



Pedders and the Fleet Forum

October 2024

Australian Automotive Specialists



1950

Pedders Suspension & Brakes was founded in 1950 by Roy Pedder in Melbourne, Australia.

40

We operate in over 40 countries.

20,000

We design, engineer and manufacture over 20,000 SKUs.

308,000

Our products make up over 308,000 vehicle applications within the extensive Pedders catalogue.

OUR PILLARS

Pedders operates within a framework of four pillars. These pillars are the foundation of who we are as an organisation and they guide our strategy and operations at every level.



Family

We celebrate the family culture of Pedders and promote an inclusive, supportive, and meaningful workplace environment for our people.



Quality

We seek excellence in our products and processes to satisfy and exceed the expectations of our customers.



Innovation

We strive for continual improvement in the way we do things and pursue new ideas and initiatives to constantly enhance our outcome.



Specialists

We pursue detailed knowledge and expertise in all aspects of our work to share for the betterment of everyone within Pedders and our customers.

Pedders Strategic Vision



WHY WE ARE HERE



To provide *Better journeys* for our franchises, customers & employees

WHAT WE WILL BE KNOWN FOR

AUSTRALIA'S No.1 

BRAKE STEERING & SUSPENSION SPECIALISTS

WHAT WE STAND FOR



FAMILY



QUALITY




SPECIALISTS



INNOVATION

WHAT WE PROMISE

Straight advice, specialists you understand and **No Bull** 

HOW WE WORK

- ✔ Work Safely
- ✔ Work in Partnership
- ✔ Provide Expert Advice
- ✔ Be the Best You Can Be

HOW WE MEASURE OURSELVES



- Safety of Our People
- Employee Engagement and Customer Satisfaction
- Pedders Branded Parts Loyalty
- B2B Innovation: Traditional (Trade Workshops) and New (Tow and Load)
- Financial Performance and Stability (EBITDA)

Pedders Strategic Vision



Pedders have commenced a framework to positively impact four of the United Nations Sustainable Development Goals. Our focus is on the following Sustainable Development Goals:

- SDG 3 Good Health and Well-being
- SDG 8 Decent Work and Economic Growth
- SDG 9 Industry, Innovation and Infrastructure
- SDG 12 Responsible Consumption and Production

