

HIRTH MOTOREN KG

7141 BENNINGEN/NECKAR · KREIS LUDWIGSBURG · WEST GERMANY

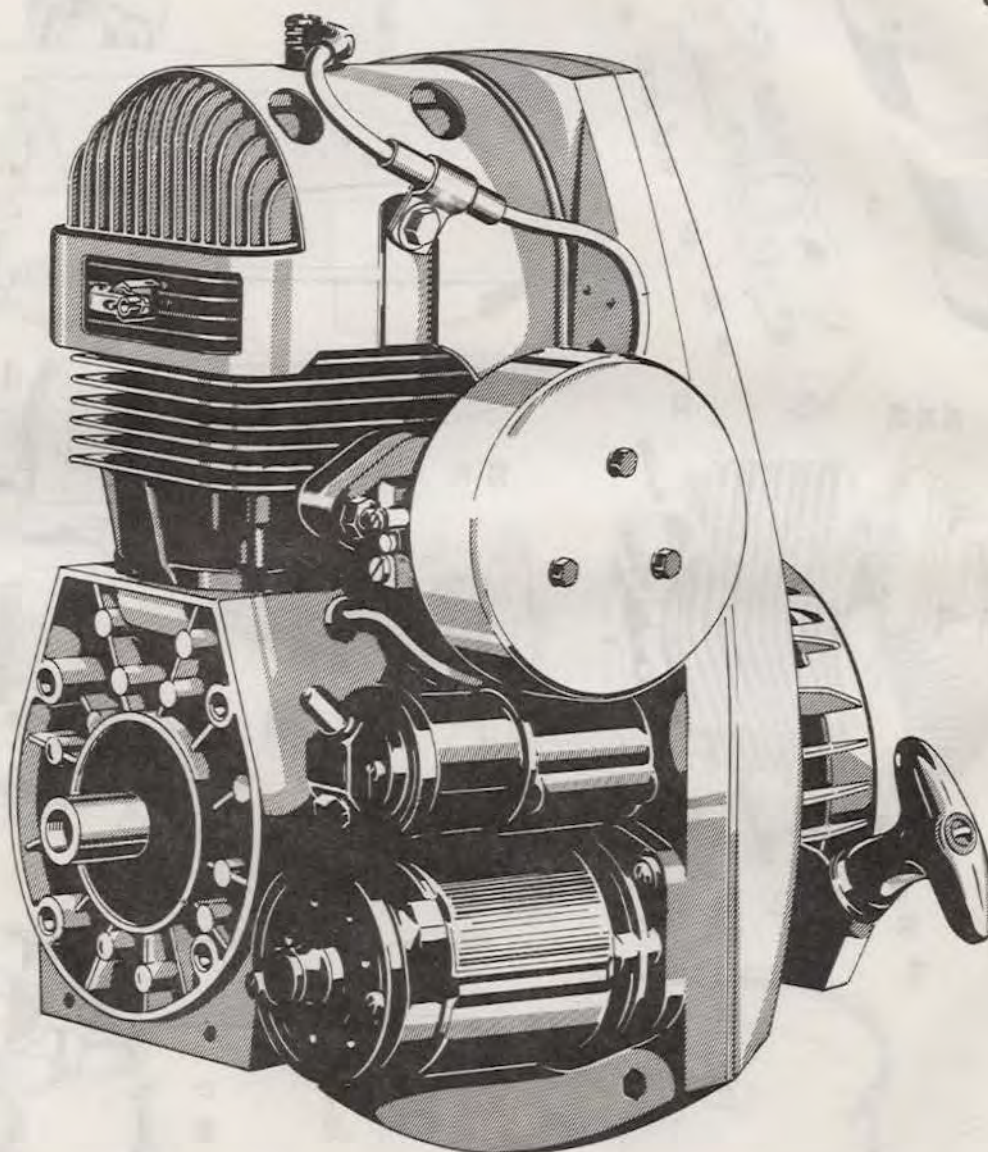


Model **193R**

HIRTH Engine

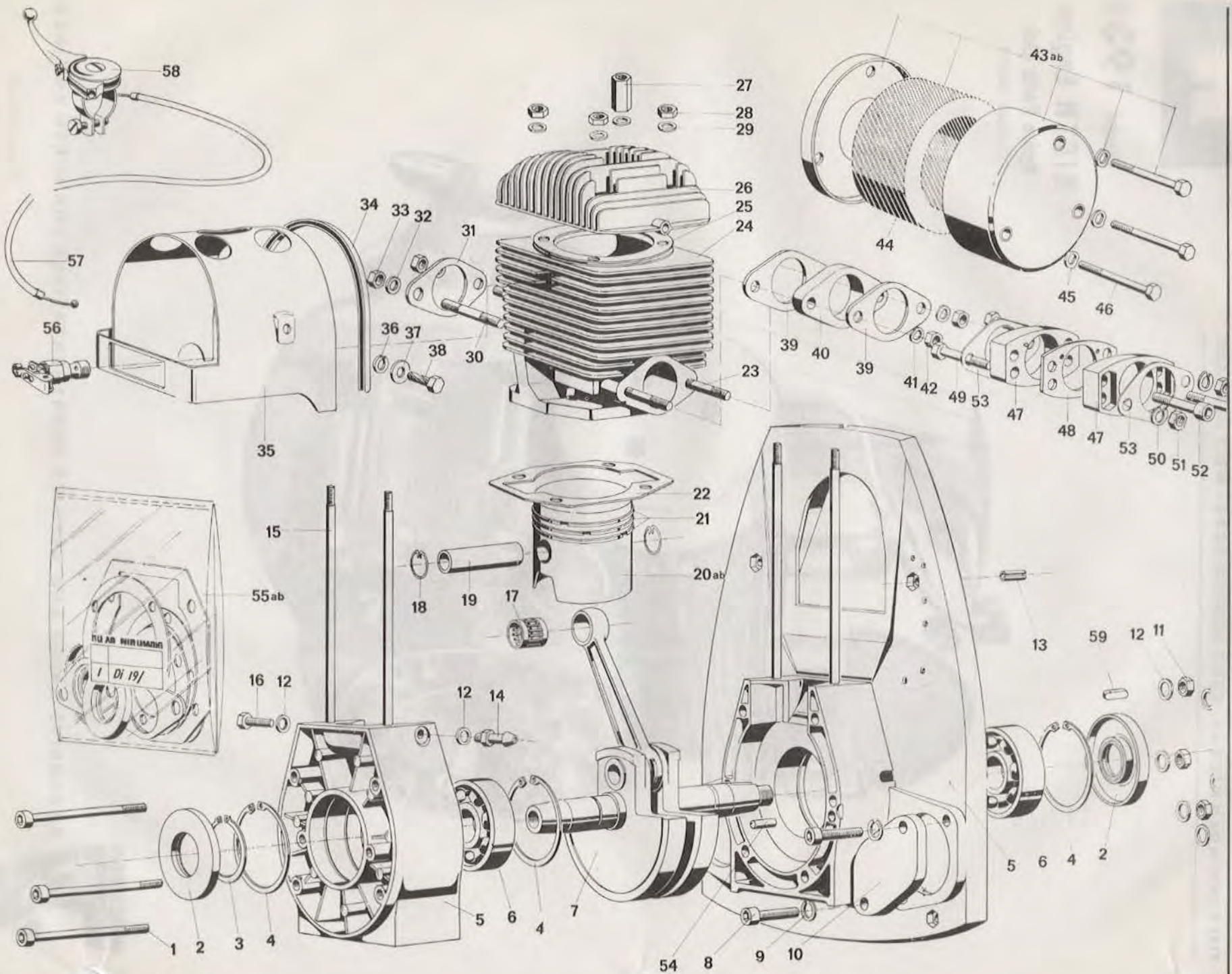
