

SMART

Rotary Hoe SH

PARTS LIST

General Information

Serial No. Prefix SH.....
 Serial number is located on front RH side of frame.

Special Notes:

- | | | | |
|----|---------------------|----------|-------------------------|
| ▲ | Left Hand | Y | Alternative |
| ▼ | Right Hand | * | Change since last print |
| ▲ | Upper | 306357x6 | Quantity |
| ▼ | Lower | 306357# | Quantity as required |
| ▲▲ | Width | W | Only for |
| ▲▲ | Length | C | Central |
| ↑ | From serial number | O | Offset |
| ↓ | Up to serial number | Z | Number of teeth |
| ↻ | rpm | | |

Catalogue no.	Issue	Page Affected
Smart Hoe	5/90	New Issue

SMART EQUIPMENT

A division of:
 Howard Australia Pty. Ltd.

Drive Shaft

CROSS SIZE ϕ 34.92 x 106.4

A8 (7108) AUSTRALIAN MARKET

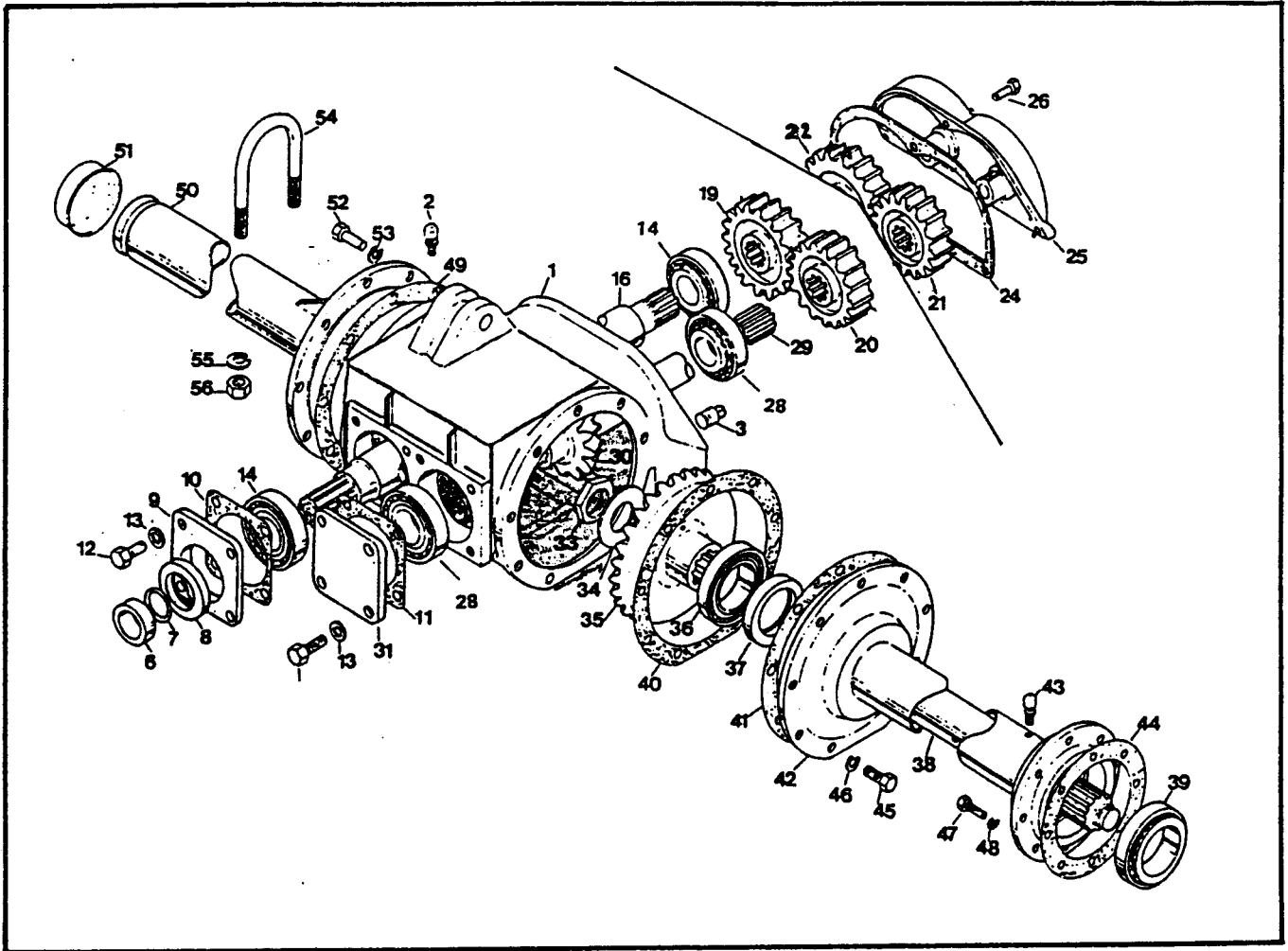
Item	Part No.	Description	Qty.
1	204056911	Lock Pin Kit	1
2	204051050	Yoke - Tractor End-6 SPLINE	1
3	204056010	Universal Joint	2
4	204056020	Circlip	8
5	204056945	Grease Nipple	2
6	204051760	Yoke - Outer Tube	1
7	204069004	Flexible Pin	1
8	204054650	Outer Shaft	1
9	204054660	Inner Shaft	1
10	204069005	Flexible Pin	1
11	204051510	Yoke - Inner Tube	1
12	204069006	Clutch Assembly	1
13	204058410	Spring	8
14	204069007	Clutch Plate	1
15	204056200	Sleeve	1
16	204056961	Friction Disc	2
17	204056962	Clutch Disc	1
18	204069008	Clamp Bolt	2
19	204056963	Inner Plate	1
20	204056964	Pressure Plate	1
21	204069009	Clutch Bolts	8
22	204069011	Half outer shaft Assy	1
23	204069010	Half Inner shaft Assy	1
24	204055980	Clip outer cover	1
25	204055981	Clip Inner Cover	1
26	204055968	Safety Outer Cone	1
27	204055979	Safety Inner cone	1
28	204055004	Safety chain	1
29	204055978	Safety Outer Tube	1
30	204055977	Safety Inner Tube	1
31	204055976	Safety outer cover Assy	1
32	204055975	Safety inner cover Assy	1
33	204055974	Safety cover Assy	1
34	204069012	Half outer shaft complete Assy	1
35	204069013	Half Inner Shaft Complete Assy	1
	204057181	A8 complete Drive Shaft Assy	1
	204051420	Yoke - TRACTOR END - 21 SPLINE	1
	204056810	LOCK PIN KIT - 21 SPLINE	1

