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**INFINITI**®

**J30**

**MODEL Y32 SERIES**



**INFINITI**®

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# FOREWORD

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This manual contains maintenance and repair procedures for the 1996 (for Canada) and 1997 (for U.S.A.) INFINITI J30.

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 INFINITI must first be completely satisfied that neither personal safety nor the vehicle's safety will be jeopardized by the service method selected.



**I N F I N I T I**®



**NISSAN MOTOR CO., LTD.**

Overseas Service Department  
Tokyo, Japan



**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 photocopy this form and type or print 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: (810) 488-3910

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

**PUBLICATION NO. (Please photocopy back cover):** \_\_\_\_\_

**VEHICLE INFORMATION VIN:** \_\_\_\_\_ **Production Date:** \_\_\_\_\_

Please describe any 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>24.11</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: J30 1996<sub>(Canada)</sub> / 1997<sub>(U.S.A.)</sub>

## ENGINE TUNE-UP DATA

Engine model	VG30DE		
Firing order	1-2-3-4-5-6		
Idle speed A/T (in "N" position) rpm	720±50		
Ignition timing (degree BTDC at idle speed)	15±2		
CO% at idle	Idle mixture screw is preset and sealed at factory.		
Drive belt deflection (Cold) mm (in)	Used belt deflection		Deflection of new belt
	Limit	Deflection after adjustment	
Alternator	10 (0.39)	8.5 - 7.5 (0.256 - 0.295)	5.5 - 6.5 (0.217 - 0.256)
Air conditioner compressor	14 (0.55)	8.5 - 9.5 (0.335 - 0.374)	7.5 - 8.5 (0.295 - 0.335)
Power steering oil pump	20 (0.79)	13 - 15 (0.51 - 0.59)	11 - 13 (0.43 - 0.51)
Applied pressed force N (kg, lb)	98 (10, 22)		
Radiator cap relief pressure kPa (kg/cm <sup>2</sup> , psi)	78 - 98 (0.8 - 1.0, 11 - 14)		
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	Standard		
	1,285 (13.1, 186)/300		
Minimum	981 (10.0, 142)/300		
Spark plug Type (Standard)	PFR5G-11, XFR5A-11		
Gap mm (in)	1.0 - 1.1 (0.039 - 0.043)		

## FRONT WHEEL ALIGNMENT (Unladen\*)

Camber Degree minute (Decimal degree)	Minimum	-1°30' (-1.50°)
	Nominal	-0°45' (-0.75°)
	Maximum	0°00' (0.00°)
Caster Degree minute (Decimal degree)	Left and right difference	45' (0.75°) or less
	Minimum	5°50' (5.83°)
	Nominal	6°35' (6.58°)
Total toe-in Distance (A - B) mm (in)	Maximum	7°20' (7.33°)
	Left and right difference	45' (0.75°) or less
	Minimum	0 (0)
Angle (left plus right) Degree minute (Decimal degree)	Nominal	1 (0.04)
	Maximum	2 (0.08)
	Minimum	0' (0.00°)
Wheel turning angle (Full turn) Inside Degree minute (Decimal degree)	Nominal	5' (0.08°)
	Maximum	10' (0.17°)
	Minimum	35°20' (35.33°)
Outside Degree minute (Decimal degree)	Nominal	38°20' (38.33°)
	Maximum	39°20' (39.33°)
	Nominal	32°00' (32.00°)

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

## REAR WHEEL ALIGNMENT (Unladen\*)

Camber Degree minute (Decimal degree)	Minimum	-1°30' (-1.50°)
	Nominal	-1°00' (-1.00°)
	Maximum	-0°30' (-0.50°)
Total toe-in Distance (A - B) mm (in)	Minimum	0 (0)
	Nominal	2 (0.08)
	Maximum	4 (0.16)
Angle (left plus right) Degree minute (Decimal degree)	Minimum	0' (0.00°)
	Nominal	11' (0.18°)
	Maximum	22' (0.37°)

