



Parts Manual

RANSOMES® Commander 3520

Series: ZE - Engine type: Kubota V2203
Product codes: LGTT010



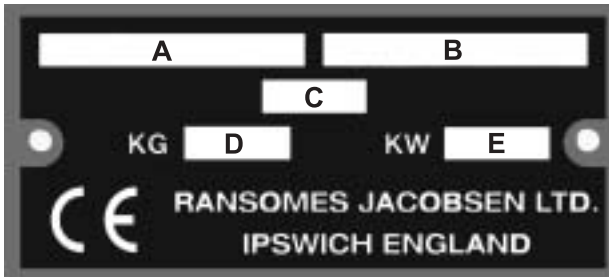
WARNING: If incorrectly used this machine can cause severe injury. Those who use and maintain this machine should be trained in its proper use, warned of its dangers and should read the entire manual before attempting to set up, operate, adjust or service the machine.



**COMMANDER 3520
PARTS MANUAL**

1	CONTENTS	
2	INTRODUCTION	
2.1	PRODUCT IDENTIFICATION	4
2.2	SPARES STOCKING GUIDE	4
2.3	HOW TO USE THE PARTS MANUAL	5
2.4	GUIDELINES FOR THE DISPOSAL OF SCRAP PRODUCTS	6
	PARTS LIST	7

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 Support Material			
Part No	Description	Part No.	Description
97898-040000	Engine Parts Manual	24347G-GB	Machine Safety, Operation & Maintenance Manual (Suffix GB replaced by FR, NL, DE, IT, DK, SE, ES dependant on language required.)
16641-8916-6	Engine Operators Manual		
	Engine Service 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	RANSOMES 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

2 INTRODUCTION

2.4 GUIDELINES FOR THE DISPOSAL OF SCRAP PRODUCTS

When it has been identified that a turf care product has no further functional value and requires disposal, the following actions should be taken.

These guidelines should be used in conjunction with applicable Health, Safety and Environmental legislation and use of approved local facilities for waste disposal and recycling.

- Position the machine in a suitable location for any necessary lifting equipment to be used.
- Use appropriate tools and Personal Protective Equipment (PPE) and take guidance from the technical manuals applicable to the machine.
- Remove and store appropriately:
 1. Batteries
 2. Fuel residue
 3. Engine coolant
 4. Oils
- Disassemble the structure of the machine referring to the technical manuals where appropriate. Special attention should be made for dealing with 'stored energy' within pressurised elements of the machine or tensioned springs.
- Any items that still have a useful service life as second hand components or can be re-serviced should be separated and returned to the relevant centre.
- Other worn out items should be separated into material groups for recycling and disposal consistent with available facilities. More common separation types are as follows:
 - o Steel
 - o Non ferrous metals
 - Aluminium
 - Brass
 - Copper

- o Plastics
 - Identifiable
 - Recyclable
 - Non recyclable
 - Not identified

- o Rubber

- Items that cannot be separated economically into different material groups should be added to the 'General waste' area.
- Do not incinerate waste.

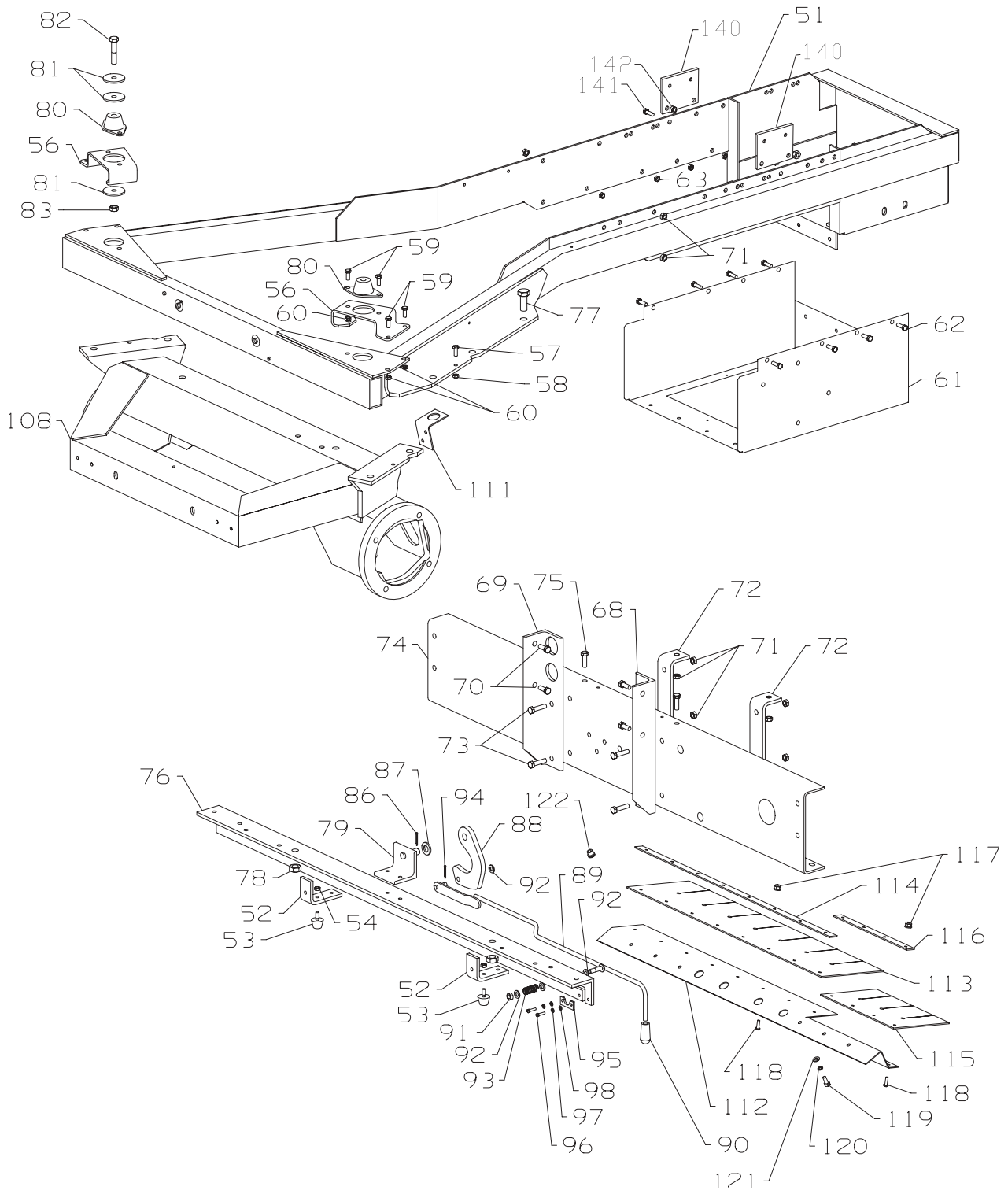
Finally update machinery records to indicate that the machine has been taken out of service and scrapped.

**COMMANDER 3520
PARTS MANUAL**

CONTENTS

MAIN FRAME	11
FUEL TANK	15
HYDRAULIC TANK AND FILTERS	17
STEERING AND REAR AXLE	19
ELECTRICAL CONTROL PANEL (LCD Display)	21
ELECTRICAL MAIN HARNESS (LCD Display)	23
ELECTRICAL RELAYS & FUSES (LCD Display)	25
ELECTRICAL (Analog Display)	27
HYDRAULICS TRACTION CIRCUIT WITH REVERSE 4WD KIT & BRAKE CIRCUIT	35
HYDRAULICS TRACTION / BRAKE CIRCUIT	41
HYDRAULICS COOLING CIRCUIT	47
HYDRAULICS CUTTING UNIT CIRCUIT WITH SINGLE UNIT CUTTING	49
HYDRAULICS CUTTING UNIT CIRCUIT	55
HYDRAULICS STEERING / LIFT CIRCUIT	59
HYDRAULIC MISCELLANEOUS ITEMS	61
ENGINE	65
COVERS	71
WHEELS	77
FRONT LIFT ARMS	79
RIGHT LIFT ARM	83
LEFT, CENTRE LIFT ARMS	87
DECALS	91
OPERATOR'S PLATFORM	93
SEAT AND FRAME	97
CONTROLS - TRACTION PEDAL / DIFF LOCK/ MOW SWITCH / UNIT LIFT / UNIT DRIVE	99
LOOSE PARTS	105
TRANSMISSION PUMP -SAUER SUNDSTRAND	107
VALVE - BACK PRESSURE	109
PRESSURE COMPENSATOR VALVE	111
CUTTING MOTOR VALVE	113
FREE WHEEL VALVE	115
TANDEM PUMP	117
WHEEL MOTOR FRONT	119
WHEEL MOTOR REAR - DANFOSS OMSW SERIES 3	123
UNIT LIFT RAM	125
STEERING RAM	127
PILOT OPERATED DIVERTOR VALVE - COMMERTIAL 4-PORT	129
PILOT OPERATED DIVERTOR VALVE - COMMERTIAL 3-PORT	131
LIFT CONTROL VALVE ASSEMBLY - Danfoss/Dukes fluid power	133
SOLENOID VALVE	137
TRANSMISSION VALVE	139
TRANSMISSION VALVE (PARKER)	141
REAR WHEEL VALVE 4WD REVERSE (HYDRAFORCE)	143
SINGLE UNIT CUTTING VALVES & LINKAGE	145
SEALS, CLIPS AND TIES	147
SEAT GRAMMER MSG 85 SEAT (4137966) - SUSPENSION	151
SEAT GRAMMER MSG 85 SEAT (4137966) - SEAT TOP	153
SEAT BREAKDOWN S85 /90R	155
SEAT SUSPENSION BREAKDOWN DS85H	159
MIRRORS	161

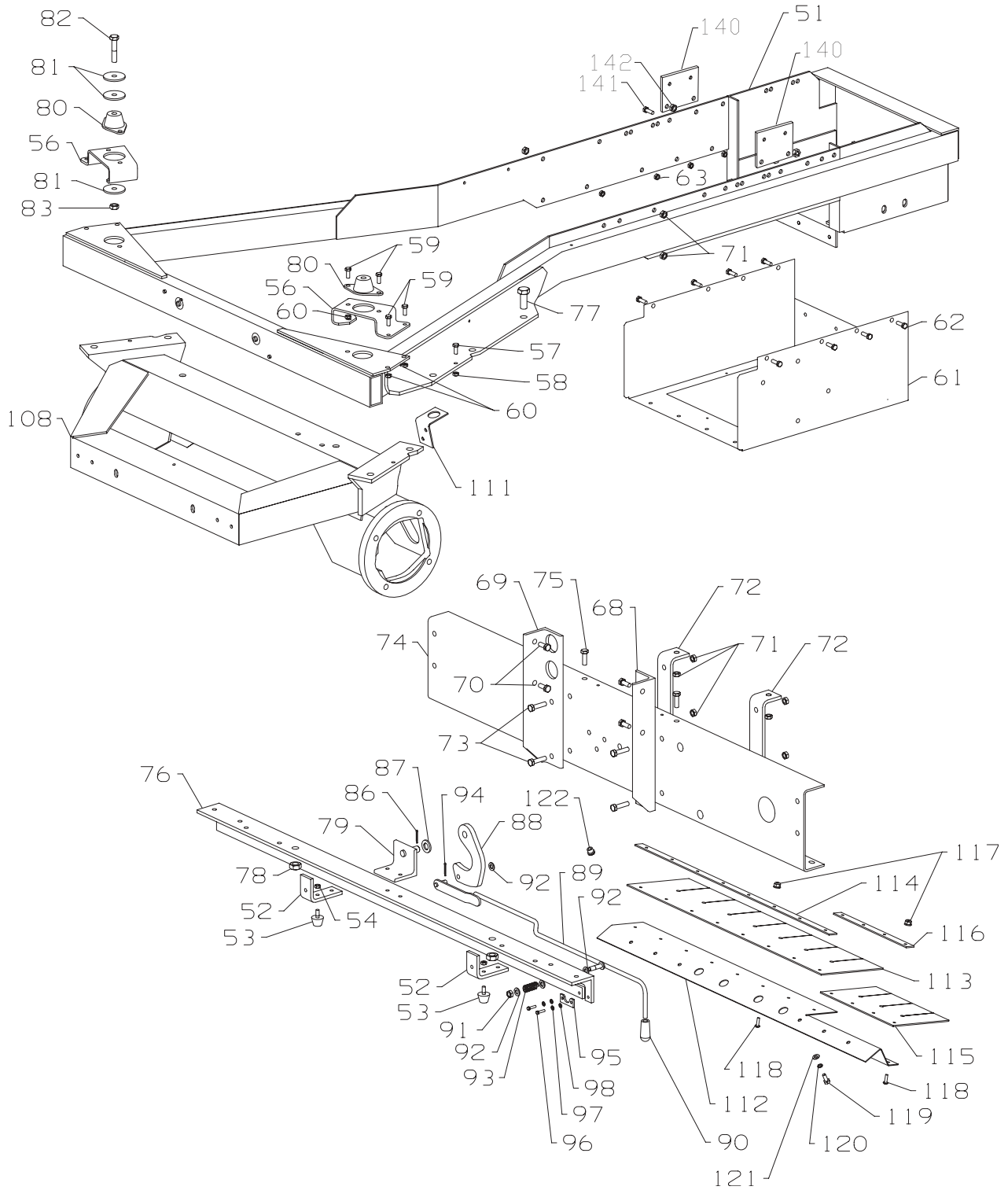
**RANSOMES COMMANDER 3520
PARTS MANUAL**



ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
51	MBE3568H	CHASSIS.	1	
52	MBE4553	UNIT STOP BRACKET.	2	
53	A299405	BONDED RUBBER BUFFER	2	
54	450378	NUT, M8 NYLOC	2	
56	MBE4042	CAB MOUNT BRKT. W/ASSY.	2	
57	450191	SCREW, M8 x 20, HEX HD	1	
58	450378	NUT, M8 NYLOC	1	
59	450191	SCREW, M8 x 20, HEX HD	10	
60	450378	NUT, M8 NYLOC	10	
61	MBF2027	COVER LOWER W/ASSY.	1	
62	450192	SCREW, M8 x 25, HEX HD	10	
63	450378	NUT, M8 NYLOC	10	
68	MBG5799	ANGLE - CHASSIS - LH.	1	
69	MBG5800	ANGLE - CHASSIS - RH	1	
70	450214	SCREW, M10 x 25, HEX HD	4	
71	450379	NUT, M10 NYLOC	10	
72	MBE3575A	BRACKET.	2	
73	450216	SCREW, M10 x 35, HEX HD	4	
74	MBG5798	CROSS MEMBER.	1	
75	450215	SCREW, M10 x 30, HEX HD	2	
76	MBE3577G	ANGLE CROSS MEMBER.	1	
77	450270	SCREW, M16 x 40, HEX HD	2	
78	450382	NUT, M16 NYLOC	2	
79	MBF1353	BRACKET WELDED ASSY.	1	
80	A299411	VIBRATION MOUNT	2	
81	MBE4000	WASHER.	10	
82	450052	BOLT, M12 x 60, HEX HD	2	
83	450380	NUT, M12 NYLOC	2	
84*	450411	S.L.WASHER, M8	4	
86	451257	SPLIT PIN, 4 x 25	1	
87	450393	WASHER, M16	1	
88	MBE4372A	HOOK.	1	
89	MBE4376B	LEVER WELDED ASSY.	1	
90	A299022	KNOB	1	
91	450379	NUT, M10 NYLOC	1	
92	450391	WASHER, M10	3	
93	A291112	COMPRESSION SPRING.	1	
94	451225	SPLIT PIN, 2.5 x 20	1	
95	MBE4701A	STOP PLATE.	1	
96	450170	SCREW, M6 x 16, HEX HD	2	
97	450389	WASHER, M6	2	
98	450410	S.L.WASHER, M6	2	
108	MBF2000	FRONT AXLE WA	1	
109*	450270	SCREW, M16 x 40, HEX HD	4	

* Not Illustrated

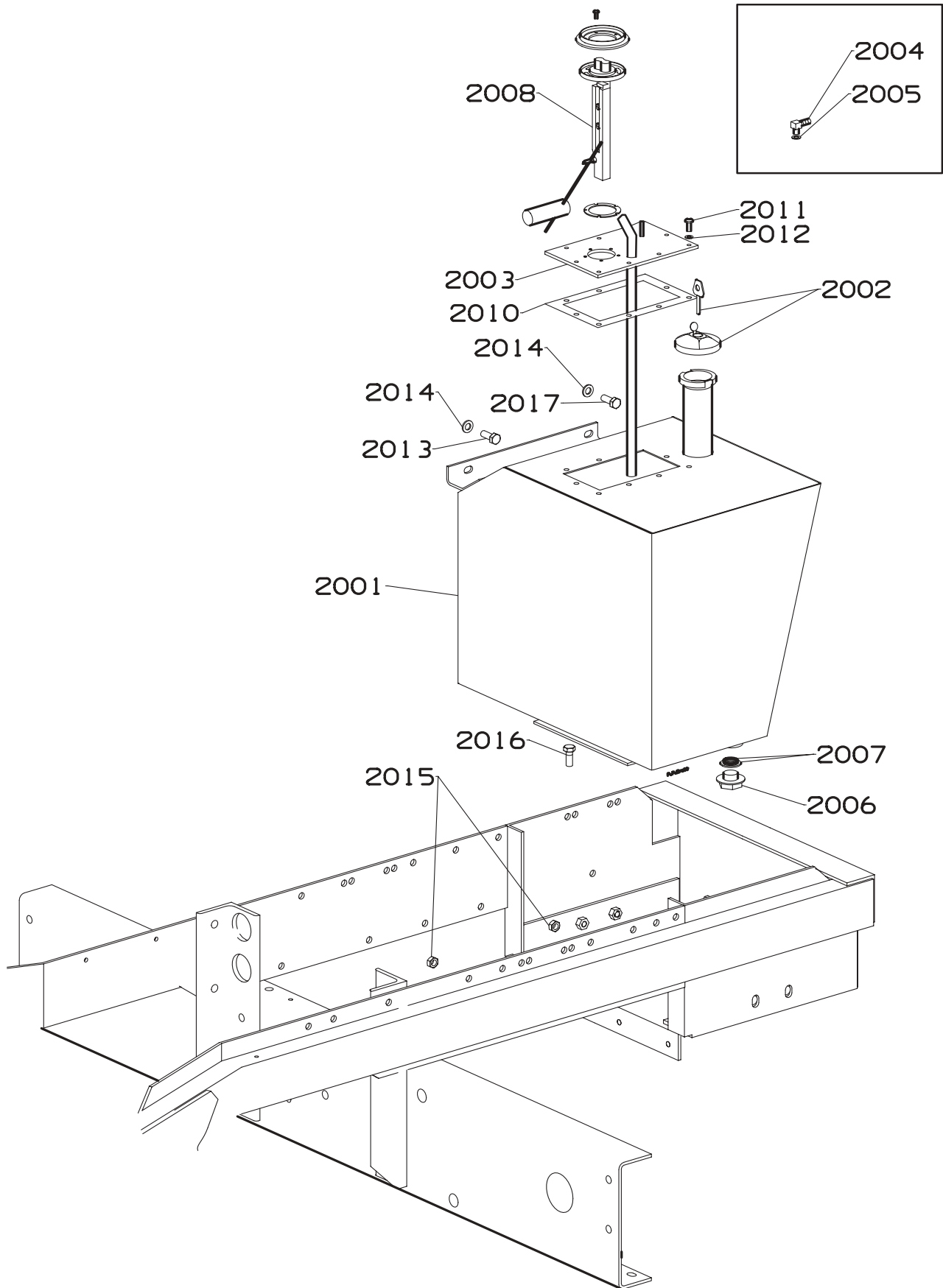
**RANSOMES COMMANDER 3520
PARTS MANUAL**



ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
110*	450382	NUT, M16 NYLOC	4	
111	MBG4525A	FITTING BRACKET	1	
112	MBG5887	COMMANDER DEFLECTOR	1	
113	MBG5888	RUBBER DEFLECTOR	1	
114	MBG5889	DEFLECTOR RETAINER	1	
115	MBG5893	RUBBER DEFLECTOR SMALL	1	
116	MBG5894	DEFLECTOR RETAINER	1	
117	452435	NUT-HEX M6 FLNG NYLOC	12	
118	450542	SCRW-PAN HD M6 x 20	12	
119	450191	SCREW-HEX M8 x 20	6	
120	450390	WSHR-M8 x 17 x 1.8	6	
121	450411	LOCKWSHR-M8 x 12.75 x 2	6	
122	450370	NUTSERT-M8 A-L x 20.5	6	USED ON MBG5798.
140	MBG6832	VALVE PLATE	2	
141	450214	SCREW M10 x 25	4	
142	450379	NUT M10, STAYTITE	4	

* Not Illustrated

RANSOMES COMMANDER 3520
PARTS MANUAL



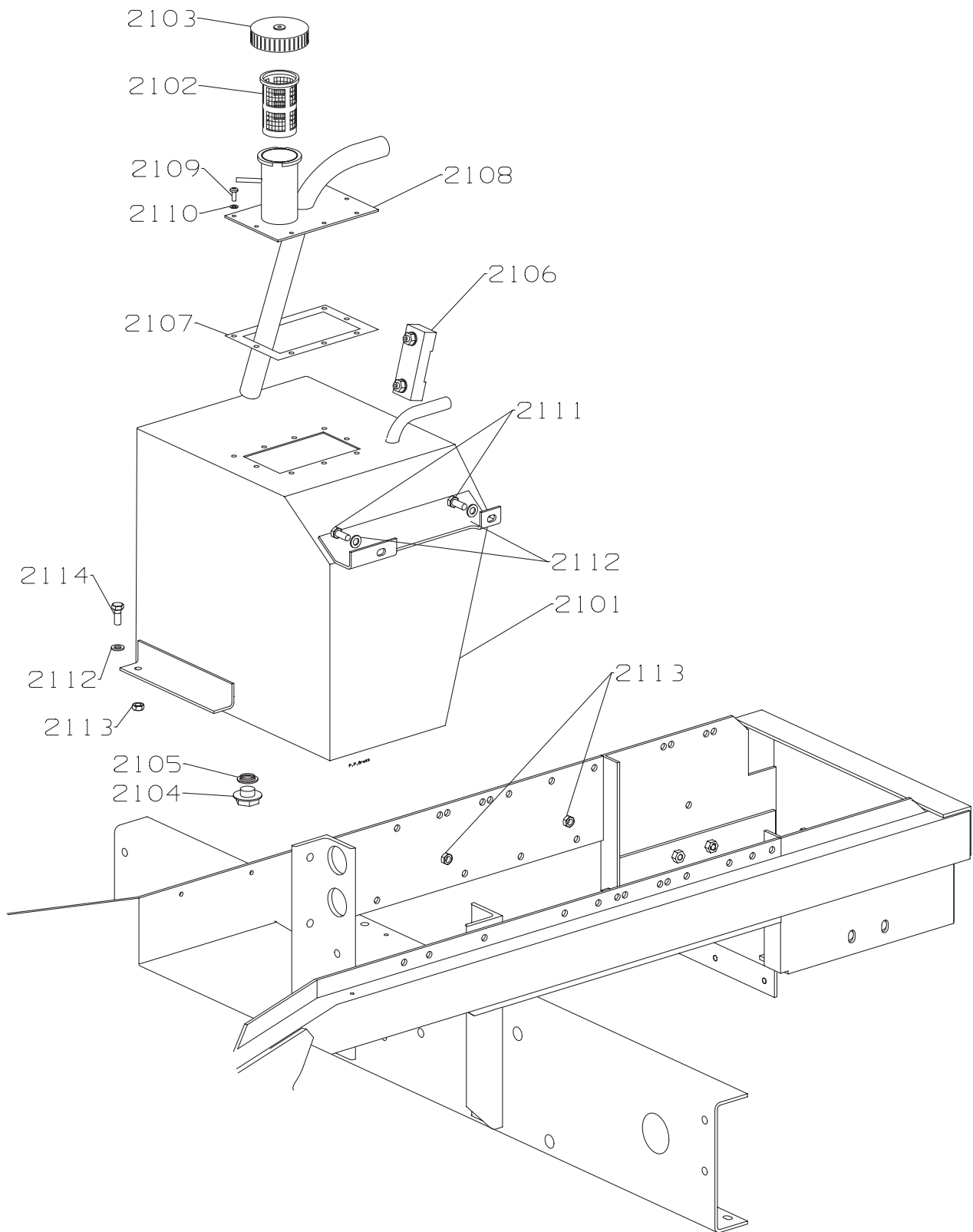
FUEL TANK

RANSOMES COMMANDER 3520 PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
2001	MBF0494A	FUEL TANK W/A	1	
2002	H460057	FILLER CAP	1	
2003	MBF0734A	COVER PLATE W/A	1	
2004	002494695	90 MALE ELBOW BSPT-TAIL	1	On early Models Only
2005	GSF3551EJ	FIBRE WASHER	1	On early Models Only.
2006	H291025	MAGNETIC PLUG	1	
2007	A229979	5/8" SEAL	1	
2008	A810967	SENDER UNIT	1	
2010	A904021	GASKET	1	
2011	450541	SCREW, M6 x 16, PAN HD	9	
2012	450389	WASHER, M6	9	
2013	450214	SCREW, M10 x 25, HEX HD	1	
2014	450391	WASHER, M10	3	
2015	450379	NUT, M10 NYLOC	3	
2016	450029	BOLT, M10 x 35, HEX HD	1	
2017	450215	SCREW, M10 x 30, HEX HD	1	
2018*	MBC6171	CLAMP, COLLAR	1	FOR ITEM 2008 (A9049390)
2019*	450529	SCREW-PAN HD M5x20	5	FOR ITEM 2018
2020*	A904939	FIBRE WASHER	5	FOR ITEM 2019

* Not Illustrated

RANSOMES COMMANDER 3520
PARTS MANUAL



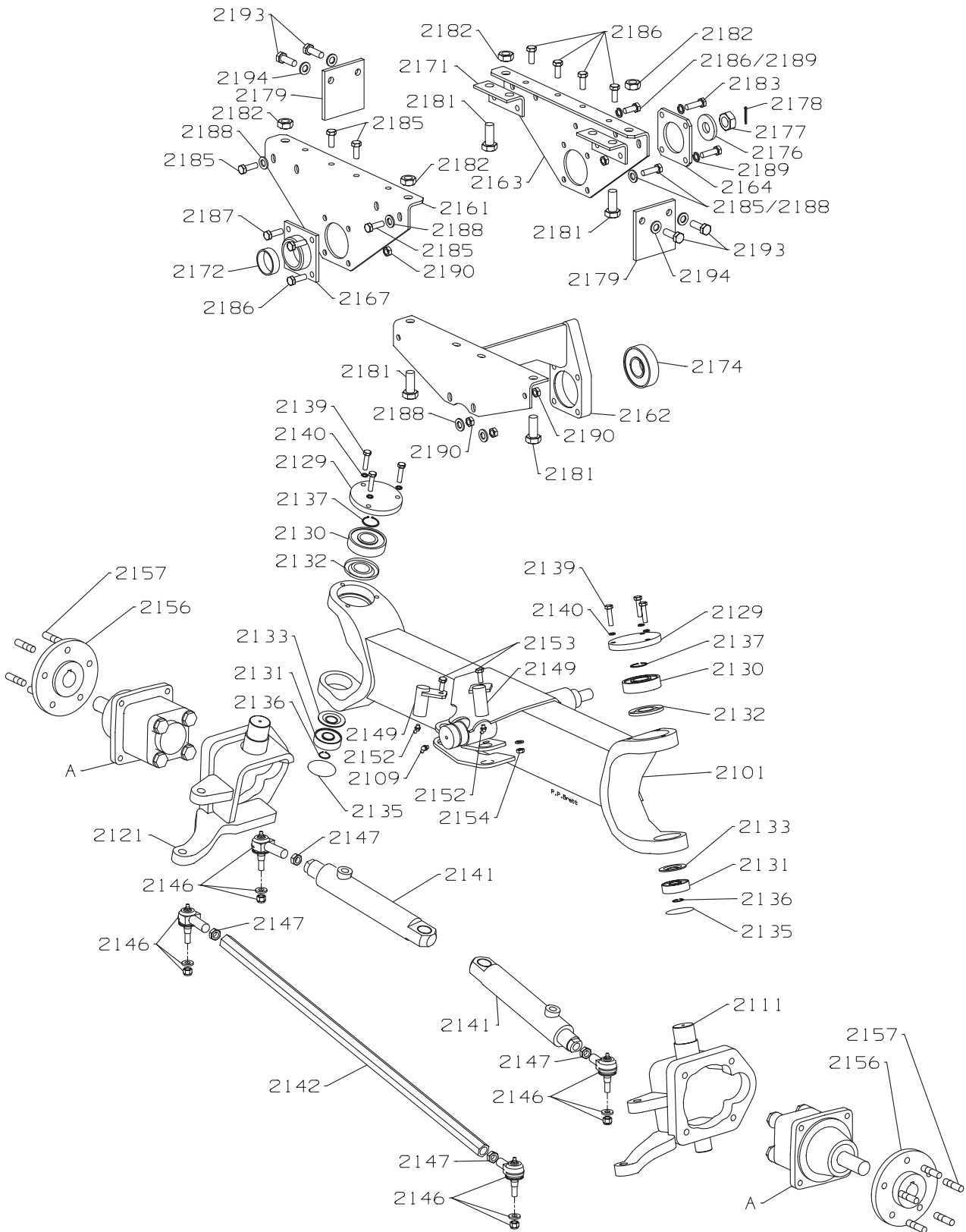
HYDRAULIC TANK AND FILTERS

RANSOMES COMMANDER 3520 PARTS MANUAL

ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
2101	MBF1897B	HYDRAULIC TANK W/ASSY.	1	
2102	MBB2629	FILTER	1	
2103	H460004	FILLER CAP	1	
2104	H291025	MAGNETIC PLUG	1	
2105	A229979	5/8" SEAL	1	
2106	A808027	LEVEL GAUGE	1	
2107	A904021	GASKET	1	
2108	MBF1095A	HYD.TANK LID W.A.	1	
2109	450541	SCREW, M6 x 16, PAN HD	9	
2110	450389	WASHER, M6	9	
2111	450214	SCREW, M10 x 25, HEX HD	2	
2112	450391	WASHER, M10	3	
2113	450379	NUT, M10 NYLOC	3	
2114	450029	BOLT, M10 x 35, HEX HD	1	

* Not Illustrated

**RANSOMES COMMANDER 3520
PARTS MANUAL**



STEERING AND REAR AXLE

RANSOMES COMMANDER 3520 PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
2101	MBE3824F	REAR AXLE.	1	
2109	A299306	LUBRICATOR	1	
2111	MBF2107	AXLE SWIVEL LH.	1	
2121	MBF2108	AXLE SWIVEL RH.	1	
2129	MBE3854	COVER.	2	
2130	A203706	BEARING, 30x72x19	2	
2131	A203605	BEARING, 25x52x15	2	
2132	A228306	NILOS RING	2	
2133	A228205	NILOS RING	2	
2135	A906500	PLUG	2	
2136	452050	EXT CIRCLIP, 25 mm	2	
2137	452055	EXT CIRCLIP, 30 mm	2	
2139	450016	BOLT, M8 x 40, HEX HD	6	
2140	450411	S.L.WASHER, M8	6	
2141	A902807	STEERING RAM	2	
2142	MBE3879	TRACK ROD.	1	
2146	A814546	STEERING JOINT	4	
2147	MBE3925	LOCKNUT.	4	
2149	MBE3855A	ANCHOR PIN.	2	
2152	A299316	LUBRICATOR	2	
2153	450191	SCREW, M8 x 20, HEX HD	2	
2154	450378	NUT, M8 NYLOC	2	
2156	MBG6022	WHEEL HUB.	2	
2157	456800237	STUD	10	GSF1194AH
2161	MBE3850	SUPPORT PLATE.	1	
2162	MBE3845B	SUPPORT HOUSING W/ASSY.	1	
2163	MBE4589	SUPPORT PLATE.	1	
2164	MBE4590	CLAMP - BEARING.	1	
2167	MBG4646	BEARING HOUSING	1	
2171	MBE3849	BRACKET.	2	
2172	A214432	BUSH	1	
2174	A203707	BEARING, 35x80x21	1	
2176	AE45106	CLAMP WASHER	1	
2177	450383	NUT, M20 NYLOC	1	
2178	451274	SPLIT PIN, 5 x 32	1	
2179	MBE3897A	AXLE STOP.	2	
2181	450270	SCREW, M16 x 40, HEX HD	4	
2182	450382	NUT, M16 NYLOC	4	
2183	450216	SCREW, M10 x 35, HEX HD	4	
2185	450029	BOLT, M10 x 35, HEX HD	2	
2186	450214	SCREW, M10 x 25, HEX HD	4	
2187	450215	SCREW, M10 x 30, HEX HD	2	
2188	450391	WASHER, M10	2	
2189	450412	S.L.WASHER, M10	4	
2190	450379	NUT, M10 NYLOC	6	
2193	450242	SCREW, M12 x 35, HEX HD	4	
2194	450380	NUT, M12 NYLOC	4	

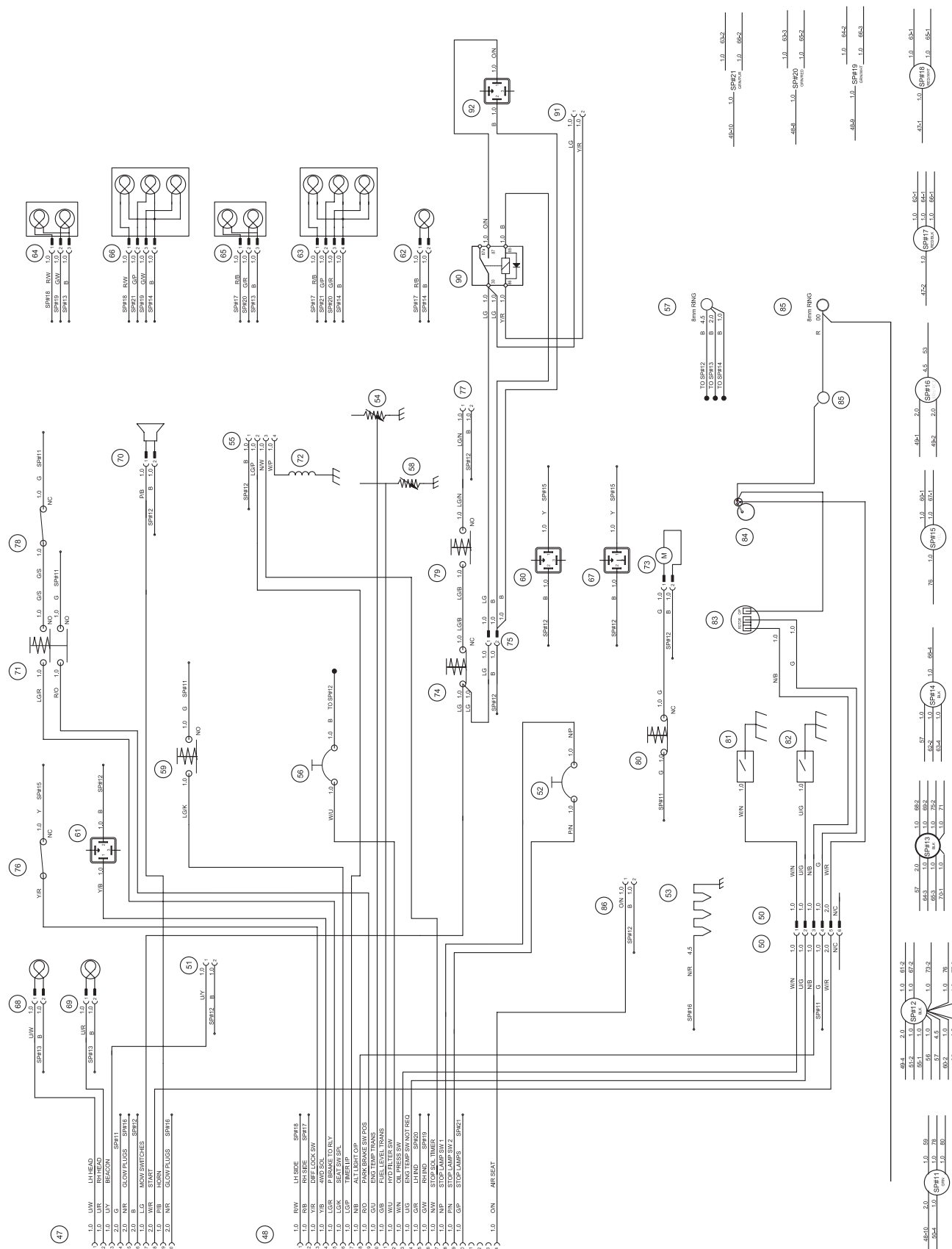
* Not Illustrated

**ELECTRICAL CONTROL PANEL
(LCD Display)**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
1	008244545	Stop Lamp Relay		
2	008244640	Seat Relay		
3	008244545	Start Relay 1		
4	008244545	Start Relay 2		
5	008244650	Flasher Relay		
6	008244545	Horn Relay		
7	N/A	Fuse Block		
8	EX KUBOTA	Lamp Timer		
9	N/A	Cab Supply		
10	008233350	Master Fuse		
11	EX KUBOTA	Key Switch		
12	N/A	Setup Switch		
13	008298544	Horn Switch		
14	N/A	Engage III 10 pin Connector		
15	N/A	Engage III 8 Pin Connector		
	4138841	Engage 3		
16	N/A	Indicator Lamp		
16.1	008232760	• Bulb		
16.2	4139774	• Lens		
17	4138891	Indicator Switch		
18	4138886	Lights Switch		
19	4138893	4 Wheel Drive Switch		
20	4138889	Beacon Switch		
21	4138892	Hazard Switch		
22	4138885	Accessory Socket		
23	4128679	Accessory Socket		
30	008245170	Safety Diode		
47	N/A	10 Pin Connector to Main Harness		
48	N/A	24 Pin Connector to Main Harness		
	4138829	Panel Loom		

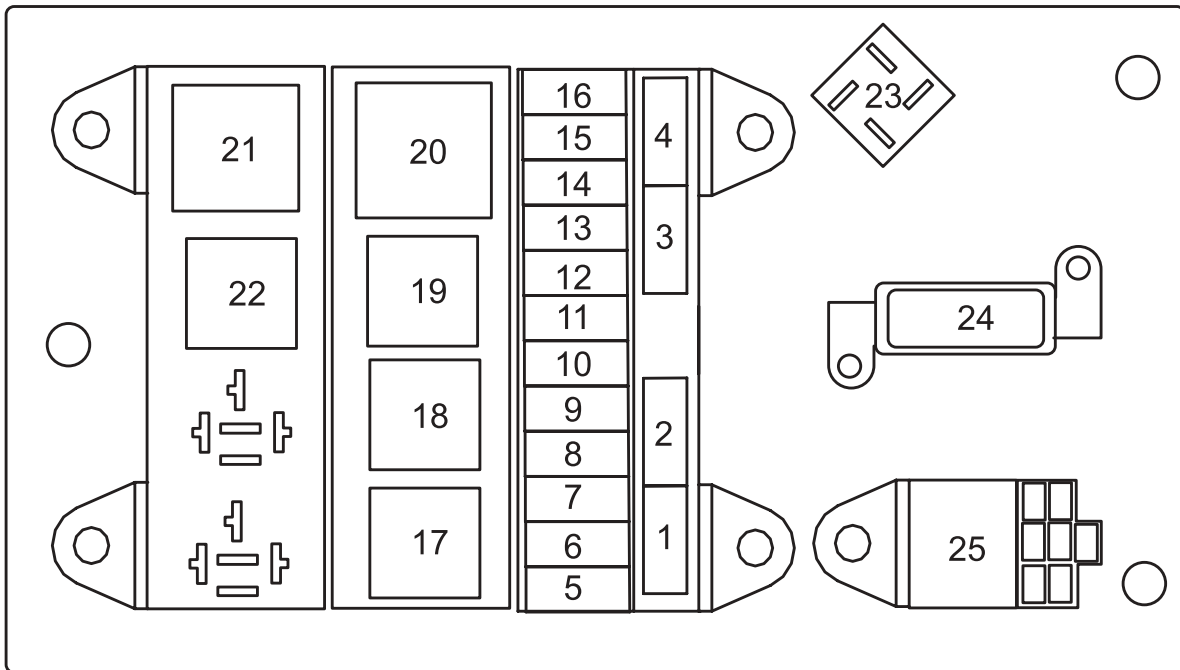
* Not Illustrated



**ELECTRICAL MAIN HARNESS
(LCD Display)**

ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
47	N/A	10 Pin Connector to Panel Harness		
48	N/A	24 Pin Connector to Panel Harness		
50	N/A	Split To Engine		
51	008231940	Beacon		
52	002600570	Brake Lamp Switch		
53	EXKUBOTA	Glow Plugs		
54	008296030	Water Temperature Sender		
55	EXKUBOTA	Stop Solenoid Timer		
56	008090880	Filter Switch		
57	-	Battery Negative Terminal		
	4138844	Negative Battery Cable		
58	008109670	Fuel Level Sender		
59	009054480	Seat Switch		
60	-	Left Hand 4 Wheel Drive Reverse Solenoid		See 4WD Reverse Valve
61	-	4 Wheel Drive Solenoid		See Transmission Valve
62	008231960	Number Plate Lamp		
63	4127604	Left Hand Rear Lamp		
64	4139130	Right Hand Side Lamp		
65	4139130	Left Hand Side Lamp		
66	4127605	Right Hand Rear Lamp		
67	-	Right Hand 4 Wheel Drive Reverse Solenoid		See 4WD Reverse Valve
68	009050610	Left Hand Head Lamp		
69	009050610	Right Hand Head Lamp		
70	008239720	Horn		
71	009058090	Parking Brake Switch		
72	EXKUBOTA	Stop Solenoid		
74	W038383	Forward/ Reverse Switch		
73	EXKUBOTA	Fuel Pump		
75	N/A	Split to Single Unit Cut Loom		
76	009058090	Differential Lock Switch		
77	008011560	Cylinder Drive Valve Solenoid		
78	W038383	Cylinder Drive Switch		
79	009058090	Cylinder Drive Foot Switch		
80	W038383	Emergency Brake Release Switch		
81	EXKUBOTA	Oil Pressure Switch		
82	EXKUBOTA	Water Over Temperature Switch		
83	EXKUBOTA	Alternator		
84	EXKUBOTA	Starter Motor Main Terminal		
85	-	Battery Positive Terminal		
	4138842	Positive Battery Cable		4142090 & 4142525 From Serial No: ZE0007xx
86	N/A	Air Seat Power Supply		
90	008244730	Single Unit Cut Relay		
91	J3007392	Single Unit Cut Switch		
92	009028180	Single Unit Cut Solenoid		
	4138826	Main Loom		
	4138827	Single Cut Loom		
	4139132	Engine Loom		
	009056770	Reg. Plate Harness		

* Not Illustrated

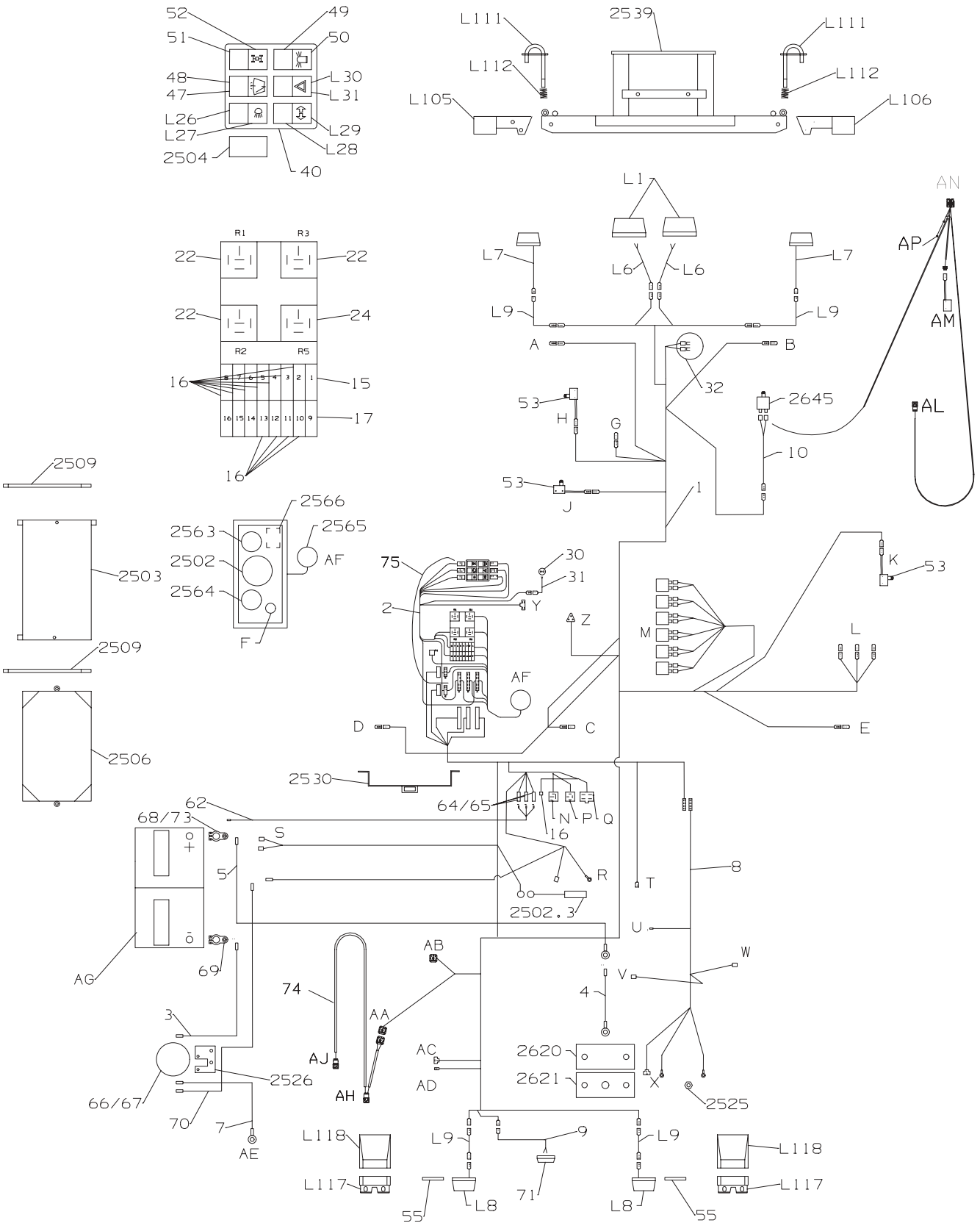


**ELECTRICAL RELAYS & FUSES
(LCD Display)**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	4139775	Fuse 2 Amp	1	Engage 3 Instrument
2	008233164	Fuse 10 Amp	1	Hazard Lights
3	008233180	Fuse 20 Amp	1	Cab Supply & Stop Solenoid Timer
4	008233164	Fuse 10 Amp	1	Stop Lamps, Horn & Beacon
5	008233164	Fuse 10 Amp	1	Accessory Socket 2
6	008233172	Fuse 15 Amp	1	Accessory Socket 1
7	008233172	Fuse 15 Amp	1	Ignition, Engage 3 & Start Relay Control
8	008233164	Fuse 10 Amp	1	Indicators
9	008233164	Fuse 10 Amp	1	4 Wheel Drive System
10	4139775	Fuse 2 Amp	1	Horn Alarm Circuits
11	008233164	Fuse 10 Amp	1	Seat Delay, Alternator, Fuel Pump & Control Circuits
12	008233156	Fuse 5 Amp	1	Mow Switches
13	008233164	Fuse 10 Amp	1	Right Hand Headlamp
14	008233164	Fuse 10 Amp	1	Left Hand Headlamp
15	008233156	Fuse 5 Amp	1	Right Hand Marker Lights
16	008233156	Fuse 5 Amp	1	Left Hand Marker Lights
17	008244545	Relay		Starter Relay 1
18	008244545	Relay		Starter Relay 2
19	008244545	Relay		Stop Lamp Relay
20	008244650	Relay		Flasher Unit
21	008244640	Relay		Seat Delay
22	008244545	Relay		Horn
23	008245170	Diode Bridge		
24	008233350	Main Fuse		
25	EX KUBOTA	Stop Solenoid Timer		

