



McLaren 620R

Owner's Handbook



Contents

- 1.01 Before You Drive
- 2.01 Maintaining Your McLaren
- 3.01 At the Track
- 4.01 Vehicle Data and Glossary

Introduction

Introduction

Please read this information to familiarise yourself with your McLaren 620R and its features before you drive.

The information contained within this supplement refers specifically to the McLaren 620R. Therefore to fully understand the operation, functions and controls of the McLaren 620R, it will be necessary to refer to both the McLaren Sports Series Owner's Handbook and this supplement.

Together, this supplement and the McLaren Sports Series Owner's Handbook, provide the necessary information for you to get the optimum benefit and enjoyment from your McLaren.

This publication must not be reproduced, translated or reprinted, in whole or in part, without written permission from McLaren Automotive Ltd. The equipment fitted to your McLaren may vary from that shown depending on vehicle specification.

McLaren constantly updates its vehicles, and therefore reserves the right to introduce changes in design, equipment and technical features at any time.

The documents supplied with your McLaren are an integral part of the vehicle. Ensure that you pass them onto the new owner if you sell the vehicle.

This vehicle may be covered by patents. See cars.mclaren.com/patents.

Printed in United Kingdom, 31QA006CP.

Using this supplement

To find information relating to the McLaren 620R, refer to information contained within this supplement in the first instance. If the required information is not found, refer to the following table. The table contains a list of systems and functions that are not applicable to the McLaren 620R.

If the information you are looking for is not contained within the supplement and is not contained within the following table, please refer to the McLaren Sports Series Owner's Handbook. Where further information is required, contact your McLaren retailer.

The following systems and functions that are not applicable to the McLaren 620R:

- Child passengers
- Cup holders
- Navigation (optional)
- Air Conditioning (optional)

The information is divided into specific sections, to assist in finding the particular information you require.

Introduction

Before You Drive

Details the settings you need to make in the cockpit to ensure you are fully prepared and have safe and easy access to all controls before driving.

Maintaining your McLaren

Information on maintaining your McLaren is here. Included is advice on the emergency systems fitted to the McLaren 620R and how to care for your McLaren.

At the Track

Describes the systems and tools that are supplied with the vehicle, where the use of the system or tool is primarily in the pit garage.

Vehicle Data and Technical Glossary




Refer to this section when you need information regarding the fluid specifications and quantities that are required for the various systems on your McLaren, or when you need to know a specific piece of data relating to your McLaren or its performance.

Index


The table of contents and the index will help you find information quickly, when you need it.

Symbols

You will find the following symbols in this Owner's Handbook. These symbols are intended to give you an instant visual message on what type of information is being displayed.


Warnings	
	A warning draws your attention to activities that could cause injury or death.
Notes	
	Notes draw your attention to activities that contain possible risks to your McLaren, provide advice that you may find useful, or give additional information regarding a particular subject.
Environmental notes	
	Environmental notes give you tips on minimising the impact that you and your vehicle have on the environment.

Vehicle use

 **WARNING: The electronic systems fitted to your McLaren interact with each other. Tampering with these systems could cause malfunctions in other interconnected systems. Such faults could seriously endanger the operational safety of your McLaren and your own safety. Additional work or modifications made to the vehicle, which have been carried out incorrectly can also affect its operating safety.**

Observe the following when using your McLaren:

- The safety notes throughout this supplement and the McLaren Sports Series Owner's Handbook
- Road traffic laws and regulations

 **WARNING: There are various warning labels attached to your McLaren. These are intended to make you and others aware of various risks. Do not remove any warning labels from the vehicle.**

Introduction

If you remove these warning labels, you or others may not then be aware of dangers, which may result in an injury.

Ground clearance



WARNING: Damage to the underside of the vehicle may occur when approaching steep inclines or declines.

Drive with care when:

- approaching kerbs.
- approaching steep inclines.
- departing steep declines.
- driving on rough roads.
- driving in areas where traffic calming measures have been deployed.
- driving in any other environment where sudden change of road surface height or elevation are encountered such as car parks.

See Vehicle dimensions, page 4.03.