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

## BRAKE

		Unit: mm (in)
Front brake		
Pad wear limit		2.0 (0.079)
Rotor repair limit		26.0 (1.024)
Rear brake		
Pad wear limit		2.0 (0.079)
Rotor repair limit		14.0 (0.551)
Pedal free height		178 - 188 (7.01 - 7.40)
Pedal depressed height*		95 (3.74) or more

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

## REFILL CAPACITIES

Unit	Liter	US measure
Fuel tank	72	19 gal
Coolant (With reservoir tank)	9.2	9-3/4 qt
Engine	With oil filter	4.3
	Without oil filter	3.9
Transmission	A/T	8.3
Differential carrier		1.5
Power steering system		1.3
Air conditioning system	Compressor oil	0.25
	Refrigerant	0.70 - 0.80 kg

**TEST VALUE AND TEST LIMIT (GST ONLY — NOT APPLICABLE TO CONSULT-II)**

The following is the information specified in Mode 6 of SAE J1979.

The test value is a parameter used to determine whether a system/circuit diagnostic test is “OK” or “NG” while being monitored by the ECM during self-diagnosis. The test limit is a reference value which is specified as the maximum or minimum value and is compared with the test value being monitored.

Items for which these data (test value and test limit) are displayed are the same as SRT code items.

These data (test value and test limit) are specified by Test ID (TID) and Component ID (CID) and can be displayed on the GST screen.

: Applicable : : Not applicable

SRT item	Self-diagnostic test item	DTC	Test value (GST display)		Test limit	Application	Unit
			TID	CID			
CATALYST	Three way catalyst function (Bank 1)	P0420	01H	01H	Max.	X	-
	Three way catalyst function (Bank 2)	P0430	03H	02H	Max.	X	-
EVAP SYSTEM	EVAP control system (Small leak)	P0440	05H	03H	Max.	X	-
	EVAP control system purge flow monitoring	P1447	06H	83H	Min.	X	mV
HO2S	Heated oxygen sensor 1 (Bank 1)	P0130	09H	04H	Max.	X	ms
		P0130	0AH	84H	Min.	X	mV
		P0130	0BH	04H	Max.	X	mV
		P0130	0CH	04H	Max.	X	mV
		P0130	0DH	04H	Max.	X	s
	Heated oxygen sensor 1 (Bank 2)	P0150	11H	05H	Max.	X	ms
		P0150	12H	85H	Min.	X	mV
		P0150	13H	05H	Max.	X	mV
		P0150	14H	05H	Max.	X	mV
		P0150	15H	05H	Max.	X	s
	Heated oxygen sensor 2 (Bank 1)	P0136	19H	86H	Min.	X	mV/500ms
		P0136	1AH	86H	Min.	X	mV
		P0136	1BH	06H	Max.	X	mV
		P0136	1CH	06H	Max.	X	mV
	Heated oxygen sensor 2 (Bank 2)	P0156	21H	87H	Min.	X	mV/500ms
		P0156	22H	87H	Min.	X	mV
P0156		23H	07H	Max.	X	mV	
P0156		24H	07H	Max.	X	mV	
HO2S HTR	Heated oxygen sensor 1 heater (Bank 1)	P0135	29H	08H	Max.	X	mV
		P0135	2AH	88H	Min.	X	mV
	Heated oxygen sensor 2 heater (Bank 2)	P0155	2BH	09H	Max.	X	mV
		P0155	2CH	89H	Min.	X	mV
	Heated oxygen sensor 2 heater (Bank 1)	P0141	2DH	0AH	Max.	X	mV
		P0141	2EH	8AH	Min.	X	mV
	Heated oxygen sensor 2 heater (Bank 2)	P0161	2FH	0BH	Max.	X	mV
		P0161	30H	8BH	Min.	X	mV
EGR SYSTEM	EGR function	P0400	31H	8CH	Min.	X	°C
		P0400	32H	8CH	Min.	X	°C
		P0400	33H	8CH	Min.	X	°C
		P0400	34H	8CH	Min.	X	°C
		P0400	35H	0CH	Max.	X	°C
	EGRC-BPT valve function	P0402	36H	0CH	Max.	X	-
		P0402	37H	8CH	Min.	X	-