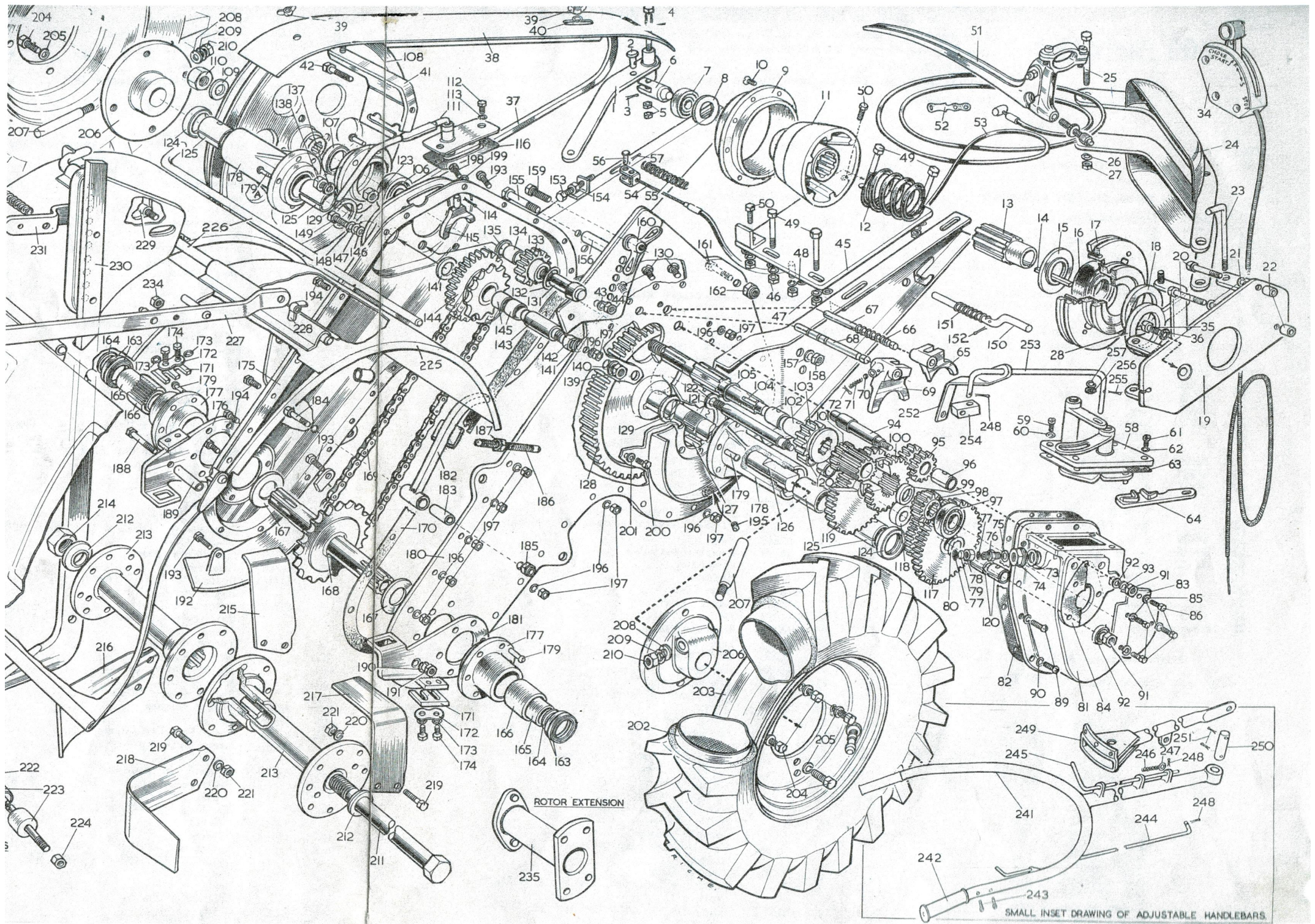


This image is blown up, to show the rear of the clutch, which is different from the later 350. It shows why there isn't a brake arm, as contrast to the later models of the 350; Take a look at the manual, including the thrust pad and thrust bearing pad.

