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**QUICK REFERENCE INDEX**

 **INFINITI**<sup>®</sup>  
**G35 Coupe**  
 MODEL V35 SERIES

  
**INFINITI**<sup>®</sup>

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<b>A GENERAL INFORMATION</b>	<b>GI General Information</b>	
<b>B ENGINE</b>	<b>EM Engine Mechanical</b>	
	<b>LU Engine Lubrication System</b>	
	<b>CO Engine Cooling System</b>	
	<b>EC Engine Control System</b>	
	<b>FL Fuel System</b>	
	<b>EX Exhaust System</b>	
	<b>ACC Accelerator Control System</b>	
	<b>CL Clutch</b>	
<b>C TRANSMISSION/ TRANSAXLE</b>	<b>MT Manual Transmission</b>	
	<b>AT Automatic Transmission</b>	
	<b>PR Propeller Shaft</b>	
<b>D DRIVELINE/AXLE</b>	<b>RFD Rear Final Drive</b>	
	<b>FAX Front Axle</b>	
	<b>RAX Rear Axle</b>	
	<b>FSU Front Suspension</b>	
<b>E SUSPENSION</b>	<b>RSU Rear Suspension</b>	
	<b>WT Road Wheels &amp; Tires</b>	
	<b>BR Brake System</b>	
<b>F BRAKES</b>	<b>PB Parking Brake System</b>	
	<b>BRC Brake Control System</b>	
	<b>PS Power Steering System</b>	
<b>G STEERING</b>	<b>SB Seat Belts</b>	
<b>H RESTRAINTS</b>	<b>SRS Supplemental Restraint System (SRS)</b>	
	<b>BL Body, Lock &amp; Security System</b>	
<b>I BODY</b>	<b>GW Glasses, Window System &amp; Mirrors</b>	
	<b>RF Roof</b>	
	<b>EI Exterior &amp; Interior</b>	
	<b>IP Instrument Panel</b>	
	<b>SE Seat</b>	
	<b>ATC Automatic Air Conditioner</b>	
	<b>J AIR CONDITIONER</b>	<b>SC Starting &amp; Charging System</b>
<b>K ELECTRICAL</b>	<b>LT Lighting System</b>	
	<b>DI Driver Information System</b>	
	<b>WW Wiper, Washer &amp; Horn</b>	
	<b>BCS Body Control System</b>	
	<b>LAN LAN System</b>	
	<b>AV Audio, Visual, Navigation &amp; Telephone System</b>	
	<b>ACS Auto Cruise Control System</b>	
	<b>PG Power Supply, Ground &amp; Circuit Elements</b>	
	<b>L MAINTENANCE</b>	<b>MA Maintenance</b>
	<b>M INDEX</b>	<b>IDX Alphabetical Index</b>

**A**  
**B**  
**C**  
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# FOREWORD

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This manual contains maintenance and repair procedure for the 2003 INFINITI G35 Coupe.

In order to assure your safety and the efficient functioning of the vehicle, this manual should be read thoroughly. It is especially important that the PRECAUTIONS in the GI section be completely understood before starting any repair task.

All information in this manual is based on the latest product information at the time of publication. The right is reserved to make changes in specifications and methods at any time without notice.

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## IMPORTANT SAFETY NOTICE

The proper performance of service is essential for both the safety of the technician and the efficient functioning of the vehicle.

The service methods in this Service Manual are described in such a manner that the service may be performed safely and accurately. Service varies with the procedures used, the skills of the technician and the tools and parts available. Accordingly, anyone using service procedures, tools or parts which are not specifically recommended by NISSAN must first be completely satisfied that neither personal safety nor the vehicle's safety will be jeopardized by the service method selected.



NISSAN MOTOR CO., LTD.



**PLEASE HELP MAKE THIS SERVICE MANUAL BETTER!**

**INFINITI®**

Your comments are important to INFINITI and will help us to improve our Service Manuals.

Use this form to report any issues or comments you may have regarding our Service Manuals.