CROSS SIZE ϕ 34.92 x 94

IN7 (7107)

Item	Part No.	Description	Qty.
1	204056911	Lock pin kit	1
2	204051450	Yoke - Tractor End	1
3	204056913	Universal Joint	2
4	204056020	Circlip	8
5	204056945	Grease Nipple	2
6	204051530	Yoke - Outer Tube	1
7	204056280	Flexible Pin	1
8	204054710	Outer Shaft	1
9	204054720	Inner shaft	1
10	204056400	Flexible Pin	1
11	204051540	Yoke - Inner Tube	1
12	204069020	Clutch Assembly	1
13	204056410	Spring	8
14	204069027	Clutch Plate	1
15	204056200	Sleeve	1
16	204056961	Friction Disc	2
17	204056962	Clutch Disc	1
18	204069008	Clamp Bolt	2
19	204056963	Inner Plate	1
20	204056964	Pressure Plate	1
21	204069009	Clutch Bolts	8
22	204056894	Half outer shaft Assy	1
23	204056895	Half Inner shaft Assy	1
24	204055880	Clip outer cover	1
25	204055890	Clip Inner cover	1
26	204055067	Safety outer cone	1
27	204055074	Safety Inner cone	1
28	204055004	Safety chain	1
29	204055079	Safety outer tube	1
30	204055078	Safety inner tube	1
31	204055077	Safety outer cover Assy	1
32	204055076	Safety inner cover Assy	1
33	204055075	Safety cover Assy	1
34	204056892	Half outer shaft complete Assy	1
35	204056893	Half inner shaft complete Drive	1
	204057179	IN7 complete Drive shaft Assy	1

