



Parts Manual

RANSOMES[®] **MASTIFF 91**

Series: FN & FP
Engine type: Briggs & Stratton 9hp Vanguard
Product code: LDEA230 & LDEA240



WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.



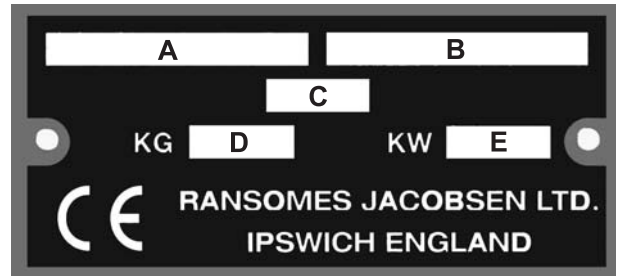
Ransomes Jacobsen Limited reserves the right to make design changes without obligation to make these changes on units previously sold and the information contained in this manual is subject to change without notice.

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2.1 PRODUCT IDENTIFICATION

- A Machine Name
- B Serial Number
- C Year of Manufacture
- D Machine Weight
- E Engine Power



2.2 SPARES STOCKING GUIDE

To keep your equipment fully operational and productive, Ransomes suggests you maintain a stock of the more commonly used maintenance items. We have included part numbers for the additional support materials and training aids.

Service Parts			
Part No	Description	Part No	Description
MBA7010A	Bottom Blade	LMSA647	Brake Shoe Assy.
MBB2659D	Cutting Cylinder 6K	LMAY186	Clutch Shoe Assy
MBF2288	Cutting Cylinder 9K	LMAY468C	Front Roll Assy
003020512	Chain (Cylinder)	003030395	Chain (Land Roll)
003802027	Connecting Link (Cylinder)	003803023	Connecting Link (Land Roll)

Service Support Material			
Part No	Description	Part No.	Description
MS6669	Engine Operators Manual	24804G	Machine Safety & Operation Manual
MS2497	Engine Parts Manual		

2.3 HOW TO USE THE PARTS MANUAL**ITEM NUMBER**

Each part which is identified in the illustrations has an item number. Parts which do not have an item number may not be readily identified in the illustration but are usually closely associated with the immediately adjacent part.

ASSEMBLIES

A complete assembly, e.g. a wheel motor or hydraulic motor or roll assembly, is listed as a complete item with subsequent individual components listed separately.

The assembly is listed under its part number with component parts being listed offset to the right, e.g.:-

ITEM	PART NO.	DESCRIPTION	QTY	REMARKS
4295	MBG2504	Bracket	1	
4296	MBG3848	Latch	2	
4298	450865	Screw, M8 X 20, Sckt Csk Hd	2	
4300	450378	Nut, M8 Nyloc	2	
4301	WI001	Set Of Wheels	1	
4301.1	008162130	• Wheel & Hub Assy	1	(Rear)
4301.2	008170390	•• Tyre	1	
4301.3	008161830	•• Rim	1	
4301.4	008169140	•• Hub Assy.	1	
4301.5	008169150	•• Cap	1	
4301.6	002993010	•• Lubricator	1	
4301.7	008161990	• Wheel & Tyre	2	(Front)
4301.8	008170780	•• Tyre	2	

It may not be possible to illustrate every item. With certain items purchased from outside suppliers some component parts may not be available from Ransomes and may need to be specially ordered from the supplier.

QUANTITIES

Quantities shown are for one assembly or sub-assembly.

USING THE PARTS LIST

Determine the function and application of the part required. Turn to the main index page and select the appropriate section. Locate the part on the illustration and parts list and read off the quantity from the appropriate MODEL column.

NUMERICAL INDEX

This is a summary of all part numbers used in the manual arranged in numerical sequence and showing the page and item number under which the parts appear.

ORDERING OF SPARE PARTS

When ordering replacement parts, it is most important to quote the SERIAL NUMBER of the machine, PART NUMBER, DESCRIPTION and QUANTITY required.

Any arbitrary modifications carried out on this machine may relieve the manufacturer of liability for any resulting damage or injury.

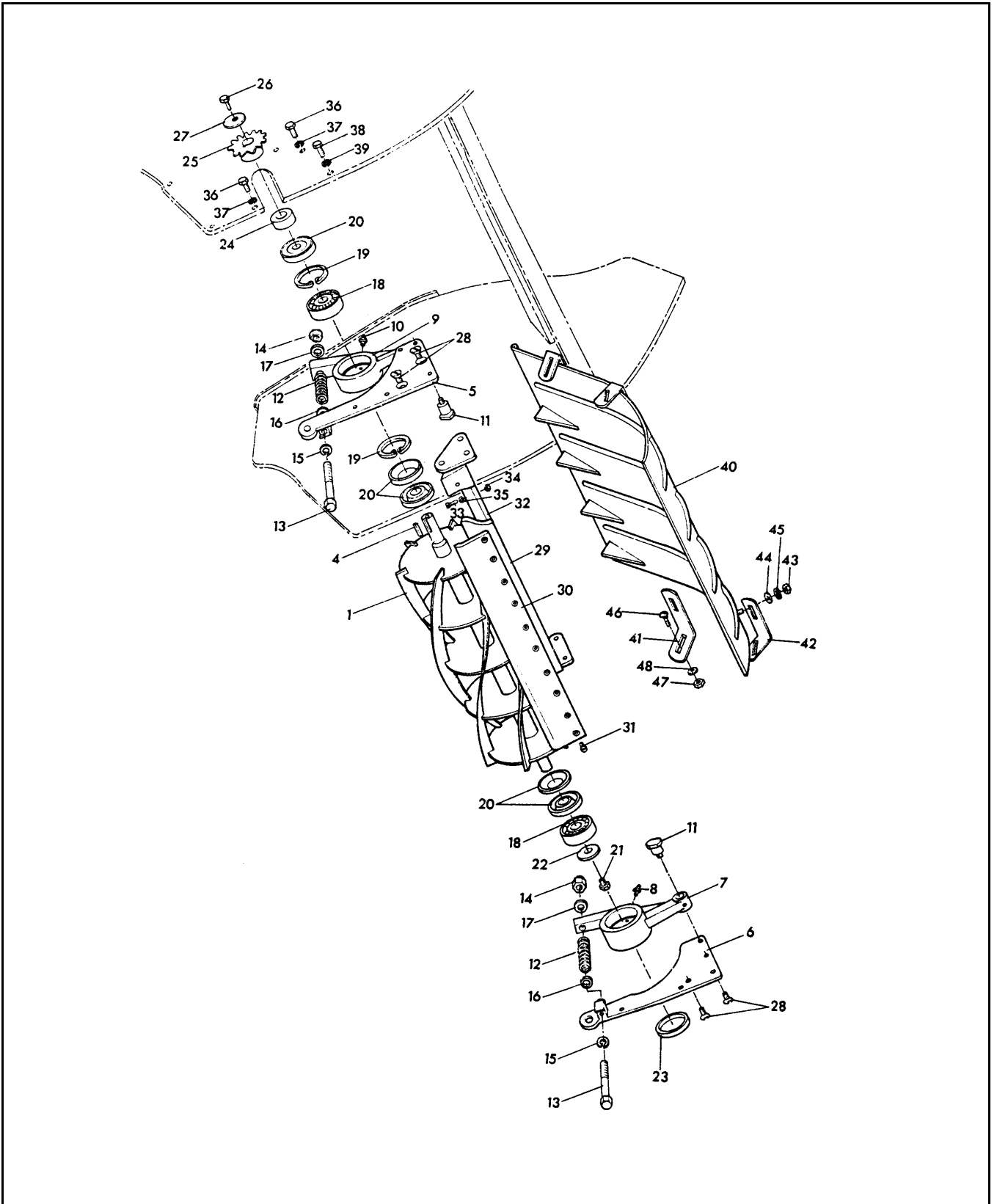
ABBREVIATIONS

N/A Not Available

AR As Required

MASTIFF 91 PARTS MANUAL

1. CUTTING UNIT

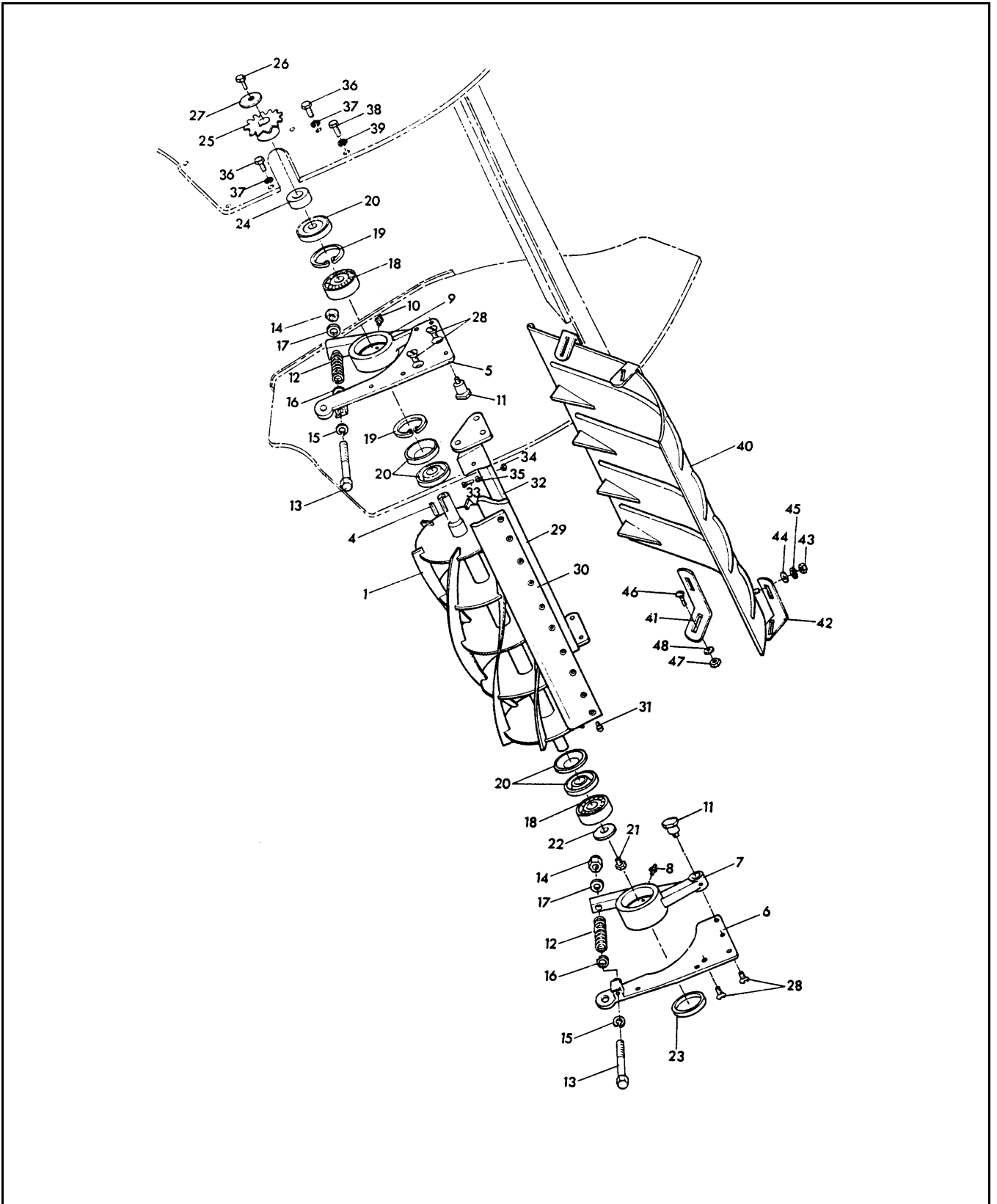


1. CUTTING UNIT

ITEM	PART NO.	DESCRIPTION	QTY.
	355R0005	Cutting Unit Assy.	1
1	MBB2659D	Cutting Cylinder 6k	1
1*	MBF2288	Cutting Cylinder 9k	1
4	453005165	Key-1/4 x 1/4 x 1-1/8	1
5	MAA0259	Stiffener RH	1
6	MAA0260	Stiffener LH	1
	LMSC590	Bearing Housing LH Assy.	1
7	MBB2665A	Housing	1
8	002993063	Lubricator-M6 x 45°	1
	LMSC591	Bearing Housing RH Assy.	1
9	MBB2666A	Housing	1
10	002993063	Lubricator-M6 x 45°	1
11	MAA0253A	Pivot Pin	2
12	461006142	Adjusting Spring	2
13	451031401	Adjusting Screw	2
14	001399105	Nut-Hex 3/8-24 Nyloc	2
15	452200134	Lockwasher 3/8 x .683 x .094	2
16	MAA0254	Collar	2
17	452000326	Washer-3/8 x 3/4 x .072	2
18	820000638	Brg-Align 25 x 62 x 17	2
19	451992	Circlip-Int 62 x 2T	2
20	002203012	Oil Seal	5
21	456050375	Screw	1
22	MAA0250	Washer	1
23	MAA0249	Dust Cover	1
24	MBB2668	Distance Piece	1
25	MBE3011	Pinion 11T	1
26	456010381	Screw-Hex 3/8-24 x 1	1
27	MAA0244	Washer	1
28	456050252	Screw-Csk 1/2-20 x 3/4	4
	LMSC731A	Bottom Block & Blade Assy.	1
29	MBA2090C	● Bottom Block	1
30	MBA7010A	● Bottom Blade	1
31	001190000	● Screw-Csk 3/8-16 x 11/16	12
32	600004719	● Wood Fillet	1
33	456040186	● Screw-Pan Hd 1/4-28 x 1-1/4	3
34	450020037	● Nut-Hex 1/4-28	3
35	452000211	Washer 1/4 x 9/16 x .056	3
36	456010323	Screw-Hex 3/8-24 x 5/8	4
37	452200087	Lockwasher-3/8 x .590 x .092	4
38	456010381	Screw-Hex 3/8-24 x 1	2

MASTIFF 91 PARTS MANUAL

1. CUTTING UNIT

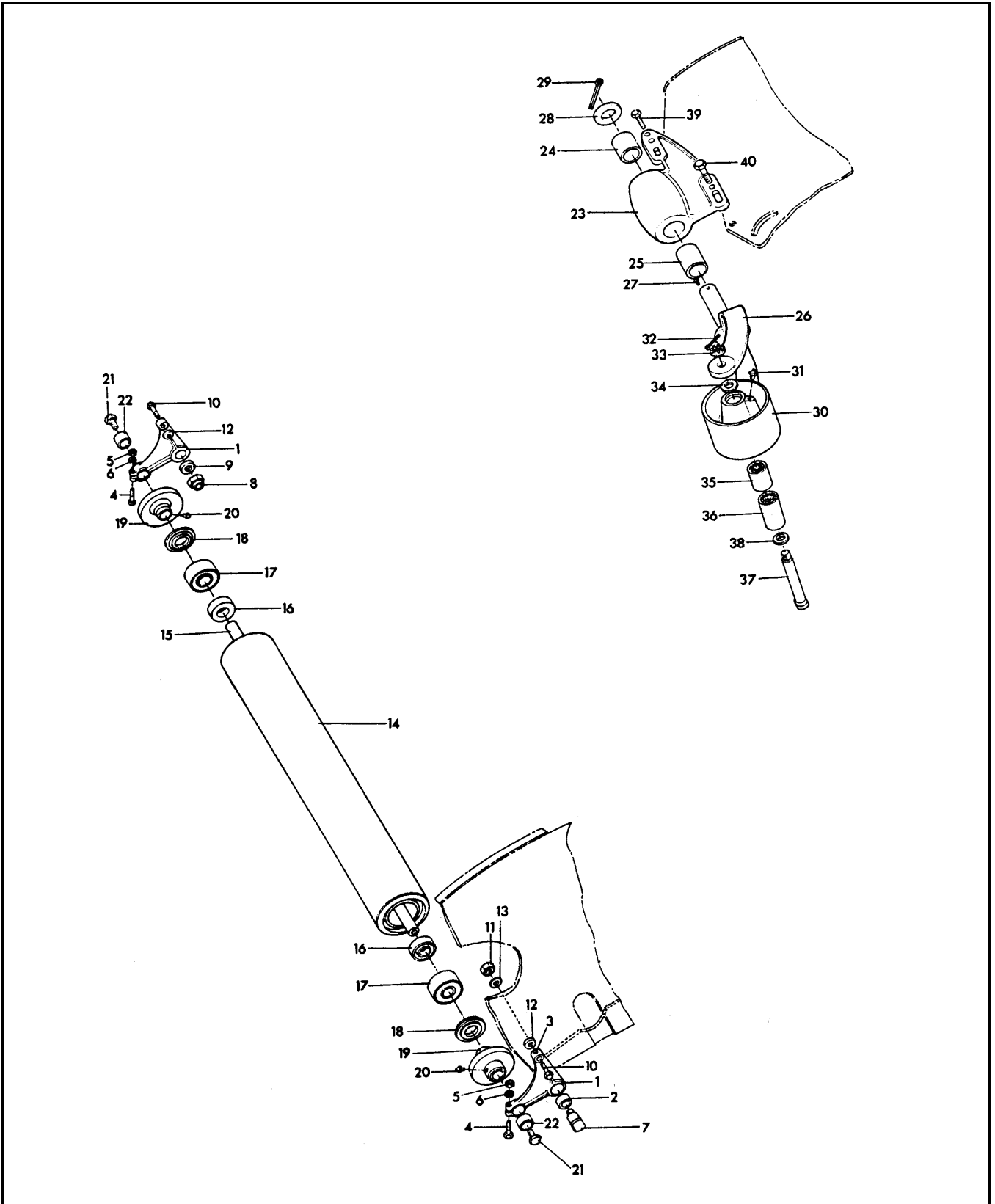


1. CUTTING UNIT

ITEM	PART NO.	DESCRIPTION	QTY.	
39	452200087	Lockwasher-3/8 x .590 x .092	2	
	LMAY485B	Concave Assy.	1	
40	MBA2093A	Concave Plate	1	
41	MBA0916	RH Bracket Upper	1	
42	MBA0917	RH Bracket Lower	1	
43	450324	Nut-Hex M8	2	
44	450390	Washer-M8 x 17 x 1.8	2	
45	450411	Lockwasher-M8 x 12.75 x 2	2	
46	001029001	Bolt-Crg M8 x 20	4	
47	450324	Nut-Hex M8	4	
48	450390	Washer-M8 x 17 x 1.8	4	