The thrust pad and thrust bearing pad can be troublesome, as they go direct to the back of the clutch because it is the brake, wearing out the clutch. Over time the clutch could become unusable. In the later models of the 350 this design was changed.



ROTOR EXTENSION

SMALL INSET DRAWING OF ADJUSTABLE HANDLEBARS.

300 Parts List

When ordering spare parts, it is important that the user of a machine should always give the serial number of the particular machine for which the part is required, the part number (NOT the illustration number) and the description. The serial number of the machine is stamped on the handle bar mounting (ilus. No. 249). We cannot guarantee that correct parts will be supplied unless the number and the correct part numbers are quoted.

In the following parts list all directions are described "Left" and "Right" from behind the machine.

Illus. No.	Part No.	Description	No. off	Illus. No.	Part No.	Description	No. off
CONE CLUTCH ASSEMBLY							
1	66391	Operating Arm	1	53	64417	Clutch Cable Assembly	1
2	25914	Pin	1	54		comprising:	
3		Splitpin $\frac{1}{16}$ " dia. x $\frac{1}{2}$ " long	1	55	26575	Cable	1
4		Bolt $\frac{1}{8}$ " UNC. x $2\frac{1}{4}$ " long	1	56	34233	Spring	1
5		Locknut $\frac{5}{16}$ " UNC.	2	57		Pin	1
6	66926	Clutch Release	1			Splitpin $\frac{1}{16}$ " dia. x $\frac{1}{2}$ " long	1
7		Ballrace—Fischer DN.2062— $\frac{5}{8}$ " i.d. x $1\frac{9}{16}$ " o.d. x $\frac{7}{16}$ " w. Double Sealed	1	GEARBOX—BACKPLATE AND ROTOR DRIVE UNIT			
8	14509	Washer	1	58	66356	Gearbox Cover and Selectors	1
9	66921	Clutch Cone—Outer	1	59		Cheese Head Setscrew $\frac{1}{4}$ " UNC. x $\frac{5}{8}$ " long	2
10		Countersunk Setscrew, No. 10 UNC. x $\frac{3}{4}$ " long	8	60		Spring Washer $\frac{1}{4}$ " dia.	2
11	66922	Clutch Cone—Inner	1	61		Capscrew $\frac{1}{4}$ " UNC. x $\frac{3}{4}$ " long	2
12	66923	Spring	1	62		Shakeproof Washer $\frac{1}{4}$ " dia.	2
13	66924	Clutch Drive Shaft	1	63	64379	Gasket	As req'd.
14	66927	Key	1	64	65750	Selector Gate	1
15	66925	Spring Pad	1	65	64323	Reverse Selector	1
16		Ballrace—LS.12 RSSV.3, $1\frac{1}{4}$ " i.d. x $2\frac{3}{4}$ " o.d. x $\frac{11}{16}$ " w. Double Sealed	1	66	64472	Reverse Selector Spring	1
17	66920	Engine Pulley	1	67	64324	Reverse Selector Slide Bar	1
18	67021	Thrust Pad	1	68	64325	Travel Selector Slide Bar	1
19	66436	Backplate	1	69	64322	Travel Selector	1
20		Setscrew— $\frac{5}{16}$ " UNC. x $2\frac{1}{2}$ " long, Hex Head	2	70		Ball $\frac{3}{8}$ " dia.	1
21		Spring Washer $\frac{5}{16}$ " dia. 'Morlock'	2	71	64471	Spring	1
22	66439	Spacer	2	72		Splitpin $\frac{1}{16}$ " dia. x $\frac{1}{2}$ " long	1
23	66440	Locking Pin	1	73		Washer—Benton and Stone No. 1386D	1
24	66427	Control Frame	1	74	66274	Plug	1
25		Bolt $\frac{5}{16}$ " UNC. x 3 " long	1		66193	Breather Assembly	1
26		Shakeproof Washer $\frac{5}{16}$ " dia. Internal	1	75	10580	comprising:	1
27		Nut $\frac{5}{16}$ " UNC.	1	76	B1.8312	Washer	1
28	67454	Thrust Bearing Pad	1	77	23646	Brass Union	1
29—33	not allocated			78	G.279	Gauze Filter	2
				79	66195	Nut	1
				80	66272	Breather Pad	1
				81	66273	Shim .015	As req'd.
				82	66274	Shim .010	As req'd.
				83	64308	Gearbox	1
				84	64395	Gearbox Gasket	1
				85	64352	Bearing and Slide Bar Cover	1
				86	64459	Gasket	As req'd.
				87		Spring Washer $\frac{1}{4}$ " dia.	4
				88		Setscrew $\frac{1}{4}$ " UNC. x $\frac{1}{2}$ " long, Hex. Head	4
				89		87-88 not allocated	
						Setscrew $\frac{1}{4}$ " UNC. x $\frac{1}{2}$ " long, Rd. Head,	
						Philips Recess	6
						Spring Washer $\frac{1}{4}$ " dia.	6
						Locknut $\frac{3}{8}$ " UNC.	2
						Flat Washer $\frac{3}{8}$ " dia.	2
						Spring Washer $\frac{3}{8}$ " dia.	1
						Reverse Spindle	1
						Reverse Gear Assembly	1
						comprising:	
						Reverse Gear	1
						Bearing—Glacier No. 2008 $\frac{3}{8}$ " i.d. x $2\frac{3}{32}$ " o.d. x 1 " long	1
						Ballbearing $\frac{3}{8}$ " i.d. x $1\frac{9}{16}$ " o.d. x $\frac{7}{16}$ " w.—Hoff.LS.7	1
						Drive Shaft Gear 13T.	1
						Thrust Washer	1
						Drive Shaft Gear 27T.	1

