

# MRC RESEARCH BROADCAST



THE LAUNCH OF MRC'S LOCALLY RESEARCH VEHICLE SPECIFIC  
REAL TIMES DATABASE PROJECT FOR PROTON X50

Thank you for reading this MRC Research Broadcast Issue #01/2026/004. If you have any questions regarding the content, or suggestion for improvement, please contact MRC Malaysia via

# INTRODUCTION



**Steve Miller**  
Chief Executive Officer,  
MRC Malaysia

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We are pleased to introduce this edition of our MRC Research Broadcast, dedicated to the Vehicle Specific Real Times Project, featuring the locally researched Proton X50. This initiative represents a significant milestone in our ongoing commitment to deliver accurate, relevant, and market-driven automotive intelligence tailored specifically to the Malaysian automotive industry.

The Vehicle Specific Real Times Project is built on a comprehensive research process that integrates with vehicle-specific data validation. By focusing on a specific model, such as the Proton X50, we are able to achieve a higher level of precision, ensuring that the data reflects real-world conditions, and local specifications.

The key advantage of this project lies in its ability to enhance transparency, consistency, and confidence across the automotive value chain. Accurate, Vehicle Specific Real Times data supports better decision-making, improves operational efficiency, and ultimately elevates service quality for all stakeholders, from insurers and repairers to assessors and parts suppliers.

Through this initiative, we hope to encourage stronger collaboration among industry players within the automotive ecosystem. We believe that collective participation, data sharing, and alignment towards common standards are essential to raising industry benchmarks. Initiatives such as the Vehicle Specific Real Times Project are designed not only to add value to individual organisations, but also to support and strengthen the broader efforts led by MRC Malaysia in advancing a more sustainable, credible, and progressive automotive industry.

We look forward to continued engagement and support from the industry as we move forward together in shaping a more data-driven and service-oriented future.

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Figure 1.0: MRC Times Database

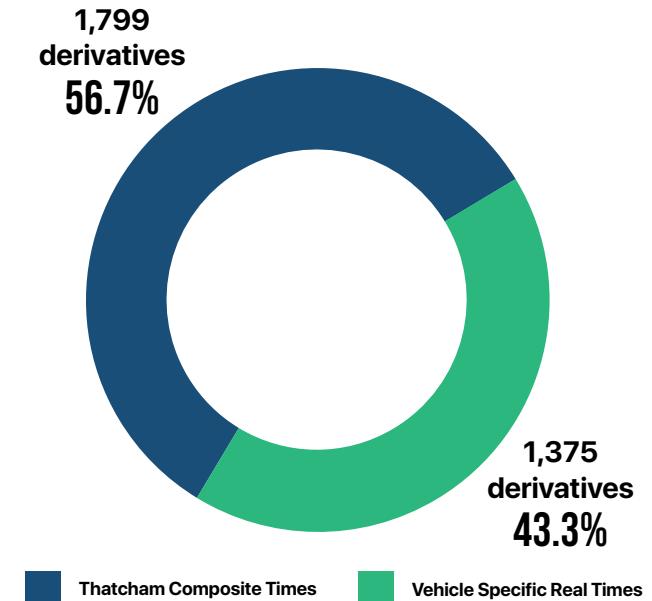
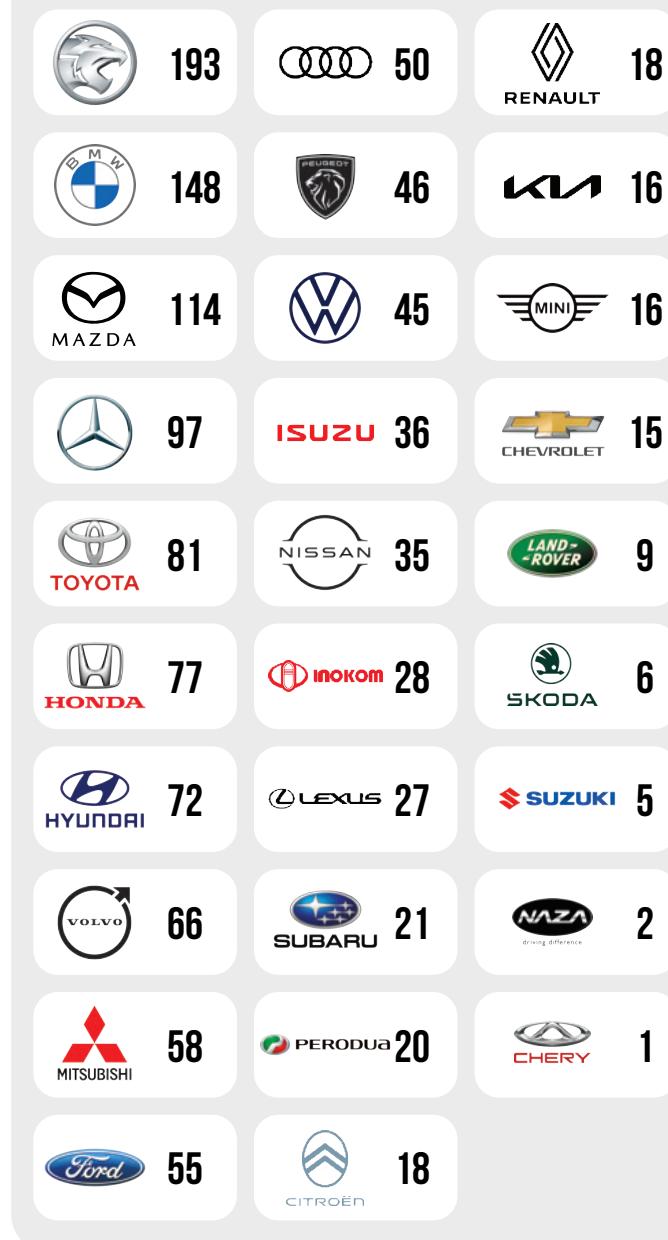


