

**FALCON**  
**2034**  
**VERTICAL LIFT**

# ILLUSTRATED PARTS CATALOG

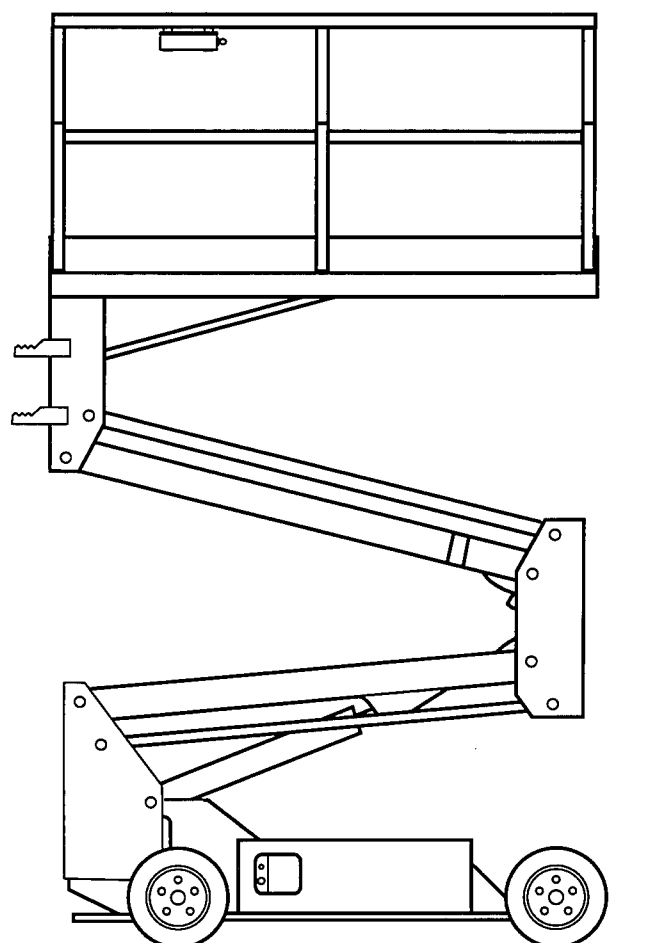
FOR MACHINE  
SERIAL NUMBER

\_\_\_\_\_

**Note:**

Early versions of the FALCON 2034 Vertical Lift are identified on nameplates, decals and accompanying publications as "L-2034E".

Both names refer to the same model, which is identified throughout this publication by its current name, "FALCON".



Part No. 89-750005 • Revision "0.7", dated June 1996 •

# TABLE OF CONTENTS

## INTRODUCTION

## PRIMARY MACHINE COMPONENT GROUPS

### SECTION 1: UNDERCARRIAGE

01.51: UNDERCARRIAGE ASSEMBLY

### SECTION 3: BOOM

03.51: BOOM ASSEMBLY

### SECTION 4: PLATFORM

04.51: PLATFORM ASSEMBLY

### SECTION 9: PLATFORM CONTROL CONSOLE

09.51: PLATFORM CONTROL CONSOLE

### SECTION 11: CYLINDERS

11.51: LIFT CYLINDER

11.52: STEER CYLINDER

11.53: BRAKE CYLINDER

11.56: LIFT CYLINDER HOLDING VALVE

11.60: LIFT CYLINDER

11.88: CUSHION CYLINDER ASSEMBLY

### SECTION 12: PUMP

12.51: PUMP AND MOTOR ASSEMBLY

### SECTION 14: TOWING EQUIPMENT

14.51: TOW VALVE ASSEMBLY

### SECTION 23: MANIFOLD

23.51: CONTROL VALVE ASSEMBLY (COMBINATION VALVE)

### SECTION 24: HYDRAULIC TANK

24.51: HYDRAULIC TANK ASSEMBLY

### SECTION 99: DECALS

99.51: DECALS

## INTRODUCTION

This Illustrated Parts Catalog is designed to help you identify and order the correct replacement parts for use on SIMON FALCON 2034 VERTICAL LIFT PLATFORMS (as well as some earlier versions described as "L-2034"). All parts represented here are manufactured and supplied in accordance with Simon Aerials quality standards. We recommend that you use GENUINE SIMON AERIALS PARTS to insure maximum SAFETY and PERFORMANCE.

Prices for all parts listed in this Catalog can be found in a separate Spare Parts Price List. Please contact Simon Aerials Parts Department for the latest edition of the Spare Parts Price List.

## HOW TO USE THIS CATALOG

The Cover Page indicates the specific model or models covered by this Parts Catalog.

The "Table of Contents" pages list the specific sections, pages and page titles that are relevant to this model, and contained in this Catalog. Only those pages that refer specifically to the FALCON 2034 are included in this Catalog.

The "Primary Machine Component Groups" page illustrates the three major assemblies, along with their "Section" number.

The Parts Catalog is divided into "Sections", numbered from 1 through 99. Each section contains the individual parts that make up a major component, assembly or item. The first three sections (1,3 and 4) contain the major assemblies, or "Primary Machine Component Groups". Sections that follow contain sub-assemblies or components of these "major" assemblies.

If a part number is followed by a plate number in the "SEE SECTION" column, refer to the plate indicated for a further breakdown of components for that part number. Items with indented descriptions are components of the non-indented item directly above.

When selecting parts for a specific machine, be sure to verify the machine model number, and serial number or date code (found on the data plate). When ordering parts, always give:

1. Model and Serial Number
2. Item Part Number and Description
3. Order Quantity

If a part number is not listed for a selected item, please provide this additional information:

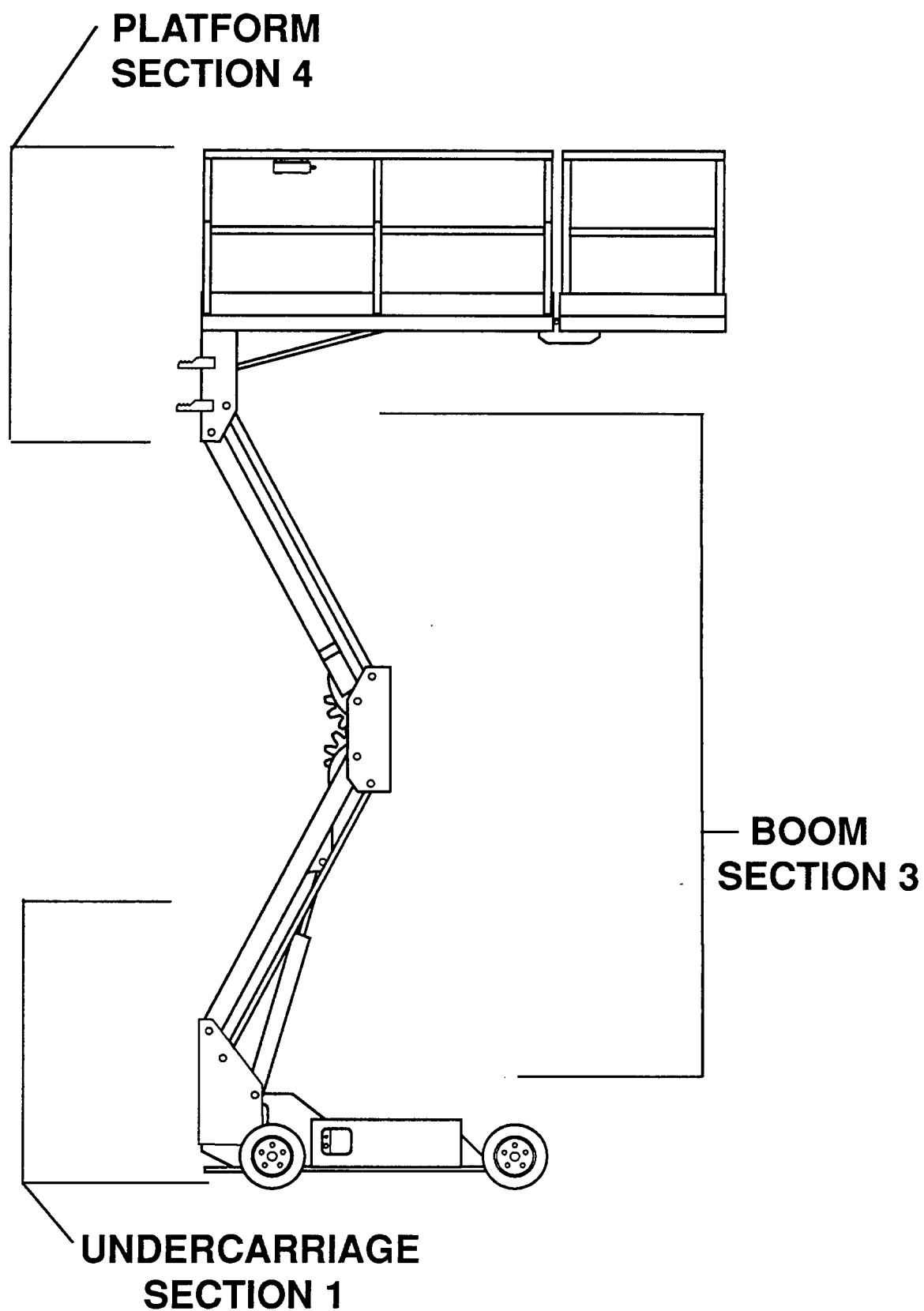
4. Parts Plate number, Item Number and Description of the desired item, OR
5. Part Number of the next assembly (Parent Part), if the desired item is not listed.

Some assembled items, such as hydraulic cylinders, may have been supplied by more than one source. While the assemblies may be able to be used interchangeably, FOR SAFETY'S SAKE, do not mix components or repair kits. Please confirm the make of the assembly on the unit before ordering or installing replacement parts.

Left and right-hand, front and rear should be determined as though you are standing on the Platform, with the steering wheels to the front. All dimensions are in inches unless otherwise specified.

SIMON AERIALS INC. reserves the right to change, improve, modify or expand features of its equipment. Therefore, specifications, models or equipment are subject to change without notice, and without incurring obligation to change, improve, modify or expand features of previously delivered units.

All SIMON AERIALS INC. manuals are periodically updated to reflect changes that occur in the equipment. Please contact Simon Aerials Technical Support Department with any questions you may have regarding your particular machine, or the availability of more recent manuals.



DESCRIPTION	PART NO.
PRIMARY MACHINE COMPONENT GROUPS	

# PARTS LIST

ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
1	2161540		UNDERCARRIAGE WELDMENT (without lifting lugs)	1
	2178510		UNDERCARRIAGE WELDMENT (with lifting lugs)	1
2	2178360		LUG, LIFTING (front)	2
3	2178350		LUG, LIFTING (rear)	2
4	3520810		SPINDLE ASSEMBLY (right)	1
	3520820		SPINDLE ASSEMBLY (left)	1
5	2160690		SPINDLE WELDMENT (right)	1
	2160570		SPINDLE WELDMENT (left)	1
6	08-064400		BUSHING (1" I.D., 1-1/4" O.D., 1" long)	2
7	08-050000		FITTING, GREASE (1/8", straight)	1
8	2161030		PIN, SPINDLE (1" x 8-15/16")	2
9	08-060500		BEARING, THRUST (Oilite, 1" I.D., 2" O.D.)	2
10	2161040		PIN, LOCK ["L" type, 1-7/8" (47 mm) long]	2
11	2169850		PIN, KEEPER [straight pin, 3" (76 mm) long]	2
12	2169860		PLATE, KEEPER [for 3" (76 mm) long straight pin]	2
13	08-040600		RING, RETAINING (1")	4
14	See plate . . .	11.52	CYLINDER, STEER <b>Note: "Type 1" cylinder was original equipment on units up to S/N L 433.</b> <b>"Type 2" cylinder is original equipment on S/N L 433 and above. See plate 11.52.</b>	1
15	10-117300		BOOT, CYLINDER ROD COVER (not shown) For "Type 1" steer cylinder only. See plate 11.52.	1
16			PIN, CLEVIS	2
17			PIN, COTTER	4
18	2158970		ROD, TIE	1
19	2158980		BUSHING, TIE ROD (1/2" I.D., 3/4" O.D., 1/2" long)	2
20	07-003089		SCREW, HEX HEAD (1/2"-13 x 2-1/4", Grade 5)	2
21	07-050018		NUT, STOP (1/2"-13, Grade 5)	2
22	07-061018		WASHER, FLAT (1/2" SAE)	2
23	02-019800		HUB ASSEMBLY, FRONT	2
24			CUP, BEARING (inner)	1
25			CUP, BEARING (outer)	1
26			STUD, WHEEL MOUNTING	5
27	02-019802		SEAL	1
28			CONE AND ROLLER, BEARING (inner)	1
29			CONE AND ROLLER, BEARING (outer)	1
30	02-019801		CAP, HUB	1
31	02-019503		WASHER, FLAT	2
32	02-019501		NUT (3/4"-16)	2
33	02-019502		PIN, COTTER	2
34	07-090134		NUT, LUG (1/2"-20)	10

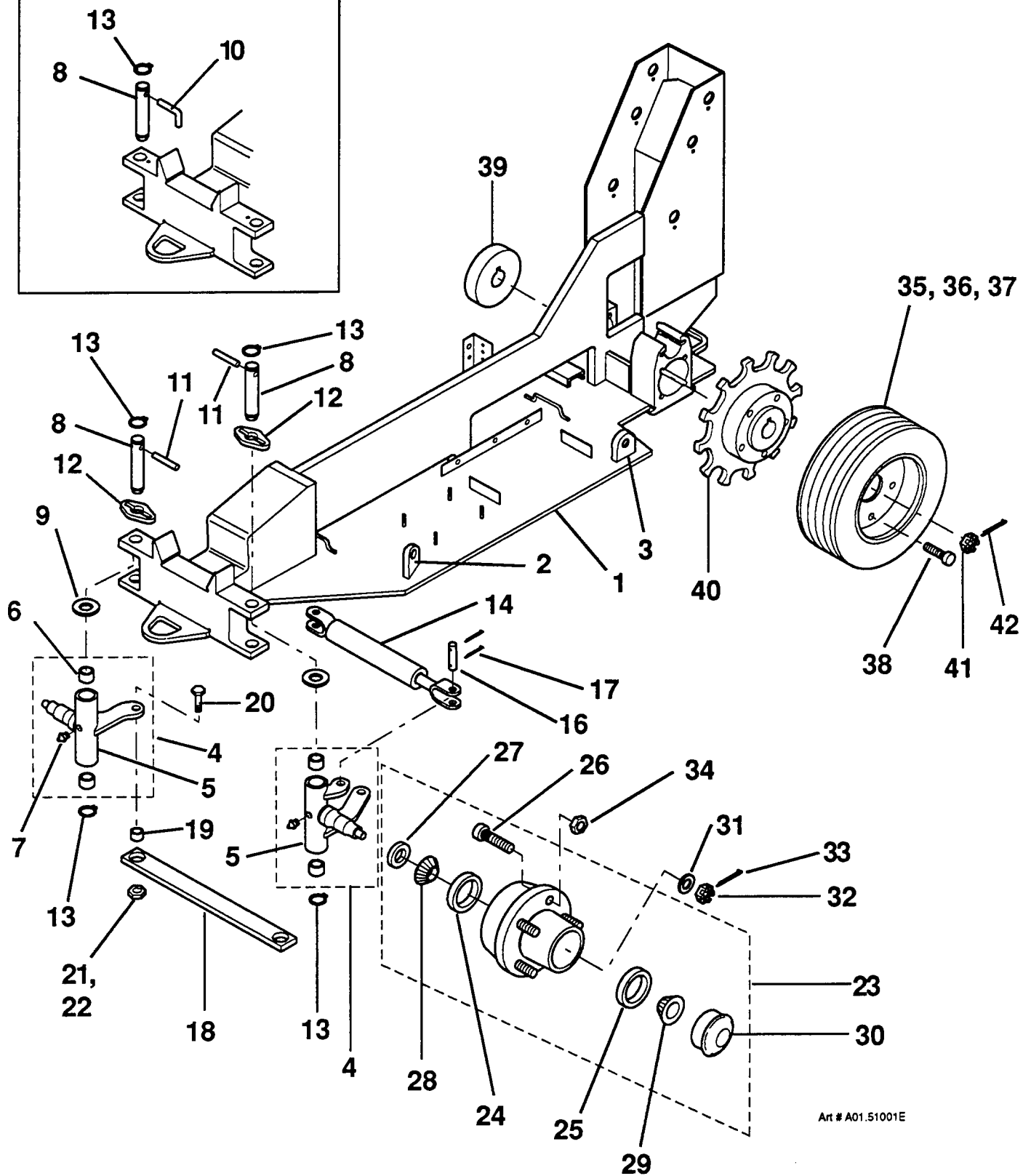
TITLE UNDERCARRIAGE, FALCON 2034 (PLATE 1 OF 3)

PLATE NO. 01.51 **SIMON AERIALS INC.**

REV. 03 MAR., 1992

PART NO.

