



# FLUID CAPACITY CHART



| MY / VEHICLE                      | ENGINE OIL <sup>[1]</sup><br>(Rev 11/04)   | MANUAL TRANS. <sup>[2]</sup><br>(Rev 11/04)                | AUTOMATIC TRANS. <sup>[3]</sup>  | DIFFERENTIAL AUTOMATIC TRANS. <sup>[4]</sup> | COOLING SYSTEM <sup>[5]</sup>  | POWER STEERING <sup>[6]</sup> | WINDSHIELD WASHER <sup>[7]</sup> | A/C REFRIGERANT R-134a <sup>[8]</sup> | A/C REFRIGERANT OIL <sup>[9]</sup> |
|-----------------------------------|--|--|--|--|--|-------------------------------|----------------------------------|---------------------------------------|------------------------------------|
| Jetta/Golf<br>Jetta Wagon<br>2002 | w/filter change<br><b>1.8T(AWP)</b><br><b>1.8T (AWW)</b><br>4.4L (4.6 qt)<br><b>1.9 (ALH)</b><br>4.5L (4.8 qt)<br><b>2.0 (AVH)</b><br><b>2.0 (AZG)</b><br>4.2L (4.4 qt)<br><b>2.8 (AFP)</b><br>5.8L (6.1 qt) | <b>02J</b><br>2.0L (2.1 qt)<br><b>02M</b><br>2.3L (2.4 qt) | <b>01M</b><br>New fill: 5.3L (5.6 qt)<br>Refill: approx. 3.0L (3.2 qt)<br><b>09A</b><br>New fill: 7.0 L (7.4 qt) | New fill: 0.75L (0.80 qt)                    | <b>1.8 T (AWP)</b><br><b>1.8 T (AWW)</b><br>5.0L (5.3 qt)<br><b>1.9 (ALH)</b><br>6.0L (6.3 qt)<br><b>2.0 (AZG)</b><br><b>2.0 (AVH)</b><br>5.0L (5.3 qt)<br><b>2.8 (AFP)</b><br>9.0L (9.5 qt) | 0.7-0.9L (0.74-0.95 qt)       | 3.0 L (3.2 qt)                   | 750+50 g (26+1.8 oz)                  | 135±15 cc (4.6± 0.5 fl. oz)        |

<sup>[1]</sup> **ENGINE OIL: Approximate quantities!** Gasoline engines: Use API SERVICE SL, Either VW 502 00, VW 500 00 or VW 501 01, ACEA A3. Diesel engines: Use API SERVICE CF4, API SERVICE CG4, VW 505 00, ACEA B3, or ACEA B4. Do not overfill! Overfilling engine oil can cause misfire DTC's to be stored in Engine Control Module (ECM) -J220-. To prevent overfilling, add approx. 0.5L less than capacity, start engine and let run until engine operating temperature is approx. 60°C (140°F), turn OFF ignition, wait approx. 3 minutes, check dipstick, then fill to MAX. See Repair Manual for details. **Turbo engines only:** After changing oil and filter, start and run engine at idle until oil pressure light goes out. DO NOT rev engine, as this could cause damage/ failure of the turbocharger.

<sup>[2]</sup> **MANUAL TRANS:** Use synthetic oil, SAE 75W90, Part no. G 052 171 A2 for **02M**, Use mineral oil SAE 75W90 Part No. G 052 726 A2 for **02J**.

<sup>[3]</sup> **AUTOMATIC TRANS:** Use VW ATF, Part No. G 052 162 A2 for 01M trans, G 052 990 A2 for 09A trans.. Life-time filling, new fill quantity is for reference only. Only replace after repair (i.e. when removing oil pan). See Repair Manual for details.

<sup>[4]</sup> **DIFFERENTIAL AUTOMATIC TRANS:** Use synthetic gear oil, SAE 75W90, Part No. G 052 145 S2 . Life-time filling, new fill quantity is for reference only. Only replace after repair. See Repair Manual for details.

<sup>[5]</sup> **COOLING SYSTEM:** Use only phosphate-free coolant G 12. **DO NOT INTERCHANGE OR MIX** older G11 with G 12. This can result in serious damage to the engine. Frost protection is required down to approximately -25°C (-13°F). In countries with arctic climates, frost protection is required down to approximately -35°C (-31°F). The anti-freeze ratio must be a minimum of 40%, as otherwise frost protection is reduced. The recommended mixture ratio is 50:50. If greater frost protection is required (very cold climates), the amount of G12 can be increased, but only up to 60%. This provides frost protection to approx. -40°C (-40°F). Do not reduce the coolant concentration by adding water, even in warmer seasons and in warmer countries, as cooling effectiveness will be reduced.

