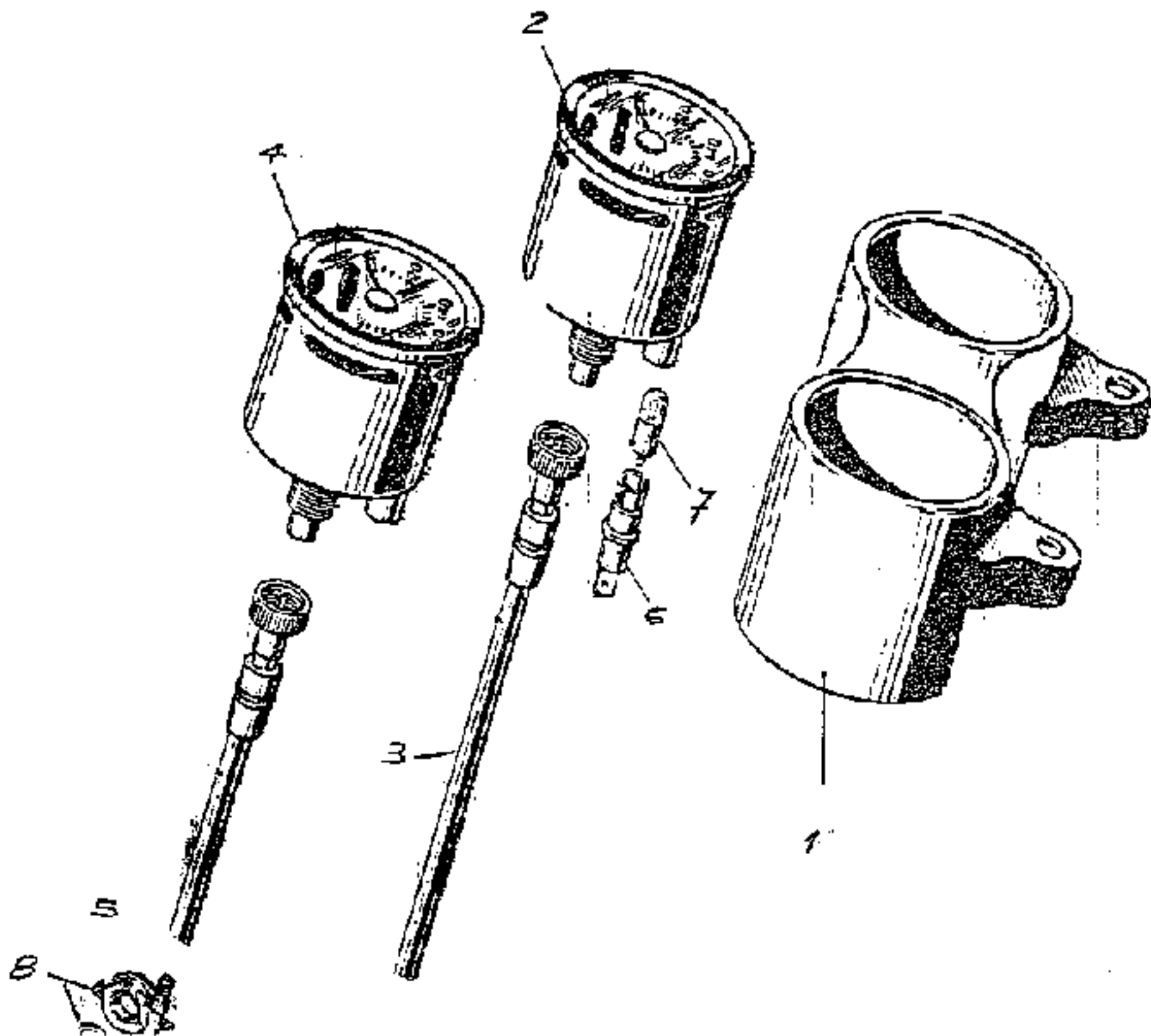
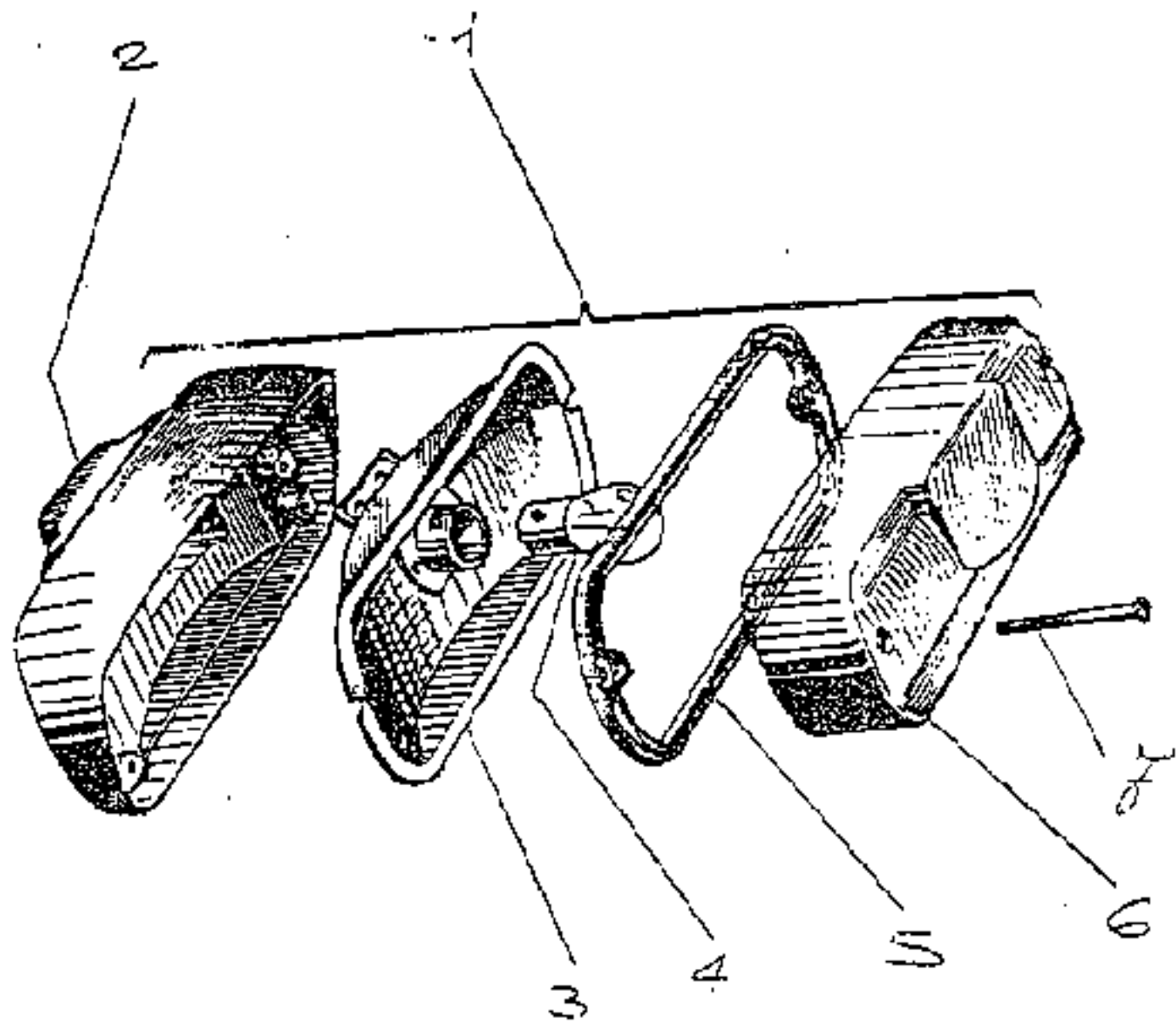
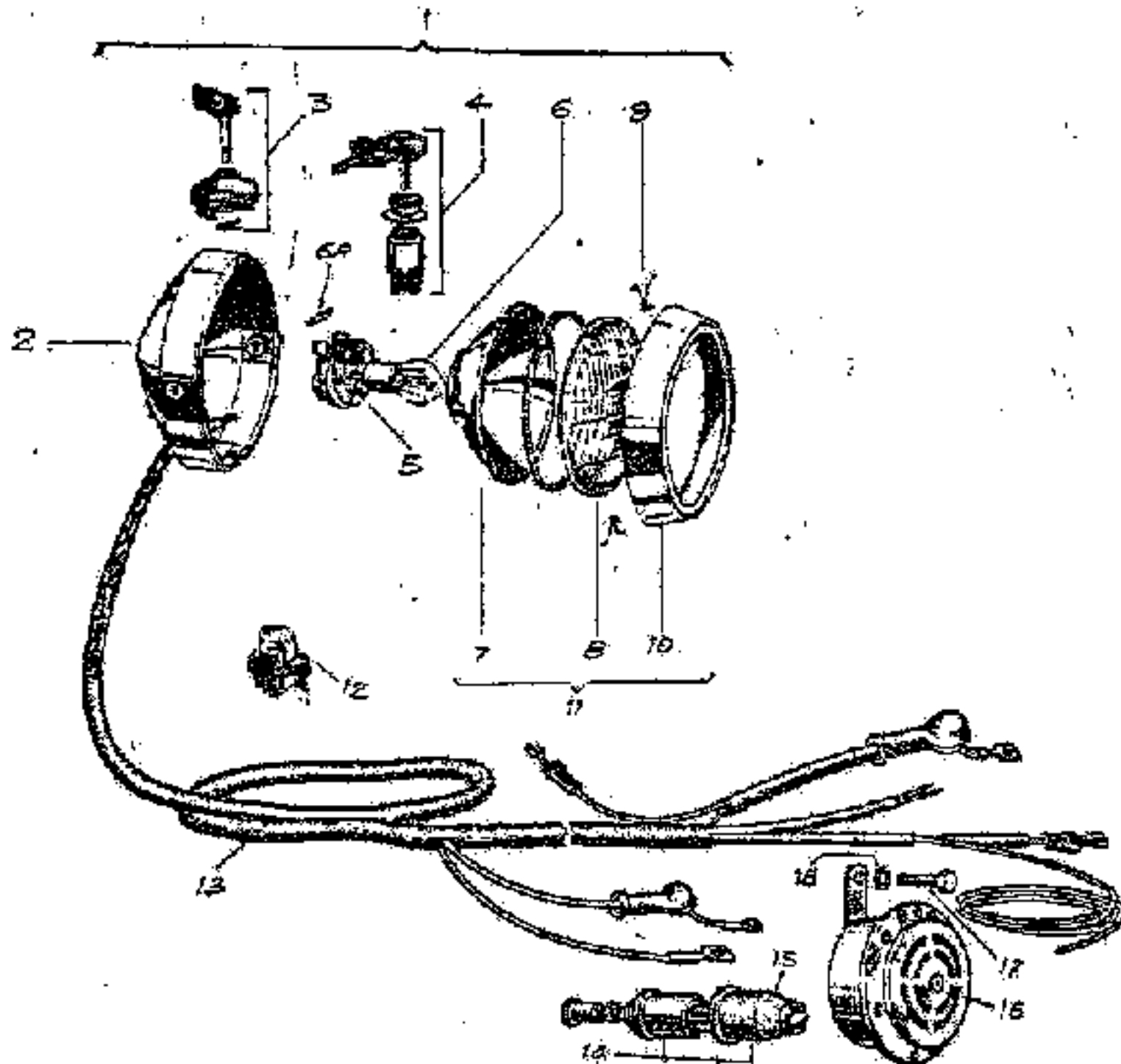