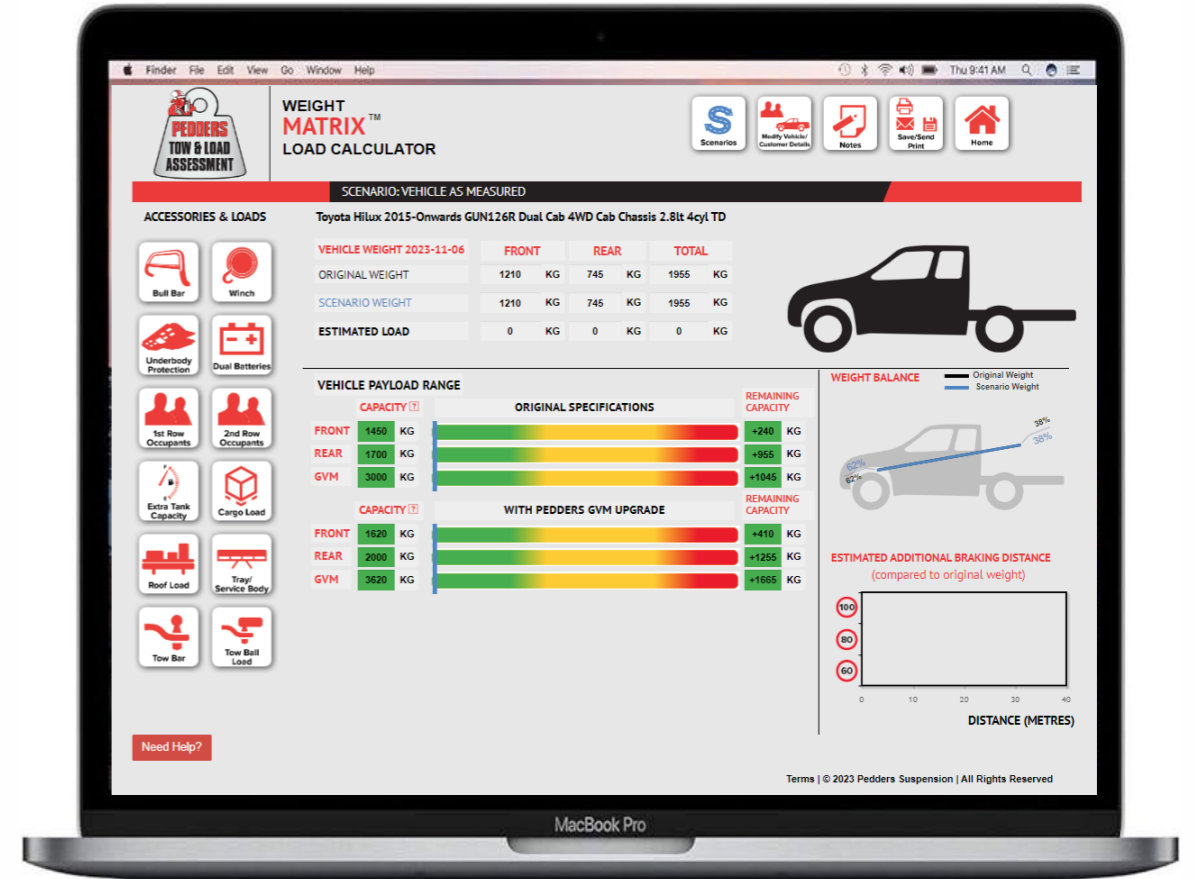


The Impact of Weight

1. Vehicle Performance & Safety:

- Suspension
- Steering
- Brakes

2. Pedders Weight Matrix



Vehicle Performance: Suspension



Over compression of Springs and Shocks due to excessive Weight leads to:

- Bottoming Out
- Reduced Shock Absorption
- Premature Suspension Failure
- Uneven Load Distribution
- Increased Body Roll



Indication of poor suspension

Ultimately, if vehicle weight is overloaded, we compromise the vehicles structural integrity, comfort and occupant safety.

Solution: Suspension Upgrade OR in extreme cases, a GVM/GVW Upgrade may be required.

The Impact of Weight



Rear- 1900kg	Front- 1400kg
OEM GVM/GVW- 3200kg	



Rear- 2200kg	Front- 1600kg
AFTERMARKET GVM/GVW- 3800kg	

What is a GVM/GVW Upgrade?

A **GVM (also known as Gross Vehicle Weight)** Upgrade increases the available **Payload**, and depending on vehicle, can increase axle capacity.