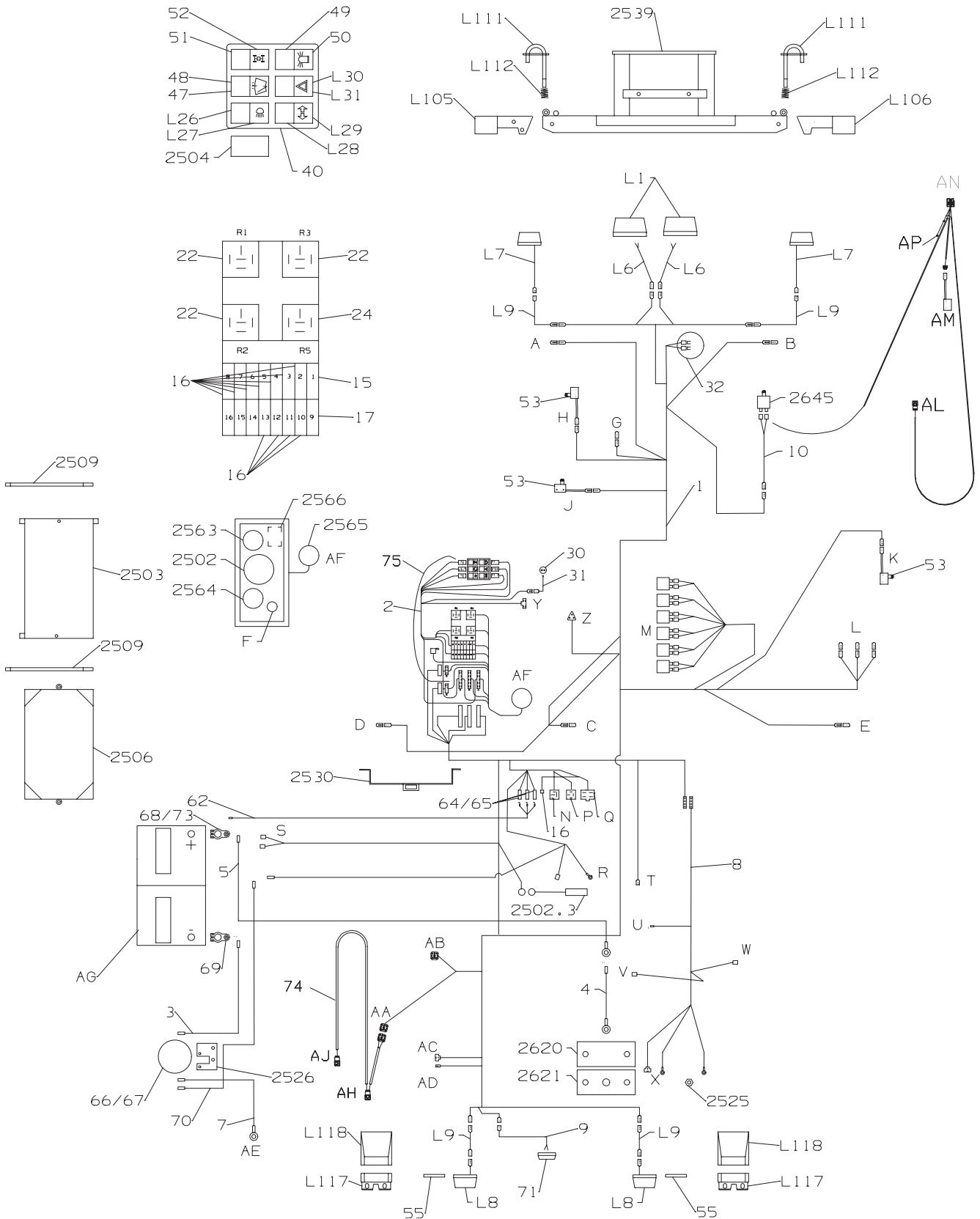
RANSOMES COMMANDER 3520
PARTS MANUAL



ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
2502	A810963	HOURMETER	1	
2503	MBF1185A	BATTERY TRAY WA	1	
2505*	MBE3504	MIC.SWITCH KEEP PLATE.	3	
2506	MBF2363	BATTERY CLAMP W/ASSY.	1	
2507*	W48228	HOSE CLIP	1	
2508*	A199253	EDGE CLIP, 6-7 mm	1	
2509	MBE4162	ROD.	2	
2510*	450324	NUT, M8	2	
2511*	450390	WASHER, M8	2	
2512*	450378	NUT, M8 NYLOC	2	
2513*	450215	SCREW, M10 x 30, HEX HD	1	
2514*	450391	WASHER, M10	1	
2515*	450379	NUT, M10 NYLOC	1	
2516*	A199232	CABLE TIE BASE	2	
2517*	A199211	TIE, 140 x 3.6	2	
2518*	450191	SCREW, M8 x 20, HEX HD	1	
2519*	450390	WASHER, M8	1	
2520*	450378	NUT, M8 NYLOC	1	
2521*	450191	SCREW, M8 x 20, HEX HD	1	
2522*	450390	WASHER, M8	1	
2523*	450411	S.L.WASHER, M8	1	
2524*	A119032	SCREW, M10 x 20	2	
2525	MBE4412	ADAPTOR.	1	
2526	MBG5249	ISOLATOR BRACKET.	1	
2527*	450172	SCREW, M6 x 25, HEX HD	2	
2528*	450389	WASHER, M6	2	
2529*	450377	NUT, M6 NYLOC	2	
2530	MBE4315A	BRACKET - RELAY.	1	
2531*	450171	SCREW, M6 x 20, HEX HD	2	
2532*	450410	S.L.WASHER, M6	2	
2533*	450528	SCREW, M5 x 16, PAN HD	8	
2534*	450376	NUT, M5 NYLOC	8	
2535*	A199211	TIE, 140 x 3.6	15	
2536*	H499802	CABLE TIE	15	
2539	MBE4444D	BUMPER BAR W/ASSY.	1	
2540*	450217	SCREW, M10 x 40, HEX HD	4	
2541*	450412	S.L.WASHER, M10	4	
2542*	450325	NUT, M10	4	
2562*	A199232	CABLE TIE BASE	3	
2563	A810020	TEMP GAUGE, LCD	1	
2564	A810019	FUEL GAUGE LCD	1	
2565	A905543	INSTRUMENT HARNESS	1	A905717 + A905726
2566	A905018	SEAT SWITCH DELAY	1	
2567*	A903926	COLOUR CODING SPOT KIT	1	
2570*	MBG0003	KEEP PLATE.	1	
2620	A913488	TERMINAL PLATE	1	
2621	A913489	INSULATING PLATE	1	

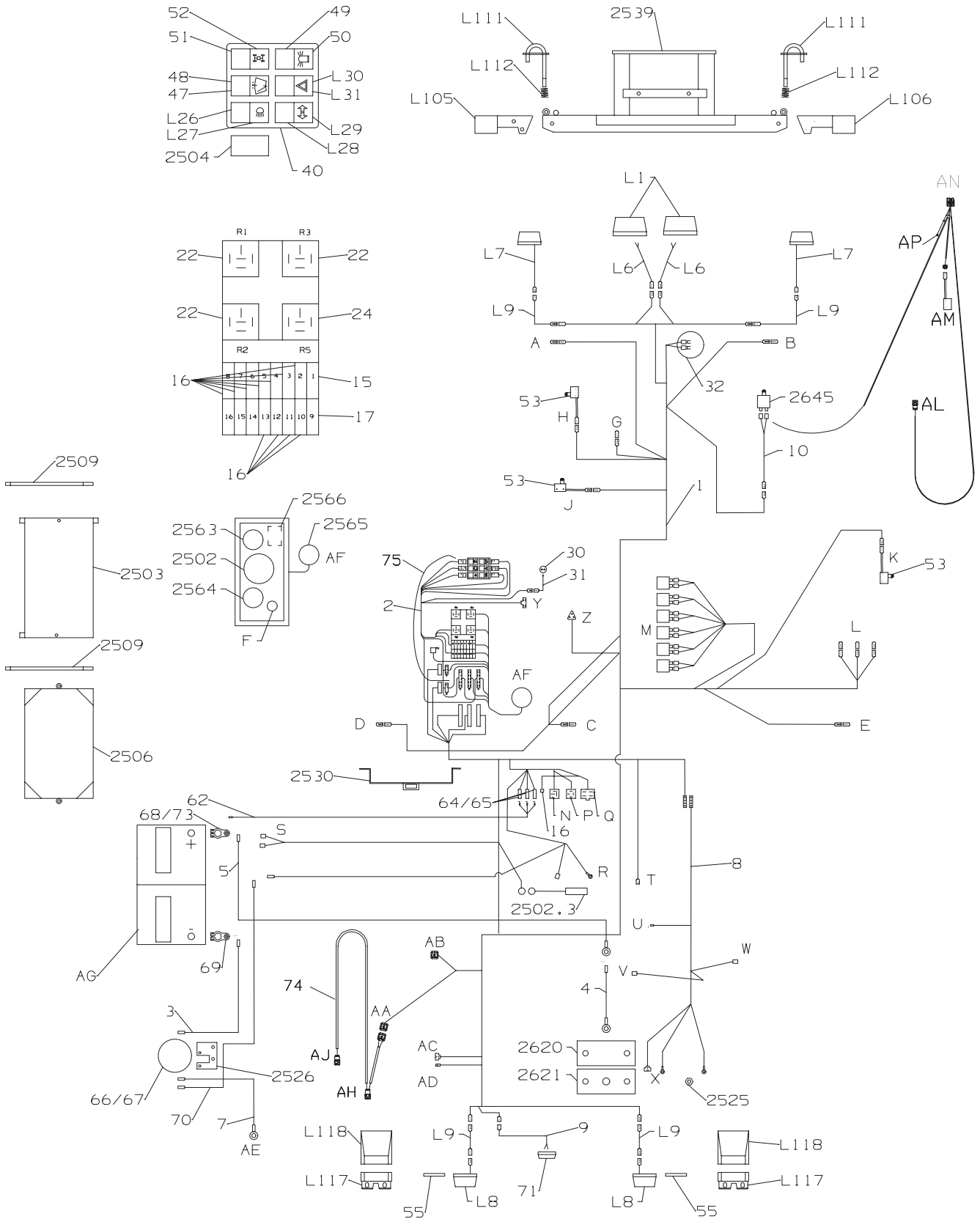
* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



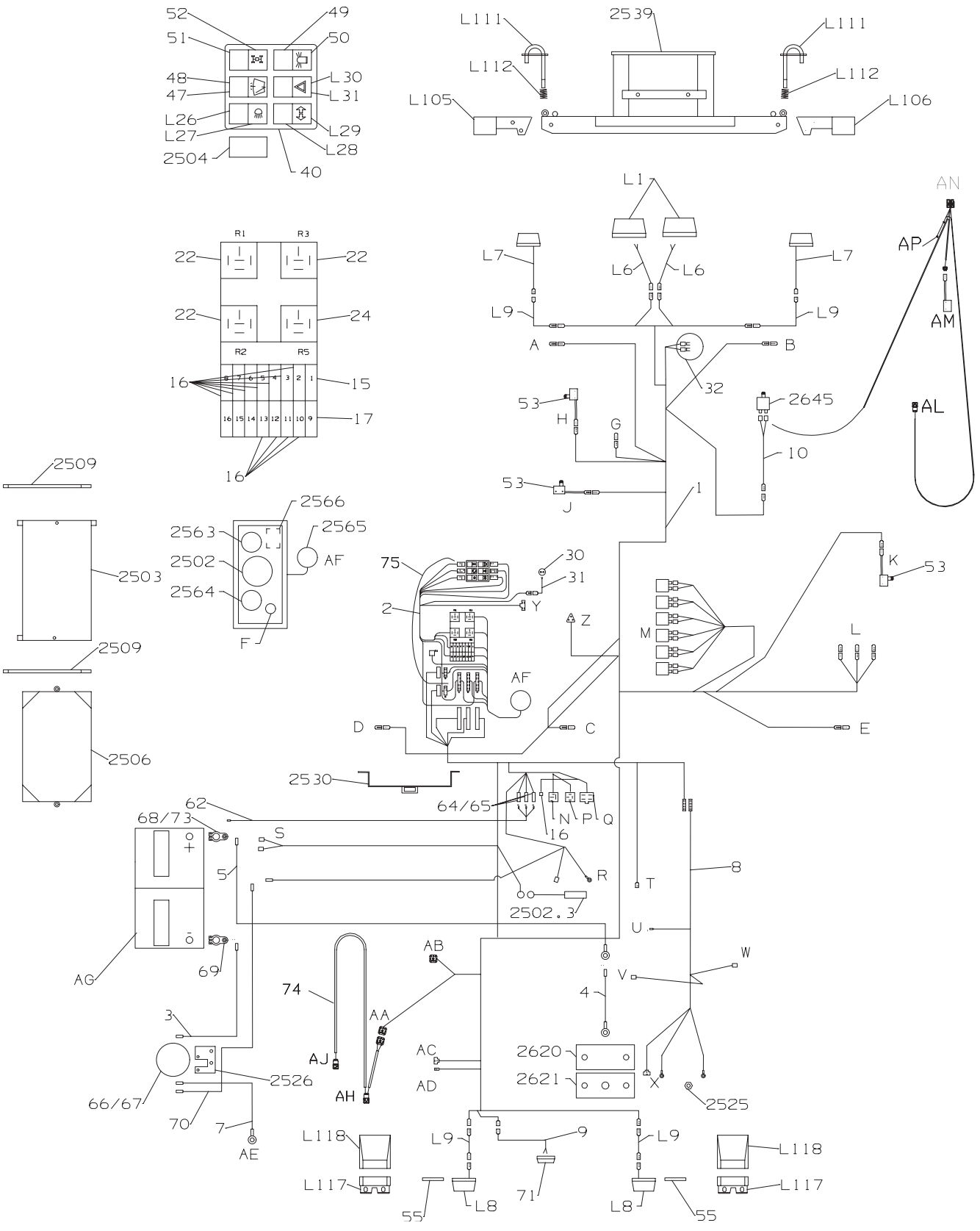
ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
2622*	A913490	SPACER, NYLON	2	
2631*	450195	SCREW, M8 x 40, HEX HD	1	
2632*	450390	WASHER, M8	4	
2633*	450324	NUT, M8	1	
2634*	450378	NUT, M8 NYLOC	1	
2635*	450856	SCREW, M6 x 35, SCKT CSK HD	2	
2636*	450389	WASHER, M6	1	
2637*	450377	NUT, M6 NYLOC	1	
2641*	A199235	CLIP, 12-14 mm	2	
2645	W038383	SWITCH	2	
2646	A913479	CORUGATED NYLON CONDUIT	1	FOR BATTERY LEADS
2647*	A829886	NO/NO DBLE POLE SWITCH	1	BLACK PLUNGER
		ELECTRICAL KIT		
1	A905758	HARNESS - MAIN	1	
2	A905759	HARNESS CONSOLE	1	
3	A905646	BATTERY LEAD -VE	1	
4	A905662	BATTERY LEAD POS	1	
5	A905485	BATTERY LEAD +VE	1	
7	A905487	EARTH STRAP	1	
8	A905760	ENGINE SUB HARNESS	1	
9	A905677	HARNESS, REG PLATE	1	
10	A905665	HARNESS, SWITCH ADAPTOR	1	
15	A823315	5 AMP FUSE	1	
16	A823316	FUSE 10 AMP	11	
17	A823318	FUSE 20 AMP	2	
22	A824454	RELAY	3	
24	A824465	FLASHER RELAY	1	
30	A829854	SWITCH (PUSH BUTTON)	1	
31	A905469	SWITCH HARNESS	1	
32	A823972	HORN	1	
40	A829569	SWITCH FRAME (3WAY)	2	
47	A829529	ROCKER SWITCH	1	
48	A829556	LENS INSERT WIPER/WASH	1	
49	A829526	ROCKER SWITCH	1	
50	A823159	LENS INSERT - BEACON	1	
51	A829526	ROCKER SWITCH	1	
52	A829567	LENS INSERT, 4WD, GREEN.	1	
53	A905809	MICROSWITCH ASSLY	3	
55	A823153	REFLECTOR	2	
62	A905492	BATTERY FUSE HARNESS	1	
64	A823335	FUSE HOLDER	3	
65	A823337	FUSE, STRIP LINK	3	
66	A829576	BATTERY ISO SWITCH	1	
67	A829577	KEY FOR ISO SWITCH	1	
68	A822207	BATTERY TERMINAL	1	
69	A822208	BATTERY TERMINAL	1	

RANSOMES COMMANDER 3520 PARTS MANUAL



ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
70	A905651	ISO SWITCH LEAD -VE	1	
71	A823196	REG.PLATE LAMP	1	
72*	MBG4133	BUSH, STRAIN RELIEF	1	
73*	A823030	INSULATION BOOT	2	
*	A823343	RELAY / FUSE MOUNTING KIT	AR	
74	009057780	4WD REVERSE HARNESS	1	
75	4116829	JUMPER LEAD	1	
A				BLANK
B				SHORTING PLUG
C				BLANK
D				BLANK
E				BLANK
F		KEY SWITCH		
G				BLANK
H	009058090	MICROSWITCH		CYLINDER RESET
J	009058090	MICROSWITCH		4WD REVERSE SWITCH
K		MICROSWITCH		MOW CONTROL
L				BLANK
M	A801080	SOLENOID VALVES		
N	A824467	HEATER TIMER		
P	A824466	STARTER RELAY		
Q	31351-31413	STOP SOLENOID RELAY		EX KUBOTA
R	-	GLOW PLUGS		SEE KUBOTA ENGINE MANUAL.
S	A810009	FUEL LEVEL SENDER		
T	-	BEACON CONNECTION		
U	-	ENGINE OIL PRESSURE SENDER		SEE KUBOTA ENGINE MANUAL.
V	-	STARTER MOTOR		SEE KUBOTA ENGINE MANUAL.
W	A809088	HYD. PUMP OIL FILTER SENDER		
X	-	ALTERNATOR		SEE KUBOTA ENGINE MANUAL.
Y	-	KEY SWITCH		SEE KUBOTA ENGINE MANUAL.
Z	-	SEAT SWITCH CONNECTION		
AA	-	CONNECTOR 4WD REVERSE		
AB	A801052	TRANSMISSION VALVE SOLENOID		
AC	-	FUEL PUMP		SEE KUBOTA ENGINE MANUAL.
AD	-	ENGINE STOP SOLENOID		
AE	-	ENGINE EARTH		
AF	-	INSTRUMENT PANEL CONNECTION		
AG	-	BATTERY TYPE 665		
AJ	-	RH 4WD REVERSE VALVE		
AK	-	LH 4WD REVERSE VALVE		
AL	-	SINGLE UNIT CUTTING SOLENOID		
AM	J3007392	PROXIMITY SWITCH		
AN	008244730	SINGLE UNIT CUTTING RELAY		
AP	-	EARTH		

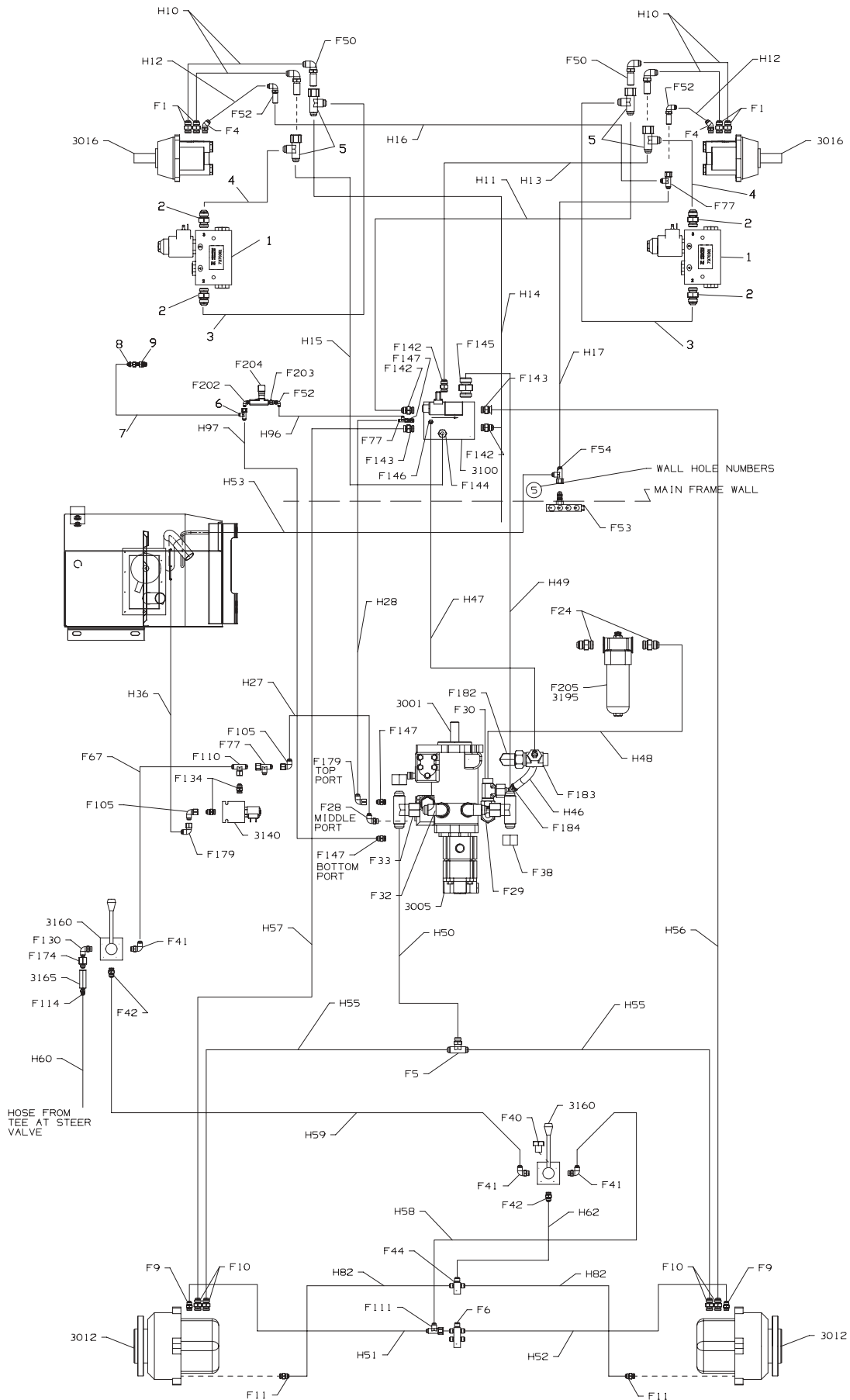
RANSOMES COMMANDER 3520 PARTS MANUAL



ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
		LIGHTING KIT		
L1	A905061	EC HEADLIGHT - UK	2	
L1	A905063	EC HEADLIGHT - EUROPE	2	
*	A905771	EC HEADLIGHT HARNESS	4	2 PER LIGHT
*	A905062	HALOGEN BULB FOR EC LIGHTS	2	1 PER LIGHT
L2*	A823176	LIGHT BULB - BS NO. 382	4	
L6	A905675	HARNESS, HEADLAMP	2	
L7	A823134	SIDELIGHT FRONT	2	
L8	008233480	LIGHT (REAR) LH	1	
	008233490	LIGHT (REAR) RH	1	
	008231764	• BULB BS No. 382	2	
	008232990	• BULB BS No. 245	1	
L9	A900676	HARNESS, SIDELAMP	4	
L13*	A295001	BUSH, STRAIN RELIEF	1	
L26	A829533	ROCKER SWITCH	1	
L27	A829552	LENS INSERT HEAD/SIDE	1	
L28	A829572	ROCKER SWITCH	1	
L29	A829573	LENS DIRECTION INDICATOR	1	
L30	A829525	HAZARD SWITCH	1	
L31	A829558	HAZARD LENS INSERT	1	
L105	MBE4472C	LAMP ARM LH.	1	
L106	MBE4478C	LAMP ARM RH.	1	
L107*	450040	BOLT, M10 x 90, HEX HD	2	
L108*	A292083	DISC SPRING WASHER	4	
L109*	450391	WASHER, M10	2	
L110*	450379	NUT, M10 NYLOC	2	
L111	MBE4534	HOOK W/ASSY.	2	
L112	A291013	COMPRESSION SPRING.	2	
L113*	450378	NUT, M8 NYLOC	2	
L114*	450168	SCREW, M6 x 12, HEX HD	2	
L115*	450323	NUT, M6	2	
L117	MBF2209	LAMP BRACKET WELDMENT.	2	
L118	MBG6338	LAMP COVER WELDMENT.	2	
L119*	450542	SCREW, M6 x 20, PAN HD	6	
L120*	450410	S.L. WASHER, M6	6	
L121*	450389	WASHER, M6	6	
L122*	450323	NUT, M6	6	
L123*	450539	SCREW, M6 x 12, PAN HD	8	
L124*	450389	WASHER, M6	8	
L131*	A199211	TIE, 140 x 3.6	6	
L132*	H499802	CABLE TIE	6	
L133*	A199232	CABLE TIE BASE	2	
L141*	MBG3716DG	ASSEMBLY DRAWING	1	
L142*	MBG3717DG	ASSEMBLY INSTRUCTIONS	1	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



HYDRAULICS

RANSOMES COMMANDER 3520

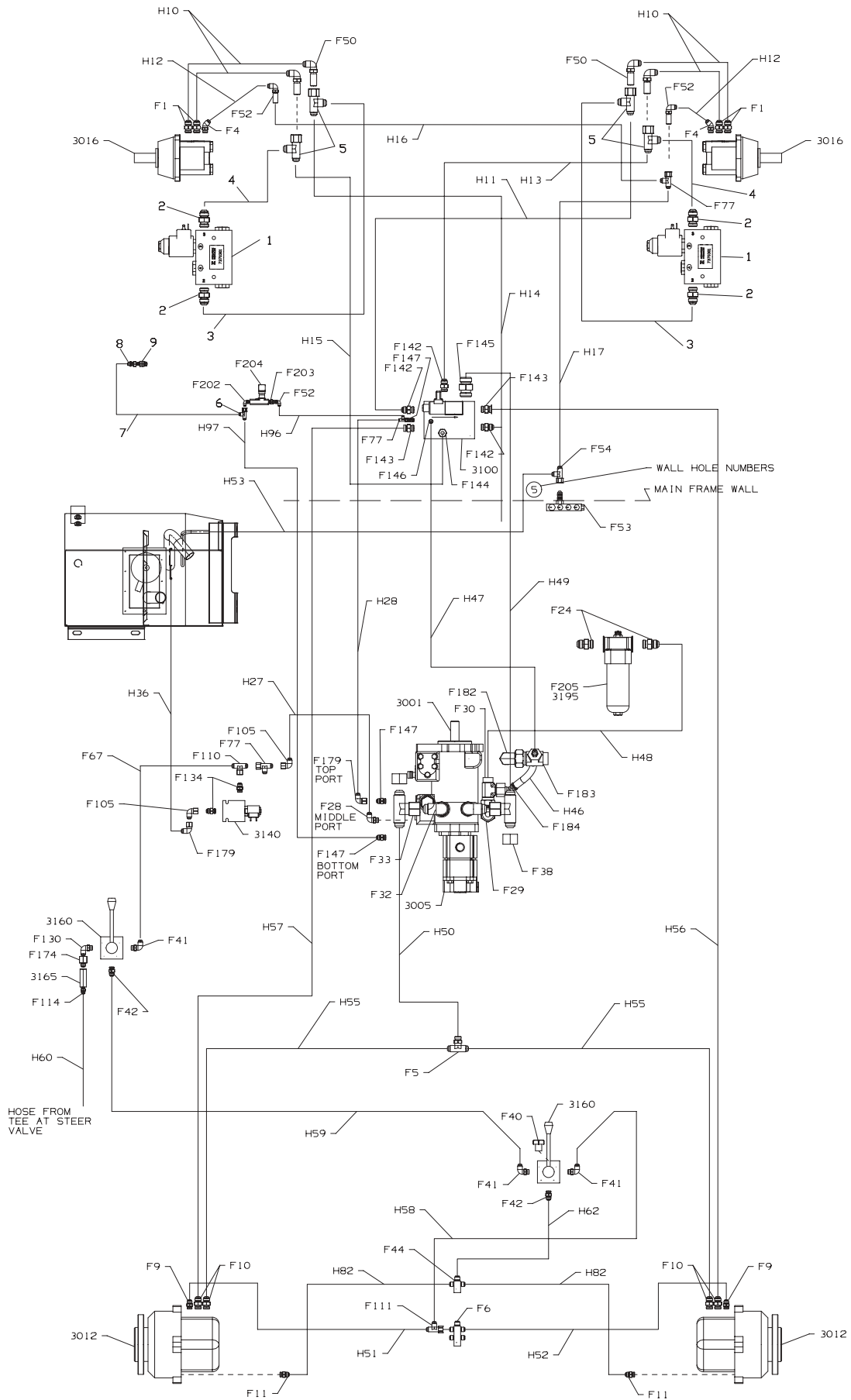
PARTS MANUAL

TRACTION CIRCUIT WITH REVERSE 4WD KIT & BRAKE CIRCUIT

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
3001	A800761	PUMP SUNDSTRAND M46 S	1	
3005	4165856	TANDEM PUMP 23cc+6cc+P	1	
3012	A800724	280CC PISTON WHEEL MOT	2	
3016	A800760	MOTOR HYDRAULIC	2	
3100	A801248	TRANSMISSION VALVE	1	
3140	A8011120	SOLENOID VALVE	1	
3160	A802834	HYDRAULIC VALVE	2	
3165	A801121	CHECK VALVE	1	
3195	A808962	FILTER ELEMENT	0	
F001	A240007	FTG-7/8 JIC x 7/8 SAE	4	
F004	A242003	45-M/M 7/16 JIC x 7/1	2	
F005	W69056-01	TEE-BLKHD/M/M 1-3/16 O	1	
F006	A249777	MANIFOLD-7/16JIC(4)x9/	1	
F009	A240032	FTG-7/16 JIC x 9/16 SAE	2	
F009	A251510	FTG-9/16 ORFS x 9/16	2	Date Code ABAB - ON
F010	W158006-11	FTG-M/M 1 ORS x 1-1/1	4	
F011	A241032	90-M/M 7/16 JIC x 9/16	2	
F011	A252501	90-M/M 9/16 ORSx9/16	2	Date Code ABAB - ON
F024	W158006-08	FTG-M/M 1-3/16 ORS x	2	
F028	A241032	90-M/M 7/16 JIC x 9/16	1	
F029	W158007-08	90-M/M 1-3/16 ORS x 1	1	
F030	A249887	TEE-M/F/M 1-3/16 ORS	1	
F032	W158007-08	90-M/M 1-3/16 ORS x 1	2	
F033	69057-02	TEE-M/M/F 1-3/16 ORS	2	
F038	A249899	CAP-F/F 1-3/16 ORS	2	
F040	459100236	3/8" BSP PLUGS. PAR	2	
F041	A249330	90-M/M 3/8 BSP x	4	
F042	GSF2571AC	ADAPTOR GSF2571AC	2	
F044	A249883	MANIFOLD-7/16JIC(3)	1	
F045*	A241006	90-M/M 3/4 JIC x 3/4	1	
F050	A249766	90 BLKHD-M/M 7/8 JIC	4	W69055-02 From Ser No:ZE000791
F052	A249769	90 BLKHD-M/M 7/16 JIC	3	4140337 From Ser No:ZE000791
F053	2497780	MANIFOLD-7/16JIC(3)x9	1	
F054	2497840	TEE-F/M/M 9/16 JIC(2)	1	
F059*	A243505	TEE-M/F/M 9/16 JIC	3	
F061*	A810959	COPPER WASHER	1	
F068	A797109	PILOT LINE ASSY	2	
F068	A797112	PILOT LINE (3/16)	2	Date Code ABAB - ON
F075*	A192516	HOSE CLAMP, 6-16	2	
F077	A243503	TEE-M/F/M 7/16 JIC	6	
F080*	A192914	DOUBLE WIRE HOSE CLIP	1	
F105	A241403	90-M/F 7/16 JIC x 7/16 JIC	2	
F110	A243403	TEE-M/M/F 7/16 JIC	3	
F111	A243503	TEE-M/F/M 7/16 JIC	3	
F114	GSF2570AB	STRAIGHT CONNECTOR GS	1	
F115*	GSF2571AT	STRAIGHT CONNECTOR GS	2	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



HYDRAULICS

RANSOMES COMMANDER 3520

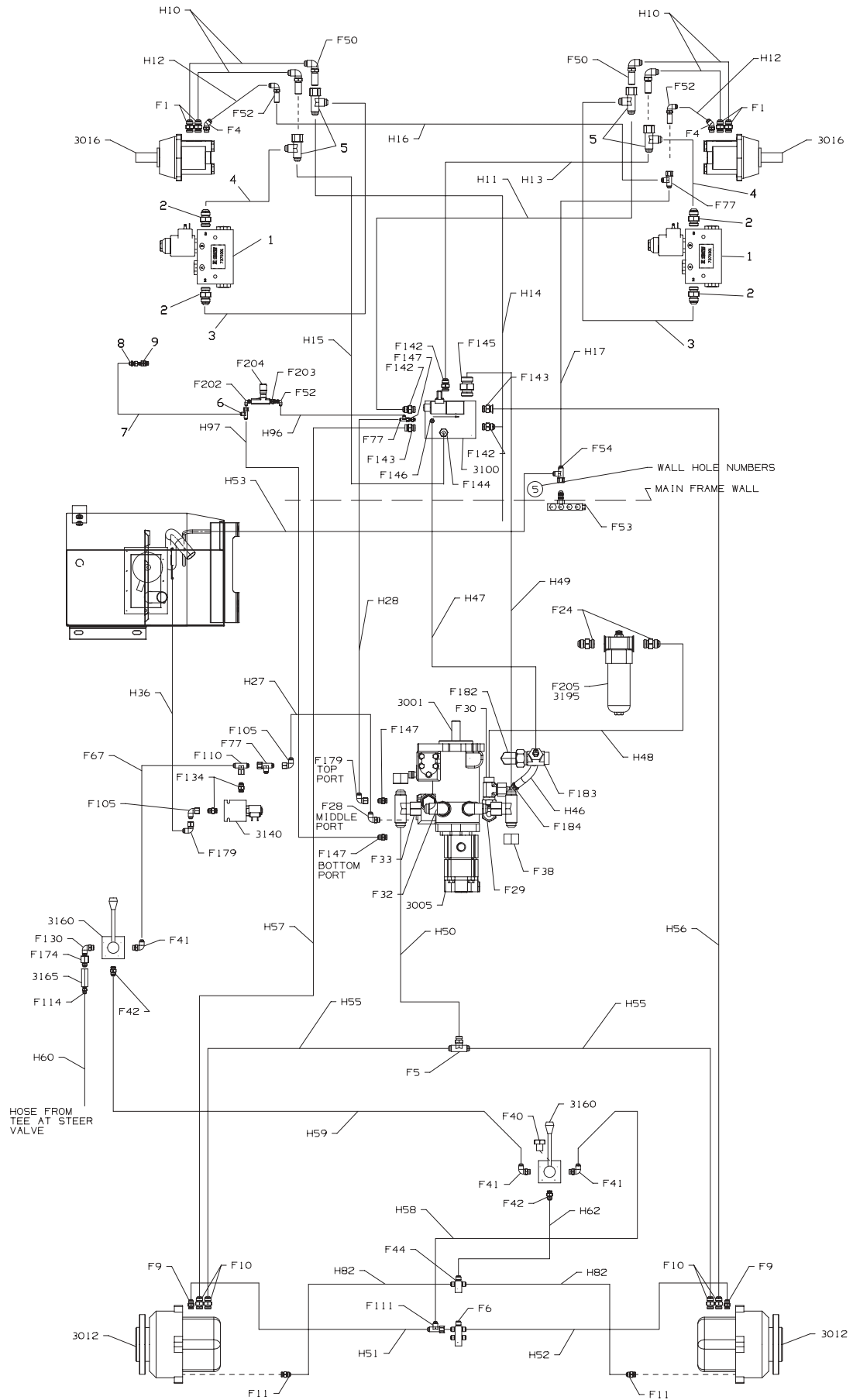
PARTS MANUAL

TRACTION CIRCUIT WITH REVERSE 4WD KIT & BRAKE CIRCUIT

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
F118*	A249800	FTG-LG 1/4 BSPP x 7/16 JIC	2	
F119*	A241005	90-M/M 9/16 JIC x 9/16 SAE	1	
F124*	A249740	90-M/M 1/8 BSP x 1/4 BSP	1	
F130	A249333	90-M/M 3/8BSPP x 9/16 JIC	1	
F134	A240032	FTG-7/16 JIC x 9/16 SAE	1	
F142	A240007	FTG-7/8 JIC x 7/8 SAE	3	
F143	W158006-07	FTG-M/M 1 ORS x 7/8 SAE	2	
F144	A241007	90-M/M 7/8 JIC x 7/8 SAE	1	
F145	W158006-08	M/M 1-3/16 ORS x 1-1/16 SAE	1	
F146	A240005	FTG-9/16 JIC x 9/16 SAE	1	
F147	A240032	FTG-7/16 JIC x 9/16 SAE	3	
F165*	A192522	HOSE CLAMP, 8-22	1	
F166*	A192540	HOSE CLAMP, 19-40	4	
F167*	A192557	HOSE CLAMP, 34-57	3	
F168*	A192570	HOSE CLAMP, 23-70	1	
F174	2497950	FTG-M/F 1/4 BSPP x 9/16 JIC	1	
F179	A241403	90-M/F 7/16 JIC x 7/16 JIC	2	
F180*	W158061-04	O-RING 3.237 ID x .103 SECT	1	3001 TO 3005
F182	A260038	90-M/M/M 3/4JICx1-7/16ORFS	1	
F183	A00259099	CROSS-1-7/16ORSx9/16JICx1	1	
F184	A259100	45-F/M 1-3/8 ORS x 1/2 BARB	1	
F194*	A241407	90-M/F 7/8 JIC x 7/8 JIC	2	
F196*	459100888	HYDRAULIC ADAPTOR	1	
F198*	A260032	90-M/M 9/16 SAE x 9/16 JIC	1	
F199*	A241032	90-M/M 7/16 JIC x 9/16 SAE	3	
F202	A249879	90-M/M 1/4 BSP x 7/16 JIC	1	
F203	A260052	FTG M/F 1/4 BSP x 7/16 JIC	1	
F204	A801259	NEEDLE VALVE	1	
F205	4151777	OIL FILTER	1	
H10	A792560	HYDRAULIC HOSE	4	4140345 From SerNo:ZE000791
H11	A799769	HOSE ASSEMBLY	1	4140350 From SerNo:ZE000791
H12	A791208	HYDRAULIC HOSE	2	4140349 From SerNo:ZE000791
H13	A799770	HOSE ASSEMBLY	1	4140346 From SerNo:ZE000791
H14	A799771	HOSE ASSEMBLY	1	4140352 From SerNo:ZE000791
H15	A799772	HOSE ASSEMBLY	1	4140347 From SerNo:ZE000791
H16	A799773	HOSE ASSEMBLY	1	4140351 From SerNo:ZE000791
H17	A799774	HOSE ASSEMBLY	1	4141107 From SerNo:ZE000791
H27	A799789	HOSE ASSEMBLY	1	
H28	A799790	HOSE ASSEMBLY	1	
H36	A796200	HOSE ASSY	1	
H46	A799782	HOSE	1	
H47	A799781	HOSE ASSEMBLY	1	
H48	A799777	HOSE ASSEMBLY	1	
H49	A799780	HOSE ASSEMBLY	1	
H50	A799779	HOSE ASSEMBLY	1	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



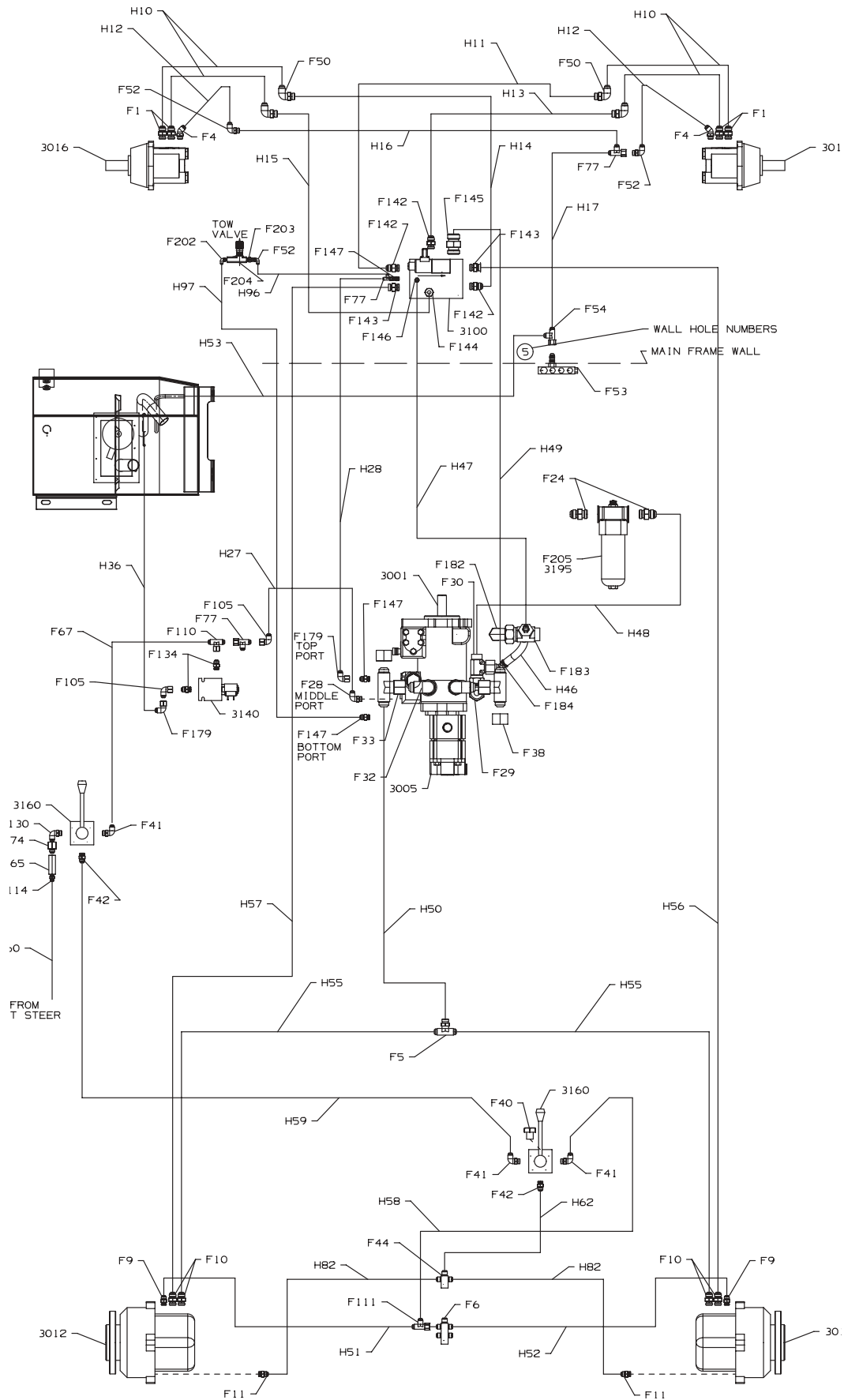
**HYDRAULICS
TRACTION CIRCUIT WITH REVERSE 4WD KIT & BRAKE CIRCUIT**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
H51	A799775	HOSE ASSEMBLY	1	
H51	A799813	HOSE ASSEMBLY	1	Date Code ABAB - ON
H52	A799776	HOSE ASSEMBLY	1	
H52	A799814	HOSE ASSEMBLY	1	Date Code ABAB - ON
H53	A799729	HYDRAULIC HOSE ASSY	1	
H55	A799778	HOSE ASSEMBLY	2	
H56	A799767	HOSE ASSEMBLY	1	
H57	A799768	HOSE ASSEMBLY	1	
H58	A799431A	HOSE ASSEMBLY	1	
H59	A799428A	HOSE ASSY	1	
H60	A799429	HOSE ASSY	1	
H62	A799431	HOSE ASSY	1	
H79*	H980031	'P' CLIP H980	6	
H82	A712070	HYDRAULIC HOSE	3	
H82	A712070	HYDRAULIC HOSE	2	Date Code ABAB - ON
H90*	A298401	HOSE SLEEVING	5	
H96	A799803	HOSE ASSEMBLY	1	
H97	A799804	HOSE ASSEMBLY	1	
		4WD REVERSING KIT		
1	008012690	REAR WHEEL DRIVE VALVE	2	
2	459100074	STRAIGHT CONNECTOR	4	
3	007998590	HYDRAULIC HOSE	2	4140348 From Ser No:ZE000791
4	007998590	HYDRAULIC HOSE	2	
5	002435075	TEE M/F/M 7/8" JIC	4	
*	002600940	CAVITY PLUG	2	UNDER CHECK VALVES IN A801248 TRANSMISSION VALVE
		BRAKE LIGHT KIT		
6	002235033	TEE M/F/M 7/16 JIC	1	
7	007998040	HOSE	1	
8	002600580	BULKHEAD FITTING	1	
9	002600570	HYD. PRESSURE SWITCH	1	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



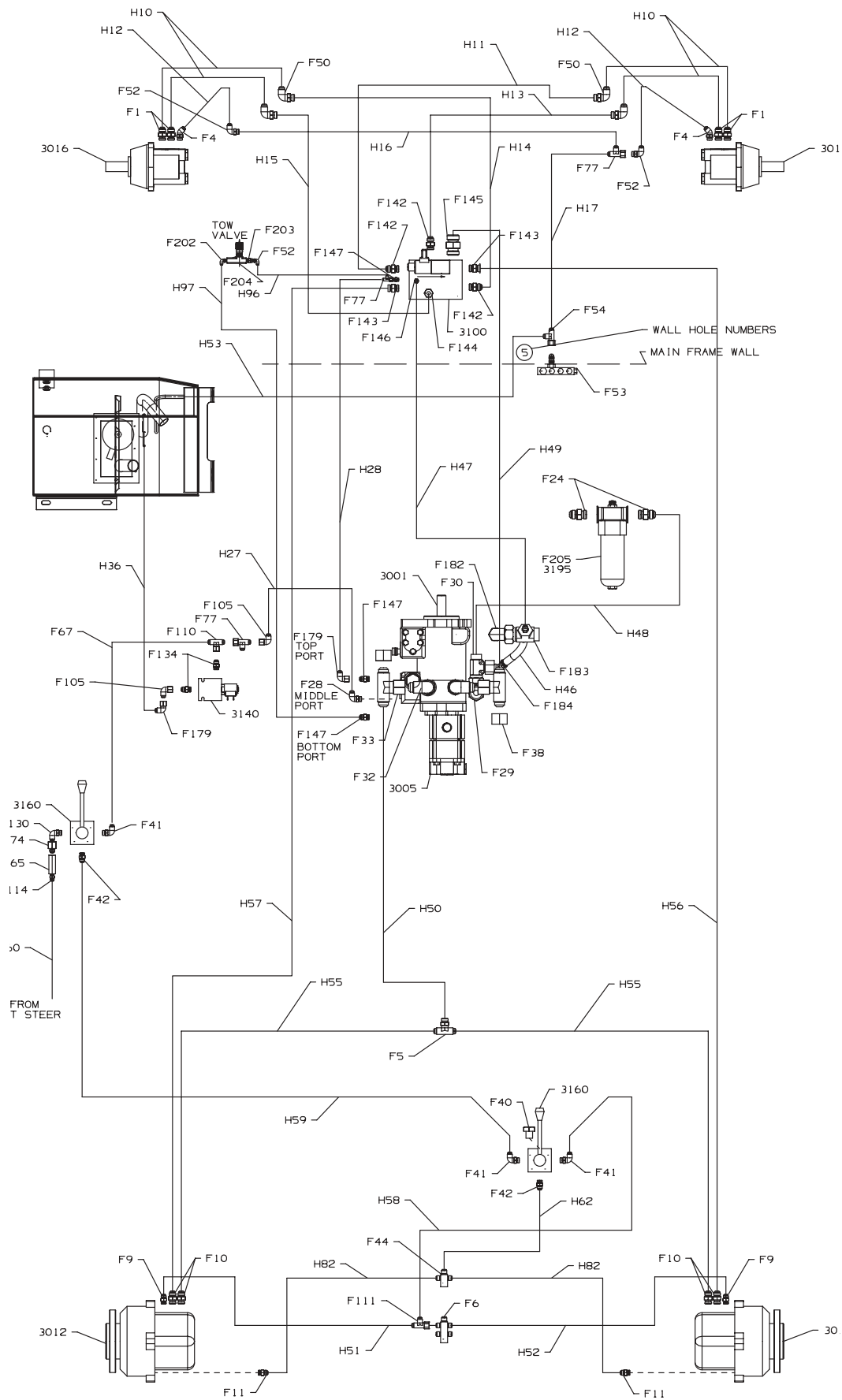
**HYDRAULICS
TRACTION / BRAKE CIRCUIT**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
3001	A800761	PUMP SUNDSTRAND M46 S	1	
3005	4165856	TANDEM PUMP 23cc+6cc+P	1	
3012	A800724	280CC PISTON WHEEL MOT	2	
3016	A800760	MOTOR HYDRAULIC	2	
3100	A801248	TRANSMISSION VALVE	1	
3140	A8011120	SOLENOID VALVE	1	
3160	A802834	HYDRAULIC VALVE	2	
3165	A801121	CHECK VALVE	1	
3195	A808962	FILTER ELEMENT	0	
F001	A240007	FTG-7/8 JIC x 7/8 SAE	4	
F004	A242003	45-M/M 7/16 JIC x 7/1	2	
F005	W69056-01	TEE-BLKHD/M/M 1-3/16 O	1	
F006	A249777	MANIFOLD-7/16JIC(4)x9/	1	
F009	A240032	FTG-7/16 JIC x 9/16 SAE	2	
F009	A251510	FTG-9/16 ORFS x 9/16	2	Date Code ABAB - ON
F010	W158006-11	FTG-M/M 1 ORS x 1-1/1	4	
F011	A241032	90-M/M 7/16 JIC x 9/16	2	
F011	A252501	90-M/M 9/16 ORSx9/16	2	Date Code ABAB - ON
F024	W158006-08	FTG-M/M 1-3/16 ORS x	2	
F028	A241032	90-M/M 7/16 JIC x 9/16	1	
F029	W158007-08	90-M/M 1-3/16 ORS x 1	1	
F030	A249887	TEE-M/F/M 1-3/16 ORS	1	
F032	W158007-08	90-M/M 1-3/16 ORS x 1	2	
F033	69057-02	TEE-M/M/F 1-3/16 ORS	2	
F038	A249899	CAP-F/F 1-3/16 ORS	2	
F040	459100236	3/8" BSP PLUGS. PAR	2	
F041	A249330	90-M/M 3/8 BSP x	4	
F042	GSF2571AC	ADAPTOR GSF2571AC	2	
F044	A249883	MANIFOLD-7/16JIC(3)	1	
F045*	A241006	90-M/M 3/4 JIC x 3/4	1	
F050	A249766	90 BLKHD-M/M 7/8 JIC	4	
F052	A249769	90 BLKHD-M/M 7/16 JIC	3	
F053	2497780	MANIFOLD-7/16JIC(3)x9	1	
F054	2497840	TEE-F/M/M 9/16JIC(2)	1	
F059*	A243505	TEE-M/F/M 9/16 JIC	3	
F061*	A810959	COPPER WASHER	1	
F068	A797109	PILOT LINE ASSY	2	
F068	A797112	PILOT LINE (3/16)	2	Date Code ABAB - ON
F075*	A192516	HOSE CLAMP, 6-16	2	
F077	A243503	TEE-M/F/M 7/16 JIC	6	
F080*	A192914	DOUBLE WIRE HOSE CLIP	1	
F105	A241403	90-M/F 7/16 JIC x 7/16 JIC	2	
F110	A243403	TEE-M/M/F 7/16 JIC	3	
F111	A243503	TEE-M/F/M 7/16 JIC	3	
F114	GSF2570AB	STRAIGHT CONNECTOR GS	1	
F115*	GSF2571AT	STRAIGHT CONNECTOR GS	2	