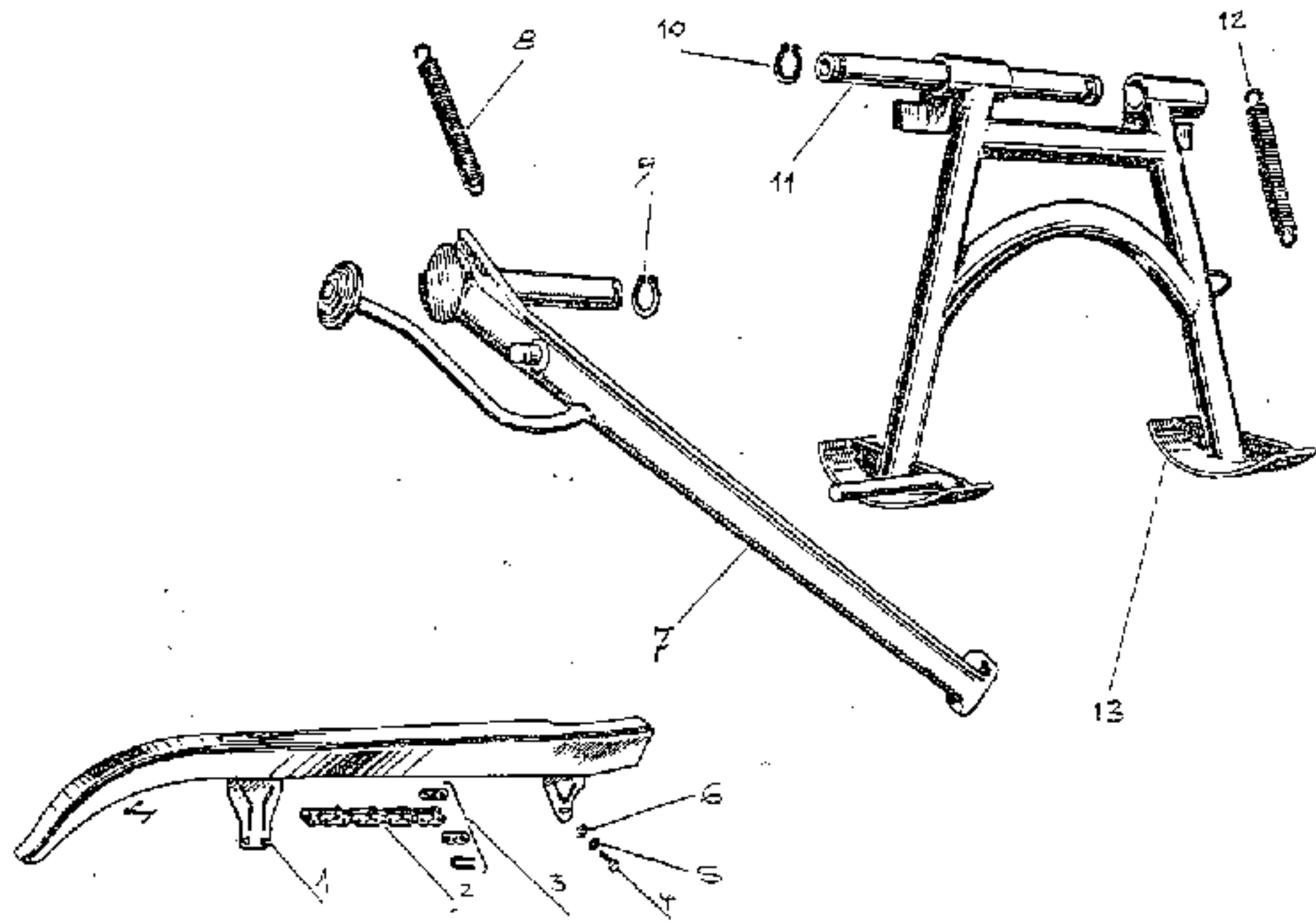
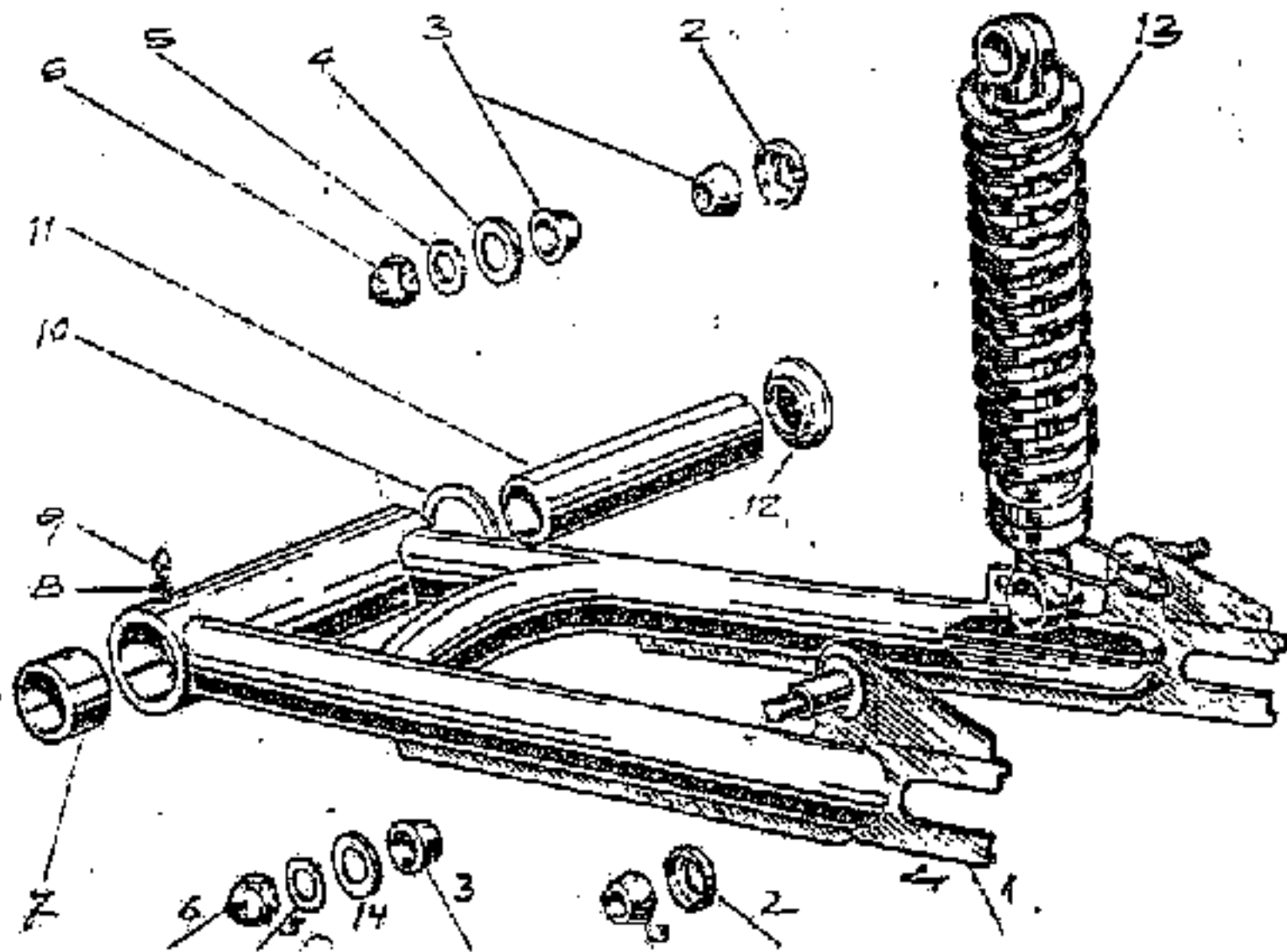


