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Supersedes: Issued Ride Manual  
Completion Date: Upon Receipt  
Page: 1 of 8

## NOTIFICATION BULLETIN

**RIDE MANUFACTURER:** A.R.M. (US) Inc.  
**AFFECTED PRODUCTION DATES:** 03/01/07, 04/01/07, 05/01/07, 06/15/07  
**RIDE NAME:** Full Tilt  
**AFFECTED SERIAL NO.:** FT201-03-01-07, FT202-04-01-07, FT203-05-01-07,  
& FT204-06-15-07  
**MODEL NUMBER:** FT 200 SERIES

**ABSTRACT OF ISSUE:**

To facilitate the proper maintenance and ordering of parts, updates to the supplied Ride Manual are necessary.

**REASON FOR RELEASE:**

Upon closer examination of the contents of the Ride Manual and parts actually used on the Full Tilt 200 series ride, several items are not in agreement. Further clarification is also needed on the Lubrication Chart in the Maintenance Section of the manual.

**ACTION TO BE TAKEN: (INSPECTION, MODIFICATION, REPLACEMENT, NDT, ORDER PARTS, MANUAL REVISION, PROCEDURAL CHANGE, ETC.)**

To make the bolt style and recommended lubricants to be used, the enclosed corrections have been supplied. The corresponding existing pages in the manufactures supplied manual must be removed. Then these new pages are to be inserted in their place. These include pages in Section 2 Maintenance, & Section 4 Parts Manual.

**DETAIL OF ISSUE:  
(TEXT/DRAWINGS/SCHEMATICS)**

None

**NOTICE**

Only components specified, authorized, or provided by A.R.M. (US) INC. shall be used. A.R.M. (US) INC. SPECIFICALLY DISCLAIMS ANY LIABILITY associated with the use of unauthorized components or modifications and/or alterations of authorized components.

**FULL TILT  
LUBRICATION CHART**

ITEM	LUBRICANT	FREQUENCY				REMARKS
		DAILY	WEEKLY	SEMIANNUAL	YEARLY/ 2000 hrs	
Tower & Car External Gear Rings & Pinions	APG 250 Luboplate	Check & Apply as Required				
Tower & Car Internal Slewing Ring	EP 2	Grease				At designated grease points
Tower Static Gear Ring	APG 250 Luboplate	Check & Apply as Required				
Platform/Hair guard Hinges	NLG1 No. 2 Lithium			Lightly Apply		
Air Compressor	SAE 30 Nondetergent		Check		Change	
Hydraulic Reservoir/System	"AW 32"	Check			Change	Drain all lines
All Drive Gear Boxes	Synthetic Mobile Oil SHC 630		Check		Change	
Push Ram Cylinder Rod	Light Oil		Oil			Lightly wipe on by hand
Drive Shaft Bearings	EP 2		Grease			Grease w/ grease Gun until excess is expelled
Tower & Arm Hinges	EP 2			Grease		Grease w/ grease Gun until excess is expelled
Locking Mechanism Ratchets & Pivot Points	NLG1 No. 2 Lithium		Check & Apply as Required			