**MASTIFF 91
PARTS MANUAL**

2. FRONT AND SIDE ROLLS

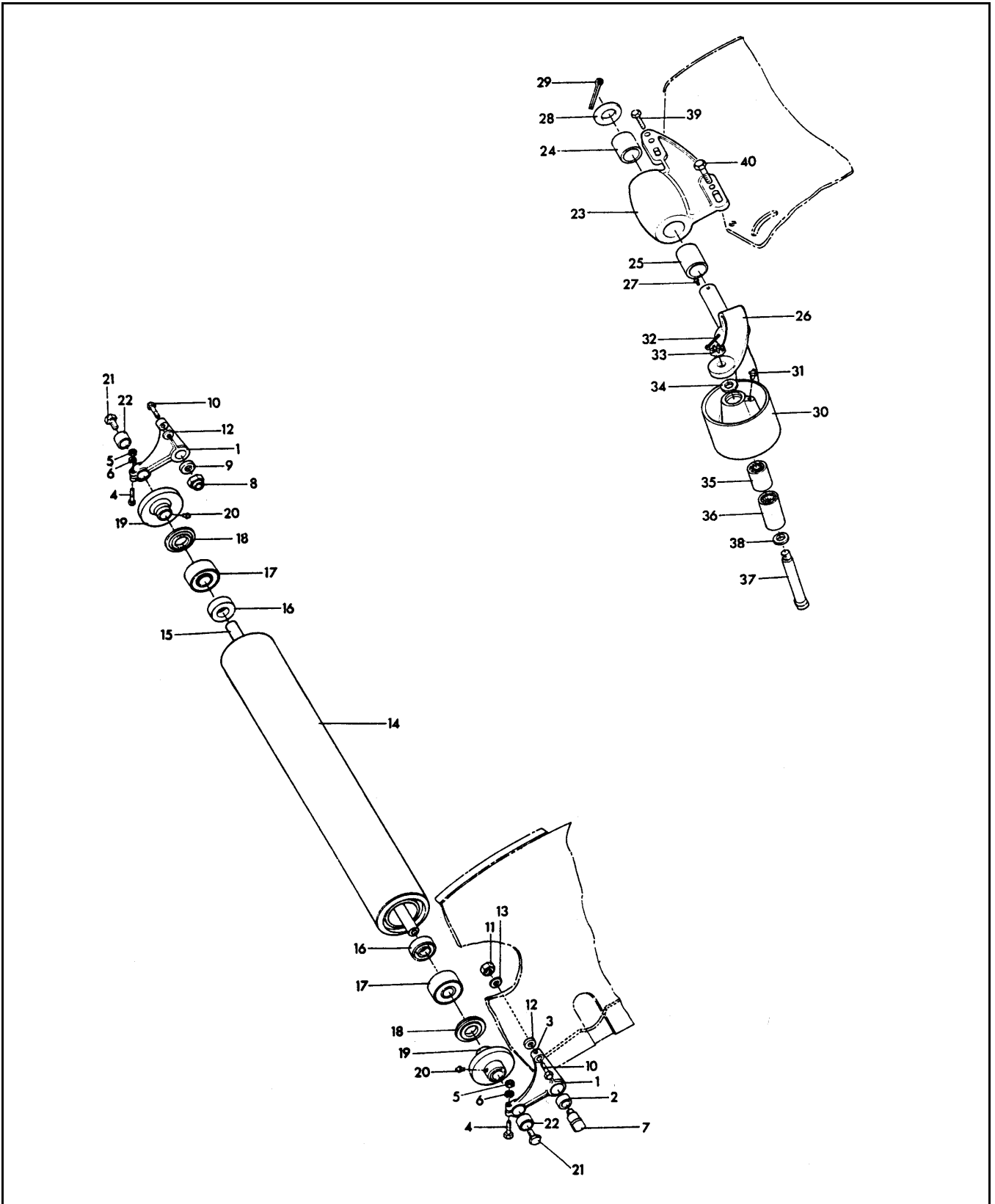


2. FRONT AND SIDE ROLLS

ITEM	PART NO.	DESCRIPTION	QTY.
	LMA468C	Front Roll Assy.	1
1	MAA0337	● Carriage	2
2	590000483	● Bush-Oilite 3/4 x 1 x 3/4	2
3	LAY0170	● Sight Pin	2
4	451031176	● Bolt-Hex 1/4-28 x 1-3/4	2
5	450020037	● Nut-Hex 1/4-28	2
6	452200029	● Lockwasher-1/4 x .425 x .072	2
14	MBB2670	● Front Roll Tube	1
15	MBB2650	● Front Roll Spindle	1
16	002202503	● Oil Seal 25 x 40 x 7	4
17	002032045	● Brg-Ball 20 x 47 x 14	2
18	002203509	● Oil Seal 35 x 50 x 7	2
	LMSC589	● End Cover Assy.	2
19	MBB2653	● ● End Cover	1
20	842000044	● ● Lubricator-1/4 Str	1
21	456092248	● Securing-Bolt	2
22	MAA0334	● Distance Piece	2
7	MAA0338	Stud	2
8	450020338	Nut-Hex 5/8-18 Thin	2
9	MAA0333	Washer-25/32 x 1-1/4 x 3/16	2
10	451030609	Bolt-Hex 1/2-20 x 1-3/4	2
11	450020142	Nut-Hex 1/2-20	2
12	MAA0335	Distance Piece	2
13	452200168	Lockwasher-1/2 x .763 x .116	2
	LMAA068	Side Roll Assy.	2
23	LSD2592A	● Castor Bracket	1
24	539000917	● Bush - Top	1
25	539000925	● Bush - Bottom	1
26	LSD2591	● Castor Fork	1
27	841000548	● Lubricator-1/4 BSF Str	1
28	LSD2723	● Washer	1

**MASTIFF 91
PARTS MANUAL**

2. FRONT AND SIDE ROLLS

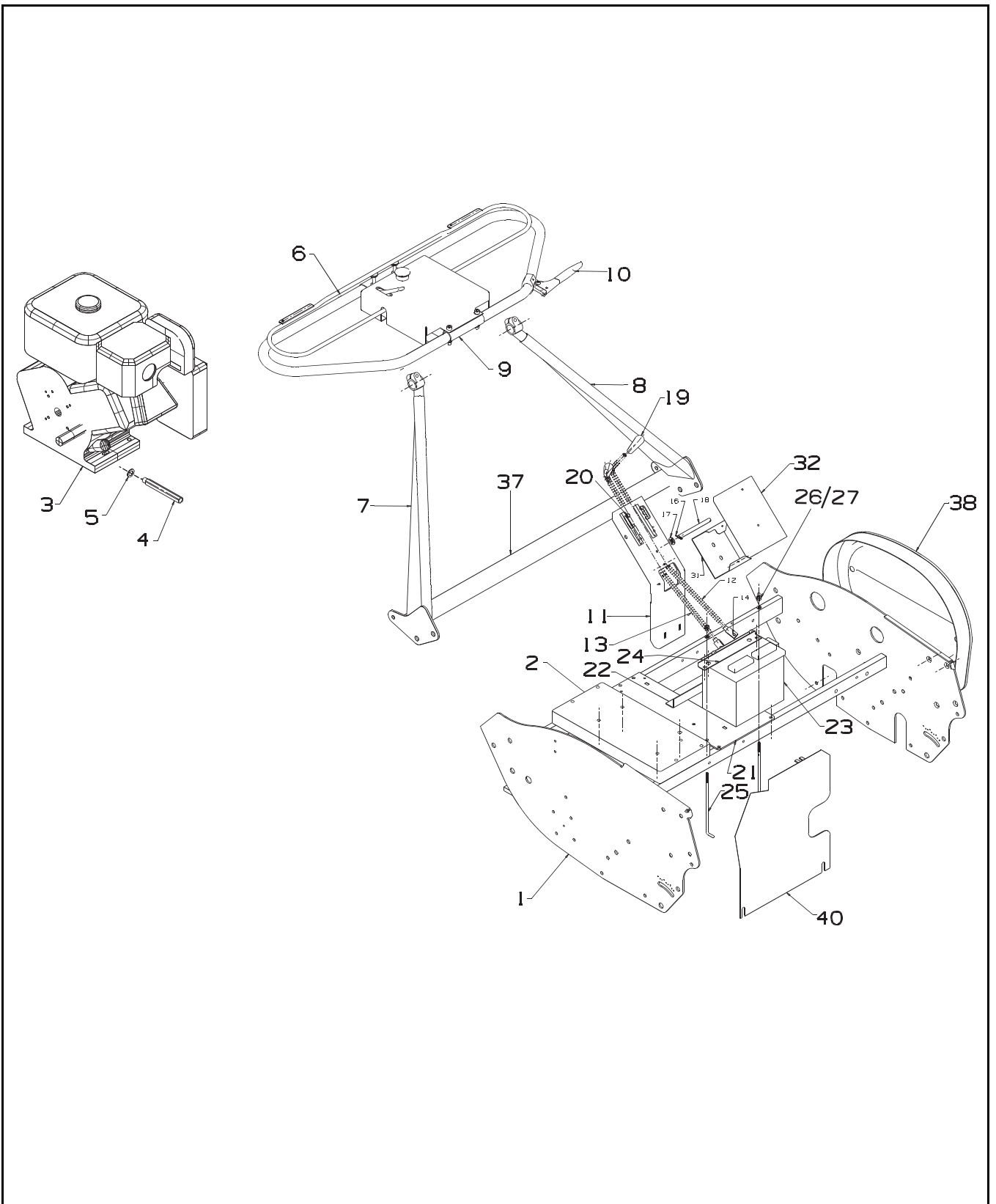


2. FRONT AND SIDE ROL

ITEM	PART NO.	DESCRIPTION	QTY.
29	454000598	● Split Pin-3/16 x 2	1
30	LSD2593A	● Side Roll	1
31	841000548	● Lubricator-1/4 BSF Str	1
32	451225	● Split Pin-2.5 x 20	1
33	450520867	● Nut-Hex 1/2 BSW Slotted	1
34	LSD2725A	● Dust Washer	1
35	839000050	● Bearing	1
36	839000034	● Bearing	1
37	LSD2724A	● Pin	1
38	LSD2725A	● Dust Washer	1
39	MBA2085A	● Bolt	2
*	450020087	● Nut-Hex 3/8-24	2
*	452000326	● Washer-3/8 x 3/4 x .072	2
40	456010577	● Screw-Hex 1/2-20 x 1-1/2	2
*	450020142	● Nut-Hex 1/2-20	2
*	450392	● Washer-M12 x 24 x 2.7	2
*	456010739	● Screw-Hex 5/8-18 x 1-1/4	2
*	450020176	● Nut-Hex 5/8-18	2
*	450393	● Washer-M16 x 30 x 3.3	2
*	450425	● Lockwasher-M16 x 27.3 x 3.5	2

MASTIFF 91 PARTS MANUAL

3. MAIN FRAME & ENGINE AND HANDLES

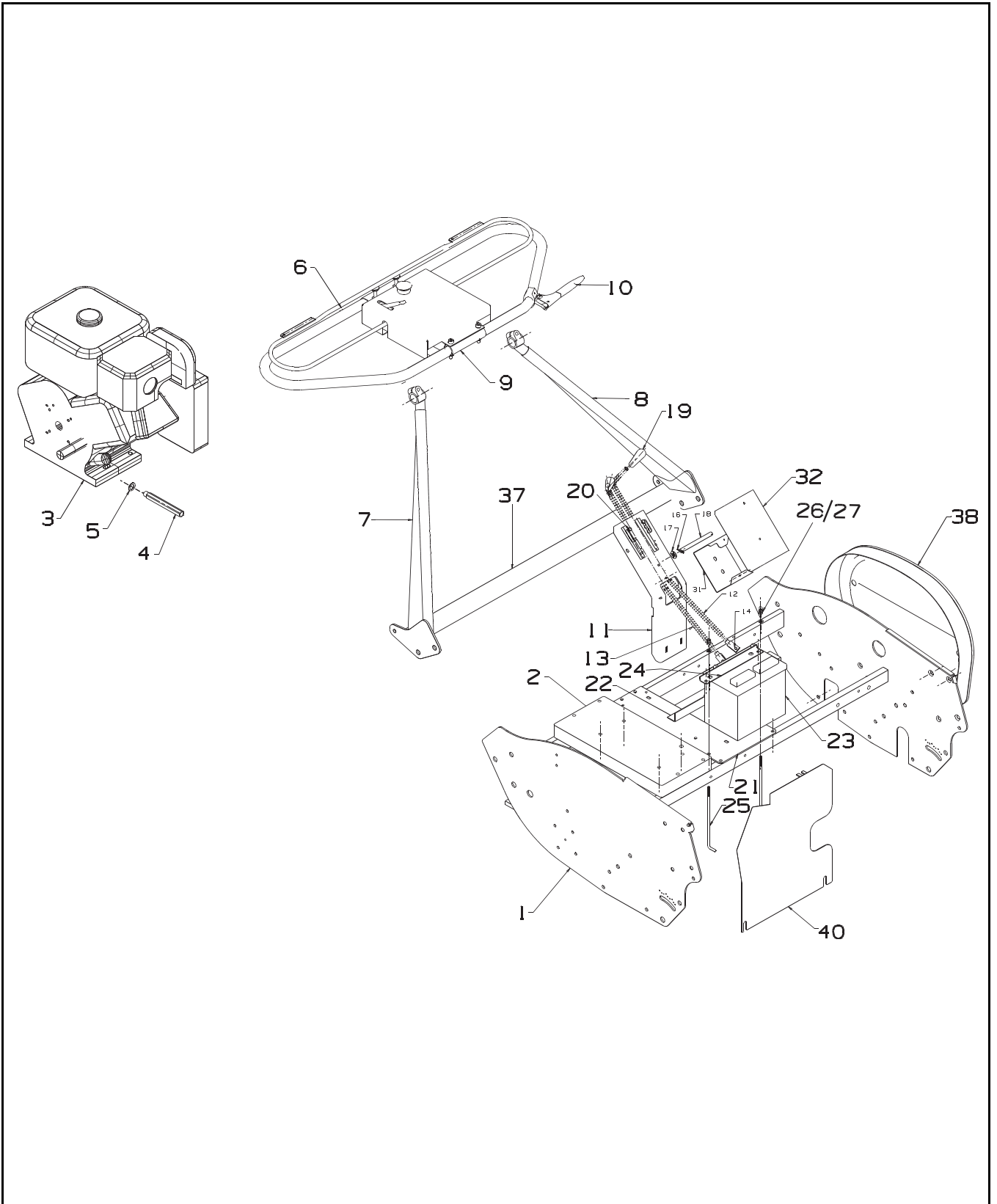


3. MAIN FRAME & ENGINE AND HANDLES

ITEM	PART NO.	DESCRIPTION	QTY.
1	MBC7014A	Main Frame	1
2	4153437	Engine Mount	1
*	456011117	Screw-Hex 5/16-24 x 2-3/4	5
*	450411	Lockwasher-M8 x 12.75 x 2	5
3	4153438	B & S 9HP Vanguard	1
*	450032	Bolt-Hex M10 x 50	4
*	450325	Nut-Hex M10	4
*	450391	Washer-M10 x 21 x 2.2	4
*	450412	Lockwasher- M10 x 15.9 x 2.5	4
4	4155580	Drain Extension	1
5	670000360	Washer-Fibre 17/32 x 13/16 x 3/32	1
6	MBA6381A	Handle Bar	1
7	MAA0568A	Handle RH	1
8	MAA0569B	Handle LH	1
*	PF30-018	● Anti Rattle Strip	1
*	451030358	Bolt-Hex 3/8-24 x 2	2
*	450020087	Nut-Hex 3/8-24	2
*	452000326	Washer-3/8 x 3/4 x .072	2
9	MBG0743	Clamping Tube	1
*	451030227	Bolt-Hex 5/16-24 x 1-3/4	2
*	001399090	Nut-Hex 5/16-24 Nyloc	2
*	451030227	Bolt-Hex 5/16-24 x 1-3/4	4
*	450020142	Nut-Hex 1/2-20	4
*	452200168	Lockwasher-1/2 x .763 x .116	4
10	469007154	Brake Lever	1
*	890008176	Brake Cable	1
*	001992390	Clip	3
11	MBG0839B	Gate Support	1
*	456010226	Screw-Hex 5/16-24 x 1	2
*	450390	Washer-M8 x 17 x 1.8	2
*	450411	Lockwasher-M8 x 12.75 x 2	2
12	MBF0356A	Gear Lever	1
13	MBF0355A	Gear Lever	1
14	890007926	Clevis Joint	2
*	001863061	Washer-M6 x 11.5 x 1.14 Crinkle	2
*	450389	Washer-M6 x 12.5 x 1.8	2
*	450020257	Nut-Hex 5/16-24 Thin	2
*	454000077	Split Pin-1/16 x 5/8	2

