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Engine, Clutch, Heating System

<u>Date introduced</u>	<u>Chassis No.</u>	<u>Unit No.</u>	<u>Modification</u>
<u>1943</u>		020 000	<u>Engine</u> Now: 1151 cu.cm Formerly: 998 cu.cm.
<u>1946</u>	054 617		<u>Push rod tubes</u> Now: corrugated tube ends fitted in a number of cases. Formerly: with spring
<u>1947</u>	071 616	099 610	<u>Cooling air throttle ring</u> Now: with swing handle Formerly: slide
<u>1948</u>	Apr.48 076 722	105 558	<u>Crankshaft</u> Now: with 48.5 mm centering lug for flywheel. Flywheel with a bore of 48.5 mm
<u>1949</u>	5 Jan.49 091 914		<u>Heating control cable</u> Now: twin cable
12 Jan.49	092 498	123 184	<u>Oil pump cover</u> Now: deep-drawn sheet metal Formerly: light metal
14 Jan.49	092 918	123 564	<u>Air cleaner</u> Now: mushroom shape Formerly: pot shape
18 Jan.49	093 270	124 031	<u>Lower heater channel</u> Now: modified sheets without hinges

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1 Feb.49	094 554	125 426	<u>Intake manifold support</u> Formerly: none
7 Mar.49	096 978	128 051	<u>Fan housing</u> Now: without throttle ring
7 Apr.49	100 615	131 840	<u>V-belts</u> Now: 1 - modified stickers 2 - new marking
8 Apr.49	100 826	132 017	<u>Fuel pump</u> Now: with blue Solex diaphragm fitted with 4 seals
28 Apr.49	101 902	133 131	<u>Exhaust valves</u> Now: operating with inserted pressure plate (except for engine numbers 133 634 - 668)
May 49			<u>V-belts</u> Now: red marks for adjusting belt tension
June 49	1-0 106 637	137 701	<u>Vent pipe</u> Now: extended. Modified rear engine cover plate
June 49	1-0 108 091	139 293	<u>Filters</u> Now: in cylinder head vent holes
July 49	1-0 114 186		<u>Felt cone filter</u> Now: for engines in vehicles of type 11 A

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Aug. 49	1-0 116 811	147 950	<u>Connecting rod bushes</u> Now: widened
Aug. 49	1-0 117 389	148 542	<u>Fuel pump</u> Now: genuine Solex in a number of cases
Aug. 49			<u>Push rod tubes</u> Now: several hundred engines with corrugated tube ends
Sept. 49	1-0 119 364	150 486	<u>Carburetor</u> Now: genuine Solex, standard equipment
Sept. 49	1-0 119 588	150 702	<u>Piston clearance</u> Now: 0.05 mm larger for 3rd cylinder
Sept. 49	1-0 120 959	152 050	<u>Clutch pressure plate</u> Now: offset F & S plate. Double thrust springs continue to be used for the time being
Sept. 49	1-0 119 841	150 956	<u>Heating control sheets, front</u> Now: with rubber gasket
30 Sept. 49	1-0 142 902		<u>Cylinder</u> Now: higher phosphorus content
Oct. 49	1-0 127 560		<u>Clutch lever</u> Now: reinforced
Oct. 49			<u>Starting handle</u> Now: no longer supplied

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Nov. 49	1-0 132 535	163 614	<u>Heater box</u> Now: with straps
Dec. 49	from 1-0 134 921 up to 1-0 134 966	from 166 091 up to 166 135	<u>Fuel pump</u> Now: straight push rods with conical transition
Dec. 49	from 1-0 135 268 up to 1-0 136 157	from 166 439 up to 167 412	<u>Fuel pump</u> Now: straight push rods with conical transition
Dec. 49	1-0 136 729	168 075	<u>Push rod tubes</u> Now: only corrugated tubes with cylindrical ends at both sides
<u>1950</u>			
Jan. 50	1-0 138 646	169 969	<u>Oil filler and breather assy</u> Now: with gasket
Jan. 50	1-0 138 765	170 086	<u>Crankcase</u> Now: oil can be completely drained off (passage through timing gear chamber) Oil quantity: 2.5 litres Oil deflector no longer required. 4th main bearing bore provided with a groove.
17 Jan. 50	1-0 141 601	173 030	<u>Oil dipstick</u> Now: phosphatized and blackened
Jan. 50	1-0 140 243		<u>Cylinders</u> Now: gasket between cylinder and cylinder head

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16. Jan.50	1-0141 236	172 650	<u>Exhaust pipe</u> Now: flanges surface-ground
21 Jan.50	1-0142 442	173 950	<u>Induction tube</u> Now: welded seam between intake manifold and preheating pipe extended on both sides by 10 mm
23 Jan.50	1-0142 587	174 106	<u>Distributor gear</u> Now: with distance spring
Feb. 50			<u>Oil drain plug</u> Now: with 19 mm hex. head (in a number of cases)
4 Feb.50	from 1-0145 121 up to 1-0145 450	from 176 911 up to 177 255	<u>Tapped insert for spark plugs</u> Now: with hex. head (345 engines)
17 Feb.50	1-0147 713	Engine No. 181 134	<u>Oil drain plug</u> Now: with 19 mm hex. head (standard)
22 Feb.50	1-0148 529	Fr.axle No. 156 350	
22 Feb.50	1-0149 061	Transm. No. 159 350	
March 50			<u>Spark plug wrench</u> Now: "Special Hazet 500" with holder
March 50			<u>Fuel pump</u> Now: only black, flexible diaphragms fitted from now on.
14 Mar.50	1-0152 857	185 196	<u>Pistons</u> Now: only "KS" pistons with 0.035 - 0.055 mm clearance fitted from now on.

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30 Mar.50	1-0 156 129	188 974	<u>Exhaust pipe</u> Now: 32 mm dia. Formerly: 31 mm dia.
3 Apr.50	1-0 156 970	189 691	<u>Intake manifold and preheating pipe</u> Now: light metal jacket for intensified preheating of mixture.
15 Apr.50	1-0 159 092	192 300	<u>Crankcase</u> Now: push rod tube eyes reinforced and lowered. Trapezoidal section gaskets fitted in a number of cases.
25 Apr.50	1-0 161 234	194 696	<u>Solex carburetor</u> Now: hinged float Float weight: 12,5 g Pilot jet air bleed: 1.0 mm dia.
2 May 50	1-0 162 580	196 110	<u>Automatic cooling air regulation</u> Formerly: throttle ring with swing handle
9 May 50	1-0 164 402	198 222	<u>Muffler</u> Now: connecting tube at muffler for intensified mixture preheating (through-flow system) is standard.
13 May 50		199 321	<u>Pistons</u> Now: "Mahle Autothermik" pistons fitted in a number of cases
26 May 50	1-0 168 045	from 203 403 up to 209 190	<u>Clutch</u> Inner spring no longer fitted in a number of cases

Date introduced	Chassis No.	Unit No.	Modification
1 June 50	1-0 169 355	203 383	<u>Exhaust valve</u> Now: armoured valves in a number of cases
2 June 50	1-0 169 704	204 025	<u>Valve seat ring</u> Now: made of V2A steel in a number of cases
13 June 50	1-0 172 368		<u>Pulley half</u> Now: inner half with spot-welded spacer
15 June 50	1-0 173 695	207 770	<u>Main bearing No. I</u> Now: with outside oil groove (bearing web in crankcase without oil groove)
19 June 50	1-0 173 719	108 481	<u>Clutch</u> Now: one spring only (standard)
29 June 50	1-0 176 547	from 212 437 up to 212 974	<u>Oil pump gear wheels</u> Now: remelt alloy Formerly: steel
5 July 50	1-0 177 736	from 213 301 up to 213 455	<u>Careburetor</u> Now: without hinged float in a number of cases
6 July 50	1-0 173 141	207 431	<u>Pistons</u> Now: "Mahle-Autothermik" pistons in a number of cases
1 Aug. 50	1-0 181 111	217 380	<u>Pushrod tubes</u> Now: trapezoidal section seal ring is standard

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10 Aug. 50	1-0 183 539	220 317	<u>Exhaust valves</u> Now: armoured (standard)
19 Aug. 50	1-0 186 361		<u>Heating control mechanism</u> Now: hex. head screw, 9 mm Formerly: slotted screw
28 Aug.	1-0 188 291	from 225 484 up to 226 410	<u>Pistons</u> Now: "Nüral" pistons, 75 mm dia in a number of cases
Oct. 50	1-0 285 789	285 789	<u>V-belts</u> Now: installation of 875 cable-cord belts
Oct. 50			<u>Oil filter</u> Now: mechanical oil filter (service part)
23 Oct.	1-0 203 845	245 131	<u>Valve spring</u> Now: outer spring no longer fitted in a number of cases
16 Nov.	1-0 210 317	from 252 725 up to 253 775	<u>Exhaust valves</u> Now: with brazed tip
2 Dec.	1-0 214 450	258 311	<u>Distributor pinion</u> Now: distance spring no longer fitted
Dec. 50	1-0 218 140	263 133	<u>Pistons</u> Now: 20 000 "Nüral" pistons fitted