Spare Parts List

ISSUE MM-315



EXCLUSIVE SALES AND SERVICE REPRESENTATIVES FOR HIRTH ENGINES

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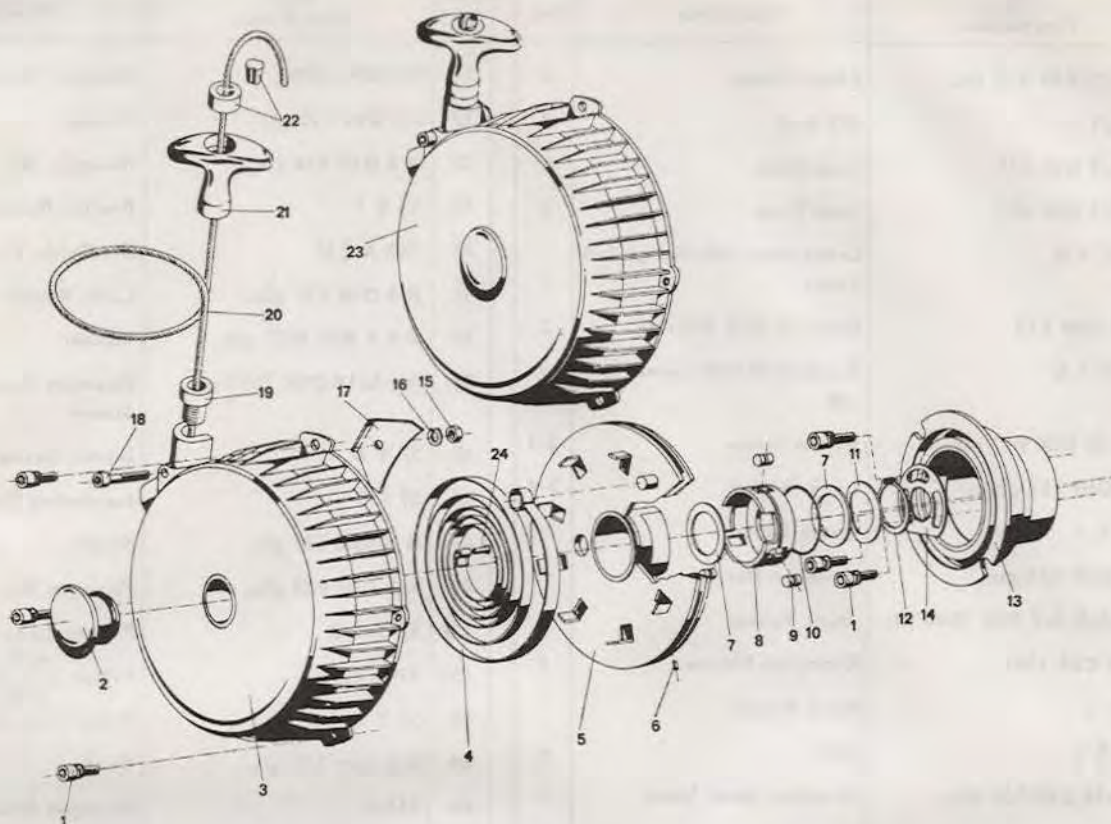