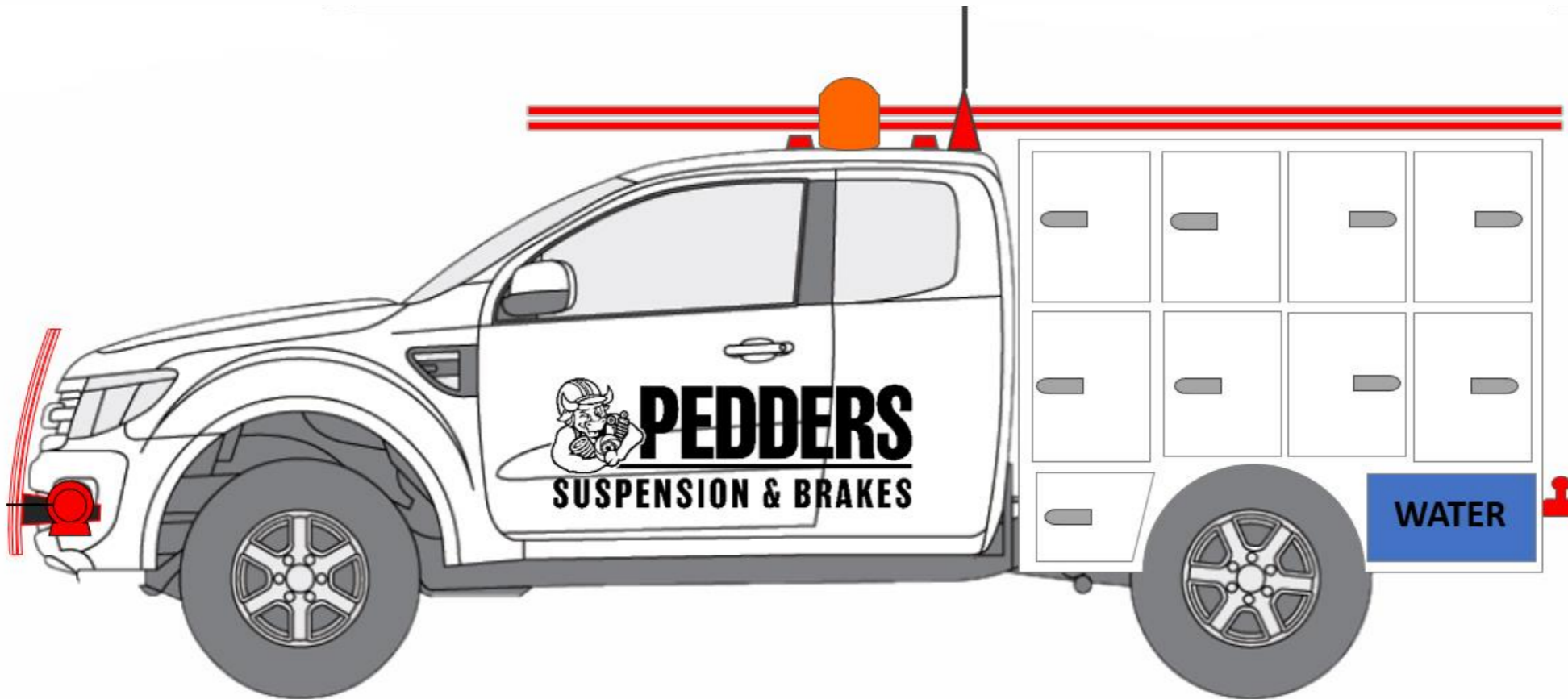
Payload is simply the difference between **Kerb weight** and **GVM/GVW** rating as set by the manufacturer. Increasing **GVM/GVW** rating increases **Payload**.

Payload is consumed by accessories, cargo, occupants and tow ball mass, if towing a trailer.

Example to the left is a GVM upgrade that increases **Payload** by up to 600kg, as well as axle capacity, front and rear.

The Impact of Weight

GVM/GVW: 3200kg
Kerb Weight: 1950kg
Payload: 1250kg



Kerb Weight	1950kg
Service Body	488kg
Frontal Protection	62kg
Winch	35kg
Towing Equipment	25kg
Communication Equipment	15kg
Cargo Rack	31kg
Safety/Work Light	12kg
Water Tank	20kg....

Leaves 562kg Payload!

