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# **ALL-NEW OUTLANDER PHEV**

## **– Technical Overview –**



**Kentaro Honda**  
**C-Segment Chief Vehicle Engineer**

# Product Concept of the All-New Outlander

## 威風堂堂 (I-FU-DO-DO\*)

### 1 ♦ Toughness



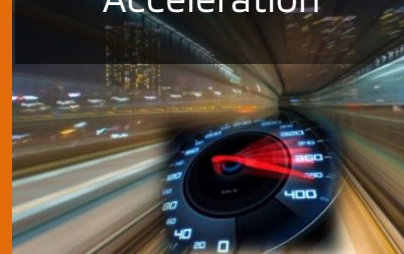
### 2 ♦ Confidence



### 3 ♦ Quality



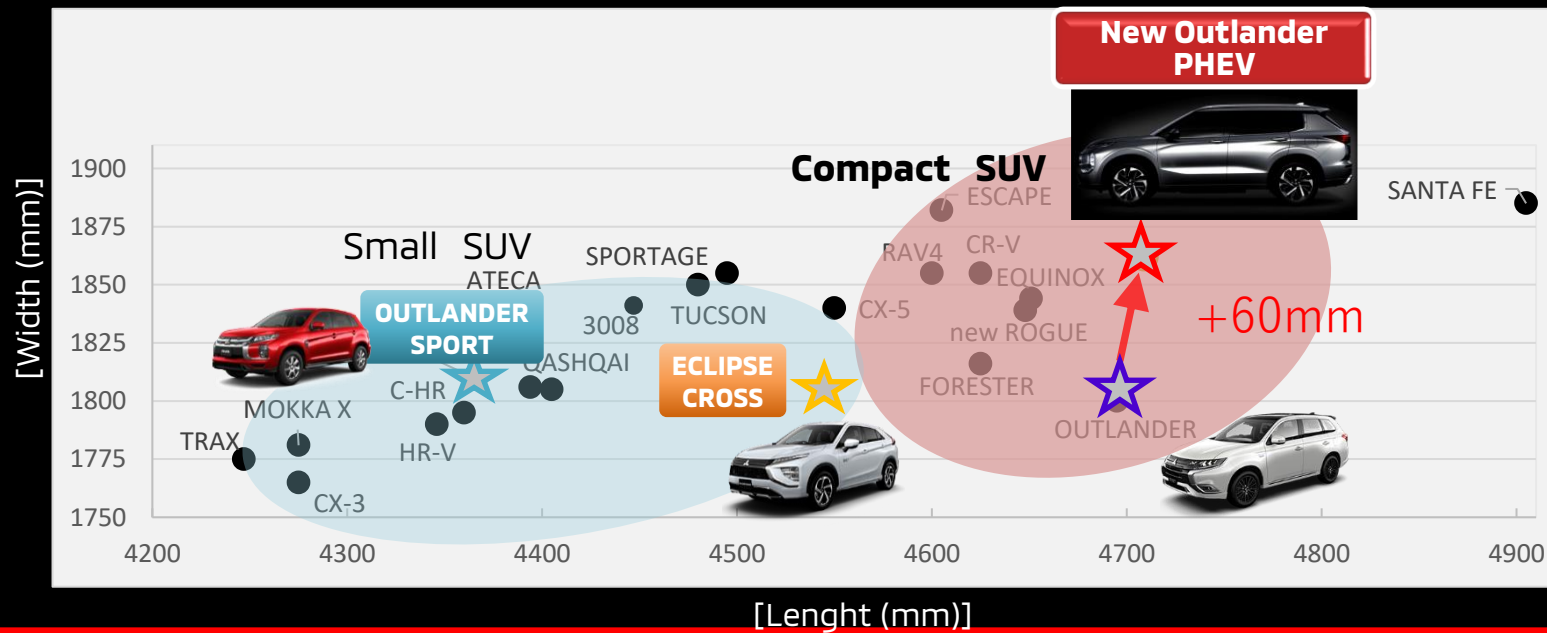
### 4 ♦ Strong & Smooth Acceleration



# 1 Toughness



## Up Scaled Proportion



# 1 Toughness



20inch wheel



	Wheel[inch]	Tire Size
<b>New Outlander</b>	<b>20</b>	<b>255/45R20</b>
Toyota RAV4	19	235/55R19
Nissan Rogue	19	225/55R19
Land Rover Discovery Sport	20	245/45R20
Audi Q5	20	255/45R20