MAIN ENGINE PARTS
FOR ALL 193R MODELS

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FOR ALL 193R MODELS**

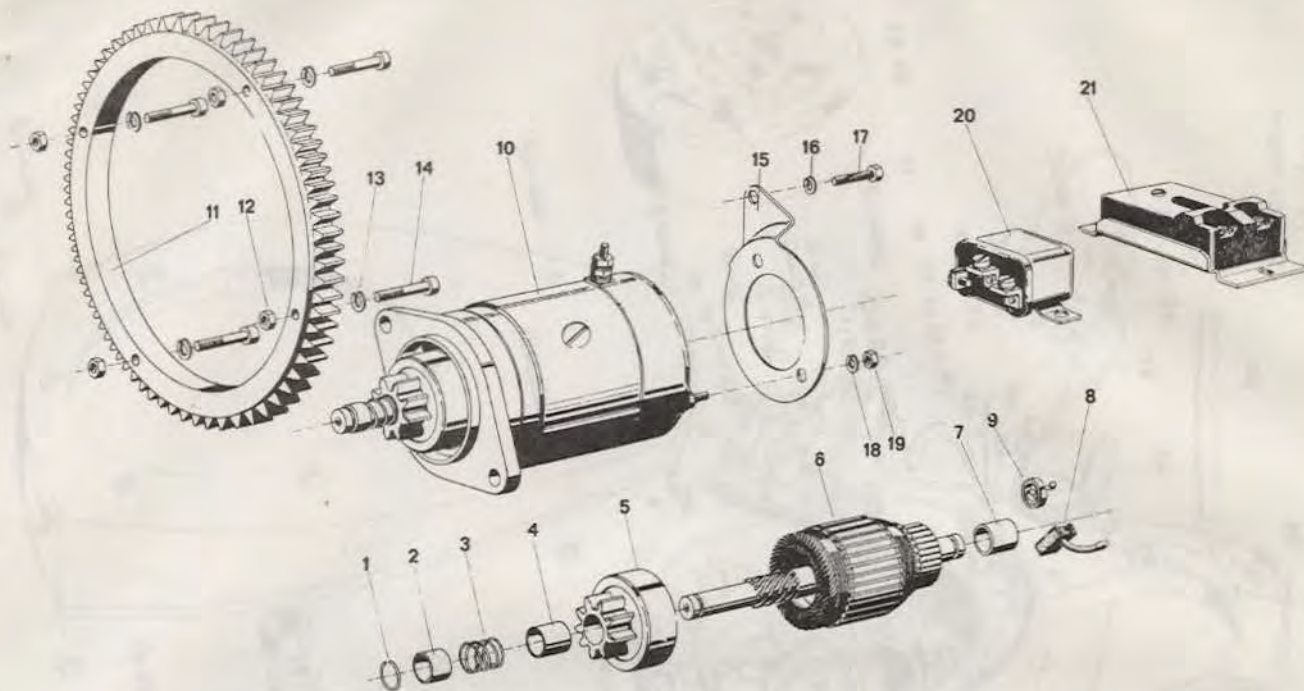
Ref. No.	Hirth Part Number	Description	Qty.	Ref. No.	Hirth Part Number	Description	Qty.
1	M 6x70 DIN 912 glz.	Ellern Screw	6	31	901.300-008	Exhaust Gasket	1
2	055.21	Oil Seal	2	32	8.4 DIN 125 glz.	Washer	2
3	30x1.5 DIN 471	Snap Ring	1	33	M 8 DIN 934 cu	Hexagon Nut	2
4	72x2.5 DIN 472	Snap Ring	3	34	13 B 1	Profile Rubber	1
5	190 C 1 U	Crankcase with flange and studs	1	35	193 A 2 U	Air Guide Plate	1
6	6306 DIN 625	Grooved Ball Bearing	2	36	B 6 DIN 127 glz.	Lock Washer	2
7	191 C 1 U	Crankshaft with connecting rod	1	37	B 6.4 DIN 9021 glz.	Washer	2
8	M 8x30 DIN 912 glz.	Ellern Screw	2-4	38	AM 6x18 DIN 7513 glz.	Hexagon Head Cutting Screw	2
9	B 8 DIN 127 glz.	Lock Washer	2-4	39	57 Y 6	Intake Gasket	2
10	195 A 1	Cover Plate	1-2	40	57 Y 7	Insulating Flange	1
11	M 6 DIN 934 glz.	Hexagon Nut	6	41	B 8 DIN 137 glz.	Washer	2
12	A 6.5x9.5x2 DIN 7603 AL	Joint Washer	8	42	M 8 DIN 934 glz.	Hexagon Nut	2
13	8x10 DIN 7346	Clamping Sleeve	4	43a	57 Y 1 U	Filter, Complete with element	1
14	50 K 4	Hose Nipple	1	43b	57 Y 10 U	Filter, Complete without element	1
15	190 B 5	Stud	4	44	57 Y 5	Filter Element	1
16	M 6x10 DIN 933 glz.	Hexagon Head Screw	1	45	B 6 DIN 137 glz.	Washer	3
