



SPARE PARTS LIST

ZÜNDAPP-SCOOTER

R 154 BELLA

with electric starter

12.2 / 8.8 / 2.2
1.3 / 3.0 / 2.2

Published in May 1957



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R 154 BELLA

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beginning with FRAME No. R 29101

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Printed in Germany

Contents

	Page	Illustration
Introduction	5	—
Group M: a) Engine (assembly)	9	1
b) Housing and cylinder		
Crankcase	11	2
Crankcase cover	15	3
Cylinder and cylinder head	17	4
c) Drive mechanism		
Crankshaft, connecting rod, piston	19	5
f) Carburettor	21	6
Intake silencer and air cleaner	25	7
Intake silencer with air cleaner	27	7a
g) Clutch, clutch operating mechanism	29	8
Group G: c) Shafts and gears		
Selector shaft	31	9
Layshaft	33	9
d) Footshift mechanism	35	10
Group R: a) Frame	37	11
Front engine carrier, side stand	39	12
Rear engine carrier with swinging fork	41	13
b) Foot boards	45	14
d) Mudguards		
Front mudguard	47	15
Rear mudguard and chaincase	49	16
e) Body		
Front shield	53	17
Front cover and dashboard		
with cover	55	18
Rear body	57	19
Dual seat	59	20
f) Fuel tank and fuel pipes	61	21
h) Exhaust set	63	22
i) Front swinging arm suspension	65	23
k) Handlebar and handlebars		
with cables	68	24
Group B: a) Brakes		
Handbrake	73	25
Footbrake	75	26
b) Wheels	79	27
Group E: a) Electrical equipment		
Headlight, battery, dashboard,		
taillight, horn, conducts	81	28
Starter generator	87	29
Group W: a) Tools	89	30
b) Tool box	91	31

INTRODUCTION

Please take note that only **Genuine Zündapp Spares** will be the safeguard for security, claims under guarantee, and will prevent many a damage and loss.

Therefore, do not use parts of another origin but demand only **Genuine Zündapp Spares** from your Zündapp dealer, for by fitting imitated parts any claim under guarantee will automatically become void.

In order to avoid errors, queries, and incorrect deliveries, please quote with all orders for spare parts:

1. **Description and number of the spare part wanted**
in accordance with this list,
2. **Frame number**
stamped into the rating plate,
3. **Modifications made on the vehicle**
by exchanging spare parts or groups.

If these data cannot be given it will be necessary to send in a pattern labelled with the sender's name and address. These patterns will be returned to the sender only upon request.

Model Order

Re. Frame No. R 29 325

1 crankshaft	No. 1950 k 207
1 cylinder	No. 2162 z 210
1 piston	No. 883 z 157
3 piston rings	No. 1262 z 101

Deliveries of spare parts are only made through our respective representatives.

All illustrations and data in this list are not binding. We reserve the right for alterations without previous notice.

ZÜNDAPP-WERKE G.M.B.H., NÜRNBERG-MÜNCHEN
NÜRNBERG WORKS



R 154, left-hand view
beginning with Frame No. R 29 101



R 154, right-hand view
beginning with Frame No. R 29 101

Illustration 1, Group M: a) Engine (Assembly)

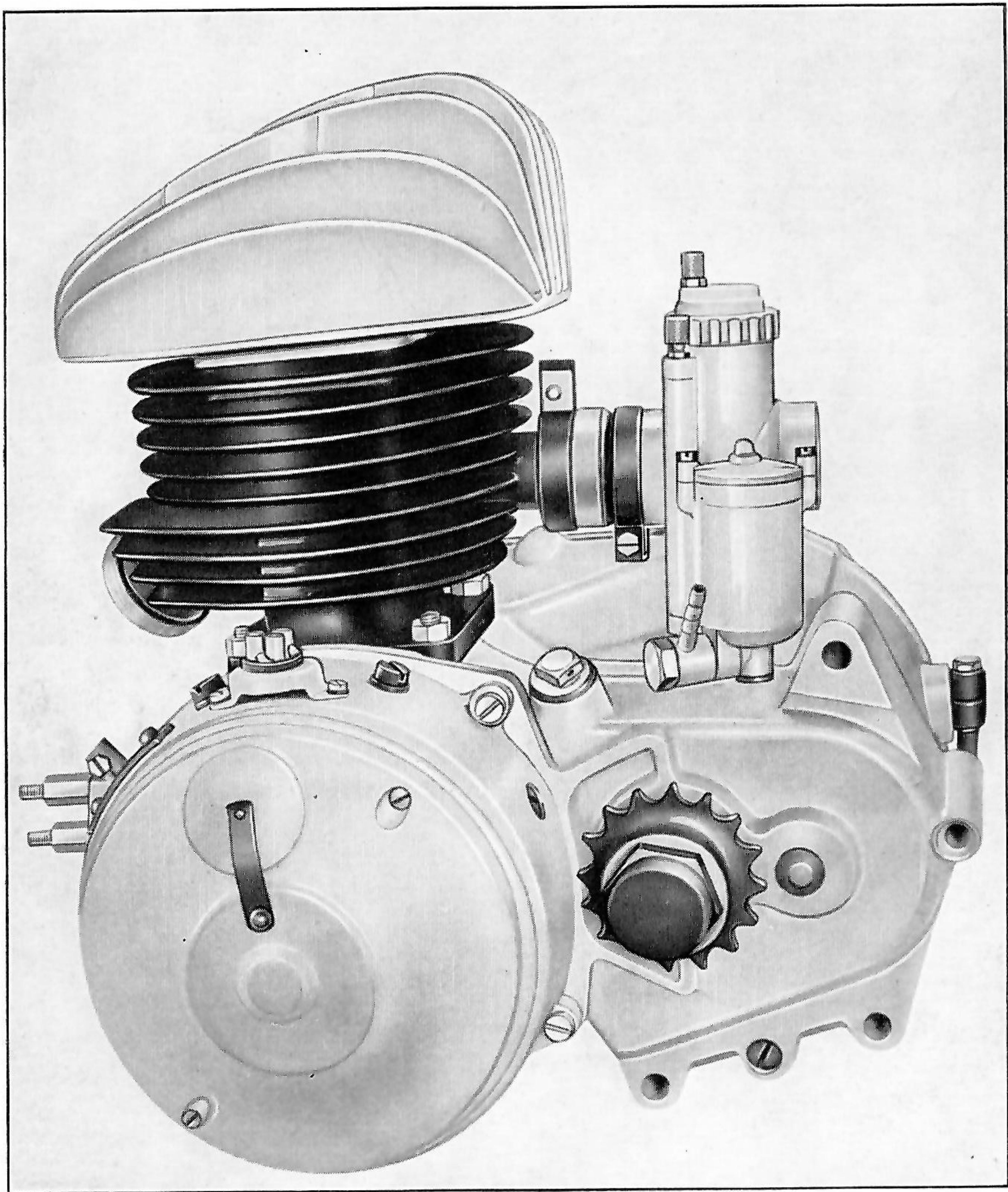


Illustration 1, Group M: a) Engine (Assembly)

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
—	6590 k 257	Engine Engine complete with starter generator and carburettor	1	

Illustration 2, Group M: b) Housing and Cylinder, Crankcase

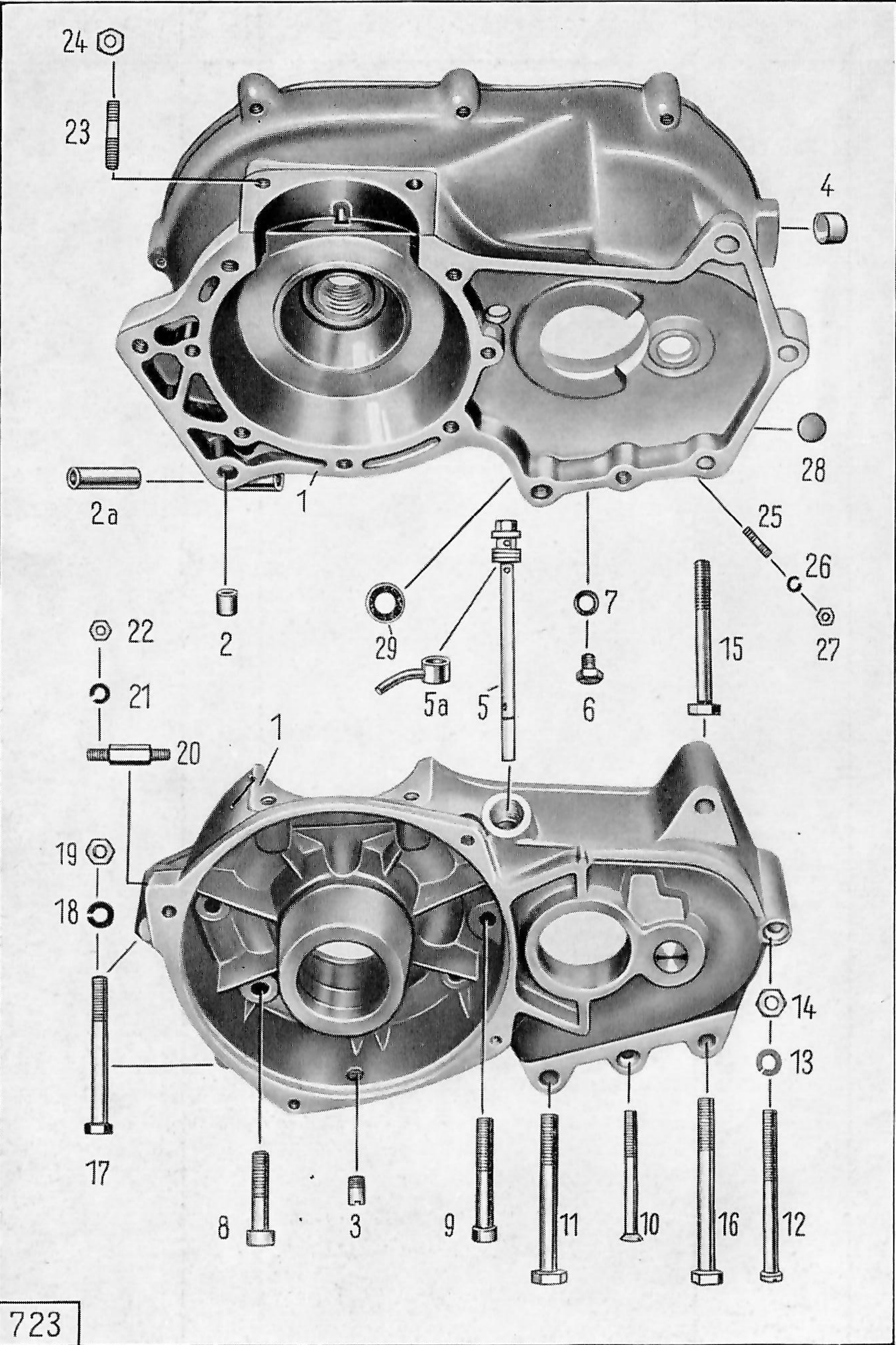


Illustration 2, Group M: b) Housing and Cylinder, Crankcase

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Crankcase				
1	510 k 233	crankcase complete	1	
2	181 z 18	bushing (between left and right half of crankcase)	2	
2a	184 z 534	bushing (for selector shaft)	1	
3	1331 z 839	gas escape pipe	1	
4	184 z 328	bearing bushing (for clutch pressure bar)	1	
5	1550 z 114	oil dip stick (for gearbox)	1	
5a	1340 z 230	breather tube	1	
6	—	hex. screw M 8 × 10 DIN 933 (for oil draining)	3	
7	—	packing washer C 8 × 14 DIN 7603	3	
8	—	cylindrical screw M 8 × 40 DIN 912 k (to fasten left to right half of crankcase)	6	
9	—	cylindrical screw M 8 × 55 DIN 912 k (to fasten left to right half of crankcase)	1	
10	—	screw, countersunk raised head M 8 × 65 DIN 91 k (to fasten left to right half of crankcase)	1	
11	—	hex. screw M 10 × 80 DIN 931 k (to fasten left to right half of crankcase)	1	
—	—	spring washer B 10 DIN 137 k	1	
—	—	hex. nut M 10 DIN 934 k	1	
12	—	cylindrical screw CM 8 × 85 DIN 84 k (to fasten left to right half of crankcase as well as to rear engine carrier)	1	
13	—	spring washer A 8 DIN 127 k	1	
14	—	hex. nut M 8 DIN 934 k	1	

Illustration 2, Group M: b) Housing and Cylinder, Crankcase

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
15	—	hex. screw M 10 × 80 DIN 931 k (to fasten crankcase to rear engine carrier)	1	
16	—	hex. screw M 10 × 90 DIN 931 k (to fasten crankcase to rear engine carrier)	1	
—	—	spring washer A 10 DIN 127 k	2	
—	—	hex. nut M 10 DIN 934 k	2	
17	—	hex. screw M 8 × 80 DIN 931 k (to fasten crankcase to front engine suspending plates)	2	
18	—	spring washer A 8 DIN 127 k	2	
19	—	hex. nut M 8 DIN 934 k	4	
20	121 z 1102	thread bolt (to fasten ignition coil to crankcase)	2	
21	—	spring washer A 6 DIN 127 k	2	
22	—	hex. nut M 6 DIN 934 k	2	
23	1561 z 010	stud (for fixing cylinder)	4	
24	—	hex. nut M 8 DIN 934 k	4	
25	1561 z 107	stud (for fixing gear selector support)	4	
26	—	spring washer A 5 DIN 127 k	4	
27	—	hex. nut M 5 DIN 934 k	4	
28	—	sealing washer 16 DIN 470 (pertaining to right half of crankcase) ..	1	
29	—	radial gasket (oil seal) B 14 × 24 × 7 DIN 6503 (pertaining to footshift shaft)	1	

Illustration 3, Group M: b) Housing and Cylinder, Crankcase Cover

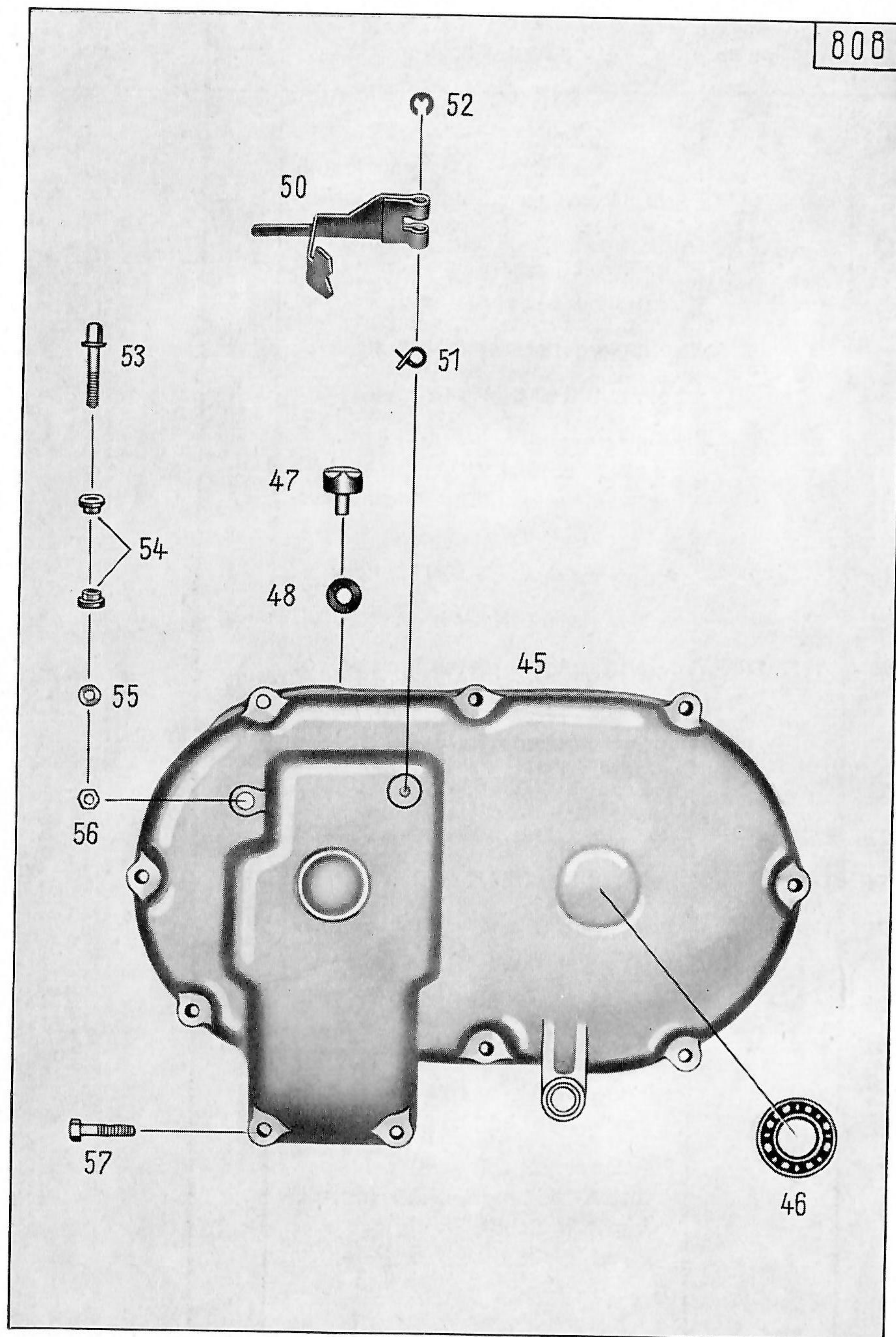


Illustration 3, Group M: b) Housing and Cylinder, Crankcase Cover

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Crankcase Cover				
45	260 z 40	crankcase cover	1	
46	—	ball bearing 6203 DIN 625	1	
47	1121 z 32	supporting bolt	1	
48	1301 z 52	spacer shim	} as re- quir- ed	
—	1301 z 616	spacer shim		
50	670 z 205	contact breaker arm (for idle check light)	1	
51	321 z 322	ratchet spring	1	
52	—	C-washer 3,2 DIN 6799	1	
53	131 z 515	bolt	1	
54	176 z 29	bushing	2	
55	—	washer 5,3 DIN 125 k	2	
56	—	hex. nut M 5 DIN 934 k	2	
—	—	hex. screw M 6 × 22 DIN 931 k (to fasten crankcase cover to crankcase)	8	
57	—	hex. screw M 6 × 25 DIN 931 k (to fasten crankcase cover to crankcase)	2	

Illustration 4, Group M: b) Housing and Cylinder, **Cylinder and
Cylinder Head**

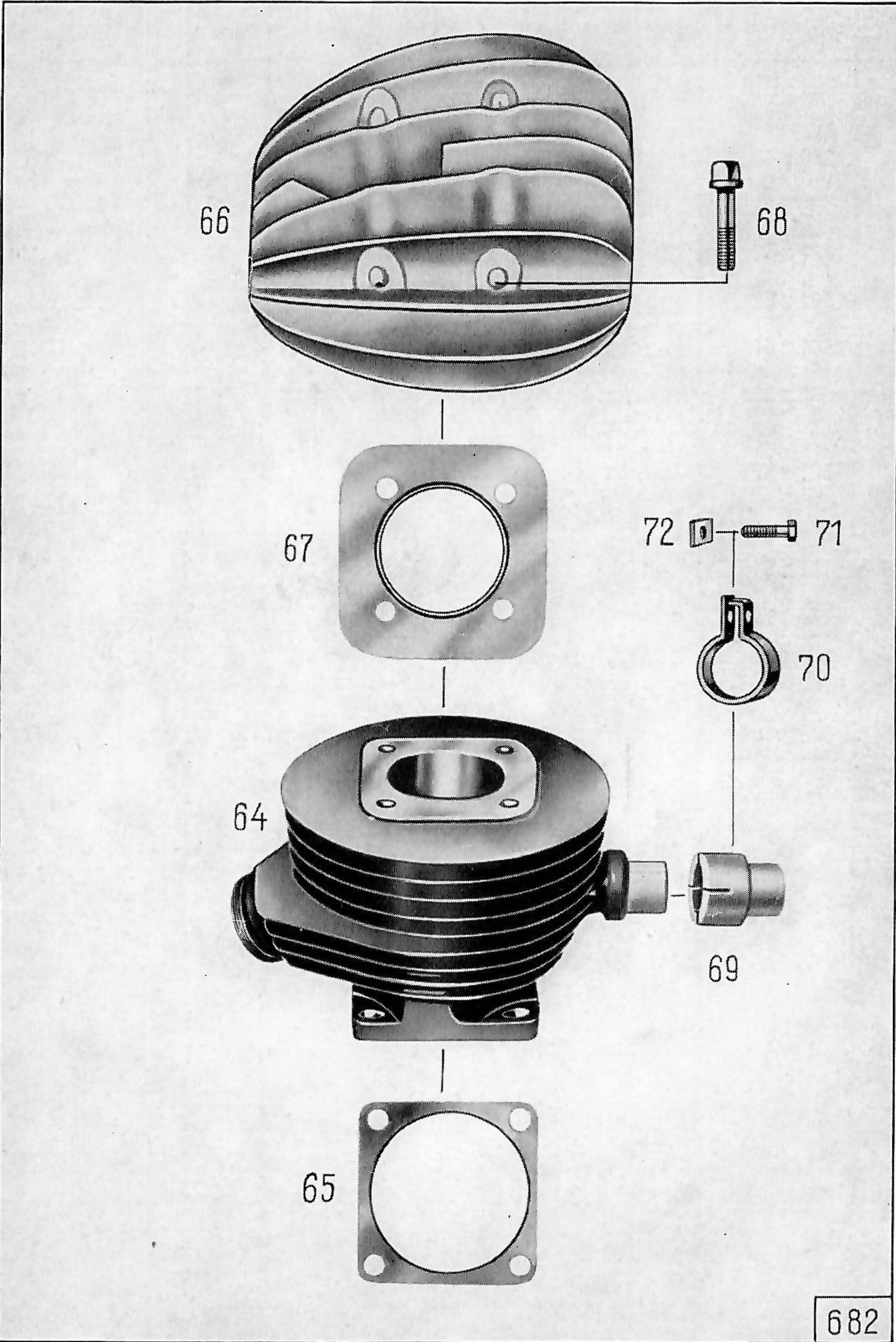


Illustration 4, Group M: b) Housing and Cylinder, **Cylinder and
Cylinder Head**

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Cylinder				
64	2162 z 210	cylinder	1	only for repair-work
65	468 z 182	cylinder base gasket	1	
66	273 z 153	cylinder head	1	
—	174 z 6	tapped bushing (for spark plug) ..	1	
67	461 z 5	cylinder head gasket	1	
68	1551 z 016	square screw (to fasten cylinder head)	4	
69	177 z 115	insulating bushing	1	
70	1441 z 160	clamp	1	
71	—	hex. screw M 6 × 20 Sz DIN 933 k (to clamp)	1	
72	1001 z 217	square nut	1	

