

# Spearhead

## Excel 323 & Twiga 3000 Reach Mowers



**PARTS MANUAL**

**Spearhead**  
**Excel 323 &**  
**Twiga 3000**  
**Compact Reach Mower**

**Parts Book**

7<sup>th</sup> Edition – October 2008

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# Spearhead Excel 323 Reach Mower

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# Spearhead Excel 323 Reach Mower

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## Ordering Your Part's

When ordering parts please refer to your parts list to help your dealer with your order.

Part number and quantity  
Description  
Machine model number  
Serial number of the machine  
Delivery instructions (e.g. next day).

Delivery is normally via carrier direct to your dealer. Please check with your dealer for stock availability and arrangement of dispatch. Ensure you or your dealer has sufficient cover for parts requirement outside factory hours.

When ordering your seal kits please quote both codes stamped on the base of the cylinder.

## Important Note

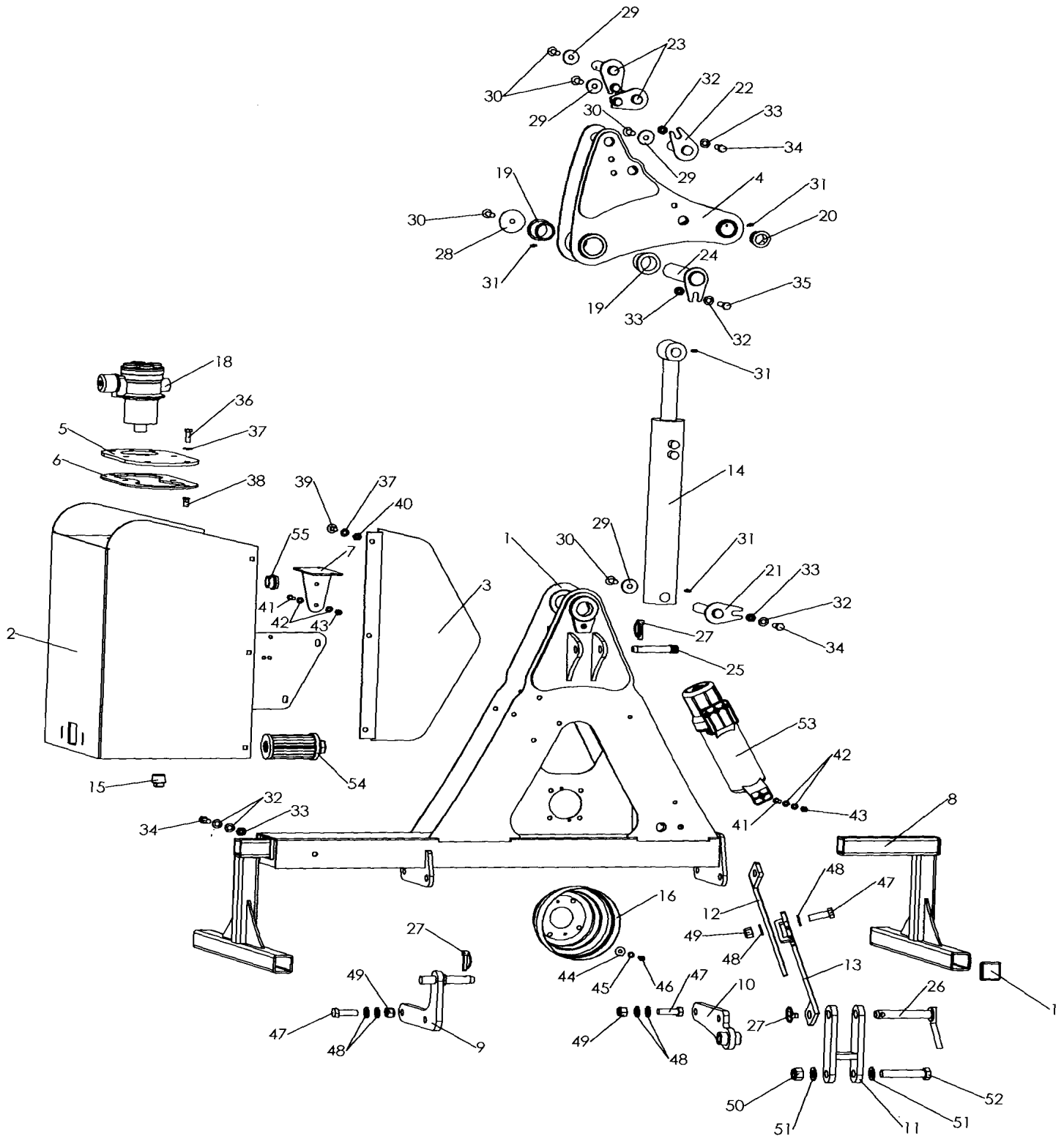
The information contained in this manual is correct at the time of publication. However, in the course of constant development, changes in specification are inevitable. Should you find the information given in this book different to the machine it relates to, please contact the "After Sales Department" for advise.

### Key:

(LH) = Left hand  
(RH) = *Right hand*

# Spearhead Excel 323 Reach Mower

## Main Frame Assembly



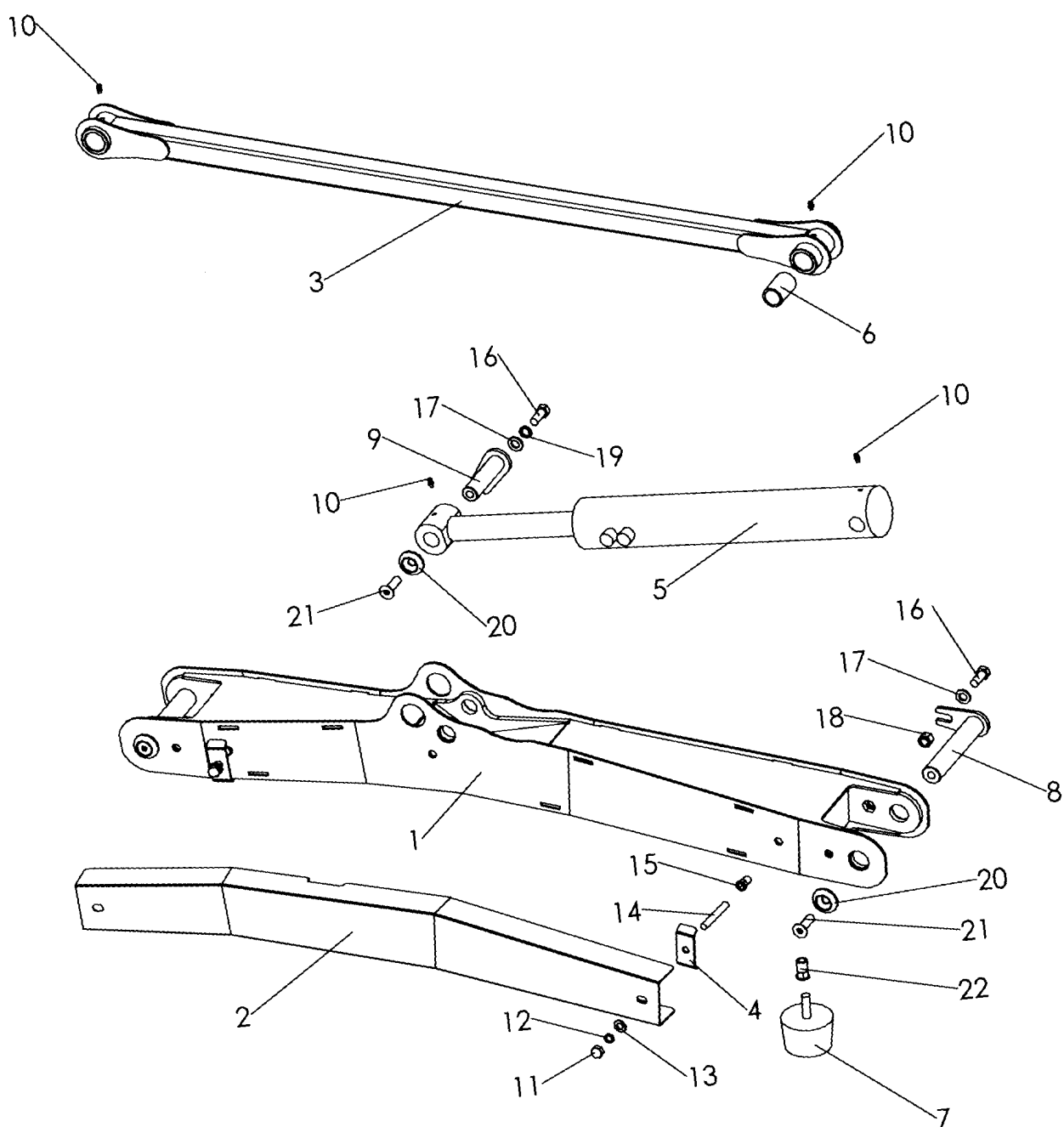
# Spearhead Excel 323 Reach Mower

## Main Frame Assembly

REF. NO	PART NO.	DESCRIPTION
1	1800176	A FRAME
2	1800163	TANK
3	1800164	REAR PANEL
4	1800166	LIFT FRAME
5	1800173	TANK LID
6	1800168	GASKET
7	1800165	BRACKET
8	1800178	LEG
9	1800179	LOWER LINK
10	1800169	LOWER LINK ARM
11	1800175	CLEVIS
12	1800351	INNER STABILISER
13	1800352	OUTER STABILISER
14	3580680	RAM
	3580680W	SEAL KIT
15	T1698	PLUG
16	5770107	COVER
17	07.262.03	CAP
18	3900049	FILTER
19	4600127-A	BUSH
20	4600135B	BUSH
21	1777358	PIN
22	1777761	PIN
23	1778037	PIN
24	1782055	PIN
25	6310202	TOP LINK PIN
26	6310229	LOWER LINK PIN
27	00.372.01	CLIP
28	1777208	WASHER
29	1777209	WASHER
30	2770398	SCREW
31	2770467	GREASE NIPPLE
32	2770417	NUT
33	2770436	WASHER
34	2770535	BOLT
35	2770397	BOLT
36	2770421	BOLT
37	2770434	WASHER
38	2770203	RIVNUT
39	2770255	BOLT
40	2770412	NUT
41	2770415	BOLT
42	2770432	WASHER
43	2770416	NUT
44	2770244	WASHER
45	2770469	WASHER
46	2770370	BOLT
47	2770425	BOLT
48	2770454	WASHER
49	2770447	NUT
50	2770409	NUT
51	2770517	WASHER
52	2770400	BOLT
53	46505.01	FLASK
54	3900048	STRAINER
55	3900063	LEVEL GAUGE