Figure 2.0: Vehicle Specific Real Times by Vehicle Manufacturers & Number of Vehicle Derivatives.



## Executive Summary

MRC Malaysia provides repair times database for use in estimating the time required to remove and replace vehicle panels and parts. It also incorporates the repair methodology to meet manufacturers' specifications. There are two types of repair times:

- Thatcham Composite Times which is repair times categorised based on vehicle types and sizes.
- Real Times acquired from Thatcham, and Locally Research Real Times based on vehicle specific makes and models.

Prior to 2018, only composite times have been used in the claim estimating process. Subsequently, we have introduced Vehicle Specific Real Times to further improve by matching the actual measurements, parts, components and methods. Vehicle Specific Real Times are produced by analysing panel structures and methods review.

MRC Malaysia, in partnership with Thatcham Research, has continuously acquired Vehicle Specific Real Times to accommodate similar vehicle models in Malaysia. MRC Malaysia is collaborating with local vehicle manufacturers to build Locally Research Vehicle Specific Real Times.

### Benefits

Although composite times is generally acceptable and fairly accurate, there are some instances that the actual repair time values deviate slightly from the grouped average due to some car unique design or parts component. These discrepancies can be corrected in Vehicle Specific Real Times.

The repair times for every task and its sub-operation will be transparent and visible in real times. It would be beneficial for future audits and can also be used as a reference for resolving any dispute on claim estimates.

Motor insurers, takaful operators and vehicle repair industry can confidently produce accurate vehicle repair estimates using detailed vehicle repair information specifically for the local market. This will help improve transparency as well as provide better quality repair estimates guided by standard maintenance repair work based on actual manufacturer vehicle models.

The current times database status as of December 31, 2025, out of 3,174 derivatives of car model variants in the MRC Database, 1,799 derivatives (56.7%) are Thatcham Composite Times, and 1,375 derivatives (43.3%) are Vehicle Specific Real Times. (Figure 1.0)

Currently, the MRC database for vehicle specific real time data covers 29 VMs, incorporating local research conducted by our dedicated research team at our research centre, and encompasses a total of 201 vehicle derivatives, including 193 Proton derivatives and 20 Perodua derivatives. (Figure 2.0)

# MRC Malaysia's Locally Research Vehicle Specific Real Times Project for Proton X50

MRC Malaysia has expanded its Locally Researched Vehicle Specific Real Times database with the inclusion of the latest project: Proton X50. This new addition is available in January 2026.

In completing this project, our research team follows several phases and steps to ensure that all collected data is accurate and reliable. The key steps are outlined below:

## 1. MET (Mechanical, Electrical, Trim)

This represents the time required to remove and reinstall mechanical, electrical, or trim components. It ensures that the panel is clear and safe to work on.

## 2. Panel

This covers the time needed to carry out all panel-related tasks, such as repairing dents, aligning panels, or replacing damaged sections.

## 3. Paint

This includes the preparation and painting process, involving sanding, priming, masking, and applying

paint to restore the panel's finish.

