

Carbon brush

*These brushes make commutator smooth to reduce sparks, letting the brake system work well. Let the motor run for 10 minutes at half of the rated voltage.

** Cut-off type carbon brush

*** for North America



Marking No. on carbon brush	Country of origin marking : yes				Country of origin marking : non				Models	*Commutator polishing brush
	Carbon brush for Repair 110-127V Models		Carbon brush for Repair 220-240V Models		Carbon brush for Repair 110-127V Models		Carbon brush for Repair 220-240V Models			
	Part No.	Marking	Part No.	Marking	Part No.	Marking	Part No.	Marking		
50 / 51	194972-0	76	194963-1	51	191947-0	76	181021-2	51	N1900B 1902 N1923B 3700B N3701 4300BA 4300BV 6016 6300-4	1R095
55	194971-2	75	194964-9	55	191956-9	75	181026-2	55	6300T 6801N	
56 / 64	194971-2	75	194968-1	64	191956-9	75	191627-8	64	906 3706 4326 4326M 4327 4327M 4328 4329 6010BVR 6411 6412 6413 6510LVR 6806B 9035N B03700 B04510 B04540 DP4700 JV0600 MUH355	
65	194972-0	76	194969-9	65	191947-0	76	191628-6	65	6905B	1R095
66 / 84	194971-2	75	194968-1	64	191956-9	75	191627-8	64	4326 4327 4328 4329 B03710 B03711 B04540 B05040 B05041 DD2020 GD0603 GV5010 GV6010 HP1630 HP1631 JV0600 LM2301 UH3502 UH4652	
70	194970-4	70	194970-4	70	191914-5	70	191914-5	70	6501X	
72	194972-0	76	194969-9	65	191947-0	76	191628-6	65	3705 6905B 906H	1R095
85	194971-2	75	194973-8	85	191956-9	75	191998-3	85	HP1630 HP1631	
100	194982-7	124	194974-6	100	191945-4	124	181030-1	100	1001 1600 5800NB 6906 9005B 9005BZ 9045B 9045N 9201 9207SPB 9215SB 9218PB 9218PBL 9218SB 9741 9924DB DA4511 DA6301	1R064
**105	194975-4	**105	194975-4	**105	181038-5	**105	181038-5	**105	HK1810 HM0810 HM0810B HM0810T	1R064
106 / 131	194977-0	107	194976-2	106	181437-1	107	181410-1	106	1911B 1912B 3606 6301 8406HK0500 HP2010N RP0900 UT1301	
113/118	194978-8	**113	194978-8	**113	191904-8	**113	191904-8	**113	HK0500	
124 / 126	194982-7	124	194974-6	100	191945-4	124	181030-1	100	5005BA 6906 DA6301	1R064
**127	194975-4	**105	194975-4	**105	181038-5	**105	181038-5	**105	HK1810	1R064
132	194984-3	132	194984-3	132	191904-8	132	191904-8	132	KP0810 KP0810C UC3041A UC3541A UC4041A	
153	194986-9	154	194985-1	153	181047-4	154	181044-0	153	1002BA 1804N 1805N 1806B 2012NB 2416S 2703 2704 2704N 3501N 3600H 3601B 3612BR 4107R 4107RH 4157KB 5007F 5007MG 5007MGA 5007N 5007NB 5007NF 5008MG 5008MGA 5012B 5016B 5057KB 5103N 5201N 5377MG 5402 5477NB 5902B 6910 7104L 9401 GA7911 HS0600 HS6100 HS7100 LF1000 LH1040 LH1040F LS1016 LS1016L LS1019 LS1019L LS1030N LS1040 LS1040F LS1045 LS1216 LS1216F LS1216FL LS1216L LS1219 LS1219L LS1221 LS1440 LS1510 N5900B TW1000 UC3050A UC3051A UC3550A UC3551A UC4050A UC4051A UC4550A UC4551A	1R065
