



ROTAVATOR M series

**Reservedelsliste
Spare parts list
Ersatzteilliste
Onderdelenlijst
Liste de pièce de rechange
Lista de Piezas
Parti di ricambio**

CONTENTS

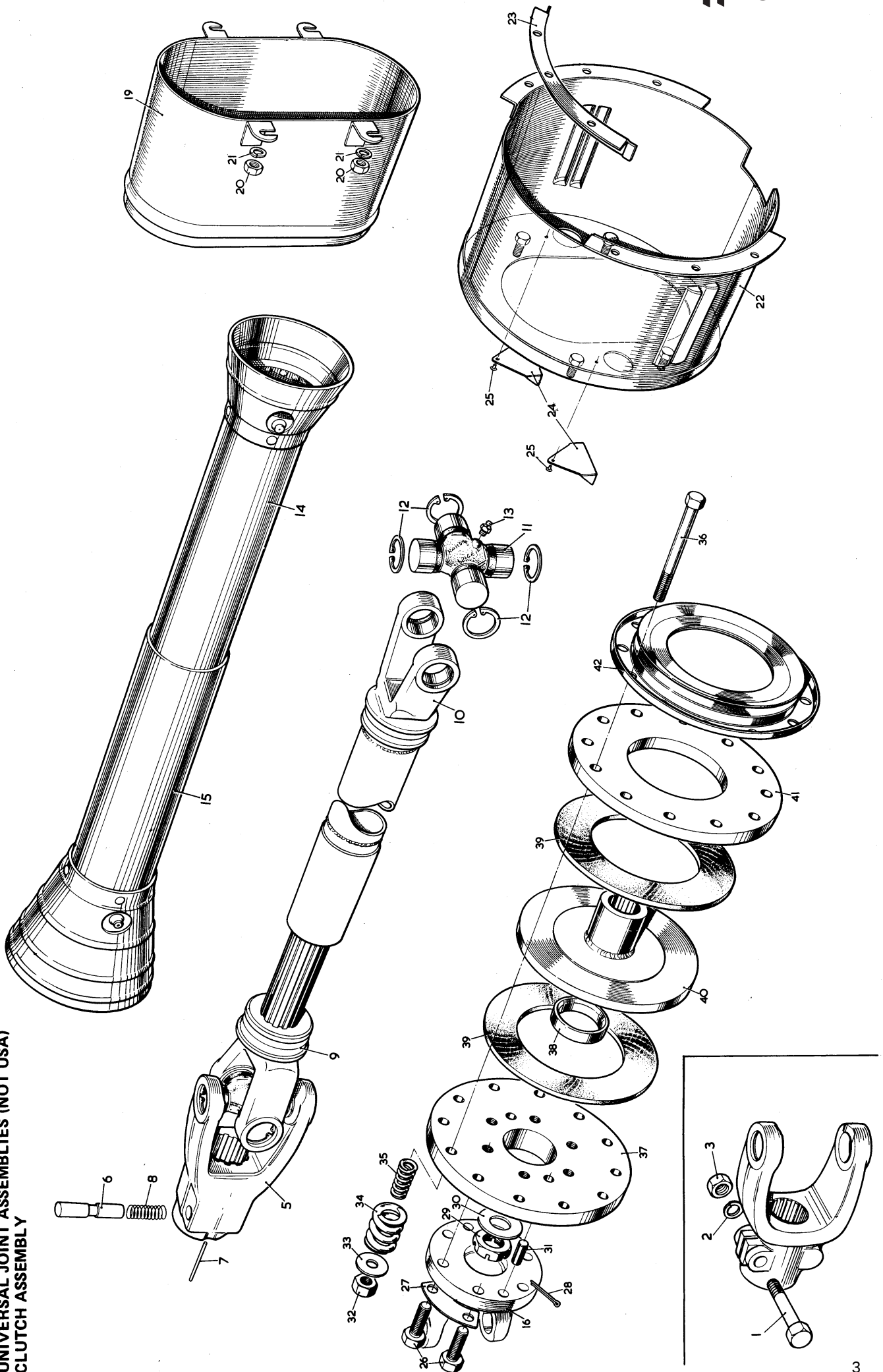
Backplate assembly	...	...	...	...	7
Clutch assembly	...	...	...	...	3
Converto frame assembly	...	...	...	...	25
Depth control arm assembly	...	...	...	...	11
Depth control hydraulic cylinder assemblies	...	...	...	...	13
Equaliser valve — USA only	...	...	...	...	15
Flow divider — USA only	...	...	...	...	15
Gearbox assembly	...	...	...	...	5
Hydraulic piping assembly	...	...	...	...	15
Jackshaft assembly	...	...	...	...	7
Machine transfers	...	...	...	...	31
Mounting frame and wing assemblies	...	...	...	...	17
Numerical parts list	...	...	...	...	32
Parking stand — USA only	...	...	...	...	9
Rotors and blades	...	...	...	...	23
Rotor drive assembly	...	...	...	...	7
Safety guards	...	...	...	...	31
Shield and trailing board assembly	...	...	...	...	21
Stub axle assembly	...	...	...	...	9
Support plate assembly	...	...	...	...	9
Trailing board adjusters	...	...	...	...	19
Underbuster kit	...	...	...	...	29
Underbuster trailing board kit	...	...	...	...	29
Universal joint assemblies — not USA	...	...	...	...	3
Universal joint assemblies — USA only	...	...	...	...	27
Universal joint assemblies for use with Converto Frame — USA only	...	...	...	...	25

NOTES FOR DEALER

The Bulletin columns provide space to record the reference number of any Bulletin issued concerning that part.

The Bin number column is for you to record the location of that item in the stores.

When writing in the Bin locations, complete the numerical index first and then transfer the information to the other pages.

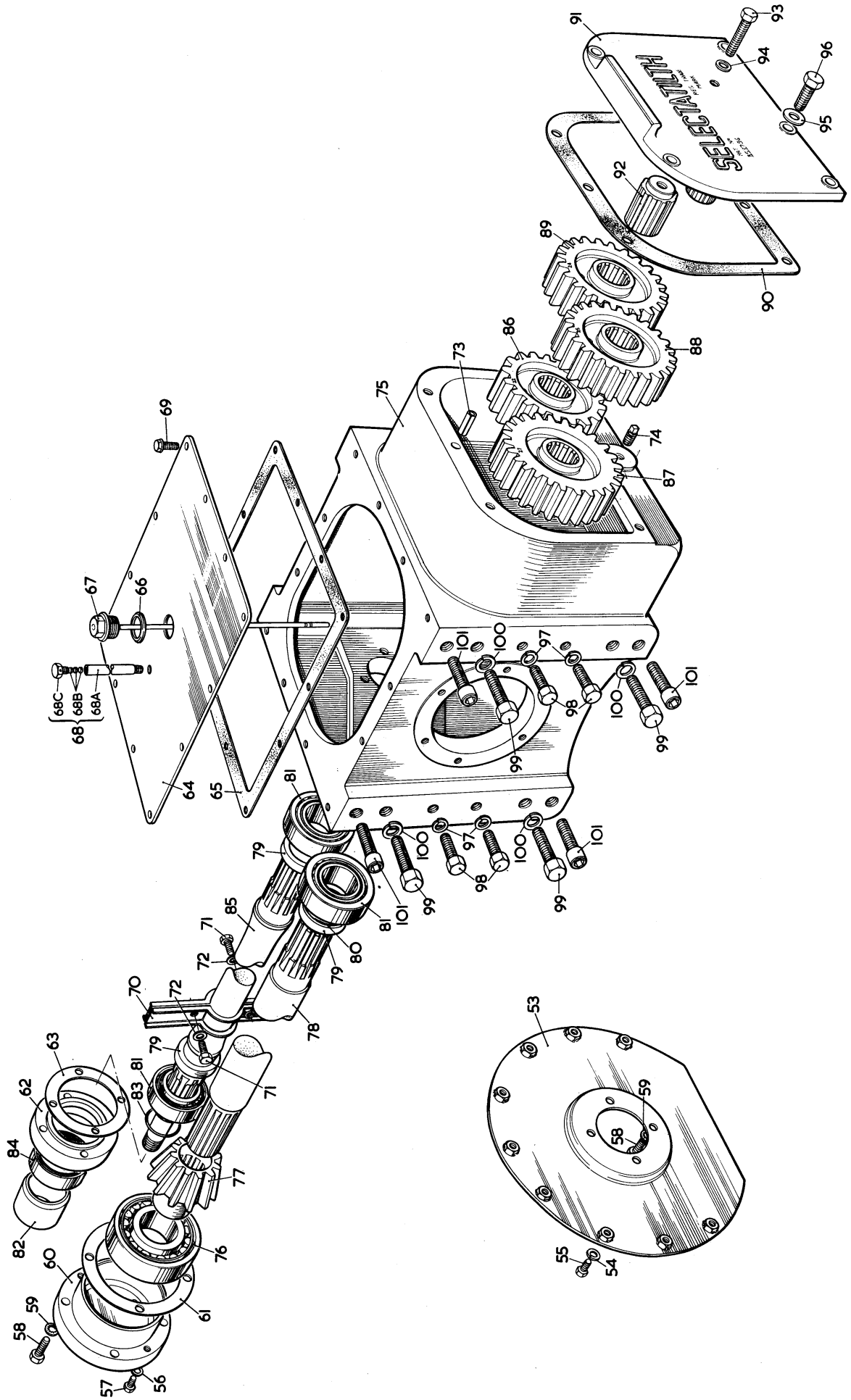


Illus. No.	Part Number	Description	No. off	Bulletin	Bin No.
UNIVERSAL JOINT ASSEMBLIES					
Note: These Universal Joint Assemblies are not supplied to USA. See illustration numbers 671 - 685 on page 27.					
	308490	Yoke 1 1/2" x 20 spline 24-17-103	1		
		includes:—			
1	301212700	Bolt 12 mm x 1.5 pitch x 70 mm	1		
2	308120040	long Hex. Head 60-06-09	1		
3	307212010	Spring Washer 12 mm 60-83-00	1		
4	not allocated	Nut 12 mm 1.5 pitch 60-53-00	1		
	*700324				
		Universal Joint Assembly			
		24" - 36" between centres			
		1 3/8" x 21 spline PTO yoke 1000 RPM	1		
		includes:—			
69118		Universal Joint Assembly 148 to 0013	1		
		comprising illustration number 5 - 15			
5	204008290	Quick Release Yoke Assembly 48-04-821			
		includes:—			
6	204011800	Pin 00-08-01	1		
7	204011790	Tension Pin 00-33-06	1		
8	204011770	Spring 00-12-00	1		
9	204008580	Yoke and Splined Bar 4EX148 to 0013	1		
10	204008590	Yoke and Tube 3EX 148 to 0013	1		
11	204011740	Spider Assembly K5-LGB-183	2		
		includes:—			
12	208001050	Circlip K3 7GB 199	8		
13	204011030	Lubricator 94-GB-2204	2		
14	204010850	Inner Half Guard BP94-TM3-1624	1		
15	204010840	Outer Half Guard BP94-TF1-1828	1		
16	300534	Flanged Yoke	1		
	*300579				
		Universal Joint Assembly			
		21" - 30" between centres			
		1 1/8" x 21 splined PTO yoke 1000 RPM	1		
		includes:—			
305313		Universal Joint Assembly	1		
		comprising illustration numbers 5 - 15			
5	204008290	Quick Release Yoke Assembly 48-04-821	1		
		includes:—			
6	204011800	Pin 00-08-01	1		
7	204011790	Tension Pin 00-33-06	1		
8	204011770	Spring 00-12-00	1		
9	204008400	Yoke and Splined Bar 4EX 148 to 0011	1		
10	204008410	Yoke and Tube 3EX 148 to 0011	1		
11	204011740	Spider Assembly K5-LGB-183	2		
		includes:—			
12	208001050	Circlip K3 7GB 199	8		
13	204011030	Lubricator 94-GB-2204	2		
14	204010830	Inner Half Guard BP-94-TM3 1324 Atkinson	1		
15	204010820	Outer Half Guard BP-94-TF1 1528 SNS/C/M/2	1		
16	300534	Flanged Yoke	1		
CLUTCH ASSEMBLY					
	300966	Clutch Cover Assembly	1		
		comprising:—			
19	300337	Shroud	1		
20	107106010	Nut 3/8" UNF	4		
21	108061140	Spring Washer 3/8" dia	4		
22	300968	Clutch Cover	1		
23	300975	Cover Plate	1		
24	300967	Cover	2		
25	208021070	Rivet 3/16" dia. x 1/2" long Round Head	2		
	300955	Clutch Assembly	1		
		comprising:—			
26	101410140	Setscrew 5/8" UNC x 1 1/4" long Hex Head	6		
27	300435	Tab Washer	3		
28	208010230	Split Pin 1/8" dia. x 1 1/4" long	1		
29	300185	Special Nut left hand thread	1		
30	300184	Special Washer	1		
31	208013090	Dowel 1/2" dia x 1 1/4" long	2		
32	107208010	Nut 1/2" UNC	12		
33	14034	Washer	12		
34	5024	Clutch Spring - Outer	12		
35	5025	Clutch Spring - Inner	12		
36	101208360	Bolt 1/2" UNC x 4 1/4" long	12		
37	300996	Flange	1		
38	301070	Clutch Sleeve	1		
39	300957	Friction Disc	2		
40	300959	Clutch Plate	1		
41	300958	Pressure Plate	1		
42	300960	Pulley	1		
		43 to 52 not allocated			
				758	3

