

PARTS MANUAL

**Rotary Boom Mower
BG 19R, BG21R, BG23R**

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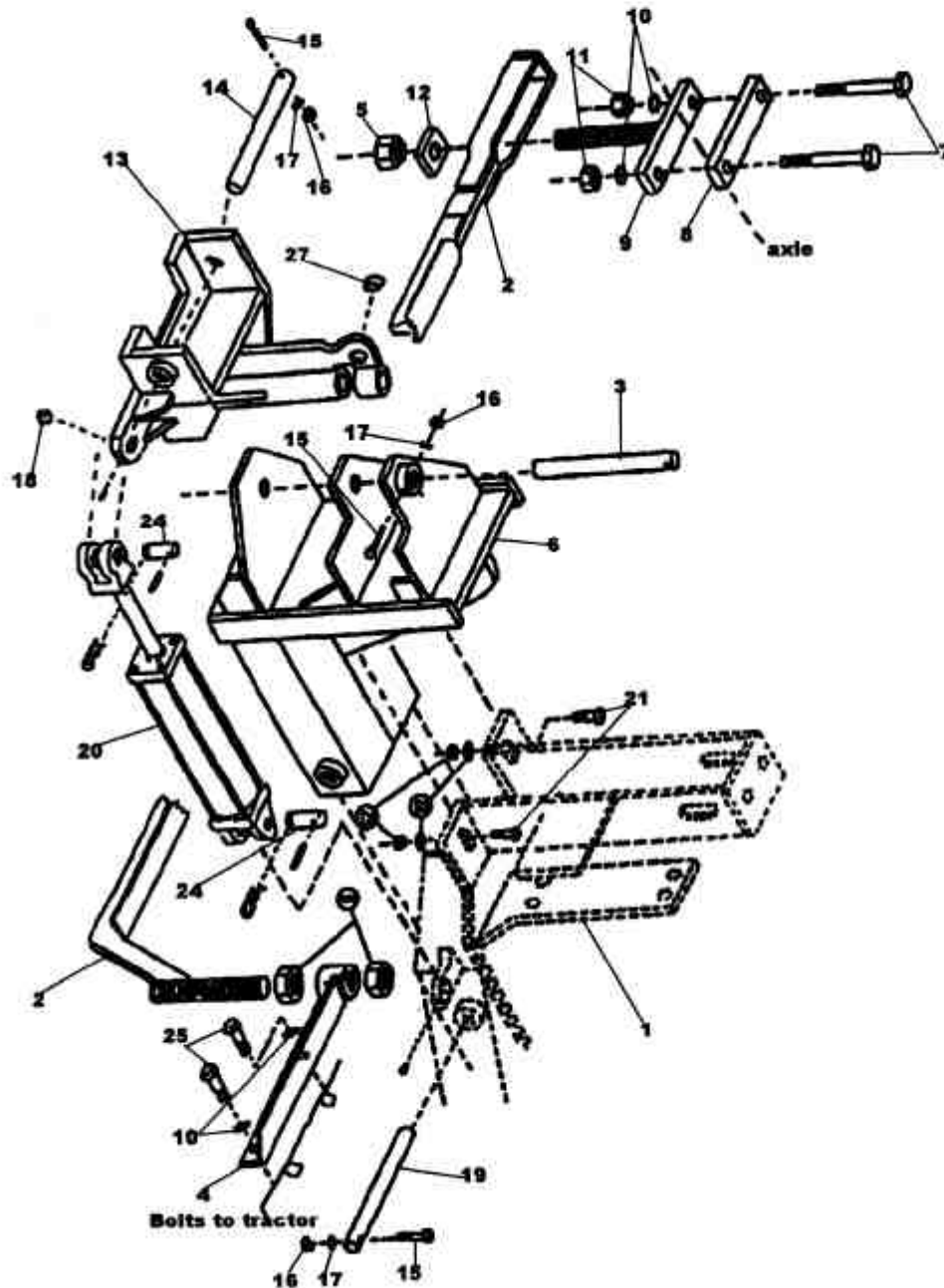
SIDE MOUNT MOWER

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Deck Assembly
BG19R 50" Deck

REF NO	PARTS DESCRIPTION	REQUIRED	PART #
1.	motor	1	MM055-O
2.	street El, 1 ¼" x 90° (left)	1	SFK20
3.	street El, 1 ¼" x 90° (right)	1	SFK20
4.	coupling chain	1	MM057
5.	motor mounting bracket	1	MMS150
6.	mower deck	1	MM50-R
7.	deck pin, 1 ½" x 11"	1	MM060
8.	right skid shoe	1	MM061
9.	bearing carrier	1	MM063
10.	left skid shoe	1	MM062
11.	trunnion pin 1" x 10 ½"	1	MM064
12.	plow bolts, 3/8" x 1"	18	3816x114FHSC
13.	lock washers, 3/8"	18	38LW
14.	hex nuts, 3/8" NC	18	3816HN
16.	cap screw, 3/8" x 1 ½" NC	11	3460
17.	flap retaining strap	1	MM189
18.	guard flap	1	MM193
20.	" Mow Master " decal	1	MM006
25.	coupling, motor	1	MM187
26.	coupling, spindle	1	MM188
27.	spring	2	MM194

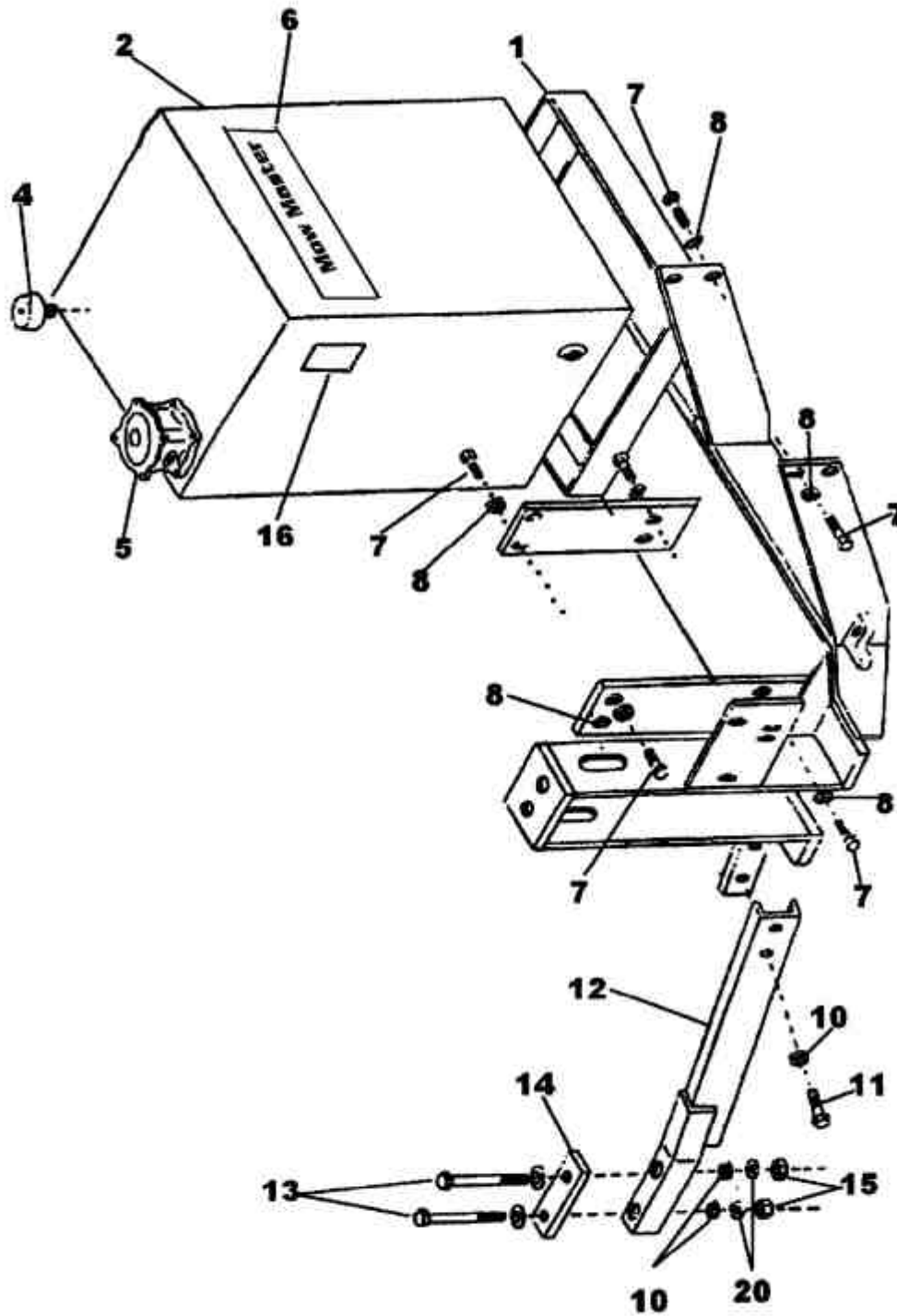
Boom Mower
subframe & boom bracket assembly
Figure 2



