

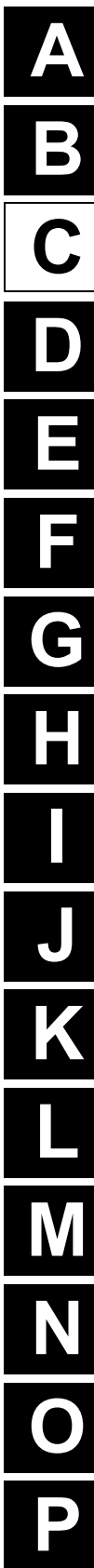
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**QUICK REFERENCE INDEX**

<b>A GENERAL INFORMATION</b>	<b>GI</b> General Information
<b>B ENGINE</b>	<b>EM</b> Engine Mechanical
	<b>LU</b> Engine Lubrication System
	<b>CO</b> Engine Cooling System
	<b>EC</b> Engine Control System
	<b>FL</b> Fuel System
	<b>EX</b> Exhaust System
	<b>STR</b> Starting System
	<b>ACC</b> Accelerator Control System
<b>C HYBRID</b>	
<b>D TRANSMISSION &amp; DRIVE-LINE</b>	<b>TM</b> Transaxle & Transmission
	<b>DLN</b> Driveline
	<b>FAX</b> Front Axle
	<b>RAX</b> Rear Axle
<b>E SUSPENSION</b>	<b>FSU</b> Front Suspension
	<b>RSU</b> Rear Suspension
	<b>SCS</b> Suspension Control System
	<b>WT</b> Road Wheels & Tires
<b>F BRAKES</b>	<b>BR</b> Brake System
	<b>PB</b> Parking Brake System
	<b>BRC</b> Brake Control System
<b>G STEERING</b>	<b>ST</b> Steering System
	<b>STC</b> Steering Control System
<b>H RESTRAINTS</b>	<b>SB</b> Seat Belt
	<b>SBC</b> Seat Belt Control System
	<b>SR</b> SRS Airbag
	<b>SRC</b> SRS Airbag Control System
<b>I VENTILATION, HEATER &amp; AIR CONDITIONER</b>	<b>VTL</b> Ventilation System
	<b>HA</b> Heater & Air Conditioning System
	<b>HAC</b> Heater & Air Conditioning Control System
<b>J BODY INTERIOR</b>	<b>INT</b> Interior
	<b>IP</b> Instrument Panel
	<b>SE</b> Seat
	<b>ADP</b> Automatic Drive Positioner
<b>K BODY EXTERIOR, DOORS, ROOF &amp; VEHICLE SECURITY</b>	<b>DLK</b> Door & Lock
	<b>SEC</b> Security Control System
	<b>GW</b> Glass & Window System
	<b>PWC</b> Power Window Control System
	<b>RF</b> Roof
	<b>EXT</b> Exterior
<b>L DRIVER CONTROLS</b>	<b>BRM</b> Body Repair Manual
	<b>MIR</b> Mirrors
	<b>EXL</b> Exterior Lighting System
	<b>INL</b> Interior Lighting System
	<b>WW</b> Wiper & Washer
	<b>DEF</b> Defogger
	<b>HRN</b> Horn
	<b>PWO</b> Power Outlet
<b>M ELECTRICAL &amp; POWER CONTROL</b>	<b>BCS</b> Body Control System
	<b>LAN</b> LAN System
	<b>PCS</b> Power Control System
	<b>CHG</b> Charging System
	<b>PG</b> Power Supply, Ground & Circuit Elements
<b>N DRIVER INFORMATION &amp; MULTIMEDIA</b>	<b>MWI</b> Meter, Warning Lamp & Indicator
	<b>WCS</b> Warning Chime System
	<b>AV</b> Audio, Visual & Navigation System
<b>O CRUISE CONTROL</b>	<b>CCS</b> Cruise Control System
	<b>DAS</b> Driver Assistance System
	<b>DMS</b> Drive Mode System
<b>P MAINTENANCE</b>	<b>MA</b> Maintenance

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# FOREWORD

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This manual contains maintenance and repair procedure for the 2015 INFINITI QX60.

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.

## IMPORTANT SAFETY NOTICE

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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 NORTH AMERICA, INC.