Howard M Series – Parts List

GEARBOX ASSEMBLY

758	2.77	4
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Illus. No.	Part Number	Description	No. off	Bulletin	Bin No.
GEARBOX ASSEMBLY					
53	300973	Guard Backplate ...	1		
54	108061140	Spring Washer $\frac{3}{8}$ " dia. ...	9		
55	101406060	Setscrew $\frac{3}{8}$ " UNC x $\frac{3}{4}$ " long, Hex. Head	9		
56	108061210	Flat Washer $\frac{3}{8}$ " dia. ...	3		
57	101406040	Setscrew $\frac{1}{8}$ " UNC x $\frac{1}{2}$ " long, Hex. Head	3		
58	101408120	Setscrew $\frac{1}{2}$ " UNC x $1\frac{1}{2}$ " long, Hex. Head	8		
59	108081430	Shakeproof Washer $\frac{1}{2}$ " dia. ...	8		
60	300045	Pinion Bearing Housing ...	1		
61	300046	Gasket .004" ...	As req'd		
	300047	Gasket .010" ...	As req'd		
	300048	Gasket .020" ...	As req'd		
62	300041	Oilseal Housing ...	1		
63	300042	Gasket .004" ...	As req'd		
	300043	Gasket .010" ...	As req'd		
	300044	Gasket .020" ...	As req'd		
64	300049	Gearbox Cover ...	1		
65	300050	Gearbox Cover Gasket ...	1		
66	202042080	Bonded Seal 1" BSP Dowry Type PP 45H	1		
67	300051	Dipstick ...	1		
68	305322	Breather Assembly ...	1		
		comprising:—			
68a	36408	Extension Tube ...	1		
68b	305244	Breather Pad ...	3		
68c	305243	Breather Pad Housing ...	1		
69	134406065	Whizz Lock Screw $\frac{3}{8}$ " UNC x $\frac{3}{4}$ " long	12		
	300529	Gearbox Oil Thrower Assembly ...	1		
		comprising:—			
70	300530	Oil Thrower ...	2		
71	101405050	Setscrew $\frac{5}{16}$ " UNC x $\frac{5}{8}$ " long, Hex. Head	2		
72	108051010	Flat Washer $\frac{5}{16}$ " dia. ...	2		
73	208009340	Mills Pin GP3 $\frac{1}{2}$ " dia. x $1\frac{1}{2}$ " long	1		
74	203031010	Plug $\frac{1}{2}$ " BSP Square Head ...	1		
75	300594	Gearbox ...	1		
76	252549151	Bearing — Timken Cup 552A - Cone 559	1		
77	301005	Pinion 15 Tooth ...	1		
78	300432	Pinion Shaft ...	1		
79	300038	Collar ...	3		
80	25058	Shim .015" ...	As req'd		
	25906	Shim .005" ...	As req'd		
81	252037121	Bearing — Timken — Cup 3720 - Cone 3780	3		
82	300040	Spacer ...	1		
83	202025020	'O' Ring Dowry PP49/23 2 $\frac{1}{8}$ " o.d. x 2" i.d. x .07" w.	1		
84	263527062	Oilseal — Pioneer 13P/35027562 Double Lipped	1		
85	300965	Drive Shaft ...	1		
86	300434	Pick-off Gear 22 Tooth White	1		
87	300433	Pick-off Gear 27 Tooth White	1		
88	300060	Pick-off Gear 25 Tooth Red	1		
89	300061	Pick-off Gear 24 Tooth Red	1		
	300066	Pick-off Gear 23 Tooth Black	1		
	300057	Pick-off Gear 26 Tooth Black	1		
	300058	Pick-off Gear 28 Tooth Orange	1		
	300059	Pick-off Gear 21 Tooth Orange	1		

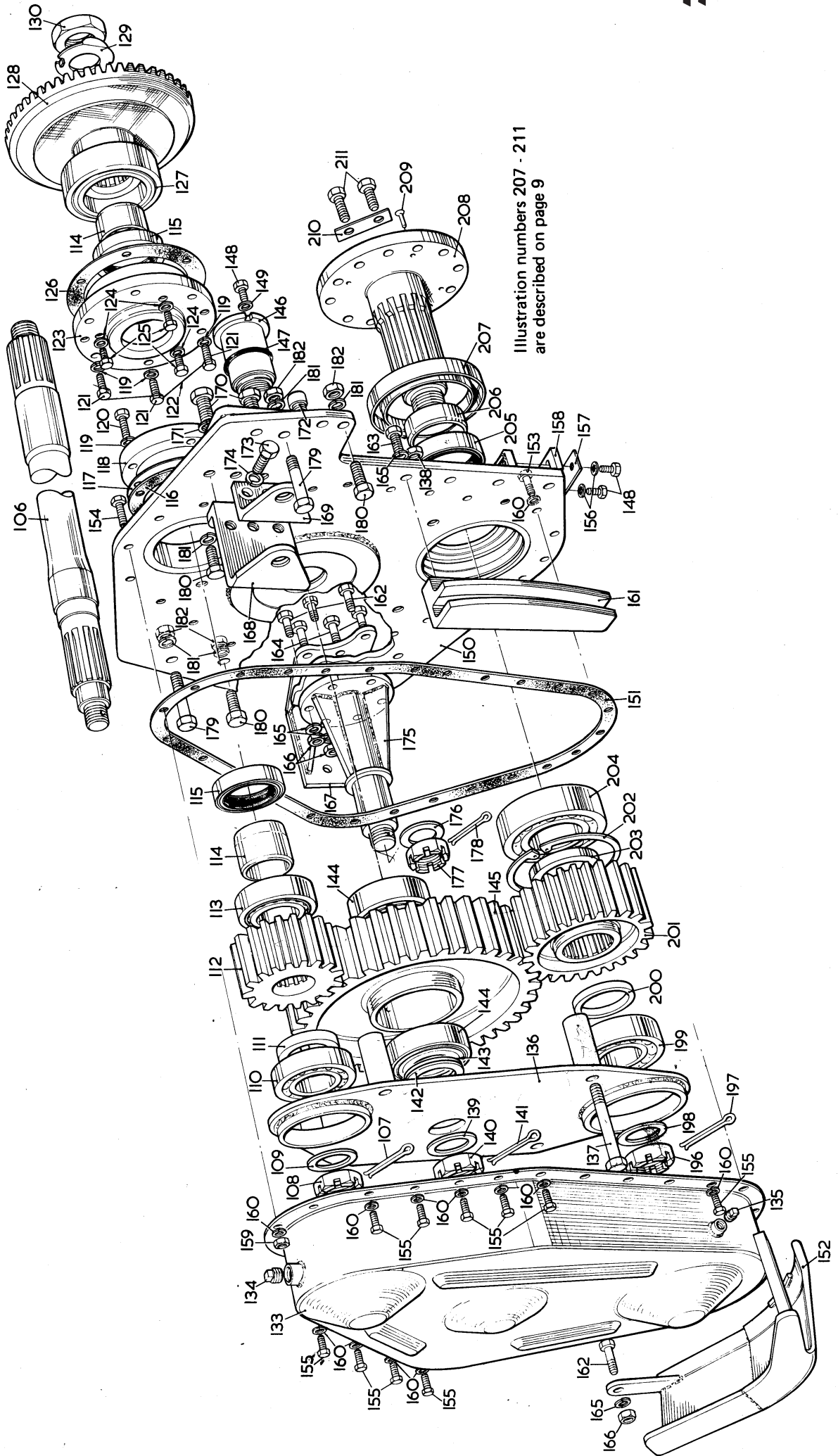
$$\frac{1000 \times 15}{43} = 349 \times 17 = 220$$

R.P.M.

$$\begin{aligned} 22/27 &= 270 \\ 27/22 &= 180 \\ 24/25 &= 230 \\ 25/24 &= 212 \end{aligned}$$

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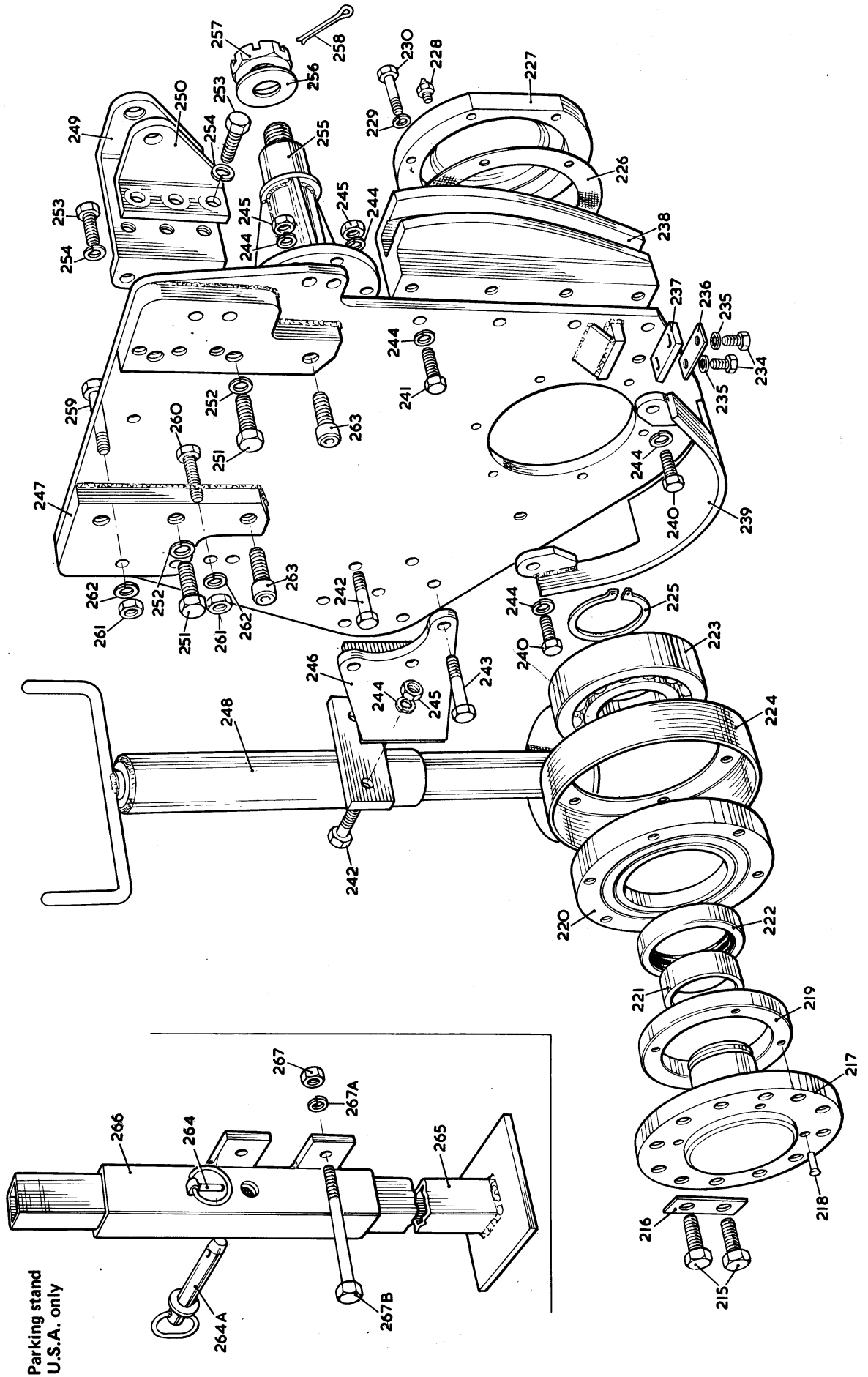
Howard M Series – Parts List JACKSHAFT, BACKPLATE AND ROTOR DRIVE ASSEMBLIES



Illus. No.	Part Number	Description	No. off	Bulletin	Bin No.
JACKSHAFT ASSEMBLY					
106	301305	Jackshaft — 80" Model ...	1		
	301205	Jackshaft — 100" Model ...	1		
	300607	Jackshaft — 130" Model ...	1		
107	208010390	Splitpin $\frac{7}{32}$ " dia. x 2½" long	1		
108	65345	Slotted Nut ...	1		
109	65344	Washer ...	1		
110	252250121	Ballbearing BRM 2½"—5" o.d. x 2¼" i.d. x 1¼" w...	1		
111	300609	Spacer ...	1		
112	300608	Jackshaft Gear ...	1		
113	252549151	Bearing — Timken "TS" — Cup 552A Cone 559...	1		
114	300072	Sleeve ...	2		
115	264029052	Oilseal 13P/400.287.50 Double Lipped 121,6" x 71,6" x 2	2		
116	300080	Gasket .004" ...	As req'd		
	300081	Gasket .010" ...	As req'd		
	300082	Gasket .020" ...	As req'd		
	300083	Shim .030" ...	As req'd		
117	300610	Bearing Housing Cover ...	1		
118	108061140	Spring Washer $\frac{3}{8}$ " dia. ...	10		
119	101206110	Bolt $\frac{5}{8}$ " UNC x 1½" long	4		
120	101206110	Special Bolt ...	6		
121	300851	Locking Wire 16SWG x 24" ...	As req'd		
122	208052010	Bearing Housing ...	1		
123	300070	Flat Washer $\frac{3}{8}$ " dia. ...	3		
124	108061210	Setcrew $\frac{3}{8}$ " UNC x ½" long. Hex. Head	3		
125	101406040	Gasket .004" ...	As req'd		
126	300077	Gasket .010" ...	As req'd		
	300078	Gasket .020" ...	As req'd		
	300079	Bearing — Timken "TS" — Cup 42584 - Cone 42375	1		
127	253759111	Crownwheel 43T ...	1		
128	301007	Tab Washer ...	1		
129	300076	Special Nut ...	1		
130	33690	131 and 132 not allocated			
BACKPLATE ASSEMBLY					
133	300624	Gearcase ...	1		
134	53654	Breather Plug ...	1		
135	203031050	Plug $\frac{5}{8}$ " BSP Square Head ...	1		
136	300618	Bearing Carrier ...	1		
137	101210440	Bolt $\frac{3}{4}$ " UNC x 5½" long	4		
138	107210020	Locknut $\frac{5}{8}$ " UNC	4		
139	65344	Special Washer ...	1		
140	65345	Slotted Nut ...	1		
141	208010390	Splitpin $\frac{7}{32}$ " dia. x 2½" long	1		
142	300620	Bearing Carrier Spacer ...	1		
143	300621	Idle Bearing Shim .004" ...	As req'd		
	300622	Idle Bearing Shim .010" ...	As req'd		
	300623	Idle Bearing Shim .020" ...	As req'd		
144	252548152	Bearing — Timken — Cup HM212011 Cone HM212047	2		
145	300616	Idle Gear ...	1		
146	300617	Idle Shaft ...	1		
147	202023470	"O" Ring 2½" o.d. x 2½" i.d. x .139 w...	1		
148	101406060	Setcrew $\frac{3}{8}$ " UNC x ¾" long Hex. Head — 80" model 100" — 130" models	2		
ROTOR DRIVE ASSEMBLY					
196	65345	Slotted Nut ...	1		
197	208010390	Splitpin $\frac{7}{32}$ " dia. x 2½" long	1		
198	65344	Washer ...	1		
199	252555121	Ballbearing BRM 2½" — 5½" o.d. x 2½" i.d. x 1¼" w...	1		
200	300647	Spacer ...	1		
201	300646	Rotor Gear ...	1		
202	208001290	Circlip 7½" dia. Internal	1		
203	300648	Spacer ...	1		
204	253275161	Ballbearing BRM 3½" — 7½" o.d. x 3¼" i.d. x 1½" w...	1		
205	264737052	Oilseal 4½" o.d. x 3½" i.d. x ½" w Weston RBW	1		
		Double lipped	1		
206	300096	Sleeve ...	1		

Howard M Series – Parts List **STUB AXLE AND SUPPORT PLATE ASSEMBLIES** **PARKING STAND (USA ONLY)**