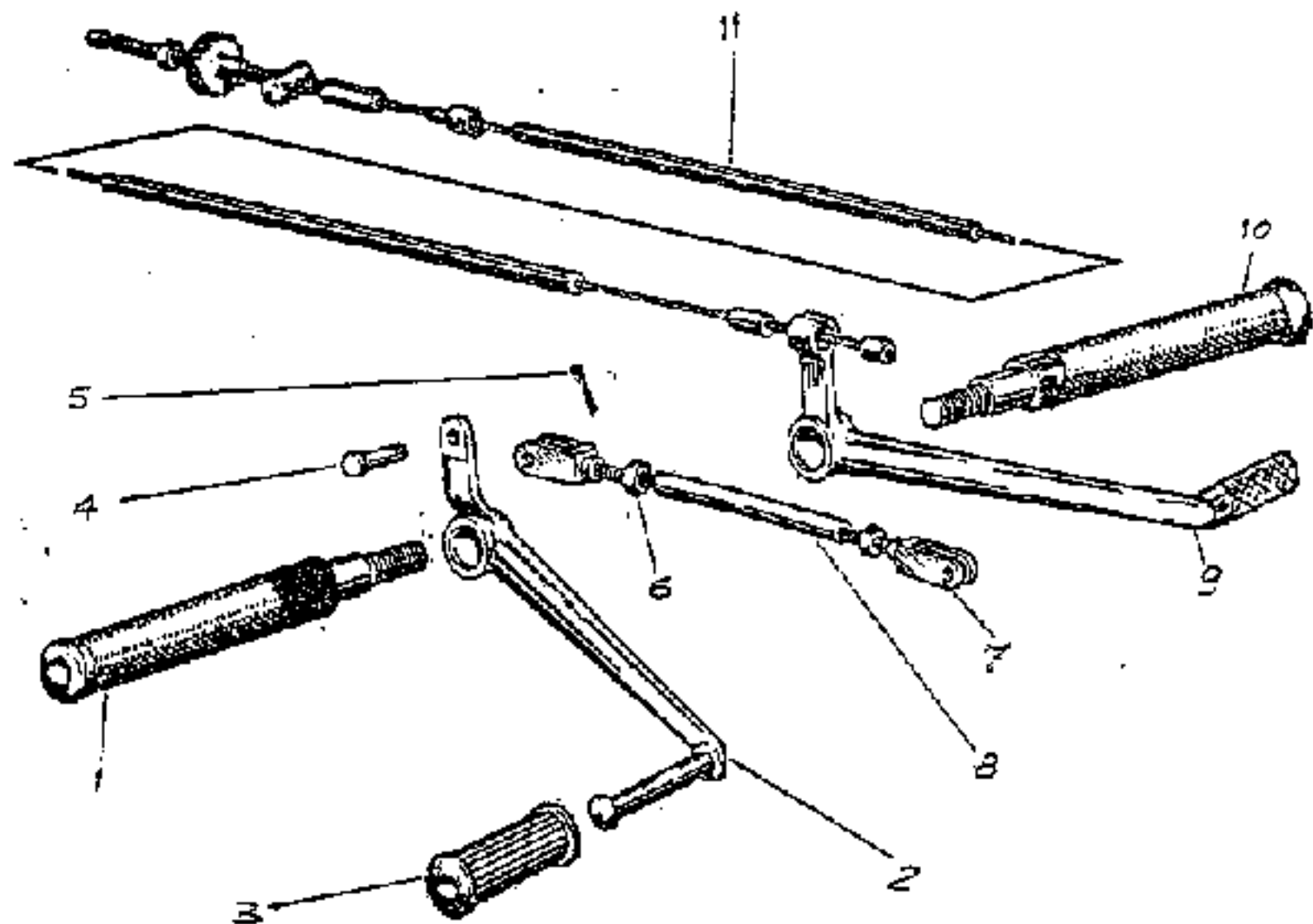


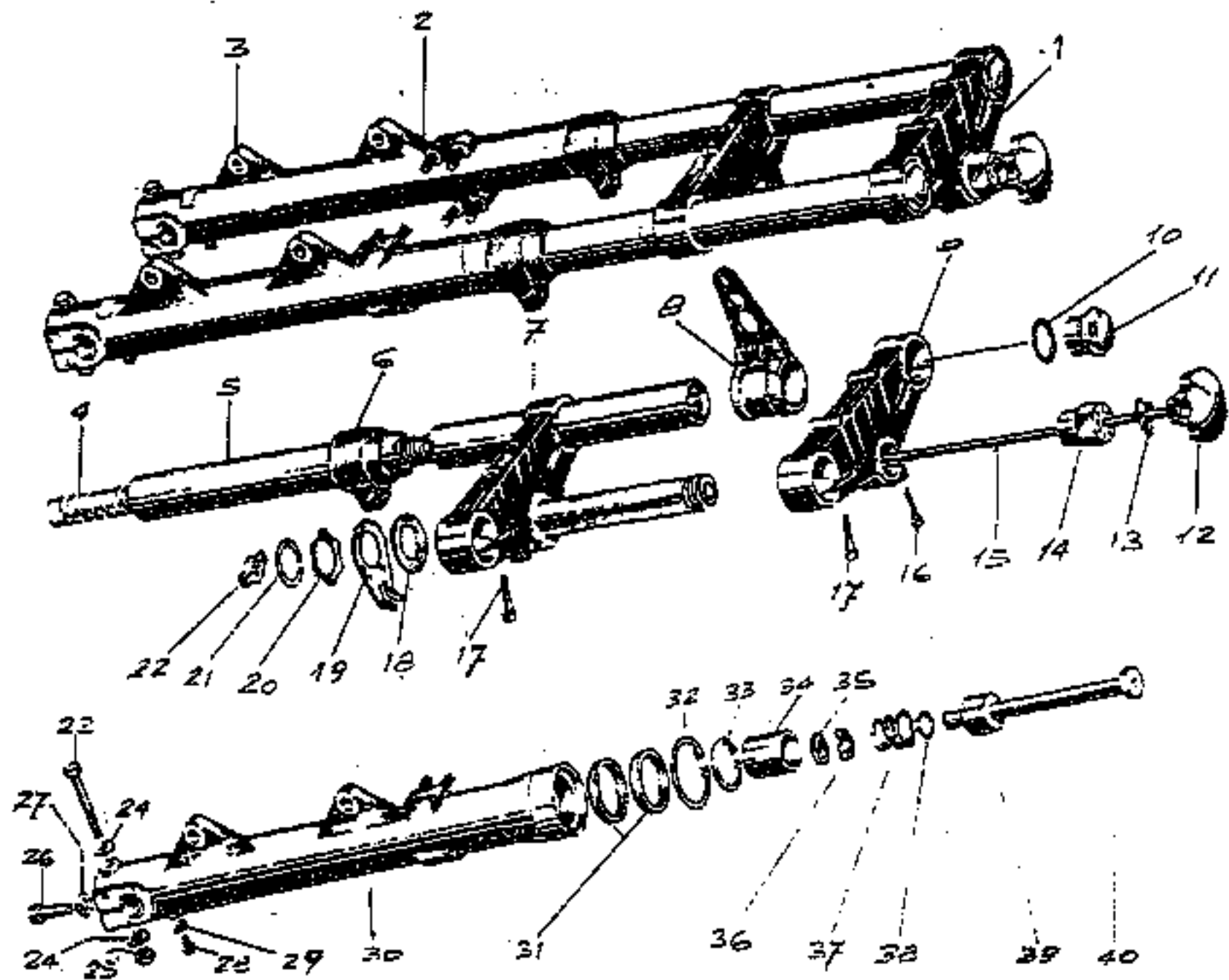


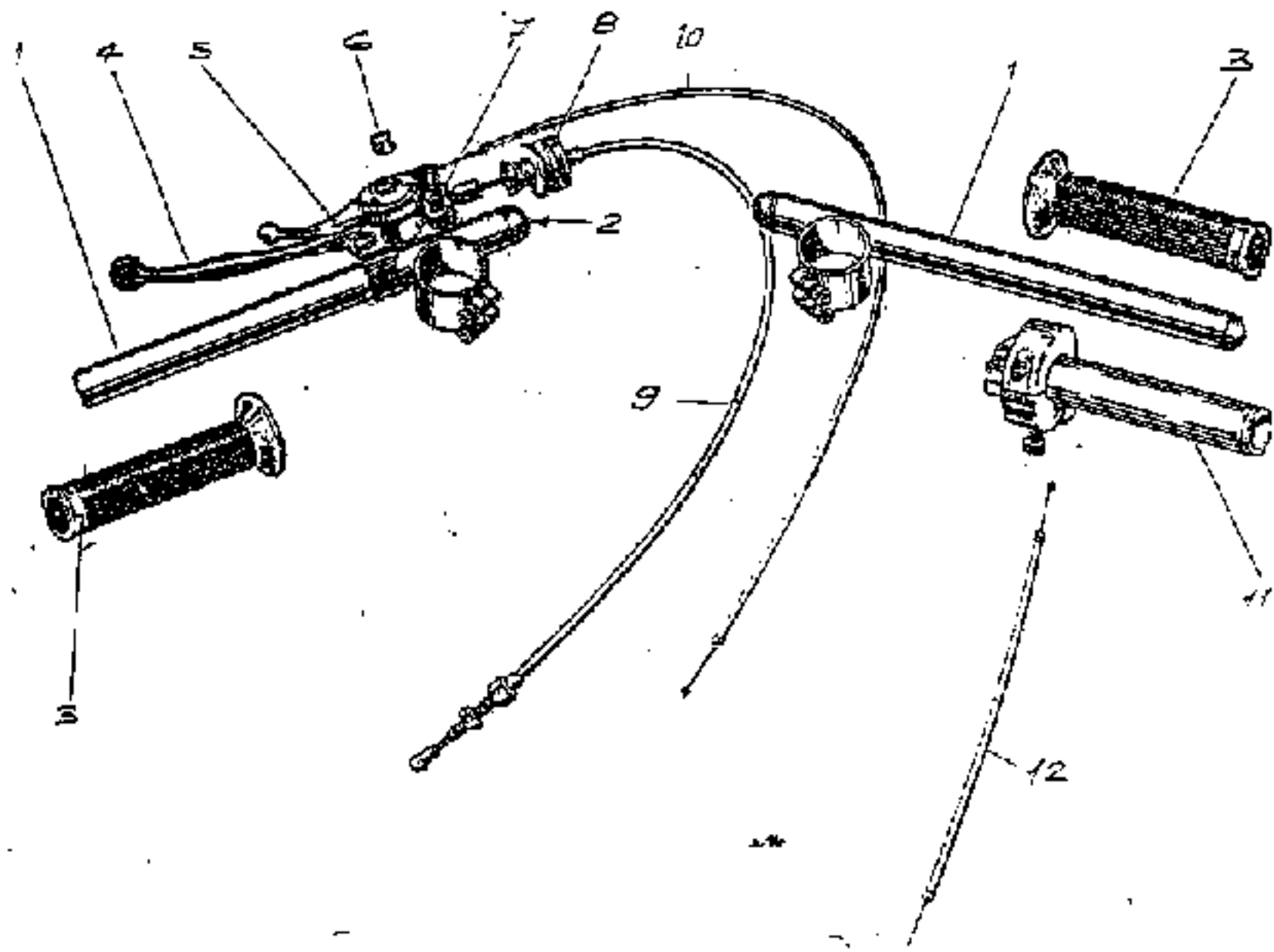


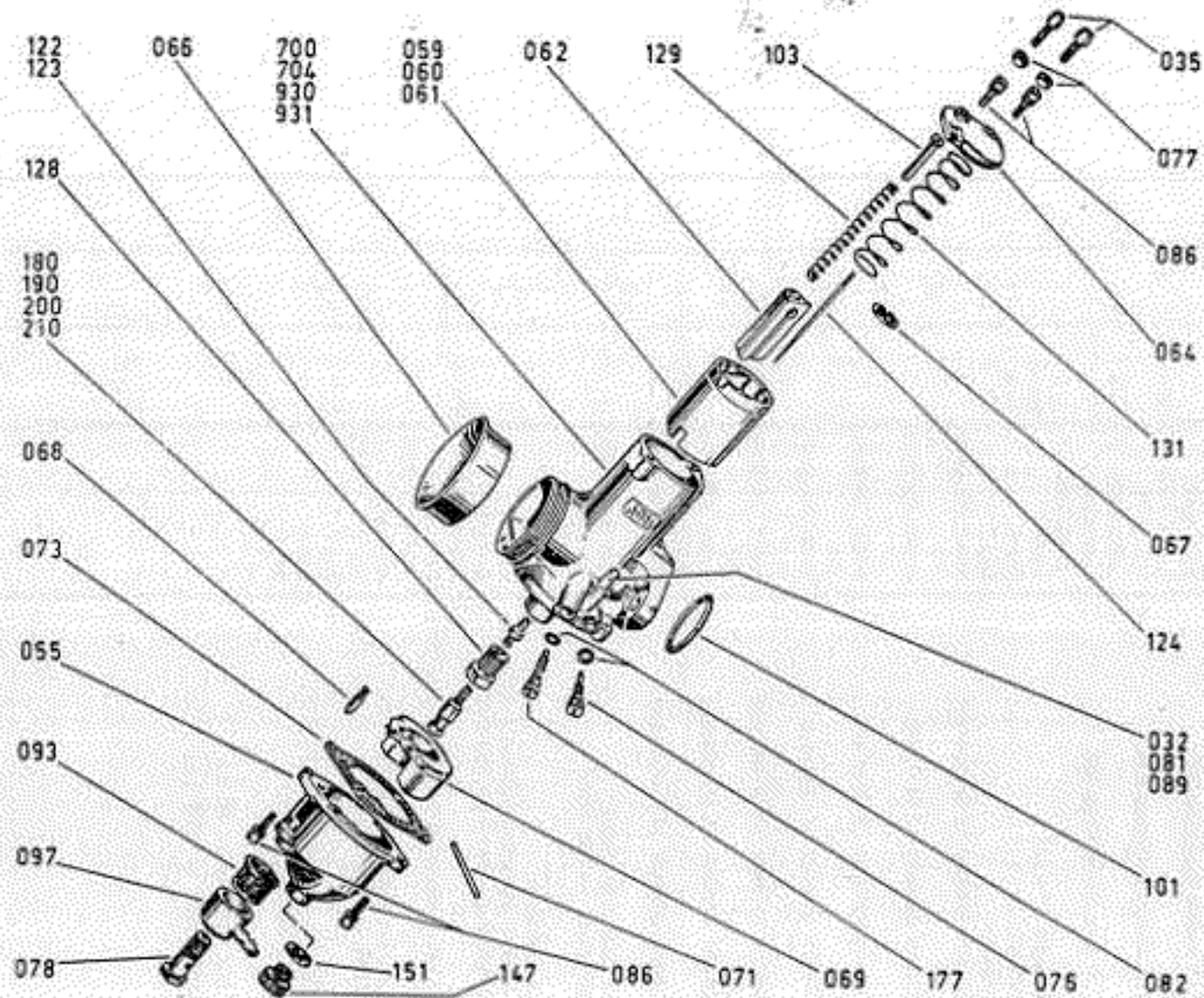


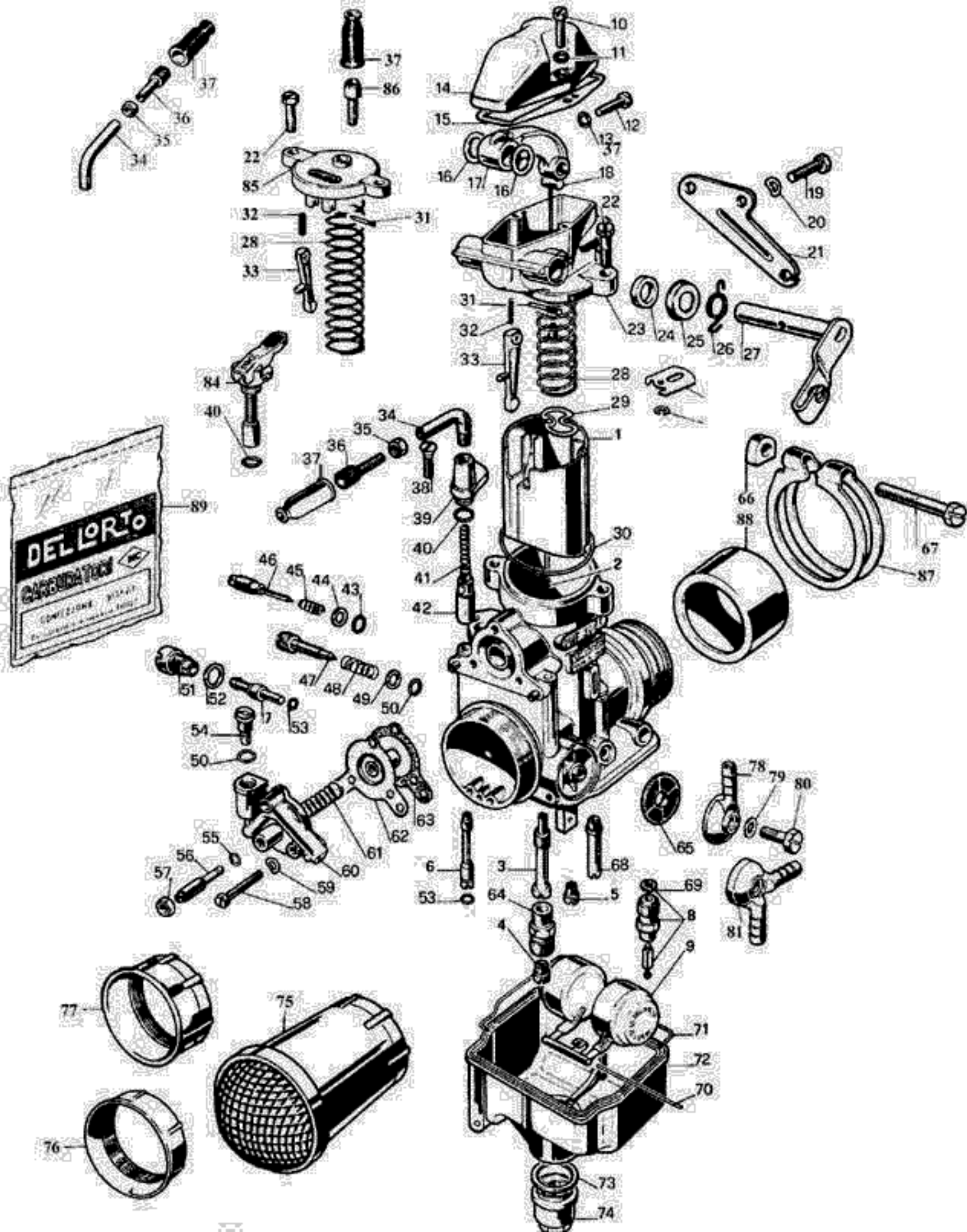


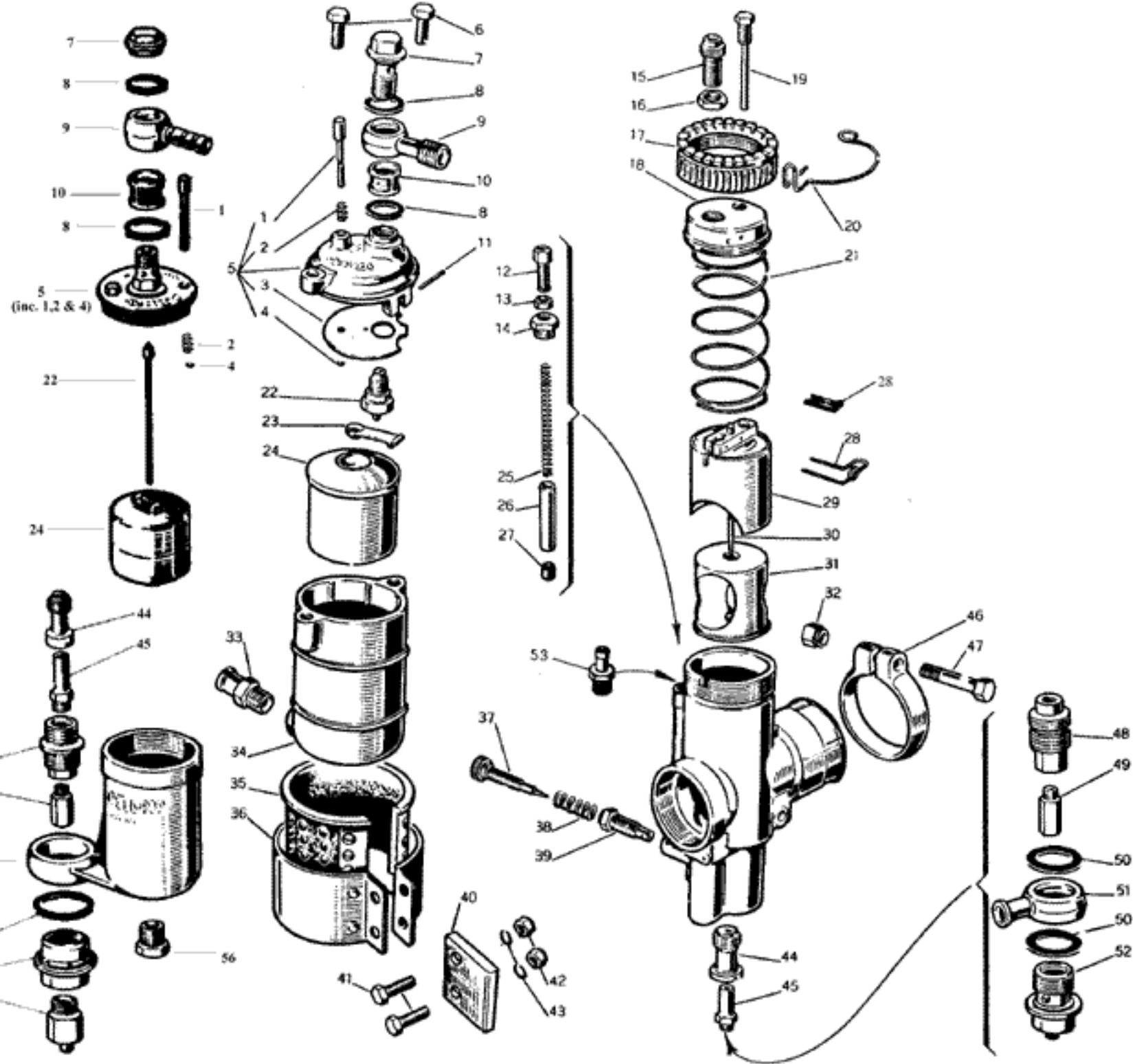


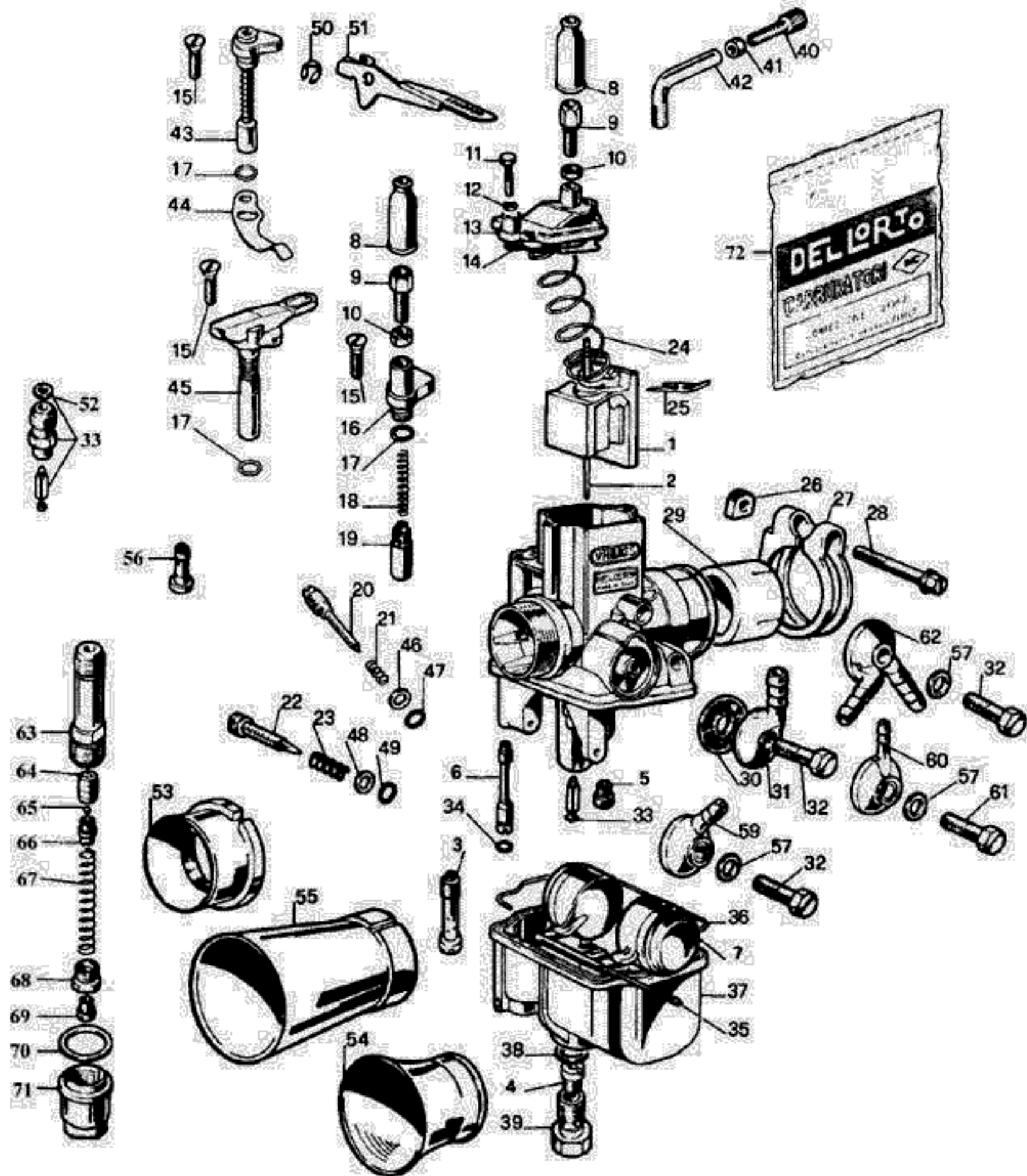


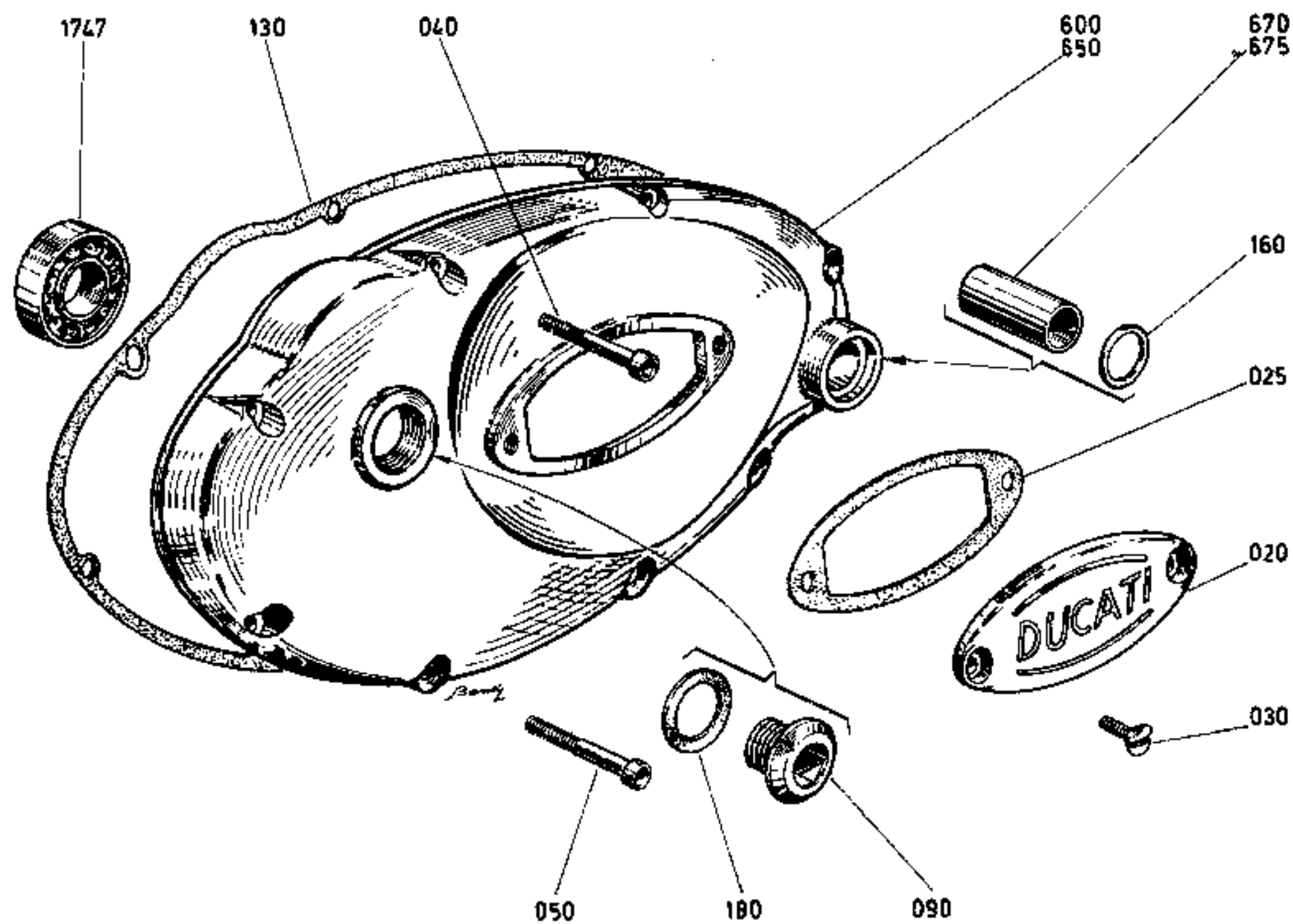


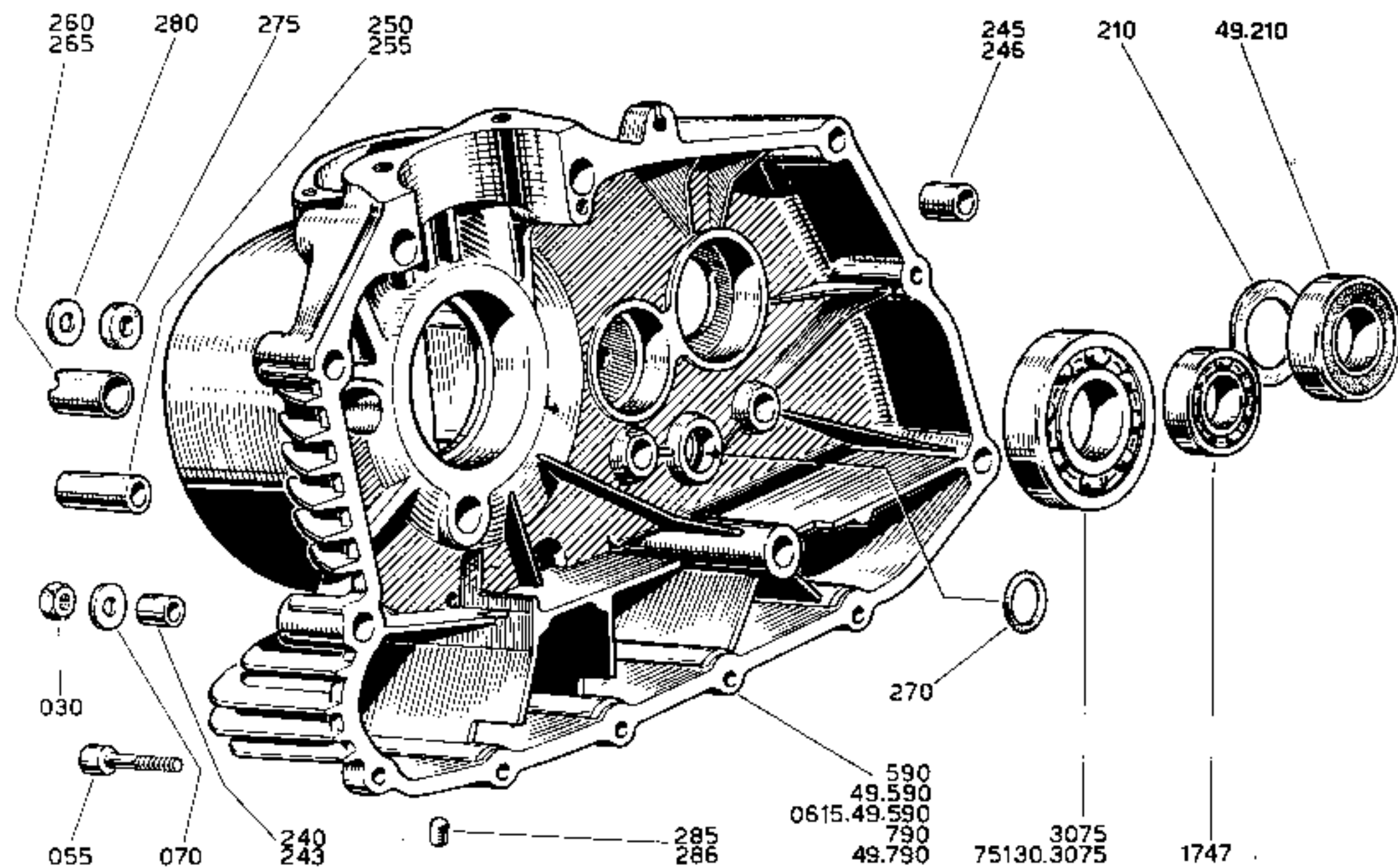












DESCRIPTION OF THE 250 c.c. SINGLE-CYLINDER O.H.C. ENGINE

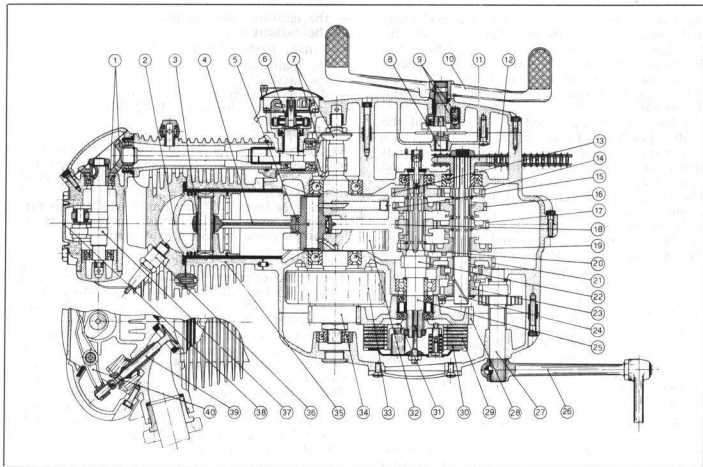


Fig. 23

KEY TO THE ENGINE PARTS

- | | | | |
|---|----------------------------------|-------------------------------------|-----------------------------------|
| 1 Matched pair of spiral bevel gears. | 11 Power exit shaft gear. | 21 1st speed driven gear. | 31 Clutch drum (clutch hub) |
| 2 Piston. | 12 Driving chain. | 22 1st speed (bottom) driving gear. | 32 Crankshaft. |
| 3 Connecting rod bush. | 13 5th speed (top) driving gear. | 23 Starter gear. | 33 Alternator magnet and flywheel |
| 4 Connecting rod. | 14 5th speed driven gear. | 24 Change layshaft. | 34 Crankshaft gear. |
| 5 Roller cage. | 15 4th speed driving gear. | 25 Change mainshaft. | 35 Engine cylinder. |
| 6 Coil ignition with automatic advance. | 16 4th speed driven gear. | 26 Starter lever. | 36 Sparking plug. |