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FAX: (248) 488-3880

**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: \_\_\_\_\_

QUICK REFERENCE CHART: QX60

Engine Tune-up Data

INFOID:0000000011671910

GENERAL SPECIFICATIONS

Cylinder arrangement		V-6
Displacement cm <sup>3</sup> (cu in)		3,498 (213.45)
Bore and stroke mm (in)		95.5 x 81.4 (3.760 x 3.205)
Valve arrangement		DOHC
Firing order		1-2-3-4-5-6
Number of piston rings	Compression	2
	Oil	1
Number of main bearings		4
Compression ratio		10.6:1
Compression pressure kPa (kg/cm <sup>2</sup> , psi)/300 rpm	Standard	1,275 (13.0, 185)
	Minimum	981 (10.0, 142)
	Differential limit between cylinders	98 (1.0, 14)

Cylinder number

SEM713A

Valve timing  
(Valve timing control - "OFF")

PBIC0187E

Unit: degree

a	b	c	d	e	f
240	240	-10	70	10	50

Drive Belt

INFOID:0000000011671911

DRIVE BELT

Tension of drive belt	Belt tension is not necessary, as it is automatically adjusted by drive belt auto-tensioner.
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Spark Plug

INFOID:000000011671912

SPARK PLUG

Unit: mm (in)

Make	DENSO	
Standard type*	FXE22HR11	
Gap	Standard	1.1 (0.043)

\*: Always check with the Parts Department for the latest parts information.

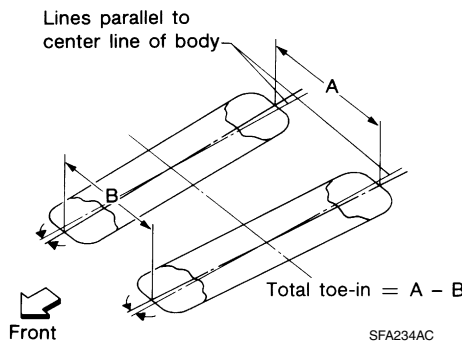
Front Wheel Alignment (Unladen\*<sup>1</sup>)

INFOID:000000011671909

**WARNING:**

**If the vehicle is equipped with the ICC cruise control system and the rear toe has been adjusted during a wheel alignment, the ICC sensor must be aligned.**

Item		Standard	
Measurement wheel		(LH) side	(RH) side
Camber Degree minute (Decimal degree)	Minimum	-1° 00' (-1.00°)	-1° 15' (-1.25°)
	Nominal	-0° 15' (-0.25°)	-0° 30' (-0.50°)
	Maximum	0° 30' (0.50°)	0° 15' (0.25°)
	(LH) and (RH) difference* <sup>2</sup>	-0° 15' ± 0° 33' (0.25° ± 0.55°)	
Caster Degree minute (Decimal degree)	Minimum	3° 55' (3.92°)	
	Nominal	4° 40' (4.67°)	
	Maximum	5° 25' (5.42°)	
	(LH) and (RH) difference* <sup>2</sup>	0.30' (0.50°) Maximum	
Kingpin inclination Degree minute (Decimal degree)	Minimum	11° 55' (11.92°)	12° 10' (12.17°)
	Nominal	12° 40' (12.67°)	12° 55' (12.92°)
	Maximum	13° 25' (13.42°)	13° 40' (13.67°)



Total toe-in	Distance (A - B)	Minimum	Out 0.6 mm (Out 0.024 in)
		Nominal	In 1.4 mm (In 0.055 in)
		Maximum	In 3.4 mm (In 0.134 in)
	Angle (LH) and (RH) Degree minute (Decimal degree)	Minimum	Out 0° 3' 36" (Out 0.06°)
		Nominal	In 0° 6' 14" (In 0.10°)
		Maximum	In 0° 15' 36" (In 0.26°)

\*1 Fuel, engine coolant, and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

\*2: The difference when assuming the (LH) side is the standard.

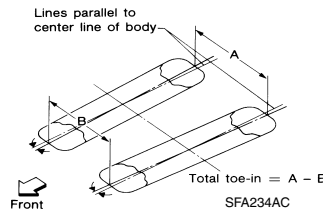
Rear Wheel Alignment (Unladen\*)

INFOID:000000011671907

**WARNING:**

If the vehicle is equipped with the ICC cruise control system and the rear toe has been adjusted during a wheel alignment, the ICC sensor must be aligned.