758	2.77	8
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<i>Illus. No.</i>	<i>Part Number</i>	<i>Description</i>	<i>No. off</i>	<i>Bulletin</i>	<i>Bin No.</i>
ROTOR DRIVE ASSEMBLY CONTINUED					
207	300538	Dust Cover	1		
208	300094	Rotor Drive Shaft	1		
209	208020050	Rivet $\frac{1}{16}$ " dia. x $\frac{1}{8}$ " long. Flat Head	4		
210	300091	Tab Washer	6		
211	101410100	Setscrew $\frac{3}{8}$ " UNC x $1\frac{1}{4}$ " long. Hex. Head	12		
212	214	not allocated			
STUB AXLE ASSEMBLY					
215	101410110	Setscrew $\frac{5}{8}$ " UNC x $1\frac{3}{8}$ " long. Hex. Head	12		
216	300091	Tab Washer	6		
217	300084	Stub Axle	1		
218	208020050	Rivet $\frac{1}{16}$ " dia. x $\frac{7}{8}$ " long. Flat Head	4		
219	300538	Dust Cover	1		
220	300087	Bearing Housing	1		
221	300096	Sleeve	1		
222	264737052	Oilseal $4\frac{3}{4}$ " o.d. x $3\frac{3}{4}$ " i.d. x $\frac{1}{2}$ " w Weston R6W Double lipped	1		
223	253070161	Ballbearing BRM3 7" o.d. x 3" i.d. x $1\frac{3}{16}$ " w	1		
224	300088	Dust Cover	1		
225	208002190	Circlip 3" dia. External	1		
226	300090	End Cover Gasket .010"	1		
227	300089	End Cover	1		
228	202030020	Grease Nipple $\frac{1}{8}$ " BSP Straight	1		
229	108061140	Spring Washer $\frac{3}{8}$ " dia.	6		
230	101206160	Bolt $\frac{3}{8}$ " UNC x 2" long	6		
231	233	not allocated			
SUPPORT PLATE ASSEMBLY					
234	101406060	Setscrew $\frac{3}{8}$ " UNC x $\frac{3}{4}$ " long. Hex. Head	2		
235	108061130	Not required for 80" machine	2		
236	5807	Shakeproof Washer $\frac{3}{8}$ " dia. Internal	2		
237	300227	Not required for 80" Machine	1		
238	300222	Backing Strip 100" and 130" Machines	1		
239	300268	Cutting Blade 100" and 130" Machines	1		
240	101408080	Lift Bracket Guide R.H.	1		
241	101408100	Guard	1		
242	101208140	Setscrew $\frac{1}{2}$ " UNC x 1" long. Hex. head	2		
243	101208180	Setscrew $\frac{1}{2}$ " UNC x $1\frac{1}{4}$ " long. Hex. Head	4		
244	108081440	Bolt $\frac{1}{2}$ " UNC x $1\frac{1}{4}$ " long (5 off required when Parking Jack is fitted)	6		
245	107208010	Bolt $\frac{1}{2}$ " UNC x $2\frac{1}{2}$ " long (required when Parking Jack is fitted)	3		
246	300213	Spring Washer $\frac{1}{2}$ " dia. (14 off required when Parking Jack is fitted)	12		
247	300680	Nut $\frac{1}{2}$ " UNC (8 off required when Parking Jack is fitted)	6		
248	209021020	L.H. Jack Mounting (required when Parking Jack is fitted)	1		
249	300218	Support Plate	1		
250	300380	Parking Jack - Metallifure PJ9	2		
		R.H. Support Bracket - Screw Jack	1		
		R.H. Support Bracket - Hydraulic Ram	1		
		R.H. Support Lug - Screw Jack	1		
PARKING STAND USA ONLY					
300382		Parking stand assembly USA only	1		
101412120		comprising:-			
108122040		Quick Pin $\frac{7}{16}$ " x $1\frac{1}{16}$ "	1		
101410120		Mounting Pin $\frac{7}{8}$ " dia.	1		
108101740		Stand	1		
300223		Tube Holder	1		
300224		Nut $\frac{3}{8}$ " UNC	2		
65255		Spring Washer $\frac{5}{8}$ " dia.	2		
208010350		Bolt $\frac{3}{8}$ " UNC x $5\frac{1}{2}$ " long	2		
101210220		Cap Screw Socket Head $\frac{3}{4}$ " UNC x $1\frac{1}{4}$ " long	2		
101410140					
107210010					
108101740					
106212100					
600385					
600099					
18830					
600391					
600388					
107210355					
108101745					
101210445					
264					
264a					
265					
266					
267					
267a					
267b					
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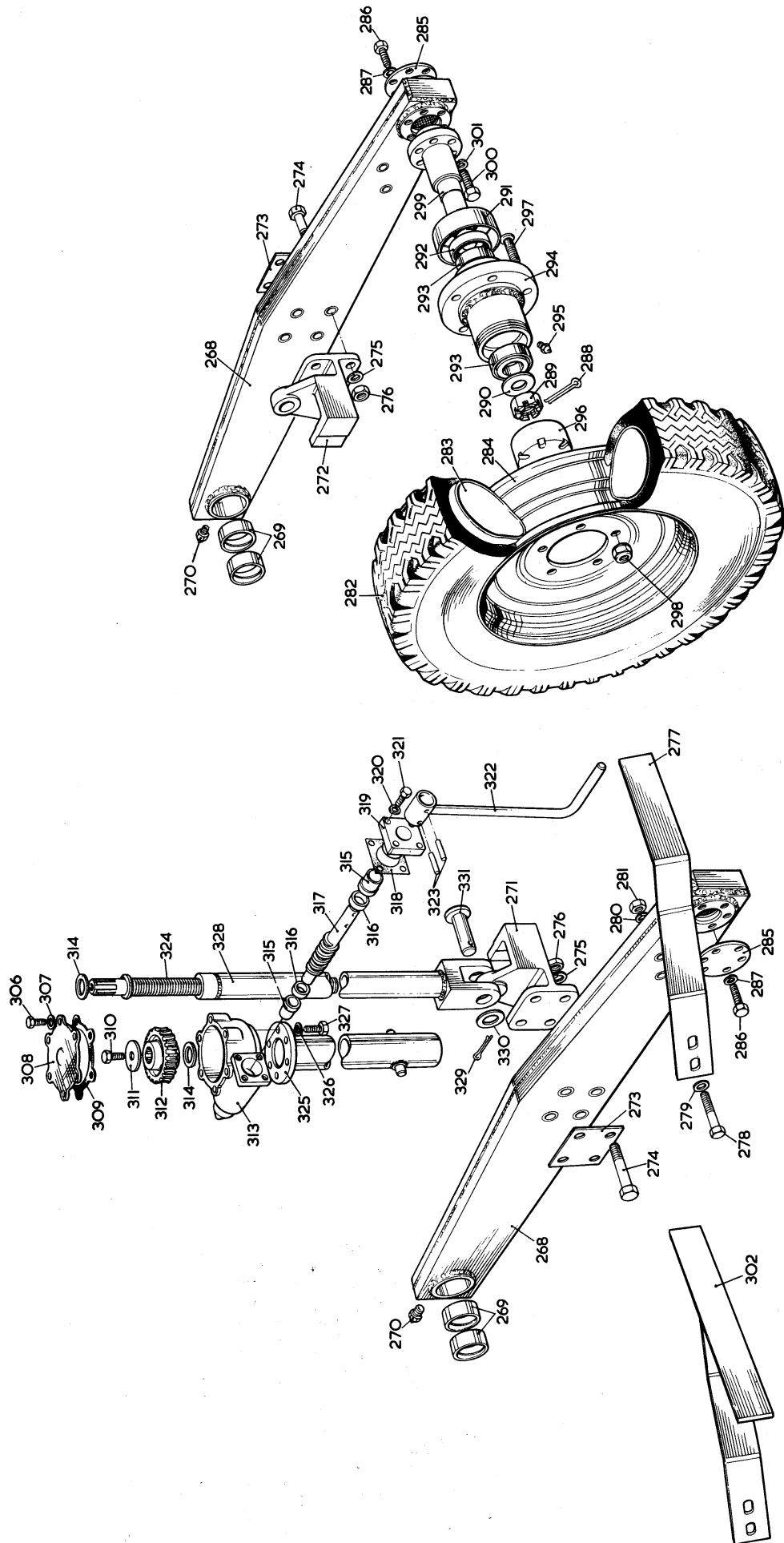
Howard M Series – Parts List

DEPTH CONTROL ARM ASSEMBLY

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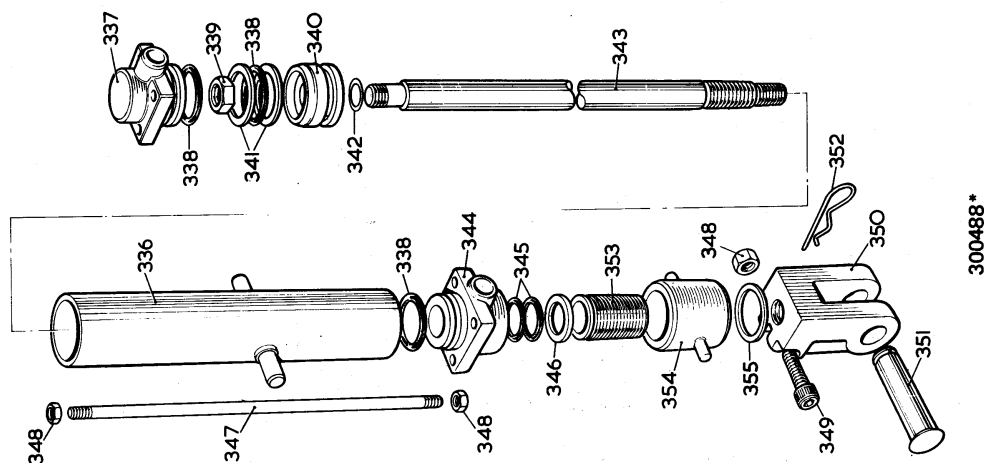


Illus. No.	Part Number	Description	No. off	Bulletin	Bin No.
DEPTH CONTROL ARM ASSEMBLY					
268	301103	Depth Control Arm ...	2		
269	300914	Bush ...	4		
270	202030020	Grease Nipple $\frac{1}{8}$ " BSP Straight	2		
271	300259	Lift Bracket L.H. ...	1		
272	300258	Lift Bracket R.H. ...	1		
273	301159	Plate ...	2		
274	101210300	Bolt $\frac{5}{16}$ " UNC x $3\frac{1}{2}$ " long	8		
275	108101740	Spring Washer $\frac{5}{8}$ " dia.	8		
276	107210010	Nut $\frac{3}{8}$ " UNC ...	8		
277	301095	Wheel Scraper ...	2		
278	101208260	Bolt $\frac{1}{2}$ " UNC x $3\frac{1}{2}$ " long	4		
279	108081610	Flat Washer $\frac{1}{2}$ " dia.	4		
280	108081440	Spring Washer $\frac{1}{2}$ " dia.	4		
281	107208010	Nut $\frac{1}{2}$ " UNC ...	4		
	300260	Wheel Assembly ...	2		
comprising:—					
282	+209001110	Tyre — Dunlop Weathermaster 7.00 x 14 x 8 ply	2		
283	+209001120	Inner Tube to suit 7.00 x 14 tyre	2		
284	209001100	Ventilated Disc Wheel ENC 5115	2		
285	301115	Cover ...	2		
286	101408100	Setcrew $\frac{1}{2}$ " UNC x $1\frac{1}{2}$ " long. Hex. Head	12		
287	108081440	Spring Washer $\frac{1}{2}$ " dia.	12		
	301096	Hub Assembly ...	2		
comprising:—					
288	208010500	Split Pin $\frac{1}{4}$ " dia. x 2" long	2		
289	107216050	Nut — Slotted 1" UNC	2		
290	108163010	Flat Washer 1" dia.	2		
291	301098	Dust Cover ...	2		
292	262717042	Oilseal 2.75" o.d. x 1.75" i.d. x .37" w Double lipped	2		
293	251425071	Taper Roller bearing Timken LM48510—LM48548	4		
294	301100	Hub ...	2		
295	202030030	Grease Nipple $\frac{1}{4}$ " UNF Straight	2		
296	62962	Hub Cap ...	2		
297	209028360	Serrated Stud $\frac{1}{2}$ " UNF x $1\frac{1}{2}$ " long	10		
298	209028350	Wheel Nut $\frac{1}{2}$ " UNF	10		
299	301099	Axle ...	2		
300	101408100	Setcrew $\frac{1}{2}$ " UNC x $1\frac{1}{2}$ " long. Hex. Head	12		
301	108081440	Spring Washer $\frac{1}{2}$ " dia.	12		
	301114	Twin Wheel Kit — Optional Extra	1		
comprising:—					
300260		Wheel Assembly Illus. No's. 282 - 284	2		
301096		Hub Assembly Illus. No's. 288 - 299	2		
301110		Wheel Scraper	2		
302					
303					
+Not fitted to machines supplied to America					
				758	11

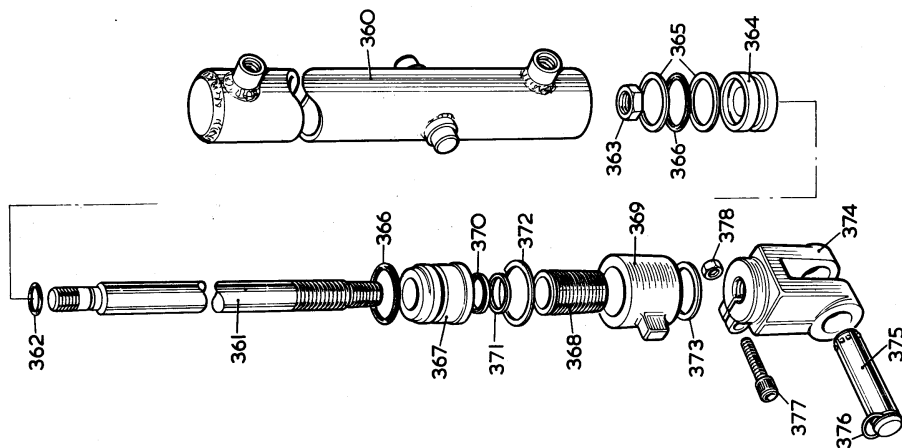
Howard M Series – Parts List

DEPTH CONTROL HYDRAULIC CYLINDER ASSEMBLIES

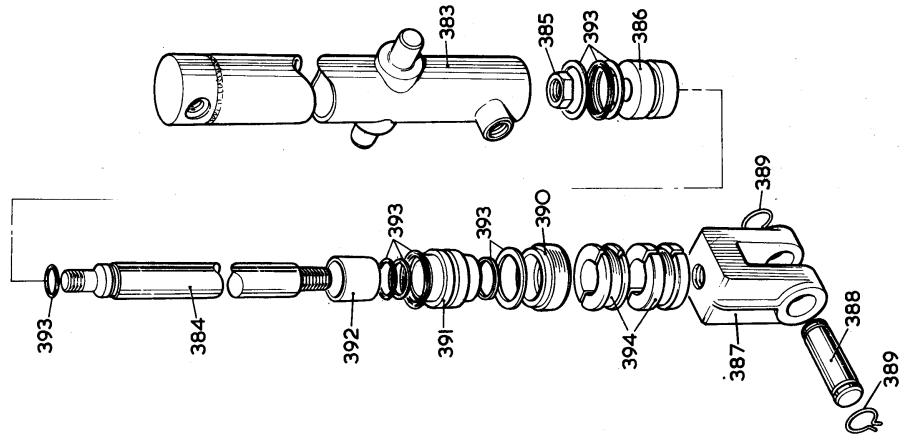
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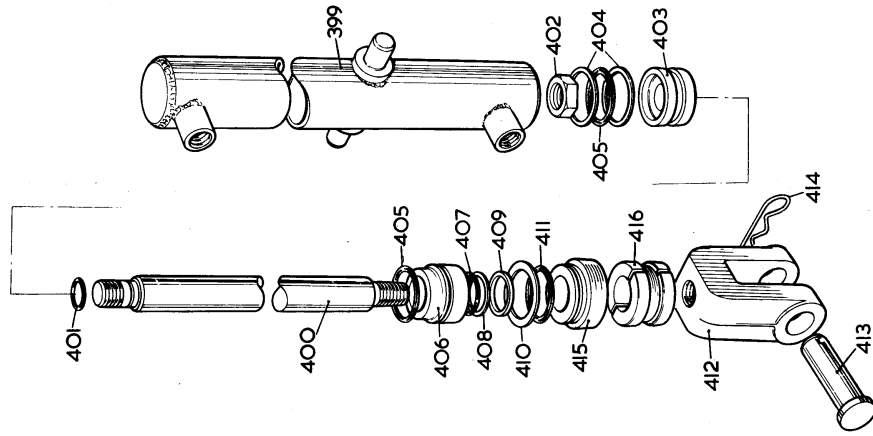
300488*