# Spearhead Excel 323 Reach Mower

## Main Arm Assembly



# Spearhead Excel 323 Reach Mower

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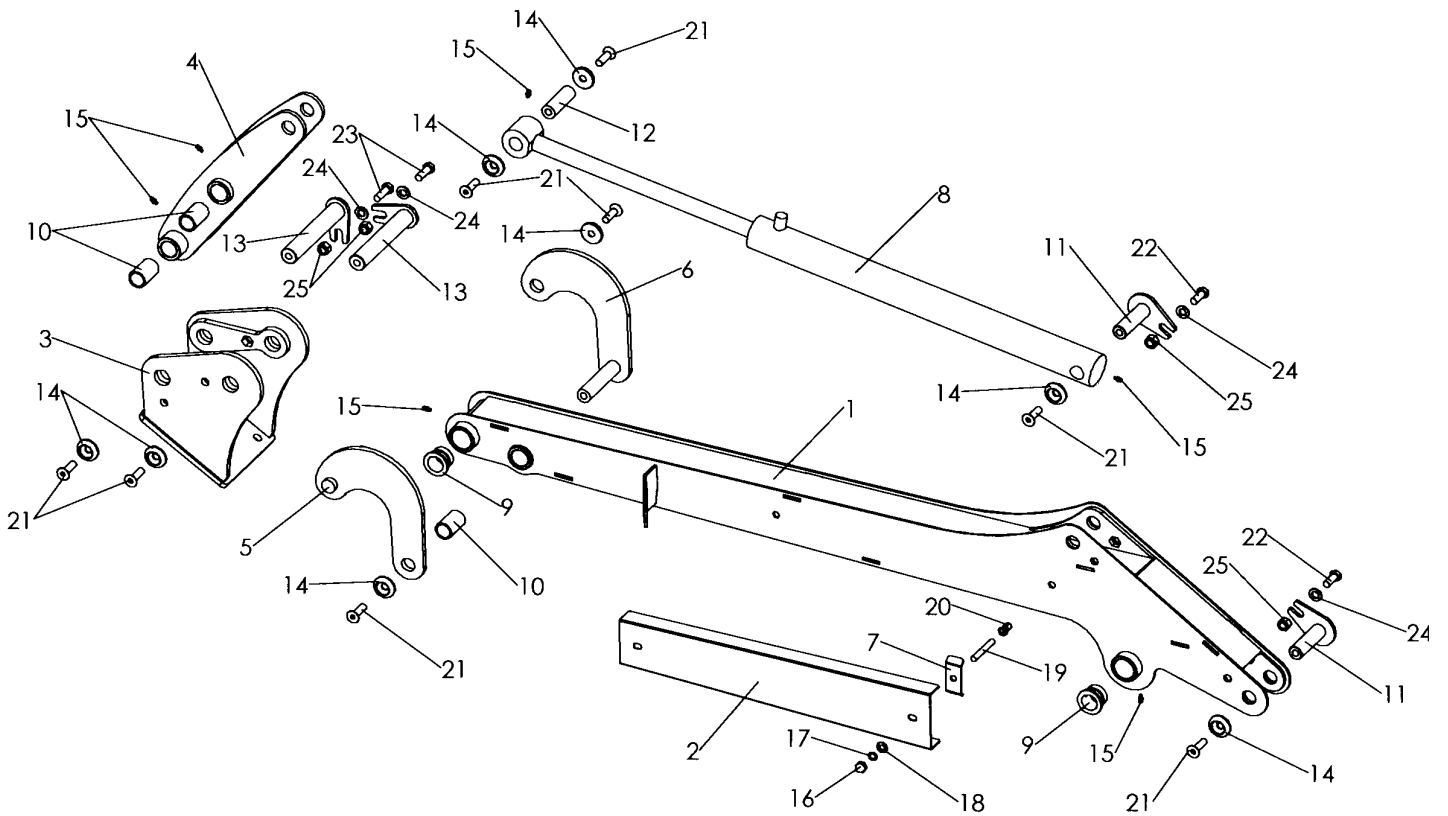
## Main Arm Assembly

REF. NO	PART NO.	DESCRIPTION
1	1800160	MAIN ARM
2	1800161	LH HOSE COVER
2	1800170	RH HOSE COVER
3	1778003	TIE BAR
4	1800177	CLAMP
5	3580680	RAM
	3580680H	SEAL KIT
6	4600124	BUSH
7	8770634	BUMP STOP
8	1777763	PIN
9	1778038	PIN
10	2770467	GREASE NIPPLE
11	9100025	NUT
12	2770469	SPRING WASHER
13	2770434	WASHER
14	04.282.76	STUD
15	2770203	RIVNUT
16	2770420	BOLT
17	2770436	WASHER
18	2770417	NUT
19	2770442	SPRING WASHER
20	1777209	WASHER
21	2770398	SCREW
22	2770205	RIVNUT



# Spearhead Excel 323 Reach Mower

## Dipper Arm Assembly



# Spearhead Excel 323 Reach Mower

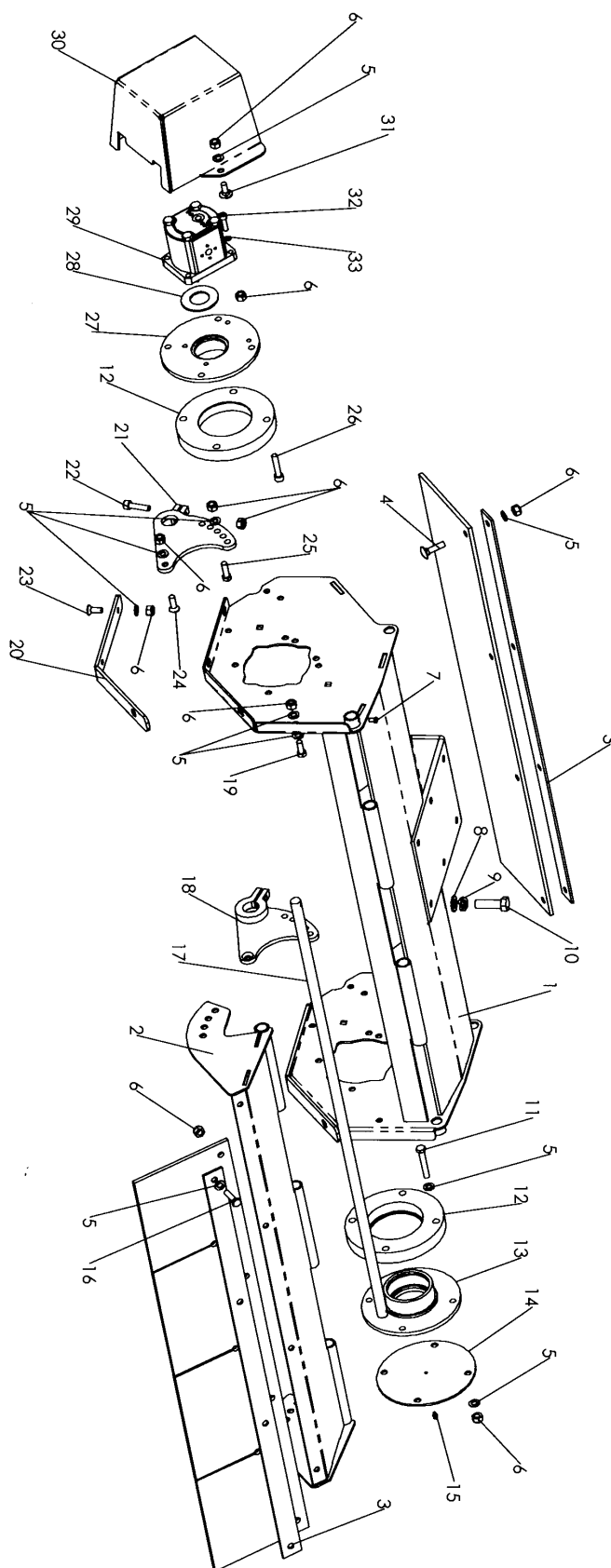
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## Dipper Arm Assembly