# TOWER ASSEMBLY

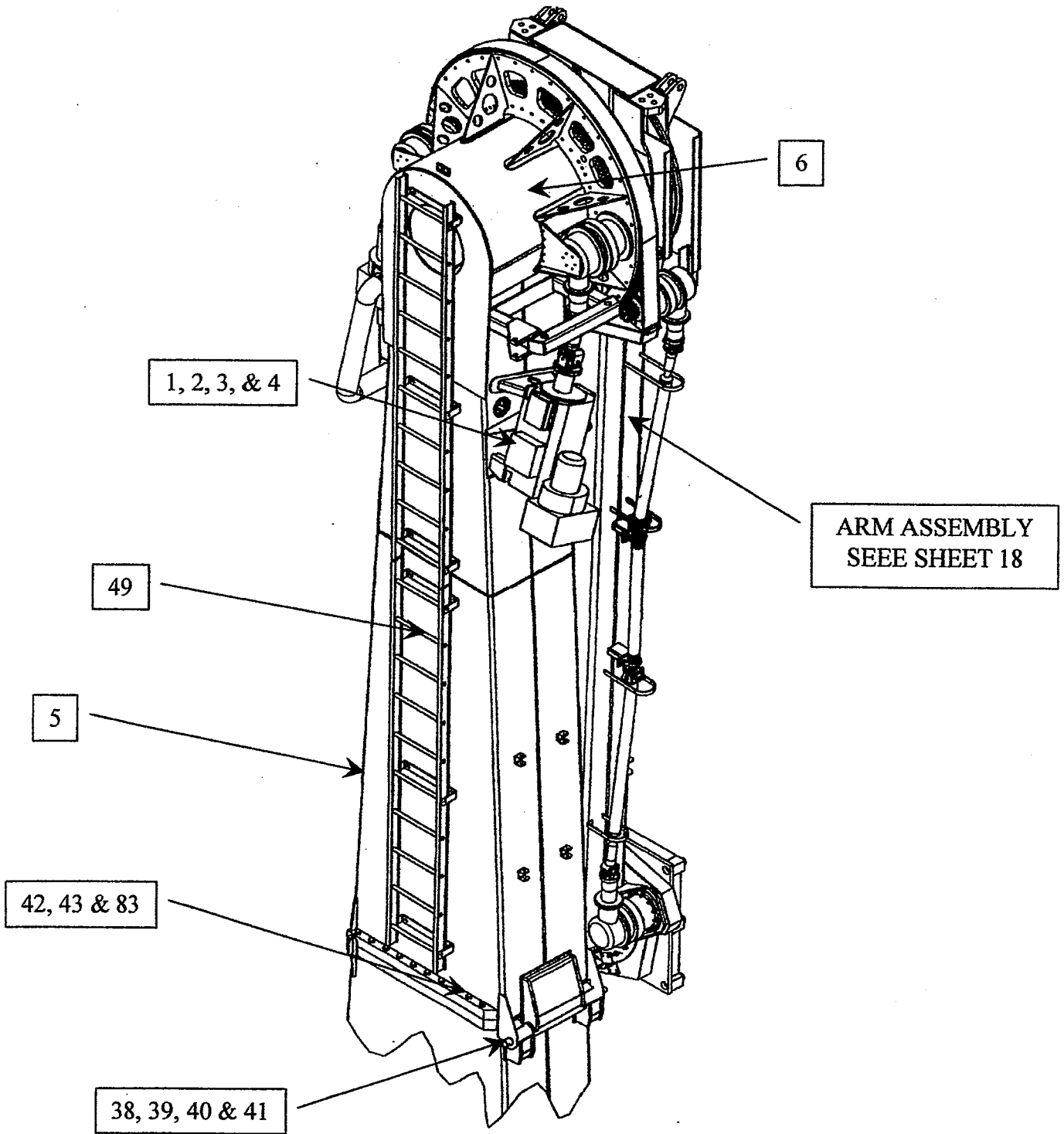


FIGURE 23

## TOWER ASSEMBLY PARTS LIST

REF. #	PART #	DESCRIPTION	QTY
1	24469902	MOTOR DC 60HP 460V (W/ ENCODER & BLOWER)	1
2	1/2x1 3/4 CS C8	BOLT (MOTOR x TOWER MOUNTING PLATE)	8
3	1/2 FW SAE	FLAT WASHER	19
4	1/2 NUT CL	NUT COARSE LOCK	8
5	414-0705-001	VEHICLE ARM/TOWER ASSEMBLY	1
6	414-0715-001	TOWER HUB WELDMENT	1
7	414-0742-012	GEAR BOX MOUNT	2
8	21190011	PIN MAIN RAM TOP 1.75X220MM	1
9	1/4 x 3 CP SS	COTTER PIN	7
10	414-0705-011	PIN, DOWEL	4
11	414-0728-001	VENT COVER WELDMENT	4
12	66161000	RIVET 3/16	16
13	23018701	GEARBOX MAIN TOWER	2
14	M16 x 55MM 10.9Z/9	BOLT (GEAR BOX x GEAR RING)	20
15	5/8 FW SAE G8	FLAT WASHER	92
16	601317400	SLEEVE 37D FLARED 3/8"	4
17	3/8 NUT SHORT	NUT-SHORT 3/8" O.D. TUBE	4
18	60019400	ADAPTER 3/8 MP: 3/8 M37	2
19	60034800	ADAPTER 90D 3/8MP: 3/8M37	2
20	65286000	PIN, EXPANSION, 1/2x2 LG	4
21	414-0361-001	CAP, PINION	1
22	M10-1.5 x 25MMFH	BOLT (PINION x GEAR BOX)	3
23	M8-1.25 x 25MMGR8.8	BOLT (GEAR BOX x TOWER PLATE)	12
24	5/16 LW	WASHER LOCK	12
25	3/8 x 1.5 CS C5	BOLT (DRIVE MOTOR BLOWER x DUCT)	24
26	3/8 x 1.5 CS C8	BOLT (TOWER PLATE x TOWER) (MISC.)	42
27	3/8 FW HRD	WASHER FLAT HRD	32
28	3/8 FW	WASHER FLAT	40
29	3/8 NUT CL C5	NUT COARSE LOCK	24
30	G16120-1	GEAR RING	1
31	5/8 x 5 CS C8	BOLT (GEAR RING x TOWER - TOP)	28
32	5/8 NUT C8	NUT GRADE 8	92
33	5/8 FW SAE C8	WASHER FLAT	36
34	5/8 x 4 1/4 CS C8	BOLT (GEAR RING x TOWER - LOWER)	2
35	21190012	PIN DAMPER RAM	1
36	BA-0117	CYLINDER- TOWER DAMPENING	1
37	5/8 x 2 CS C5	BOLT (PUSH RAM x TOWER BASE)	4
38	MB454DDU	HINGE PIN BUSHING	2
39		PIN TOWER HINGE	1
40	1 3/4 FW SAE	WASHER TOWER HINGE	2