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<u>1951</u>			
4 Jan.51	1-0221 051	266 644	<u>Belt pulley</u> Now: Small modified shim, outer dia. 4 mm, inside dia. 3 mm Formerly: outer dia. 5 mm, inside dia. 4 mm
16 Jan.51	1-0244 171	270 484	<u>Cylinder head</u> Now: inner valve spring modified
18 Jan.51 9 Feb.51	1-0224 763 20-09 940		<u>Choke control cable</u> Now: guide sleeve for thrust spring
19 Jan.51	1-0225 376 20-09 065	272 061	<u>Crankcase</u> Now: made of electron Formerly: remelt alloy
27 Feb.51	1-0235 501	284 793	<u>Distributor drive</u> Now: distance spring fitted again
21 Mar.51	1-0241 734	287 661	<u>Camshaft gear</u> Now: made of "Resitex" plastic (for export only)
27 Mar.51	1-0242 600	293 200	<u>Muffler</u> Now: modified pipe
28 Mar.51	1-0268 333 from 324 902 up to 327 026		<u>Valve seat ring</u> Now: material VCN 25 in a number of cases
6 Apr.51	1-0243 731	294 845	<u>Heat control sheet</u> Now: front sheet relocated into heating box

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18 Apr.51	1-0 246 090	297 815	<u>Generator</u> Now: RED 130/6 - 2600 AL 16 Formerly: AL 15
April 51		296 606	<u>Crankcase</u> Now: openings (oil throwers) provided in both crankcase halves 40 x 11, right-hand side
24 May 51	1-0 253 943	307 219	<u>Cooling system deflectors</u> Now: modified shape
28 May 51	1-0 254 576	from 307 994 up to 308 886	<u>Cylinders</u> Now: fins and deflector inside cover plate
17 July 51	1-0 268 548	352 081	<u>Valve springs</u> Now: gradation for valve springs at cylinder head
1 Aug.51	1-0 272 706	330 345	<u>Oil breather</u> Now: Filler cap with clamp spring.
21 Aug.51	1-0 278 121	336 759	<u>Cylinder head cover</u> Now: cover plate made of one piece
26 Nov.51 26 Nov.51	1-0 305 813 20- 019 034	369 483	<u>Valve seat ring</u> Now: valve seat ring for exhaust valve made of V2A steel (standard)

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26 Nov.51	1-0305 813 20-019 195	from 369 483 up to 372 422 from 381 035 up to 382 910	<u>Valve seat ring</u> Now: lead-steel material in a number of cases
27 Nov.51	1-0306 417	from 370 472 up to 370 556	<u>Valves</u> Now: with caps in a number of cases
10 Dec.51	1-0309 833 20-019 589		<u>Solex carburetor 26 VFIS</u> Now: throttle hole diameter 1.4/1.5 mm
17 Dec.51 18 Dec.51	1-0311 923 20-019 942	376 900	<u>Throttle ring</u> Now: spot-welded Formerly: screw-mounted
<u>1952</u>			
18 Jan.52	1-0320 113 20-020 804		<u>Thermostat</u> Now: simplified holder in a number of cases
21 Jan.52 28 Jan.52	1-0320 804 20-021 054	387 815	<u>Gland nut</u> Now: with felt seal to prevent loss of grease
21 Jan.52 23 Jan.52	20-020 804 1-0320 113	286 937	<u>Thermostat</u> Now: simplified holder (standard)
1 Feb.52 4 Feb.52	1-0232 132 20-021 355	390 307	<u>Intake valve</u> Now: induction-hardened Formerly: surface-hardened
5 Feb.52	1-0323 802 20-021 398	from 391 315 up to 359 379	<u>Valve seat ring</u> Now: made of lead-steel in a number of cases (3rd introduction)

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7 Feb.52 7 Feb.52	1-0 324 532 20-021 506	392 231	<u>Upper air duct</u> Now: lateral support no longer fitted
21 Feb.52 22 Feb.52	1-0 328 831 20-022 075	397 264	<u>Intake and exhaust valve cams</u> Now: modified transition from surface end to radius, reduced noise
4 Mar.52 6 Mar.52	1-0 331 701 20-022 434	400 407	<u>Hot air ducts</u> Now: cover plate between ducts no longer fitted
25 Mar.52 27 Mar.52	1-0 338 059 20-023 584	408 661	<u>Exhaust pipe</u> Now: connecting pipe between exhaust pipe and muffler no longer fitted
13 May 52 13 May 52	1-0 352 446 20-026 314	426 128	<u>Pulley</u> Now: a) pulley I, 45.0 mm b) radial run-out: 1.0 mm c) lateral run-out: 0.2 mm Formerly: a) 58.0 mm b) 0.5 mm c) 0.1 mm
29 May 52 29 May 52	1-0 357 667 20-027 414	433 003	<u>Valve spring</u> Now: one spring Formerly: two springs
7 June 52 7 June 52	1-0 360 478 20-027 952	436 414	<u>Oil dipstick</u> Now: dipstick tube located higher
9 June 52 10 June 52	1-0 360 851 20-028 063	436 869	<u>Fan wheel</u> Now: balance center relocated

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18 June 52 19 June 52	1-0 364 368 20-028 709	441 034	<u>Crankshaft</u> Now: thrust washer I = 0.30 ± 0.02/II = 0.35 ± 0.03 mm Formerly: 1.1 - 1.2 - 1.3 - 0.9 - 0.8 mm
20 June 52 21 June 52	1-0 365 201 20-028 853	418 210 418 102	<u>Clutch operating lever</u> Now: lever and adjusting nut with recess and chamfering
30 June 52 1 July 52	1-0 368 508 20-029 529	from 446 176 up to 451 092	<u>V-belts</u> Now: "Optiflex" material 13/8 x 50
20 Aug. 52 20 Aug. 52	1-0 382 029 20-032 051	462 001	<u>Oil bath air cleaner</u> Now: fitted in a number of cases
18 Sept. 52 18 Sept. 52	1-0 391 619 20-033 964	473 814	<u>Clutch plate</u> Now: "Textar" lining only from now on. Clutch plate 1.2 mm (formerly 1.5 mm)
23 Sept. 52	20-034 214		<u>Oil bath air cleaner</u> Now: fitted in VW Ambulance (overhead arrangement)
26 Sept. 52 26 Sept. 52	1-0 395 441 20-034 744	478 493	<u>Throttle ring support</u> Now: guide projection for operating shaft in a number of cases Formerly: recessed
26 Sept. 52 26 Sept. 52	1-0 395 819 20-034 827		<u>Flywheel</u> Now: radial run-out limited to 0.2 mm

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26 Sept. 52 26 Sept. 52	1-0395 441 20-034 827	478 493	<u>Throttle ring</u> Now: lever for operating rod with hole, screw head at lever Formerly: cotter pin. Screw head welded
Sept. 52			<u>Intake manifold</u> Now: with special jacket and jacket end (longer jacket casting). (Service part for Skandinavian countries)
1 Oct. 52	1-0397 023	481 713	<u>V-belts</u> Now: no longer included in tool kit
			<u>Heating system</u> Now: setting by rotary knob and spindle
			<u>Carburetor 28 PCI</u> Formerly: carburetor 26 VFIS
			<u>Fuel pipes</u> Now: cross section 17 mm ² Formerly: 32 mm ²
			<u>Intake manifold</u> Now: with preheating tube in joint aluminum-cast jacket
Oct. 52			<u>Oil bath cleaner</u> Now: two annular reinforcing grooves at the bottom
15 Oct. 52	1-0402 111 20-036 112		<u>V-belts</u> Now: included in tool kit.
20 Oct. 52		122-00 001	<u>VW Industrial Engine</u> Start of production
Nov. 52			<u>Felt cone air cleaner</u> Now: with flame guard screen

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10 Nov.52	1-0 411 773 20-038 304	498 719	<u>Intake manifold support</u> Now: beaded sheet metal strip Formerly: pipe
10 Nov.52	from 20-039 360 up to 20-039 666	from 503 889 up to 506 589	<u>Starting dog</u> Now: temporarily fitted in Type 2 Formerly: fitted in VW Industrial Engine only
26 Nov.52 27 Nov.52	1-0 417 482 20-039 567	505 970	<u>Throttle ring support</u> Now: guide projection for operating shaft (standard) Formerly: recessed at collar
13 Dec.52 15 Dec.52	1-0 423 415 20-040 811	513 320	<u>Intake valve</u> Now: 4.9 dia. h 11 Formerly: 5.075 dia. h 11
31 Dec.52 2 Jan.53	20-041 546 1-0 428 221	517 651	<u>Oil bath air cleaner</u> Now: with strap
<u>1953</u>			
2 Jan.53	20-041 712	518 653	<u>Intake manifold</u> Now: longer shaping of exhaust pipe to cylinder 3/4. Longer jacket casting <u>Fuel piping</u> Now: cross section 17 mm ² dia. Formerly: 32 mm ² dia. <u>Carburetor 28 PCI</u> Formerly: carburetor 26 VFIS <u>Clutch cable</u> Now: Bowden cable. Clutch cable retaining bracket. <u>Oil bath air cleaner</u> Now: new type fitted

