

MRC TECHNICAL eBULLETIN

RAISING STANDARDS FOR THE AUTOMOTIVE INDUSTRY

NEWLY
LAUNCHED CARS

ADAS TERMINOLOGY
BASIC PRINCIPAL OF ADAS



“ MRC is a crucial component at every stage of the motor claims process ”





“

Hello everyone,

We bring insights into a number of new vehicles recently launched in Malaysia, along with information regarding recalls for the Honda vehicles as well as a recall on the Proton X70, with concerns regarding cooling fan assembly. We also include information about ADAS Terminology and Basic Principal of ADAS and the ASEAN NCAP vehicle safety test and overall rating for the new Perodua Alza.

Malaysia is celebrating the 65th National Day of Malaysia on 31 August 2022 and Malaysia Day on 16 September 2022. The theme for the celebration this year will follow the concept of Keluarga Malaysia Teguh Bersama. I would like to take this opportunity to wish “Selamat Menyambut Hari Kemerdekaan” to all Malaysian and may this day bring fortune and success for every one of us.

”



**#KELUARGA
MALAYSIA
TEGUH BERSAMA**

Steve Miller
Chief Executive Officer,
MRC Malaysia





NEWLY LAUNCHED CARS

05 Volkswagen Arteon R-Line launched



07 Hyundai Kona facelift launched

RECALLS

09 Proton X70 CBU recalled for radiator fan assembly

11 Honda Malaysia recalls City, City Hatchback, HR-V and BR-V

INDUSTRY NEWS

13 ADAS Terminology & Basic Principal of ADAS



17 Database Releases at a Glance

23 MRC Academy Training Courses

25 ASEAN NCAP : Overall Rating for Perodua Alza 2022

» Volkswagen Arteon R-Line was released in MRCDB P63.0

NEWLY LAUNCHED CARS



“ Keeping ahead
through technology ”



Volkswagen Arteon R-Line launched

Volkswagen Malaysia has now officially launched and announced the Volkswagen Arteon R-Line for the Malaysian market. It has been locally assembled in Pekan, Pahang and it is priced at RM221,065. The price is inclusive of a five-year unlimited-mileage warranty, three years of free maintenance and five years of free roadside assistance.

The Arteon comes with 2.0 litre TSI turbocharged 4-cylinder petrol engine that produced 190 PS from 4,180 rpm to 6,000 rpm and 320 Nm of torque from 1,500 to 4,180 rpm. Also, this engine sends a drive to the front axle via a 7-speed DSG wet dual-clutch transmission with paddle shifters.

The local model comes with an 11.7-inch digital instrument display and a range-topping Discover Pro navigation system with a 9.2-inch touchscreen. Wireless Apple CarPlay and wired Android Auto connectivity come as standard, together with 11 speakers of a 700-watt Dynaudio sound system. It also comes with keyless entry, push-button start, triple-zone auto climate control, cruise control, 14-way power adjustable front seats with driver's side memory, 3-colour ambient lighting and front and rear parking sensors. The Arteon adds a couple of features that can not be found on the Passat, which are the 360-degree camera system and Dynamic Chassis Control (DCC) adaptive dampers.

In addition, it is fitted with seven airbags, ABS with EBD and brake assist, stability control, a tyre pressure monitoring system and ISOFIX child seat anchors at the rear.

Specification

	Volkswagen Arteon R-Line
Retail Price	RM221,065
Horsepower (PS)	276@5100rpm
Engine	2.0I TSI 280PS (206kW) 5,100-6,500 rpm
Length*Width*Height (mm)	4,862*1,871*1,450
Transmission	7-Speed Direct Shift Gearbox (DSG)
Fuel Economy	7.4L/100km

NEWLY LAUNCHED CARS



“ Technology is only as good as the people behind it ”



Hyundai Kona facelift launched

Hyundai-Sime Darby Motors (HSDM) introduced four variants of the 2021 Hyundai Kona which are the base 2.0, 2.0 Active, 1.6 Turbo, as well as the Kona N Line model.