41	6516500	PIN COTTER 1/4x3	2
42	3/4-10x7.5 CS C5	BOLT (TOWER x TOWER BASE)	20
43	3/4-10 FULL NUT F436	NUT (TOWER x TOWER BASE)	20
44	23923600	LADDER 10' 250#	2

**TOWER ASSEMBLY PARTS LIST (cont'd)**

45	35232700	PIN, LADDER	6
46	414-0765-001	LADDER BRACKET	5
47	414-0765-002	LADDER BRACKET	1
48	414-0762-002	LADDER SUPPORT	6
49	23923800	LADDER 16' SINGLE SEC 250#	1
50	414-0429-003	POST WELDMENT	1
51	414-1429-001	TORSION WELDMENT	1
52	1/2-13 x 1.25 CS C5	BOLT COARSE (TORSION WELDMENT x HUB)	2
53	414-0710-013	GREASEBLOCK	1
54	1/4x1.5 CS C5	BOLT COARSE (GREASE BLOCK x TOWER)	2
55	1/4 SAE FW	WASHER FLAT	4
56	1/4 NUT CL	NUT COARSE LOCK	2
57	68980200	ZERK GREASE 1/8 - PT STRAIGHT (LG)	4
58	60145400	ADAPTER 1/8MP:1/4 TUBE	8
59	48015200	TUBE AIR BRAKE .25 RED	1
60	60172400	NUT TUBING 1/4"	8
61	60131000	SLEEVE 37D FLARED 1/4"	8
62	60169800	INSERT TUBING 1/4"	8
63	414-0755-011	PROP SHAFT BILLIT	2
64	414-0350-003	DRIVELINE U-JOINT 90D CLOCKED	1
65	414-0755-012	PROP SHAFT BILLIT	2
66	414-0350-002	DRIVELINE U-JOINTS	1
67	414-0755-014	PINON-DRIVELINE COMPT	2
68	0414-0755-015	ARM GEAR BOX WASHER	2
69	M20-2.5 x 35MM GR8.8	BOLT ZINC PLATED	2
70	3/4 FW HRD	WASHER FLAT HRD	2
71	0414-0755-016	MAIN GEAR BOX WASHER BILLET	2
72	M12-1.7 x 50MM G8	BOLT ZINC PLATED	2
73	0414-0426-003	RING BRACKET	1
74	414-0426-002	SLIPRING TUBE - TOWER	1
75	414-0427-001	UHMW BUSHING AIRLINE SUPPRINGS	1
76	414-0425-013	PIPE - COUNTERWEIGHT ARM	1
78	20493903	SLEWING RING - MAIN	1
79	414-0710-011	ALL THREAD	10
80	20493904	STATIC RING	1
81	5/8-11 x 5.5 CS C8	BOLT COARSE (STATIC RING x TOWER PLATE)	34
82	M16-2x110MM 10.9	BOLT ZINC PLATED (STATIC RING)	2
83	3/4 FW F436	WASHER FLAT	20