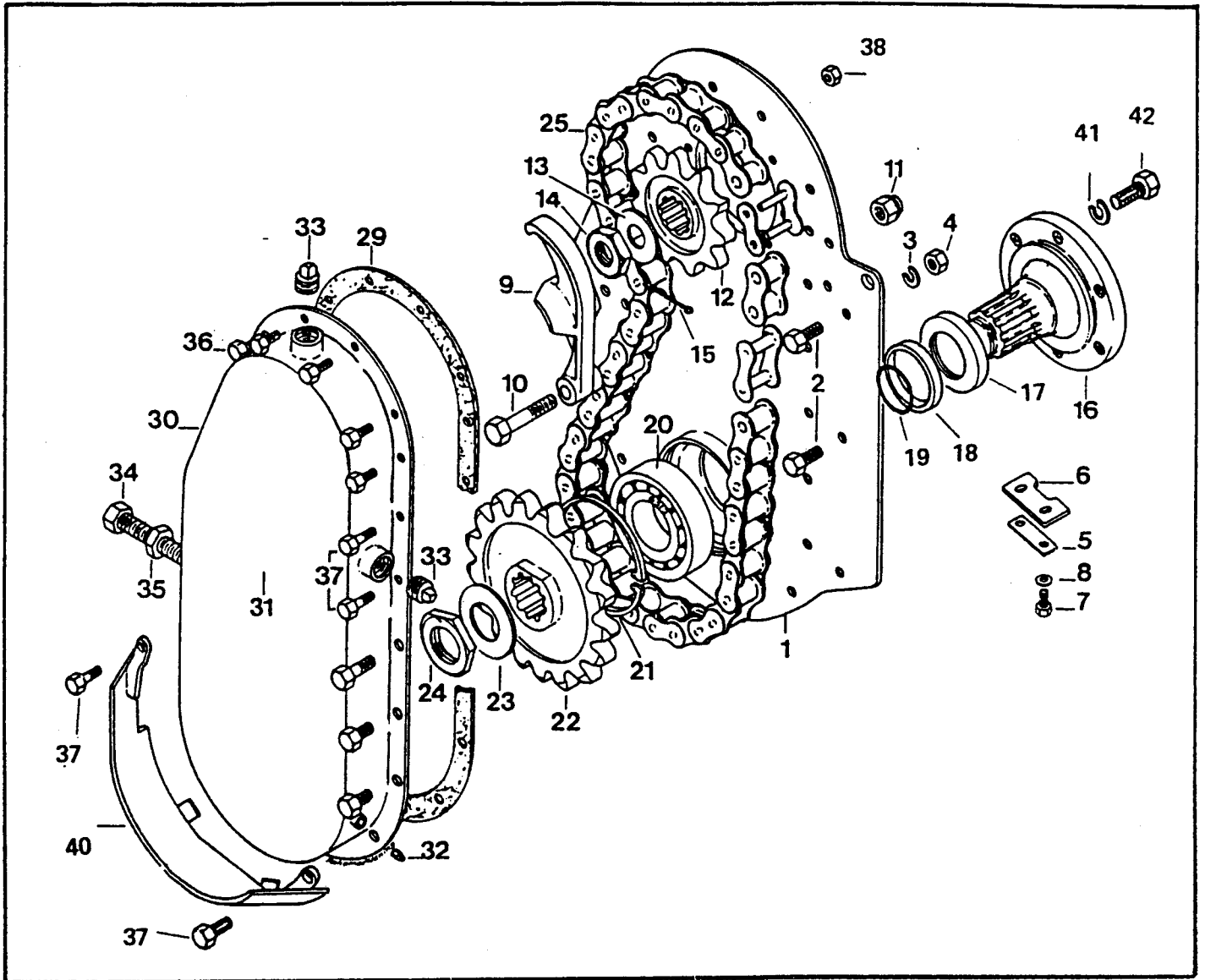
SH SERIES HOE



Selectatilh Gearbox

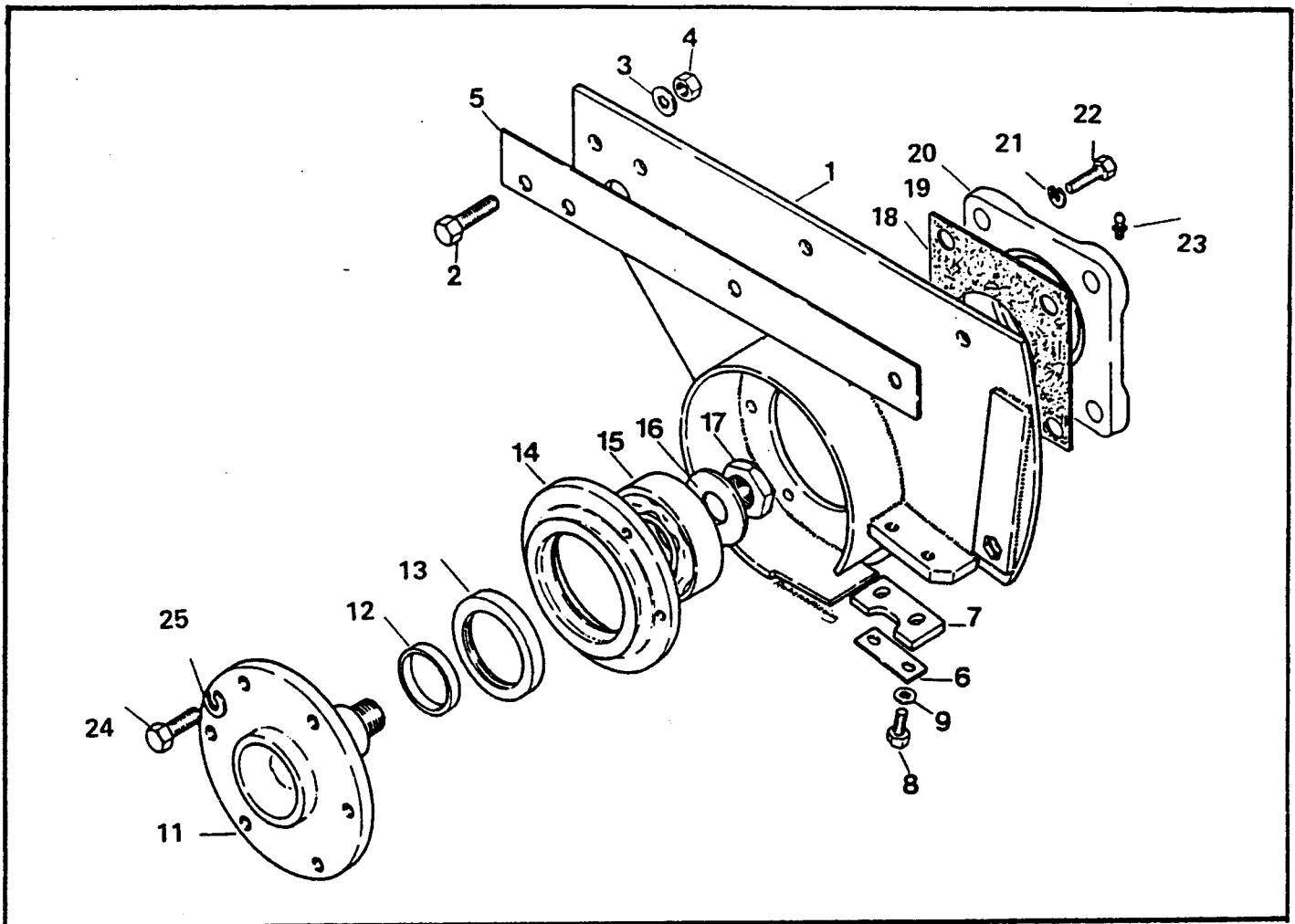
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	640863	Gearbox Housing	1	34	203026150	Belleville Washer 080 x 4.1 x 3	1
2	203032010	Breather	1	35	640844	Crownwheel 26 t	1
3	203031190	Drain Plug	1	36	256011241	Bearing — 60 x 110 x 24	1
6	640993	Sleeve	1	37	267560081	Oil Seal	1
7	202023920	'O' Ring	1	38	640807	Jack shaft 60 & 70	(616) 1
8	267250121	Oil Seal — 267250101	1		640810	Jack shaft 80	(1000) 1
9	640860	End Cover — Input	1		640821	Jack shaft 70 CENT.	(853) 1
10	65553	Gasket	1	39	255011291	Bearing — 50 x 110 x 29	1
11	65554	Gasket	1	40	65544	Gasket	1
12	301212305	Setscrew M12 x 30 Hex	8	41	610431	Gasket 0.39 mm	As Reg.
13	308120040	Spring Washer M12	8	42	640799	Jack shaft Housing 60 & 70	1
14	254080251	Bearing	2		640802	Jack shaft Housing 80	1
16	640991	Input Shaft	1		640818	Jackshaft Housing 70 CENT.	1
19	640317	Selectatilh 17T Gear	1	43	203032010	Breather	1
20	640315	Selectatilh 15T Gear	1	44	65967	Gasket	1
21	640318	Selectatilh 18T Gear	1	45	301214350	Setscrew M14 x 35 Hex.	9
22	640320	Selectatilh 20T Gear	1	46	308140040	Spring Washer M14	9
24	65545	Gasket	1	47	301410355	Setscrew M10 x 35 Hex	6
25	610433	Cover	1	48	308100045	Spring Washer M10	6
26	301210200	Setscrew M10 x 20 Hex	3	49	65544	Gasket	1
28	254080251	Bearing	2	50	610440	Sideplate R. H.	1
29	640857	Pinion Shaft	1	51	610443	Cap	1
30	640845	Pinion Nut	1	52	301214355	Setscrew M14 x 35 Hex.	9
31	640861	Cover Plate	1	53	301410045	Spring Washer M14	9
33	640648	Special Nut	1	54	610639	'U' Bolt	2
				55	308160045	Spring Washer M16	4
				56	107210015	Nut 5/8 UNC	4