Item	Standard	
Camber Degree minute (Decimal degree)	Minimum	-1° 05' (-1.08°)
	Nominal	-0° 35' (-0.58°)
	Maximum	-0° 05' (-0.08°)



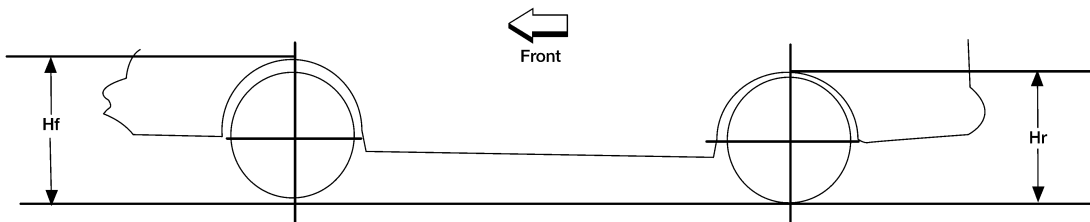
Total toe-in	Distance (A - B)	Minimum	Out 0.8 mm (Out 0.031 in)
		Nominal	In 2.2 mm (In 0.087 in)
		Maximum	In 5.2 mm (In 0.205 in)
	Angle (LH and RH) Degree minute (Decimal degree)	Minimum	Out 0° 2' 24" (Out 0.04°)
		Nominal	In 0° 9' 36" (In 0.16°)
		Maximum	In 0° 21' 36" (In 0.36°)

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

Wheelarch Height

INFOID:000000011671908

UNITED STATES

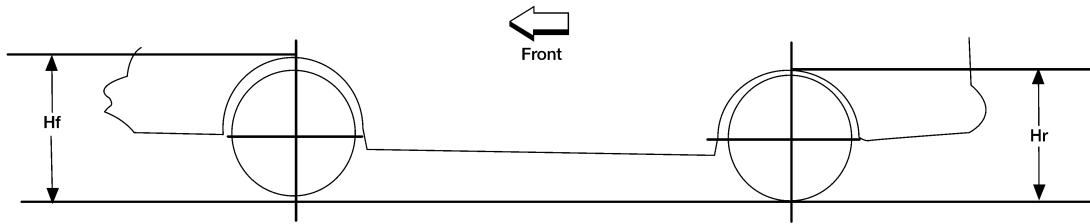


LEIA0085E

Drive type	FWD			AWD		
Tire size	235/65R18		235/55R20	235/65R18		235/55R20
Grade	Base	Premium		Base	Premium	Premium
Front (Hf)	822 mm (32.36 in)	822 mm (32.36 in)	821 mm (32.32 in)	822 mm (32.36 in)	821 mm (32.32 in)	820 mm (32.28 in)
Rear (Hr)	828 mm (32.60 in)	827 mm (32.56 in)	826 mm (32.52 in)	827 mm (32.56 in)		825 mm (32.48 in)

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

CANADA



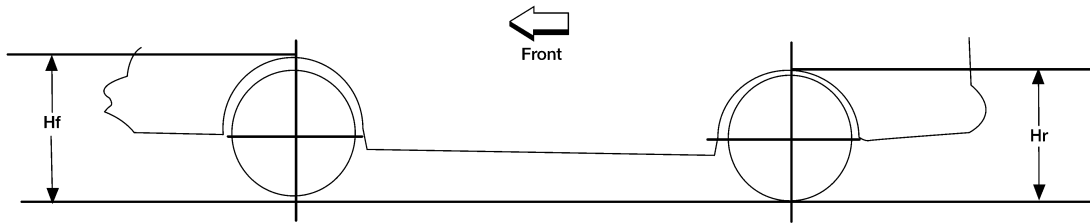
LEIA0085E

Drive type	AWD		
Tire size	235/65R18		235/55R20
Grade	Base	Premium	Premium
Front (Hf)	822 mm (32.36 in)	822 mm (32.36 in)	821 mm (32.32 in)
Rear (Hr)	828 mm (32.60 in)	827 mm (32.56 in)	826 mm (32.52 in)

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

MEXICO

Unit: mm (in)



LEIA0085E

Drive type	AWD	
Tire size	235/65R18	
Grade	Premium	
Front (Hf)	822 (32.36)	
Rear (Hr)	827 (32.56)	

Measure value under unladen\* conditions. (Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions).