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15 Jan.53	1-0433 397	525 661	<u>Carburetor</u> Now: air correction jet 200 Formerly: 190
20 Jan.53 21 Jan.53	1-0435 509 20-043 322	528 095	<u>Valve play</u> Now: 0.10 mm Formerly: 0.15 mm
20 Jan.53	1-0434 991	from 527 580 up to 529 045	<u>Oil pump shaft</u> Now: shaft pressed into gear (in a number of cases) Formerly: knurled shaft
21 Jan.53 23 Jan.53	1-0435 491 20-043 414	531 963	<u>Oil cooler</u> Now: position of damping plate offset (noise reduction). Formerly: straight
13 Feb.53	1-0444 803 20-045 180	539 380	<u>Carburetor and fuel pump</u> Now: angle of nipple 40° + 5° Formerly: 60°
14 Feb.53	1-0400 000		<u>Cylinder head nuts</u> Now: with sleeves, tightened to a torque of 3.5 mkg Formerly: 3.0 mkg
20 Feb.53 26 Feb.53	1-0448 196 20-046 039	543 500	<u>Operating rod for heat control sheet</u> Now: left and right 217.5 and 203 ± 0.25 resp. Formerly: 221.5 and 207.5 ± 0.25
25 Feb.53	1-0449 850	545 450	<u>Flywheel and crankshaft</u> Now: residual unbalance marked
17 Feb.53 10 Mar.53	1-0446 526 20-047 157	541 586 551 512	<u>Clutch</u> Complete. Lobes increased from 3 to 9 (improved centering)

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1 Mar.53	1-0451 313		<u>Cylinder head nuts</u> Now: tightening torque 3.6 - 3.8 mkg Formerly: 3 mkg
13 Mar.53	from 1-0456 312 up to 1-0486 886 from 20-047 552	from 553 395	<u>Gland nut bush</u> Now: made of special brass and provided with graphite grooves. Lubrication changed from VW-A 51 to VW-A 052 in a number of cases
14 Mar.53	up to 20-050 205	up to 569 876	
15 Mar.53		122-00 335	<u>VW Industrial Engine</u> Now: fitted with hardened starting dogs
16 Apr.53	from 1-0486 887 up to 1-0487 128 from 20-050 206	from 569 877	<u>Gland nut bush</u> Now: sinter iron bushes, previous design (about 16 000)
21 Apr.53	up to 20-053 268	up to 590 340	
1 May 53			<u>Fuel pump intermediate flange</u> Now: inside fins reinforced to 2.5 mm. Pressing temperature increased to 170°C Formerly: 1.5 mm 165°C (Dimensions do not include textile linings)
8 May 53	1-0478 795 20-052 602	580 297 595 150 122-00 537	<u>Clutch, complete</u> Now: residual unbalance indicated by paint mark
28 May 53	1-0487 128 20-053 268	590 341 590 330	<u>Bush in gland nut</u> Now: made of special brass (standard) Formerly: sinter iron
6 June 53	20-053 960		<u>Pick up truck</u> Now: new exhaust manifold and branch. Improved sealing

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14 June 53	1-0 494 496	599 300	<u>Fuel pipe ends</u> Now: tin-coated. Nipple made of "Pantal"
15 June 53	1-0 494 340	599 218	<u>Carburetor Solex 28 PCI</u> Now: ball valves made of bronze; pump channel accessible through screw plug Formerly: steel ball valves; steel pin tap
18 June 53	20-054 994		
19 June 53	20-055 054		<u>VW Pick up</u> Now: seal ring (rubber) for intake manifold 3 x 2 mm Formerly: 2 mm dia.
11 Aug.53	1-0 512 819 20-058 075	620 552	<u>Nipple for carburetor and pump</u> Now: 33° + 5° Formerly: 40° + 5°
31 Aug.53	1-0 522 314 20-059 939		<u>Tapped insert for sparking plugs</u> Now: tightening torque increased to 7 mkg - 7.5 mkg Formerly: 4 - 5 mkg
16 Oct.53	1-0 544 004	658 442 122-01 654	<u>Oil cooler with two dampersheets</u> Now: one month's production
9 Oct.53			<u>VW Industrial Engine</u> Now: fitted exclusively with V-belts of "Höxter" make
7 Oct.53		Industrial Engine	<u>Induction manifold support</u> Now: 65 mm long Formerly: 63 mm long

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14 Oct.53	20-063 686 1-0537 356	657 159 650 657 122-01654	<u>Fan housing</u> Now: fan wheel with blade 1.5 mm thick Formerly: 1.25 mm
19 Oct.53		122-01665	<u>VW Industrial Engine</u> Now: a) governor lever for governor shaft marked. b) governor lever: slot lengthened, better clamping.
31 Oct.53	20-065 361 1-0552 150	667 950 667 964	<u>Engine housing - engine No.</u> Now: Marking surface for engine No. 2 mm elevated. Formerly: 0.5 mm
26 Nov.53	1-0563 195	621 028	<u>Oil breather</u> Now: modified shape, larger steel wool volume
21 Dec.53	1-0575 415 20-069 409	695 282 695 356 122-019 888	<u>Engine rating</u> Now: 30 HP/1192 cm ³ Compression ratio 6.1:1 Formerly: 25 HP/1131 cm ³ Compression ratio 5.8:1 <u>Intake manifold</u> Now: heating jacket for downpipe <u>Oil bath air cleaner</u> Now: standard equipment for all models <u>V-belts</u> Now: narrow V-belts <u>Running-in instructions</u> Now: deleted

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			<u>Connecting rods</u> Now: 2 g weight tolerance Formerly: 11 g <u>Crankshaft bearings</u> Now: improved lubrication <u>Cylinder heads</u> Now: modified fins <u>Valve guides</u> Now: 55 mm long Formerly: 60 mm <u>Intake valve head</u> Now: 30 mm dia. Formerly: 28 mm dia. <u>Pulley</u> Now: 1.25 mm sheet metal Formerly: 1.0 mm thick
<u>1954</u>			
9 Jan.54	1-0 583 906		<u>V-belts</u> Now: 18 000 belts of Phönix make
25 Jan.54	1-0 591 433	514 590	<u>Oil dipstick assembly</u> Now: bent loop and cap
6 Feb.54 9 Feb.54	1-0 518 795 20-073 860	723 005	<u>Oil cooler</u> Now: marking of month and year on under side
13 Feb.54	1-0 602 340 20-074 427	195 326 190 180 508 068	<u>Drive shaft</u> Now: Pilot dia. 14.91/14.88 mm Formerly: 14.95/14.88 mm
1 Mar.54	1-0 607 509 20-076 135	737 071	<u>Flywheel seal</u> Now: aluminium foil Formerly: paper seal

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11 Mar.54	1-0 522 588	668 722	<u>Oil cooler</u> Now: one month's production with wide deflector plate.
22 Mar.54		122-02857	<u>Starting handle</u> Now: reinforced: a) thickness of material 3 mm formerly: 2 mm b) seamless tube
6 Apr.54 9 Apr.54	1-0 631 062 20-080 864	762 020	<u>Oil pump housing</u> Now: modified dimensions to clear the oil pump shaft.
8 Apr.54		122-03126	<u>Valve spring</u> Now: one valve spring for engines of 1500 r.p.m. and 1800 r.p.m.
21 Apr.54	1-0 637 872	770 850	<u>Ignition distributor</u> VJU 4 BR 3 mk Now: improved springs for centrifugal weights (marking: red point)
17 May 54	1-0 653 400	from 788 196 up to 794 174 from 806 314 up to 811 940	<u>Carburetor 28 PCI</u> Now: nylon float (11 604 floats). Marking: blue point.
14 Apr.54		122-01988	<u>Crankshaft bore / gland nut</u> Now: chamfered 5 mm Formerly: edge rounded only <u>Flywheel</u> Now: inside diameter 29.0/28.6 mm Formerly: 28.5/28.0 mm