Please print this form and type or write your comments below. Mail or fax to:

Nissan North America, Inc.  
Technical Service Information  
39001 Sunrise Drive, P.O. Box 9200  
Farmington Hills, MI USA 48331  
FAX: (248) 488-3910

**SERVICE MANUAL: Model:** \_\_\_\_\_ **Year:** \_\_\_\_\_

**PUBLICATION NO. (Refer to Quick Reference Index):** \_\_\_\_\_

Please describe any Service Manual issues or problems in detail:

Page number(s) \_\_\_\_\_ *Note: Please include a copy of each page, marked with your comments.*

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**Are the trouble diagnosis procedures logical and easy to use? (circle your answer) YES NO**

If no, what page number(s)? \_\_\_\_\_ *Note: Please include a copy of each page, marked with your comments.*

Please describe the issue or problem in detail: \_\_\_\_\_

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**Is the organization of the manual clear and easy to follow? (circle your answer) YES NO**

Please comment: \_\_\_\_\_

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**What information should be included in INFINITI Service Manuals to better support you in servicing or repairing customer vehicles?**

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DATE: \_\_\_\_\_ YOUR NAME: \_\_\_\_\_ POSITION: \_\_\_\_\_

DEALER: \_\_\_\_\_ DEALER NO.: \_\_\_\_\_ ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE/PROV./COUNTRY: \_\_\_\_\_ ZIP/POSTAL CODE: \_\_\_\_\_

## INCH TO METRIC CONVERSION TABLE

(Rounded-off for automotive use)

inches	mm	inches	mm
.100	<b>2.54</b>	.610	<b>15.49</b>
.110	<b>2.79</b>	.620	<b>15.75</b>
.120	<b>3.05</b>	.630	<b>16.00</b>
.130	<b>3.30</b>	.640	<b>16.26</b>
.140	<b>3.56</b>	.650	<b>16.51</b>
.150	<b>3.81</b>	.660	<b>16.76</b>
.160	<b>4.06</b>	.670	<b>17.02</b>
.170	<b>4.32</b>	.680	<b>17.27</b>
.180	<b>4.57</b>	.690	<b>17.53</b>
.190	<b>4.83</b>	.700	<b>17.78</b>
.200	<b>5.08</b>	.710	<b>18.03</b>
.210	<b>5.33</b>	.720	<b>18.29</b>
.220	<b>5.59</b>	.730	<b>18.54</b>
.230	<b>5.84</b>	.740	<b>18.80</b>
.240	<b>6.10</b>	.750	<b>19.05</b>
.250	<b>6.35</b>	.760	<b>19.30</b>
.260	<b>6.60</b>	.770	<b>19.56</b>
.270	<b>6.86</b>	.780	<b>19.81</b>
.280	<b>7.11</b>	.790	<b>20.07</b>
.290	<b>7.37</b>	.800	<b>20.32</b>
.300	<b>7.62</b>	.810	<b>20.57</b>
.310	<b>7.87</b>	.820	<b>20.83</b>
.320	<b>8.13</b>	.830	<b>21.08</b>
.330	<b>8.38</b>	.840	<b>21.34</b>
.340	<b>8.64</b>	.850	<b>21.59</b>
.350	<b>8.89</b>	.860	<b>21.84</b>
.360	<b>9.14</b>	.870	<b>22.10</b>
.370	<b>9.40</b>	.880	<b>22.35</b>
.380	<b>9.65</b>	.890	<b>22.61</b>
.390	<b>9.91</b>	.900	<b>22.86</b>
.400	<b>10.16</b>	.910	<b>23.11</b>
.410	<b>10.41</b>	.920	<b>23.37</b>
.420	<b>10.67</b>	.930	<b>23.62</b>
.430	<b>10.92</b>	.940	<b>23.88</b>
.440	<b>11.18</b>	.950	<b>24.13</b>
.450	<b>11.43</b>	.960	<b>24.38</b>
.460	<b>11.68</b>	.970	<b>24.64</b>
.470	<b>11.94</b>	.980	<b>24.89</b>
.480	<b>12.19</b>	.990	<b>25.15</b>
.490	<b>12.45</b>	1.000	<b>25.40</b>
.500	<b>12.70</b>	2.000	<b>50.80</b>
.510	<b>12.95</b>	3.000	<b>76.20</b>
.520	<b>13.21</b>	4.000	<b>101.60</b>
.530	<b>13.46</b>	5.000	<b>127.00</b>
.540	<b>13.72</b>	6.000	<b>152.40</b>
.550	<b>13.97</b>	7.000	<b>177.80</b>
.560	<b>14.22</b>	8.000	<b>203.20</b>
.570	<b>14.48</b>	9.000	<b>228.60</b>
.580	<b>14.73</b>	10.000	<b>254.00</b>
.590	<b>14.99</b>	20.000	<b>508.00</b>
.600	<b>15.24</b>		