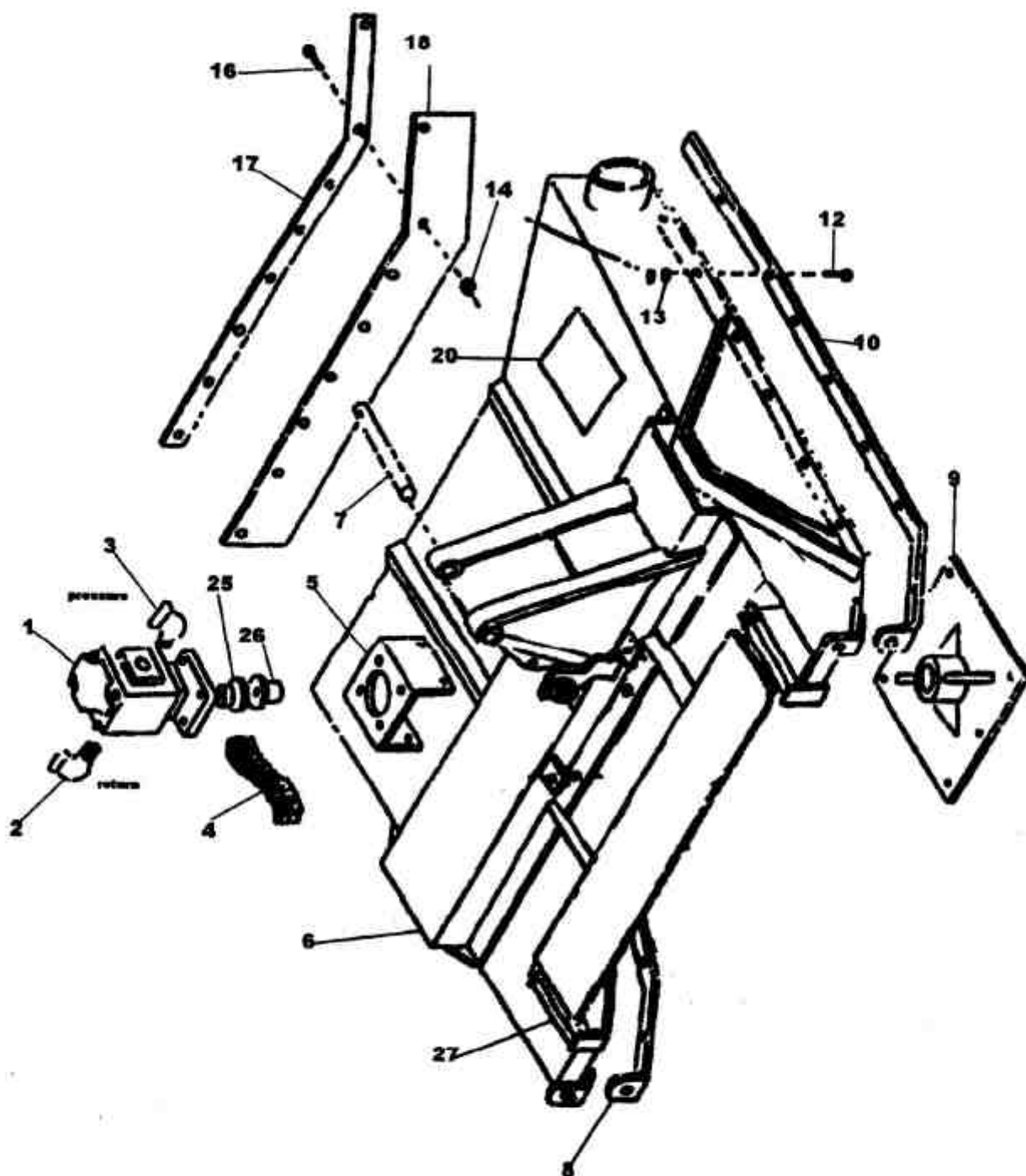
Boom Mower
subframe & boom bracket assembly
Figure 2

REF NO	PARTS DESCRIPTION	REQUIRED	PART #
1.	main & sub frame	1	MM001
2.	center relief section	1	MM017
3.	inner vertical swing pin 1 ½" x 22 ½"	1	MM018
4.	front relief bracket	1	MM019
5.	hex nut, 1 ½"	3	MM020
6.	swivel plate	1	MMSW
7.	cap screw, ¾" x 10" NC	2	3410x10HH
8.	upper rear sub frame bracket	1	MM023
9.	lower rear sub frame bracket	1	MM024
10.	lock washers, ¾"	2	34LW
11.	hex nuts, ¾" NC	2	3410HN
12.	rear sub frame square plate	1	MM026
13.	swivel assembly	1	MMSW1
14.	main boom horizontal pin 1 ½" x 15 ½"	1	MM141
15.	bolt, 3/8" x 3" NC	3	3816x3HH
16.	hex nut 3/8"	3	3816HN
17.	lock washer, 3/8"	3	38LW
18.	bushing, 1 ¼" x 1"	2	SB1
19.	boom bracket pin 1 ½" x 16"	1	MM142
20.	boom swing cylinder 3 x 8	1	MM33008
21.	bolt, 7/8" x 2 ¾"	2	
22.	lock washer, 7/8"	2	78LW
23.	hex nut, 7/8"	2	78HN
24.	cylinder pins, 1" x 4"	2	MM050
25.	bolts, ¾" x 2 ½"	2	3410x212HH
26.	transition brackets	1	MMT-B2
27.	bushing 1" x 1 5/8"	1	LB4