| 7 Matched pair of spiral bevel gears. | 17 3rd speed driving gear. | 27 Starting shaft. | 37 Camshaft. |
| 8 Gear change selector. | 18 3rd speed driving gear. | 28 Clutch housing. | 38 Engine head. |
| 9 Compression spring and ball. | 19 2nd speed driving gear. | 29 Driving clutch plates. | 39 Valve. |
| 10 Gear change lever. | 20 2nd speed driving gear. | 30 Driven clutch plates. | 40 Rocker. |

PARTS OF THE SINGLE-CYLINDER O.H.C. 250 GT DUCATI ENGINE

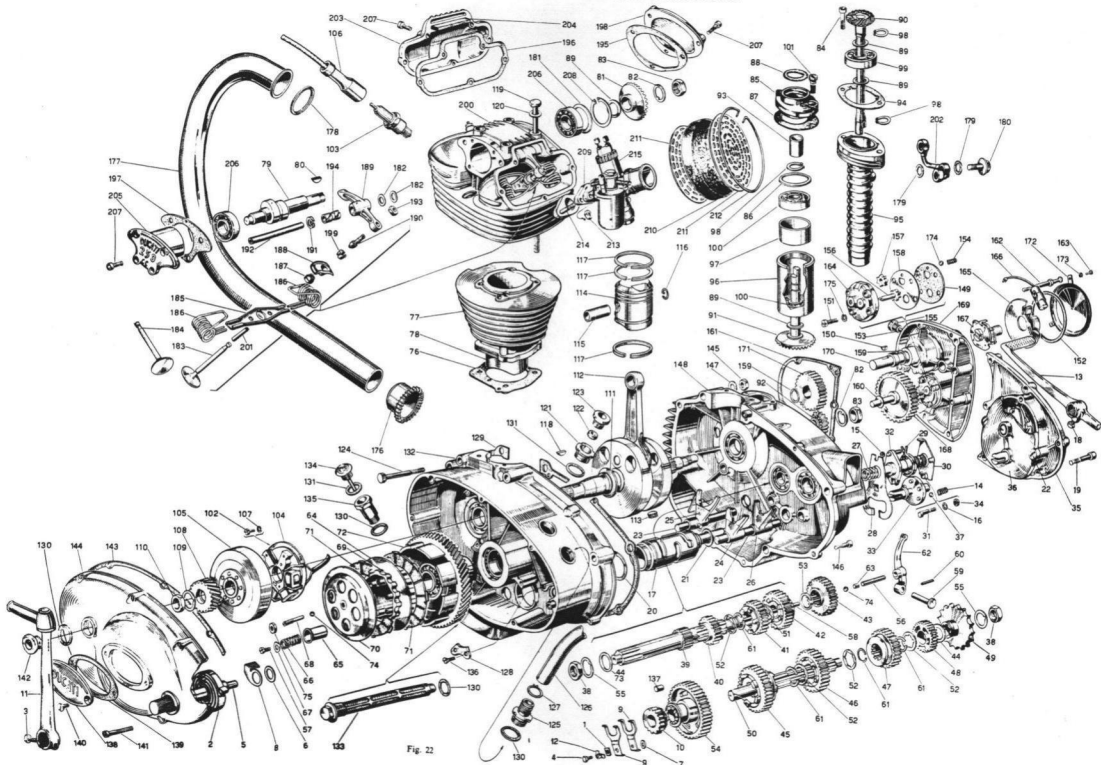


Fig. 22

STARTER Assembly

1. Pin
2. Pedal return spring
3. Screw TE 6MAx28 UNI 184
4. Screw TE 6MAx12 UNI 187
5. Starter pin Z=20
6. Thrust washer $\varnothing 15.5 \times 23 \times 0.5$
7. Washer $\varnothing 6.5 \times 13 \times 1.5$
8. Segment locking plate
9. Leaf spring
10. Starter gear Z=22
11. Complete starter lever
12. Safety washer $\varnothing 16 \times 4$

GEARBOX CONTROL Assembly

13. Gear operating lever
14. Ball spring
15. Washer $\varnothing 7.4 \times \varnothing 13 \times 0.5$
16. Bent washer $\varnothing 6.4 \times \varnothing 11 \times 0.5$
17. Speed gear selector
18. Screw TE 6MAx25
19. Screw TCEI 6MAx30
20. Screw TCEI 6MAx35
21. Screw TCEI 6MAx45
22. Thrust washer $\varnothing 36.5 \times \varnothing 42 \times 0.2$
23. Thrust washer $\varnothing 36.5 \times \varnothing 41 \times 0.5$