The Impact of Weight

510kg



470kg



PAYLOAD





The Impact of Weight

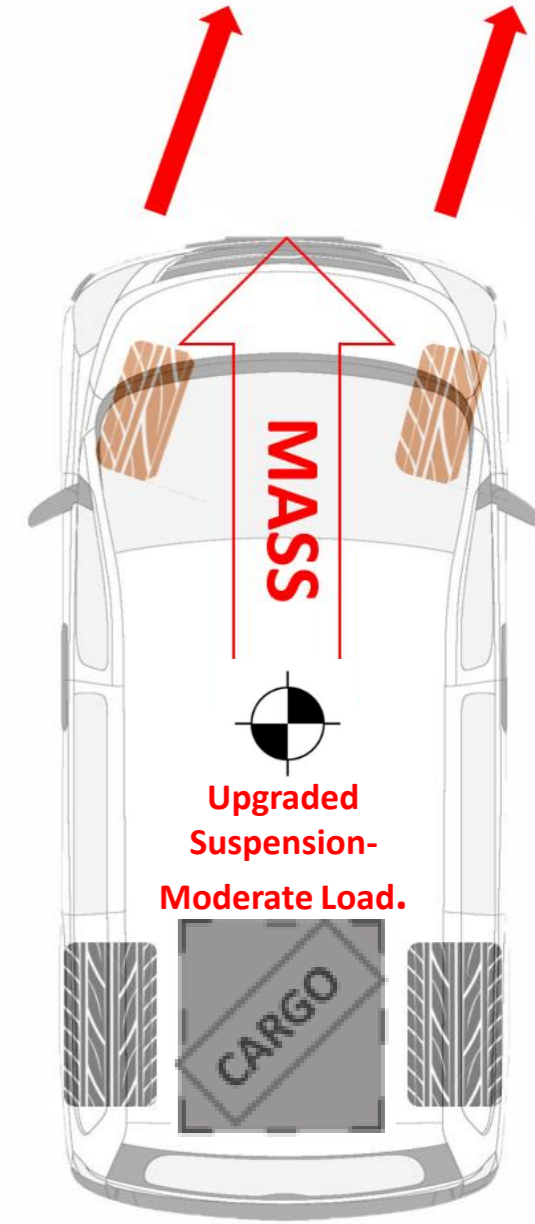
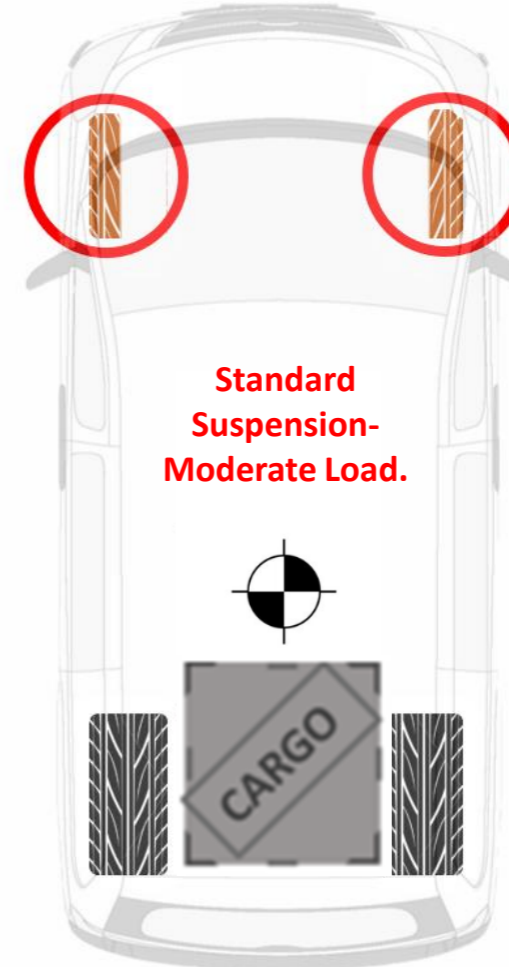
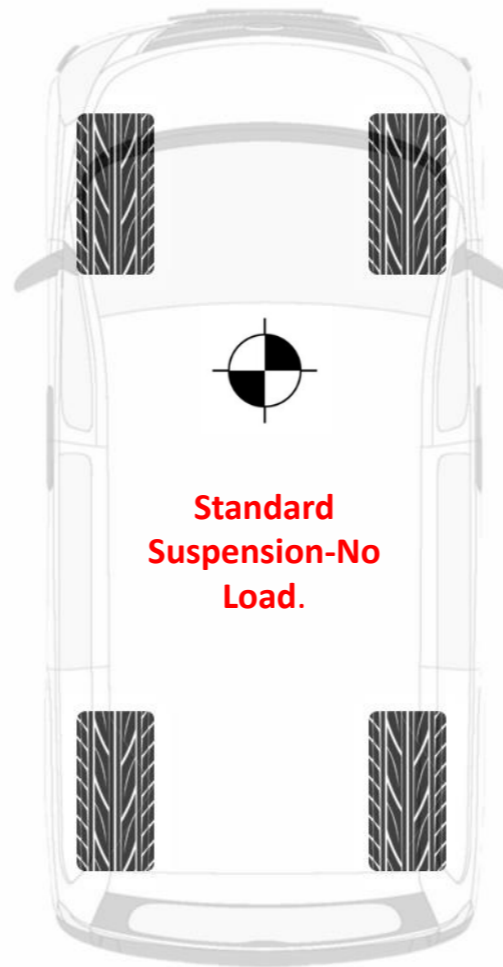