SH SERIES HOE



Rotor Drive

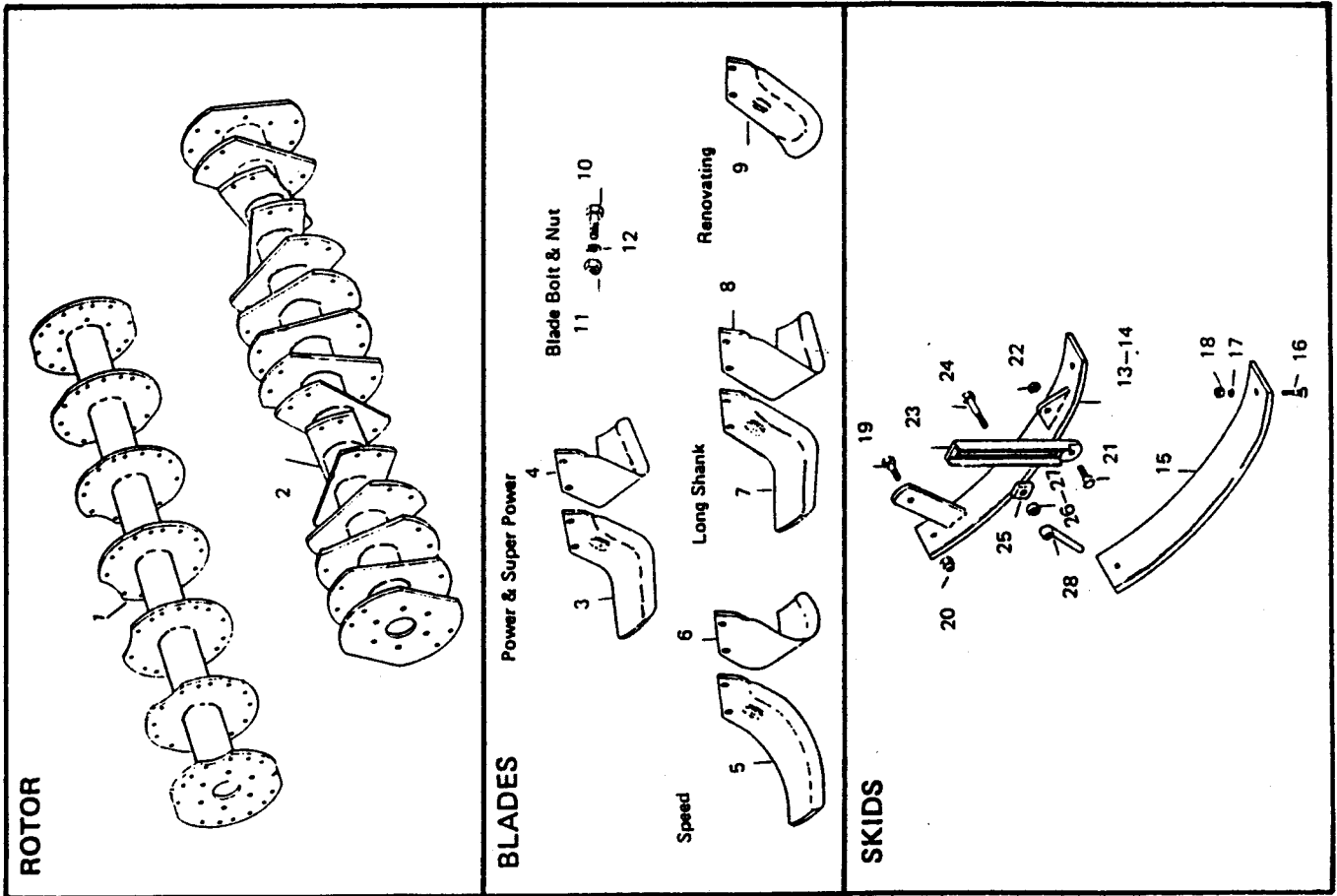
Item	Part No.	Description	Qty.	Item	Part No.	Description	Qty.
1	648380	Back plate	1	23	649558	Belleville Washer 080x45 x3	1
2	301412355	Setscrew M12 x 35 Hex	3	24	56801	Special Nut	1
3	308120065	Spring Washer M12	3	25	204003160	Roller Chain	1
4	307212015	Nut M12 Hex.	3	29	61816	Gasket	1
5	644824	Backing Strip	1	30	610668	Chaincase	1
6	644821	Weedcutter	1	31	70755	Transfer - Symbol (530x140)	1
7	301408205	Setscrew M8 x 20 Hex	2	32	203031230	Plug oil level	1
8	308080045	Spring Washer M8	2	33	203031190	Plug	2
9	640054	Chain Skid	1	34	301820100	Setscrew Adjuster M20 x 100	1
10	301216800	Setscrew M16 x 80	1	35	307220010	Nut M20 Hex	1
11	307216055	Nut Nyloc M16 Hex	1	36	301410255	Setscrew M10 x 25 Hex	13
12	65584	Sprocket 11T	1	37	301210355	Bolt M10 x 35 Hex	6
13	203026150	Belleville Washer 080	1	38	307210055	Lock Nut M10 Hex	19
14	640648	Castle Nut (Special Nut)	1	40	610684	Chaincase skid optional	1
15	208012630	Split Pin	1	41	308180040	Spring Washer M18	6
16	640781	Rotor Drive Shaft	1	42	301218400	Setscrew M18 x 40	6
17	261080164	Special Seal	1				
18	640782	Spacer	1				
19	202023900	'O' Ring	1				
20	256013311	Bearing	1				
21	208101610	Circlip 130 ← 208001790	1				
22	65671	Sprocket	1				



Stub Axle

Item	Part No.	Description	Qty.
1.	648415	Stub Axle Plate	1
2	301212355	Bolt M12 x 35 Hex	4
3	308120045	Spring washer M12	4
4	307212015	Nut M12 Hex	4
5	610753	Packing shim	As Reg.
6	644824	Backing strip	1
7	644821	Weedcutter	1
8	301408205	Setscrew M8 x 20 Hex	2
9	308080045	Spring washer MB	2
11	640771	Stub Axle	1
12	640770	Spacer	1
13	267560103	Special Seal	1
14	640772	Bearing Housing	1
15	254510251	Bearing	1
16	203026150	Belleville washer Ø 80	1
17	22031	Special Nut	1
18	57545	Gasket	2
19	648416	Spacer Plate	1
20	324545	End Cover	1
21	301212455	Bolt M12 x 45 Hex	4
22	308120045	Spring Washer M12	4
23	202030020	Grease Nipple	1
24	301212305	Setscrew M 12 x 30 Hex.	6
25	308120045	Spring Washer M12	6