WITH "L" TYPE PINS



Art # A01.51001E

TITLE

UNDERCARRIAGE, FALCON 2034 (PLATE 1 OF 3)

**SIMON AERIALS INC.**

REV. 03 MAR., 1992

PART  
NO.

PLATE  
NO.

**01.51**

# PARTS LIST

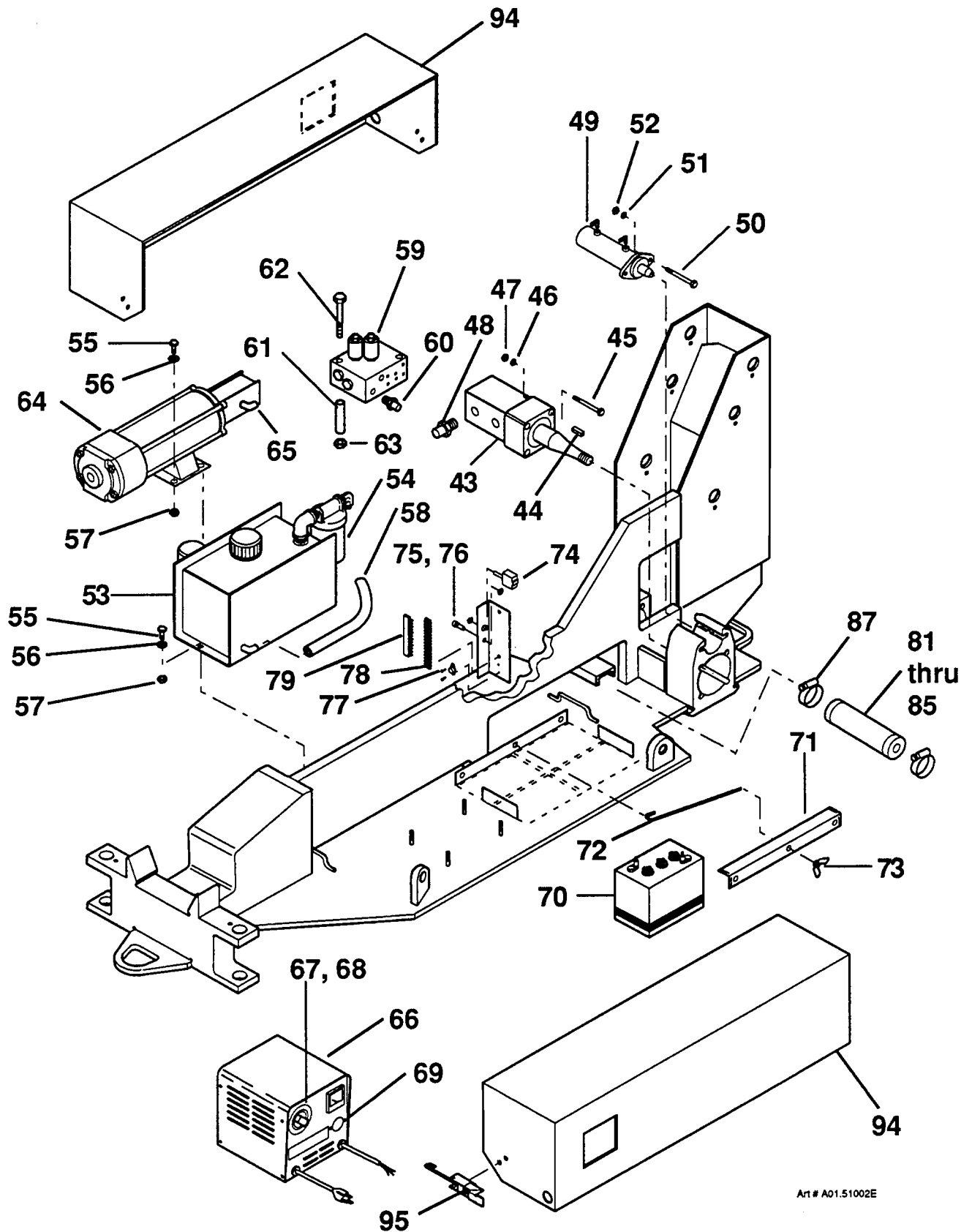
ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
35	02-019700		WHEEL AND TIRE ASSEMBLY (black lugged tire)	4
	02-031200		WHEEL AND TIRE ASSEMBLY (black ribbed tire)	4
	02-031000		WHEEL AND TIRE ASSEMBLY (white non - marking tire)	4
36			WHEEL ASSEMBLY (8" dia. x 4" wide)	1
37			TIRE	1
38	07-090133		BOLT, REAR WHEEL MOUNTING (1/2"-20 x 1")	10
39	2160890		HUB, REAR (right, for Serial Numbers L-101 thru L-112)	1
	02-019600		HUB, REAR (right, for Serial Numbers L-113 and up)	1
40	2160930		HUB AND SPROCKET, REAR BRAKE (left)	1
41			NUT	2
42	07-070507		PIN, COTTER (1/8" x 1-3/4")	2
43	01-097300		MOTOR, DRIVE	2
44			KEY, WOODRUFF (5/16")	1
45	07-003103		SCREW, HEX HEAD (1/2"-13 x 6-1/2", Grade 5)	8
46			WASHER, FLAT (1/2")	8
47			NUT, HEX LOCK (1/2"-13)	8
48	06-040000		CONNECTOR, STRAIGHT THREAD (6-10 F50X)	1
49	See plate ...	11.53	CYLINDER, BRAKE	1
50	07-003059		SCREW, HEX HEAD (3/8"-16 x 5", Grade 5)	2
51			WASHER, FLAT (3/8")	2
52			NUT, HEX LOCK (3/8"-16)	2
53	3520800	24.51	TANK ASSEMBLY, HYDRAULIC	1
54	01-081501		ELEMENT, FILTER	1
55			SCREW, HEX HEAD (5/16"-18 x 1-3/4", Grade 5)	6
56			WASHER, FLAT (5/16")	6
57			NUT, HEX LOCK (5/16"-18)	6
58	05-101400		HOSE, BRAIDED [2 layer, fabric, 3/4" I.D. x 2.1 ft. (64 cm)]	1
59	01-097500	23.51	VALVE ASSEMBLY, COMBINATION	1
60	01-098300		SWITCH, PRESSURE	1
61	2161840		SPACER, VALVE MOUNT	2
62	07-027058		BOLT, CARRIAGE (3/8"-16 x 9", Grade 5)	2
63			NUT (3/8"-16)	2
64	01-097400		MOTOR, PERMANENT MAGNET (24 Volt DC, 150 Amp @ 3600 RPM)	1
65	06-205200		INSERT, BEADED [45°, 3/4" (19 mm) dia. to #8 "O"-Ring]	1

TITLE UNDERCARRIAGE, FALCON 2034 (PLATE 2 OF 3)

PLATE NO. 01.51 **SIMON AERIALS INC.**

REV. 03 MAR., 1992

PART NO.



Art # A01.51002E

TITLE

UNDERCARRIAGE, FALCON 2034 (PLATE 2 OF 3)

**SIMON AERIALS INC.**

REV. 03 MAR., 1992

PART  
NO.

PLATE  
NO.

01.51



# PARTS LIST

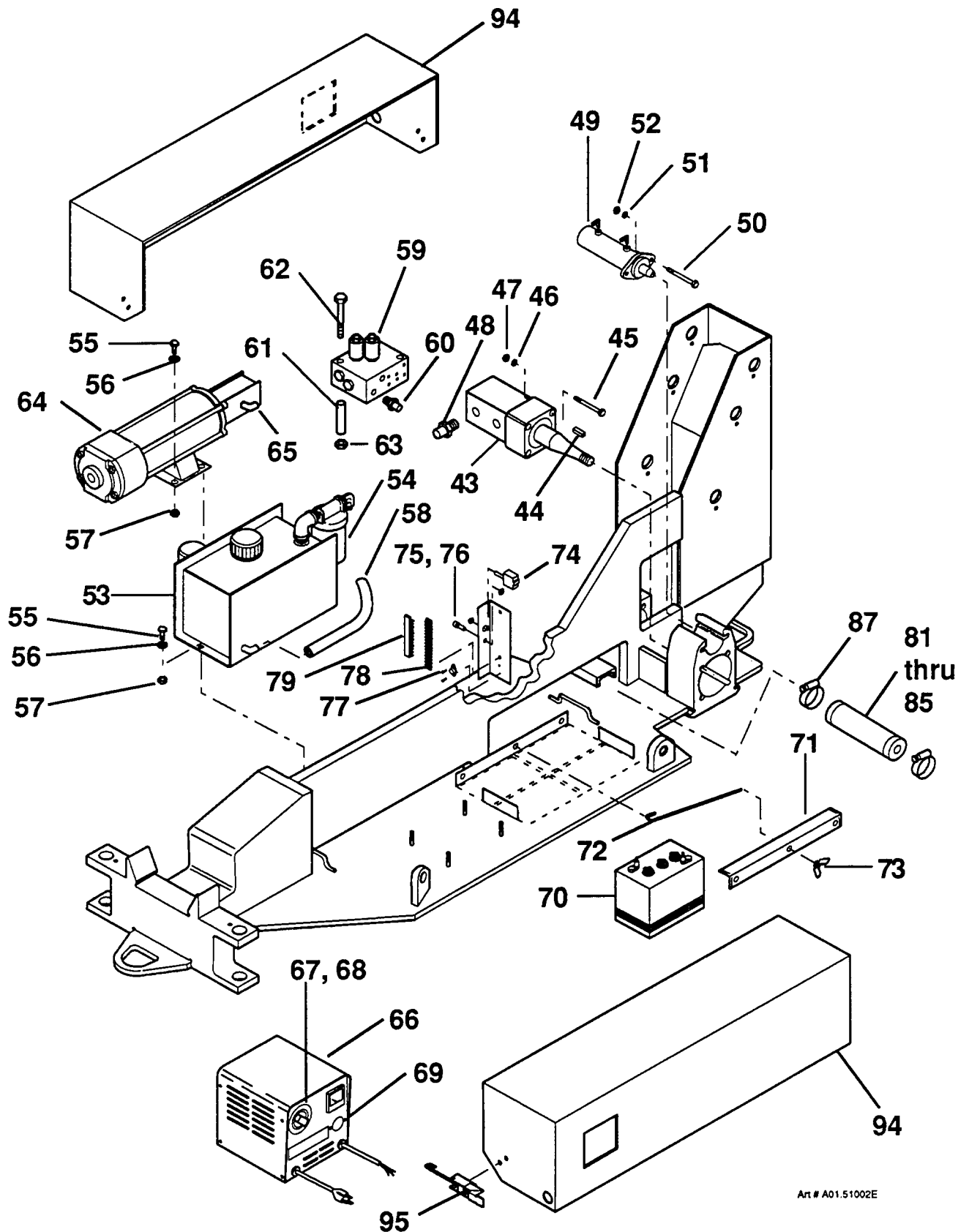
ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
66	03-467300 03-474700		CHARGER, BATTERY (24 V AC, 60 hz, 8 Amp, 25 V DC) First type, on units built prior to June, 1990 Second type, on units built June, 1990 and later	1
67			TIMER, 16 HOUR (for "Type 1" charger)	1
68			KNOB, TIMER (for "Type 1" charger)	1
69			FUSE ASSEMBLY (for "Type 1" charger)	1
70	03-053700		BATTERY (6 Volt DC)	4
71	2160110		HOLD DOWN, BATTERY	1
72	2161560		ROD, BATTERY TIE DOWN	3
73			NUT, WING (1/4"-20)	3
74	03-020500		SWITCH, TOGGLE	1
75	03-468300		HOLDER, FUSE	1
76	03-468400		FUSE, 15 AMP (fast acting, 1/4" x 1-1/4")	1
77	03-467900		ALARM, DESCENT	1
78	03-468700		STRIP, TERMINAL	1
79	2162330		STRIP ASSEMBLY, FANNING	1
80	3521210		CYLINDER KIT, CUSHION (Ref. Service Bulletin 89-100290)	1
81	04-033800		CUSHION, CYLINDER	1
82	04-033801		SEAL KIT, CUSHION CYLINDER	1
83	04-033802		SPRING	2
84	04-033803		PISTON	1
85	04-033804		GLAND, END	2
86	2173440		CHANNEL, CYLINDER MOUNTING	1
87	09-005700		CLAMP, HOSE	2
88	3512370		HOSE ASSEMBLY	2
89	06-039500		CONNECTOR, STRAIGHT THREAD (4-6 F50X)	2
90	06-048500		RUN TEE, STRAIGHT THREAD (6 R50X)	2
91	06-060100		REDUCER, TUBE END (6-4 TRTX)	2
92	06-090800		REDUCER/ EXPANDER (10-6 F50G5)	2
93	06-057500		TUBE NUT (6 BTX)	2
94	2161680 2165370		COVER, COMPARTMENT (for S/N L-101 thru L-112) COVER, COMPARTMENT (for S/N L-113 and up)	2 2
95	10-099400 10-111500		LATCH, DRAW (for Serial Numbers L-101 thru L-112) LATCH, DRAW (for Serial Numbers L-113 and up)	4 4

TITLE UNDERCARRIAGE, FALCON 2034 (PLATE 3 OF 3)

PLATE NO. 01.51 SIMON AERIALS INC.

REV. 03 MAR., 1992

PART NO.



Art # A01.51002E

TITLE

UNDERCARRIAGE, FALCON 2034 (PLATE 3 OF 3)

**SIMON AERIALS INC.**

REV. 03 MAR., 1992

PART  
NO.

PLATE  
NO.

01.51

# PARTS LIST

ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
1	2161470 2167270 2178570		BOOM WELDMENT, LOWER for Serial Numbers L-101 thru L-120 for S/N L-121 and up, except for units sold in Australia for units sold in Australia	1
2	2158860 2178830		ARM WELDMENT, LOWER PARALLEL except for units sold in Australia for units sold in Australia	1
3	2161000 2167250 2178500		MID-POST WELDMENT for Serial Numbers L-101 thru L-120 for S/N L-121 and up, except for units sold in Australia for units sold in Australia	1
4	2161420 2167260 2178840		BOOM WELDMENT, UPPER for Serial Numbers L-101 thru L-120 for S/N L-121 and up, except for units sold in Australia for units sold in Australia	1
5	2158810		ARM WELDMENT, UPPER PARALLEL	1
6	08-014000		BEARING, SLEEVE (1-1/2" I.D., 1-3/4" O.D., 1-1/2" long)	12
7	2160750		PIN, LIFT CYLINDER (Base end) (1-1/2" x 9-5/16")	1
	2160750		PIN, LOWER BOOM PIVOT (1-1/2" x 9-5/16") (at base post)	1
	2160750		PIN, LOWER PARALLEL ARM PIVOT (1-1/2" x 9-5/16")	2
8			PIN, BOOM PIVOT (at mid post)	2
	2166930		1-1/2" x 10-9/16" (for Serial Numbers L-101 thru L-120)	
	2167100		2-3/8" x 9-5/16" (for Serial Numbers L-121 and up)	
9	2160760		PIN, UPPER BOOM PIVOT (1-1/2" x 8-1/16") (at upper post)	1
	2160760		PIN, UPPER PARALLEL ARM PIVOT (1-1/2" x 8-1/16")	2
10	2160770		PIN, LIFT CYLINDER (Rod end) (1-1/2" x 4-5/16")	1
11	2161040		PIN, LOCK ["L" type, 1-7/8" (47 mm) long]	8
	2169850		PIN, KEEPER [straight pin, 3" (76 mm) long]	8
12	2169860		PLATE, KEEPER [for 3" straight pin]	8
13	08-040900		RING, RETAINING (1-1/2")	16
14	08-050000		FITTING, GREASE (1/8", straight)	3
15	08-051300		FITTING, GREASE (1/8", 90°)	7
16	See plate . .	11.51	CYLINDER, LIFT	1
17	01-200400		FUSE, VELOCITY [2.2 gal. (8.3 L) / min.]	1
	01-205000		FUSE, VELOCITY [3.0 gal. (11.4 L) / min.]	1
18	08-014000		BEARING, SLEEVE (for Serial Numbers L-101 thru L-120)	4
	08-066500		BEARING, SLEEVE (for Serial Numbers L-121 and up)	4
19	2161040		PIN, LOCK ("L" type, for Serial Numbers L-101 thru L-120)	2
	2167120		PIN, LOCK ("L" type, for Serial Numbers L-121 and up)	2
	2169840		PIN, KEEPER (straight pin, 4-1/4" long)	2
20	2169870		PLATE, KEEPER (FOR 4-1/4" straight pin)	2
21	08-040900		RING, RETAINING (1-1/2") (for S/N L-101 thru L-120)	4
	08-066600		RING, RETAINING (1-1/2") (for S/N L-121 and up)	4