- Legal Maximum, Gross Combined Weight (GCW)= 5885Kgs
- Actual Total= **1,323 Kgs Overloaded**
(the weight of a small car)

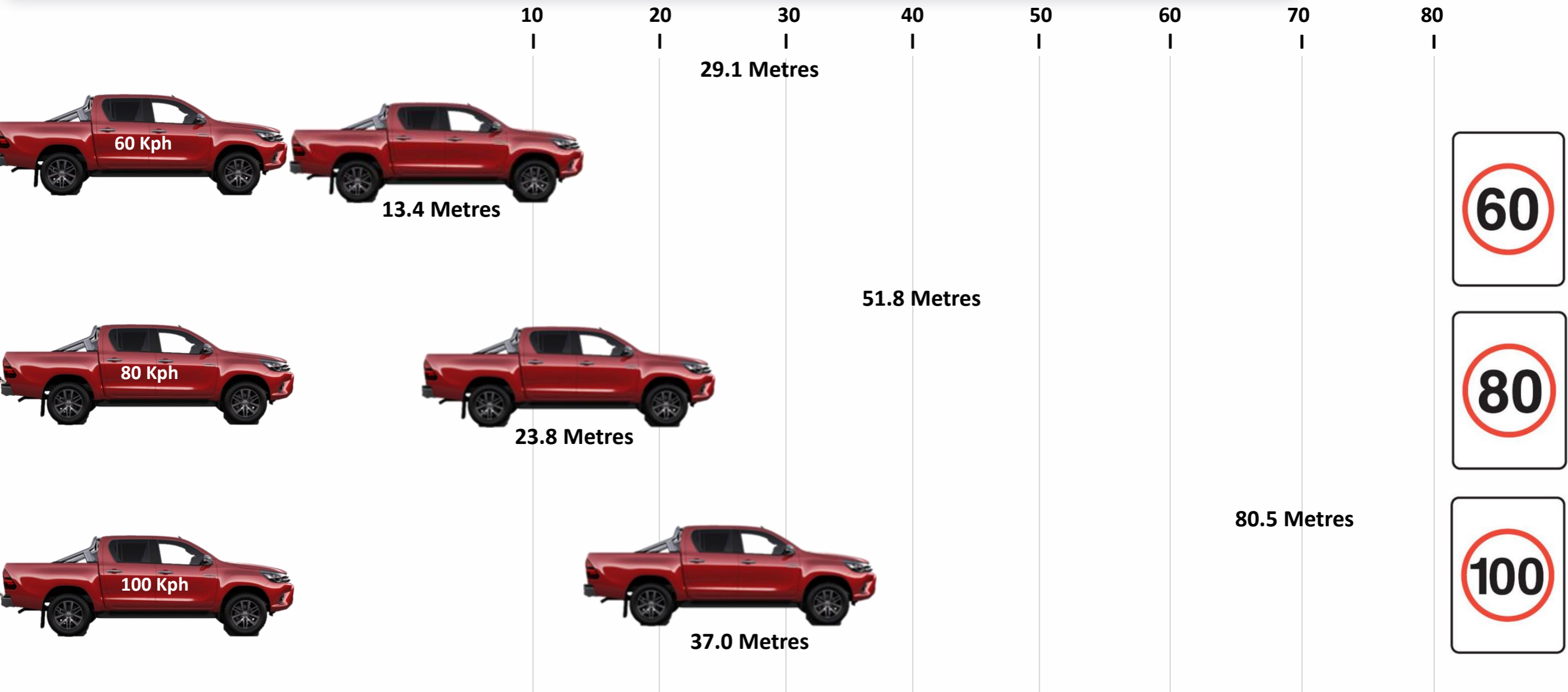
Vehicle Performance: Steering

How does vehicle Load impact Steering?

-  Reduced Responsiveness
-  Unbalanced Steering
-  Accelerated Tyre Wear
-  Impact on Electronic Steering Systems



Vehicle Performance: Brakes



Other braking considerations include:

- ⊗ Braking System Overload
- ⊗ Heat Dissipation Issues
- ⊗ Increased Wear & Tear
- ⊗ Brake Fluid Overheating
- ⊗ Failure of Parking Brakes



Chain of Responsibility...