* Not Illustrated

**RANSOMES COMMANDER 3520
PARTS MANUAL**



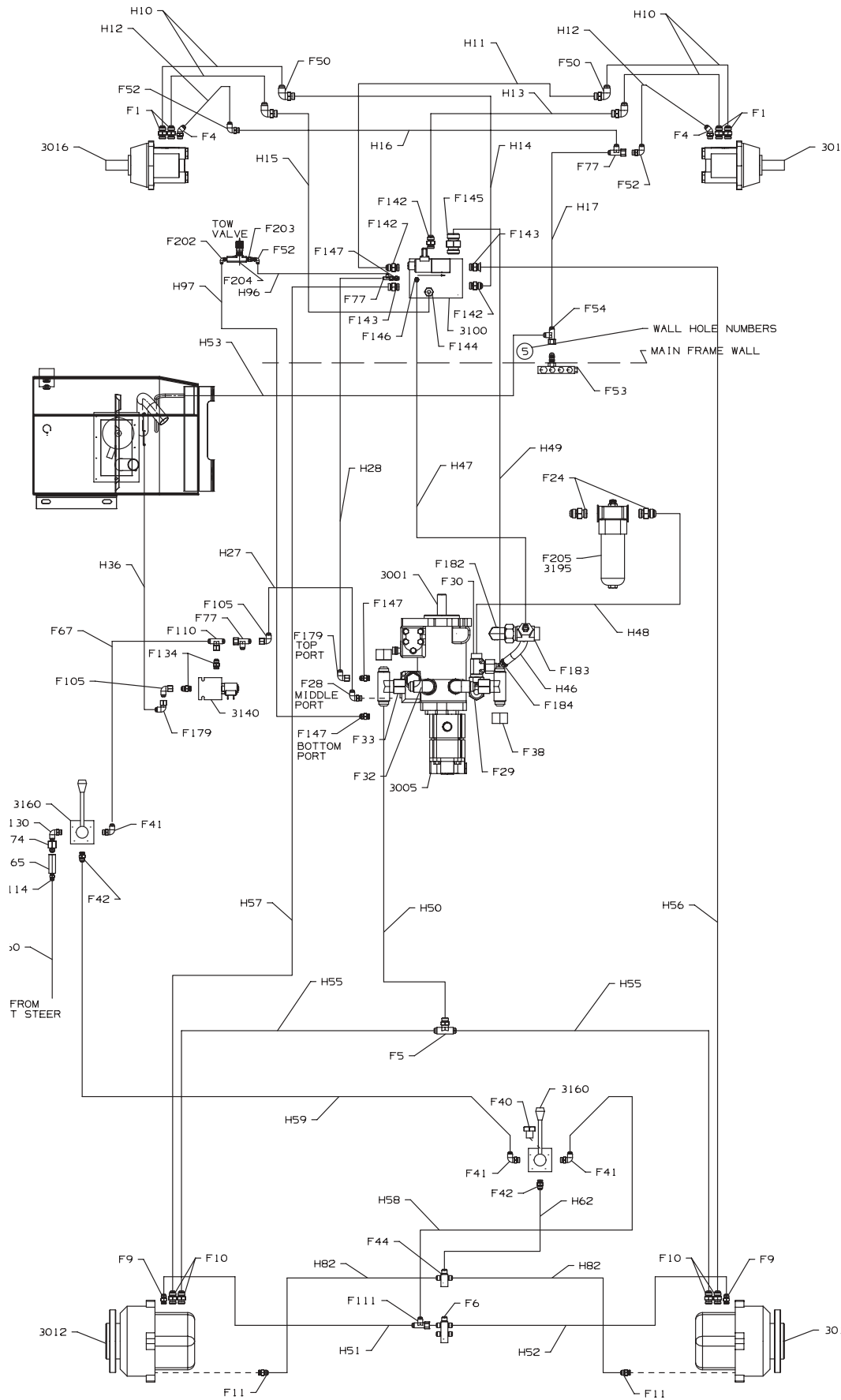
**HYDRAULICS
TRACTION / BRAKE CIRCUIT**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
F118*	A249800	FTG-LG 1/4 BSPP x 7/16 JIC	2	
F119*	A241005	90-M/M 9/16 JIC x 9/16 SAE	1	
F124*	A249740	90-M/M 1/8 BSP x 1/4 BSP	1	
F130	A249333	90-M/M 3/8BSPP x 9/16 JIC	1	
F134	A240032	FTG-7/16 JIC x 9/16 SAE	1	
F142	A240007	FTG-7/8 JIC x 7/8 SAE	3	
F143	W158006-07	FTG-M/M 1 ORS x 7/8 SAE	2	
F144	A241007	90-M/M 7/8 JIC x 7/8 SAE	1	
F145	W158006-08	M/M 1-3/16 ORS x 1-1/16 SAE	1	
F146	A240005	FTG-9/16 JIC x 9/16 SAE	1	
F147	A240032	FTG-7/16 JIC x 9/16 SAE	3	
F165*	A192522	HOSE CLAMP, 8-22	1	
F166*	A192540	HOSE CLAMP, 19-40	4	
F167*	A192557	HOSE CLAMP, 34-57	3	
F168*	A192570	HOSE CLAMP, 23-70	1	
F174	2497950	FTG-M/F 1/4 BSPP x 9/16 JIC	1	
F179	A241403	90-M/F 7/16 JIC x 7/16 JIC	2	
F180*	W158061-04	O-RING 3.237 ID x .103 SECT	1	3001 TO 3005
F182	A260038	90-M/M/M 3/4JICx1-7/16ORFS	1	
F183	A00259099	CROSS-1-7/16ORSx9/16JICx1	1	
F184	A259100	45-F/M 1-3/8 ORS x 1/2 BARB	1	
F194*	A241407	90-M/F 7/8 JIC x 7/8 JIC	2	
F196*	459100888	HYDRAULIC ADAPTOR	1	
F198*	A260032	90-M/M 9/16 SAE x 9/16 JIC	1	
F199*	A241032	90-M/M 7/16 JIC x 9/16 SAE	3	
F202	A249879	90-M/M 1/4 BSP x 7/16 JIC	1	
F203	A260052	FTG M/F 1/4 BSP x 7/16 JIC	1	
F204	A801259	NEEDLE VALVE	1	
F205	A808961	OIL FILTER	1	
H10	A792560	HYDRAULIC HOSE	4	
H11	A799769	HOSE ASSEMBLY	1	
H12	A791208	HYDRAULIC HOSE	2	
H13	A799770	HOSE ASSEMBLY	1	
H14	A799771	HOSE ASSEMBLY	1	
H15	A799772	HOSE ASSEMBLY	1	
H16	A799773	HOSE ASSEMBLY	1	
H17	A799774	HOSE ASSEMBLY	1	
H27	A799789	HOSE ASSEMBLY	1	
H28	A799790	HOSE ASSEMBLY	1	
H36	A796200	HOSE ASSY	1	
H46	A799782	HOSE	1	
H47	A799781	HOSE ASSEMBLY	1	
H48	A799777	HOSE ASSEMBLY	1	
H49	A799780	HOSE ASSEMBLY	1	
H50	A799779	HOSE ASSEMBLY	1	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



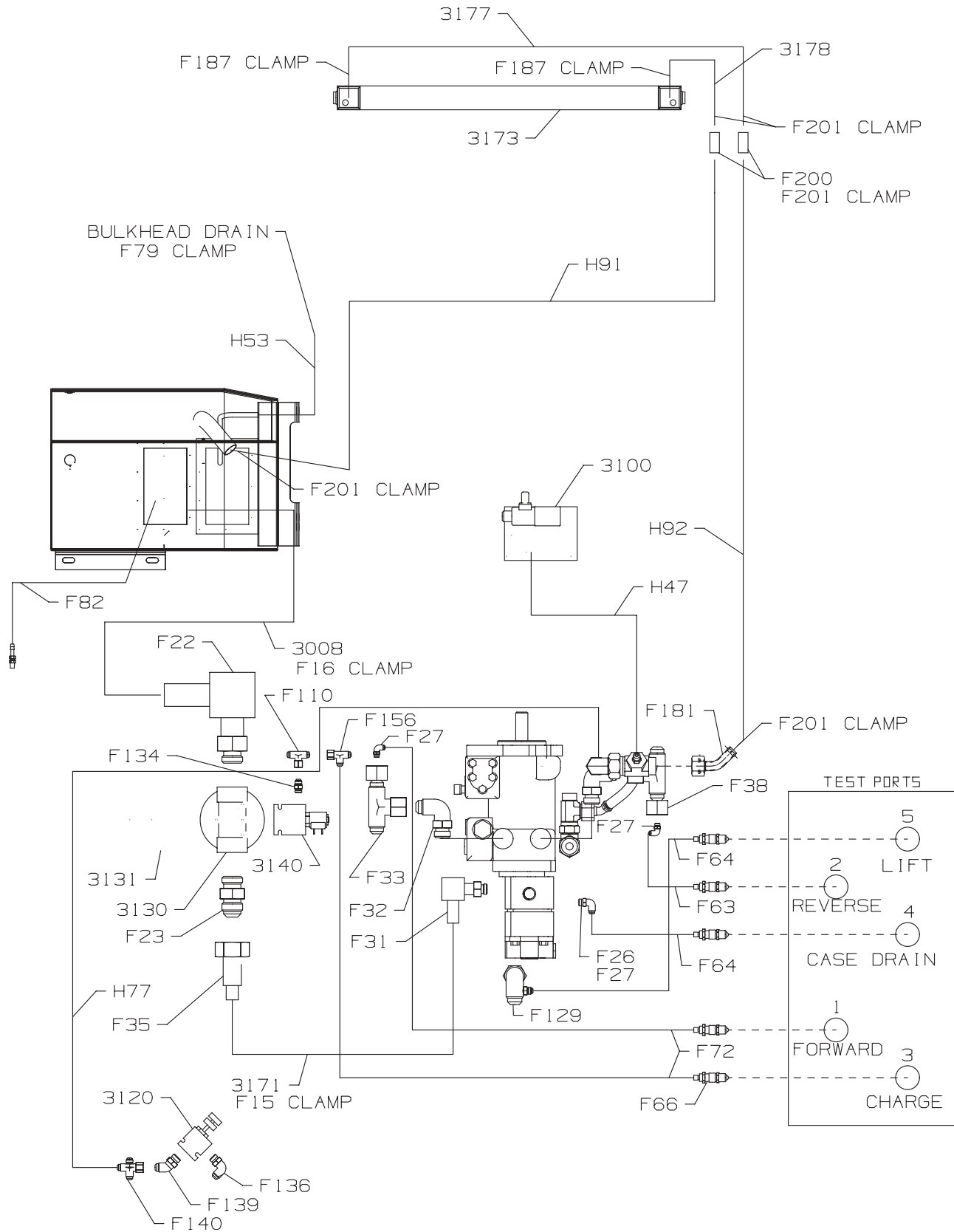
**HYDRAULICS
TRACTION / BRAKE CIRCUIT**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
H51	A799775	HOSE ASSEMBLY	1	
H51	A799813	HOSE ASSEMBLY	1	Date Code ABAB - ON
H52	A799776	HOSE ASSEMBLY	1	
H52	A799814	HOSE ASSEMBLY	1	Date Code ABAB - ON
H53	A799729	HYDRAULIC HOSE ASSY	1	
H55	A799778	HOSE ASSEMBLY	2	
H56	A799767	HOSE ASSEMBLY	1	
H57	A799768	HOSE ASSEMBLY	1	
H58	A799431A	HOSE ASSEMBLY	1	
H59	A799428A	HOSE ASSY	1	
H60	A799429	HOSE ASSY	1	
H62	A799431	HOSE ASSY	1	
H79*	H980031	'P' CLIP H980	6	
H82	A712070	HYDRAULIC HOSE	3	
H82	A712070	HYDRAULIC HOSE	2	Date Code ABAB - ON
H90*	A298401	HOSE SLEEVING	5	
H96	A799803	HOSE ASSEMBLY	1	
H97	A799804	HOSE ASSEMBLY	1	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



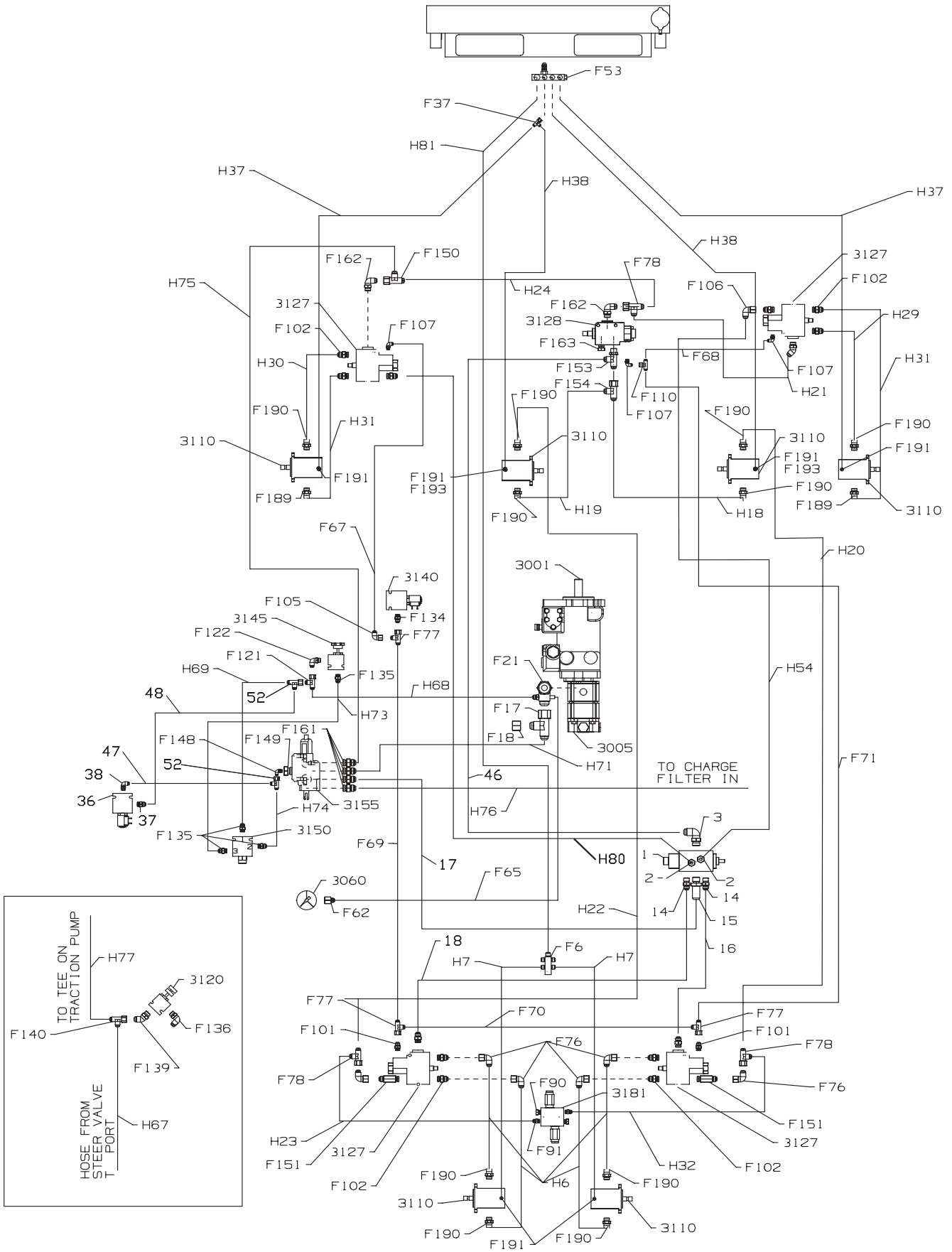
**HYDRAULICS
COOLING CIRCUIT**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
3008	A912157	SUCTIONHOSE	1	Seal Kit 002301300
3100	A801248	TRANSMISSION VALVE	1	
3120	A801125	WEIGHT TRANSFER VALVE	1	
3130	2208038	FILTER HEAD-SPINON	1	
3131	W178025	OIL FILTER ELEMENT	1	
3140	A8011120	SOLENOID VALVE	1	
3171	A912194	SUCTIONHOSE	1	
3173	A691142	OIL COOLER	1	
3177	A912188	RETURNHOSE	1	
3178	A912189	RETURNHOSE	1	
F015	108094-01	HOSE CLAMP .75 TO 1.75	4	
F016	48383	CLAMP-HOSE 2-1/2 DIA.	2	
F022	158058-08	90-M/M 1-7/8 SAE x 1.50 BARB	1	
F023	158006-12	FTG-M/M 2 ORS x 1-7/8 SAE	1	
F026	A249898	PLUG-M/F 1-1/16 SAE x 1/4 BSPP	1	
F027	A249740	90-M/M 1/8 BSP x 1/4 BSP	2	
F031	A260007	90-M/M 1-5/16 SAE x 29mm BARB	1	
F032	W158007-08	90-M/M 1-3/16 ORS x 1-5/16 SAE	2	
F033	69057-02	TEE-M/M/F 1-3/16 ORS	2	
F035	A910063	MANIFOLD-INLET	1	
F038	A249899	CAP-F/F 1-3/16 ORS x 1/4 BSPP	2	
F063	A808037	GAUGE LINE ASSEMBLY A80	1	
F064	A808038	GAUGE LINE ASSEMBLY A80	2	
F066	2449110	TEST POINT-1/8 BSPP	5	
F072	A808045	GAUGE LINE ASSY.	2	
F079	A192532	HOSE CLAMP, 13-32	11	
F082	A249704	BREATHER x 1/4 BARB	1	
F110	A243403	TEE-M/M/F 7/16 JIC	3	
F129	A260036	90-M/M/M 1/8 BSPP X 9/16 JIC X 7/16	1	
F134	A240032	FTG-7/16 JIC x 9/16 SAE	1	
F136	A241042	90-M/M 9/16 JIC x 3/4 SAE	1	
F139	A242006	45-M/M 3/4 JIC x 3/4 SAE	1	
F140	A260019	SWIVEL NUT BRANCH CROSS	1	
F156	A249867	TEE-M/F/M 7/16 JIC(2) x 1/8 BSPP	1	
F181	A260026	45-F/M 1-7/16 ORS x 1-1/4 BARB	1	
F186*	A199201	TIE, 12.7 x 230	2	
F187	108094-01	HOSE CLAMP .75 TO 1.75	2	
F200	A260051	HOSE CONNECTOR	2	
F201	A808982	HOSE CLAMP	6	
H47	A799781	HOSE ASSEMBLY	1	
H53	A799729	HYDRAULIC HOSE ASSY	1	
H77	A799796	HOSE ASSEMBLY	1	
H91	5320153	HOSE 1-1/4" BORE X 1530mm	1	
H92	5320084	HOSE 1-1/4" BORE X 840mm	1	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



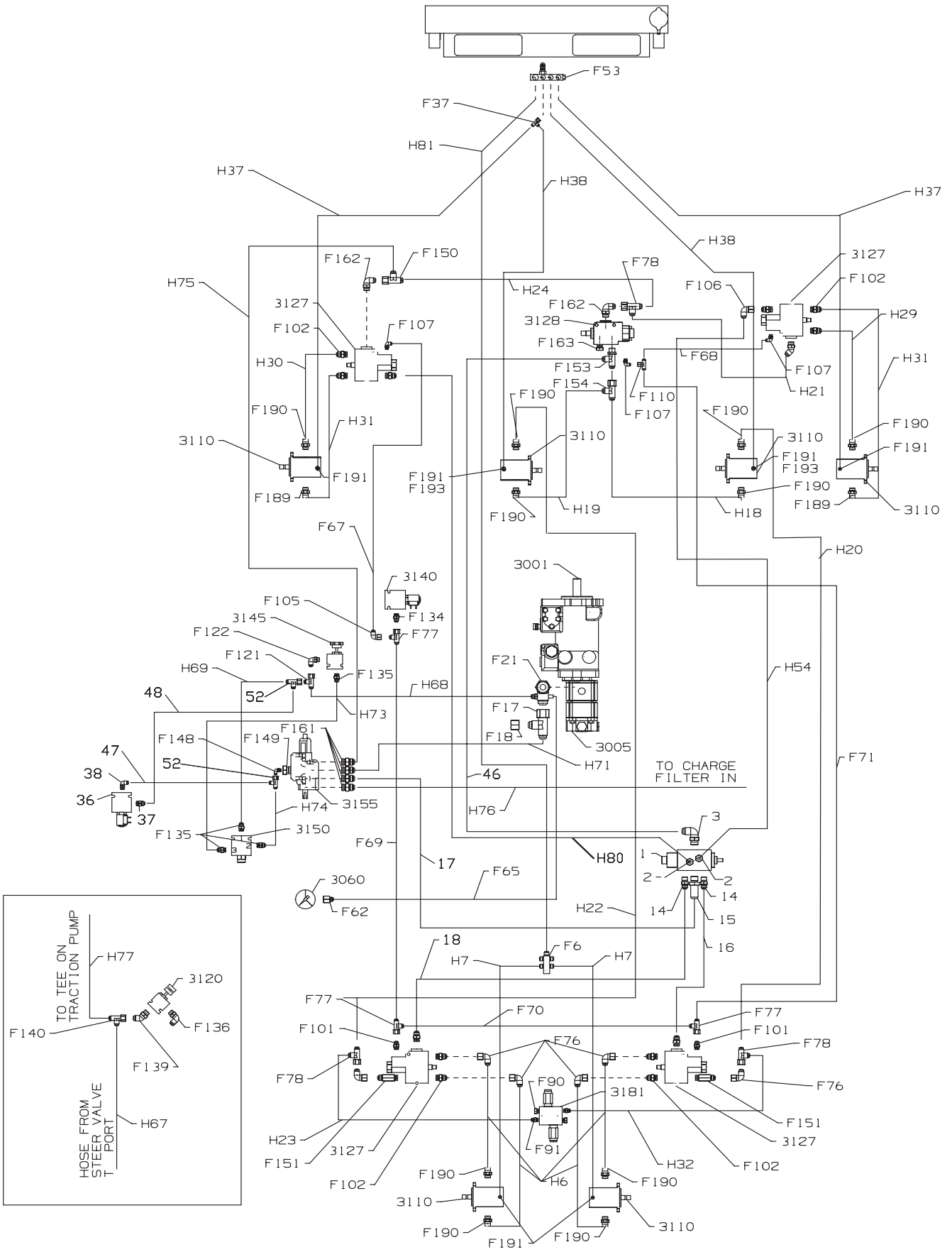
**HYDRAULICS
CUTTING UNIT CIRCUIT WITH SINGLE UNIT CUTTING**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
3001	A800761	PUMP SUNDSTRAND M46	1	SERVO
3005	4165856	TANDEM PUMP 23cc+6cc+PFD	1	
3060	A810941	PRESSURE GAUGE	1	
3110	4155520	GEARMOTOR+MALE SPL.SHFT.	6	
3120	A801125	WEIGHT TRANSFER VALVE	1	
3127	4155522	DIVERTER VALVE 4 PORT PILOT	4	
3128	A801250	DIVERTER VALVE 3PORT PILOT	1	
3140	A801112	SOLENOID VALVE	1	
3145	2208046	VALVE BLOCK-BACK PRESSUR	1	
3150	A801126	PRESSURE COMPENSATOR	1	VALVE
3155	A801252	DIRECTIONAL CONTROL VALVE	1	
3181	A801258	CROSSLINE RELIEF	1	
F006	A249777	MANIFOLD-7/16JIC(4)x9/16JIC	1	
F017	A243508	TEE-M/F/M 1-1/16 JIC	1	
F018	A244808	CAP-1-1/16 JIC	1	
F021	A260037	90-M/M/M/M 1/8BSPPX9/16JIC	1	
F037	A243503	TEE-M/F/M 7/16 JIC	1	
F053	A249778	MANIFOLD-7/16JIC(3)x9/16JIC(2)	1	
F053	A260059	MANIFOLD-7/16JIC(4)x9/16JIC(2)	1	Date Code ABAB - ON
F062	A249287	FTG-M/F 1/8 BSP x 1/4 BSP	1	
F065	A808043	GAUGE LINE ASSY, 1060 LG	1	
F067	A797110	PILOT LINE ASSY	1	
F068	A797109	PILOT LINE ASSY	2	
F068	A797112	PILOT LINE (3/16)	2	Date Code ABAB - ON
F069	A797106	PILOT LINE ASSY	1	
F070	A797105	PILOT LINE ASSY	1	
F071	A797107	PILOT LINE ASSY	1	
F076	A241403	90-M/F 7/16 JIC x 7/16 JIC	5	
F077	A243503	TEE-M/F/M 7/16 JIC	6	
F078	A243507	TEE-M/F/M 7/8 JIC	5	
F090	a244405	PLUG-9/16 SAE	2	
F091	A240051	FTG-7/8 JIC X 9/16 SAE	2	4140343 From Ser No:ZE000791
F101	A240003	FTG-7/16 JIC x 7/16 SAE	1	
F102	A240007	FTG-7/8 JIC x 7/8 SAE	12	
F104*	A241007	90-M/M 7/8 JIC x 7/8 SAE	3	
F105	A241403	90-M/F 7/16 JIC x 7/16 JIC	2	
F106	A241407	90-M/F 7/8 JIC x 7/8 JIC	13	
F107	A241003	90-M/M 7/16 JIC x 7/16 SAE	3	
F110	A243403	TEE-M/M/F 7/16 JIC	2	
F112*	A249312	FTG-LG 7/8 JIC x 7/8 SAE	1	
F121	A243505	TEE-M/F/M 9/16 JIC	1	
F122	A241042	90-M/M 9/16 JIC x 3/4 SAE	2	
F133	A240003	FTG-7/16 JIC x 7/16 SAE	2	
F134	A240032	FTG-7/16 JIC x 9/16 SAE	1	
F135	A240042	FTG-9/16 JIC x 3/4 SAE	5	
F136	A241042	90-M/M 9/16 JIC x 3/4 SAE	1	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



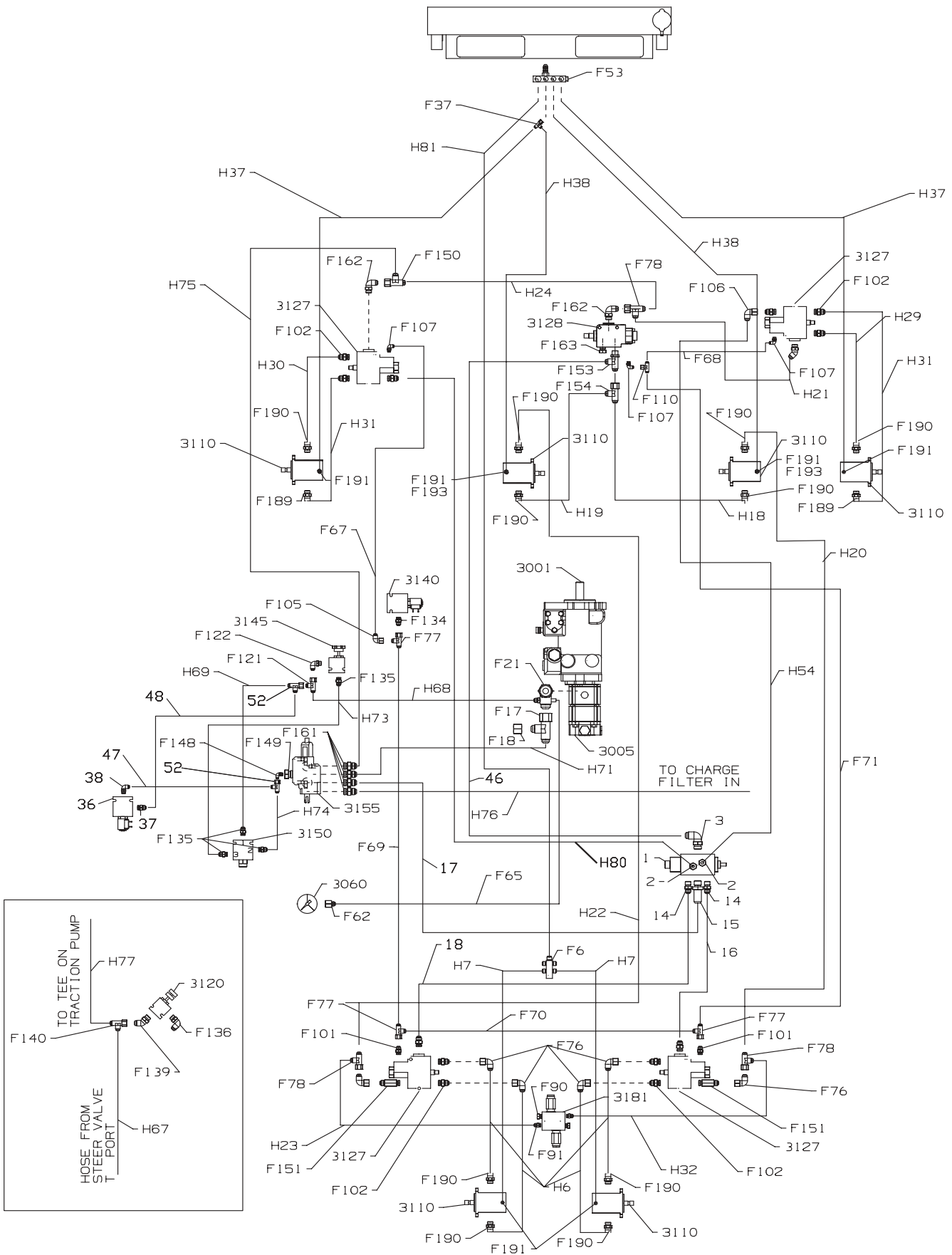
**HYDRAULICS
CUTTING UNIT CIRCUIT WITH SINGLE UNIT CUTTING**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
F139	A242006	45-M/M 3/4 JIC x 3/4 SAE	1	
F140	A243506	TEE -M/F/M 3/4 JIC	1	
F148	A241042	90-M/M 9/16 JIC x 3/14 SAE	1	
F149	A260056	REDUCING BUSH 3/4 BSP	1	
F150	A260040	TEE M/F/M 7/8JIC(2) x 1 1/16JIC	1	4140613 From Ser No:ZE000791
F151	A249312	FTG-LG 7/8 JIC x 7/8 SAE	3	
F153	A260041	TEE M/M/M7/8SAE X 1 1/16JIC	1	
F154	A243508	TEE-M/F/M 1-1/16 JIC	1	002498870 From Ser No:ZE000791
F161	A260039	FTG 3/4BSPc/w seal x 1 1/16"JIC	4	002498850 From Ser No:ZE000791
F162	A241007	90-M/M 7/8 JIC x 7/8 SAE	2	
F163	A244407	PLUG-7/8 SAE	1	
F189	A242007	45-M/M 7/8 JIC x 7/8 SAE	2	
F190	A241007	90-M/M 7/8 JIC x 7/8 SAE	10	
F191	A241032	90-M/M 7/16 JIC x 9/16 SAE	6	
F193	A242403	45-M/F 7/16 JIC x 7/16 JIC	2	
F193	839846	45-9/16 SAE x 9/16 ORFS	2	Date Code ABAB - ON
H06	A792570	HYDRAULIC HOSE	4	
H07	A712160	HOSE ASSY A712160	2	
H10	A792560	HYDRAULIC HOSE	4	
H18	A799761	HOSE ASSEMBLY	1	4140829 From Ser No:ZE000791
H19	A799760	HOSE ASSEMBLY	1	4140828 From Ser No:ZE000791
H20	A799762	HOSE ASSEMBLY	1	4140830 From Ser No:ZE000791
H21	A799765	HOSE ASSEMBLY	1	
H22	A799762	HOSE ASSEMBLY	1	4140830 From Ser No:ZE000791
H23	A799763	HOSE ASSEMBLY	1	4140354 From Ser No:ZE000791
H24	A799766	HOSE ASSEMBLY	1	4142565 From Ser no:ZE000791
H29	A799753	HYD HOSE ASSEMBLY	1	
H30	A799798	HYD HOSE ASSY	1	
H31	A792573	HYDRAULIC HOSE	2	
H32	A799764	HOSE ASSEMBLY	1	4140355 From Ser No:ZE000791
H37	A799788	HOSE ASSEMBLY	2	
H38	A799787	HOSE ASSEMBLY	2	
H38	A799812	HOSE ASSEMBLY	2	Date Code ABAB - ON
H54	A799759	HOSE ASSEMBLY	1	
H67	A791416	HYDRAULIC HOSE	1	
H68	A799791	HOSE ASSEMBLY	1	
H69	A799433	HOSE ASSY	1	
H71	A799792	HOSE ASSEMBLY	1	4140356 From Ser No:ZE000791
H72	A799793	HOSE ASSEMBLY	1	
H73	A799438	HOSE ASSY	1	
H74	A799808	HOSE ASSY	1	
H75	A799794	HOSE ASSEMBLY	1	4140357 From Ser No:ZE000791
H76	A799795	HOSE ASSEMBLY	1	4140358 From Ser No:ZE000791
H77	A799796	HOSE ASSEMBLY	1	
H80	A799758	HOSE ASSY	1	
H81	A799786	HOSE ASSEMBLY	1	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



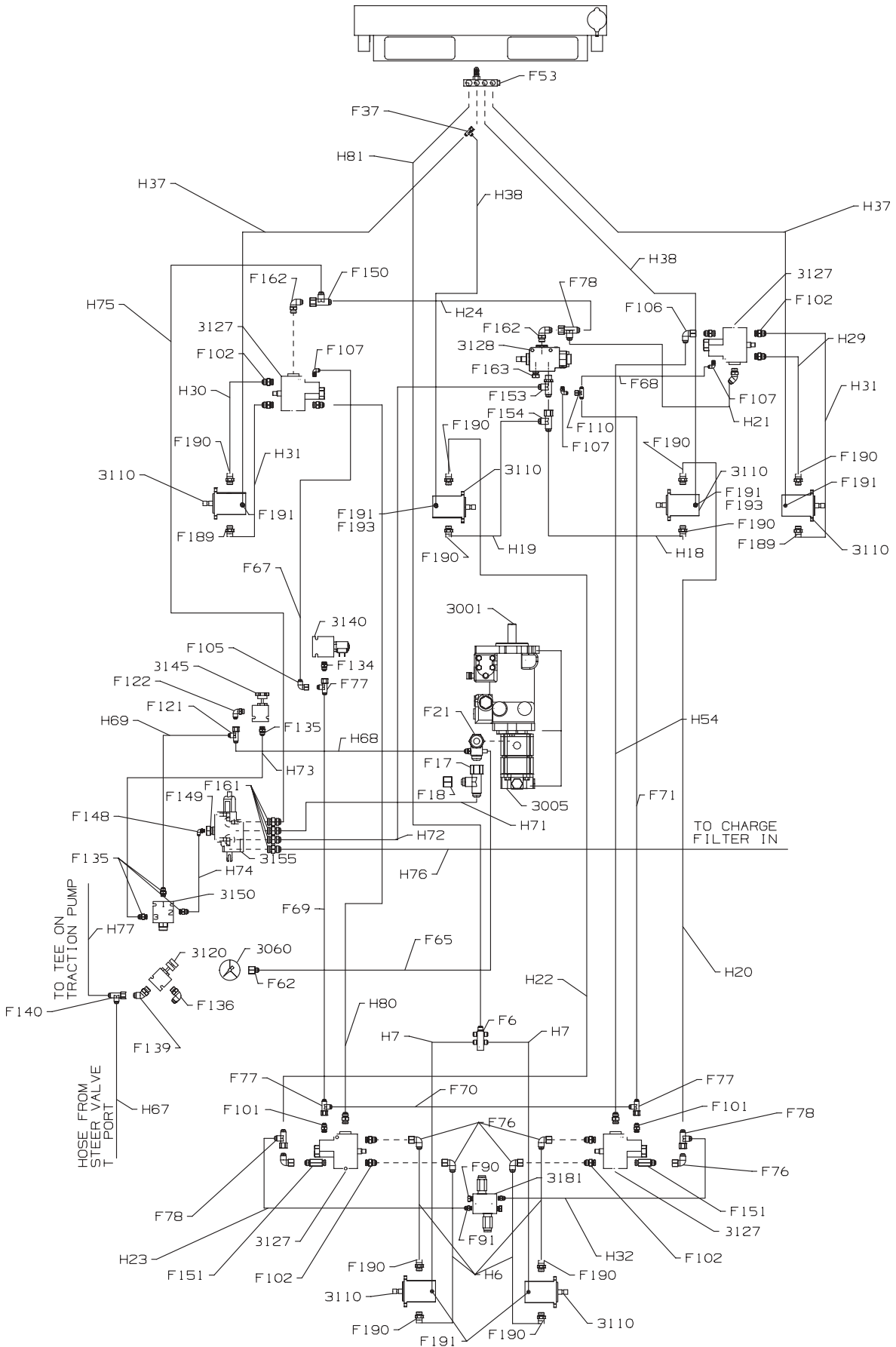
**HYDRAULICS
CUTTING UNIT CIRCUIT WITH SINGLE UNIT CUTTING**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	009028100	MOTOR CHANGEOVER VALVE	1	
2	002600600	FTG-45-1/2" BSP-ADJ	2	
3	002497300	90-M/M 3/4 BSP x 1-1/16	1	
14	459100074	STRAIGHT CONNECTOR	2	
15	002600610	FTG-3/4" BSP x 1" 1/16 JIC	1	
16	007998240	HOSE ASSEMBLY	1	
17	007998250	HOSE ASSEMBLY	1	4140353 From Ser No:ZE000791
18	007998230	HOSE ASSEMBLY	1	
36	009028180	SOLONOID VALVE	1	
37	459100202	ADAPTOR-3/8" BSP X 3/8" JIC	1	
38	002493330	90-M/M 3/8 BSPP x 9/16 JIC	1	
46	007998520	HOSE ASSEMBLY	1	4140831 From Ser No:ZE000791
47	007998530	HOSE ASSEMBLY	1	
48	007998540	HOSE ASSEMBLY	1	
52	002435059	TEE-M/F/M 9/16 JIC	2	
*	002515010	FTG-1-3/16" ORS x 7/8" SAE	1	From Ser No:ZE000791
*	002590110	TEE-M/F/M 1" ORS	4	From Ser No:ZE000791
*	002590470	TEE-M/M/F 9/16" ORS	1	From Ser No:ZE000791
*	W158007-05	90-M/M 1" ORS x 7/8" SAE	4	From Ser No:ZE000791
*	002600410	TEE-M/M/M 7/8" SAE x 1-1/16" JIC	1	From Ser No:ZE000791
*	4140612	FTG-STR 1-1/16" JIC F to 7/8" JIC M	1	From Ser No:ZE000791
*	002493128	FTG-LG 7/8" JIC x 7/8" SAE	1	From Ser No:ZE000791

* Not Illustrated

**RANSOMES COMMANDER 3520
PARTS MANUAL**



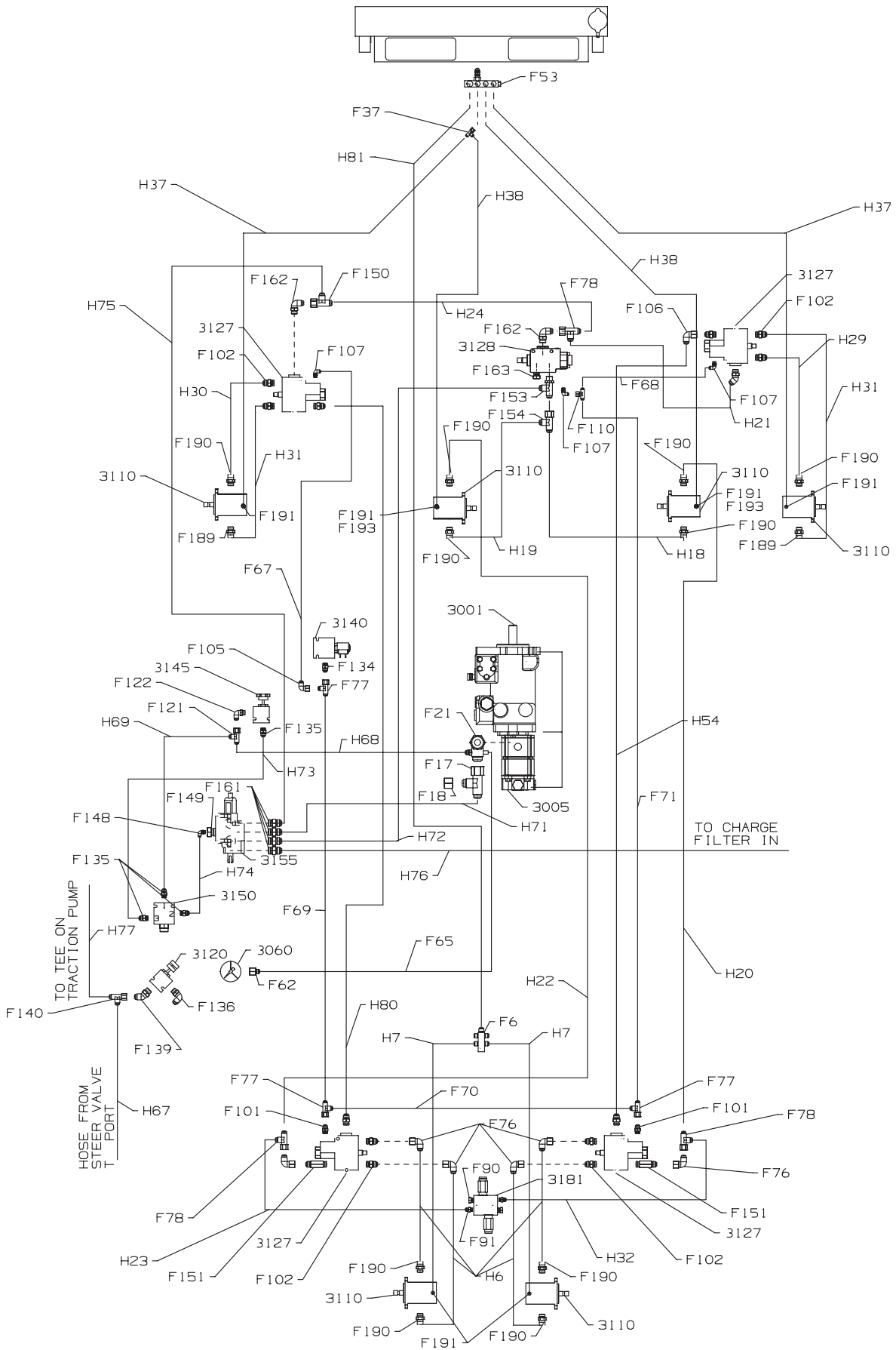
**HYDRAULICS
CUTTING UNIT CIRCUIT**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
3001	A800761	PUMP SUNDSTRAND M46	1	SERVO
3005	4165856	TANDEM PUMP 23cc+6cc+PFD	1	
3060	A810941	PRESSURE GAUGE	1	
3110	4155520	GEARMOTOR+MALE SPL.SHFT.	6	
3120	A801125	WEIGHT TRANSFER VALVE	1	
3127	4155522	DIVERTER VALVE 4 PORT PILOT	4	
3128	A801250	DIVERTER VALVE 3PORT PILOT	1	
3140	A8011120	SOLENOID VALVE	1	
3145	2208046	VALVE BLOCK-BACK PRESSUR	1	
3150	A801126	PRESSURE COMPENSATOR	1	
3155	A801252	DIRECTIONAL CONTROL VALVE	1	
3181	A801258	CROSSLINE RELIEF	1	
F006	A249777	MANIFOLD-7/16JIC(4)x9/16JIC	1	
F017	A243508	TEE-M/F/M 1-1/16 JIC	1	
F018	A244808	CAP-1-1/16 JIC	1	
F021	A260037	90-M/M/M/M 1/8BSPPX9/16JIC	1	
F037	A243503	TEE-M/F/M 7/16 JIC	1	
F053	A249778	MANIFOLD-7/16JIC(3)x9/16JIC(2)	1	
F053	A260059	MANIFOLD-7/16JIC(4)x9/16JIC(2)	1	Date Code ABAB - ON
F062	A249287	FTG-M/F 1/8 BSP x 1/4 BSP	1	
F065	A808043	GAUGE LINE ASSY, 1060 LG	1	
F067	A797110	PILOT LINE ASSY	1	
F068	A797109	PILOT LINE ASSY	2	
F068	A797112	PILOT LINE (3/16)	2	Date Code ABAB - ON
F069	A797106	PILOT LINE ASSY	1	
F070	A797105	PILOT LINE ASSY	1	
F071	A797107	PILOT LINE ASSY	1	
F076	A241403	90-M/F 7/16 JIC x 7/16 JIC	5	
F077	A243503	TEE-M/F/M 7/16 JIC	6	
F078	A243507	TEE-M/F/M 7/8 JIC	5	
F090	2444056	PLUG-9/16 SAE	2	
F091	A2400513	FTG-7/8 JIC X 9/16 SAE	2	
F101	A240003	FTG-7/16 JIC x 7/16 SAE	1	
F102	A240007	FTG-7/8 JIC x 7/8 SAE	12	
F104*	A241007	90-M/M 7/8 JIC x 7/8 SAE	3	
F105	A241403	90-M/F 7/16 JIC x 7/16 JIC	2	
F106	A241407	90-M/F 7/8 JIC x 7/8 JIC	13	
F107	A241003	90-M/M 7/16 JIC x 7/16 SAE	3	
F110	A243403	TEE-M/M/F 7/16 JIC	2	
F112*	A249312	FTG-LG 7/8 JIC x 7/8 SAE	1	
F121	A243505	TEE-M/F/M 9/16 JIC	1	
F122	A241042	90-M/M 9/16 JIC x 3/4 SAE	2	
F133	A240003	FTG-7/16 JIC x 7/16 SAE	2	
F134	A240032	FTG-7/16 JIC x 9/16 SAE	1	
F135	A240042	FTG-9/16 JIC x 3/4 SAE	5	
F136	A241042	90-M/M 9/16 JIC x 3/4 SAE	1	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



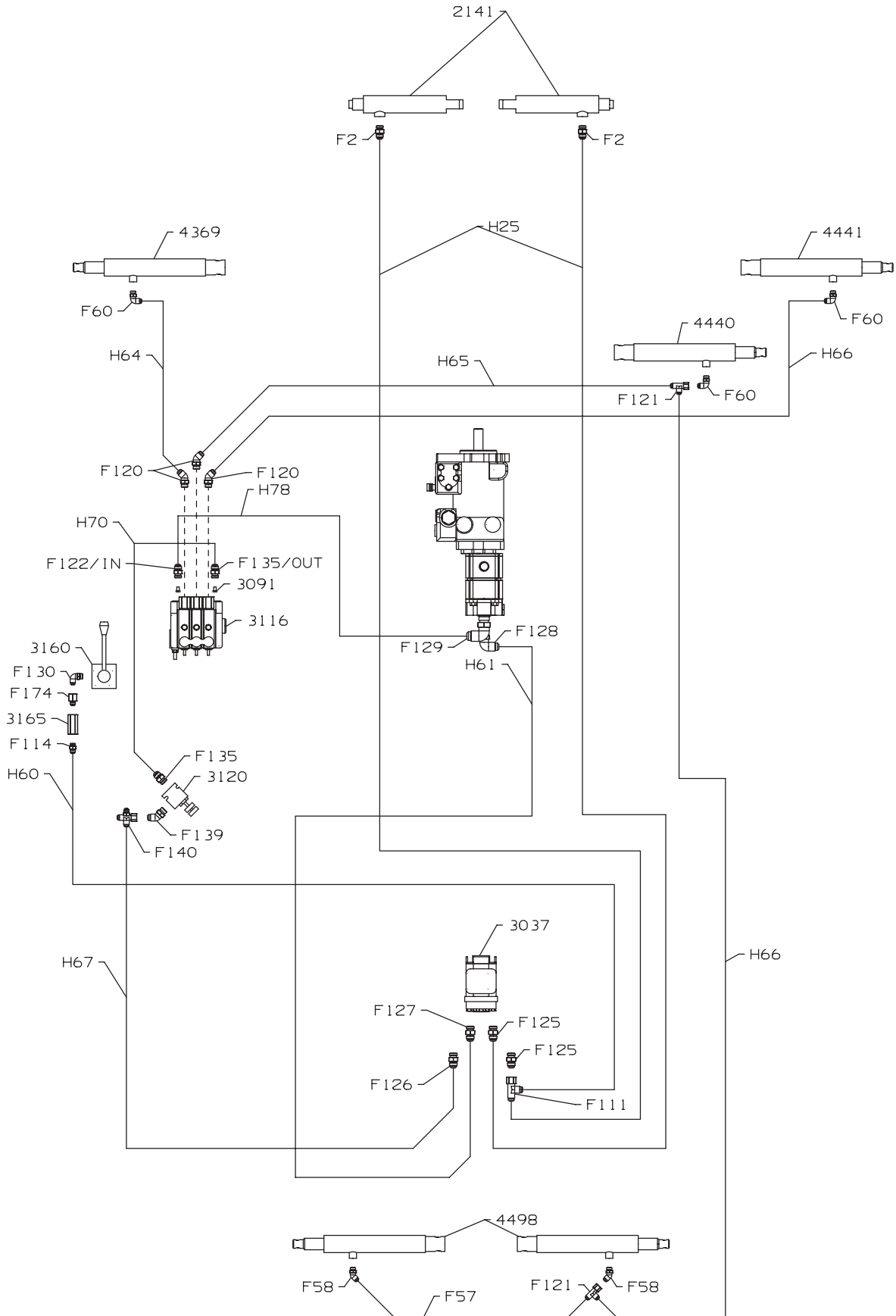
**HYDRAULICS
CUTTING UNIT CIRCUIT**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
F139	A242006	45-M/M 3/4 JIC x 3/4 SAE	1	
F140	A243506	TEE -M/F/M 3/4 JIC	1	
F148	A241042	90-M/M 9/16 JIC x 3/14 SAE	1	
F149	A260056	REDUCING BUSH 3/4 BSP	1	
F150	A260040	TEE M/F/M 7/8JIC(2) x 1 1/16JIC	1	
F151	A249312	FTG-LG 7/8 JIC x 7/8 SAE	3	
F153	A260041	TEE M/M/M7/8SAE X 1 1/16JIC	1	
F154	A243508	TEE-M/F/M 1-1/16 JIC	1	
F161	A260039	FTG 3/4BSPc/w seal x 1 1/16"JIC	4	
F162	A241007	90-M/M 7/8 JIC x 7/8 SAE	2	
F163	A244407	PLUG-7/8 SAE	1	
F189	A242007	45-M/M 7/8 JIC x 7/8 SAE	2	
F190	A241007	90-M/M 7/8 JIC x 7/8 SAE	10	
F191	A241032	90-M/M 7/16 JIC x 9/16 SAE	6	
F193	A242403	45-M/F 7/16 JIC x 7/16 JIC	2	
F193	839846	45-9/16 SAE x 9/16 ORFS	2	Date Code ABAB - ON
H06	A792570	HYDRAULICHOSE	4	
H07	A712160	HOSE ASSY	2	
H10	A792560	HYDRAULICHOSE	4	
H18	A799761	HOSE ASSEMBLY	1	
H19	A799760	HOSE ASSEMBLY	1	
H20	A799762	HOSE ASSEMBLY	1	
H21	A799765	HOSE ASSEMBLY	1	
H22	A799762	HOSE ASSEMBLY	1	
H23	A799763	HOSE ASSEMBLY	1	
H24	A799766	HOSE ASSEMBLY	1	
H29	A799753	HYD HOSE ASSEMBLY	1	
H30	A799798	HYD HOSE ASSY	1	
H31	A792573	HYDRAULICHOSE	2	
H32	A799764	HOSE ASSEMBLY	1	
H37	A799788	HOSE ASSEMBLY	2	
H38	A799787	HOSE ASSEMBLY	2	
H38	A799812	HOSE ASSEMBLY	2	Date Code ABAB - ON
H54	A799759	HOSE ASSEMBLY	1	
H67	A791416	HYDRAULICHOSE	1	
H68	A799791	HOSE ASSEMBLY	1	
H69	A799433	HOSE ASSY	1	
H71	A799792	HOSE ASSEMBLY	1	
H72	A799793	HOSE ASSEMBLY	1	
H73	A799438	HOSE ASSY	1	
H74	A799808	HOSE ASSY	1	
H75	A799794	HOSE ASSEMBLY	1	
H76	A799795	HOSE ASSEMBLY	1	
H77	A799796	HOSE ASSEMBLY	1	
H80	A799758	HOSE ASSY	1	
H81	A799786	HOSE ASSEMBLY	1	