TITLE

BOOM ASSEMBLY, FALCON 2034

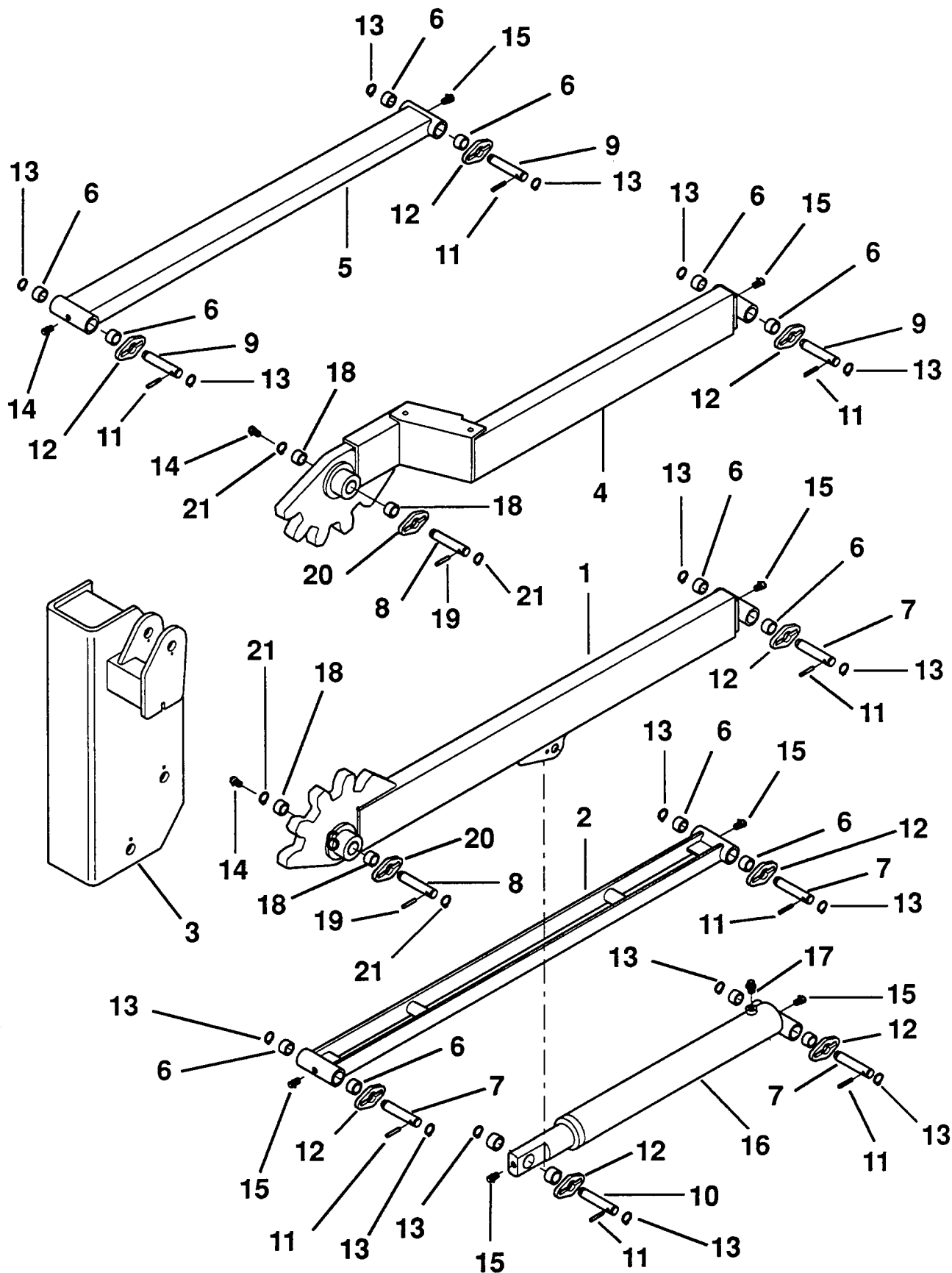
PLATE NO.

03.51

**SIMON AERIALS INC.**

REV. 27 MAR., 1991

PART NO.



TITLE

BOOM ASSEMBLY, FALCON 2034

**SIMON AERIALS INC.**

REV. 27 MAR., 1991

PART  
NO.

PLATE  
NO.

03.51

# PARTS LIST

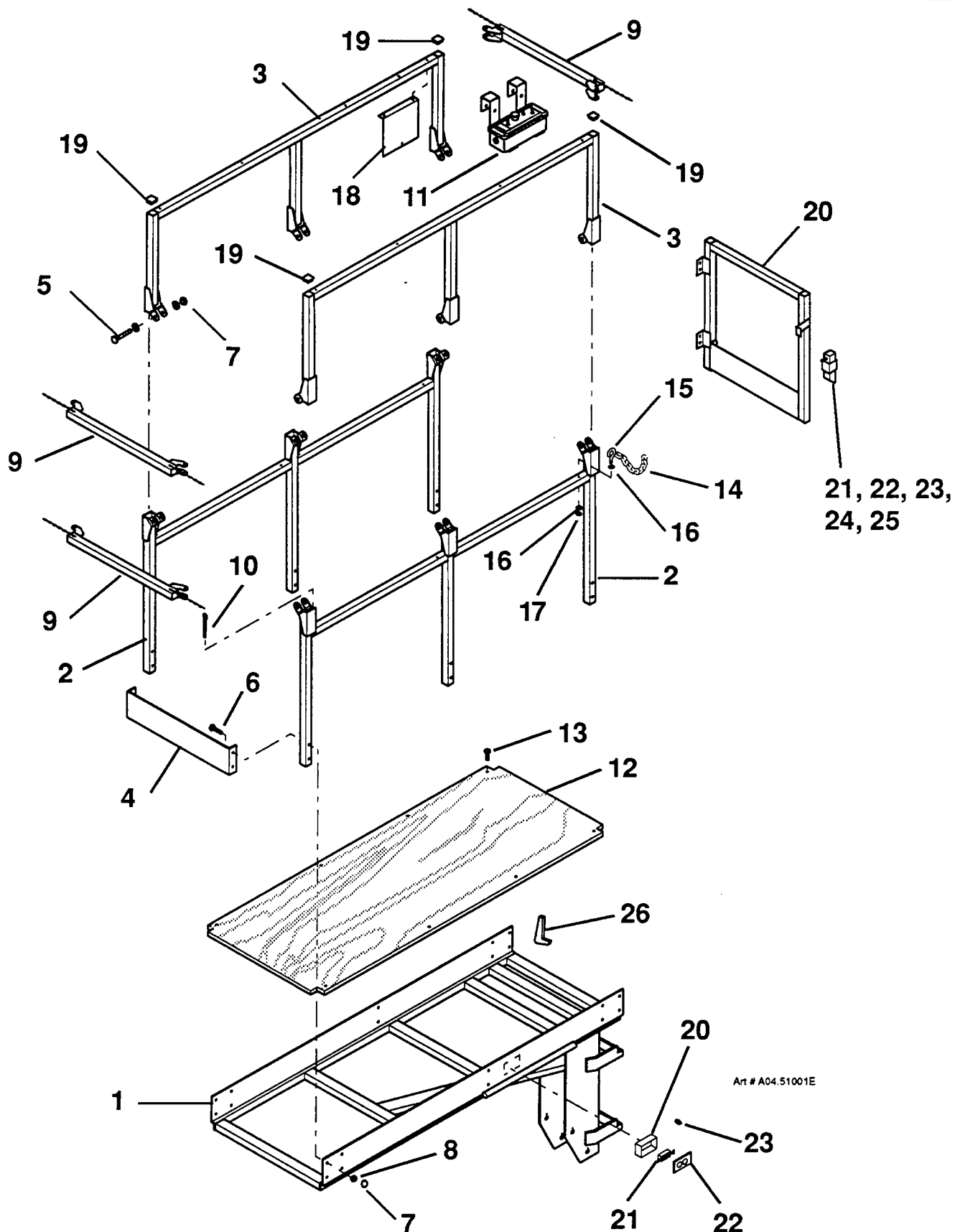
ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
1	2161500		PLATFORM WELDMENT	1
2	2161690		RAIL WELDMENT, SIDE LOWER (fixed section)	2
3	2161670		RAIL WELDMENT, SIDE UPPER (folding section)	2
4	2161760		KICK BOARD, PLATFORM END (without fold down deck)	1
5	07-003050		SCREW, HEX HEAD (3/8"-16 x 2-1/4", Grade 5)	6
6	07-003049		SCREW, HEX HEAD (3/8"-16 x 2", Grade 5)	12
7	07-050016		NUT, HEX LOCK (3/8"-16)	18
8	07-062016		WASHER, FLAT (3/8")	12
9	2161730		RAILING, END [28" (71 cm) long] (without fold down deck)	3
			(with fold down deck)	2
10	11-082100		PIN, HITCH (5/16" x 2-1/2") (without fold down deck)	6
			(with fold down deck)	4
11	See plate . .	09.51	CONSOLE, PLATFORM CONTROL	1
12	10-110800		PLYWOOD, EXTERIOR GRADE [5/8" x 24" x 96" (16 mm x 61 cm x 244 cm)]	1
13	07-029365		SCREW, HEX WASHER HEAD (#12 x 1", self drill, w/ seal)	6
14	2163950		CHAIN ASSEMBLY, SAFETY	1
15	07-026006		BOLT, EYE (5/16")	2
16	07-062015		WASHER, FLAT (5/16")	4
17	07-050015		NUT, STOP (5/16"-18, Grade 5)	2
18	2166320		PLATE, DECAL MOUNTING	1
19	10-114100		CAP, SQUARE TUBING	4
20	2179050		GATE WELDMENT (for units sold in Australia)	1
21	2179010		LATCH ASSEMBLY, GATE (for units sold in Australia)	1
22	2179000		LATCH, GATE	1
23	07-075822		PIN, ROLL (1/4" x 2")	2
24			TUBE, LATCH	1
25			SPACER, LATCH TUBE	1
26	2182130		GUSSET, GATE REINFORCEMENT	1
			Following items used on machines with 110 Volt AC outlet mounted <b>directly to Platform Assembly</b> (S/N L-121 and up). For AC outlet on earlier machines, see plate 09.51 (Platform Control Console):	
27	03-062100		BOX, DUPLEX OUTLET	1
28	03-067000		OUTLET, DUPLEX (110 Volt AC)	1
29	03-062200		COVER, DUPLEX OUTLET	1
30	03-041000		GRIP, CORD	1

TITLE PLATFORM ASSEMBLY, FALCON 2034 (PLATE 1 OF 2)

PLATE NO. 04.51 SIMON AERIALS INC.

REV. 10 FEB., 1992

PART NO.



TITLE PLATFORM ASSEMBLY, FALCON 2034 (PLATE 1 OF 2)

**SIMON AERIALS INC.**

REV. 10 FEB., 1992

PART  
NO.

PLATE  
NO.

04.51



## PARTS LIST

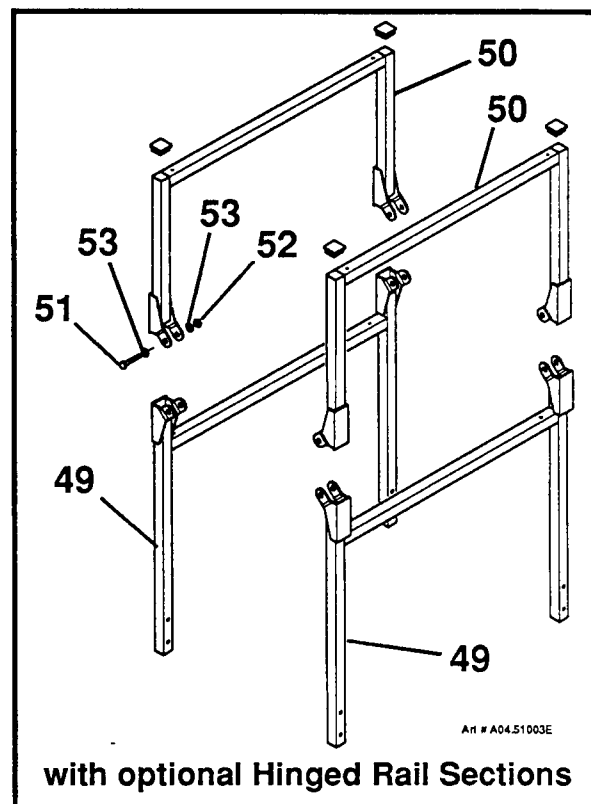
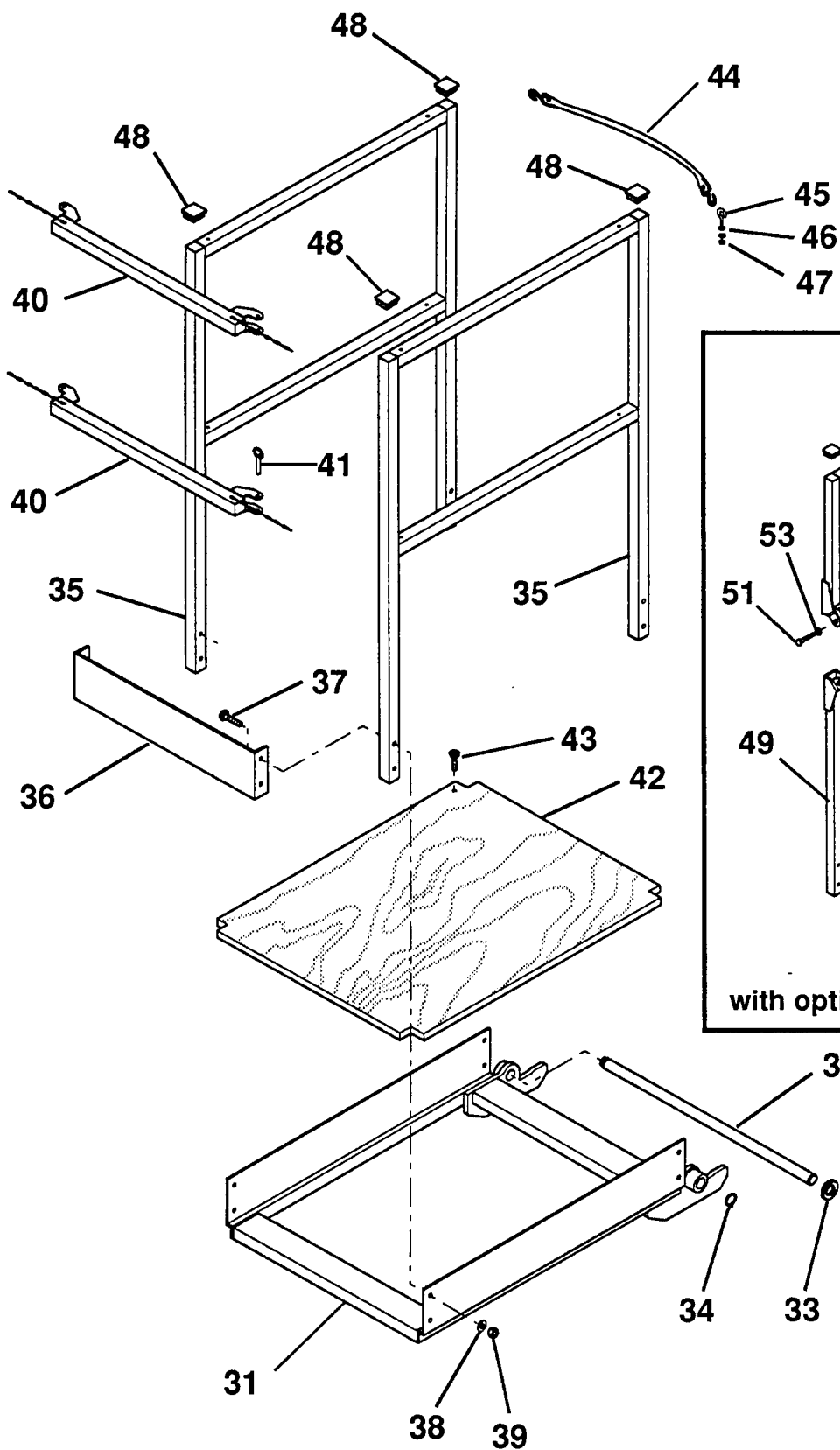
ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
			The following items are used <b>only</b> with the optional <b>FOLDING DECK EXTENSION</b> :	
31	2166510		DECK WELDMENT, FOLDING	1
32	2162490		PIN, PIVOT	1
33	07-060024		WASHER, FLAT (1" SAE)	A.R.
34	08-040600		RING, RETAINING (1")	2
35	2162700		RAIL WELDMENT, SIDE (with fixed side railings. See items 49 thru 53 for optional folding side rails.)	2
36	2162450		KICK BOARD, DECK EXTENSION END	1
37	07-003049		SCREW, HEX HEAD (3/8"-16 x 2", Grade 5)	8
38	07-062016		WASHER, FLAT (3/8")	12
39	07-050016		NUT, HEX LOCK (3/8"-16)	8
40	2162470		RAILING, END [22-1/4" (56.5 cm) long]	2
41	11-082100		PIN, HITCH (5/16" x 2-1/2")	4
42	10-111400		PLYWOOD, EXTERIOR GRADE [5/8" x 23" x 30" (16 mm x 58.4 cm x 76 cm)]	1
43	07-029365		SCREW, HEX WASHER HEAD (#12 x 1", self drill, w/ seal)	4
44	10-114500		TIE DOWN, RUBBER	1
45	07-026006		BOLT, EYE (5/16")	2
46	07-062015		WASHER, FLAT (5/16")	4
47	07-050015		NUT, STOP (5/16"-18, Grade 5)	2
48	10-114100		CAP, SQUARE TUBING	4
			The following items are used with the optional <b>FOLDING SIDE RAILS</b> on the optional <b>FOLDING DECK EXTENSION</b> :	
49	2176520		RAIL WELDMENT, SIDE LOWER	2
50	2176600		RAIL WELDMENT, SIDE UPPER	2
51	07-003050		SCREW, HEX HEAD (3/8"-16 x 2-1/4", Grade 5)	4
52	07-050016		NUT, HEX LOCK (3/8"-16)	4
53	07-062016		WASHER, FLAT (3/8")	8

TITLE	PLATFORM ASSEMBLY, FALCON 2034 (PLATE 2 OF 2)
-------	---

PLATE NO.	04.51	SIMON AERIALS INC.
-----------	-------	--------------------

REV. 10 FEB., 1992

PART  
NO.