<sup>[6]</sup> **POWER STEERING:** Hydraulic oil G 002 012. Do not use ATF.

<sup>[7]</sup> **WINDSHIELD WASHER:** Concentrated ZVW 177 901/903/904/906. Windshield container also serves for rear washer in Jetta Wagon.

<sup>[8]</sup> **A/C REFRIGERANT:** Use R-134a

<sup>[9]</sup> **A/C REFRIGERANT OIL:** Use PAG oil, Part No. G 052 154 A2 w/ Sandon compressor, (G052 300AZ, or G 052 154.A2w/Zexel compressor) with R-134a.

**NOTE: Part numbers are for reference only. Always check with your Parts Dept. for the latest parts information.**



# FLUID CAPACITY CHART



| MY / VEHICLE    | ENGINE OIL <sup>[1]</sup><br>(Rev 11/04)  | MANUAL TRANS. <sup>[2]</sup><br>(Rev 11/04)                | AUTOMATIC TRANS. <sup>[3]</sup>  | DIFFERENTIAL AUTOMATIC TRANS. <sup>[4]</sup> | COOLING SYSTEM <sup>[5]</sup>  | POWER STEERING <sup>[6]</sup> | WINDSHIELD WASHER <sup>[7]</sup> | A/C REFRIGERANT R-134a <sup>[8]</sup> | A/C REFRIGERANT OIL <sup>[9]</sup> |
|-----------------|---|--|--|--|--|-------------------------------|----------------------------------|---------------------------------------|------------------------------------|
| New Beetle 2002 | w/filter change<br><b>1.8T (AWV)</b><br>4.5L (4.8 qt)<br><b>1.9 (ALH)</b><br>4.5L (4.8 qt)<br><b>2.0 (AVH)</b><br><b>2.0 (AZG)</b><br>4.2L (4.4 qt) | <b>02J</b><br>2.0L (2.1 qt)<br><b>02M</b><br>2.3L (2.4 qt) | <b>01M</b><br>New fill: 5.3L (5.6 qt)<br>Refill: approx. 3.0L (3.2 qt) | New fill: 0.75L (0.80 qt)                    | <b>1.8T (AWV)</b><br>5.0L (5.3 qt)<br><b>1.9 (ALH)</b><br>6.0L (6.3 qt)<br><b>2.0 (AVH)</b><br><b>2.0 (AZG)</b><br>5.0L (5.3 qt) | 0.7-0.9 L (0.74-0.95 qt)      | 2.0L (2.1 qt)                    | 700+50 g (24.7+1.8 oz)                | 135 cc (4.6± 0.5 fl. oz)           |

<sup>[1]</sup> **ENGINE OIL: Approximate quantities!** Gasoline engines: Use API SERVICE SL, Either VW 502 00, VW 500 00 or VW 501 01, ACEA A3. Diesel engines: Use API SERVICE CF4, API SERVICE CG4, VW 505 00, ACEA B3, or ACEA B4. Do not overfill! Overfilling engine oil can cause misfire DTC's to be stored in Engine Control Module (ECM) -J220-. To prevent overfilling, add approx. 0.5L less than capacity, start engine and let run until engine operating temperature is approx. 60°C (140°F), turn OFF ignition, wait approx. 3 minutes, check dipstick, then fill to MAX. See Repair Manual for details. **Turbo engines only:** After changing oil and filter, start and run engine at idle until oil pressure light goes out. DO NOT rev engine, as this could cause damage/ failure of the turbocharger.

<sup>[2]</sup> **MANUAL TRANS:** Use synthetic oil, SAE 75W90, Part No. G 052 171 A2 for **02M**, Use mineral oil Part No. G 052 726 A2 for **02J**.

<sup>[3]</sup> **AUTOMATIC TRANS:** Use VW ATF, Part No. G 052 162 A2(1 liter container). Life-time filling, new fill quantity is for reference only. Only replace after repair (i.e. when removing oil pan). See Repair Manual for details.

<sup>[4]</sup> **DIFFERENTIAL AUTOMATIC TRANS:** Use synthetic gear oil, SAE 75W90, Part No. G 052 145 S2. Life-time filling, new fill quantity is for reference only. Only replace after repair. See Repair Manual for details.