Just a thought....

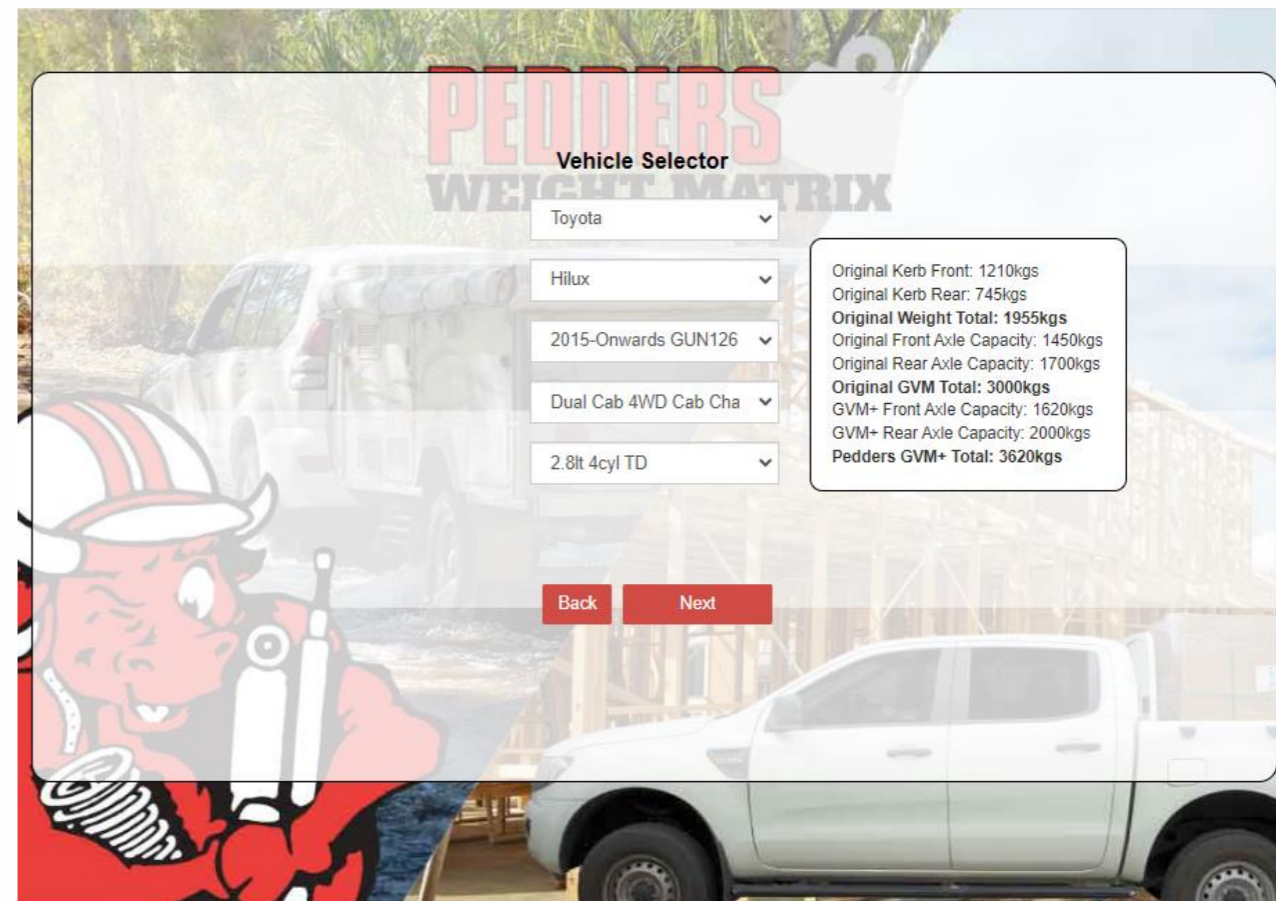
Occupational Health and Safety:

- We all play a part in the responsibility of a safe workplace.
- What measures do you have in place for load management?
- How does the vehicle operator understand their payload figure in their mobile workplace?

The End Goal:


- Creating a Safe and Comfortable Work Environment.

