



HIGH-STANDARD PRODUCTION PROCESS

This plan covers the entire production process of cattle guard bumpers, clarifies core processes and key requirements, and demonstrates a high-standard production system. The procedures are as follows:

- 

1 PLATE LASER CUTTING
Select high-quality plates and precisely cut standard components
- 

2 SHEET METAL BENDING
Precisely form the basic shape of components
- 

3 SHEET METAL WELDING
High-standard welding process for seamless, firm and stable joints
- 

4 PRECISION GRINDING
Full-surface fine grinding to eliminate surface defects
- 

5 SHOT BLASTING
High-speed projectile impact on surface to remove oxides and impurities, enhance hardness and improve adhesion
- 

6 ACID PICKLING & PHOSPHATING
Acid Pickling and Phosphating / Remove residual oil and rust, form a phosphating film to improve subsequent process adhesion and rust resistance.
- 

7 GALVANIZING TREATMENT
Surface galvanization to enhance product corrosion resistance
- 

8 ELECTROPHORESIS
Deposit electrophoretic paint film to form double-layer protection for long-lasting durability
- 

9 POWDER COATING
Professional-grade AkzoNobel powder coating for improved texture, excellent wear resistance, scratch resistance and UV resistance
- 

10 FINAL PROCESSES
Full re-inspection of product details, assembly of matching components and packaging after passing standards, with strict control over delivery criteria