* Not Illustrated

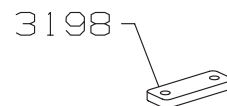
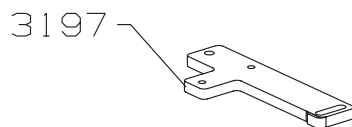
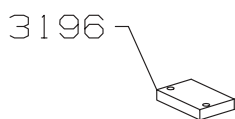
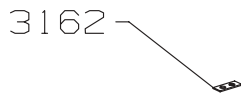
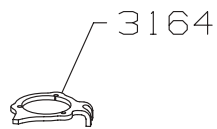
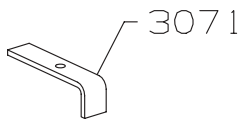
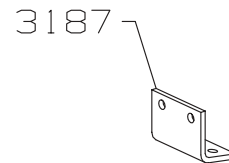
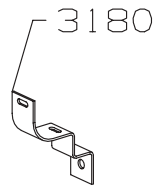
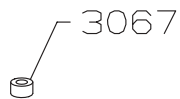
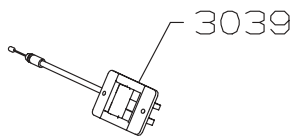
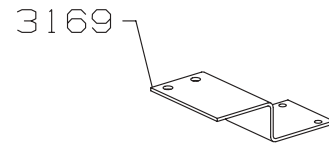
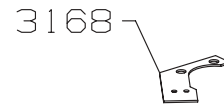
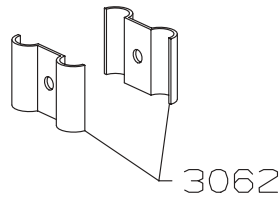
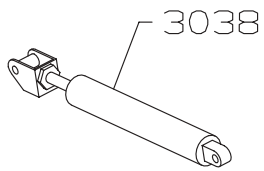
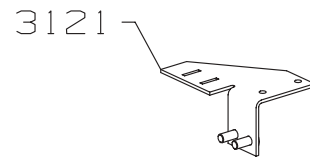
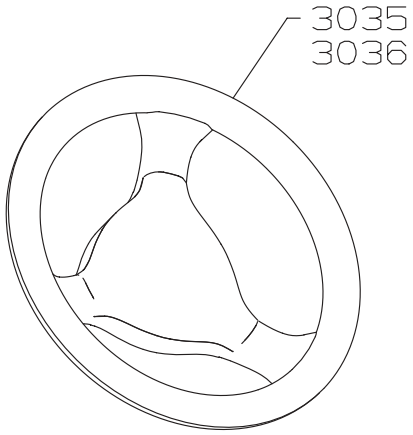
RANSOMES COMMANDER 3520
PARTS MANUAL



**HYDRAULICS
STEERING / LIFT CIRCUIT**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
2141	A902807	STEERINGRAM	2	Seal Kit 4133843
3037	A808980	STEERINGUNIT	1	
3091	MBE4675A	DUALRESTRICTOR.	2	
3116	A801036	LIFTVALVE	1	
3120	A801125	WEIGHTTRANSFER VALVE	1	
3160	A802834	HYDRAULIC VALVE	2	
3165	A801121	CHECK VALVE	1	
4369	A902811	HYDRAULICRAM	2	
4440	A902734	HYDRAULICRAM	1	
4441	A902811	HYDRAULICRAM	1	
4498	A902737	HYDRAULICRAM	2	
F002	A240032	FTG-7/16 JIC x 9/16 SAE	2	
F057	A797200	HYD HOSE ASSY	1	
F058	A242005	45-M/M 9/16 JIC x 9/16 SAE	2	
F060	A241005	90-M/M 9/16 JIC x 9/16 SAE	3	
F111	A243503	TEE-M/F/M 7/16 JIC	3	
F114	GSF2570AB	STRAIGHT CONNECTOR GS1		
F120	A242005	45-M/M 9/16 JIC x 9/16 SAE	6	
F121	A243505	TEE-M/F/M 9/16 JIC	1	
F122	A241042	90-M/M 9/16 JIC x 3/4 SAE	2	
F125	A240032	FTG-7/16 JIC x 9/16 SAE	2	
F126	A240047	FTG-3/4 JIC x 9/16 SAE	1	
F127	A801255	CHECK VALVE	1	
F128	A240042	FTG-9/16 JIC x 3/4 SAE	1	
F129	A260036	90-M/M/M 1/8BSPPX9/16JICX	1	
F130	A249333	90-M/M 3/8BSPP x 9/16 JIC	1	
F135	A240042	FTG-9/16 JIC x 3/4 SAE	5	
F139	A242006	45-M/M 3/4 JIC x 3/4 SAE	1	
F140	A260019	SWIVEL NUT BRANCH CROSS	1	
F174	2497950	FTG-M/F 1/4 BSPP x 9/16 JIC	1	
H25	A791220	HYD HOSE ASSY	1	
H60	A799429	HOSE ASSY	1	
H61	A799430	HOSE ASSY	1	
H64	A799425	HOSE ASSY	1	
H65	A799426	HOSE ASSY	1	
H66	A799427	HOSE ASSY	1	
H67	A791416	HYDRAULICHOSE	1	
H70	A799434	HOSE ASSY	1	
H78	A799797	HOSE ASSEMBLY	1	

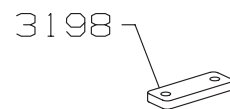
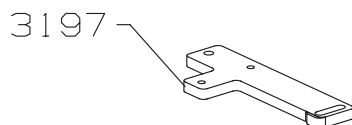
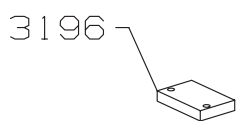
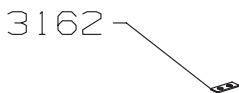
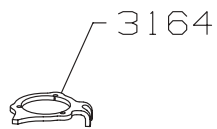
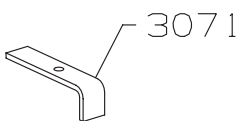
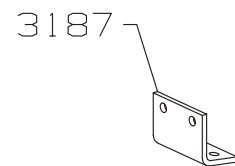
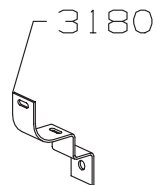
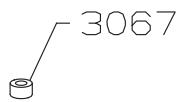
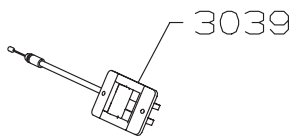
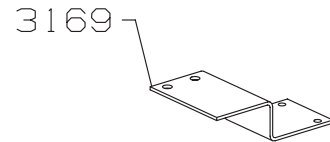
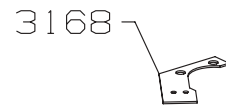
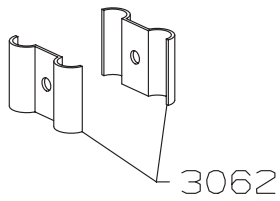
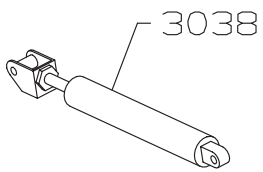
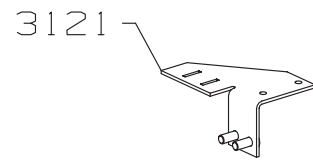
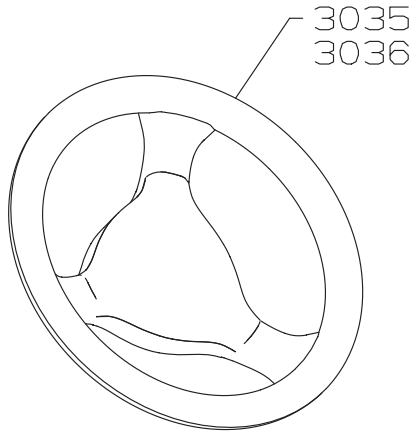


HYDRAULIC MISCELLANEOUS ITEMS

RANSOMES COMMANDER 3520 PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
3002*	450756	CAPSCRW, M12 x 40, SCKT HD	2	
3003*	A159905	WASHER, 33/64"	2	
3004*	450424	S.L.WASHER, M12	2	
3006*	450214	SCREW, M10 x 25, HEX HD	2	
3007*	450412	S.L.WASHER, M10	2	
3014*	A119116	SCRW-HEX M14 x 30	12	MOTOR TO AXLE
3015*	A159420	S.L.WASHER, M14	12	
3017*	456010577	SCREW, 1/2 x 1 1/2, HEX HD	8	REAR MOTOR TO SWIVEL
3018*	452200168	S.L.WASHER, 1/2	8	
3026*	MBG6420	ORIFACE PLATE	1	
3035	2811364	STEERING WHEEL	1	
3036	2811365	STEERING WHEEL CAP	1	
3038	J5002918	ACTUATOR, GAS SPRING	1	
3039	J5002919	CABLE, ACTUATOR	1	
3044*	450020	BOLT, M8 x 60, HEX HD	10	DIVERTORS
3045*	450031	BOLT, M10 x 45, HEX HD	1	LEVER W/A
3046*	450379	NUT, M10 NYLOC	1	
3047*	MBE4170	STUD.	1	LEVER W/A
3048*	MBE4169	NUT.	1	
3049*	450378	NUT, M8 NYLOC	2	
3050*	A291079	SPRING	1	
3052*	450390	WASHER, M8	2	
3053*	H980031	'P' CLIP	5	
3061*	GSF2150L	WASHER	6	
3062	MBE1265	BRACKET.	4	
3063*	450173	SCREW, M6 x 30, HEX HD	4	
3064*	450215	SCREW, M10 x 30, HEX HD	2	
3065*	450391	WASHER, M10	3	
3066*	450379	NUT, M10 NYLOC	3	
3067	MBC5963	SPACER.	2	
3068*	450011	BOLT, M6 x 80, HEX HD	1	
3069*	450377	NUT, M6 NYLOC	1	
3071	MBE4237	CLAMP - HOSES.	1	
3072*	450018	BOLT, M8 x 50, HEX HD	1	
3073*	450378	NUT, M8 NYLOC	1	
3074*	A298401	HOSE SLEEVING	3	
3075*	A298401	HOSE SLEEVING	3	
3085*	450529	SCREW, M5 x 20, PAN HD	6	
3086*	450322	NUT, M5	6	
3087*	450388	WASHER, M5	6	
3090*	H060105	PLASTIC SPRING GUARD	1	
3101*	450026	BOLT-HEX M8 x 90	2	VALVE TO CHASSIS
3102*	450324	NUT HEX M8	2	
3103*	450411	LOCKWASHER M8	2	
3121	MBF2144	BRACKET WA	1	
3122*	450411	S.L.WASHER, M8	2	
3123*	450324	NUT, M8	2	
3124*	450004	BOLT, M6 x 45, HEX HD	2	

* Not Illustrated



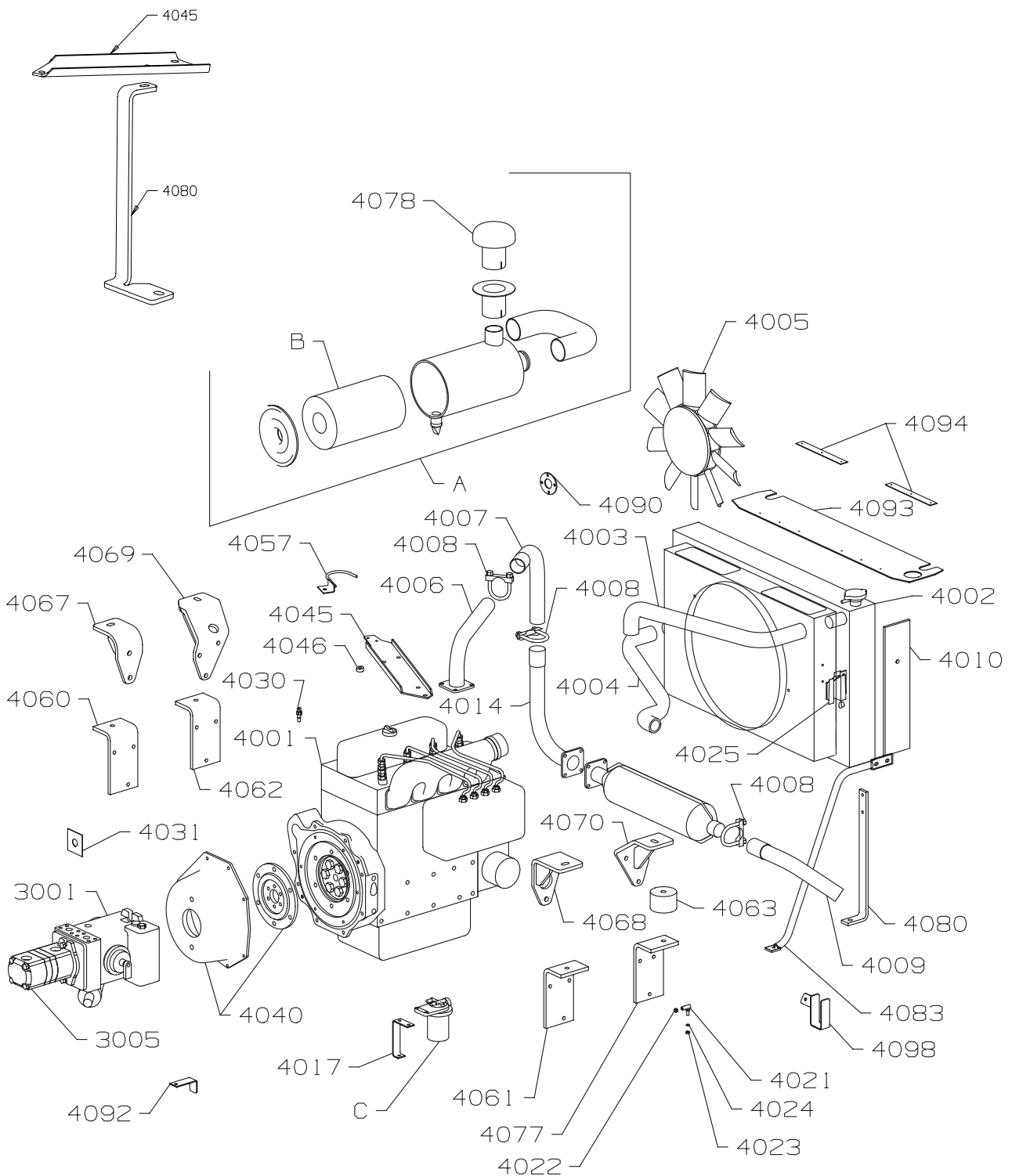
HYDRAULIC MISCELLANEOUS ITEMS

RANSOMES COMMANDER 3520
PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
3125*	450389	WASHER, M6	2	
3126*	450377	NUT, M6 NYLOC	2	
3133*	A119003	SCREW, 5/16 UNC x 3/4	3	
3134*	450390	WASHER, M8	4	
3135*	450192	SCREW, M8 x 25, HEX HD	1	
3136*	450411	S.L.WASHER, M8	4	
3137*	450378	NUT, M8 NYLOC	1	
3156*	450038	BOLT-HEX M10	3	
3157*	450376	NUT-HEX M5 NYLOC	2	
3158*	450388	WSHR-M5	3	
3159*	450528	SCRW-PAN HD, M5	2	
3161*	451153	SCRW PAN HD, #10 x 9.5	3	
3162	MBF0918	CLAMP PLATE	1	
3163	MBG5177	BRKT-M.SWITCH, BRAKE	1	
3164	MBG5181	M.SWITCHACTUATOR	1	
3168	MBG3284A	BRACKET-M.SWITCH	1	
3169	MBG3283	BRACKET - EBV	1	
3169*	4163400	BRACKET	1	
3174*	A298937	HOSE SLEEVING	7	
3175*	A199208	TIE, 200 x 4.8	15	
3180	MBG5544	BRACKET HOSE SUPPORT	2	REAR OF MACHINE
3187	MBG5403	FILTER BRACKET	1	
3188*	450191	SCRW-HEX, M8 x 20	2	
3189*	450324	NUT-HEX, M8	2	
3190*	450390	WSHR, M8	2	
3191*	450411	LOCKWASHER, M8	4	
3192*	456110189	SCRW HEX 5/16 x 3/4	2	
3196	MBG5445	PLATE	1	
3197	MBG5402	VALVE BRACKET	1	
3198	MBG6081	PLATE	1	
3199*	450020	BOLT-HEX M8 x 60	2	
3200*	450411	LOCKWASHER, M8	4	
3201*	450192	SCRW-HEX, M8 x 25	2	
3202*	450378	NUT-HEX, M8 NYLOC	2	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



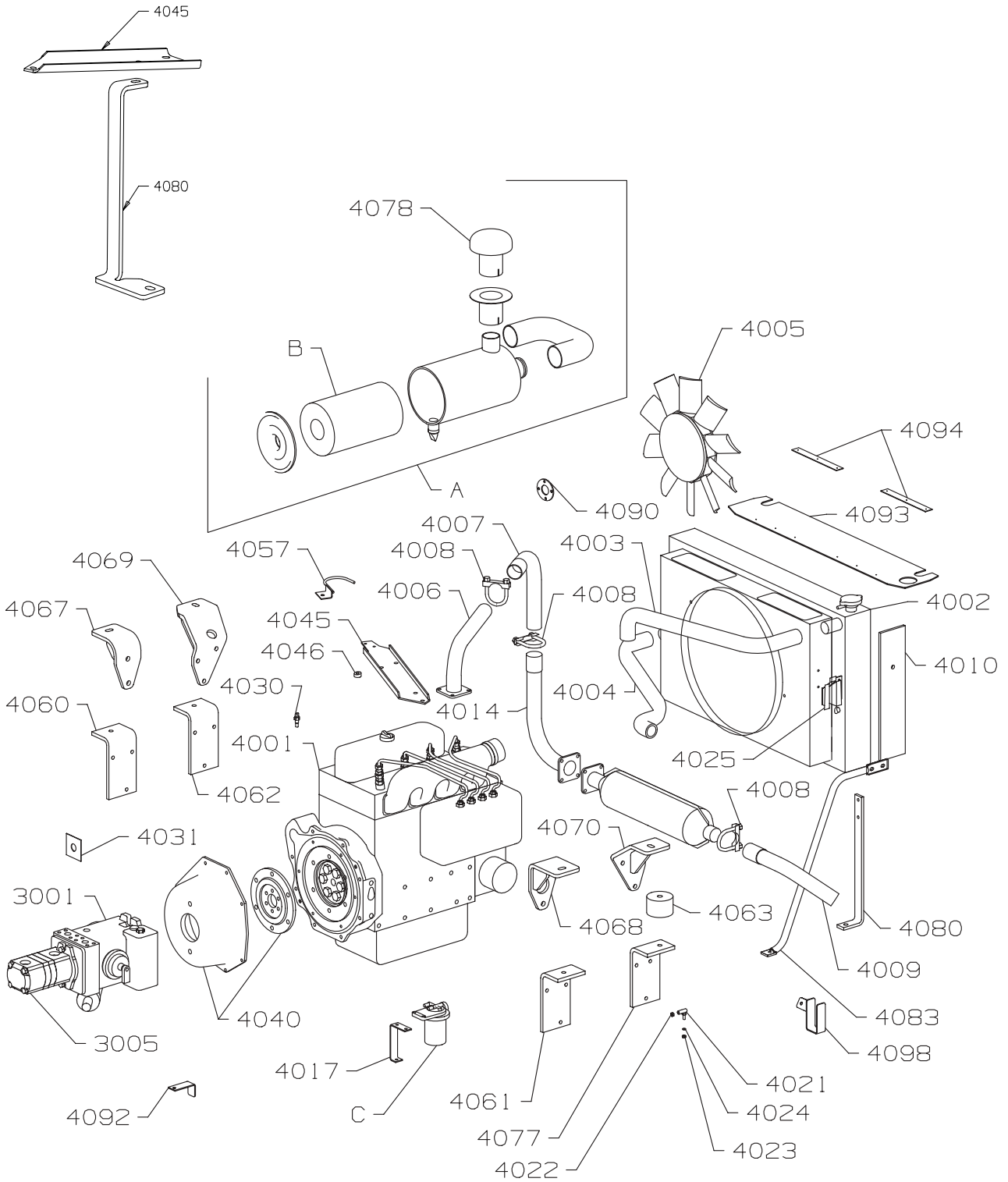
ENGINE

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
4001	A682185	ENGINE (V2203)	1	
4002	A691141	RADIATOR	1	Radiator Cap 0069102120
4003	A912129	TOP HOSE	1	
4004	A910065	BOTTOMHOSE	1	
4005	4121011	FAN	1	
4006	MBE4668	FRONT EXHAUST W/ASSY.	1	
4007	MBE4667	REAR EXHAUST W/ASSY.	1	
4008	A199035	CLAMP, 1.3/4"	4	
4009	MBE4504A	EXHAUST TAILPIPE.	1	
4010	A914929	SEALING PAD	2	
4012*	4135618	SLEEVING	1.5	
4013*	A192557	HOSE CLAMP, 34-57	4	
4014	MBE4666	EXHAUST LOWER PIPE.	1	
*	4134436	Exhaust Gasket	1	
4015*	A199035	CLAMP, 1.3/4"	1	
4016*	A907207	SPECIAL WASHER	3	
4017	MBE4309	FUEL FILTER BRACKET.	1	
4018*	450192	SCREW, M8 x 25, HEX HD	4	
4019*	450411	S.L.WASHER, M8	4	
4020*	450324	NUT, M8	4	
4021	A814501	BALL JOINT	1	
4022	A139314	NUT, M6	1	
4023	450323	NUT, M6	3	
4024	450410	S.L.WASHER, M6	2	
4025	MBF0138	SUPPORT-WATER BOTTLE	1	
4026*	450170	SCREW, M6 x 16, HEX HD	2	
4027*	450410	S.L.WASHER, M6	2	
4028*	450389	WASHER, M6	2	
4029*	450377	NUT, M6 NYLOC	2	
4030	A829603	TEMP SENDER CURTIS	1	
4031	MBE4658	ADAPTOR PLATE	1	
4040	A814639	BELL HOUSING AND COUPLING	1	* Please see after item 3005
4041*	450241	SCREW, M12 x 30, HEX HD	6	
4042*	450424	S.L.WASHER, M12	6	
4043*	A100972	BOLT, M10x1.25x65, HEX HD	8	
4044*	450411	S.L.WASHER, M8	8	
4045	MBE4548	BRACKET - AIR CLEANER.	1	
4045	4136447	BRACKET - AIR CLEANER	1	FITTED FROM ZE000695
4046	MBE4291B	BOSS.	4	
4047*	450015	BOLT, M8 x 35, HEX HD	2	
4048*	450004	BOLT, M6 x 45, HEX HD	2	
4049*	450213	SCREW, M10 x 20, HEX HD	2	
4050*	450389	WASHER, M6	2	
4051*	450390	WASHER, M8	2	
4052*	450391	WASHER, M10	2	
4053*	450410	S.L.WASHER, M6	2	
4054*	450411	S.L.WASHER, M8	2	

* Not Illustrated

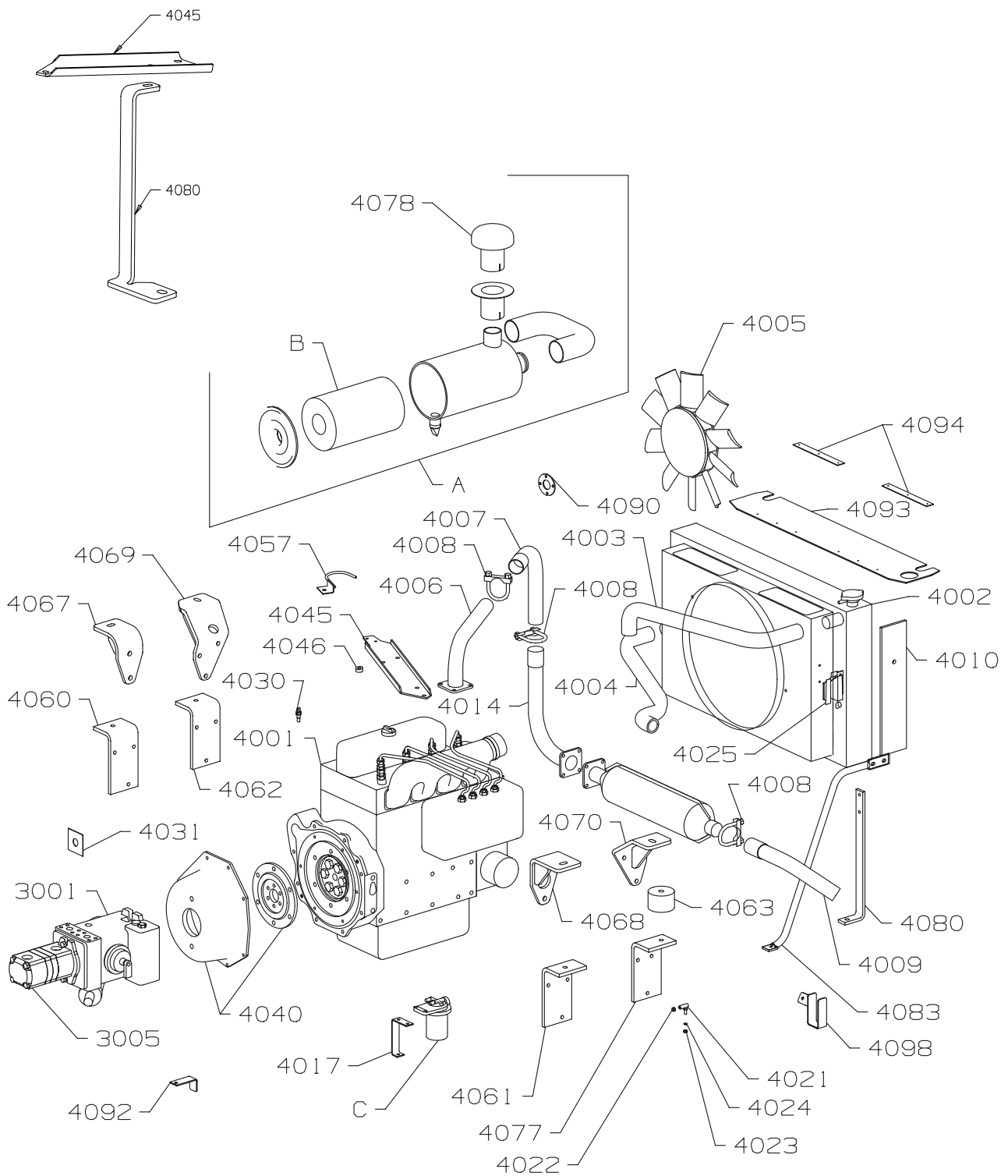
**RANSOMES COMMANDER 3520
PARTS MANUAL**



ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
4055*	450412	S.L.WASHER, M10	2	
4056*	MBE4154	SPACER - AIR CLEANER BRKT.	2	
4057	MBF0075	STAY FOR AIR CLEANER	1	
4058*	MBC0175	WASHER	2	
4059*	450379	NUT, M10 NYLOC	1	
4060	MBG2928	MTG BRKT RH FRONT	1	Exhaust Buffer (Rubber) A299409
4061	MBG2940	MTG BRKT LH FRONT	1	
4062	MBG2929	MTG BRACKET REAR	1	
4063	A895019	RUBBER MOUNT	4	
4064*	64123-73	SCREW, 1/2" UNC X 1" LONG	7	
4065*	GSF2164L	1/2" SPRING LOCKWASHER	8	
4066*	450392	WASHER, M12	8	
4067	MBF1099A	ENG BRKT RH FRONT	1	
4068	MBF1100A	ENG BRKT LH FRONT	1	
4069	MBF1101A	ENG BRKT RH REAR	1	
4070	MBF1102A	ENG BRKT LH REAR	1	
4071*	A119116	SCREW, M14x1.5x30, HEX HD	4	
4072*	A159420	S.L.WASHER, M14	4	
4073*	A682057	BOLT, M12 x 30	5	
4074*	A682055	BOLT, M10 x 30	1	
4075*	450413	S.L.WASHER, M12	5	
4076*	450412	S.L.WASHER, M10	1	
4077	MBG3088	MTG BRKT REAR LH	1	
4078	009009230	CLEANER ADAPTOR	1	
4079*	A192570	HOSE CLAMP, 23-70	1	
4080	MBG3130	EXHAUST STAY	1	
4080	4136446	EXHAUST STAY	1	FITTED FROM ZE000695
4081*	GSF2093JH	SCREW, 1/2" UNC X 1.1/4" LONG	1	
4082*	MBG4873	RADIATOR STIFFENER RH	1	
4083	MBG4874	RADIATOR STIFFENER LH	1	
4084*	450191	SCREW, M8 x 20, HEX HD	2	
4085*	450390	WASHER, M8	8	
4086*	450378	NUT, M8 NYLOC	2	
4090	MBF1826	SPACER 63.5 OD x 28.5 ID x 3	1	
4091*	64139-20	BOLT-WLF M6-1.00 x 16	4	(USED 4090)
4092	MBG5433	BRACKET	1	(HOSE SUPP, BEHIND SEAT)
4093	MBG5628	RUBBER SEAL	1	(TOP OF RADIATOR)
4094	MBG5629	PLATE	2	
4095*	A691153	TEXTRON KEY RING	1	
4096*	001496052	RIVET-POP 1/8 x 5/16	6	
4097*	A298938	TRIM SEAL	2	(TOP/BOTTOM BUGSCREEN)
4098*	MBF2098	HOSE BRACKET W/A	1	
4099*	450016	BOLT HEX M8 x 40	1	(USED 4098)
4100*	450390	WSHR-M8 x 17 x 1.8	1	(USED 4098)

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



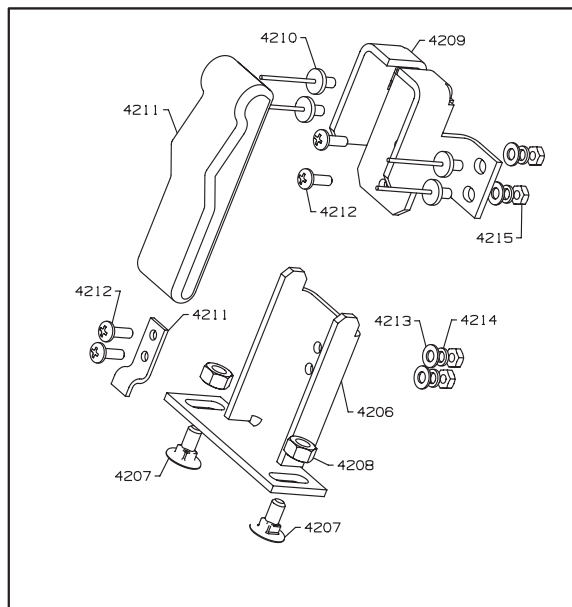
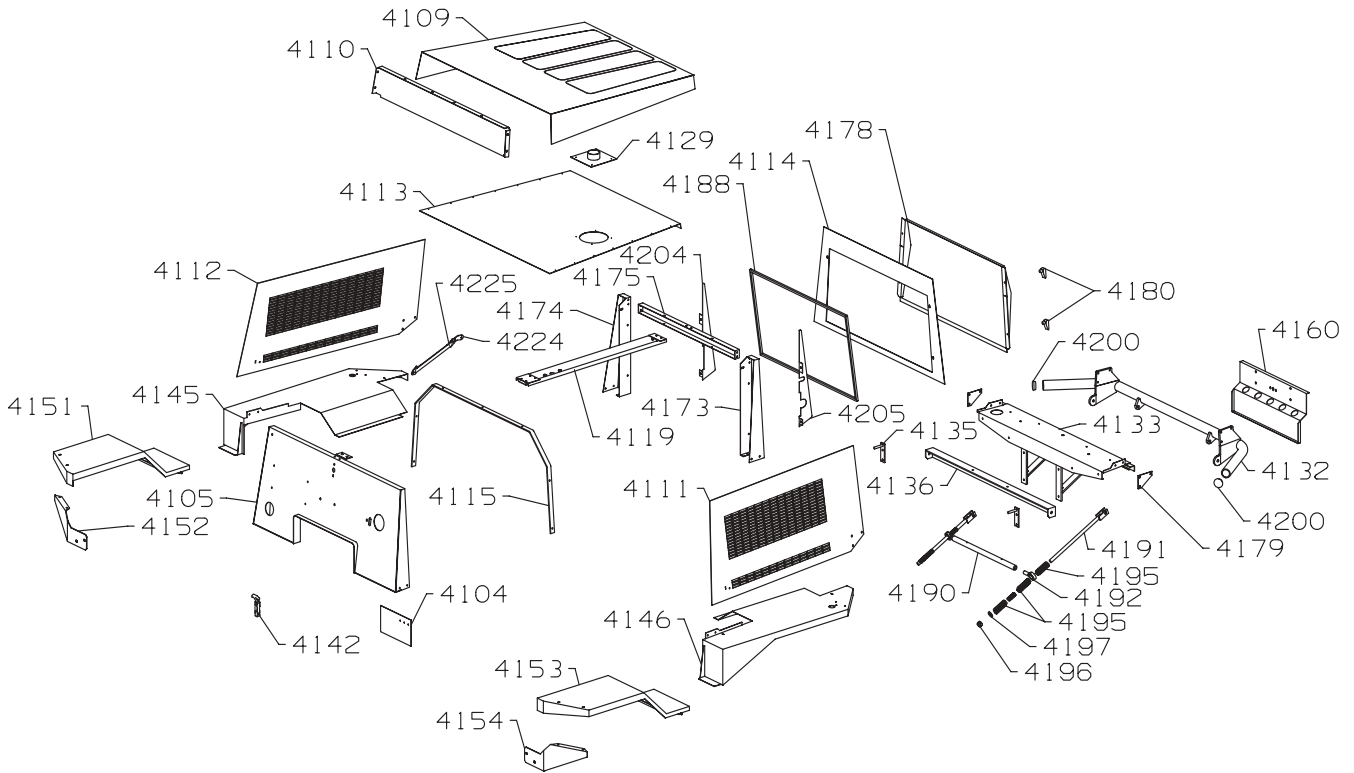
ENGINE

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
4101*	450378	NUT-HEXM8 NYLOC	1	(USED 4098)
3001 3005	A800761 A800759	PUMP SUNSTRAND M46 SERVO TANDEM PUMP 23cc+6cc+PFD		
A	19077-4012	AIRCLEANER ASSY.	1	
B	17351-1108-0	AIRFILTER ELEMENT	1	
C	16665-43011	FUEL FILTER	1	
*	15461-63010	STARTER MOTOR	1	
*	17356-64010	ALTERNATOR	1	
*	15196-97010	FAN BELT	1	
*	009009230	AIR INTAKE FUNNEL		
		<u>CONT. FROM ITEM 4040</u>		
*	A8902510	NYLON COUPLING FLANGE		
*	4120330	NYLON FLANGE K.T.R. PART		(Use 008902510)
*	4120332	PUMP GEAR COUPLING		

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



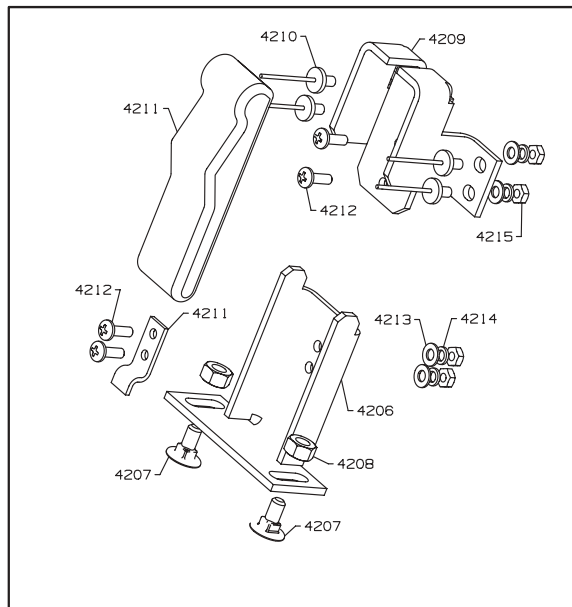
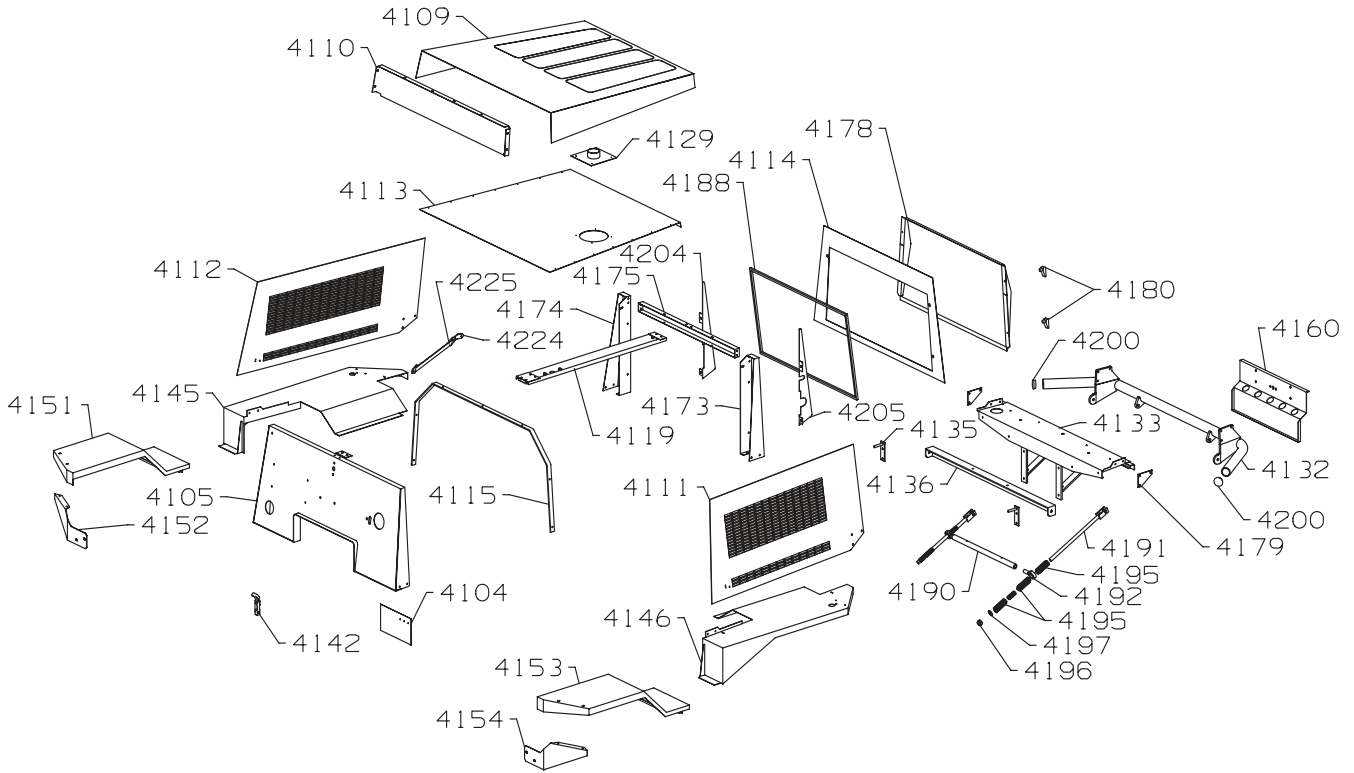
COVERS

RANSOMES COMMANDER 3520
PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
4104	A912008	RELAY FLAP	1	
4105	MBF1108F	WLDMT-FRONT PANEL	1	
4106*	450389	WASHER, M6	2	
4107*	H089014	CLIP	6	
4109	MBF2175	TOP COVER W.A.	1	
4110	MBG2839B	BACK PANEL	1	
4111	MBG6139	SIDE PANEL L.H.	1	Beading for Cover 002989310 &
4112	MBG6140	SIDE PANEL R.H.	1	379050522
4113	MBG2849B	TOP PANEL	1	
4114	MBG2858A	REAR PANEL	1	
4115	MBG2853	STAY	1	
4116*	AC008A	ACOUSTICKIT	1	
4116.2	009155050	• ACOUSTIC FOAM PAD	2	Bonnet Sides
4116.3	009155060	• ACOUSTIC FOAM PAD	1	Bulkhead Top
4116.4	009155070	• ACOUSTIC FOAM PAD	1	Seat Plate
4116.7	009155100	• ACOUSTIC FOAM PAD	1	Platform Side Slope
4116.9	009155120	• ACOUSTIC FOAM PAD	1	Bonnet LH
4116.10	009155130	• ACOUSTIC FOAM PAD	1	Bonnet RH
4116.11	4121012	• ACOUSTIC FOAM PAD	1	Bulkhead LH
4116.12	4121013	• ACOUSTIC FOAM PAD	2	Ops Compartment RH
4116.13	4121014	• ACOUSTIC FOAM PAD	1	Bulkhead RH
4116.14	4121015	• ACOUSTIC FOAM PAD	1	Bulkhead Centre
4116.15	4121016	• ACOUSTIC FOAM PAD	1	Bulkhead Rear RH
4116.16	4121017	• ACOUSTIC FOAM PAD	1	Bulkhead Centre RH
4118*	A298936	DOOR SEAL	1	FOR ITEM 4114
4119	MBF1405	BEAM W/ASSY.	1	
4120*	64018-20	BLT-CRG 1/4-20 X 1/2	20	
4121*	A139305	NUT, 1/4 UNC	20	
4122*	A149615	RIVET, 1/8 X .400"	22	
4123*	450541	SCREW, M6 x 16, PAN HD	7	
4124*	450377	NUT, M6 NYLOC	4	
4125*	450357	NUTSERT, M6 A-K 1ST GRIP	3	
4126*	450170	SCREW, M6 x 16, HEX HD	4	
4127*	450410	S.L.WASHER, M6	6	
4128*	450541	SCREW, M6 x 16, PAN HD	2	
4129	MBF1138	AIRCLEANER EXTENSION	1	
4130*	451126	SCREW, No.6 x 9.5, PAN HD	4	
4132	MBF1083C	BUMPER ASSEMBLY	1	
4133	MBF1359A	REAR PANEL W/ASSY.	1	
4134*	A299409	RUBBERMOUNT	2	
4135	MBE4400B	EXHAUST BRACKET W/ASSY.	2	
4136	MBF2202	ANGLE SUPPORT	1	
4137*	450192	SCREW, M8 x 25, HEX HD	4	
4138*	450378	NUT, M8 NYLOC	4	
4139*	450170	SCREW, M6 x 16, HEX HD	4	
4140*	450389	WASHER, M6	4	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



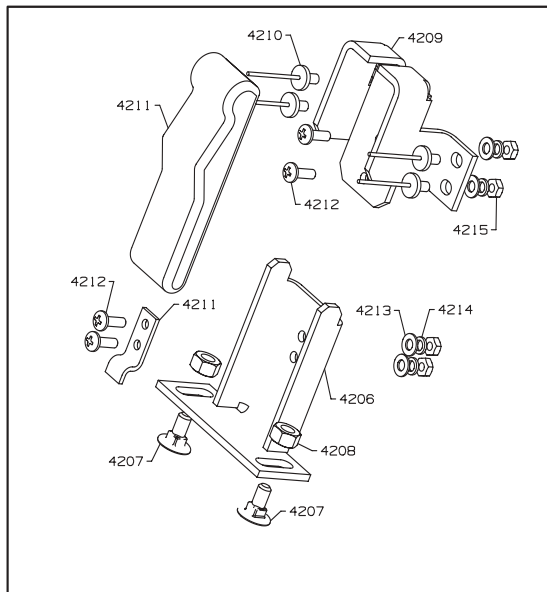
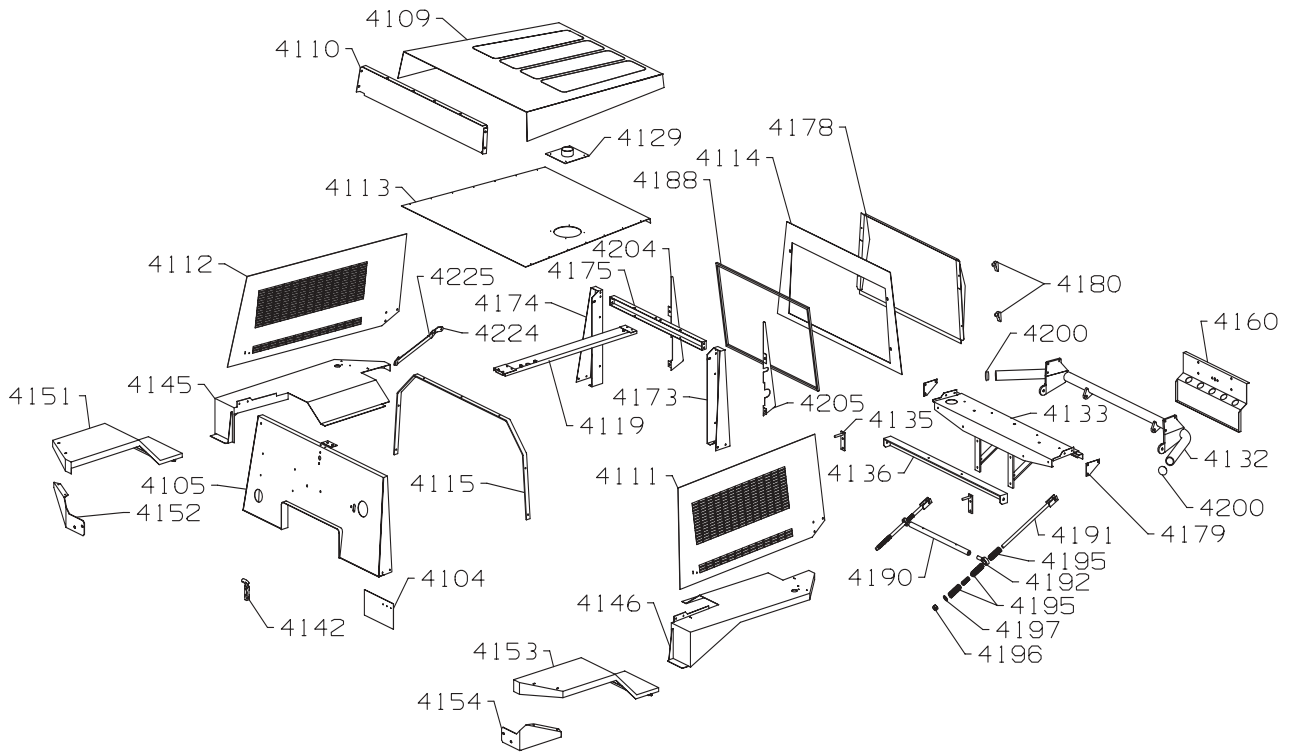
COVERS

RANSOMES COMMANDER 3520
PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
4141*	450377	NUT, M6 NYLOC	4	
4142	A199063	LATCH	1	
4143*	450528	SCREW, M5 x 16, PAN HD	8	
4144*	450388	WASHER, M5	8	
4145	MBF2140	REAR MUDGUARD RH W/ASSY.	1	
4146	MBF2142	REAR MUDGUARD LH W/ASSY.	1	
4147*	450170	SCREW, M6 x 16, HEX HD	4	
4148*	450377	NUT, M6 NYLOC	4	
4149*	450191	SCREW, M8 x 20, HEX HD	4	
4150*	450378	NUT, M8 NYLOC	4	
4151	MBE4051B	RH MUDGUARD W/ASSY.	1	
4152	MBE4056A	RH MUDGUARD SUPPT. BRKT.	1	
4153	MBE4052B	LH MUDGUARD W/ASSY.	1	
4154	MBE4057A	LH MUDGUARD SUPPORT W/A	1	
4155*	450170	SCREW, M6 x 16, HEX HD	4	
4156*	450170	SCREW, M6 x 16, HEX HD	4	
4157*	450170	SCREW, M6 x 16, HEX HD	4	
4158*	450410	S.L.WASHER, M6	12	
4159	A298904	SAFETY WALK STRIP	1	
4160	MBG5870	NUMBER PLATE BRACKET.	1	
4161*	450170	SCREW, M6 x 16, HEX HD	4	
4162*	450377	NUT, M6 NYLOC	4	
4163*	450389	WASHER, M6	4	
4167*	A904295	RUBBER MAT	1	
4168*	A298928DG	SEALING STRIP	2	
4171*	H060104	BEADING	4	
4172*	AC002	ACOUSTIC KIT-COMMANDER	1	
4173	MBF1889A	SUPPORT LH W/A.	1	
4174	MBF1888	SUPPORT RH W/A	1	
4175	MBF1934A	CHANNEL W/A	1	
4176*	450170	SCREW, M6 x 16, HEX HD	4	
4177*	450377	NUT, M6 NYLOC	4	
4178	MBF2158	REAR ACCESS PANEL	1	
4179	MBG2880	SHIM	2	
4180	2198084	LATCH-SWELL	4	
4181*	AE22003	WASHER	2	
4182*	450192	SCREW, M8 x 25, HEX HD	6	
4183*	450378	NUT, M8 NYLOC	6	
4184*	450216	SCREW, M10 x 35, HEX HD	2	
4187*	A295322	GROMMET	1	
4188	A915136	SCREEN	1	
4189*	A298934	SEALING STRIP	1	
4190	MBG3168	SHAFT	1	
4191	MBF1178B	TIE ROD W.A.	2	
4192	A814541	ROD END	2	
4193*	450327	NUT, M16	2	
4194*	450194	SCREW, M8 x 35, HEX HD	2	
4195	A291118	COMPRESSION SPRING	6	
4196	450382	NUT, M16 NYLOC	2	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