REF. NO	PART NO.	DESCRIPTION
1	1800167	DIPPER ARM
2	1800162	HOSE COVER
3	1778013	HEAD BRACKET
4	1778031	CROWD LINK
5	1777790	LH LINK
6	1777790R	RH LINK
7	1800177	CLAMP
8	3580644	RAM
	3580644W	SEAL KIT
9	4600135B	BUSH
10	4600124	BUSH
11	1778036	PIN
12	1778039	PIN
13	1777483	PIN
14	1777209	WASHER
15	2770467	GREASE NIPPLE
16	9100025	NUT
17	2770469	SPRING WASHER
18	2770434	WASHER
19	04.282.76	STUD
20	2770203	RIVNUT
21	2770398	SCREW
22	2770420	BOLT
23	2770535	BOLT
24	2770436	WASHER
25	2770417	NUT

# Spearhead Excel 323 Reach Mower

## Head Assembly



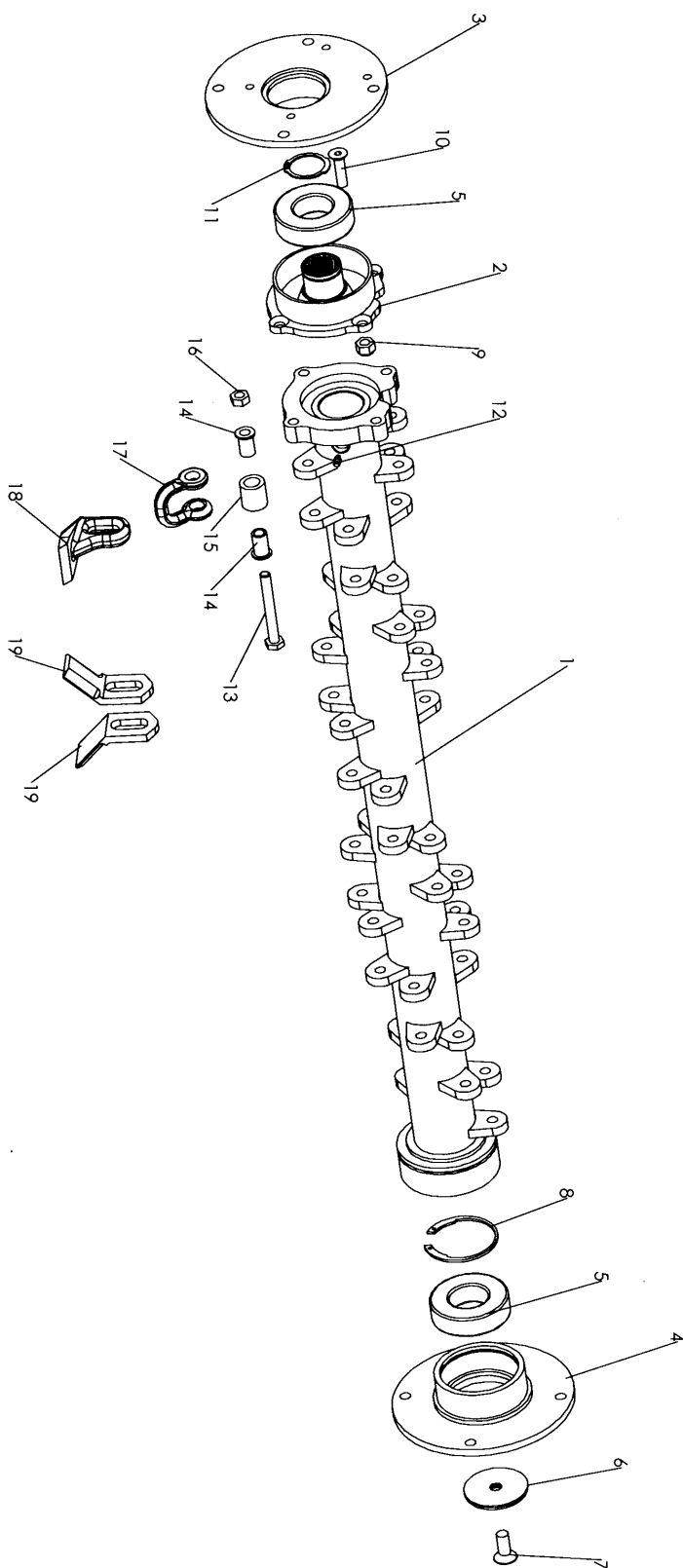
# Spearhead Excel 323 Reach Mower

## Head Assembly

REF. NO	PART NO.	DESCRIPTION
1	180350	HEAD SHELL
2	180351	FRONT HOOD
3	1778067	RETAINING STRIP
4	2770257	BOLT
5	2770434	WASHER
6	2770412	LOCKNUT
7	05.969.02	SCREW
8	2770454	WASHER
9	2770456	WASHER
10	2770425	BOLT
11	2770553	BOLT
12	180355	SPACER RING
13	1778011	BEARING HOUSING
14	1778022	COVER
15	2770467	GREASE NIPPLE
16	2770396	BOLT
17	1778019	HINGE
18	1778017	LH ROLLER PLATE
19	2770407	BOLT
20	1778021	SKID
21	1778018	RH ROLLER PLATE
22	2772284	SCREW
23	2770554	BOLT
24	2770520	BOLT
25	2770421	BOLT
26	2772293	BOLT
27	1778010	BEARING HOUSING
28	1778026	MOTOR BUSH
29	5770036	MOTOR
30	180352	GUARD
31	2770255	BOLT
32	2770368	BOLT
33	2770433	WASHER

# Spearhead Excel 323 Reach Mower

## Rotor Assembly



# Spearhead Excel 323 Reach Mower

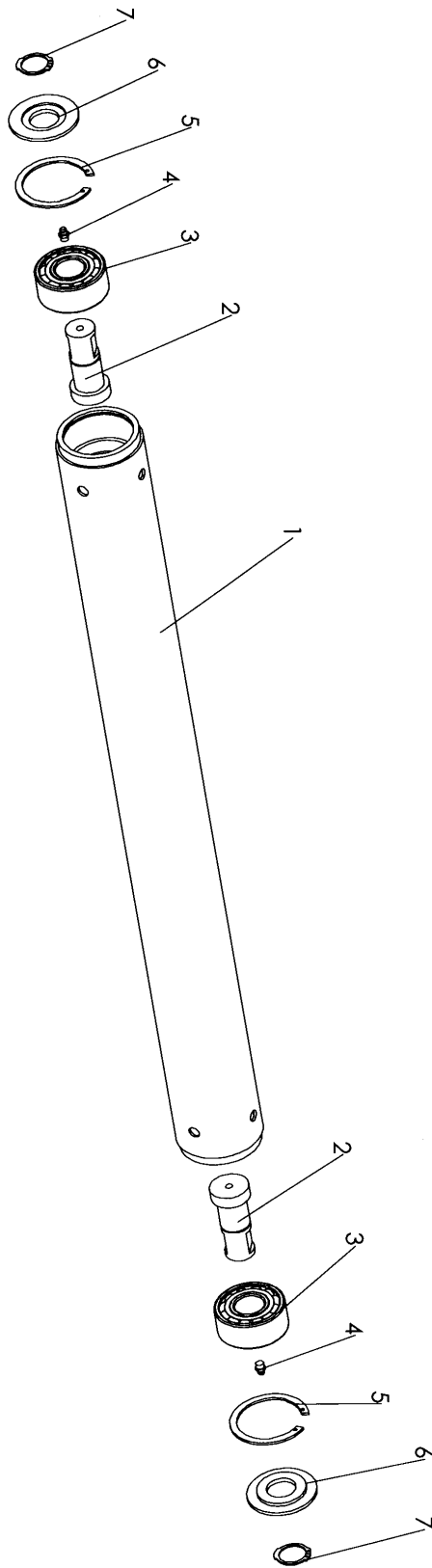
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## Rotor Assembly

REF. NO	PART NO.	DESCRIPTION
1	180353	RH ROTOR ASSEMBLY (BOOT)
	180356	LH ROTOR ASSEMBLY (BOOT)
	180357	ROTOR ASSEMBLY (Y FLAIL)
2	180449	DRIVE COUPLING
3	1778010	BEARING HOUSING
4	1778011	BEARING HOUSING
5	4770817	BEARING
6	1777208	WASHER
7	2770506	BOLT
8	2771129	CIRLIP
9	2770412	LOCKNUT
10	2770422	BOLT
11	2777512	CIRCLIP
12	2770467	GREASE NIPPLE
13	05.775.02	BOLT
14	02.801.01	BUSH
15	02.807.01	SPACER
16	05.968.02	LOCKNUT
17	7770741	SHACKLE (24)
18	7770740	BOOT FLAIL (24)
19	7190166	Y FLAIL (48)