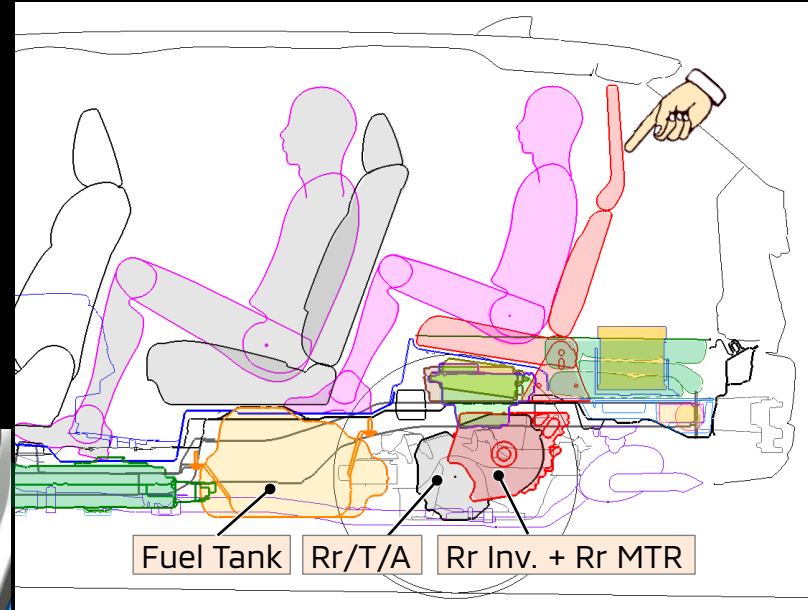
# 3 Quality

## Upper Classed Cabin



## 3 row seat

- ✓ Folding 3 row seat (Unique in compact PHEV SUV)
- ✓ Flat & capable cargo room with folding condition



## + Space Utility

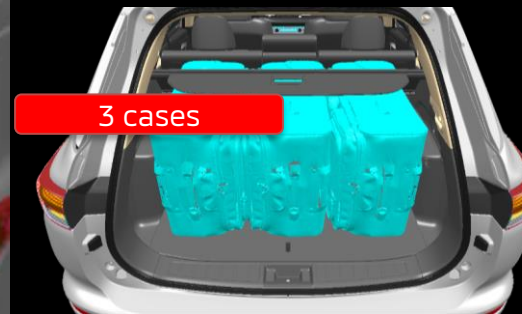
### Cargo capacity [cu. ft.]