Four variants are available at launch, the base 2.0 is priced at RM119,888, the 2.0 Active is priced at RM136,888, the 1.6 Turbo is priced at RM146,888 and the N Line is priced at RM156,888. As usual for HSDM, the Kona comes with a five-year or 300,000 km warranty and a three-year or 50,000 km free maintenance package. For 2.0 variants, it comes with 2.0 litre Nu MPI Atkinson-cycle four-cylinder, renamed the Smartstream G2.0 MPI but making the same 149 PS at 6,200 rpm and 180 Nm of torque at 4,500 rpm. The gearbox, however, has been switched from a six-speed automatic to an Intelligent Variable Transmission (iVT), effectively a CVT driven by a chain instead of a belt.

For 1.6 Turbo variants, it is powered by Hyundai's Smartstream G1.6 T-GDi turbocharged engine with 198 PS and 265 Nm of torque at 1,600 to 4,500 rpm. Compared to the previous 1.6T engine, the Smartstream G1.6 gets the Continuous Variable Valve Duration (CVVD) equipped. All variants comes with the standard-fit remote engine start function for the keyless entry system, plus a USB port and a centre cubby hole for rear occupants. It is also comes with automatic headlights, push-button start, cruise control, a tyre pressure monitoring system, reverse sensors and a reverse camera.

For safety features, all models get six airbags, ABS with EBD and brake assist, stability control, hill start assist, hill descent control and rear ISOFIX child seat anchors. Except for base 2.0 models, all Kona variants come with Hyundai's Smartsense active safety and driving assistance tech. The pack includes Blind-Spot Collision Avoidance Assist (BCA) with Rear Cross-Traffic Collision-Avoidance Assist (RCCA), Lane Keeping Assist (LKA), Lane Following Assist (LFA), and Smart Cruise Control with Stop and Go that keeps the SCC running even when the vehicle comes to a complete stop.

Specification

	Hyundai Kona 2.0	Hyundai Kona 2.0 Active	Hyundai Kona 1.6 Turbo	Hyundai Kona 1.6 Turbo N Line
Retail Price	RM119,888	RM136,888	RM146,888	RM156,888
Horsepower (PS)	149@6200rpm		198@6000rpm	
Engine	2.0L Petrol Engine, 4 Cylinder 16 Valve Smartstream G2.0 Atkinson (Nu Improved 2.0 Atkinson)		1.6L Petrol Engine, 4 Cylinder 16 Valve Smartstream G1.6 T-GDi (Gamma II 1.6 T-GDi)	
Length*Width*Height (mm)	4,180*1,800*1,555			
Transmission	Continuous Variable Transmission (CVT)		7-Speed Automatic	
Fuel Economy	7.2L/100km			

RECALLS



Proton Recalls X70

Proton has issued a recall for the fully imported (CBU) Proton X70 over an issue with their cooling fan assembly.

According to Proton, the recall involves a batch of the CBU X70 that is fitted with cooling fan assemblies made by Valeo, installed in vehicles before the effective chassis number L6T7742Z8KU043589. This is a mandatory part replacement for the vehicles involved, and service centres have been notified via a "pop-up" system that will send the notification from May 21, 2022 for Peninsular Malaysia, and from June 1, 2022 for East Malaysia.

According to Proton's service bulletin, vehicles manufactured after this chassis number will receive the upgraded cooling fan assembly made by LangXin.





RECALLS



Honda Malaysia Recalls Various Models

Honda Malaysia (HMSB) has announced a safety recall for various models that including City, City Hatchback, HR-V and BR-V models. It's for two different precautionary safety measures.

First, there are 1,068 units of the MY2021 City and MY2022 City Hatchback are being recalled for the inspection of the nut torque on the alternating current generator (ACG). HMSB will inspect the nut tightening on the ACG terminal of the engine harness. A loose one may cause poor contact and battery malfunction, which in turn may lead to the engine stopping while driving.

Separately, 343 units of the MY2020 HR-V and 116 units of the MY2021 BR-V are being recalled for the inspection of the bolt earth grounding tightness. A loose bolt may lead to a loose wire harness. Similarly, this may lead to poor contact, which in turn may lead to the engine stopping while driving, or the car being unable to start.

According to HMSB, they said: "As of today, there are no incidences of crashes or injuries caused by this issue reported in Malaysia." HMSB adds that it believes that this product recall is necessary as customer safety is its top priority.