TITLE PLATFORM ASSEMBLY, FALCON 2034 (PLATE 2 OF 2)

**SIMON AERIALS INC.**

REV. 10 FEB., 1992

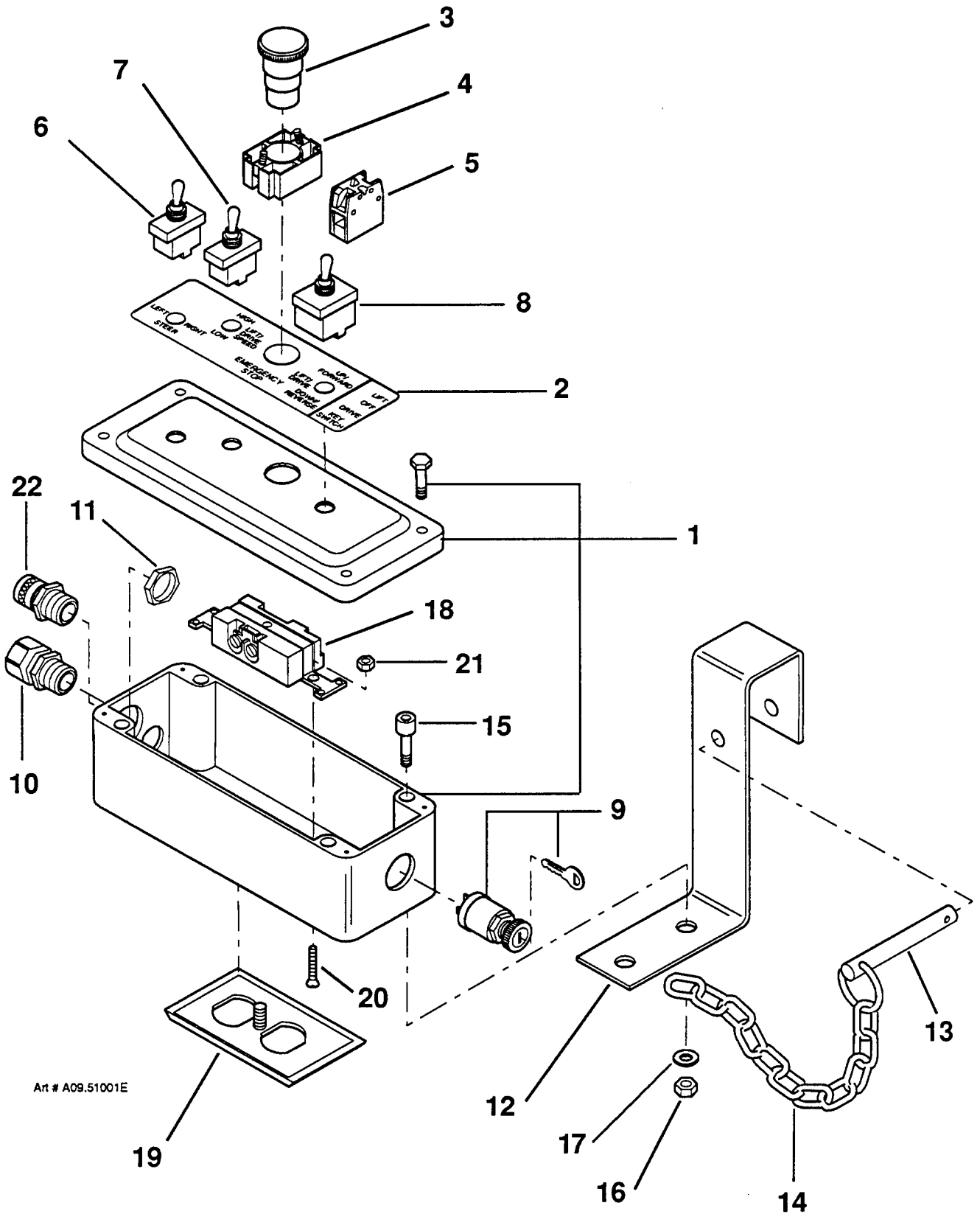
PART  
NO.

PLATE  
NO.

04.51



PARTS LIST				
ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
1	2162940		CONSOLE ASSEMBLY, PLATFORM CONTROL (with 110 Volt AC outlet. For S/N L-101 thru L-120)	1
	2166060		(without 110 Volt AC outlet. For S/N L-121 and up)	1
			BOX, PLATFORM CONTROL (includes cover)	1
	2161450		(with cutout for AC outlet. S/N L-101 thru L-120)	1
	2166050		(has no cutout for AC outlet. S/N L-121 and up)	1
2	2162920		DECAL, PLATFORM CONTROL	1
3	03-409800		BUTTON, EMERGENCY STOP	1
4	03-454900		BASE, SWITCH MOUNTING	1
5	03-437300		BLOCK, CONTACT (normally closed)	1
6	03-020500		SWITCH, TOGGLE (Steer) (3 position, intermittent, single pole, single throw)	1
7	03-020400		SWITCH, TOGGLE (Lift/ Drive speed) (2 position, maintained, single pole, single throw)	1
8	03-020600		SWITCH, TOGGLE (Lift/ Drive direction) (3 position, intermittent, double pole, double throw)	1
9	03-468900		SWITCH, KEY OPERATED	1
10	03-037200		GRIP, CORD (5/8")	1
11	03-055500		NUT, CONDUIT LOCK (1/2") (for Serial Numbers L-101 thru L-120)	2
			(for Serial Numbers L-121 and up)	1
12	2161460		BRACKET, CONTROL BOX MOUNTING	2
13	11-082100		PIN, HITCH (5/16" x 2-1/2")	1
14	2161720		CHAIN [14 link, 14 Gauge., 7" (178 mm) long]	1
15	07-008354		SCREW, HEX SOCKET HEAD (#10-24 x 1-1/4")	4
16	07-050011		NUT, STOP (#10-24)	4
17	07-062011		WASHER, FLAT (#10)	1
			Following items used only on Console Assembly with 110 Volt AC outlet. For Serial Numbers L-101 thru L-120 only:	
18	03-067000		OUTLET, DUPLEX (110 Volt AC)	1
19	03-062200		COVER, DUPLEX OUTLET	1
20	01-011335		SCREW, PAN HEAD (#6-32 x 1/2")	2
21	07-050007		NUT, STOP (#6-32)	2
22	03-045500		GRIP, CORD (1/2")	1
TITLE PLATFORM CONTROL CONSOLE, FALCON 2034				
PLATE NO.	09.51	SIMON AERIALS INC.		PART NO.
		REV. 27 MAR., 1991		



TITLE

PLATFORM CONTROL CONSOLE, FALCON 2034

**SIMON AERIALS INC.**

REV. 27 MAR., 1991

PART  
NO.

PLATE  
NO.

09.51

# PARTS LIST

ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
1	04-031000		CYLINDER, LIFT (Type 1, for Serial No. L-101 thru L-120) (A "Type 1" cylinder can be identified by the bleed screw location <b>in line with</b> the hose fitting, at the rod end of the cylinder)	1
	04-033600		CYLINDER, LIFT (Type 2, for Serial No. L-121 and above) [A "Type 2" cylinder has a 4" (102 mm) cylinder bore, and can be identified by a bleed screw location <b>180° from</b> the hose fitting, at the rod end of the cylinder. There is no Simon part number stamped near the hose fitting.]	1
	04-034000		CYLINDER, LIFT (Type 3) [A "Type 3" cylinder has a 3-1/2" (89 mm) cylinder bore, and can be identified by a bleed screw location <b>180° from</b> the hose fitting, at the rod end of the cylinder. The Simon part number is stamped near the hose fitting.]	1
2			BUSHING, BASE END (comes with cylinder) (1-3/4" O.D., 1-1/2" I.D., 1-1/4" long)	2
3			BUSHING, ROD END (comes with cylinder) (1-3/4" O.D., 1-1/2" I.D., 1" long)	2
4			SCREW, FLAT HEAD (#10, with metal washer) (Comes with "Type 1" cylinder)	1
			PLUG, HEX SOCKET (SAE #4 "O"-Ring) (With "Type 2" cylinder. To replace original 1/4"-28 screw & washer per Service Bulletin #082-062790.)	1
			PLUG, HEX SOCKET (SAE #4 "O"-Ring) (Comes with "Type 3" cylinder)	1
5	04-031002		ROD ASSEMBLY, CYLINDER (for "Type 1" cylinder)	1
6	04-031003		PISTON (for "Type 1" cylinder)	1
7	04-031004		RING, SNAP (for "Type 1" cylinder)	1
8	04-031005		GUIDE, ROD (for "Type 1" cylinder)	1
9	04-031001		SEAL KIT (for "Type 1" cylinder)	1
	04-033601		SEAL KIT (for "Type 2" cylinder)	1
	04-034001		SEAL KIT (for "Type 3" cylinder)	1
			The following parts are <b>NOT INCLUDED</b> as part of the lift cylinder assembly.	
10	08-051300		FITTING, GREASE (1/8", 90°)	2
11	01-200400		FUSE, VELOCITY (option, shown)	1
	See plate . . .	11.56	VALVE, HOLDING (option)	1
12	10-117400		BOOT, CYLINDER ROD COVER (for "Type 1" cylinder)	1

TITLE

LIFT CYLINDER, FALCON 2034

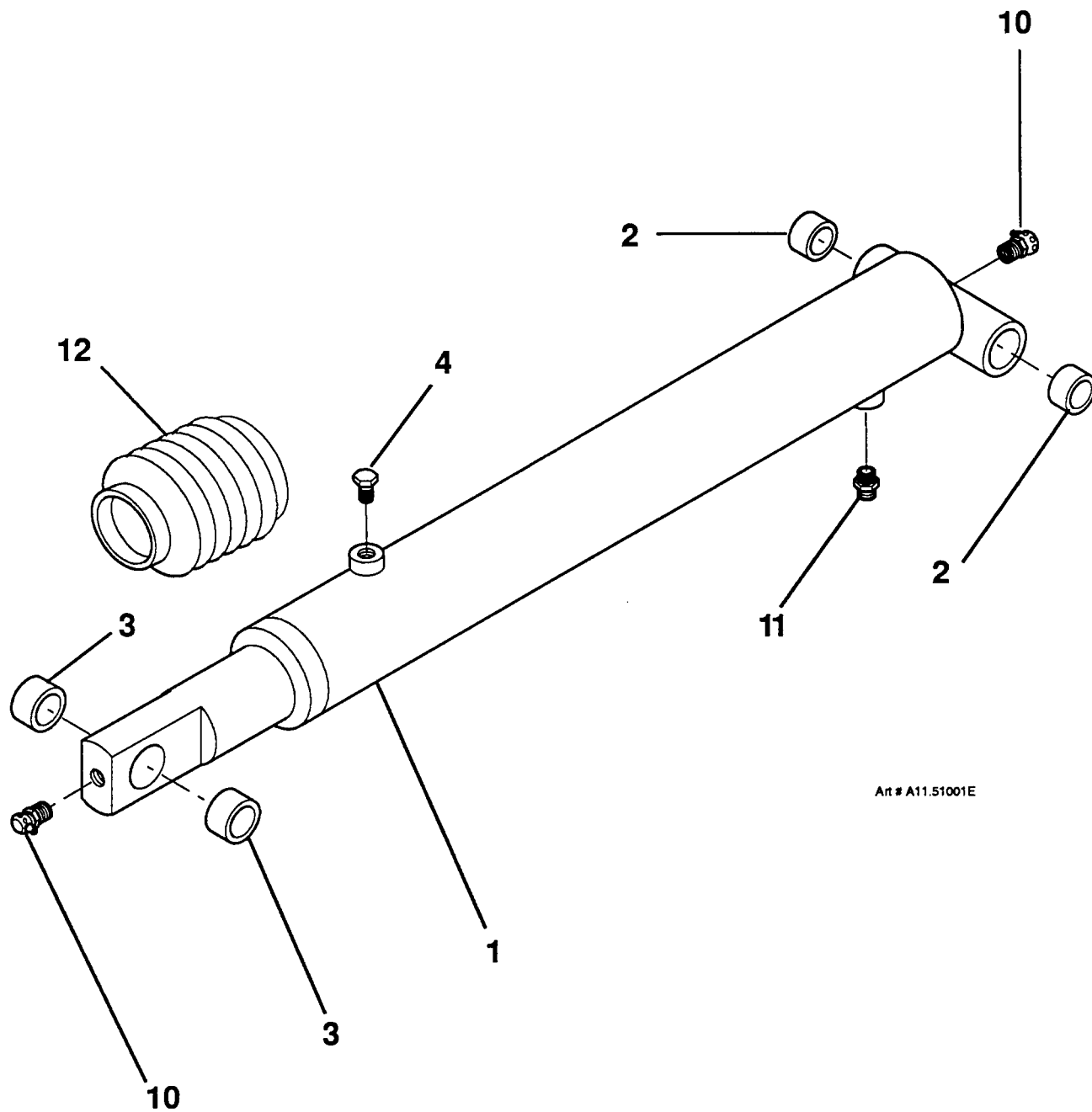
PLATE NO.

11.51

**SIMON AERIALS INC.**

REV. 01 APR., 1991

PART NO.



Art # A11.51001E

TITLE

LIFT CYLINDER, FALCON 2034

**SIMON AERIALS INC.**

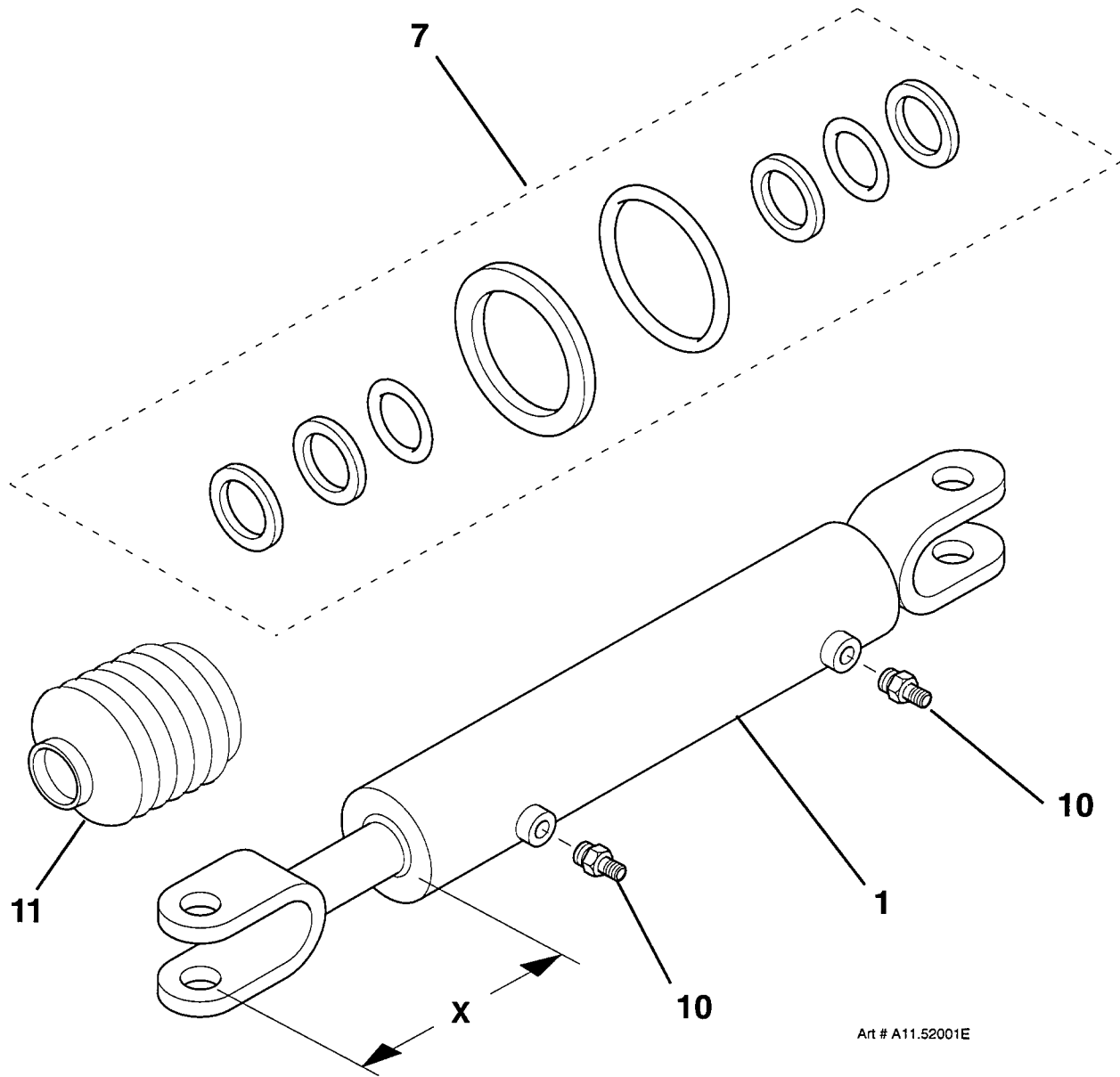
REV. 01 APR., 1991

PART  
NO.