# Spearhead Excel 323 Reach Mower

## Roller Assembly



# Spearhead Excel 323 Reach Mower

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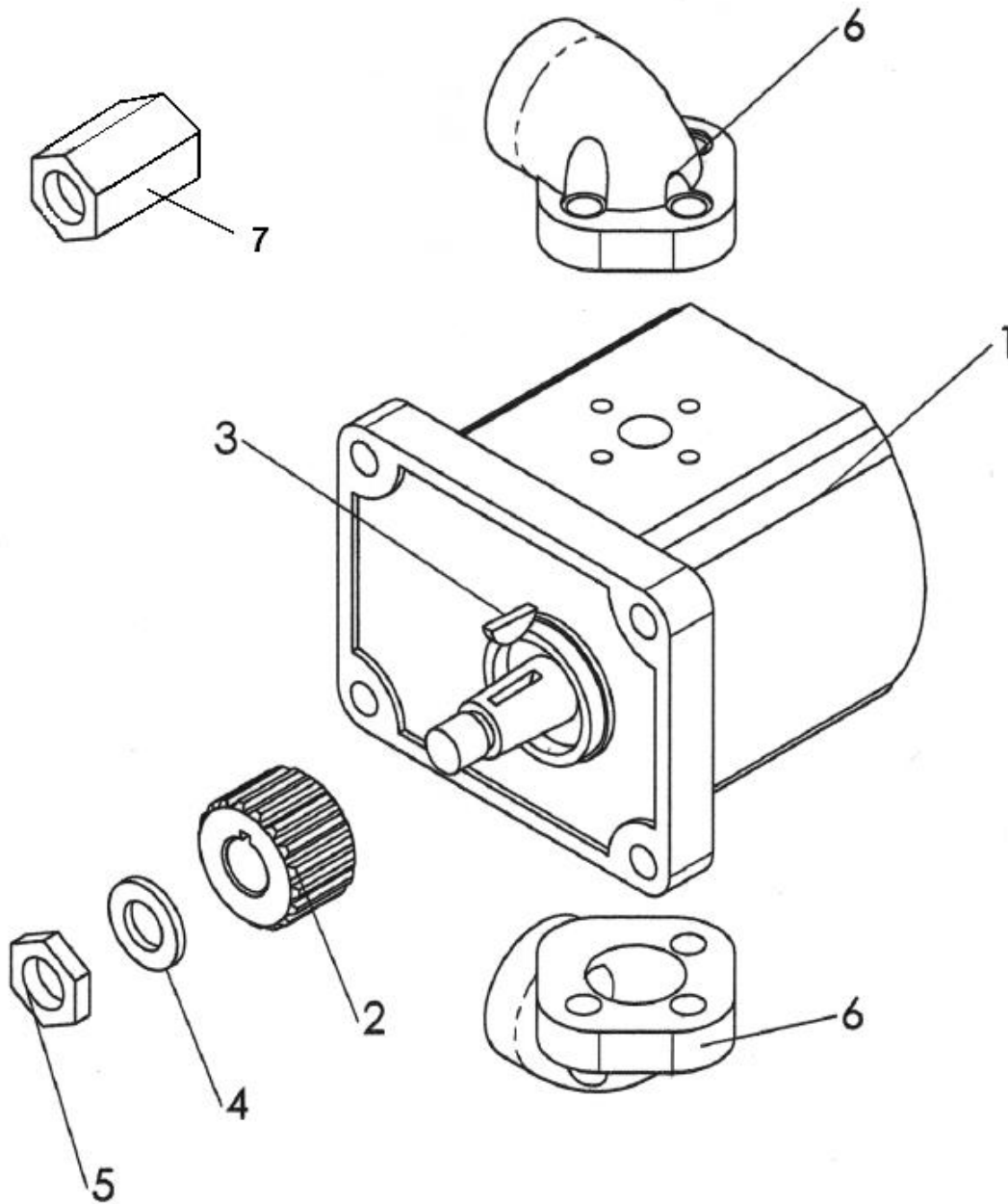
## Roller Assembly

REF. NO	PART NO.	DESCRIPTION
	SA04009	ROLLER ASSEMBLY
1	180354	ROLLER TUBE
2	1800196	ROLLER STUB SHAFT
3	4771604	BEARING
4	2770468	GREASE NIPPLE
5	2771108	CIRCLIP
6	1777231A	HUB COVER
7	2777519	CIRCLIP



# Spearhead Excel 323 Reach Mower

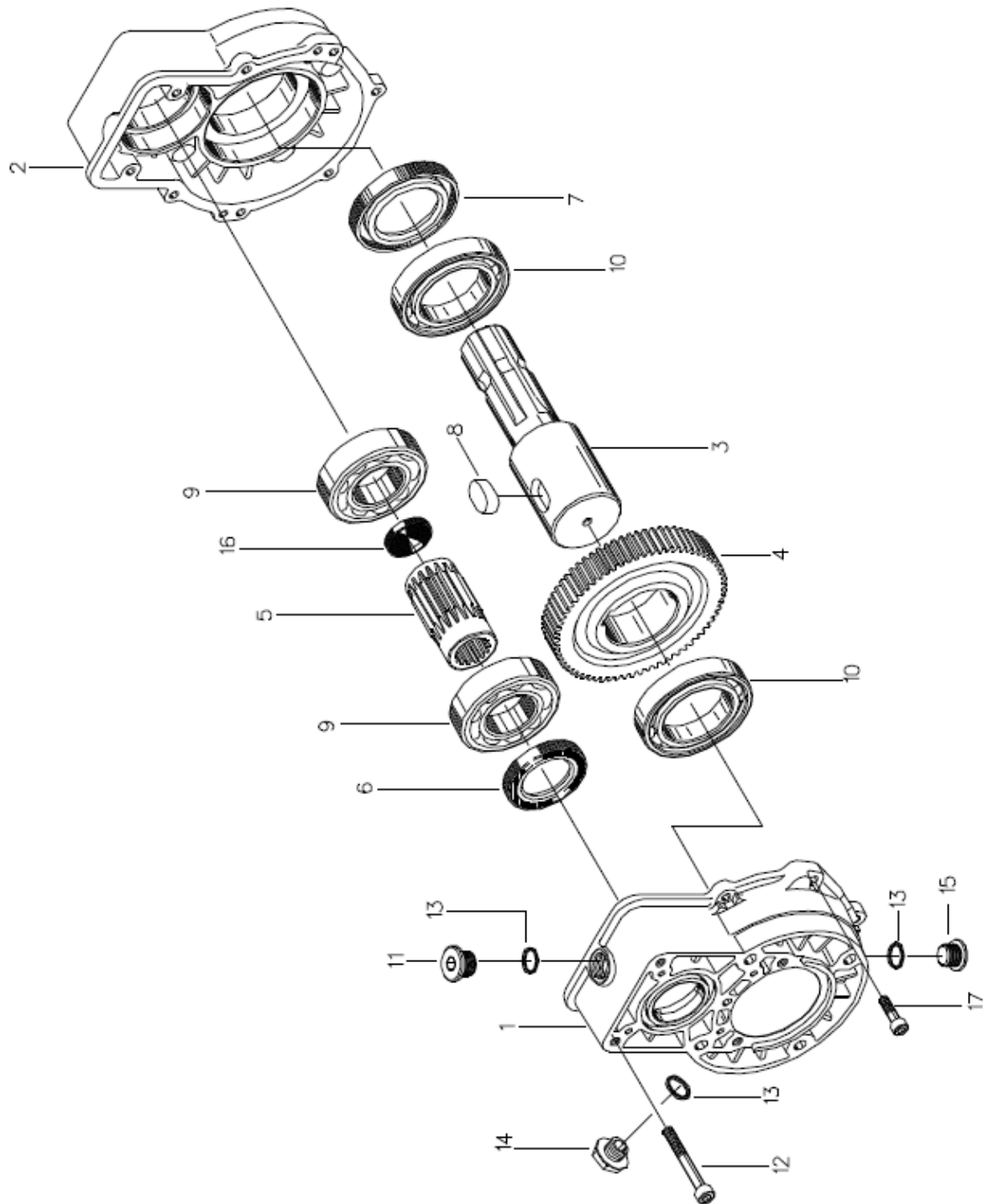
## Motor Assembly



REF. NO	PART NO.	DESCRIPTION
1	5770036	MOTOR
	3151066	SEAL KIT MOTOR
2	3151077	HUB COUPLING
3	4772227	MOTOR WOODRUFF KEY
4	2770436	FLAT WASHER
5	2770526	HALF NUT-MOTOR SHAFT
6	3151057	PORT ELBOW
7	3610039A	VALVE 5 BAR