## ARM ASSEMBLY PARTS LIST

REF. #	PART #	DESCRIPTION	QTY
1	414-0220-004	FIANAL WELDMENT COUNTER WEIGHT ARM	1
2	414-0249-001	PIN WLEDMENT CNTW (COUNTER WEIGHT SET UP)	2
3	414-0249-006	TUBE-RING CNTW PIN	2
4	2IDx3ODx.0895 TW	WASHER THRUST	2
5	1 1/2-6 x 9.5 CS C5	BOLT (COUNTER WEIGHT)	2
6		NO LONGER USED	
7	1 1/2 FW F436	WASHER FLAT	2
8	1 1/2 NUT C5	NUT COARSE	2
9	414-0220-36	BUSHING - ARM	2
10	68980900	ZERK GREASE FITTING 1/4-28 STRAIGHT	4
11	414-0200-016	KEEPER NUT	2
12	1.25x7 CS C5	BOLT COARSE BLACK	6
13	1.25 FW F436	WASHER FLAT	6
14	1.25 NUT C5	NUT COARSE	6
15	414-0213-018	STOP - BUSHING	4
16	414-0200-011	STRAIGHT PIN	2
17	414-0200-012	SPACER ARM	4
18	414-0200-013	SPACER ARM	4
19	414-0200-014	SPACER ARM	4
20	414-0200-015	SPACER ARM	4
21	65165800	PIN COTTER 1/4 x 2	4
22	414-0213-001	VEHICLE ARM DRIVE ASSEMBLY	1
23	22020500	COUPLER HYD. 1/2-14 NPTF	1
24	44102502	CONDUIT 1 (CAR FLEX)	7
25	20743900	BOLT 1/2" TERMINAL (I/E)	1
26	26134202	INGSLIP 2.5" BORE 9-RING	1
27	414-0705-011	PIN-DOWEL	4
28	21895100	CONN. LT-FX 1" STR NON-INS.	1
29	27687800	SWIVEL AIR 1/2MP: 1/2FP (P/H)	1
30		PIN COUNTER WEIGHT SAFETY	1
31		1/4x4 CLEVIS PIN	1
32	5/8-11 x 5.5 CS C8	BOLT COARSE (OUTER STATIC RING x ARM)	40
33	5/8 FW A325	WASHER FLAT HRD A325	40
34	5/8 NUT G8	NUT COARSE G8	40
35	414-0213-016	PROXY SWITCH TARGET WELDT	1
36	1/2-13 NUT	NUT COARSE	2
37	1/2 SAE FW	WASHER FLAT	2
38	414-0255-012	PROPSHAFT BILLIT DRIVE1	2
39	3/8x1 CS C8	BOLT COARSE (PROP SHAFT BILLIT x DRIVE LINE VEHICLE)	16
40	3/8 FW S/S	WASHER FLAT S/S	16
41	EN24T-15-28	PINION-DRIVELINECOMPT	2
42	414-0360-001	CAP, PINION	2
43	M10-1.5x25MM FH SH	BOLT SOCKET HEAD FLAT CAP SCREW	6
44	414-0255-015	WASHER, MOTOR & MAIN DRIVE GEAR BOX BILLET	2