17	046.6	Needle Cage	1	46	051.4	Hexagon Screw	3
18	18 DIN 73123	Piston Pin Retaining Ring	2	47-53	197 A 1 U	Insulating Flange, Compl.	1
19	014.35/4	Piston Pin - for 74 mm and 74.5 mm piston	1	47	197 A 2	Insulating Flange	2
	014.26/4	Piston Pin - for 75 mm piston	1	48	197 A 3	Intermediate Plate	1
20	014.35	Piston with pin and 2 rings, 74 mm	1	49	M 8x40 DIN 931	Hexagon Screw	2
20a	014.35/10	Oversize Piston with pin and 2 rings, 74.5 mm	1	50	B 8 DIN 127	Lock Washer	2
20b	014.32	Oversize Piston with pin and 2 rings, 75 mm	1	51	M 8 DIN 934	Hexagon Nut	2
21	014.35/1	Compression Ring, 74 mm	2	52	M 8x35 DIN 6912	Ellern Screw	2
	014.35/11	Compression Ring, 74.5 mm	2	53	197 A 4	Gasket	1
	014.26/1	Compression Ring, 75 mm	2	54	6 m 6x12 DIN 7	Fixing Pin	2
22	50 A 5	Cylinder base gasket	1	55a	Di 19/1	Gasket Set w/ Ref. No. 39	1
23	M 8x33 DIN 939 glz.	Stud	2	55b	Di 19/2	Gasket Set w/ Ref. No. 53	1
24	192 J 3 U	Cylinder Block, without studs	1	56	058.2	Decompression valve	1
25	192 K 2	Cylinder Head Gasket	1	57	17 M 1 U/450	Bowden Cable	1
26	192 A 1	Cylinder Head	1	58	049.11	Clamp-mounted Lever	1
27	60 C 5	Hexagon Nut	4	59	A 6x6x14 DIN 6885	Fitting Key	1
28	M 8 DIN 934	Hexagon Nut Optional	4				
29	190 A 6	Washer	4				
30	M 8x20 DIN 939 glz.	Stud	2				