# Spearhead Excel 323 Reach Mower

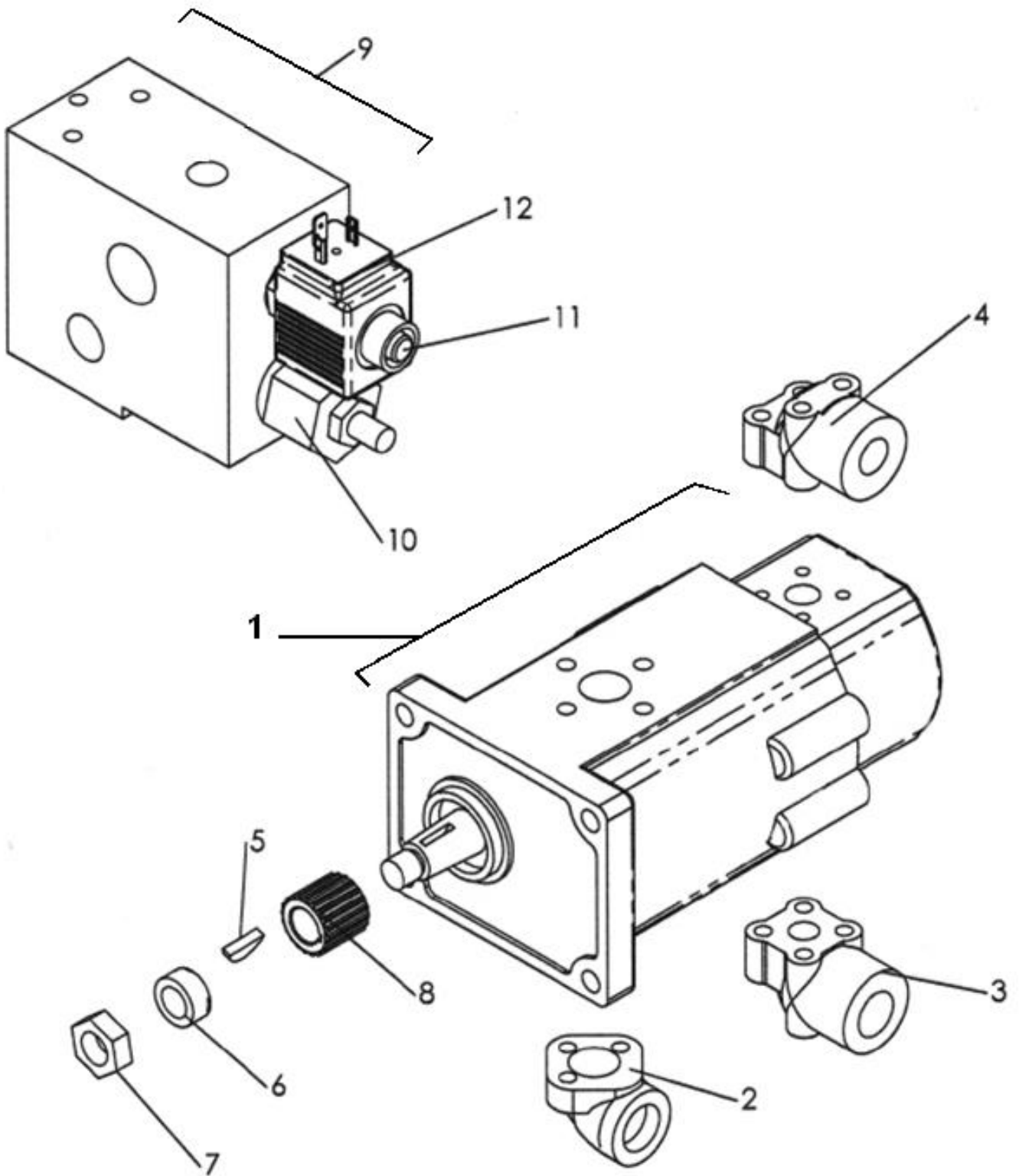
## Gearbox Assembly



REF. NO	PART NO.	DESCRIPTION
1	3151069	GEARBOX ASSEMBLY 1000 RPM
	3151070	GEARBOX ASSEMBLY 540 RPM
11	5771607	BREATHER
14	5771610	GAUGE
15		PLUG

# Spearhead Excel 323 Reach Mower

## Pump & Electric Rotor Valve Assembly



# Spearhead Excel 323 Reach Mower

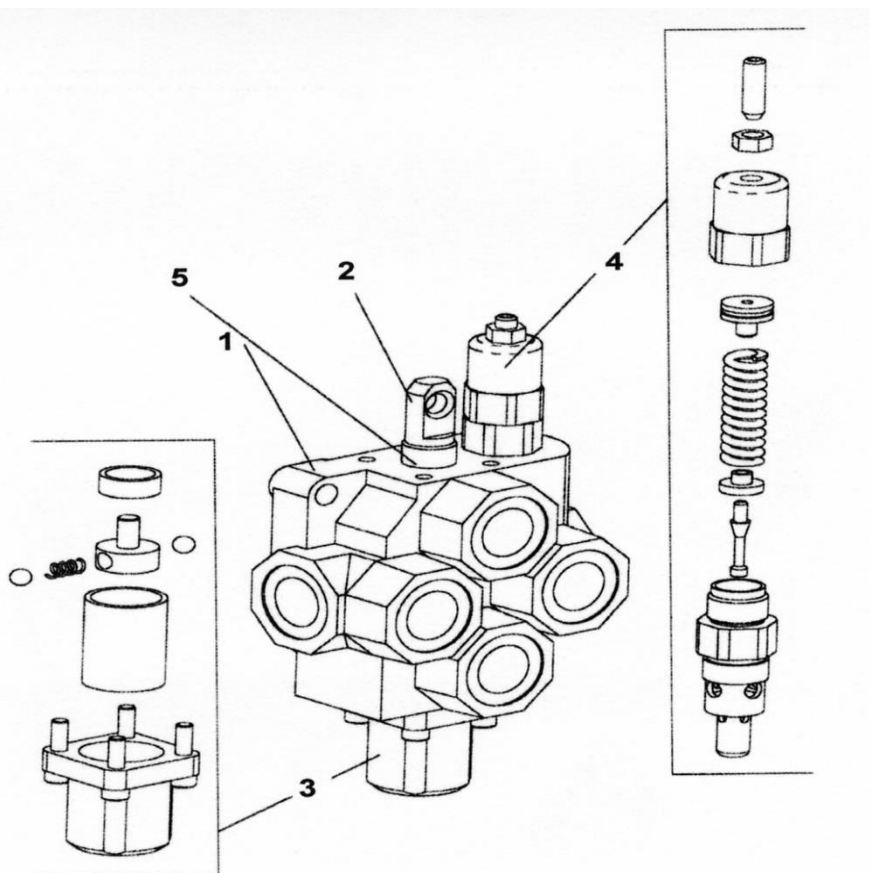
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## Pump & Electric Rotor Valve Assembly

REF. NO	PART NO.	DESCRIPTION
1	3151073	PUMP
	3151065	PUMP SEAL KIT
2	3151057	PORT ELBOW
3	3151058	PORT ELBOW
4	3151059	PORT ELBOW
5	4772227	WOODRUFF KEY MOTOR SHAFT
6	2770442	SPRING WASHER
7	2770350	HALF NUT - MOTOR SHAFT
8	3151076	HUB COUPLING
9	3610059	ELECTRIC ROTOR VALVE
10	6310062	RELIEF VALVE
11	3600142A	SINGLE POPPET VALVE
12	3610030A	COIL
13	3151071	GASKET

# Spearhead Excel 323 Reach Mower

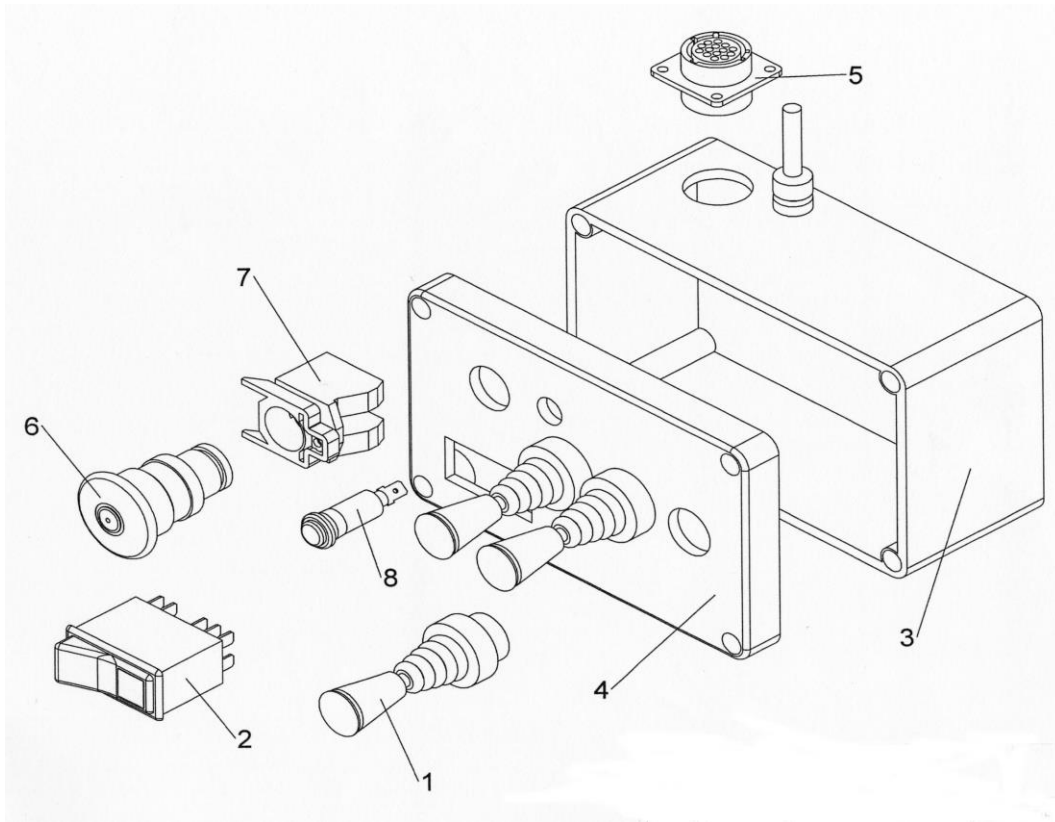
## Rotor - Cable Control Valve



REF. NO	PART NO.	DESCRIPTION
1	8125421	ROTOR VALVE ASSEMBLY
2	-	SPOOL
3	3610081A	SPOOL DETENT KIT (3 POS)
4	3600080	VALVE CARTRIDGE
5	3600101S	O-RING