154	194986-9	154	194986-9	154	181047-4	154	181047-4	154	1002BA 5007FA 5402 LS1440 LS1510	1R065
**155	194987-7	**155	194987-7	**155	181048-2	**155	181048-2	**155	HM1201 HM1211B HM1400 HR3811HR5000	1R065
165 / 166	195057-5	166	195056-7	165	191968-2	166	191936-5	165	410	1R294
172/173	195101-8	**172	195489-6	**173	195100-0	**172	195483-8	**173	VC1310L VC2201M VC2211M VC2510L VC3210L VC3211H VC3211M	
174	194986-9	154	196018-8	174	181047-4	154	196017-0	174	HS6100 HS6101 HS7100 HS7101	1R065
**175	195845-0	**175	195845-0	**175	195844-2	**175	195844-2	**175	HM1101C HM1111C HM1203C HM1205C HM1213C HM1214C HM1307C HM1307CB HM1317C HM1317CB HR4501C HR4510C HR4511C HR5202CHR5212C	
203	194991-6	203	194991-6	203	191953-5	203	191953-5	203	2414DB 2414NB 3612 3612C 5143R 5104 5104S 5143R 5402NA 5903R 9067 GA7010C GA7011C GA7012C GA7020 GA7020R GA7020S GA7021 GA7030 GA7030R GA7030S GA7031 GA7040R GA7040S GA7050 GA7050R GA9010C GA9012C GA9020 GA9020R GA9020S GA9030 GA9030R GA9030S GA9031 GA9040 GA9040R GA9040S GA9050R GA9050R GS5000 GS6000 KP312 KP312S HW1200 HW1300 LC1230 LP2521 LW1400 LW1401 PK5011C RP1800 RP1800F RP1801 RP1801F RP2300FC RP2301FC SA7000 SA7000C VR1000	1R202
**204	194992-4	**204	194992-4	**204	191957-7	**204	191957-7	**204	4112HS 4114S 9069 GA7010C GA7011C GA7012C GA7020 GA7020R GA7020S GA7021 GA7030 GA7030R GA7030S GA7031 GA7040R GA7040S GA7050 GA7050R GA9010C GA9012C GA9020 GA9020R GA9020S GA9030 GA9030R GA9030S GA9031 GA9040 GA9040R GA9040S GA9050R GA9050R GS5000 GS6000 HM1304 HM1304B HM1306 HM1500 HM1801 HM1810 PK5011C SA7000 SA7000C VR1000	1R202
210	194993-2	210	---	---	1936965	210	---	---	4112 4112H 4112HS 4114 4114S	1R202
217 / **218	197128-4	**218	197128-4	**218	197129-2	**218	197129-2	**218	GA7060 GA7060R GA7061 GA7061R GA7062 GA7062R GA7063 GA7063R GA7064 GA7064R GA9060R GA9061R GA9061R GA9062 GA9062R GA9063 GA9063R HM1501 HM1502 HM1511 HM1512 HM1802 HM1812	1R458
250	194994-0	253	194994-0	253	194547-5	253	194547-5	253	4100NB 4101R 8406C	1R197
253 / 254	194994-0	253	194994-0	253	194547-5	253	194547-5	253	HB270 GA5020C GA5021C GA6020C GA6021C PC5000C PC5001C	
257/**258/259/260	191D84-4	**258	191D85-2	**260					GA4050 GA4050R GA4051R GA4550 GA4550R GA4551R GA4552 GA4552R GA4553R GA5050 GA5050R GA5051R GA5052 GA5052R GA5053R	