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			<u>Gland nut</u> Now: length 32.2/34.8 mm Formerly: 34.4/28.487 mm Now: shoulder dia.: 28.500/28.487 mm Formerly: shoulder dia.: 27.98/27.80 mm
28 May 54 1 Oct.54	1-0 659 075 20-099 252	795 912	<u>Intake valve</u> Now: greater heat resisting material Cr. 45 Si 34 Formerly: CK 45
25 June 54	1-0 674 360 20-089 330	813 867 122-04399	<u>Flywheel gasket</u> Now: paper 0.20 - 0.25 mm Formerly: aluminum foil
1 July 54	1-678 002 20-090 138	818 838	<u>Cylinder head</u> Now: Bore and filter plug no longer required.
1 July 54	1-0 678 201 20-090 138	819 078	<u>Oil filler neck</u> Now: filter element omitted
5 July 54	1-0 678 966	from 820 415 up to 820 513	<u>Distributor drive gear</u> Now: Made of Aeterna bronze, fitted in 12 000 engines.
4 Aug.54	1-0 689 103		<u>Thermostat</u> Now: Elongated contact surface. Elongated opening in bracket
17 Aug.54 19 Aug.54	20-093 601 1-0 696 501		<u>Spare V-belt</u> Now: No longer included in tool kit

Date introduced	Chassis No.	Unit No.	Modification
19 Aug.54	1-0696 205 20-093 891	841 536	<u>Intermediate flange for fuel pump</u> Now: top lube hole, 4 mm dia., no longer provided
28 Aug.54	1-0702 015		<u>Crankshaft bearing</u> Now: a) Dowel pin bore 3.0 + 0.2 oversize tolerance reduced. b) 4.989/4.979 mm Formerly: a) 2.5 + 0.5 mm b) 4.989/4.975 mm
31 Aug.54	1-0702 742 20-095 422	849 905 122-05 091	<u>Piston, 77 mm dia.</u> Now: with flat crown, compression ratio 6.6:1
31 Aug.54	1-0702 742 20-095 422	849 905	<u>Carburetor 28 PCI</u> Now: with nylon float (yellow point)
18 Sept.54	1-0715 352 20-097 612	864 241 863 940 122-05379	<u>Crankcase</u> Now: oil scraper edge narrowed above camshaft gear
1 Oct. 54	1-0722 916 from 873 276 20-099 235 up to 873 456 122-05475		<u>Small pulley</u> Now: 20 mm width Formerly: 10.5 mm
13 Oct.54	from 1-0713 718 from 882 625 up to 1-0751 006 up to 906 366		<u>Carburetor (yellow point)</u> Now: with plastic float
1 Nov.54			<u>First engine oil filling</u> Now: SAE 10-W from November to March

Date introduced	Chassis No.	Unit No.	Modification
12 Nov.54	1-0753 096	907 663	<u>Generator</u> Now: fan wheel and small pulley dynamically balanced.
15 Nov.54	1-0735 501 20-104 810	from 909 582 up to 912 012 122-06070	<u>Bearing shell No. II</u> Now: 2.035 engines with Al-alloy 83 A, alternatively AL 100
29 Nov.54	20-106 223	916 812	<u>Air intake elbow</u> Now: for Pick up: one-piece pipe. Intake manifold for oil bath air cleaner.
<u>1955</u>			
4 Jan.55	1-0783 227 20-110 944	from 947 472 up to 947 654 122-06677	<u>Intake manifold</u> Now: treated with special paint.
13 Jan.55	1-0792 450 20-112 005	955 511 122-06841	<u>Rocker arm shaft</u> Now: induction - hardened 0.6 - 1.2 mm Formerly: case - hardened 0.5 - 0.6 mm
2 Feb.55	20-114 690	971 506	<u>Electrical equipment</u> Now: generator, starter motor, ignition coil and ignition distributor supplied as VW parts (Garbe-Lahmeyer make.)
12 Feb.55	1-0814 430 20-116 095	980 644 980 405	<u>Fuel pump push rod</u> Now: spherically ground at both ends
14 Feb.55 15 Feb.55 17 Feb.55	1-0814 685 20-117 922	984 789 993 856 122-07472	<u>Carburetor 28 PCI</u> Now: with nylon float. Weight 5.7 g (current)

Date introduced	Chassis No.	Unit No.	Modification
1 Mar. 55	20-117 902	991 590	<u>Carburetor 28 PCI</u> Now: air correction jet 180 Formerly: air correction jet 195
1 Mar. 55	20-117 902	991 590	<u>Oil bath air cleaner</u> Now: overhead type, lateral arrangement
9 Mar. 55	1-0833 543		<u>Pulley</u> Now: 5,000 pulleys fitted with balance weights
28 Mar. 55	1-0848 612 20-121 769	1018 556 1018 608	<u>Oil pump</u> Now: 2 studs AM 6A x 28 for better centering
29 Mar. 55	1-0848 013 20-121 987	1021 257 1020 663	<u>Camshaft</u> Now: slot width 5.6 + 0.1 mm Formerly: 5.15 + 0.1 mm
1 Apr. 55	1-0848 900 20-122 385	1023 781 1023 367 122-08152	<u>First engine oil filling</u> Now: SAE 10-W, January - December Formerly: SAE 20W in summer
5 Apr. 55	1-0855 005 20-122 728	1027 492 122-08216	<u>Oil pump</u> Now: 4 studs AM 6A x 28 for better centering
20 Apr. 55	1-0864 001 20-124 852	1038 409 122-08216	<u>Induction manifold</u> Now: with cast light metal jacket
April 55		KD-63 311	<u>KD engine</u> Now: changed from 1131 cu.cm to 1192 cu.cm in a number of cases
30 Apr. 55 29 Apr. 55	1-0870 301 20.126 812	1048 209 122-08681	<u>Ignition distributor drive gear</u> Now: made of Aeterna bronze VL 22 Formerly: steel

Date introduced	Chassis No.	Unit No.	Modification
11 June 55		122-09667	<u>Friction wheel</u> Now: keyed onto shaft
14 June 55			<u>VW Industrial Engine</u> Now: cooling fan with protective guard
11 July 55			<u>Induction manifold, 1192 cu.cm engine</u> Now: marked "30" on light metal jacket (30 = h.p.)
15 July 55 16 Aug. 55	20-137 738	1119 403 122-11220	<u>Muffler</u> Now: connecting pipe for pre-heating tube
			<u>Gland nut</u> Now: with needle bearing
			<u>Breather</u> Now: cover plate
			<u>Small pulley</u> Now: dynamically balanced with generator
			<u>Cylinder head</u> Now: hex. nut Formerly: socket screw
			<u>Spark plugs</u> Now: plugs W 255 T 1 (fitted in a number of cases)
4 Aug. 55	1-0929 746 20-137 738	1119 403 122-11220	<u>Muffler</u> Now: single chamber, with 2 exhaust tail pipes and connecting pipe for pre-heating tube

Date introduced	Chassis No.	Unit No.	Modification
			<u>Gland nut</u> Now: with needle bearing
			<u>Engine cover plates</u> Now: modified, with rubber grommet
			<u>Breather</u> Now: with cover plate
			<u>Generator pulley</u> Now: each with 2 driving lugs of different widths (total 4) Now: secured with 21 mm hexagon nut Formerly: 36 mm
			<u>Cylinder head</u> Now: hex. head nuts, sparking plugs 225 T 1 Formerly: sparking plugs 175 T 1
9 Aug. 55		122-10631	<u>Small pulley</u> Now: driving lugs, generator set dynamically balanced
11 Aug. 55	1-0938 077 20-138 990	1128 016 122-11145	<u>Oil dipstick</u> Now: brazed cap
5 Oct. 55			<u>Heater channel, lower, right-hand side</u> Now: opening in thermostat bracket reduced in size
14 Oct. 55	1-0995 357 20-148 656	- - 122-12502	<u>Crankcase</u> Now: 2 bolts 6 x 30.8 G Formerly: 6 x 28
1 Dec. 55	1-1033 950 from up to	1 231 475 1 245 817	<u>Light metal camshaft gear</u> Now: 60 000 vehicles Formerly: plastic "Resitex" gears

Date introduced	Chassis No.	Unit No.	Modification
27 Jan. 56	1 087 746 165 101	1 306 861 1 306 738 122-14774	<u>Tapped insert for sparking plugs</u> Now: 11.340 mm Formerly: 11.840 mm (total length)
15 Feb. 56	106 312 187 674	1 326 994 122-15165	<u>Fuel pump</u> Now: beaded cover plate
24 Feb. 56	1 114 318	from 1 336 623 up to 1 443 574	<u>Light metal camshaft gear</u> Now: 20 000 engines fitted with light metal gear wheels
1 Mar. 56			<u>Piston for pressure relief valve</u> Now: phosphatized
27 Apr. 56 11 May 56	1 171 490 179 401	1 404 588 122-17704	<u>Oil pump housing</u> Now, tolerance in bore: 14.068/14.050 dia. Formerly: 14.177/14.050 dia.
May 56	1 184 415 180 901	122-17821	<u>Piston pins</u> Reduced play Now, bore for bush: 20.00/20.013 mm dia. Formerly: 20.005/20.020 mm dia.
7 May 56 23 May 56	1 184 415 180 901	1 415 300 122-17821	<u>Piston pin bush</u> Now, bore 20.00/20.013 mm Formerly: 20.005/20.020 mm
16 May 56 18 June 56	1 191 375 181 623	1 426 600 122-18928	<u>Oil induction pipe</u> Now: bottom section shortened by 12 mm
25 May 56	1 198 184		<u>Cylinder, diameter 77 mm</u> Now: cylinder working surface shortened by 8 mm (1000 engines)