Main Frame Assembly
Rotary Boom Mower BG19R, BG21R, BG23R
Figure 1

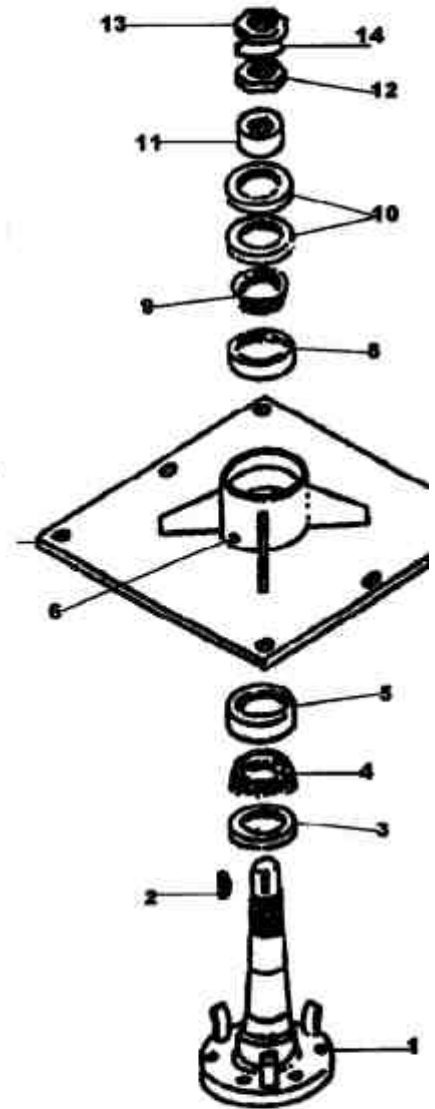


Deck Assembly
BG19R, BG21R, BG23R
50" Deck

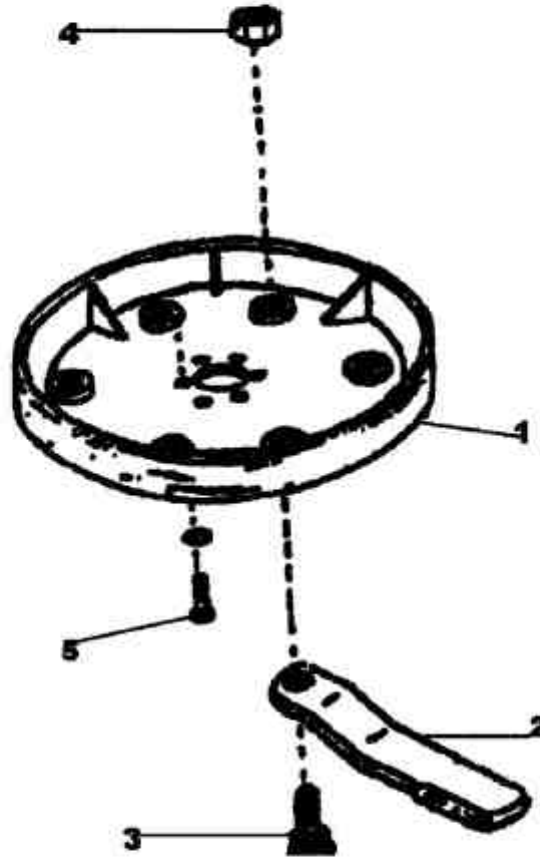


**Boom Mowers
Spindle Assembly
MMS940**

REF NO	PART DESCRIPTION	REQUIRED	PART#
1.	spindle	1	MM153
2.	spindle key	1	MM154
3.	seal	1	MM155
4.	bearing cone	1	MM156
5.	bearing cup	1	MM157
6NS	18" whip hose	1	715-1229
7.	bearing carrier	1	MM063
8.	bearing cup	1	MM160
9.	bearing cone	1	MM161
10.	upper ring seals	2	MM162
11.	bearing adjustment sleeve	1	MM163
12.	bearing adjustment nut	1	MM165A
13.	bearing lock nut	1	MM165
14.	locking tab washer	1	W09
15.	roll pin - 3/4"	4	MM152



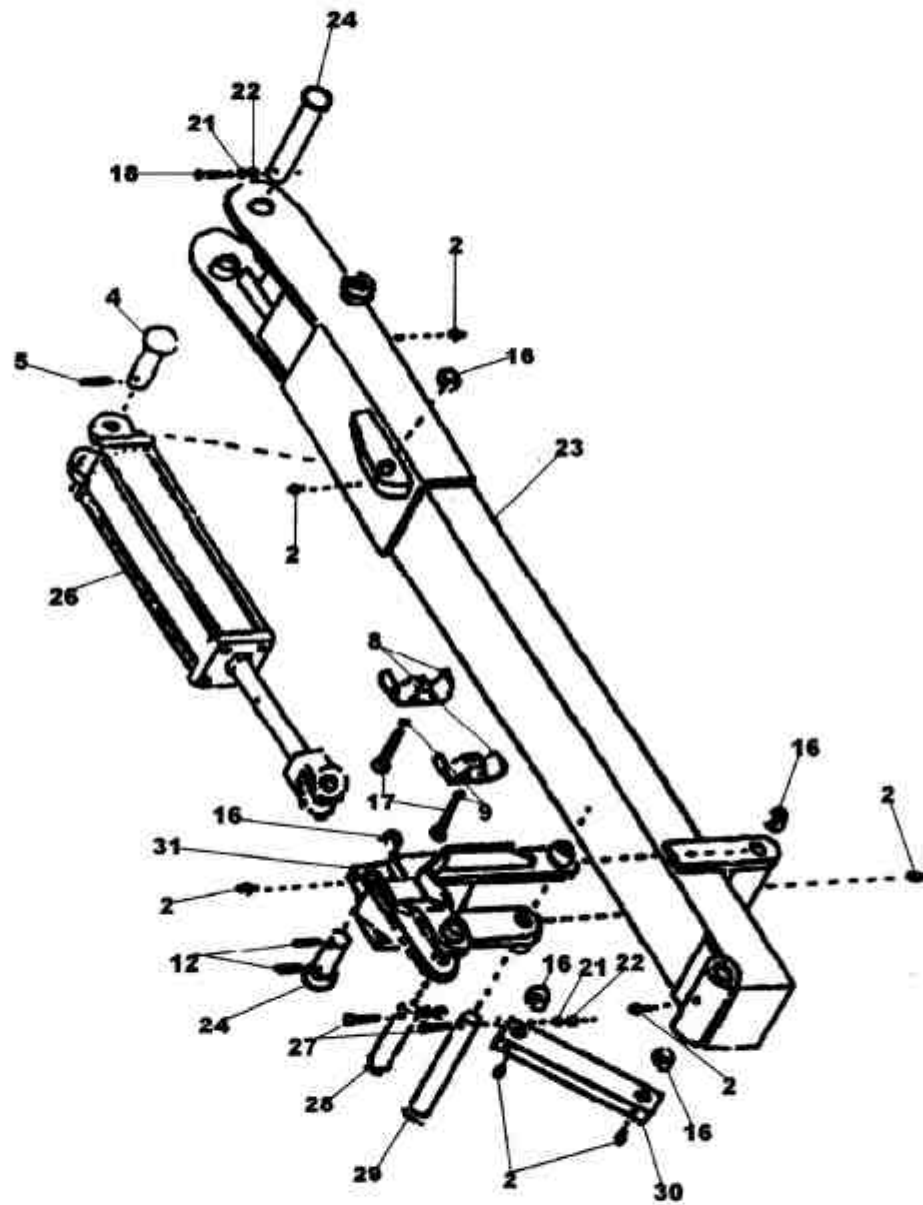
Blade Mounting Assembly and Blade
BG19R, BG21R, BG23R