POWER—FRAME AND CONTROL UNIT

Briggs and Stratton Engine 0147-01 Petrol

34		Throttle Control Assembly	1				
		comprising:					
		Cable—WC.248-4-48	1				
		Case and Lever—WT.11, Brand D.520-7	1				
35		Setscrew $\frac{1}{4}$ " UNF. x $\frac{7}{8}$ " long, Hex. Head	1				
36		Shakeproof Washer $\frac{1}{2}$ " dia. External	1				
37		V-Belt, Fenner-Alpha 560	1				
38	64479	Belt Guard	1				
39		Wing Nut $\frac{5}{16}$ " UNC.	2				
40		Flat Washer $\frac{5}{16}$ " dia.	1				
41	66076	Belt Guard Bracket and Rotor Selector	1				
42		Bolt $\frac{1}{4}$ " UNF. x 1 " long	1				
43		Spring Washer $\frac{1}{4}$ " dia.	1				
44		Nut $\frac{1}{4}$ " UNF.	1				
45	64461	Engine Mounting Plate	1				
46		Nut $\frac{5}{16}$ " UNC.	8				
47		Spring Washer $\frac{5}{16}$ " dia.	8				
48		Flat Washer $\frac{5}{16}$ " dia.	8				
49		Bolt $\frac{5}{16}$ " UNC. x $1\frac{7}{8}$ " long	4	97	BRL $\frac{5}{8}$		
50		Bolt $\frac{5}{16}$ " UNC. x $1\frac{1}{8}$ " long	2				
51		Clutch Lever, Doherty 107 P.A.— $\frac{7}{8}$ " LH.	1	98	64321		
52		Cable Clip, John Bull—Size 'S'	2	99	64317		
				100	64319		