Date introduced	Chassis No.	Unit No.	Modification
5 June 56	1 210 230	1 447 496	<u>Vacuum pipe</u> Now: below throttle control cable Formerly: above air control cable. Cable rising after leaving the carburetor
12 July 56	1 243 944	1 490 629 122-22173	<u>Main bearing No. II</u> <u>(oval bearing)</u> Pressure side 0.02 mm thicker (20 000 vehicles)
4 Aug. 56 7 Aug. 56 14 Aug. 56	1 252 842 193 306	122-22352	<u>Oil strainer</u> New mesh size: 16 per 1 sq. cm Formerly: 12 per sq. cm New wire diameter: 0.26 mm Formerly: 0.24 mm Now: chamfering no longer provided
16 Aug. 56	1 259 940	1 509 953 122-22815	<u>Oil pump</u> Now: bore for shaft, Length: 25 mm Formerly: 23 mm long Now: 16.068/14.050 mm dia. Formerly: 14.077/14.050 mm Now: length of driving lug: 8-0.5 mm Formerly: 10.2-0.5 mm
21 Aug. 56	1 266 678	1 518 878	<u>Light metal camshaft gear</u> Now: for all de Luxe Sedans Formerly: resitex material Now: backlash 0.0-0.052 mm Formerly: 0.0-0.025 mm Now: tolerance 0, + 1, + 2, 0, - 1, - 2, - 3
21 Sept.56 24 Sept.56 26 Sept.56	1 299 842 203 300	1 558 402 122-24249	<u>Main bearing No. IV</u> Now: play 0.047 - 0.102 mm Formerly: 0.031 - 0.083 mm New wall thickness: 4.883 - 4.972 mm Formerly: 4.989 - 4.979 mm

Date introduced	Chassis No.	Unit No.	Modification
21 Sept.56 27 Sept.56 8 Oct. 56	201 501 1 306 289 1 316 650 (Karmann-Ghia)	1 553 093 1 493 995	<u>Carburetor spring for butterfly valve</u> Now: spring force 48 + 7 g Formerly: 33 g
26 Sept.56	203 163		<u>Oil bath air cleaner</u> Now: "Knecht" make with toggle-type cover (similar to Mann & Hummel make) Formerly: wing nut
29 Sept.56 4 Oct. 56	1 205 787 204 955	1 568 432 122-24443	<u>Piston pin bush</u> Now: rolled from strip material
3 Dec. 56 12 Dec. 56	1 370 676 220 001	1 647 826 1 647 826	<u>Main bearing No. I</u> Now: improved design (60 000 engines), 0.03 mm lead layer. 4 oil pockets on thrust lubrication groove deepened face
10 Dec. 56	1 378 864	1 657 124	<u>Clutch</u> Now: thrust spring cross section and clutch pressure reduced. Lining: Textar 50 S
21 Dec. 56 4 Jan. 57	222 401 1 394 917	1 666 159 1 666 159	<u>Heating System</u> Now: outlet openings for exhaust pipes in heater junction box provided with sheet metal flange and two sheet metal tabs. Modified toggle lever and operating lever
29 Dec. 56	1 395 146 224 201	1 677 480 122-26807	<u>Oil cooler</u> Now: support between oil cooler, fan housing and crankcase
29 Dec. 56 2 Jan. 57 5 Jan. 57	1 397 440 224 501	122-26807 1 677 688 1 677 688	<u>Oil strainer</u> Now: bell-shaped cap at oil suction pipe Bottom: oil strainer with water trap. Ring-shaped recess in crankcase bottom (in a number of cases)

Date introduced	Chassis No.	Unit No.	Modification
14 Jan. 57	1 408 860	1 693 804	<u>Clutch</u> Now: sleeves "Beral 1533/9 M", with square hole, for thrust springs (10,000 vehicles)
1 Feb. 57	1 429 178	1 718 770	<u>Intake manifold</u> Now: thickness of wall, 20 x 2 mm Formerly: 18 x 1 mm
6 Mar. 57 8 Mar. 57	1 461 448 239 700	1 758 765 1 759 440	<u>Main bearing I</u> Now: with 0.03 mm lead. 4 oil pockets on thrust face. Deepened annular groove (60,000 engines)
10 Apr. 57 2 May 57	249 436	1 812 562 122-32927	<u>Oil cooler</u> Now: only brazed oil coolers without support, all coolers painted black. Height: 226.5 mm; 32 oil tubes Formerly: soldered, with prop. Height: 254 mm; 36 oil tubes
29 Apr. 57 29 Apr. 57 3 May 57	1 524 059 253 500	1 833 131 122-31322 1 833 211	<u>Suction pipe</u> Now: 1.5/1 mm thick iron-reinforced asbestos gaskets (3 mm thick bead at bore) for exhaust and heater pipe flange. Formerly: asbestos gaskets 1.4/1.1 mm thick
13 May 57	1 536 250	1 850 530	<u>Oil cooler</u> Now: alternatively brazed black-painted oil cooler without support, height 226 mm; 32 oil tubes. Formerly: soldered, with prop. Height 254 mm; 36 oil tubes
13 May 57 17 May 57 11 June 57	1 536 617 257.000	1 851 331 1 851 331 122-34199	<u>Main bearing I</u> Now: working surface with 0.02 - 0.03 mm hard lead. 4 oil pockets at flywheel side. Annular groove deepened. Formerly: without lead and pockets

Date introduced	Chassis No.	Unit No.	Modification
21 May 57	257 373	1 207 267	<u>Clutch release bearing</u> Now: ball thrust bearing with new-type retaining springs Formerly: carbon release bearing
12 June 57 12 June 57 16 June 57	1 569 912 262 701	1 887 696 122-34813 1 887 696	<u>Dowel pin for flywheel</u> Now: length 14 - 0.3 mm Formerly: 12.5 - 0.2 mm
July 57			<u>Pilot jet</u> Now: with electromagnetic shut off valve as service part
2 July 57 2 July 57 8 July 57	1 587 435 269 541	1 919 370 122-35470 1 919 370	<u>Crankcase</u> Now: web of main bearing II reinforced, size of opening underneath web reduced. 25 mm opening between dowel pin (main bearing II) and top jointing faces
8 July 57 9 July 57 12 July 57	1 597 047 272 301	122-35240 1 934 104 1 934 152	<u>Cylinder, 77 mm dia.</u> Now: length of working surface 125.25 mm Formerly: 133.25 mm
10 July 57	1 585 100	1 916 146 -1 926 145	<u>Oil cooler</u> Now: short design, brazed Formerly: soldered
1 Aug. 57	1 600 440		<u>Oil bath air cleaner</u> Now: modified shape (higher but of smaller outside dia.)
2 Aug. 57 2 Aug. 57 8 Aug. 57	1 601 517 274 503	1 939 746 122-36317 1 939 746	<u>Flywheel</u> Now: overall thickness, clutch contact surface/ collar 46.5 - 0.5 mm Formerly: 46.4/45.7 mm
16 Aug. 57 16 Aug. 57 21 Aug. 57	1 624 372 277 917	122-36784 1 971 537 1 971 537	<u>Crankcase</u> Now: 21 mm width, camshaft bearing to crankcase bottom jointing faces, at flywheel end. Recess omitted Formerly: 10 mm

Date introduced	Chassis No.	Unit No.	Modification
26 Aug. 57	1 593 105	1 930 001 -1 950 000	<u>Oil cooler</u> Now: short design, brazed Formerly: soldered
27 Aug. 57 2 Sept. 57	1 631 980 281 900	1 978 946 1 978 946	<u>Clutch</u> Now: distance between clutch cover contact surface at flywheel and release plate 27 mm Formerly: 26 mm
2 Sept. 57	1 642 672	1 964 301 -1 970 000	<u>Oil cooler</u> Now: short design, brazed Formerly: soldered
12 Sept. 57	1 657 072	1 937 452	<u>Clutch</u> Now: reduced thrust spring cross section. Clutch linings: Textar 50 S or Beral 1533/9M. Sleeves with square holes. Less foot pressure required at clutch pedal
18 Oct. 57	1 655 524	1 997 104	<u>Oil cooler</u> Now: brazed. Support and drilling in fan housing discontinued. Height/cooler: 226.5 mm 32 oil tubes Painted black
23 Oct. 57 24 Oct. 57 29 Oct. 57	1 703 065 299 100	122-38221 2 039 743 2 059 109	<u>Exhaust flange gasket</u> Now: 1.5/1.1 mm thick iron-reinforced asbestos gaskets (3 mm thick bead at bore). Formerly: asbestos gaskets 1.4/1.1 mm thick
29 Oct. 57 29 Oct. 57 30 Oct. 57	300 700 1 709 092	2 068 883 122-38832 2 068 883	<u>Heater flange gasket</u> Now: steel-reinforced asbestos gasket (3 mm bead at bore), 1.5/1 mm thick (standard feature) Formerly: 1.4/1.1 mm asbestos gasket