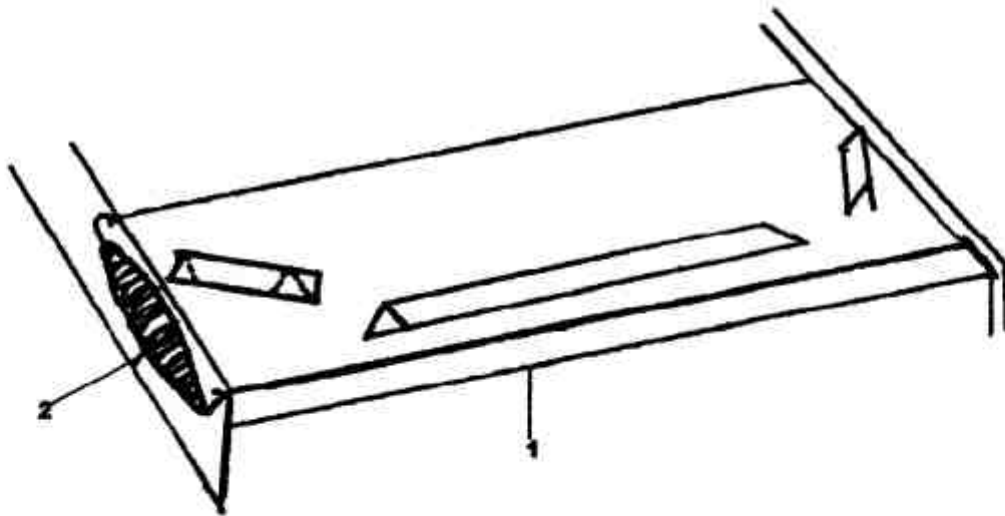
REF NO	PART DESCRIPTION	REQUIRED	PART #
1.	mounting disk-50" deck	1	MMS50
2.	50" blade	2*	MMT1
3.	blade mounting bolt	2*	MMB1
4.	blade mounting nut	2*	MMN1
5.	bolt, 5/8" x 2" fine thread	6	MM2664

* 2, 3, 4 or 6 blades may be used

Boom Mower
Secondary Boom
Figure 4B

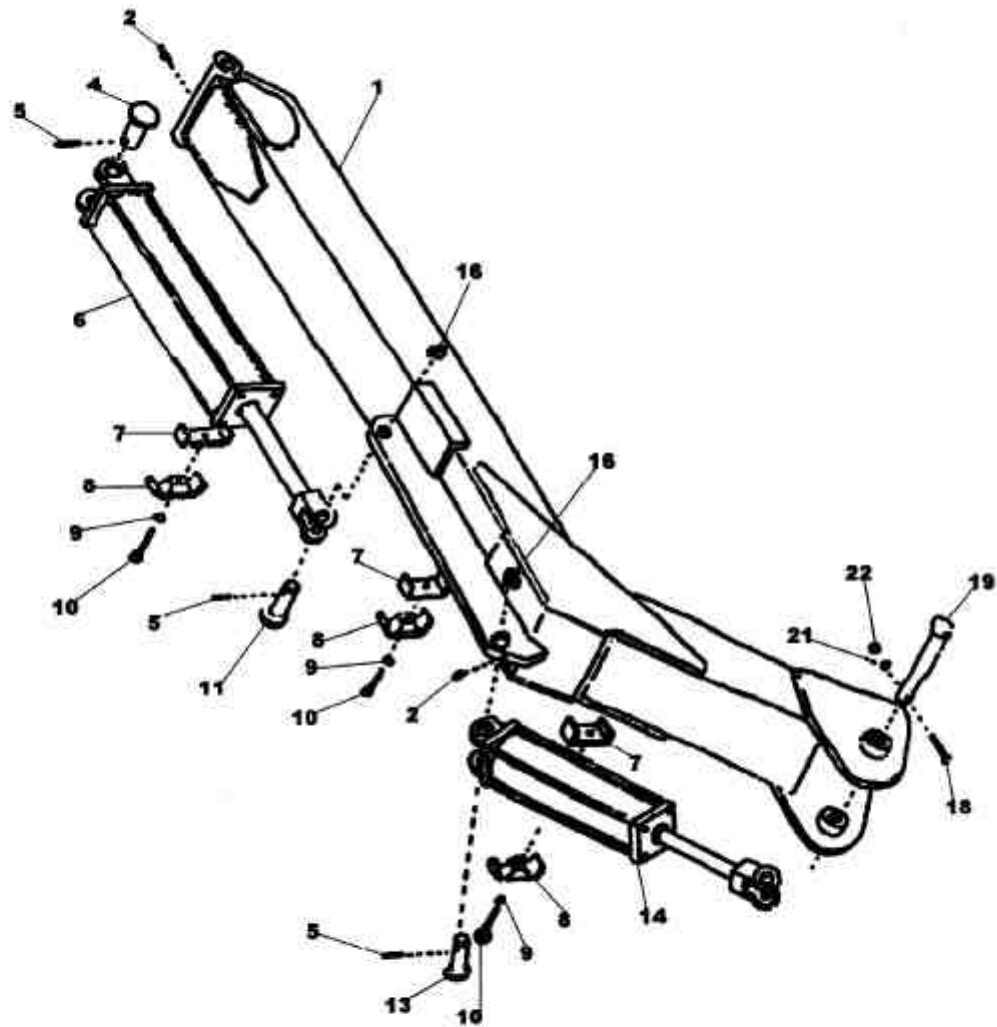


Boom Mower BG 50
Spring loaded retractable blade guard



REF NO	DESCRIPTION	REQUIRED	PART #
1.	door assembly	1	MM190
2.	spring	2	MM194

Boom Mowers
Main Boom
Figure 4A



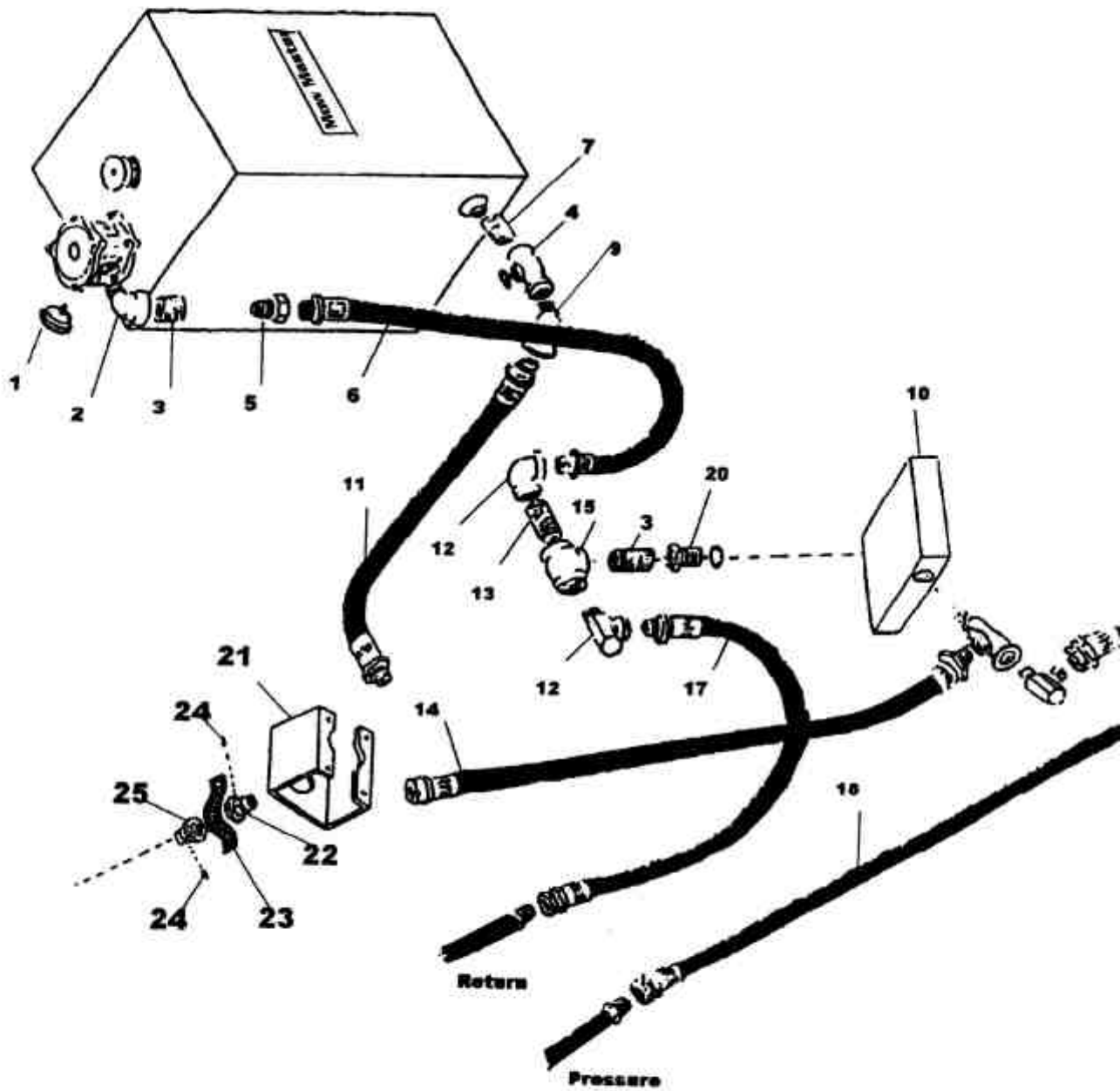
Boom Mowers
Main and Secondary Booms
Figure 4A and 4B