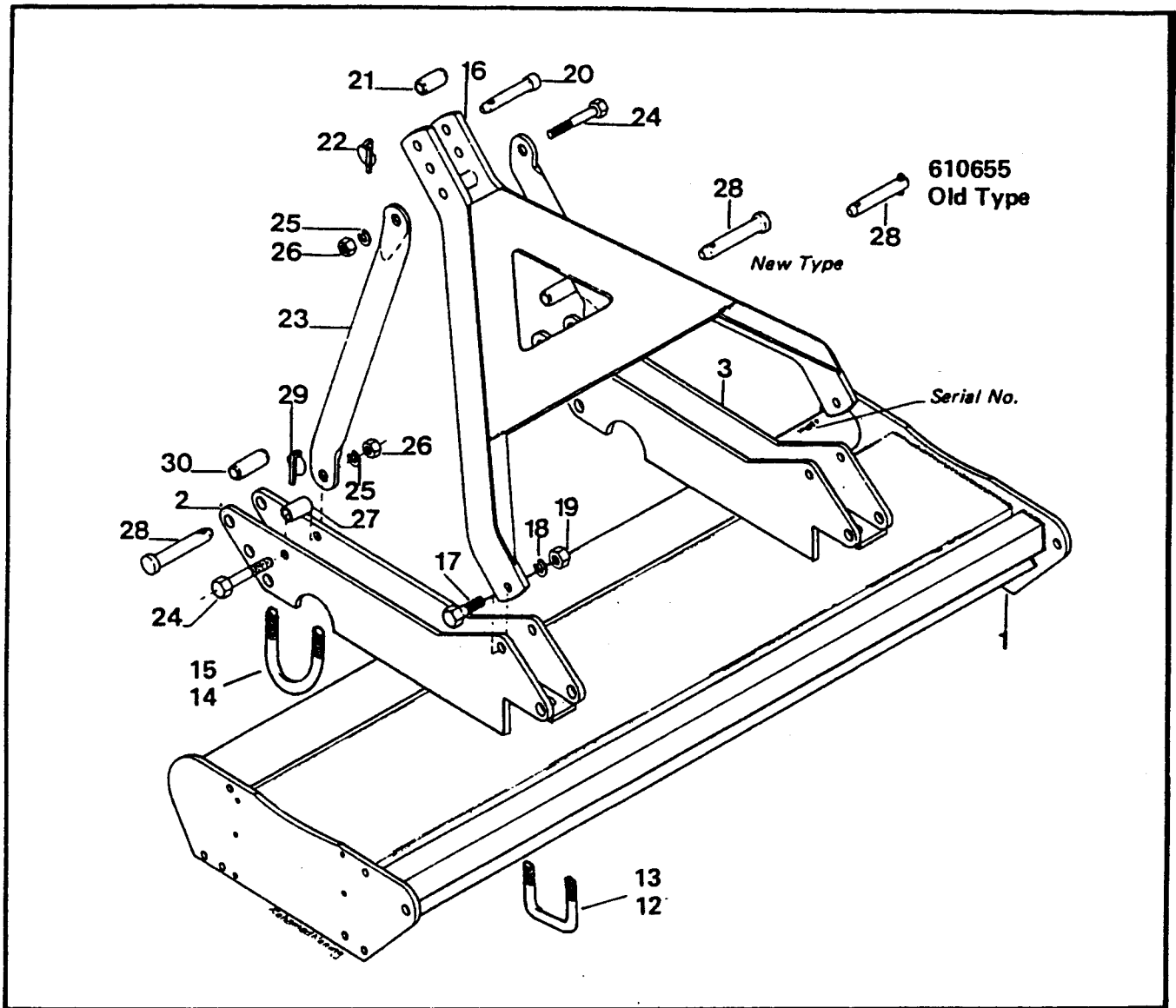
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Item	Part No.	Description	Qty
1	648400	Rotor - 155	1
	648401	Rotor - 180	1
	648402	Rotor - 205	1
2	648496	Renovating - 155	1
	648497	Renovating - 180	1
	648498	Renovating - 205	1
3	3900 / 63604	Blade - Standard L. H.	18 (155), 21 (180), 24 (205)
4	3901 / 63605	Blade - Standard R. H.	18 (155), 21 (180), 24 (205)
5	5978	Blade - Long Shank L. H.	18 (155), 21 (180), 24 (205)
6	5979	Blade - Long Shank R. H.	18 (155), 21 (180), 24 (205)
7.	610768	Blade - Speed L. H.	18 (155), 21 (180), 24 (205)
8.	610769	Blade - Speed R. H.	18 (155), 21 (180), 24 (205)
9.	610749	Blade - Renovating	30 (155), 34 (180), 38 (205)
10	9844	Bolt - Special	72 (155), 84 (180), 96 (205)
11	52053	Nut-Special	72 (155), 84 (180), 96 (205)
12	108081440	Spring Washer 1/2"	72 (155), 84 (180), 96 (205)
13	648410	Skid L. H. - with protector	1
14	648411	Skid R. H.	1
15	610803	Sole Plate	2
16	104607100	Plough Bolt 7/16" BSW x 1 1/2"	4
17	108071240	Spring Washer 7/16"	4
18	107607010	Nut 7/16" BSW	4
19	301212355	Bolt M12 x 35 Hex	2
20	307212055	Nyloc Nut M12 Hex.	2
21	301412405	Setscrew M12 x 40 Hex	2
22	307212055	Nyloc Nut M12 Hex	2
23	50476	Adjusting Bar	2
24	301212755	Bolt M12 x 75 Hex	2
25	50477A	Adjusting Stop	2
26	648381	Spacer	1
27	648382	Spacer	1
28	640854	Hand Nut M12.	2

BOLT 1/2 x 2 1/2
 BOLT 1/2 x 2 1/2
 HAND NUT 1/2"