Illustration 5, Group M: c) Drive Mechanism, Crankshaft, Connecting Rod, and Piston

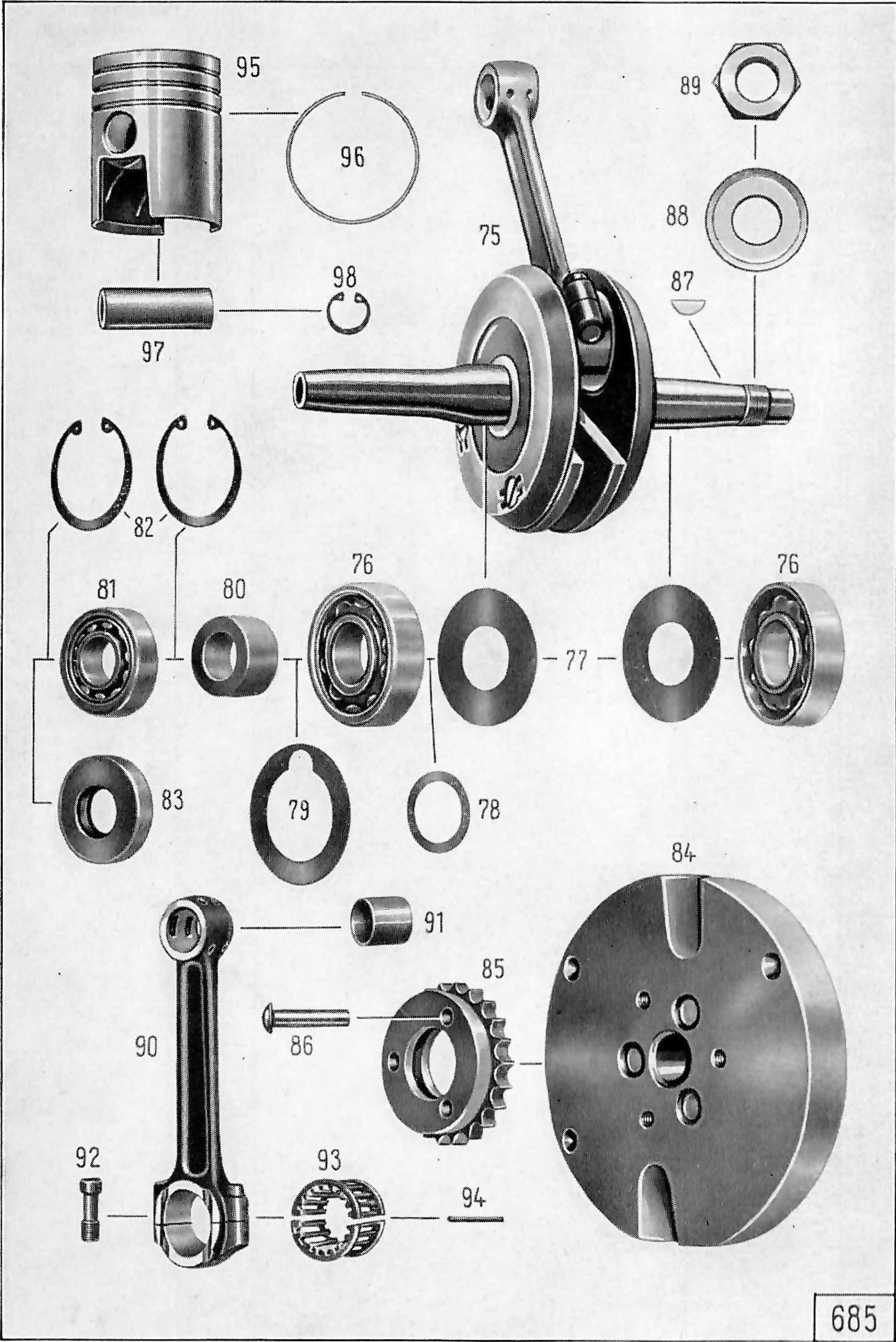


Illustration 5, Group M: c) Drive Mechanism, Crankshaft, Connecting Rod, and Piston

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Crankshaft				
75	1950 k 207	crankshaft with connecting rod ..	1	} betw. crank web and ball-bearing
76	—	ball-bearing M 25 DIN 615	2	
77	1281 z 382	covering washer	2	
78	1301 z 1003	spacer shim 27,2 × 36 × 0,05	} as re-quired	
—	1301 z 1004	spacer shim 27,2 × 36 × 0,1		
—	1301 z 1005	spacer shim 27,2 × 36 × 0,15		
79	1301 z 132	spacer shim 41 × 61,5 × 0,1		
—	1301 z 133	spacer shim 41 × 61,5 × 0,2		
—	1301 z 134	spacer shim 41 × 61,5 × 0,3		
—	1301 z 135	spacer shim 41 × 61,5 × 0,5		
—	1301 z 1012	spacer shim 41 × 61,5 × 0,15		
80	181 z 341	bushing (on crankshaft)	1	
81	—	roller bearing NJL 20 DIN 5412	1	
82	—	circlip 47 × 1,75 DIN 472	2	
83	—	radial gasket (oil seal) B 20 × 47 × 10 DIN 6503	1	
84	1310 z 61	flywheel with sprocket	1	
85	2101 z 152	sprocket 22 teeth (to flywheel)	1	
86	—	rivet, button head, 7 × 40 DIN 660	3	
87	—	key 4 × 6,5 DIN 6888	1	
88	1291 z 64	lock washer	1	
89	1001 z 20	hex. nut	1	
Connecting Rod				
90	1160 k 151	connecting rod	1	
91	184 z 523	gudgeon pin bushing	1	
92	1571 z 1	connecting rod screw	2	
93	1874 z 1	cage ring	1	
94	1871 z 1	bearing needle	18	
Piston				
95	883 z 157	piston 57,0 φ (standard)	1	
—	2473 k 63-0	piston 57,5 φ 1st oversize	1	
—	2473 k 64-0	piston 58,0 φ 2nd oversize	1	
—	2473 k 69-0	piston 58,5 φ 3rd oversize	1	
—	2473 k 70-0	piston 59,0 φ 4th oversize	1	
96	1262 z 101	piston ring 57,0 mm φ (standard) ..	3	
—	2442 k 41-0	piston ring 57,5 mm φ 1st oversize	3	
—	2442 k 42-0	piston ring 58,0 mm φ 2nd oversize	3	
—	2442 k 43-0	piston ring 58,5 mm φ 3rd oversize	3	
—	2442 k 44-0	piston ring 59,0 mm φ 4th oversize	3	
97	121 z 1060	gudgeon pin	1	
98	—	circlip 18 × 1 DIN 472	2	

Illustration 6, Group M: f) Carburettor

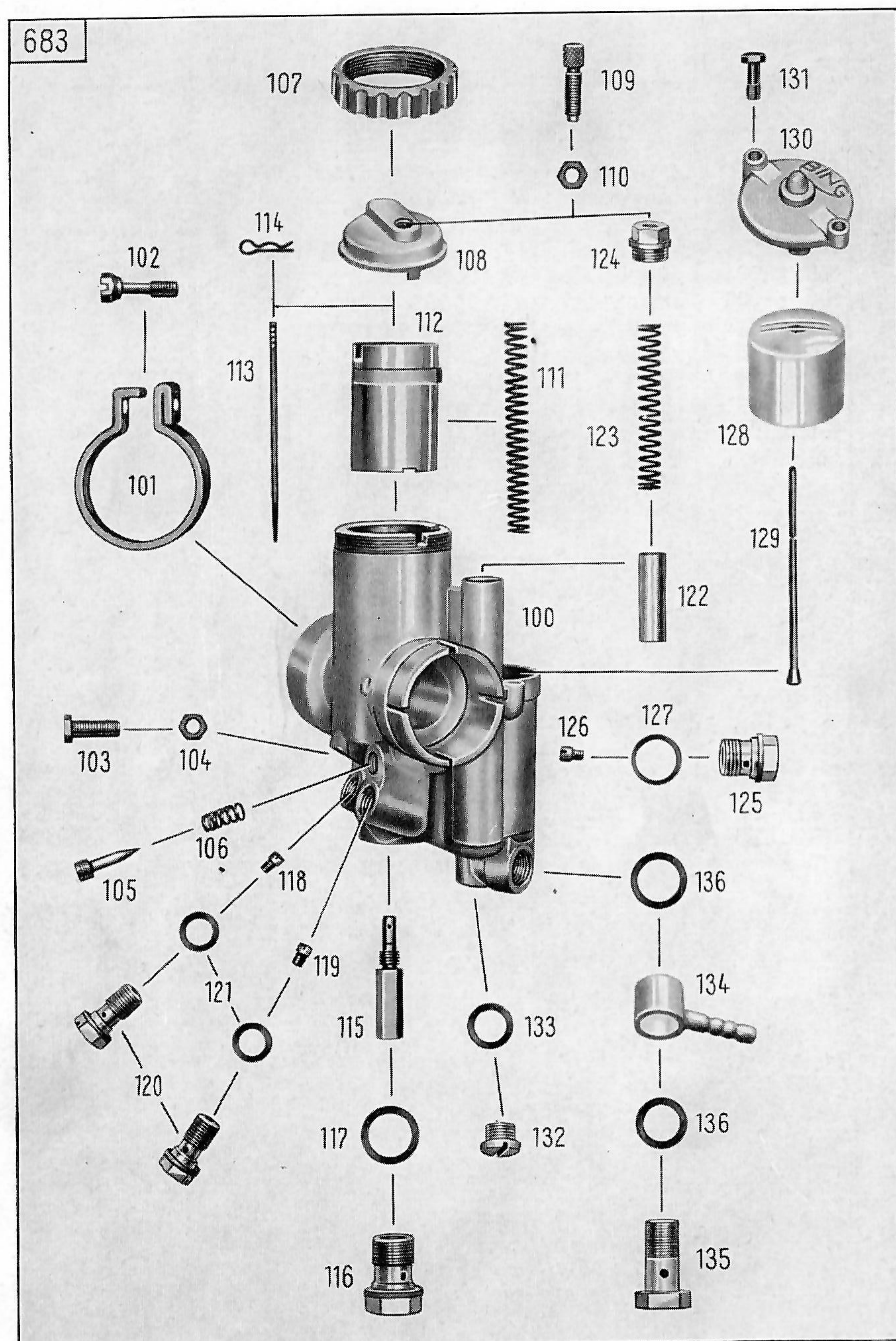


Illustration 6, Group M: f) Carburettor

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
		Carburettor		
—	6430 z 82	oblique-jet carburettor with starting device (model Bing 1/20/19)	1	
100	2403 k 95-0	carburettor housing	1	
—	6430 z 85	oblique-jet carburettor with starting device (model Bing 1/20/38). Only in combination with intake silencer in right-hand cover flap	1	
—	2403 k 103	carburettor housing (to carburettor 6430 z 85)	1	
101	2401 k 78-2	clamping ring	1	
102	2401 k 2-2	screw (to clamping ring)	1	
103	2401 k 3-2	idle running adjusting screw	1	
104	2401 k 6-2	nut (to idle running adjusting screw)	1	
105	2401 k 70-2	idle air screw	1	
106	2401 k 69-2	spring (to idle air screw)	1	
107	2403 k 51-0	nut (to seal cover)	1	
108	2403 k 97-0	cover plate	1	
109	2401 k 5-4	adjusting screw for throttle cable	1	
110	2401 k 6-2	nut (to throttle cable adjusting screw)	1	
111	2401 k 52-2	slide spring	1	
112	2403 k 98-0	gas slide (size 13)	1	
113	2401 k 89-0	jet needle	1	
114	2401 k 80-2	clip (to jet needle)	1	
115	2404 k 32-0	needle jet (please quote No. stamped on it when ordering) ..	1	
116	2403 k 55-0	end screw	1	

Illustration 6, Group M: f) Carburettor

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
117	2407 k 7-0	packing washer (to end screw) ..	1	
118	2404 k 23-0	jet (main jet, size 110)	1	
—	2404 k 23-0	jet (main jet, size 105; only to carburettor 6430 z 85)	1	
119	2404 k 23-0	jet (idling jet, size 45)	1	
120	2401 k 81-6	jet block	2	
121	2407 k 14-0	packing washer (to jet block)	2	
122	2403 k 99-0	starter slide	1	
123	2401 k 90-2	pressure spring	1	
124	2401 k 91-0	lock screw	1	
—	2401 k 96	lock washer	1	
109	2401 k 5-4	adjusting screw for throttle cable	1	
110	2401 k 6-2	nut (to throttle cable adjusting screw)	1	
125	2401 k 92-0	end screw	1	
126	2404 k 23-0	jet (starter jet, size 80)	1	
127	2407 k 17-0	packing washer (to end screw) ..	1	
128	2404 k 3-0	float	1	
129	2401 k 93-0	float needle	1	
130	2403 k 100-0	float chamber cover	1	
131	2401 k 61-2	set screw (to cover)	2	
132	2401 k 94-0	lock screw	1	
133	2407 k 18-0	packing washer (to lock screw) ..	1	
134	2403 k 101-0	swivel type pipe connector	1	
135	2401 k 95-0	set screw	1	
136	2407 k 19-0	packing washer (to set screw) ..	2	

Illustration 7, Group M: f) Carburettor, Intake Silencer and Air Cleaner

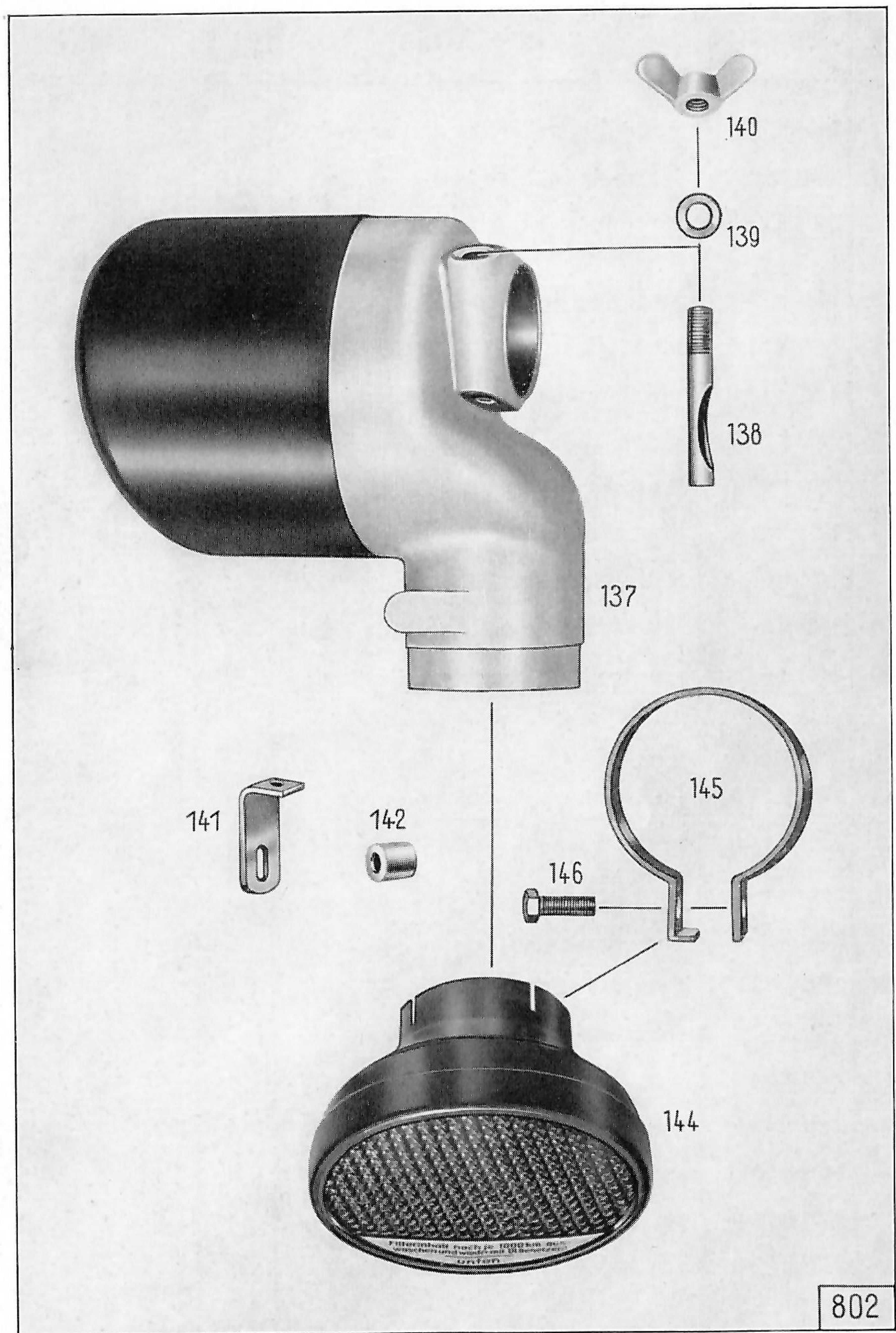


Illustration 7, Group M: f) Carburettor, Intake Silencer and Air Cleaner

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Intake Silencer				
up to F. 30 400 and from F. 30 801 to F. 31 000				
137	6350 z 138	intake silencer	1	
138	121 z 1104	clamping bolt (to fasten intake silencer to carburettor)	1	
139	—	spring washer A 8 DIN 137 k	1	
140	—	wing nut M 8 DIN 315 k	1	
141	211 z 276	supporting clip	1	
142	1241 z 036	spacer ring	1	
—	—	hex. screw M 6 × 30 DIN 931 k (to fasten intake silencer to crankcase cover)	1	
Air Cleaner				
144	6410 k 210	air filter	1	
145	1441 k 306	clamp	1	
146	—	hex. screw M 6 × 20 DIN 933 k (to clamp) ..	1	

Illustration 7a, Group M: f) Carburettor, Intake Silencer with Air Cleaner

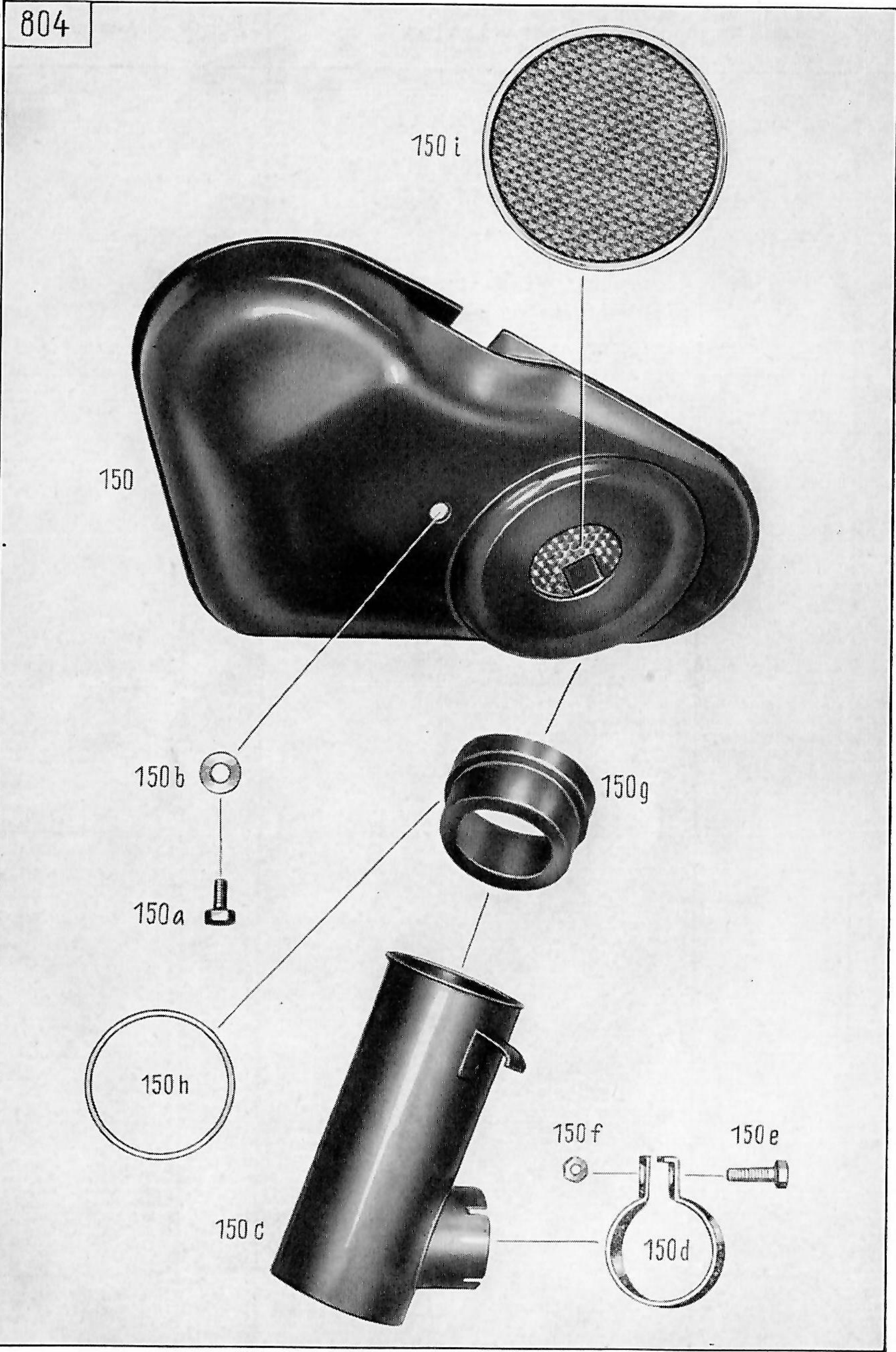


Illustration 7a, Group M: f) Carburettor, Intake Silencer with Air Cleaner

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Intake Silencer				
in right-hand cover flap from F. 30 401 with the exception of F. 30 801 to F. 31 000				
150	480 k 462	intake-silencer housing with air cleaner inset	1	
150a	—	hex. screw M 8 × 12 DIN 933 k (to fasten intake silencer to right flap)	1	
150b	—	spring washer A 8 DIN 137 k	1	
150c	1330 z 226	tube (for air guiding)	1	
150d	1441 z 160	clamp	1	
150e	—	hex. screw M 6 × 22 DIN 931 k	1	
150f	—	hex. nut M 6 DIN 934 k	1	
150g	1236 z 357	packing washer	1	
150h	1241 z 387	spacer ring	as re- quir- ed	
150i	780 z 116	air cleaner inset	1	