Pedders Weight Matrix








Pedders Weight Matrix

Notes:



WEIGHT MATRIX™
LOAD CALCULATOR


ACCESSORIES & LOADS

SCENARIO: VEHICLE AS MEASURED


Toyota Hilux 2015-Onwards GUN126R Dual Cab 4WD Cab Chassis 2.8lt 4cyl TD

VEHICLE WEIGHT 2023-11-06	FRONT	REAR	TOTAL
ORIGINAL WEIGHT	1210 KG	745 KG	1955 KG
SCENARIO WEIGHT	1210 KG	745 KG	1955 KG
ESTIMATED LOAD	0 KG	0 KG	0 KG

VEHICLE PAYLOAD RANGE		ORIGINAL SPECIFICATIONS		REMAINING CAPACITY	
	CAPACITY				
FRONT	1450 KG	[Progress Bar]		+240	KG
REAR	1700 KG	[Progress Bar]		+955	KG
GVM	3000 KG	[Progress Bar]		+1045	KG
WITH PEDDERS GVM UPGRADE		ORIGINAL SPECIFICATIONS		REMAINING CAPACITY	
	CAPACITY				
FRONT	1620 KG	[Progress Bar]		+410	KG
REAR	2000 KG	[Progress Bar]		+1255	KG
GVM	3620 KG	[Progress Bar]		+1665	KG



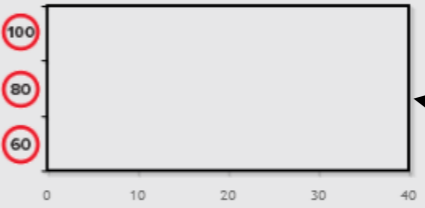
WEIGHT BALANCE



Legend: Original Weight (black), Scenario Weight (blue)

Weight Balance

ESTIMATED ADDITIONAL BRAKING DISTANCE
(compared to original weight)




DISTANCE (METRES)

Estimated Braking distance without reaction time consideration

Original Weight


Payload available with OEM Suspension

Payload available with Pedders Suspension








Need Help?

Pedders Weight Matrix












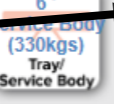
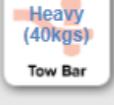
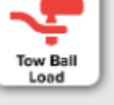
WEIGHT MATRIX™

LOAD CALCULATOR

SCENARIO: VEHICLE AS MEASURED

ACCESSORIES & LOADS

- 
- 
- 
- 
- 
- 
- 
- 
- 
- 
- 
- 


Need Help?

Toyota Hilux 2015-Onwards GUN126R Dual Cab 4WD Cab Chassis 2.8lt 4cyl TD

VEHICLE WEIGHT 2023-11-06	FRONT	REAR	TOTAL
ORIGINAL WEIGHT	1210 KG	745 KG	1955 KG
SCENARIO WEIGHT	1284 KG	1661 KG	2945 KG
ESTIMATED LOAD	+74 KG	+916 KG	+990 KG


VEHICLE PAYLOAD RANGE

	CAPACITY	ORIGINAL SPECIFICATIONS	REMAINING CAPACITY
FRONT	1450 KG		+166 KG
REAR	1700 KG		+39 KG
GVM	3000 KG		+55 KG
WITH PEDDERS GVM UPGRADE			
FRONT	1620 KG		+336 KG
REAR	2000 KG		+339 KG
GVM	3620 KG		+675 KG

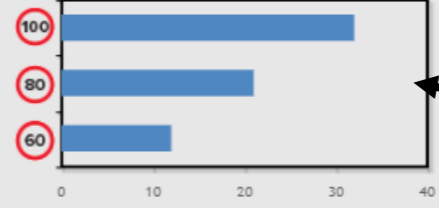


WEIGHT BALANCE

— Original Weight (black line)
— Scenario Weight (blue line)



ESTIMATED ADDITIONAL BRAKING DISTANCE
(compared to original weight)