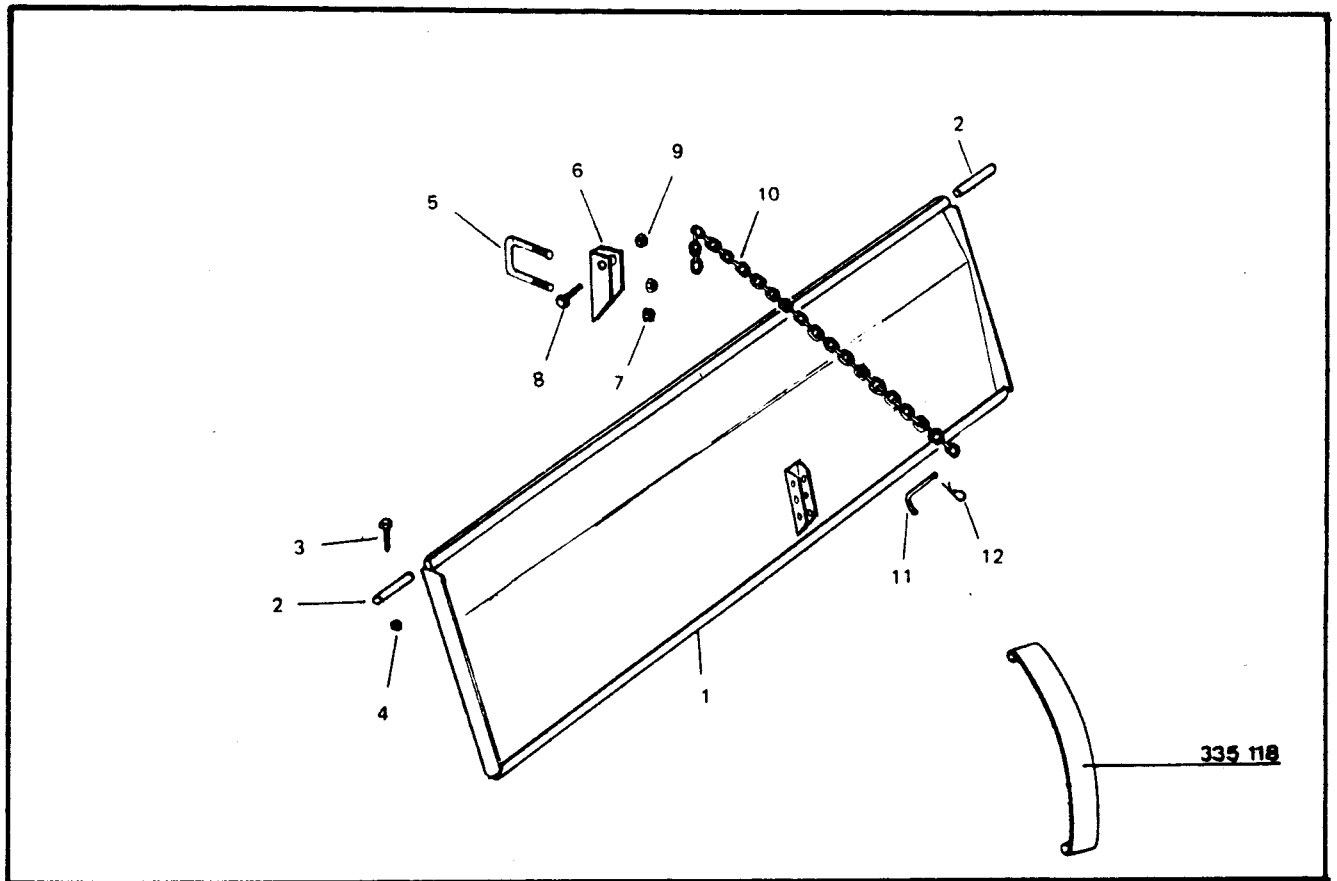
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Main Frame

Item	Part No.	Description	Qty.
1	648360	Frame 155	1
	648361	Frame 180	1
	648375	Frame 205	1
2	648366	Clevis Bracket - Standard	1
	648493	Clevis Bracket - offset	1
3	648366	Clevis Bracket - Standard	1
12	644927	U Bolt	2
13	307216055	Nut Nyloc M16 Hex	4
14	648468	U Bolt	2
15	307216055	Nut Nyloc M16 Hex	4
16	648488-610645	A Frame - Heavy Duty	1
	648484	A Frame - Medium Duty	1
17	301220505	Bolt M20 x 50 Hex	2
18	308200045	Spring Washer M20	2
19	307220015	Nut M20 Hex	2
20	648500-70071	Hitch Pin - Top	1
21	65577	Steeve	1
22	610661	Cotter Assembly	1
23	610666	Support Tube	2
24	301620135	Bolt M20 x 130 Hex.	1
25	308200045	Spring Washer M20	1
26	307220015	Nut M20 Hex	1
27	610667	Spacer	2
28	648499-610654	Hitch Pin - Bottom	2
29	610661	Cotter Assembly	2
30	610660	Sleeve Cat II	2