Track driving

To achieve optimum performance and reliability, it is important to ensure the following preconditions are met before attempting to drive your vehicle on a track:

- Engine oil is at normal operating temperature
- Engine coolant is at normal operating temperature
- Tyres should not exceed the safe operating temperatures



NOTE: Before you use your vehicle on a track, consult your McLaren retailer. McLaren recommend that your vehicle is inspected before and after track use.



NOTE: Always drive within your limits and the limits of the vehicle.

Cooling down

McLaren recommend that you take time to cool the vehicle down during track driving, due to the high temperatures that may be generated by the brakes and transmission which could affect performance. Time should be taken to drive the vehicle at a slower speed without using hard braking or carrying out excessive gear changes, this uses the airflow to cool the vehicle.

McLaren recommend that time is allowed for your vehicle to return to normal operating temperatures before leaving the track.



NOTE: When stopping the vehicle directly after performance driving, McLaren recommend that the ignition is not immediately switched off or parking brake applied. McLaren recommend that the engine is left to idle prior to the ignition being switched off.



NOTE: Please refer to your Service and Warranty Guide for track and competition use implications.

Before You Drive

- Opening and Closing.....1.02**
 - Opening a door.....1.02
 - Closing a door.....1.02
 - Emergency door opening.....1.03
 - Luggage Compartment.....1.03
- Seats.....1.04**
 - Race seats.....1.04

Before You Drive

Opening and Closing

Opening a door

The McLaren 620R has the same interior and exterior door handles as the standard McLaren Sports Series, which should be used for normal entry to the vehicle. Refer to the McLaren Sports Series Owner's Handbook.

Closing a door



WARNING: Keep hands and other objects clear of the door edge when closing. This is particularly important for vehicles fitted with soft close latches as the door will automatically continue to the fully closed position when the first catch has engaged. There is no anti-trap feature preventing the door closing if an item or body part is trapped between the door and the door aperture, serious injury and vehicle damage may occur.

Push/pull the door downwards and ensure that it latches securely.



NOTE: Do not force close the door, the door aperture or door seals may be damaged.

The pull strap can be used to close the door when the driver is strapped into the seat.



Before You Drive

Opening and Closing

Emergency door opening

Emergency door opening - from inside

The McLaren 620R has an interior emergency door release, to release a door from inside, locate the manual door release strap and pull. Refer to the McLaren Sports Series Owner's Handbook.

Emergency door opening - from outside

If you are unable to lock or unlock the vehicle because the vehicle battery or key fob battery has become discharged, use the mechanical key. Refer to the McLaren Sports Series Owner's Handbook.

Luggage Compartment

To maximise aerodynamic performance, the McLaren 620R has open ducts through the luggage compartment.



NOTE: Open ducts may result in occasional water droplets entering the luggage compartment when the lid is opened in wet conditions.

Before You Drive Seats

Race seats

Seat forward and rearward adjustment



i NOTE: It is only possible to adjust the forward and rearward position of the seat.

To adjust the seat, lift the lever and slide the seat to the desired position, ensuring you can comfortably reach all pedals and are able to move them through their full travel.

! **WARNING:** Ensure the seat is locked in position before driving.

i NOTE: Ensure that there are no items of luggage in the footwell or adjacent to the seats as this may lead to the seats being damaged or not getting full adjustment.

Seat height and tilt adjustment

For seat height and tilt adjustment, arrange for you vehicle to be set up to your specific requirements at your McLaren retailer.

! **WARNING:** Seat height adjustment should only be carried out by your McLaren retailer.

Maintaining Your McLaren

Vehicle Care.....2.02
 Washing your McLaren.....2.02

McLaren Assistance.....2.03
 Towing for recovery.....2.03

Maintaining Your McLaren Vehicle Care

Washing your McLaren



ENVIRONMENTAL: Some cleaning products contain chemicals that are hazardous to the environment. Always take precautions to prevent fluids from spilling and never use excessive quantities.

Hand washing your McLaren

The McLaren 620R is available with decals as an option, if fitted these decals are fragile and may tear. Regularly clean by hand wash only.



NOTE: If using a jet wash aim away from decal edges, always use a lint free cloth to dry and ensure the cloth does not catch on the decal edges.



NOTE: For further recommendations on cleaning your McLaren 620R see the McLaren Sports Series Owner's Handbook: Vehicle Care.

Maintaining Your McLaren McLaren Assistance

Towing for recovery



Your McLaren is equipped with a front tow strap, for use on track.

