

# 10 = Transmission

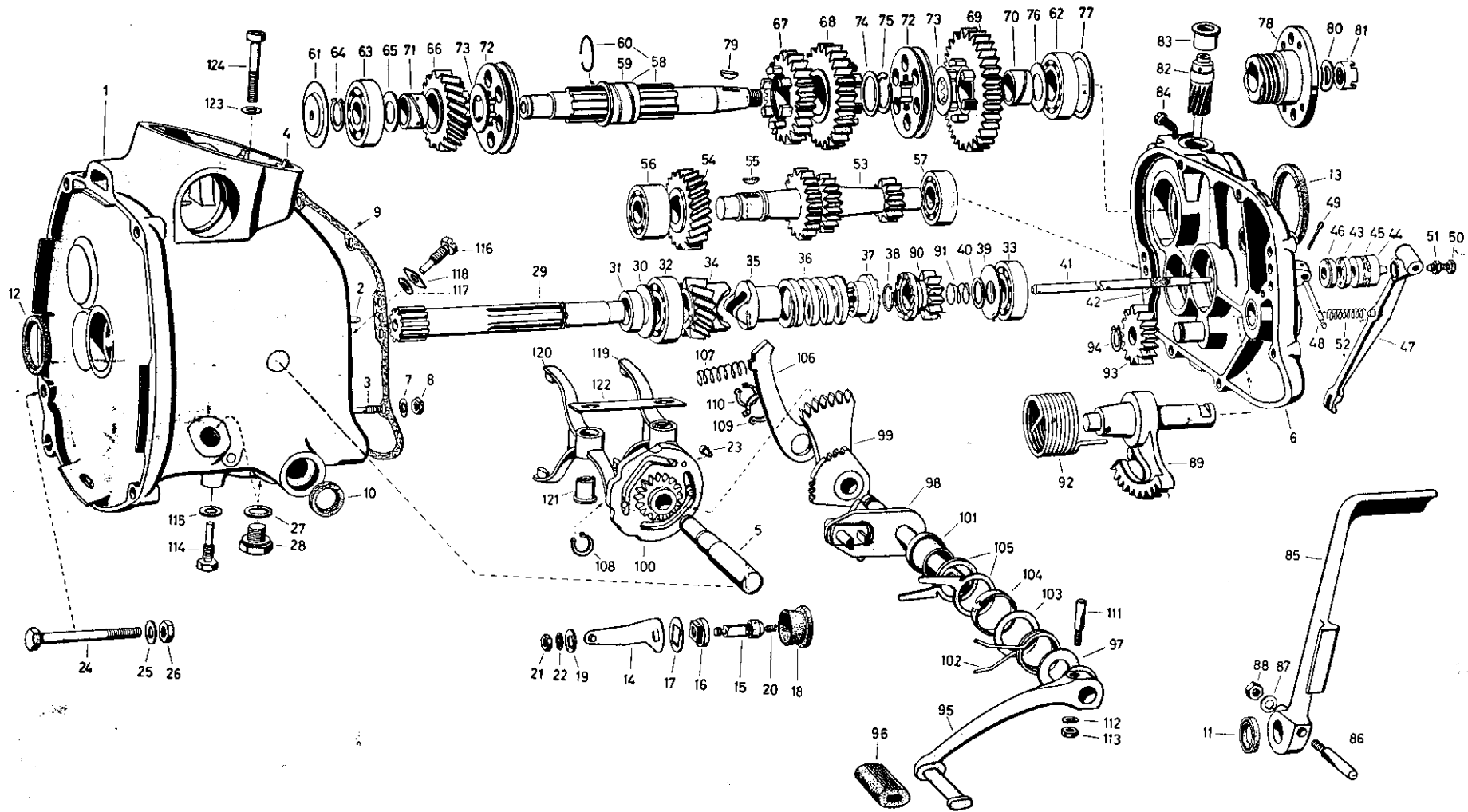
Table 4

A. R. C. W.  
Transmission

# 10 = Transmission

R 50 · R 50 S · R 60 · R 69 S

Table 4



Ordering No.	Call-out No.	Description of Part	Qty.				
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S
<b>Transmission Housing</b>							
10 06 029	1	Transmission housing with .....	1	1	1	1	1
10 12 100	2	Locating pin .....	2	2	2	2	2
99 03 214	3	Stud M 6×25 Sn 4—5 cad. (E) .....	7	7	7	7	7
99 41 365	4	Locating pin 4×6 for air filter .....	1	1	—	1	—
10 06 142	5	Axle for cam plate .....	1	1	1	1	1
10 12 031	6	Cover for transmission housing .....	1	1	1	1	1
99 31 043	7	Flat washer 6.4 cad. ....	7	7	7	7	7
99 22 053	8	Hex. nut M 6—6 S cad. ....	7	7	7	7	7
10 06 280	9	Gasket between transmission housing and cover .....	1	1	1	1	1
10 06 120	10	Seal for shaft of gearshift foot lever .....	1	1	1	1	1
10 06 132	11	Seal for kickstarter shaft .....	1	1	1	1	1
30 38 510	12	Seal for drive shaft, front .....	1	1	1	1	1
10 06 178	13	Seal for drive shaft, rear .....	1	1	1	1	1
<b>Parts for electrical neutral indication</b>							
10 06 152	—	Electrical neutral indication, complete ....	1	1	1	1	1
10 06 154	14	Contact spring .....	1	1	1	1	1
10 06 158	15	Contact shaft .....	1	1	1	1	1
10 06 162	16	Insulating bushing .....	1	1	1	1	1
10 06 166	17	Insulating washer .....	1	1	1	1	1
10 06 174	18	Rubber plug .....	1	1	1	1	1
10 06 170	19	Flat washer .....	1	1	1	1	1
99 05 660	20	Set screw M 4×6×3—5 S .....	1	1	1	1	1
99 21 055	21	Hex. nut BM 6—6 S .....	1	1	1	1	1
99 36 135	22	Star washer J 6.4 .....	1	1	1	1	1
10 66 174	23	Contact rivet .....	1	1	1	1	1
<b>Transmission attachment on engine</b>							
99 12 551	24	Hex.-head screw M 8×75 G cad. ....	1	1	1	1	1
99 31 065	25	Flat washer .....	4	4	4	4	4
99 22 081	26	Hex. nut M 8—6 S cad. ....	3	3	3	3	3

