

Additional application for the 「DAMPER ZZ-R L」 is now available for the  
TOYOTA ALPHARD PHEV / VELLFIRE PHEV (AAHP45W)

DAMPER ZZ-R L

Adjustable suspension kit with springs and bump rubbers tailored vehicle specifically. Stock upper mounts are utilized and the amount of oil optimized for a smoother ride quality.

[Click here for more information on DAMPER ZZ-R L](#)



Front : 17mm Down / Rear : 18mm Down

(Vehicle)	(Model Year)	(Model)	(Engine Model)	(MSRP w/tax)	(JAN Code)
TOYOTA					
ALPHARD PHEV	2025/01-	AAHP45W	A25A-5NM-4NM	¥308,000	4959094926573
VELLFIRE PHEV					

Product Characteristics

[Click here for price and availability](#)

- The ZZ-R L series pursues greater quality, ride comfort and quietness compared to its predecessor.
- Employs 32 levels of damping force adjustability and height adjustable suspension kit.
- Balances comfort and stability at high speeds while moderately lowering the vehicle for style.
- To ensure optimal ride quality stock upper mount along with vehicle specific spring, and bump rubber are utilized.  
Furthermore, the amount of oil in the shock absorber has been optimized to ensure sufficient stroke length.
- φ44 Mono-tube structure allows a fine balance of structural rigidity and smooth ride quality.

Product Specification		
	Front	Rear
Damping Force Adjustability	32 Levels	32 Levels
Length Adjustment	○	○
Shock Absorber Structure	Coilovers	Separate
Upright or Inverted	Upright	Upright
Upper Mount	Stock	Reinforced Rubber
Spring Rate kgf/mm	7.5	10.5
Free Length of Spring mm	250	240
Spring Type※	BS	BS
Ride Height Adjustability mm	-30 ~ 0	-25 ~ 0



■Remarks : Rear damping force dials located inside wheel well. Ride height from ALPHARD PHEV 6 passenger Executive Lounge.

※Abbreviation for Spring Types 「ST : ID62 Straight Spring」 , 「BS : Barrel or Tapered, Vehicle Specific Springs」

※Adjustability in ride height may vary between vehicles.

DAMPER ZZ-R L Spec & Vehicle Information



Data taken from in house measurements. Measurements for the vehicle height may differ depending on the vehicle's grade and options. The distance from the ground to fender may differ even when your vehicle is set at the same measurements as the test vehicle. Please use the following data as a reference and adjust your vehicle height accordingly.

メーカー (Manufacturer)	車名 (Vehicle Name)	型式 (Model)	年式 (Model Year)	グレード (Grade)
TOYOTA	ALPHARD PHEV	AAHP45W	2025年3月	Executive Lounge

確認車両情報		フロント (Front)	リア (Rear)	備考 (Remarks)
車両情報 (Vehicle Information)	車重(kg) (Vehicle Weight)	2470		
	軸重(kg) (Axle Weight)	1290	1180	
	タイヤサイズ (Tire Size)	225/55 R19	225/55 R19	
	ホイールサイズ (Wheel Size)	19inch 7J Inset40	19inch 7J Inset40	
	レバー比 (Lever Ratio)	1.0	1.2	
アライメントデータ (Alignment Data)	トー (Toe)	+0°03'	+0°05'	
	キャンバー (Camber)	-1°11'	-1°56'	
	キャスター (Caster)	+5°39'	-	

DAMPER ZZ-R L Spec.		フロント (Front)	リア (Rear)	備考 (Remarks)
DAMPER ZZ-R 仕様(Spec.)	スプリングレート(kgf/mm) (Spring Rate)	7.5	10.5	
	スプリング自由長(mm) (Free Length of Spring)	250	240	
	スプリング内径(mm) (Spring Inner Diameter)	φ107.5 - (φ175) - φ62.5	φ91.5 - (φ152) - φ78.5	
	減衰力調整段数 (Damping force Adjustment)	1段 ~ 32段 (HARD) (SOFT)	1段 ~ 32段 (HARD) (SOFT)	DSC Plus装着時 32,64,96段へ変更可能
	地面〜フェンダー(mm) (Ground〜Fender)	745	751	
	基準車高(mm) (Difference from Stock)	-17	-18	
	車高調整範囲(mm) (Height Adjustment Range)	-30 ~ 0	-25 ~ 0	
	最低地上高(mm) (Minimum Ground Clearance)	123mm (マフラーフランジ)		※ホイールベース3000mmの為、 最低地上高100mm以上

初めてご使用される際の推奨減衰力 (Recommended Damping force)	28段	20段	左記に記載の減衰に合わせて からご使用ください
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※Product shipped at damping force of 16. Turn the dial all the way to the right for level 1 which is the hardest.  
※During installation turn the dial all the way to the right and then make adjustment towards the left accordingly.

Product Description

- Luxury model suspensions aimed for enhanced comfort and ride quality.
- For customer pursuing premium feel with outstanding driving performance that is expected from the Damper ZZ-R Series. From cities to the highway unnecessary pitch and roll are suppressed for stability in all situations.
- Moderate lowering amount to achieve style that is distinct from the stock appearance.
- Bump rubbers and shock absorbers for both front and rear are specifically designed for the Damper ZZ-R L series.
- The kit also includes short bump rubbers for the rear springs.
- By installing the Optional Damper ZZ-R L Spec DSC PLUS, the damping force can be adjusted from inside the vehicle. Additionally, G sensor and speed can be inputted for automated changes to the damping force.