300574*



301362*



301215

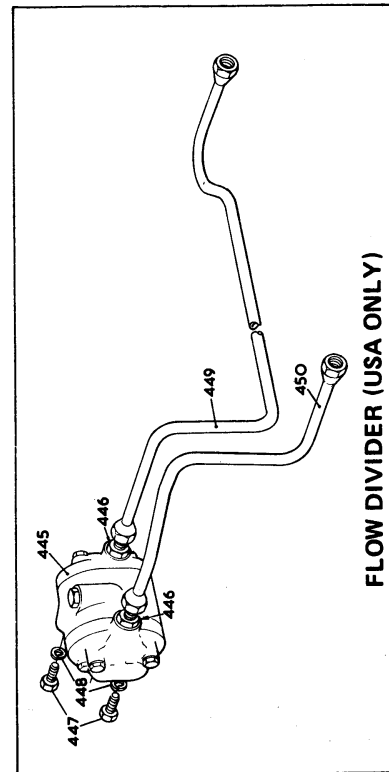
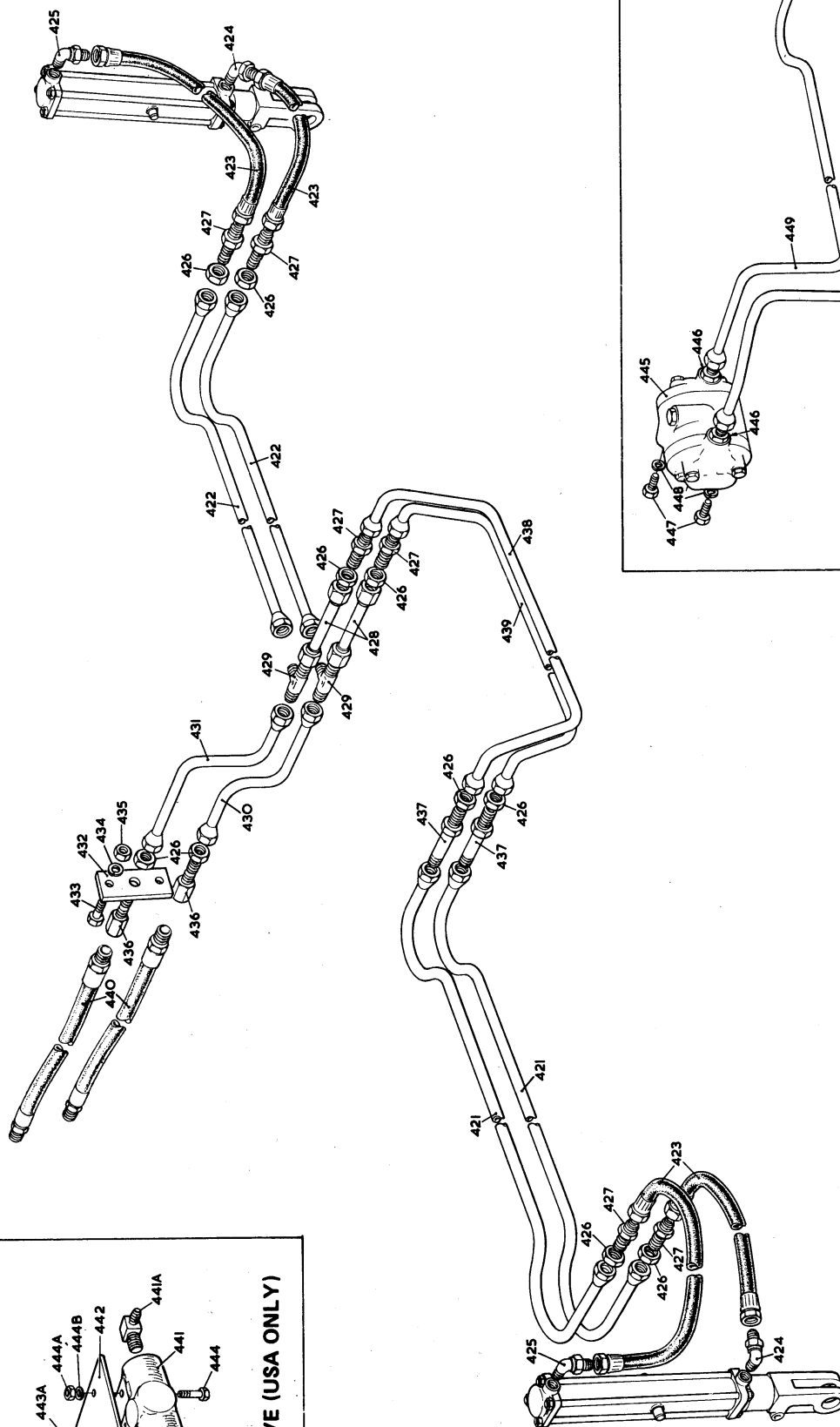
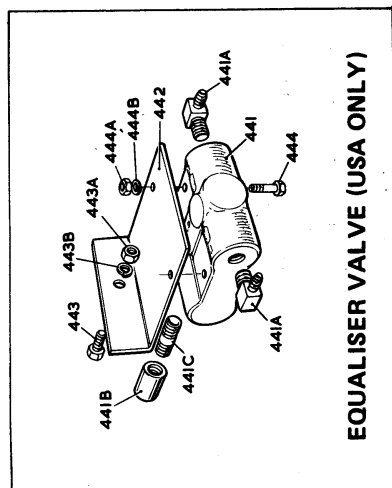
*No longer available as a complete unit — use part number 301215

<i>Illus. No.</i>	<i>Part Number</i>	<i>Description</i>	<i>No. off</i>	<i>Bulletin</i>	<i>Bin No.</i>
DEPTH CONTROL HYDRAULIC CYLINDER ASSEMBLIES					
*300488		Hydraulic Cylinder Assembly 220090 D	2		
		comprising:—			
336	202017090	Tube IC1836	...		
337	202017040	Base IC1838	...		
338	202017210	Seal O-Ring 1A0110	...		
339	202017200	Nut 1A0143	...		
340	202017100	Piston IC0567	...		
341	202017190	Seal Back-up Ring 1A0111	...		
342	202017140	Seal Gasket 1A0224	...		
343	202017110	Rod IC1835	...		
344	202017080	Head IC0569	...		
345	202017180	Seal 'O' Ring 1A0087	...		
346	202017170	Seal Wiper Lip-Type 1A0014	...		
347	202017020	Tie Rod IC1834	...		
348	202017150	Nut 1A0022	...		
349	202017160	Cap Screw 1A0021	...		
350	202017050	Clevis IC1833	...		
351	202017030	Clevis Pin IC0393	...		
352	202017120	Clip 1A0122	...		
353	202017060	Collar IC0253	...		
354	202017070	Collar — Outside Stop IC0262	...		
355	202017130	Retaining Ring 1A0404	...		
356 to 359	not allocated				
*300574		Hydraulic Cylinder Assembly — Energy REF. XC, 41	2		
		comprising:—			
360	202017260	Cylinder Body - XB 312	...		
361	202017270	Piston Rod - XA 813	...		
362	202017360	'O' Ring $\frac{3}{8}$ " i.d. x $\frac{7}{8}$ " o.d. — 80305	...		
363	202017390	Jam Nut $\frac{7}{8}$ " x 14 NF Hex 80281	...		
364	202017290	Piston — A1845	...		
365	202020010	Back-up Washer $1\frac{5}{8}$ " i.d. x 2" o.d. — 81472	...		
366	202023540	'O' Ring $1\frac{3}{8}$ " i.d. x 2" o.d. 80327	...		
367	202017280	Piston Rod Guide — A1906	...		
368	202017310	Inside Collar — CY116	...		
369	202017300	Outside Collar — CY117	...		
370	202017370	U-Cup $1\frac{1}{8}$ " i.d. x $1\frac{3}{8}$ " o.d. - A2154.85	...		
371	202017340	Rod Wiper — 81544	...		
372	202017380	Retaining Ring 2" - 80707	...		
373	202017420	Retaining Ring - 5100150	...		
374	202017330	Piston Rod Clevis CY73	...		
375	202017320	Clevis Pin CY 72	...		
376	202017350	Clevis Pin Clip CY 121	...		
377	106406120	Cap Screw $\frac{3}{8}$ " UNC x $1\frac{1}{2}$ " long. Socket Head	...		
378	107206010	Nut $\frac{3}{8}$ " UNC	...		
379 to 382	not allocated				

<i>Illus. No.</i>	<i>Parr Number</i>	<i>Description</i>	<i>No. off</i>	<i>Bulletin</i>	<i>Bin No.</i>
	*301362	Hydraulic cylinder assembly Bruning ref. 7110.094 comprising:—			
383	202008050	Tube	...		900002113
384	202008090	Rod	...		900002117
385	202008060	Locking Nut	...		900002114
386	202008030	Piston	...		900002111
387	202008080	Clevis	...		900002116
388	202008100	Clevis Pin	...		900002118
389	202008110	Clevis Pin Clip	...		900002119
390	202008120	Spacer	...		900002120
391	202008040	Head	...		900002112
392	202008070	Bronze Bush	...		900002115
393	†202008020	Seal Repair Kit	...		900002121
		comprising:—			
		Static Rod Seal	...		...
		Piston 'O' Ring	...		...
		Piston Back Up Washer	...		...
		Static Head Seal	...		...
		Head Lock Ring	...		...
		Rod Wiper	...		...
		Rod Back Up Washer	...		...
		Rod 'O' Ring	...		...
394	301216	Depth Control Stop Kit	...		900002125
		†Only available as a complete unit — use part No. 301215			
395 to 398	not allocated				
	301215	Hydraulic cylinder assembly Energy ref. A-1782			
		comprising:—			
399	202017260	Cylinder Body XB 312	...		...
400	202017570	Piston Rod A 1784	...		...
401	202017360	'O' Ring $\frac{3}{8}$ " i.d. x $\frac{7}{8}$ " o.d. — 80305	...		...
402	202017390	Jam Nut $\frac{7}{8}$ " — 14 NF Hex. 80281	...		...
403	202017290	Piston A1845	...		...
404	202020010	Back Up Washer $1\frac{5}{8}$ " i.d. x 2" o.d. — 81472	...		...
405	202023540	'O' Ring $1\frac{3}{8}$ " i.d. x 2" o.d. 80327	...		...
406	202017280	Piston Rod Guide A 1906	...		...
407	202017540	'O' Ring $1\frac{1}{8}$ " i.d. x $1\frac{3}{8}$ " o.d. 80320	...		...
408	202017530	Back Up Washer $1\frac{1}{8}$ " i.d. x $1\frac{3}{8}$ " o.d. 81467	...		...
409	202017520	Rod Wiper $1\frac{1}{8}$ " 81544	...		...
410	202017380	Retaining Ring Internal 2" 80707	...		...
411	202017550	'O' Ring $1\frac{3}{16}$ " i.d. x 2" o.d. 80329	...		...
412	202017580	Piston Rod Clevis A-205	...		...
413	202017600	Clevis Pin A542	...		...
414	202017610	Clevis Pin Clip 80438	...		...
415	202017560	Cap A1788	...		...
416	301216	Depth Control Stop Kit	...		900002125
417 to 420	not allocated				

Howard M Series – Parts List

HYDRAULIC PIPING ASSEMBLY
EQUALISER VALVE AND FLOW DIVIDER (USA ONLY)



Illus. No.	Part Number	Description	No. off	Bulletin	Bin No.
HYDRAULIC PIPING ASSEMBLY					
		Without Flow Divider			
421	300366	Wing Line L.H. — 130" Model	2		
	301049	Wing Line L.H. — 100" Model	2		
	301339	Wing Line L.H. — 80" Model	2		
422	300370	Wing Line R.H. — 130" Model	2		
	301050	Wing Line R.H. — 100" Model	2		
	301341	Wing Line R.H. — 80" Model	2		
423	202021790	Hose ...	4		
424	202057140	45° Elbow ...	2		
425	202056120	90° Elbow ...	2		
426	202041130	Locknut $\frac{9}{16}$ " UNF Imperial	2		
		Eastman 711 FSO $\frac{3}{8}$ "	10		
427	202051050	Bulk Head Union — Imperial	6		
428	300373	Eastman 832—FS-06	2		
429	202054050	Bridge Feed Line ...	1		
		Union Tee — Imperial	2		
		Eastman 844—FS-06	2		
430	300519	Lower Feed Pipe ...	1		
431	300445	Adaptor Feed Line ...	1		
432	300526	Adaptor Plate ...	1		
433	101406100	Setscrew $\frac{3}{8}$ " UNC x 1½"	2		
		long. Hex. Head 80" and 100"	2		
		Models only ...	2		
		Bolt $\frac{3}{8}$ " UNC x 1½" long	2		
434	101206120	130" Model ...	2		
435	108061140	Spring Washer $\frac{3}{8}$ " dia.	2		
436	107206010	Nut $\frac{3}{8}$ " UNC ...	2		
437	300449	Inlet Adaptor ...	2		
438	300367	Adaptor ...	2		
439	300368	Bridge Line — Upper	1		
	300369	Bridge Line — Lower	1		
NI	202040270	Tapered Plug for screw Jack	10		
	202040280	Redcap AQ 330/16	2		
	202040040	Redcap AQ 270/6	4		
	202040420	Redcap AQ 290/5	2		
440	301091	Feed and Return Hose Assembly	2		
EQUALISER VALVE USA ONLY					
	18672	Equaliser Valve Assembly (U.S.A. only)	1		
		comprising:—			
441	900002001	Flow Equaliser Valve B100	1		
441a	900002002	90° Male Elbow ½" NPTF 370 $\frac{3}{8}$ " JIC	2		
441b	900002004	Female Connector ½" NPTF	1		
441c	900002003	Nipple ½" NPTF	1		
442	18671	Bracket ...	1		
443	101206100	Cap Screw $\frac{3}{8}$ " UNC x 1½" long	1		
443a	107206010	Nut $\frac{3}{8}$ " UNC	1		
443b	108061140	Spring Washer $\frac{3}{8}$ " dia.	1		
444	101204160	Cap Screw ½" UNC x 2" long	2		
444a	107204010	Nut ½" UNC	2		
444b	108040840	Spring Washer ½" dia.	2		
FLOW DIVIDER USA ONLY					
445	202004010	Flow Divider — Gear Type (U.S.A. only)	1		
446	202063040	Male Connector — Imperial Eastman	2		
NI	202064040	848-FSO-06X08	1		
447	101406080	Adaptor — Imperial Eastman 720-FSO-½" x ½"	2		
		Setscrew $\frac{3}{8}$ " UNC x 1" long Hex. Head	2		
		80" and 100" models	2		
	101406100	Setscrew $\frac{3}{8}$ " UNC 1½" long Hex. Head 130" model	2		
448	108061140	Spring Washer $\frac{3}{8}$ " dia.	2		
449	300515	Upper Wing Line R.H. 130" model	1		
	301046	Upper Wing Line R.H. 100" model	1		
	301343	Upper Wing Line R.H. 80" model	1		
450	300517	Upper Feed Pipe ...	1		
451	not allocated	+Supplied and fitted in U.S.A.			
758					
2.77					
15					

