# **VOLVO C40 RECHARGE**

OCTOBER 2022 - ONWARDS
ALL SINGLE AND TWIN MOTOR VARIANTS





RATING YEAR 2022 VEHICLE TYPE Small SUV

**ENGINE TYPE** Battery Electric Vehicle (BEV)

BUILT FROM July 2022
ON SALE FROM October 2022
SERIES N/A

AIRBAGS Dual frontal, side chest,

side head, centre, driver knee

The Volvo C40 Recharge was introduced in Australia and New Zealand in October 2022. This ANCAP safety rating applies to all single and twin motor variants.

Dual frontal, side chest-protecting and side head-protecting airbags, as well as a driver knee airbag are standard. A centre airbag which provides added protection to front seat occupants in side impact crashes is also standard.

Autonomous emergency braking (Car-to-Car, Vulnerable Road User and Junction Assist) as well as a lane support system with lane keep assist (LKA), lane departure warning (LDW) and emergency lane keeping (ELK), blind spot monitoring (BSM) and a speed sign recognition system are standard equipment.









### **RATING APPLICABILITY**

VARIANT	BODY TYPE	ENGINE	DRIVETRAIN	AUS	NZ
Volvo C40 Recharge	5 door SUV	Battery Electric Vehicle (BEV)	2WD	$\checkmark$	$\checkmark$
Volvo C40 Recharge Twin	5 door SUV	Battery Electric Vehicle (BEV)	4WD	$\checkmark$	$\checkmark$



The passenger compartment of the Volvo C40 Recharge remained stable in the frontal offset (MPDB) test. Dummy readings for the driver and front passenger showed GOOD protection for all critical body regions.

The front structure of the Volvo C40 Recharge presented a higher risk to occupants of an oncoming vehicle in the MPDB test (which evaluates vehicle-to-vehicle compatibility), and a 4.00 point penalty was applied.

In the full width frontal test, GOOD protection was offered to all critical body regions of the driver and rear passenger except the chest of rear passenger, protection of which was ADEQUATE.

In the side impact test and the oblique pole test, protection offered to all critical body regions was GOOD and the Volvo C40 Recharge scored maximum points in these tests.

The Volvo C40 Recharge is equipped with a centre airbag to protect against occupant-to-occupant interaction in side impacts and it provided GOOD protection for the head of both front seat occupants. Prevention of excursion (movement towards the other side of the vehicle) in the far side impact tests was assessed as GOOD for the vehicle-to-vehicle impact scenario, and ADEQUATE in the vehicle-to-pole scenario.

### FRONTAL OFFSET (MPDB) (50km/h)



### **DRIVER**

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### FRONT PASSENGER

Head / neck: Chest:	4.00 pts
	4.00 pts
Upper legs:	4.00 pts 4.00 pts
Lower legs:	4.00 pts Nil
Deductions:	INII

## COMPATIBILITY

Deductions: -4.00 pts

### **FULL WIDTH FRONTAL (50km/h)**



#### DRIVER

#### **REAR PASSENGER**

Head:	4.00 pts
Neck:	4.00 pts
Chest:	2.77 pts
Upper legs:	4.00 pts
Upper legs:	4.00 pts
Deductions:	Nil

# **RESCUE & EXTRICATION**

Rescue Sheet		No penalty
Door Opening / Extrication		No penalty
Multi-Collision Braking		1.00 pt
Advanced eCall	×	1.00 pt default

A Rescue Sheet, providing information for first responders in the event of a crash is available, and a multi-collision braking system is fitted

FRONTAL OFFSET (MPDB)#	6.00	(out of 8)
FULL WIDTH FRONTAL#	7.69	(out of 8)
SIDE IMPACT#	6.00	(out of 6)
OBLIQUE POLE#	6.00	(out of 6)
WHIPLASH PROTECTION	3.60	(out of 4)
FAR SIDE IMPACT	4.00	(out of 4)
RESCUE & EXTRICATION	2.00	(out of 2)

<sup>#</sup>Scaled scores. Total test scored out of 16.00 points.