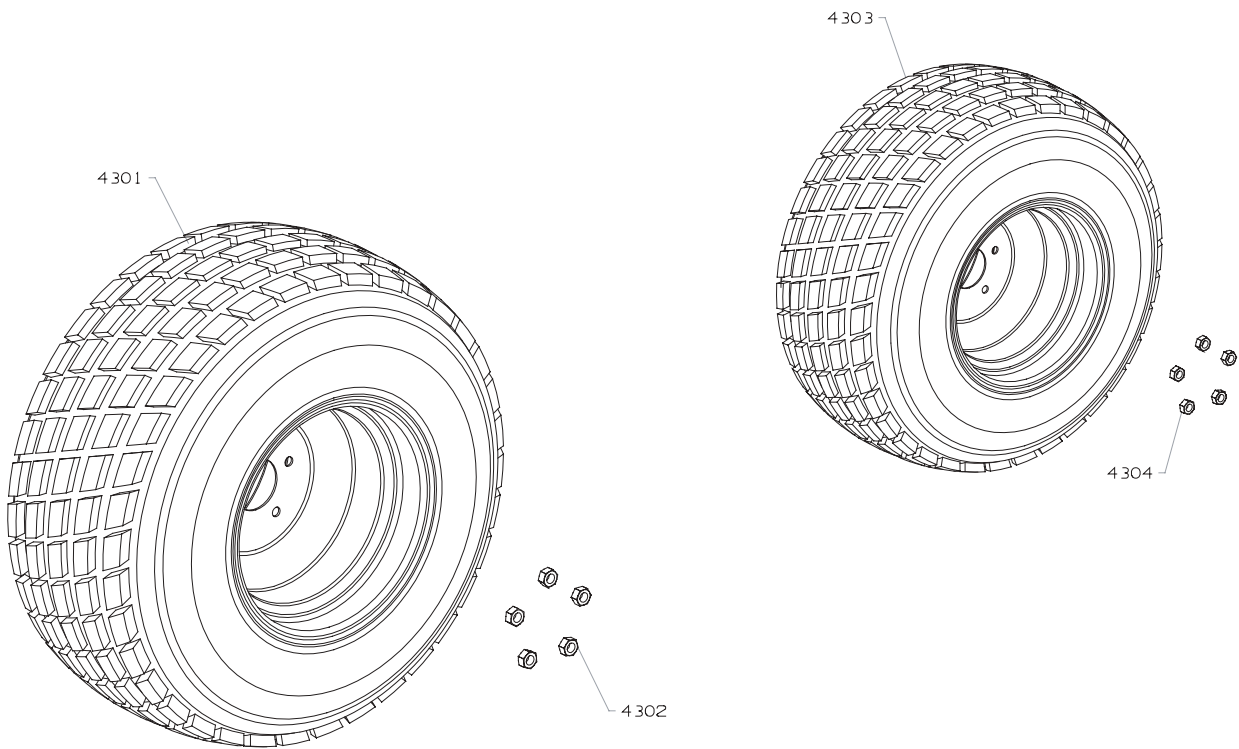
COVERS

RANSOMES COMMANDER 3520
PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
4197	450393	WASHER, M16	2	
4198*	450243	SCREW, M12 x 40, HEX HD	2	
4199*	450380	NUT, M12 NYLOC	2	
4200	A895516	PLASTIC PLUG	2	
4201*	A914822	SOUNDDEAFENING PAD	1	
4203*	451143	SCREW-PAN HD #10 x 9.5	2	
4204	MBF1885A	BRACKET RH W/A	1	
4205	MBF1886B	BRACKET LH W/A	1	
4206	MBG6069	LATCHBRACKET	2	
4207	64018-20	BLT-CRG 1/4-20 x 1/2	4	
4208	A139305	NUT-HEX 1/4-20WHIZ	4	
4209	MBG5264	BRKT-LATCH, HOOD	2	
4210	A149623	RIVET-POP 3/16 x .062-.270	8	
4211	2198112	LATCH-HOOD	2	
4212	450517	SCRW-PAN HD M4 x 12	8	
4213	450387	WSHR-M4 x 9 x 0.9	8	
4214	450408	LOCKWSHR-M4 x 6.95x1.2	8	
4215	450321	NUT-HEXM4	8	
4216*	MBF1712A	BONNET KEY	1	
4224	MBG6308	STOP STAY	2	
4225	2218083	LANYARD	2	
4226*	452710	BOLTM10x25	2	USED ITEM 4224/4225
4227*	452437	NUTM10 FLNG NYLOC	2	USED ITEM 4224/4225

* Not Illustrated

**RANSOMES COMMANDER 3520
PARTS MANUAL**

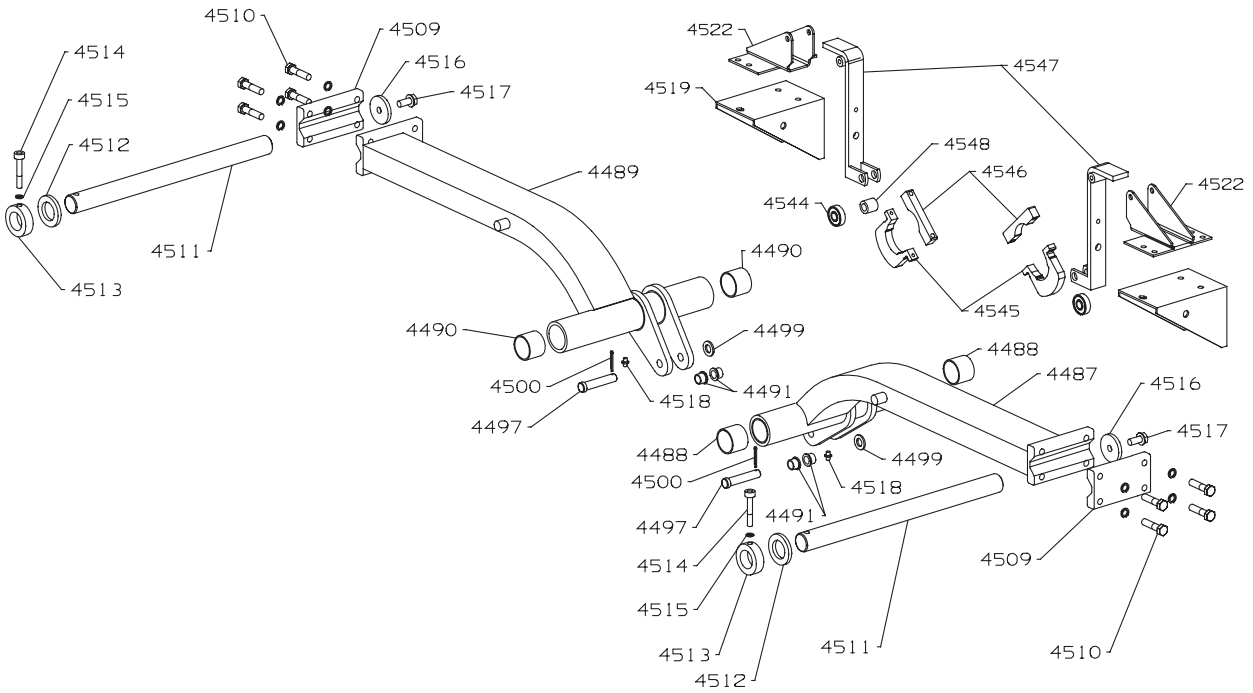
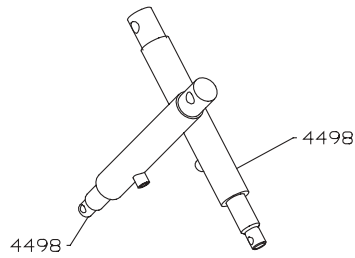
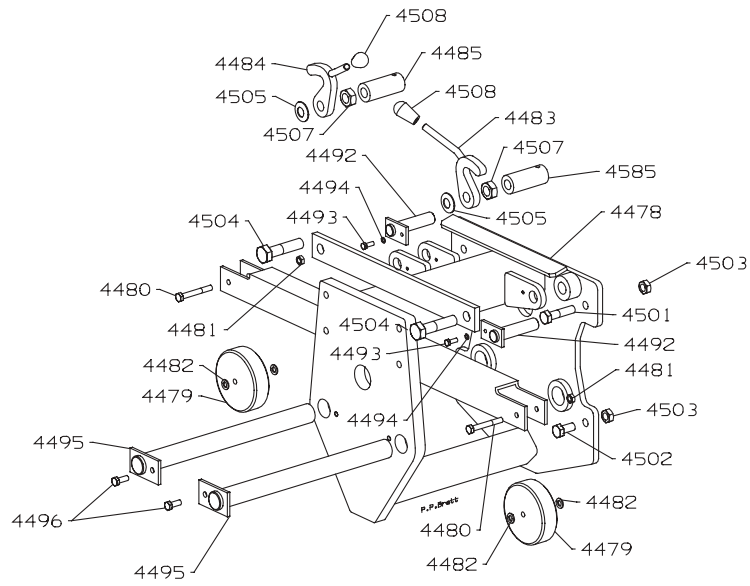


WHEELS

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
		WHEELSWITHSTANDARDTYRES		
4301	WL031	WHEEL KIT	1	
*	A816259	• FRT. WHEEL AND TYRE ASSY	2	
*	A816268	•• RIM	1	
*	A817097	•• TYRE 26 X 12.00 - 12 6 PLY	1	
4303	A816285	• REAR WHEEL & TYRE ASSY	2	
*	A816144	•• RIM	1	
*	A817094	•• TYRE 23 X 10.5 - 12. 6PLY	1	
4302	A800846	WHEEL NUT M14 SPHERICAL	10	Torque 80Nm
4304	A134111	WHEELNUT	10	Torque 80Nm
4305*	A149061	PIN, 1/8 x 2	4	
		WHEELS WITH KEVLAR TYRES		
	WL044	WHEEL KIT	1	
	008162750	• WHEEL ASSEMBLY FRONT	2	
	008162680	•• RIM	1	
	008174090	•• TYRE 26 X 12.00 - 12 6 PLY	1	
	4132820	• WHEEL ASSEMBLY REAR	2	
	008161444	•• RIM	1	
	008174110	•• TYRE 23 X 10.5 - 12. 6PLY	1	

* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



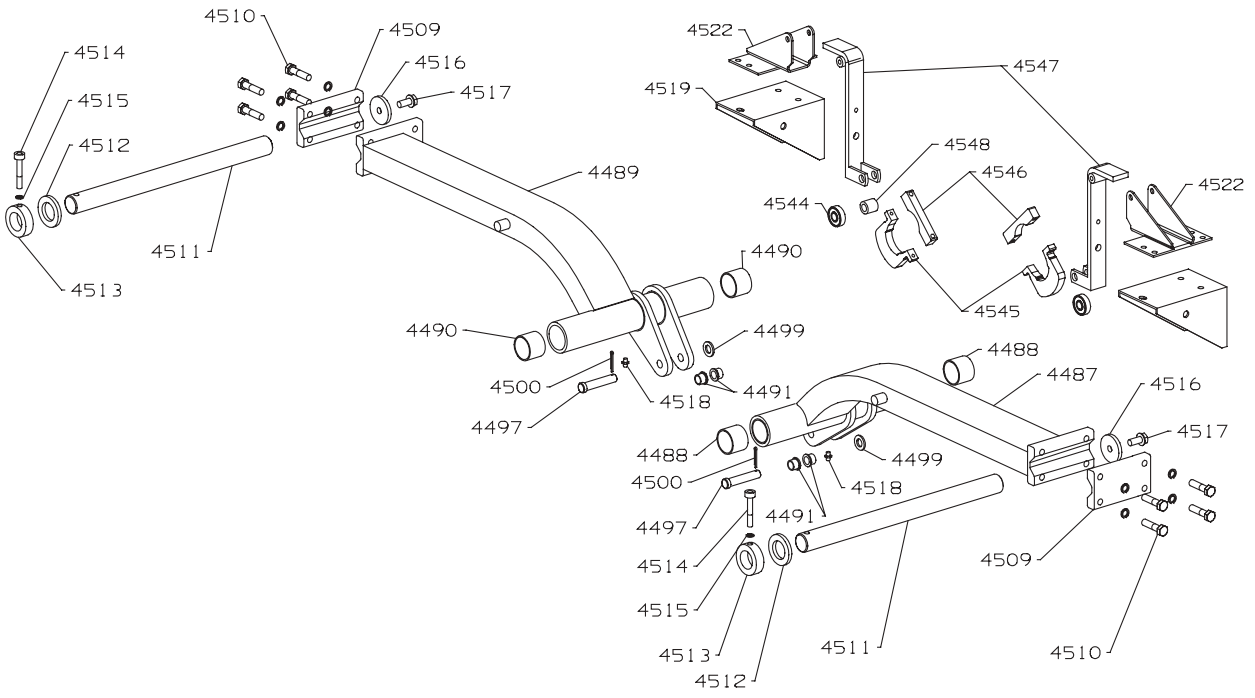
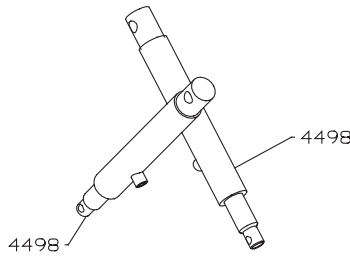
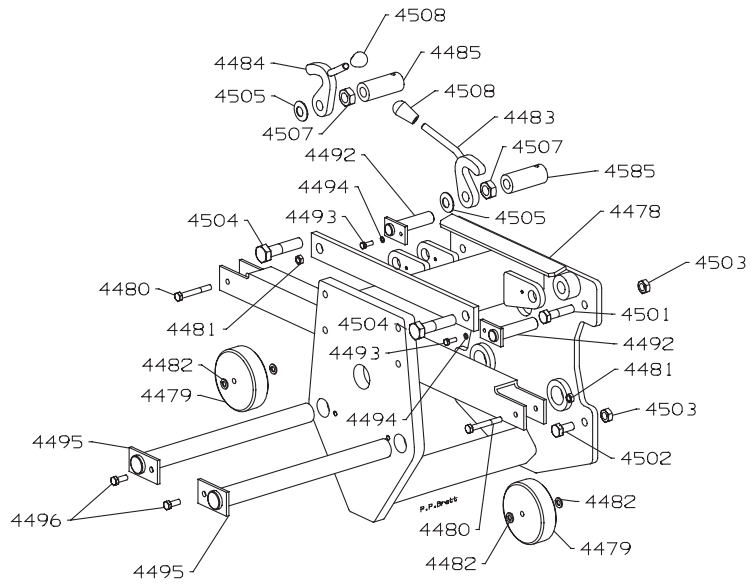
FRONT LIFT ARMS

RANSOMES COMMANDER 3520
PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
4478	MBE3882D	FRONT UNITS BRACKET.	1	
4479	MBE1373	ROLLER	2	
4480	450020	BOLT, M8 x 60, HEX HD	2	
4481	450378	NUT, M8 NYLOC	2	
4482	450390	WASHER, M8	4	
4483	MBE3404	HOOK LH W/ASSY.	1	
4484	MBE3403	HOOK RH W/ASSY.	1	
4485	MBE4683	STOP BAR.	2	
4487	MBF1026	LIFT ARML.H.FRONT	1	
4488	A219331	NYLON BUSH.	2	Use 002190160 BRASS BUSH
4489	MBE3910B	LIFT ARM RH FRONT W/ASSY.	1	
4490	A219331	NYLON BUSH.	2	Use 002190160 BRASS BUSH
4491	MBE4713	BUSH.	10	
4492	MBE3952	RAM PIN W/ASSY.	2	
4493	450151	SCREW, M5 x 16, HEX HD	2	
4494	450409	S.L.WASHER, M5	2	
4495	MBE3963C	PIVOT SHAFT W/ASSY.	2	
4496	450191	SCREW, M8 x 20, HEX HD	2	
4497	MBE3978	RAM PIN.	2	
4498	A902734	HYDRAULIC RAM	2	
4499	450392	WASHER, M12	2	
4500	451241	SPLIT PIN, 3.2 x 22	2	
4501	450054	BOLT, M12 x 70, HEX HD	2	
4502	450240	SCREW, M12 x 25, HEX HD	2	
4503	450380	NUT, M12 NYLOC	2	
4504	450071	BOLT, M16 x 60, HEX HD	1	
4505	A292110	DISC SPRING	5	
4506*	450393	WASHER, M16	2	
4507	450382	NUT, M16 NYLOC	2	
4508	A299022	KNOB	2	
4509	MBG3772	CLAMP CAP.	2	
4510	A100975	BOLT, M10 x 45, HEX HD	4	
4511	MBC0092D	SHAFT.	2	
4512	MBE0297	COLLAR.	2	
4513	MBG4592	COLLAR	2	
4514	450729	SCREW, M8 x 50, SCKT CAP HD	2	
4515	450411	S.L.WASHER, M8	2	
4516	MBE0115	WASHER.	2	
4517	450477	SCREW, M10 x 20	2	VERBUS RIPP
4518	A299301	LUBRICATOR	2	
4519	MBE4274A	DIVERTOR BRACKET.	2	
4520*	450191	SCREW, M8 x 20, HEX HD	4	
4521*	450378	NUT, M8 NYLOC	10	
4522	MBE4275C	LEVER BRACKET W/ASSY.	2	
4523*	450003	BOLT, M6 x 40, HEX HD	4	

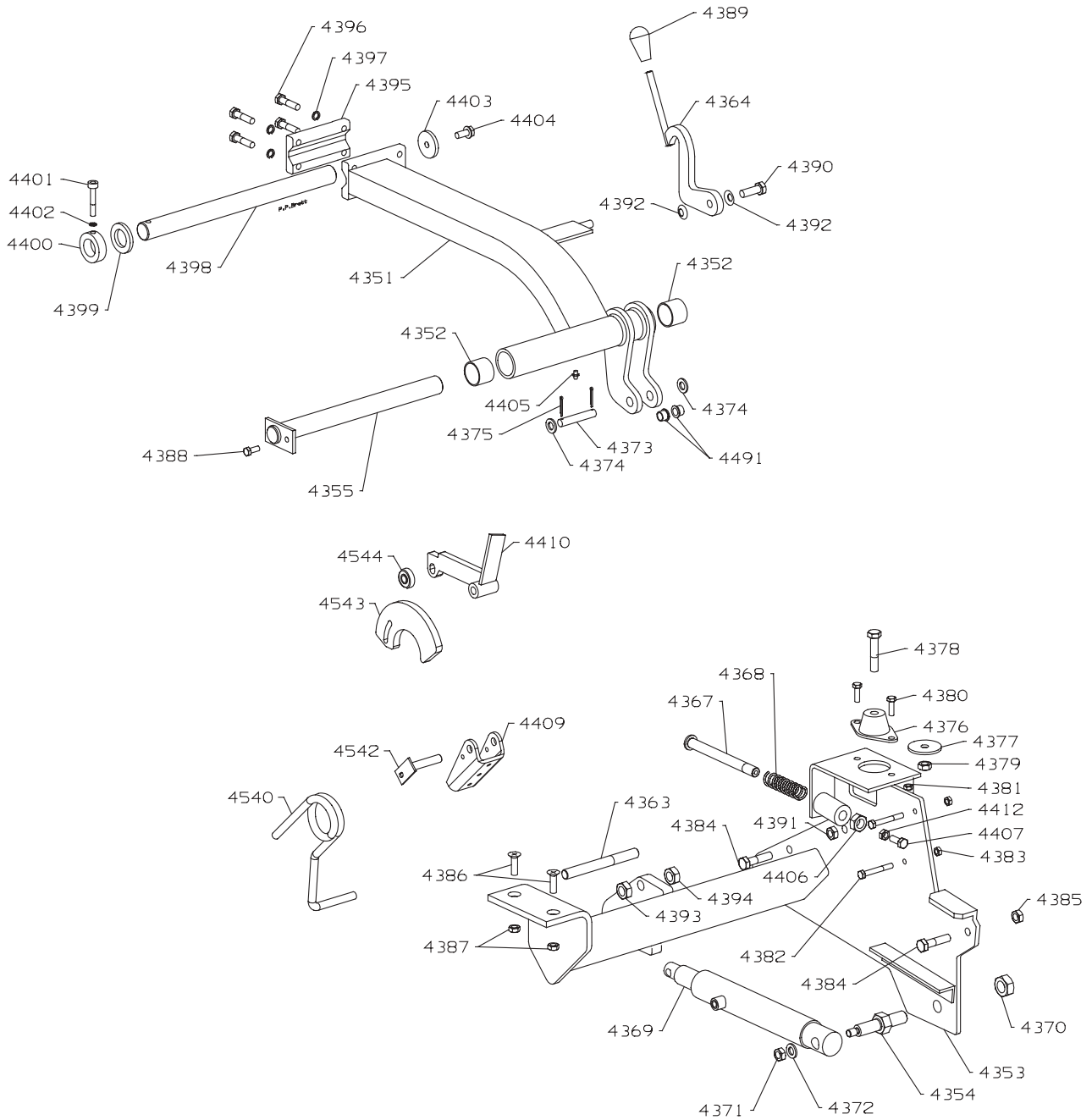
* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
4525*	450014	BOLT, M8 x 30, HEX HD	4	
4526*	450324	NUT, M8	4	
4527*	450038	BOLT, M10 x 80, HEX HD	2	
4528*	A291079	SPRING	2	
4529*	450020	BOLT, M8 x 60, HEX HD	2	
4530*	A181434	SCREW, M3 x 45	4	
4531*	A182003	NUT, M3	4	
4532*	A183003	WASHER, 3 mm	4	
4537*	450324	NUT, M8	1	
4538*	450379	NUT, M10 NYLOC	2	
4539*	450412	S.L.WASHER, M10	8	
4544	A203601	BEARING, 12x32x10	4	
4545	MBF0972	DIVERTEDCAMRING	2	
4546	MBG3836	CLAMP PLATE	2	
4547	MBF1373	LEVER W.A.FRONT	2	
4548	MBG2545	SPACER	1	

RANSOMES COMMANDER 3520 PARTS MANUAL



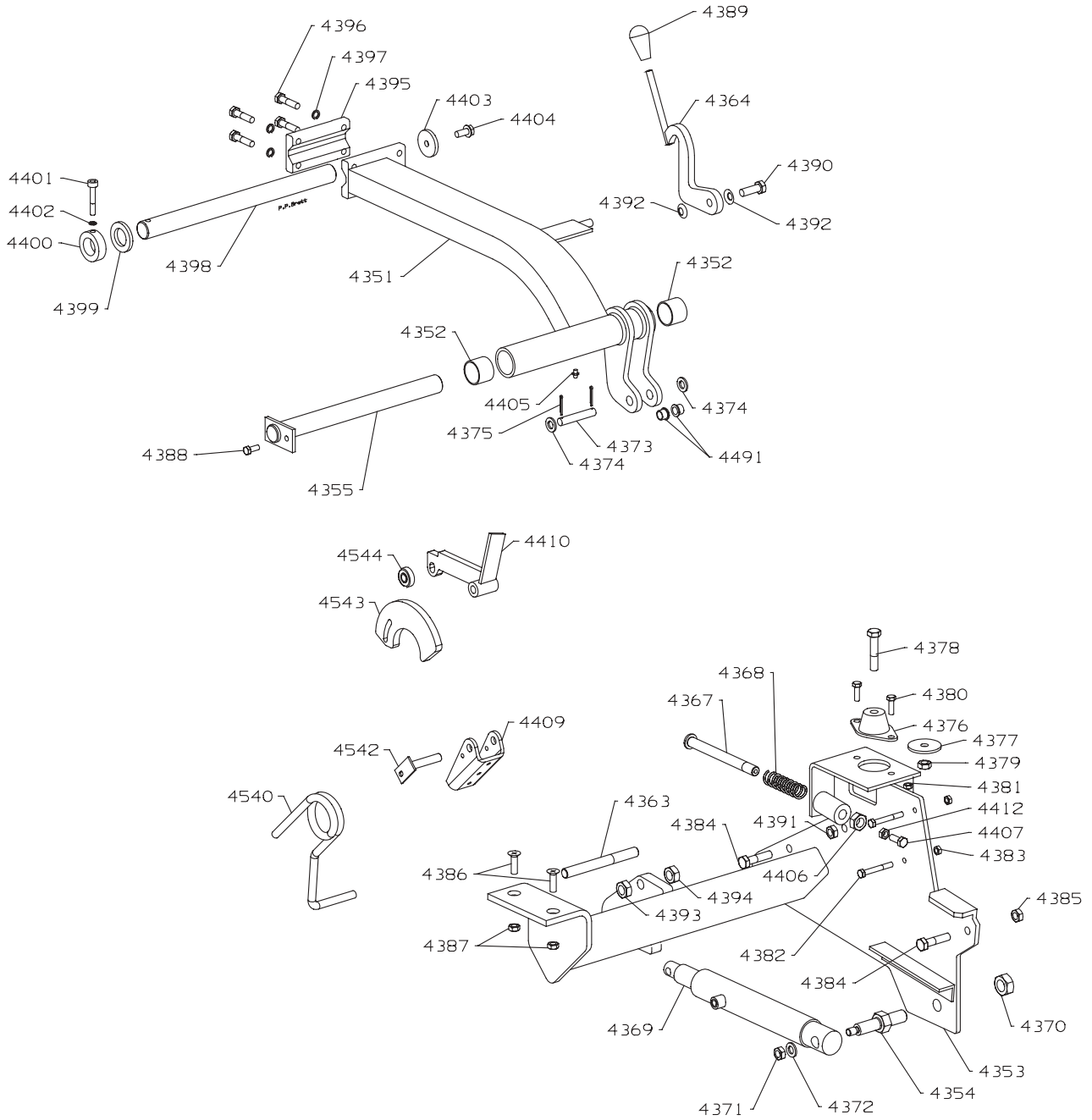
RIGHT LIFT ARM

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS	
4351	MBF1152	LIFT ARM RH WA	1	Use 002190160 BRASS BUSH	
4352	A219331	NYLON BUSH.	2		
4353	MBF2043	SUPPORT PLATE RH W/ASSY.	1		
4354	MBE3699A	PIN. (RAM SUPPORT)	1		
4355	MBE3963C	PIVOT SHAFT W/ASSY.	2		
4358*	450212	SCREW, M10 x 16, HEX HD	2		
4359*	450412	S.L.WASHER, M10	2		
4360*	GSF2154GN	WASHER	2		
4363	MBG3086A	WING UNIT PIN	1		
4364	MBE4540	HOOK W/ASSY.	1		
4365*	450391	WASHER, M10	4		
4367	MBF1002	PLUNGER	1		
4368	A291128	COMPRESSION SPRING	1		
4369	A902811	HYDRAULIC RAM	1		
4370	450383	NUT, M20 NYLOC	1		
4371	450380	NUT, M12 NYLOC	1		
4372	450392	WASHER, M12	1		
4373	MBE0265	PISTON PIN.	1		
4374	450392	WASHER, M12	2		
4375	451241	SPLIT PIN, 3.2 x 22	2		
4376	A299411	VIBRATION MOUNT	1		
4377	MBE4000	WASHER.	1		
4378	450052	BOLT, M12 x 60, HEX HD	1		
4379	450380	NUT, M12 NYLOC	1		
4380	450192	SCREW, M8 x 25, HEX HD	2		
4381	450378	NUT, M8 NYLOC	2		
4382	450020	BOLT, M8 x 60, HEX HD	2		
4383	450378	NUT, M8 NYLOC	2		
4384	450048	BOLT, M12 x 40, HEX HD	3		
4385	450380	NUT, M12 NYLOC	3		
4386	450651	SCREW, M10 x 30, CSK HD	2		
4387	450379	NUT, M10 NYLOC	2		
4388	450191	SCREW, M8 x 20, HEX HD	1		
4389	A299022	KNOB	1		
4390	450242	SCREW, M12 x 35, HEX HD	1		
4391	450380	NUT, M12 NYLOC	1		
4392	A292100	DISC SPRINGS	2		
4393	450327	NUT, M16	1		
4394	450382	NUT, M16 NYLOC	1		
4395	MBG3772	CLAMP CAP.	1		(NEW ONE PIECE CLAMP)
4396	A100975	BOLT, M10 x 45, HEX HD	4		
4397	450412	S.L.WASHER, M10	4		
4398	MBC0092D	SHAFT.	1		
4399	MBE0297	COLLAR.	1		
4400	MBG4592	COLLAR	1		
4401	450729	SCREW, M8 x 50, SCKT CAP HD	1		

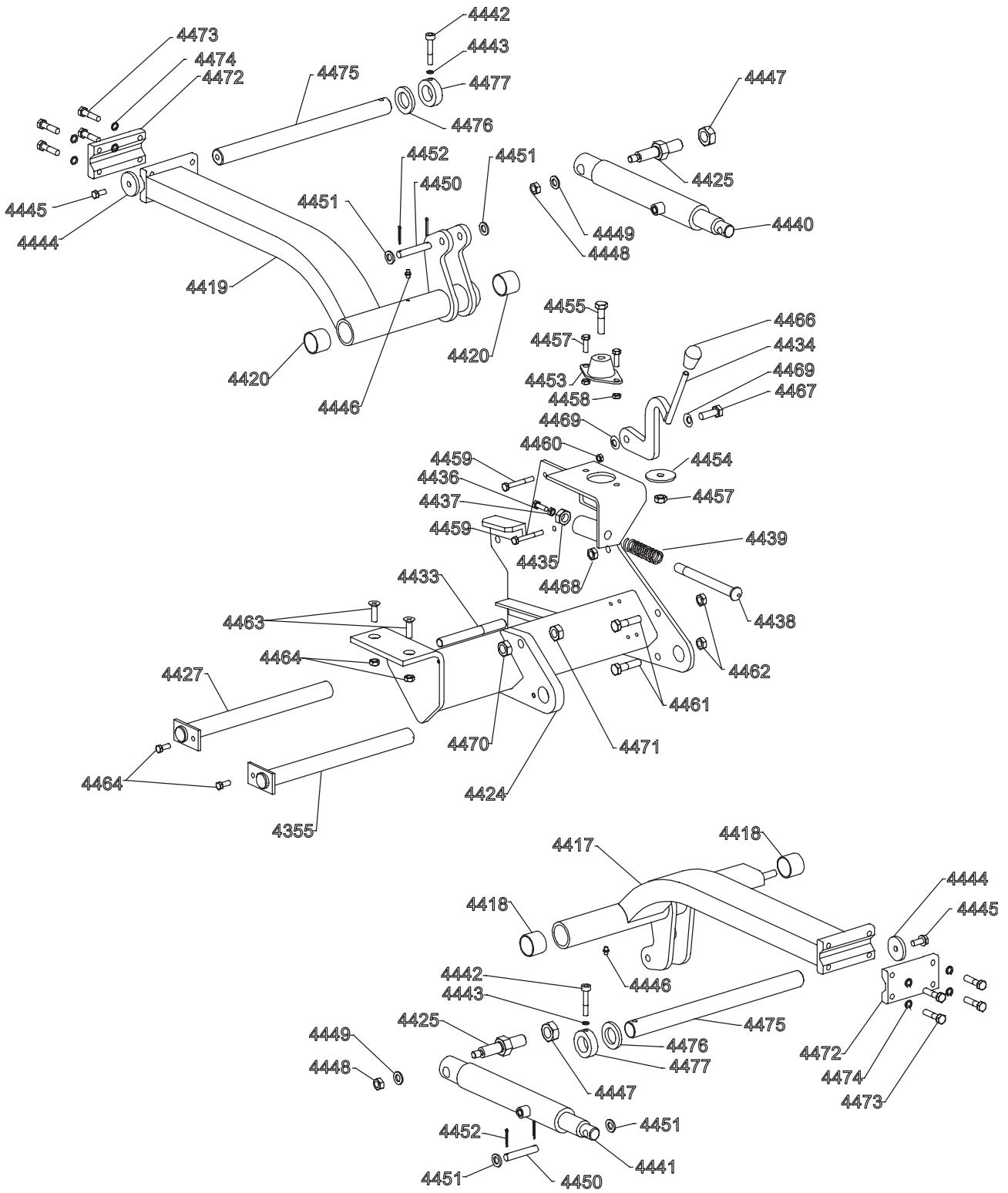
* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
4402	450411	S.L.WASHER, M8	1	VERBUS RIPP
4403	MBE0115	WASHER.	1	
4404	450477	SCREW, M10 x 20	1	
4405	A299301	LUBRICATOR	1	
4406	450382	NUT, M16 NYLOC	1	
4407	450192	SCREW, M8 x 25, HEX HD	1	
4409	MBG2723A	BRACKET	1	
4410	MBF2056	LEVER RH WA	1	
4411*	450192	SCREW, M8 x 25, HEX HD	1	
4412	450324	NUT, M8	1	
4413*	450168	SCREW, M6 x 12, HEX HD	2	
4414*	A181434	SCREW, M3 x 45	2	
4415*	A182003	NUT, M3	2	
4416*	A183003	WASHER, 3 mm	2	
4540	A906317	TORSION SPRING RH	1	
4542	MBF1040	PIN WA	2	
4543	MBF1001	DIVERTER CAM RING	2	
4544	A203601	BEARING, 12x32x10	4	

RANSOMES COMMANDER 3520
PARTS MANUAL

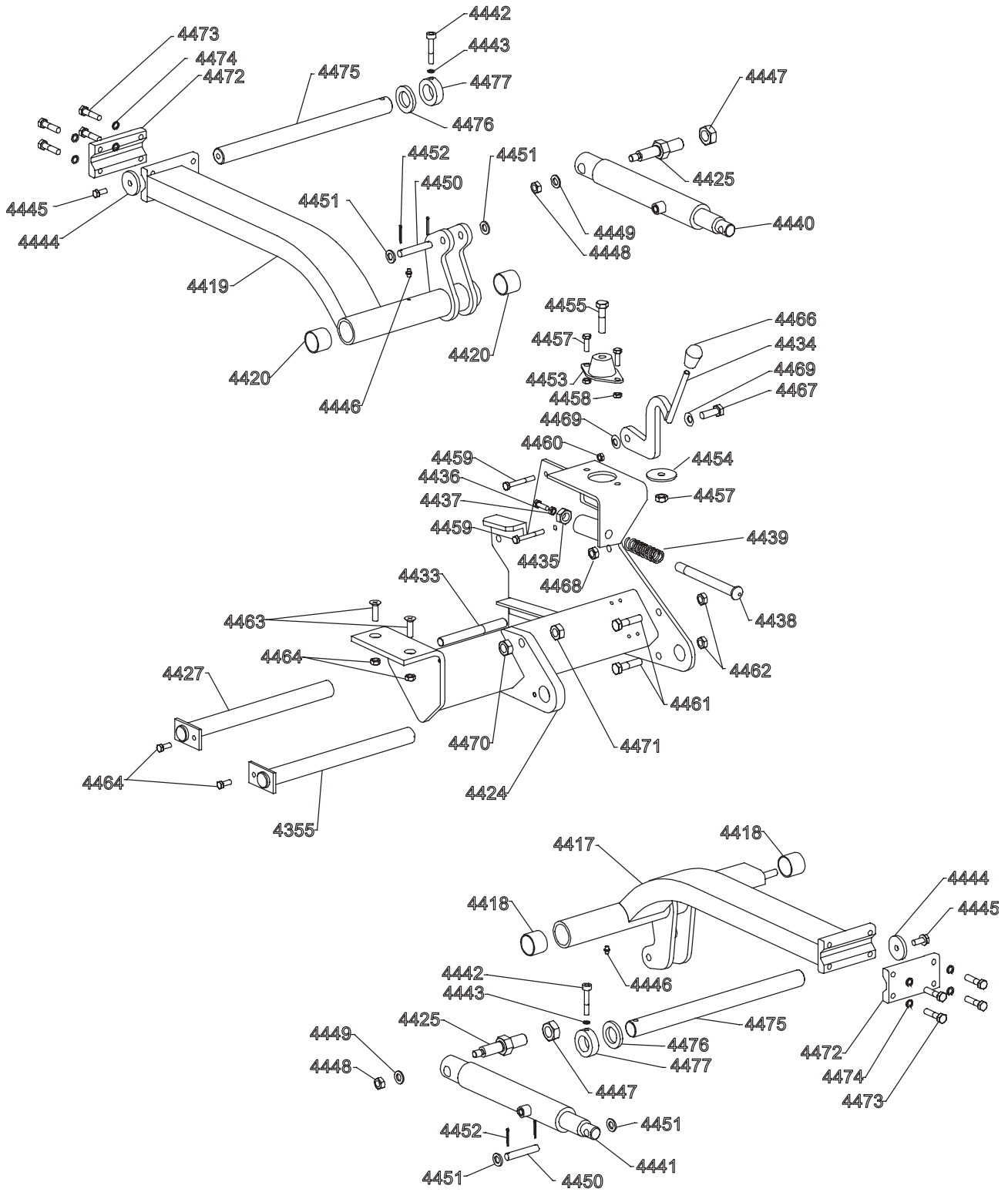


LEFT, CENTRE LIFT ARMS

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
4417	MBF1151	LIFT ARM LH WA	1	
4418	A219331	NYLONBUSH.	2	Use 002190160 BRASS BUSH
4419	MBE3670B	LIFT ARM - CENTRE.	1	
4420	A219331	NYLONBUSH.	2	Use 002190160 BRASS BUSH
4421*	MBG2723A	BRACKET	1	
4422*	MBF2057	LEVER LH WA	1	
4423*	450192	SCREW, M8 x 25, HEX HD	1	
4424	MBF2042	SUPPORT PLATE LH W/ASSY.	1	
4425	MBE3699A	PIN. (RAMSUPPORT)	2	
4426*	450852	SCREW, M6 x 16, SCKT CSK	2	
4427	MBE3963C	PIVOT SHAFT W/ASSY.	1	
4428*	450324	NUT, M8	1	
4429*	450168	SCREW, M6 x 12, HEX HD	2	
4430*	A181434	SCREW, M3 x 45	2	
4431*	A182003	NUT, M3	2	
4432*	A183003	WASHER, 3 mm	2	
4433	MBG3086A	WING UNIT PIN	1	
4434	MBE4540	HOOK W/ASSY.	1	
4435	450382	NUT, M16 NYLOC	1	
4436	450192	SCREW, M8 x 25, HEX HD	1	
4437	450324	NUT, M8	1	
4438	MBF1002	PLUNGER	1	
4439	A291128	COMPRESSION SPRING	1	
4440	A902734	HYDRAULIC RAM	1	
4441	A902811	HYDRAULIC RAM	1	
4442	450729	SCREW, M8 x 50, SCKT CAP HD	2	
4443	450411	S.L.WASHER, M8	2	
4444	MBE0115	WASHER.	2	
4445	450477	SCREW, M10 x 20	2	VERBUS RIPP
4446	A299301	LUBRICATOR	2	
4447	450383	NUT, M20 NYLOC	2	
4448	450380	NUT, M12 NYLOC	2	
4449	450392	WASHER, M12	2	
4450	MBE0265	PISTON PIN.	2	
4451	450392	WASHER, M12	4	
4452	451241	SPLIT PIN, 3.2 x 22	4	
4453	A299411	VIBRATION MOUNT	1	
4454	MBE4000	WASHER.	1	
4455	450052	BOLT, M12 x 60, HEX HD	1	
4456	450380	NUT, M12 NYLOC	1	
4457	450192	SCREW, M8 x 25, HEX HD	2	
4458	450378	NUT, M8 NYLOC	2	
4459	450020	BOLT, M8 x 60, HEX HD	2	
4460	450378	NUT, M8 NYLOC	2	
4461	450048	BOLT, M12 x 40, HEX HD	2	
4462	450380	NUT, M12 NYLOC	2	

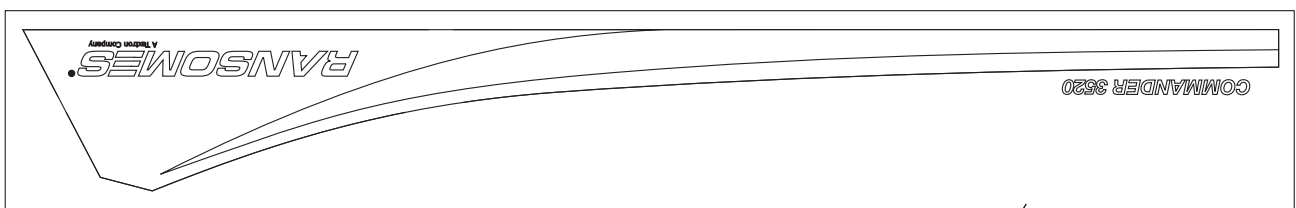
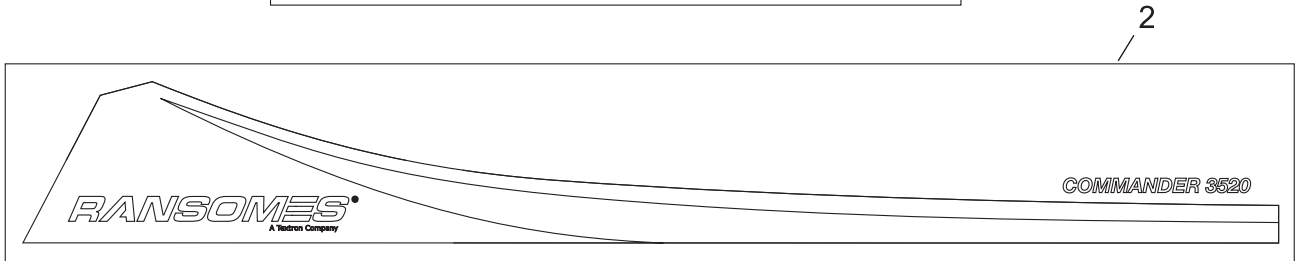
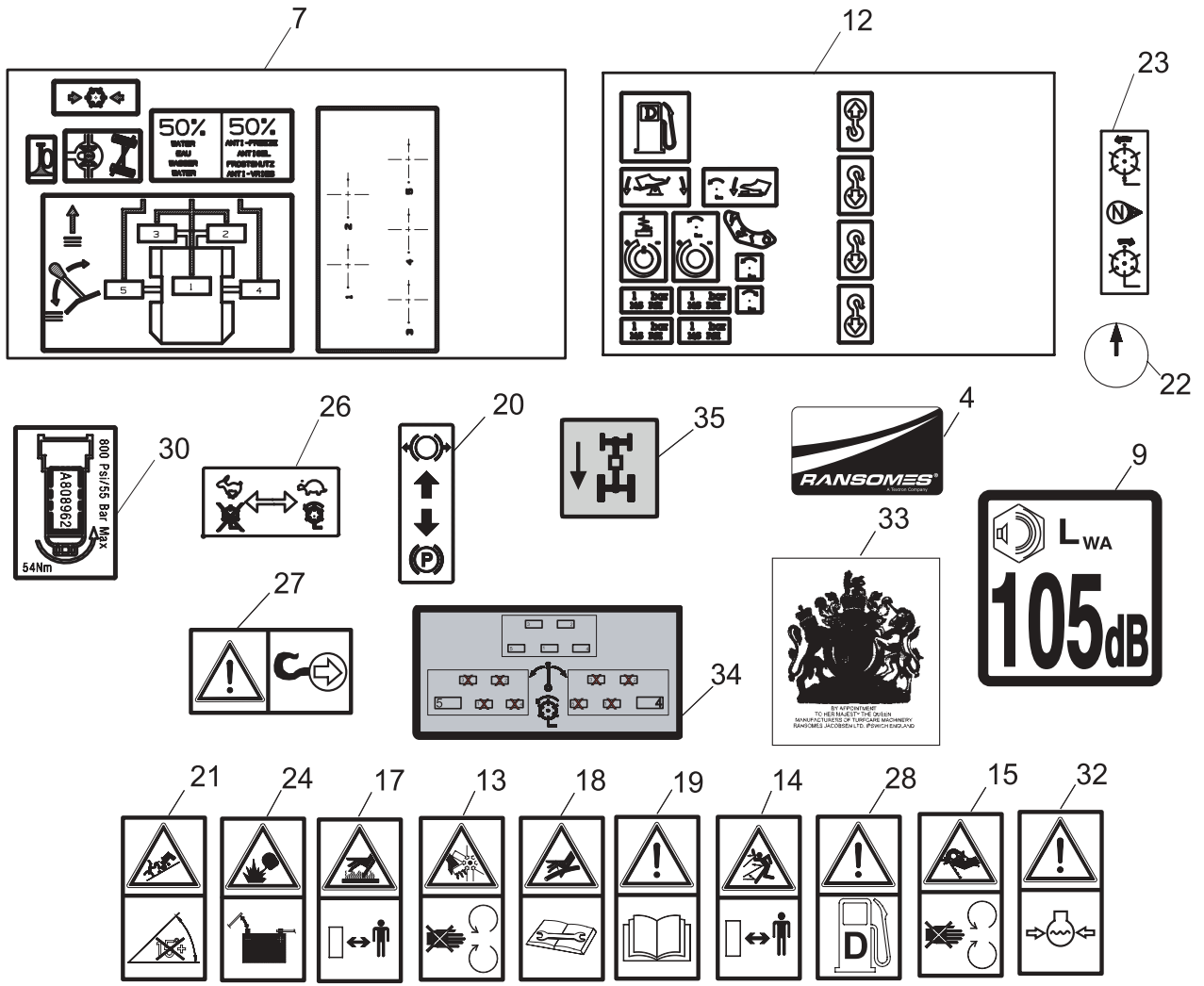
* Not Illustrated

RANSOMES COMMANDER 3520
PARTS MANUAL



ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
4463	450651	SCREW, M10 x 30, CSK HD	2	
4464	450379	NUT, M10 NYLOC	2	
4465	450191	SCREW, M8 x 20, HEX HD	2	
4466	A299022	KNOB	1	
4467	450242	SCREW, M12 x 35, HEX HD	1	
4468	450380	NUT, M12 NYLOC	1	
4469	A292100	DISC SPRINGS	2	
4470	450327	NUT, M16	1	
4471	450382	NUT, M16 NYLOC	1	
4472	MBG3772	CLAMP CAP.	2	FOR 4417, 4419
4473	A100975	BOLT, M10 x 45, HEX HD	8	
4474	450412	S.L.WASHER, M10	8	
4475	MBC0092D	SHAFT.	2	
4476	MBE0297	COLLAR.	2	
4477	MBG4592	COLLAR	2	
4541*	A906316	TORSION SPRING LH	1	
4542*	MBF1040	PIN WA	2	
4543*	MBF1001	DIVERTER CAMRING	2	
4544*	A203601	BEARING, 12x32x10	4	

RANSOMES COMMANDER 3520 PARTS MANUAL

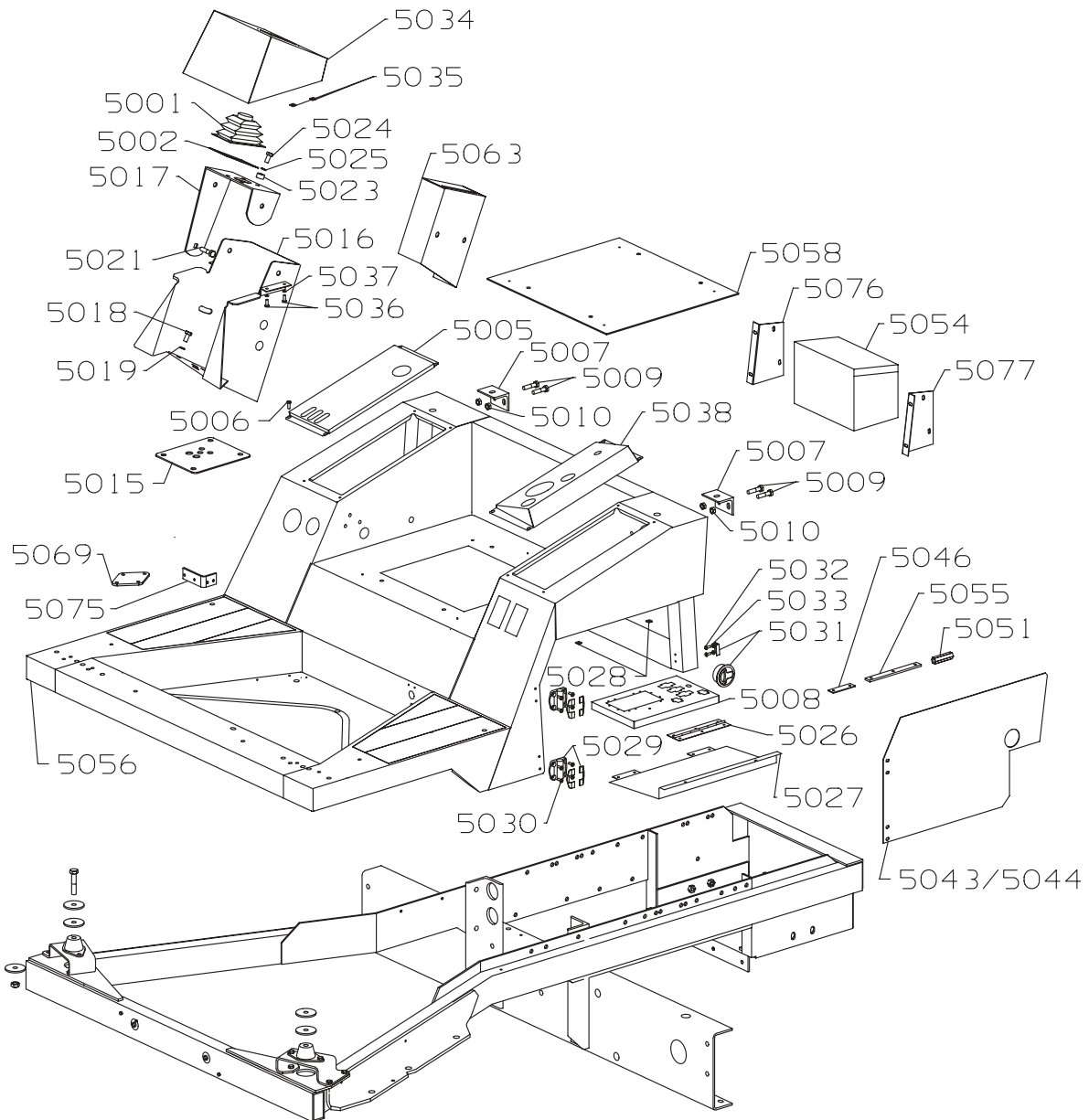
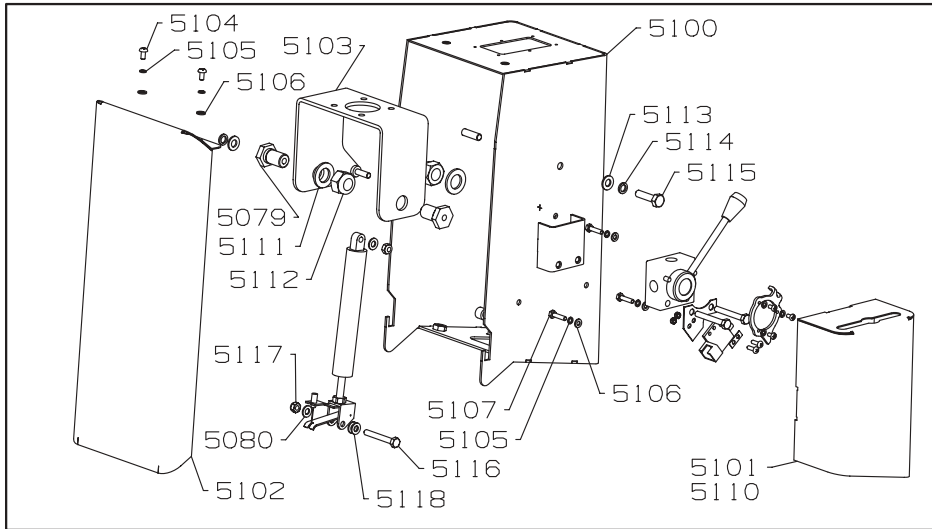