24. Thrust washer $\varnothing 36.5 \times \varnothing 32 \times 0.2$
25. Thrust washer $\varnothing 36.5 \times \varnothing 22 \times 0.5$
26. Screw TSC 6MAx30
27. Fork pin $\varnothing 12 \times 106$
28. 1st and 2nd speed engaging fork
29. 2nd and 4th speed engaging fork
30. Top speed engaging fork
31. Fork pressure spring
32. Selector operating fork
33. Pedal return spring
34. Adjustment plate
35. Eccentric 6MA
36. Fork operating spindle
37. 5th speed selector
38. Hex. nut 6MAx6
39. Cover chain side
40. Cover for speed selector
41. Ball 11 32' ($\varnothing 8.731$) RIV 90142011

GEARSHIFT & CLUTCH Assembly

38. Hex. nut (16x1M)x6
39. Gear change main shaft Z=17
40. 2nd speed driving gear Z=22
41. 3rd speed driving gear Z=28
42. 4th speed driving gear Z=29
43. 5th speed driving gear Z=31
44. Washer $\varnothing 20.2 \times \varnothing 28.2 \times 1$
45. 2nd speed driven gear Z=38
46. 3rd speed driven gear Z=35
47. 4th speed driven gear Z=32
48. 5th speed driven gear Z=30
49. Chain sprocket
50. Gearbox lensball
51. Grooved thrust washer
52. Grooved thrust washer $\varnothing 18 \times \varnothing 26 \times 0.5$
53. Spring ring $\varnothing 18 \times \varnothing 22 \times 2.5$
54. 1st speed driven gear Z=43
55. Safety washer tab $\varnothing 16 \times 16.3$