Illustration 8, Group M: g) Clutch, Clutch, Clutch Operating Mechanism

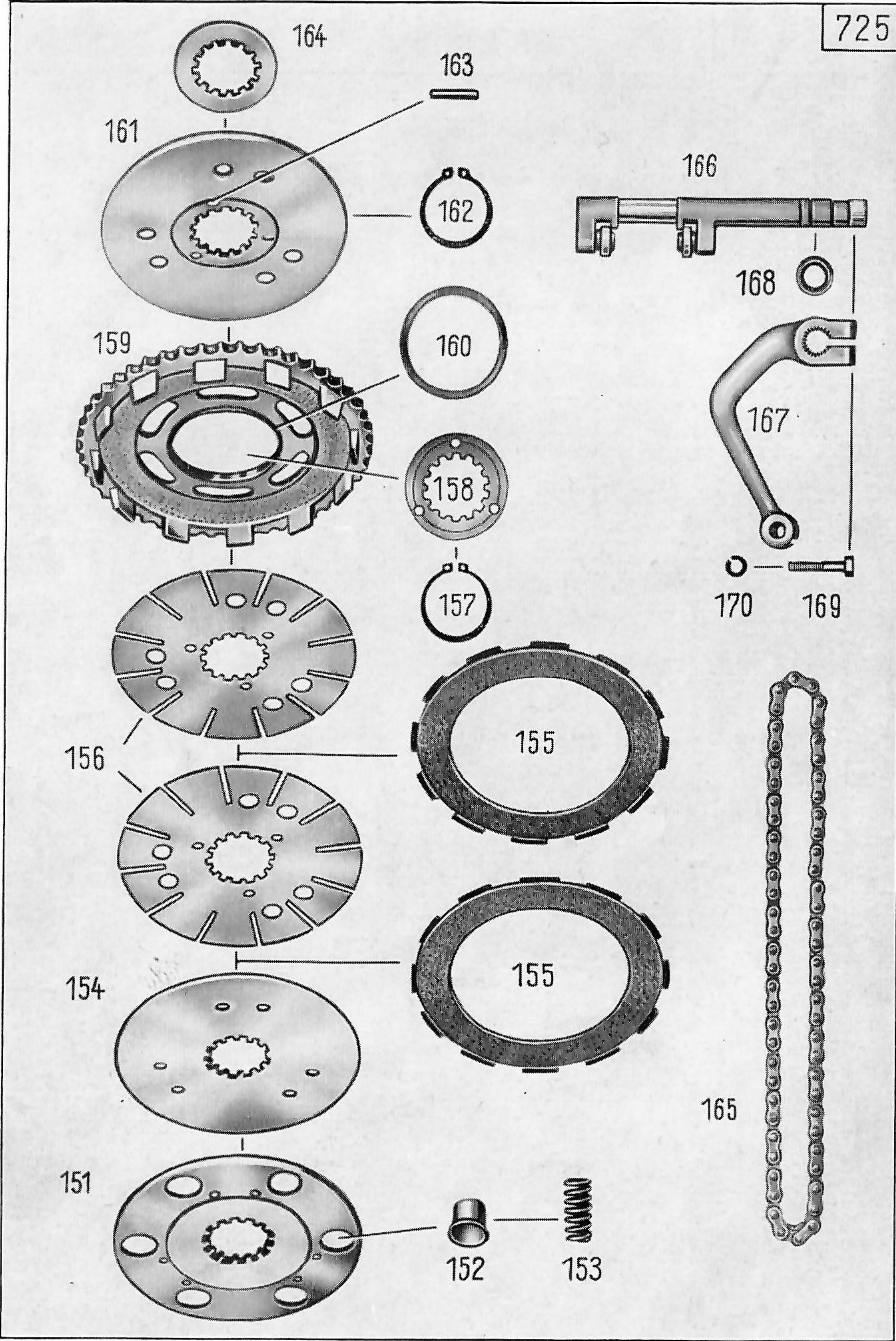


Illustration 8, Group M: g) Clutch, Clutch, Clutch Operating Mechanism

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Clutch				
151	921 z 69	spring plate	1	
152	781 z 273	spring cup (in spring plate)	6	
153	321 z 564	clutch spring	6	
154	921 z 67	clutch pressure plate	1	
155	920 z 52	clutch disk with lining	2	
156	921 z 68	clutch disk	2	
157	—	circlip 35 × 1,5 DIN 471	1	with ground side surfaces
158	1231 z 212	spacer ring	1	
159	2100 z 165	clutch sprocket with bushing, 48 teeth	1	
160	184 z 317	bushing (in clutch sprocket)	1	
161	921 z 203	clutch plate	1	
162	—	circlip 35 × 1,5 DIN 471	1	with ground side surfaces
163	1691 z 113	push rod	3	
164	1231 z 213	pressure ring	1	
165	—	roller chain 62 links, endless A 9,5 × 9,5 DIN 73232	1	
Clutch operating mechanism				
166	1940 z 25	clutch pressure bar, complete	1	
167	671 z 341	clutch lever (to clutch pressure bar)	1	
168	1236 z 222	packing washer	1	
169	—	hex. screw M 6 × 25 DIN 931 (to fasten clutch lever to pressure bar)	1	
170	—	spring washer A 6 DIN 127 k	1	

Illustration 9, Group G: c) Shafts and Gears, Selector Shaft, Layshaft

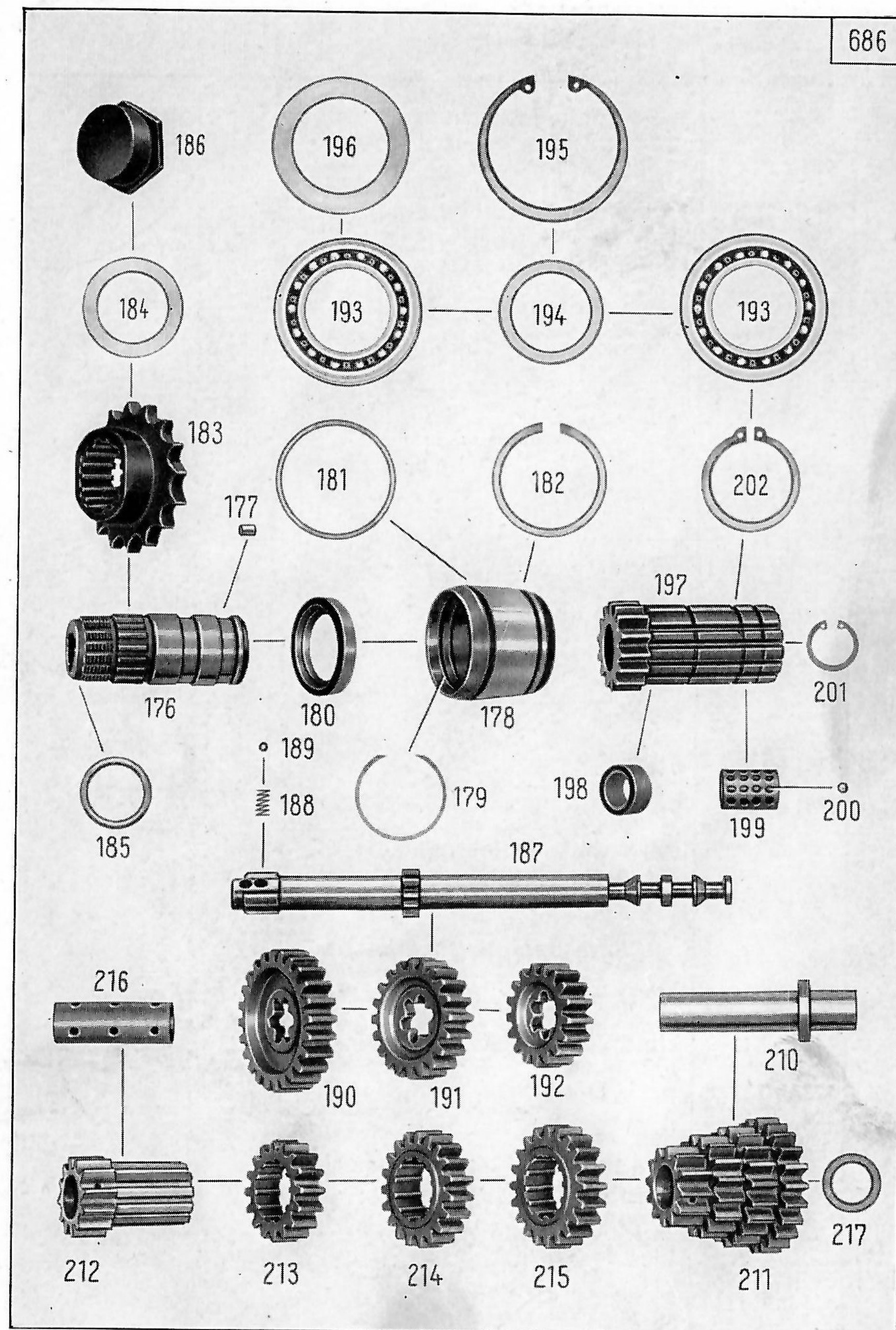


Illustration 9, Group G: c) Shafts and Gears, Selector Shaft, Layshaft

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Selector Shaft				
176	961 z 125	final drive shaft	1	
177	1871 z 07	roller	38	
178	1871 z 154	bearing ring (to left half of crankcase)	1	
179	1251 z 99	internal circlip	2	} at option
—	1251 z 251	internal circlip	2	
—	1251 z 252	internal circlip	2	
180	—	radial gasket (oil seal) B 32 × 45 × 7 DIN 6503 (in bearing ring)	1	
181	1301 z 603	spacer shim 48,1 × 52,3 × 0,5	} as required	} betw. bearing ring and half of crankcase
—	1301 z 604	spacer shim 48,1 × 52,3 × 0,3		
—	1301 z 605	spacer shim 48,1 × 52,3 × 0,2		
182	1251 z 176	snap ring (to fasten bearing ring in half of crankcase)	1	
183	2101 z 60	sprocket 16 teeth (on final drive shaft)	1	
184	1291 z 65	lock washer	1	
185	1236 z 220	packing washer	1	
186	1001 z 214	lock nut (to fasten sprocket to final drive shaft)	1	
187	1921 z 701	selector shaft	1	
188	321 z 312	pressure spring	2	
189	—	ball 6 mm III DIN 5401	3	
190	2131 z 303	gear wheel 1st speed 24 teeth ..	1	
191	2131 z 304	gear wheel 2nd speed 20 teeth ..	1	
192	2131 z 307	gear wheel 3rd speed 17 teeth ..	1	
193	—	ball bearing 16 007 DIN 625 (to right half of crankcase)	2	
194	—	spacer ring 35 × 45 × 2 DIN 988 (between the ball bearings)	1	
195	—	circlip 62 × 2 DIN 472	1	
196	1301 z 133	covering washer (betw. crankcase and ball bearing)	1	

Illustration 9, Group G: c) Shafts and Gears, Selector Shaft, Layshaft

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
197	960 z 101	clutch hub (simultaneously 4th speed)	1	
198	184 z 324	bearing bushing (in clutch hub) ..	1	
199	1871 z 151	ball cage	1	
200	—	ball 4 mm III DIN 5401	40	
201	1251 k 259	circlip J 23 × 1,2	1	
202	—	circlip 35 × 1,5 DIN 471 (to fasten clutch hub to half of crankcase)	1	with ground side surfaces
Layshaft				
210	1940 z 206	layshaft	1	} as re- quired } betw. gear wheel block and right half of crankcase
211	2130 z 101	gear wheel block, complete	1	
212	2131 z 238	gear wheel 1st speed 12 teeth ..	1	
213	2131 z 239	gear wheel 2nd speed 16 teeth ..	1	
214	2131 z 247	gear wheel 3rd speed 19 teeth ..	1	
215	2131 z 237	drive gear wheel 22 teeth	1	
216	184 z 316	bushing	1	
217	1301 z 177	spacer shim 18,2 × 25,7 × 0,5		
—	1301 z 367	spacer shim 18,2 × 25,7 × 0,2		
—	1301 z 368	spacer shim 18,2 × 25,7 × 0,3		

Illustration 10, Group G: d) Footshift Mechanism

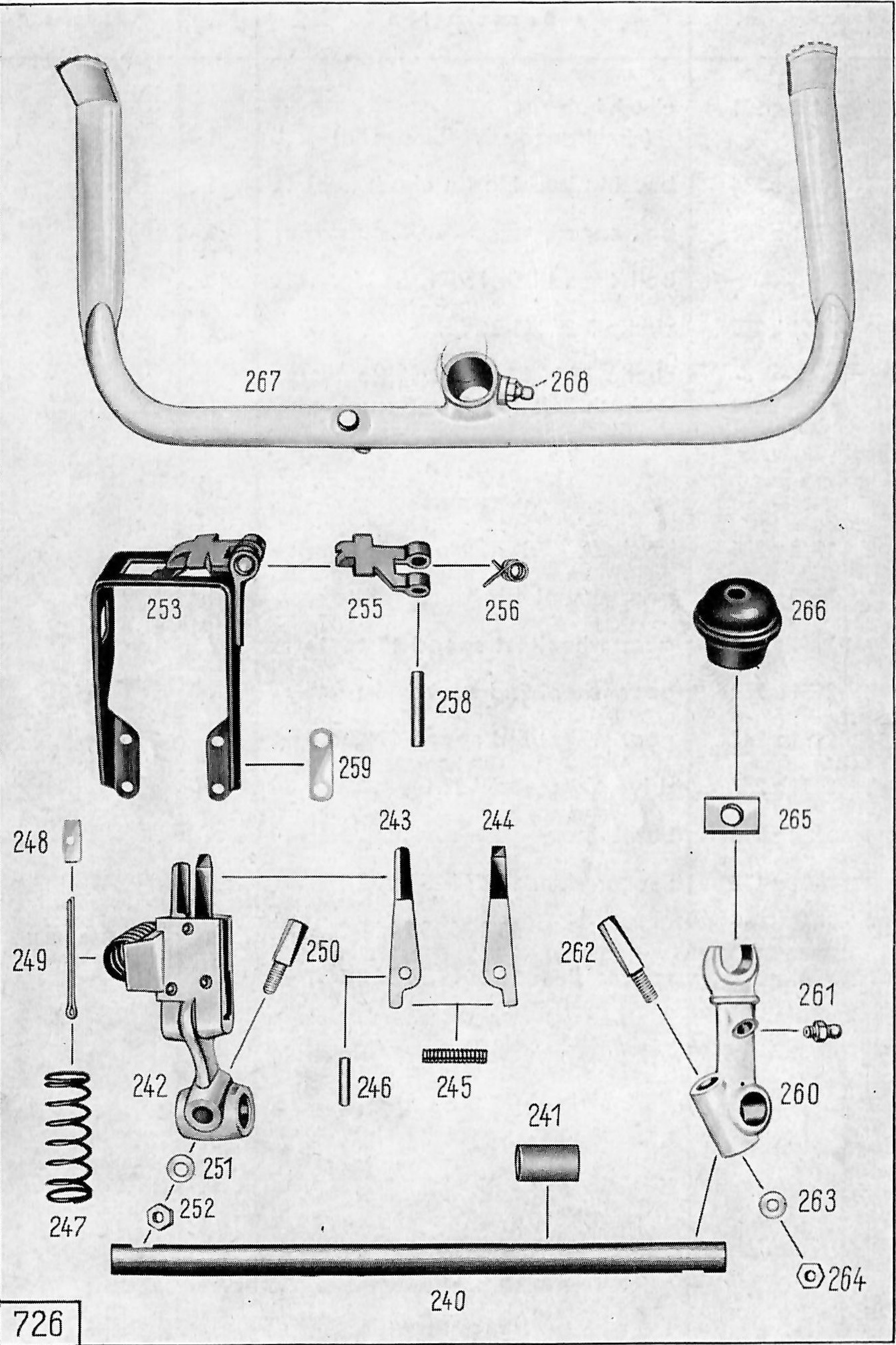


Illustration 10, Group G: d) Footshift Mechanism

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Footshift Mechanism				
240	1941 z 313	footshift shaft (to gear selector fork)	1	
241	1596 z 421	hose (on footshift shaft)	2	
242	670 k 233	gear selector fork, complete	1	
243	841 z 40	selector finger, left-h.	1	
244	841 z 41	selector finger, right-h.	1	
245	321 z 317	pressure spring	1	
246	—	pin A 5 h 9 × 20 DIN 7341	3	
247	321 z 316	return spring	1	
248	1281 z 359	joint	2	
249	—	split pin 3 × 35 DIN 94	1	
250	121 z 1112	cotter pin (to fasten gear selector fork to footshift shaft)	1	
251	—	spring washer B 6 DIN 137 k	2	
252	—	hex. nut M 6 DIN 934 k	1	
253	200 z 107	gear selector support with ratchet	1	
255	841 z 39	ratchet	1	
256	321 z 322	ratchet spring	1	
258	—	pin A 6 h 9 × 32 DIN 7341 (to fasten ratchet to gear selector support)	1	
259	1281 z 242	joint }	4	} at option
—	1281 z 243	joint } to gear selector support ..	4	
—	1281 z 244	joint }	4	
260	671 z 315	gearshift lever	1	
261	—	grease nipple D 6 DIN 71412	1	
262	121 z 553	cotter pin (to fasten gearshift lever to shaft)	1	
263	—	spring washer B 6 DIN 137 k	2	
264	—	hex. nut M 6 DIN 934	1	
265	574 z 7	sliding block (to gearshift lever) ..	1	
266	616 z 215	rubber sleeve (to gearshift lever)	1	
267	680 z 31	footshift lever	1	
268	—	grease nipple D 6 DIN 71412	1	

Illustration 11, Group R: a) Frame

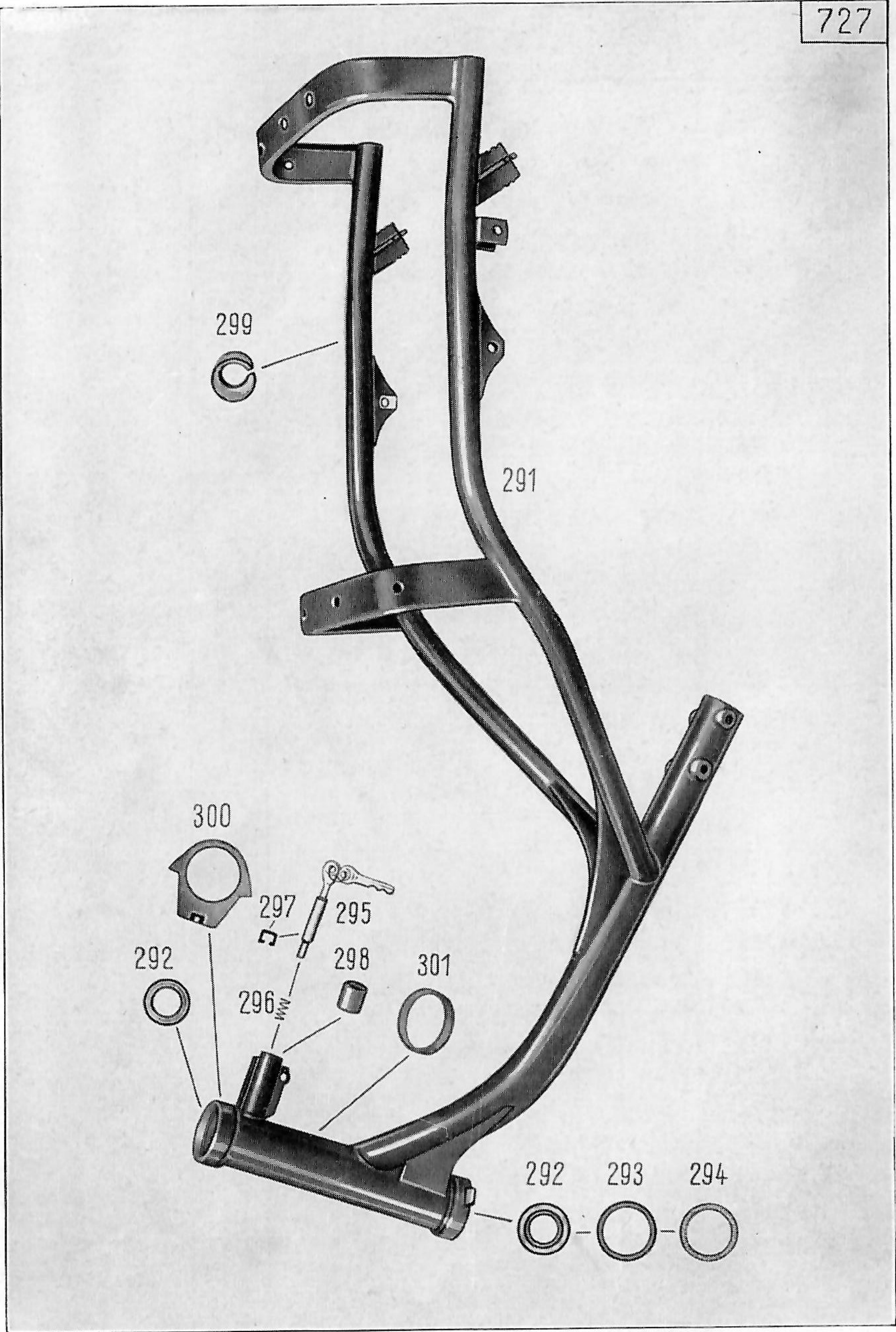
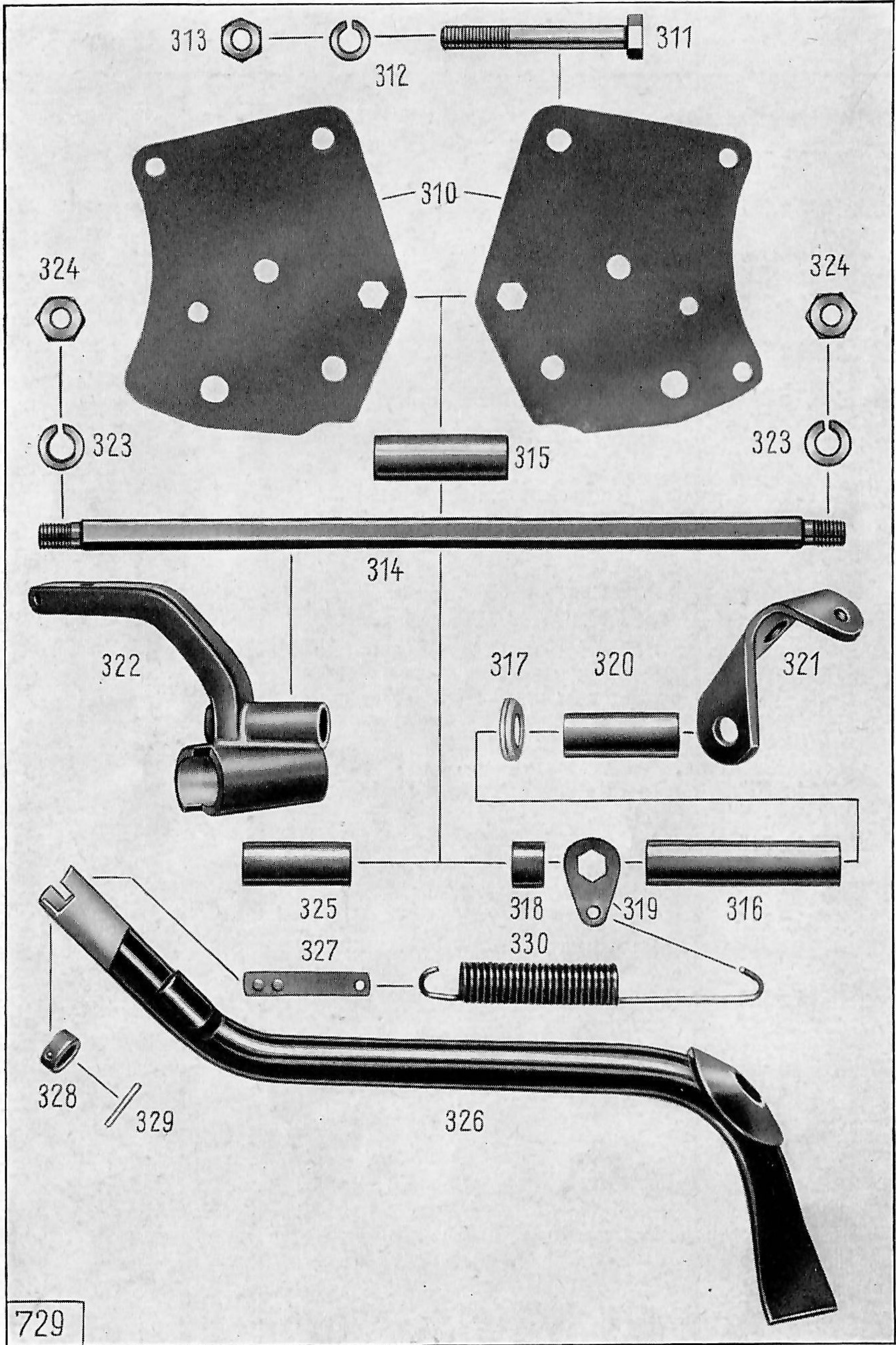