# Spearhead Excel 323 Reach Mower

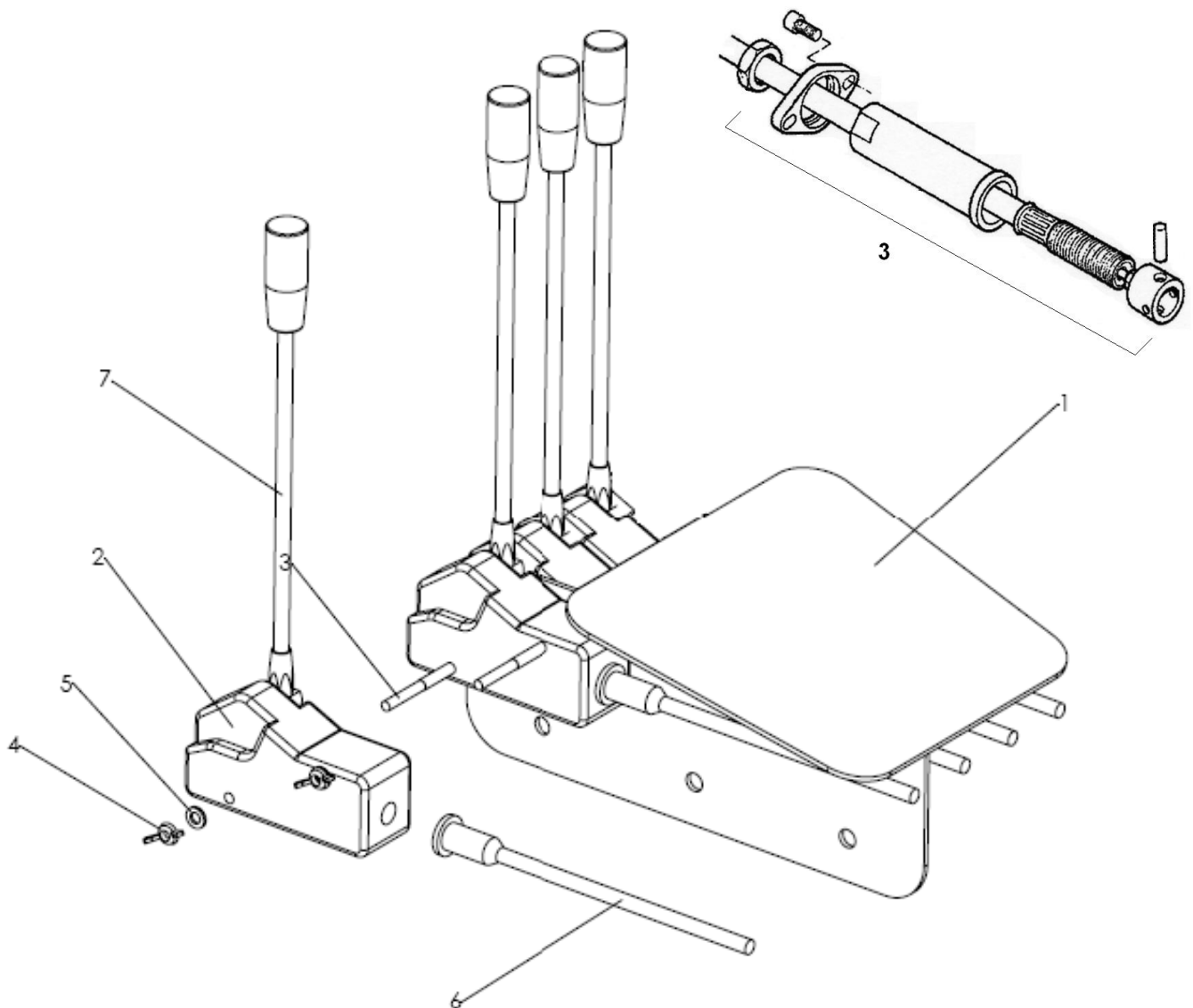
## Electric Control Assembly



REF. NO	PART NO.	DESCRIPTION
	8770716	COTROL ASSEMBLY
1	8770716.01	JOYSTICK
2	8770716.02	ROCKER SWITCH
3	8770716.03	BOX
4	8770716.04	LID
5	8770716.05	MULTI PIN SOCKET
6	8400167	ROTOR KNOB
7	8400166	ROTOR SWITCH
8	8400168	LIGHT
	8770717	ELECTRIC LOOM

# Spearhead Excel 323 Reach Mower

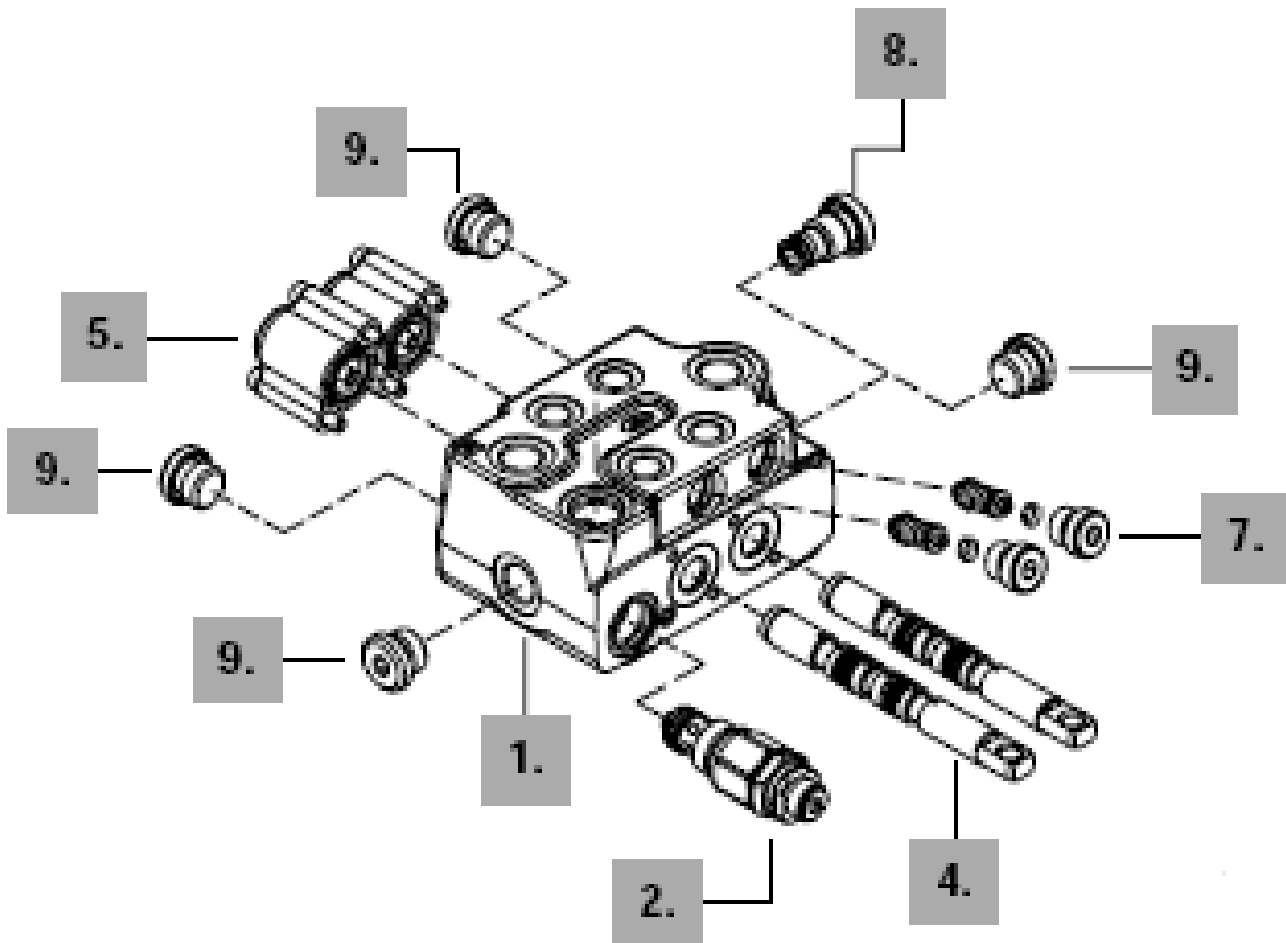
## Cable Control Assembly



REF. NO	PART NO.	DESCRIPTION
1	1800315	CABLE CONTROL BRACKET
	8770391	LH CONTROL DECAL
2	47531.01	CABLE ASSEMBLY – BLACK KNOB
2	47531.05	CABLE ASSEMBLY – RED KNOB
3	47532.01	FIXING KIT – ARM VALVE
3	47539.01	FIXING KIT – MOTOR VALVE
3	04.282.71	STUD: M6
4	05.948.37	M6 WING NUT
5	2771408	M6 FLAT WASHER