## METRIC TO INCH CONVERSION TABLE

(Rounded-off for automotive use)

mm	inches	mm	inches
<b>1</b>	.0394	<b>51</b>	2.008
<b>2</b>	.079	<b>52</b>	2.047
<b>3</b>	.118	<b>53</b>	2.087
<b>4</b>	.157	<b>54</b>	2.126
<b>5</b>	.197	<b>55</b>	2.165
<b>6</b>	.236	<b>56</b>	2.205
<b>7</b>	.276	<b>57</b>	2.244
<b>8</b>	.315	<b>58</b>	2.283
<b>9</b>	.354	<b>59</b>	2.323
<b>10</b>	.394	<b>60</b>	2.362
<b>11</b>	.433	<b>61</b>	2.402
<b>12</b>	.472	<b>62</b>	2.441
<b>13</b>	.512	<b>63</b>	2.480
<b>14</b>	.551	<b>64</b>	2.520
<b>15</b>	.591	<b>65</b>	2.559
<b>16</b>	.630	<b>66</b>	2.598
<b>17</b>	.669	<b>67</b>	2.638
<b>18</b>	.709	<b>68</b>	2.677
<b>19</b>	.748	<b>69</b>	2.717
<b>20</b>	.787	<b>70</b>	2.756
<b>21</b>	.827	<b>71</b>	2.795
<b>22</b>	.866	<b>72</b>	2.835
<b>23</b>	.906	<b>73</b>	2.874
<b>24</b>	.945	<b>74</b>	2.913
<b>25</b>	.984	<b>75</b>	2.953
<b>26</b>	1.024	<b>76</b>	2.992
<b>27</b>	1.063	<b>77</b>	3.031
<b>28</b>	1.102	<b>78</b>	3.071
<b>29</b>	1.142	<b>79</b>	3.110
<b>30</b>	1.181	<b>80</b>	3.150
<b>31</b>	1.220	<b>81</b>	3.189
<b>32</b>	1.260	<b>82</b>	3.228
<b>33</b>	1.299	<b>83</b>	3.268
<b>34</b>	1.339	<b>84</b>	3.307
<b>35</b>	1.378	<b>85</b>	3.346
<b>36</b>	1.417	<b>86</b>	3.386
<b>37</b>	1.457	<b>87</b>	3.425
<b>38</b>	1.496	<b>88</b>	3.465
<b>39</b>	1.535	<b>89</b>	3.504
<b>40</b>	1.575	<b>90</b>	3.543
<b>41</b>	1.614	<b>91</b>	3.583
<b>42</b>	1.654	<b>92</b>	3.622
<b>43</b>	1.693	<b>93</b>	3.661
<b>44</b>	1.732	<b>94</b>	3.701
<b>45</b>	1.772	<b>95</b>	3.740
<b>46</b>	1.811	<b>96</b>	3.780
<b>47</b>	1.850	<b>97</b>	3.819
<b>48</b>	1.890	<b>98</b>	3.858
<b>49</b>	1.929	<b>99</b>	3.898
<b>50</b>	1.969	<b>100</b>	3.937

QUICK REFERENCE CHART G35 COUPE

PFP:00000

ENGINE TUNE-UP DATA (VQ35DE)

ELS0003W

Engine model		VQ35DE				
Firing order		1-2-3-4-5-6				
Idle speed M/T, A/T (In "N" position) rpm		650±50				
Ignition timing (BTDC at idle speed)		15°±5°				
CO% at idle		0.7 - 9.9 % and engine runs smoothly				
Drive Belt	Deflection adjustment		Unit: mm (in)	Tension adjustment		Unit: N(kg, lb)
	Used belt		New belt	Used belt		New belt
	Limit	After adjustment		Limit	After adjustment	
Alternator, power steering oil pump and fan belt	7 (0.28)	4 - 5 (0.16 - 0.20)	3.5 - 4.5 (0.138 - 0.177)	294 (30, 66)	730 - 818 (74.5 - 83.5, 164 - 184)	838 - 926 (85.5 - 94.5, 188 - 208)
Air conditioner compressor belt	12 (0.47)	9 - 10 (0.35 - 0.39)	8 - 9 (0.31 - 0.35)	196 (20, 44)	348 - 436 (35.5 - 44.5, 78 - 98)	470 - 559 (48 - 57, 106 - 126)
Applied pushing force	98 (10, 22)			—		
Radiator cap relief pressure		kPa (kg/cm <sup>2</sup> , psi)		78 - 98 (0.8 - 1.0, 11 - 14)		
Standard						
Limit				59 (0.6, 9)		
Cooling system leakage testing pressure		kPa (kg/cm <sup>2</sup> , psi)		157(1.6, 23)		
Compression pressure		kPa (kg/cm <sup>2</sup> , psi)/rpm		1,275 (13.0, 185) /300		
Standard						
Minimum				981 (10.0, 142)/300		
Spark plug (Platinum-tipped type)		Standard type		PLFR5A - 11		
		Hot type		PLFR4A - 11		
		Cold type		PLFR6A - 11		
Gap (Nominal)		mm(in)		1.1 ( 0.043 )		