ADAS TERMINOLOGY & BASIC PRINCIPAL OF ADAS



Autonomous vehicles and Advanced Driver Assistance Systems (ADAS) are projected to help save millions of lives globally, eliminate congestion, reduce emissions, and allow us to rebuild cities around people and not cars.



What is ADAS?

Definition

Almost all vehicle accidents are caused by human error, which can be avoided with Advanced Driver Assistance Systems (ADAS). The role of ADAS is to prevent deaths and injuries by reducing the number of car accidents and the serious impact of those that cannot be avoided.

Essential safety-critical ADAS applications include:

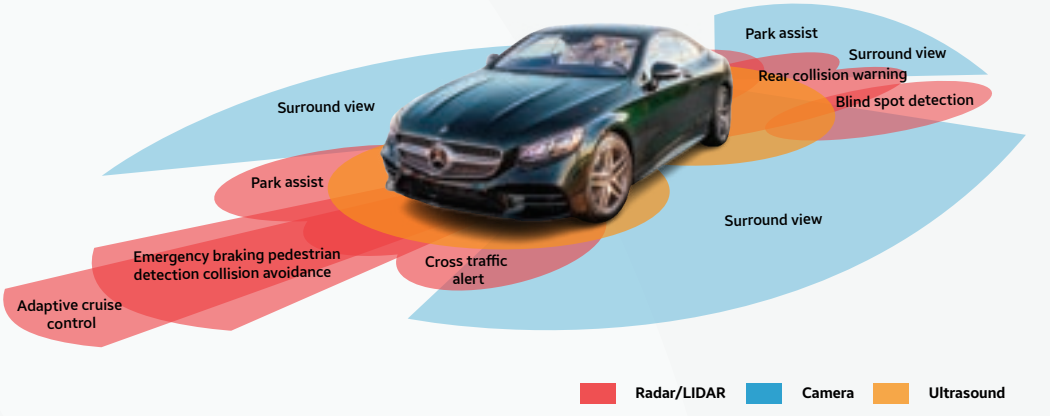
- Pedestrian detection/avoidance
- Lane departure warning/correction
- Traffic sign recognition
- Automatic emergency braking
- Blind spot detection

These lifesaving systems are key to ensuring the success of ADAS applications, incorporating the latest interface standards and running multiple vision-based algorithms to support real-time multi-media, vision co-processing, and sensor fusion subsystems.

How does ADAS work?

Automobiles are the foundation of the next generation of mobile-connected devices, with rapid advances being made in autonomous vehicles. Autonomous application solutions are partitioned into various chips, called SoCs (systems on a chip). These chips connect sensors to actuators through interfaces and high-performance ECUs (electronic controller units).

Self-driving cars use a variety of these applications and technologies to gain 360-degree vision, both near (in the vehicle's immediate vicinity) and far. That means hardware designs are using more advanced process nodes to meet ever-higher performance targets while simultaneously reducing demands on power and footprint.