# Spearhead Excel 323 Reach Mower

## Cable Operated Valve Assembly

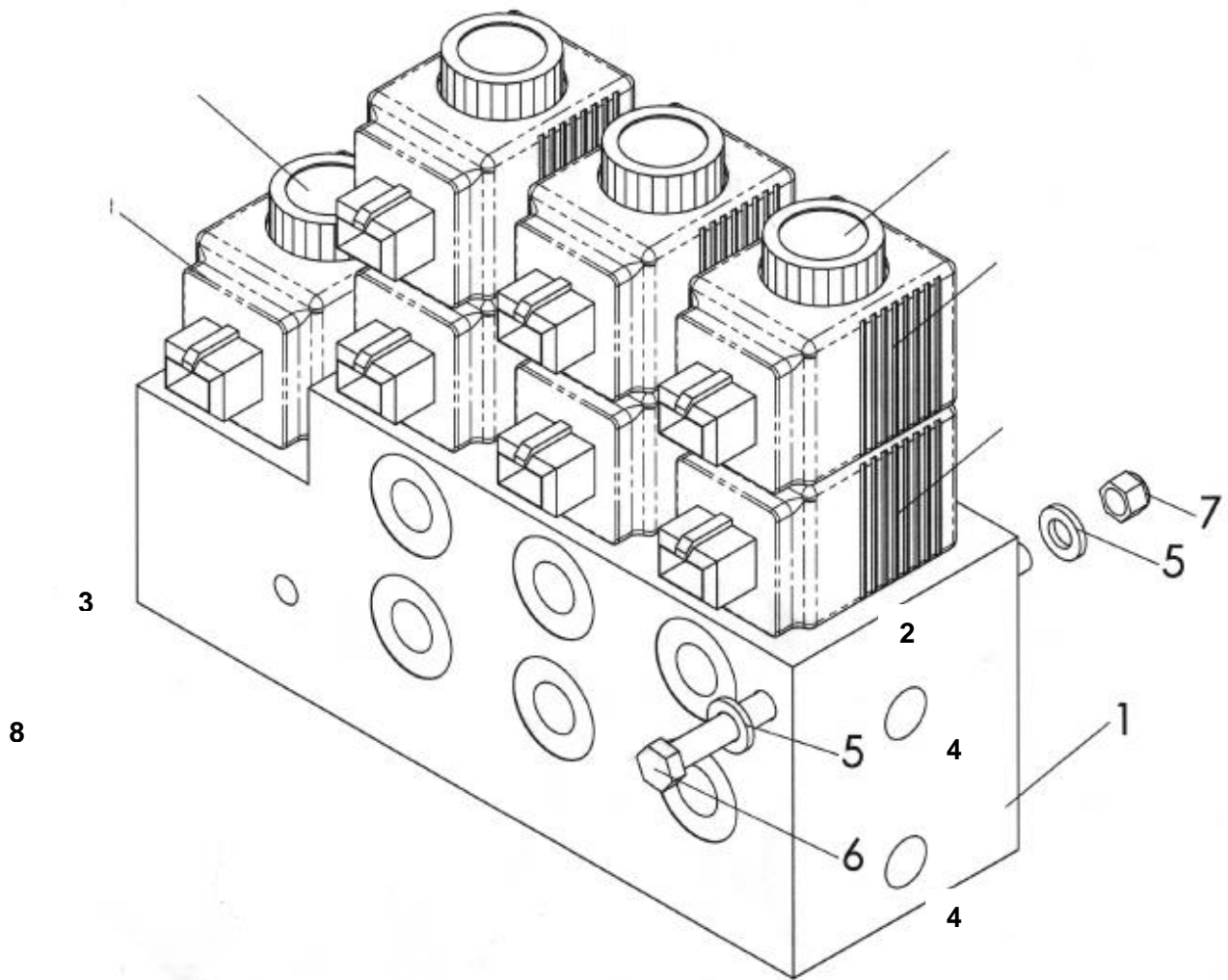


REF. NO	PART NO.	DESCRIPTION
1	8136250	VALVE ASSEMBLY
2		MAIN RELIEF VALVE
3	N/A	
4		SPOOL
5		SPRING KIT – CABLE
6	N/A	
7		PORT RELIEF CARTRIDGE
8		PLUG
9		PLUG



# Spearhead Excel 323 Reach Mower

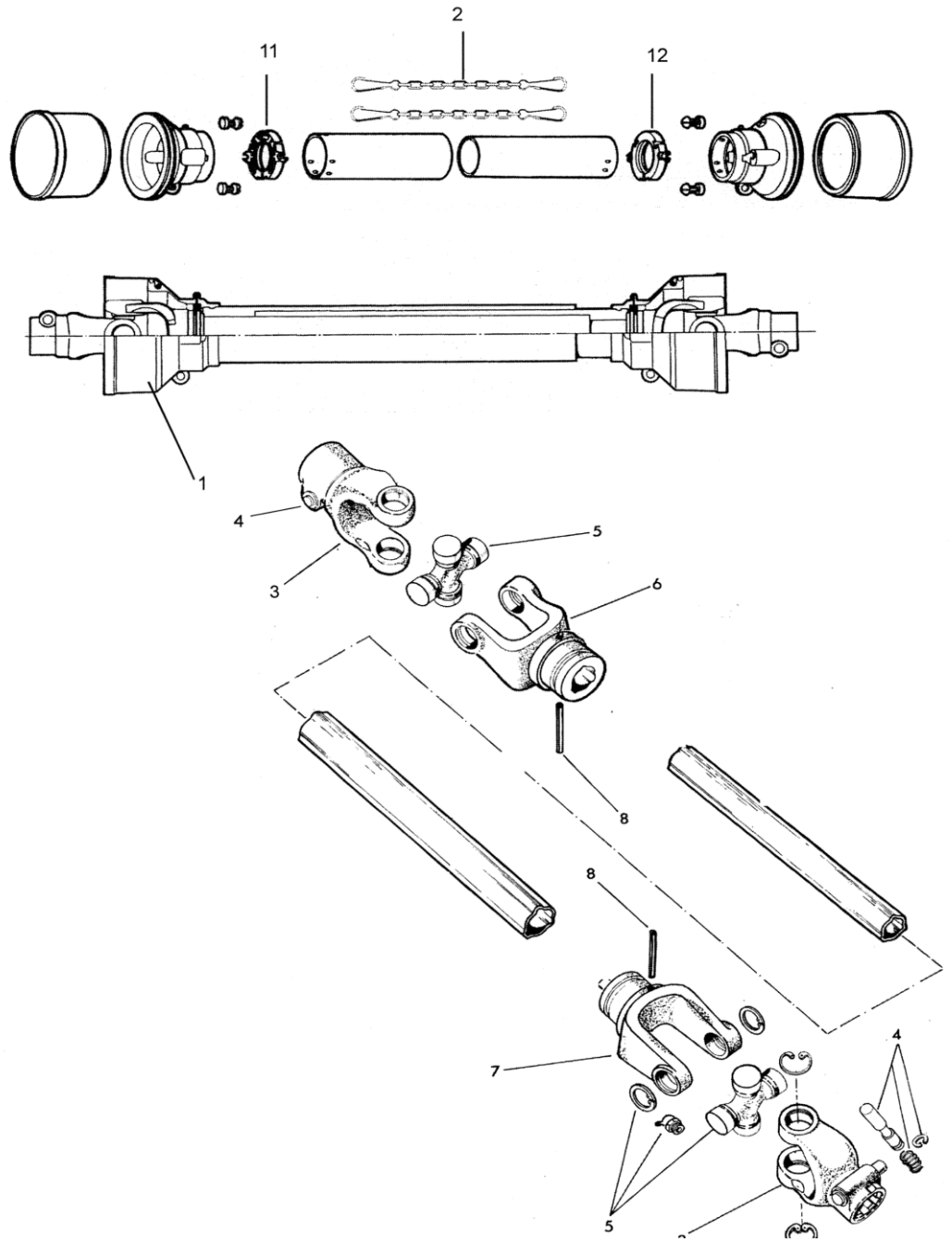
## Electric Valve Assembly



REF. NO	PART NO.	DESCRIPTION
1	3610058	3 BANK ASSY
2	3610023	SOLENOID CARTRIDGE
3	3600142A	SOLENOID CARTRIDGE
4	3610025	COIL
5	2771408	FLAT WASHER
6	2770581	BOLT
7	2770373	NUT
8	3610025A	COIL
9	3600145	RELIEF VALVE (NOT SHOWN)
10	3600146	POC VALVE (NOT SHOWN)