FORD RANGER RAPTOR



ADR Compliant: Yes
Airbag Compatible: Yes
Bumper Cut Required: No

LED Fog Lights:
Integrated Lamp Assembly

Overall Length Added To Vehicle:
150mm



FORD RANGER



ADR Compliant: Yes
Airbag Compatible: Yes
Bumper Cut Required: No

LED Fog Lights:
Integrated Lamp Assembly

Overall Length Added To Vehicle:
130mm



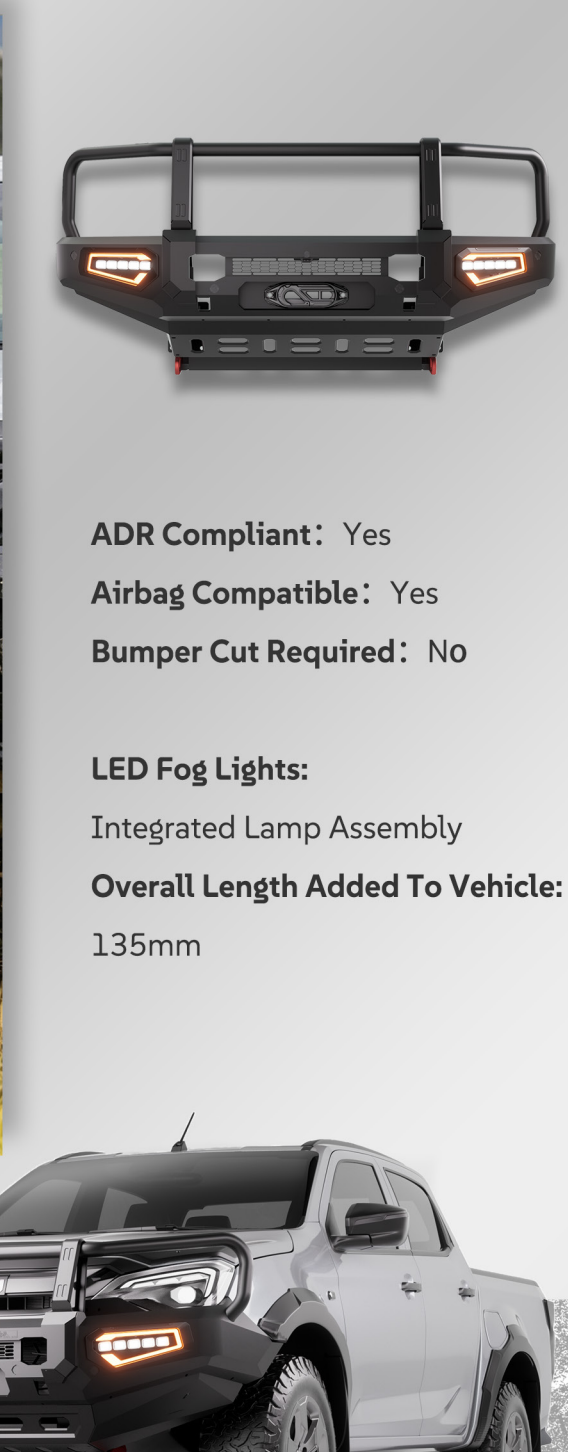
BYD SHARK



ADR Compliant: Yes
Airbag Compatible: Yes
Bumper Cut Required: Yes

LED Fog Lights:
Integrated Lamp Assembly

Overall Length Added To Vehicle:
160mm



TOYOTA HILUX



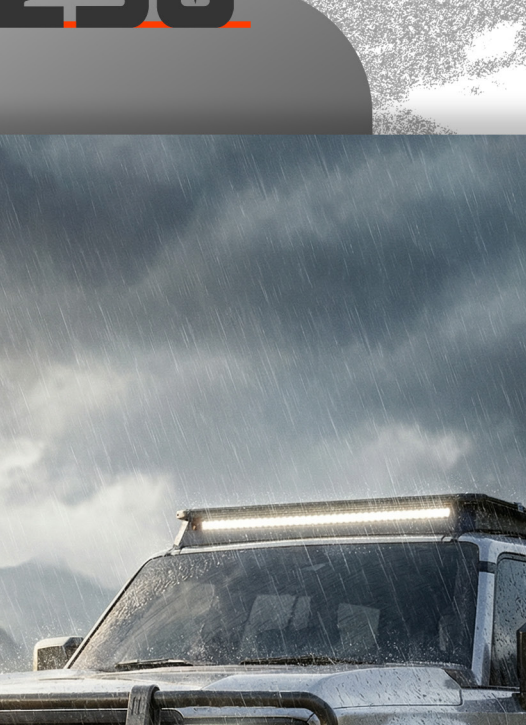
ADR Compliant: Yes
Airbag Compatible: Yes
Bumper Cut Required: No