- i** NOTE: The tow strap is for track use only. The standard towing eyes should be used for recovery on the road.
- i** NOTE: The tow strap is to be installed by your McLaren retailer only.

i NOTE: Do not tow the vehicle, doing so could damage the gearbox. The tow strap must only be used to winch the vehicle onto a trailer or transporter for recovery purposes.

At the Track

- Aerodynamics.....3.02**
 - Overview.....3.02
 - Rear wing.....3.02
- Wheel Nut Tightening.....3.04**
 - Wheel nut tools.....3.04
 - Wheel nut direction.....3.04
- Tyres.....3.05**
 - Slick tyres.....3.05
- Suspension.....3.06**
 - Overview.....3.06
 - Dampers.....3.06




At the Track

Aerodynamics

Overview

The McLaren 620R has an adjustable rear wing and dive planes to give improved downforce.

Rear wing

-  **WARNING:** The rear wing must only be adjusted by your McLaren retailer.
-  **WARNING:** The rear wing must be regularly checked for signs of damage and to ensure it is correctly mounted.
-  **WARNING:** Changing the rear wing angle will have an effect on the handling and stability of the vehicle. Please familiarise yourself with the vehicle's behaviour after changes have been implemented.

The aerodynamic stability of the McLaren 620R is greatly affected by the rear wing at high speeds.



Rear wing adjustment bolt torque figure	9 Nm (7 lb.ft)
-----------------------------------------	----------------

The rear wing angle can be adjusted for driving on race circuits. The factory setting (lowest angle of attack) is recommended for the overall aerodynamic performance of the vehicle, giving a balanced performance between the downforce on both axles and the drag of the vehicle.

At the Track

Aerodynamics

The rear wing can be adjusted to three different positions. A steeper angle of attack will increase the downforce on the rear axle to improve the grip and stability of the vehicle. However, the aerodynamic drag on the vehicle will also increase as the angle is increased.

At the Track

Wheel Nut Tightening

Wheel nut tools

A wheel change must be carried out by your McLaren retailer.



The wheel nut centre locking ring removal (2) and nut torque (1) tools are located in the front luggage compartment.

Wheel nut direction

Vehicle side	Hub and nut thread
LH side	LH thread
RH side	RH thread

Tightening directions shown in the following images.




At the Track

Tyres

Slick tyres

Tyre selection

If slick tyres have been installed on the vehicle, the tyre type needs to be changed in the instrument cluster menu. This will change the Tyre Pressure Monitoring System (TPMS) settings, in this setting the TPMS warning light is permanently illuminated due to slick tyres not being road legal. Tyre pressure limits have been set to detect a puncture therefore please ensure tyre pressures are monitored and managed during track running. Upon installation of road use tyres please revert the setting in the instrument cluster menu.

 **NOTE:** McLaren recommend this setting for track use to reduce the occurrence of TPMS warnings. In the event of hot bleeding being carried out, some TPMS warnings are still possible.

Wheel sizes

Front Wheels	8J x 19
Rear Wheels	11J x 20

Tyre sizes

Front Tyres	225/35-R19
Rear Tyres	285/35-R20

Tyre pressures



WARNING: Slick tyres should not be used below 1.7 bar, never drive the vehicle if the tyre pressures are below this. Maintaining this pressure ensures tyre integrity.

The optimum tyre pressures for the McLaren 620R will be dependent on environmental conditions and track temperature. Irrespective of any outside influences, the minimum tyre pressure must not be below 1.7 bar when cold with a target of 2.1 bar when the tyres are at their optimum operating temperature.

At the Track

Suspension

Overview

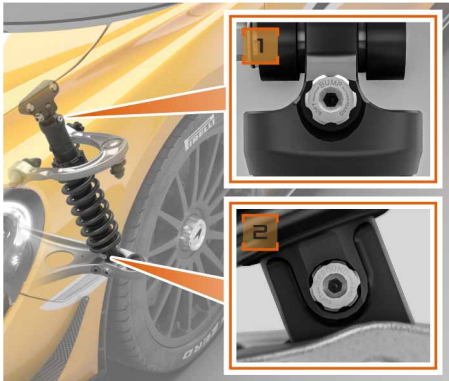
The McLaren 620R has two-way adjustable dampers, the dampers are adjustable in both compression and rebound.

i NOTE: Due to the motorsport suspension installed on the McLaren 620R, knocking and hydraulic valve noise can be heard within the cabin. This is the expected behaviour of the vehicle and not reason for customer concern.