Illustration 11, Group R: a) Frame

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Frame				
291	6690 z 325	frame	1	
292	1871 z 171	frame race	2	
—	—	ball 6,35 mm III DIN 5401	38	
293	1231 z 210	covering washer	1	
294	1236 z 333	packing washer	1	
295	6040 z 274	antitheft lock	1	
296	321 z 537	spring (to antitheft lock)	2	
297	211 z 250	clip (to fasten antitheft lock)	1	
298	1236 z 338	ring (to bushing for antitheft lock)	1	
—	—	hex. screw M 6 × 10 DIN 933 k (to fasten cable for earth terminal to frame)	1	
—	—	spring washer B 6 DIN 137	1	
—	—	hex. nut M 6 DIN 934 k	1	
299	616 z 234	rubber sleeve (to fuel tank)	4	
300	1236 z 316	rubber ring (distance piece be- tween steering tube and cover)	1	
301	1236 z 323	rubber ring (to fasten electric and Bowden cables)	2	
—	1236 z 355	rubber ring (to fasten Bowden cables)	1	

Illustration 12, Group R: a) Frame, Front Engine Carrier and Side Stand



729

Illustration 12, Group R: a) Frame, Front Engine Carrier and Side Stand

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Front Engine Carrier				
310	1181 z 409	engine suspending plate	2	
311	—	hex. screw M 10 × 80 DIN 931 k (to fasten engine suspending plates to frame)	2	
312	—	spring washer A 10 DIN 127 k	2	
313	—	hex. nut M 10 DIN 934 k	2	
314	121 z 1099	front bearing bolt	1	
315	1331 z 778	spacer tube (between engine sus- pending plates)	1	
316	1331 z 813	spacer tube, right-hand	1	
317	1301 z 656	spacer washer	1	
318	1331 z 903	spacer tube	1	
319	1141 z 2209	bracket (to return spring)	1	
320	1331 z 767	spacer tube (to footshift lever) ..	1	
321	631 z 562	front foot board support, right-h. ..	1	
322	630 z 509	front foot board support, left-h. ..	1	
323	—	spring washer A 12 DIN 127 k	2	
324	—	hex. nut M 12 DIN 934 k (on bearing bolt)	2	
Side Stand				
325	1331 z 904	spacer tube	1	
326	1750 z 232	side stand, complete	1	
327	1141 z 2210	bracket	1	
328	1241 z 365	retaining ring	1	
329	—	pin 3 × 25 DIN 1473	1	
—	—	packing washer A 6 × 10 DIN 7603	1	
—	—	grease nipple D 6 DIN 71412	1	
330	321 z 588	return spring	1	

Illustration 13, Group R: a) Frame, Rear Engine Carrier and Swinging Fork

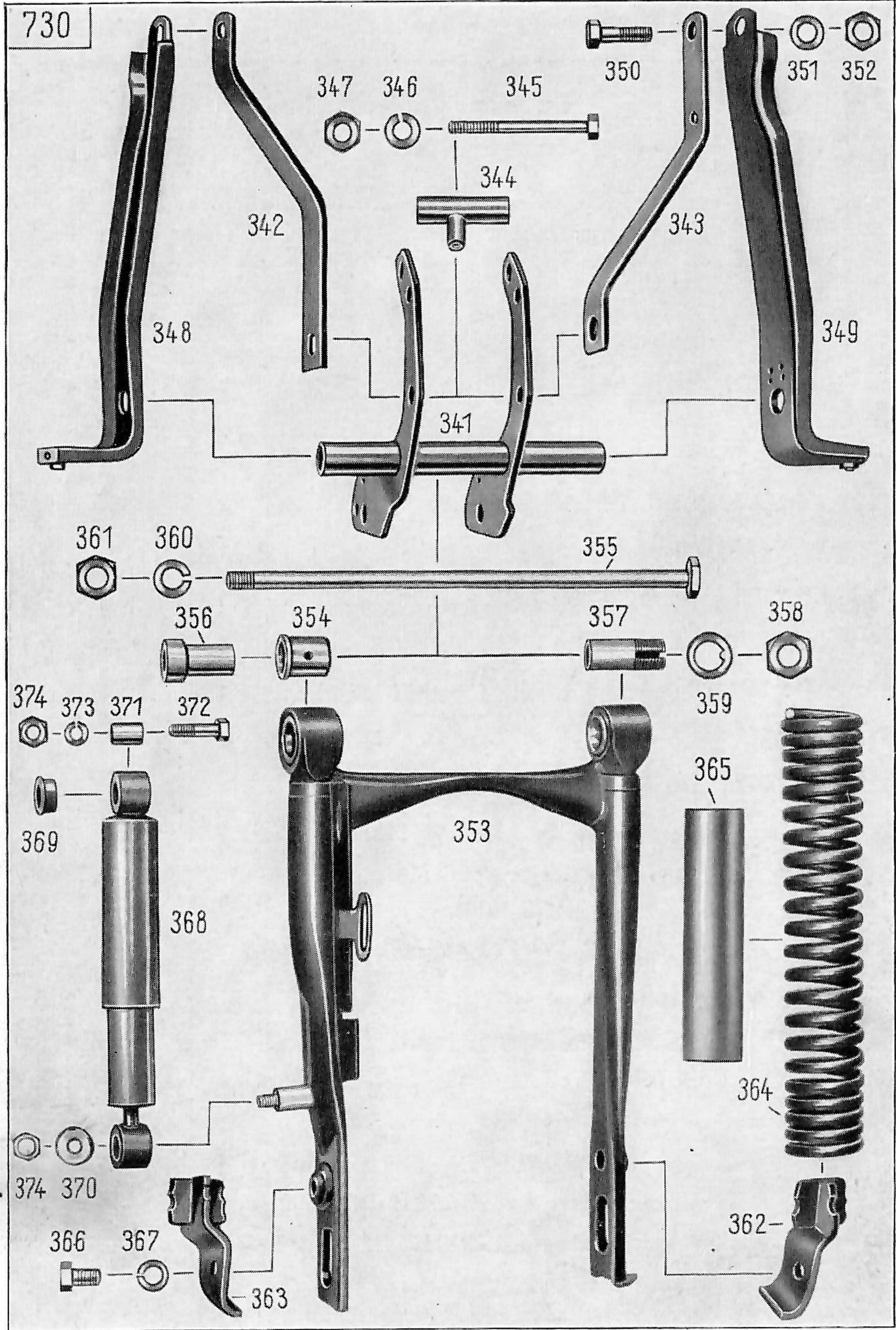


Illustration 13, Group R: a) Frame, Rear Engine Carrier and Swinging Fork

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Rear Engine Carrier				
341	630 z 508	rear engine carrier	1	
342	1751 z 263	bracket, left-h.	1	
343	1751 z 264	bracket, right-h.	1	
344	1330 z 208	spacer tube	1	
345	—	hex. screw M 10 × 90 DIN 931 k (to fasten brackets to rear engine carrier)	1	
346	—	spring washer A 10 DIN 127 k	1	
347	—	hex. nut M 10 DIN 934 k	1	
348	1750 z 225	brace, left-h.	1	
349	1750 z 224	brace, right-h.	1	
350	—	hex. screw M 10 × 35 DIN 931 k (to fasten rear engine carrier to frame)	2	
351	—	spring washer B 10 DIN 137 k	2	
352	—	hex. nut M 10 DIN 934 k	2	
Swinging Fork				
353	710 z 247	rear swinging fork	1	
354	184 z 531	bushing for swinging fork	2	
355	131 z 540	bearing bolt	1	
356	1330 z 202	bearing tube	1	
357	1331 z 876	bearing tube	1	
358	1001 z 224	hex. nut	2	
359	1301 z 1022	washer	1	
360	—	spring washer A 14 DIN 127 k	1	
361	—	hex. nut M 14 × 1,5 DIN 936 k	1	
—	1080 z 1	grease nipple	2	
—	—	packing washer A 6 × 10 DIN 7603	2	

Illustration 13, Group R: a) Frame, Rear Engine Carrier and Swinging Fork

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
362	630 z 494	lower spring carrier, right-hand ..	1	
363	630 z 493	lower spring carrier, left-hand	1	
364	321 z 590	spring	2	
365	616 z 258	rubber sleeve (damper)	2	
366	—	hex. screw M 10 × 18 DIN 933 k (to fasten spring carrier to swinging arm)	2	
367	—	spring washer A 10 DIN 127 k	2	
368	6350 z 101	shock absorber	1	
369	2376 k 2	rubber sleeve	4	
370	1301 z 168	washer	1	
371	1331 z 885	spacer tube	1	
372	—	hex. screw M 8 × 35 DIN 931 k (to fasten shock absorber to frame)	1	
373	—	spring washer A 8 DIN 127 k	1	
374	—	hex. nut M 8 DIN 934 k	2	

Illustration 14, Group R: b) Foot Boards

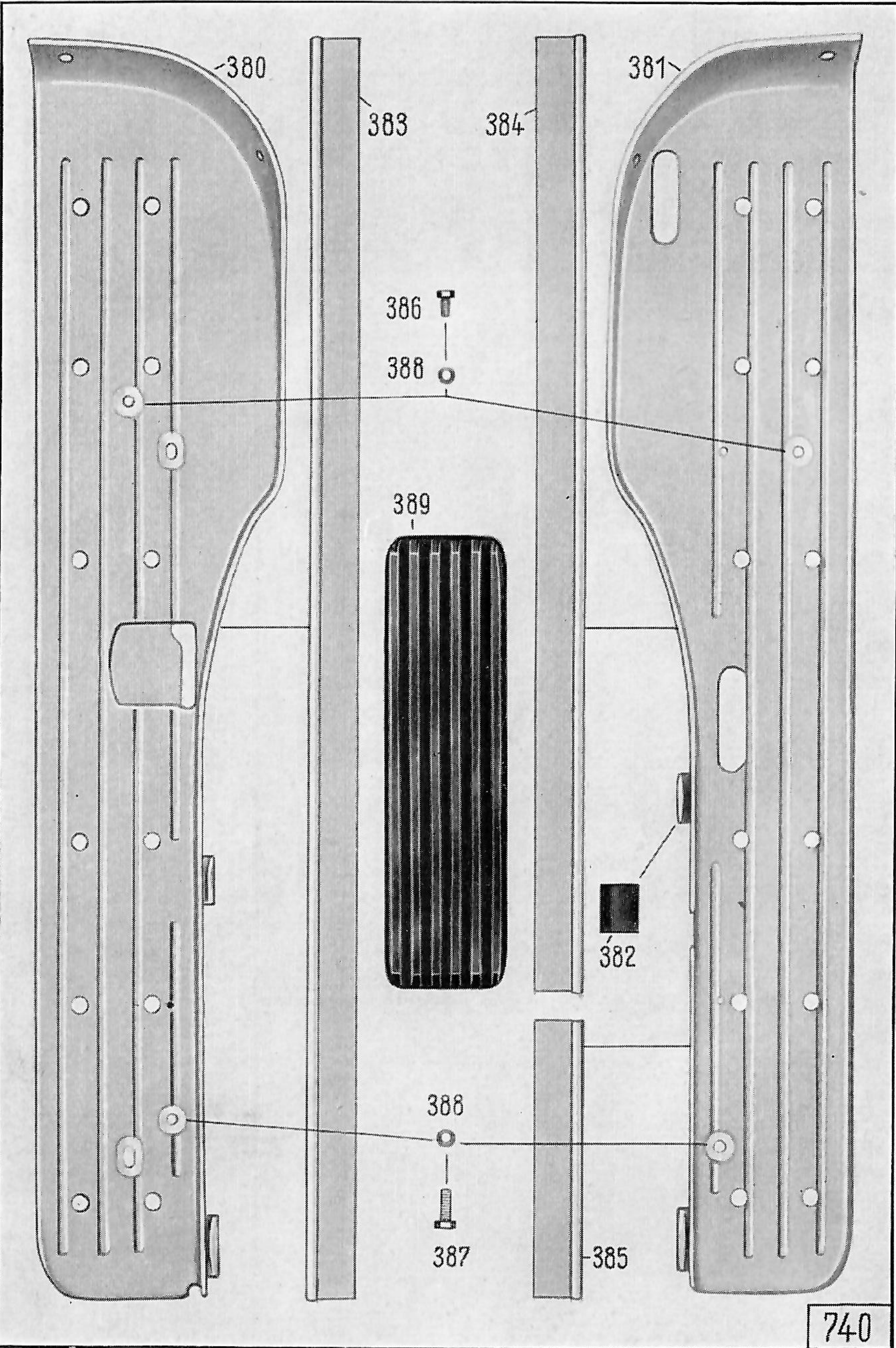


Illustration 14, Group R: b) Foot Boards

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Foot Boards				
380	470 z 36	foot board, left-hand	1	} foot board, left-hand
381	470 z 37	foot board, right-hand	1	
382	1596 z 404	rubber hose	2	
383	1397 z 24	beading	1	
382	1596 z 404	rubber hose	2	} foot board, right-hand
384	1397 z 25	front beading	1	
385	1397 z 26	rear beading	1	
386	—	hex. screw M 6 × 12 DIN 933 k (to fasten foot board to front part of foot board carrier)	2	
387	—	hex. screw M 6 × 20 DIN 933 k (to fasten foot board to rear part of foot board carrier)	2	
388	—	spring washer B 6 DIN 137 k	4	
389	1146 z 105	rubber foot mat	4	

Illustration 15, Group R: d) Mudguards, Front Mudguard

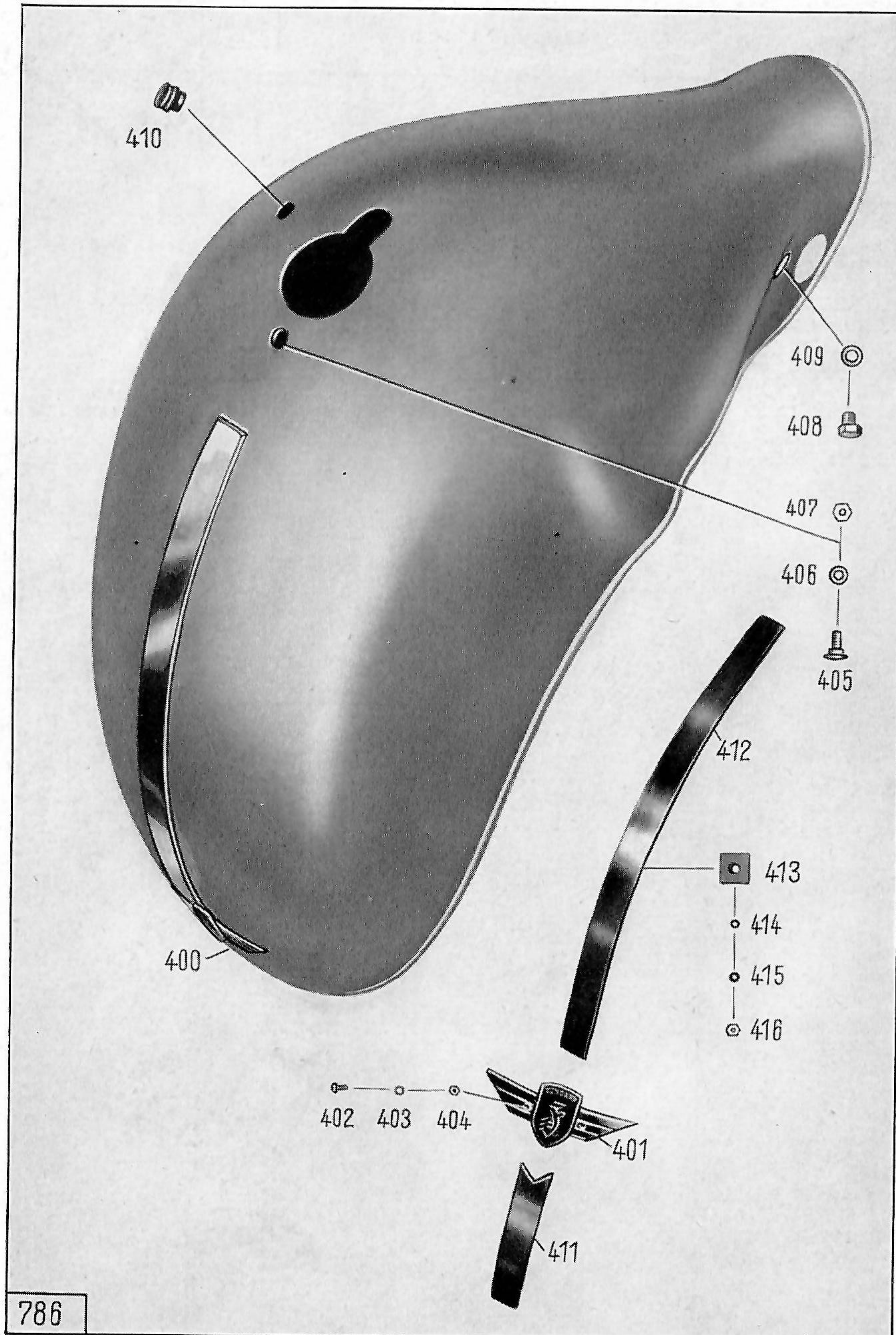


Illustration 15, Group R: d) Mudguards, Front Mudguard

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
		Front Mudguard		
400	6370 z 188	front mudguard	1	please quote colour
401	1483 z 65	manufacturer's plate	1	
402	—	screw, countersunk raised head AM 3 × 6 DIN 91 crp	2	
403	—	spring washer A 3 DIN 137 k	2	
404	—	hex. nut M 3 DIN 934 k	2	
405	—	screw M 6 × 15 DIN 603 k (to fasten front mudguard to swinging fork)	1	
406	—	spring washer A 6 DIN 127 k	1	
407	—	hex. nut M 6 DIN 934 k	1	
408	—	hex. screw M 8 × 10 DIN 933 crp (to fasten front mudguard to swinging fork)	2	
409	—	spring washer A 8 DIN 137 k	2	
410	616 z 216	grommet (to front brake cable) ..	1	
411	943 z 34	moulding	1	
412	943 z 35	moulding	1	
413	1550 z 117	screw (to moulding)	4	
414	—	spring washer A 4 DIN 127 k	4	
415	—	spring washer A 4 DIN 137 k	4	
416	—	hex. nut M 4 DIN 934 k	4	