## CAR ASSEMBLY PARTS LIST

REF. #	PART #	DESCRIPTION	QTY
1	1.25-7x9 1/2 SH CS	BOLT (ARM x CAR)	6
2	1.25-7 FULL NUT C5	NUT	6
3	182400H	CRANK JACK	3
4	AC40220-34	JACK MOUNTING PLATE	4
5	3/8x1 1/2 CS C5	BOLT (CAR JACK x MOUNTING PLATE)	8
6	3/8 SAE FW	WASHER FLAT	16
7	3/8 NUT	NUT	8
8	3/8x22 E&E C	CABLE 6x25 E & E W/ THIMBLE	2
9	L160575	WHEEL	4
10	L165008-1	WHEEL BUSHING	8
11	1 X 4 1/2 CS F5	BOLT FINE, WHEELS	4
12	1 NUT FL	NUT, NYLOCK FINE, WHEELS	4
13	1 X 2 FW	WASHER, FLAT MACHINED, WHEELS	8
14	AA40220-37	9/16x11 SAFETY PIN	2
15	43026	LIGHT BAR	8
16	35058	AIR TANK 1400 CU IN	1
17	3/8 x 1 1/4 CS C5	BOLT (AIR TANK x CAR)	4
18	3/8 SAE FW	WASHER	8
19	3/8 NUT	3/8 NUT	4
20	M/31102	AIR BELLOWS NORGREN	2
21	5/16 x 1 CS C5	BOLT (AIR BELLOWS x CAR FRAME)	16
22	5/16 FW SAE	WASHER	32
23	5/16 NUT CL	NUT	16
24	FT LAPBAR	LAP BAR	14
25	FT SEAT	SEAT FIBERGLASS	14
26	74715T67	BRUSH, LAP BAR GUARD	28
27	8813T13	HOLDER, LAP BAR GUARD	28
28	A1593-002	SEAT BELT ASSY FT	14
29	3/8 x 2.5 CS C5	BOLT (SEAT BELT x SEAT)	14
30	3/8 SAE FW	WASHER	28
31	3/8 NUT CL	NUT NYLOCK	14
32	RFI-1620-24	LAP BAR BUSHING, CROSS TUBE	28
33	3/8 X 1 CS C5	BOLT COARSE, LAP BAR PIVOT BLOCK	56
34	3/8 LW	LOCK WASHER, LAP BAR PIVOT BLOCK	56
35	M20 NUT CL	NYLON LOCKNUT, LAP BAR	24
36	RSP-150	HINGE 3 LEAF (HAIR GUARD HINGE)	8
37	5/8x7 CS C8	BOLT COARSE (SAFETY CABLE x CAR FRAME)	4
38	14-20LP	PIN LOCK 1/4 x 2 1/4 GRIP (JACK HANDLE PIN)	2
39	66150	CLEVIS PIN 5/8 x 3 (W/ COTTER PIN)	28
40	2.00DXPSRBS08.0	CYLINDER, LAP BAR 2" BORE	14
41	AA630-8	BUSHING 5/8OD x 3/8ID 1 3/4 LONG	14
42	66072	3/8x2 CLEVIS PIN ZINC PLATED (W/ COTTER PIN)	14
43	3/8 SAE FW	WASHER FLAT ZINC PLATED	28
44	414-0170-001	RATCHET LOCK ASSEMBLY	14