#### SIDE IMPACT OBLIQUE POLE





#### SIDE IMPACT (MDB) (60km/h)

Head:	4.00 pts
Chest:	4.00 pts
Abdomen:	4.00 pts
Pelvis:	4.00 pts
Deductions:	Nil .

### OBLIQUE POLE (32km/h)

4.00 pts
4.00 pts
4.00 pts
4.00 pts
Nil

### **FAR SIDE IMPACT**







# SIDE IMPACT (MDB)

Head:	4.00 pts
Neck:	4.00 pts
Chest & Abdomen:	4.00 pts
Pelvis:	No penalty

### OBLIQUE POLE

Head:	4.00 pts
Neck:	4.00 pts
Chest & Abdomen:	4.00 pts
Pelvis:	No penalty

# OCCUPANT-TO-OCCUPANT

Head contact: No penalty

# WHIPLASH (REAR IMPACT) PROTECTION



Driver / front passenger: 2.60 pts Rear passenger: 1.00 pts



In the frontal offset and side impact tests, protection of the 10 year and 6 year dummies was GOOD and the Volvo C40 Recharge scored maximum points in these tests.

The Volvo C40 Recharge is fitted with lower ISOFix anchorages on the rear outboard seats and top tether anchorages for all rear seating positions.

Installation of typical child restraints available in Australia and New Zealand showed most child restraints could be accommodated in most rear seating positions, though one of the selected booster seats could not be correctly installed in the centre rear seating position.

DYNAMIC TEST (FRONT)	16.00	(out of 16)
DYNAMIC TEST (SIDE)	8.00	(out of 8)
RESTRAINT INSTALLATION	11.81	(out of 12)
ON-BOARD SAFETY FEATURES	8.00	(out of 13)

### FRONTAL OFFSET (MPDB) (50km/h)



### SIDE IMPACT (60km/h)



### **ON-BOARD SAFETY FEATURES**

FEATURE	FRONT PASSENGER	2nd ROW OUTBOARD	2nd ROW CENTRE	3rd ROW OUTBOARD	3rd ROW CENTRE
ISOFix	×	•	×	-	-
Integrated child restraints	×	×	×	-	-
Top tether anchorage	×	•	•	-	-
Airbag disabling	×	-	-	-	-

FITTED TO TEST CAR AS STANDARD ONT FITTED TO TEST CAR BUT AVAILABLE AS AN OPTION X NOT AVAILABLE - NOT APPLICABLE



NOTE: The child restraints fitted to vehicles tested by Euro NCAP are relevant to the European market. For Australasian consumers, this information should be used as a guide to vehicle features only. The Child Restraint Evaluation Program (CREP) provides an independent assessment on the safety of Australasian child restraints see www.childcarseats.com.au.



# **CHILD RESTRAINT INSTALLATION\***

		CLUI D DESTRAINT (CDS) TYPEA	FRONT ROW		2nd ROW			3rd ROW	
	CHILD RESTRAINT (CRS) TYPE^		PASSENGER	LEFT	CENTRE R	IGHT	LEFT	CENTRE	RIGHT
		Rearward facing capsule	×	•	•	•	-	-	-
	TYPE A	Rearward facing with harness - convertible (Model A)	×	•	•	•	-	-	-
۵		Rearward facing with harness - convertible (Model B)	×	•	•	•	-	-	-
BELTED	T\/DE D	Forward facing with harness - convertible (Model A)	×	•	•	•	-	_	-
B	TYPE B	Forward facing with harness - convertible (Model B)	×	•	•	•	-	-	-
	TYPE E	Booster - 4 to 8 years	×	•	•	•	-	-	-
	TYPE F	Booster - 4 to 10 years	×	•	•	•	-	-	-
	× TYPE A	Rearward facing capsule	×	•	-	•	-	-	-
×		Rearward facing with harness - convertible (Model A)	×	•	-	•	-	_	-
ISOFIX		Rearward facing with harness - convertible (Model B)	×	•	-	•	-	-	-
<u>S</u>	TVDED	Forward facing with harness - convertible (Model A)	×	•	-	•	-	-	_
	TYPE B	Forward facing with harness - convertible (Model B)	×	•	-	•	-	-	-

<sup>\*</sup> Installation of each child restraint is assessed separately in each position. Installation of multiple restraints has not been assessed and may not be possible.