**New O/L :33.5/78.5**

Previous O/L :30.4/66.6

RAV4 Prime :33.5/69.8

Tucson PHEV :31.9/66/3

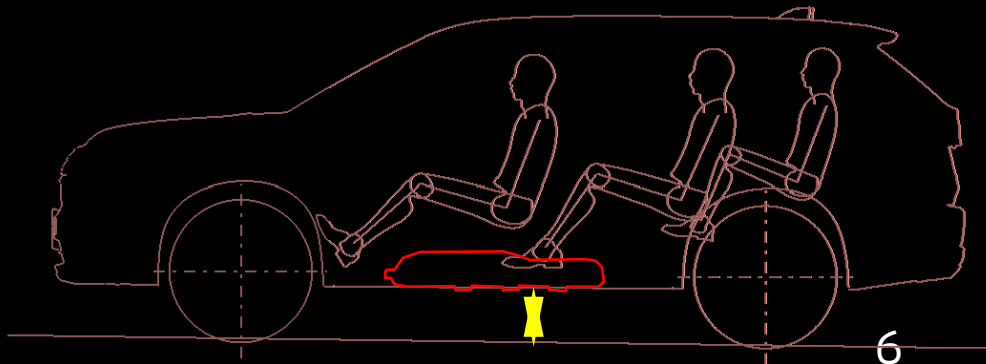


### Ground clearance [in.]

**New O/L :8.3**

Previous O/L :7.3

RAV4 Prime :8





# Product Concept of the All-New Outlander PHEV

1 ♦ Toughness

2 ♦ Confidence

3 ♦ Quality

4 ♦ Strong & Smooth  
Acceleration

## All-Wheel Control



## Electrification





# All-Wheel Control (S-AWC)



**Traction  
performance**



**Stability  
performance**



**Handling  
performance**





# Electrification



**MINICA EV**  
**1971**



**FTO EV**  
**(2000km/24h +QC)**  
**1999**



**i-MiEV**  
**(First mass prod. BEV)**  
**2009**



**1995**  
**Mitsubishi HEV**  
**(Li-ion series HV)**  
**Test in CA**



**2005**  
**MiEV Evolution**  
**(In-wheel motor)**



**2013**  
**Outlander PHEV**  
**(Best-selling PHEV SUV\*)**



from January 2013 to December 2020



# PHEV Benefits

- EV for daily city usage with clean & economical driving
- HEV for long drives with comfort & without range anxiety

**City: EV**



**Suburbs & highways: HEV**



**PHEV**

**EV: 38 miles**

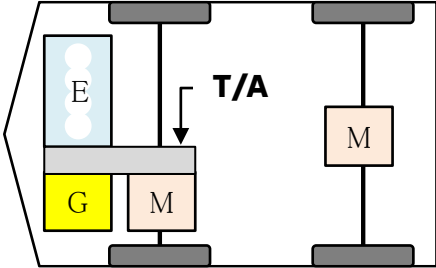
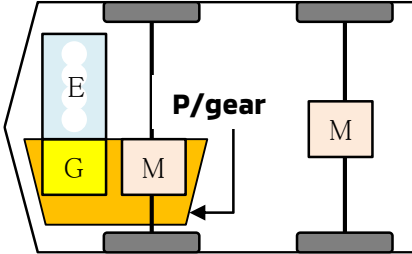
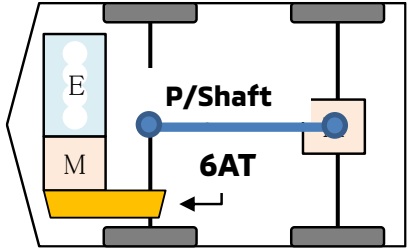
**HEV: 420 miles**

**EV**

**EV: 180 miles**

# All-Wheel Control (PHV & 4WD System)

- EV-based PHEV system is used for Outlander PHEV

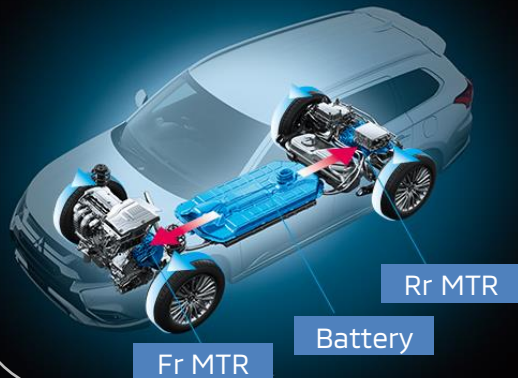
	EV-based	HV-based	
System	3 motors (Large Rr) + T/A	3 motors + planetary gear	1 motor
			