Date introduced	Chassis No.	Unit No.	Modification
29 Oct. 57		KD-93 938	<u>Clutch release bearing</u> Now: all exchange rear axles for VW Transporter fitted with ball bearing release bearing Formerly: release bearing with carbon ring
28 Nov. 57 28 Nov. 57	1 741 696 308 901	2 111 034 2 111 227	<u>Exhaust valve guide</u> Now: reverted to valve guide of 60.0 mm length Formerly: 55.3 - 0.6 mm
1958			
2 Jan. 58 3 Jan. 58 9 Jan. 58	1 777 426 - 318 411	2 158 806 122-41202 2 158 849	<u>Connecting rod bearing shell</u> Now: three layer bearing Formerly: two layer bearing
2 Jan. 58	1 784 097 316 224	- -	<u>Crankshaft bearings</u> Now: running surface of the bearings 1 - 4 with hard lead coating 0.02 - 0.03 mm (Canada M 173 current)
3 Mar. 58 3 Mar. 58 10 Mar. 58	1 854 278 - 335 791	2 254 287 122-42495 2 254 263	<u>Toggle lever in heating junction box</u> Now: modified shape; longer arms slightly bent at ends Formerly: straight arms
20 Mar. 58 18 Apr. 58	1 882 550 345 925	- -	<u>Spark plug wrench</u> Now: with rubber sleeve Formerly: with holding spring
24 Mar. 58 2 Apr. 58 3 Apr. 58	342 168 - 1 890 983	2 290 219 122-43481 2 300 536	<u>Clutch driven plate</u> Now: sprung cushion segment design
2 June 58 5 June 58	361 100 1 975 105	2 378 726 2 385 613	<u>Carburetor 28 PCI</u> Now: nylon venturi (current) Formerly: made of light metal
29 Aug. 58	384 875	-	<u>Starting handle</u> Now: no longer supplied in tool kit; starter dog discontinued after present stocks are exhausted

Date introduced	Chassis No.	Unit No.	Modification
Sept. 58	-	-	<u>Fan belts</u> Now: Tropical fan belts as service part.
4 Sept. 58	2 068 890	2 522 526	<u>Cylinder head</u> Now: heli-coil-inserts for spark plug (approx. 65 % of production) Formerly: threaded bush
12 Sept. 58	388 882	2 517 920	
12 Sept. 58	-	122-47 475	
15 Sept. 58	2 084 715	2 542 727	<u>Flywheel</u> Now: chamfer omitted on starter ring teeth on starter pinion engagement side
15 Sept. 58	-	122-47 784	
17 Sept. 58	391 706	2 542 727	
28 Oct. 58	-	122-48 522	<u>Crankshaft pulley</u> Now: oil return thread, triple thread with 6 mm pitch Formerly: single trapezoidal thread
29 Oct. 58	2 148 240	-	
6 Nov. 58	-	122-48 519	<u>Exhaust valve guide</u> Now: length 55.3 - 0.6 mm Formerly: 60.8 - 0.8 mm
7 Nov. 58	2 163 370	2 634 771	
15 Nov. 58	2 168 007	-	<u>Cylinder head</u> Now: rib underneath the spark plug bore strengthened by addition of two cross fins (50 % of production)
15 Nov. 58	403 131	-	
Dec. 58	-	-	<u>Oil strainer</u> Now: with permanent magnet ring available for service installation
29 Dec. 58	-	122-49 701	<u>Crankcase</u> Now: drilling for dowel pin 18 mm deep Formerly: 10 mm (Dowel pin 7 mm longer)
30 Dec. 58	2 223 801	2 718 443	

Date introduced	Chassis No.	Unit No.	Modification
1959			
2 Jan. 59	2 228 267	2 722 333	<u>Crankshaft bearings</u> Now: main bearing 1 - 3 with steel backed shells (M 173)
6 Jan. 59	425 970	2 711 258	
5 Jan. 59	425 412	2 710 727	<u>Crankcase</u> Now: drilling for dowel pin 18 mm deep Formerly: 10 mm (Dowel pin lengthened by 7 mm)
2 Feb. 59	2 269 932	-	<u>Cylinder head</u> Now: heli-coil-inserts for spark plug (standard)
2 Feb. 59	433 401	-	
2 Feb. 59	-	122-51 402	
9 Mar. 59	-	122-52 660	<u>Muffler</u> Now: top surface protected with zink paint Formerly: black muffler paint
11 Mar. 59	2 331 207	2 847 140	
18 Mar. 59	449 484	2 842 258	
26 Mar. 59	-	122-53 201	<u>Heater junction box</u> Now: operating lever shaft now has four flat surfaces
31 Mar. 59	2 357 120	2 876 822	
1 Apr. 59	453 100	2 871 882	
7 Apr. 59	2 368 967	2 892 310	<u>Spark plugs</u> Now: heat valve 175 Formerly: 225
7 Apr. 59	-	122-53 666	
15 Apr. 59	459 151	2 900 530	
23 Apr. 59	-	122-54 401	<u>Governor</u> Now: lever for centrifugal secured to regulating lever by woodruff key and modified clamp
4 May 59	2 409 056	2 939 201	<u>Heating system</u> Now: modified heater junction box
4 May 59	466 690	2 944 416	

Date introduced	Chassis No.	Unit No.	Modification
12 May 59	2 422 426	2 955 878	<u>Fan</u>
12 May 59	469 305	2 961 407	Now: New lock washer and modified nut
12 May	-	122-54 916	
13 May 59	2 425 182	2 957 823	<u>Muffler</u>
13 May 59	-	122-54 647	Now: Connections between muffler and heater junction box, muffler and tail pipe provided with conical asbestos seals and held in position with clips
19 May 59	469 447	3 403 348	
13 May 59	2 428 094	2 958 225	<u>Muffler extension</u> Now: 10 mm shorter
19 May 59	469 447	3 400 000	<u>Engine</u> Now: Crankcase with detachable generator bracket. Now: Compression 6.6 : 1 Formerly: 6.1 : 1 Now: Crankshaft thrust support at No. 2 journal. End play: 0.064 - 0.130 mm Formerly: Thrust support at No. 1 journal. Now: Steel-lead-bronze crankshaft bearing outside dia. 60 mm. Now: Modified push rods Now: Modified cylinder head Now: Engine number stamped on flange below generator bracket. Now: 0.5 mm gasket between oil pump and transmission housing. Formerly: 0.2 mm paper gasket. Now: Modified camshaft
19 May 59	469 447	3 403 348	<u>Fan</u>
6 Aug. 59	2 528 668		Now: Ratio of crankshaft pulley/fan drive 1 : 1.75 Formerly: 1 : 2
2 July 59	-	122-56 723	<u>Fan belt</u>
3 July 59	2 503 092	3 052 042	Now: Tropical type fan belt, standard part
16 July 59	490 808	3 424 389	
6 July 59	482 895	3 415 755	<u>Oil pipe to oil pump</u> Now: 5 mm longer, deeper location in oil

Date introduced	Chassis No.	Unit No.	Modification
6 July 59	482 895	3 415 755	<u>Oil pipe to oil pump</u> Now: 5 mm longer, deeper location in oil
10 July 59	2 503 370	3 640 288	<u>Clutch</u> Now: stronger pressure springs, painted light grey
6 Aug.59	2 528 668	3 072 724	<u>Oil dipstick</u> Now: distance from tip of dipstick to upper oil level mark is now 40 mm Formerly: 44 mm
			<u>Oil drain plug</u> Now: in bottom plate of oil strainer Formerly: oil drain plug hole in crankcase
			<u>Muffler</u> Now: extension pipe modified in conjunction with 2° inclined installation of engine
6 Aug.59	2 528 890	3 072 724	<u>Fan</u> Now: bore 28 mm dia. (180 Watt) Formerly: 20 mm dia. (160 Watt)
6 Aug.59	2 533 000		<u>Fan belt</u>
6 Aug.59	492 000		Now: remodified, 8-11 distance washers for belt adjustment Formerly: 5-8 washers
14 Sept.59	508 847	3 440 135	<u>Exhaust valve</u>
13 Nov. 59	2 725 501	3 390 949	Now: valve stem strengthened at part where it joins the valve head
13 Nov. 59		122-61 085	
2 Oct. 59	519 827	3 447 323	<u>Fan</u> Now: bore 28 mm dia. (180 Watt generator) Formerly: 20 mm dia.

