damaging seal (5). Assemble coupling shaft (11).
5. Assemble thrust bearing (13).
6. Assemble drive link (14).
7. Assemble wear plate (15).
8. Assemble rotor assembly (16) with counterbore in rotor (16.1) down.
9. Assemble manifold plate (17), manifold (18) and commutator ring (21).

10. Assemble commutator (19) and new bonded ring (20).
11. Assemble new seal rings (7) on housing assembly (6) and end cover assembly (23).
12. Apply a generous amount of "STP" to both ends on sleeve protector (22) and assemble over unit and onto unit and onto housing assembly (6). Make sure sleeve protector is setting in a non-cocked position.
13. Assemble end cover assembly (23) onto sleeve protector (22) in a non-cocked position.
14. Assemble seven special bolts (24) and screw in finger tight. Alternately and progressively tighten the seven special bolts to pull end cover assembly (23) and sleeve protector (22) down into place. (Torque the seven special bolts to 50 ± 5 ft. lbs.)

*** NOTE

If it was necessary to remove thrust washers (8), thrust bearing (9), needle bearing (10) and needle bearing (12), the following assembly procedure must be followed.

1. Assemble new thrust washer (8), new thrust bearing (9), new thrust washer (8) in this order into housing assembly (6).
2. Press in new needle bearing (10) with suitable tools to a $2.365 \pm .030$ dimension into housing assembly (6). **Note:** Bearing should indicate which side to press against.
3. Press in new needle bearing (12) with suitable tools to a $.18 \pm .03$ dimension into housing assembly (6). **Note:** Bearing should indicate which side to press against.

TROUBLE SHOOTING

<u>Trouble</u>	<u>Cause</u>	<u>Remedy</u>
Oil leakage	1. Hose fittings leaking	(a) Tighten fittings (b) Replace O ring in 7/8", 14 thread fitting
	2. Seal ring leak	(a) Replace seal ring by disassembling motor
	3. Special bolt leakage	(a) Tighten single bolt to 50 foot lbs.
	4. Faulty high pressure seal	Remove dirt seal, retaining ring and spacer. Blow out seal. Replace seal.
	5. Coupling shaft and high pressure seal	Replace coupling shaft and seal package.
High loss of speed, under load.	1. Lack of sufficient oil supply	(a) Adjust faulty pressure relief valve.
		(b) Repair worn pump.
		(c) Use correct oil for temperature of operation.
	2. High internal motor leakage.	(a) Replace worn rotor set with new rotor assembly
		(b) Replace worn commutator ring
		(c) Replace worn manifold
		(d) Replace worn wear plate.
Low mechanical efficiency or undue high pressure required to operate TORQMOTOR	1. Line blockage	(a) Replace blocked line.
	2. Internal Interference.	(a) Correct clearance of rotor set. (Replace rotor set)

THE PRODUCT REPRESENTED HEREIN IS
PROTECTED BY THE FOLLOWING PATENTS:

U.S.A. PATENT NO. 3,288,034

U.S.A. PATENT NO. 3,289,602
3,452,680

OTHER U.S.A. AND FOREIGN
PATENTS GRANTED AND PENDING

Another Product

of —



TRW[®]

ROSS GEAR DIVISION

LAFAYETTE, INDIANA 47902



MARK INDUSTRIES

SERVICE BULLETIN

THIS SECTION HAS BEEN PROVIDED TO KEEP MARK INDUSTRIES SERVICE BULLETINS THAT APPLY TO THE IMPROVEMENT OF YOUR MARKLIFT.



Mark Industries

SERVICE BULLETIN

No: 3382
Date: January, 1983

To: Mark Industries Distributors and Representatives
From: Service Department
Subject: Revision 1 - Self-Propelled Scissor (Rough Terrain)
Operation Maintenance and Parts Manual.

This revision has been prepared to incorporate recent disc brake and early model coverage. The early model information was prepared by Jim Aughenbaugh to include models that were produced before those covered by the September 1981 initial issue of this Manual.

For ease of updating this Manual, a complete parts section has been provided. The Revision 1 section replaces the existing section in your book.

Refer to the "Record of Revisions" (Page xi) in the forematter section, as a guide to perform the rest of this update.

This cover letter goes in the "Service Bulletins" section.

John Laurin
Service Manager