Illustration 16, Group R: d) Mudguards, Rear Mudguard and Chain Case

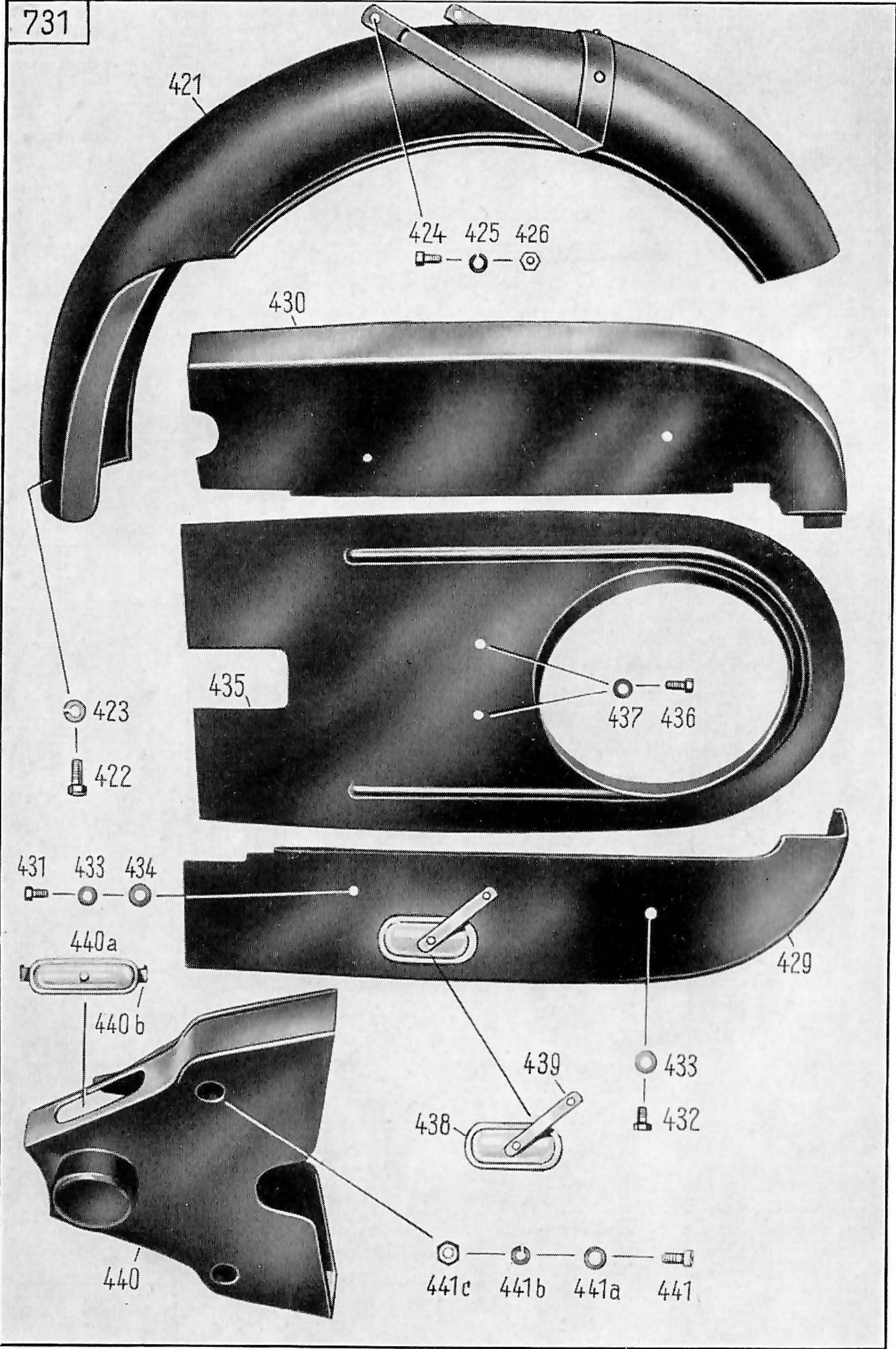


Illustration 16, Group R: d) Mudguards, Rear Mudguard and Chain Case

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Rear Mudguard				
421	6370 z 176	rear mudguard	1	
422	—	hex. screw M 8 × 15 DIN 933 k (to fasten rear mudguard to rear engine carrier)	1	
423	—	spring washer A 8 DIN 127 k	1	
424	—	hex. screw M 6 × 10 DIN 933 k (to fasten rear mudguard to frame)	2	
425	—	spring washer A 6 DIN 127 k	2	
426	—	hex. nut M 6 DIN 934 k	2	
Chain Case				
429	1500 z 277-8	chain case, lower front part	1	
430	1500 z 259-8	chain case, upper front part	1	
431	—	hex. screw M 6 × 10 DIN 933 k (to fasten chain case front parts to swinging fork)	2	
432	—	hex. screw M 6 × 12 DIN 933 k (to fasten chain case front parts to swinging fork)	2	
433	—	spring washer B 6 DIN 137 k	4	
434	—	washer 6,4 DIN 125 k	2	
435	1501 z 184-8	chain case, rear part	1	
436	—	hex. screw M 6 × 12 DIN 933 k (to fasten chain case rear part to brake cover)	2	
437	—	spring washer B 6 DIN 137 k	2	
438	230 z 230	cap	1	
439	331 z 303	laminated spring	1	
—	—	rivet, button head 4 × 6 DIN 660 (to fasten laminated spring to cap as well as to chain case front part)	2	
—	—	washer 4,3 DIN 125 k	1	
—	—	spring washer B 5 DIN 137 k	1	

Illustration 16, Group R: d) Mudguards, Rear Mudguard and Chain Case

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
440	650 z 385	protective cover	1	
440a	230 z 232	cap	1	
440b	331 z 328	laminated spring	1	
—	—	rivet, button head 4 × 6 DIN 660 Alu (to fasten laminated spring to cap)	1	
441	—	cylindrical screw M 8 × 15 DIN 84 k (to fasten protective cover to rear engine carrier)	2	
441a	—	spring washer A 8 DIN 137 k	2	
441b	—	spring washer A 8 DIN 127 k	2	
—	1301 z 52	shim 8,5 × 18 × 0,2	} as required	
—	1301 z 53	shim 8,5 × 18 × 0,3		
—	1301 z 54	shim 8,5 × 18 × 0,4		
441c	—	hex. nut M 8 DIN 934 k	2	

Illustration 17, Group R: e) Front Shield

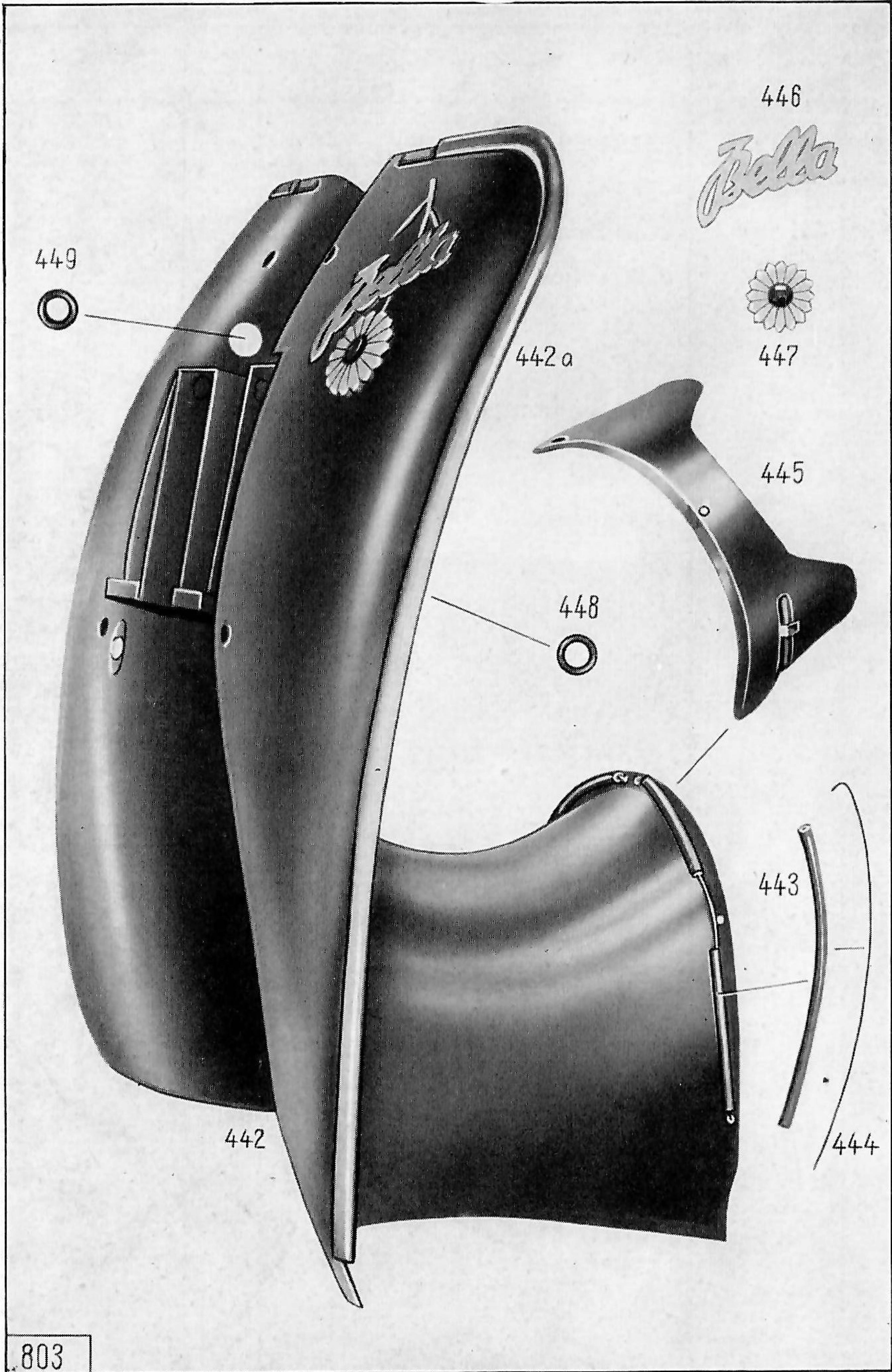


Illustration 17, Group R: e) Front Shield

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Front Shield				
442	650 z 430	front shield, complete	1	please quote colour
442a	943 z 36	moulding, left-h.	1	
—	943 z 37	moulding, right-h.	1	
—	—	screw, countersunk raised head AM 4 × 12 DIN 91 crp	8	
443	1596 z 296	rubber hose	4	
444	741 z 30	retaining wire	2	
445	651 z 236	wind guiding shield	1	
—	—	screw, button head AM 4 × 10 DIN 86 k (to fasten wind guiding shield to front shield)	3	
—	—	spring washer B 5 DIN 137 k	3	
—	—	washer 4,3 DIN 125 k	2	
—	—	hex. nut M 4 DIN 934 k	3	
—	—	hex. screw M 6 × 15 DIN 933 k (to fasten front shield to foot boards)	4	
—	—	hex. screw M 6 × 12 DIN 933 k (to fasten front shield to foot boards)	2	
—	—	spring washer B 6 DIN 137 k	12	
—	—	hex. nut M 6 DIN 934 k	6	
446	1483 z 68	plate (Bella)	1	
—	—	rivet, button head 1,4 × 4 DIN 660 Alu elox.	5	
447	1487 z 51	decorative plate (flower)	1	
—	173 z 110	spacer tube	1	
—	—	rivet, countersunk head 2 × 10 DIN 661 Alu elox.	1	
—	—	hex. screw M 6 × 25 DIN 933 k (to fasten dashboard cover to front shield)	1	
—	—	washer 6,4 DIN 125 k	1	
448	1806 z 104	rubber grommet (to set of cables)	1	
449	1806 z 02	rubber grommet (to set of cables)	1	

Illustration 18, Group R: e) Front Cover, Dash Board with Cover

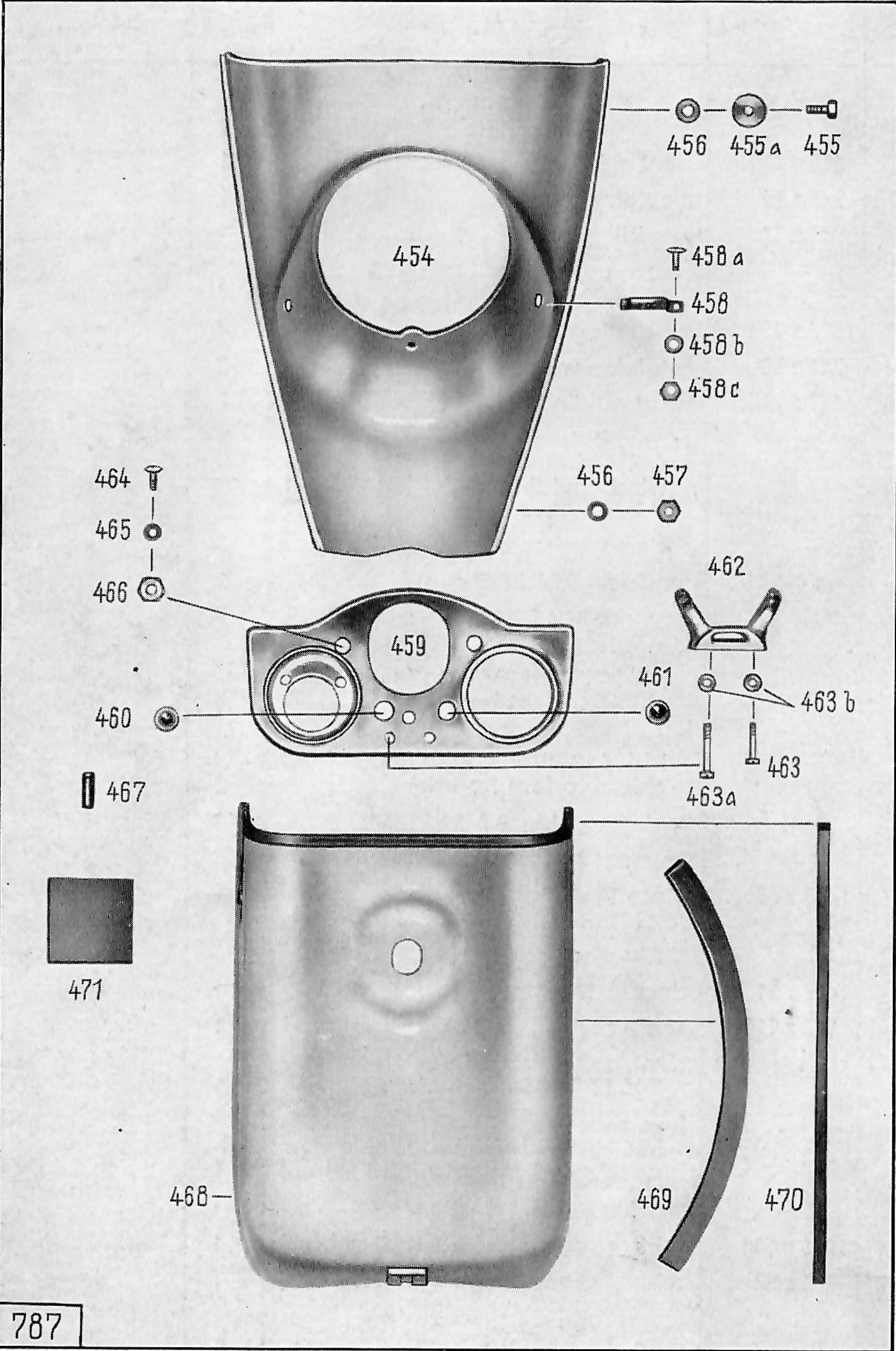


Illustration 18, Group R: e) Front Cover, Dash Board with Cover

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Front Cover				
454	650 k 414	front cover	1	please quote colour
455	—	hex. screw M 6 × 15 DIN 933 k (to fasten front cover to front shield)	2	
455a	1301 z 1019	washer	2	
456	—	spring washer B 6 DIN 137 k	4	
—	1301 z 1039	washer	2	
457	—	hex. nut M 6 DIN 934 k	2	
—	1396 z 243	double beading, left-hand	1	
—	1396 z 244	double beading, right-hand	1	
458	631 z 659	cable support	2	
458a	—	screw, button head AM 4 × 8 DIN 86 k	2	
458b	—	spring washer A 4 DIN 127 k	2	
458c	—	hex. nut M 4 DIN 934 k	2	
Dash Board				
459	483 z 322	dash board	1	please quote colour
460	1110 z 19	inspection glass (for battery charge control lamp)	1	
461	1110 z 20	inspection glass (for idle control lamp)	1	
462	1113 z 3	eyelet (for a strap, etc.)	1	
463	—	cylindrical screw AM 5 × 25 DIN 84 k (to fasten eyelet to dash board)	1	
463a	—	cylindrical screw AM 5 × 35 DIN 84 k (to fasten eyelet as well as holder for control lamps within dash board)	1	
463b	—	spring washer B 5 DIN 137 k	2	
464	—	screw, countersunk raised head AM 6 × 12 DIN 91 crp (to fasten dashboard to front shield)	3	
465	—	shake-proof washer J 6,4 DIN 6797 k	3	
466	—	hex. nut M 6 DIN 934 k	3	
467	1596 z 418	profile rubber (piece of a hose) for dashboard	2	
468	650 z 384	cover (for dashboard)	1	
—	1110 z 19	inspection glass (for flashlight) ..	1	
469	1396 z 240	profile rubber	2	
470	1396 z 239	profile rubber	1	
471	1146 z 94	rubber plate	2	
(For electric parts see under headlight)				

Illustration 19, Group R: e) Rear Body

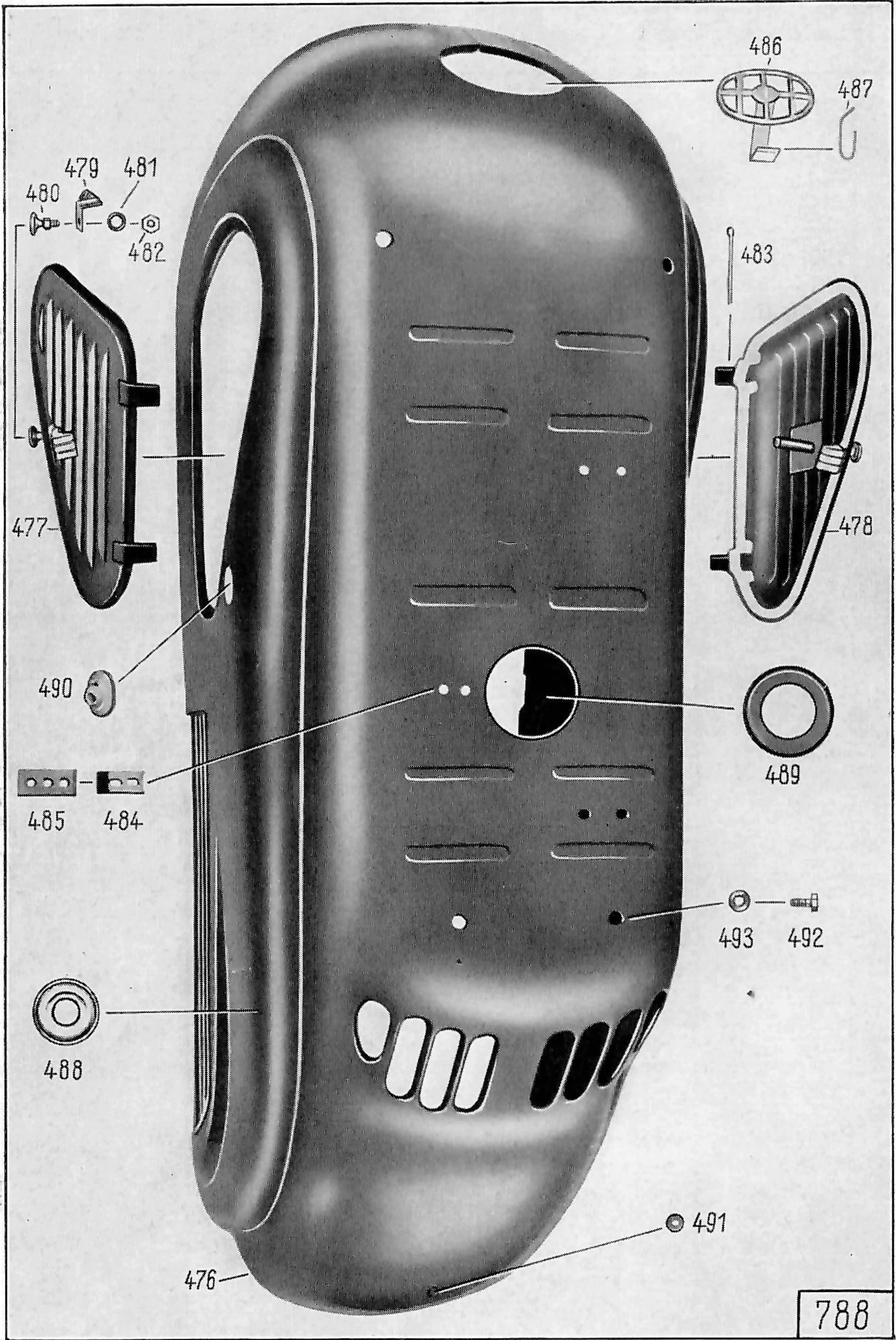
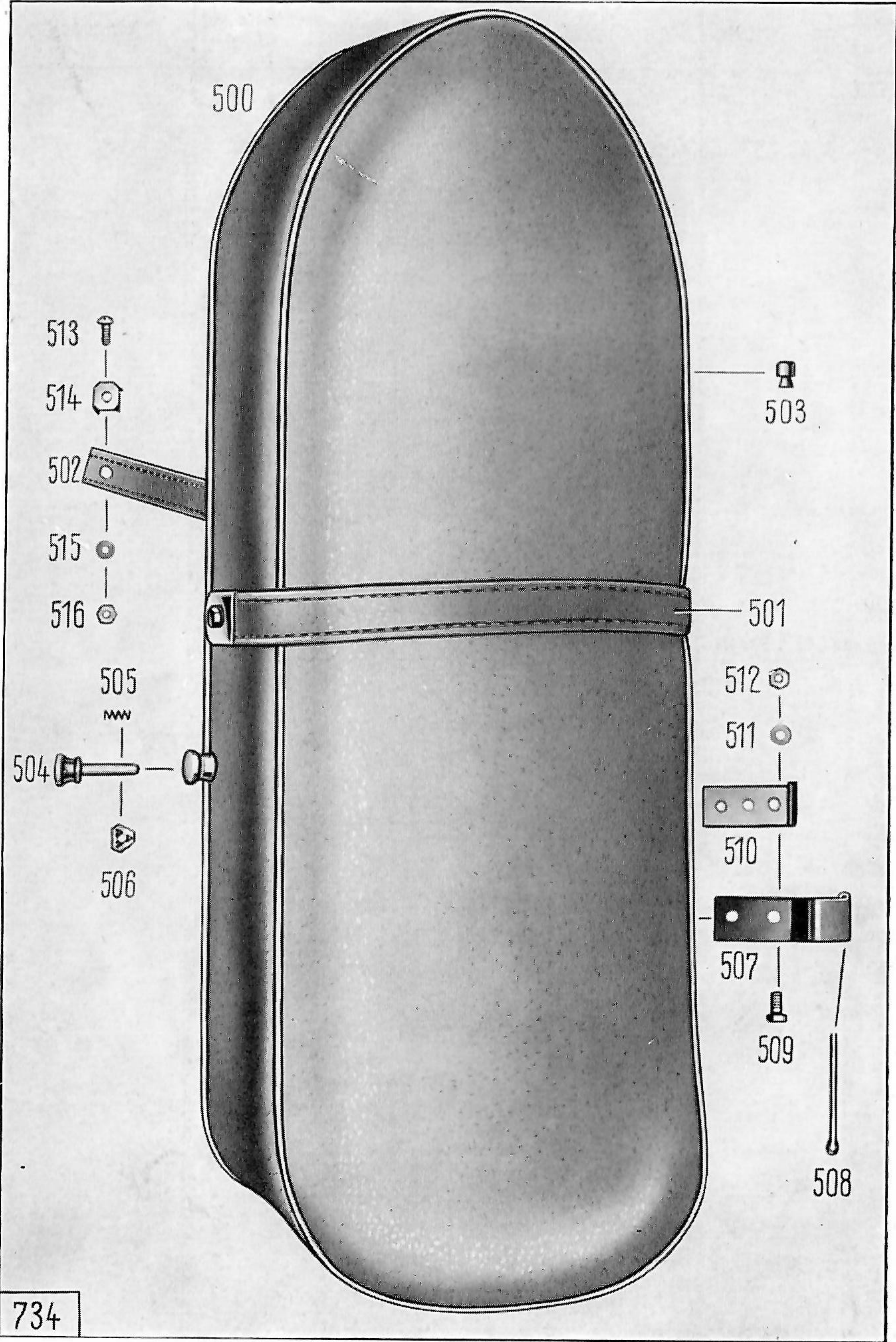