101	64361	comprising:	1
		Drive Gear	1
102		Bearing—Glacier No. 2406 $\frac{1}{4}$ " i.d. x $\frac{1}{2}$ " o.d. x $\frac{3}{4}$ " long	2
103	64316	Rotor Selector Gear	1
104	64315	Drive Shaft	1
105	64320	Gear Spacer	1
106	BRM $\frac{3}{4}$	Ballbearing $\frac{1}{2}$ " i.d. x 2 " o.d. x $\frac{1}{16}$ " w.—Hoff.MS.8	1
107		Oilseal 150.112.25 Pioneer 11P.	1
108	66452	Driven Pulley	1
109		Flat Washer $\frac{1}{2}$ " dia.	1
110	67605	Pulley Nut	1
111	66170	Rotor Selector Arm	1
112		Setscrew $\frac{1}{4}$ " UNC. x $\frac{1}{2}$ " long, Hex. Head	3
113		Spring Washer $\frac{1}{4}$ " dia.	3
114		Splitpin $\frac{1}{16}$ " dia. x $\frac{1}{2}$ " long	1
115	64390	Rotor Selector	1
116	65499	Gasket	1
	67258	Cluster Gear Assembly	1
		comprising—	
117	67259	Cluster Gear	1
120		Bearing—Glacier No. 2005 $\frac{3}{8}$ " i.d. x $\frac{3}{16}$ " o.d. x $\frac{5}{8}$ " long	2
118	67262	Gear Spacer	1
		NUCL.	1
	67494	Shim (-010)	As req'd.
	67495	Shim (-015)	As req'd.
	67260	Final Drive Pinion Assembly	1
		comprising—	
119	67261	Final Drive Pinion	1
120		Bearing—Glacier No. 2005 $\frac{3}{8}$ " i.d. x $\frac{3}{16}$ " o.d. x $\frac{5}{8}$ " long	2
121	67263	Intermediate Shaft	1
122	67264	Thrust Washer	1
123		Locknut $\frac{3}{8}$ " UNC.	1
124		Oilseal $1\frac{1}{2}$ " o.d. x 1 " i.d. x $\frac{3}{8}$ " w.—Pioneer 11P. 150.100.37	2
125		Bearing—Glacier No. 3210. 1 " i.d. x $1\frac{1}{8}$ " o.d. x $1\frac{1}{2}$ " long	4
126	64344	Wheel Axle	1
127	64497	Key	2
128	64343	Bull Gear	1
129	14224	Wearing Washer	2
130		Setscrew $\frac{5}{16}$ " UNC. x $\frac{3}{8}$ " long, Countersunk Head	3
131	67250	Idler Pinion Shaft	1
132	64320	Gear Spacer	1
	67248	Rotor Idler Gear Assembly	1
		comprising—	
133	67249	Rotor Idler Gear	1
134		Bearing—Glacier No. 2408. $\frac{3}{4}$ " i.d. x $\frac{7}{8}$ " o.d. x 1 " long	1
135	64317	Thrust Washer	1
136		Not allocated	
137		Spring Washer $\frac{7}{16}$ " dia.	1
138		Nut $\frac{7}{16}$ " UNC.	1
140		Spring Washer $\frac{1}{2}$ " dia.	1
141	67257	Thrust Washer	2
142	67256	Spacer	1
143	67255	Drive Sprocket Spindle	1
	67251	Rotor Drive Sprocket	1
		comprising—	
144	67252	Rotor Drive Sprocket	1
145		Bearing—Glacier No. 3204. 1 " i.d. x $1\frac{1}{8}$ " o.d. x $\frac{1}{2}$ " long	2
146		'O' Ring $\frac{7}{16}$ " I.D. x $\frac{3}{8}$ " O.D. x Pioneer 3-113	1
147	65114	Washer	1
148		Shakeproof Washer $\frac{1}{8}$ " dia. Internal	1
149		Setscrew $\frac{1}{8}$ " UNC. x $\frac{1}{2}$ " long, Hex. Head	1
150	64469	Retaining Pin	1
151	P.0869	Spring	1
152		Splitpin $\frac{3}{16}$ " dia. x $\frac{1}{2}$ "	1
153	64495	Adjusting Bolt	1
154		Nut $\frac{3}{8}$ " UNC.	1
155		Bolt $\frac{1}{2}$ " UNF. x $3\frac{1}{2}$ " long	1
156	64392	Spacer	1