Dampers

- ⚠ WARNING: Dampers must be adjusted symmetrically, this will ensure a consistent behaviour of the vehicles handling and stability.**
- ⚠ WARNING: Adjusting the damper settings will have an effect on the handling and stability of the vehicle. Please familiarise yourself with the vehicles behaviour after changes have been implemented.**

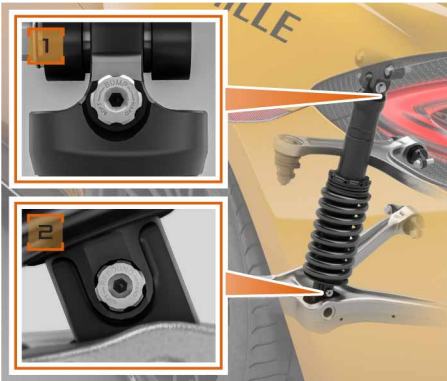
The compression adjuster is located at the top of the damper body, compression adjustment has 32 different positions. The adjustment requires a 4 mm Allen key, rotate clockwise to stiffen, and counter clockwise soften.



The rebound adjuster is located at the base of the damper body, rebound adjustment has 35 different positions. The adjustment wheel should be rotated clockwise to stiffen and counter clockwise to soften.

Item	Description
1	Front damper compression adjuster
2	Front damper rebound adjuster

At the Track Suspension



Item	Description
1	Rear damper compression adjuster
2	Rear damper rebound adjuster

Damper Settings

The vehicle will be delivered to your McLaren retailer with the dampers pre-set to a mid range setting that gives a balanced performance for the road and track. Through the development of the vehicle McLaren has defined the following recommended settings for different usage cases:

Road and track	Compression clicks from fully closed	Rebound clicks from fully closed
Front	20	13
Rear	20	24

Bumpy road	Compression clicks from fully closed	Rebound clicks from fully closed
Front	23	16
Rear	22	28

Smooth track	Compression clicks from fully closed	Rebound clicks from fully closed
Front	18	9
Rear	10	17

Vehicle Data and Glossary

- Data.....4.02
 - Overview.....4.02
 - Vehicle operating temperatures.....4.02
 - Engine.....4.02
 - Recommended fuel.....4.03
 - Vehicle dimensions.....4.03
 - Vehicle weights.....4.04
 - Wheels and tyres.....4.04

Vehicle Data and Glossary Data

Overview

This section contains all the necessary technical data for your vehicle and applies to the vehicle's standard equipment. The data may therefore differ for vehicles with optional equipment. You can obtain further information from your McLaren retailer.

Vehicle operating temperatures

Minimum ambient operating temperature	-20°C (-4°F)
Maximum ambient operating temperature	+50°C (+122°F)

i NOTE: If the vehicle is used outside the minimum and maximum ambient temperatures, performance degradation may be experienced. McLaren disclaims any liability of the stated engine power not being achieved if the vehicle is being used outside of the stated temperature ranges or being used at altitude.

Engine

Rated output (kW) @rpm	456 @ 7,000
Rated output (PS) @rpm	620 @ 7,000
Rated torque (Nm) @rpm	620 @ 3,500
Rated torque (lb-ft) @rpm	457 @ 3,500
Number of cylinders	8
Displacement cm³	3,779
Maximum engine speed (rpm)	8,500

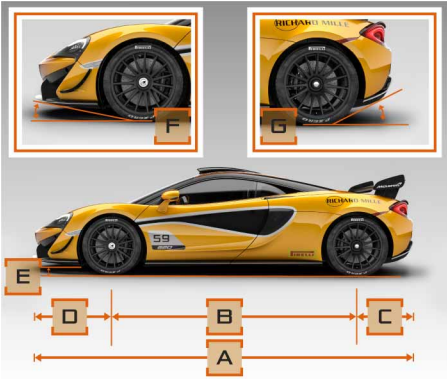
Vehicle Data and Glossary Data

Recommended fuel

⚠ WARNING: Engine performance will be severely degraded if different grades of fuel are used.