REF NO	PARTS DESCRIPTION	REQUIRED	PART #
1.	main boom BG19R	1	MM027
1A.	main boom BG 21R	1	MM027A
1B.	main boom BG 23R	1	MM027B
2.	zerk, 1/4"	4	80024
4.	cylinder pin 1 1/4" x 3 1/2"	1	MM019
5.	roll pin, 1/4" x 2"	3	31620
6. ***	main boom cylinder, 4" x 24"	1	MM34024
7.	control tube clamp	3	MM032
8.	double tube clamp	5	MM033
9.	lock washer, 7/16"	8	716LW
10.	capscrew, 7/16" x 3"	6	4812
11.	clevis pin, 1" x 4"	1	MM050
13.	clevis pin, 1" x 3 1/2"	3	MM038
14.	secondary boom cylinder 3 1/2" x 20	1	MM33520
16.	bushing	7	SB-1
17.	capscrew, 7/16" x 2 1/2"	2	71614x212HH
18.	capscrew, 3/8" x 3"	2	3816x3HH
19.	secondary boom swivel 1 1/2" x 13"	1	MM042
21.	lock washer, 3/8"	8	38LW
22.	hex nut, 3/8"	3	38HN
23.	secondary boom BG19R	1	MM046
23A.	secondary boom BG21R	1	MM046A
23B.	secondary boom BG23R	1	MM046B
24.	secondary boom cyl pin 1 1/4" x 7 1/4"	2	MM047
26.	deck roll cylinder 3" x 18"	1	MM33018
27.	capscrew	2	4793
28.	roll arm pin, 1" x 4"	1	MM050
29.	accuator pin 1" x 10 1/2"	1	MM051
30.	accuator link	1	MM052
31.	accuator deck roll assembly	1	MM053
32.	secondary link block (not shown)	1	MM55
***	cylinder butt end	1	MMC424-125

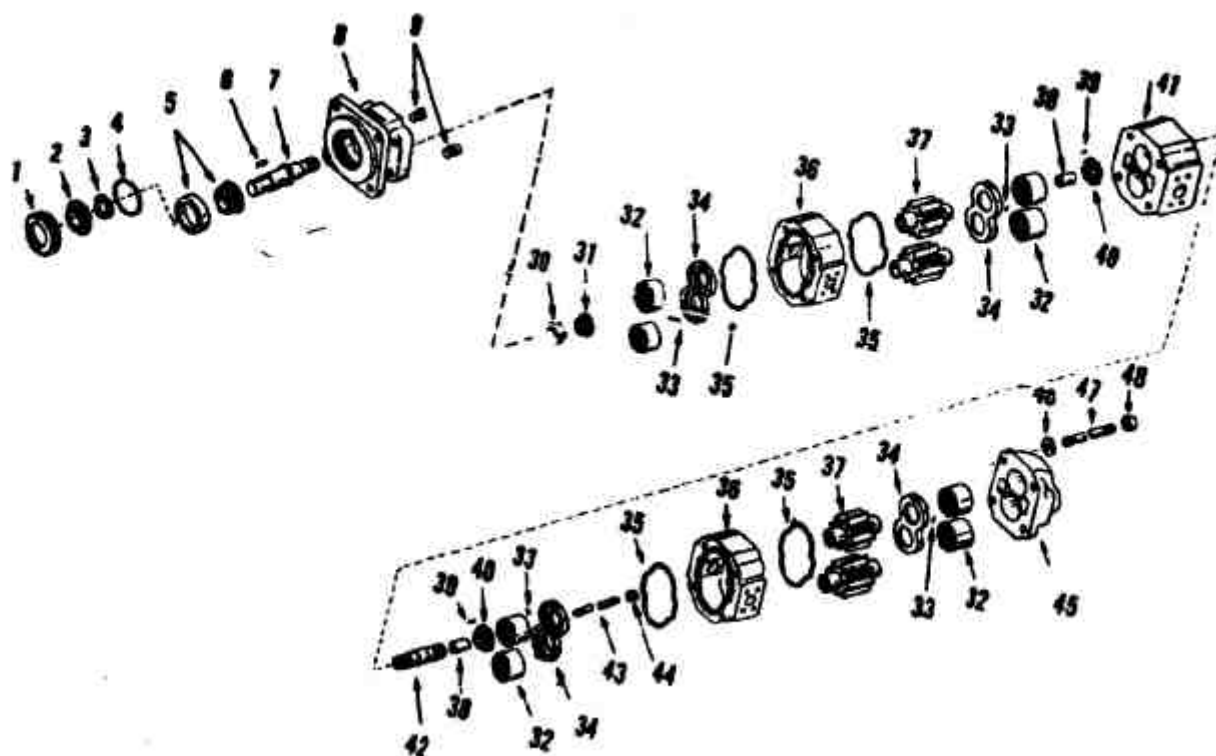
Boom Mowers
Feed line assembly
Figure 6

REF NO	PARTS DESCRIPTION	REQUIRED	PART #
1.	pressure gauge	1	MM649
2.	street el, 1 ¼" x 90° x HD	1	MM056
3.	close nipple 1 ¼" x HD	2	MM069
4.	1 ¼" gate valve	1	MM070
5.	swivel, 1 ¼" MP- 1 ¼" FP	1	MM071
6.	hose, 1 ¼" x 82"	1	MM24520
7.	1 ½" close nipple XHD	1	MM073
9.	street el, 1 ¼" x 45° XHD	4	MM075
10.	valve, (complete)	1	MM076
11.	hose, 1 ¼" x 100"	1	MM24516
12.	street el, 1 ¼" x 90°	4	MM056
13.	1 ¼" x 4" nipple XHD	1	MM078
14.	hose, 1 ¼" x 68"	1	MM24516
15.	tee, 1 ¼" x XHD	2	MM080
16.	1 ¼" MP x 90° swivel	2	MM081
17.	1 ¼" hose, x 53"	1	MM24516
18.	1 ¼" hose, x 53"	1	MM24516
20.	Adapter, 1 ¼" MB-1 ¼" FP	1	MM084
21.	pump mounting bracket	1	MM085
22.	PTO adapter coupling (21spline)	1	MM086
23.	chain coupling	1	MM057
24.	grease zerk, ¼" straight	2	80024
25.	pump adaptor coupling	1	MM089