Illustration 19, Group R: e) Rear Body

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Rear Body				
476	650 z 437	rear body	1	} please quote colour
477	650 k 438	left flap with lock	1	
—	650 z 394	right flap with lock (not for incorporating intake silencer)	1	
478	650 z 465	right flap with lock (for incorporating intake silencer)	1	
—	1397 k 30	packing strip (to 650 z 465)	1	
479	331 z 326	lock spring	2	
480	593 z 103	lock button	2	
481	—	spring washer B 6 DIN 137 k	2	
482	—	hex. nut M 6 DIN 934 k	2	
483	—	split pin 4 × 60 DIN 94 k (to fasten flaps to body)	4	
—	321 z 609	pressure spring	2	
484	2051 z 553	locking angle (to dual seat)	1	
485	1141 z 2130	supporting plate	1	
—	—	hex. screw M 6 × 12 DIN 933 k (to fasten locking angle to body)	2	
—	—	spring washer B 6 DIN 137 k	2	
—	—	hex. nut M 6 DIN 934 k	2	
486	650 z 379	locking flap	1	
487	331 z 331	laminated spring	1	
488	1243 z 10	protective ring	4	
489	616 z 254	rubber grommet (to seal fuel tank)	1	
490	616 z 244	rubber grommet (to extension for fuel tap)	1	
491	1806 z 106	rubber grommet (to cable passage)	1	
—	—	hex. screw M 8 × 18 DIN 933 crp (to fasten rear body to frame, fore-part) ..	2	
492	—	hex. screw M 8 × 18 DIN 933 k (to fasten rear body to frame, rear part)	2	
—	1281 z 396	washer (to fixation in the fore-part)	2	
—	1281 z 397	washer (to fixation in the rear part)	2	
493	—	spring washer B 8 DIN 137 k	4	

Illustration 20, Group R: e) Dual Seat



734

Illustration 20, Group R: e) Dual Seat

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Dual Seat				
500	6330 k 43	dual seat complete	1	please quote colour
—	6346 z 11	foam rubber cushion	1	
—	6340 z 78	dual seat cover	1	please quote colour
—	—	screw, countersunk raised head S 3,5 × 9,5 DIN 7973 k (to fasten dual seat cover)	14	
—	—	screw, countersunk raised head S 3,5 × 13 DIN 7973 k (to fasten dual seat cover)	2	
—	1284 z 15	washer	12	
—	1147 z 806	covering plate	4	
—	—	spring washer A 5 DIN 137 k	4	
501	2360 k 1	holding strap	1	please quote colour
—	1143 z 105	holding plate	2	
—	1141 z 2143	clamping plate	2	
—	—	hex. screw M 6 × 20 DIN 933 crp (to fasten holding strap to frame of dual seat)	2	
—	—	spring washer A 6 DIN 137 k	2	
502	2360 k 2	retaining strap	1	please quote colour
503	1126 z 1	supporting bolt	4	
504	590 z 109	lock button	1	
505	321 z 549	spring	1	
506	1251 z 258	triangle circlip D 6	1	
507	1151 z 206	joining band	2	
508	—	split pin 4 × 60 DIN 94 k	2	
509	—	hex. screw M 6 × 12 DIN 933 k (to fasten dual seat to rear body)	4	
510	1141 z 2130	supporting plate	2	
511	—	spring washer B 6 DIN 137 k	4	
512	—	hex. nut M 6 DIN 934 k	4	
513	—	screw, button head M 5 × 12 DIN 86 k (to fasten re- taining strap to rear body)	1	
514	1141 z 2143	clamping plate	1	
515	—	washer 5,3 DIN 125 k	1	
516	—	hex. nut M 5 DIN 934 k	1	

Illustration 21, Group R: f) Fuel Tank and Fuel Pipes



695

Illustration 21, Group R: f) Fuel Tank and Fuel Pipes

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Fuel Tank				
520	6230 z 135	fuel tank	1	
521	1850 z 103	filler cap	1	
522	1236 z 342	rubber ring (to filler cap)	1	
—	—	split pin 1,5 × 12 DIN 94 k	1	
—	1146 z 78	felt piece (to fuel tank)	1	
523	1390 z 116	tie (to fasten fuel tank to frame) ..	1	
524	1146 z 58	support (below tie)	4	
525	6010 z 162	fuel tap	1	
526	1001 z 55	nut	1	
527	120 z 211	extension (to fuel tap)	1	
528	1590 z 58	fuel hose	1	

Illustration 22, Group R: h) Exhaust Set

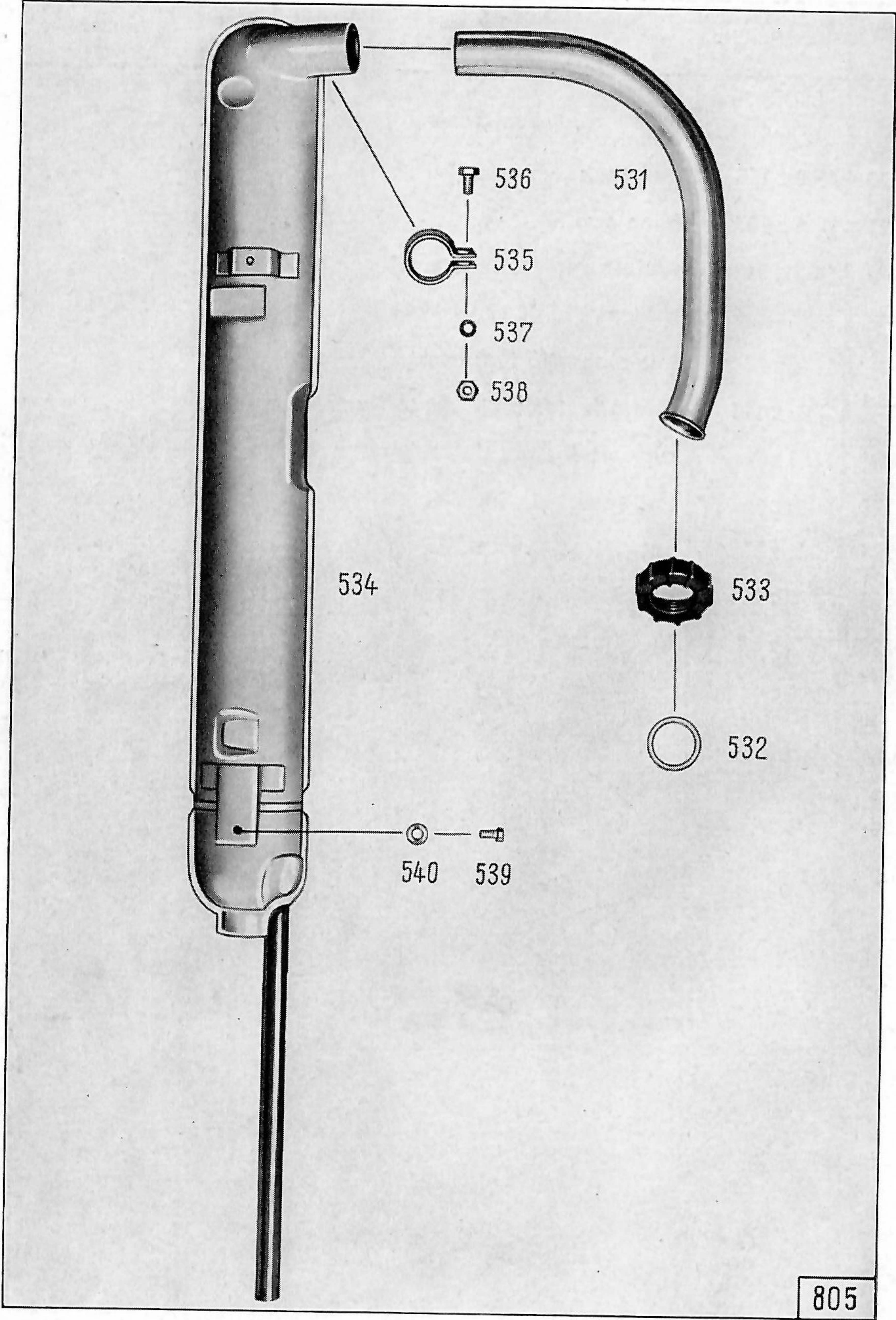


Illustration 22, Group R: h) Exhaust Set

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Exhaust Set				
531	1351 z 201	exhaust pipe	1	
532	1239 z 1	packing washer	2	
533	1011 z 12	exhaust nut	1	
534	6030 z 334	silencer	1	
—	2271 k 27	silencer — end piece	1	
535	1441 z 01	clamp (to fasten silencer to exhaust pipe)	1	
536	—	hex. screw M 8 × 15 DIN 933 k	1	
537	—	spring washer A 8 DIN 127 k	1	
538	—	hex. nut M 8 DIN 934 k	1	
539	—	hex. screw M 6 × 12 DIN 933 k (to fasten silencer to left foot board)	2	
540	—	spring washer B 6 DIN 137 k	2	

Illustration 23, Group R: i) Front Swinging Arm Suspension

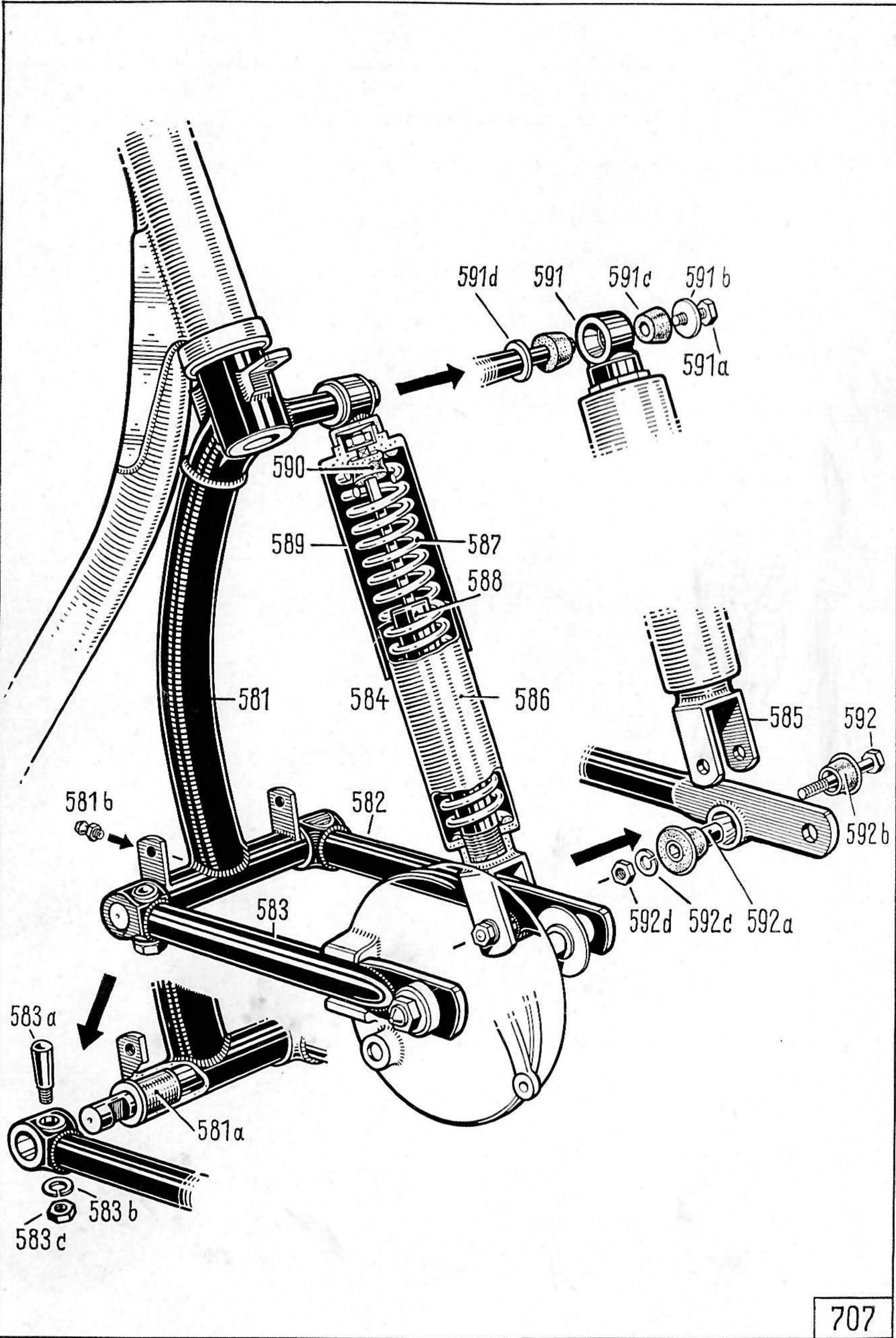


Illustration 23, Group R: i) Front Swinging Arm Suspension

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Front Swinging Arm Suspension				
—	6810 k 230	front swinging arm suspension complete	1	please quote colour
581	710 z 253	swinging fork	1	
581a	184 z 535	bushing (in bearing tube)	2	
—	—	pin 10 × 40 DIN 1472	1	
—	1871 z 170	fork race (on swinging fork, at bottom)	1	please quote colour
—	1301 z 07	washer	1	
581b	—	grease nipple D 6 DIN 71412	1	
—	—	packing washer A 6 × 10 DIN 7603 Alu	1	
582	710 k 241	front left swinging arm with shaft	1	
583	710 z 217	front right swinging arm	1	
583a	121 z 1085	cotter pin (to fix swinging arm to shaft)	1	
583b	—	spring washer A 12 DIN 127 k	1	
583c	—	hex. nut M 12 × 1,5 DIN 936 k	1	
—	1870 z 52	fork race (on swinging fork, at top)	1	
—	1236 z 336	packing washer	1	
—	—	splined nut M 30 × 1 DIN 70852 k ..	1	
584	6350 z 118	spring unit (spring leg) complete, with hydraulic shock absorber ..	1	
585	550 z 103	bar head, lower	1	
—	—	spring washer B 16 DIN 127 k	1	
586	170 z 216	protective sleeve, inner	1	
—	1127 z 5	distance bolt	6	
587	321 z 582	pressure spring	1	
588	6350 z 120	hydraulic shock absorber (brand Boge)	1	
589	173 z 114	protective sleeve, outer	1	
590	616 z 243	rubber damper	1	
—	1301 z 667	washer	1	
—	—	washer 8,4 DIN 125 k	1	
—	—	hex. nut M 8 DIN 934 k	1	
591	553 z 106	bar head, upper	1	
—	—	pin, button head 3 × 8 DIN 1476 ..	1	
591a	—	hex. screw M 8 × 12 DIN 933 k (for fixing spring unit to swinging fork, at top)	1	
591b	1301 z 35	washer	1	
591c	176 z 41	rubber bushing	2	
591d	—	washer 17 DIN 433 k	1	

Illustration 23, Group R: i) Front Swinging Arm Suspension

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
592	—	hex. screw M 8 × 50 DIN 931 k (for fixing spring unit to swinging fork, at bottom)	1	
592a	1331 z 851	distance tube	1	
592b	176 z 40	rubber bushing	2	
—	—	washer 8,4 DIN 125 k	1	
592c	—	spring washer A 8 DIN 127 k	1	
592d	—	hex. nut M 8 DIN 934 k	1	

Illustration 24, Group R: k) Handlebar and Hand levers with Cables

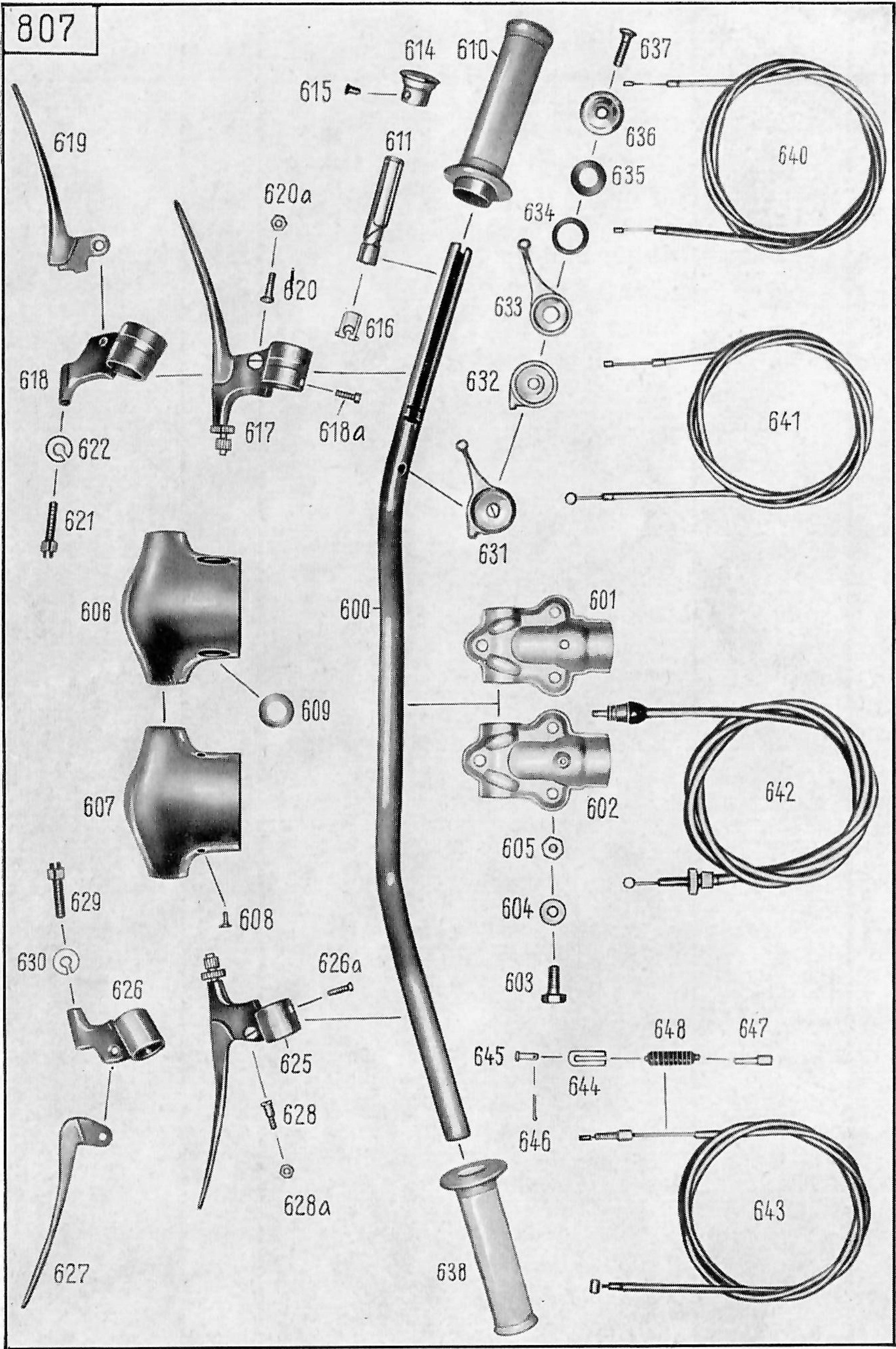


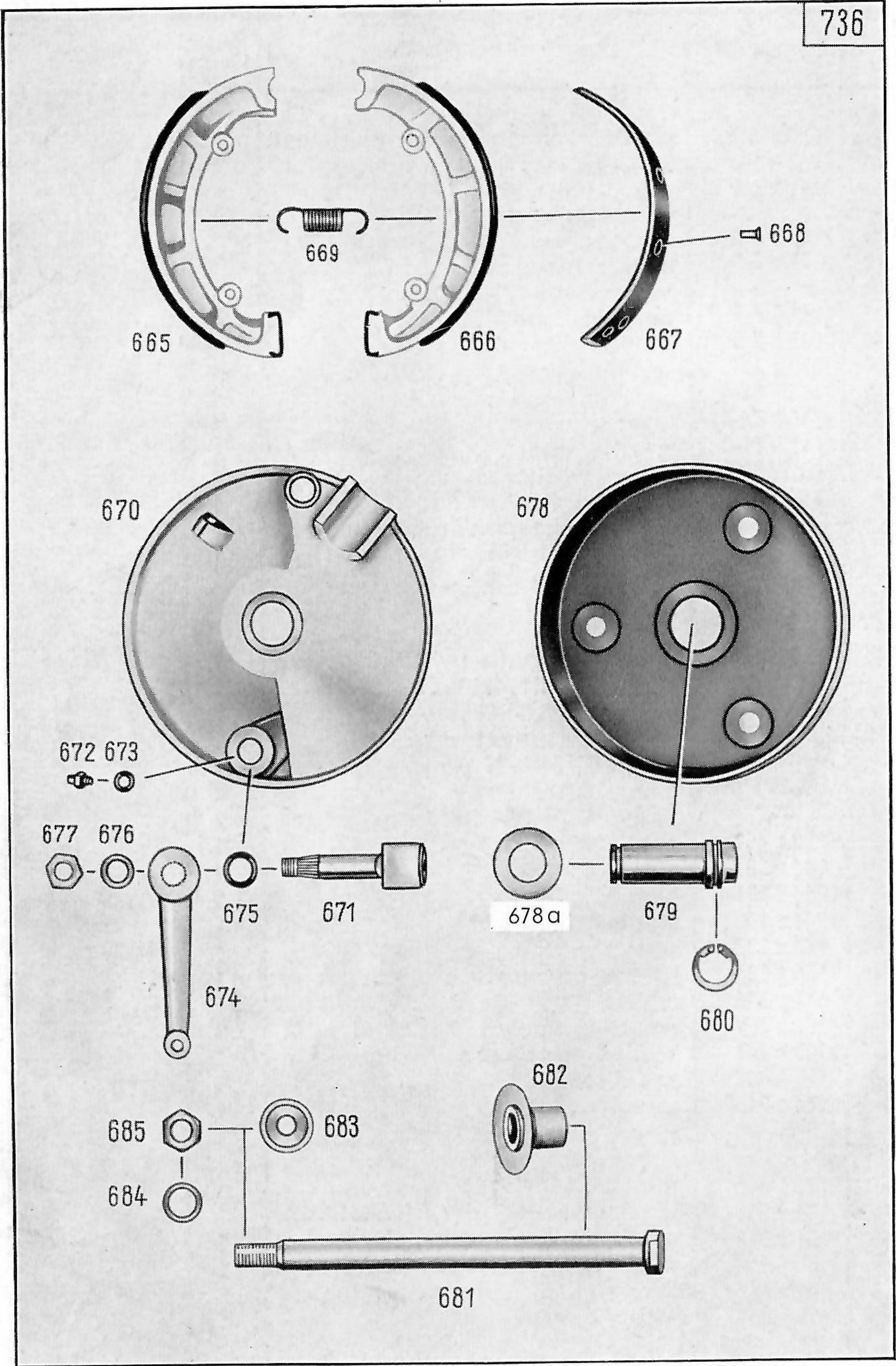
Illustration 24, Group R: k) Handlebar and Hand levers with Cables