DECALS

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
	IDL0119	COMMANDER DECAL KIT	1	
1	4125621	DECAL - R/H Commander 3520	1	
2	4125622	DECAL - L/H Commander 3520	1	
3	4125605	Decal - 10" Ransomes Lettering	1	
4	4124185	DECAL - "RANSOMES" EMBLEM	1	
7	009114290	SET OF DECALS	1	
9	009034770	DECAL - NOISE 105 dB	1	
12	009033420	SET OF DECAL:	1	
13	009034880	DECAL - FAN	1	
14	009034890	DECAL - BYSTANDER WARNING	1	
15	009034900	DECAL - BELT	1	
17	009034920	DECAL - HOT	3	
18	009034930	DECAL - HYD PRESS LEAK	4	
19	009034910	DECAL - INSTRUCTION	1	
20	009239820	DECAL - PARKING BRAKE	1	
21	009114160	DECAL - SLOPE 15 DEG	1	
22	2000616	LABEL - ADJUST KNOBS	1	
23	009039800	DECAL - MOW VALVE	1	
24	009114100	DECAL - BATTERY	2	
26	009239700	DECAL - TRANSPORT CUTTING	1	
27	009114480	DECAL - TOWING WARNING	2	
28	009114340	DECAL - DIESEL, HAZARD	1	
30	009239050	DECAL - HYDRAULIC FILTER	1	
32	4118415	DECAL - COOLANT HAZARD	1	
33	009036216	LABEL - COAT OF ARMS	1	
34	4135450	DECAL - SINGLE CUT	1	
35	4135451	DECAL - REVERSE 4WD	1	
36*	4146857	DECAL-SEATBELT ROPS	1	
37*	4153197	DECAL-PRESSURE WASH	1	

* Not Illustrated

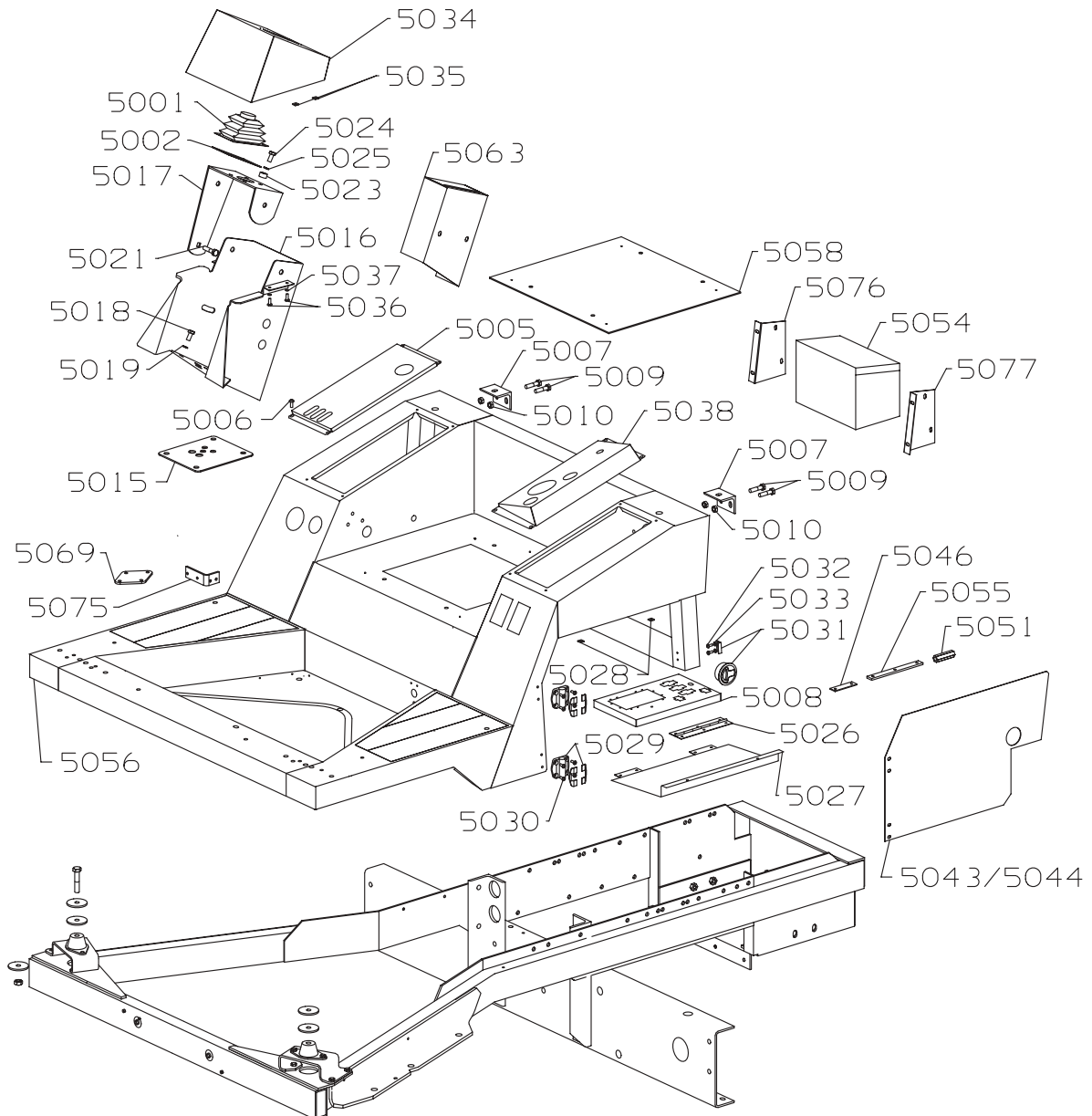
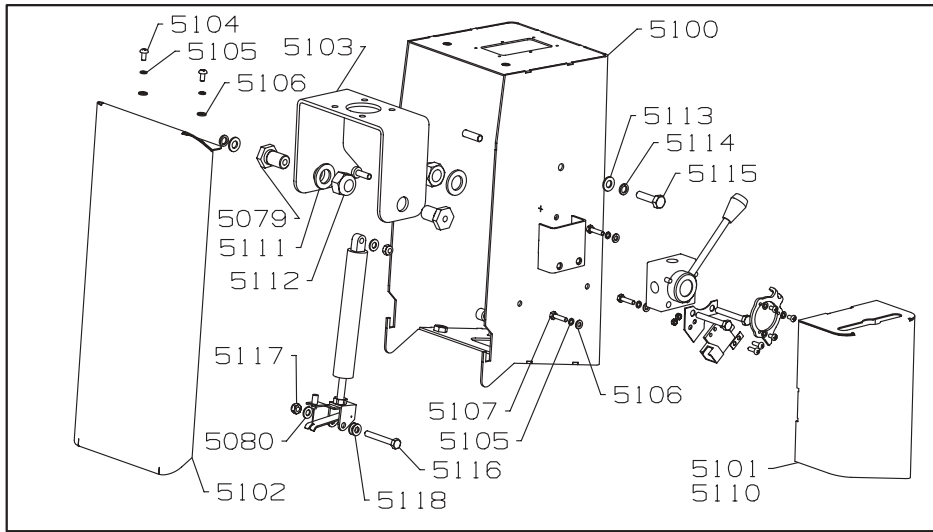
**RANSOMES COMMANDER 3520
PARTS MANUAL**



ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
5001	A913416	GAITER (STEER FRAME)	1	
5002	MBE3961B	BEZEL - STEERING.	1	
5003*	A149605	RIVET, 1/8 x 5/16	6	
5004*	A295332	DIAPHRAGMGROMMET	6	
5005	MBG3179	VALVE COVER	1	
5006	452692	SCREW, M6 x 12, HEX TAPTITE	4	
5007	MBE3920A	CAB MOUNTING BRACKET.	2	
5008	MBG3557	RELAY PLATE.	1	Analog Display
*	4138478	RELAY & FUSE PLATE	1	LCD Display
5009	450214	SCREW, M10 x 25, HEX HD	4	
5010	450379	NUT, M10 NYLOC	4	
5015	MBG6634	STEERING COLUMN MAT	1	
5016	MBF2105	SUPPORT BRKT. W/ASSY.	1	
5017	MBF2059	STEERING UNIT BRKT.	1	
5018	450215	SCREW, M10 x 30, HEX HD	6	
5019	450412	S.L.WASHER, M10	6	
5021	452585	BOLT, M10 x 25, SQ NECK	1	
5023	MBC5963	PACKER	4	
5024	450029	BOLT, M10 x 35, HEX HD	4	
5025	450412	S.L.WASHER, M10	4	
5026	MBE3165A	TOOLBOX HINGE.	1	
5027	MBE4141C	FLOOR PLATE W/ASSY.	1	
5028	A907207	SPECIAL WASHER	7	
5029	A299104	HINGE	4	
5030	450528	SCREW, M5 x 16, PAN HD	8	
5031	A199065	LATCH	2	
5032	450528	SCREW, M5 x 16, PAN HD	4	
5033	450388	WASHER, M5	4	
5034	MBF2123	STEERING UNIT COVER.	1	
5035	A139401	NUT, M6	4	
5036	450170	SCREW, M6 x 16, HEX HD	4	
5037	450410	S.L.WASHER, M6	4	
5038	MBG0438	CONTROL PANEL	1	Analog Display
*	4137783	CONTROL PANEL	1	LCD Display
5039*	452692	SCREW, M6 x 12, HEX TAPTITE	6	
5040*	450528	SCREW, M5 x 16, PAN HD	7	
5041*	450388	WASHER, M5	7	
5042*	450376	NUT, M5 NYLOC	7	
5043	MBG0518	RH DOOR PANEL	1	
5044	MBG3281	LH DOOR PANEL	1	
5045	MBE4437	TOOLBOX W/ASSY.	1	
5046	MBE4494	HINGE PACKER.	2	
5050*	A295331	GROMMET	1	
5051	MBE4547A	RELAY PANEL SPACER.	1	Analog Display
5052*	450191	SCREW, M8 x 20, HEX HD	2	
*	4138333	RELAY & FUSE PLATE SPACER	3	LCD Display

* Not Illustrated

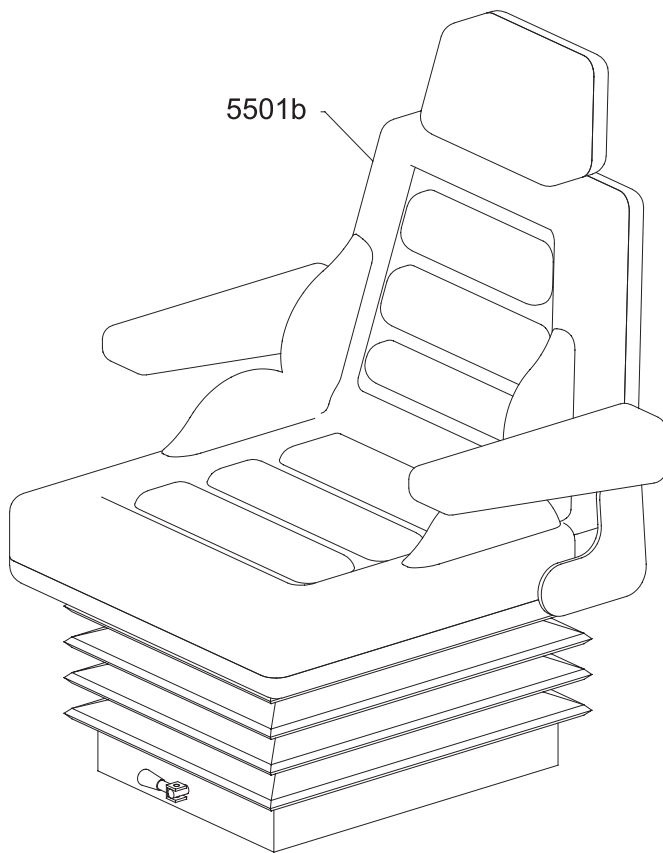
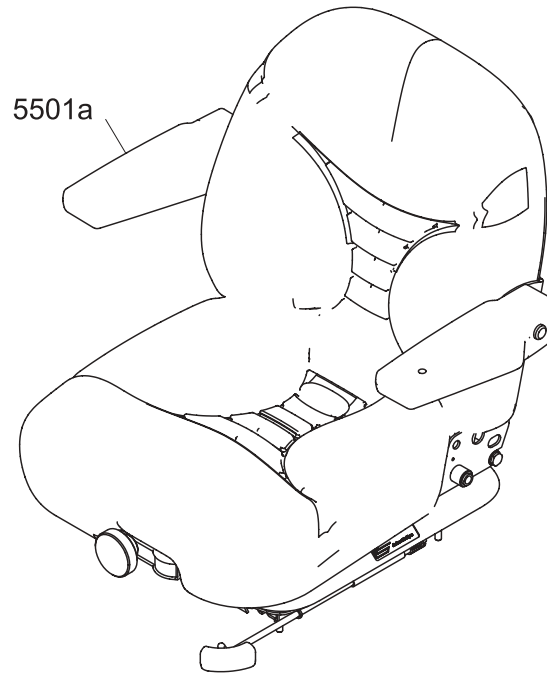
**RANSOMES COMMANDER 3520
PARTS MANUAL**



ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
5053*	450411	S.L.WASHER, M8	2	
5054*	450390	WASHER, M8	2	
5055	MBE4643	RELAY PLATE PACKER.	1	
5056	MBF2077	OPSCOMPARTMENT	1	
5057*	A298904	SAFETY WALK STRIP	3	
5058	MBG2914	SEAT PLATE	1	
5059*	450369	NUTSERT, M8 A-L 1ST GRIP	4	
5060*	450188	SCREW, M8 x 12, HEX HD	4	
5061*	450411	S.L.WASHER, M8	4	
5063	MBG6068	VALVE COVER	1	
5066*	450324	NUT, M8	6	
5067*	450390	WASHER, M8	4	
5068*	450378	NUT, M8 NYLOC	2	
5069	MBG6119	FILTER BRACKET	1	
5070*	A119003	SCREW, 5/16 UNC x 3/4	3	
5071*	450191	SCREW, M8 x 20, HEX HD	1	
5072*	450378	NUT, M8 NYLOC	1	
5073*	450390	WASHER, M8	4	
5075	MBG3189	NEEDLE VALVE BRACKET	1	
5076	MBG3320	BRACKET RH	1	
5077	MBG3321	BRACKET LH	1	
5078*	450369	NUTSERT-M8 A-L x 17.5	4	
5079	MBG5859	SHOULDER BOLT (M10/M20)	2	USED ITEM 5016
5080	MBG5860	SPACER (DIA.16 x 12 WIDE)	1	USED ITEM 5016
5081*	MBG5861	SPACER (DIA.16 x 3 WIDE)	1	USED ITEM 5016
5083*	AC013	SOUND REDUCTION KIT	1	
5084*	A295263	END CAP	2	50 x 50
		LATER MODELS		
5100	MBF2224	STEER TOWER	1	
5101	MBG6498	COVER BRAKE	1	
5102	MBF2253	FRONT COVER	1	
5103	MBF2227	STEER BRACKET	1	
5104	450539	SCREW-PAN M6x12	2	
5105	450410	LOCKWASHER-M6	5	
5106	450389	WASHER-M6	5	
5107	450000	BOLT-M6x25	3	
5110	450357	NUTSERT-M6	3	
5111	450394	WASHER-M20	2	
5112	450383	NYLOC NUT-M20	2	
5113	450391	WASHER-M10	2	
5114	450412	LOCKWASHER-M10	2	
5115	450217	BOLT-M10x40	2	
5116	450020	BOLT-HEX M8x60	1	
5117	450378	NUT-HEX M8 NYLOC	2	
5118	450390	WASHER-M8	AR	

* Not Illustrated

RANSOMES COMMANDER 3520
PARTS MANUAL

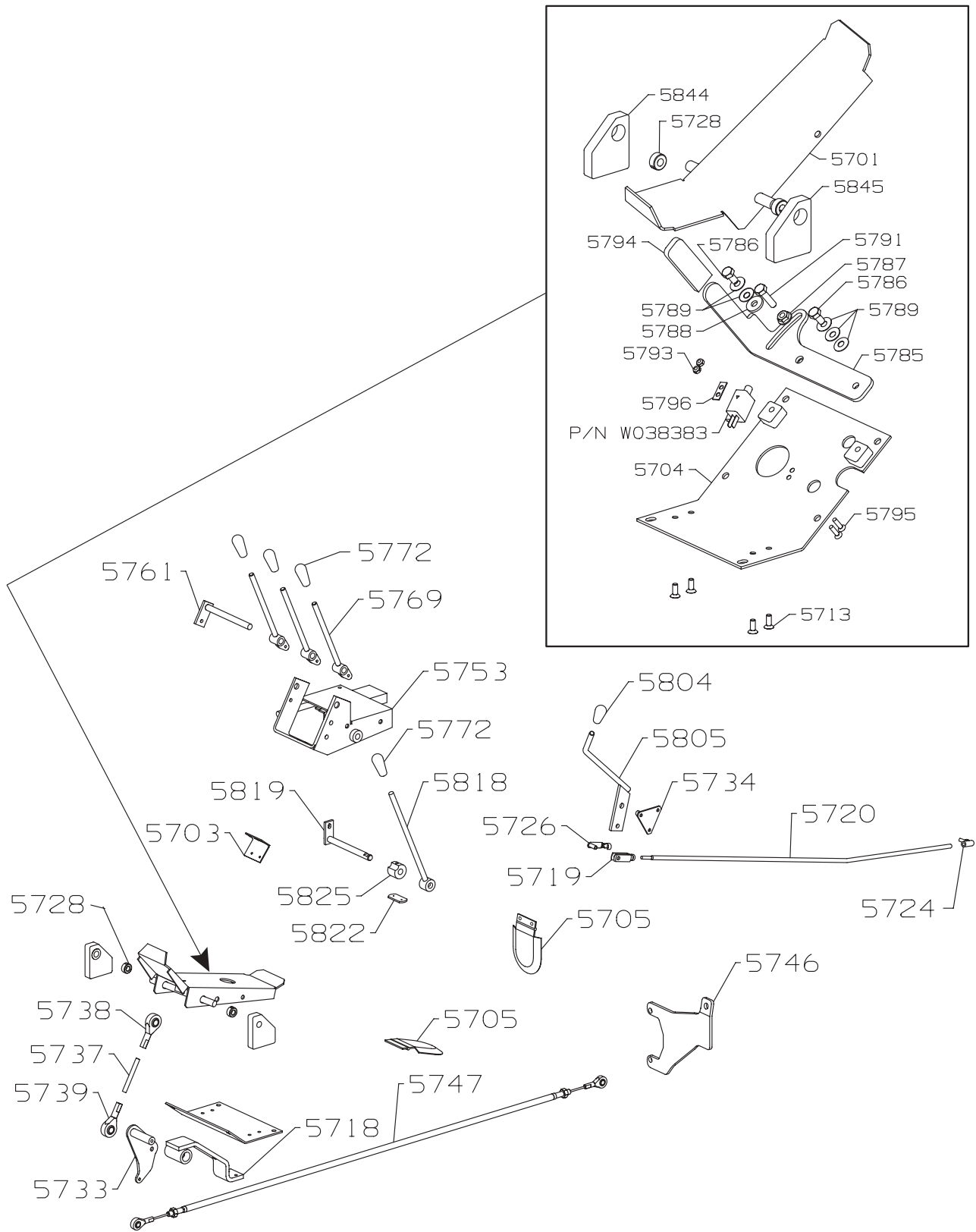


- 5503 
- 5504 
- 5502 

SEAT AND FRAME

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
5501a	4137966	SEAT, GRAMMER MSG85	1	
5501b	008199400	SEAT, GRAMMER S85/90R	1	
5502	450191	SCREW, M8 x 20, HEX HD	4	
5503	450390	WASHER, M8	4	
5504	450411	S.L.WASHER, M8	4	

**RANSOMES COMMANDER 3520
PARTS MANUAL**



**CONTROLS - TRACTION PEDAL / DIFF LOCK/
MOW SWITCH / UNIT LIFT / UNIT DRIVE**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
5701	MBF2072	FOOTPEDAL	1	
5702*	A298904	SAFETY WALK STRIP	4	
5703	MBE3466A	BRACKET - MICRO SWITCH.	1	
5704	MBF2186	BASE PLATE - NEUTRAL STOP	1	
5705	MBE3313C	PAD W/ASSY.	2	Unit Drive & 4WD Reverse
5706*	450608	SCREW, M5 x 20, CSK HD	4	
5707*	450409	S.L.WASHER, M5	4	
5708*	450322	NUT, M5	4	
5709*	A291054	SPRING	2	
5710*	A109185	WELDBOLT, M8 x30	2	
5711*	450378	NUT, M8 NYLOC	2	
5713*	450619	SCREW, M6 x 16, CSK HD	4	
5714*	450191	SCREW, M8 x 20, HEX HD	4	
5715*	450390	WASHER, M8	4	
5716*	450193	SCREW, M8 x 30, HEX HD	1	
5717*	450324	NUT, M8	1	
5718	MBE4091	BRACKET - BUSHED ASSY.	1	
*	A210115	BUSH	2	
5719	A194904	CLEVIS, M8	1	
5720	MBG0534	THROTTLE LINK	1	
5721*	450377	NUT, M6 NYLOC	1	
5722*	450389	WASHER, M6	1	
5723*	450323	NUT, M6	1	
5724	A814501	BALL JOINT	1	
5725*	450324	NUT, M8	1	
5726	A149066	SPRING CLIP	1	
5727*	450378	NUT, M8 NYLOC	1	
5728	MBF0654A	SET COLLAR	2	
5730*	A119004	SCREW, No.10 x 1/2	2	
5731*	A139325	NUT, No.10-24	2	
5732*	450388	WASHER, M5	4	
5733	MBE4118B	LEVER W/ASSY.	1	
5734	MBF0205	THROTTLE BRACKET	1	
5735*	450393	WASHER, M16	1	
5736*	452041	EXT CIRCLIP, 16 mm	1	
5737	MBF1106	CABLE ROD	1	
5738	A814513	ROD END LH	1	
5739	A814514	ROD END RH	1	
5740*	GSF2052BB	LOCKNUT 5/16" UNF LH	1	
5741*	GSF2052AB	LOCKNUT 5/16" UNF RH	1	
5742*	A292071	DISC SPRING	2	
5743*	A295340	GROMMET 31.8PH-1.2PT-25.4	2	
5744*	W43067A	COLLAR - SET.	2	
5746	MBG4085C	CABLE BRACKET	1	WITH SAUER PUMP
5747	A811106	CONTROL CABLE	1	SAUER PUMP

* Not Illustrated

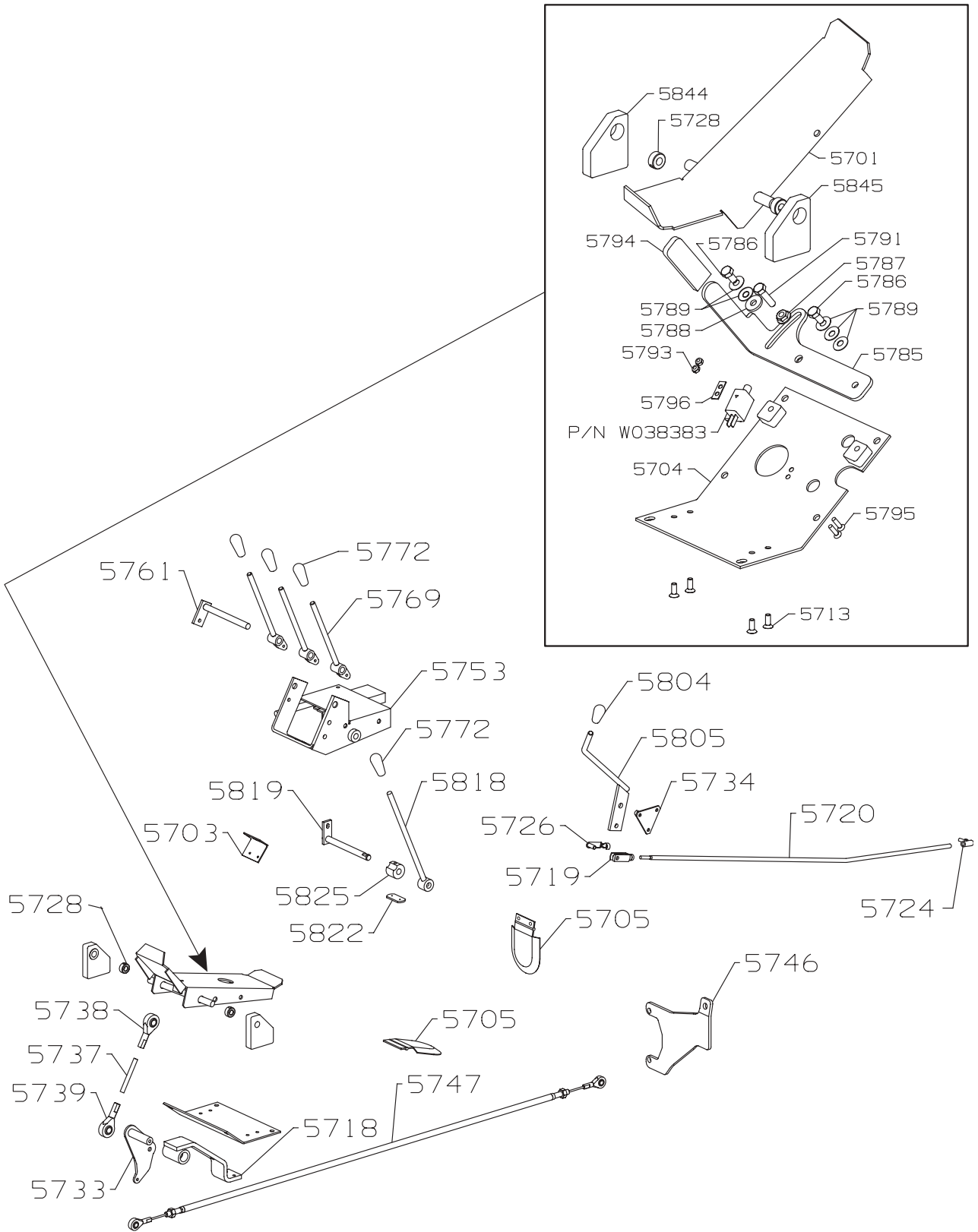
**CONTROLS - TRACTION PEDAL / DIFF LOCK/
MOW SWITCH / UNIT LIFT / UNIT DRIVE**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
5748*	450739	SCREW, M10 x 30, SCKT HD	2	
5749*	450391	WASHER, M10	4	
5750*	450412	S.L.WASHER, M10	2	
5753	MBF2113	VALVE BRACKET W.A.	1	
*	A219340	BUSH	2	FOR ITEM 5753
5754*	450005	BOLT, M6 x 50, HEX HD	2	
5755*	450389	WASHER, M6	2	
5756*	450377	NUT, M6 NYLOC	2	
5757*	450192	SCREW, M8 x 25, HEX HD	4	
5758*	450390	WASHER, M8	4	
5759*	450378	NUT, M8 NYLOC	4	
5761	MBE4216A	PIN W/ASSY.	1	
5762*	450171	SCREW, M6 x 20, HEX HD	1	
5763*	450377	NUT, M6 NYLOC	1	
5765*	A380202	CONNECTING LINK	3	
5769	MBF1180A	LEVER W.A.	3	
*	A219340	BUSH	6	FOR ITEM 5769
5772	A299022	KNOB	4	
5773*	450392	WASHER, M12	4	
5776*	AG12040	SPACER - 12x20x40	1	INNER END FOR 5769
5780	MBF1461A	WASHER	1	FOR CABLE A811106
5781	MBF1635	WASHER	1	FOR CABLE A811106
5782	450154	SCREW, M5 x 30, HEX HD	1	FOR CABLE A811106
5783	450376	NUT, M5 NYLOC	1	FOR CABLE A811106
5784	450409	S.L.WASHER, M5	1	FOR CABLE A811106
5785	MBF2187	PEDAL STOP	1	
5786	450190	SCRW-HEX M8 x 16	2	
5787	450453	NUT-HEX M8 VERBUS RIP	1	
5788	A907207	WSHR-M8	1	
5789	A292071	SPRG-DISC 8.2 x 20 x 0.8	2	
5791	450193	SCRW-HEX M8 x 30	1	
5793	450376	NUT-HEX M5 NYLOC	2	
5794	A914200	COVER HANDLE	1	
5795	A119131	SCRW-CSK M5 x 16 TAPTITE	2	
5796	MBF0918	CLAMP PLATE	1	
5804	A299022	KNOB	1	
5805	MBF0206	THROTTLE LEVER	1	
5806*	450391	WASHER, M10	1	
5807*	450332	NUT, M10 THIN	2	
5808*	A292083	DISC SPRING WASHER	2	
5809*	450171	SCREW, M6 x 20, HEX HD	2	
5810*	450389	WASHER, M6	3	
5811*	450020	BOLT, M8 x 60, HEX HD	1	
5812*	450003	BOLT, M6 x 40, HEX HD	1	
5814*	450410	S.L.WASHER, M6	3	

* Not Illustrated

**RANSOMES COMMANDER 3520
PARTS MANUAL**



**CONTROLS - TRACTION PEDAL / DIFF LOCK/
MOW SWITCH / UNIT LIFT / UNIT DRIVE**

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
5815*	450377	NUT, M6 NYLOC	3	
5816*	450154	SCREW, M5 x 30, HEX HD	3	
5817*	450376	NUT, M5 NYLOC	1	
5818	MBF2118	WLDMT-FNRLEVER	1	
5819	MBF2119	WLDMT-FNR SHAFT	1	
5822	MBE3504	MIC.SWITCH KEEP PLATE.	1	
5823*	A119210	SCREW, M3 x 40	2	
5824*	A183003	WASHER, 3 mm	2	
5825	MBF0155	CAM-MICROSWITCH	1	
5826*	450959	SETSCREW, M6 x 8, CUP PNT	1	
5827*	A219335	NYLINER BEARING	1	
5828*	W43067A	COLLAR - SET.	1	
5829*	A129037	SCREW, 1/4 UNC x 1/4	1	
5830*	GSF1045LE	PIN	1	
5831*	454000077	SPLIT PIN	1	
5844	MBF1419	F/PEDAL BLOCK ASSY LH	1	
5845	MBF1420	F/PEDAL BLOCK ASSY RH	1	
*	A219108	BUSH	1	FOR ITEMS 5844/5845
5847*	A219340	BUSH-EP 12x14x12	8	
5846*	451208	SPLIT PIN-2 x 14	1	
5849*	MBG6057	CLEVIS PIN	1	
5850*	451436	PIN-SPIROL 5 x 26	1	FOR ITEM 5818

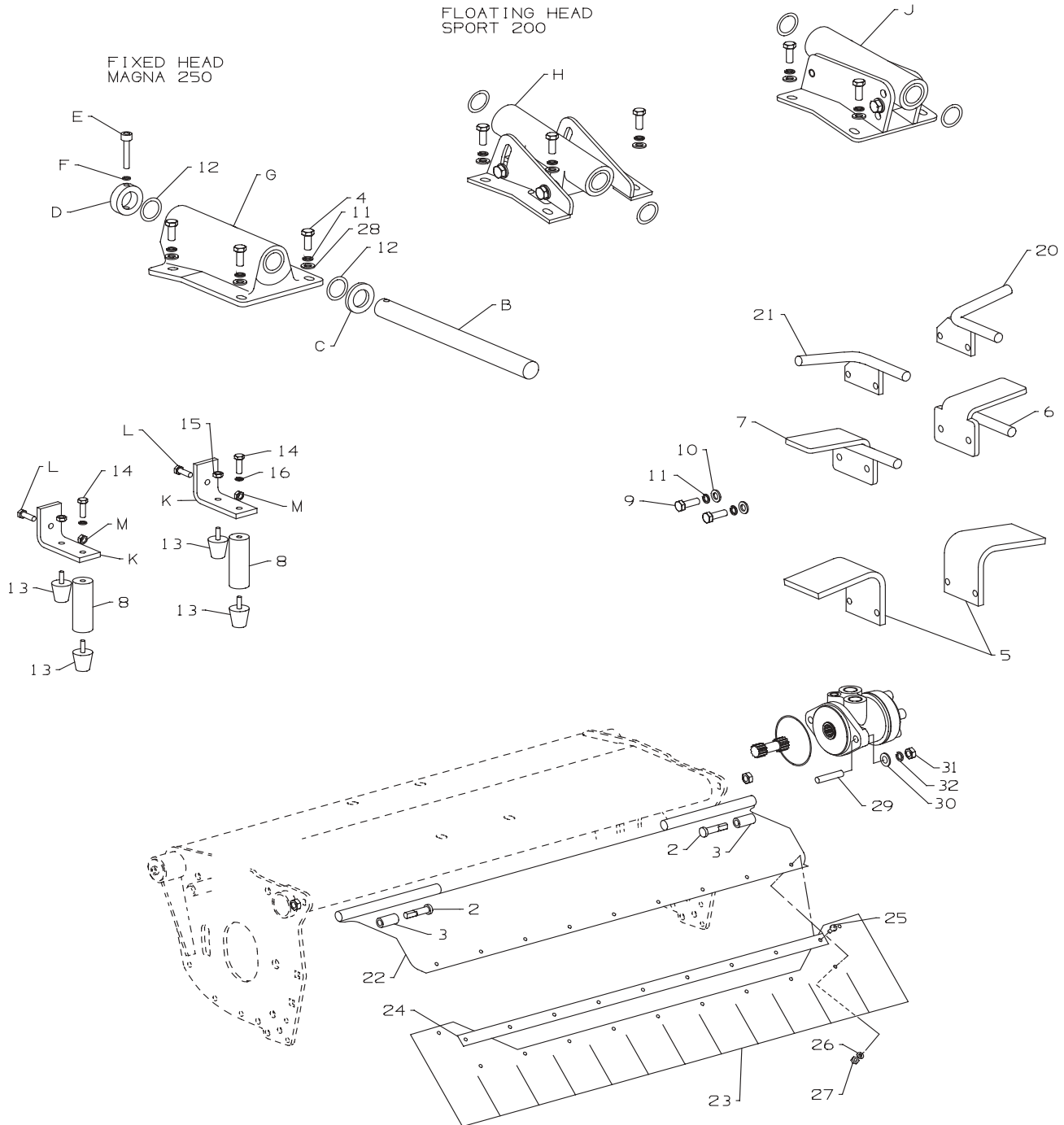
* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL

FIXED HEAD
SPORT 200

FLOATING HEAD
SPORT 200

FIXED HEAD
MAGNA 250



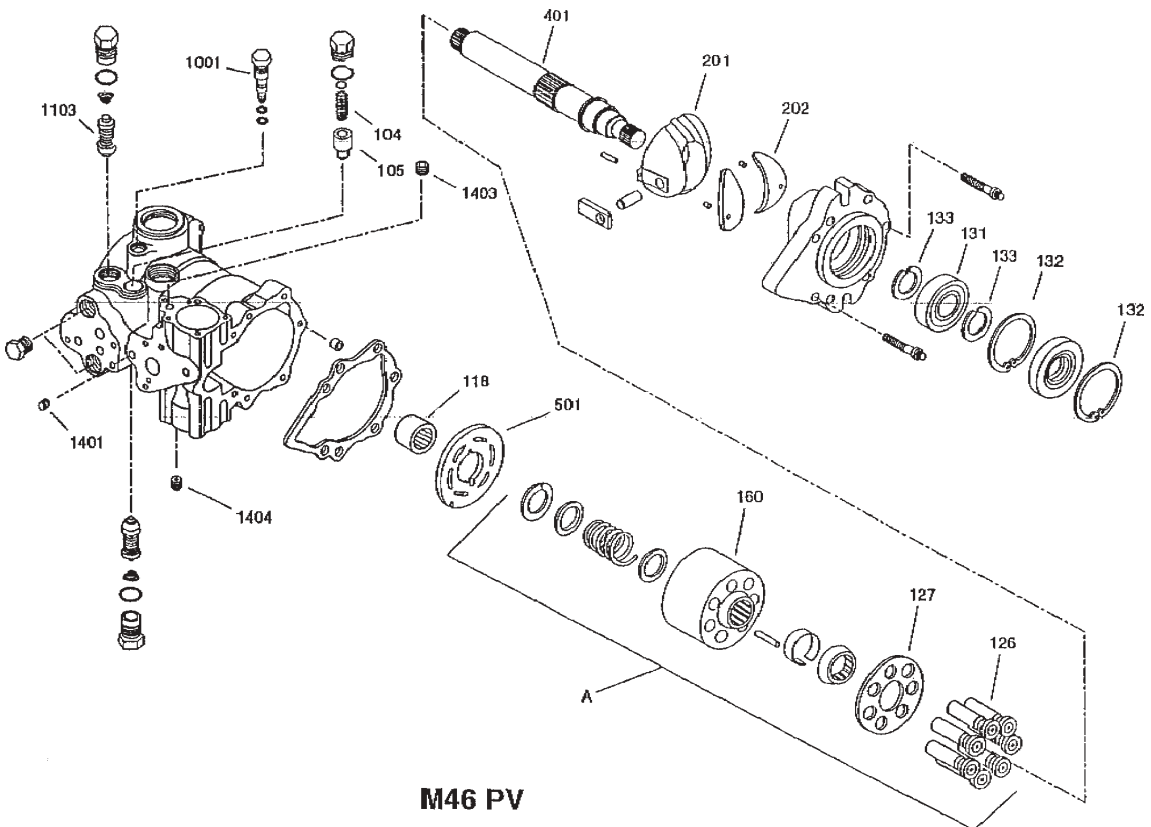
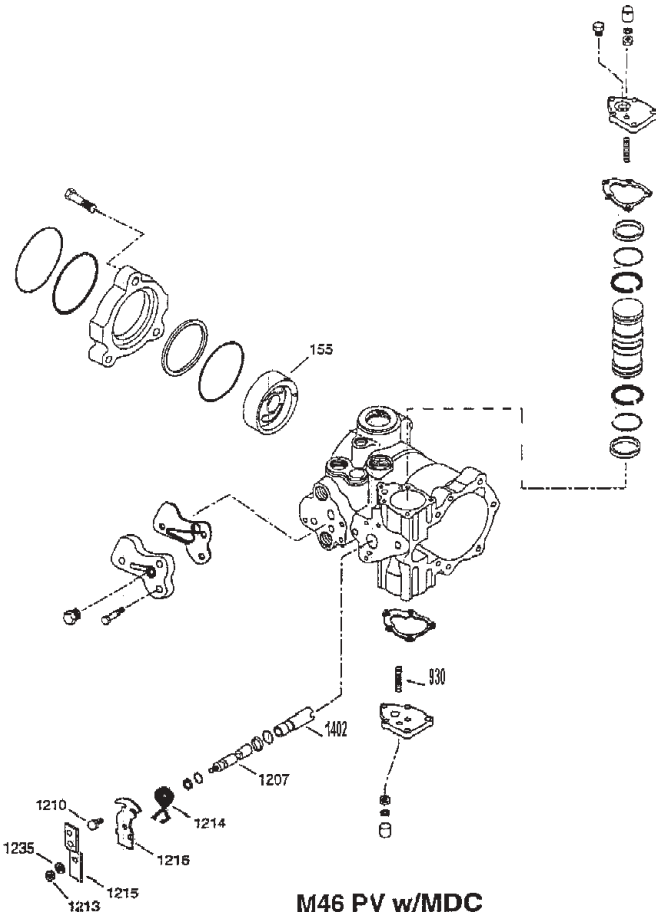
RH DRIVE UNIT SHOWN

LOOSE PARTS

**RANSOMES COMMANDER 3520
PARTS MANUAL**

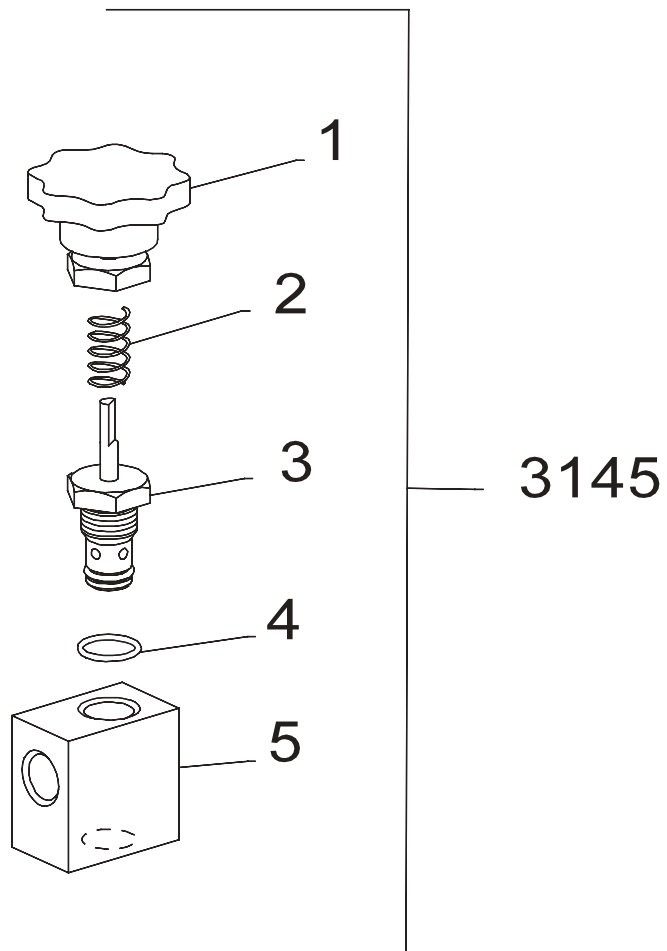
ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
2	MBC8956A	SPECIAL BOLT	10	
3	A298383	SPACER	10	
*	450379	STIFFNUT M10	10	
4	450029	BOLT M10 X 35	20	
5	MBE1276	ROLLER BRACKET	2	
6	MBE3815B	ANTI ROLL BRACKET LH	1	
7	MBE3858B	ANTI ROLL BRACKET RH	1	
8	MBE4554	SPACER	2	
9	450215	SCREW M10 X 30	12	
10	450391	WASHER 10mm	12	
11	450412	S.L.WASHER 10MM	32	
12*	W158061-04	O RING (3.237" ID)	6	CUTTER MOTOR
13	A299405	BONDED RUBBER BUFFER	2	
14	450192	SCREW M8 X 25	2	
15	450378	NUT M8	4	
16	450411	S.L.WASHER 8mm	2	
*	MBB6448	"HEIGHT OF CUT BAR"	1	(8" floating head)
*	MBE3927	GREASE	1	
	LMAC012	MAGNA 250 WING UNIT LATCH	1	KIT
20	MBE4488	• LATCH BRACKET LH	1	
21	MBE4491	• LATCH BRACKET RH	1	
	LMAC011	SPORT 200 WING WING LATCH	1	KIT
	4118697	• LATCH BRACKET LH	1	
	4118698	• LATCH BRACKET RH	1	
22	MBE4612	DEFLECTOR	5	
23	MBG6192	DEFLECTOR FLAP	5	
24	MBE4613	DEFLECTOR STRIP	5	
25	450526	SCREW M5 X 12	55	
26	450388	WASHER 5mm	55	
27	450322	NUT M5	55	
*	A829577	KEY FOR ISO SWITCH	1	
28	MBE4682	WASHER	20	
29*	2203039	STUD-10MM/8MM	10	CUTTER MOTOR
30	A159401	WSHR-.328 x .75 x 14 GA	10	USED ITEM 23
31	450378	NUT-HEX M8 NYLOC	10	USED ITEM 23
32	MBG6193	WASHER	10	USED ITEM 23 TO 22

* Not Illustrated



ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
	A800761	TRANSMISSION PUMP	1	M46 SERVO
A	A800858	•CYLINDER BLOCK KIT	1	
104	A800859	•SPRING	1	CHARGE RELIEF VALVE
105	A800860	•POPPET	1	CHARGE RELIEF VALVE
118	A800861	•NEEDLE BEARING	1	
126	A800862	•PISTON	7	
127	A800863	•SLIPPER RETAINER	1	
131	A800864	•SHAFT BEARING	1	
132	A800865	•CIRCLIP	2	
133	A800866	•CIRCLIP	2	
155	A800867	•CHARGE PUMP HOUSING	1	
160	A800868	•CYLINDER BLOCK	1	
201	A800869	•SWASHPLATE	1	
202	A800870	•SWASHPLATE BEARING	2	
401	A800871	•DRIVE SHAFT	1	
501	A800872	•VALVE PLATE	1	
930	A800873	•ADJUSTER SCREW	1	
1001	A800874	•BY-PASS VALVE	1	
1103	A828929	•RELIEF VALVE CARTRIDGE	1	230 BAR
1104	A828928	•RELIEF VALVE CARTRIDGE	1	345 BAR
1207	A800876	•ROTARY SPOOL	1	
1210	A800877	•ADJUSTER SCREW	1	
1213	A800878	•LOCKNUT	1	
1214	A800879	•RETURN SPRING	1	
1215	A800880	•CONTROL LEVER	1	
1216	A800881	•CAM PLATE	1	
1235	A800882	•LOCKWASHER	1	
1401	A800883	•ORIFICE	1	
1402	A800884	•SLEEVE	1	
1403	A800885	•ORIFICE	1	
1404	A800885	•ORIFICE	1	
*	A800886	•SEAL KIT	1	

* Not Illustrated

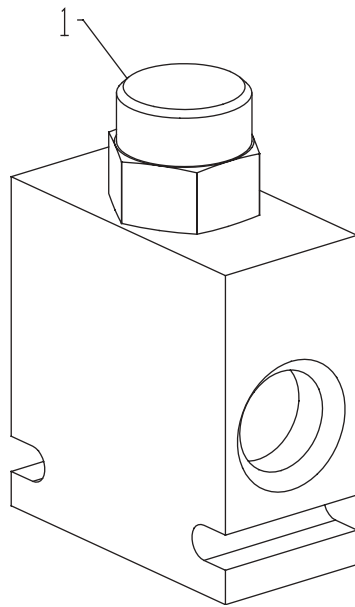


VALVE - BACK PRESSURE

**HYDRAFORCE NV10-21E-8T-N
NEEDLE VALVE**

ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
3145 1 2 3 4 5 *	2208046 2208085 + 178102-37	VALVE - BACK PRESSURE KNOB SPRING-SS COMPRESSION CARTRIDGE O RING SEAL PORTED BODY SEAL KIT Parts marked + are not normally held in stock Parts marked N/A are Not Avalable. Major repairs should be carried out by a specialist hydraulic workshop.	1 1 1 1 1 1 1	ITEMS 1 - 3 = 4130690

* Not Illustrated

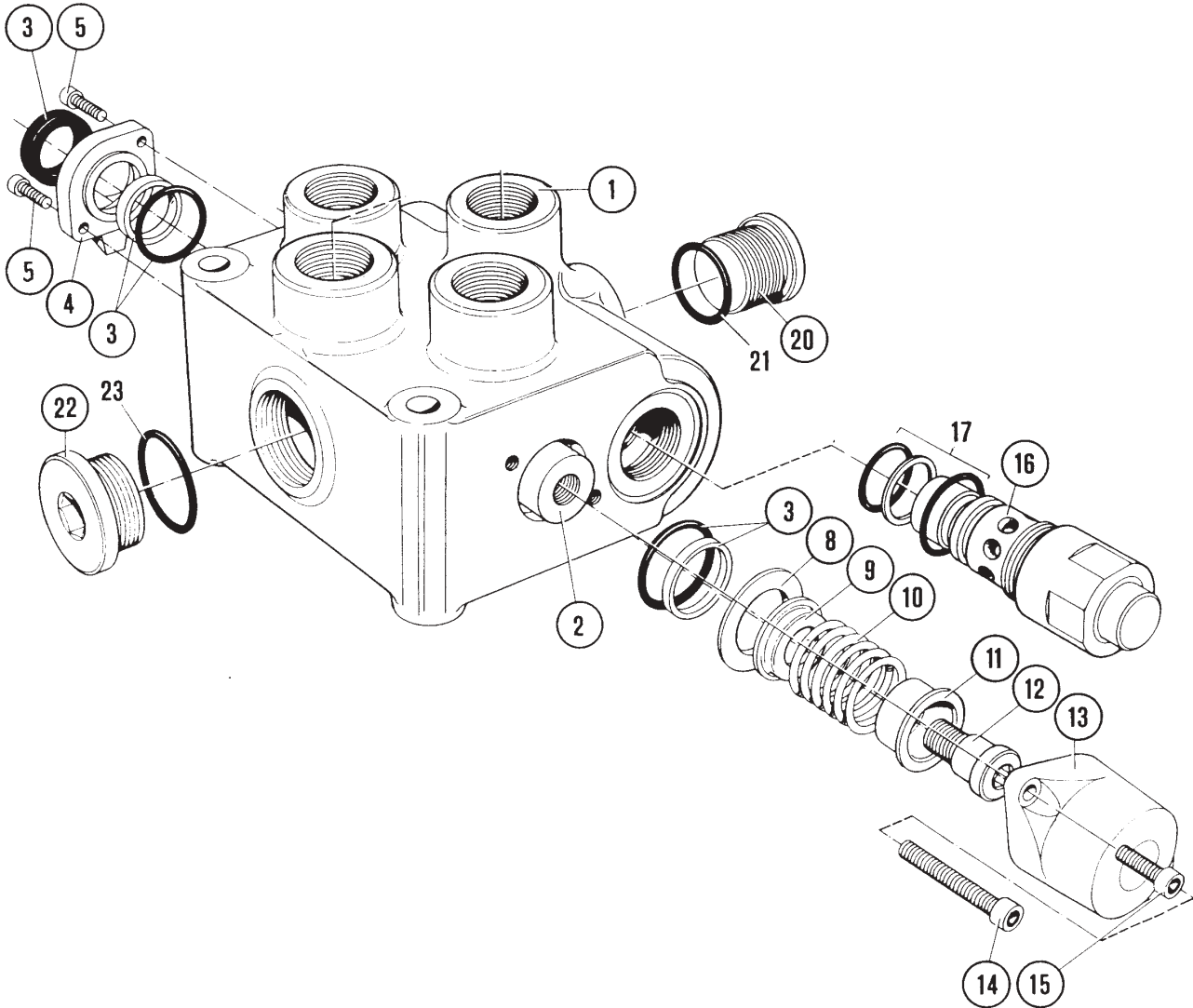


PRESSURE COMPENSATOR VALVE

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1 *	A801126 A230093	PRESSURE COMP. VALVE SEAL KIT	1 1	