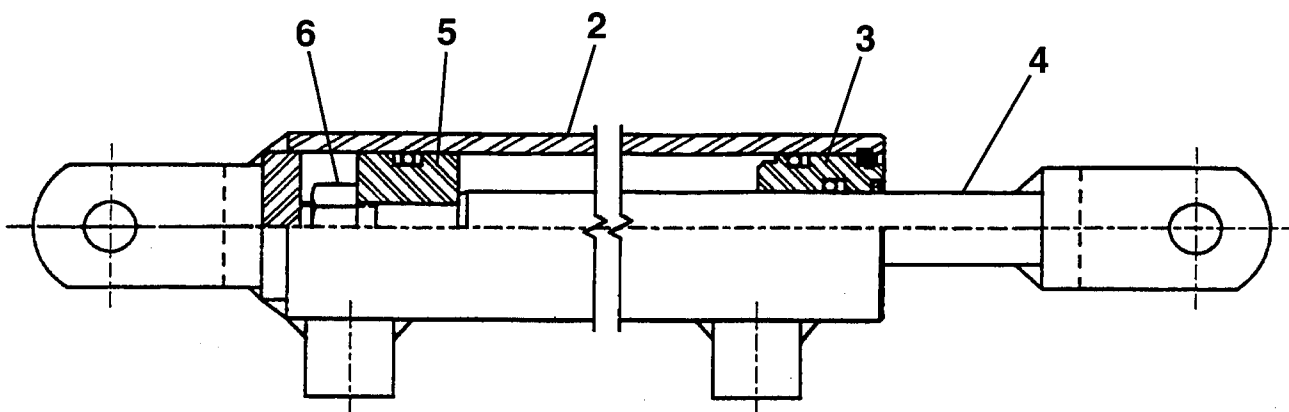
PLATE  
NO.

11.51

PARTS LIST				
ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
1	04-031300		CYLINDER, STEER (Type 1) <b>Note:</b> A "Type 1" cylinder can be identified by the collapsed dimension "X" of 3.062" (77.8 mm).	1
	04-034300		CYLINDER, STEER (Type 2) <b>Note:</b> A "Type 2" cylinder can be identified by the collapsed dimension "X" of 2.562" (65.1 mm).	1
			<b>Note:</b> When ordering <b>REPLACEMENT CYLINDER</b> , "Type 2" will be supplied.	
2			BODY ASSEMBLY, CYLINDER	1
3	04-031306		GUIDE, ROD (for "Type 1" cylinder)	1
	04-034306		GUIDE, ROD (for "Type 2" cylinder)	1
4	04-031304		ROD, CYLINDER (for "Type 1" cylinder)	1
	04-034305		ROD, CYLINDER (for "Type 2" cylinder)	1
5	04-031305		PISTON (for "Type 1" cylinder)	1
	04-034304		PISTON (for "Type 2" cylinder)	1
6			NUT, LOCK (1/2"-20) (for "Type 1" cylinder)	1
7	04-031301		SEAL KIT (for "Type 1" cylinder)	1
	04-034301		SEAL KIT (for "Type 2" cylinder)	1
8	04-031302		PIN, CLEVIS (1/2" x 2-1/16") (for "Type 1" cylinder)	2
	04-034302		PIN, CLEVIS (1/2" x 2-1/16") (for "Type 2" cylinder)	2
9	04-031303		PIN, COTTER (Steel, 1/8" x 3/4") (for "Type 1" cylinder)	4
	04-034303		PIN, COTTER (Steel, 1/8" x 3/4") (for "Type 2" cylinder)	4
			The following parts are <b>NOT INCLUDED</b> as part of the steer cylinder assembly:	
10	06-000600		CONNECTOR, STRAIGHT MALE (4-6 FTX)	2
11	10-117300		BOOT, CYLINDER ROD COVER (for "Type 1" cylinder)	1
TITLE			STEER CYLINDER	
PLATE NO.	11.52	SIMON AERIALS INC.		PART NO.
REV. 25 JAN. 1994				



Art # A11.52001E



**Steer Cylinder Internal Components (Type 1 Cylinder shown)**

ART # A11.52002S

**TITLE**

**STEER CYLINDER**

**SIMON AERIALS INC.**

REV. 25 JAN., 1994

**PART  
NO.**

**PLATE  
NO.**

**11.52**



# PARTS LIST

ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
1	04-031100		CYLINDER, BRAKE (Type 1, for Falcon 2034, S/N L-101 thru L-112, for Falcon 2034, S/N L-114 thru L-118)	1
	04-033700		"Type 1" cylinder length from flange to end of barrel is 8-1/16" (205 mm). CYLINDER, BRAKE (Type 2, for Falcon 2034, S/N L-113, for Falcon 2034, S/N L-119 and above, for Falcon 2548 and 2570, all)	1
			"Type 2" cylinder length from flange to end of barrel is 6-1/2" (165 mm).	
			<b>Note:</b> when ordering <b>REPLACEMENT CYLINDER</b> , "Type 2" will be supplied.	
2			JACKET ASSEMBLY	1
3	04-031102		ROD, PISTON (for "Type 1" cylinder)	1
	04-033701		ROD, PISTON (for "Type 2" cylinder)	1
4			SPACER	1
5	04-031103		PISTON (for "Type 1" cylinder)	1
	04-033704		PISTON (for "Type 2" cylinder)	1
6			NUT, LOCK	1
7			SPRING (for "Type 1" cylinder)	1
	04-033705		SPRING (for "Type 2" cylinder)	1
8	04-033703		REPAIR KIT (For "Type 2" cylinder. Includes Gland Nut and Seal Kit)	1
9	04-031104		NUT, GLAND (#1, for "Type 2" cylinder)	1
	04-031105		NUT, GLAND (#2, for "Type 2" cylinder)	1
10	04-033702		SEAL KIT (for "Type 2" cylinder)	1
11			WIPER, ROD	1
12			SEAL, PISTON ("Polypak")	1
13			WASHER, BACKUP	1
14			"O"-RING	1
15			"O"-RING	1
16			SEAL, "POLYPAK"	1
17			NUT, GLAND (for "Type 1" cylinder)	1
18	04-031101		SEAL KIT (for "Type 1" cylinder)	1
			The following part is <b>NOT INCLUDED</b> as part of the brake cylinder assembly.	
19	06-0003800		ELBOW, 90° MALE (6 CTX)	2

TITLE

BRAKE CYLINDER, FALCON

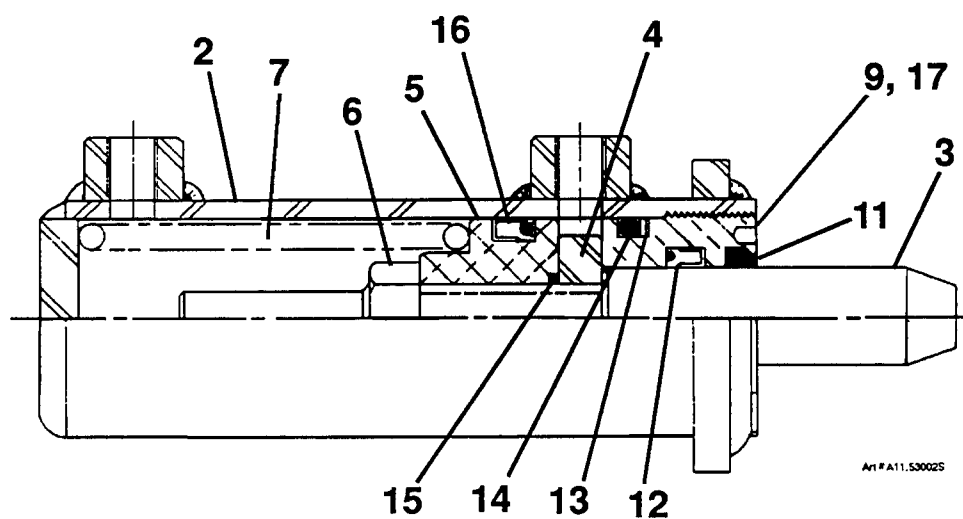
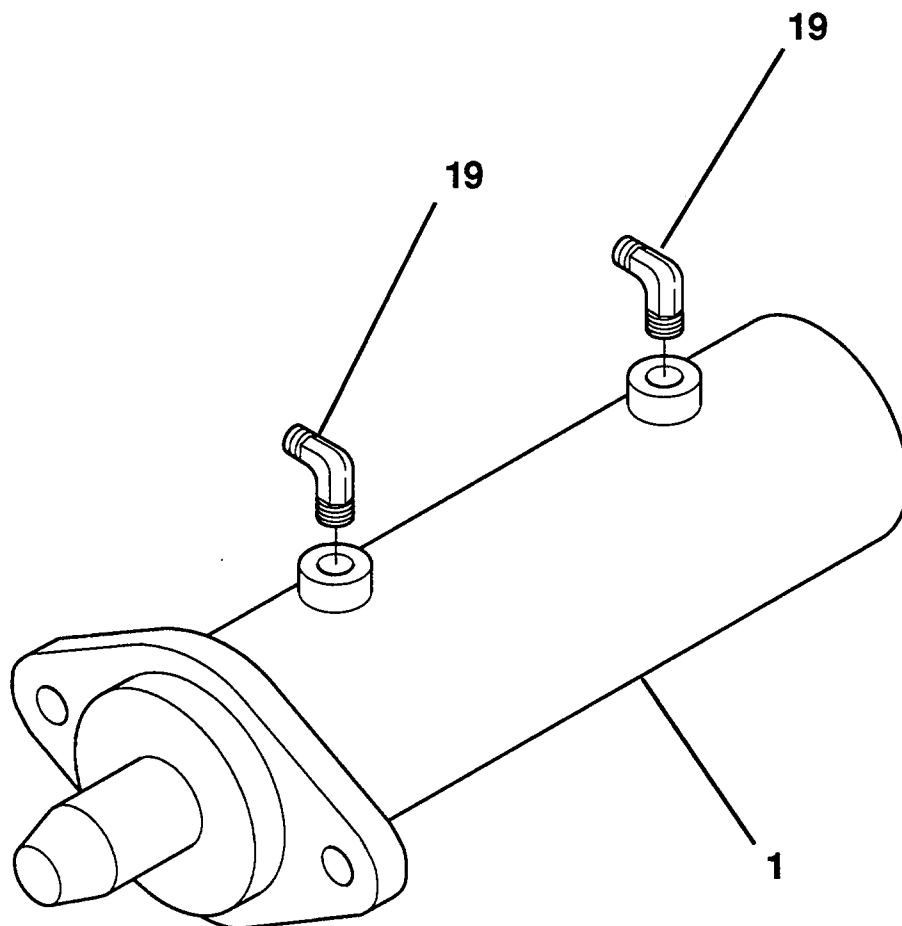
PLATE  
NO.

11.53

**SIMON AERIALS INC.**

REV. 01 APR., 1992

PART  
NO.



**Brake Cylinder Internal Components (Type 2 Cylinder shown)**

**TITLE**

**BRAKE CYLINDER, FALCON**

**SIMON AERIALS INC.**

REV. 01 APR., 1992

**PART  
NO.**

**PLATE  
NO.**

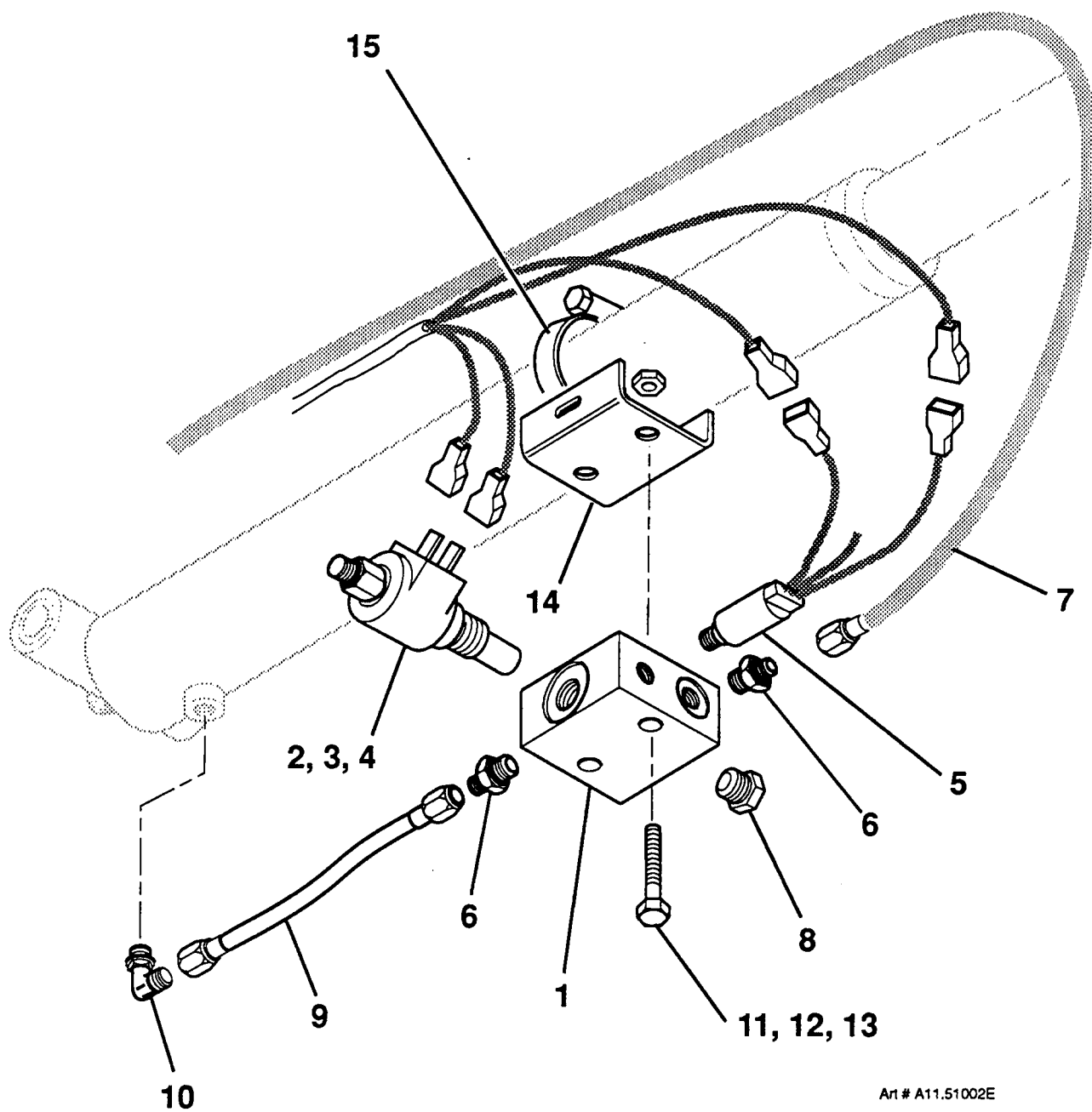
**11.53**



PARTS LIST				
ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
			The following items are used on Lift Cylinders 04-031000, 04-033600 or 04-034000 when Velocity Fuse is not installed (see plate 11.51):	
1	2183480		BODY, HOLDING VALVE	1
2	01-097506		CARTRIDGE, SOLENOID VALVE	1
3	01-097520		SCREEN (100 mesh)	1
4	01-097507		COIL, SOLENOID VALVE	1
5	01-098300		SWITCH, PRESSURE (350 PSI)	1
6	06-039800		CONNECTOR, STRAIGHT THREAD (6 F50X)	2
7	05-202500		HOSE ASSEMBLY [83" (2.11 M) long]	1
8	06-095000		PLUG, HOLLOW HEX (6 HP50N)	1
9	2183500		TUBE ASSEMBLY	1
10	06-044600		ELBOW, STRAIGHT THREAD (6 C50X)	1
11	07-003008		CAP SCREW, HEX HEAD (1/4"-20 x 1-3/4", Grade 5)	2
12	07-050014		NUT, HEX LOCK (1/4"-20, Grade 5)	2
13	07-060014		WASHER, FLAT (1/4")	2
14	2183490		BRACKET, HOLDING VALVE	1
15	09-008700		CLAMP, BAND [4-1/2" (114 mm) dia.]	1
16			HARNESS, WIRE [93" (2.36 M) long]	1
17	07-003002		CAP SCREW, HEX HEAD (1/4"-20 x 5/8", Grade 5) (Ground)	1
18	07-050014		NUT, HEX LOCK (1/4"-20, Grade 5)	1
19	07-060014		WASHER, FLAT (1/4")	1
20	03-066400		TIE, CABLE [20" (51 cm) long]	A.R.
21	03-064000		TIE, CABLE [6-3/4" (171 mm) long]	A.R.
22	03-439000		TIE, CABLE [1" (25.4 mm) long]	A.R.
			Ref. also Holding Valve Kit, Part No. 55-000080.	
TITLE HOLDING VALVE, LIFT CYLINDER				
PLATE NO.	11.56	SIMON AERIALS INC.		PART NO.
				REV. 05 MAR., 1992

## HOLDING VALVE, LIFT CYLINDER

PART  
NO.