**FRONT WHEEL ALIGNMENT (Unladen\* )**

ELS0003X

Tire		17inch	18inch
Camber	Degree minute (Decimal degree)	Minimum	-1° 15' ( - 1.25° )
		Nominal	- 0° 30' ( - 0.50° )
		Maximum	0° 15' ( 0.25° )
		Left and right difference	45' ( 0.75° )
Caster	Degree minute (Decimal degree)	Minimum	7° 25' ( 7.42° )      7° 15' ( 7.25° )
		Nominal	8° 10' ( 8.17° )      8° 00' ( 8.00° )
		Maximum	8° 55' ( 8.92° )      8° 45' ( 8.75° )
		Left and right difference	45' ( 0.75° )
Kingpin inclination	Degree minute (Decimal degree)	Minimum	4° 10' ( 4.17° )
		Nominal	4° 55' ( 4.92° )
		Maximum	5° 40' ( 5.67° )
Total toe-in Distance ( A – B )	mm (in)	Minimum	0 ( 0 )
		Nominal	1 ( 0.04 )
		Maximum	2 ( 0.08 )
Wheel turning angle (Full turn)	Inside Degree minute (Decimal degree)	Minimum	35° 45' ( 35.75° )
		Nominal	38° 45' ( 38.75° )
		Maximum	39° 45' ( 39.75° )
	Outside Degree minute (Decimal degree)	Nominal	30° 45' ( 30.75° )

\* : Fuel, engine coolant and engine oil full. Spare tire, jack, hand tools and mats in designated positions.

**REAR WHEEL ALIGNMENT (Unladen\*)**

ELS0003Y

Camber	Degree minute (Decimal degree)	Minimum	- 2° 00' ( - 2.00° )
		Nominal	- 1° 30' ( - 1.50° )
		Maximum	- 1° 00' ( - 1.00° )
Total-in Distance ( A – B )	mm (in)	Minimum	0 ( 0 )
		Nominal	2.8 ( 0.110 )
		Maximum	5.6 ( 0.220 )

\* : Fuel, engine coolant and oil full. Spare tire, jack, hand tools and mats in designated positions.

**BRAKE**

ELS0003Z

Unit : mm ( in )

Front brake	Pad wear limit	2.0 ( 0.079 )
	Rotor repair limit	OPB27VA model : 28.4 ( 1.118 ), CLZ25VD model : 22.0 ( 0.866 )
Rear brake	Pad wear limit	2.0 ( 0.079 )
	Rotor repair limit	OPB13VB model : 20.2 ( 0.795 ), AD14VE model : 14.0 ( 0.551 )
Pedal free height		M/T model : 154 - 164 ( 6.06 - 6.46 ), A/T model : 162 - 172 ( 6.38 - 6.77 )
Pedal depressed height*		M/T model : More than 90 ( 3.54 ), A/T model : More than 95 ( 3.74 )

\* : Under force of 490 N( 50 kg, 110 lb ) with engine running.

# QUICK REFERENCE CHART G35 COUPE

2003

## REFILL CAPACITIES

ELS00040

UNIT		Liter	US measure
Fuel tank		76	20 - 1/8 gal
Coolant ( With reservoir tank )		8.7	9 - 1/4 qt
Engine	Drain and refill		
	With oil filter change	4.7	5 qt
	Without oil filter change	4.4	4 - 5/8 qt
	Dry engine (Overhaul)	5.4	5 - 3/4 qt
Transmission	A/T	10.3	10 - 7/8 qt
	M/T	2.9	3 - 1/8 qt
Differential carrier		1.4	3 pt
Power steering system		1.0	1 - 1/8 qt
Air conditioning system	Compressor oil	0.18	6.0 fl oz
	Refrigerant	0.55 kg	1.21 lb