For maximum engine performance the use of 99 RON is required.

Vehicle dimensions



A	Vehicle length	4,557 mm (14 ft 11 in)
B	Wheelbase	2,670 mm (8 ft 9 in)
C	Rear overhang	785 mm (2 ft 7 in)
D	Front overhang	1102 mm (3 ft 7 in)
E	Ground clearance	92 mm (4 in)
F	Approach angle	6.1°

G	Departure angle	6.1°
---	-----------------	------



H	Vehicle width (doors closed, including mirrors)	2,095 mm (6 ft 10 in)
I	Vehicle height (doors closed)	1,193 mm (3 ft 11 in)

Vehicle Data and Glossary


Data




Vehicle weights

Weight	kg (lbs)
Dry weight	1,282 (2,826)

Wheels and tyres

 **WARNING:** Tyre grip decreases rapidly on wet or icy roads, particularly when the tread depth is close to the minimum. You could lose control of the vehicle and cause an accident due to the reduced grip of the tyres. Reduce your speed and drive with greater care.

J	Vehicle width (doors open at widest point)	3,225 mm (10 ft 7 in)
K	Vehicle height (doors open)	1,973 mm (6 ft 6 in)

 **NOTE:** All dimensions are approximate.

Vehicle Data and Glossary

Data

Wheel sizes

Front Wheels	8J x 19
Rear Wheels	11J x 20

Tyre sizes


Front Tyres	225/35-R19
Rear Tyres	285/35-R20

Tyre pressures

Loading condition	Front wheels		Rear wheels	
Normal use	Bar	Psi	Bar	Psi
Pirelli P Zero™ Trofeo R	2.0	29	2.0	29

Loading condition	Front wheels		Rear wheels	
Speeds over 165 mph (270 km/h)	Bar	Psi	Bar	Psi
Pirelli P Zero™ Trofeo R	2.5	36	2.5	36

Slick Tyres

 **WARNING: Slick tyres should not be used below 1.7 bar, never drive the vehicle if the tyre pressures are below this. Maintaining this pressure ensures tyre integrity.**

The optimum tyre pressures for the McLaren 620R will be dependent on environmental conditions and track temperature. Irrespective of any outside influences, the minimum tyre pressure must not be below 1.7 bar when cold with a target of 2.1 bar when the tyres are at their optimum operating temperature.

A	technical data.....4.02	P
Aerodynamics.....3.02	F	Power output.....4.02
dive planes.....3.02	Fuel	engine.....4.02
rear wing.....3.02, 3.02	quality.....4.03	R
C	G	Race seats.....1.04
Cleaning.....2.02	Ground clearance.....4	adjustment.....1.04
exterior.....2.02	I	Rear wing.....3.02
D	Introduction.....2	Recommended fuel quality.....4.03
Dampers	L	Recovery of your vehicle.....2.03
adjustment.....3.06	Luggage compartment.....1.03	S
damper adjustment.....3.06	O	Seats.....1.04
Data	Opening a door.....1.02	Specifications.....4.02
overview.....4.02	emergency.....1.03	Suspension
Dimensions.....4.03	Operating temperatures	adjustment.....3.06
Dive planes.....3.02	vehicle.....4.02	dampers.....3.06
Doors		Symbols.....3
closing.....1.02		T
emergency opening.....1.03		Technical data.....4.02
opening.....1.02		engine.....4.02
E		vehicle dimensions.....4.03
Engine		vehicle operating temperatures.....4.02
power output.....4.02		vehicle weights.....4.04

Index

wheel and tyres.....	3.05	Wheels and tyres.....	4.04
wheels and tyres.....	4.04	Wheel sizes.....	3.05, 4.05
Towing.....	2.03		
Track driving.....	4		
Tyre pressures.....	3.05		
Tyre selection.....	3.05		
Tyre sizes.....	3.05		

U

Using this supplement.....	2
----------------------------	---

V

Vehicle dimensions.....	4.03
Vehicle washing.....	2.02
Vehicle weights.....	4.04

W

Washing.....	2.02
exterior.....	2.02
Weights.....	4.04
Wheel and tyres.....	3.05
Wheel nuts	
care.....	3.04
maintenance.....	3.04
tightening direction.....	3.04