RECOIL STARTER ASSEMBLY FOR ALL 193R MODELS



Ref. No.	Hirth Part Number	Description	Qty.	Ref. No.	Hirth Part Number	Description	Qty.
1	M 6x18 Z 4-1 DIN 912 glz.	Ellern Screw	8	18	M 6x30 DIN 912 glz.	Ellern Screw	1
2	15 B 20	Plug	1	19	75 B 23	Rope Guide Bushing	1
3	165 A 24 U	Starter Housing	1	20	165 A 16	Wire Rope 2475 mm long	1
4	165 A 20	Rewind Starter Spring	1	21	75 B 36	Handle	1
5	165 A 8 U	Driver Pulley	1	22	75 B 34 75 B 35	Clamp Ring Clamp Piece both parts	1 1
6	3x8 DIN 1473	Pin	1	23	165 D 2 U	Recoil Starter complete with wire rope 20	1
7	15 A 17	Washer	1-2				
8	15 B 31	Roller Cage	1				
9	75 B 16	Clamp Roller	3				
10	75 B 17	Roller Retaining Spring	1				
11	15 A 19	Lock Washer	1-2				
12	32x1.5 DIN 471	Snap Ring	1				
13	165 A 1 U	Recoil Starter Drive Hub	1				
14	165 A 3	Security Plate	1				
15	M 6 DIN 934 glz.	Hexagon Nut	1				
16	B 6 DIN 127 glz.	Lock Washer	1				
17	165 A 18	Cover Plate	1				