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Handlebar				
600	1371 z 153	handlebar	1	
601	821 z 13	handlebar clamp	1	
602	820 z 11	handlebar clamp	1	
603	—	hex. screw M 8 × 28 DIN 931 k	3	
604	—	spring washer B 8 DIN 137 k	3	
605	—	hex. nut M 8 DIN 934 k	3	
606	650 z 411	front cover plate	1	
607	651 z 283	rear cover plate	1	
608	—	screw, countersunk raised head, AM 4 × 5 DIN 91 crp	3	
609	616 z 229	grommet	2	
Hand Levers				
610	170 k 218	throttle twist grip	1	colour of rubber = grey
611	2253 k 7-0	sliding block	1	
—	2250 k 7-0	grip tube with rubber	1	colour of rubber = grey
—	2256 k 5-0	rubber sleeve	1	
614	2251 k 5-0	lock cap	1	
615	—	screw, counter sunk raised head AM 5 × 10 DIN 91 k	1	
616	2253 k 3-0	cable support	1	
617	670 z 211	brake lever with cable adjustment	1	
618	2263 k 5-0	joining piece	1	
—	2261 k 2-0	brake spring	1	
—	2261 k 3-3	adjusting screw	1	
618a	2261 k 4-3	screw, fillister head (to joining piece)	1	
619	2263 k 6-0	brake lever	1	
620	2261 k 5-5	lever screw	1	
620a	—	hex. nut M 6 DIN 934 crp	1	
621	2261 k 6-5	adjusting screw	1	
622	2263 k 7-0	knurled edge nut	1	

Illustration 24, Group R: k) Handlebar and Hand levers with Cables

Key No.	Spare Part No.	Description	No. of Pieces	Remarks	
625	670 z 207	clutch lever with cable adjustment	1	colour of rubber = grey	
626	2263 k 1-0	joining piece	1		
626a	2261 k 4-3	screw, fillister head (to joining piece)	1		
627	2263 k 2-0	clutch lever	1		
628	2261 k 7-3	lever screw	1		
628a	—	hex. nut M 5 DIN 934 crp	1		
629	2261 k 6-5	adjusting screw	1		
630	2263 k 7-0	knurled edge nut	1		
631	670 z 231	starter lever	1		
632	2263 k 35-4	housing	1		
633	2263 k 34-4	lever	1		
634	2261 k 31-0	thrust washer	1		
635	2261 k 30-0	spring washer	1		
636	2263 k 33-4	covering washer	1		
637	—	screw, countersunk raised head M 6 × 22 DIN 88 crp	1		
638	616 z 232	grip	1		
Cables					
640	6290 k 460	cable for throttle twist grip	1		
—	—	nipple C DIN 71988	2		
—	—	sleeve C 2,5 DIN 71987	2		
641	6290 z 462	cable for starter lever	1		
—	—	nipple C DIN 71988	1		
—	—	nipple D DIN 71988	1		
—	—	sleeve C 2,5 DIN 71987	2		
642	6290 z 461	cable for clutch	1		
—	144 z 25	nipple seat	1		
—	1064 z 101	nipple	1		
—	1064 z 102	nipple	1		
—	173 z 109	sleeve	1		
—	1806 z 08	rubber grommet	1		
—	616 z 236	rubber cover	1		
—	2261 k 6-5	adjusting screw	1		
—	2263 k 7-0	knurled edge nut	1		
643	6290 k 467	cable for front brake	1		
—	144 z 04	cable end	1		
—	—	nipple seat A DIN 71988	1		
—	—	nipple B 2,3 DIN 71988	1		
—	—	sleeve C 3 DIN 71987	1		
644	551 z 108	fork connecting piece (yoke)	1		
645	131 z 516	bolt (to fork connecting piece)	1		
646	—	split pin 1,5 × 15 DIN 94 k	1		
647	171 z 442	sleeve	1		
648	616 z 263	rubber cover	1		

Illustration 25, Group B: a) Brakes, Handbrake



736

Illustration 25, Group B: a) Brakes, Handbrake

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Handbrake				
665	20 z 108	brake shoe with lining, left-hand	1	} lining fixed with paste
666	20 z 109	brake shoe with lining, right-hand	1	
667	49 z 12	brake lining	2	} to be riveted
668	1044 z 10	cylindrical rivet	12	
669	321 z 310	return spring (betw. brake shoes)	2	
670	230 z 233	brake cover	1	
671	1100 z 110	brake cam with bracket	1	
672	1080 z 1	grease nipple	1	
673	—	packing washer A 6 × 10 DIN 7603	1	
674	671 z 324	brake lever	1	
675	1236 z 06	rubber sleeve (betw. brake lever and brake cover)	1	
676	—	spring washer A 10 DIN 127 k	1	
677	—	hex. nut M 10 DIN 934 k	1	
678	1791 z 203	brake drum	1	
678a	1301 z 640	washer (between brake cover and brake drum)	1	
679	121 z 1109	bearing bushing (to brake drum) ..	1	
680	1251 k 260	V-circlip	1	
—	1301 z 1030	washer	1	
—	—	circlip 18 × 1,2 DIN 471 k	1	
681	131 z 537	front wheel axle	1	
682	1330 z 193	spacer tube 23,7 mm length	} at option	
—	1330 z 194	spacer tube 24,0 mm length		
—	1330 z 195	spacer tube 24,3 mm length		
—	—	washer 17 DIN 125 k	1	
683	1781 z 155	pressure plate	1	
684	—	spring washer B 12 DIN 137 k	1	
685	—	hex. nut M 12 × 1,5 DIN 934 k	1	

Illustration 26, Group B: a) Brakes, Footbrake

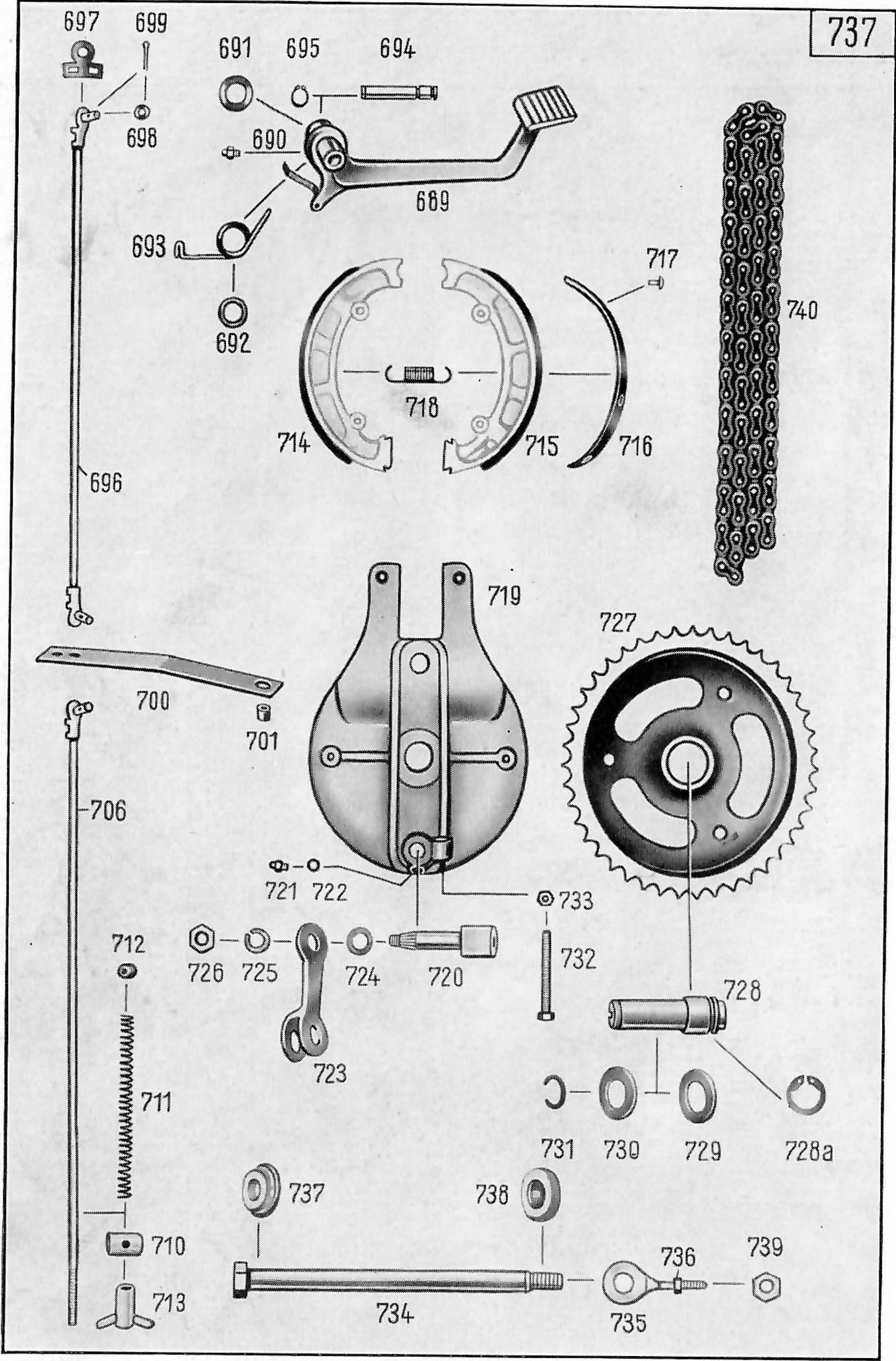


Illustration 26, Group B: a) Brakes, Footbrake

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Footbrake				
689	700 k 112	footbrake lever	1	} lining fixed with paste to be riveted
690	1080 z 1	grease nipple	1	
—	—	packing washer A 6 × 10 DIN 7603	1	
691	1236 z 324	gasket	1	
692	1236 z 325	gasket	1	
693	321 z 556	return spring	1	
694	121 z 1141	bearing bolt to foot brake lever ..	1	
695	—	circlip 10 × 1 DIN 471	2	
696	1650 k 122	front brake rod with stop clamp ..	1	
697	1111 z 01	stop clamp	2	
698	—	washer 6,4 DIN 125 k	1	
699	—	split pin 2 × 12 DIN 94 (to fasten brake rod to foot brake lever) ..	2	
700	671 z 343	footbrake spacer lever	1	} lining fixed with paste to be riveted
701	1241 z 368	spacer ring	1	
—	—	hex. screw M 7 × 20 DIN 933 k (to fasten footbrake spacer lever to left-h. brace)	1	
—	—	spring washer B 10 DIN 137 k	2	
—	1301 z 1028	washer	1	
—	—	hex. nut M7 DIN 934 k	1	
706	1650 k 123	rear brake rod, with stop clamp ..	1	
697	1111 z 01	stop clamp	1	
698	—	washer 6,4 DIN 125 k	1	
699	—	split pin 2 × 12 DIN 94 k	1	
710	121 z 1046	brake lever bolt (to rear wheel brake lever)	1	
711	321 z 88	spring	1	
712	1241 z 34	ring	1	
713	1023 z 16	toggle nut (to fasten brake rod to rear wheel brake lever)	1	
714	20 z 108	brake shoe with lining, left-hand ..	1	
715	20 z 109	brake shoe with lining, right-hand ..	1	
716	49 z 12	brake lining	2	
717	1044 z 10	cylindrical rivet	12	

Illustration 26, Group B: a) Brakes, Footbrake

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
718	321 z 310	return spring (betw. brake shoes)	2	
719	230 z 226	brake cover	1	
720	1100 z 8	brake cam with bracket	1	
721	1080 z 1	grease nipple	1	
722	—	packing washer A 6 × 10 DIN 7603	1	
723	671 z 011	brake lever	1	
724	1236 z 06	rubber sleeve (betw. brake lever and brake cover)	1	
725	—	spring washer A 10 DIN 127 k	1	
726	—	hex. nut M 10 DIN 934 k	1	
727	1791 z 213	brake drum (43 teeth)	1	
728	121 z 1115	bearing bushing (to brake drum) ..	1	
728a	1251 k 261	circlip	1	
729	1301 z 640	washer (betw. brake cover and brake drum)	1	
731	1251 z 29	snap ring (on bearing bushing) ..	1	
732	—	hex. screw M 6 × 55 Din 933 k (in brake cover for chain tightening)	1	
733	—	hex. nut M 6 DIN 934 k	1	
734	131 z 510	rear wheel axle	1	
735	1111 z 209	chain tightener	1	
736	—	hex. nut M 6 DIN 934 k	2	
737	1231 z 309	clamping ring	1	
738	1243 z 7	spacer ring	1	
739	—	hex. nut M 12 × 1,5 DIN 934 k (to rear wheel axle)	1	
740	—	roller chain 1 × 12,7 × 7,75 DIN 8180, 96 links incl. lock	1	
—	—	cranked link 1 D 12,7 × 7,75 DIN 8180	1	
—	—	lock 1 E 12,7 × 7,75 DIN 8180	2	

Illustration 27, Group B: b) Wheels

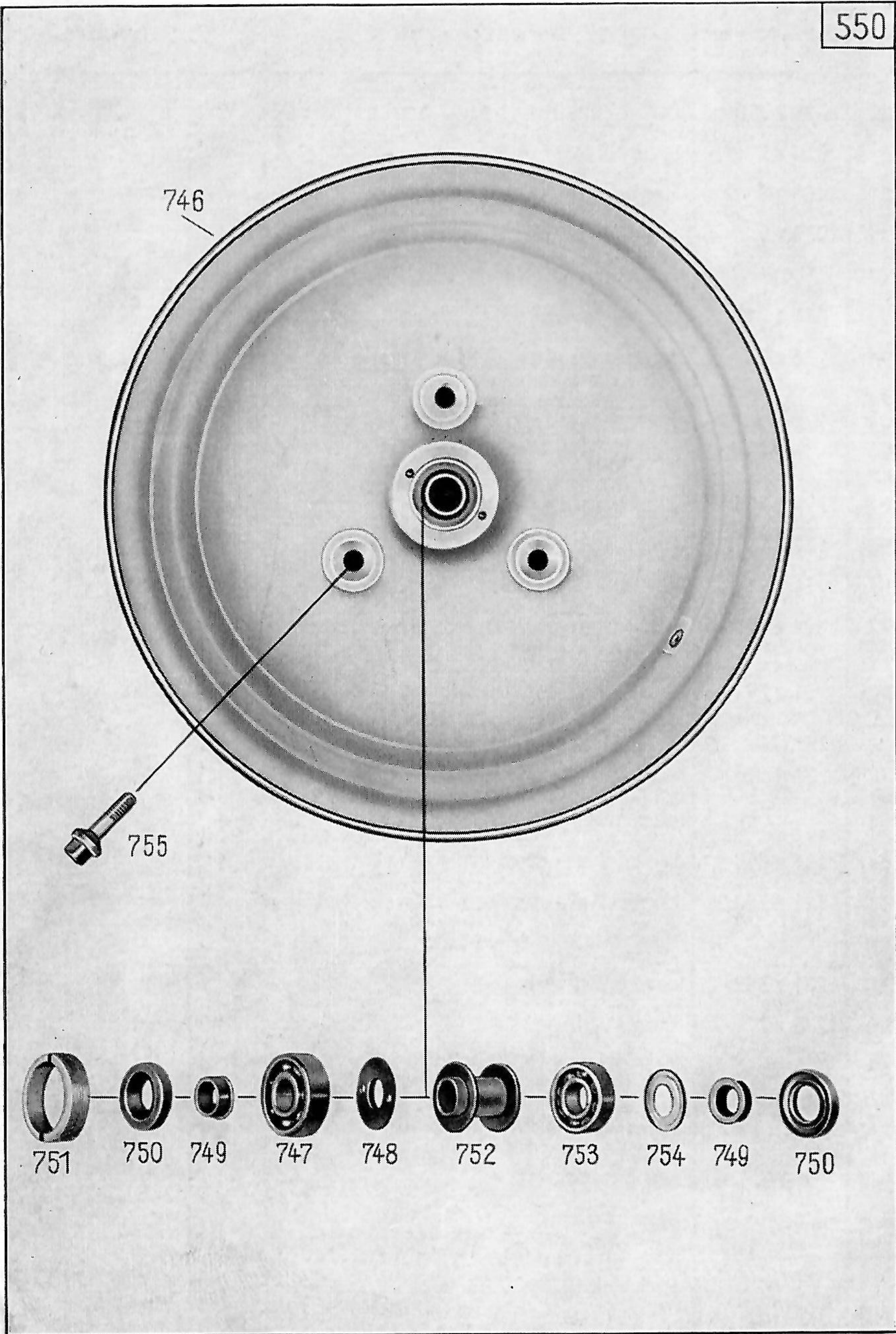


Illustration 27, Group B: b) Wheels

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
		Wheels		
746	6660 z 87	wheel without tyre	2	} as re- quired } betw. ball bearing and distance bushing
747	—	ball bearing 6302 DIN 625	2	
748	1301 z 641	shim 15,2 × 36,6 × 0,1	}	
—	1301 z 642	shim 15,2 × 36,6 × 0,2		
—	1301 z 643	shim 15,2 × 36,6 × 0,3		
749	171 z 412	distance bushing	4	
750	—	radial gasket (oil seal) with dust protective lip A 20 × 35 × 7 DIN 6503	4	
751	1011 z 84	ring nut	2	
752	1330 z 166	distance tube	2	
753	—	ball bearing 6202 DIN 625	2	
754	1231 z 305	ring	2	
755	1551 z 411	square screw (for fixing wheel) ..	6	

Illustration 28, Group E: a) Electrical Equipment, Headlight

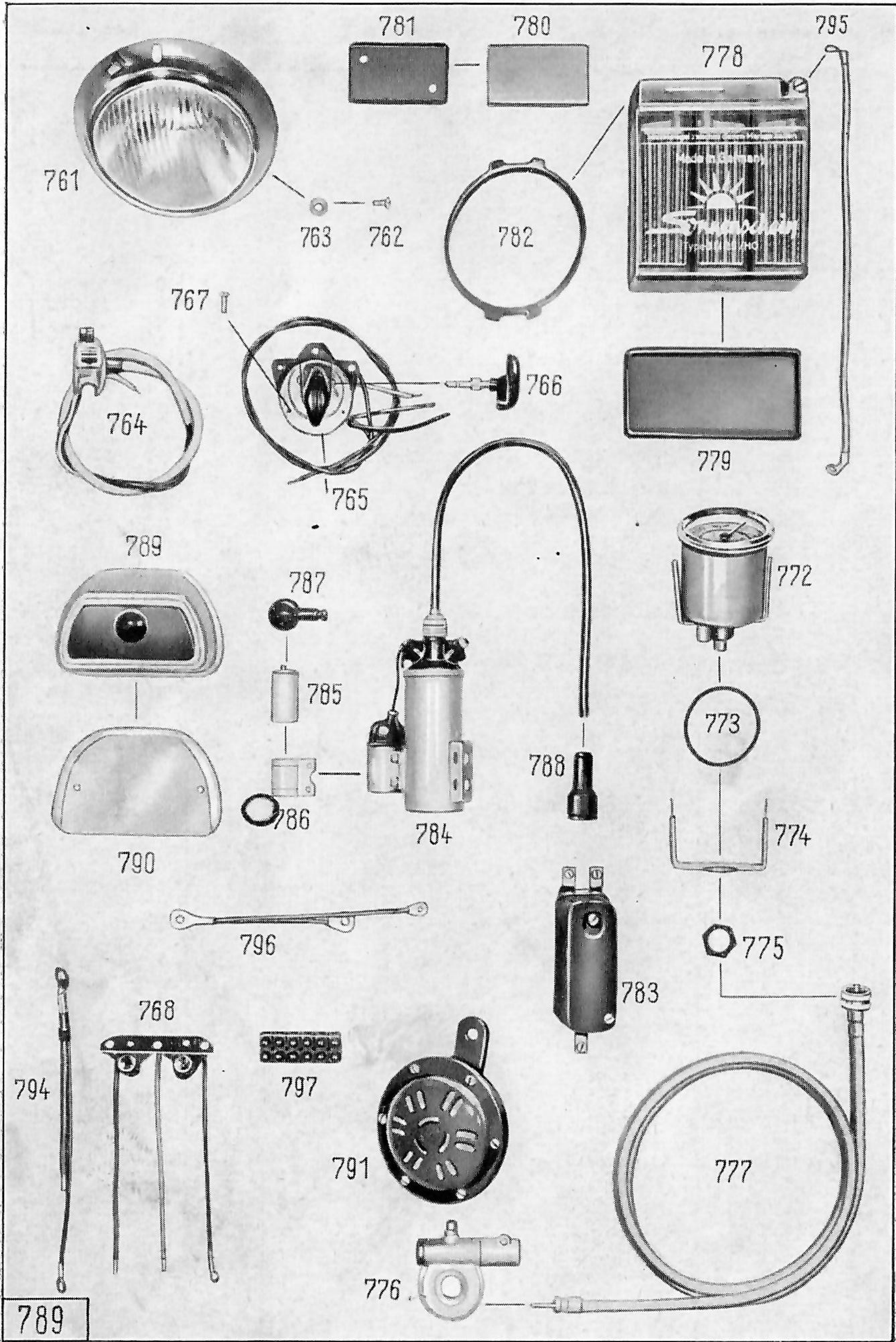


Illustration 28, Group E: a) Electrical Equipment, Headlight

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Headlight				
761	6090 z 103	headlight (without bulbs)	1	
—	2310 k 28-0	reflector	1	
—	2311 k 31-4	rim	1	
—	2317 k 6-0	headlight glass	1	
—	2316 k 6-0	rubber ring (to headlight glass) ..	1	
—	2310 k 29-6	holder (to Bilux bulb)	1	
—	2311 k 32-0	retaining spring (to holder)	1	
—	—	Bilux bulb B 12 V 35/35 W DIN 72601	1	Osram 7327
—	—	parking light bulb H 12 V 2 W DIN 72601	1	Osram 3796
762	—	screw, countersunk raised head AM 4 × 10 DIN 91 crp (to fasten headlight to front cover)	3	
763	1281 z 365	washer	3	
764	6160 z 154	dip switch with set of cables	1	
—	2340 k 1	set of cables (4 lines)	1	
—	2346 k 1	rubber grommet	1	
within the dashboard:				
765	6160 z 180	starter-ignition-light switch with key and cable	1	
766	2310 z 50	ignition key	1	
767	—	screw, countersunk raised head AM 4 × 12 DIN 91 crp (to fasten switch to dashboard)	2	
768	6160 z 186	holder (for battery charge control and idle control lamp)	1	
—	—	cylindrical screw AM 4 × 10 DIN 84 k (to fasten holder to dashboard)	1	
—	—	spring washer A 4 DIN 137 k	2	
—	2310 k 51	bulb 12 V 3 W	2	Osram 3766