<sup>^</sup> The above list of child restraints has been selected to provide a general indication of the rated vehicle's ability to accommodate various CRS types. ANCAP does not endorse or recommend any one CRS brand or model, nor does it rate the safety of child restraints.



The bonnet of the Volvo C40 Recharge provided GOOD or ADEQUATE protection to the head of a struck pedestrian over most of its surface, with MARGINAL and POOR results recorded at the base of the windscreen and on the stiff windscreen pillars.

Protection of the pelvis was mixed, with areas of GOOD and POOR performance, while the bumper provided GOOD protection to pedestrians' legs.

The autonomous emergency braking (AEB) system is capable of detecting and reacting to vulnerable road users such as pedestrians and cyclists. Testing of this system showed ADEQUATE performance in pedestrian test scenarios. The AEB system does not react to vulnerable road users in reverse, and hence AEB Backover tests were not conducted. GOOD performance was also seen in cyclist test scenarios with collisions avoided or mitigated at all test speeds.

HEAD IMPACTS	15.71	(out of 24)	
UPPER LEG IMPACTS	2.69	(out of 6)	
LOWER LEG IMPACTS	6.00	(out of 6)	
AEB - Pedestrian (forward)	5.97	(out of 7)	
AEB - Pedestrian (backover)	0.00	(out of 2)	
AEB - Cyclist	7.50	(out of 9)	

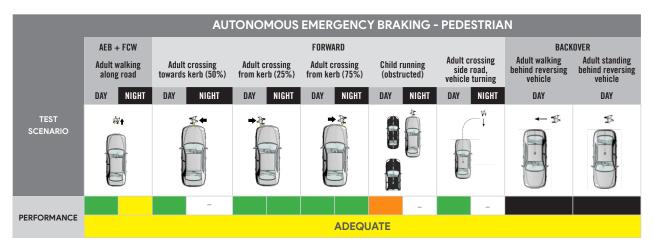
### **AUTONOMOUS EMERGENCY BRAKING (PEDESTRIAN, CYCLIST & BACKOVER)**

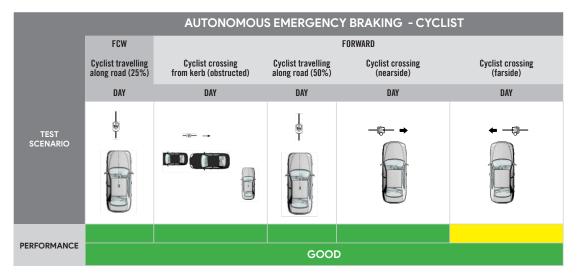
SYSTEM NAME: Safety Assistance

TYPE: Autonomous emergency braking with forward collision warning

OPERATIONAL FROM: 4-80 km/h

**DESCRIPTION:** System functions in the daytime and night





### PEDESTRIAN IMPACT TEST (40 KM/H)





The Volvo C40 Recharge is fitted with an autonomous emergency braking (AEB) system capable of functioning at highway speeds, a lane support system (LSS) with lane keep assist (LKA) and emergency lane keeping (ELK) functionality, and blind spot monitoring (BSM).

Tests of the AEB (Car-to-Car) system showed GOOD performance, with collisions avoided or mitigated in all scenarios, including AEB Junction Assist.

Tests of LSS functionality showed GOOD performance, including the more critical emergency lane keeping test scenarios.