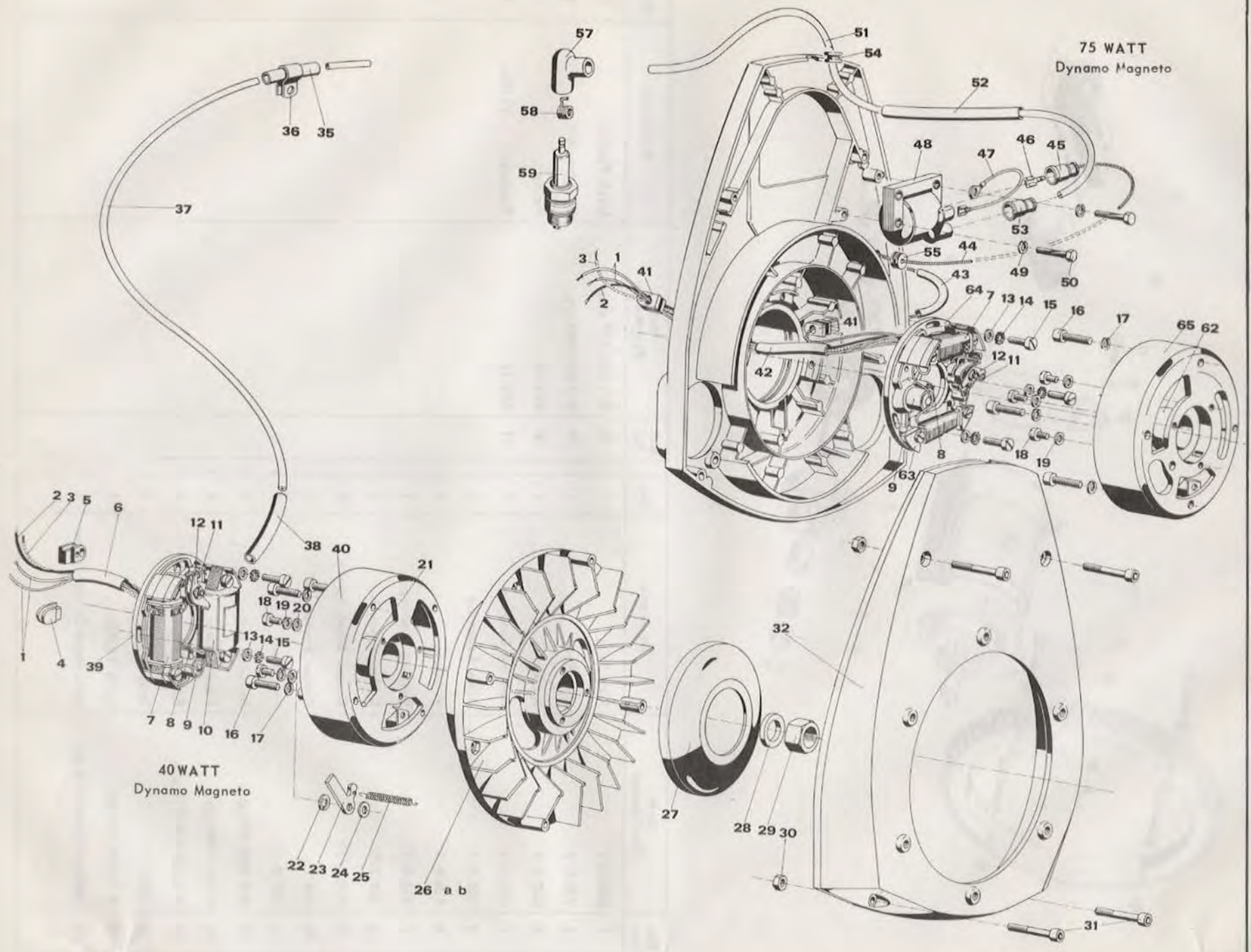
STARTING MOTOR MOUNTING FOR ALL 193R MODELS



Ref. No.	Hirth Part Number	Description	Qty.	Ref. No.	Hirth Part Number	Description	Qty.
1	028.9/7	Snap Ring	1	18	B 5 DIN 127 glz.	Lock Washer	2
2	028.9/6	Stop Ring	1	19	M 5 DIN 934 glz.	Hexagon Nut	2
3	028.9/5	Spring	1	20	032.15	Relay	1
4	028.9/4	Bearing Bushing	1	21	032.14	Resister 35 Ohm	1
5	028.9/3	Drive Assembly	1				
6	028.9/2	Armature	1				
7	028.9/1	Bearing Bushing	1				
8	028.9/9	Carbon Brush Set	1				
9	028.3/10	Carbon Brush Spring	1				
10	028.9	Pinion Starter	1				
11	163 B 3	Ring Gear	1				
12	M 6 DIN 934 glz.	Hexagon Nut	4				
13	6 DIN 7980 glz.	Lock Washer	4				
14	M 6x20 DIN 912 glz.	Ellern Screw	4				
15	195 A 2	Support Plate	1				
16	B 6 DIN 127 glz.	Lock Washer	1				
17	AM 6x18 DIN 7513 glz.	Hex. Head Cutting Screw	1				