<sup>[5]</sup> **COOLING SYSTEM:** Use only phosphate-free coolant G 12. **DO NOT INTERCHANGE OR MIX** older G 11 with G12. This can result in serious damage to the engine. Frost protection is required down to approximately -25°C (-13°F). In countries with arctic climates, frost protection is required down to approximately -35°C (-31°F). The anti-freeze ratio must be a minimum of 40%, as otherwise frost protection is reduced. The recommended mixture ratio is 50:50. If greater frost protection is required (very cold climates), the amount of G12 can be increased, but only up to 60%. This provides frost protection to approx. -40°C (-40°F). Do not reduce the coolant concentration by adding water, even in warmer seasons and in warmer countries, as cooling effectiveness will be reduced.

<sup>[6]</sup> **POWER STEERING:** Hydraulic oil G 002 012. Do not use ATF.

<sup>[7]</sup> **WINDSHIELD WASHER:** Concentrated ZVW 177 901/903/904/906.

<sup>[8]</sup> **A/C REFRIGERANT:** Use R-134a.

<sup>[9]</sup> **A/C REFRIGERANT OIL:** Use PAG oil, Part No. G 052 154 A2 w/Sandon compressor.

**NOTE: Part numbers are for reference only. Always check with your Parts Dept. for the latest parts information.**



# FLUID CAPACITY CHART



| MY / VEHICLE | ENGINE OIL <sup>[1]</sup><br>(Rev 10/04)  | MANUAL TRANS. <sup>[2]</sup> | AUTOMATIC TRANS. <sup>[3]</sup>  | DIFFERENTIAL AUTOMATIC TRANS. <sup>[4]</sup>   | COOLING SYSTEM <sup>[5]</sup>   | POWER STEERING <sup>[6]</sup> | WINDSHIELD WASHER <sup>[7]</sup> | A/C REFRIGERANT R-134a <sup>[8]</sup>   | A/C REFRIGERANT OIL <sup>[9]</sup>  |
|--------------|---|------------------------------|--|--|---|-------------------------------|----------------------------------|---|---|
| Passat 2002  | w/filter change<br><b>1.8T (AWM)</b><br>See " * " below<br>4.1L (4.3 qt)<br><b>2.8 (ATQ)</b><br>6.2L (6.5 qt) | <b>012</b><br>2.25L (2.4 qt) | <b>01V</b><br>New fill: 9.0L (9.5 qt)<br>Refill: approx. 2.6-3.0L (2.7-3.2 qt) | <b>01V</b><br>Front final drive<br>New fill: 0.75L (0.80 qt)<br><b>01V</b> (all-wheel drive)<br>Transfer gearbox<br>New fill: 0.8L (0.85 qt)<br><b>01R</b> Rear final drive<br>New fill: 1.5L (1.6 qt) | <b>2.8 (AWM)</b><br><b>2.8 (ATQ)</b><br><b>4.0 (BDP)</b><br>8.0L (8.5 qt) | 0.7-0.9L<br>(0.74-0.95 qt)    | 6.2L (6.6 qt)                    | <b>Denso</b><br>600+25 g<br>(21+0.9 oz)<br><b>W8 Only</b><br>500 +25 g<br>(17.6 + 0.9 oz) | 250 cc<br>(8.5 fl. oz)<br><br><b>W8 Only</b><br>200 cc ± 10 cc<br>(6.76 ± .34 fl. oz) |
| W8           | <b>4.0(BDP)</b><br>8.5L(9.0 qt)   |                              |  |  |   |                               |                                  |   |   |

<sup>[1]</sup> **ENGINE OIL: Approximate quantities!** Use API SERVICE SL, Either VW 502 00, VW 500 00 or VW 501 01, ACEA A3. **W8 Only:** ACEA A3 specification: SAE 5W40, SAE 10W40, SAE15W50, VW 502 00, VW 503 01, VW 505 01, or for topping up only, ILSAC GF3 SAE 5W30. Do not overfill! Overfilling engine oil can cause misfire DTC's to be stored in Engine Control Module (ECM) -J220-. To prevent overfilling, add approx. 0.5L less than capacity, start engine and let run until engine operating temperature is approx. 60°C (140°F), turn OFF ignition, wait approx. 3 minutes, check dipstick, then fill to MAX. See Repair Manual for details. **Turbo engines only:** After changing oil & filter, start and run eng. at idle till oil pressure light goes out. Don't rev eng. as this could cause damage/failure of turbocharger. \* **1.8T (AWM) MUST** use oil meeting VW 502 00 standard ONLY(either 0W40, 5W40 or 5W30) and oil filter part No. 068 115 561B. See TB Grp 17.

<sup>[2]</sup> **MANUAL TRANS:** Use synthetic oil, SAE 75W90, Part No. G 052 911 A1

<sup>[3]</sup> **AUTOMATIC TRANS:** Use VW ATF, Part No. G 052 162 A2(1 liter container). Life-time filling, new fill quantity is for reference only. Only replace after repair (i.e. when removing oil pan). See Repair Manual for details.