56. Clutch peg
57. Screw TC 5MAx12
58. Clutch operating rod
59. Clutch lever pin
60. Split drift pin $\varnothing 2.8 \times 25$
61. Spring ring $\varnothing 16 \times 20$
62. Clutch operating lever
63. Roller $\varnothing 5 \times 5$ - RIV 9131051
64. Inner driven disc
65. Spring retainer
66. Clutch spring
67. Washer $\varnothing 5.5 \times \varnothing 14 \times 1$
68. Clutch adjustment screw 6MA
69. Clutch drum
70. Pressure disc
71. Driving disc
72. Clutch housing Z=60 (see couple of gears)
73. Outer distance piece $\varnothing 20.5 \times \varnothing 25 \times 5$
74. Ball 3 16' ($\varnothing 4.76$) RIV 9053006
75. Hex. nut 6MAx5

CYLINDER Assembly

76. Gasket between cylinder and head
77. Cylinder $\varnothing 10 \times 74$
78. Cylinder liner

TIMING Assembly

79. Timing shaft
80. Special Woodruff key 3x5
81. Bevel gear Z=28
82. Safety washer with $\varnothing 16 \times 4.5$ tab.
83. Hex. nut (14x1M) sin.1x6
84. Screw TCEI 6MAx30
85. Flange
86. Thrust washer $\varnothing 29.2 \times \varnothing 35 \times 0.1$
87. Thrust washer $\varnothing 29.2 \times \varnothing 35 \times 0.2$
88. Thrust washer $\varnothing 29.2 \times \varnothing 35 \times 0.5$
89. Gasket between flange and crankcase
90. Gasket GACD 08 138
91. Normal thrust washer $\varnothing 15.5 \times \varnothing 22$ - thick.
92. 0.25 - 0.1 - 0.2 - 0.5 - 1
93. Transmission with bevel gear Z=20
94. Bevel gear Z=31
95. Bevel gear Z=21
96. Normal sleeve $\varnothing 15 \times \varnothing 20 \times 34$
97. Gasket for head protection
98. Timing protection
99. Bush
100. Distance piece $\varnothing 31 \times \varnothing 35 \times 19.6$
101. Ring Senger 15 E
102. Bearing RIV 02 A1 $\varnothing 15 \times \varnothing 35 \times 11$
103. Bearing RIV 3 A03 $\varnothing 15 \times \varnothing 35 \times 11$
104. Screw TCEI 6MAx16 UNI 2383

ELECTRIC SYSTEM Assembly

102. Screw TCC 5MAx15
103. Sparking plug thermic degree 260 with gasket, Marelli CW 260 N, BERU 260, KLO F-100
104. Complete stator plate 31.95.409
105. Flywheel $\varnothing 126$ 31.95.415
106. Ignition cable - 31.95.113

107. Spring washer A 5.3 UNI 1751

CRANKSHAFT Assembly

108. Crankshaft gear Z=24
109. Safety washer with tab $\varnothing 16 \times 20.2$
110. Hex. nut (20x1M)x7
111. Thrust washer $\varnothing 30.5 \times \varnothing 37$ (thickness 1 - 1.1 - 1.2 - 1.3)
112. Crankshaft
113. Threaded dowel 18x1M
114. Complete normal Borgo piston $\varnothing 74$
115. Normal piston gudgeon pin
116. Spring ring $\varnothing 16 \times 17.5$
117. Piston ring set
118. Woodruff key 4x5 UNI 99

CRANKCASE Assembly

119. Tie rod TE 10MAx253
120. Bent washer $\varnothing 10.5 \times \varnothing 18 \times 0.8$
121. Cable gland nut
122. Rubber for flywheel cable
123. Ring plug
124. Screw TE 6MAx35
125. Screw TE 6MAx120
126. Breather air nozzle 22MB
127. Breather tube locking ring
128. Plate
129. Gasket
130. Gasket $\varnothing 22.5 \times \varnothing 28 \times 1$
131. Gasket $\varnothing 22 \times \varnothing 28 \times 1.5$
132. Crankcase clutch side
133. Filter
134. Oil plug with level stick
135. Oil filter
136. Screw TS 6MAx15 UNI 261
137. Roller $\varnothing 7 \times 7$ RIV 9131071
138. Cover for clutch adjustment hole
139. Cover gasket
140. Screw TSC 6MAx14
141. Screw TCEI 6MAx35
142. Screw TCEI 6MAx50
143. Plug 22 MB
144. Gasket for clutch side cover
145. Cover clutch side with bush
146. Hex. nut 6MAx8 UNI 265
147. Hex. nut Elastic-Stop 6MAx10.5
148. Screw TCEI 6MAx35
149. Screw TCEI 6MAx40
150. Bent washer $\varnothing 8.4 \times \varnothing 15 \times 0.5$
151. Crankcase chain side

PUMP - ELECTRICAL SYSTEM Assembly

149. Pump gasket
150. Special Woodruff key 3x5
151. Screw with hole TC 6MAx30
152. Gasket
153. Rubber tube
154. Pressure valve spring
155. Threaded bush 1/8"
156. Driving gear Z=7
157. Driven gear Z=7
158. Pump cover
159. Thrust washer $\varnothing 15.5 \times \varnothing 22 \times 1$

160. Thrust washer $\varnothing 10.5 \times \varnothing 18 \times 1$
161. Timing cover gasket
162. Column 6MA - L=61.5
163. Column 6MA - L=70.5
164. Screw TCC 6MAx7
165. Pump body
166. Complete distributor
167. Condenser 0.3 μ F
168. Automatic advance
169. Pump operating gear with pin
170. Timing cover
171. Distributor operating spindle
172. Driving gear of the distributor Z=30
173. Distributor cover with 2 springs
174. Spring washer A43 UNI 1751
175. Ball 4' ($\varnothing 6.35$) RIV 9053208
176. Spring washer A64 UNI 1751

EXHAUST Assembly

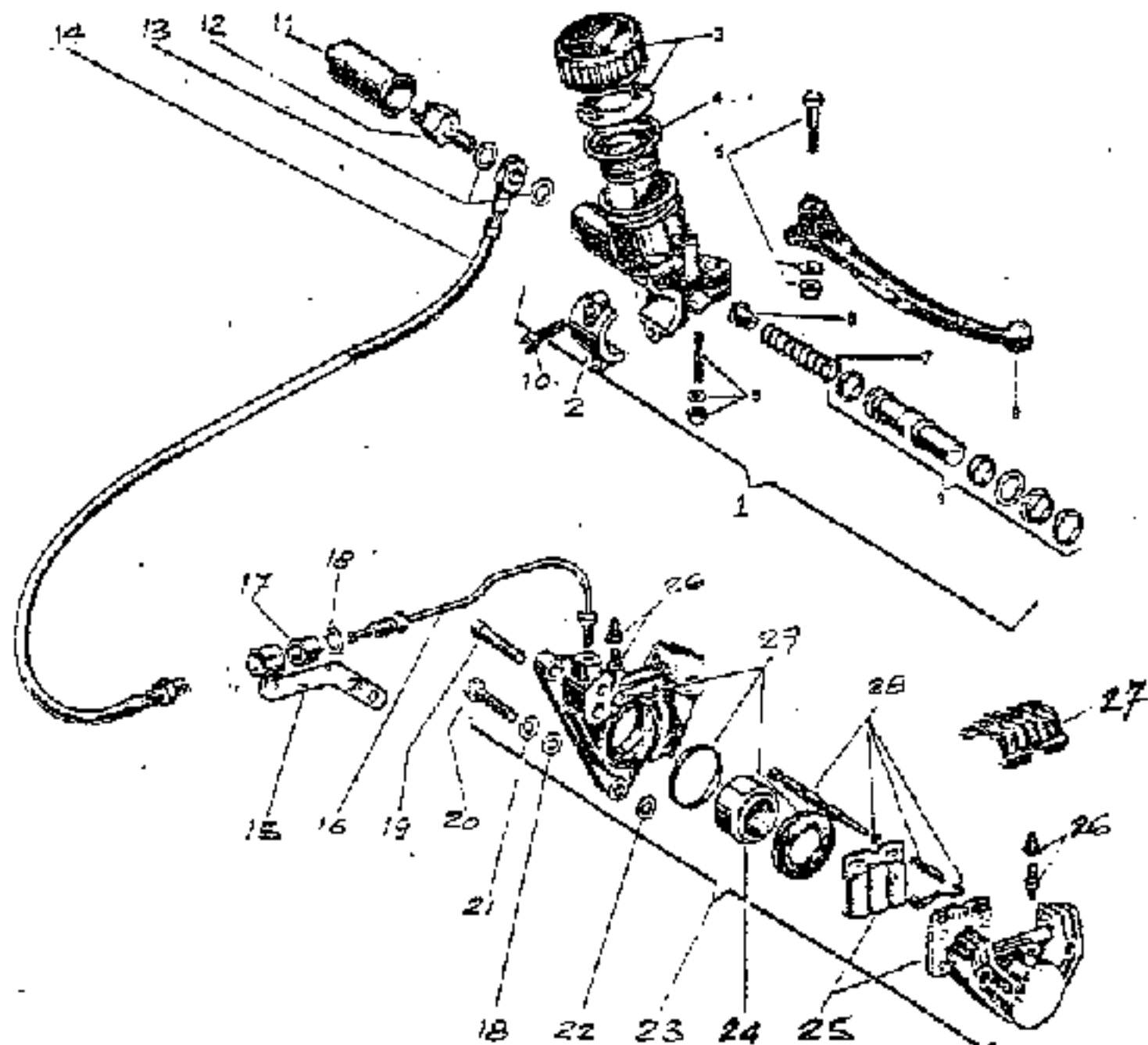
176. Hold ring 48x15MM
177. Exhaust pipe
178. Gasket $\varnothing 16$

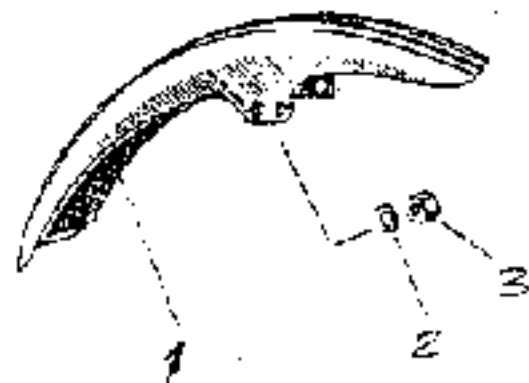
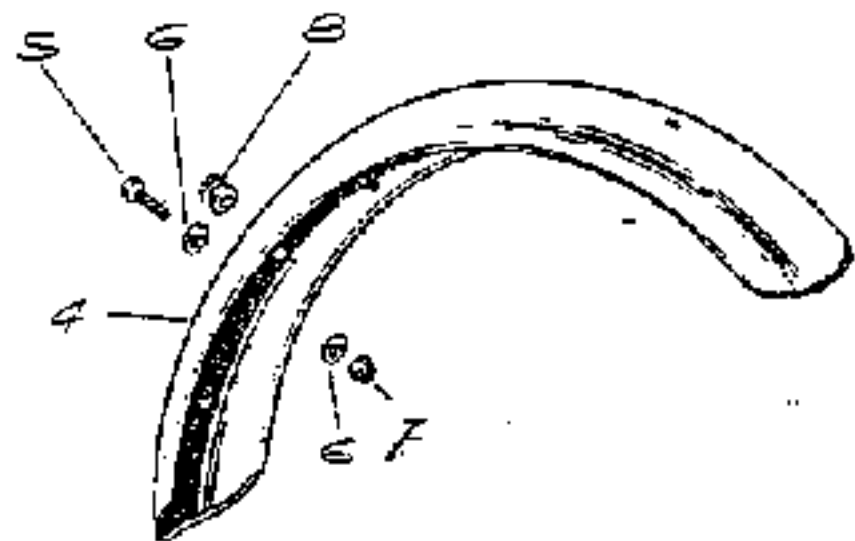
HEAD Assembly