**MASTIFF 91
PARTS MANUAL**

3. MAIN FRAME & ENGINE AND HANDLES

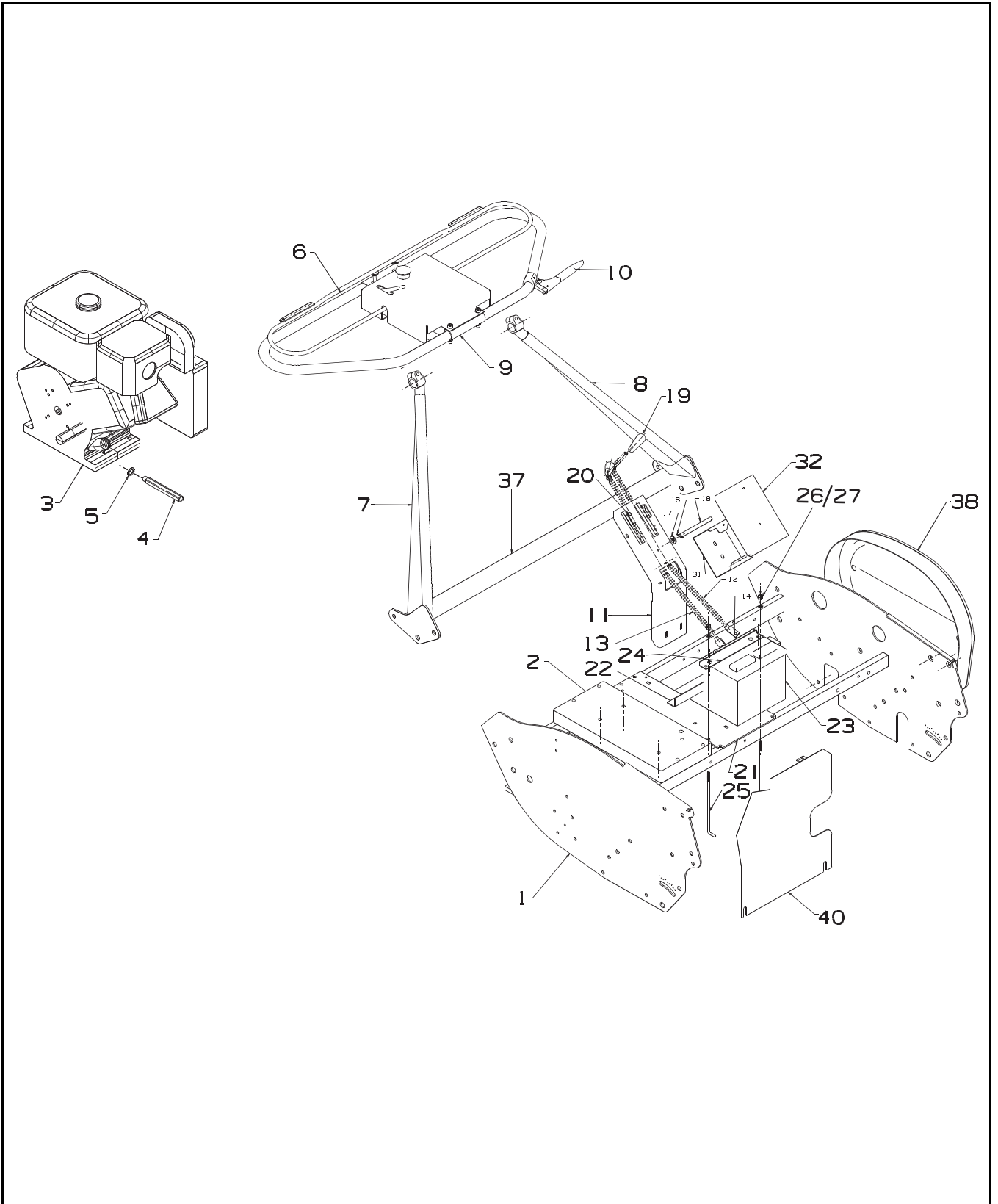


3. MAIN FRAME & ENGINE AND HANDLES

ITEM	PART NO.	DESCRIPTION	QTY.	
16	MBC7040	Split Pin-2.5 x 20	1	
17	450391	Washer-M10 x 21 x 2.2	2	
18	451225	Pin	2	
19	002990227	Knob	2	
20	MBC2894	Pin	2	
*	450323	Nut-Hex M6	2	
*	45210019	Washer-1/4 x 5/8 x .064	2	
*	450410	Lockwasher-M6 x 9.6 x 1.5	2	
*	002900513	Spring-Ten 7.95 x 0.81 x 38.1	1	
*	001992105	Cable Clip	5	
*	451144	Screw-Pan Hd No.10 x 13	5	
*	680001941	Cable Tie-270 x 4.8	1	
*	450135	Screw-Hex M4 x 20	1	
*	450321	Nut-Hex M4	1	
*	450387	Washer-M4 x 9 x 0.9	2	
*	450408	Lockwasher-M4 x 6.95 x 1.2	1	
21	MBC5499	Battery Plate	1	
*	451030201	Bolt-Hex 5/16-24 x 1-1/4	4	
*	450411	Lockwasher-M8 x 12.75 x 2	4	
22	MBC5679	Abutment Angle	1	
*	450541	Screw-Pan Hd M6 x 16	2	
*	450389	Washer-M6 x 12.5 x 1.8	2	
*	450410	Lockwasher-M6 x 9.6 x 1.5	2	
23	008230350	Battery	1	
24	MBC5502	Clamp Angle	1	
25	MBC5501A	Clamp Rod	2	
26	450323	Nut-Hex M6	4	
27	450389	Washer-M6 x 12.5 x 1.8	2	
*	009053206	Battery Lead - Neg	1	
*	4155120	Battery Lead - Pos	1	
*	450170	Screw-Hex M6 x 16	2	
*	450323	Nut-Hex M6	2	
*	450410	Lockwasher-M6 x 9.6 x 1.5	2	
30	MBG0841C	Switch Bracket	1	
31	MBG0840A	Switch Cover	1	
*	379050310	Beading (300 mm)	0.3 m	
*	451126	Screw-Pan Hd No.6 x 9.5	3	
*	4147161	Keyswitch	1	

MASTIFF 91 PARTS MANUAL

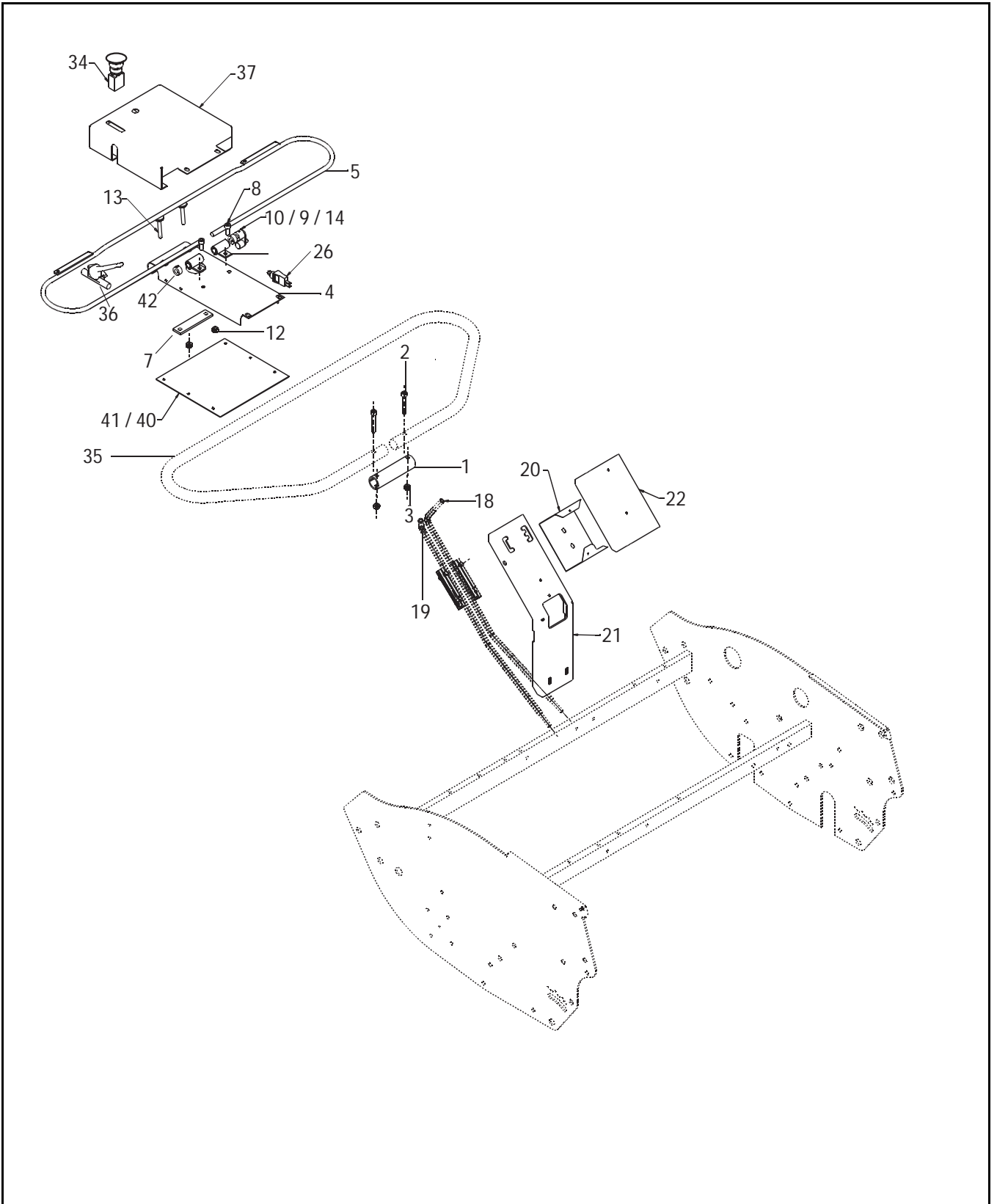
3. MAIN FRAME & ENGINE AND HANDLES



3. MAIN FRAME & ENGINE AND HANDLES

ITEM	PART NO.	DESCRIPTION	QTY.
*	4144491	Main Harness	1
*	4156840	Link Wire	1
*	008245135	Diode (3 Amp)	1
*	008233156	Fuse (5 Amp)	1
*	001992286	Cable Clip	3
*	450528	Screw-Pan Hd M5 x 16	3
*	450322	Nut-Hex M5	3
*	450388	Washer-M5 x 10 x 1.1	3
*	450409	Lockwasher-M5 x 8.55 x 1.5	3
*	002953192	Grommet	1
37	MBA1727Z	Balance Bar	1
*	451030340	Bolt-Hex 3/8-24 x 1-3/4	2
*	MAA0244	Washer-13/32 x 1-1/2 x 4 mm	2
*	452200087	Lockwasher-3/8 x .590 x .092	2
38	MBF0330	Chain Cover	1
*	LC00033	Nut	2
40	4155062	Engine Cover	1
*	456040380	Screw-Pan Hd 5/16-24 x 3/4	2
*	450390	Washer-M8 x 17 x 1.8	2
*	450411	Lockwasher-M8 x 12.75 x 2	2
*	MBC8372	Plate (Switch Cover)	2
*	MBF2356	Wldmt-Grass Shield	1
*	MBG6999	Bracket-Grass Shield	1
*	450541	Screw-Pan Hd M6 x 16	2
*	450377	Nut-Hex M6 Nyloc	2

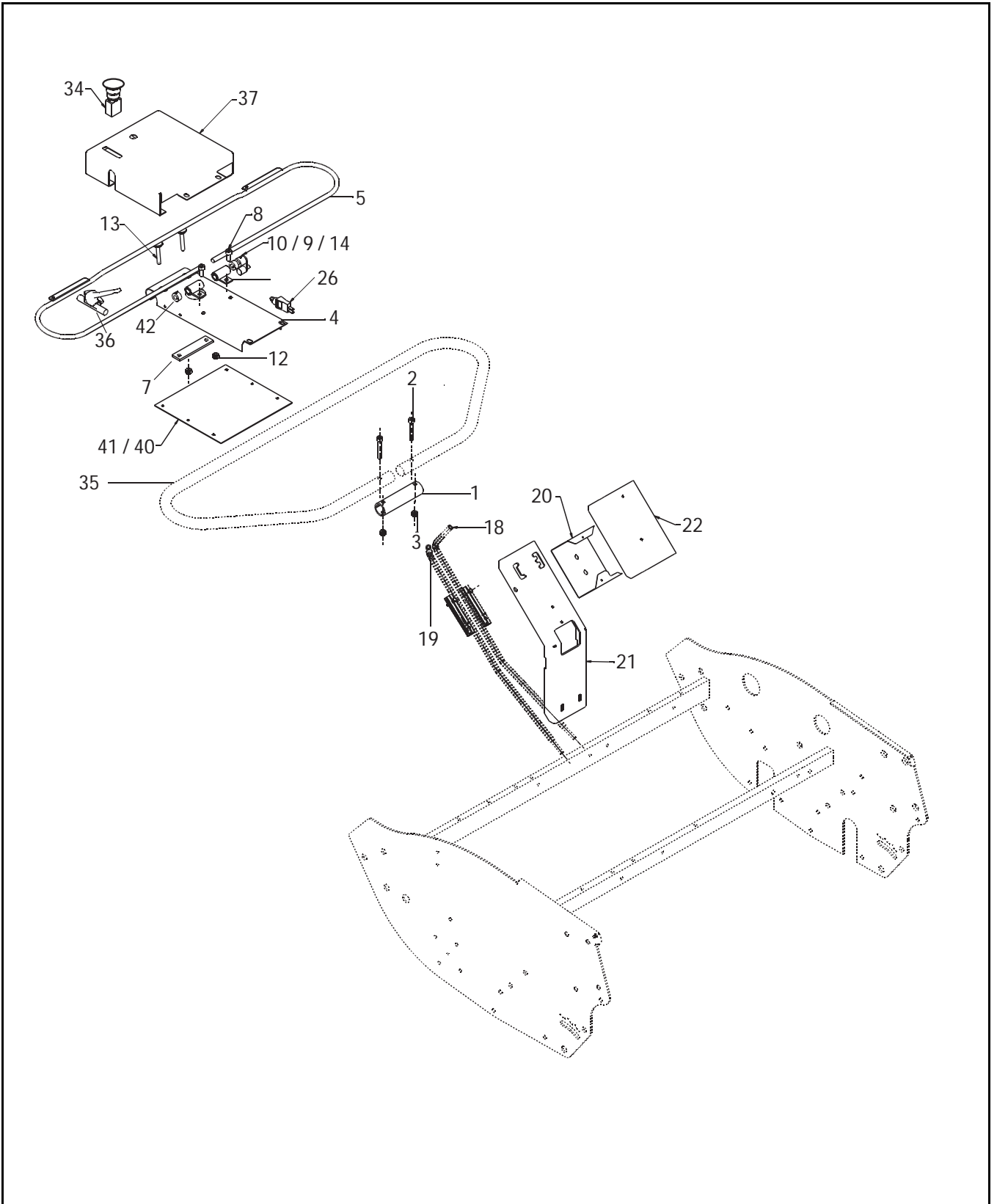
4. OPERATOR PRESENCE CONTROL



4. OPERATOR PRESENCE CONTROL

ITEM	PART NO.	DESCRIPTION	QTY.	
1	MBG0743	Clamping Tube	1	
2	451030227	Bolt-Hex 5/16-24 x1-3/4	2	
3	001399090	Nut-Hex 5/16-24 Nyloc	2	
4	MBF0207A	Top Cover	1	
5	4153439	O.P.C. Lever (Throttle)	1	
6	4153000	Pivot Assembly	2	
7	4153005	Clamp Plate	1	
8	450723	M8 x 20 Bolt	2	
9	MBG0363	Link-Cable	1	
10	MBF0146	Pin, Swivel	1	
11*	450942	Screw-Set M4 x 6, Cup Pnt	1	
12	450378	M8 Nyloc Nut	2	
13*	002910930	Spring-Comp 21 x 1.25 x 30	2	
14	MBF0193	Spacer, Pivot	1	
15	450411	Lockwasher-M8 x 12.75 x 2	4	
16*	4157567	Cable-Throttle	1	
17*	MBC7004	Strap	3	
18	MBF0355A	Gear Rod	1	
19	MBF0356A	Gear Rod	1	
20	MBG0841B	Switch Bracket	1	
21	MBG0839B	Lever Support	1	
22	MBG0840A	Switch Cover	1	
23	MBF0359B	Switch Bracket	1	
24*	MBG0871	Beading	1	
25	009058030	Microswitch	1	Gear Select
26	009058030	Microswitch	1	OPC Lever
27*	4144491	Main Harness, Mastiff	1	
28*	4147159	Capacitor Diode	1	
29*	008244545	Relay	2	
30*	4155120	Battery Lead (+)	1	
31*	009053206	Battery Lead (-)	1	
32*	4147161	Keyswitch	1	
33	001992113	Cable Tie-140 x 3.6	1	
34	4147160	Stop Switch	1	
35*	4155343	Foam Grip	2	
36	4155821	Throttle Lever Control	1	