**260	191D84-4	**258	191D85-2	**260					GA4050 GA4050R GA4051R GA4550 GA4550R GA4551R GA5050 GA5050R GA5051R	
303	194996-6	303	194996-6	303	191963-2	303	191963-2	303	2107F 2107FW 4100KB 4100NH 4100NH2 4101RH 4100NH2R 4100NH2W 4130N 4131 5606B 5705R 5740NB 5806B 6305 6924N 9227C 9227CB 9237C 9237CB 9403 9404 9902 9903 9920 9921 CA5000 DA4000LR DA4031 DS4000 GA5010 GA5020 GA5021 GA6010 GA6020 GA6021 GV7000 GV7000C HS6600 HS6601 HS7000 HS7010 HS7600 HS7601 HS7610 HS7611 JN3201 JR3050 JR3050T JR3060T JR3070CT JS3201 LS0713FL LS0714 LS0714F LS0714FL LS0714L LS0715F LS0715FL LS0716FL LS0814FL PV7000C PV7001C RD1101 RF1100 RF1101 RP0910 RP1101 RP1110C SP6000 UB1101 UB1102 UB1103 UT1305 UT2204	1R203
**304	194997-4	**304	195003-8	**327	191961-6	**304	194285-9	**327	9227C HM0830	1R203
309 / **310	194999-0 1964548 ***	318	194999-0 1964548 ***	318	191978-9 196453-0 ***	318	191978-9 196453-0 ***	318	GD0800C GD0801C GD0810C GD0811C	
311	194998-2	311			191979-7	311			GA5020 GA6020	1R203
314 / **315	194999-0 1964548 ***	318	194999-0 1964548 ***	318	191978-9 196453-0 ***	318	191978-9 196453-0 ***	318	9562CH 9562CVH 9564CV 9564PC 9564PCV 9565C 9565CLR 9565CR 9565CV 9565CVL 9565CVR 9565PC 9565PCV 9566C 9566CR 9566CV 9566CVR 9566PC 9566PCV GA4040C GA4041C GA4540C GA4541C GA5040C GA5041C GA6040C PC5010C PC5010C POS000C PO6000C PW5000C PW5001C SA5040C SG1251	
320 / 321 / 322	194996-6	303	194996-6	303	191963-2	303	191963-2	303	2107F 2107FW JR3050 JR5030T JR5060T JR3051T JR3061T UB1101 UB1102 UB1103 4100NH3 HS7010	1R203

**325 / **326	195001-2	**325	195001-2	**325	194074-2	**325	194074-2	**325	9553B 9553HB 9553HN 9553NB 9554HN 9555HN 9556HB 9556HN 9556HP 9556NB 9556PB 9557HN 9557HNR 9557HP 9557NB 9557NBR 9557PB 9558HN 9558HNR 9558HP 9558NB 9558NBR 9558PB 9564P 9565HR 9565P BO6050 GA4040 GA4540 GA4540R GA4541 GA4541R GA4570 GA5040 GA5040R GA5041R GA6040 GD0602 GD0800 HR2230 HR2300 HR2320T HR2460 HR2460F HR2460FT HR2470 HR2470F HR2470FT HR2470T HR2600 HR2601 HR2630 HR2630T HR2631F HR2631FT HR2650 HR2651 HR2651T HR2652 HR2653 HR2653T HR2800 HR2810 HR2810T HR2811F HR2811FT	
334 / **335	194999-0 1964548 : ***	318	194999-0 1964548 : ***	318	191978-9 196453-0 ***	318	191978-9 196453-0 ***	318	9564PC 9564PCV GA4540C GA4541C PO5000C PO6000C SA5040C	
338 / **339	194999-0 1964548 ***	318	194999-0 1964548 ***	318	191978-9 196453-0 ***	318	191978-9 196453-0 ***	318	9564CV 9564PCV 9565CV 9565PCV 9566CV 9566PCV 9566PCV GA4040C GA4041C GA4540C GA4541C GA4542C GA4543C GA5040C GA5041C GA5042C GA5043C GA6040C GA6042C PC5010C SA5040C	
**350	194160-9	**350	194160-9	**350	194160-9	**350	194160-9	**350	HK1820 HK1820L HM0870C HM0871C HR3001C HR3011F HR3012F HR3200C HR3210C HR3210FT HR3530 HR3540C HR3541FC HR4002 HR4003C HR4010C HR4013C HR4030C HR4041C	1R368
**351	197244-2	**351	197244-2	**351	197245-0	**351	197245-0	**351	HR3001C HR3011F HR3012F HR4003C HR4013C HR4030C	1R368
401	195005-4	401	195012-7	415	191910-3	401	191950-1	415	6302H 6303H 6904V 6904VH 6905H NHP1300S	