Art # A11.51002E

TITLE

HOLDING VALVE, LIFT CYLINDER

**SIMON AERIALS INC.**

REV. 05 MAR., 1992

PART  
NO.

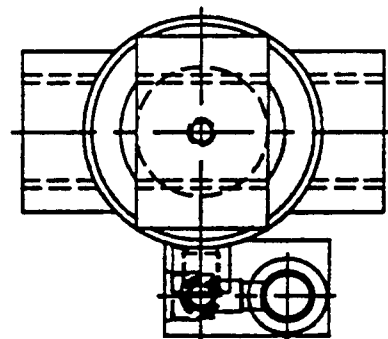
PLATE  
NO.

11.56

PARTS LIST				
ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
1	04-034400		CYLINDER, LIFT (Type 4) (A "Type 4" cylinder has the solenoid valve block mounted as an integral part of the cylinder tube, near the base end. The Simon Aerials part number "04034400" and the cylinder serial number are stamped near the rod end port.)	1
2			TUBE WELDMENT, CYLINDER	1
3	04-034405		GLAND, END	1
4	04-034404		SHAFT, CYLINDER	1
5			PISTON	1
6			BLOCK, STROKE	1
7			NUT, LOCK (1"-14)	1
8	04-034402		BUSHING (Base end)	2
9	04-034406		BUSHING (Rod end)	1
10	04-034401		SEAL KIT (for "Type 4" Lift cylinder)	1
11	04-034506		VALVE, SOLENOID	1
			The following item is <b>not</b> included as part of the Lift Cylinder:	
12	08-051300		FITTING, GREASE (1/8", 90°)	2
TITLE LIFT CYLINDER, FALCON 2034				
PLATE NO.	11.60	SIMON AERIALS INC.		PART NO. 04-034400
NEW 12 MAR., 1992				

# LIFT CYLINDER, FALCON 2034

04-034400



1

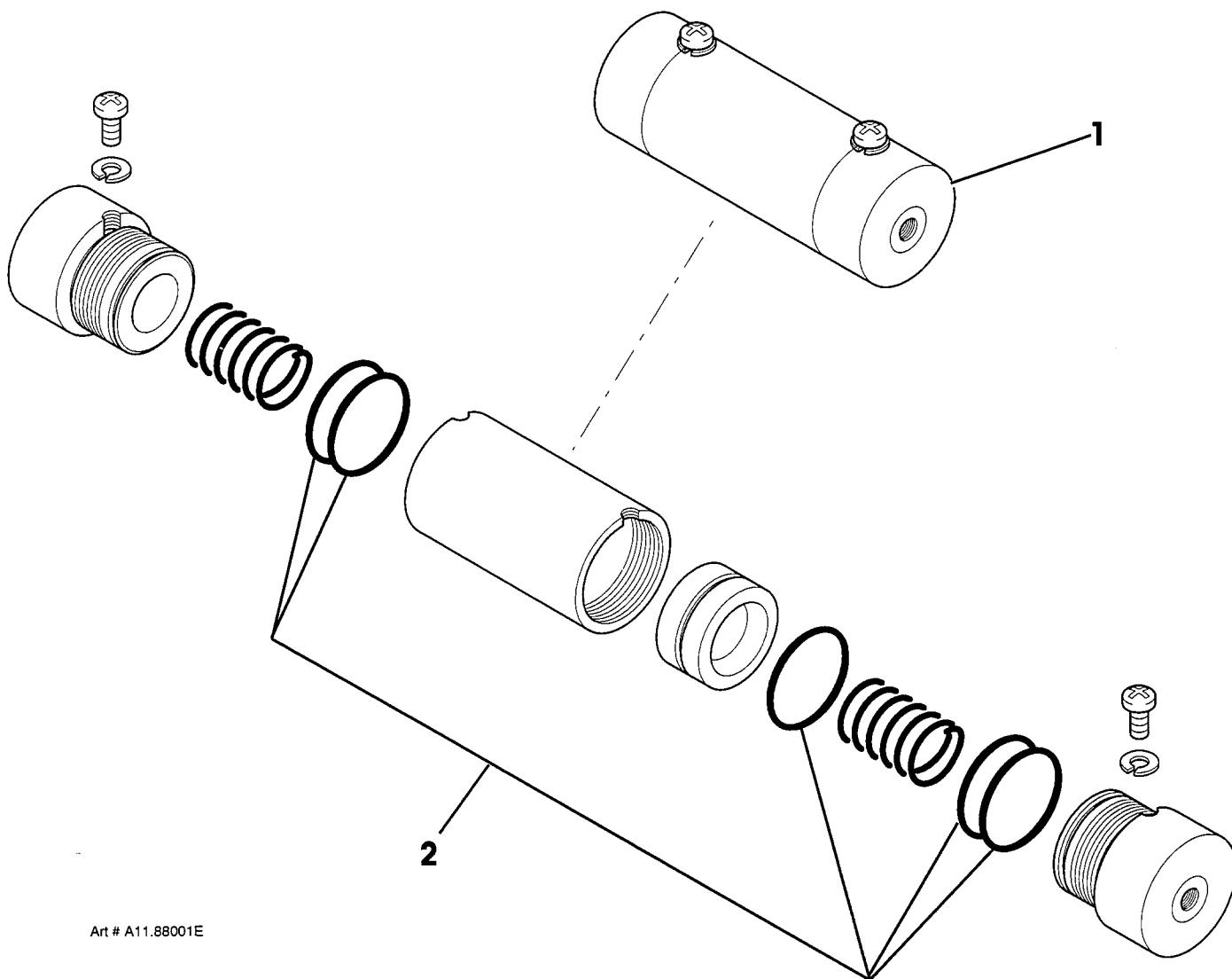
Stamped Part Number

This diagram shows an exploded view of a mechanical assembly. The main component is a rectangular block with a circular feature in the center. A label with the text "04034400" and a small "A" is attached to the top of this block. Below the main block is a smaller component with a similar circular feature. At the bottom is a large, complex component with multiple internal features and a central circular opening. A dashed line indicates the assembly path, showing how the smaller component fits into the main block and how the main block fits into the larger base component. A wavy line is shown near the main block, possibly indicating a seal or a flexible connection. The label "Stamped Part Number" points to the label on the main block, and the number "1" points to the main block itself.

Art # A11.600025

11.60

[illegible]



Art # A11.88001E



Simon Aerials Inc.  
10600 West Brown Deer Road  
Milwaukee Wisconsin 53224 USA  
Parts Phone 1-800-47-SIMON  
24 Hr (Machine) 414-362-8280  
Fax 414-355-3172

TITLE

## CUSHION CYLINDER ASSEMBLY

PART NO. **04-033800**

REV. **A**

DATED  
30 MAY, 1996

SECTION **11.**

PLATE NO. **88**

PAGE **01**

## PARTS LIST

ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
1	01-097400		PUMP AND MOTOR ASSEMBLY ("Type 1") <b>Note:</b> The motor on a "Type 1" pump and motor assembly is rated at <b>"150 Amps"</b> (see nameplate). Electrical connections are made to <b>studs</b> on the side of the motor.	1
	01-221000		PUMP AND MOTOR ASSEMBLY ("Type 2") <b>Note:</b> The motor on a "Type 2" pump and motor assembly is rated at <b>"170 Amps"</b> (see nameplate). Electrical connections are made to <b>studs</b> on the side of the motor.	1
	01-222500		PUMP AND MOTOR ASSEMBLY ("Type 3") <b>Note:</b> The motor on a "Type 3" pump and motor assembly is rated at <b>"170 Amps"</b> (see nameplate). <b>Wire leads</b> are provided on the side of the motor for electrical connection.	1
2			MOTOR, PERMANENT MAGNET [4 HP (2.98 Kw) @ 3600 RPM, 24 Volt DC]	
	01-097402		"Type 1", rated <b>150 Amp</b> (see nameplate)	1
	01-221001		"Type 2", (with studs) rated <b>170 Amp</b> (see nameplate)	1
	01-222501		"Type 3", (with wires) rated <b>170 Amp</b> (see nameplate)	1
3	01-097405		BRUSH SET (for <b>"Type 1"</b> motor)	1
	01-221002		BRUSH (for <b>"Type 2"</b> or <b>"Type 3"</b> motor)	4
4	01-097406		PUMP ASSEMBLY, TANDEM	1
5			PLATE, DRIVE	1
6	01-097401		SEAL, OIL	1
7			PIN, DOWEL	2
8			CASE, GEAR	1
9			SHAFT, DRIVE	1
10	01-097404		COUPLING	1
11			SHAFT, IDLER	1
12			KEY, DOWEL	2
13			BALL	1
14			GEAR	2
15			RING, RETAINING	4
16			GEAR	2
17			SPACER	1
18			CASE, GEAR	1
19			PLATE, END	1
20			PIN, DOWEL	2
21			BOLT, HEX HEAD	2
22	01-097403		"O"-RING	4

TITLE PUMP AND MOTOR ASSEMBLY, FALCON 2034, 2548

PLATE NO.

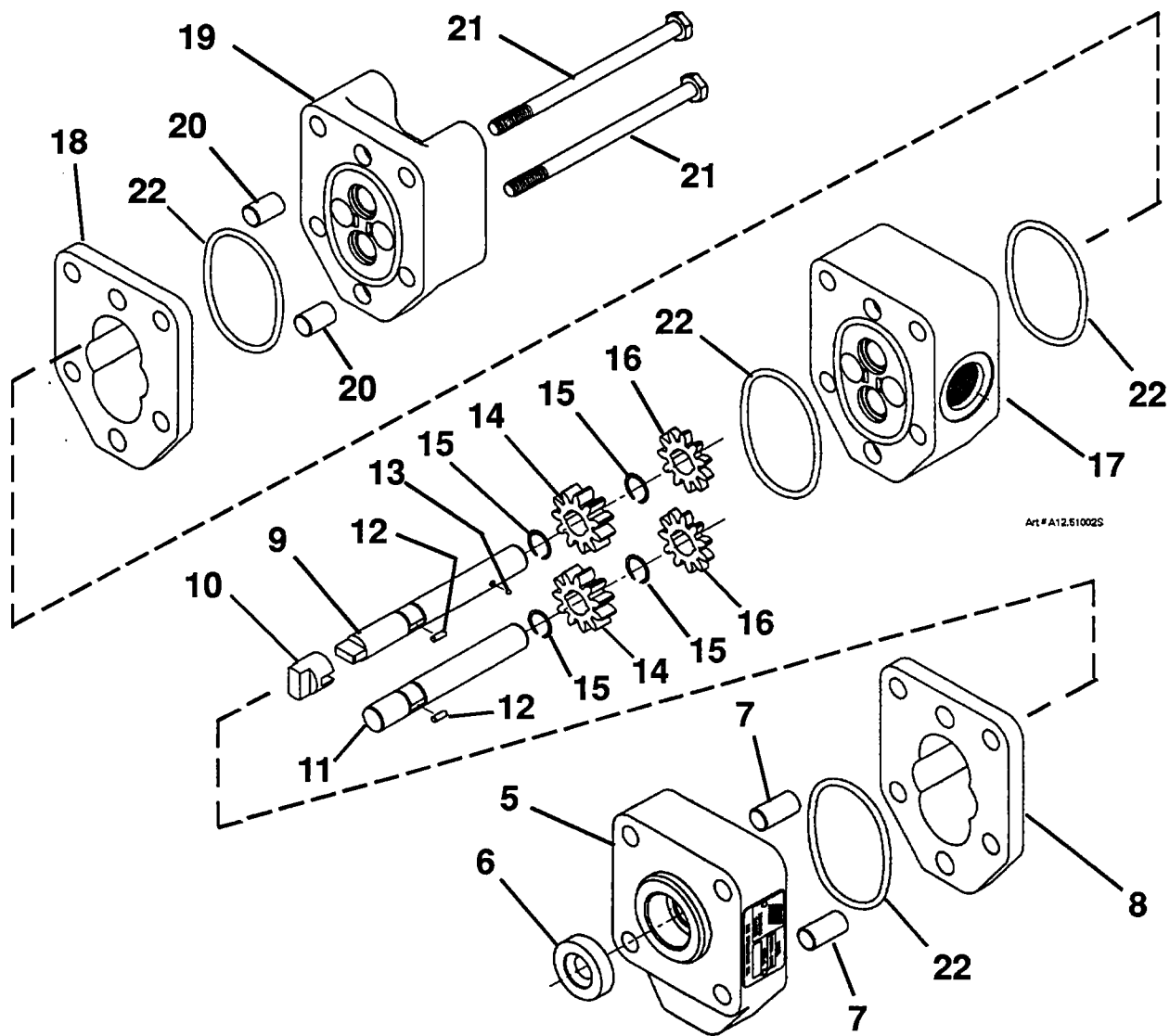
12.51

**SIMON AERIALS INC.**

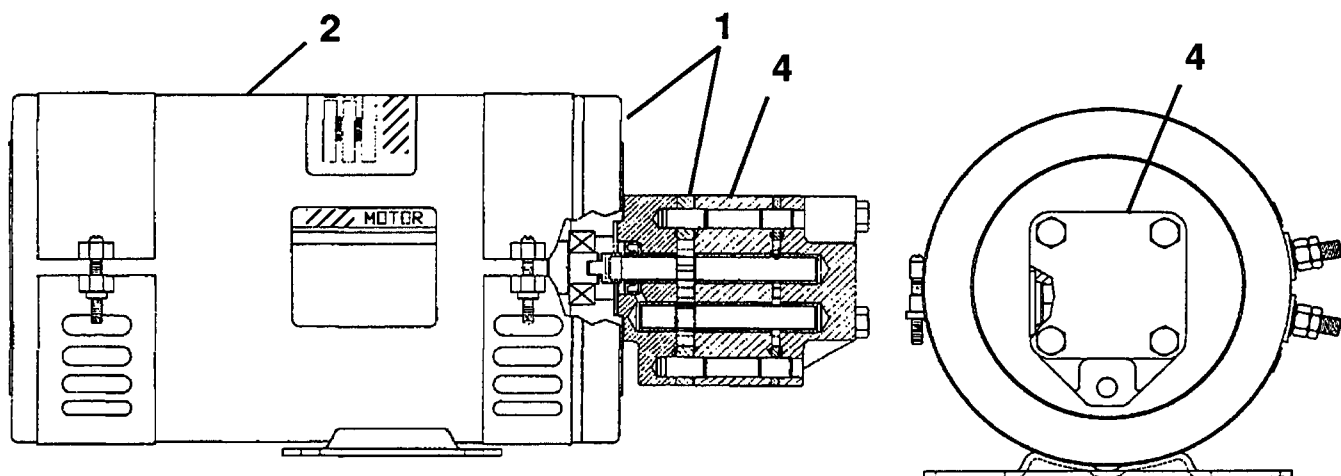
REV. 19 MAR., 1993

PART NO.

Art # A12.51001S



**Exploded View of Pump Assembly**



TITLE

PUMP AND MOTOR ASSEMBLY, FALCON 2034, 2548

**SIMON AERIALS INC.**

REV. 19 MAR., 1993

PART  
NO.