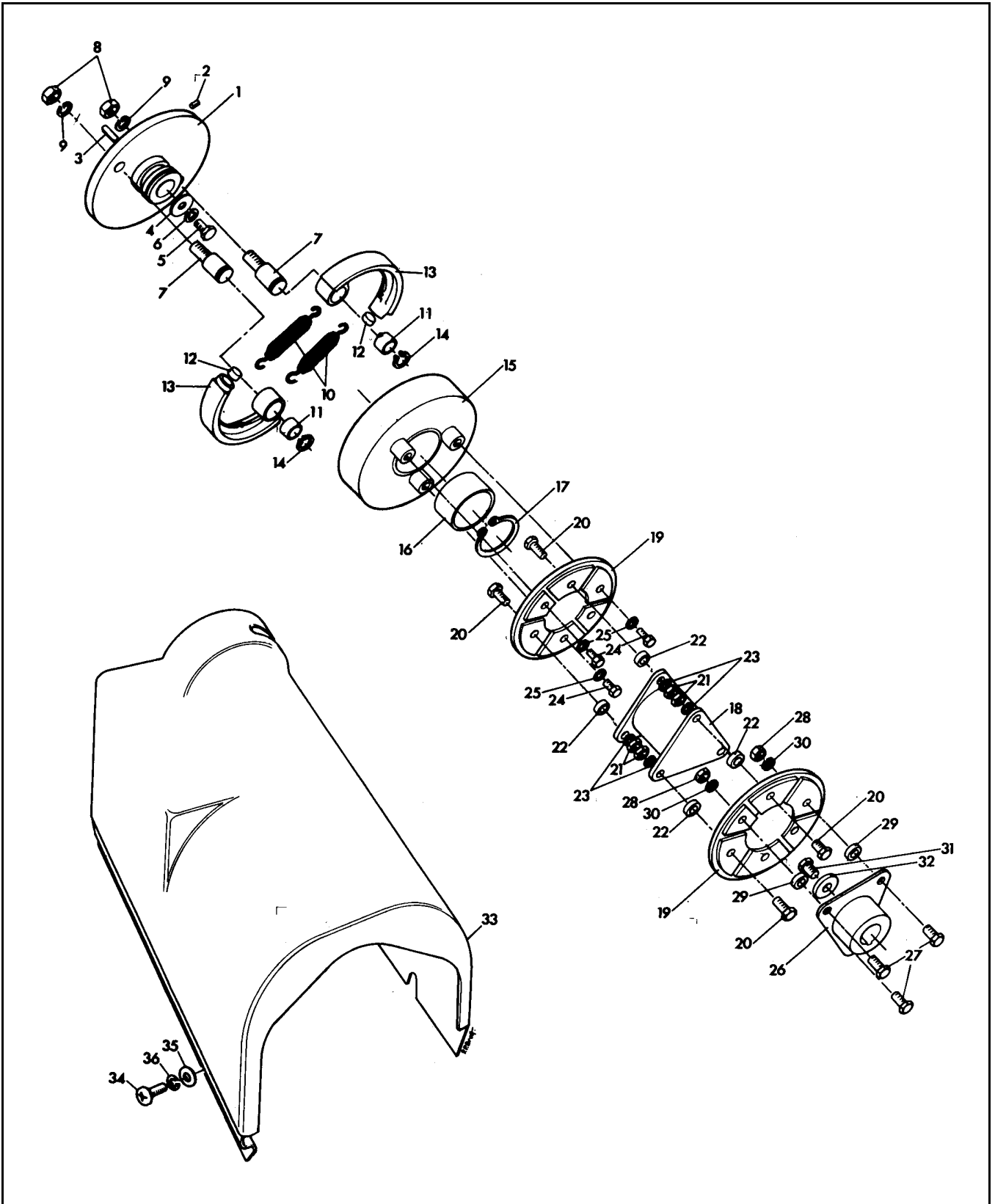
4. OPERATOR PRESENCE CONTROL



4. OPERATOR PRESENCE CONTROL

ITEM	PART NO.	DESCRIPTION	QTY.	
37	4157481	OPC Cover	1	
40	4156820	Bottom Plate	1	
41*	450152	Screw-Hex M5 x 20	6	
42	4153004	Lock Collar	2	

5. FLYWHEEL AND CLUTCH ASSEMBLY

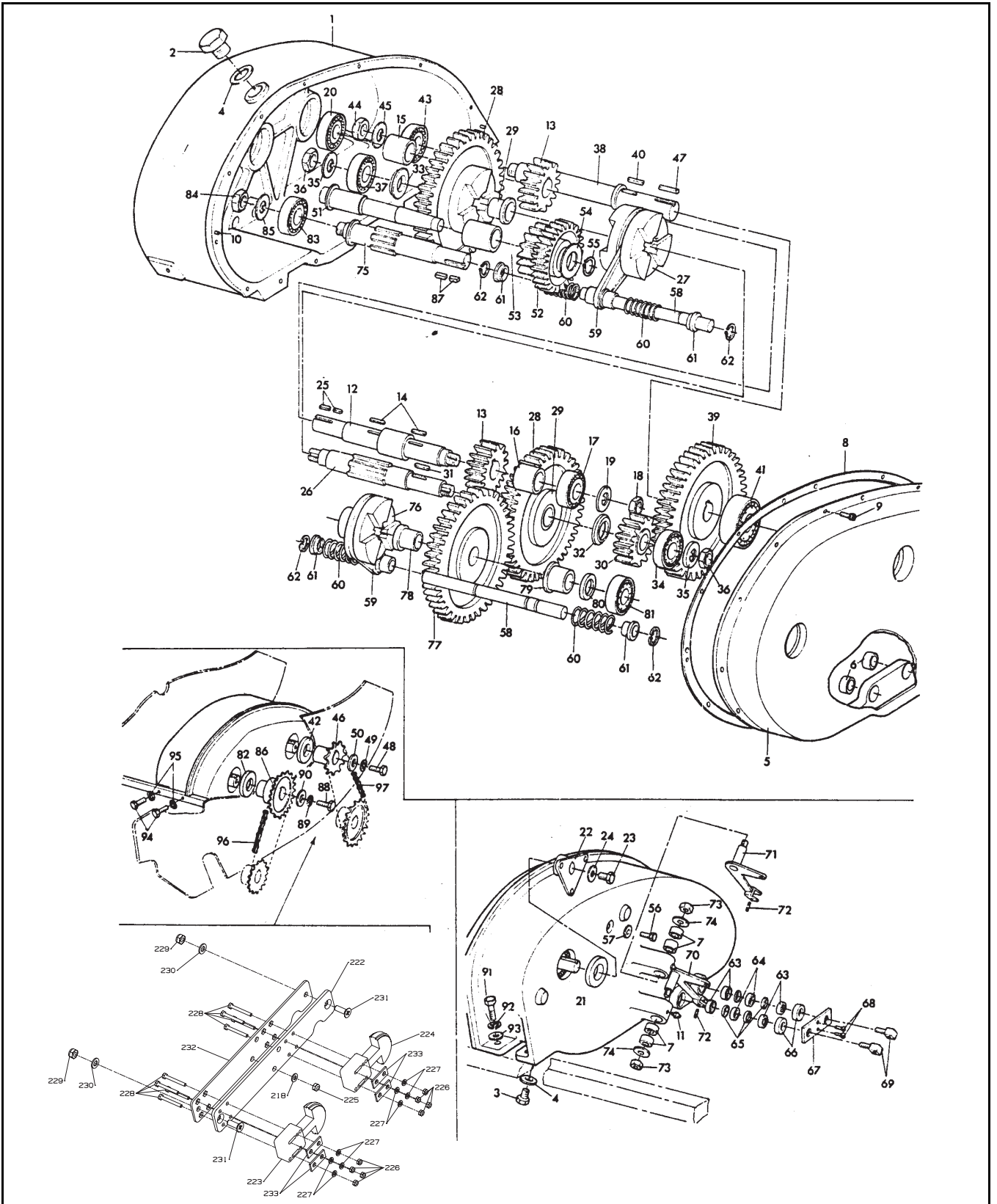


5. FLYWHEEL AND CLUTCH ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY.
1	MBC9826	Flywheel	1
2	450968	Screw-Set M8 x 10 Cup Pnt	2
3	001690149	Key-7 x 7 x 35	1
4	MBC9856	Washer-8.5 x 29.5 x 4	1
5	450191	Screw-Hex M8 x 20	1
6	450411	Lockwasher-M8 x 12.75 x 2	1
7	MAA0320A	Stud	2
8	450020338	Nut-Hex 5/8-18 Thin	2
9	450425	Lockwasher-M16 x 27.3 x 3.5	2
10	4116360	Spring-Ten 16 x 2.6 x 80	2
	LMAY186	Clutch Shoe Assy.	1
11	590002265	Bush-Oilite 7/8 x 1 x 1	2
12	649000053	Rubber Buffer	2
13	LSD4560B	Clutch Shoe (Pair)	1
14	461004205	Circlip	2
15	MBC9827	Clutch Ring	1
16	002039283	Bearing-Ball 40 x 68 x 15	2
17	461006095	Circlip	1
18	MBA6210B	Clutch Spider	1
19	649002908	Flexible Coupling	2
20	451030201	Bolt-Hex 5/16-24 x 1-1/4	6
21	450020053	Nut-Hex 5/16-24	6
22	MAA0328	Distance Piece	6
23	450411	Lockwasher-M8 x 12.75 x 2	3
24	456010226	Screw-Hex 5/16-24 x 1	3
25	450411	Lockwasher-M8 x 12.75 x 2	3
26	MBB2247B	Single Flange (See Gearbox Assy)	1
27	451030201	Bolt-Hex 5/16-24 x 1-1/4	3
28	450020053	Nut-Hex 5/16-24	3
29	MAA0328	Distance Piece	3
30	450411	Lockwasher-M8 x 12.75 x 2	3
31	456010381	Screw-Hex 3/8-24 x 1	1
32	MAA0244	Washer	1
33	009132523	Cover	1
34	456040380	Screw-Pan Hd 5/16-24 x 3/4	4
35	450390	Washer-M8 x 17 x 1.8	4
36	450411	Lockwasher-M8 x 12.75 x 2	4

MASTIFF 91 PARTS MANUAL

6. GEARBOX AND FINAL DRIVE

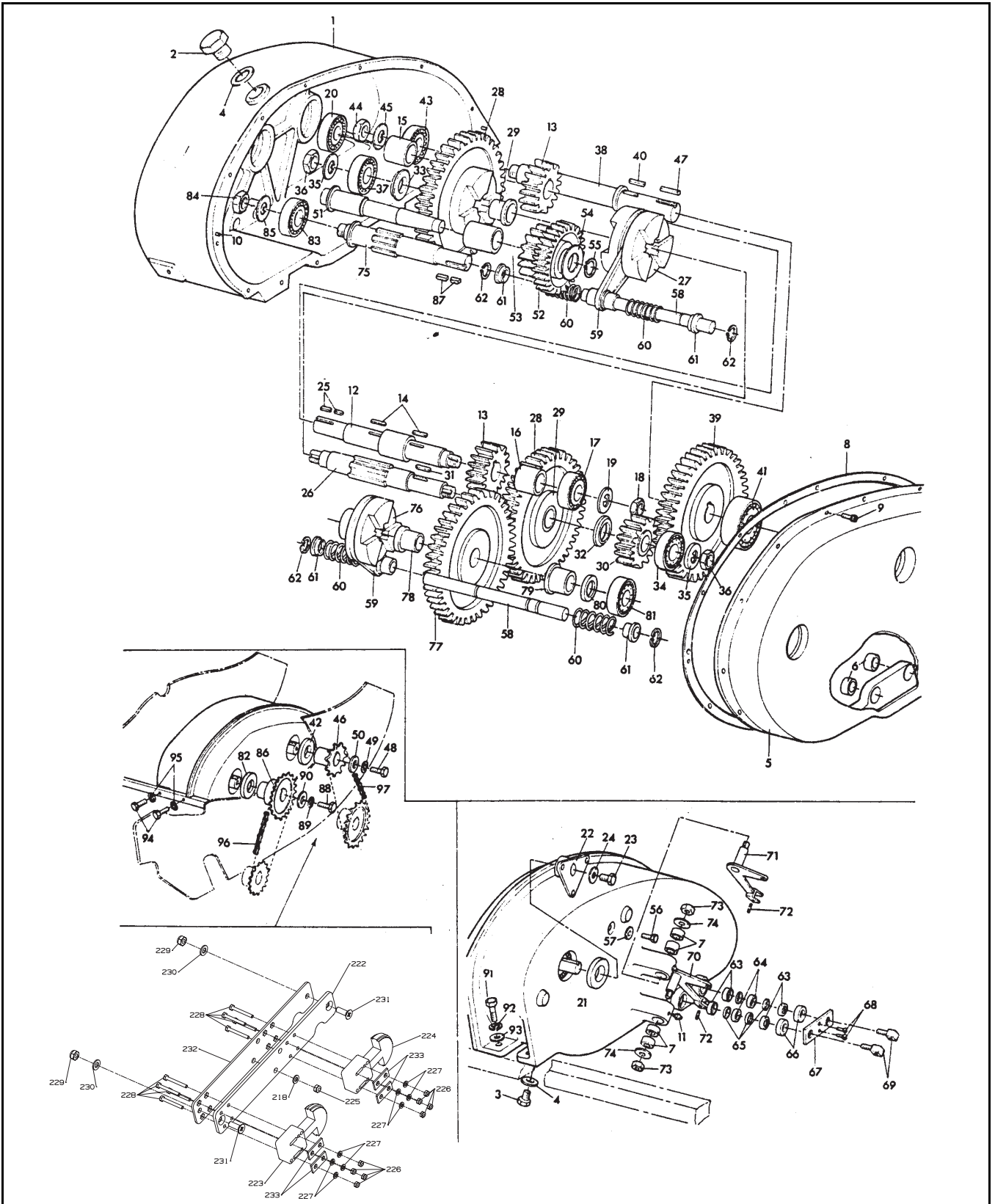


6. GEARBOX AND FINAL DRIVE

ITEM	PART NO.	DESCRIPTION	QTY.	
	LMAY470A	Gearbox Assy.	1	
	LMSC911	● Gearbox Case Assy.	1	
1	MBB2240	● ● Gearbox Half	1	
2	459005187	● ● Filler plug	1	
3	459100228	● ● Drain Plug	1	
4	670000360	● ● Washer-Fibre	2	17/32 x 13/16 x 3/32
5	MBB2241	● ● Gearbox Half	1	
6	590000116	● ● Bush-Oilite 1/2 x 3/4 x 1/2	2	
7	590002134	● ● Bush-Oilite 5/8 x 13/16 x 5/8	4	
8	690403568	● ● Gasket	1	
9	456090042	● ● Capscrew-Sckt 1/4-28 x 7/8	13	
10	049008168	● ● Dowel	2	
11	842000044	● ● Lubricator-1/4" Str	2	
	457100030	● ● Insert-Helicoil	2	1/4 BSP x 1-1/2D
12	MBB2246B	● Input Shaft (Engine)	1	
13	460010481	● Pinion	2	
14	452174	● Key-6 x 6 x 18	2	
15	MBB2250	● Spacer - 1-1/16 x 30mm x 1.284	1	
16	MBB2251	● Spacer - 1-1/16 x 30mm x 1.034	1	
17	002073043	● Bearing-Roller 20 x 52 x 15	1	
18	MBF1211	● Nut	1	
19	452900837	● Tab Washer	1	
20	002033041	● Bearing-Ball 20 x 52 x 15	1	
21	002203509	● Oil Seal 35 x 50 x 7	1	
22	MBB2247B	● Flange Coupling	1	
23	456010381	● Screw-Hex 3/8-24 x 1	1	
24	MAA0244	● Washer	1	
25	452174	● Key-6 x 6 x 18	2	
26	MBB2252B	● Intermediate Shaft	1	
27	MAA0294	● Dog Clutch	1	
	LMSC573	● Intergear Assy.	2	
28	009170206	● ● Gear	1	

MASTIFF 91 PARTS MANUAL

6. GEARBOX AND FINAL DRIVE

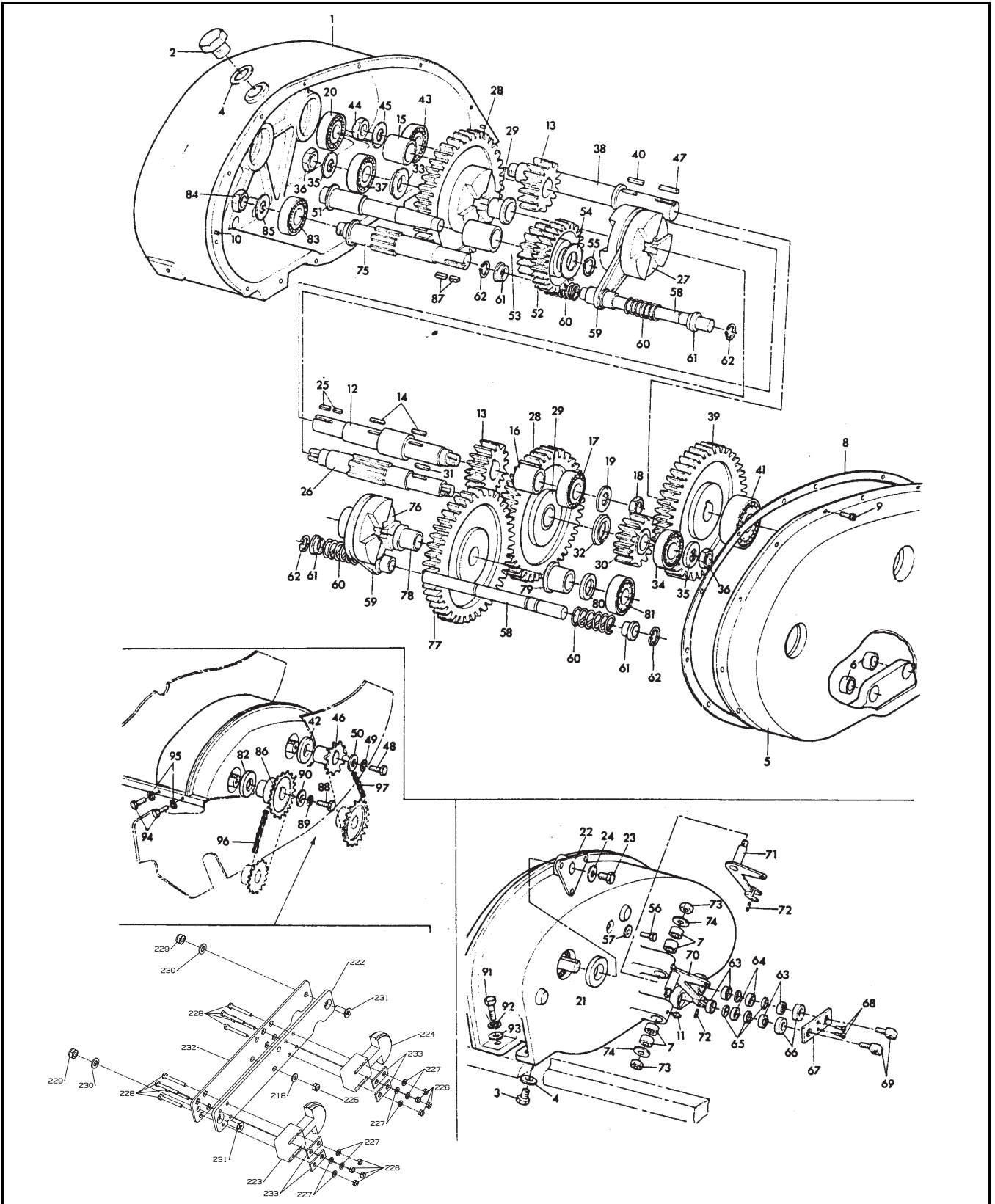


6. GEARBOX AND FINAL DRIVE

ITEM	PART NO.	DESCRIPTION	QTY.
29	539000983	● ● Bush	1
30	460010465	● Pinion	1
31	452180	● Key-6 x 6 x 36	1
32	MBB2254	● Thrust Washer RH	1
33	MBB2255	● Thrust Washer LH	1
34	002073043	● Bearing-Roller 20 x 52 x 15	1
35	452900837	● Tab Washer	2
36	MBF1211	● Nut	2
37	002033041	● Bearing-Ball 20 x 52 x 15	1
38	MBB2256	● Drive Shaft - Landroll	1
39	009170214	● Gear	1
40	452189	● Key-8 x 7 x 22	1
41	002073069	● Bearing-Roller 30 x 72 x 19	1
42	870001833	● Oil Seal	1
43	002033041	● Bearing-Ball 20 x 52 x 15	1
44	MBF1211	● Nut	1
45	452900837	● Tab Washer	1
46	MBE3010	● Sprocket 13 Teeth	1
47	452192	● Key-8 x 7 x 32	1
48	456010381	● Screw-Hex 3/8-24 x 1	1
49	452200087	● Lockwasher-3/8 x .590 x .092	1
50	MAA0244	● Washer-13/32 x 1-1/2 x 4mm	1
51	MAA0295	● Reverse Shaft	1
52	460010300	● Pinion	1
53	MAA0296	● Bush	1
54	MAA0298	● Thrust Washer	1
55	461004205	● Circlip	1
56	456010420	● Screw-Hex 3/8-24 x 1-1/4	1
57	452000326	● Washer-3/8 x 3/4 x .072	1
58	MAA0299A	● Operating Rod	2
59	MAA0300	● Clutch Fork	2