407	195007-0	407	195015-1	419	191927-6	407	191962-4	419	4304 4350CT 4350FCT 4350T 4351FCT 6407 6408 6807 6821 6823 BO4555 BO4556 BO4557 BO4558 BO4565 BO4566 BO4900 BO4900V BO4901 BO6030 DA3010 DA3010F DA3011 DA3011F DP3003 DP4000 DP4001 DP4002 DP4003 FS2200 FS2300 FS2500 FS2700 FS2701 FS4000 FS4200 FS4200A FS4300 FS6200 FS6300 HP1230 HP1640 HP1640F HP1641 HP2032 HP2050 HP2050F HP2051 HP2051F HP2070 HP2070F HP2071 HP2071F HR1830 HR2020 HR2022 HR2475 HR2641 HR2661 HR2663 JR1000FT JS1300 JS8000 LM2351 LM2851	1R226
411	195008-8	408	195010-1	411	191938-1	408	191940-4	411	3703 3707FC 3708FC 3708F 3709 3710 N500 6840 6841 6841R 6842 6843 6844 6922KR 6922NB 6951 6952 6953 9031 9032 N9500N 9500NB 9910 9911 DS4011 DS4012 DS5000 JN1601 LS0611 LS0717FL PC9003 RT0700C TD0101 TD0101FTW0200 TW0250 TW0350 3708F 3709 3710	1R198
415	195005-4	401	195012-7	415	191910-3	401	191950-1	415	6904V 6904VH 6905H HP1300S	
419	195007-0	407	195015-1	419	191927-6	407	191962-4	419	4350CT 4350FCT 4350T 4351CT 4351FCT 6307 6407 6408 6807 6821 6823 9035H 9046 BO4510H BO4555 BO4556 BO4557 BO4558 BO4565 BO4566 BO4900 BO4900V BO4901 BO5030 BO5031 BO6030 DA3010 DA3010F DA3011 DA3011F DP3003 DP4000 DP4001 DP4002 DP4003 FS2200 FS2300 FS2500 FS2700 FS2701 FS4000 FS4200 FS4200A FS4300 FS6200 FS6300 HP1230 HP1640 HP1641 HP1641F HP2032 HP2050 HP2050F HP2051 HR2020 HR2022 HR2641 HR2661 HR2663 JR1000FT JS1300 JS8000 N800 N900 N910 TD0100 UH4261 UH4570 UH5580 UH6570 UH6580 UH7580	1R226
452	195024-0	452	195024-0	452	191980-2	452	191980-2	452	6952 6953	1R198
453 / 454 / 456	195008-8	408	195010-1	411	191938-1	408	191940-4	411	4104BA 9500NB 9533 9533B 9533BL 9533L 9539B DF0300 DS4010 DS4011 DS4012 DS5000 HP0300 KP0800 RT0700C TD0101 TD0101FTW0200 TW0250 TW0350 PC9003	1R198
458 / **459 / 461 / 466	195025-8	458	195026-6	**459	194721-5	458	194722-3	**459	GA4030 GA4030R GA4031 GA4032 GA4033 GA4034 GA4530 GA4530R GA4534 GA5030 GA5030R GA5034 HR1840 HR1841F PJ7000 JS1000 JS1601 JS1602 TM3000C TM3010C	
460	---	---	---	---	---	---	194723-1	**460	GA4030 GA4030R GA4031 GA4032 GA4034 GA5030 GA5030R GA5034	
464	195008-8	408	195010-1	411	191938-1	408	191940-4	411	9500NB 9520B 9520NB 9521NB 9522NB 9533 9533B 9533BL 9533L	1R198
466	195025-8	458	195026-6	459	194721-5	458	194722-3	459	GA4030 GA4030R GA4530 GA4530R GA5030 GA5030R PJ7000	
467	195007-0	407	195015-1	419	191927-6	407	191962-4	419	DP2010 DP2011	1R226