* Not Illustrated

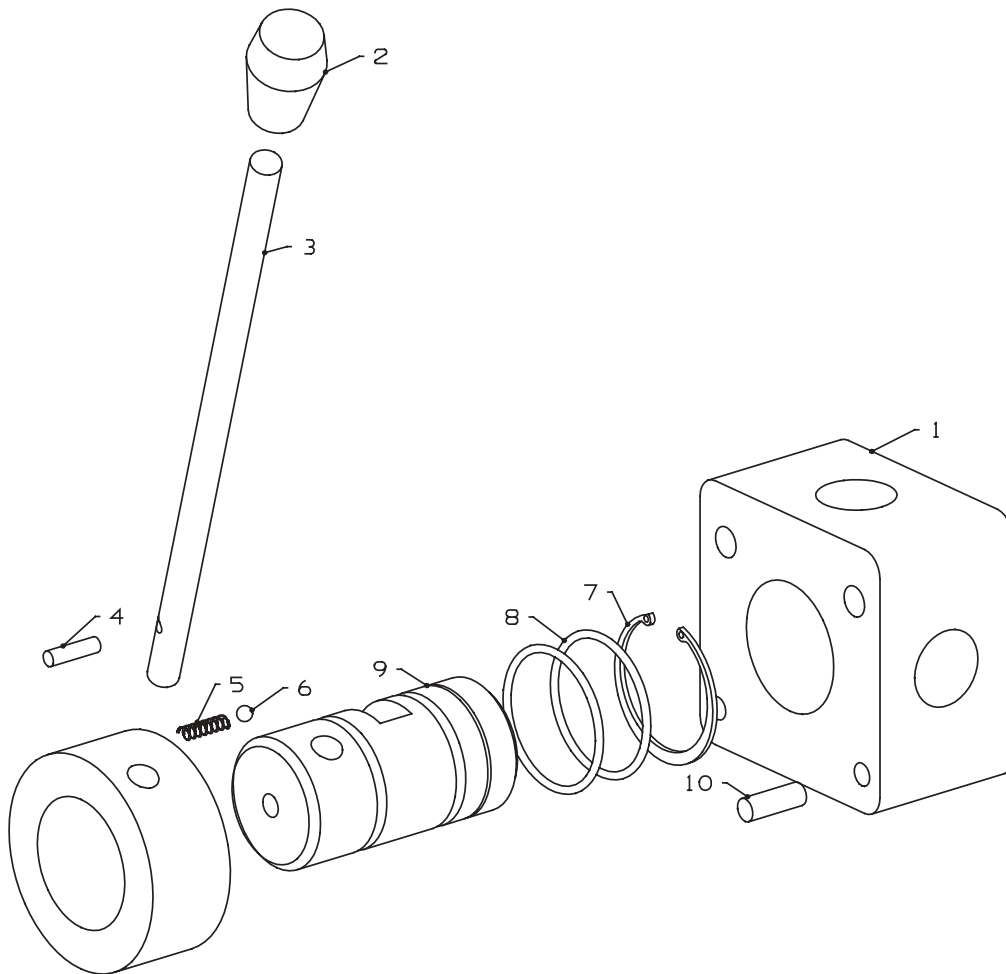
RANSOMES COMMANDER 3520
PARTS MANUAL



CUTTING MOTOR VALVE

RANSOMES COMMANDER 3520 PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
*	A801252	CUTTING MOTOR VALVE	1	FORWARD-NEUTRAL-REVERSE ITEMS(3,17,21,23)
	A230119	SEAL KIT	1	
1	N/A	BODY	1	
2	N/A	SPOOL	1	
3		O RING & BACK UP WASHER	2	PART OF A230119
4	+	HOUSING	1	
5	+	SCREW	2	
8	+	WASHER	1	
9	+	BUSH	1	
10	+	SPRING	1	
11	+	BUSH	1	
12	+	SCREW	1	
13	+	HOUSING	1	
14	+	SCREW	1	
15	+	SCREW	1	
16	+	VALVE	1	
17		VALVE SEALS	1	PART OF A230119
20	+	PLUG	1	
21		ORING	1	PART OF A230119
22	+	PLUG	1	
23		ORING	1	PART OF A230119
<p>Parts marked + are not normally held in stock</p> <p>Parts marked N/A are Not Available.</p> <p>Major repairs should be carried out by a specialist hydraulic workshop.</p>				

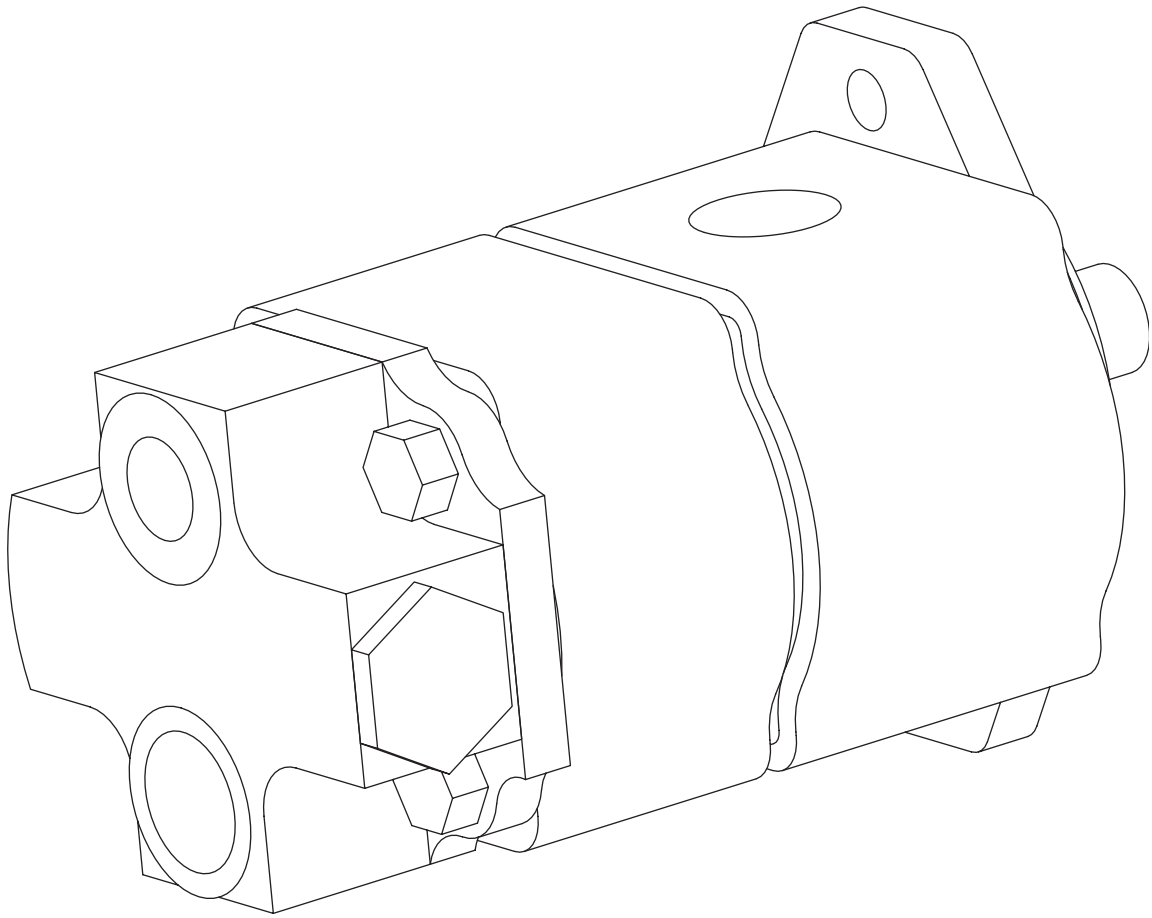


FREE WHEEL VALVE

RANSOMES COMMANDER 3520 PARTS MANUAL

HY-PRO - V1860

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	A802834	HYDRAULIC VALVE	1	
2	N/A	BODY	1	
3	+	KNOB	1	
4	+	LEVER	1	
5	+	TENSIONPIN	1	
6	+	SPRING	1	
7	+	BALL	1	
8	A171025	CIRCLIP	1	
9	GSF3599BN	ORING	2	
10	N/A	SPOOL	1	
	+	TENSIONPIN	2	
<p>Parts marked + are not normally held in stock</p> <p>Parts marked N/A are Not Available.</p> <p>Major repairs should be carried out by a specialist hydraulic workshop.</p>				

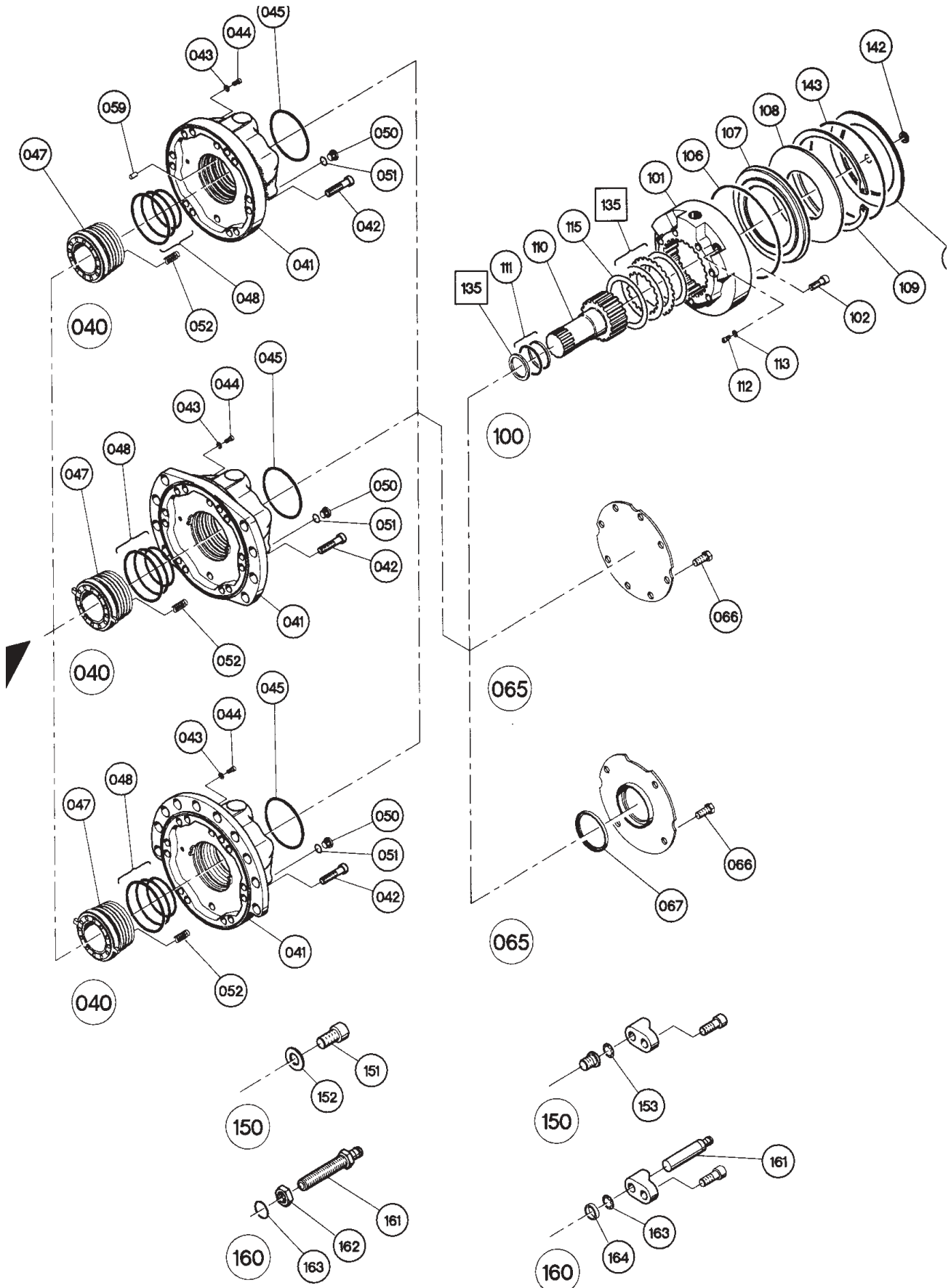


TANDEM PUMP

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
A *	4165856	HYDRAULIC PUMP SEAL KIT	1 1	

* Not Illustrated

RANSOMES COMMANDER 3520
PARTS MANUAL



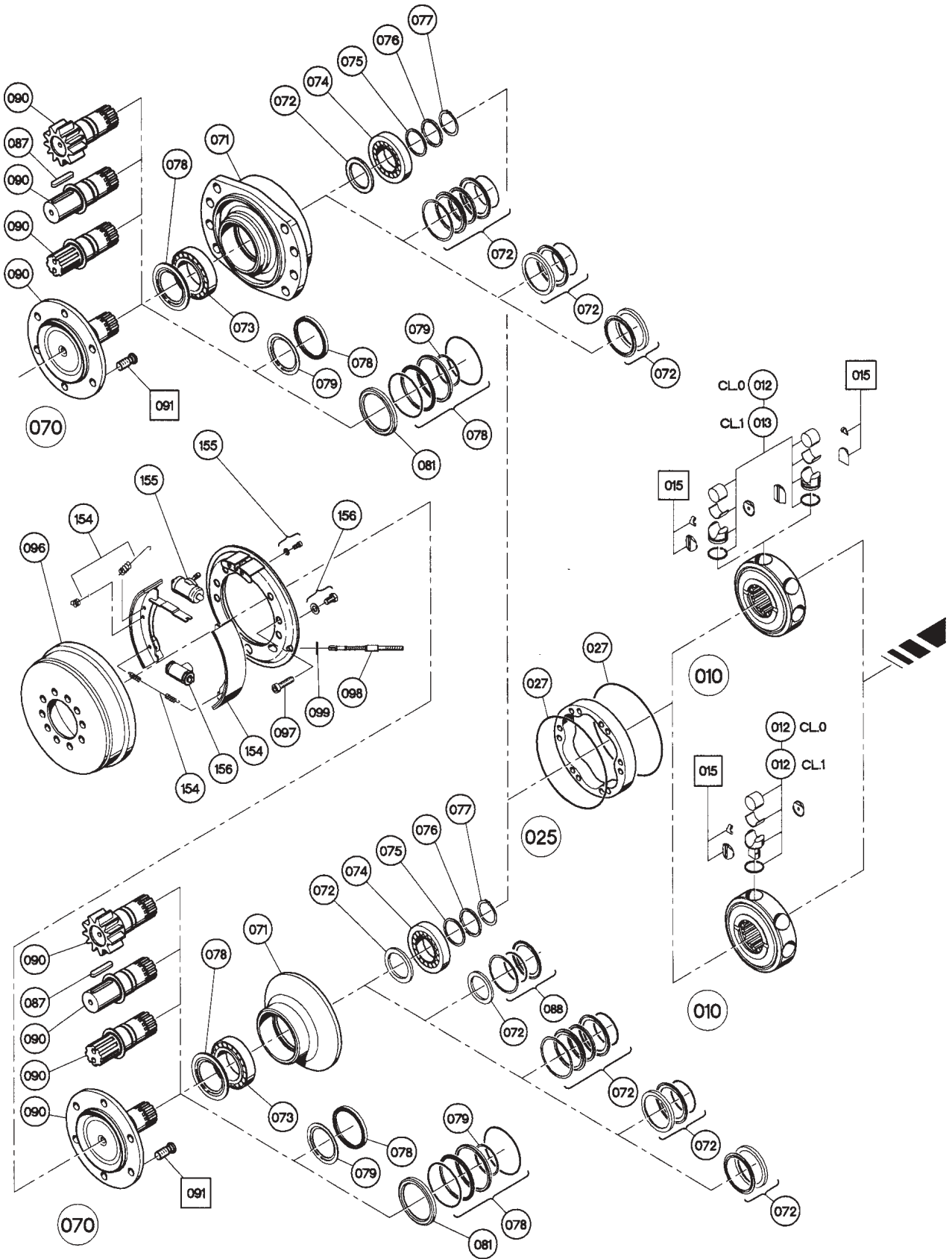
WHEEL MOTOR FRONT

RANSOMES COMMANDER 3520
PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
001	A808966	Seal kit	1	
002	A808967	Seal kit	1	
010	A808968	Cylinder-block Assy.	1	
012	4131089	•Piston sub-assy.Cl.0		New Item
013	4131090	•Piston sub-assy.Cl.10		New Item
015	A808969	Repair kit.	1	
025	A808970	Cam Assy.	1	
027	N/A	•O-ring.		
040	A808971	Valving cover assy.	1	
041	N/A	•Valving cover part.		
042	N/A	•Screw.		
043	N/A	•Seal washer.		
044	N/A	•Screw.		
045	N/A	•O-ring.		
047	N/A	•Valving.		
048	N/A	•Seal kit.		
050	N/A	•Plug.		
051	N/A	•O-ring.		
052	N/A	•Spring.		
053	N/A	•Valve spool.		
054	N/A	•Washer.		
055	N/A	•Snap ring.		
056	N/A	•Spring.		
057	N/A	•O-ring.		
059	N/A	•Pin.		
065	A808972	Cover plate.	1	
066	N/A	•Screw.		
067	N/A	•Sealing ring.		
070	A808973	Bearing support assy.	1	
071	N/A	•Bearing support.		
072	N/A	•Radial lip seal.		
073	N/A	•Roller bearing.		
074	N/A	•Roller bearing.		
075	N/A	•Set of shims.		
076	N/A	•Thrust ring.		
077	N/A	•Snap ring		
078	N/A	•Lip Seal		
079	N/A	•Deflector		
081	N/A	•Seal support		
087	N/A	•Key		
090	N/A	•Shaft		

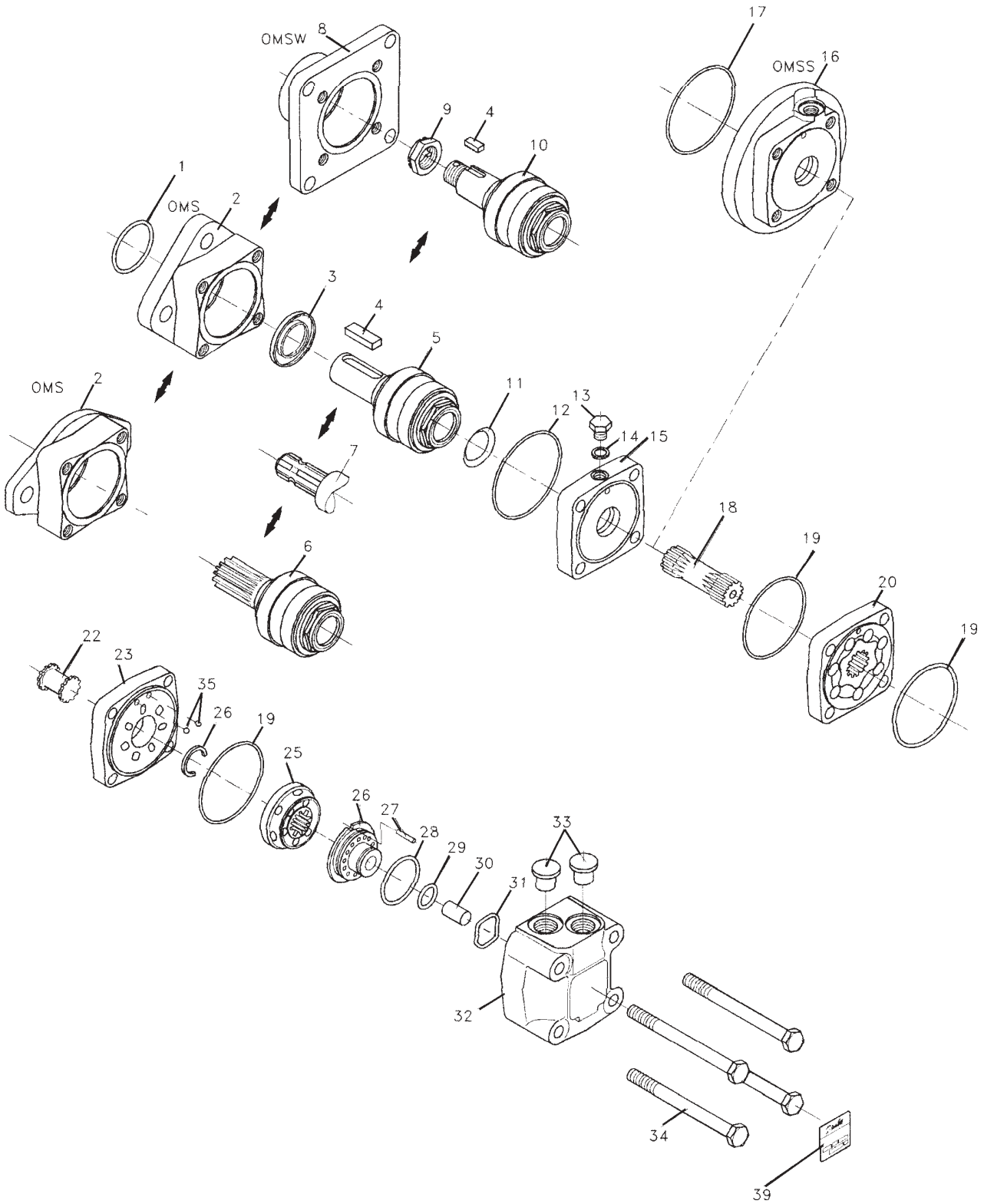
* Not Illustrated

RANSOMES COMMANDER 3520
PARTS MANUAL



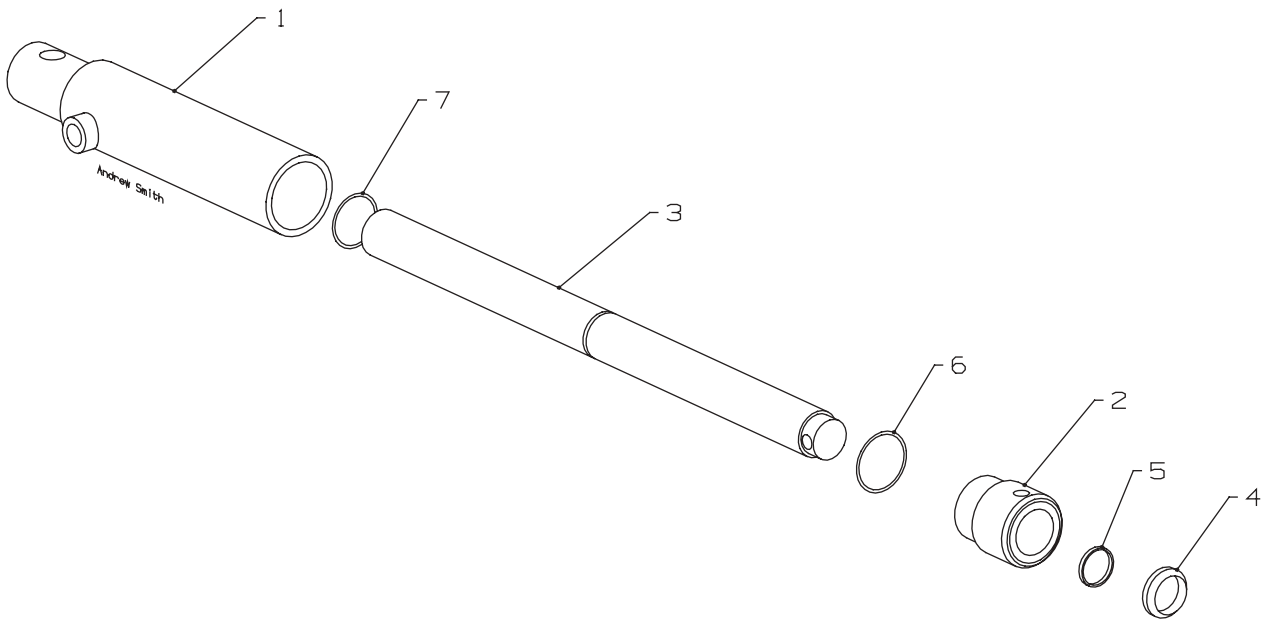
ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
096	N/A	•Drum Brake.		
097	N/A	•Screw.		
098	N/A	•Brake cable.		
099	N/A	•Snap ring.		
091	A808975	Set of studs.	1	
100	A808974	Brake assy.	1	
101	N/A	Brake body.		
102	N/A	Screw.		
106	N/A	O-ring.		
107	N/A	Brake piston.		
108	N/A	Spring washer.		
109	N/A	Snap ring.		
110	N/A	Brake shaft.		
111	N/A	Seal.		
112	N/A	Screw.		
113	N/A	Sealing ring.		
141	N/A	Protector.		
142	N/A	Plug.		
143	N/A	O-ring.		
135	A808976	Brake kit.	1	
		Parts marked + are not normally held in stock		
		Parts marked N/A are Not Available.		
		Major repairs should be carried out by a specialist hydraulic workshop.		

RANSOMES COMMANDER 3520
PARTS MANUAL

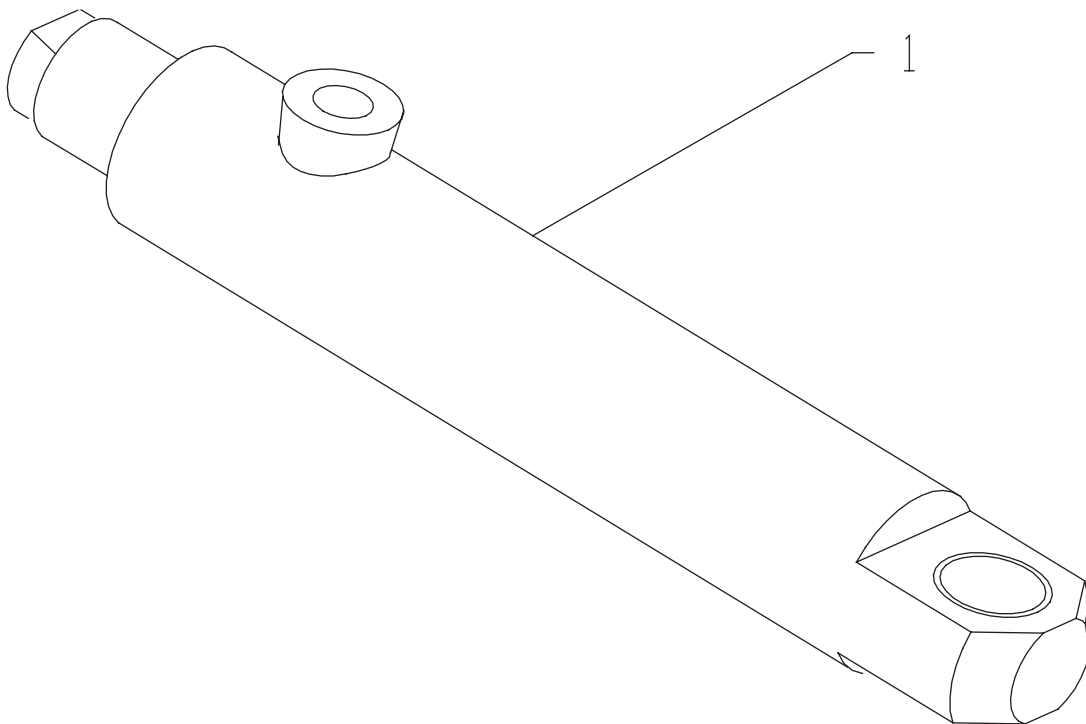


ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	A8007600	WHEEL MOTOR	1	ITEM 1,3,11,12,19,28 & 29.
2	N/A	DUST SEAL	1	
3	N/A	BEARING HOUSING	1	
4	A800781	SHAFT SEAL	1	
9	A800782	PARALLEL KEY 5/16x5/16	1	
11		CASTELLATED NUT	1	
12		SEAL RING	1	
13	+	ORING	1	
14	+	PLUG	1	
15	+	WASHER	1	
18	+	INTERMEDIATE PLATE	1	
19	+	CARDAN SHAFT	1	
20	+	ORING	3	
22	+	GEARWHEEL SET	1	
23	+	VALVE DRIVE	1	
25	+	CHANNEL PLATE	1	
26	+	DISC VALVE	1	
27	+	BALANCE PLATE	1	
28	+	GUIDE PIN	1	
29	+	ORING	1	
30	+	ORING	2	
31	+	SPACER	1	
32	+	SPRING WASHER	1	
34	N/A	VALVE HOUSING	1	
A	A230062	BOILT	4	
		SET OF SEALS NBR	1	
		Parts marked + are not normally held in stock		
		Parts marked N/A are Not Available.		
		Major repairs should be carried out by a specialist hydraulic workshop.		

RANSOMES COMMANDER 3520
PARTS MANUAL



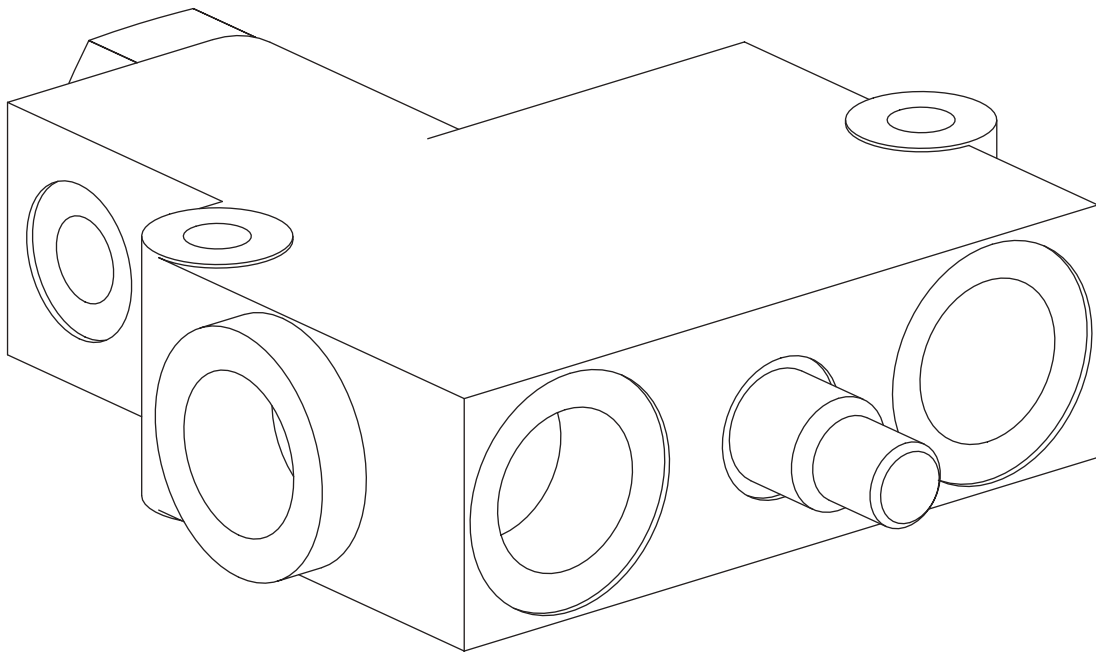
ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
	A902734	HYDRAULIC RAM FRONT & CENTRE	3	
	A902811	HYDRAULIC RAM, . WING	2	
1	N/A	• CYLINDER	1	
2	N/A	• GLAND	1	
3	N/A	• PISTON ROD	1	
	A230043	• SEAL KIT	1	
4	A224903	•• WIPER SEAL	1	
5	A229949	•• S.A. SEAL	1	
6	A221218	•• O RING	1	
7	GSF1058BB	• SNAP RING	1	



STEERING RAM

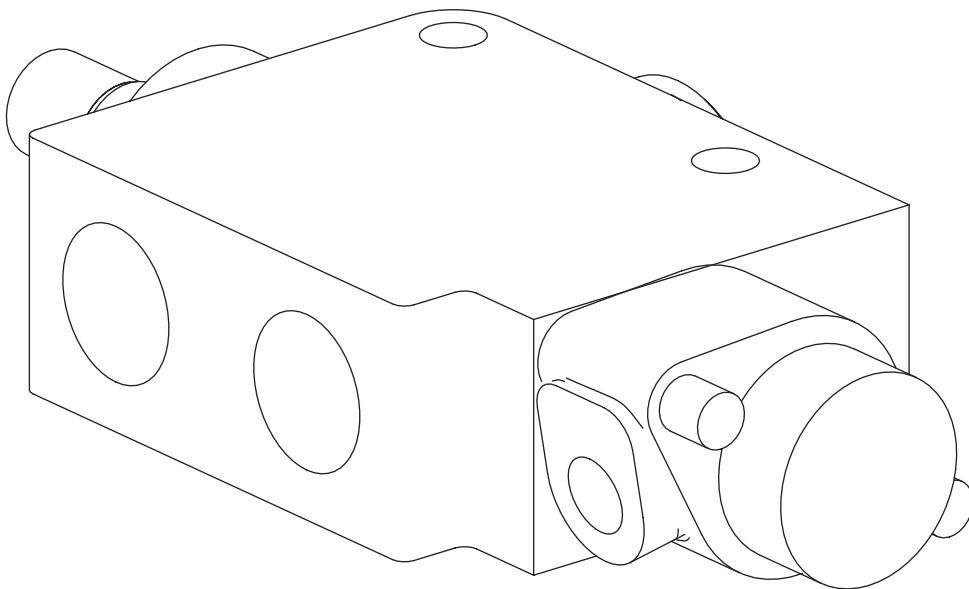
ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1 * *	A902807 A230042 A214393	STEERINGRAM SEAL KIT BUSH	2 1 1	PIVOT 002143930

* Not Illustrated



ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
A *	4155522 A230123	DIVERTOR 4 PORT SEAL KIT	1 1	

* Not Illustrated



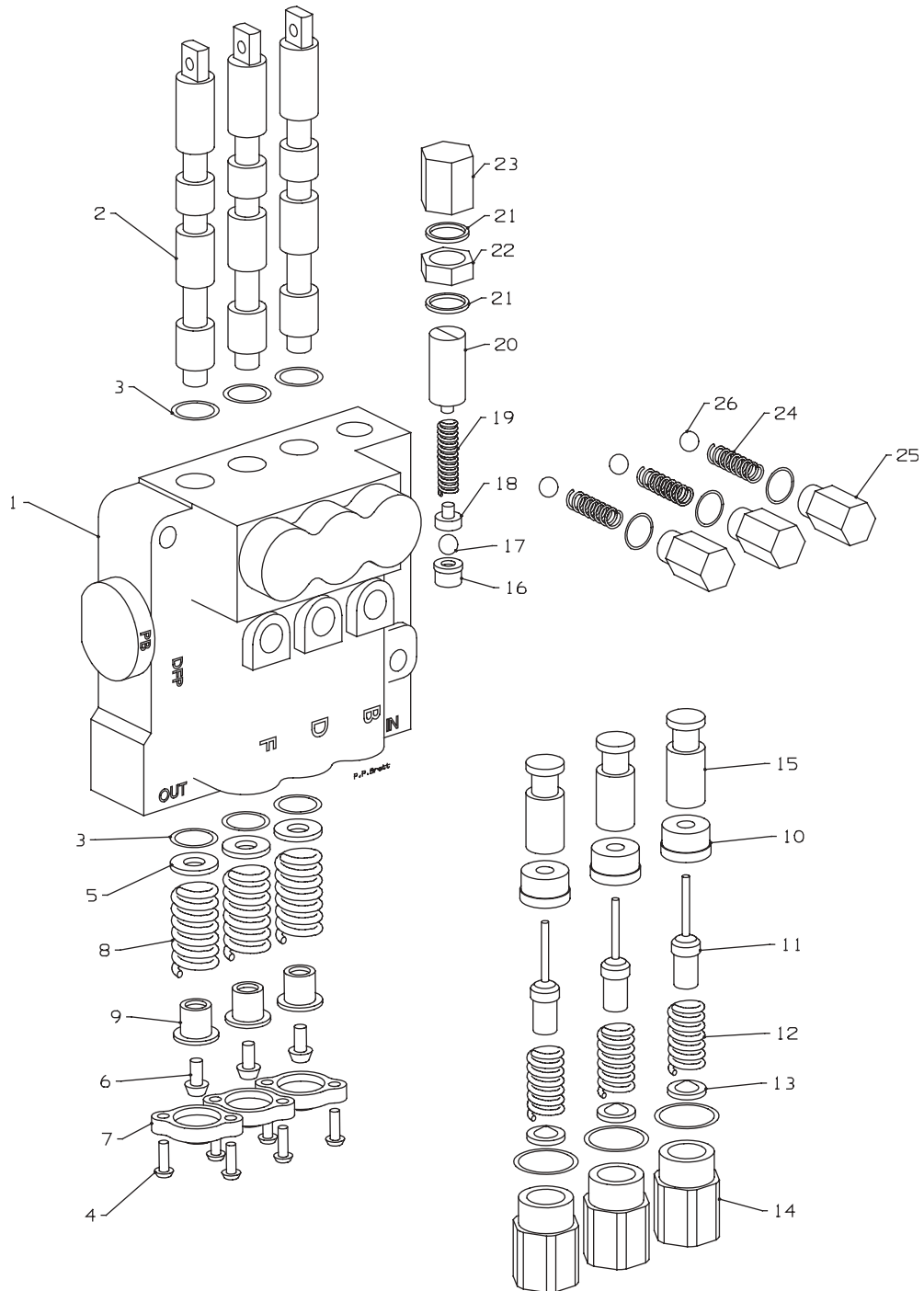
PILOT OPERATED DIVERTOR VALVE - COMMERTIAL 3-PORT

**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
A *	A801250 A230123	DIVERTOR 3PORT SEAL KIT	1 1	

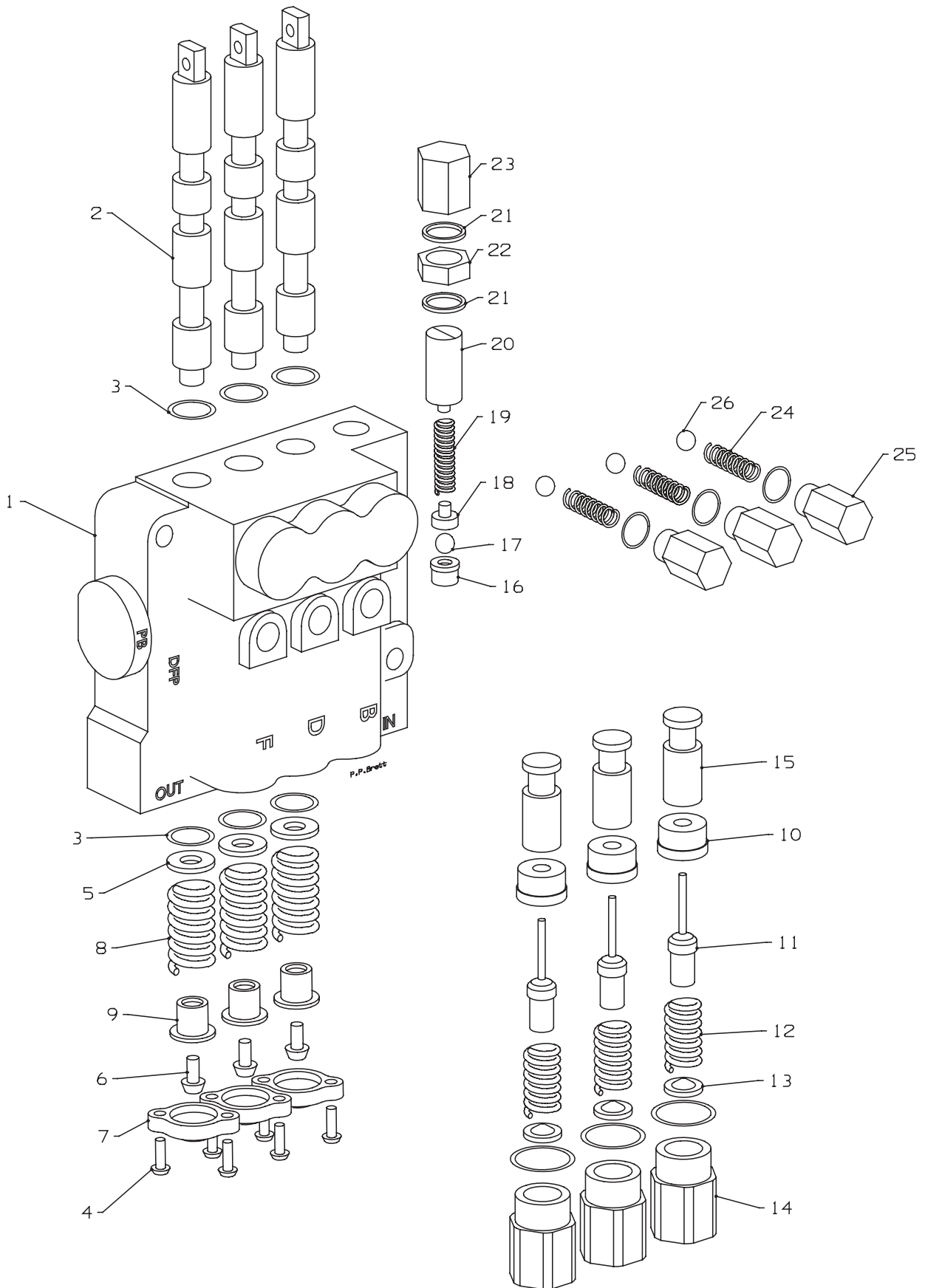
* Not Illustrated

RANSOMES COMMANDER 3520
PARTS MANUAL



LIFT CONTROL VALVE ASSEMBLY
(From serial number ZE300880)
Danfoss / Dukes fluid power

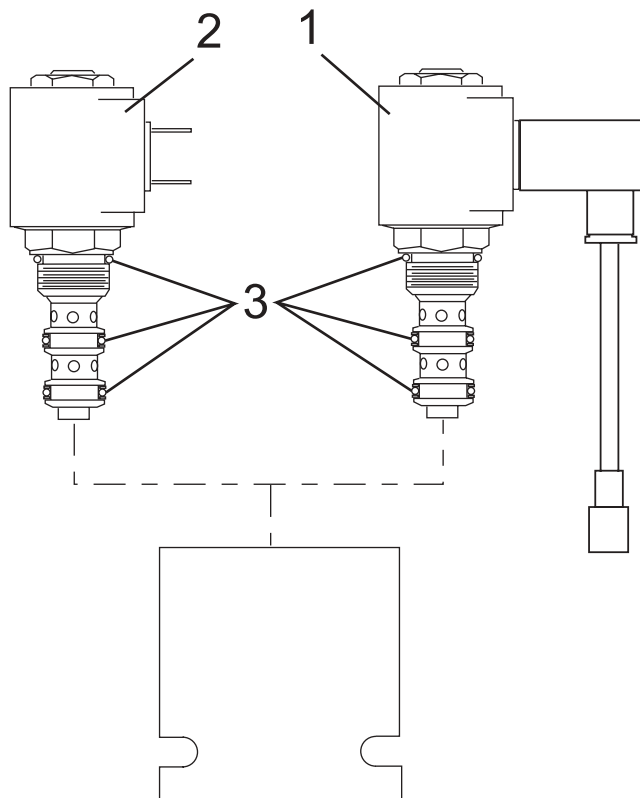
ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
A	A801068	Lift Valve Assy.	1	
1	N/A	Body	1	
2	N/A	Spool	3	
3	+	O Ring	6	contained in seal kit A230033
4	+	Screw with Lock		
	+	washer	6	
5	+	Washer	3	
6	+	Screw	3	
7	+	End Cap	3	
8	+	Spring, return	3	
9	+	Spacer	3	
10	A808922	Seat, pilot chk.	3	
	A802086	Pilot chk. valve assy	3	
11	A801073	• Poppet	1	
12	A808921	• Spring, pilot chk.	1	
13	A808928	• Poppet Stop	1	
14	A808920	• Port Adaptor	1	
15	A808929	Plunger, SA detent	3	
	A801161	Relief valve Cartridge 129 bar (Items 16 to 23)		
16	A801074	• Valve Seat	1	
17	A801075	• Ball, steel	1	
18	A801076	• Ball Retainer	1	
19	A801077	• Spring, relief	1	
20	+	• Screw, adjustment	1	
21	+	• Gasket	2	contained in seal kit A230033
22	+	• Jam Nut	1	
23	+	• Relief Cap	1	
24	+	Spring, detent	3	
25	+	Detent Plug	3	
26	+	Ball, steel	3	
B	A230033	Seal kit	1	
		Parts marked + are not normally held in stock		
		Parts marked N/A are Not Available.		



LIFT CONTROL VALVE ASSEMBLY
(Up to serial number ZE300879)
Danfoss/Dukes fluid power

RANSOMES COMMANDER 3520
PARTS MANUAL

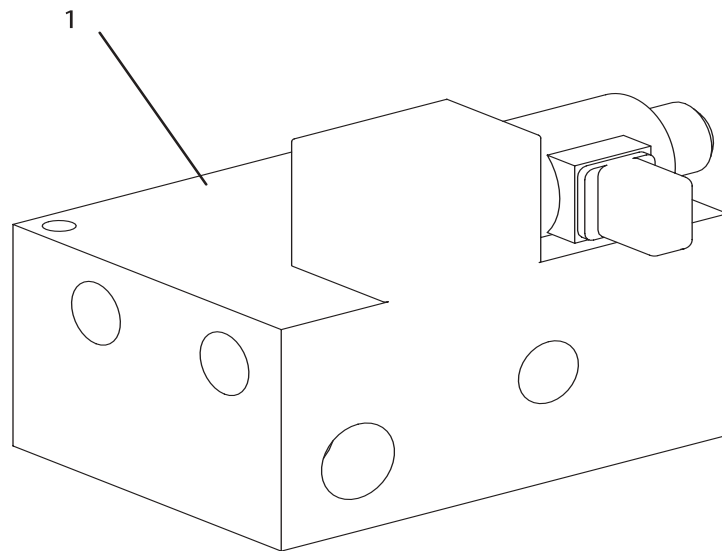
ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	008010360	Lift Valve Assy.	1	MBG 3087 for 3510/3500
2	N/A	Body	1	
3	N/A	Spool	3	
3		O Ring	6	included in seal kit A230033
4	+	Screw with Lock Washer	6	
5	+	Washer	3	
6	+	Screw	3	
7	+	End Cap	3	
8	+	Spring, return	3	
9	+	Spacer	3	
10	A808922	Seat, pilot chk.	3	
	A802086	Pilot chk. valve assy	3	
11	A801073	• Poppet	1	
12	A808921	• Spring, pilot chk.	1	
13	A808928	• Poppet Stop	1	
14	A808920	• Port Adaptor	1	
15	A808929	Plunger, SA detent	3	
	A801097	Relief valve Cartridge 210 bar (Items 16 to 23)		
16	A801074	• Valve Seat	1	
17	A801075	• Ball, steel	1	
18	A801076	• Ball Retainer	1	
19	A801077	• Spring, relief	1	
20	N/A	• Screw, adjustment	1	
21		• Gasket	2	included in seal kit A230033
22	N/A	• Jam Nut	1	
23	N/A	• Relief Cap	1	
24	+	Spring, detent	3	
25	+	Detent Plug	3	
26	+	Ball, steel	3	
		Parts marked + are not normally held in stock		
		Parts marked N/A are Not Available.		