MASTIFF 91 PARTS MANUAL

6. GEARBOX AND FINAL DRIVE

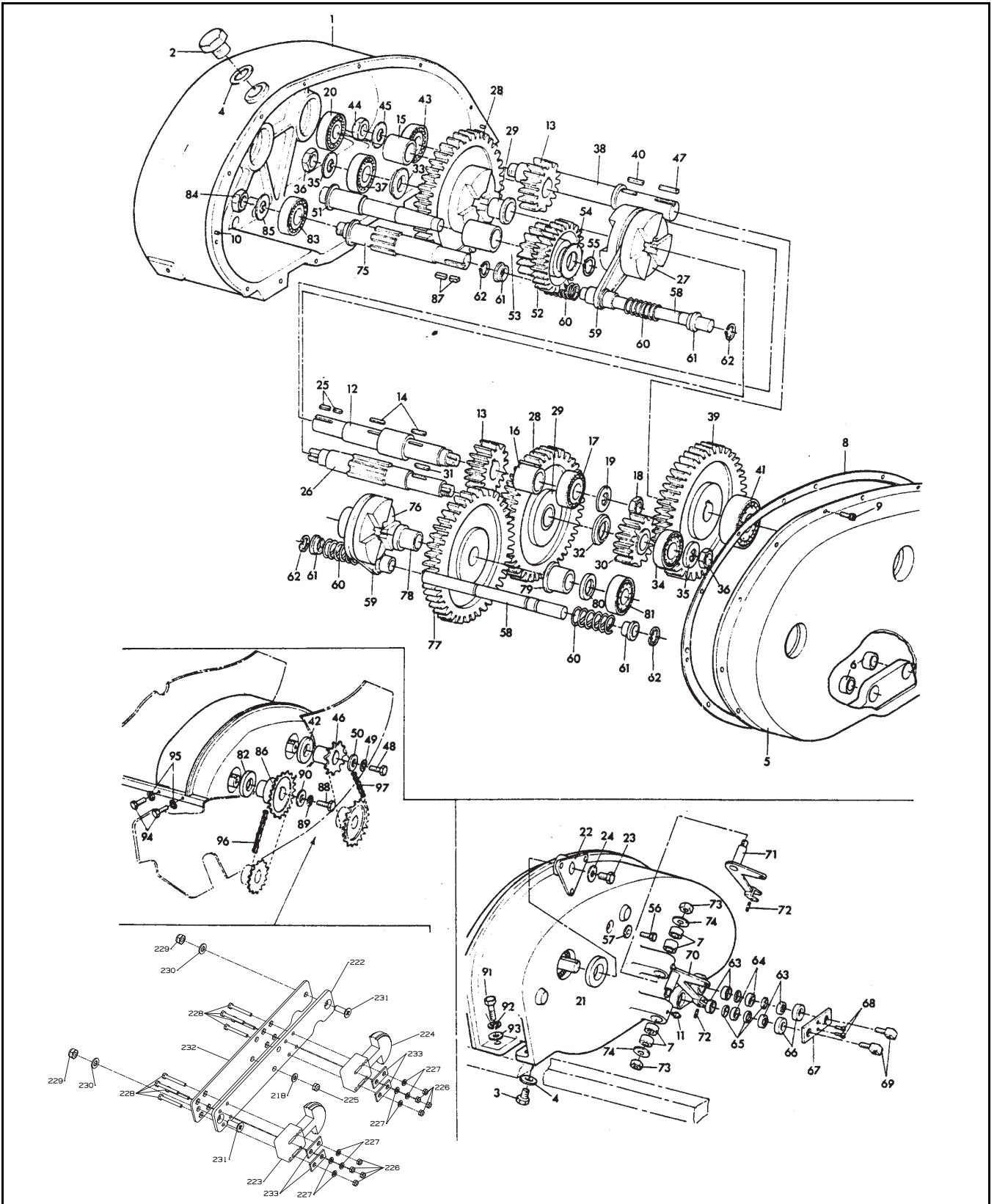


6. GEARBOX AND FINAL DRIVE

ITEM	PART NO.	DESCRIPTION	QTY.
60	461900194	● Spring	4
61	MAA0302	● Collar	4
62	461004166	● Circlip	4
63	MAA0276	● Collar-Oil Seal	4
64	MAA0277	● Washer-Oil Seal	2
65	870001778	● O-Ring	4
66	650001619	● Felt Washer	2
67	MAA0280	● Cover	1
68	456430092	● Screw-Cheese Hd 2BA x 5/8	2
69	MAA0303	● Operating Eye	2
70	MAA0310	● Bellcrank	1
71	MAA0311	● Cylinder Bellcrank	1
72	MAA0318A	● Pin	2
73	450020087	● Nut-Hex 3/8-24	2
74	452000384	● Washer-7/16 x 7/8 x .092	2
75	MBB2242A	● Drive Shaft - Cutting Cyl.	1
76	MAA0306	● Dog Clutch	1
	LMSC573	● Inter Gear Assy.	1
77	009170206	● Gear	1
78	539000983	● Bush	1
79	MBB2244	● Distance Piece	1
80	MBB2245A	● Washer-.789 x 30mm x .142	1
81	002073043	● Bearing-Roller 20 x 52 x 15	1
82	002203509	● Oil Seal 35 x 50 x 7	1
83	002033041	● Bearing-Ball 20 x 52 x 15	1
84	MBF1211	● Nut	1
85	452900837	● Tab Washer	1
86	MBE3016	● Sprocket 23 Teeth	1
87	452174	● Key-6 x 6 x 18	2
88	456010331	● Screw-Hex 3/8-24 x 3/4	1
89	452200087	● Lockwasher-3/8 x .590 x .092	1

MASTIFF 91 PARTS MANUAL

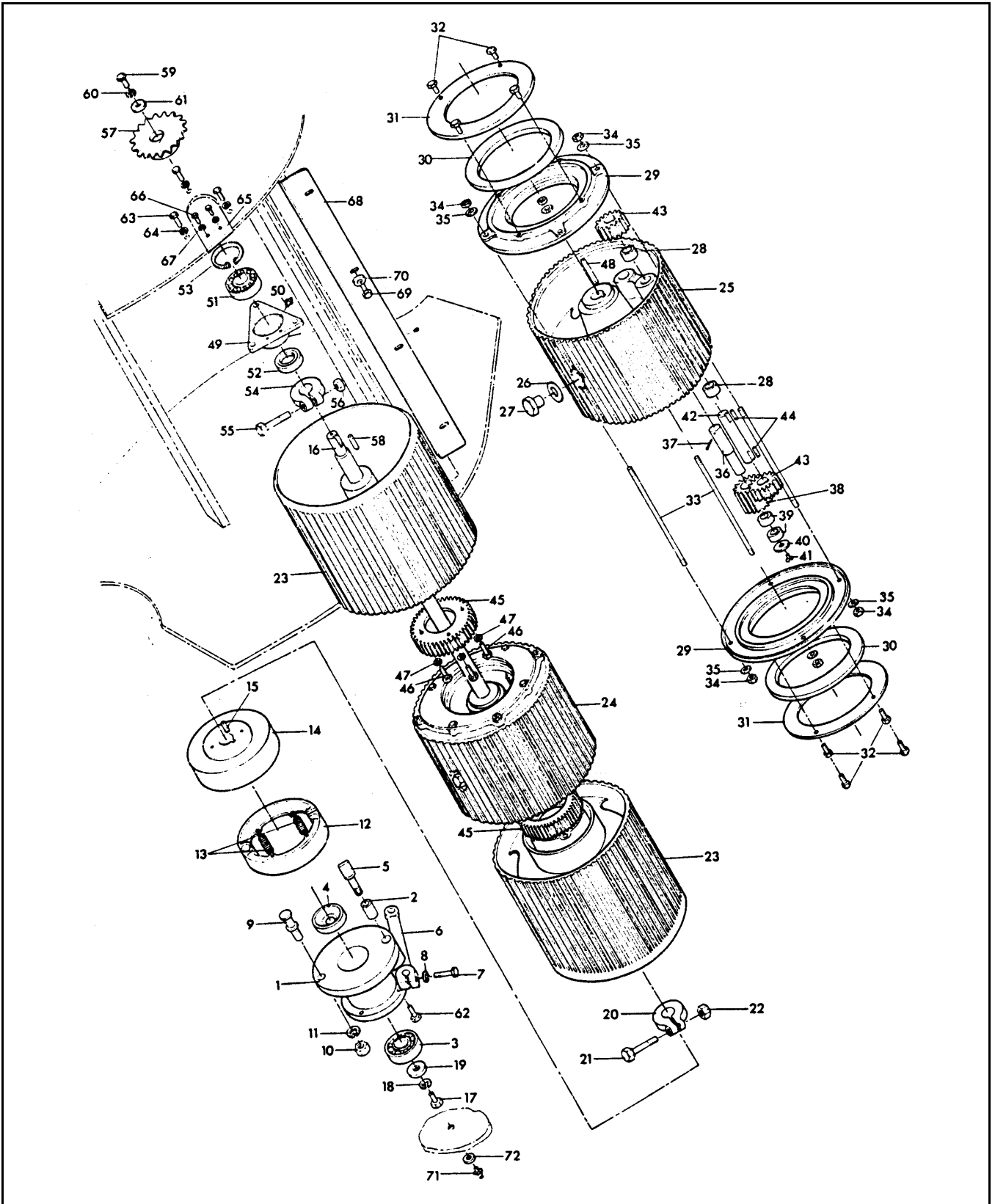
6. GEARBOX AND FINAL DRIVE



6. GEARBOX AND FINAL DRIVE

ITEM	PART NO.	DESCRIPTION	QTY.
90	MAA0244	● Washer-13/32 x 1-1/2 x 4mm	1
*	MAA0240A	● Dipstick	1
		GEAR BOX MOUNTING	
91	451030201	Bolt-Hex 5/16-24 x 1-1/4	2
92	450411	Lockwasher-M8 x 12.75 x 2	2
93	450390	Washer-M8 x 17 x 1.8	2
94	451030332	Bolt-Hex 3/8-24 x 1-1/2	2
95	452200087	Lockwasher-3/8 x .590 x .092	2
96	003020512	Chain (Cylinder)	1
*	003802027	● Connecting Link	1
97	003030395	Chain (Land Roll)	1
*	003803023	● Connecting Link	1
		CHAIN TENSIONERS	
218	450390	Washer plain M8	1
222	4120659	Tensioner plate	1
223	4120667	Chain Tensioner 5/8"	1
224	4120670	Chain Tensioner 3/4"	1
225	450378	Nut - Nyloc M8	1
226	450377	Nut - Hex M6	8
227	450389	Washer Plain M6	8
228	450177	Screw - Hex M6x50	8
229	450379	Nut - Nyloc M10	2
230	450391	Washer - Plain M10	2
231	450651	Screw - CSK M10x30	2
232	4121042	Tensioner Plate Spacer	1
233	MBC5095	Plate	4

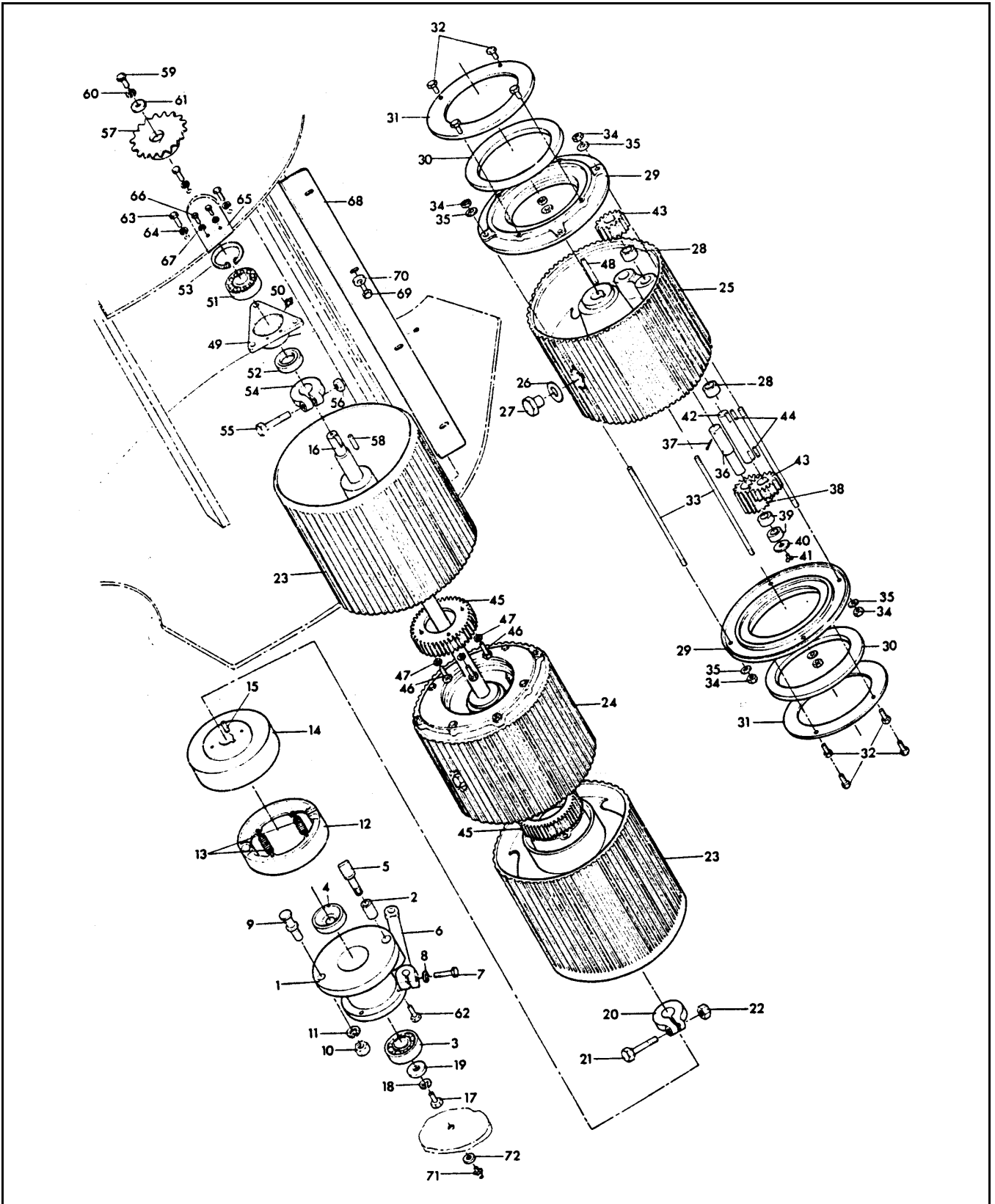
7. LANDROLL AND BRAKE



7. LANDROLL AND BRAKE

ITEM	PART NO.	DESCRIPTION	QTY.
	LMAY467C	Landroll Assy.	1
	LMSC592	● Bearing Housing RH Assy.	1
1	MBB2655	● ● Housing	1
2	590000378	● ● Bush-Oilite 5/8 x 7/8 x 1	1
3	820000052	● Bearing-Align 25 x 52 x 15	1
4	002203012	● Oil Seal 30 x 62 x 7	1
5	460050019	● Brake Cam	1
6	LCN0473U	● Brake Lever	1
7	456010111	● Screw-Hex 1/4-28 x 1	1
8	452200029	● Lockwasher-1/4 x .425 x .072	1
9	LSD4649U	● Anchor Pin	1
10	450020087	● Nut-Hex 3/8-24	1
11	452200087	● Lockwasher-3/8 x .590 x .092	1
	LMSA647A	● Brake Shoe Assy.	2
12	LSD3078	● ● Brake Shoe	1
13	461001736	● ● Spring	2
14	LAY0045A	● Brake Drum	1
15	453002002	● Key-1/4 x 3/16 x 7/8	1
16	MBB2656	● Landroll Spindle	1
17	MBB2854	● LH Screw	1
18	452200168	● Lockwasher-1/2 x .763 x .116	1
19	MAA0244	● Washer-13/32 x 1-1/2 x 4mm	1
20	LSD3205B	● Set Collar	1
21	451030730	● Bolt-Hex 1/2-20 x 3-1/2	1
22	450020142	● Nut-Hex 1/2-20	1
23	MBB6902	● Landroll Outer	2
*	LSD5895U	● Oil Tube	2
*	842000044	● Lubricator-1/4 Str	2
24	LMSC593	● Centre Roll Assy.	1
25	LAY0069	● Roll	1
26	002292047	● Washer-Fibre 13/16 x 1-1/8 x 1/16	1
27	LSD3785	● Filler Plug	1