Model	Outlander PHEV	SUV.A	SUV.B



## Motor Drive

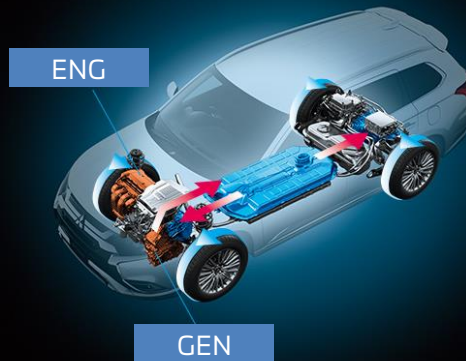
### [EV]

- Battery
- For daily use



### [Series]

- Battery + engine
- For passing & long drives



## Engine Drive

### [Parallel]

- Engine
- For cruising



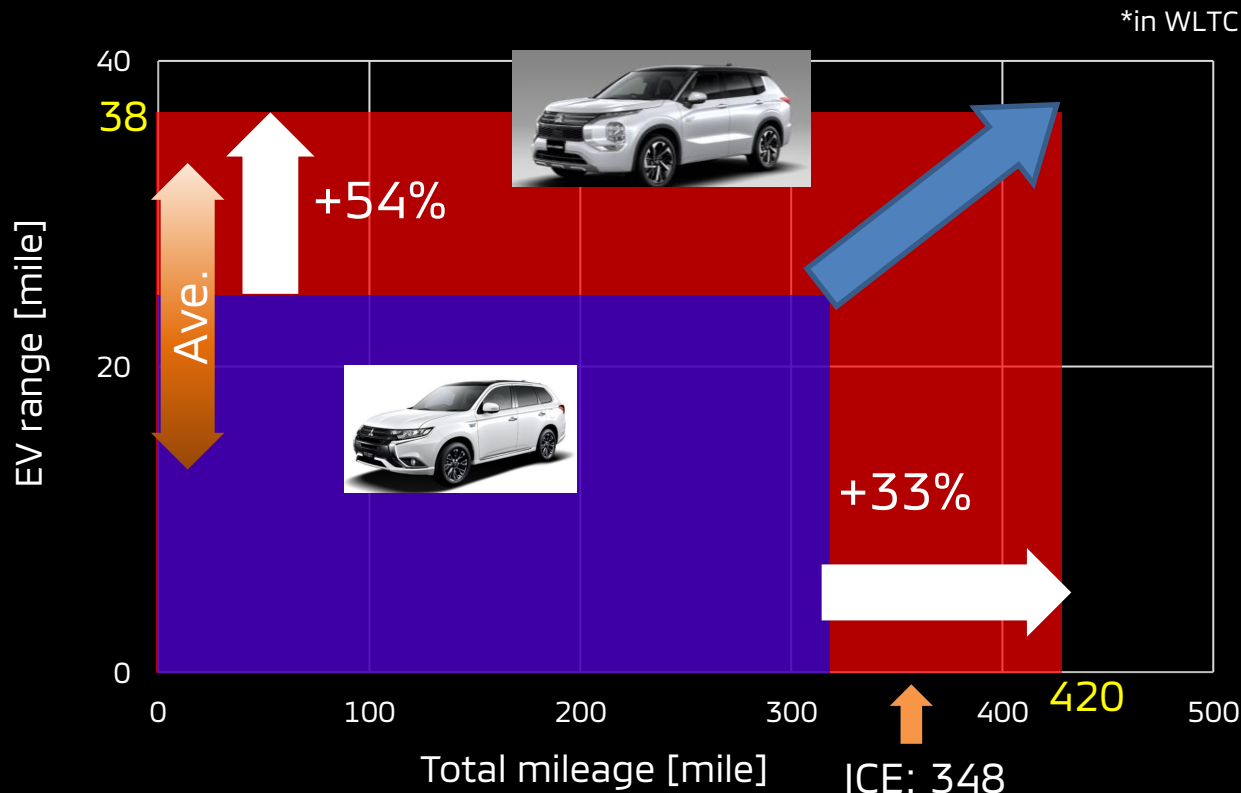


# Longer Range for New Outlander PHEV

- Longer range made possible by larger battery & fuel tank

**Battery**  
**20 kWh ← 13.8 kWh**

**Fuel Tank**  
**14.8 gal ← 11.3 gal**



# Upgraded PHEV System

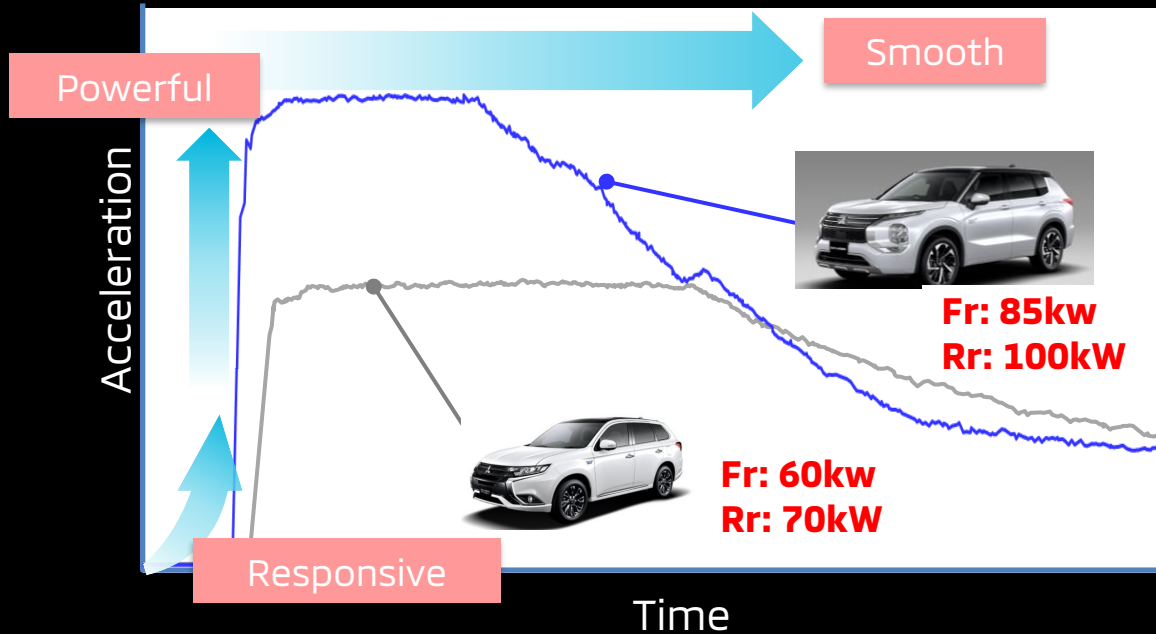
- Acceleration feel of an EV was further evolved by enhanced motor output & battery output

## Front Motor

• **85kW** ← **60kW**

## Rear Motor

• **100kW** ← **70kW**



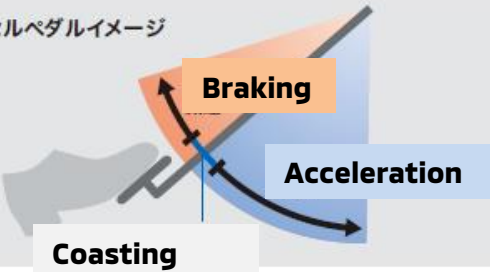
# Unique Equipment

## Innovative Pedal Operation Mode

## AC1500W Outlet

## Quick Charge connector

アクセルペダルイメージ




Braking

Coasting

Acceleration

Innovative Pedal Operation Mode SW



City Ride

Winding Road

Snow

Down Hill





**MITSUBISHI  
MOTORS**

Drive your Ambition