Figure 27

IGNITION PARTS
FOR ALL 193R MODELS



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IGNITION PARTS
FOR ALL 193R MODELS

Ref. No.	Hirth Part Number	Description	Qty.	Ref. No.	Hirth Part Number	Description	Qty.
1	021.4/11	Lighting Cable	2	39-40	021.14	Dynamo Magneto Ignition with Advance Timing - 40 Watt	1
2	020.4/12	Short-circuit Cable	1	41	194 A 1	Rubber Bushing	2
3	021.5/13	Ground Cable	1	42	B 6x0.6 DIN 40621/70	Insulating Hose	1
4	164 A 3	Plug	1	43	B 3x0.4 DIN 40621/110	Insulating Hose	1
5	164 A 1	Rubber Bushing	1	44	021.16/10	Generator Cable, blue	1
6	B 6x0.6 DIN 40621/70	Insulating Hose	1	45	034.14	Protecting Sleeve	1
7	021.5/4	Lighting Coil	1	46	6.3x1 DIN 46247	Plug	1
8	020.4/8	Lubrication Wick	1	47	14 B 9 U	Ground Cable, Complete	1
9	021.3/7	Condenser	1	48	020.13/3	Ignition Coil	1
10	021.14/3	Ignition Coil	1	49	B 5 DIN 127 glz.	Lock Washer	2
11	021.14/6	Contact Plate	1	50	AM 5x25 DIN 7513 glz.	Cutting Screw, Hex. Head	2
12	021.14/5	Rocker Arm	1	51	026.5/420	Ignition Cable	1
13	5.3 DIN 433	Washer	3	52	B 8x0.7 DIN 40621/200	Insulating Hose	1
14	A 5.1 DIN 6797	Toothed Washer	3	53	020.13/15	Protecting Sleeve	1
15	AM 5x15 DIN 84	Fillister Head Screw	3	54	14 C 1	Rubber Bushing	1
16	M 6x15 DIN 912	Ellern Screw	4	55	14 C 3	Rubber Bushing	1
17	B 6 DIN 127	Lock Washer	4	57	024.11	Spark Plug Hood	1
18	M 4x5 DIN 84	Fillister Head Screw	3	58	024.12	Spring	1
19	B 4 DIN 127	Lock Washer	3	59	023.12	Spark Plug	1
20	4.3 DIN 125	Washer	3	62	021.19/9	Advancing Cam	1
21	021.14/9	Advancing Cam	1	63	021.19/3	Generator Coil	1
22	5 DIN 6799	Security Ring	1	64	021.19/1	Armature Plate	1
23	020.12/19	Timing Lever	1	65	021.19/2	Magneto Ring	1
24	020.12/20	Washer	1	64-65	021.19	Dynamo Magneto Ignition with Advance Timing - 75 Watt	1
25	020.12/18	Spring	1				
26a	193 D 1 U	Flywheel - 75 Watt	1				
26b	193 F 1 U	Flywheel - 40 Watt	1				
27	193 D 3	Cover Plate	1				
28	161 A 6	Washer	1				
29	M 16x1.5 DIN 934	Hexagon Nut	1				
30	M 6 DIN 934 glz.	Hexagon Nut	4				
31	M 6x35 DIN 912 glz.	Ellern Screw	4				
32	193 D 2	Fan Housing	1				
35	B 8x0.7 DIN 40621/50	Hose	1				
36	063.7/1	Clamp for Ignition Cable	1				
37	026.5/550	Ignition Cable	1				
38	B 8x0.7 DIN 40621/100	Insulating Hose	1				
39	021.14/1	Armature Plate	1				
40	021.14/2	Magneto Ring, Complete	1				