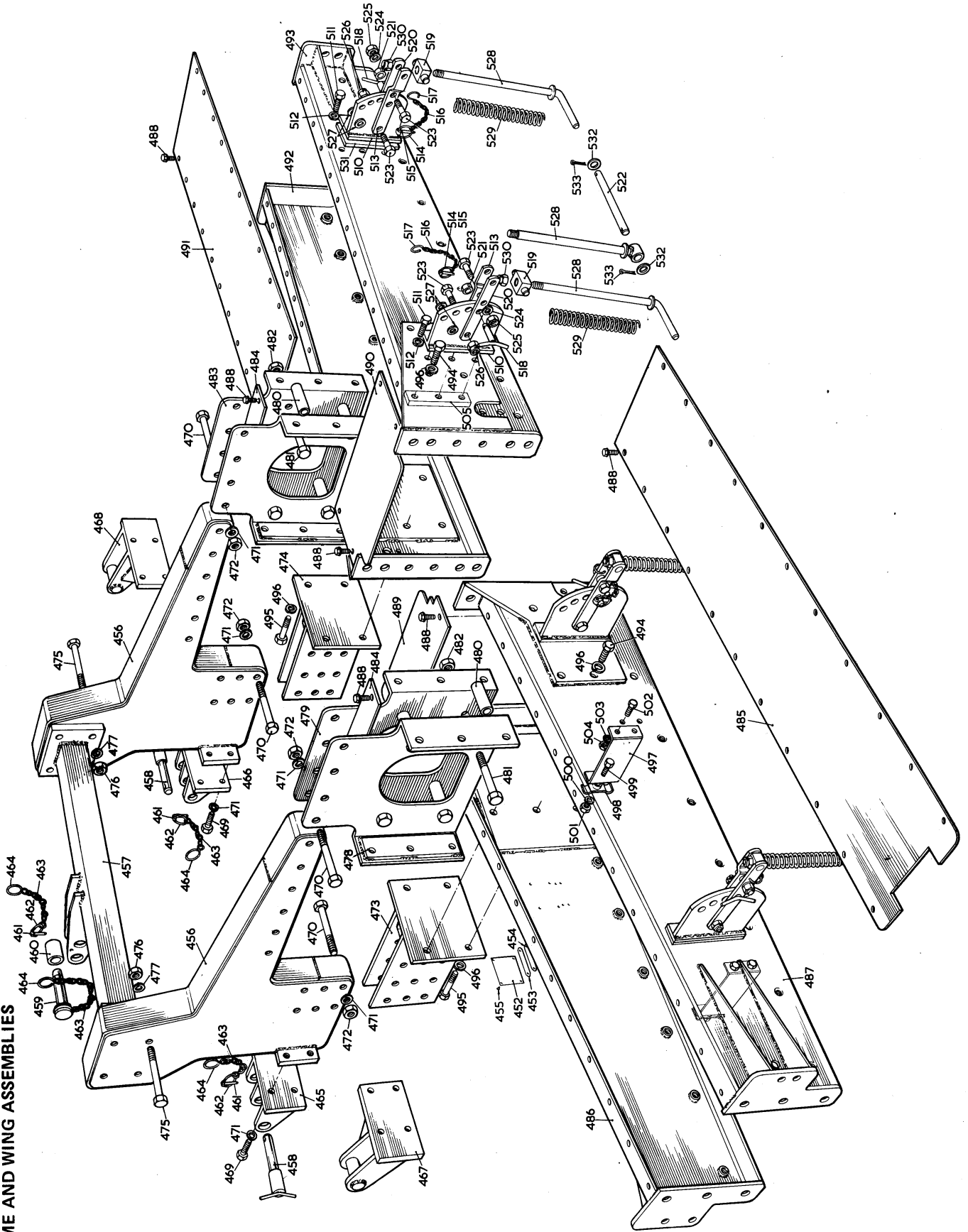
Howard M Series — Parts List



Howard M Series – Parts List

MOUNTING FRAME AND WING ASSEMBLIES

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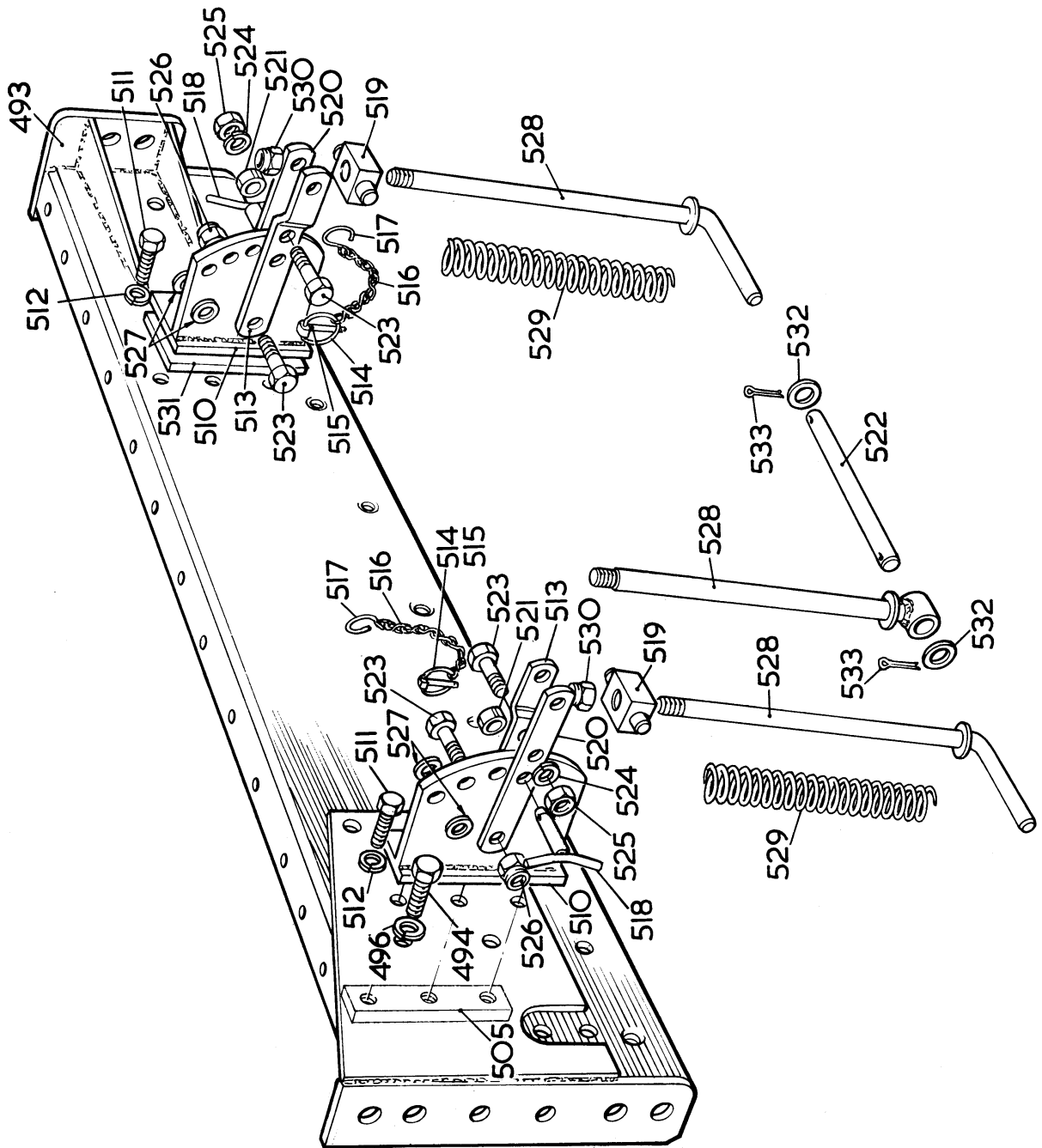


<i>Illus. No.</i>	<i>Part Number</i>	<i>Description</i>	<i>No. off</i>	<i>Bulletin</i>	<i>Bin No.</i>
452	60954	MOUNTING FRAME AND WING ASSEMBLIES	1		
453	66488	Machine Serial Number Plate	1		
454	66494	Patents Pending Plate	1		
455	208041080	Hammer Drive screw Type U No. 2 x $\frac{1}{8}$ " long 80"	8		
	208041090	Hammer Drive Screw Type U No 2 x $\frac{1}{8}$ " long 100" — 130"	8		
456	301014	Top Frame Sideplate	2		
457	301016	Arm	1		
458	300558	Mounting Pin (Not required when Quick Hitch Mounting Plates 301217 and 301218 fitted)	2		
459	300301	Draw Pin	1		
460	300302	Sleeve for category 3 tractors.	1		
461	50934	Clip Pin One off each only required when	3		
462	60495	Clip Ring Quick Hitch Mounting fitted	3		
463	3913	Chain Two off each required when	4		
464	300310	Hook Quick Hitch Mounting fitted	4		
465	300554	L.H. Clevis	1		
466	300555	R.H. Clevis	1		
467	301218	Quick Hitch Mounting Plate L.H.	1		
468	301217	Quick Hitch Mounting Plate R.H.	1		
469	101410140	Setscrew $\frac{5}{16}$ " UNC x $1\frac{1}{2}$ " long. Hex. Head	8		
470	101210380	Bolt $\frac{5}{8}$ " UNC x $4\frac{3}{4}$ " long	20		
471	108101740	Spring Washer $\frac{5}{8}$ " dia.	28		
472	107210010	Nut $\frac{5}{8}$ " UNC	20		
473	*309208	L.H. Lower Mounting Bracket	1		
474	*309207	R. H. Lower Mounting Bracket	1		
		*Not required if fitted with Converto Frame			
475	101212380	Bolt $\frac{3}{4}$ " UNC x $4\frac{3}{4}$ " long	8		
476	107212010	Nut $\frac{3}{4}$ " UNC	8		
477	108122040	Spring Washer $\frac{3}{4}$ " dia.	8		
		Note: Mounting Frame Assembly not required if Machine is to be fitted with Converto frame.			
478	300493	L.H. Mounting Bracket	1		
		comprising:—			
479	300494	L.H. Mounting Bracket	1		
480	300535	Spacer	4		
481	101212380	Bolt $\frac{3}{4}$ " UNC x $4\frac{3}{4}$ " long	4		
482	107212150	Nut $\frac{3}{4}$ " UNC Self locking nut	4		
		R.H. Mounting Bracket	1		
		comprising:—			
480	300535	Spacer	4		
481	101212380	Bolt $\frac{3}{4}$ " UNC x $4\frac{3}{4}$ " long	4		
482	107212150	Nut $\frac{3}{4}$ " UNC Self locking nut	4		
483	300490	R.H. Mounting Bracket	2		
484	300128	Plate	2		
485	300664	L.H. Wing Top Plate 130" model	1		
	300719	L.H. Wing Top Plate 100" model	1		
	300750	L.H. Wing Top Plate 80" model	1		
486	300902	L.H. Front Wing 130" model	1		
	300717	L.H. Front Wing 100" model	1		
	300748	L.H. Front Wing 80" model	1		
487	300905	L.H. Rear Wing 130" model	1		
	300718	L.H. Rear Wing 100" model	1		
	300749	L.H. Rear Wing 80" model	1		
488	134405060	Whiz Lock Screw $\frac{5}{16}$ " UNC x $\frac{3}{4}$ " long 130" model	54		
	134405060	Whiz Lock Screw $\frac{5}{16}$ " UNC x $\frac{3}{4}$ " long 100" model	46		
	134405060	Whiz Lock Screw $\frac{5}{16}$ " UNC x $\frac{3}{4}$ " long 80" model	38		
489	300235	L.H. Wing Filler Plate	1		
490	300118	R.H. Wing Filler Plate	1		
491	300709	R.H. Wing Top Plate 130" model	1		
	300740	R.H. Wing Top Plate 100" model	1		
	300754	R.H. Wing Top Plate 80" model	1		
492	300908	R.H. Front Wing 130" model	1		
	300722	R.H. Front Wing 100" model	1		
	300752	R.H. Front Wing 80" model	1		
493	300911	R.H. Rear Wing 130" model	1		
	300720	R.H. Rear Wing 100" model	1		
	300753	R.H. Rear Wing 80" model	1		
494	101410140	Setscrew $\frac{5}{16}$ " UNC x $1\frac{1}{2}$ " long Hex. Head	8		
495	101210180	Bolt $\frac{5}{8}$ " UNC x $2\frac{1}{2}$ " long	8		
496	108101740	Spring Washer $\frac{5}{8}$ " dia.	16		
		Model: 80" 100" 130"			
	300477	Pipe Support Assembly	2		
		comprising:—			
497	300478	Pipe Support Bracket	2		
498	300479	Clip	2		
499	101404070	Setscrew $\frac{1}{4}$ " UNC x $\frac{7}{8}$ " long. Hex Hd	2		
500	108040840	Spring Washer $\frac{1}{4}$ " dia	2		
501	107204010	Nut $\frac{1}{4}$ " UNC	2		
502	101405070	Setscrew $\frac{5}{16}$ " UNC x $\frac{7}{8}$ " lg. Hex Hd.	4		
503	108050940	Spring Washer $\frac{5}{16}$ " dia	4		
504	107205010	Nut $\frac{5}{16}$ " UNC	4		
505	300497	Pad	2		
	301312	Pad	2		
		506 to 509 not allocated			
				758	17

Howard M Series – Parts List

TRAILING BOARD ADJUSTERS

758	2.77	18
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Howard M Series - Parts List