# HYDRAULIC

## HYDRAULIC SCHEMATIC

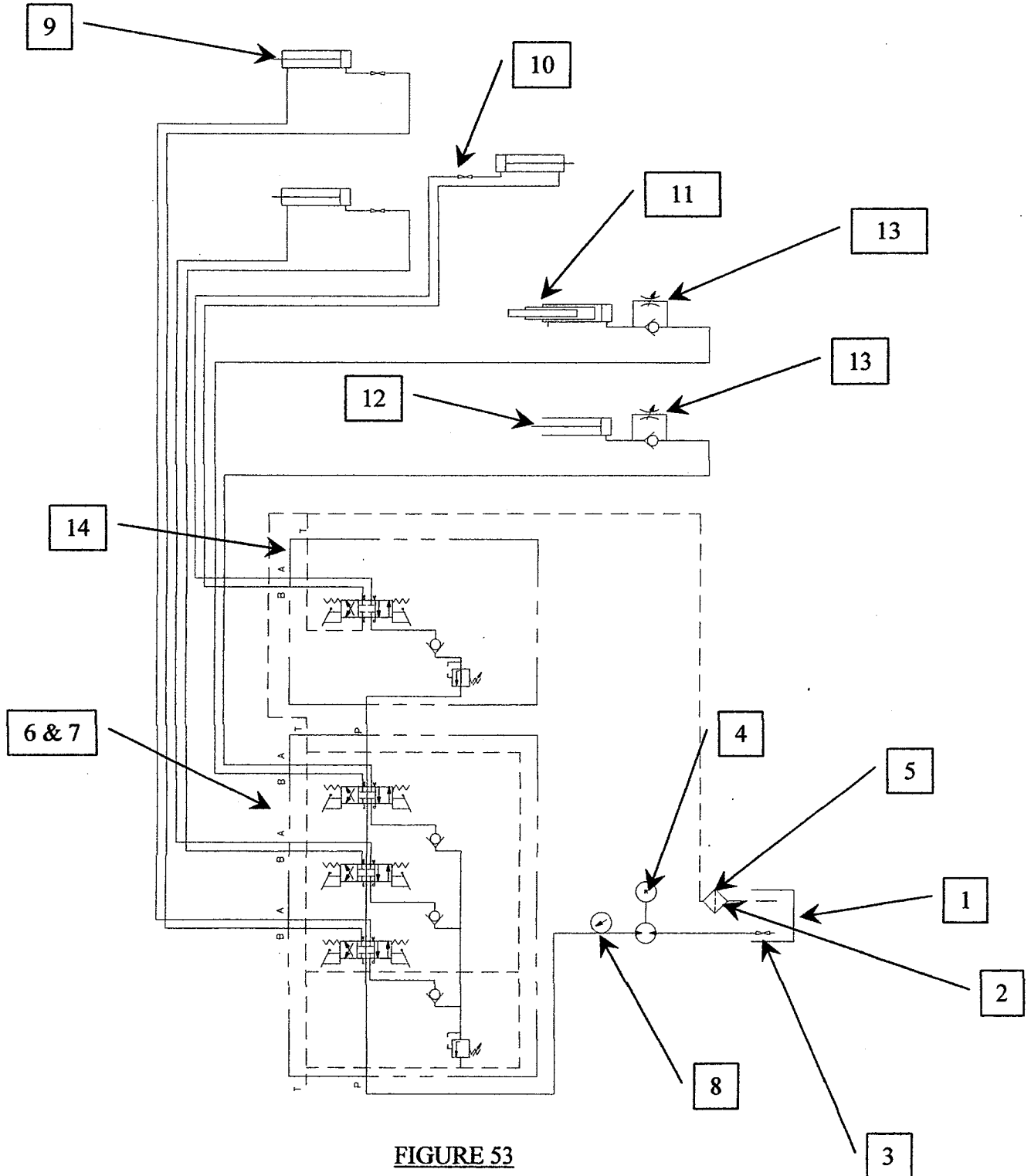


FIGURE 53