Ordering No.	Call-out No.	Description of Part	Qty.					
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S	
		Oil Filler and Oil Drain Plugs on transmission						
99 63 242	27	Gasket C 14×20 steel-asbestos .....	2	2	2	2	2	
00 07 104	28	Oil plug for intake and drain .....	2	2	1	1	1	
00 07 106	28	Oil plug, 0.1 mm. oversize thread .....	as req.	as req.	as req.	as req.	as req.	
00 07 108	28	Oil plug M 16×1.5 (Replacement for Part No. 00 07 106, when thread is damaged ....	as req.	as req.	as req.	as req.	as req.	
00 07 161	28	Magnetic oil drain plug .....	—	—	1	—	1	
00 07 160	28	Magnetic oil drain plug, 0.1 mm. oversize thread .....	—	—	1	—	1	
00 07 162	28	Magnetic oil drain plug M 16×1.5 (Replace- ment for Part No. 00 07 160, when thread is damaged) .....	—	—	1	—	1	
99 63 259	—	Gasket C 16×20 steel-asbestos (for oil plugs Part No. 00 07 108 and No. 00 07 162) .....	as req.	as req.	as req.	as req.	as req.	
		<b>Primary Shaft</b>						
10 20 005	29	Primary shaft .....	1	1	1	1	1	
10 20 136	30	Flat washer for primary shaft front .....	1	1	1	1	1	
10 20 140	31	Bushing for primary shaft, front .....	1	1	1	1	1	
99 81 219	32	Ball bearing 6204 C 3, front .....	1	1	1	1	1	
99 81 408	33	Ball bearing 6302 C 3, rear .....	1	1	1	1	1	
10 20 245	34	Drive gear .....	1	1	1	1	1	
10 80 154	35	Coupling for drive gear .....	1	1	1	1	1	
10 20 152	36	Spring for damper .....	1	1	1	1	1	
10 20 160	37	Ratchet for kickstarter .....	1	1	1	1	1	
10 20 148	38	Snap ring for kickstarter ratchet .....	1	1	1	1	1	
10 20 210	39	Spacer for primary shaft, rear (thickness as required) .....	1	1	1	1	1	
10 20 164	40	Thrust washer for primary shaft, rear .....	1	1	1	1	1	
		<b>Clutch Operation</b>						
10 80 176	41	Thrust rod with felt ring and end piece ....	1	1	1	1	1	
10 20 132	42	Felt ring .....	1	1	1	1	1	