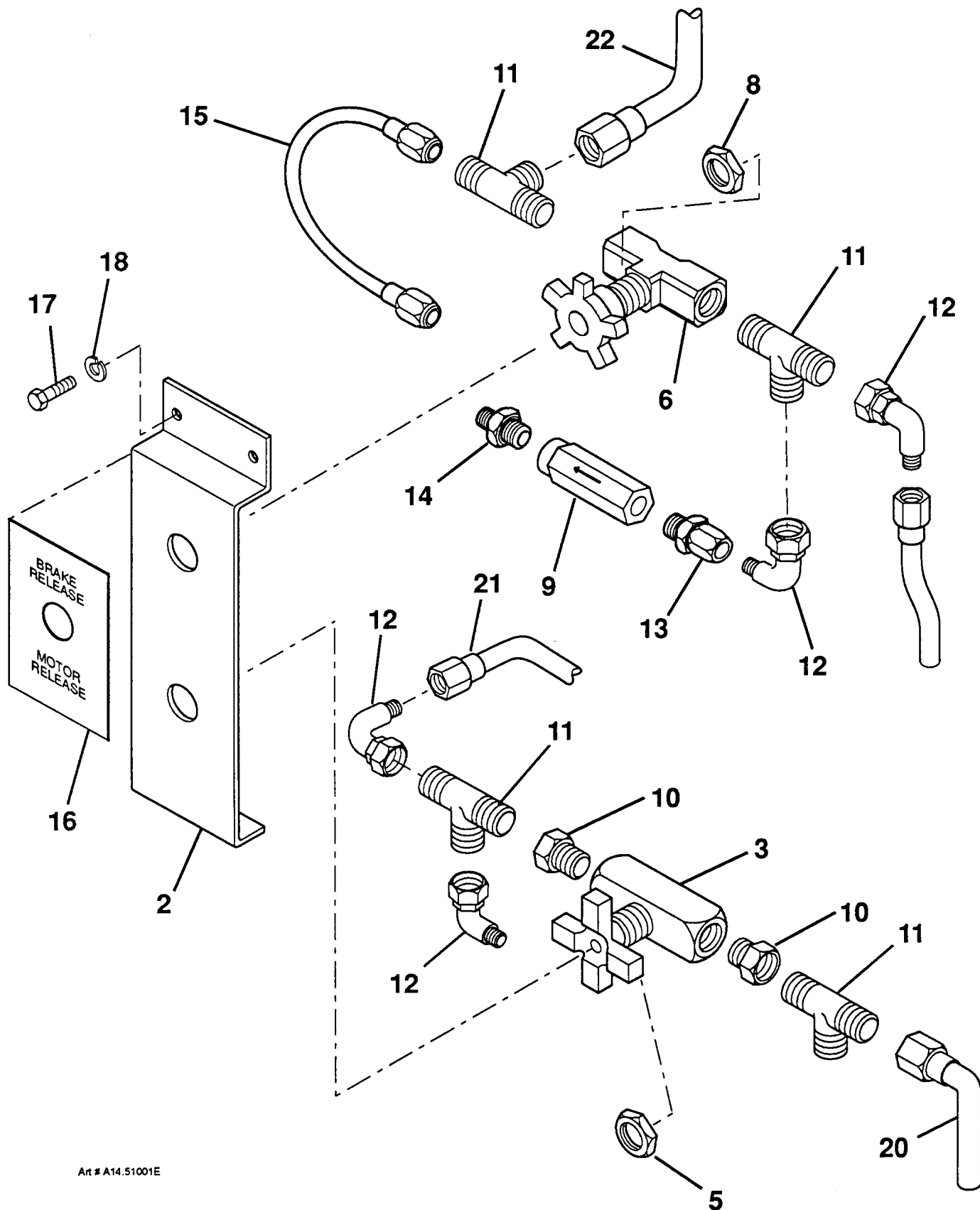
PLATE  
NO.

**12.51**



[illegible]

PLATE NO.	14.51	SIMON AERIALS INC.	REV. 24 DEC., 1991	PART NO.
-----------	-------	--------------------	--------------------	----------



Art # A14.51001E

TITLE

TOW VALVE ASSEMBLY, FALCON 2034

**SIMON AERIALS INC.**

REV. 24 DEC., 1991

PART  
NO.

PLATE  
NO.

14.51

## PARTS LIST

ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
1			BLOCK, VALVE	1
2	01-097504		VALVE, HIGH SPEED (V8) (2 way, normally open)	1
3	01-097516		SEAL KIT, VALVE	1
4	01-097507		COIL, SOLENOID (24 Volt DC)	1
5	01-097506		VALVE, DOWN (V9) (2 way, normally closed) (incl. screen) (for units with <b>velocity fuse</b> installed on lift cylinder)	1
	01-209100		CARTRIDGE, SOLENOID VALVE (Lift valve) (incl. screen) (for units with <b>holding valve</b> installed on lift cylinder)	1
6	01-097516		SEAL KIT, VALVE	1
7	01-097520		SCREEN (100 mesh)	1
8	01-097513		DISC, ORIFICE (ORF2) [.040" (1.016 mm)]	1
9	01-097507		COIL, SOLENOID (24 Volt DC)	1
10	01-097514		VALVE, SEQUENCE (V10) (1800 PSI) (124 Bar) (126.6 kg/ cm <sup>2</sup> )	1
11	01-097517		SEAL KIT, SEQUENCE VALVE	1
12	01-097508		VALVE, CHECK (CV1, CV2, CV4) (4 PSI) (.28 Bar) (.28 kg/ cm <sup>2</sup> )	3
13	01-097516		SEAL KIT, VALVE	3
14	01-097510		VALVE, BRAKE RELEASE SHUTTLE (CV5)	1
15	01-097517		SEAL KIT, BRAKE RELEASE SHUTTLE	1
16	01-097509		VALVE, MAIN RELIEF (RV1) (2600 PSI) (179 Bar) (182.8 kg/ cm <sup>2</sup> )	1
17	01-097516		SEAL KIT, VALVE	1
18	01-097501		VALVE, STEER (V1) (4 way, 3 position)	1
19	01-097515		SEAL KIT, STEER VALVE	1
20	01-097503		COIL, STEER VALVE SOLENOID (S1 and S2) (24 V DC)	2
21	01-097504		VALVE, STEERING BYPASS (V6) (2 way, normally open)	1
22	01-097516		SEAL KIT, VALVE	1
23	01-097507		COIL, SOLENOID (24 Volt DC)	1
24	01-097512		VALVE, COUNTERBALANCE (V2 and V3) (2000 PSI) (138 Bar) (140.6 kg/ cm <sup>2</sup> )	2
25	01-097517		SEAL KIT, COUNTERBALANCE VALVE	2
26	01-097502		VALVE, DRIVE (V4) (4 way, 3 position)	1
27	01-097515		SEAL KIT, DRIVE VALVE	1
28	01-097503		COIL, DRIVE VALVE SOLENOID (S3 and S4) (24 V DC)	2
29	01-097511		ORIFICE, BRAKE RELEASE (ORF1)	1
30	01-097518		SEAL KIT, BRAKE RELEASE ORIFICE	1
31	01-097505		VALVE, LIFT (V7) (2 way, normally closed)	1
32	01-097516		SEAL KIT, VALVE	1
33	01-097507		COIL, SOLENOID (24 Volt DC)	1
34	01-097519		VALVE, CHECK (CV3) (10 PSI) (.69 Bar) (.703 kg/ cm <sup>2</sup> )	1
35	01-097516		SEAL KIT, VALVE	1

**TITLE** CONTROL VALVE ASSEMBLY (COMBINATION VALVE), FALCON 2034

**PLATE NO.**

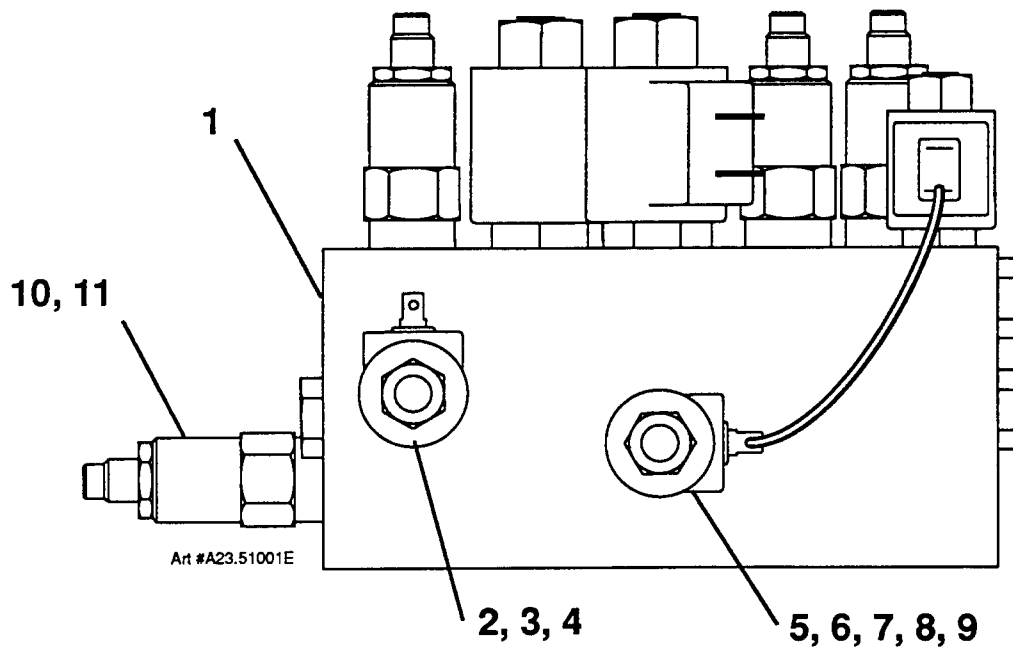
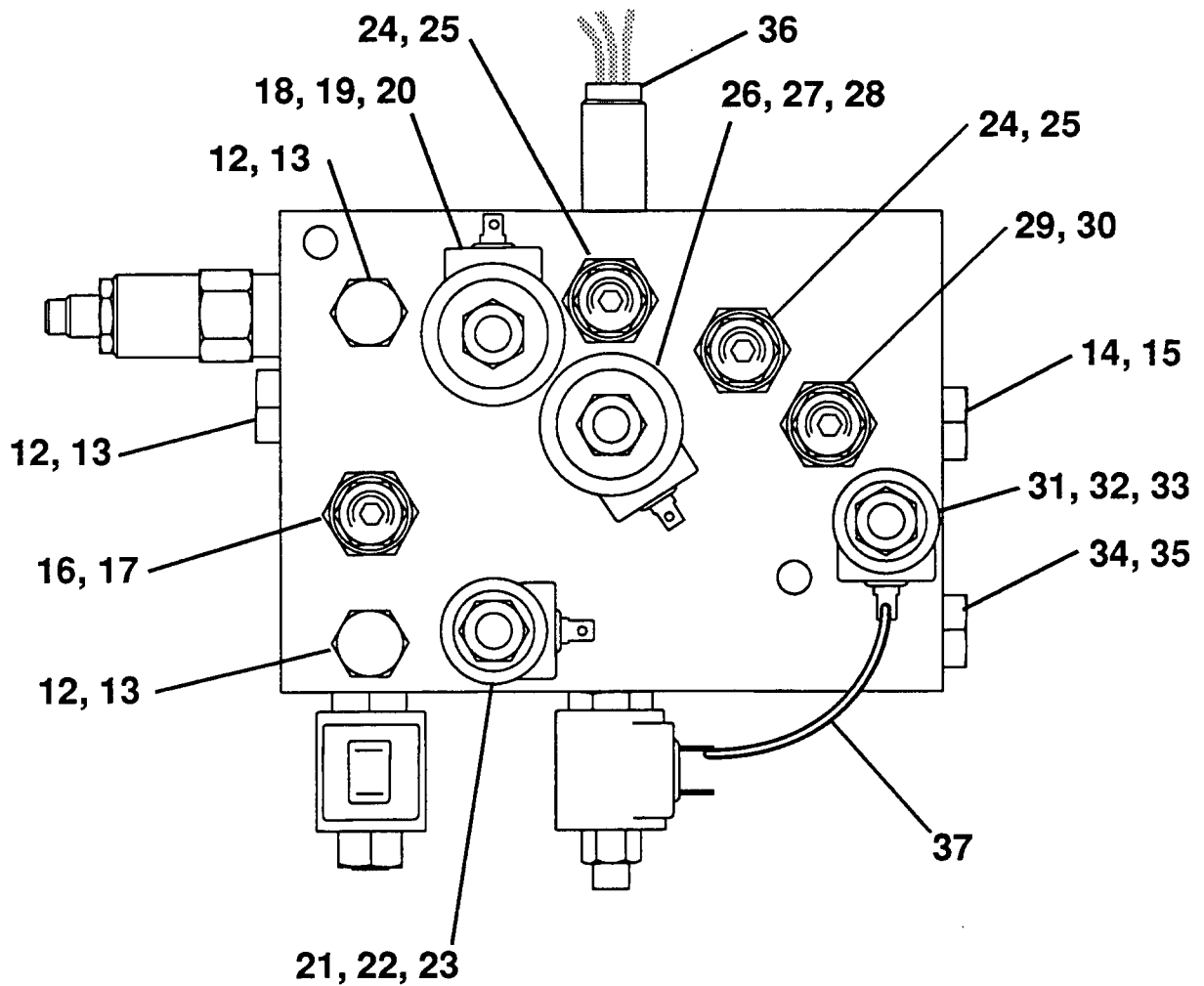
**23.51**

**SIMON AERIALS INC.**

REV. 23 DEC., 1991

**PART NO.**

**01-097500**



TITLE CONTROL VALVE ASSEMBLY (COMBINATION VALVE), FALCON 2034

**SIMON AERIALS INC.**

REV. 23 DEC., 1991

PART  
NO.

01-097500

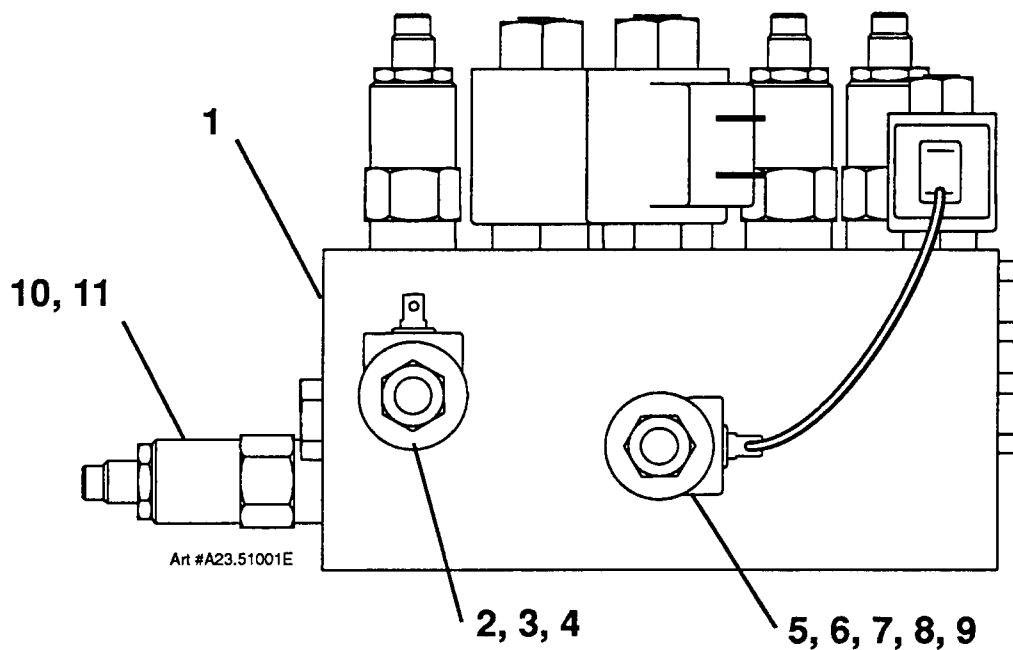
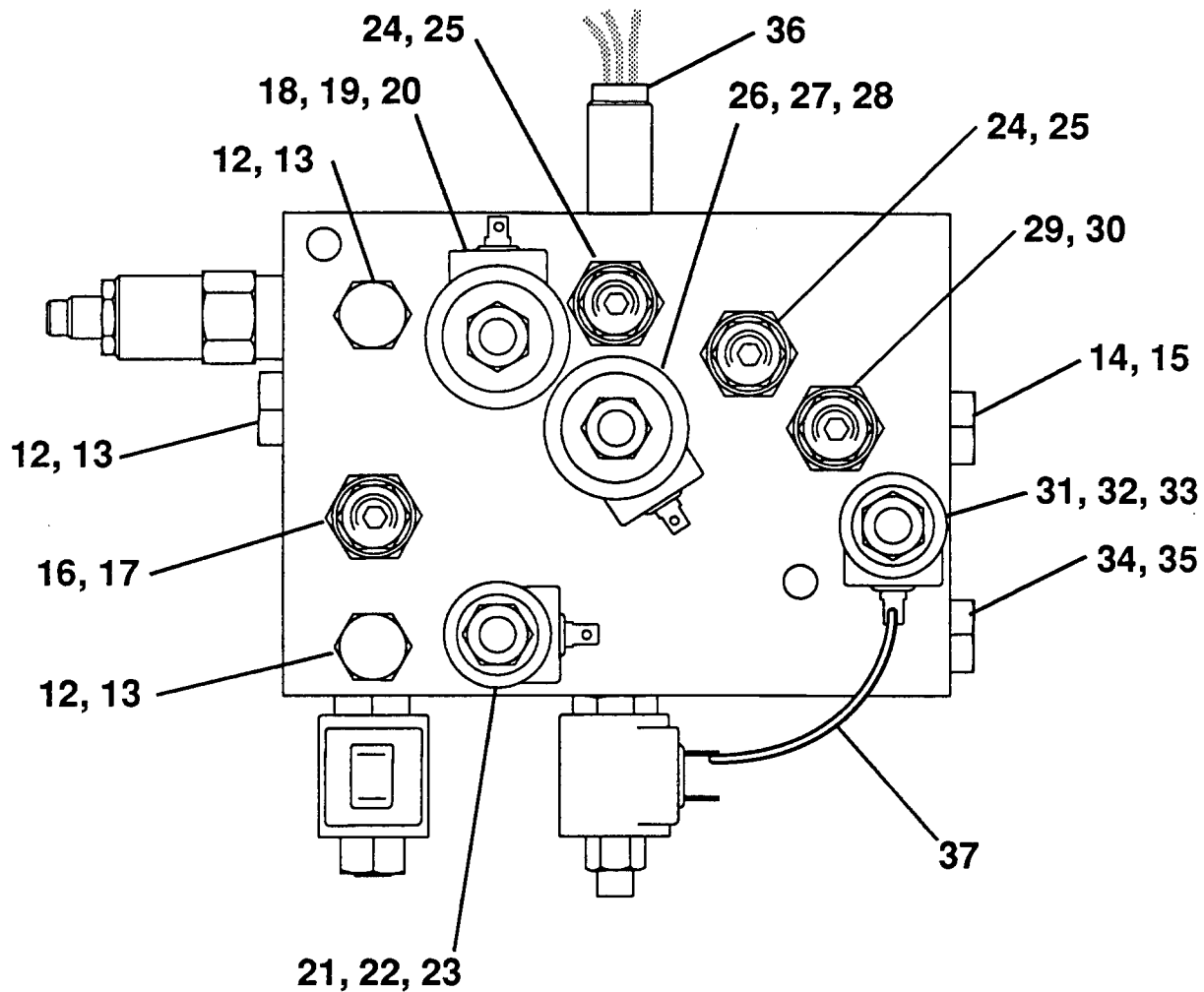
PLATE  
NO.