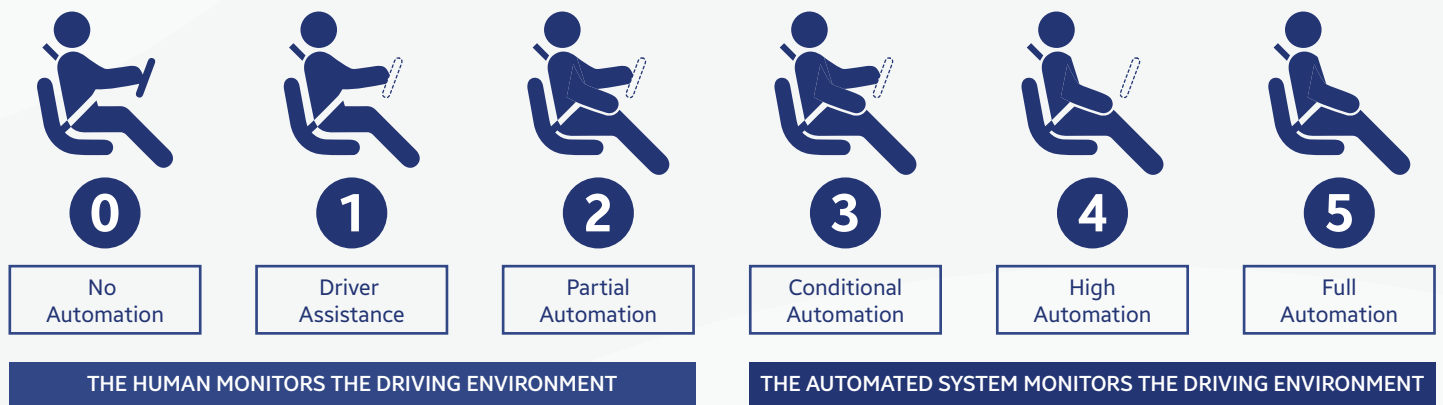


Why is ADAS important?

According to the August 2016 Traffic Safety Facts Research Note by the National Highway Traffic Safety Administration (NHTSA), "The Nation lost 35,092 people in crashes on U.S. roadways during 2015." This 7.2% increase was "the largest percentage increase in nearly 50 years." An analysis revealed that about 94% of those accidents were caused by human error, and the rest by the environment and mechanical failures.

The opportunity to reduce car accidents is making automotive ADAS even more critical. Automatic emergency braking, pedestrian detection, surround view, parking assist, driver drowsiness detection, and gaze detection are among the many ADAS applications that assist drivers with safety-critical functionality to reduce car accidents and save lives.

Autonomous driving levels



Level 0 : No Automation

Level 0 refers to a vehicle that has no driving automation technology. In this case, the driver is entirely in charge of operating the vehicle's movement, including steering, accelerating, braking, parking, and any other necessary maneuver to move the car in any direction.

However, at Level 0, driver support systems that may temporarily intervene during driving may be present. Examples include stability control, forward-collision warning, automatic emergency braking, blind-spot warning, and lane-keeping assistance. These technologies are considered Level 0 because they do not drive the vehicle but offer alerts or momentary action in specific situations. The majority of vehicles on American roadways are Level 0.

Level 1 : Driver Assistance

At Level 1, the lowest rung of automation, a vehicle has at least one driver support system that provides steering assistance or braking and acceleration assistance. The driver remains responsible for driving the vehicle and must be prepared to take control at any time and for any reason. Adaptive cruise control is an example of a Level 1 driver assistance technology. It maintains a safe following distance between your vehicle and traffic ahead without any intervention by the driver. A steering assistance feature, such as lane-centering assistance or lane-following assistance, would also qualify as Level 1 autonomy.

Level 2 : Partial Automation

Level 2 driving automation applies to vehicles with advanced driving assistance systems (ADAS) that can take over steering, acceleration, and braking in specific scenarios. But, even though Level 2 driver support can control these primary driving tasks, the driver must remain alert and is required to actively supervise the technology at all times. An example of Level 2 driving automation is Highway Driving Assist, installed in Genesis, Hyundai, and Kia vehicles. It requires the driver to have her hands on the steering wheel but actively steers, accelerates, and brakes the vehicle when traveling on highways. Blue Cruise is a new hands-free partial driving automation technology from Ford. It is more sophisticated than Highway Driving Assist, allowing the driver to take her hands off of the steering wheel on specific, approved highways in the U.S. and Canada. Both of these examples of Level 2 driving automation require the driver to remain alert, engaged, and ready to take control at any time.

1950 - 2000

- Safety/Convenience Features
 - Cruise Control
 - Seat Belts
 - Antilock Brakes



2000 - 2010

- Advanced Safety Features
- Electronic Stability Control
 - Blind Spot Detection
- Forward Collision Warning
- Lane Departure Warning



2010 - 2016

- Advanced Driver Assistance Features
 - Rearview Video Systems
 - Automatic Emergency Braking
- Pedestrian Automatic Emergency Braking
 - Rear Automatic Emergency Braking
 - Rear Cross Traffic Alert
 - Lane Centering Assist



2016 - 2025

- Partially Automated Safety Features
 - Lane Keeping Assist
 - Adaptive Cruise Control
 - Traffic Jam Assist
 - Self-park