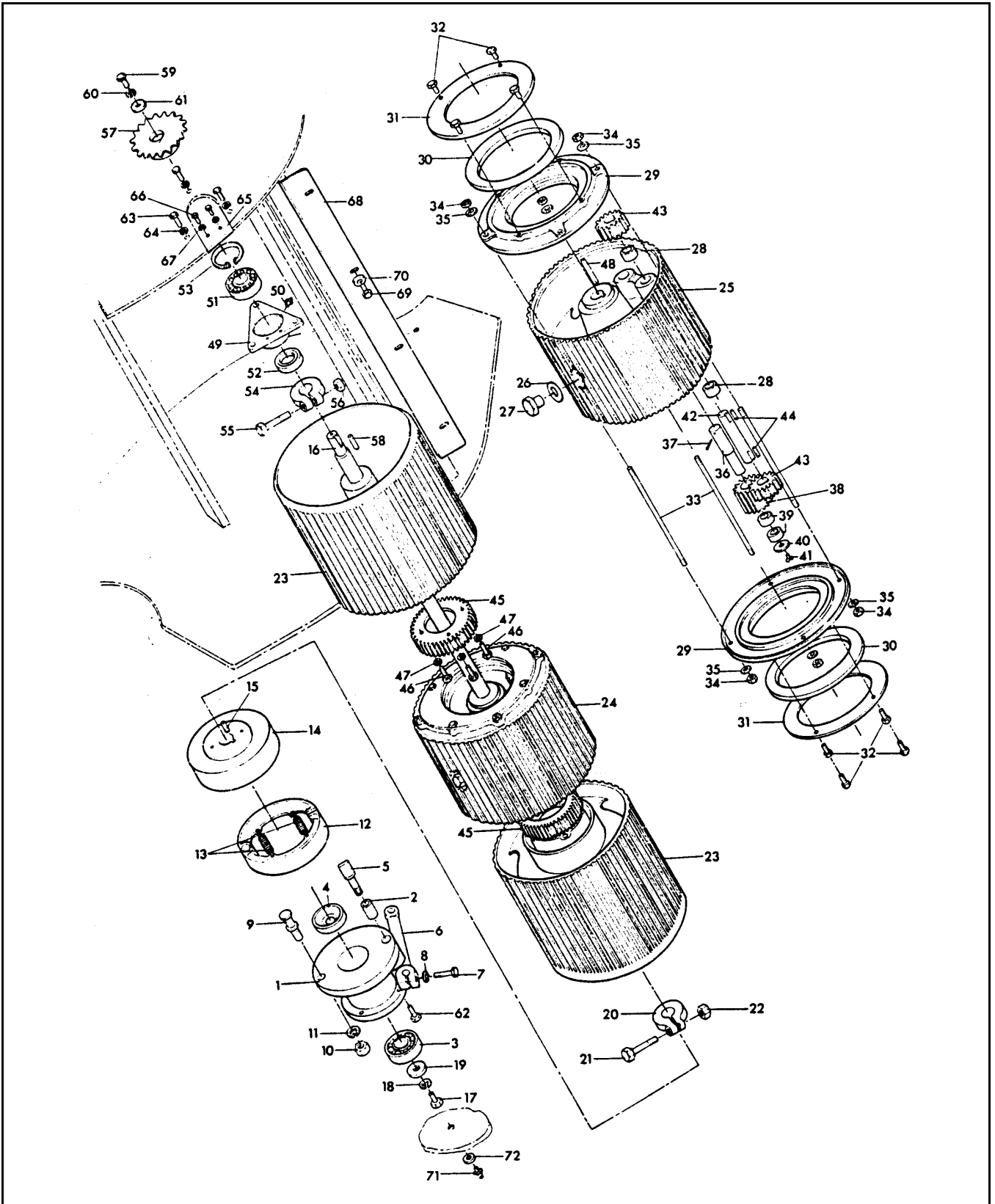
7. LANDROLL AND BRAKE



7. LANDROLL AND BRAKE

ITEM	PART NO.	DESCRIPTION	QTY.
28	590001544	● Bush-Oilite 7/8 x 1-1/8 x 1	2
29	LSD4661U	● End Plate	2
30	650001180	● Felt Washer	2
31	LSD3340A	● Cover	2
32	456010014	● Screw-Hex 1/4-28 x 3/8	8
*	452200029	● Lockwasher-1/4 x .425 x .072	8
33	456800643	● Studs	4
34	450020053	● Nut-Hex 5/16-24	8
35	670000310	● Washer-Fibre 21/64 x 9/16 x 1/16	8
36	LSD4660U	● Spindle	1
37	454000297	● Split Pin-1/8 x 1-1/4	1
	LMSY406	● Double Gear Pinion Assy.	1
38	460010279	● ● Double Gear Pinion	1
39	590002532	● ● Bush-Oilite 7/8 x 1-1/8 x 7/8	2
40	LSD3772	● Washer	1
41	456050155	● Screw-Csk 5/16-24 x 1	1
42	468030079	● Spindle	1
43	460010261	● Single Gear Pinion	2
44	453003290	● Key-1/4 x 1/4 x 1	2
45	LAY0087A	● Differential Gear	2
46	456010331	● Screw-Hex 3/8-24 x 3/4	8
47	452200087	● Lockwasher-3/8 x .590 x .092	8
48	453002450	● Key-3/8 x 1/4 x 4-1/2	1
49	MBB2654	● Bearing Housing LH	1
50	842000044	● Lubricator	1
51	820000060	● Bearing-Align 30 x 62 x 16	1
52	002203509	● Oil Seal 35 x 50 x 7	1
53	451992	● Circlip-Int 62 x 2 T	1
54	LSD3205B	● Set Collar	1
55	451030730	● Bolt-Hex 1/2-20 x 3-1/2	1
56	450020142	● Nut-Hex 1/2-20	1

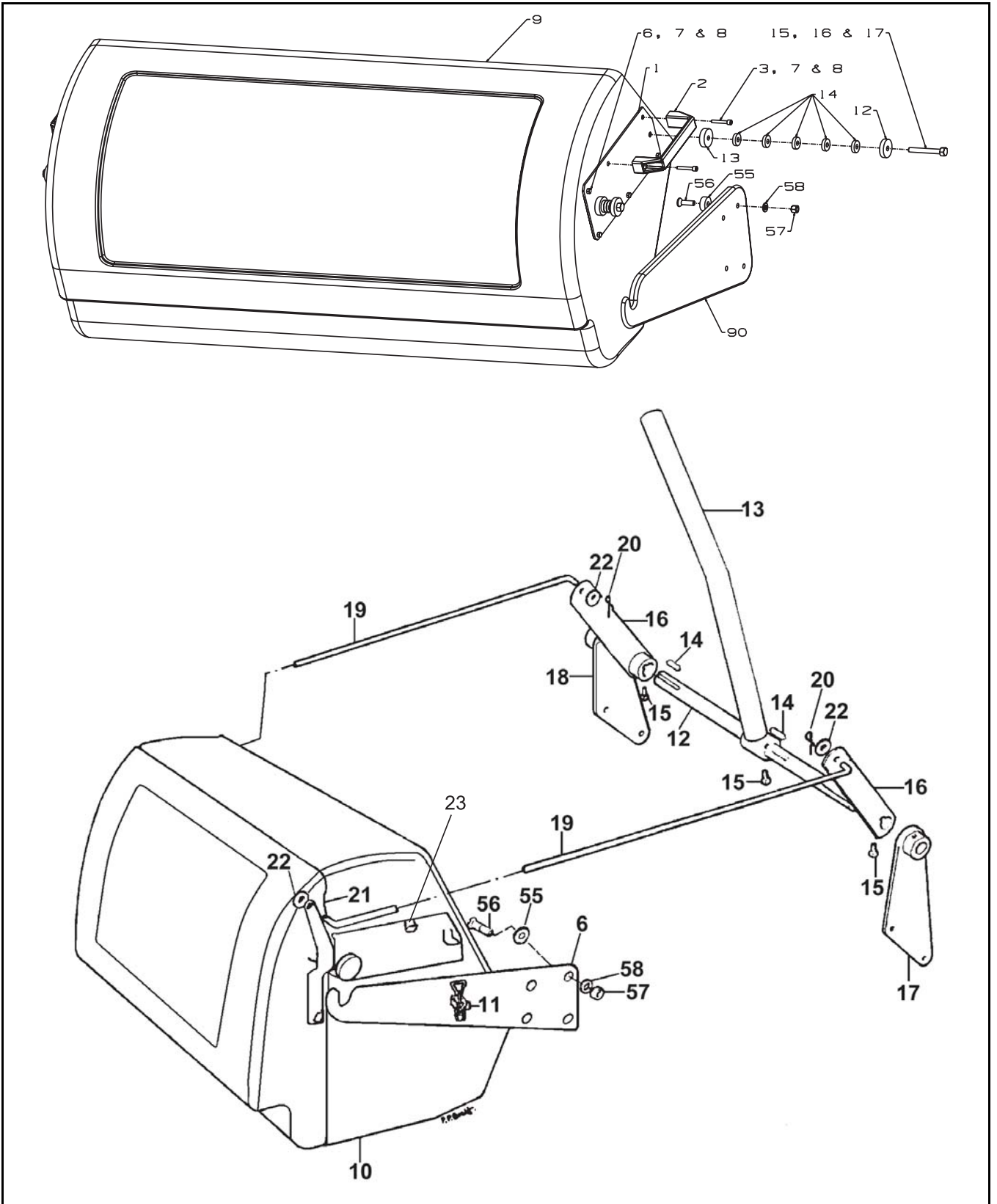
7. LANDROLL AND BRAKE



7. LANDROLL AND BRAKE

ITEM	PART NO.	DESCRIPTION	QTY.
57	MBE3015	● Sprocket 16 Teeth	1
58	452192	● Key-8 x 7 x 32	1
59	456010381	● Screw-Hex 3/4-24 x 1	1
60	452200087	● Lockwasher-3/8 x .590 x .092	1
61	MAA0244	● Washer-13/32 x 1-1/2 x 4mm	1
62	456010226	● Screw-Hex 5/16-24 x 1	4
*	450411	● Lockwasher- M8 x 12.75 x 2	4
*	450020053	● Nut-Hex 5/16-24	4
63	456010331	● Screw-Hex 3/4-24 x 3/4	3
64	452200087	● Lockwasher-3/8 x .590 x .092	3
65	MAA0243	● Slot Cover	1
66	456010072	● Screw-Hex 1/4-28 x 5/8	2
67	452200029	● Lockwasher-1/4 x .425 x .072	2
68	LBBO375A	● Scraper	1
69	451030201	● Bolt-Hex 5/16-24 x 1-1/4	4
70	450390	● Washer-M8 x 17 x 1.8	4
71	842000044	● Lubricator-1/4" Str	1
72	452100019	● Washer-1/4 x 5/8 x .064	1
*	LAY0456	● Dipstick	1

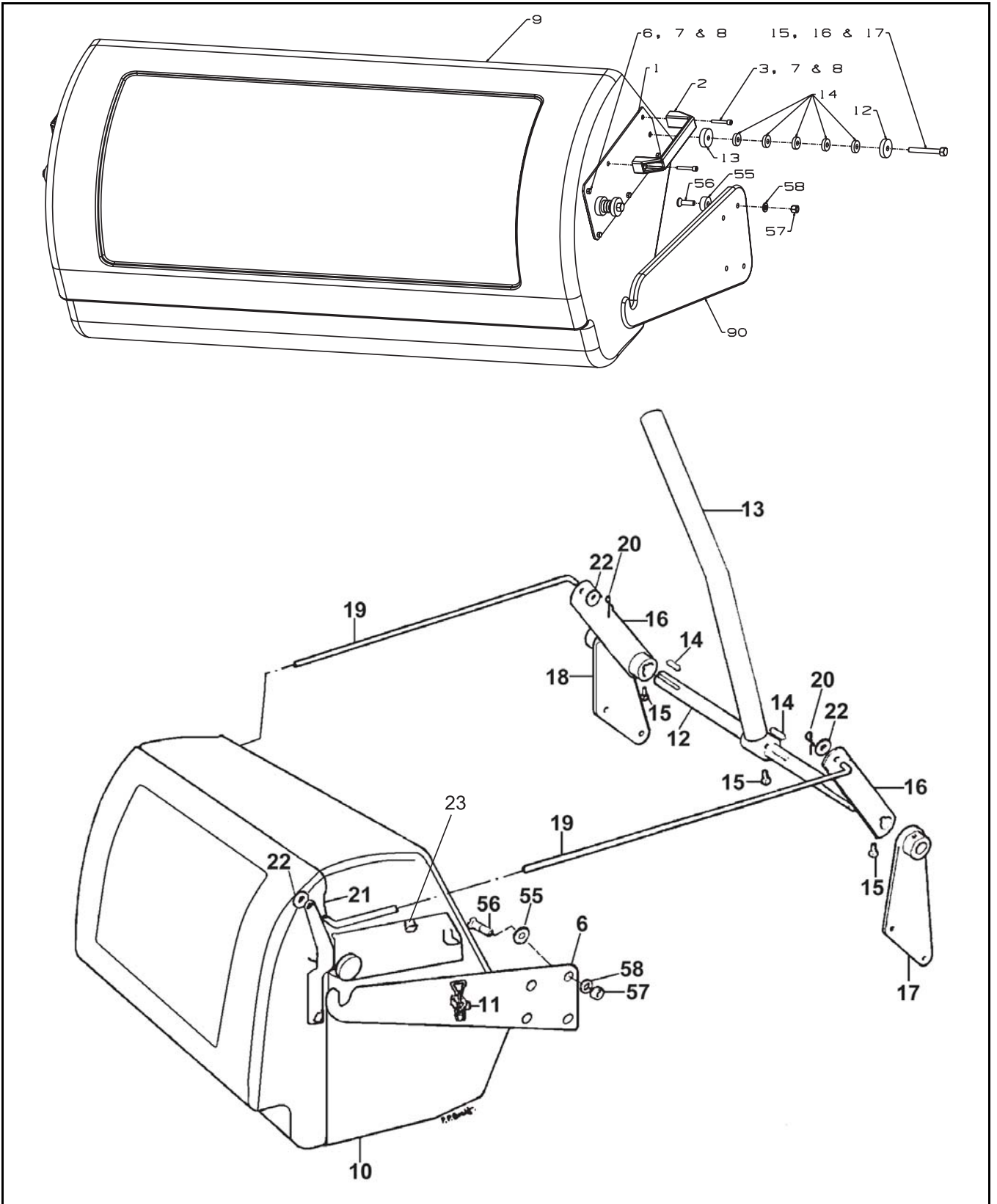
8. GRASSBOX



8. GRASSBOX

ITEM	PART NO.	DESCRIPTION	QTY.
		STANDARD GRASSBOX	
1	MBG6801	Side Plate	2
2	009135530	Handle	2
3	450714	Capscrew - Sckt M6 x 30	4
6	450170	Screw-Hex M6 x 16	8
7	452101667	Washer-1/4 x 1 x .104	12
8	450377	Nut-Hex M6 Nyloc	12
9	009151010	Grassbox 36"	1
12	MBE2193	Spacer	4
13	MBE2194	Tapped Spacer	4
14	009042780	Rubber Bush	20
15	450034	Bolt-Hex M10 x 60	4
16	450379	Nut-Hex M10 Nyloc	4
17	009072080	Washer	4
55	MBE2400	Spacer-10 x 30 x 9.5/9.0	8
56	456050113	Screw-Csk 3/8-24 x 1-1/4	8
57	450020087	Nut-Hex 3/8-24	8
58	452000326	Washer-3/8 x 3/4 x .072	8
90	MBE2371A	Grassbox Arm LH	1
91*	MBE2369A	Grassbox Arm RH	1
		SELF EMPTYING GRASSBOX	
6	MBE2371A	Grassbox Arm LH	1
*	MBE2369A	Grassbox Arm RH	1
56	456050244	Screw-Csk 3/8-24 x 7/8	8
57	450020087	Nut-Hex 3/8-24	8
58	452000326	Washer-3/8 x 3/4 x .072	8
10	009131569	Grassbox 36"	1
11	MBB6845A	Adjusting Toggle	2
*	451143	Screw-Pan Hd No.10 x 9.5	4
12	MBC7066A	Cross Shaft	1
13	MBC7067	Hand Lever	1
14	453003244	Key-3/16 x 3/16 x 1	3
15	456060132	Screw-Sq Hd 5/16-24 x 1/2	3
16	MBA2059A	Operation Lever	1