LED Fog Lights:
Integrated Lamp Assembly

Overall Length Added To Vehicle:
135mm



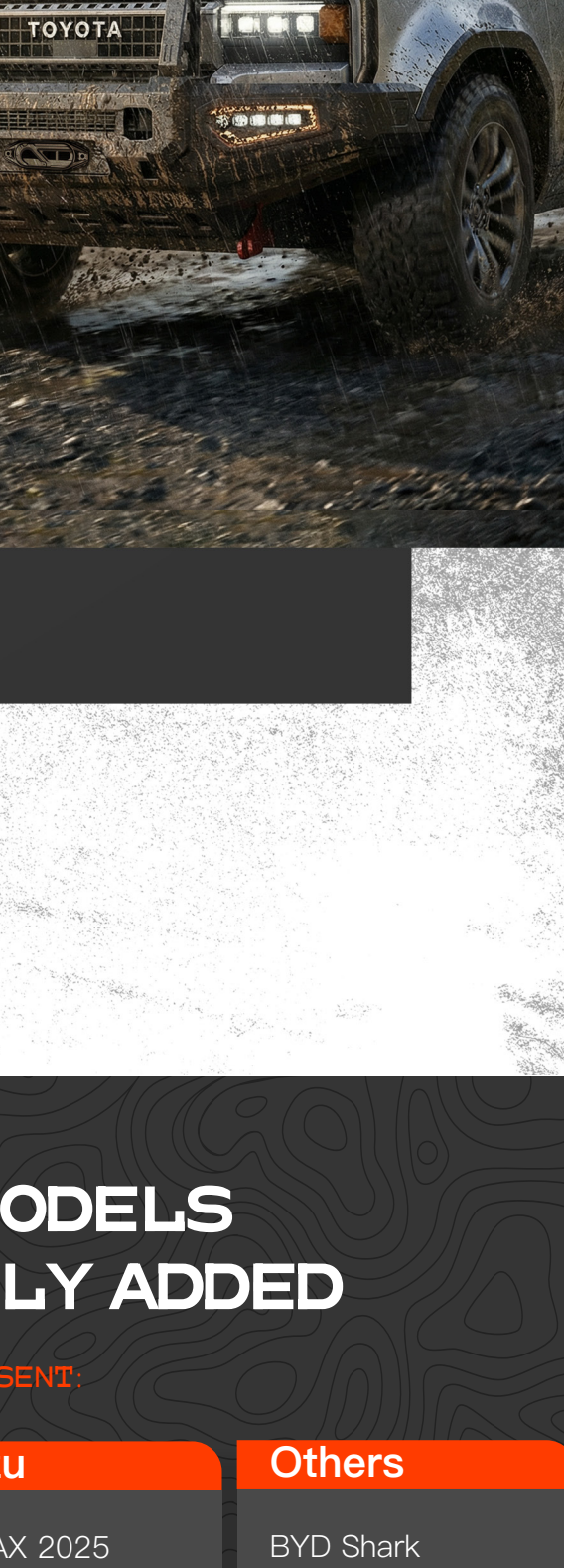
TOYOTA LAND CRUISER 300



ADR Compliant: Yes
Airbag Compatible: Yes
Bumper Cut Required: Yes

LED Fog Lights:
Integrated Lamp Assembly

Overall Length Added To Vehicle:
140mm



VOLKSWAGEN AMAROK 2023⁺



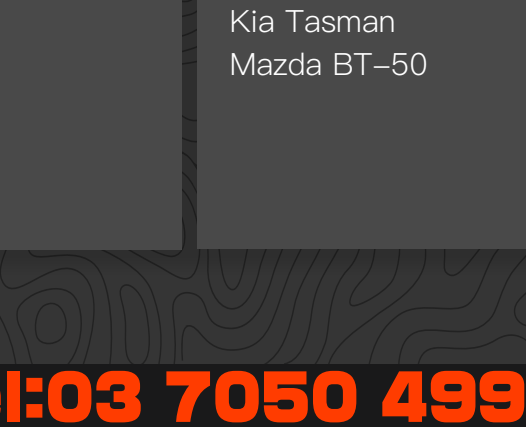
ADR Compliant: Yes
Airbag Compatible: Yes
Bumper Cut Required: No

LED Fog Lights:
Integrated Lamp Assembly

Overall Length Added To Vehicle:
140mm



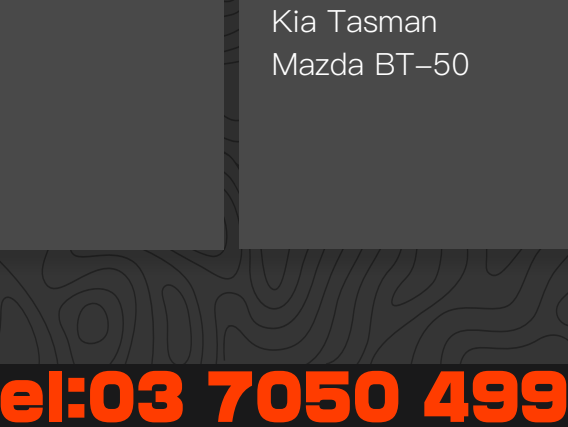
ISUZU D-MAX 2024⁺



ADR Compliant: Yes
Airbag Compatible: Yes
Bumper Cut Required: No

LED Fog Lights:
Integrated Lamp Assembly

Overall Length Added To Vehicle:
135mm



LAND CRUISER 250

ADR Compliant: Yes
Airbag Compatible: Yes
Bumper Cut Required: Yes

LED Fog Lights:
Integrated Lamp Assembly

Overall Length Added To Vehicle:
155mm

COMPATIBLE VEHICLE MODELS ARE BEING CONTINUOUSLY ADDED

HERE ARE THE MODELS AVAILABLE FOR FITMENT AT PRESENT:

Toyota	Ford	Isuzu	Others
Hilux 2026 Hilux SR5 Hilux GR Sport Hilux Rogue Land Cruiser Prado LC150 Land Cruiser Prado LC250 Land Cruiser 79 Series GXL Land Cruiser 300 Series	Ranger Ranger Raptor Ranger Super Duty	D-MAX 2025 D-MAX 2021-2024	BYD Shark Volkswagen Amarok Nissan Navara Kia Tasman Mazda BT-50