Brake Specifications

INFOID:0000000011671905

Unit: mm (in)

Front disc brake	Cylinder bore diameter	45.0 (1.772) × 2
	Pad length × width × thickness	131.4 (5.173) × 53.0 (2.087) × 10.0 (0.394)
	Rotor outer diameter × thickness	320.0 (12.598) × 28.0 (1.102)
Rear disc brake	Cylinder bore diameter	42.86 (1.6874)
	Pad length × width × thickness	83.0 (3.268) × 33.0 (1.299) × 8.5 (0.335)
	Rotor outer diameter × thickness	308 (12.126) × 16.0 (0.630)
Master cylinder	Cylinder bore diameter	26.99 (1.063)
Control valve	Valve type	Electric brake force distribution

# QUICK REFERENCE CHART: QX60

2015

## Brake Pedal

INFOID:0000000011671906

Unit: mm (in)

Item	Standard
Brake pedal height (H1)	214.2 – 224.2 (8.43 – 8.82)
Clearance (A) between brake pedal bracket, stop lamp switch and brake pedal position switch contact ends	0.74 – 1.96 (0.0291 – 0.0772)
Brake pedal full stroke (H2)	139.1 (5.476)
Depressed brake pedal height (H3) [Depressing 490 N (50 kg, 110 lb) while turning the engine ON]	75.1 (2.96)

## Front Disc Brake

INFOID:0000000011671903

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc brake rotor	Wear thickness	26.0 (1.024)
	Thickness variation (measured at 8 positions)	0.008 (0.0003)
	Runout (with disc brake rotor attached to the vehicle)	0.040 (0.0016) or less

## Rear Disc Brake

INFOID:0000000011671904

Unit: mm (in)

Item		Limit
Brake pad	Wear thickness	2.0 (0.079)
Disc brake rotor	Wear thickness	14.0 (0.551)
	Thickness variation (measured at 8 positions)	0.020 (0.0008)
	Runout (with disc brake rotor attached to the vehicle)	0.050 (0.0020) or less

## FOR USA AND CANADA : Fluids and Lubricants

INFOID:0000000011671898

The following are approximate capacities, The actual refill capacities may be slightly different. When refilling, follow the procedures described elsewhere in this manual.

Description	Capacity (Approximate)		
	Metric	US measure	Imp measure
Fuel	74.0 ℓ	19-1/2 gal	16-1/4 gal
Engine oil Drain and refill	With oil filter change	4.8 ℓ	5-1/8 qt
	Without oil filter change	4.5 ℓ	4-3/4 qt
	Dry engine (Overhaul)	5.1 ℓ	5-3/8 qt
Cooling system (with reservoir at MAX level)	9.6 ℓ	10-1/8 qt	8-1/2 qt
CVT fluid	8.8 ℓ	9-1/4 qt	7-3/4 qt
Differential gear oil	0.5 ℓ	1-1/8 pt	7/8 pt
Transfer fluid	0.31 ℓ	5/8 pt	1/2 pt
Power steering fluid (E-PSF)	1.0 ℓ	2-1/8 pt	1-3/4 pt
Brake fluid	—	—	—
Multi-purpose grease	—	—	—



# QUICK REFERENCE CHART: QX60

2015

Description	Capacity (Approximate)		
	Metric	US measure	Imp measure
Windshield washer fluid	5.0 ℓ	5-1/4 qt	4-3/8 qt
Air conditioning system refrigerant	0.80 ± 0.03 kg	1.80 ± 0.07 lb	1.80 ± 0.07 lb
Air conditioning system oil	230 m ℓ	7.8 fl oz	8.1 fl oz

## FOR MEXICO : Fluids and Lubricants

INFOID:000000011671901

The following are approximate capacities, The actual refill capacities may be slightly different. When refilling, follow the procedures described elsewhere in this manual.

		Capacity (Approximate)		
		Metric	US measure	Imp measure
Fuel		74.0 ℓ	19-1/2 gal	16-1/4 gal
Engine oil Drain and refill	With oil filter change	4.8 ℓ	5-1/8 qt	4-1/4 qt
	Without oil filter change	4.5 ℓ	4-3/4 qt	4 qt
	Dry engine (engine overhaul)	5.1 ℓ	5-3/8 qt	4-1/2 qt
Cooling system (with reservoir at MAX line)		9.6 ℓ	10-1/8 qt	8-1/2 qt
CVT fluid		8.8 ℓ	9-1/4 qt	7-3/4 qt
Differential gear oil		0.5 ℓ	1-1/8 pt	7/8 pt
Transfer fluid		0.31 ℓ	5/8 pt	1/2 pt
Power steering fluid		1.0 ℓ	2-1/8 pt	1-3/4 pt
Brake fluid		—	—	—
Multi-purpose grease		—	—	—
Windshield washer fluid		5.0 ℓ	5-1/4 qt	4-3/8 qt
Air conditioning system refrigerant		0.80 ± 0.03 kg	1.80 ± 0.07 lb	1.80 ± 0.07 lb
Air conditioning system oil		230 m ℓ	7.8 fl oz	8.1 fl oz