Howard Rotavator 300

Illus. No.	Part No.	Description	No. off	Illus. No.	Part No.	Description	No. off.
157		Spring Washer $\frac{1}{2}$ " dia. ...	1	208		Flat Washer $\frac{3}{8}$ " dia. ...	2
158		Nut $\frac{1}{2}$ " UNF. ...	1	209		Spring Washer $\frac{3}{8}$ " dia. ...	2
159		Bolt $\frac{3}{8}$ " UNF. x $1\frac{1}{4}$ " long ...	1	210		Nut $\frac{3}{8}$ " UNF. ...	2
160		Wing Nut $\frac{3}{8}$ " UNF.—Utility Cycle No. 2	1				
161		Bolt $\frac{3}{8}$ " UNF. x 1" long ...	1				
162		Philidas Nut $\frac{3}{8}$ " UNF. JUF1	1				
163		Oilseal—INA.G.30 x 37 x 4	4				
164	64429	Rotor Spacer ...	As req'd.	211	64427	Rotor Draw Bolt 16" Model	1
165		Inner Race—INA.IR.25mm. x 30mm. x 38.5mm. ...	2	212	64430	Drawbolt Washer ...	2
166		Needle Bearing—INA.HK.3026	2	213	64420	Rotor 16" Model ...	2
167	64367	Thrust Washer ...	2	214		Nut $\frac{5}{8}$ " UNC. ...	1
168	64364	Rotor Drive Shaft ...	1	215	64486	Centre Blade L.H. ...	2
169	64393	Chain Assembly ...	1	216	64485	Centre Blade R.H. ...	2
170	64394	Chaincase Gasket ...	1	217	20917LH	Blade L.H. ...	4
171	64496	Weed Cutter ...	1	218	20917RH	Blade R.H. ...	4
172	G.830	Keeper Plate... ...	2	219	14144	Special Bolt ...	24
173		Shakeproof Washer $\frac{1}{4}$ " dia. Internal	4	220		Spring Washer $\frac{5}{16}$ " dia. ...	24
174		Bolt $\frac{1}{4}$ " UNF. x $\frac{5}{8}$ " long ...	4	221		Nut $\frac{5}{16}$ " UNF. ...	24
	64338	Chainbox Assembly comprising:—	1	222	65476	Drawbolt ...	1
175	66593	Chainbox ...	1	223	65475	Dust Cap ...	2
176	66638	Depth Skid Bracket L.H. ...	1	224		Nut $\frac{5}{16}$ " UNF. ...	1
177	64335	Rotor Bearing Housing ...	1	225	64431	Shield 16" Model ...	1
178	64330	Axle Bearing Housing ...	1	226	64439	Shield Securing Pin ...	1
179		Rivet $\frac{1}{4}$ " dia. x $\frac{3}{4}$ " long, Pan Head	6	67284		Shield Securing Pin ...	1
179A		Avdelock Bolt Ref. 26110807 ...	6	67285		Clip Pin ...	1
		Avdelock Bolt Collar Ref. 26620800 ...	6	64440		Depth Control Handle ...	1
	64327	Backplate Assembly comprising:—	1	227		Wing Nut $\frac{5}{16}$ " UNC. ...	1
180	66592	Backplate ...	1	228		Depth Control Handle Pivot Bolt	1
181	66639	Depth Skid Bracket R.H. ...	1	229	64443	Depth Control Handle Pivot Bolt	1
177	64335	Rotor Bearing Housing ...	1	230	64446	Depth Skid ...	1
178	64330	Axle Bearing Housing ...	1	231	64445	Spring Clip ...	1
179		Rivet $\frac{1}{4}$ " dia. x $\frac{3}{4}$ " long, Pan Head	6	232	20470	Spring ...	1