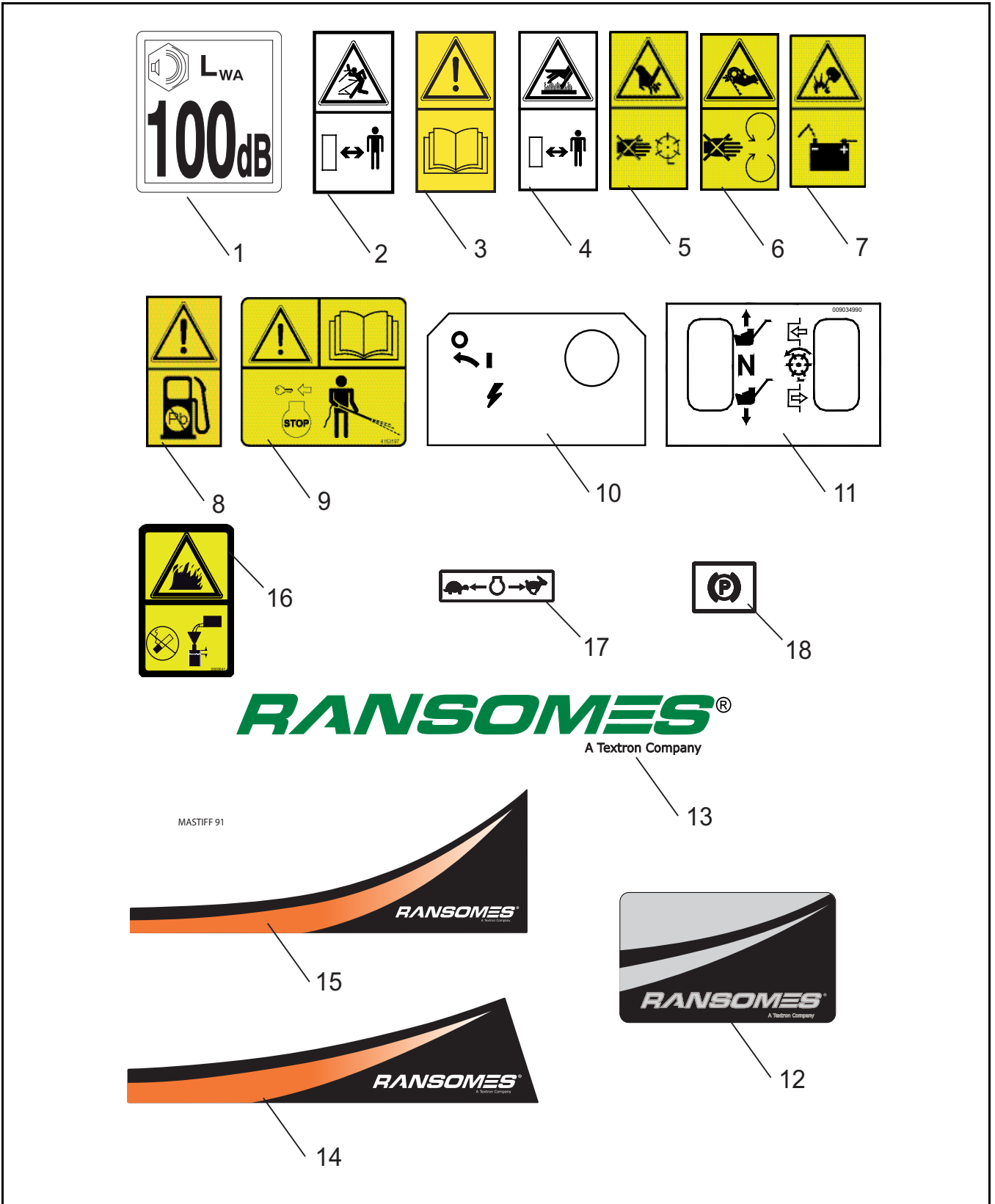
8. GRASSBOX



8. GRASSBOX

ITEM	PART NO.	DESCRIPTION	QTY.	
17	MBA2066	Bracket LH	1	
18	MBA2067	Bracket RH	1	
19	MBA2069	Pull Rod	2	
20	461300029	Pin Clip	2	
21	451225	Split Pin-2.5 x 20	2	
22	450390	Washer-M8 x 17 x 1.8	4	
*	680000791	Hand Grip-For 7/8 Dia	1	
23	009079280	Hook	2	

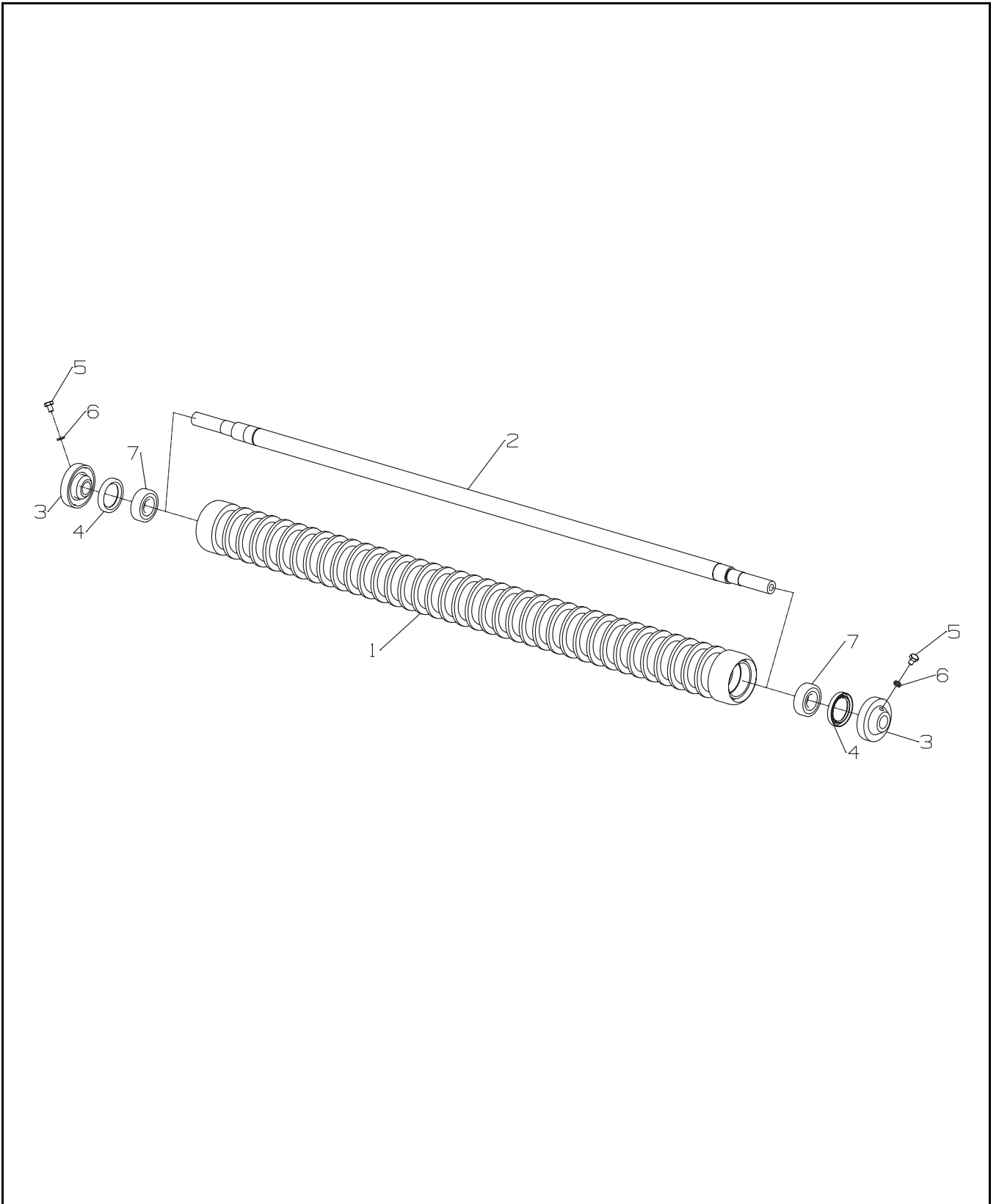
9. DECALS



9. DECALS

ITEM	PART NO.	DESCRIPTION	QTY.
	IDL133	Decal Kit - Mastiff	
1	009034760	● Decal - Noise 100	1
2	009034890	● Decal - Bystander Warning	1
3	009034910	● Decal - Instruction	1
4	009034920	● Decal - Hot	1
5	009034940	● Decal - Rotating Blades	1
6	009034900	● Decal - Do Not Remove Guards	1
7	009114100	● Decal - Danger Battery	1
8	009114240	● Decal - Lead Free Fuel	1
9	4153197	● Decal - Caution, Pressure Washing	1
10	009034980	● Decal - Ignition	1
11	009034990	● Decal - Forward / Reverse	1
12	4124185	● Decal - "Ransomes" Emblem	1
13	4128628	● Decal - Ransomes 13"	1
14	4128837	● Decal - RH Swoosh Mastiff	1
15	4128838	● Decal - Front Cover Swoosh	1
16	2000641	● Decal - Explosive Fuel	1
17	4144565	● Decal - Engine Throttle	1
18	009039700	● Decal - Parking Brake	1

10. ACCESSORIES

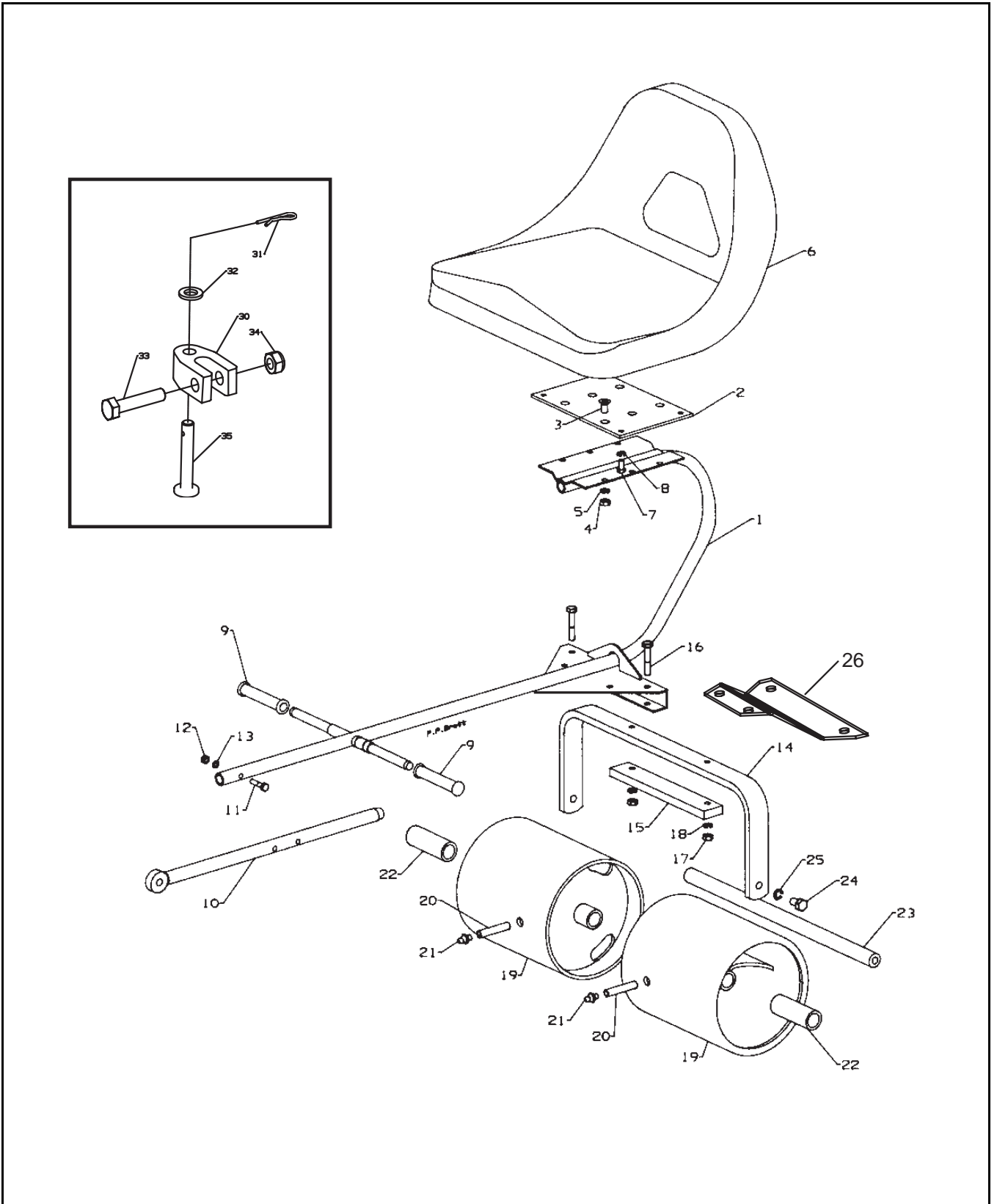


10. ACCESSORIES

ITEM	PART NO.	DESCRIPTION	QTY.	
1	LMSE167	Grooved Front Roll Assembly		
2	4120210	● Grooved Roll Tube	1	
3	MBB2650	● Spindle	1	
4	MBB2653	● End Cover	2	
5	002203509	● Oil Seal	2	
6	456010014	● Screw - Hex HT 1/4-20x3/8 UNF	2	
7	452200029	● Spring Washer 1/4"	2	
	002036049	● Bearing 20x47x14	2	

MASTIFF 91 PARTS MANUAL

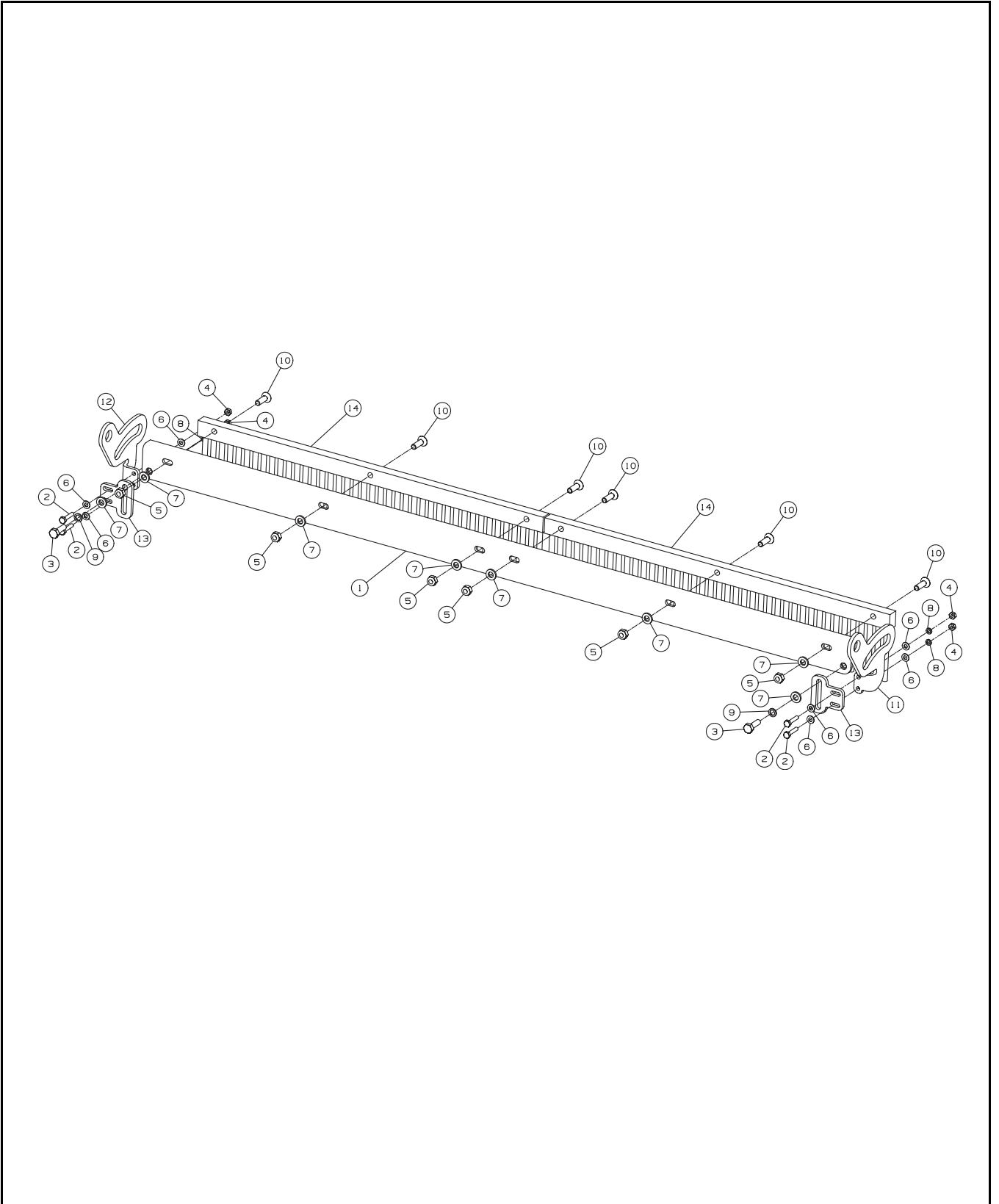
10. ACCESSORIES



10. ACCESSORIES

ITEM	PART NO.	DESCRIPTION	QTY.
	LMAB029	Trailing Seat Assembly	1
1	MBA2141	● Main Frame	1
2	MBC9575B	● Seat Plate	1
3	450879	● Screw - Socket Hd M10 x20	4
4	450325	● Nut - Hex M10	4
5	450412	● Washer - Lock M10x15.9x2.5	4
6	699524927	● Seat Assembly	1
7	456110066	● Screw Hex 3/8-16x1	4
8	450411	● Lockwasher M8 x 12.75x2	1
9	649002160	● Foot Rubber	2
10	MBA2146	● Drawbar	1
11	451030219	● Bolt - Hex 5/16-24x1-1/2"	1
12	450020053	● Nut - Hex 5/16-24	1
13	450411	● Lockwasher M8 x 12.75x2	1
14	MBA2171B	● Roll Carriage	1
15	MBA2172	● Packing Strip	1
16	451030358	● Bolt - Hex 3/8-24x2	4
17	450020087	● Nut - Hex 3/8-24	6
18	452200087	● Lockwasher 3/8x.590x.092	10
19	MAA0159	● Roll	2
20	LSD4253	● Oil Tube	2
21	840000270	● Grease Nipple	2
22	MAA0160	● Distance Piece	2
23	MAA0008	● Spindle	1
24	456010569	● Screw - Hex 1/2-20x1-1/4"	2
25	452200168	● Lockwasher 1/2x.763x.116	2
26	MBE1129A	● Plate	1
*	456010331	● Screw - Hex 3/8-24x3/4"	2
*	452000326	● Washer 3/8x3/4x.072	4
	LMSC022	Kit-SwivelL Joint	1
30	LSD4001A	● Swivel Joint	1
31	001490226	● 'R' Clip	1
32	450392	● Washer M12x24x2.7	1
33	450052	● Bolt - hex M12x60	1
34	450380	● Nut - Hex Nyloc M12	1
35	4120572	● Swivel Joint Pin	1