10 = Transmission Clutch Operation—Intermediary Shaft—Output Shaft Table 4

Ordering No.	Call-out No.	Description of Part	Qty.				
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S
10 20 104	43	Ball cage with 7 balls .....	1	1	1	1	1
10 80 150	44	Thrust piece .....	1	1	1	1	1
10 20 108	45	Seal ring for thrust piece .....	1	1	1	1	1
10 80 134	46	Thrust plate .....	1	1	1	1	1
10 80 166	47	Clutch lever .....	1	1	1	1	1
10 20 112	48	Pin for clutch .....	1	1	1	1	1
99 45 180	49	Cotter pin 3×28 cad. ....	1	1	1	1	1
10 20 116	50	Adjusting screw .....	1	1	1	1	1
99 21 056	51	Hex. nut BM 6—5 S cad. ....	1	1	1	1	1
10 80 122	52	Spring .....	1	1	1	1	1
<b>Intermediary Shaft</b>							
10 40 027	53	Intermediary shaft .....	1	—	—	—	—
10 40 028	53	Intermediary shaft .....	—	1	1	1	1
10 40 108	54	Spur gear for intermediary shaft, front ....	1	1	1	1	1
99 51 480	55	Woodruff key 5×6.5 for intermediary shaft, front .....	1	1	1	1	1
99 82 410	56	Taper bearing 3203 for intermediary shaft, front .....	1	1	1	1	1
99 81 214	57	Ball bearing 6203 C 3 .....	1	1	1	1	1
<b>Output Shaft</b>							
10 30 027	58	Output shaft with bushing and snap ring ..	1	1	1	1	1
10 30 262	59	Bushing for second and third .....	1	1	1	1	1
10 30 100	60	Snap ring .....	1	1	1	1	1
10 06 242	61	Oil retainer plate with jet to ball bearing, front .....	1	1	1	1	1
99 81 219	62	Ball bearing 6204 C 3 for output shaft, rear	1	1	1	1	1
99 81 416	63	Ball bearing 6303 C 3 for output shaft, front	1	1	1	1	1
99 34 090	64	Circlip 16×1 .....	1	1	1	1	1
10 20 102	65	Spacer for fourth speed gear .....	1	1	1	1	1
10 30 151	66	Spur gear for fourth .....	1	1	1	1	1
10 30 148	67	Spur gear for third <i>wide ratio</i> .....	1	—	—	—	—
10 30 149	67	Spur gear for third .....	—	1	1	1	1