Date introduced	Chassis No.	Unit No.	Modification
9 Oct. 59	520 045		<u>Engine rear cover plate</u> Now: wider in direction of travel. Narrower rear cross member panel and modified weatherstrip
19 Oct. 59	2 668 915	3 169 889	<u>Fan pulley/Generator</u> Now: thickness of metal 2.5 mm Formerly: 2.0 mm Now: hub diameter 47.5 mm Formerly: 40 mm
11 Nov. 59	532 737	3 462 260	<u>Camshaft</u> Now: lift on intake cams raised by 0.5 mm
14 Nov. 59	536 592	3 464 486	<u>Crankcase</u> Now: thrust surface for camshaft 38 mm wide Formerly: 36 mm
26 Nov. 59	538 647	3 469 130	<u>Muffler</u> Now: perforated metal inserts installed in the muffler extensions for Nos. 1 and 3 cylinder exhaust pipes. Exhaust pipes shortened by 20 mm (.8")
3 Dec. 59	542 805	3 472 710	<u>Crankshaft bearings</u> Now: wall thickness of the crankshaft bearing shells I, II and III, has been reduced. Running clearance 0.035-0.090 mm Steel-lead-bronze bearings with red paint mark
17 Dec. 59	548 128	3 478 036	<u>Clutch driven plate</u> Torsional springing effect
<u>1960</u>			
7 Jan. 60		3 351 754	<u>Valve adjustment lock nut</u> Now: wrench size 13 mm (engine - passenger car) Formerly: 14 mm

Date introduced	Chassis No.	Unit No.	Modification
29 Jan. 60	562 857	3 491 700 (intermittently)	<u>Crankcase</u>
26 Feb. 60	575 610	3 502 659 (continuously)	Now: intermittently. Both crankcase halves provided with an aperture in the web for main bearing II Now: oil return groove behind No. 4 bearing is right angled Now: No. 4 bearings with annular oil groove and oil drain groove as spare parts
29 Jan. 60	562 857	3 491 700	<u>Crankshaft bearings</u> Now: the crankshaft thrust is now taken by No. 1 bearing Formerly: thrust taken by No. II bearing Now: end play 0.065 - 0.125 mm Formerly: 0.064 - 0.130 mm Now: steel backed bearings, outside dia. 60 mm with oil pocket
26 Feb. 60	575 498-	3 503 001-	<u>Crankshaft bearings</u>
9 Mar. 60	581 372	3 506 974	Now: 5 000 engines with a thick walled aluminium bearings. Thrust and adjustment of end play on bearing No. 1
2 Mar. 60	577 378	3 504 784	<u>Cylinder head</u> Now: holes for push rod tubes 24 + 0.2 mm dia. Formerly: 23 + 0.2 mm dia.
17 Mar. 60	584 092	3 511 710	<u>Valve spring caps</u> Now: shoulder angle increased, measurement now 2 + 0.3 mm Formerly: 1.2 + 0.3 mm
7 Apr. 60	593 761	3 519 209	<u>Cylinder head</u>
1 Aug. 60	3 192 507	5 000 001	Now: spark plug threads cut direct in head
5 Aug. 60	-	122-073 001	Formerly: heli-coil inserts
21 Oct. 60	3 386 181	3 903 100	
11 Apr. 60	595 973	3 520 333	<u>Crankshaft bearings</u> Now: all engines with thick walled aluminium bearings; outside dia. 65 mm. Thrust and end play adjustment at bearing No. 1. End play: 0.065 - 0.125 mm

Date introduced	Chassis No.	Unit No.	Modification
26 Apr. 60	599 862	3 524 892	<u>Crankshaft bearings</u>
1 Aug. 60	3 192 507	5 000 001	Now: Steel backed shells at Nos. 1, 2 and 3 bearings for countries with arctic climates (M 173). No. 4 bearing standard
9 May 60	3 060 711	-	<u>Warm air system</u> Now: Synthetic tubes with noise dampers between body and engine Formerly: Metal tubes with dampers underneath rear seats
31 May 60	614 462	5 000 491	<u>No. 4 crankshaft bearing</u> Now: With hard lead coating, annular oil groove and oil drain groove (M 173)
1 June 60	614 456	5 000 001	<u>Engine capacity</u> Now: 34 bhp./1192 cc. compression ratio: 7.0 : 1 Formerly: 30 bhp./1192 cc. compression ratio: 6.6 : 1 <u>Heater junction box</u> Now: Left junction box with connection for pre-heating pipe <u>Intake elbow</u> Now: Modified shape <u>Pistons</u> Now: Dimension from center of pin to piston crown 39 mm Formerly: 38 mm <u>Cylinders</u> Now: Upper cylinder shoulder reinforced and lengthened 1 mm <u>Cylinder head</u> Now: Holes for cylinders and rocker shaft mounting altered

Date introduced	Chassis No.	Unit No.	Modification
			<u>Front engine cover plate</u> Now: with hole and grommet for the pre-heating pipe Formerly: without hole
8 June 60	620 101	5 005 249	<u>Flywheel</u>
9 June 60	3 135 791	3 849 122	Now: ventilation hole edges cleaned up
5 Aug. 60	-	122-073 001	
23 June 60	624 263	5 009 585	<u>Camshaft</u> Now: camshaft, cam followers and valve timing altered. Minimum camshaft end-play 0.03 mm
23 June 60	624 263	5 009 663	<u>Generator pulley</u>
1 Aug. 60	3 200 001	5 016 001	Now: rear pulley disc thickness 2.5 mm Formerly: 2 mm
5 Aug. 60	-	122-073 001	
6 July 60	630 035	5 024 107	<u>Valve spring caps</u>
5 Aug. 60	-	122-073 001	Now: material thickness 2 mm Formerly: 1.75 mm
1 Aug. 60	3 192 507	5 000 001	<u>Engine</u> Now: 34 bhp engine Formerly: 30 bhp engine <u>Crankcase</u> Now: thrust surface for camshaft widened to 38 mm Formerly: 36 mm
1 Aug. 60	632 231	5 032 590	<u>Valve guides</u> Now: press fit min. 0.02 mm Formerly: 0.01 mm
1 Aug. 60	3 195 309	5 016 085	<u>Crankcase</u>
5 Aug. 60	633 812	5 012 820	Now: annular oil groove in camshaft thrust bearing

Date introduced	Chassis No.	Unit No.	Modification
			<u>Camshaft</u> Now: end-play minimum 0.04 mm Formerly: 0.03 mm
1 Aug. 60	3 197 504 631 810 standard	5 022 942 5 023 489 3 906 420	<u>Cap for oil filler</u> Now: softer, galvanised spring
5 Aug. 60 5 Aug. 60	3 223 145 638 491	5 042 363 5 042 363	<u>Pre-heater pipe</u> Now: gasket for left connection flange, internal dia. 6 mm Formerly: 16 mm dia.
5 Aug. 60	639 531	5 036 223	<u>Crankshaft pulley</u> Now: two marks for ignition timing (7.5 and 10° before T.D.C.) Formerly: one mark at 7.5°
5 Aug. 60	-	122-073 001	<u>Industrial Engine</u> Now: 34 bhp Formerly: 25 and 30 bhp
5 Aug. 60 15 Aug. 60 16 Aug. 60	- 639 731 3 234 439	122-073 001 5 101 291 5 056 055	<u>Cap for oil filler</u> Now: spring travel-angle on bayonet fitting reduced
18 Aug. 60	3 234 061 634 176 -	5 067 818 5 067 818 122-073 150	<u>Camshaft</u> Now: end-play 0.06 mm - 0.114 mm Formerly: 0.04 mm - 0.084 mm
22 Aug. 60	3 247 220	-	<u>Main drive shaft</u> Now: splines treated with dry Molybdenum-Disulphide powder (1 month) Formerly: paste

Date introduced	Chassis No.	Unit No.	Modification
19 Sept. 60	654 600	5 146 943	<u>Cylinder head</u> Now: angle of countersink for push rod seal 60° (5 000 engines) Formerly: 55
21 Sept. 60 21 Sept. 60 7 Oct. 60	3 315 740 - 666 032	5 096 200 122-075 348 5 189 082	<u>Dipstick</u> Now: modified version (except Standard-Model)
27 Sept. 60	3 326 021	3 919 880	<u>Dipstick (Standard)</u> Now: from end of dipstick to upper oil level mark 40 mm, distance between marks 24.5 mm Formerly: 44 and 27.5 mm
30 Sept. 60 3 Oct. 60	3 335 848 659 687	5 178 453 5 178 453	<u>Valve seat insert - exhaust</u> Now: material W 24-8 Formerly: FCN 335
21 Oct. 60	3 452 000	-	<u>Saxomat</u> Now: lead, gearshift lever/ control valve, No. of strands in cable increased three-fold with same cross section. Bend resistance of insulation improved. Hole on gearshift lever turned 180°
8 Nov. 60 8 Nov. 60 8 Nov. 60 8 Nov. 60	3 432 861 679 977 Standard -	5 282 381 5 282 381 3 904 318 122-077 656	<u>Cooling fan</u> Now: 28 blades, bore 20 mm dia. Formerly: 16 blades, bore 28 mm dia.
24 Nov. 60 24 Nov. 60 24 Nov. 60	3 465 332 693 495 -	5 326 955 5 326 955 122-078 159	<u>No. 4 crankshaft bearing</u> Now: with annular oil groove and oil drain groove