2025+

- Fully Automated Safety Features
 - Highway Autopilot



*Extracted from article [jdpower.com](https://www.jdpower.com)

Level 3 : Conditional Automation

The leap from Level 2 to Level 3 automation is significant, so no Level 3 systems are legal to use on American roads. Yet, Level 3 is known as conditional driving automation. It uses various driver assistance systems and artificial intelligence to make decisions based on changing driving situations around the vehicle. People inside the vehicle do not need to supervise the technology, which means they can engage in other activities. However, a human driver must be present, alert, and able to take control of the vehicle at anytime, especially in the case of an emergency due to system failure. No, you still cannot take a nap while sitting in the driver's seat of a Level 3 conditionally autonomous vehicle.

Audi developed a Level 3 traffic jam assistance technology for its 2019 A8 flagship sedan, but it never received regulatory approval for the system in Germany and has since shelved the effort. That opened the door for Honda to become the first automaker in the world to sell an approved Level 3 traffic jam assistance system to consumers. It went on sale as an upgrade to the company's Legend flagship sedan in early 2021, offered in low quantities and only for use in the automaker's home market of Japan. Other vehicles equipped with Level 3 driving automation but waiting for regulatory approval include there designed 2021 Mercedes-Benz S-Class and the all-new 2022 Mercedes-Benz EQS electric vehicle. The Mercedes technology is called Drive Pilot.

Level 4 : High Automation

Referred to as high-driving automation, Level 4 autonomy does not require any human interaction in the vehicle's operation because it is programmed to stop itself in the event of system failure. Since a human driver is never needed, a Level 4 vehicle may not have a steering wheel and pedals. And yes, at Level 4, you can take a nap while riding in the vehicle. Level 4 driving automation technology is for use in driverless taxis and public transportation services. Such vehicles will be programmed to travel between Point A and Point B and restricted to specific geographic boundaries by geofencing technology. Certain conditions may limit or cancel Level 4 autonomous vehicle operation, such as severe weather.






Level 5 : Full Automation

As the highest classification of driving automation, Level 5 means a vehicle can drive itself everywhere in all conditions without any human interaction. A Level 5 vehicle is neither bound by geofencing nor affected by weather and transports human beings comfortably and efficiently without requiring a driver. The only human involvement will be to set a destination. The information in this article is from the Society of Automotive Engineers (SAE). This article was first published on September 8, 2020. It is updated to reflect revisions and clarifications announced by SAE on April 30, 2021.

Database Releases At A Glance





MRCDB P61.0
JANUARY 2022

New Vehicles in Detail

Manufacturer					
Model	Ford Ranger	Ford Ranger Raptor	Proton Iriz	Proton Persona	Volkswagen Passat
Model Year	12/2019 on - 6/2020 on - 8/2020 on - 9/2020 on	4/2020 on - 3/2021 on	2/2021 on	2/2021 on	1/2020 on - 10/2020 on
TPS Project Code	FD131 / FD132 / FD133 / FD134	FD129 / FD130	PR266	PR265	VW050/VW051
TTS Project Code	TC064	TC064	PR201	PR215	VW044
Body Shape	4 Dr. D/Cab Pick-Up	4 Dr. D/Cab Pick-Up	5 Dr. H/back	4 Dr. Sedan	4 Dr. Sedan
Engine Size	2.2 lit / 2.0 lit	2.0 lit	1.6 lit	1.6 lit	2.0 lit
Total Line Items	2,468	1,368	486	568	1,780







MRCDB P61.0
JANUARY 2022

Manufacturer's Price Updates






Manufacturer				
No. of Parts Price Changes	233	238	76	3
No. of New Parts	596	591	63	0
No. of Supersession	0	0	0	0

MRCDB P61.1
FEBRUARY 2022








Manufacturer's Price Updates







Manufacturer						
No. of Parts Price Changes	65	3	739	794	254	123
No. of New Parts	21	0	304	300	179	761
No. of Supersession	0	0	0	0	0	1,977