## 4. Corrosion Protection

This accounts for the time to apply protective coatings to prevent rust and long-term damage.

By dividing repair or refinishing work into MET, Panel, Paint and Corrosion Protection, tasks can be estimated more accurately and performed more efficiently. This clear breakdown provides both technicians and customers with a transparent understanding of the work involved.

For this Proton X50 project, it covers 12 MVIs across five trim levels and three model year ranges within the MK1 (SX11) platform.

The trim level covers such as 1.5 TGDi Flagship, 1.5T Premium, 1.5T Executive, 1.5T Standard, and 1.5T Sport Edition / 1.5T Flagship. (Figure 3.0)

Figure 3.0: Proton X50 Derivatives Involved

No.	MVI Code	Trim Level	Model Range
1	PR262	1.5 TGDi Flagship	(2020-2024) (SX11)
2	PR261	1.5T Premium	(2020-2024) (SX11)
3	PR260	1.5T Executive	(2020-2024) (SX11)
4	PR259	1.5T Standard	(2020-2024) (SX11)
5	PR302	1.5T Sport Edition	(2024-2025) (SX11 (RC))
6	PR297	1.5 TGDi Flagship	(2024-2025) (SX11 (RC))
7	PR296	1.5T Premium	(2024-2025) (SX11 (RC))
8	PR295	1.5 Executive	(2024-2025) (SX11 (RC))
9	PR294	1.5T Standard	(2024-2025) (SX11 (RC))
10	PR305	1.5T Flagship	(2025) (SX11 FL)
11	PR304	1.5T Premium	(2025) (SX11 FL)
12	PR303	1.5T Executive	(2025) (SX11 FL)



## Example of Repair Times for Proton X50



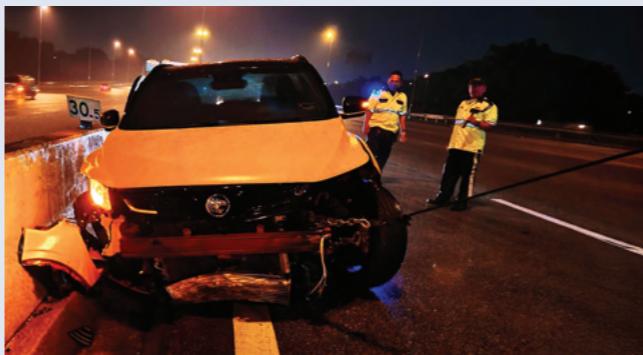
The examples illustrate a clear difference between existing generic repair times and the Locally Researched Vehicle Specific Real Times developed specifically for the Proton X50. The generic times, derived from composite databases, are designed to cover a broad range of models and conditions. While useful as a general reference, they might not fully reflect the actual repair complexity and structure of a specific vehicle model.

Based on the analysis, the variance between generic times and Vehicle Specific Real Times ranges within approximately five per cent from one panel to another. The Vehicle Specific Real Times figures demonstrate greater accuracy because they are derived from hands-on local research,

panel-by-panel assessment, and model-specific validation for the Proton X50. This approach ensures that the recorded times reflect actual repair processes, tools, and labour considerations, rather than relying on averaged assumptions across multiple vehicle platforms.

Overall, this comparison reinforces the importance of adopting Vehicle Specific Real Times data to improve precision, fairness, and transparency in repair estimation. By moving away from generic benchmarks and towards Locally Researched Vehicle Specific Real Times data, industry stakeholders can achieve more consistent assessments, reduce disputes, and enhance service quality across the automotive ecosystem.

### Front Collision Example



Based on the comparison shown, the Locally Researched Vehicle Specific Real Times for the Proton X50 record a total repair time of 34.5 hours, compared to 35.9 hours under the existing

Parts Name	Total Times (MET, Panel and Paint)		
	New Locally Research Vehicle Specific (PR261)	Thatcham Composite (TC025)	Difference
		Hours	%
Bonnet			
Front Pillar Outer RH			
Door Glass Front Window RH			
Door Front RH			
Fender Front RH			
	<b>34.5 HRS</b>	<b>35.9 HRS</b>	<b>-1.4</b>
			<b>-4%</b>

### Rear Collision Example

The comparison indicates that the Locally Researched Vehicle Specific Real Times for the Proton X50 show a total repair time of 46.4 hours, compared to 44.9 hours under the existing generic composite times. This reflects an increase of 1.5 hours, or approximately 3%, suggesting that the generic benchmark slightly underestimates the actual repair effort required for the selected rear and side panels.