		Avdelock Bolt Ref. 26110808 ...	6	233		Bolt $\frac{1}{4}$ " UNC. x $1\frac{1}{2}$ " long ...	1
		Avdelock Bolt Collar Ref. 26620800 ...	6	234		Nut $\frac{1}{4}$ " UNC. ...	1
182	67275	Chain Tensioner ...	1				
183	67281	Sleeve ...	1				
184		Bolt $\frac{5}{16}$ " UNF. x $1\frac{1}{2}$ " long ...	1				
185		Philidas Nut $\frac{5}{16}$ " UNF. GUF/1. ...	1				
186	67280	Adjuster Screw ...	1	235	64451	Rotor Extension 23" Model	2
187		Locknut $\frac{5}{16}$ " UNC. ...	1	211	64450	Rotor Draw Bolt 23" Model	1
188		Bolt $\frac{1}{4}$ " UNC. x $2\frac{1}{8}$ " long ...	1	225	64455	Rotor Shield 23" Model	1
189	64391	Skid Bracket Spacer ...	1	217	20917LH	Blade L.H. ...	2
190		Spring Washer $\frac{1}{4}$ " dia. ...	1	218	20917RH	Blade R.H. ...	2
191		Nut $\frac{1}{4}$ " UNC. ...	1	219	14144	Special Bolt ...	8
192	65131	Chaincase Skid ...	1	220		Spring Washer $\frac{5}{16}$ " dia. ...	8
193		Setscrew $\frac{1}{4}$ " UNC. x $1\frac{7}{8}$ " long, Hex. Head	3	221		Nut $\frac{5}{16}$ " UNF. ...	8
194		Setscrew $\frac{1}{4}$ " UNC. x $1\frac{3}{8}$ " long, Hex. Head	24	236-240		Not allocated	
195		Plug $\frac{1}{8}$ " BSP. Sq. Head ...	1				
196		Spring Washer $\frac{1}{4}$ " dia. ...	27				
197		Nut $\frac{1}{4}$ " UNC. ...	27				
198		Setscrew $\frac{1}{4}$ " UNC. x $\frac{3}{8}$ " long, Hex. Head ...	1				
199		Spring Washer $\frac{1}{4}$ " dia. ...	1				
200		Setscrew $\frac{1}{4}$ " UNC. x $\frac{3}{8}$ " long, Hex. Head	1				
201	25578	Fibre Washer ...	1				
		WHEELS					
202		Tyre and Tube 400 x 8 ...	2	241	65431	Handle Bar Stem ...	1
203	64467	Wheel ...	2	242	20557	Handle Bar Grip ...	2
204		Bolt $\frac{3}{8}$ " UNC. x $\frac{3}{4}$ " long ...	8	243		Cheese Head Bolt, 2 BA. x 1" long	2
205		Spring Washer $\frac{3}{8}$ " dia. ...	8	244	65508	Upper Control Rod ...	1
206	64465	Wheel Hub ...	2	245	65430	Release Handle ...	1
207	64466	Cotter Pin ...	2	246	62135	Spring ...	1
				247		Flat Washer $\frac{3}{8}$ " dia. ...	1
				248		Splitpin $\frac{1}{16}$ " dia. x $\frac{5}{8}$ " long ...	3
				249	65432	Handle Bar Mounting ...	1
				250	65433	Pin ...	1
				251		Splitpin $\frac{1}{8}$ " dia. x 1" long ...	2
				252	65439	Control Rod Bracket ...	1
				253	65507	Lower Control Rod ...	1
				254	65506	Gear Control Trunnion ...	1
				255		Splitpin $\frac{1}{16}$ " dia. x $\frac{3}{8}$ " long ...	1
				256		Flat Washer $\frac{5}{16}$ " dia. ...	1
				257		Spring Washer $\frac{5}{16}$ " dia. Double Coil	1