Boom Mowers
Feed line assembly
Figure 6



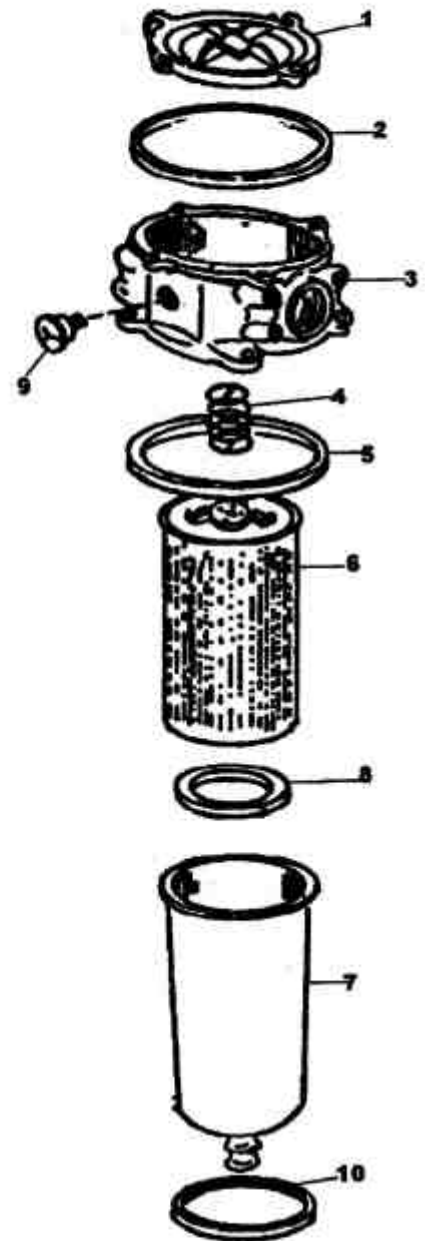
Front Mount Pump MM1208 STD



REF NO	PARTS DESCRIPTION	REQUIRED	PART #
1.	retainer ring	1	MM169
2.	seal retainer	1	MM208-7
3.	double lip seal	1	MM208-2
4.	o rings	2	MM208-3
5.	tapered bearings	1	MM208-5
7.	drive shaft - splined	1	MM208-4
8.	shaft end cover	1	MM175
9.	check assembly/plug	2	MM176
30.	shaft bushing	1	MM1208-8
31.	spring	1	MM1208-9
32.	roller bearings	8	MM181
33.	pocket seals (strips)	2	MM182
34.	thrust plates	4	MM1208-10
35.	gasket seal	4	MM187A
36.	gear housing	2	MM1208-11
37.	matched gears (set)	2	MM1208-12
38.	spacer	2	MM208-6
39.	roll pin	2	MM179
40.	bushing	2	MM180
41.	bearing carrier	1	MM1208-13
42.	connecting shaft	1	MM1208-14
43.	stud	1	MM1208-15
44.	lock nut	1	MM208-23
45.	port end cover	1	MM1208-16
46.	washers	4	MM1208-17
47.	studs	4	MM208-18
	cap screws	4	MM208-24
48.	hex nuts	4	MM1208-19
	seal kit		MM1208SK

Boom Mowers
Motor feedline in-tank filter
MM005

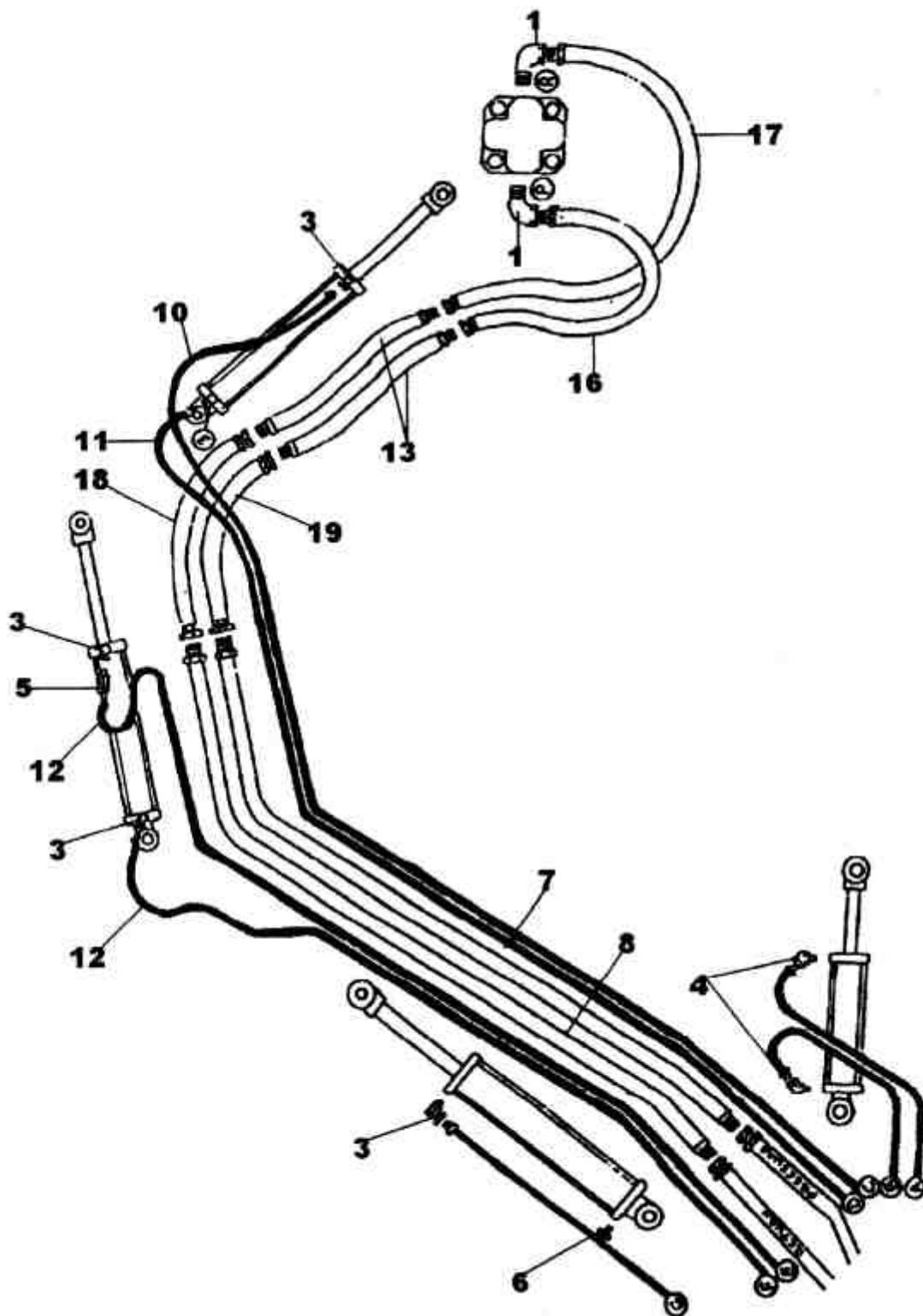
REF NO	PARTS DESCRIPTION	REQUIRED	PART #
1.	cover	1	MM140
2.	seal	1	MM141
3.	filter body	1	MM142
4.	element spring	1	MM143
5.	seal-body to tank	1	MM144
6.	25 micron element	1	MM145
7.	filter bowl	1	MM146
8.	seal-element to bowl	1	MM152
9.	gauge	1	MM649
10.	seal-bowl to body	1	MM005A
11.	seal kit	1	MM16-5040