# Spearhead Excel 323 Reach Mower

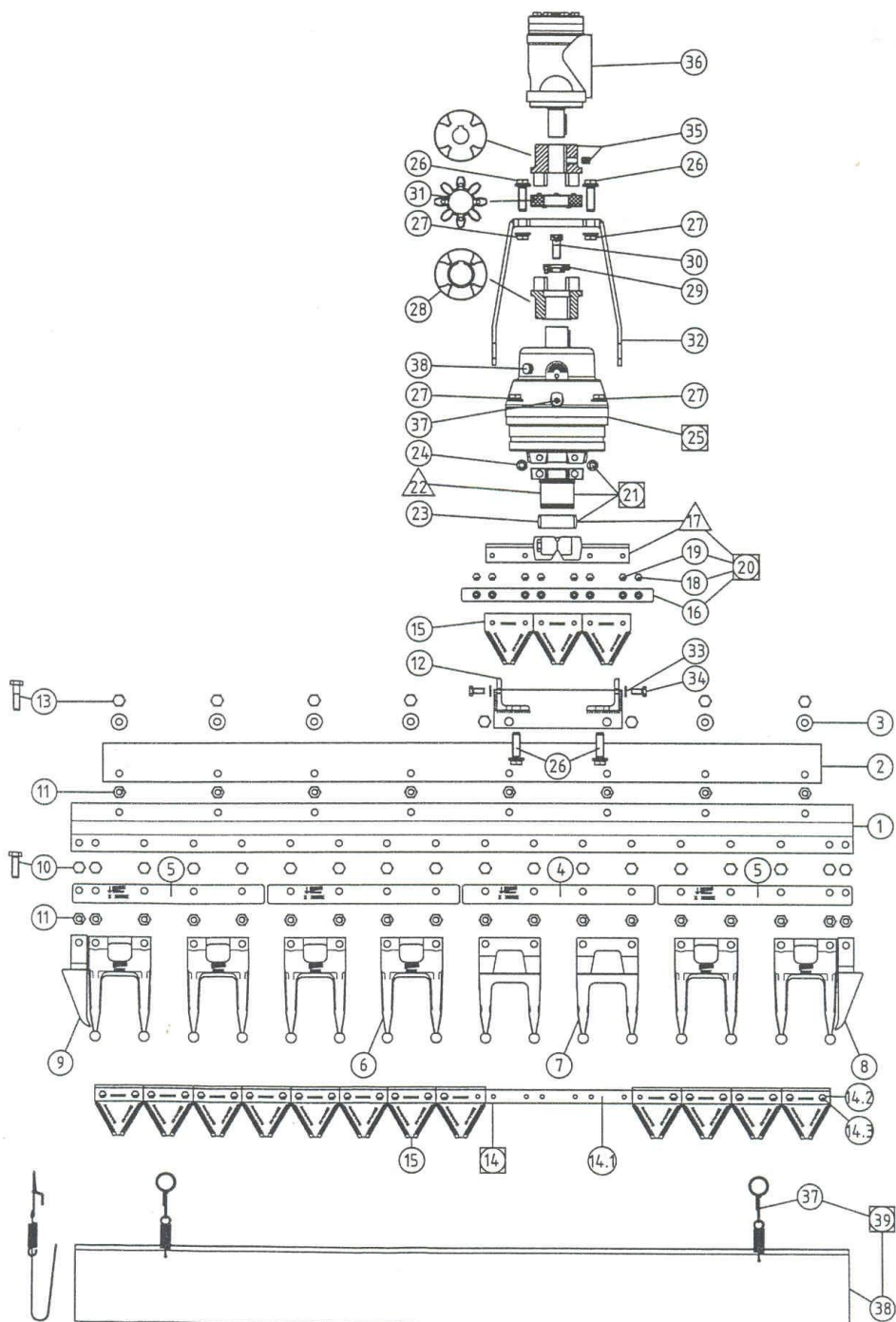
## PTO Shaft Assembly



REF. NO	PART NO.	DESCRIPTION
	5770069	P.T.O. SHAFT
1	5772259	COMPLETE GUARD
2	5771020	RETAINING CHAIN
3	5770112	YOKE
4	5771023	RELEASE BUTTON
5	5770113	CROSS JOURNAL
6	5772273	INNER TUBE YOKE
7	5772274	OUTER TUBE YOKE
8	2770515	ROLL PIN
11	5771336	OUTER BEARING
12	5771337	INNER BEARING

# Spearhead Excel 323 Reach Mower

## Cutter Bar Assembly



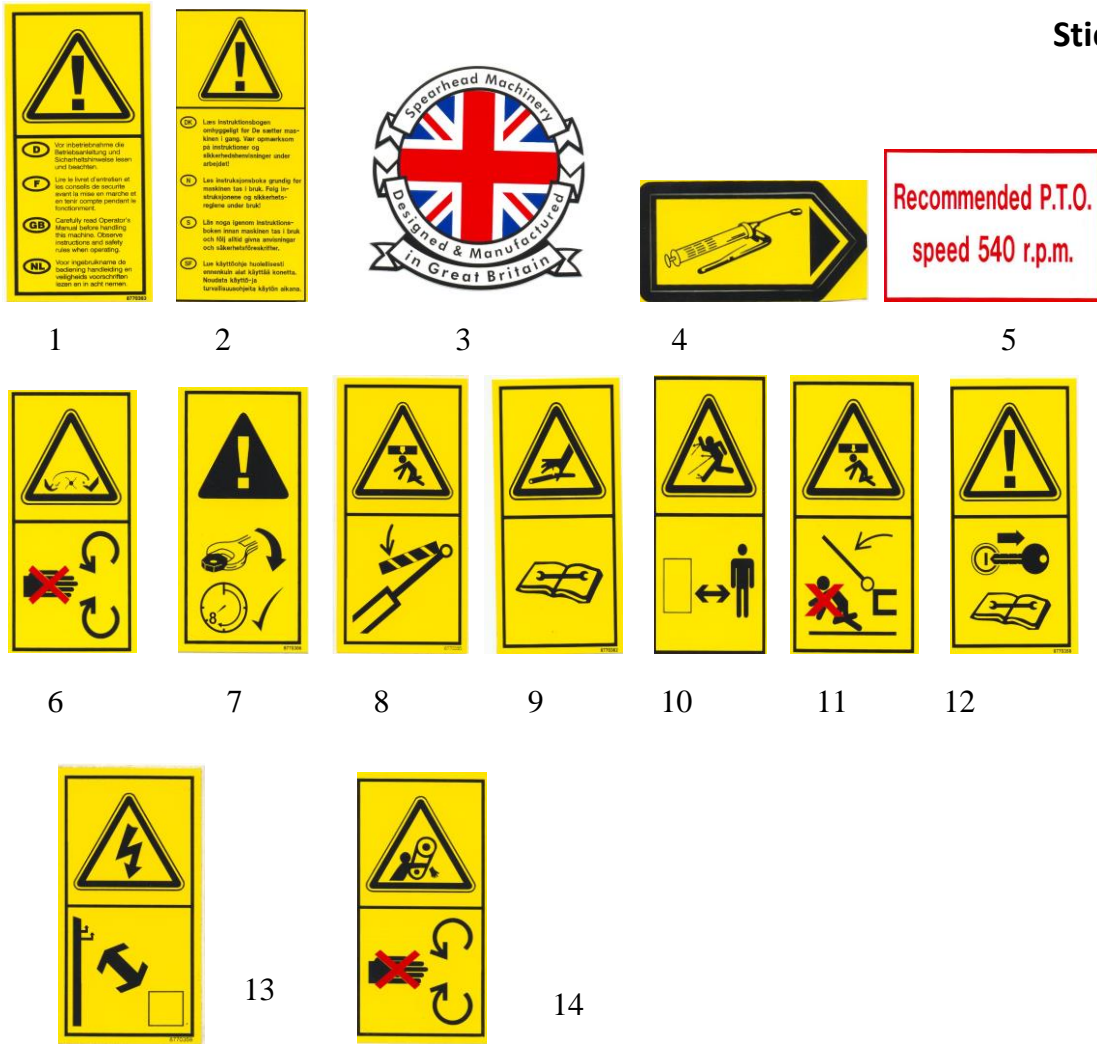
# Spearhead Excel 323 Reach Mower

## Cutter Bar Assembly

REF. NO	PART NO.	DESCRIPTION
1	01828	PROFILE BAR
2	01834	REINFORCEMENT STRIP
3	01064	SPACER TUBE
4	10726	SPACERBAR (1 FOOT; 4 HOLES)
5	01060	OUTER SPACERBAR (1 FOOT; 5 HOLES)
6	10631	GUARD 17MM WITH KEEP-OFF RAIL BALL
7	14502	LEADER-GUARD 17MM WITH KEEP-OFF BALLS
8	01048	PROTECTION GUARD RIGHT
9	01049	PROTECTION GUARD LEFT
10	13014	HEXAGON HEAD SCREW M10 X 35
11	10047	NUT M10
12	12588	GEARBOX CONSOLE (TYPE: S)
13	10076	HEXAGON HEAD SCREW M10 X 40
14	15077	KNIFE 5 FOOT (INC POS 15/16/18/19)
14.1	12087	KNIFE BACK (5 FOOT)
14.2	10931	TEETH BOLT M6 X 16
14.3	13961	FLANGE NUT M6
15	10991	KNIFE SECTION PRO-CUT FINE –CC-
16	10926	KNIFE CONNECTOR
17	Δ	KNIFEHEAD PRO-DRIVE (ONLY COMPLETE OBTAINABLE – POS 20)
18	10067	HEXAGON HEAD SCREW M6 X 18
19	01086	HEXAGON HEAD SCREW M6 X 22
20	11371	KNIFEHEAD PR-DRIVE CPL (INCL POS 16/17/18/19/23)
21	12766	HEAD CONNECTOR 17MM CPL (INCL POS 22/23/24)
	14739	HEAD CONNECTOR 17MM MAINTENANCE-FREE (INCL POS 22/23/24)
22	Δ	HEAD CONNECTOR 17MM (ONLY COMPLETE OBTAINABLE (POS 21)
23	12543	ADAPTER POM
24	10099	BOLT M10 X 35
25	12480	PRO-DRIVE 85HS G
26	01087	RIPP BOLT M12 X 40
27	01088	RIPP NUT M12
28	14671	CLAW COUPLING F38 D=35MM
29	12601	TENSION WASHER COMPLETE
30	10230	BOLT M12 X 30
31	12603	COUPLING STAR F38
32	12586	MOTORHOLDER
33	01066	WASHER WITH EXTERNAL CHAMFER FOR M8
34	01089	HEXAGON HEAD SCREW M8 X 16
35	12610	CLAW COUPLING F38 D=25MM
	12442	HYDROMOTOR EPM/OMR 50CCM
36	12443	HYDROMOTOR EPM/OMR 80CCM
	12444	HYDROMOTOR EPM/OMR 100CCM
37	01923	KNIFE PROTECTOR RETENTION CLIP
38	01925	KNIFE PROTECTOR 5 FOOT
39	01930	KNIFE PROTECTOR 5 FOOT CPL (INCL POS 37/38)

# Spearhead Excel 323 Reach Mower

## Stickers



REF. NO	PART NO.	DESCRIPTION
1	8770363	READ MANUAL
2	8770367	READ MANUAL
3	8770307	GB
4	8770322	GREASE POINT
5	8770305	540 PTO
6	8770361	MOVING BLADES
7	8770306	KEEP BOLTS TIGHT
8	8770355	RAM STOP
9	8770362	ESCAPING FLUID
10	8770357	KEEP YOUR DISTANCE
11	8770368	DANGER UN-PROPED
12	8770358	REMOVE KEY
13	8770359	DANGER OVERHEAD POWER CABLES
14		DANGER MOVING PARTS