A speed assistance system (SAS) is also standard equipment on the Volvo C40 Recharge. This system identifies the local speed limit and allows the driver to set the speed accordingly.

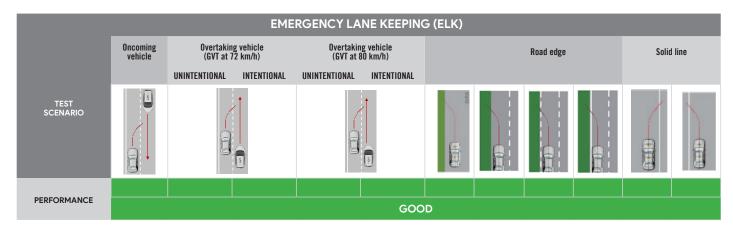
A seatbelt reminder system is fitted for all front and rear seating positions, however occupant detection is not available for rear seats.

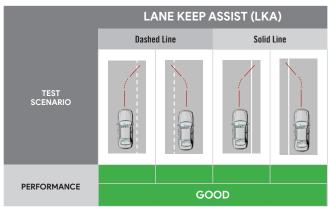
A driver drowsiness monitor system is fitted as standard.

OCCUPANT STATUS		
- Seat belt reminders	1.00	(out of 2)
- Driver monitoring	1.00	(out of 1)
SPEED ASSISTANCE SYSTEMS	2.83	(out of 3)
LANE SUPPORT SYSTEMS	4.00	(out of 4)
AEB - Car-to-Car	3.75	(out of 4)
AEB - Junction Assist	2.00	(out of 2)

### LANE SUPPORT SYSTEMS (LSS)

SYSTEM NAME: Safety Assistance
OPERATIONAL FROM: 65-110+ km/h









# **AUTONOMOUS EMERGENCY BRAKING (CAR-TO-CAR)**

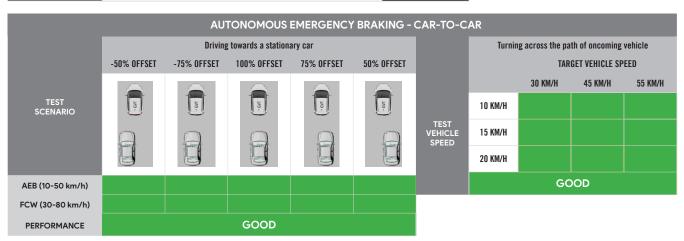
SYSTEM NAME: Safety Assistance

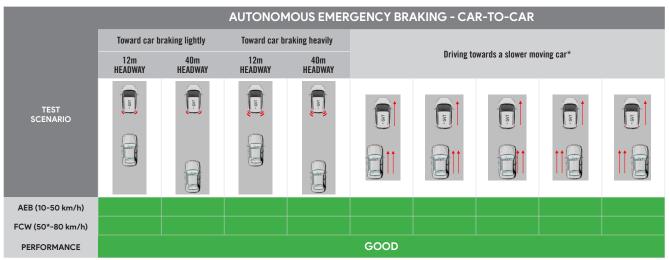
TYPE: Autonomous emergency braking with forward collision warning

OPERATIONAL FROM: 4-110+ km/h

**DESCRIPTION:** Defaults ON for every journey

HUMAN MACHINE INTERFACE (HMI)				
FUNCTION	Supplementary warning	PASS		
	Restraint activation / dynamic retractors	[NOT FITTED]		





### **OCCUPANT STATUS**

WARNING TYPE	DRIVER	FRONT PASSENGER	REAR PASSENGERS
Occupant Detection	-	•	×
Seat Belt Reminder (Visual)	•	•	•
Seat Belt Reminder (Audible)	•	•	•
Driver Monitoring	•	-	-

# SPEED ASSISTANCE SYSTEMS (SAS)

SAS FEATURE	DESCRIPTION	
Speed Limit Information Function	Camera & map	
Speed Limitation Function	System advised	