23.51

[illegible]

PLATE NO.	23.51	SIMON AERIALS INC.	REV. 23 DEC., 1991	PART NO.
-----------	-------	--------------------	--------------------	----------

**PART  
NO.**



TITLE CONTROL VALVE ASSEMBLY (COMBINATION VALVE), FALCON 2034

**SIMON AERIALS INC.**

REV. 23 DEC., 1991

PART  
NO.

PLATE  
NO.

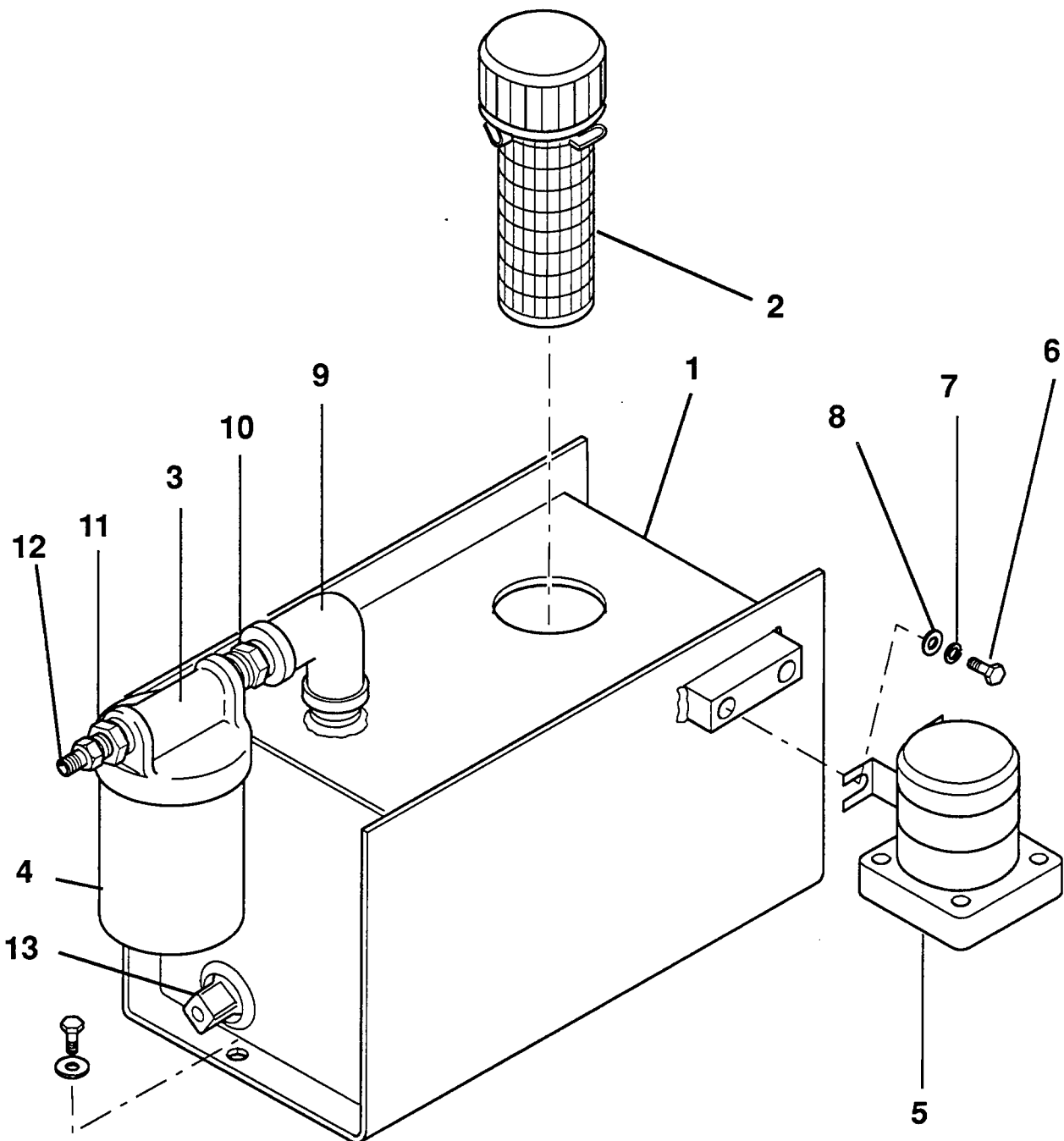
23.51



[illegible]

# HYDRAULIC TANK, FALCON 2034

3520800



Art # A24.51001E

TITLE

HYDRAULIC TANK, FALCON 2034

**SIMON AERIALS INC.**

REV. 06 APR. 1992

PART  
NO.

3520800

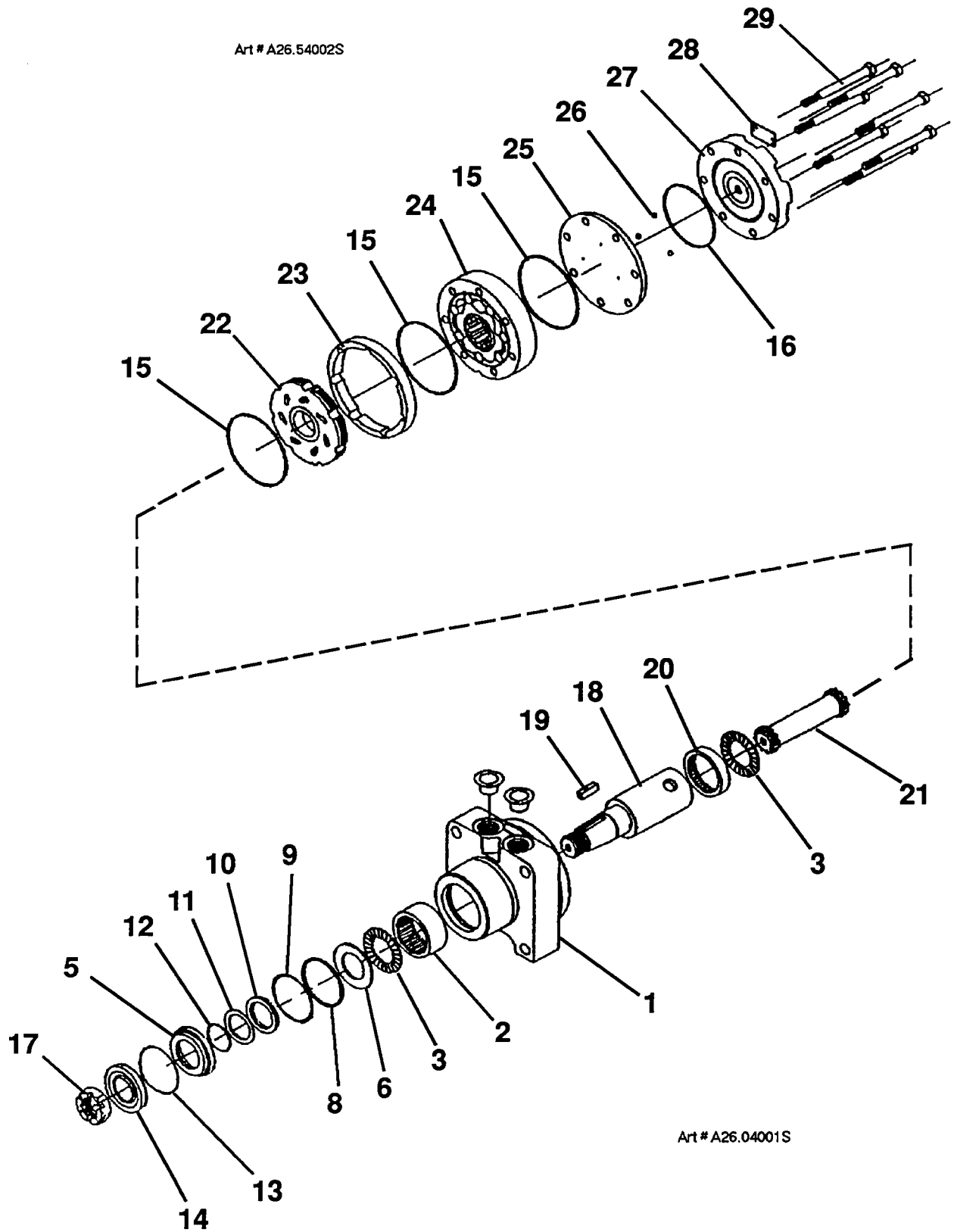
PLATE  
NO.

24.51



PARTS LIST				
ITEM	PART NO	SEE SECTION	DESCRIPTION	QTY.
	01-097300		MOTOR ASSEMBLY (Motor identification tag reads "RE 24070300")	
1			HOUSING	1
2			BEARING, ROLLER	1
3			BEARING, THRUST	2
4	01-074401		SEAL KIT	1
5			SEAL, CARRIER	1
6			WASHER, THRUST	1
7	01-201601		SEAL KIT	1
8			SEAL, HOUSING (high pressure)	1
9			RING, BACKUP	1
10			SEAL, SHAFT	1
11			SEAL, BACKUP	1
12			SHIM, BACKUP	1
13			RING, SNAP	1
14			SEAL, DUST	1
15			SEAL, BODY	3
16			SEAL, BODY	1
17			NUT	1
18	01-201602		SHAFT	1
19			KEY	1
20			BEARING, ROLLER	1
21			LINK, DRIVE	1
22	01-205418		MANIFOLD	1
23	01-205412		BOOT, MANIFOLD	1
24	01-208101		ROTOR SET ASSEMBLY	1
25	01-205413		PLATE, BALANCE (includes ball checks)	1
26	01-205414		CHECK, BALL (3/16")	4
27			COVER, END	1
28			PLATE, MOTOR IDENTIFICATION (with screws)	1
29			BOLT SET (includes 7 bolts)	1
TITLE WHEEL MOTOR ASSEMBLY				
PLATE NO.	26.55	SIMON AERIALS INC.		PART NO. 01-097300
NEW 23 OCT., 1992				

Art # A26.54002S



Art # A26.04001S

TITLE

WHEEL MOTOR ASSEMBLY

**SIMON AERIALS INC.**

NEW 23 OCT., 1992

PART  
NO.

01-097300

PLATE  
NO.

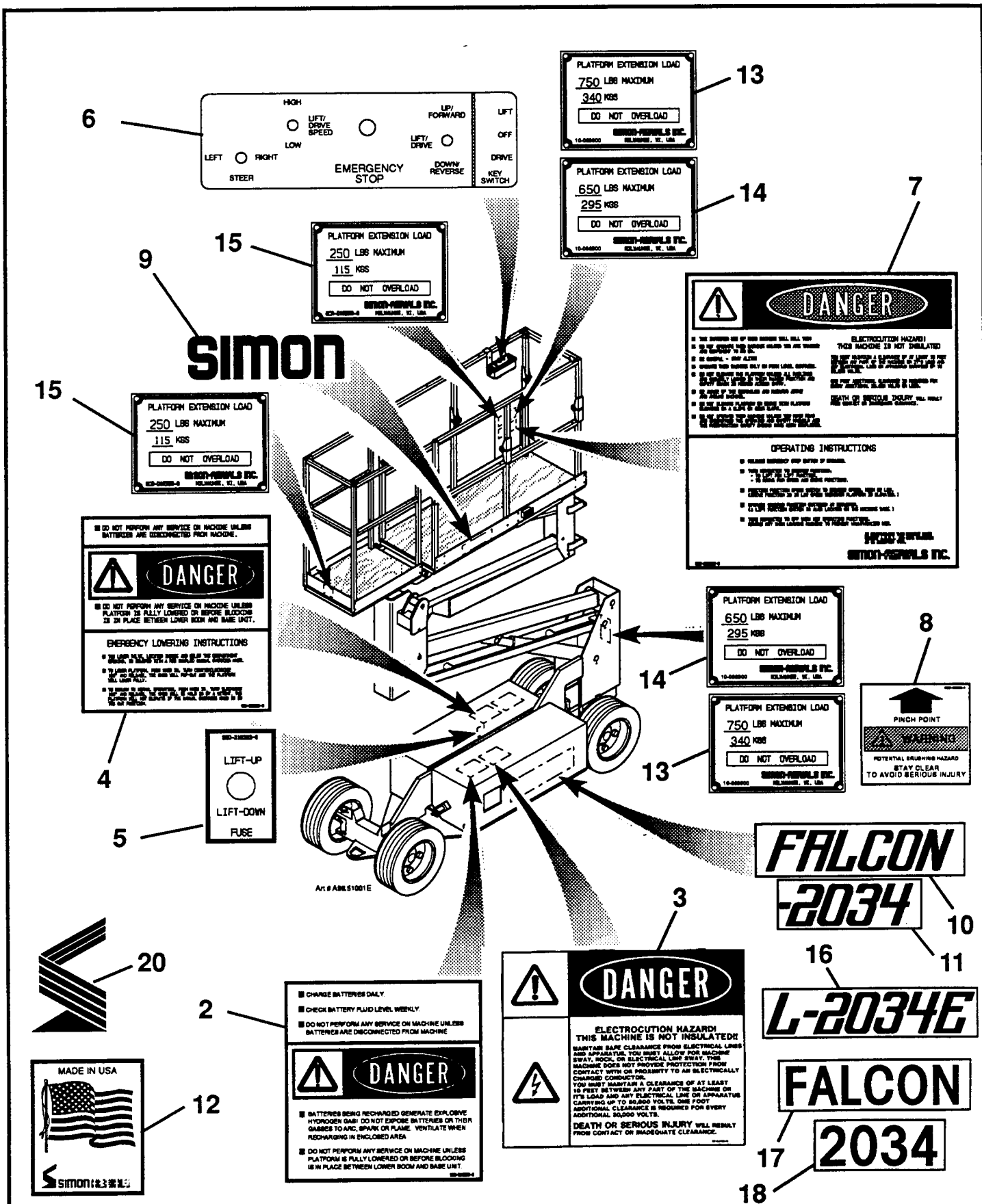
26.55

## PARTS LIST

[illegible]

## DECALS, FALCON 2034

**PART  
NO.**



TITLE DECALS, FALCON 2034

SIMON AERIALS INC.

REV. 02 MAR., 1992

PART NO.

PLATE NO.

99.51