Illustration 28, Group E: a) Electrical Equipment Speedometer, Battery, Taillight

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Speedometer				
772	6770 z 57	speedometer with lighting incorporated	1	Osram 3898
—	6770 z 58	speedometer indicating miles	1	
773	2426 k 2-0	rubber ring	1	
774	2421 k 7	retaining clip	1	
775	2421 k 6-2	hex. nut (to retaining clip)	1	
—	2424 k 1-0	bulb holder	1	
—	—	bulb J 12 V 2 W DIN 72601	1	
776	6780 z 102	drive (to rear wheel)	1	
777	6790 z 108	cable for drive	1	
—	616 z 247	rubber grommet (for clutch lever)	1	
—	1806 z 108	rubber grommet (for speedometer drive)	1	
Battery				
778	6060 z 104	battery 6 V 11 Ah	2	
779	1146 k 95	battery base	2	
780	1146 z 77	rubber plate	2	
781	1141 z 2125	pressure plate	2	
782	1236 z 337	rubber ring	2	
Regulator				
783	6160 z 181	regulator (to starter-generator "Noris")	1	
—	—	cylindrical screw AM 4 × 6 DIN 84 k (to fasten regulator to front shield)	3	
—	—	spring washer A 4 DIN 127 k	3	
Ignition Coil				
784	6180 z 11-0	ignition coil with ignition cable ..	1	
785	2290 k 55-0	condenser	1	
786	2291 k 30-3	fixing clamp	1	
—	—	cylindrical screw AM 4 × 6 DIN 84 k	2	
—	—	spring washer A 4 DIN 127 k	2	
787	2296 k 9	rubber cap	1	
788	6080 z 102	spark plug cover (Beru L 4 Z)	1	
Taillight				
789	6110 z 50	brake-tail-number plate-light	1	Osram 6418
—	2320 k 9	cap	1	
790	2326 k 8	supporting plate	1	
—	—	spring washer A 5 DIN 127 k	2	
—	—	hex. nut M 5 DIN 934 k	2	
—	—	bulb L 12 V 5 W DIN 72601	1	

Illustration 28, Group E: a) Electrical Equipment, Horn, Electric Conducts

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Horn				
791	6130 z 23	horn	1	
—	1441 z 315	clamp	1	
—	—	hex. screw M 8 × 25 DIN 931 k (to fasten clamp to frame elbow)	1	
—	—	spring washer A 8 DIN 127 k	1	
—	—	washer 8,4 DIN 125 k	2	
—	—	hex. nut M 8 DIN 934 k	1	
Electric Conducts				
—	760 z 268	set of cables, complete	1	
794	760 z 252	cable complete (ignition switch 30 — battery + — regulator)	1	
795	760 k 253	cable complete (battery + — battery —)	1	
796	760 z 254	cable complete (battery and case of regulator — earth)	1	
—	1391 z 167	cable strand (cable set for headlight)	1	
—	1396 z 51	elastic clamp	4	for cable set and Bowden cables
—	1396 z 216	elastic clamp	2	
797	6080 z 109	terminal board	1	
—	—	cylindrical screw AM 3 × 15 DIN 84 k (to fasten terminal board to front shield) ..	2	
—	—	spring washer A 3 DIN 137 k	2	
—	—	hex. nut M 3 DIN 934 k	2	

Illustration 28, Group E: a) Electrical Equipment, Horn, Electric Conducts

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
		(Please order cables as well as sleeves resp. hoses by meters)		
—	—	cable NYAF 0,860 m		colour red
—	—	cable B 1,5 DIN 72551 2,660 m		colour yellow
—	—	cable B 1,5 DIN 72551 0,820 m		colour green
—	—	cable B 1,5 DIN 72551 1,070 m		colour blue
—	—	cable B 1,5 DIN 72551 1,080 m		colour blue/red
—	—	cable B 1,5 DIN 72551 3,475 m		colour red
—	—	cable B 1,5 DIN 72551 0,750 m		colour black
—	—	cable B 1,5 DIN 72551 1,540 m		col. yell./green
—	—	cable B 1,5 DIN 72551 0,200 m		colour red/yellow
—	—	cable B 1,5 DIN 72551 2,220 m		col. black/white
—	144 z 31	cable shoe A 4 × 2 DIN 46211	6	tinned
—	144 z 32	cable shoe A 5 × 3 DIN 46211	3	tinned
—	—	cable shoe A 6 × 4,5 DIN 46211 ..	3	tinned
—	—	cable shoe C 5 × 3 DIN 46211	2	tinned
—	1806 z 01	connection protector	1	
—	—	connection protector H DIN 72311	2	
—	174 z 17	contact sleeve	1	} for taillight cable
—	1064 z 104	connection nipple	1	
—	—	rubber hose 16 × 14 1030 mm		
—	—	rubber hose 12 × 10 180 mm		
—	—	rubber hose 10 × 8 1000 mm		
—	—	rubber hose 8 × 6 180 mm		
—	—	insulating hose		
		B 4 × 5 sw DIN 40621 600 mm		
—	—	insulating hose		
		B 8 × 9,4 sw DIN 40621 100 mm ..		

Illustration 29, Group E: a) Electrical Equipment, Starter Generator

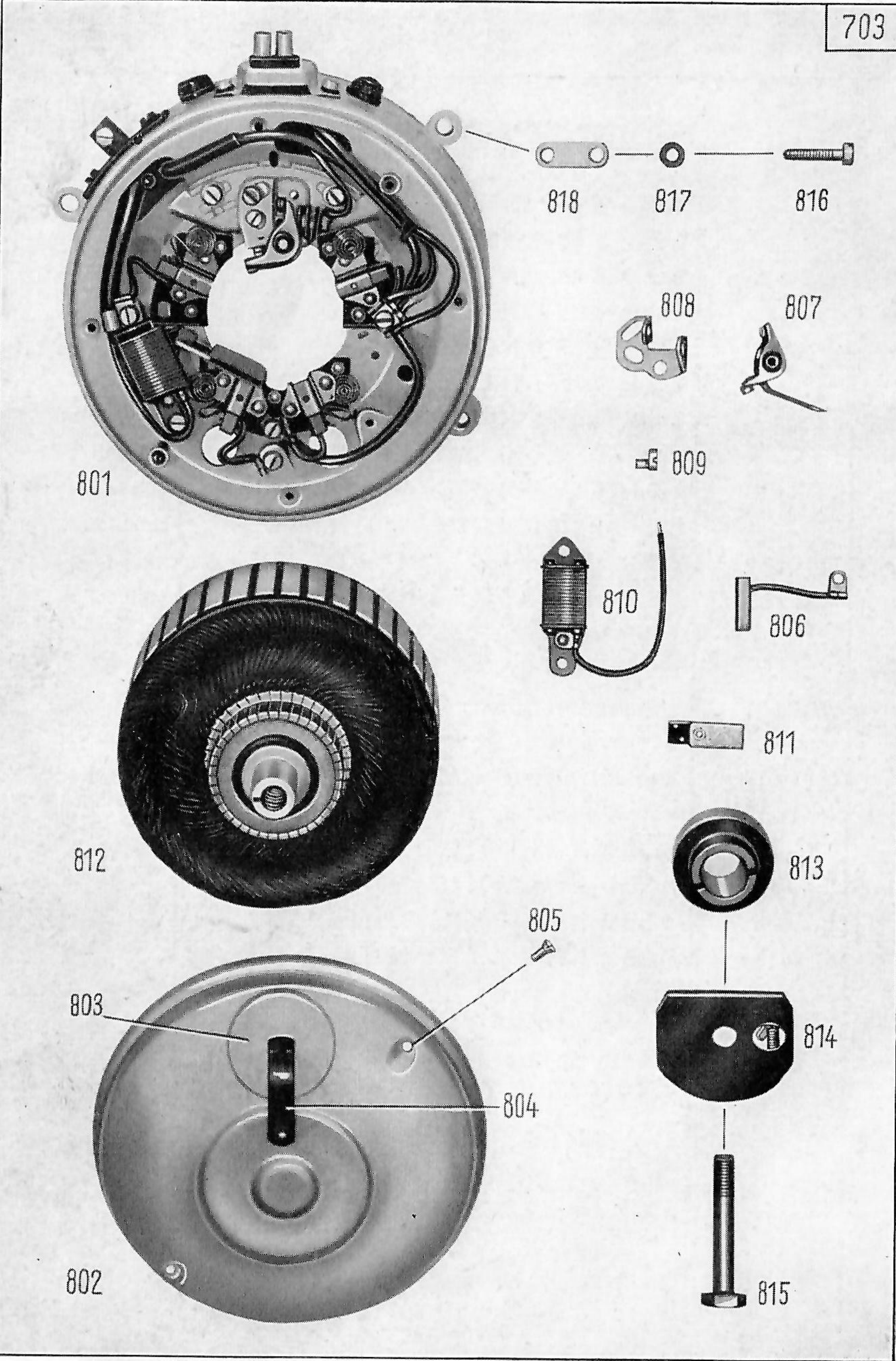


Illustration 29, Group E: a) Electrical Equipment, Starter Generator

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Starter Generator				
801	6210 z 1	starter generator model Noris LA 12/100/3 L 12 V 100 W	1	
802	2291 k 33-3	protective cover	1	
803	2291 k 34-3	cap (for protective cover)	1	
804	2291 k 35-0	laminated spring	1	
—	2291 k 36-0	rivet, button head (to fasten laminated spring to protective cover)	1	
805	—	screw, countersunk raised head M 4 × 6 DIN 88 k (for fixing pro- tective cover)	2	
806	2290 k 58-0	carbon brush with cable	4	
—	2291 k 37-0	pressure spring (to carbon brush)	4	
807	2290 k 30-6	contact breaker arm with contact	1	
808	2290 k 35-6	contact bracket	1	
809	2291 k 26-3	eccentric screw	1	
—	—	cylindrical screw M 4 × 8 DIN 84 k	1	
810	2290 k 59-0	resistance	1	
811	2290 k 36-0	laminated spring with felt	1	
—	2291 k 15-2	rivet (to laminated spring)	2	
812	2290 k 60-0	armature	1	
813	2290 k 61-0	interruptor cam	1	
814	2290 k 62-0	flyball governor	1	
—	2291 k 38-0	spring (to flyball governor)	1	
—	—	key 4 × 5 DIN 6888 (to fasten arma- ture on crankshaft)	1	
815	2291 k 39-2	hex. screw (for fixing armature) ..	1	
—	—	spark plug with gasket 14 DIN 72502	1	Bosch W 225 T 11 or Beru 225/14 u2
816	—	cylindrical screw AM 6 × 25 DIN 84 k (to fasten starter-generator to crankcase)	4	
817	—	spring washer A 6 DIN 137 k	4	
818	1281 z 391	joint (to fasten clutch cable to starter-generator)	1	
—	1806 k 110	connection protector	1	

Illustration 30, Group W: a) Tools

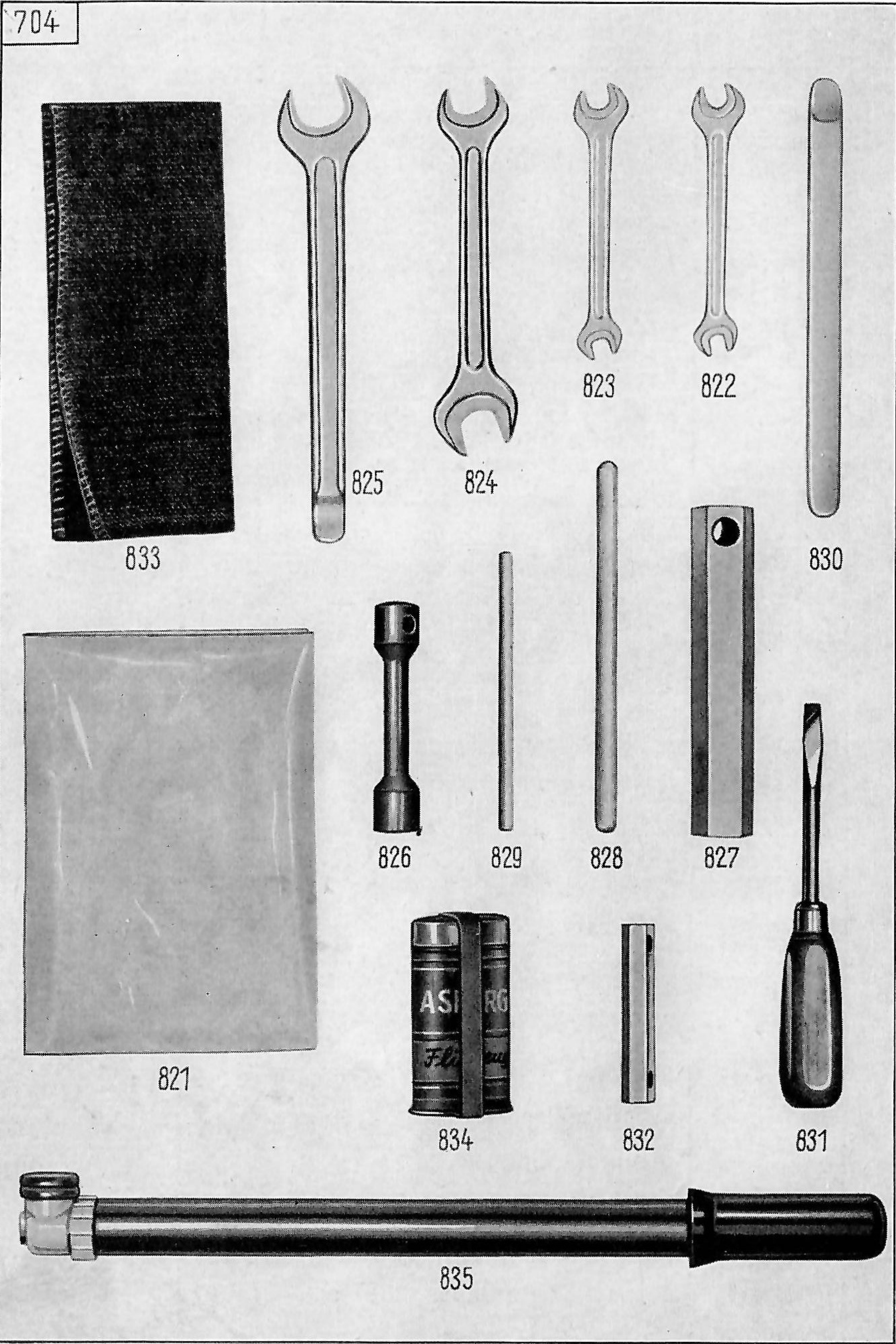


Illustration 30, Group W: a) Tools

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Tools				
—	6890 k 43	set of tools with bag	1	
821	6040 z 273	bag for set of tools	1	
822	—	double end spanner 7 × 9 mm DIN 895	1	
823	—	double end spanner 8 × 10 mm DIN 895	1	
824	—	double end spanner 14 × 17 mm DIN 895	1	
825	2011 k 104	one end spanner 19 mm with tyre lever	1	
826	2021 z 51	square socket wrench	1	
827	2021 z 56	socket wrench (to spark plug)	1	
828	1671 z 02	mandrel 10 mm ϕ	1	
829	2001 z 15	mandrel 7 mm ϕ	1	
830	2001 z 01	tyre lever	1	
831	2009 z 01	screw driver	1	
—	2000 z 24	screw driver	1	
832	2021 z 23	socket wrench (to carburettor)	1	
833	2208 k 12	cleaning cloth	1	
834	6040 k 269	box with rubber repairing material	1	obtainable in the trade
—	1596 z 401	sleeve (to rubber repairing box)	1	
—	6040 z 279	bag (to rubber repairing box) ..	1	
835	6040 k 255	air pump (without hose)	1	
—	1596 z 291	sleeve (to air pump)	1	

Illustration 31, Group W: b) Toolbox

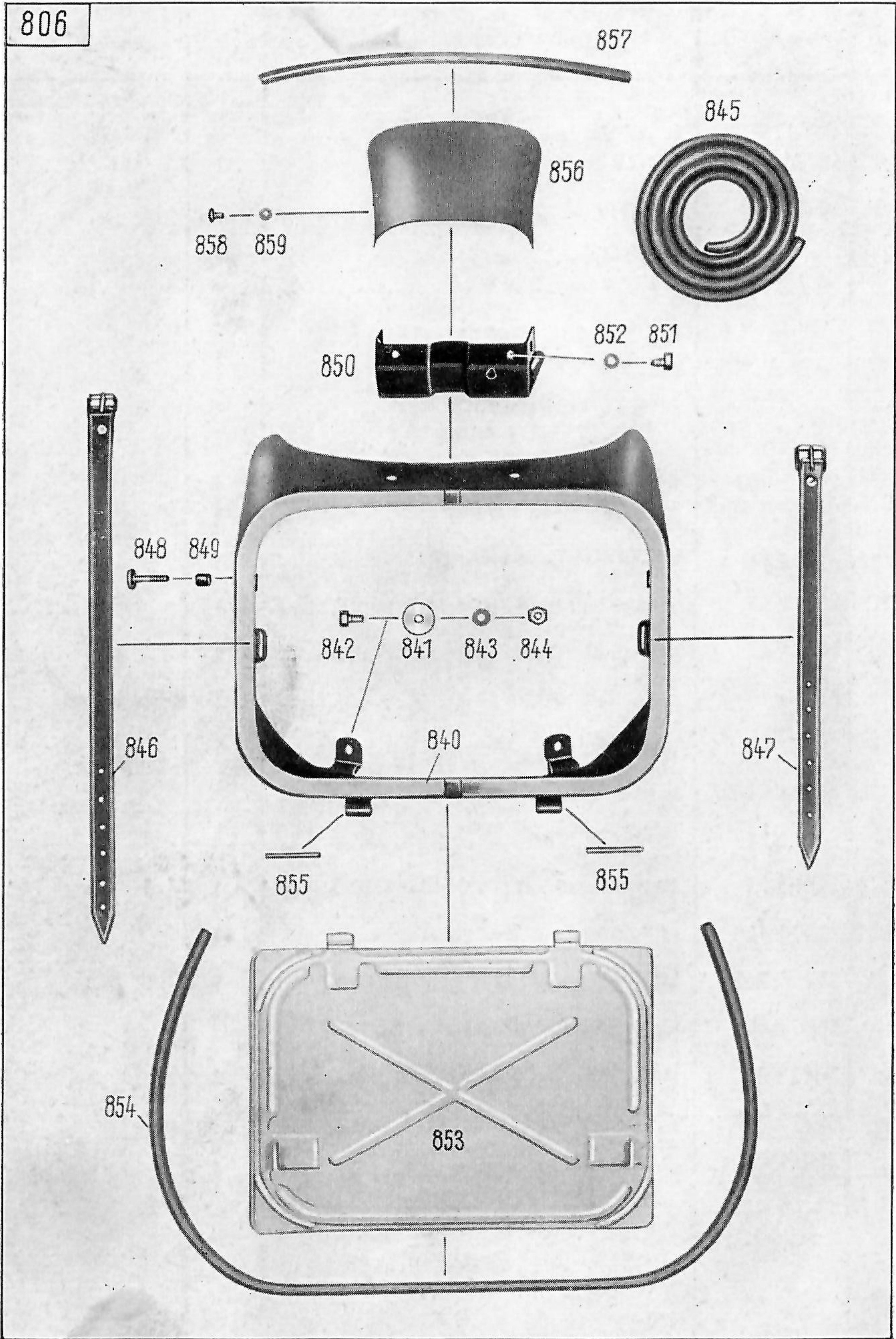


Illustration 31, Group W: b) Toolbox

Key No.	Spare Part No.	Description	No. of Pieces	Remarks
Toolbox				
840	2190 z 68	toolbox	1	please quote colour
841	1301 z 1019	washer	4	
842	—	hex. screw M 6 x 12 DIN 933 k (to fasten toolbox to rear body)	4	
843	—	spring washer B 6 DIN 137 k	4	
844	—	hex. nut M 6 DIN 934 k	4	
845	1396 z 259	rubber lace (length 1100 mm)	1	
846	1390 z 122	strap (with buckle) for tools	1	
847	1390 z 118	strap (with buckle) for rubber repairing material ..	1	
848	1541 z 319	slot screw	2	
849	176 z 48	rubber bushing	2	
850	2051 z 606	bracket (to taillight)	1	
851	—	hex. screw M 6 x 6 DIN 933 k (to fasten bracket to toolbox)	2	
852	—	spring washer B 6 DIN 137 k	2	
853	1470 z 13	cover (to toolbox)	1	
854	1396 z 258	rubber lace (length 850 mm)	1	
855	—	riveting pin A 4 h 11 x 38 DIN 7341 Ms (to fasten cover to toolbox)	2	
856	651 z 293	cover plate (to taillight)	1	please quote colour
857	1396 z 260	rubber lace	1	
858	—	screw, button head, AM 4 x 5 DIN 86 crp (to fasten cover plate)	2	
859	—	spring washer A 4 DIN 137 k	2	