New Vehicles in Detail

Manufacturer					
Model	INFINITI Q60	Proton Saga	Proton Persona	Toyota Harrier	Toyota GR Yaris
Model Year	5/2017 on	2/2021 on	8/2021 on	4/2021 on	12/2020 on
TPS Project Code	IF007	PR267	PR268 / PR269 / PR270	TY288	TY270
TTS Project Code	TC033	PR220	PR215	TC031	TC022
Body Shape	2 Dr. Coupe	4 Dr. Sedan	4 Dr. Sedan	5 Dr. SUV	5 Dr. H/back
Engine Size	2.0 lit	1.3 lit	1.6 lit	2.0 lit	1.6 lit
Total Line Items	630	565	1,910	808	638

Manufacturer's Price Updates




Manufacturer							
No. of Parts Price Changes	12,674	13,379	6,606	6,334	1,274	1,368	142
No. of New Parts	496	396	960	990	126	127	135
No. of Supersession	0	0	3,395	2,395	4,120	4,123	0

Manufacturer						
No. of Parts Price Changes	234,040	1,000	35	3	97	102
No. of New Parts	18,906	40	56	0	326	323
No. of Supersession	63,404	43	0	0	0	0

Database Releases At A Glance


MRCDB P63.0
MARCH 2022

New Vehicles in Detail

Manufacturer			
Model	Hyundai Elantra	Proton Iriz	Volkswagen Arteon
Model Year	12/2020 on - 5/2021 on	8/2021 on	8/2020 on
TPS Project Code	HY130 / HY131	PR271 / PR272 / PR273	VW054
TTS Project Code	TC020	PR201	TC038
Body Shape	4 Dr. Sedan	5 Dr. H/back	5 Dr. H/back
Engine Size	1.6 lit	1.3 lit / 1.6 lit	2.0 lit
Total Line Items	1,054	1,800	789








MRCDB P63.0
MARCH 2022









Manufacturer's Price Updates

Manufacturer	
No. of Parts Price Changes	28
No. of New Parts	0
No. of Supersession	0






Manufacturer's Price Updates

MRCDB P63.1
APRIL 2022



Manufacturer							
No. of Parts Price Changes	22,778	21,452	2,608	5	41	449	3,418
No. of New Parts	7,067	7,400	897	71	1	309	252
No. of Supersession	0	0	4,134	4,134	0	0	0

Manufacturer								
No. of Parts Price Changes	3,140	5,466	5,930	11,355	44	3	856	788
No. of New Parts	278	1,108	822	2,508	69	0	776	441
No. of Supersession	0	0	0	5,625	0	0	0	0








New Vehicles in Detail

Manufacturer						
Model	BMW 2 Series G. Coupe	BMW 3 Series Hybrid	Hyundai Kona	Kia Seltos	Lexus ES	Peugeot 3008
Model Year	10/2020 on	10/2020 on	4/2021 on	1/2021 on	9/2019 on	11/2021 on
TPS Project Code	BM171	BM170	HY132 / HY133 / HY134 / HY135	KI077 / KI078	LE032 / LE033	PG056
TTS Project Code	TC035	TC027	TC025	TC025	TC027	TC031
Body Shape	4 Dr. Coupe	4 Dr. Sedan	5 Dr. SUV	5 Dr. SUV	4 Dr. Sedan	5 Dr. SUV
Engine Size	1.5 lit	2.0 lit	2.0 lit / 1.6 lit	1.6 lit	2.5 lit	1.6 lit
Total Line Items	727	722	2,526	1,202	2,413	706

Manufacturer's Price Updates

Manufacturer		
No. of Parts Price Changes	259	809
No. of New Parts	0	33
No. of Supersession	0	37


Manufacturer's Price Updates

Manufacturer							
No. of Parts Price Changes	5,749	5,453	167	178	200	3	241
No. of New Parts	1,607	1,431	345	335	94	2	243
No. of Supersession	4,765	4,765	0	0	0	0	0

Database Releases At A Glance








MRCDB P65.0
MAY 2022








New Vehicles in Detail

Manufacturer 	
Model	BMW 3 Series
Model Year	7/2021 on - 10/2020 on - 12/2020 On
TPS Project Code	BM172 / BM173 / BM174
TTS Project Code	TC027
Body Shape	4 Dr. Sedan
Engine Size	2.0 lit / 3.0 lit
Total Line Items	2,410