SHIELD AND TRAILING BOARD ASSEMBLY

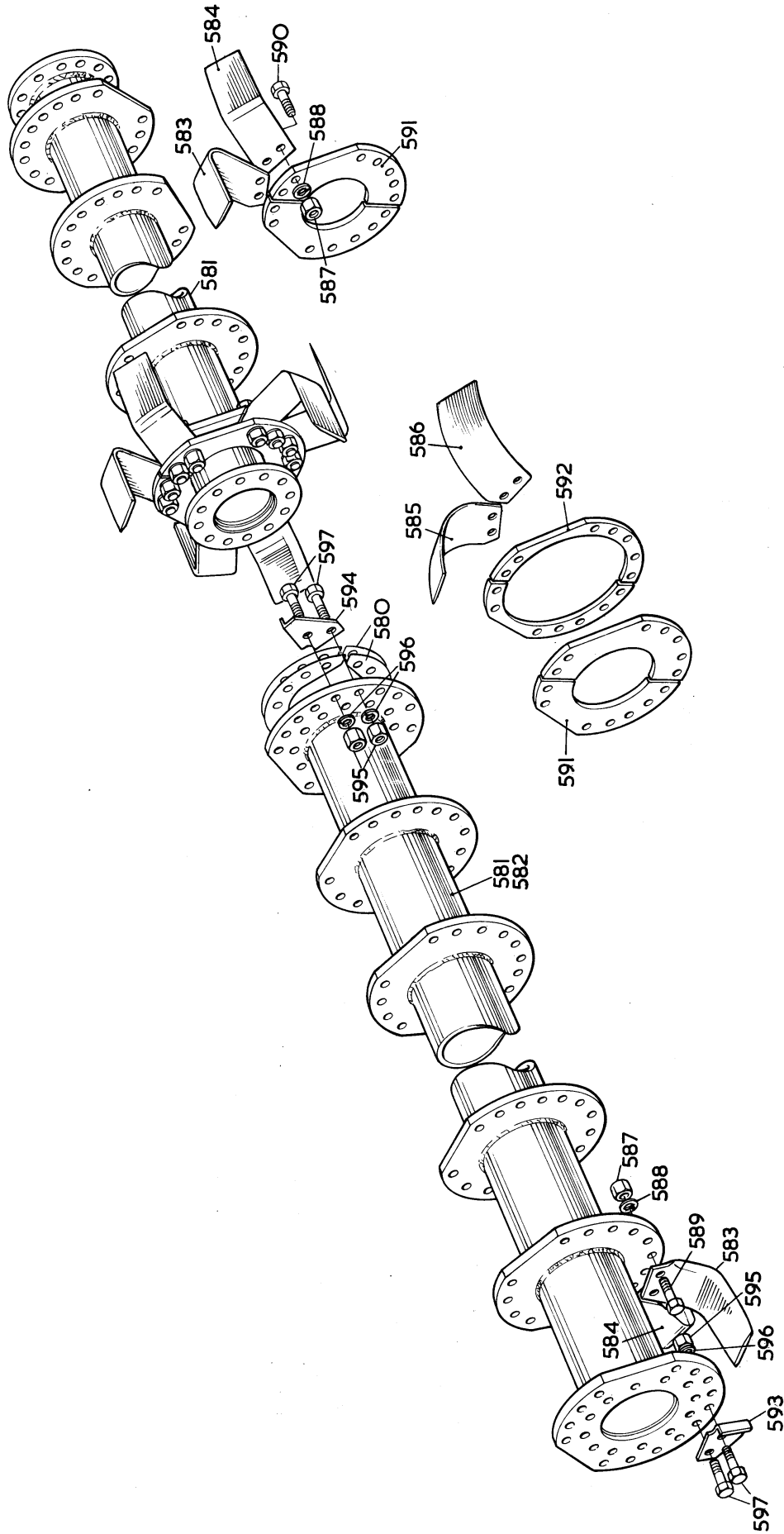


<i>Illus. No.</i>	<i>Part Number</i>	<i>Description</i>	<i>No. off</i>	<i>Bulletin</i>	<i>Bin No.</i>	<i>Illus. No.</i>	<i>Part Number</i>	<i>Description</i>	<i>No. off</i>	<i>Bulletin</i>	<i>Bin No.</i>
SHIELD AND TRAILING BOARD ASSEMBLY											
538	300673	Shield — 130" model	1			560	301366	Rear Retaining Strip L.H. 130" model	1		
	300726	Shield — 100" model	1				301367	Rear Retaining Strip R.H. 130" model	1		
539	301004	Shield — 80" model	1				300990	Rear Retaining Strip 100" model	1		
	300671	L.H. Front Shield Support — 130" model	1				300993	Rear Retaining Strip 80" model	1		
	300723	L.H. Front Shield Support — 100" model	1								
540	300755	L.H. Front Shield Support — 80" model	1								
	300672	R.H. Front Shield Support — 130" model	1								
	300724	R.H. Front Shield Support — 100" model	1								
	300756	R.H. Front Shield Support — 80" model	1								
		Model: 80" 100" 130"									
541	101406070	Setscrew $\frac{3}{8}$ " UNC x $\frac{7}{8}$ " long. Hex Head 10	12			561	53395	Control Rod Collar	130"		
542	101406100	Setscrew $\frac{3}{8}$ " UNC x $1\frac{1}{4}$ " long. Hex Head 8	14			562	101406040	Setscrew $\frac{3}{8}$ " UNC x $\frac{1}{2}$ " long	21		
543	108061140	Spring Washer $\frac{3}{8}$ " dia	10					Hex Head	2		
544	107206010	Nut $\frac{3}{4}$ " UNC	26			563	101406080	Setscrew $\frac{3}{8}$ " UNC x $1\frac{1}{2}$ " long	2		
		Model: 80" 100" 130"						Hex Head	7		
		Setscrew $\frac{3}{8}$ " UNC x $1\frac{1}{2}$ " long. Hex Head 10	12			564	101206110	Bolt $\frac{3}{8}$ " UNC x $1\frac{1}{2}$ " long	7		
		Setscrew $\frac{3}{8}$ " UNC x $1\frac{1}{4}$ " long. Hex Head 8	10			565	101406060	Setscrew $\frac{3}{8}$ " UNC x $\frac{3}{4}$ " long	7		
		Spring Washer $\frac{3}{8}$ " dia	12			566	108061140	Spring Washer $\frac{3}{8}$ " dia	4		
		Nut $\frac{3}{4}$ " UNC	20			567	107206010	Nut $\frac{3}{8}$ " UNC	16		
		Model: 80" 100" 130"				568	209025750	Flat Washer $\frac{3}{8}$ " dia	14		
		Setscrew $\frac{3}{8}$ " UNC x $1\frac{1}{2}$ " long. Hex Head 80"	24						5		
545	300675	L.H. Front Bar 130" model	1			569	300105	Trailing Board — 130" model	2		
	300727	L.H. Front Bar 100" model	1				301028	Trailing Board — 100" model	2		
	300759	L.H. Front Bar 80" model	1				301333	Trailing Board — 80" model	2		
546	300676	R.H. Front Bar 130" model	1								
	300728	R.H. Front Bar 100" model	1								
	300760	R.H. Front Bar 80" model	1								
547	101410140	Setscrew $\frac{5}{8}$ " UNC x $1\frac{1}{4}$ " long Hex. Head 80"	1								
		and 130" models	12								
		Setscrew $\frac{5}{8}$ " UNC x $1\frac{1}{4}$ " long Hex Head 100" model	8			570	50724	Hinge	130"		
548	101408140	Setscrew $\frac{1}{2}$ " UNC x $1\frac{1}{4}$ " long Hex Head 100" model	4			571	101308100	Setscrew $\frac{1}{2}$ " UNF x $1\frac{1}{4}$ " long	8		
549	108101740	Spring Washer $\frac{5}{8}$ " dia. 80" and 130" models	12					Hex. Head	6		
		Spring Washer $\frac{5}{8}$ " dia. 100" model	8			572	101308120	Setscrew $\frac{1}{2}$ " UNF x $1\frac{1}{2}$ " long	12		
550	108081440	Spring Washer $\frac{1}{2}$ " dia. 100" model	4					Hex. Head	12		
551	300674	Rear Shield Support 130" model	1			573	108081440	Spring Washer $\frac{1}{2}$ " dia	24		
	300725	Rear Shield Support 100" model	1			574	107108010	Nut $\frac{1}{2}$ " UNF	24		
552	300677	L.H. Rear Bar 130" model	1								
	300729	L.H. Rear Bar 100" model	1			575	101410140	Setscrew $\frac{5}{8}$ " UNC x $1\frac{3}{4}$ " long Hex. Head	8		
553	300678	L.H. Rear Bar 80" model	1			576	108101740	Spring Washer $\frac{5}{8}$ " dia.	8		
	300730	R.H. Rear Bar 130" model	1								
	300762	R.H. Rear Bar 100" model	1								
		Model: 80" 100" 130"									
554	101408100	Setscrew $\frac{1}{2}$ " UNC x $1\frac{1}{4}$ " long Hex. Head	6								
555	101410100	Setscrew $\frac{5}{8}$ " UNC x $1\frac{1}{4}$ " long Hex. Head 2	14								
556	108081440	Spring Washer $\frac{1}{2}$ " dia.	6								
557	108101740	Spring Washer $\frac{5}{8}$ " dia.	2								
558	300936	Inner Rubber Shield 130" model	1								
	300988	Inner Rubber Shield 100" model	1								
	300991	Inner Rubber Shield 80" model	1								
559	300937	Front Retaining Strip 130" model	1								
	300989	Front Retaining Strip 100" model	1								
	300992	Front Retaining Strip 80" model	1								

Howard M Series – Parts List

ROTOR AND BLADES

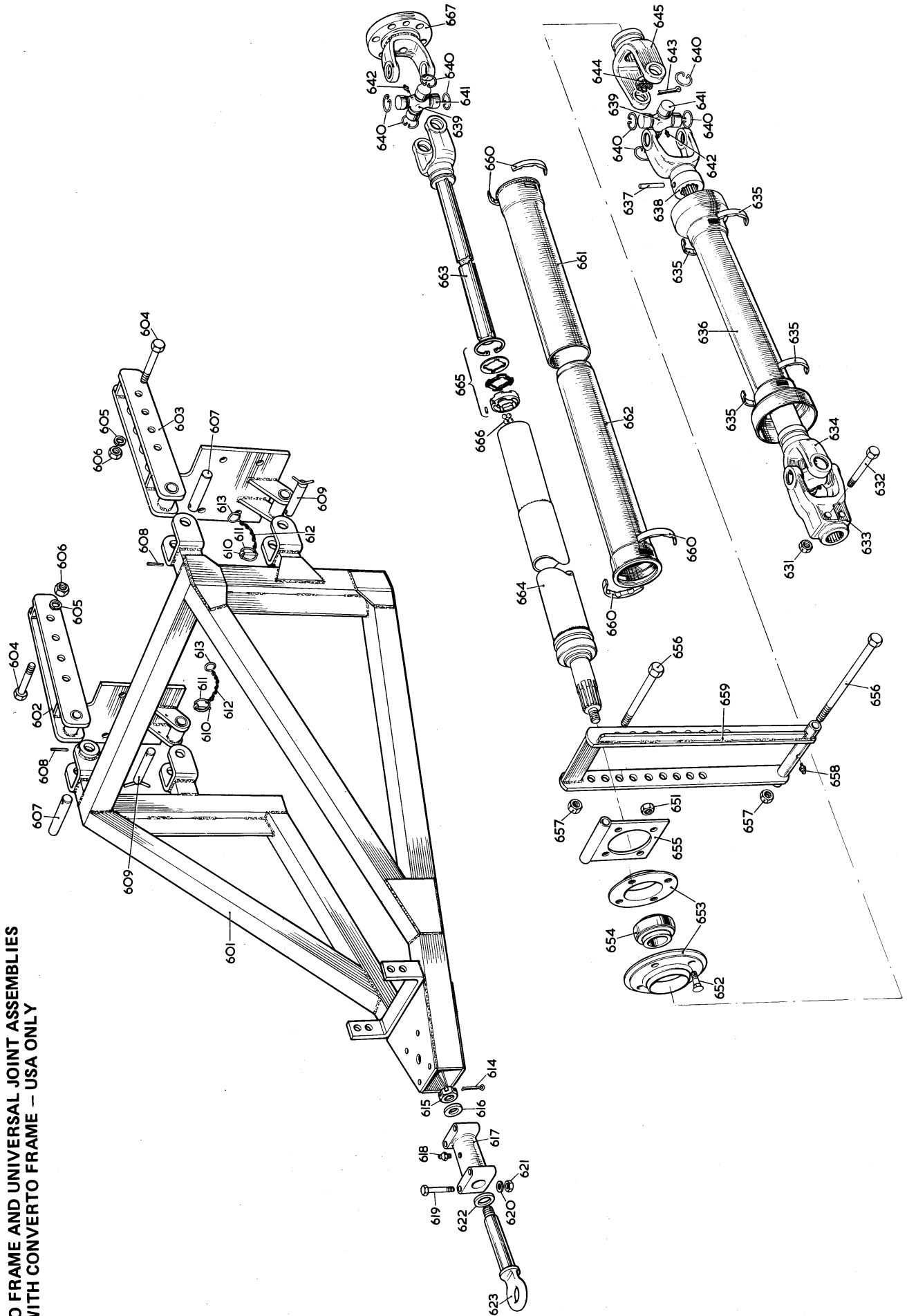
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<i>Illus. No.</i>	<i>Part Number</i>	<i>Description</i>	<i>Illus. No.</i>	<i>Part Number</i>	<i>Description</i>	<i>No. off</i>	<i>Bin No.</i>
ROTORS AND BLADES							
580	300151	Shim .064"	593	300228	Shearing Blade LH	Model: 80" 100" 130"	
	300152	Shim .036"	594	300229	Shearing Blade RH	Model: 80" 100" 130"	
581	301346	Rotor — Open end (Spares only)	595	67557	High Nut	Model: 80" 100" 130"	
582	301364	Rotor — Standard From Machine	596	108101740	Spring Washer $\frac{3}{8}$ " dia.	Model: 80" 100" 130"	
		Serial Number 940A 1745	597	*9850	Blade Bolt	Model: 80" 100" 130"	
	301022	Rotor		*67556	Blade Bolt Assembly Pack	Model: 80" 100" 130"	
	300149	Rotor			comprising:—	Model: 80" 100" 130"	
		Note: Standard blades on M80			Blade Bolt, ... $\frac{3}{8}$ " dia.	Model: 80" 100" 130"	
		Standard blades on M100 & M 130			Spring Washer $\frac{3}{8}$ " dia.	Model: 80" 100" 130"	
		All other blades are alternatives			High Nut	Model: 80" 100" 130"	
583	9860	Straight Shank Blade Heavy Duty LH	598	9850	Blade Bolt	Model: 80" 100" 130"	
584	9861	Straight Shank Blade Heavy Duty RH		108101740	Spring Washer $\frac{3}{8}$ " dia.	Model: 80" 100" 130"	
583	9862	Straight Shank Blade LH		67557	High Nut	Model: 80" 100" 130"	
584	9863	Straight Shank Blade RH					
NI	9910	Long Shank Blade LH					
NI	9911	Long Shank Blade RH					
NI	9864	Hard Faced Straight Blade LH					
NI	9865	Hard Faced Straight Blade RH					
NI	9868	Hard Faced Heavy Duty LH					
NI	9869	Hard Faced Heavy Duty RH					
NI	69766	Hard Faced Long Shank Blade LH					
NI	69767	Hard Faced Long Shank Blade RH					
585	9950	Speed Blade LH					
586	9951	Speed Blade RH					
NI	69756	Hard Faced Speed Blade LH					
NI	69757	Hard Faced Speed Blade RH					
587	67557	High Nut					
588	108101740	Spring Washer $\frac{3}{8}$ " dia.					
589	*9850	Blade Bolt					
590	+301350	Blade Bolt					
	+9854	Blade Bolt (use with clamping rings)					
591	+301355	Centre Clamping Ring					
592	+301349	End Clamping Ring					
		+Standard fitment 80" model					
		Optional fitment 100" model					
							23