This difference highlights the importance of model-specific research, as certain areas of the vehicle may involve greater complexity, accessibility constraints, or additional repair steps

generic composite times. This represents a reduction of 1.4 hours, or approximately 4%, indicating that the generic benchmark slightly overestimates the actual repair effort required for the selected front-related panels.

This variance demonstrates the strength of the Vehicle Specific Real Times approach, as the locally researched data is derived specifically from the Proton X50's design, panel structure, and real-world repair conditions. By reflecting the true repair process more accurately, Vehicle Specific Real Times provides a fairer and more precise reference, helping to improve estimation consistency and decision-making across the automotive repair and assessment ecosystem.

that are not fully captured in generic times. The Vehicle Specific Real Times figures, being locally validated and vehicle-specific, provide a more accurate representation of real-world repair conditions, supporting fairer assessments and more reliable

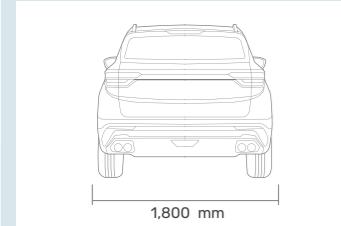
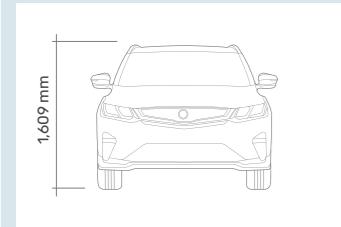
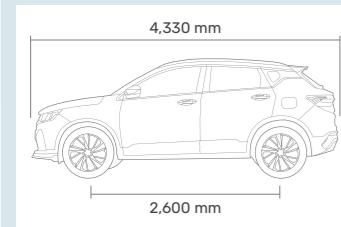


Parts Name	Total Times (MET, Panel and Paint)		
	New Locally Research Vehicle Specific (PR261)	Thatcham Composite (TC025)	Difference
		Hours	%
Quarter Panel RH			
Lamp Assembly Rear RH (tts)			
Door Glass Rear Window RH			
Door Rear RH			
Runningboard Panel RH			
	<b>46.4 HRS</b>	<b>44.9 HRS</b>	<b>+1.5</b>
			<b>+3%</b>

## VEHICLE

Manufacturer : Proton  
 Model : X50  
 Year : 2020 On  
 MVI Code : PR259, PR260  
 PR261 & PR262  
 MRC Times : PR261  
 Version : MVI210101\_R1

## DIMENSION



## CRASH SAFETY RATING



Overall Score  
84.26



## VEHICLE SPECIFICATIONS

Variant	Standard	Executive	Premium	TGDi Flagship
Price	RM 79,200*	RM 84,800*	RM 93,200*	RM 103,300*
Engine	12-valve DOHC, Turbocharged with Variable Valve Timing			
Capacity	1,477 cc			
Power	148 hp at 5,500 rpm		175 hp at 5,500 rpm	
Torque	226 Nm at 1,500 rpm		255 Nm at 1,500 rpm	
Transmission Type	Dual-clutch Automatic (Wet)			
MVI Code	PR259	PR260	PR261	PR262
MRC Times	PR261			

\* The price shown reflects the 2020 pricing.

## VEHICLE FEATURES

PA AUTO PARK ASSIST TGDi FLAGSHIP ONLY	AEB AUTONOMOUS EMERGENCY BRAKING TGDi FLAGSHIP ONLY	LKA LANE-KEEPING ASSIST TGDi FLAGSHIP ONLY	ACC ADAPTIVE CRUISE CONTROL TGDi FLAGSHIP ONLY	BSD BLIND SPOT DETECTION TGDi FLAGSHIP ONLY
360° 360-DEGREE CAMERA PREMIUM & TGDi FLAGSHIP	AHB AUTO HIGH BEAM TGDi FLAGSHIP ONLY	VSC VEHICLE STABILITY CONTROL ALL VARIANTS	HSA HILL-START ASSIST ALL VARIANTS	EPB ELECTRONIC PARKING BRAKE ALL VARIANTS
TPMS TIRE PRESSURE MONITORING SYSTEM PREMIUM & TGDi FLAGSHIP	AUTOMATIC CLIMATE CONTROL PREMIUM & TGDi FLAGSHIP	SUNROOF PANORAMIC TGDi FLAGSHIP ONLY	NAVIGATION ALL VARIANTS	KEYLESS-ENTRY SYSTEM PREMIUM & TGDi FLAGSHIP

## Crash Safety Rating for Proton X50