Date introduced	Chassis No.	Unit No.	Modification
1 Dec. 60	689 779	5 345 121	<u>Crankcase</u>
1 Dec. 60	-	122-078 656	Now: the two thrust surfaces of the camshaft thrust bearing have been chamfered to 30° at the joint
6 Dec. 60	3 500 256	5 345 121	
16 Dec. 60	3 504 379	-	<u>Saxomat</u> Now: measurements for the adjustment of the clutch lever and adjusting nut/clutch servo rod 17 ± 2 mm and 42 ± 2 mm Formerly: 23 ± 2 mm and 36 ± 2 mm
<u>1961</u>			
25 Jan. 61	719 504	5 497 750	<u>Crankcase</u>
25 Jan. 61	-	122-080 250	Now: the thrust surface for the distributor drive shaft 5 mm deeper in left crankcase half. Distributor drive shaft with thrust shoulder
27 Jan. 61	3 616 527	5 497 750	
27 Jan. 61	721 758	5 507 794	<u>Fan pulleys</u>
30 Jan. 61	-	122-080 657	Now: ratio 1.75 : 1 Formerly: 1.8 : 1
1 Feb. 61	3 627 442	5 507 794	
3 Feb. 61	-	122-080 647	<u>Magneto</u> Now: fastened by an additional clip, secured to intake manifold (carburetor end)
14 Feb. 61	733 268	5 561 105	<u>Exhaust clips</u>
14 Feb. 61	-	122-080 770	Now: fixing screws secured with self locking nuts Formerly: hexagon nuts
17 Feb. 61	3 681 132	5 561 105	
17 Feb. 61	3 681 132	3 908 937	
20 Mar. 61	3 752 922	5 650 250	<u>Oil capacity</u>
20 Mar. 61	749 530	3 914 031	Now: first filling 1.75 l Formerly: 1.5 l
		5 650 250	

Date introduced	Chassis No.	Unit No.	Modification
11 Apr. 61	3 806 249	5 703 138	<u>Crankcase-ventilation</u>
8 June 61	792 098	5 870 191	Now: connection hose from the oil filler to the oil bath air cleaner Formerly: breather tube
9 June 61	3 931 154 (141/143)	5 855 551	
18 Apr. 61	764 224	5 732 007	<u>Cylinder head/crankcase</u>
18 Apr. 61	-	122-084 089	Now: cone shaped countersink for the reception of the push rod tubes Formerly: rounded countersink
21 Apr. 61	3 831 556	5 732 007	
4 May 61	770 136	5 772 654	<u>Cooling air regulation</u>
6 May 61	3 866 883	5 773 144	Now: 8 - 9 mm thick rubber stop for throttle ring Formerly: flat rubber stop
4 May 61	770 290	5 776 100	<u>Exhaust valve</u> Now: bimetal-valve (USA and Canada)
10 May 61	3 874 581	5 784 193	<u>Exhaust valve</u>
15 May 61	-	122-084 245	Now: modified material Formerly: cromo 193
29 May 61	0 000 016	0 000 001	<u>Flywheel</u> Now: Junction between plate and hub strengthened.
			<u>Gland nut</u> Now: Collar lengthened 1 mm thread position reduced accordingly.
29 May 61	782 557	5 840 142	<u>Exhaust pipe</u>
29 May 61	-	122-085 625	Now: the wall thickness of the exhaust pipe for Nos. 1 and 3 cylinders 2.0 mm Formerly: 1.5 mm
31 May 61	3 915 597	5 840 597	
8 June 61	792 043	5 869 983	<u>Cylinder head/Cylinder head Cover</u>
30 Oct. 61		122-090501	Now: Sealing modified. Sealing surface on cylinder head below intake manifold runs in straight line.
2 Nov. 61	4 242 151	6 210 000	
13 June 61	793 372	5 880 887	<u>Push rod tube seals</u>
15 June 61		122-086 726	Now: Plastic, white Formerly: rubber, red and green
16 June 61	3 959 952	5 880 887	

Date introduced	Chassis No.	Unit No.	Modification
15 June 61	794 677	5 891 601	<u>Exhaust valve</u> Now: bimetal valve
1 Aug. 61	803 985	4 959 575	<u>Heater junction boxes</u>
1 Aug. 61		122-087 221	
2 Aug. 61	4 011 959	5 959 575	Now: Held together with metal lugs on front half junction box. Formerly: Tapping screws.
8 Aug. 61		5 979 933	<u>Cylinder head</u> Now: Rocker shaft stud with 12.5 mm dia. shoulder. Sealing ring diameters modified.(partially) Formerly: 11.5 mm dia.
9 Aug. 61	4 040 690	4 153 177	<u>Clutch operating lever</u>
2 Oct. 61	835 705	4 229 962	Now: Operating lever with splines fixed to shaft with circlip. Formerly: Distance sleeve and clamp screw.
28 Aug. 61	0.001 400	0 000 900	<u>Heat exchanger</u> Now: Insulated with plastic shells and glass wool discontinued.
21 Sept.61	4 445 383	3 926 253	<u>Exhaust pipes</u> Now: Wall thickness 2.0 mm for exhaust pipe of No. 1 and 3 cylinders Formerly: 1.5 mm
28 Sept.61	834 154	6 120 731	<u>Automatic cooling air regulation</u>
2 Oct. 61	4 166 056	6 120 731	
21 Nov. 61		122-091 357	Now: Opening temperature of thermostat 65 - 70° C Formerly: 75 - 80° C
29 Sept.61	834 347	6 123 675	<u>Flywheel</u>
2 Oct. 61		122-089 276	
2 Oct. 61	4 165 118	6 123 675	Now: Junction between plate and hub reinforced.

Date introduced	Chassis No.	Unit No.	Modification
			<u>Gland nut</u> Now: Collar lengthened 1 mm thread portion reduced accordingly.
2 Oct. 61	4 163 317	6 114 986	<u>Exhaust valve</u>
2 Oct. 61		122-089 161	Now: Modified armoured seating. Flatter valve heads.
12 Oct. 61	838 698	6 161 125	<u>Intake manifold</u>
13 Oct. 61	4 205 477	6 161 125	Now: pre-heater pipe 20 x 2.5 mm
13 Oct. 61		122-090 067	Formerly: 20 x 2.0 mm
27 Oct. 61	0 003 806	0 004 226	<u>Muffler</u> Now: Two additional cover plates, top left and right
27 Oct. 61	0 003 770	0 004 226	<u>Flywheel/Crankshaft</u>
30 Oct. 61		122-090 886	
31 Oct. 61	849 334	6 209 113	Now: Sheet metal gasket Sealing surface slight inward conical shape (except Saxomat)
1 Nov. 61	4 244 394	6 213 300	Formerly: Paper gasket
9 Nov. 61	862 099	6 246 352	<u>Crankshaft</u>
9 Nov. 61		122-091 879	
11 Nov. 61	4 279 446	6 246 352	Now: Big end journal with 4.5 + 0.5 mm radius Formerly: 45° bevel
17 Nov. 61		122-092 265	<u>Oil filler gland nut</u>
20 Nov. 61	866 077	6 277 482	Now: Height of collar 5-0.5 mm
20 Nov. 61	0 005 894	0 006 512	Formerly: 3.8-0.5 mm
21 Nov. 61	4 299 743	6 277 482	
29.Nov. 61	0 006 658	0 007 505	<u>Cooling fan</u> Now: With thrust washer 0.4 mm
4 Dec. 61	871 337	6 270 773	<u>Hose for crankcase breather</u> Now: 935 mm long Formerly: 905 mm

Date introduced	Chassis No.	Unit No.	Modification
4 Dec. 61		122-093 624	<u>Crankshaft</u>
5 Dec. 61	871 539	6 271 790	Now: Oil drillings on reverse side of crankshaft
5 Dec. 61	4 327 475	6 271 791	
8 Dec. 61	0 008 312	0 009 220	<u>Camshaft</u>
			Now: Material modified, identified with marking "U"
			<u>Cam followers</u>
			Now: Material modified, cam follower head 4.5 mm thick Formerly: 3.2 mm
			<u>Cam follower guides</u>
			Now: shortened 1 mm
11 Dec. 61	0 008 537	0 009 354	<u>Crankshaft bearing II</u>
12 Feb. 62	4 494 101	6 467 858	Now: 0.01 mm oval
5 Feb. 62	898 378	6 467 858	
7 Feb. 62	-	122- 101 835	Now: Oil groove 9 mm wide Formerly: 15 mm
21 May 62	-	126- 07 501	
27 Dec. 61	879 587	6 363 693	<u>Clutch plate</u>
			Now: Torsion spring type discontinued