Weight	Estimated Additional Braking Distance (Metres)
100	~35
80	~22
60	~12

Original Weight



Payload available with OEM Suspension



Payload available with Pedders Suspension



Weight Balance



Estimated Braking distance without reaction time consideration



The Effects of Weight - Extra

- **Pedders Weight Matrix**

matrix.pedders.com.au

- **Pedders LoadRyder**

<https://www.pedders.com.au/loadryder-onboard-scales>

- **Pedders Youtube**

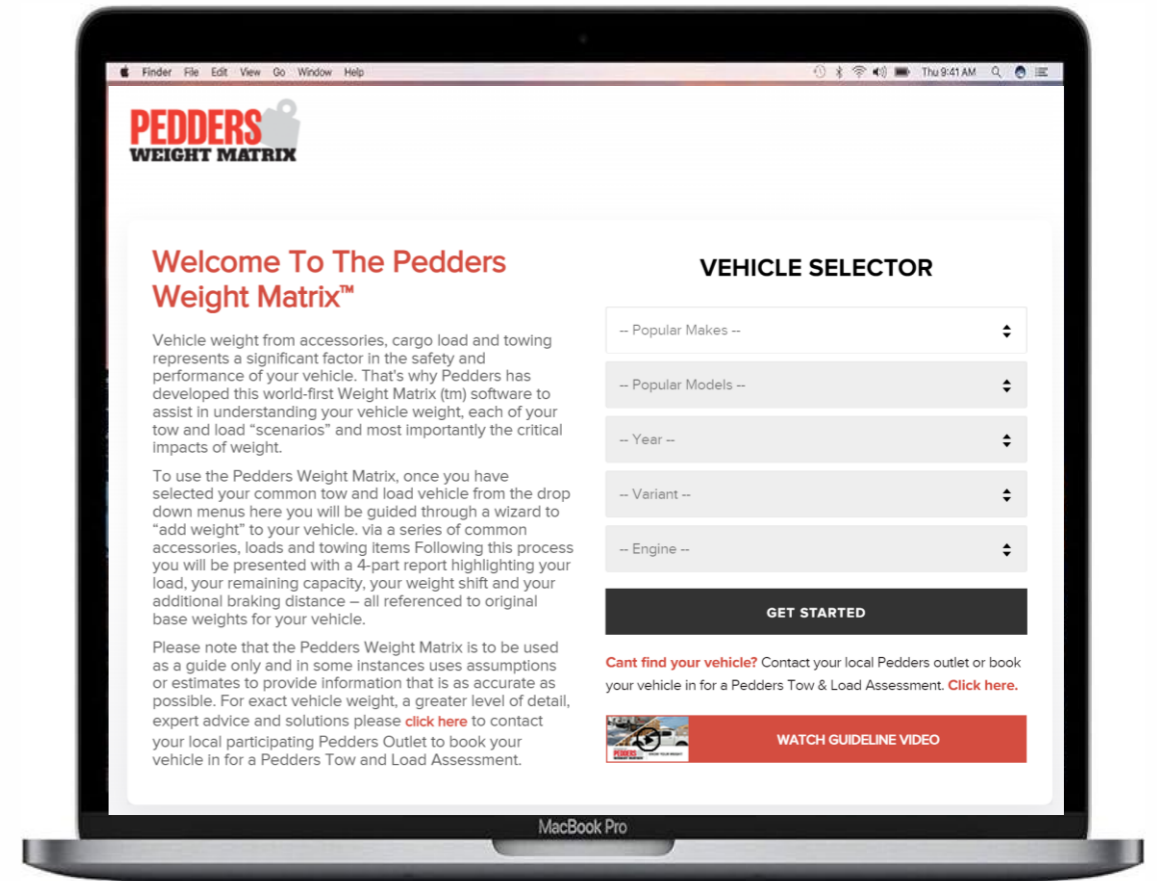
<https://www.youtube.com/user/pedderssuspension>

- **Link to Pedders Learning**

[Home | Pedders Suspension & Brakes](#)

Username is – Email

Password: FleetForum24



Close-out / Q&A

- **Mark Pedder - Director**
- **Caroline Pedder – Chief Brand and Culture**
- **Alex Gibson – International Business Development Manager**
- **Michael Green – Product Manager: Tow & Load**





Thank You

Phone: +61 (3) 9706 3500

E: alex.gibson@pedders.com.au