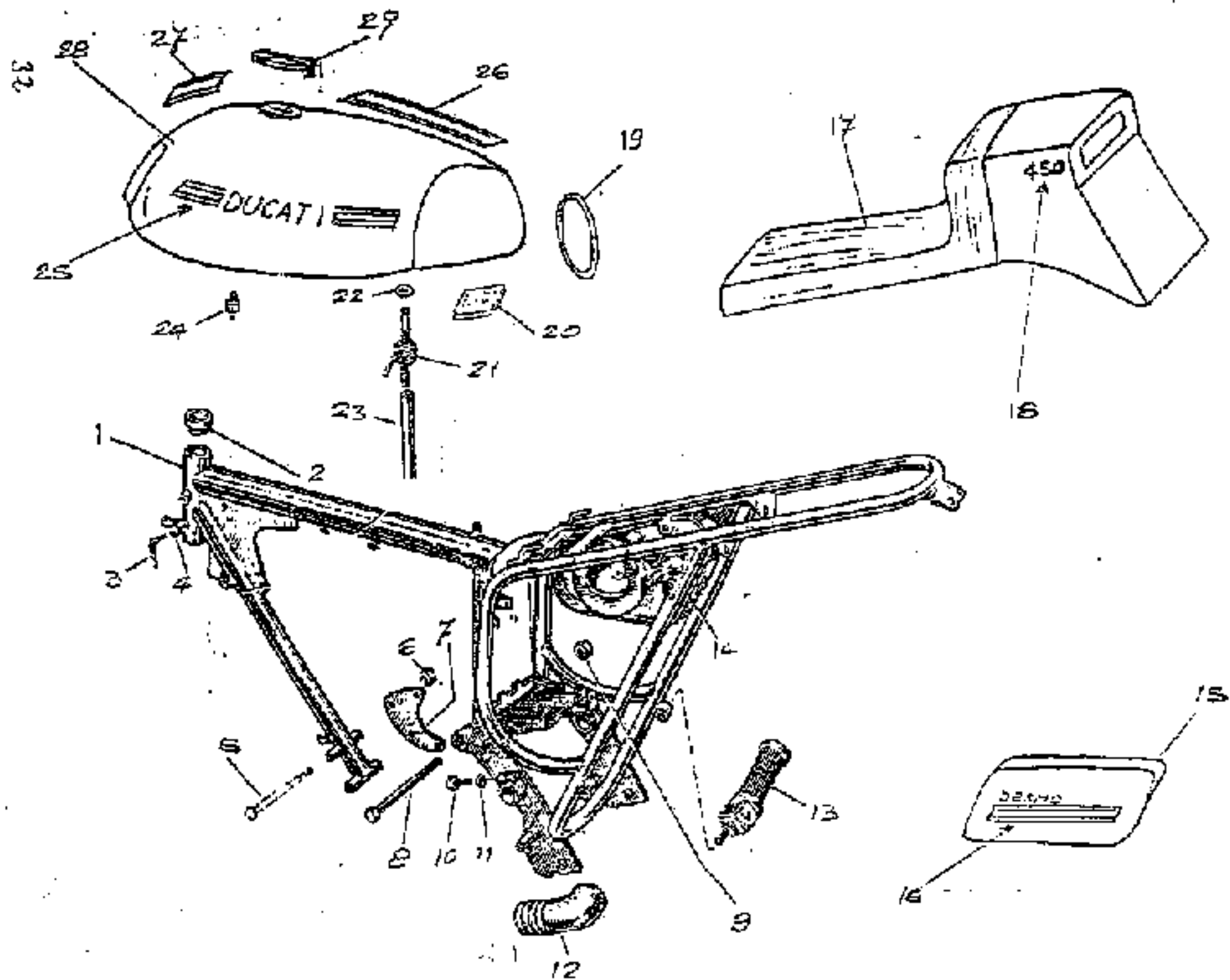
179. Gasket $\varnothing 12.2 \times \varnothing 20 \times 1$
180. Union screw (12x1.25M)x14
181. Thrust washer $\varnothing 29.2 \times \varnothing 35 \times 0.2$
182. Thrust washer $\varnothing 10.5 \times \varnothing 18 \times 1$
183. Inlet valve
184. Exhaust valve
185. Spring attachment cross-bar
186. Valve spring
187. Valve rubber
188. Spring attachment, tie 1/2
189. Rocker with chromed screw
190. Adjustment screw 6MB
191. Spring washer
192. Rocker pin
193. Hex. nut 6MBx4
194. Rocker normal bush
195. Timing cover gasket
196. Valve cover gasket
197. Cap gasket
198. Timing cover
199. Cotter $\varnothing 11.9 \times 8$
200. Head
201. Split spring drift $\varnothing 5.4 \times 12$
202. Oil union
203. Valve cover
204. Rubber 30x17x4
205. Cap bearing holder
206. Bearing RIV 02 A1 or FAG 6202 $\varnothing 15 \times \varnothing 35 \times 11$
207. Screw TCEI 6MAx16 - UNI 2383
208. Ring Senger 35 1 - UNI 3654

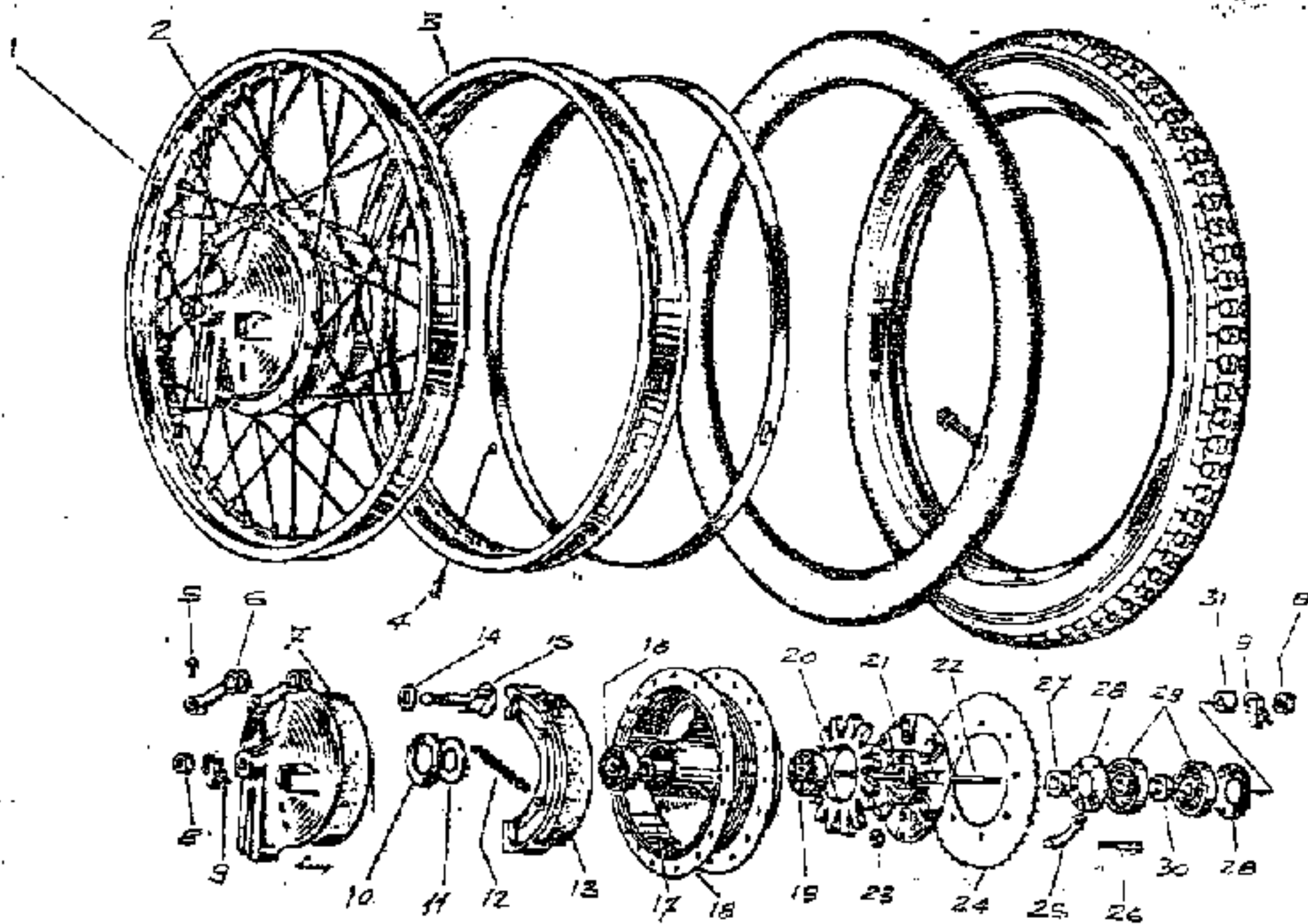
CARBURETOR

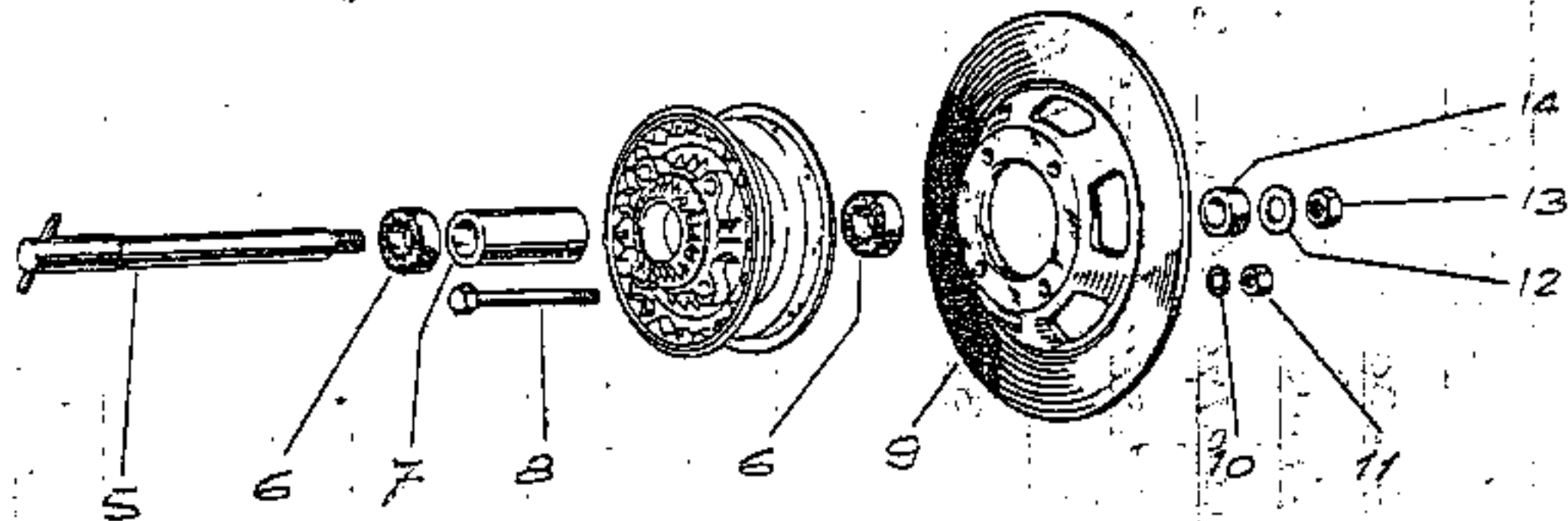
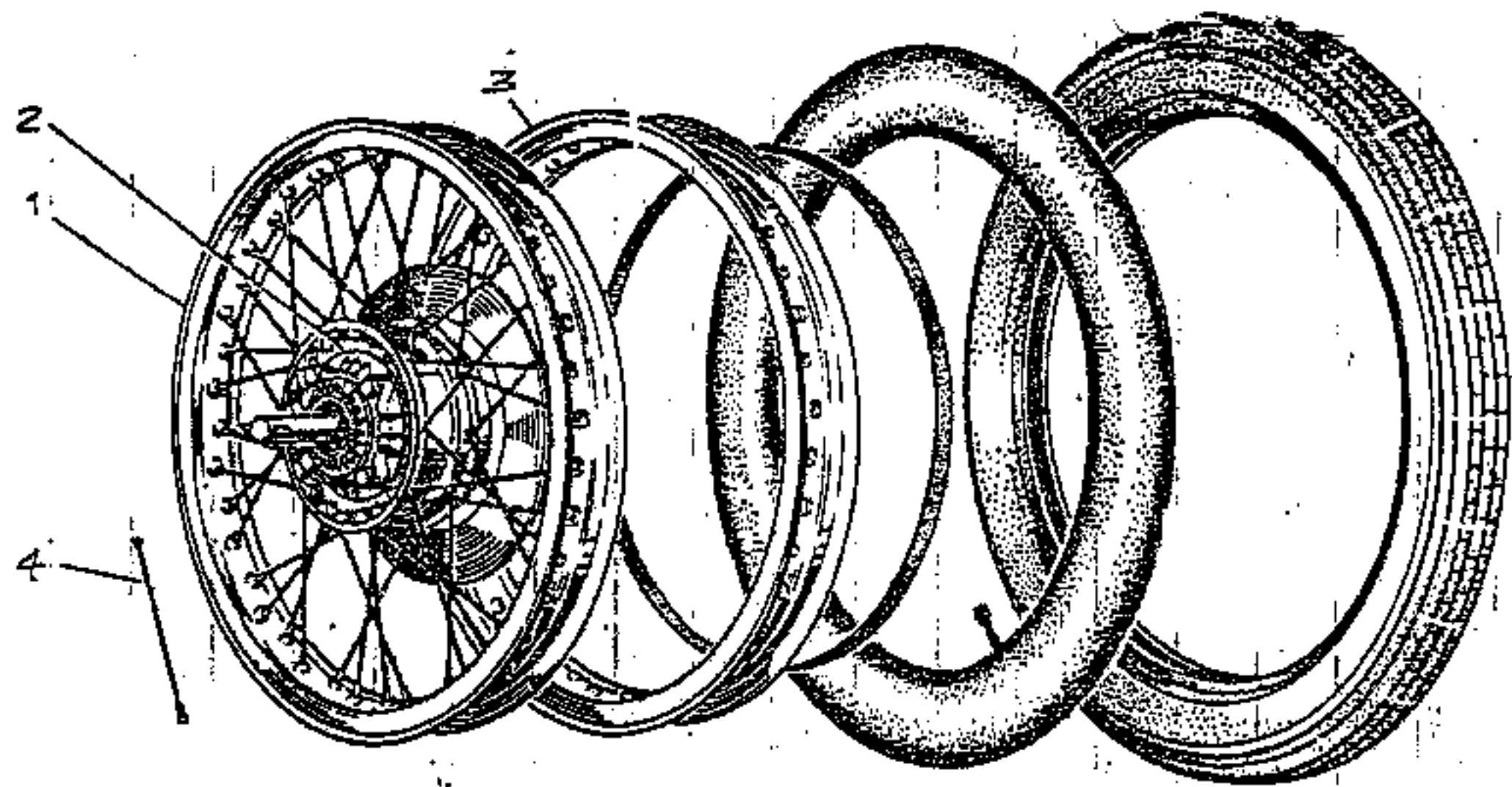
209. Rubber distance piece
210. Filtering bush 1/16"
211. Drilled disc 2167
212. Filtering body retain ring 2168
213. Hex. nut Elastic-Stop 6MAx9
214. Stud 6MAx35
215. Carburetor Dell'Orto type UBF 24 BS