SOLENOID VALVE

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	A801112	Solenoid Valve	1	with 2 pin sealed connector without 2 pin sealed connector
2	4144046	Solenoid Coil	1	
3	A801156	Solenoid Coil	1	
	A801157	Seal Kit	1	

* Not Illustrated



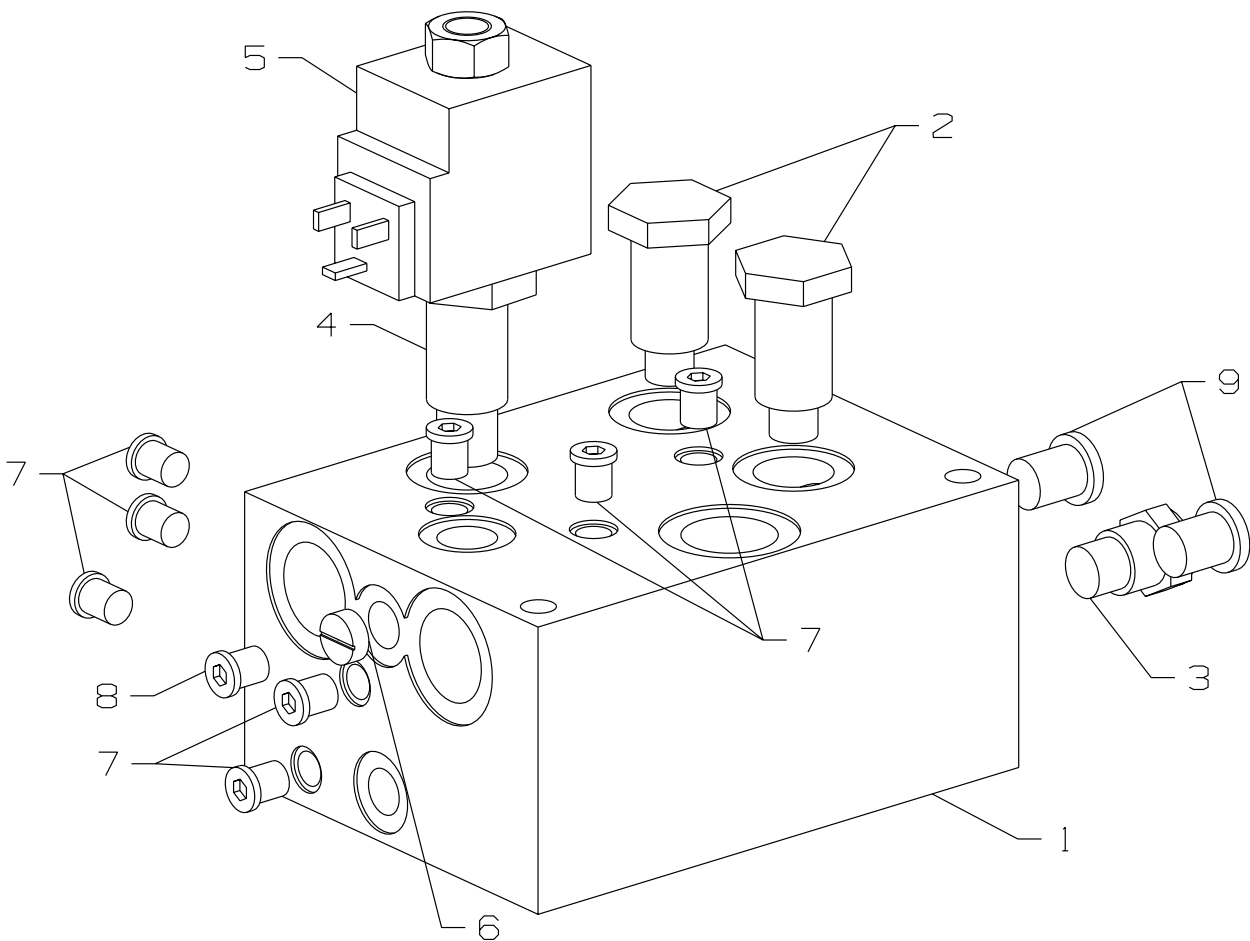
TRANSMISSION VALVE

RANSOMES COMMANDER 3520
PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	A801248	Transmission Valve	1	Savery
*	A230130	• Seal kit	1	6400-0101 cont. 4122019/21/22
*	A902963	• Blanking Plug	2	SAE 6 SOCKET HEAD
*	002218065	•• O Ring	1	
*	A902964	• Oriface Plug (Drilled 1.8)	1	1/8" NPT - 7/8" Taper
*	A902965	• Cetop 3 Solenoid Valve	1	HFA-2B
*	4122022	•• Seal Kit	1	SK03-N
*	4122596	• Piloted Directional Valve	1	R04B4-10-N
*	4122019	•• Seal Kit	1	SK30506N-1
*	008089940	• Check Valve	2	CV10-20-0-N-2
*	4122021	•• Seal Kit	1	SK10-2N-T

* Not Illustrated

RANSOMES COMMANDER 3520
PARTS MANUAL

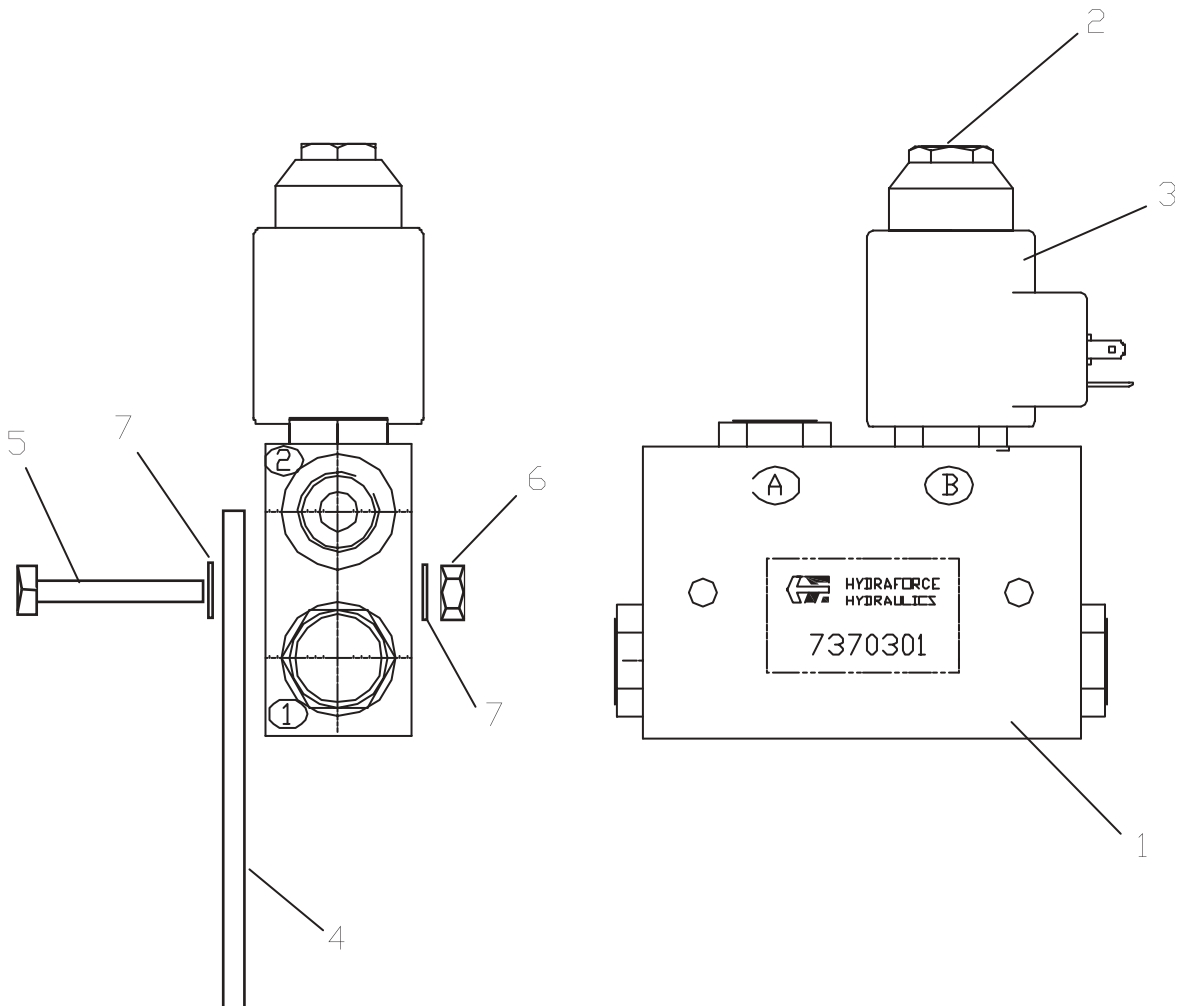


TRANSMISSION VALVE (PARKER)

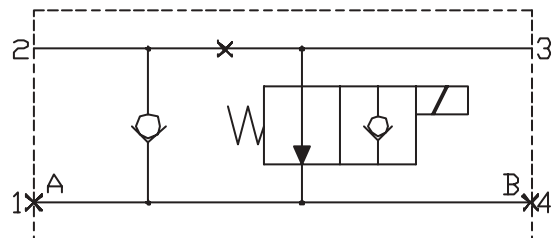
**RANSOMES COMMANDER 3520
PARTS MANUAL**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	4121647	Transmission Valve	1	
	N/A	•Manifold	1	
2	4121529	•Cartridge, Check Valve	2	10C1-5
*		•• Seal Kit	1	Part of seal Kit 4121528
3	4121530	•Cartridge, NC Pilot Directional	1	10CPD1D-75
*		•• Seal Kit	1	Part of seal Kit 4121528
4	4121531	•Valve Stem	1	10SD48
*		•• Seal Kit	1	Part of seal Kit 4121528
5	4121538	•Solenoid	1	D12H20
6	4121541	•Orifice Plug	1	11441-.070
7	4118315	•Plug, NWD-2	8	12961
8	4118326	•Plug, NWD-4	1	12962
9	008012470	•Plug, NWD-6	2	12963
1	008012680	Transmission Valve	1	
	N/A	•Manifold	1	
2	4121529	•Cartridge, Check Valve	2	10C1-5
*		•• Seal Kit	1	Part of seal Kit 4121528
3	4121530	•Cartridge, NC Pilot Directional	1	10CPD1D-75
*		•• Seal Kit	1	Part of seal Kit 4121528
4	4121531	•Valve Stem	1	10SD48
*		•• Seal Kit	1	Part of seal Kit 4121528
5	4121538	•Solenoid	1	D12H20
6	4121541	•Orifice Plug	1	11441-.070
*		•Orifice Plug	1	11441-.094
7	4118315	•Plug, NWD-2	8	12961
8	4118326	•Plug, NWD-4	1	12962
9	008012470	•Plug, NWD-6	2	12963

* Not Illustrated



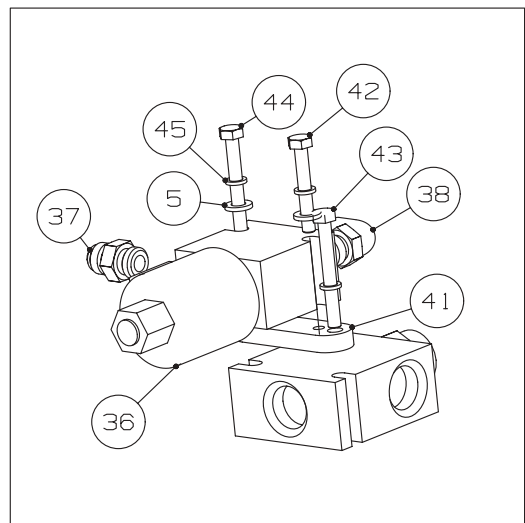
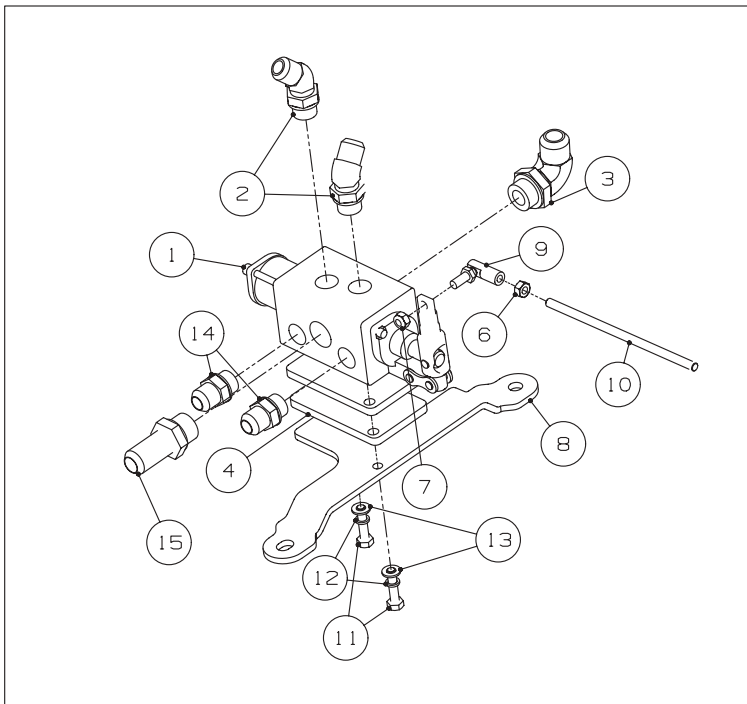
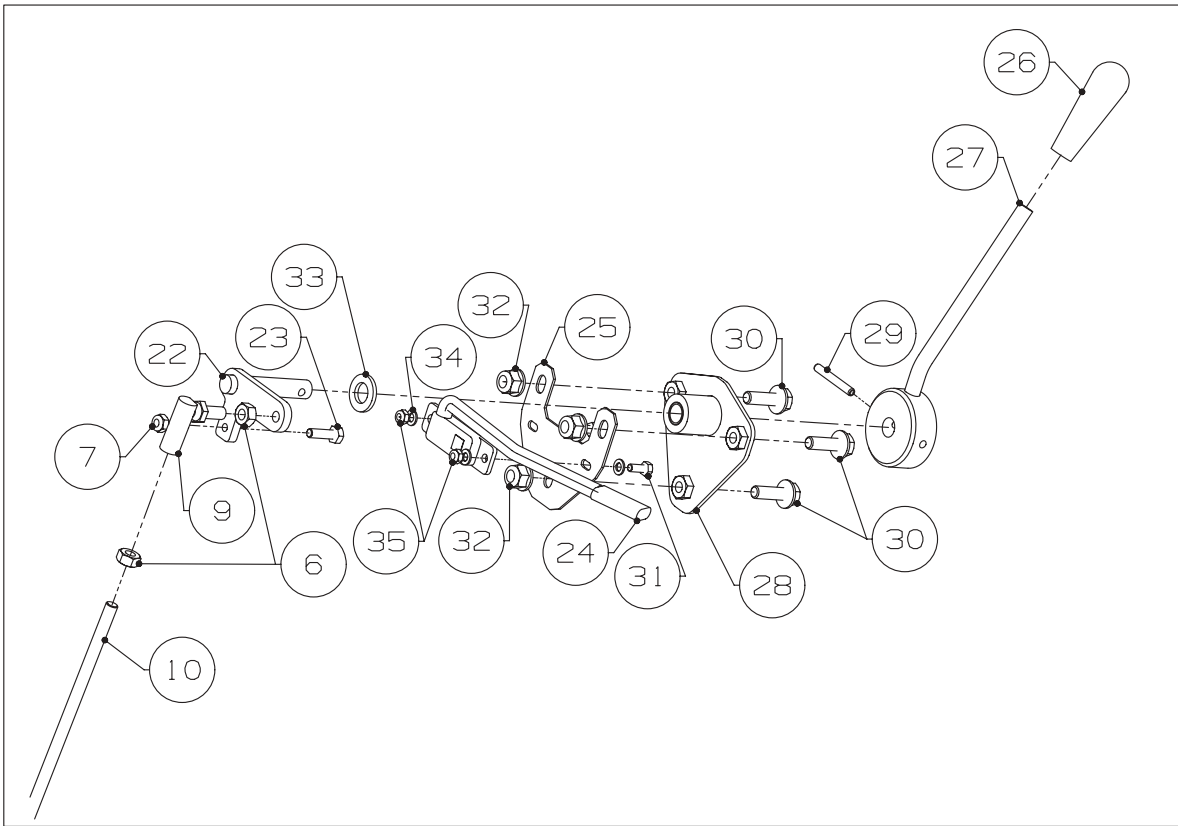
CIRCUIT DIAGRAM



**REAR WHEEL VALVE 4WD REVERSE
(HYDRAFORCE)**

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	008012690	Rear Wheel Drive Valve	2	
	4150761	• Solenoid Valve Assy	1	
2	4158043	• • Solenoid Valve	1	Including Coil
3	008012230	• • • Coil	1	
	008089943	• • Check Valve	1	
	4122021	• Seal Kit	1	for complete valve
4	MBG6823	Valve Plate	2	
5	450006	Bolt M6 x 55	4	
6	450323	Nut M6	4	
7	450389	Washer M6	8	

RANSOMES COMMANDER 3520
PARTS MANUAL



SINGLE UNIT CUTTING VALVES & LINKAGE

**RANSOMES COMMANDER 3520
PARTS MANUAL**

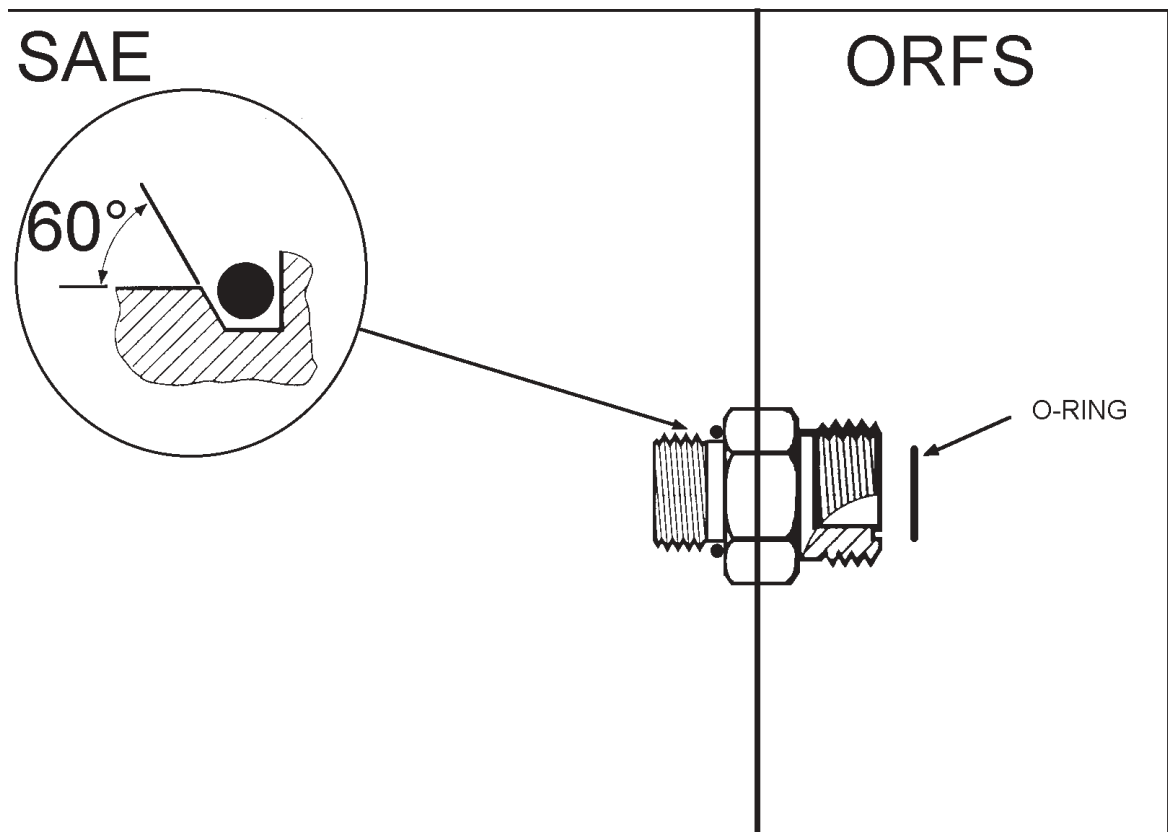
ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	A902816	MOTOR CHANGEOVER VALVE	1	
2	A260062	FTG-45-1/2"BSP-ADJ	2	
3	A249730	90-M/M 3/4 BSP x 1-1/16	1	
4	MBG6693	VALVE SPACER	2	
5	450389	WSHR-M6 x 12.5 x 1.8	3	
6	450324	NUT-HEXM8	3	
7	450377	NUT-HEXM6 NYLOC	2	
8	MBG6738	VALVE BRACKET	1	
9	A814537	M8 BALL JOINT	2	
10	MBG6675	ROD M8 THREADED ENDS	1	
11	450194	SCRW-HEX M8 x 35	2	
12	450411	LOCKWSHR-M8 x 12.75 x 2	2	
13	450390	WSHR-M8 x 17 x 1.8	2	
14	459100074	STRAIGHT CONNECTOR	2	
15	A260061	FTG-3/4"BSPx1"1/16JIC	1	
22	MBF2261	ACTUATOR ASSY	1	
23	450171	SCRW-HEX M6 x 20	1	
24	J3007392	SWITCH-PROXIMITY	1	
25	MBG6658	SWITCH BRACKET	1	
26	A299022	KNOB	1	
27	MBF2240	LEVER ASSY	1	
28	MBF2237	LEVER BOSS ASSY	1	
29	451441	PIN-SPIROL 5 x 40	1	
30	450472	SCRW-HEX M8 x 25	3	
31	450149	SCRW-HEX M5 x 12	2	
32	452436	NUT-HEXM8 FLNG	3	
33	A186902	WSHR-12x17x1.5	AR	
34	450388	WSHR-M5 x 10 x 1.1	4	
35	450376	NUT-HEXM5 NYLOC	2	
36	A902818	SOLONOID VALVE	1	
37	459100202	ADAPTOR-3/8" BSP X 3/8" JIC	1	
38	A249333	90-M/M 3/8 BSPP x 9/16 JIC	1	
41	MBG6661	BOLT STRAP	1	USED ITEM 36.
42	450003	BOLT-M6x40 HEX	1	USED ITEM 41.
43	450006	BOLT-M6x55 HEX	1	USED ITEM 41.
44	450013	BOLT-M6x90 HEX	1	USED ITEM 41.
45	450410	S.L. WASHER-M6x9.6	3	USED ITEM 41.

* Not Illustrated

All hydraulic hose assemblies, tube assemblies & hose tube assemblies have there part numbers either stamped on the sleeve, tube or on a tag.

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
	Bonded Seals			
	Seal	Fitting Size		
	H014008	1/8" BSP		
	H014011	1/4" BSP		
	H014013	3/8" BSP		
	H014016	1/2" BSP		
	H014017	5/8" BSP		
	H014019	3/4" BSP		
	H014022	7/8" BSP		
	H014024	1" BSP		
	O Ring Seal c/w Steel Support Washer			
	Seal	Fitting Size		
	A229975	1/8" BSP		
	A229976	1/4" BSP		
	A229977	3/8" BSP		
	A229978	1/2" BSP		
	A229979	5/8" BSP		
	A229980	3/4" BSP		
	A229981	7/8" BSP		
	A229982	1" BSP		
	A229983	1 1/8" BSP		
	A229984	1 1/4" BSP		

FITTING TYPES

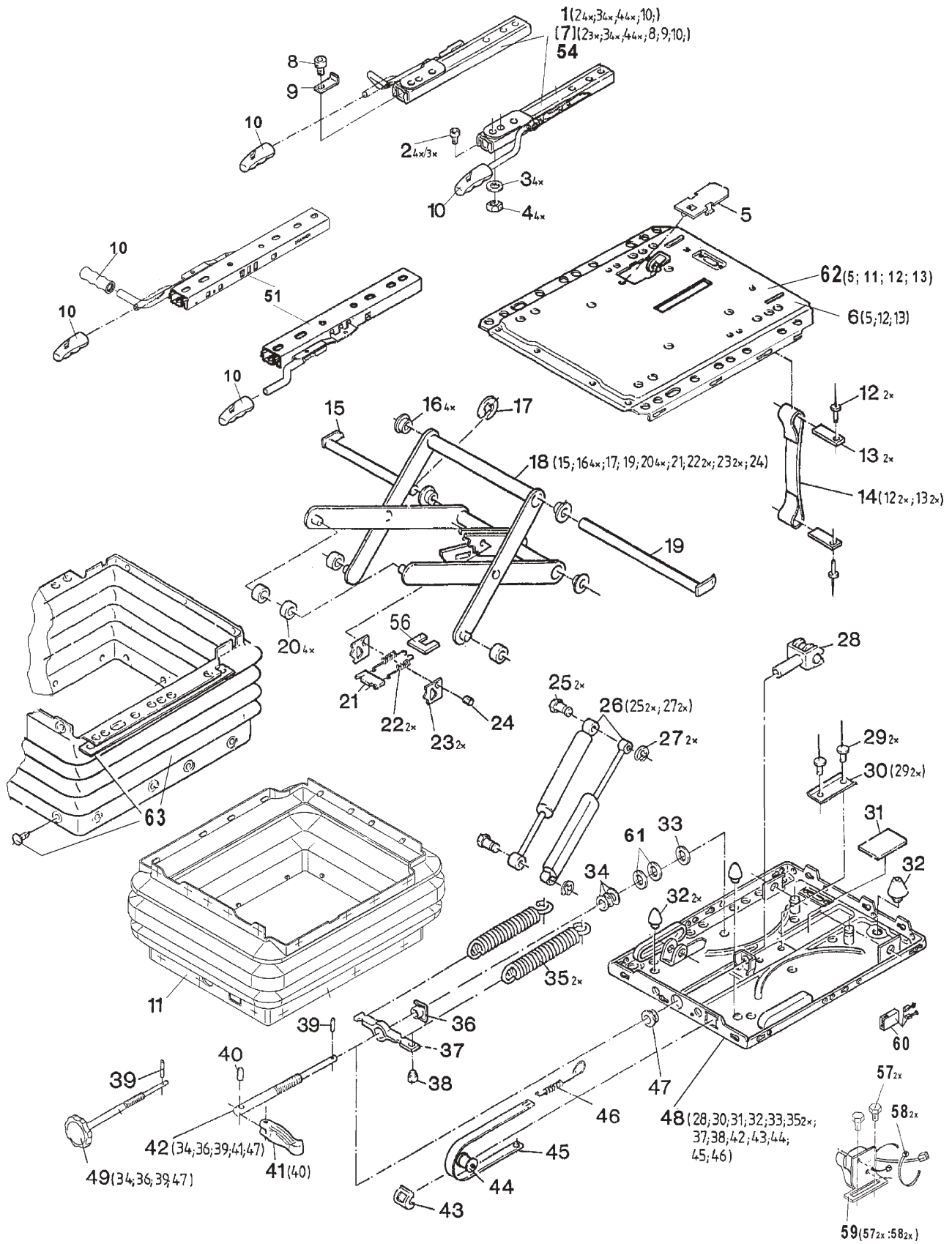


All hydraulic hose assemblies, tube assemblies & hose tube assemblies have there part numbers either stamped on the sleeve, tube or on a tag.

ITEM	RANSOMES PART NO	DESCRIPTION	QTY	REMARKS
	O RING ORF			
	O RING	FITTING SIZE		
	158061-01	1 1/16" UNF		
	158061-02	1 3/16" UNF		
	158061-08	1" UNF		
	158061-09	1 - 3/16" UNF		
	158061-15	1- 11/16" UNF		
	158061-18	9/16" UNF		
	158061-19	1 -7/16" UNF		
	O RINGS SAE			
	O RING	FITTING SIZE		
	A221803	3/8" UNF		
	A221804	7/16" UNF		
	A221806	9/16" UNF		
	A221808	3/4" UNF		
	A221810	7/8" UNF		
	A221812	1 - 1/16" UNF		
	A221814	1- 5/16" UNF		
		Hose Clips		
	Clip	Size		
	A192516	6 - 16		
	A192532	13 - 32		
	A192557	34 - 57		
	A192522	8 - 32		
	A192540	19 - 40		
	379050530	Plasic Spring Guard Plastic Spring Guard	AR	Order by the Metre
	002989370	Hose Sleeving	AR	Order by the Metre
	002984016	Small Large	AR AR	Order by the Metre Order by the Metre

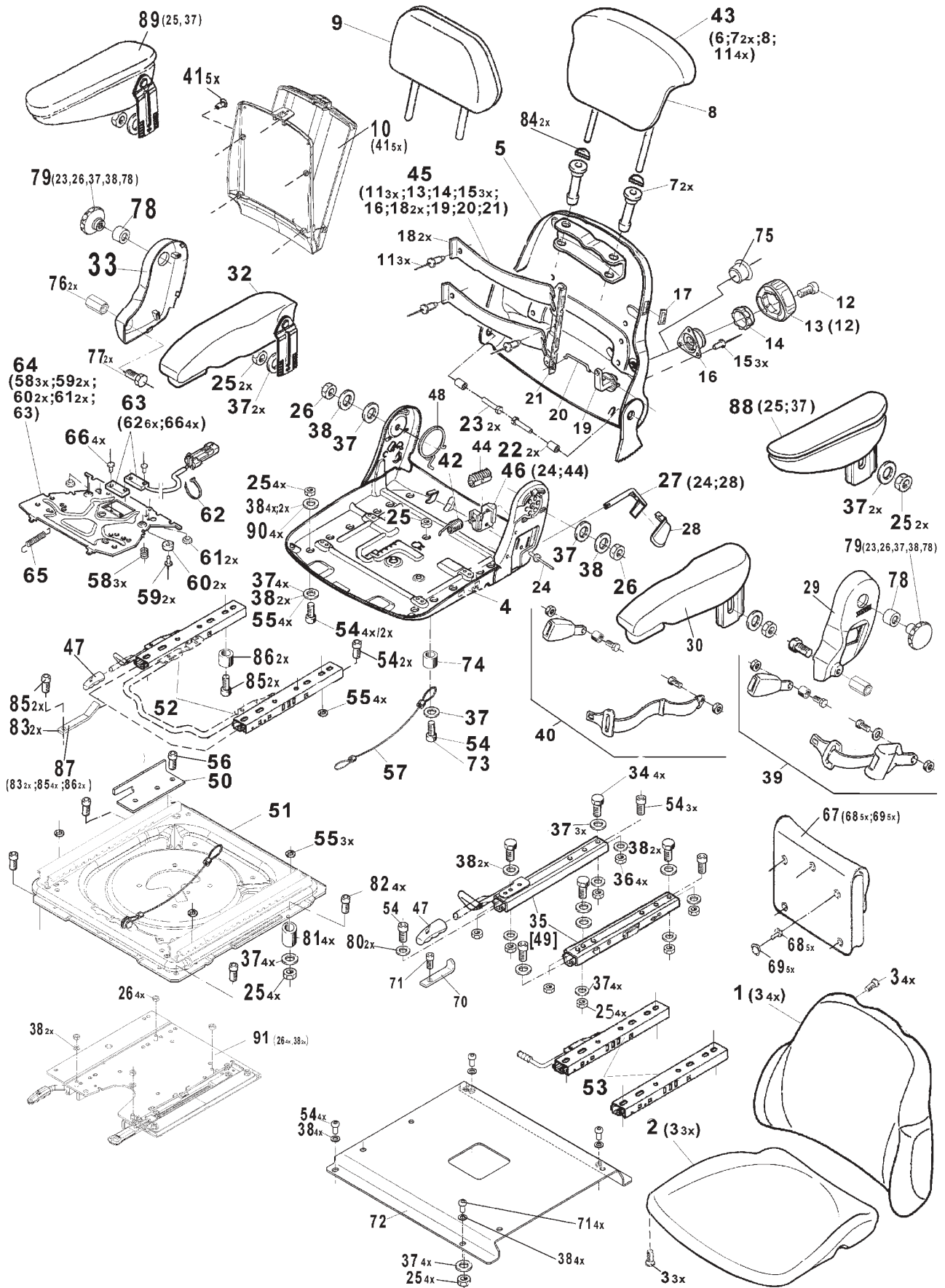
* Not Illustrated

RANSOMES COMMANDER 3520 PARTS MANUAL



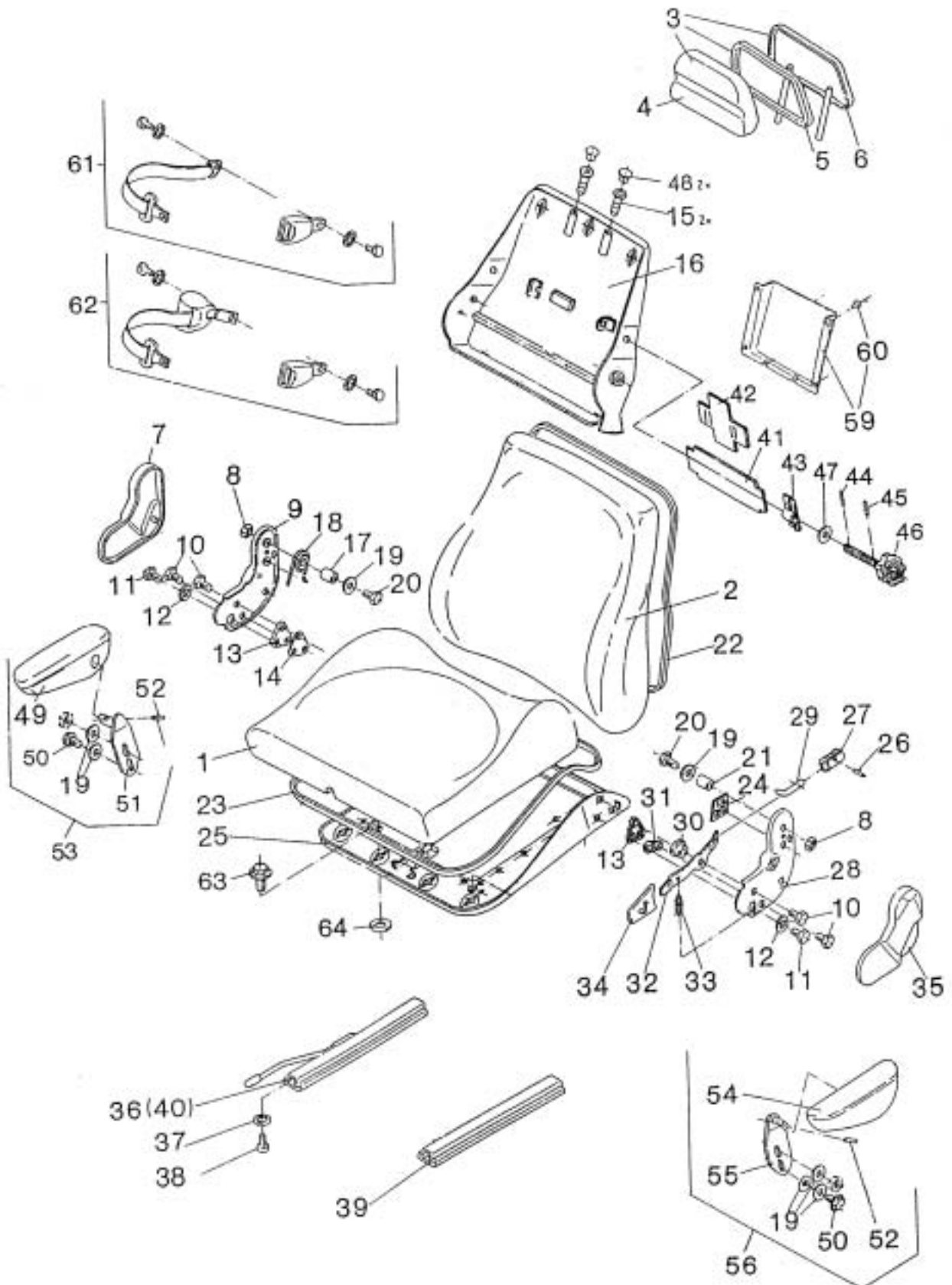
ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
5	008173680	Cover	1	
6		Kit, Suspension Upper	1	
11		Kit, Bellow	1	
15	008173790	Bolt	1	
16	008173800	Bushing	4	
18	008199900	Swing Arm Kit	1	
19		Bolt	1	
20	008173780	Roller	4	
21	008173820	Plate	1	
22		Tension Spring	2	
23	008173830	Release Plate	2	
24	008173840	Bolt	1	
25	008173710	Bolt, M8 x 22, Yellow	2	
26	008199680	Kit, Shock Absorber, S	1	
27	008173720	Washer, Retaining, 5 mm	2	
28		Fork	1	
29	008173740	Rivet, 4.0 x 10.0	2	
30		Bracket, U-Shaped Pro	1	
31	008173760	Rubber Plate	1	
32	008173730	Bumper Set	1	
33	008173870	Thrust Washer Kit	1	
35	008144410	Spring, Tension	2	
36	008173880	Nut, M12, Flange	1	
37	008173910	Spring Bracket	1	
38	008173930	Plug, Retainer	1	
39		Pin, 3.0 x 16	1	
40		Pin, 4 x 28	1	
41		Handle (Toggle)	1	
42		Adjustment Spindle	1	
43	008173950	Guide	1	
44	008193960	Roller	1	
45	008193920	Band, Weight, 130 kg	1	
46	008173940	Tension Spring	1	
47		Bushing	1	
52		Suspension Lower Par	1	
53		Fixing Parts	1	
55		Suspension MSG85	1	
57		Screw, M6 x 12	2	
58		Ties, Cable, 2.5 x 102	2	
59		Switch	1	
60	008174000	Connector, Electrical	1	

RANSOMES COMMANDER 3520 PARTS MANUAL



ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	113048	Assy, Cushion, Backrest	1	
2		Assy, Cushion, Seat	1	
3		Screw, M5 x 25, Pan Hd	7	
4		Seat Pan	1	
5		Backrest Pan Kit	1	
7		Tube	2	
8		Backrest Extension	1	
22		Tube	2	
23		Screw, M8-1.25 x 40	2	
24		Rivet, 6 x 12	1	
25		Nut, Hex, M8-1.25	6	
26		Nut, Hex, M8-1.25	2	
27		Lever	1	
28		Handle, Grey	1	
29		Cover, LH, Blk	1	
33		Cover, RH, Blk	1	
34		Screw M8 x 16	4	
35		Set of Adjustment Rails	1	
36		Nut, Hex M8-1.25	4	
37		Washer, Flat, M8	11	
38		Washer 8.4-Hv140	6	
39		Kit, Seatbelt, 2 Retractable	1	
40		Seatbelt, 2 Non-retractable	1	
42		Spring, Spiral	1	
44		Stop	1	
46		Bearing Kit	1	
48		Spring, Leg, Backrest	1	
49		Set of Adjustment Rails	1	
54		Screw, M8 x 16, Hex Socket	4	
67		Literature Box	1	
68		Blind Rivet 3.2 x 11.2	5	
69		Ball	5	
88		Armrest	1	
89		Armrest	1	

RANSOMES COMMANDER 3520
PARTS MANUAL



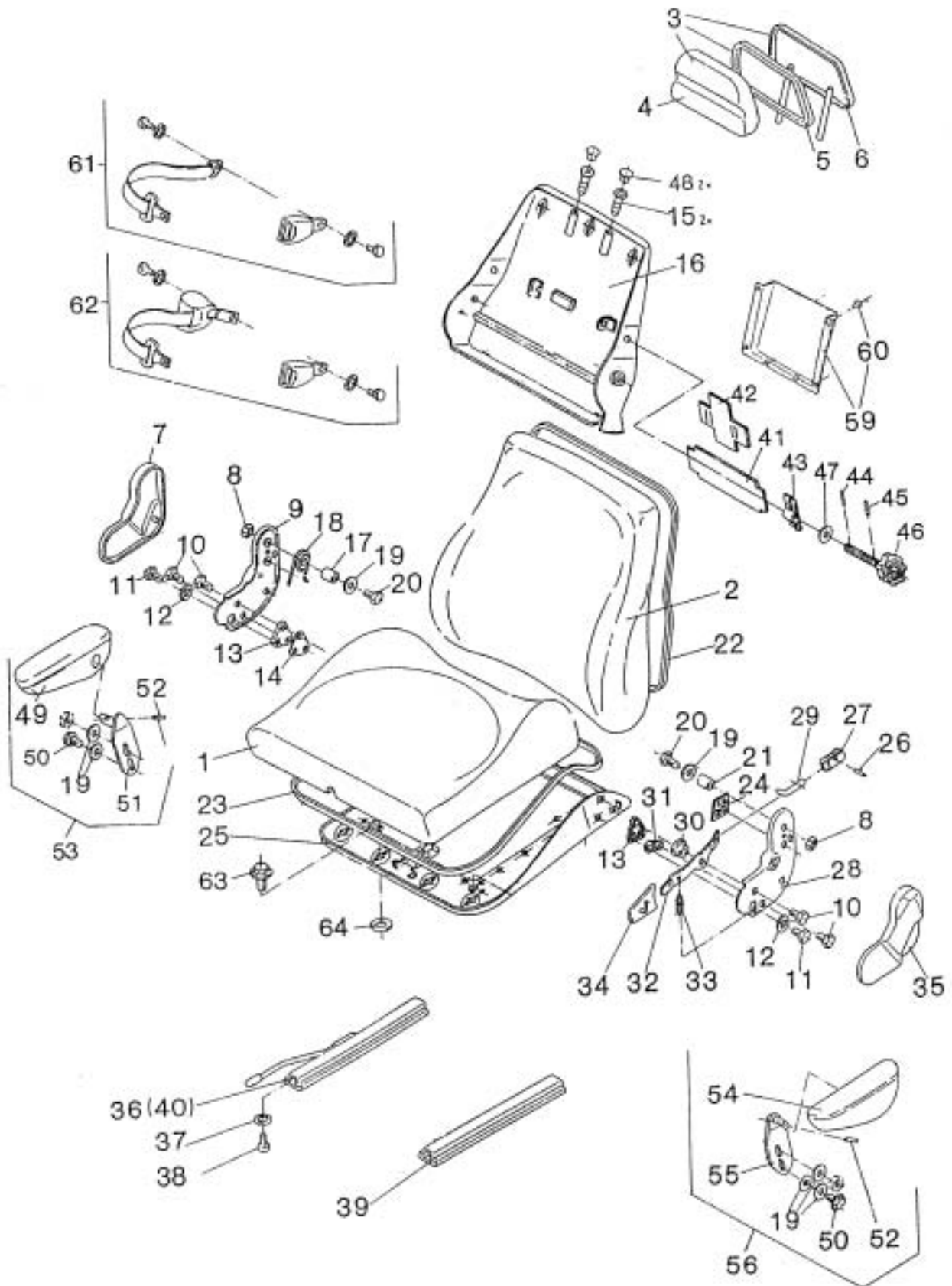
SEAT BREAKDOWN S85 /90R

RANSOMES COMMANDER 3520
PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	A819940	SEAT ASSY COMPLETE	1	INCLUDING SUSPENSION
2	A819945	SEAT CUSHION	1	
3	A819946	BACK REST CUSHION	1	
4	A819956	HEAD REST ASSY.	1	
5	A819947	HEAD REST CUSHION	1	
6	A817352	EDGE STRIP	1	
7	N/A	HEAD REST FRAME	1	
8	A819961	COVER RH	1	
9	A817337	NUT	2	
10	A817338	MOUNTING RH	1	
11	A817339	SCREW	4	
12	A817340	SCREW	2	
13	A817341	SP WASHER	2	
14	A817342	DISTANCE PLATE	2	
15	A817343	DISTANCE PLATE	1	
16	A817344	BUSH	2	
17	A819969	BACK PLATE	1	
18	A817345	TUBE	1	
19	A817346	SPRING	1	
20	A817347	WASHER	2	
21	A817348	SCREW	2	
22	A817349	TUBE	1	
23	A817350	EDGE STRIP	1	
24	A817351	EDGE STRIP	1	
25	A817353	DISTANCE PIECE	1	
26	A817354	SEAT PLATE	1	
27	A819965	PIN	1	
28	A819966	DETENT	1	
29	A817355	MOUNTING LH	1	
30	A819967	ROD	1	
31	A817356	BUSH	1	
32	A817357	DISTANCE PIECE	1	
33	A817335	LEVER	1	
34	A817336	SPRING	1	
35	A819988	HANDLE	1	
36	A817358	COVER LH	1	
37	A819964	RAIL WITH LEVER	1	
38	A817359	WASHER	4	
39	A817360	SCREW	4	
40	A819975	RAIL	1	
41	A817361	PLATE	1	
42	A817362	PLATE	1	
43	A819970	NUT	1	
44	A819971	PIN	1	

* Not Illustrated

RANSOMES COMMANDER 3520
PARTS MANUAL



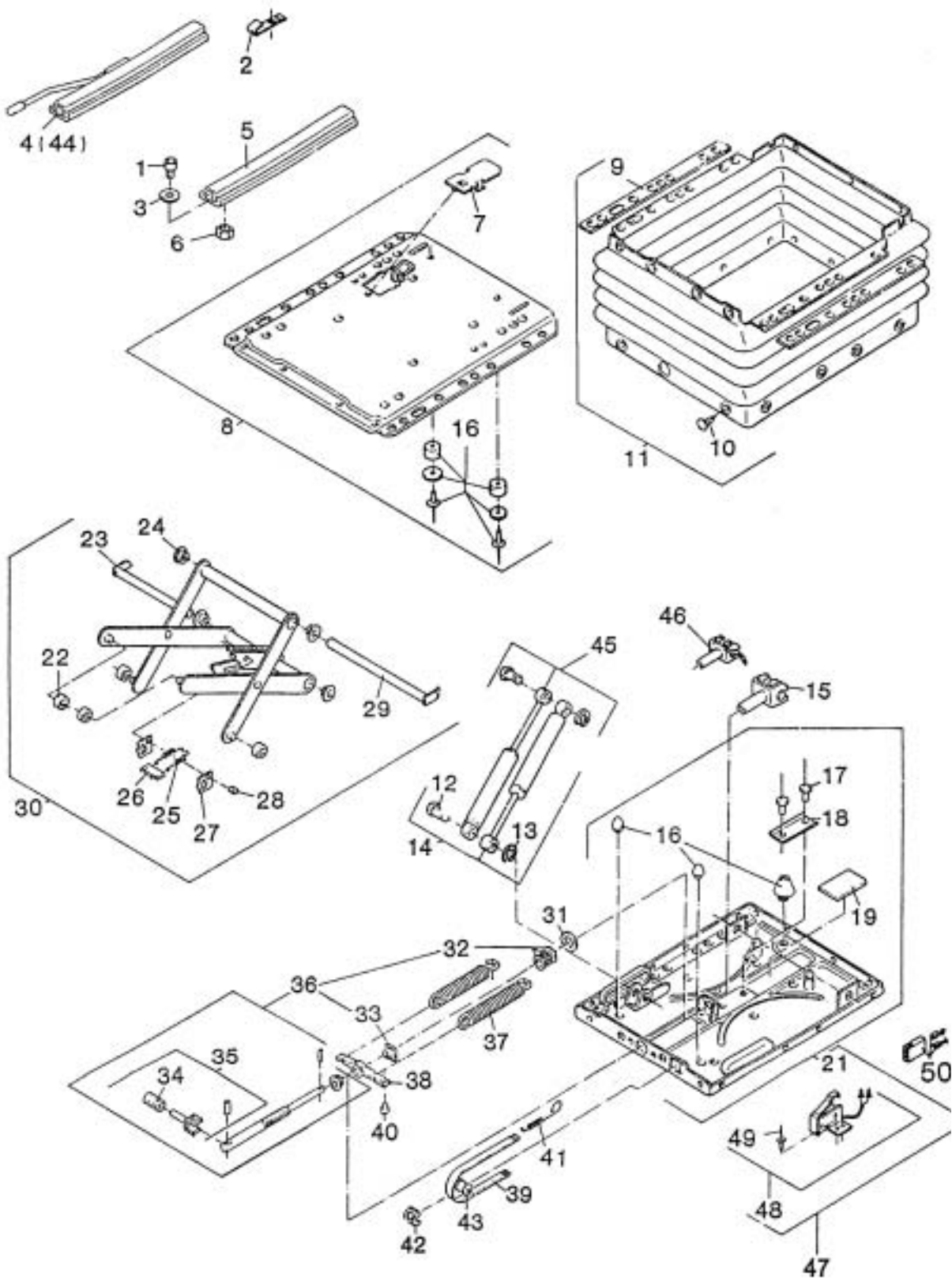
SEAT BREAKDOWN

RANSOMES COMMANDER 3520
PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
45	A819972	PIN	1	
46	A819973	ADJUSTING SPINDLE	1	
47	A819974	WASHER	1	
48	N/A	PLUG	2	
49	A819955	ARM REST RH	1	
50	N/A	SCREW	2	
51	N/A	SUPPORT RH	1	
52	N/A	PIN	2	
53	A819985	ARM REST ASSY. RH	1	
54	A817363	ARM REST LH	1	
55	N/A	SUPPORT LH	1	
56	A819986	ARM REST ASSY. LH	1	
59	N/A	COVER ASSY	1	
60	N/A	SCREW	1	
61	N/A	SEAT BELT FIXED	1	
62	N/A	SEAT BELT REEL	1	
63	N/A	SCREW		
64	N/A	WASHER		

* Not Illustrated

RANSOMES COMMANDER 3520
PARTS MANUAL

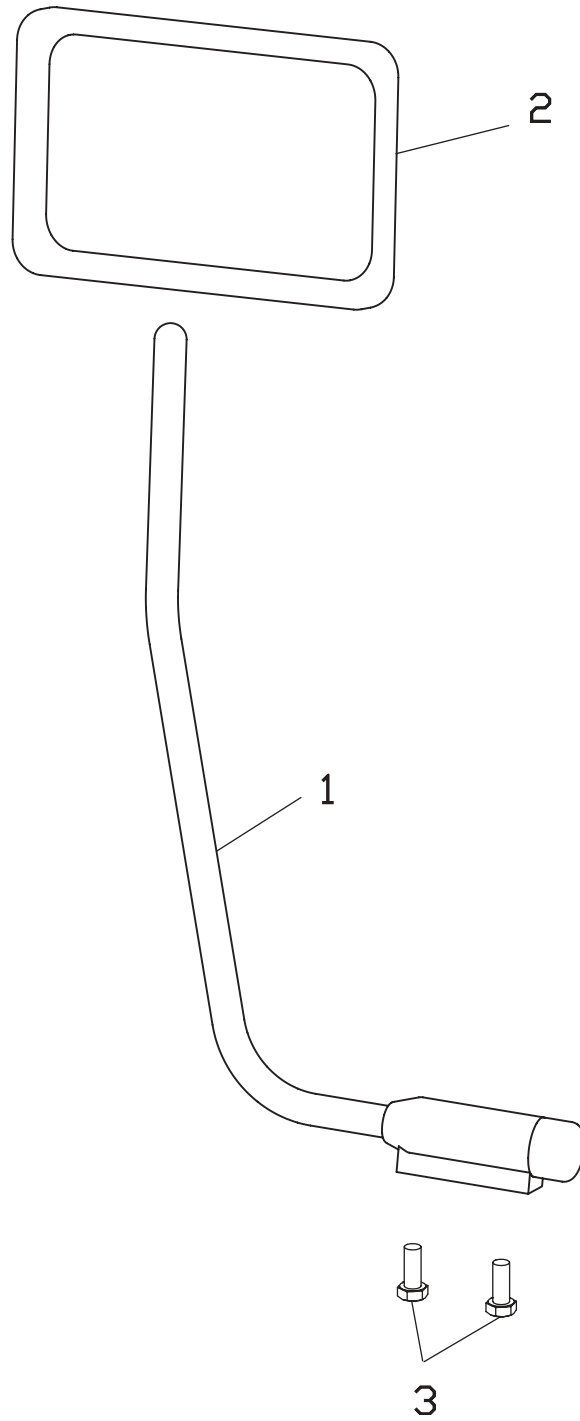


SEAT SUSPENSION BREAKDOWN DS85H

RANSOMES COMMANDER 3520
PARTS MANUAL

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	A817364	SCREW	6	
2	A817365	STOP	1	
3	A817366	WASHER	2	
4	A819964	SLIDE WITH LEVER	1	
5	A819975	SLIDE	1	
6	A817367	NUT	6	
7	A817368	COVER	1	
8	A817369	BASE ASSY.	1	
9	A817370	PLATE	2	
10	A819979	PIN	21	
11	A819984	GAITER ASSY.	1	
12	A817371	PIN	2	
13	A817372	E CLIP	2	
14	A819968	DAMPER ASSY	1	
16	A817373	BUFFER ASSY.	1	
17	A817374	RIVET	2	
18	A817375	RUNNER	1	
19	A817376	PLATE	1	
20	A817377	SUSPENSION ASSY.	1	
22	A817378	ROLLER	4	
23	A817379	PIN	1	
24	A817380	BUSH	4	
25	A817381	SPRING	2	
26	A817382	PLATE	1	
27	A817383	PLATE	2	
28	A817384	BOLT	1	
29	A817385	PIN	1	
30	A819990	HINGE	1	
31	A817386	WASHER	1	
32	A817387	BEARING	1	
33	A817388	NUT	1	
34	A817389	HANDLE	1	
35	A817390	LEVER ASSY.	1	
36	A819992	WEIGHT ADJUSTER	1	
37	A819941	SPRING	2	
38	A817391	SPRING HOOK	1	
39	A817392	WEIGHT INDICATOR	1	
40	A817393	STOP	1	
41	A817394	SPRING	1	
42	A817395	WINDOW	1	
43	A817396	ROLLER	1	
46	A817397	FORK	1	
47	A817398	SPRING FRAME	1	
48	A905448	MICROSWITCH	1	
49	A817399	SCREW	2	
50	A817400	CONNECTOR	1	

* Not Illustrated



MIRRORS

ITEM	RANSOMES PARTNO	DESCRIPTION	QTY	REMARKS
1	009096180	LH MIRROR ARM	1	
	009096170	RH MIRROR ARM	1	
2	008194180	MIRROR HEAD	2	
3	450171	SCREW HEX M6 x 20	4	

* Not Illustrated



World Class Quality, Performance and Support

Equipment from Ransomes Jacobsen Limited is built to exacting standards ensured by ISO 9001 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.



BOB-CAT BUNTON CUSHMAN JACOBSEN RANSOMES RYAN E-Z-GO

Ransomes Jacobsen Limited
West Road, Ransomes Europark, Ipswich, England, IP3 9TT
English Company Registration No. 1070731
www.ransomesjacobsen.com