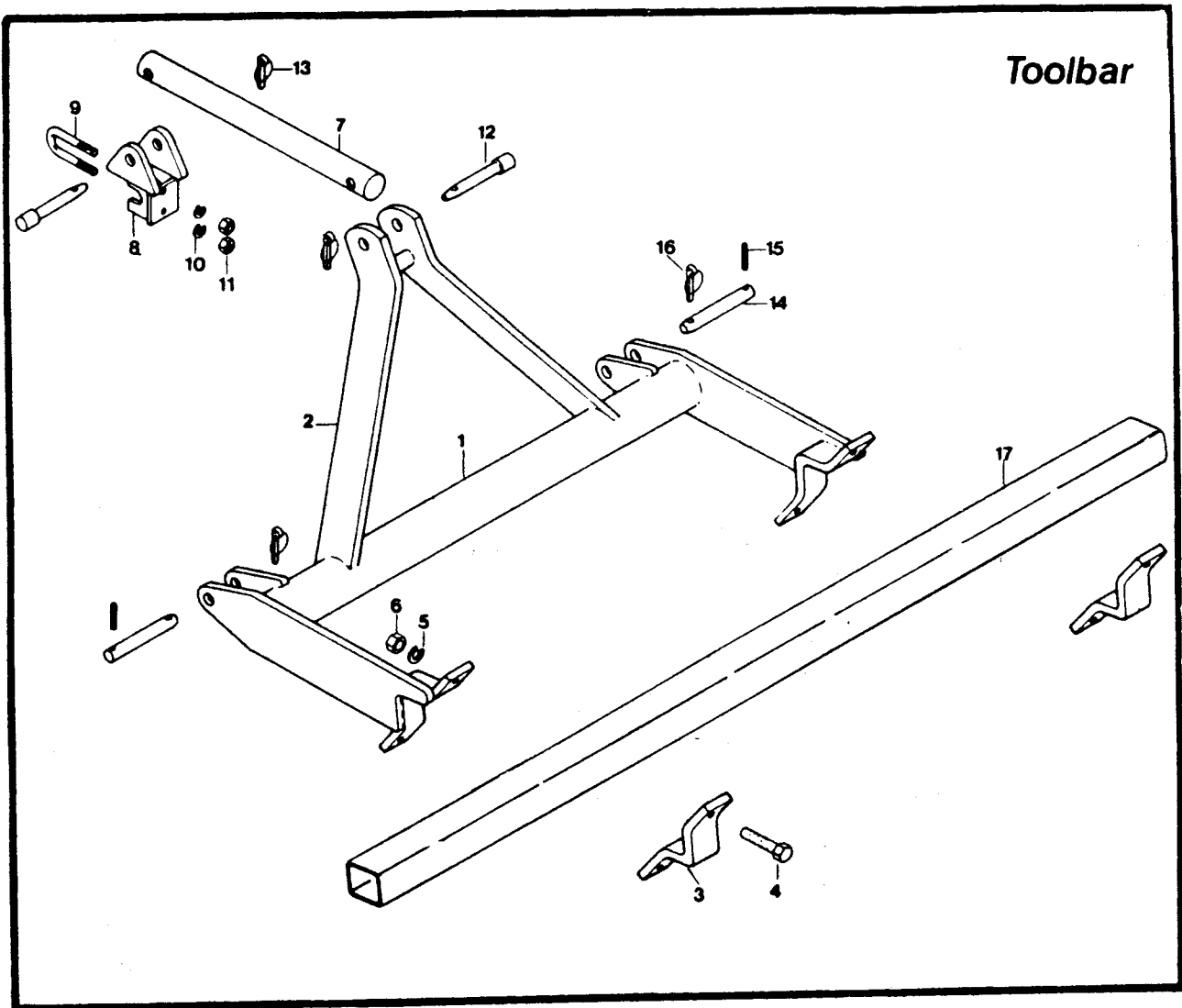
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Trailing Board & Shield

Item	Part No.	Description	Qty.
1	648458	Trailing Board 155	1
	648459	Trailing Board 180	1
	648475	Trailing Board 205 - HALF	2
2	648449	Hinge Pin	2
3	301406405	Setscrew M6 x 40 Hex	2
4	307206050	Nyloc Nut M6 Hex	2
5	644927	U Bolt	AS REQ
6	648323	Spring Bracket	"
7	307214055	Nyloc Nut M14 Hex	"
8	301210705	Bolt M10 x 70 Hex	"
9	307210050	Nyloc Nut M10 Hex	"
* 10	NA. 648492	Chain	"
11	648343	Pin	"
12	208014010	Spring Clip	"
* 10	335118	DAMPER SPRING	"
NI	70755	TRANSFER - SYMBOL (530 x 140)	1

SH SERIES HOE



Toolbar

Frame & Mounting

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Qty.</u>
1	610970	Toolbar	1
2	70601	Transfer	2
3	78606	Clamp	2
4	101112220	Bolt 3/4" UNF x 2 3/4" Hex H.T.	4
5	108122040	Spring Washer 3/4"	4
6	107112010	Nut 3/4" UNF Hex	4
7	610980	Top Link	1
8	610975	Bracket 'A' Frame	1
9	610979	U Bolt	1
10	308100040	Spring Washer M10	1
11	307210010	Nut M10 Hex G8	2
12	70071	Hitch Pin - top	2
13	610661	Cotter Assembly	2
	610991	Clevis Pin Assembly	2
14	610992	Pin	2
15	208015175	Spiral Pin 5/16 x 1 3/4"	2
16	610661	Cotter Assembly	2
17	610987	Toolbar 50"	1
	610988	Toolbar 60"	1
	610989	Toolbar 70"	1
	610990	Toolbar 80"	1