Boom Mowers
Boom arm hydraulic lines assembly
Figure 7

REF NO	PARTS DESCRIPTION	REQUIRED	PART #
1.	street el, 1 ¼" x 90°	2	MM056
3.	adj. o ring MXFP swivel x 90°	5	MM108
4.	adj. O ring, MXFP swivel x 45°	2	MM109
5.	adjustable restrictor	1	MM110
6.	cylinder breather ½" o ring	1	MMBHF12
7.	preformed tube, 1 ½" x 86" *	1	KT100
8.	preformed tube, 1 ½" x 88" *	1	KT100
10.	hose, ¼" x 68"	1	MM24504
11.	hose, ¼" x 48"	1	MM24504
12.	hose, ¼" x 20"	2	MM24504
13.	preformed tube *	2	KT100
16.	hose, pressure 1 ¼" x 56"	1	MM24516
17.	hose, return, 1 ¼" x 63"	1	MM24516
18.	hose, return, 1 ¼" x 40"	1	MM24516
19.	hose, pressure, 1 ¼" x 39"	1	MM24516
	*tube kit for 19 ft. boom		KT100
	*tube kit for 21 ft and 23 ft boom		KT116

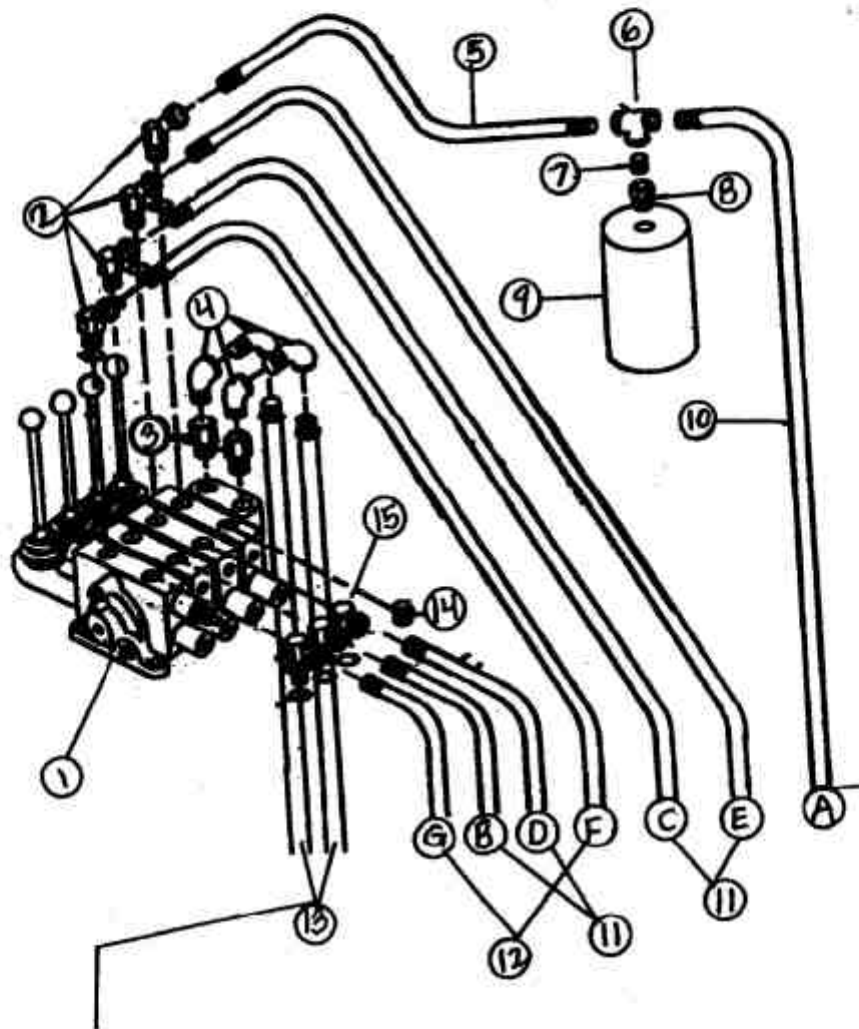
Boom Mower
Hydraulic lines assembly
Figure 7



Boom Mowers
Control feed line assembly
Figure 8

REF NO	PARTS DESCRIPTION	REQUIRED	PART #
1.	four spool valve	1	MM125
2.	45° adapter, 3/8" O ring, 3/8" FP	4	6902-6-6
3.	adapter, 3/8" O ring, 3/8" FP bushings	2	
4.	street el, 1/2" x 90°	4	MM128
5.	hose, 1/4" x 48"	1	MM24504
6.	3/8" tee	1	MM130
7.	3/8" close nipple	1	MM131
8.	O ring adapter	1	6401-8-6
9.	accumulator	1	ACC-1
10.	hose, 1/4" x 55"	1	MM24504
11.	hose, 1/4" x 72"	4	MM24504
12.	hose, 1/4" x 72"	2	MM24504
13.	hose, 3/8" x 120"	2	MM20106
14.	adapter, 1/2" o ring, 3/8" FP, 90° el	3	6902-8-8
15.	plug, o ring, 1/2"	1	MM139