<sup>[4]</sup> **DIFFERENTIAL AUTOMATIC TRANS:** Use synthetic gear oil, SAE 75W90, Part No. G 052 145 S2. Life-time filling, new fill quantities are for reference only. Only replace after repair. See Repair Manual for details.

<sup>[5]</sup> **COOLING SYSTEM:** Use only phosphate free coolant G 12. **W8 Only,** Use G12 Plus (violet colored), mixable with G12 (pink colored). **DO NOT INTERCHANGE OR MIX** older G 11 with G 12 or G12 Plus. This can result in serious damage to the engine. Frost protection is required down to approximately -25°C (-13°F). In countries with arctic climates, frost protection is required down to approximately -35°C (-31°F). The anti-freeze ratio must be a minimum of 40%, as otherwise frost protection is reduced. The recommended mixture ratio is 50:50. If greater frost protection is required (very cold climates), the amount of G 12 can be increased, but only up to 60%. This provides frost protection to approx. -40°C (-40°F). Do not reduce the coolant concentration by adding water, even in warmer seasons and in warmer countries, as cooling effectiveness will be reduced.

<sup>[6]</sup> **POWER STEERING:** Hydraulic oil G 002 000. Do not use ATF.

<sup>[7]</sup> **WINDSHIELD WASHER:** Concentrated ZVW 177 901/903/904/906, Windshield washer container also serves for rear washer on Wagon.

<sup>[8]</sup> **A/C REFRIGERANT:** Use R-134a.

<sup>[9]</sup> **A/C REFRIGERANT OIL:** Use PAG oil with R-134a. For Denso compressor, use Part No. G 052 300 A2.

**NOTE:** Part numbers are for reference only. Always check with your Parts Dept. for the latest parts information.



# FLUID CAPACITY CHART



| MY / VEHICLE | ENGINE OIL [1]                                       | MANUAL TRANS. [2]           | AUTOMATIC TRANS. [3]   | DIFFERENTIAL AUTOMATIC TRANS. [4] | COOLING SYSTEM [5]                | POWER STEERING [6]     | WINDSHIELD WASHER [7] | A/C REFRIGERANT R-134a [8] | A/C REFRIGERANT OIL [9]    |
|--------------|--|-----------------------------|--|-----------------------------------|-----------------------------------|------------------------|-----------------------|----------------------------|----------------------------|
| Cabrio 2002  | w/filter change<br><b>2.0 (ABA)</b><br>4.0L (4.2 qt) | <b>020</b><br>1.9L (2.0 qt) | <b>01M</b><br>New fill: 5.3L (5.6 qt)<br>Refill: approx. 3.0L (3.2 qt) | New fill: 0.75L (0.80 qt)         | <b>2.0 (ABA)</b><br>5.0L (5.3 qt) | 0.7-0.9L (0.74-0.95qt) | 3.0L (3.2 qt)         | 800+50 g (28.2+1.8 oz)     | 115±15 cc (3.9±0.5 fl. oz) |

[1] **ENGINE OIL: Approximate quantities!** Use API SERVICE SL, Either VW 502 00, VW 500 00 or VW 501 01, ACEA A3. Do not overfill! Overfilling engine oil can cause misfire DTC's to be stored in Engine Control Module (ECM) -J220-. To prevent overfilling, add approx. 0.5L less than capacity, start engine and let run until engine operating temperature is approx. 60°C (140°F), turn OFF ignition, wait approx. 3 minutes, check dipstick, then fill to MAX. See Repair Manual for details.

[2] **MANUAL TRANS:** Use synthetic oil, SAE 75W90, Part No. G 005 000.

[3] **AUTOMATIC TRANS:** Use VW ATF, Part No. G 052 162 A2(1 liter container). Life-time filling, new fill quantity is for reference only. Only replace after repair (i.e. when removing oil pan). See Repair Manual for details.

[4] **DIFFERENTIAL AUTOMATIC TRANS:** Use synthetic gear oil, SAE 75W90, Part No. G 052 145 S2. Life-time filling, new fill quantity is for reference only. Only replace after repair. See Repair Manual for details.