472	195008-8	408	195010-1	411	191938-1	408	191940-4	411	DF0300 HP0300	1R198
---	EE7332022S	---	EE7332022S	---	---	---	---	---	DBM130 DBM131 DBM230 UT1600	
---	EE7132A22S	---	EE7132A22S	---	---	---	---	---	DBM080 UT1400 UT1401	
---	EE7701822S	---	EE7701822S	---	---	---	---	---	UT1200	
---	UD0EIB106C	---	UD0EIB106C	---	---	---	---	---	HB500	
---	JM23000123	---	JM23000123	---	---	---	---	---	LH1200FL LH1201FL LS1017L LS1018L MLS100 MLT100 MLT100N	
---	D652023960	---	D652023960	---	---	---	---	---	UV3200	
---	D652024748	---	D652024748	---	---	---	---	---	UV3600	
---	YA00000504	---	YA00000504	---	---	---	---	---	UR2300 UR3500 UR3501 UR3502	
---	YA00000815	---	YA00000814	---	---	---	---	---	ELM3320, ELM3720, ELM4120, ELM4121	
---	609082420	---	609050953	---	---	---	---	---	HW101	
---	609641180	---	609641160	---	---	---	---	---	HW102	
---	---	---	609641000	---	---	---	---	---	HW111	
---	W26774	---	W49625/ W26775	---	---	---	---	---	446L, 447L, 447M	

For DC Models

Marking No. on carbon brush	Carbon brush for Repair				Models	*Commutat or polishing brush
	Country of origin marking : yes		Country of origin marking : non			
	Part No.	Marking No.	Part No.	Marking No.		
5	198887-3	5	---	---	DTD043 DTD044 DTD063 DTD103 BTD104 DTD104 DTD143 DTD156 DTW250 DTW251 DTW253 TD091D	
429	195022-4	441	194435-6	441	DHR202 DHR241 DTW450 DTW451	1R304
430	195018-5	430	191971-3	430	DHR164 DHR165 DUB361	1R303
431	195020-8	434	193466-2	434	BFL060F BFL061F BFL062F DFL082F DFL084F DFL122F DFL202F DFT022F BFT040F BFT042F DFT043F DFT044F BFT080F BFT081F DFT083F DFT084F BFT123F DFT125F DFT126F BTD042	1R301
432	195022-4	441	194435-6	441	DHR202 DHR241 DHS630 DJR181DJR186 DKP180 DLS713 DSS610DSS611 DTM41 DTM51	1R304
434	195020-8	434	193466-2	434	BTW151	1R301
438	195018-5	430	191971-3	430	DCO180 DCS550 DCS552 DGA402 DGA450 DGA452 DGD800 DGD801 DHR164 DHR165 DJN161 DJS100 DJS161 DJV180 DPB180 DPJ140 DPJ180 DSS500 DSS501 DUC121 DUC122	
440	195021-6	440	194427-5	440	DBN500 DBM600 DDA340 DDA341 DDA350 DDA351 DDF446 DDF448 DDF451 DDF456 DDF458 DDF482 DFR450 DFR540 DFR550 DFR750 DFR5450 DFR5451 DHP441 DHP446 DHP448 DHP451 DHP456 DHP458 DHP482 DJS130 DSC162 DSC191 BTD143 DTS130 DTW152	
441	195022-4	441	194435-6	441	DHR202 DHR241 DTW450 DTW451	1R304
442	195023-2	442	194928-3	442	BHR262 HR262D BHR262T HR262TD DHR263 DHR264 DHS710 DHS711 BUC250 UC250D DUC252 BUC300 DUC302 DUC352 BUH550 UH550D UH551 UH651	1R304
446	195021-6	440	194427-5	440	DTD146	
448	196855-0	448	196854-2	448	DTD138 DTD149 DTD152	
HG26i	198997-6	HG26i	198998-4	HG26i	DVC150 DVC151 DVC860 DVC861	
---	AS000VP071	---	AS000VP071	---	DVP180	