Boom Mower
Control feedline assembly
Figure 8

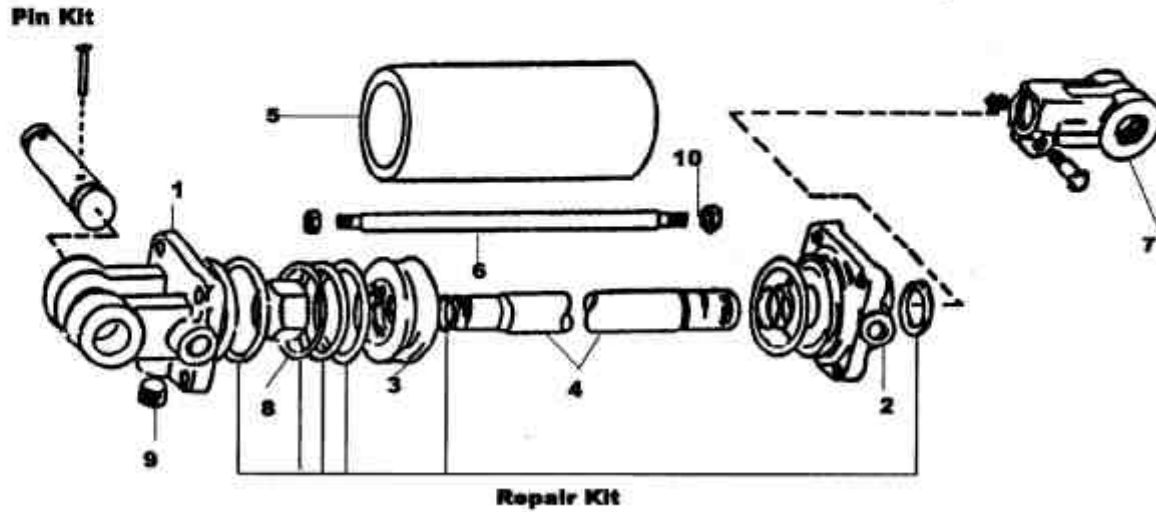


* To existing tractor hydraulics

Hose Routing to Boom and Swivel Cylinders

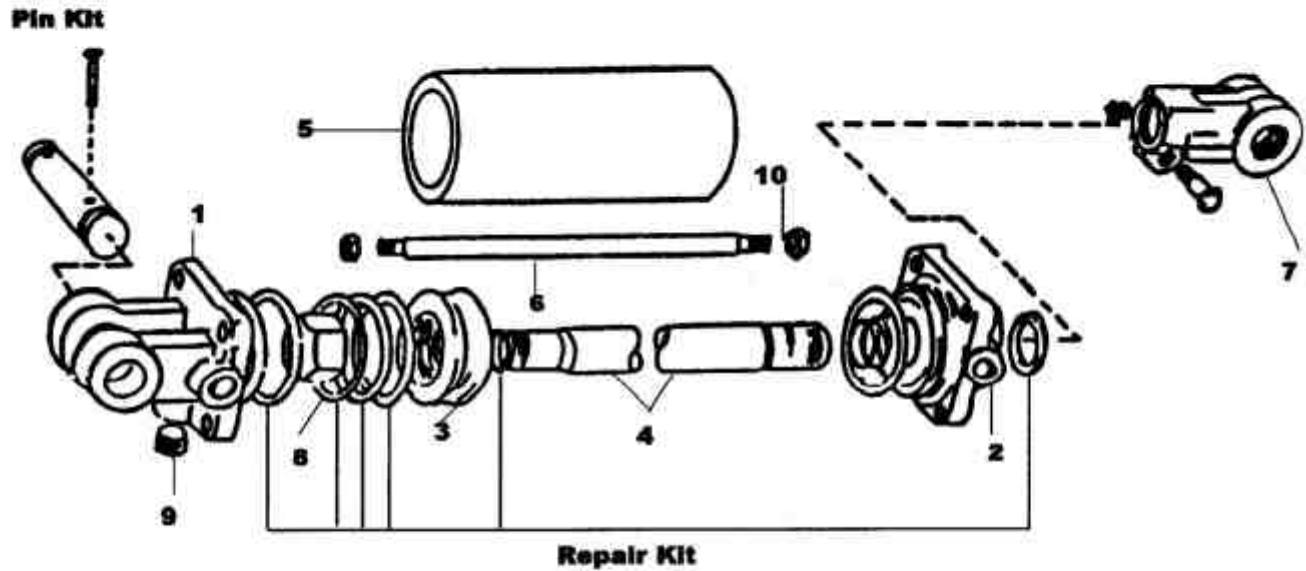
- A To main boom cylinder gland
- B To secondary cylinder butt
- C To deck cylinder butt
- D To secondary boom cylinder gland
- E To secondary cylinder butt
- F To swivel cylinder butt
- G To swivel cylinder gland

Boom Mower
Main Boom Cylinder MM34024
4 x 24



REF NO	PART DESCRIPTION	REQUIRED	PART #
1.	cylinder butt w 1 ¼" pin hole	1	MMC424-125
2.	rod gland	1	MM34024-2
3.	piston	1	MM34024-3
4.	rod	1	MM34024-4
5.	tube	1	MM34024-5
6.	tie rods	4	MM34024-6
7.	rod clevis	1	MM34024-7
8.	nut/piston	1	MM34024-8
9.	plug	1	MM34024-9
10.	tie rod nuts	4	MM34024-10
11.	seal kit		MM34000SK

Boom Mower
Deck Cylinder MM33018
 3 x 18



REF NO	PART DESCRIPTION	REQUIRED	PART #
1.	cylinder butt	1	MM33018-1
2.	rod gland	1	MM33018-2
3.	piston	1	MM33018-3
4.	rod	1	MM33018-4
5.	tube	1	MM33018-5
6.	tie rods	4	MM33018-6
7.	rod clevis	1	MM33018-7
8.	nut/piston	1	MM33018-8
9.	plug	1	MM33018-9
10.	tie rod nuts	4	MM33018-10
11.	seal kit		MM33000SK

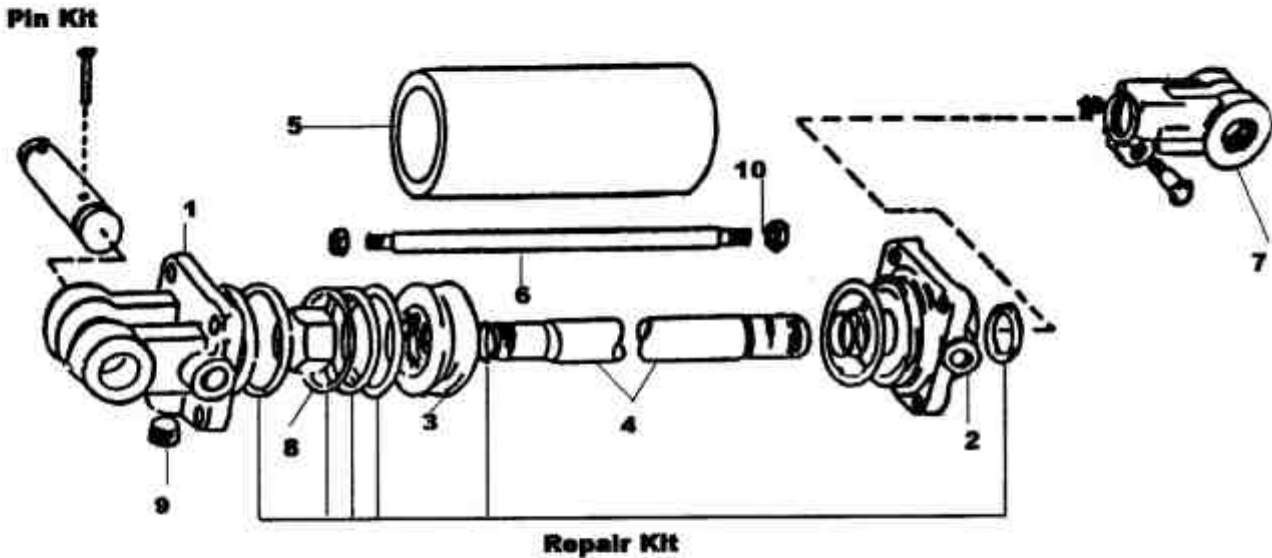
Page 1- Short Boom

REF NO	PART DESCRIPTION	REQUIRED	PART #
1.	Main boom	1	MM101-SB
2.	bushing 1 ½"ID	4	LB1
3.	pin ¼"	8	31620
4.	cylinder, 4" x 10"	1	MM34010
5.	cylinder pin 1" x 4"	4	MM050
6.	Washer 1" ID	6	MM4800
7.	cylinder, 3" x 18"	1	MM33018
8.	bolt, 2 ¼" x 5/16	1	
9.	collar, 1 ½" ID	1	MM109
10.	arm pivot	1	MM110
11.	bushing	5	SB-1
12.	zerks, ¼" x 28	5	

Page 2-Short Boom

1.	Secondary boom	1	MM112
2.	bolt, 7/16" x 3"	2	71614x3HH
3.	double tube clamp	2	MM033
4.	bolt, 5/16" x 2 ¾"	4	
5.	pin, 1 ½" x 12 ½"	1	MM115
6.	bushing	6	SB-1
7.	cylinder, 4" x 24"	1	MM34024
8.	zerks, ¼" x 28	6	
9.	pin 1" cylinder	2	MM47
10.	washer 1" ID	4	MM4800
11.	cylinder pin, 2" x ¼"	4	31620
12.	links	2	MM122

Boom Mower
Secondary Cylinder MM33520
 3 1/2 x 20



REF NO	PART DESCRIPTION	REQUIRED	PART #
1.	cylinder butt	1	MM33520-1
2.	rod gland	1	MM33520-2
3.	piston	1	MM33520-3
4.	rod	1	MM33520-4
5.	tube	1	MM33520-5
6.	tie rods	4	MM33520-6
7.	rod clevis	1	MM33520-7
8.	nut/piston	1	MM33520-8
9.	plug	1	MM33520-9
10.	tie rod nuts	4	MM33520-10
11.	seal kit		MM33500SK