Howard M Series – Parts List CONVERTO FRAME AND UNIVERSAL JOINT ASSEMBLIES FOR USE WITH CONVERTO FRAME – USA ONLY

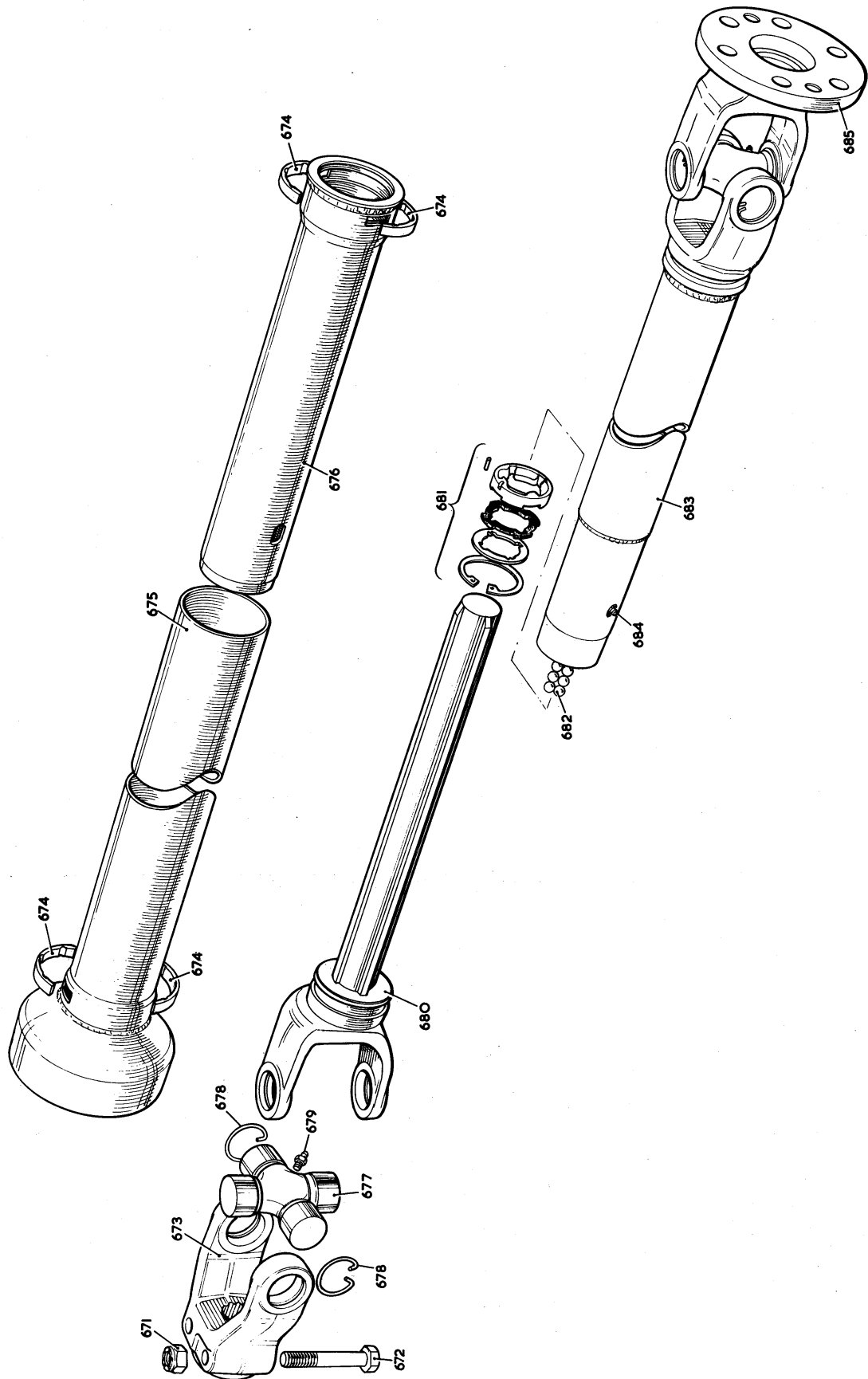
758	2.77	24
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758	2.77	26
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Howard M Series – Parts List

UNIVERSAL JOINT ASSEMBLIES – USA ONLY



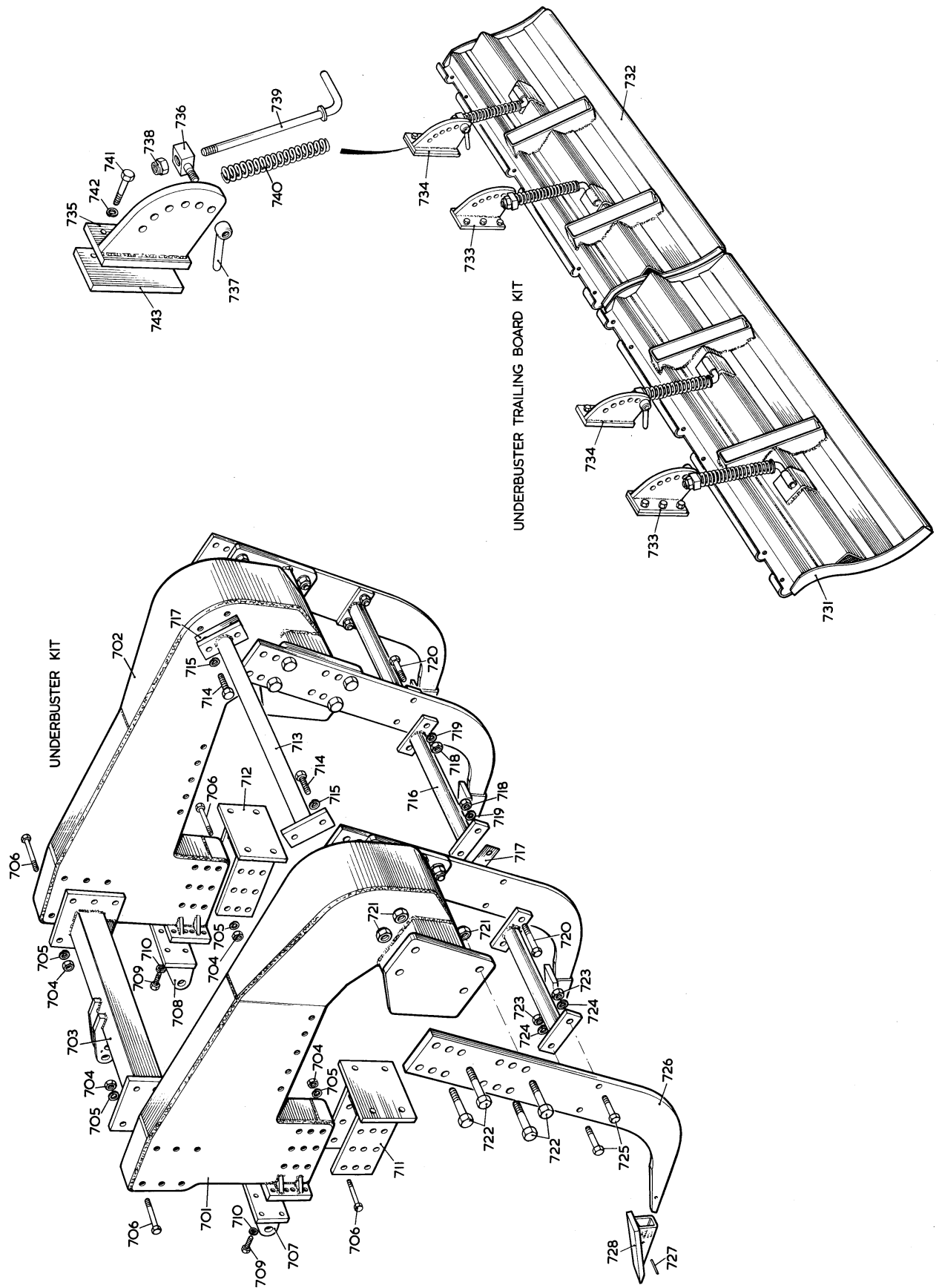
Illus. No.	Part Number	Description	No. off	Bulletin	Bin No.	Illus. No.	Part Number	Description	No. off	Bulletin	Bin No.
UNIVERSAL JOINT ASSEMBLIES USA ONLY											
	900001053	Universal Joint Assembly 1000 rpm pto 21 Splines 1 3/8" dia. 20 1/2" to 27 1/2" between centres. Illus. Nos. 671 - 685	1								
	900001059	Tractor Half	1								
	900001061	Machine Half	1								
	900001057	Universal Joint Assembly 1000 rpm pto 21 Splines 1 3/8" dia. 25 1/2" to 35 1/2" between centres. Illus. No's 671 - 685	1								
	900001067	Tractor Half	1								
	900001068	Machine Half	1								
	900012030	Universal Joint Assembly 1000 rpm pto 20 Splines 1 1/2" dia. 20 1/2" to 27 1/2" Between Centres. Illus. No's 671 - 685	1								
	900001125	Tractor Half	1								
	900001061	Machine Half	1								
	900012031	Universal Joint Assembly 1000 rpm pto 20 Splines 1 1/2" dia. 25 1/2" to 35 1/2" Between Centres. Illus. No's 671 - 685	1								
	900001126	Tractor Half	1								
	900001068	Machine Half	1								
671	107108345	1/2" NF Self Lock Nut	1								
672	101108260	Bolt 1/2" NF x 3 1/2" long	1								
673	900001072	Yoke 21 Splines 1 3/8" dia. Shaft Alternatives	1								
674	900001079	Yoke 20 Splines 1 1/2" dia. Shaft	1								
675	900001099	Nylon Bearing	4								
	900001114	Outer Shield and Bell - Short 13 1/2" Alternatives	1								
	900001115	Outer Shield and Bell - Long 18 1/2" Alternatives	1								
676	900001110	Inner Shield Tube - Short 12" Alternatives	1								
	900001111	Inner Shield Tube - Long 17" Alternatives	1								
	900001090	Cross Kit Complete	2								
		comprising:-									
677	900001091	Bearing Cup and Seal	8								
678	900001092	Snap Ring	8								
679	900001094	Grease Zerk	3								
680	900001084	Yoke and Shaft - Short Alternatives	1								
	900001088	Yoke and Shaft - Long	1								
681	900001095	Retainer and Seal Kit	1								
682	900001096	Ball Bearing Set	1								
		comprising:-									
	900001097	Ball 1 5/8" dia.	172								
683	900001080	Yoke and Tube - 11" Alternatives	1								
	900001081	Yoke and Tube - 17"	1								
684	900001094	Grease Zerk	1								
685	900001076	Flanged Yoke	1								
686 to 700 not allocated											
						758			2.77	27	

Howard M Series - Parts List

758	2.77	28
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Howard M Series – Parts List

UNDERBUSTER KIT – UNDERBUSTER TRAILING BOARD KIT



Illus. No.	Part Number	Description	No. off	Bulletin	Bin No.
UNDERBUSTER KIT M80 & M100 Mk II					
Only for use with machines fitted with hydraulic depth control assembly					
701	309202	Top Mast Plate L.H. ...	1		
702	309201	Top Mast Plate R.H. ...	1		
703	309212	Top Mast ...	1		
704	107210010	Nut 5/8" UNC	24		
705	108101740	Spring Washer 5/8" dia. ...	24		
706	101210380	Bolt 3/4" UNC x 4 1/2" long	24		
707	309206	Clevis L.H. ...	1		
708	309205	Clevis R.H. ...	1		
709	101410140	Setscrew 5/8" UNC x 1 1/2" long. Hex. Head	12		
710	108101740	Spring Washer 5/8" dia. ...	12		
711	309208	Lower Mounting Bracket L.H. ...	1		
712	309207	Lower Mounting Bracket R.H. ...	1		
713	309209	Tie Tube ...	1		
714	101410140	Setscrew 5/8" UNC x 1 1/2" long. Hex. Head	4		
715	108101740	Spring Washer 5/8" dia. ...	4		
716	309210	Tie Tube (Tines)	3		
717	309211	Packing Strip ...	Av. 6		
718	107210010	Nut 3/4" UNC	4		
719	108101740	Spring Washer 5/8" dia. ...	4		
720	101210240	Bolt 5/8" UNC x 3" long	4		
721	107216030	Nut 1 1/8" UNC Philidas WUC 1/1	16		
722	101216260	Bolt 1" UNC x 3 1/2" long	16		
723	107210010	Nut 5/8" UNC	4		
724	108101740	Spring Washer 5/8" dia. ...	4		
725	101210180	Bolt 3/8" UNC x 2 1/4" long.	4		
726	309203	Tine ...	4		
727	208015070	Spirol Pin 1/4" dia. x 1 1/2" long	4		
728	309204	Tine Tip ...	4		
729 to 730 not allocated					
UNDERBUSTER TRAILING BOARD					
comprising:—					
731	309245	Trailing Board L.H. 80"	1		
	309585	Trailing Board L.H. 100"	1		
732	309244	Trailing Board R.H. 80"	1		
	309586	Trailing Board R.H. 100"	1		
		Trailing Board Adjustment Assy			
comprising:—					
733	309247	80" Machine L.H. III. No's. 735A, 736 & 737	1		
734	309246	80" Machine R.H. III. No's. 735B, 736 & 737	1		
733	309595	100" Machine III. No's. 735D, 736 to 742	2		
734	309587	100" Machine III. No's. 735C, 736 to 742	2		
100" 80"					
735A	309257	Quadrant	1		
735B	309258	Quadrant	1		
735C	309588	Quadrant	2		
735D	309596	Quadrant	2		
736	309256	Trunnion	2		
737	54228	Adjusting Lever	2		
738	107110130	Nut 5/8" UNF Philidas	2		
739	300458	Spring Bar	2		
740	300457	Spring	2		
741	101206160	Bolt 3/8" UNC x 2" long	2		
742	108061140	Spring Washer 3/8" dia	2		
743	309597	Spacer Plate	2		
744 - 749 not allocated					