MRCDB P65.1
JUNE 2022

Manufacturer's Price Updates




Manufacturer							
No. of Parts Price Changes	732	33	65	4	41	369	363
No. of New Parts	351	126	79	0	14	766	772
No. of Supersession	0	0	0	0	0	0	0

Manufacturer							
No. of Parts Price Changes	236	354	661	788	108	133	32
No. of New Parts	427	135	294	217	315	291	0
No. of Supersession	0	0	0	0	4,167	4,167	0





Alternative Parts Price Database

Manufacturer					
Reference	Exora, Iriz, Inspira, Preve, Persona, Satria Neo, Saga & Suprima S	Alza, Axia, Bezza, Myvi & Viva	Accord, City, Civic, CR-V, HR-V & Jazz	Almera, Latio & Grand Livina	Avanza, Corolla Altis, Camry, Fortuner, Hilux, Innova & Vios
Parts Price Updates	156	184	254	55	457

New Vehicles in Detail

Manufacturer			
Model	Proton Saga	Peugeot 5008	Toyota Corolla Cross
Model Year	5/2022 on	11/2021 on	1/2022 on
TPS Project Code	PR274 / PR275 / PR276 / PR277	PG057	TY289 / TY290
TTS Project Code	PR220	PG050	TC025
Body Shape	4 Dr. Sedan	5 Dr. SUV	5 Dr. SUV
Engine Size	1.3 lit	1.6 lit	1.8 lit
Total Line Items	2,726	631	2103

Manufacturer's Price Updates

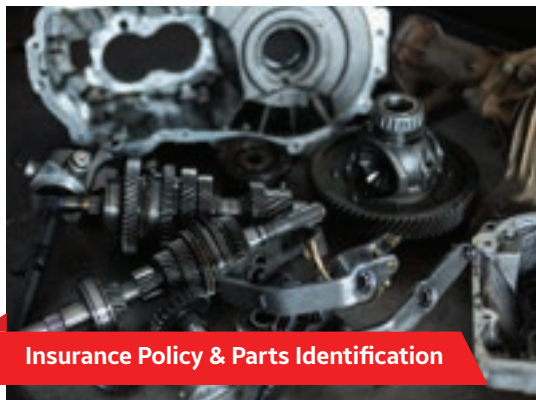
Manufacturer				
No. of Parts Price Changes	345,937	765	9,214	9,415
No. of New Parts	25,394	46	193	193
No. of Supersession	74,062	51	1,443	1,443

MRC ACADEMY

TRAINING COURSES

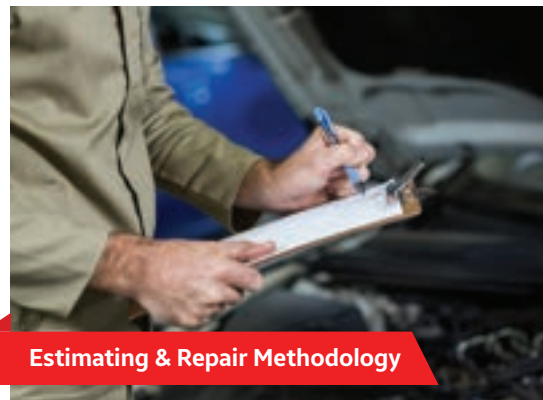


MRC Malaysia enhancing participants' skills and technical knowledge, enabling them to carry out their daily responsibilities, and for them to take advantage of these technologies and tools for their productivity improvement.



Insurance Policy & Parts Identification

The program consists both theory and hands-on modules to develop skills and knowledge with the use of technology and latest database available to the industry.



Estimating & Repair Methodology

This upskilling program for participant with experience in claims handling and repair estimating.



Mechanical Electrical Trim (MET)

This program is designed to give awareness of health, safety and legal requirement relating to the removal and fitting of MET components.



Structural Body Repair

This program consists both theory and practical modules that designed to enhance participants skills and knowledge using approved researched repair methods.