ROTOR

OPTIONAL EXTRAS FOR 23 in. ROTOR

SWINGING HANDLE BAR ASSEMBLY

Howard Rotavator 300

NUMERICAL PARTS LIST

Illus. No.	Part No.	Illus. No.	Part No.	Illus. No.	Part No.	Illus. No.	Part No.	Illus. No.	Part No.	Illus. No.	Part No.
G.279 ...	78	64319 ...	100	64392 ...	156	64471 ...	71	66193 ...	75	67021 ...	18
G.830 ...	172	64320 ...	105	64393 ...	169	64472 ...	66	66195 ...	79	67248 ...	133
P.0869 ...	151	64320 ...	132	64394 ...	170	64479 ...	38	66272 ...	80	67249 ...	133
BJ.8312 ...	76	64321 ...	98	64395 ...	82	64485 ...	216	66273 ...	80	67250 ...	131
10580 ...	75	64322 ...	69	64417 ...	53	64486 ...	215	66274 ...	74	67251 ...	144
14144 ...	219	64323 ...	65	64420 ...	213	64495 ...	153	66356 ...	58	67252 ...	144
14224 ...	129	64324 ...	67	64427 ...	211	64496 ...	171	66391 ...	1	67255 ...	143
14509 ...	8	64325 ...	68	64429 ...	164	64497 ...	127	66427 ...	24	67256 ...	142
20470 ...	232	64327 ...	182	64430 ...	212	65114 ...	147	66436 ...	19	67257 ...	141
20557 ...	242	64330 ...	178	64431 ...	225	65131 ...	192	66439 ...	22	67258 ...	117
20917LH	215	64334 ...	94	64439 ...	226	65430 ...	245	66440 ...	23	67259 ...	117
20917RH	216	64335 ...	177	64440 ...	227	65431 ...	241	66452 ...	108	67260 ...	119
23646 ...	77	64338 ...	175	64443 ...	229	65432 ...	249	66592 ...	182	67261 ...	119
25578 ...	201	64343 ...	128	64445 ...	231	65433 ...	250	66593 ...	175	67262 ...	118
25914 ...	2	64344 ...	126	64446 ...	230	65433 ...	250	66593 ...	175	67263 ...	121
26575 ...	55	64352 ...	83	64450 ...	211	65439 ...	252	66638 ...	176	67264 ...	122
34233 ...	56	64361 ...	101	64451 ...	235	65475 ...	223	66639 ...	181	67275 ...	182
62135 ...	246	64362 ...	95	64455 ...	225	65476 ...	222	66920 ...	17	67280 ...	186
64308 ...	81	64363 ...	95	64459 ...	84	65499 ...	116	66921 ...	9	67281 ...	183
64315 ...	104	64364 ...	168	64461 ...	45	65506 ...	254	66922 ...	11	67454 ...	28
64316 ...	103	64367 ...	167	64466 ...	207	65507 ...	253	66923 ...	12	67284 ...	226
64317 ...	99	64379 ...	63	64465 ...	206	65508 ...	244	66924 ...	13	67285 ...	226
64317 ...	135	64390 ...	115	64466 ...	207	65750 ...	64	66925 ...	15	67494 ...	118
64318 ...	101	64391 ...	189	64467 ...	203	66076 ...	41	66926 ...	6	67495 ...	118
				64469 ...	150	66170 ...	111	66927 ...	14	67605 ...	110

Following Howard policy of continuous improvement, the Company reserves the right to amend model specifications and prices at any time without notice.

THE WORLD'S LARGEST MANUFACTURER OF ROTARY TILLAGE EQUIPMENT

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