[5] **COOLING SYSTEM:** Use only phosphate-free coolant G12. **DO NOT INTERCHANGE OR MIX** older G11 with G12. This can result in serious damage to the engine. Frost protection is required down to approximately -25°C (-13°F). In countries with arctic climates, frost protection is required down to approximately -35°C (-31°F). The anti-freeze ratio must be a minimum of 40%, as otherwise frost protection is reduced. The recommended mixture ratio is 50:50. If greater frost protection is required (very cold climates), the amount of G12 can be increased, but only up to 60%. This provides frost protection to approx. -40°C (-40°F). Do not reduce the coolant concentration by adding water, even in warmer seasons and in warmer countries, as cooling effectiveness will be reduced.

[6] **POWER STEERING:** Hydraulic oil G002 000. Do not use ATF.

[7] **WINDSHIELD WASHER:** Concentrated ZVW 177 901/903/904/906.

[8] **A/C REFRIGERANT:** Use R-134a.

[9] **A/C REFRIGERANT OIL:** Use PAG oil SP-10, Part No. G 052 154 A2 with R-134a.

**NOTE:** Part numbers are for reference only. Always check with your Parts Dept. for the latest parts information.



# FLUID CAPACITY CHART



| MY / VEHICLE | ENGINE OIL [1]                                       | MANUAL TRANS. | AUTOMATIC TRANS. [2]   | DIFFERENTIAL AUTOMATIC TRANS. [3] | COOLING SYSTEM [4]   | POWER STEERING [5]    | WINDSHIELD WASHER [6] | A/C REFRIGERANT R-134a [7]  | A/C REFRIGERANT OIL [8]  |
|--------------|--|---------------|--|-----------------------------------|--|-----------------------|-----------------------|---|--|
| EuroVan 2002 | w/filter change<br><b>2.8 (AXK)</b><br>6.2L (6.5 qt) | N/A           | <b>01P</b><br>New fill: 5.35L (5.7qt)<br>Refill: approx. 3.5L (3.7 qt) | New fill: 1.15L (1.22 qt)         | <b>2.8 (AXK)</b><br>1 heat ex: 9.0L (9.5 qt)<br>2 heat ex: 10.8L (11.4 qt)<br>2 heat ex. + water heater: 11.4L (12.0 qt) | approx. 1.0L (1.1 qt) | 7.0L (7.4 qt)         | 1 evap: 950+50g (33.5+1.8 oz)<br>2 evap: 1350+50g (47.6+1.8 oz.)<br>2 evap, long w/b: 1400+50g (49+1.8 oz.) | 1 evap: 135 cc (4.6 fl. oz)<br>2 evap: 135+105cc=240 cc (8.1 fl. oz) |

[1] **ENGINE OIL: Approximate quantities!** Use API SERVICE SL, Either VW 502 00, VW 500 00 or VW 501 01, ACEA A3. Do not overfill! Overfilling engine oil can cause misfire DTC's to be stored in Engine Control Module (ECM) -J220-. To prevent overfilling, add approx. 0.5L less than capacity, start engine and let run until engine operating temperature is approx. 60°C (140°F), turn OFF ignition, wait approx. 3 minutes, check dipstick, then fill to MAX. See Repair Manual for details.

[2] **AUTOMATIC TRANS:** Use VW ATF, Part No. G 052 162 A2. Life-time filling, new fill quantity is for reference only. Only replace after repair (i.e. when removing oil pan). See Repair Manual for details.

[3] **DIFFERENTIAL AUTOMATIC TRANS:** Use synthetic gear oil, SAE 75W90, Part No. G 052 145 S2. Life-time filling, new fill quantity is for reference only. Only replace after repair. See Repair Manual for details.

[4] **COOLING SYSTEM:** Use only phosphate-free coolant G12. **DO NOT INTERCHANGE OR MIX** older G11 with G12. This can result in serious damage to the engine. Frost protection is required down to approximately -25°C (-13°F). In countries with arctic climates, frost protection is required down to approximately -35°C (-31°F). The anti-freeze ratio must be a minimum of 40%, as otherwise frost protection is reduced. The recommended mixture ratio is 50:50. If greater frost protection is required (very cold climates), the amount of G12 can be increased, but only up to 60%. This provides frost protection to approx. -40°C (-40°F). Do not reduce the coolant concentration by adding water, even in warmer seasons and in warmer countries, as cooling effectiveness will be reduced.

[5] **POWER STEERING:** Hydraulic oil G002 000 / G002 012. Do not use ATF.

[6] **WINDSHIELD WASHER:** Concentrated ZVW 177 901/903/904/906.

[7] **A/C REFRIGERANT:** Use R-134a.

[8] **A/C REFRIGERANT OIL:** Use PAG oil, Part No. G 052 154 A2 with R-134a.

**NOTE:** Part numbers are for reference only. Always check with your Parts Dept. for the latest parts information.