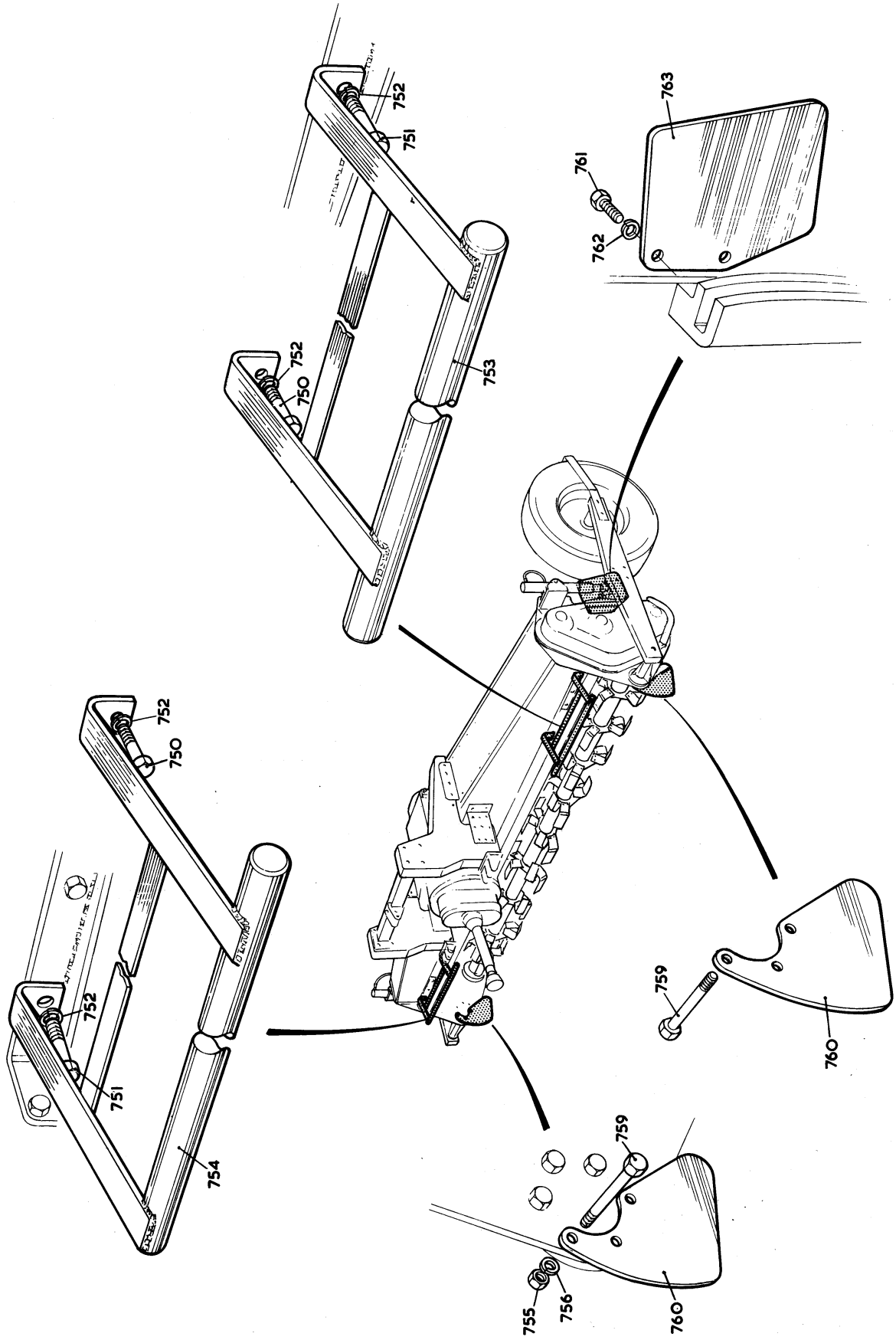
Howard M Series – Parts List



Howard M Series – Parts List

SAFETY GUARDS

758	2.77	30
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<i>Illus. No.</i>	<i>Part Number</i>	<i>Description</i>	<i>No. off</i>	<i>Bulletin</i>	<i>Bin No.</i>	<i>Illus. No.</i>	<i>Part Number</i>	<i>Description</i>	<i>No. off</i>	<i>Bulletin</i>	<i>Bin No.</i>
SAFETY GUARDS											
*These items are not part of the kit and are already fitted to the machine											
750	101408120	Setscrew 1/2" UNC x 1 1/2" long Hex. Head	80" 100" 130"								
751	101210160	Bolt 3/8" UNC x 2" long	— 2 2								
*752	108017740	Spring Washer 5/8" dia	4 2 2								
*752	108081440	Spring Washer 1/2" dia	4 2 2								
753	301077	Guard L.H.	— 2 2								
	301085	Guard L.H.	1 —								
	301090	Guard L.H.	— 1								
754	301076	Guard R.H.	— 1								
	301084	Guard R.H.	— 1								
	301089	Guard R.H.	— 1								
*755	107208010	Nut 1/2" UNC	— 6 6								
*756	108081440	Spring Washer 1/2" dia	6 6 6								
757 and 758 not allocated											
759	101208160	Bolt 1/2" UNC x 2" without Parking Jack	6 6								
	101208200	Bolt 1/2" UNC x 2 1/2" with Parking Jack	6 6 6								
760	301079	Foot Guard Plate	2 2 2								
*761	101408100	Setscrew 1/2" UNC x 1 1/2" long, Hex Head	4 4 4								
*762	108081440	Spring Washer 1/2" dia	4 4 4								
763	301080	Rotor Guard Plate	2 2 2								
MACHINE TRANSFERS											
	58288	Howard Rotavator 'M' Label	...								
	58179	Selectalith Label	...								
	58173	Warning Label	...								
	58195	Royal Coat Of Arms and Queen's Award Label	...								
	64279	Lubrication Label	...								
										758	31
										2.77	

Howard M Series – Numerical Parts List

758 2.77 32

Part No.	Illus. or Item No.	Bin No.	Part No.	Illus. or Item No.	Bin No.	Part No.	Illus. or Item No.	Bin No.	Part No.	Illus. or Item No.	Bin No.	Part No.	Illus. or Item No.	Bin No.
1239	659		300151	580		300445	431		300678	553		300957	39	
1240	656		300152	580		300449	436		300679	150		300958	41	
1241	658		300184	30		300457	529		300680	247		300959	40	
1243	655		300185	29		300457	740		300709	491		300960	42	
1244	653		300213	246		300458	528		300717	486		300965	85	
1245	654		300216	167		300458	739		300718	487		300966	19	
1382	637		300217	168		300477	497		300719	485		300967	24	
2635	615		300218	249		300478	497		300720	493		300968	22	
3912	517		300219	169		300479	498		300722	492		300973	53	
3913	463		300220	250		300488	336		300723	539		300975	23	
3913	516		300221	161		300489	483		300724	540		300988	558	
3913	612		300222	238		300490	483		300725	551		300989	559	
5024	34		300223	175		300493	478		300726	538		300990	560	
5025	35		300223	255		300493	478		300727	545		300991	558	
5807	157		300224	176		300494	478		300728	546		300992	559	
5807	236		300224	256		300495	479		300729	552		300993	560	
7059	515		300227	158		300497	505		300730	553		300996	37	
7060	514		300227	237		300515	449		300740	491		301004	538	
9850	589		300228	593		300517	450		300748	486		301005	77	
9850	597		300229	594		300519	430		300749	485		301007	128	
9854	590		300235	489		300526	432		300750	485		301014	456	
9860	583		300258	272		300530	70		300754	492		301016	457	
9861	584		300259	271		300534	16		300754	493		301022	582	
9862	583		300260	282		300535	480		300755	539		301028	569	
9863	584		300268	239		300538	207		300755	540		301046	449	
9910	NI		300301	459		300538	219		300756	551		301049	421	
9911	NI		300302	460		300554	465		300758	551		301050	422	
9951	585		300310	464		300555	466		300759	546		301076	38	
9951	586		300310	613		300558	458		300760	552		301076	754	
14034	33		300312	313		300574	360		300761	553		301077	753	
16728	315		300315	324		300575	91		300762	602		301079	760	
18671	442		300316	312		300576	92		300774	603		301084	754	
18672	441		300317	317		300579	5		300775	601		301085	753	
18830	264a		300318	319		300594	106		300812	614		301089	754	
23367	622		300319	316		300607	112		300838	623		301091	753	
23368	616		300321	314		300608	111		300839	609		301091	440	
25058	80		300322	308		300609	111		300840	617		301095	277	
25058	80		300324	318		300610	118		300841	609		301095	277	
33690	130		300325	309		300616	145		300843	607		301096	288	
36408	68a		300337	19		300617	146		300851	121		301098	291	
50724	570		300355	306		300618	136		300902	486		301099	299	
50934	461		300356	328		300620	142		300905	487		301100	294	
50934	610		300357	331		300621	143		300908	492		301103	268	
51151	644		300358	325		300622	143		300911	493		301110	302	
53395	561		300366	421		300623	143		300914	269		301114	303	
53654	134		300367	437		300624	133		300923	510		301115	285	
54228	737		300368	438		300626	151		300926	518		301120	152	
54856	527		300369	439		300646	201		300929	519		301159	273	
58173	NI		300370	422		300647	200		300930	520		301205	106	
58179	NI		300373	428		300648	203		300931	520		301216	399	
58195	NI		300379	168		300664	485		300932	513		301216	394	
58288	NI		300380	249		300671	539		300933	531		301217	416	
60495	462		300381	169		300672	540		300934	510		301217	468	
60495	611		300382	250		300673	538		300936	558		301218	467	
60954	452		300432	78		300674	551		300937	559		301305	106	
62495	322		300433	87		300675	545		300939	510		301312	505	
62962	296		300434	86		300676	546		300940	510		301315	528	
64279	NI		300435	27		300677	552		300955	26		301319	522	

Part No.	Illus. or Item No.	Bin No.	Part No.	Illus. or Item No.	Bin No.	Part No.	Illus. or Item No.	Bin No.	Part No.	Illus. or Item No.	Bin No.	Part No.	Illus. or Item No.	Bin No.	Part No.	Illus. or Item No.	Bin No.
101206110	564		101408100	286		107210010	606		108101740	496		202017280	367		204010830	14	
101206120	153		101408100	300		107210010	704		108101740	524		202017280	406		204010840	15	
101206120	433		101408100	554		107210010	718		108101740	549		202017290	364		204010850	14	
101206160	230		101408100	761		107210010	723		108101740	557		202017300	403		204011030	13	
101206160	511		101408120	58		107210020	138		108101740	588		202017310	369		204011740	11	
101206160	741		101408120	750		107210140	526		108101740	596		202017320	375		204011770	8	
101208140	162		101408140	548		107210355	267		108101740	605		202017330	374		204011790	7	
101208140	242		101408180	93		107212010	476		108101740	705		202017340	371		204011800	6	
101208160	169		101410100	211		107212150	482		108101740	710		202017350	376		204011800	12	
101208180	759		101410100	555		107212150	657		108101740	715		202017360	362		204011800	202	
101208200	243		101410110	96		107216030	721		108101740	719		202017370	401		204011800	225	
101208260	278		101410120	98		108017740	752		108101740	724		202017380	370		204011800	533	
101208360	36		101410120	173		108040840	320		108101740	724		202017390	363		204011800	614	
101210160	751		101410120	253		108040840	444b		108101740	724		202017420	409		204011800	643	
101210180	495		101410140	26		108050940	500		108101740	724		202017520	408		204011800	667	
101210180	725		101410140	180		108050940	307		108101740	724		202017530	409		204011800	685	
101210200	523		101410140	260		108050940	503		108101740	724		202017550	411		204011800	683	
101210220	179		101410140	469		108061130	156		108101740	724		202017550	407		204011800	684	
101210240	259		101410140	494		108061130	235		108101740	724		202017550	411		204011800	680	
101210240	720		101410140	547		108061140	21		108101740	724		202017550	407		204011800	683	
101210300	274		101410140	575		108061140	54		108101740	724		202017550	411		204011800	684	
101210380	470		101410140	709		108061140	54		108101740	724		202017550	411		204011800	680	
101210380	604		101410140	714		108061140	119		108101740	724		202017550	411		204011800	680	
101210380	706		101412120	170		108061140	160		108101740	724		202017550	411		204011800	680	
101210440	137		101412120	251		108061140	229		108101740	724		202017550	411		204011800	680	
101210445	267b		105208105	652		108061140	326		108101740	724		202017550	411		204011800	680	
101212180	99		106212100	172		108061140	434		108101740	724		202017550	411		204011800	680	
101212380	475		106212160	263		108061140	443b		108101740	724		202017550	411		204011800	680	
101212380	101		106212160	101		108061140	448		108101740	724		202017550	411		204011800	680	
101216260	722		106406120	377		108061140	512		108101740	724		202017550	411		204011800	680	
101308100	571		107106010	20		108061140	543		108101740	724		202017550	411		204011800	680	
101308120	572		107106010	574		108061140	566		108101740	724		202017550	411		204011800	680	
101404070	321		107108090	621		108061140	742		108101740	724		202017550	411		204011800	680	
101405050	499		107108345	631		108061210	56		108101740	724		202017550	411		204011800	680	
101405050	71		107110130	671		108061210	124		108101740	724		202017550	411		204011800	680	
101405070	306		107110130	530		108061210	149		108101740	724		202017550	411		204011800	680	
101406040	502		107204010	738		108081430	59		108101740	724		202017550	411		204011800	680	
101406040	57		107204010	444a		108081440	165		108101740	724		202017550	411		204011800	680	
101406040	125		107204010	501		108081440	244		108101740	724		202017550	411		204011800	680	
101406040	562		107205010	504		108081440	280		108101740	724		202017550	411		204011800	680	
101406050	155		107206010	159		108081440	287		108101740	724		202017550	411		204011800	680	
101406060	55		107206010	378		108081440	301		108101740	724		202017550	411		204011800	680	
101406060	148		107206010	435		108081440	550		108101740	724		202017550	411		204011800	680	
101406060	234		107206010	443a		108081440	556		108101740	724		202017550	411		204011800	680	
101406060	310		107206010	544		108081440	573		108101740	724		202017550	411		204011800	680	
101406070	565		107206010	567		108081440	752		108101740	724		202017550	411		204011800	680	
101406080	541		107208010	32		108081440	756		108101740	724		202017550	411		204011800	680	
101406080	327		107208010	166		108081440	762		108101740	724		202017550	411		204011800	680	
101406080	447		107208010	245		108081610	94		108101740	724		202017550	411		204011800	680	
101406080	563		107208010	281		108081610	279		108101740	724		202017550	411		204011800	680	
101406100	154		107208010	755		108101740	620		108101740	724		202017550	411		204011800	680	
101406100	447		107210010	651		108101740	97		108101740	724		202017550	411		204011800	680	
101406100	542		107210010	182		108101740	174		108101740	724		202017550	411		204011800	680	
101408080	240		107210010	261		108101740	181		108101740	724		202017550	411		204011800	680	
101408100	163		107210010	276		108101740	254		108101740	724		202017550	411		204011800	680	
101408100	241		107210010	472		108101740	262		108101740	724		202017550	411		204011800	680	
			107210010	525		108101740	275		108101740	724		202017550	411		204011800	680	
						108101740	471		108101740	724		202017550	411		204011800	680	