10. ACCESSORIES

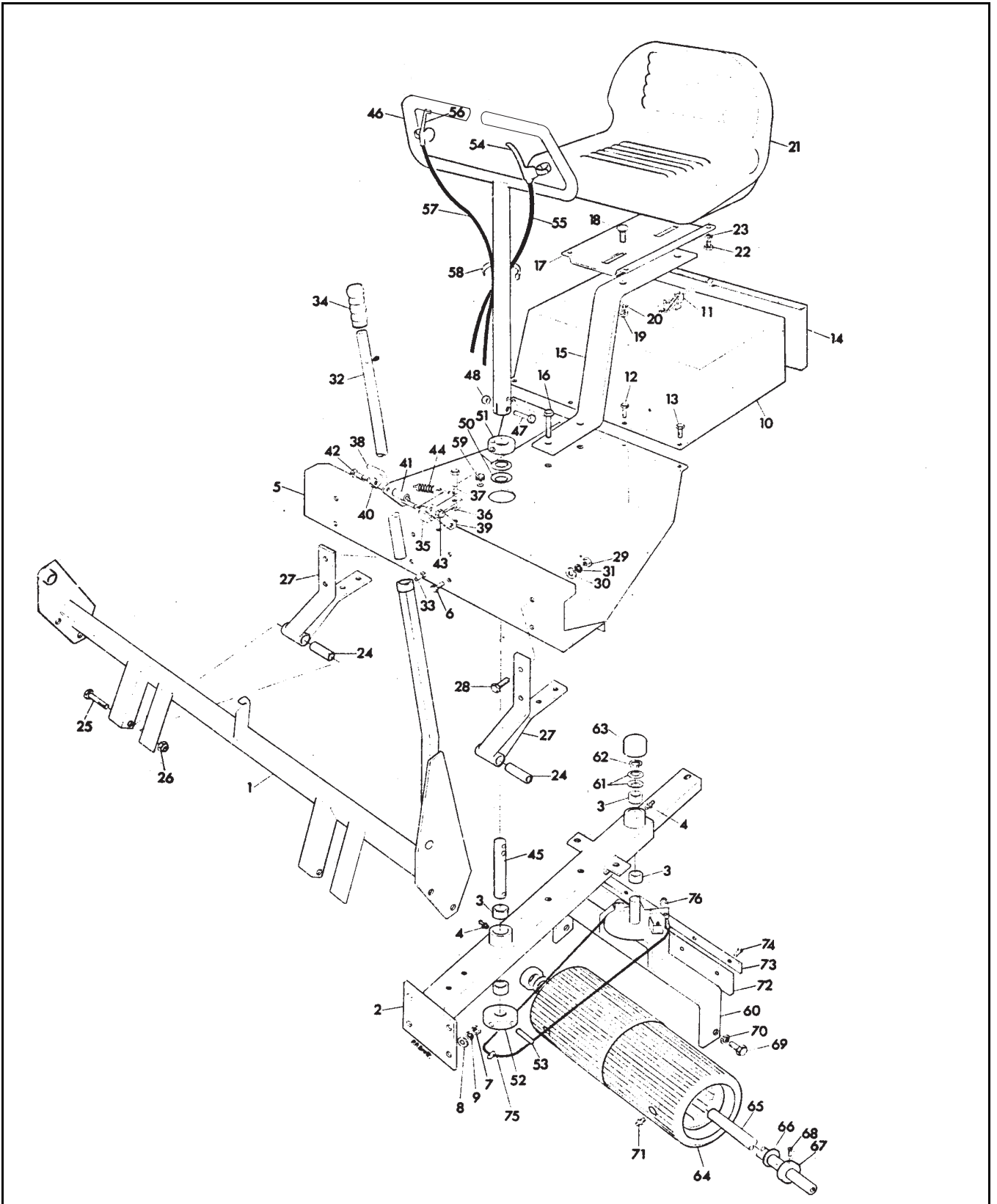


10. ACCESSORIES

ITEM	PART NO.	DESCRIPTION	QTY.
	LMAB 997	Brush Kit, Mastiff 91	
1	4118172	● Brush Bracket LH	1
2	4118173	● Brush Bracket RH	1
3	4118594	● Adjustment Bracket	2
4	4118728	● Weldment - Brush Brace	1
5	4118950	● Brush	2
6	450135	● Screw - Hex M4x20	4
7	450321	● Nut - hex M4	4
8	450387	● Wshr - M4x9z0.9	8
9	450408	● Lockwshr - M4x6.95x1.2	4
10*	45610569	● Screw - Hex 1/2-20x1-1/4	2
11*	1399032	● Nut - Hex Nyloc 1/2-20	2
12*	450392	● Wshr - M12x24x2.7	4
13	450171	● Screw - Hex M6x20	2
14	450377	● Nut - Hex Nyloc M6	6
15	450389	● Wshr - M6x12.5x1.8	8
16	450410	● Lockwshr - M6x9.6x1.5	2
17	450621	● Screw - CSK M6x25	6

**MASTIFF 91
PARTS MANUAL**

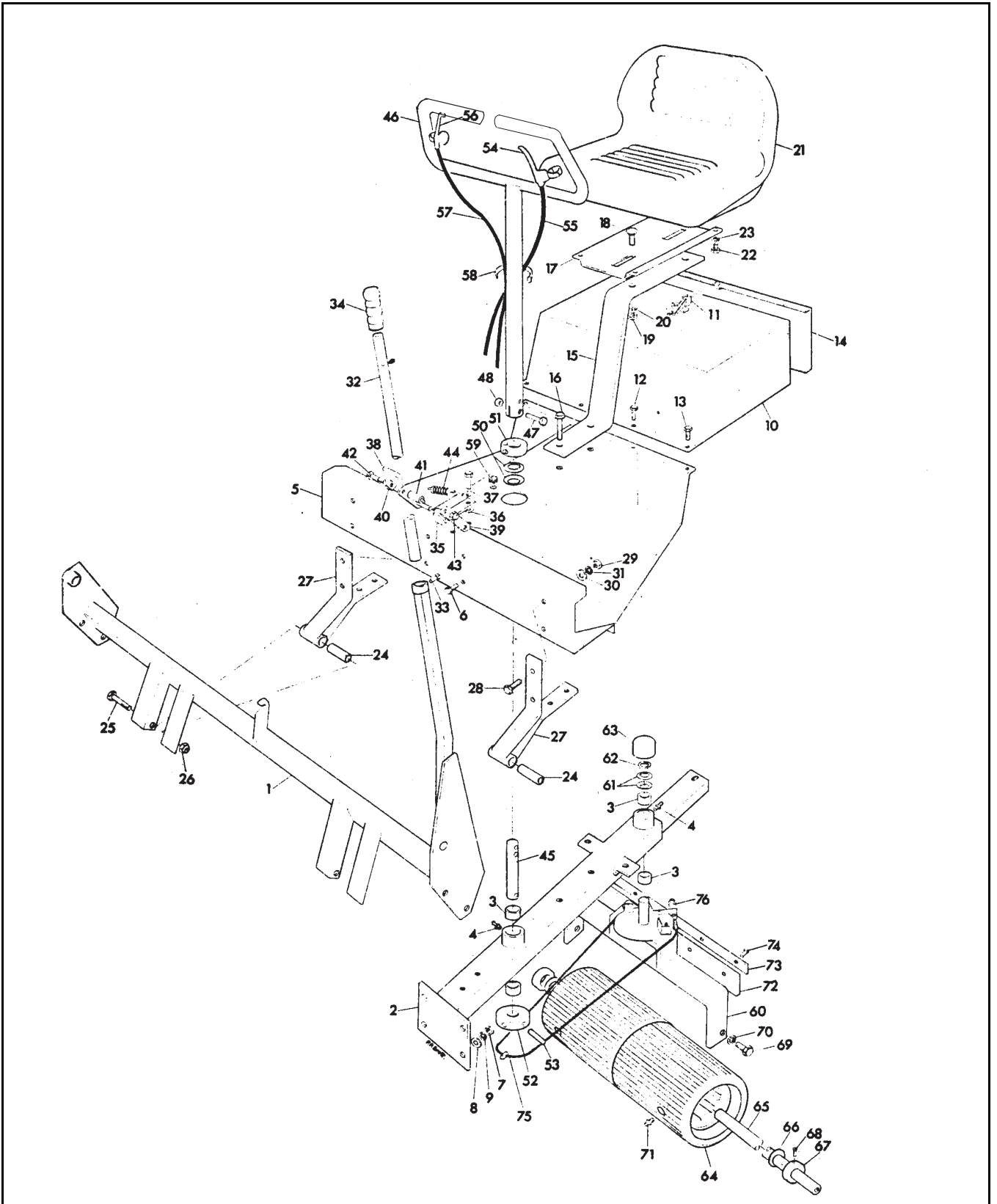
10. ACCESSORIES



10. ACCESSORIES

ITEM	PART NO.	DESCRIPTION	QTY.
	LMAC253	Steering Seat Kit, Mastiff 91	
1	MBC3832	● Support Frame	1
*	MAA0355A	● Bolt	4
*	450020142	● Nut-Hex 1/2-20	4
*	452200168	● Lockwasher-1/2 x .763 x .116	4
2	MBC3535A	● Chassis	1
3	002106513	● Bush-Oilite 25 x 30 x 20	4
4	002993013	● Lubricator-M6 Str	2
5	MBC3542A	● Footplate	1
*	MBC3546	● Non Slip Pad RH	1
*	MBC3547	● Non Slip Pad LH	1
6	450171	● Screw-Hex M6 x 20	4
7	450323	● Nut-Hex M6	4
8	450389	● Washer-M6 x 12.5 x 1.8	4
9	450410	● Lockwasher-M6 x 9.6 x 1.5	4
10	MBC3548A	● Storage Box	1
11	001990462	● Fastener	1
*	MBC7706	● Stiffener	1
*	450191	● Screw-Hex M8 x 20	3
*	450324	● Nut-Hex M8	3
*	450411	● Lockwasher-M8 x 12.75 x 2	3
*	450390	● Washer-M8 x 17 x 1.8	3
12	450171	● Screw-Hex M6 x 20	3
13	450170	● Screw-Hex M6 x 16	2
*	450323	● Nut-Hex M6	5
*	450410	● Lockwasher M6 x 9.6 x 1.5	5
14	MBC3553	● Box Lid	1
*	450149	● Screw-Hex M5 x 12	2
*	450322	● Nut-Hex M5	2
*	450409	● Lockwasher-M5 x 8.55 x 1.5	2
*	450388	● Washer-M5 x 10 x 1.1	2
*	009036590	● Decal-Ransomes	1
15	MBC3565	● Seat Support	1
16	450020	● Bolt-Hex M8 x 60	2
*	450324	● Nut-Hex M8	2
*	450411	● Lockwasher-M8 x 12.75 x 2	2
17	MBC3566	● Seat Plate	1
18	452564	● Bolt-Crg M8 x 25	2
19	450324	● Nut-Hex M8	2

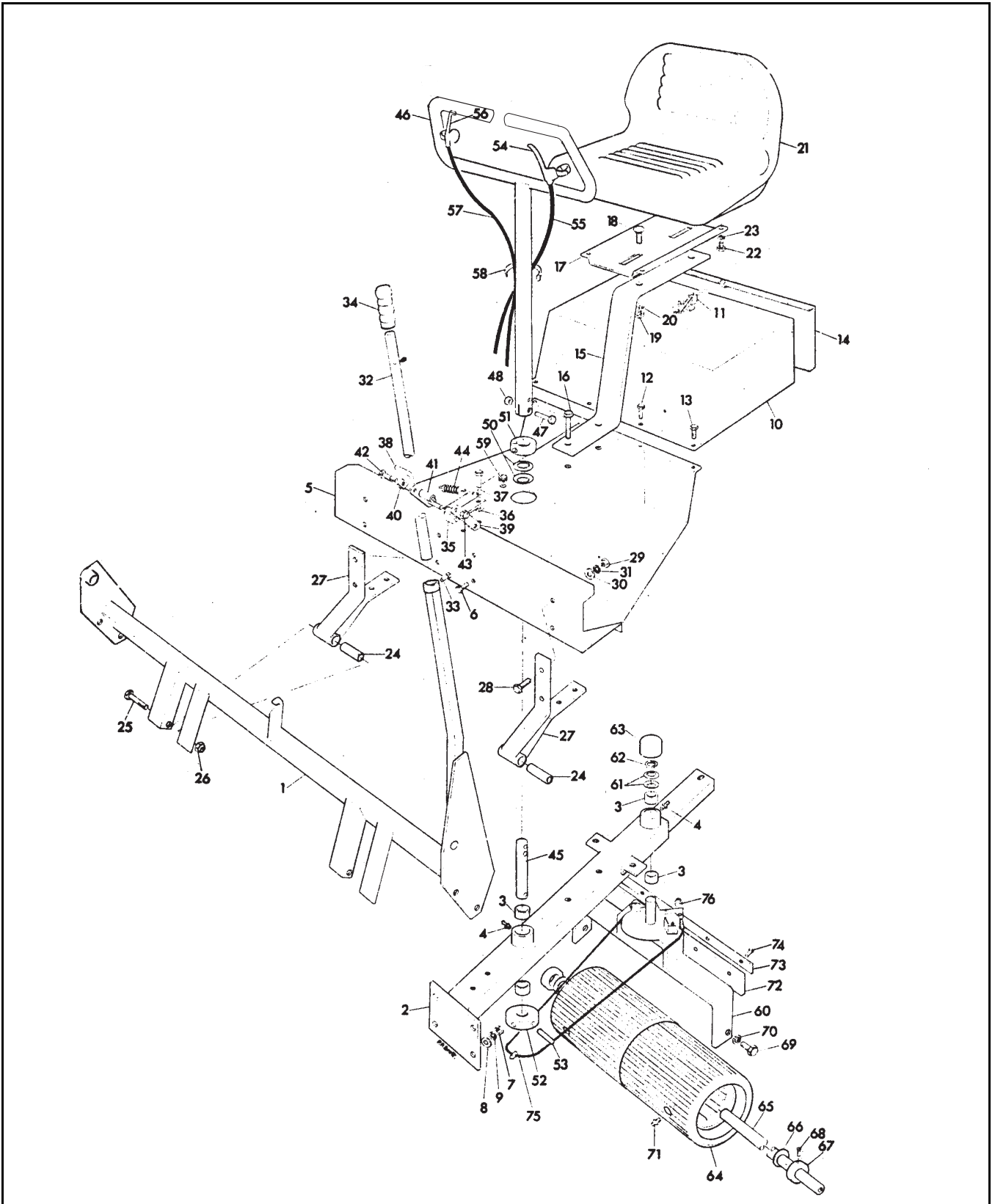
10. ACCESSORIES



10. ACCESSORIES

ITEM	PART NO.	DESCRIPTION	QTY.
20	450411	● Lockwasher-M8 x 17 x 1.8	2
21	008199239	● Seat	1
22	456110189	● Screw-Hex 5/16-18 x 3/4	4
23	450411	● Lockwasher-M8 x 12.75 x 2	4
24	MBC3849	● Pivot	2
25	450038	● Bolt-Hex M10 x 80	2
26	450379	● Nut-Hex M10 Nyloc	2
27	MBC4630	● Connector	2
28	450172	● Screw-Hex M6 x 25	8
29	450323	● Nut-Hex M6	8
30	452000237	● Washer-1/4 x 3/4 x .064	8
31	450410	● Lockwasher-M6 x 9.6 x 1.5	8
32	MBC4392	● Handle	1
33	452464	● Screw-Sq Hd M8 x 16	1
34	78011-1A	● Grip-Plain 1"	1
35	MBC3852	● Catch Bracket	1
36	MBC3861	● Spring Anchor (Long)	1
37	450022	● Bolt-Hex M8 x 70	2
*	450324	● Nut-Hex M8	2
*	450390	● Washer-M8 x 17 x 1.8	2
*	450411	● Lockwasher-M8 x 12.75 x 2	2
38	MBC3856	● Catch	1
39	MBC3858	● Plate	1
40	MBC3862	● Spring Anchor (Short)	1
41	MBC3859A	● Sleeve	1
42	450020	● Bolt-Hex M8 x 60	1
43	450378	● Nut-Hex M8 Nyloc	1
44	002900521	● Spring-Ten 9.53 x 1.22 x 101.6	1
45	MBC3573B	● Shaft	1
46	MBF0369	● Steering Handle	1
47	450017	● Bolt-Hex M8 x 45	2
48	450378	● Nut-Hex M8 Nyloc	2
49*	009142150	● Hand Sleeve	2
50	461901849	● Spring-Disc 25.4 x 50 x 2	2
51	001950258	● Clamping Collar, 25 mm	1
52	MBC3574	● Pulley	1
53	451498	● Pin-Spirol 8 x 50	1
54		● Brake Lever	1

10. ACCESSORIES



10. ACCESSORIES

ITEM	PART NO.	DESCRIPTION	QTY.
55	4157948	● Brake Lever Complete with Cable	
56	4157568	● Lever, OPC	1
57	4157947	● Throttle Cable	1
58	680001941	● Cable Tie-270 x 4.8	3
*	001992105	● P-Clip	1
59	002953118	● Grommet	1
60	MBC3577A	● Roll Yoke	1
61	461901849	● Spring-Disc 25.4 x 50 x 2	2
62	452120	● E-Clip, 19 mm	1
63	009043562	● Plastic Cover	1
64	MBC3119	● Landroll	2
65	MBC3581	● Spindle	1
66	MBC3186	● Washer-25.4 x 41.28 x 1.6	2
67	MBC5312	● Clamping Collar	2
68	001190636	● Screw-Sq Hd M6 x 16	2
69	450029	● Bolt-Hex M10 x 35	2
70	450412	● Lockwasher-M10 x 15.9 x 2.5	2
71	849000237	● Lubricator	2
72	009042061	● Scraper	1
73	MBC1989	● Backing Strip	1
74	001191307	● Screw-Pan Hd M6 x 16 Taptite	5
75	009060382	● Cable	1
76	450378	● Nut-Hex M8 Nyloc	1
*	4157700	● OPC Spacer	1
*	4157720	● Bracket	1
*	4157801	● Spring Mounting Bracket	1
*	4157881	● OPC Actuator W/A	1



World Class Quality, Performance and Support

Equipment from Ransomes Jacobsen Limited is built to exacting standards ensured by ISO 9001, ISO 14001 and ISO18001 registration at all our manufacturing locations. A worldwide dealer network and factory-trained technicians backed by Ransomes Jacobsen Parts Xpress provide reliable, high-quality product support.



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