Ordering No.	Call-out No.	Description of Part	Qty.				
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S
10 30 144	68	Spur gear for second <i>Wide ratio</i>	1	—	—	—	—
10 30 145	68	Spur gear for second .....	—	1	1	1	1
10 30 243	69	Spur gear for first speed .....	1	—	—	—	—
10 30 244	69	Spur gear for first speed .....	—	1	1	1	1
10 30 259	70	Bushing for first speed gear .....	1	1	1	1	1
10 30 266	71	Bushing for fourth speed gear .....	1	1	1	1	1
10 30 140	72	Coupling disc .....	2	2	2	2	2
10 40 104	73	Spacer for first and fourth speed gear ....	2	2	2	2	2
10 30 104	74	Spacer for second speed gear .....	1	1	1	1	1
10 30 108	75	Snap ring for second speed gear .....	1	1	1	1	1
10 30 112	76	Spacer for first speed gear .....	1	1	1	1	1
10 30 116	77	Shim for output shaft, rear (thickness as required) .....	1	1	1	1	1
10 30 296	78	Coupling flange on output shaft, rear .....	1	1	1	1	1
99 51 461	79	Woodruff key 4×6.5 .....	1	1	1	1	1
10 30 168	80	Spring washer .....	1	1	1	1	1
10 30 120	81	Castellated nut (round) .....	1	1	1	1	1
<b>Speedometer Take-Off</b>							
10 30 164	82	Worm gear .....	1	1	1	1	1
10 30 176	83	Bushing .....	1	1	1	1	1
10 30 174	84	Hex.-head screw .....	1	1	1	1	1
<b>Kickstarter</b>							
10 56 120	85	Kickstarter crank .....	1	1	1	1	1
10 56 124	86	Locking screw .....	1	1	1	1	1
99 31 065	87	Flat washer 8.4 cad. ....	1	1	1	1	1
99 22 081	88	Hex. nut M 8—6 S cad. ....	1	1	1	1	1
10 56 274	89	Kickstarter segment gear, with spring .....	1	1	1	1	1
10 56 104	90	Gear for kickstarter on primary shaft .....	1	1	1	1	1
10 56 116	91	Spring for kickstarter gear .....	1	1	1	1	1
10 56 112	92	Kickstarter return spring .....	1	1	1	1	1
10 56 108	93	Idler gear .....	1	1	1	1	1
99 34 080	94	Circlip 15×1 for idler gear .....	1	1	1	1	1

Ordering No.	Call-out No.	Description of Part	Qty.				
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S
<b>Gearshift Mechanism</b>							
10 66 244	95	Foot shift lever .....	1	1	1	1	1
10 66 178	96	Rubber pad for foot shift lever .....	1	1	1	1	1
10 66 116	97	Spacer (thickness as required) between transmission housing and foot shift lever ..	1	1	1	1	1
10 66 268	98	Selector lever, with foot shift spindle, stop pins, spacer bushing and swivel piece ....	1	1	1	1	1
10 66 274	99	Sector gear .....	1	1	1	1	1
10 66 248	100	Cam plate with gear .....	1	1	1	1	1
10 36 138	101	Spacer bushing .....	1	1	1	1	1
10 66 150	102	Return spring .....	1	1	1	1	1
10 66 134	103	Washer .....	1	1	1	1	1
10 66 146	104	Steel spring ring .....	1	1	1	1	1
10 66 142	105	Pawl .....	2	2	2	2	2
10 66 256	106	Ratchet plate .....	1	1	1	1	1
10 66 130	107	Spring for ratchet plate .....	1	1	1	1	1
99 34 060	108	Circlip 12×1 for came plate .....	1	1	1	1	1
99 34 120	109	Circlip 18×1.2, for sector gear .....	1	1	1	1	1
99 34 071	110	Circlip 14×1 for foot shift spindle, rear end	1	1	1	1	1
Attachment of foot shift lever on foot shift spindle (selector lever)							
10 66 102	111	Locking screw .....	1	1	1	1	1
99 31 043	112	Flat washer .....	1	1	1	1	1
99 22 053	113	Hex. nut M 6—6 S cad. ....	1	1	1	1	1
Limit screws on transmission housing							
10 66 278	114	Limit screw, below .....	1	1	1	1	1
10 66 286	115	Spacer (thickness as required) .....	1	1	1	1	1
10 66 282	116	Limit screw, above .....	1	1	1	1	1
10 66 154	117	Spacer (thickness as required) .....	1	1	1	1	1
10 66 290	118	Locking plate .....	1	1	1	1	1

Ordering No.	Call-out No.	Description of Part	Qty.					
			R 50 60	R 50/2 60/2	R 50 S	R 69	R 69 S	
		Shifting forks on transmission housing, top						
10 66 166	119	Shifting fork for first and second .....	1	1	1	1	1	
10 66 206	120	Shifting fork for third and fourth .....	1	1	1	1	1	
10 66 162	121	Bushing for shifting fork .....	2	2	2	2	2	
10 66 170	122	Retaining plate .....	1	1	1	1	1	
10 66 186	123	Flat washer for allenhead screw .....	2	2	2	2	2	
99 19 741	124	Allenhead screw M 8×45—8 G pha.black. ...	2	2	2	2	2	

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