# **SAFETY FEATURES & TECHNOLOGIES**

	A)/A II A	DUITY
FEATURE / TECHNOLOGY~	AVAILA	BILITY NZ
Seat belts (three-point) for all forward-facing seats	,,,,,	•
Seat belt pre-tensioners (front)		
Seat belt pre-tensioners (rear outboard) - 2nd row		
Seat belt pre-tensioners (rear centre) - 2nd row		
Seat belt pre-tensioners (rear outboard) - 3rd row	_	
Intelligent seat belt reminder (driver)		
Intelligent seat belt reminder (front passenger)		
Intelligent seat belt reminder (2nd row seats)		
Intelligent seat belt reminder (3rd row seats)	_	_
Airbag - frontal (driver)	•	
Airbag - frontal (passenger)		
Airbags - side, chest protection (front seats)		
Airbags - side, chest protection (2nd row seats)	×	×
Airbags - side, chest protection (3rd row seats)	-	_
Airbags - side, head protection (front seats)		
Airbags - side, head protection (2nd row seats)		
Airbags - side, head protection (3rd row seats)	-	-
Airbag - centre		
Airbag - knee (driver)	•	
Airbag - knee (front passenger)	×	×
Airbag disabling switch - automatic (front passenger)	×	×
Airbag disabling switch - manual (front passenger)	×	×
Head restraints for all seats		
Active bonnet	×	×
Adaptive cruise control (ACC)		
Anti-lock braking system (ABS)		
Autonomous emergency braking (AEB) - Car-to-Car	•	
Autonomous emergency braking (AEB) - VRU		
Autonomous emergency braking (AEB) - Backover	×	×
Autonomous emergency braking (AEB) - Junction Assist	•	
Automatic emergency call (eCall)	•	
Blind spot monitor (BSM)	•	
Child presence alert	×	×
Electronic brakeforce distribution (EBD)		
Event data recorder (EDR)		
Electronic stability control (ESC)		
Emergency brake assist (EBA)	•	
Emergency stop signal (ESS)		
Fatigue reminder		
Fatigue monitor / detection		
Forward collision warning (FCW)		
ISOFix		
Lane departure warning (LDW)		
Lane keep assist (LKA)		
Pre-crash systems		
Rear cross-traffic alert (RCTA)		
Reversing collision avoidance (camera)		
Roll stability system Secondary / multi-collision brake		
Secondary / multi-collision brake  Speed assistance - auto / intelligent speed limiter		
Speed assistance - auto / intelligent speed limiter  Speed assistance - manual speed limiter		
Speed assistance - speed sign recognition & warning		
Smart (intelligent) key		
Vehicle-to-infrastructure communication (V2I)	×	×
Vehicle-to-vehicle communication (V2V)	×	×
Table to Tomore Communication (TAT)	^	^

**TESTED MAKE / MODEL** 

Volvo C40 Recharge

TESTED VEHICLE(S) BUILT 2022

**TESTED BODY TYPE** 

TESTED VEHICLE ENGINE Battery Electric **RATING PUBLISHED** 

**RATING UPDATED** 

October 2022

5 door SUV

# MODEL VARIANTS:

ANCAP safety ratings do not automatically extend to variants that have different body styles, engine configurations, driven wheels or occupant restraint systems (e.g. fewer airbags). In these cases, ANCAP considers technical evidence submitted by manufacturers before deciding on the extension of a rating to additional variants of a model.

#### RATING YEAR (DATESTAMP):

The Rating Year denotes the year requirements against which a vehicle has been assessed. The Rating Year is determined by ANCAP and, for vehicles rated from 2018, the Rating Year is the year in which the vehicle was tested.

- Specifications & availability subject to change. Please check with the vehicle manufacturer for confirmation of vehicle specification.
- STANDARD
   OPTIONAL
   NOT AVAILABLE
- NOT AVAILABLE ON BASE VARIANT BUT STANDARD OR OPTIONAL ON HIGHER VARIANTS