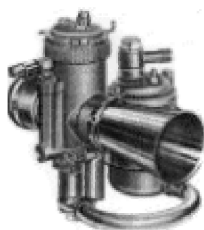








Ducati Vintage Carburettor Settings



BOLOGNA FACTORY STANDARD SINGLES

Model	Year	Dell'Orto type	Size	Needle	Main	Pilot	Slide	Needle pos.	Needle jet
60 Sport	1950-51	MA16B	16	D15	70	45	50	2	260B
98N	1952-58	MA16B	16	D12	75	35	40	2	260B
98T	1952-58	MA16B	16	D12	75	35	40	2	260B
98TL	1953-58	MA16B	16	D12	75	35	40	2	260B
98S	1953-58	MA18B	18	D16	82	35	60	2	260B
98 Super Sport	1954-55	MB20B	20	E10	72	35	50	-	-
55E	1955-57	14MFC	Weber	Carb.	60	45	-	-	-
55R	1955-57	14MFC	Weber	Carb.	60	45	-	-	-
55M	1955-57	14MFC	Weber	Carb.	60	45	-	-	-
125T	1956-60	MA18B	18	D12	80	40	50	2	260A
125TV	1956-58	MB20B	20	E10	82	35	50	2	260B
85N	1958-60	ME15BS	15	G4	70	35	50	2	258A
85 Sport	1958-60	ME15BS	6v	G4	70	35	50	2	258A
98TS	1958-60	ME16BS	16	G1	74	35	50	3	258A
175S	1957	MB22.5B	22.5	E14	98	80	40	2	260B
175T	1957	MB22B	22	E12	92	45	80	2	260B

125S	1957	MB20B	20	E9	78	38	70	3	262A
100 Sport	1958-60	MA18B	18	D17	78	35	50	2	260A
125 Sport	1958-65	UB20BS	20	E10	85	35	50	2	260B
125 Sport(opt)	1958-61	SS1 22C	22	R4	92	50	80	3	260
125TS (note 1)	1958	UA20BS	20	E10	85	35	50	2	260B
125TS	1959-65	ME18BS	18	G4	76	38	50	3	258B
175 Americano	1958	MB22B	22	E12	92	45	80	2	260B
175 Sport	1958-61	UB22.5BS2	22.5	E14	98	40	80	2	260B
175 Sport(opt)	1959-61	SS1 25A	25	M14	120	50	100	2	265
175 Tourist	1958-61	MB22B	22	E12	92	45	80	2	260B
175TS	1958-60	MB22B	22	E12	92	45	80	2	260B
200 Elite	1959-65	UBF24BS	24	E10	98	40	70	2	260B
200 Super Sport	1959-62	UBF24BS	25	E10	98	40	70	2	260B
200 Super Sport(opt)	1959-62	SS1 27A	27	M13	108	50	80	3	265
200 Americano	1959	UBF24BS	24	E10	92	40	70	2	260B
200 Motocross	1959-60	SS1 27A	27	M13	105	50	80	3	265
200TS	1960-61	UBF24BS	24	E10	92	40	70	2	260B
200GT	1962	UBF24BS	24	E111	95	40	70	2	260A
250 Monza (narrow case)	1961-67	UBF24BS	24	E11	108	40	70	2	260B
Diana Europe	1961-64	UBF24BS	24	E11	103	35	70	2	260A
Diana USA	1961	UBF24BS	24	E11	108	40	70	2	260B
Diana Mk3 USA	1962-65	SS1 27D	27	M14	120	50	100	2	265
Diana Mk3 USA	1966-67	SS1 29D	29	M14	125	50	60	2	265
250 Mark 3(narrow case)	1967	SS1 29D	29	M14	125	50	60	2	265

250 Scrambler(narrow)	1962-67	SS1 27D	27	M14	112	50	100	3	265
Mach 1	1964-66	SS1 29D	29	M14	122	50	60	2	265
250GT	1964-66	UBF24BS	24	E19	108	40	60	2	260B
250 Monza(wide case)	1968	UBF24BS	24	E11	108	45	80	2	260H
250 Mark 3(wide case)	1968-69	SS1 29D	29	M14	112	45	60	2	260
250 Mark 3(wide case)	1970-74	VHB29AD	29	V13	110	40	40	2	265M
250 Mark 3D	1968-69	SS1 29D	29	M14	115	45	60	2	-
250 Mark 3D	1970-71	VHB20AD	20	V13	110	40	40	2	265M
250 Scrambler(wide)	1968-69	SS1 27D	27	M14	112	50	80	3	265
250 Scrambler(wide)	1970-73	VHB26BD	26	E17	95	45	40	2	260R
250 Desmo	1971-74	VHB29AD	29	V13	110	40	40	2	265M
239 Desmo	1974	PHF30AD	30	K3	125	65	503	2	265AB
239 Mark 3	1974	PHF30AD	30	K3	125	65	503	2	265AB
Monza Junior	1964-67	UB22BS	22	E16	98	42	60	2	260A
Piuma Standard	1961-68	T4 12D1	12	A4	58	-	-	2	1-210
Piuma Sport	1962-66	UAO15S	15	C1	68	45	65	3	260
Piuma De-Luxe	1962-67	T4 12D1	12	A4	58	-	-	2	1-210
Brisk	1961-67	T4 12D1	12	A4	58	-	-	2	1-210
Sport 48	1962-65	UAO15S	15	C1	68	-	45	3	260
180 Standard	1962-63	ME15BS	15	G1	63	40	-	3	258A
Sport 80	1962-63	UA18S	18	C1	92	35	55	3	260
49SL	1964-65	UA15S	15	C1	68	45	65	3	260
100 Cadet (51mm	1964-	UA18S	18	C2	82	38	50	2	260

bore)	66								
100 Cadet (52mm bore)	1967	UBF24BS	24	E2	102	40	70	2	260A
100 Mountaineer (51mm)	1964-66	UA18S	18	C2	82	38	50	2	260
100 Mountaineer (52mm)	1967	UBF24BS	24	E2	102	40	70	2	260A
Brio 48	1963-66	SHA14 12	12	-	52	40	6493/01	-	-
Brio 50	1967-68	SHA14 12	12	-	56	40	6108/01	-	-
Brio 100	1964-68	SHB18 16	16	-	82	40	6493/01	-	-
Brio 100/25	1968	SHB18 16	16	-	88	50	6493/02	-	-
48 Cacciatore	1964-67	UA15S	15	C1	68	45	65	3	260
50SL	1966	UA18BS	18	D10	85	40	55	1	260F
50SL/1	1967-68	UAO18S	18	D10	85	40	55	1	260F
50SL/2	1968-69	UAO18S	18	D10	85	40	55	1	260F
Rolly 50	1968	SHA14 12	12	-	52	40	6493/01	1	-
50 Scrambler	1969-70	UA18BS	18	C8	85	40	50	3	260F
100 Scrambler	1969-70	UBF24BS	24	E2	102	40	70	2	260A
125 Cadet/4	1967	ME18BS	18	G3	85	38	50	2	258A
125 Cadet/4 Motocross	1967	ME18BS	18	G3	85	38	50	2	258A
Sebring(narrow case)	1965-67	UBF24BS	24	E16	108	40	70	2	260A
Sebring(wide case)	1968	UBF24BS	24	E16	108	40	70	2	260A
350 Scrambler	1968-69	SS1 29D	29	M14	125	50	100	2	265
350 Scrambler	1970-74	VHB29AD	29	V13	110	40	40	2	265M
350 Mark 3	1968-69	SS1 29D	29	M14	112	45	60	2	260
350 Mark 3	1970-74	VHB29AD	29	V13	115	40	40	2	265M
350 Mark 3D	1968-	SS1 29D	29	M14	115	45	60	2	260

	69								
350 Mark 3D	1970-71	VHB29AD	29	V13	120	40	40	2	265M
350 Desmo	1971-74	VHB29AD	29	V13	118	40	40	2	265M
450 Scrambler	1969-74	VHB29AD	29	V17	130	50	60	2	265T
450 Mark 3	1969-74	VHB29AD	29	V7	135	50	60	2	260T
450 Mark 3D	1969-71	VHB29AD	29	V8	135	50	60	2	260T
450 Desmo	1971-74	VHB29AD	29	V8	135	50	60	2	260T
450R/T (open pipe)	1971-72	VHB29AD	29	V7	140	50	60	2	265T
450T/S	1971-73	VHB29AD	29	V7	135	50	60	2	265T
450 Mark 3 Tourer	1970-72	VHB29AD	29	V7	130	50	60	2	265T
Regularita	1975-76	PHB30BS	30	K3	125	65	50/3	2	265AB
Six Days	1977	PHBE32GS	32	K1	140	55	40	2	265AR
125 Scrambler	1971	375/20 amal	20	A1	95	12	373/3	1	105/DA

BOLOGNA FACTORY PRODUCTION ROAD RACERS

Model	Year	Dell'Orto type	Size	Needle	Main	Pilot	Slide	Needle pos.	Needle jet
98 Competizione	1955	SS1 20C	20	R4	88	50	70	3	260
125 Gran Sport	1956	SS1 20C	20	R4	80	45	70	3	260
175 Gran Sport	1957	SS1 22.5C	22.5	R4	98	50	70	3	260
175 Formula 3	1959	SS1 27A	27	M14	108	50	80	3	260
220 Grand Prix	1960	SS1 29A	29	M14	115	50	80	3	260
250 Formula 3 (Manxman)	1961	SS1 29A	29	M14	118	50	100	3	260
250 Mach 1/s	1965	SS1 30A	30	M14	132	50	60	2	260