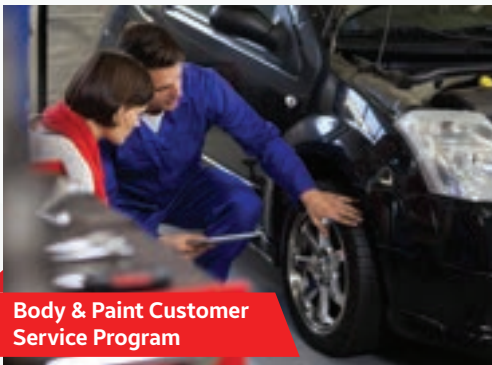
Advance Driver Assistance System (ADAS) Awareness Program

Human negligence increases the number of road accidents. Therefore, modern vehicles in Malaysia are now equipped with ADAS.



Vehicle Body Measuring Program

This program is to create awareness and exposure to having better understanding on the importance of vehicle body measuring and identify the extent of damages or misaligned.



Body & Paint Customer Service Program

This program is customised based on real environment of body & paint operation with case studies and practical. Enhancing the knowledge and skill to prepare the candidates with better customer service skill.



Understanding Thatcham Times In Electronic Claim Systems (TTS)

This program is to educate the importance of TTS application in claims estimating processes and how the time system derived, categorised and applied.



Workshop Registration & Body Structure Technical Application Process

A half-day program to create awareness on JPJ regulations in motor claims industry relating to vehicle body structure repairs.



Level 1 & Level 2: Award in Electric / Hybrid Vehicle Awareness & Hazard Management For Emergency & Recovery Personnel

This course provides knowledge on safe working practices and the precautions required to avoid potential injury when working on EV/HEV vehicles.





Overall Rating Perodua Alza Crash Test

The first edition of Perodua Alza underwent ASEAN NCAP assessment in June 2013 in which the MPV was awarded a 4-Star rating for its AOP and 46% compatibility for the COP category. After 8 years since the last assessment, Perodua has taken a huge leap by having the MPV to undergo ASEAN NCAP's new 2021-2025 assessment protocol.

The assessment was carried out by ASEAN NCAP at MIROS PC3 Crash Lab, Melaka in May 2022. The new Perodua Alza is fitted with 6 airbags as standard across its variants. In addition, the model is equipped with standard fitment of Anti-lock Braking System, Electronic Stability Control, Seat Belt Reminder system for both frontal and rear occupants, Autonomous Emergency Braking (AEB) City and AEB Inter-Urban, Auto High Beam and Pedestrian Protection technology. The 7-seater MPV also offers Blind Spot Detection, Lane Departure Warning, Forward Collision Warning and Lane Keep Assist either as standard or optional equipment.

In this assessment, the new Perodua Alza obtained an overall score of 81.64 points based on the AOP, COP, SA and MS categories, which placed the MPV to be eligible to be awarded with a 5-Star ASEAN NCAP rating.

	AOP			COP			SAFETY ASSIST			MS			2021-2025 ASEAN NCAP RATING
	Item	Point	Max	Item	Point	Max	Item	Point	Max	Item	Point	Max	
	ODB	13.34	16.00	FRONTAL	16.00	16.00	EBA	6.00	6.00	BSD/BSV	4.00	8.00	5
	SIDE	7.62	8.00	SIDE	8.00	8.00	SBR	4.50	6.00	ARV	-	4.00	
	HPT Evaluation	8.00	8.00	Installation	10.04	12.00	AEB City	2.50	2.50	AHB	2.00	2.00	
				Vehicle Based	9.00	13.00	AEB Inter-Urban	3.50	3.50	Ped. Protection	2.00	2.00	
				CPD	-	2.00	Advance SATs	3.00	3.00	Advance MST*	-	2.00	
Score		28.96	32.00		43.04	51.00		19.50	21.00		8.00	16.00	OVERALL SCORE
Normalized Score		0.90		0.84		0.93		0.50					
Weighting		40%		20%		20%		20%					81.64
Weighted Score		36.20		16.88		18.57		10.00					
Maximum Star Rating		5		5		5		5					5

*Bonus point

Source Courtesy of ASEAN NCAP



Contact Us

Thank you for reading the Issue #02/2022/005 MRC Technical eBulletin. If you have any questions regarding the content, or suggestion for improvement, please contact MRC Malaysia via