

Additional application for the 「DAMPER ZZ-R L」 is now available for the TOYOTA ALPHARD/VELLFIRE (AGH4#W/TAHA4#)

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 : 18mm Down / Rear : 16mm Down

(Vehicle)	(Model Year)	(Model)	(E/G Model)	(Code No.)	(JAN Code)
TOYOTA					
ALPHARD	2023/06-	AGH40W,AGH45W	2AR-FE	92650	4959094926504
ALPHARD HYBRID		AAHH40W	A25A-5NM		
		AAHH45W	A25A-5NM-4NM		
VELLFIRE		TAHA40W, TAHA45W	T24A-FTS		
VELLFIRE HYBRID		AAHH40W	A25A-5NM		
	AAHH45W	A25A-5NM-4NM			

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	220
Spring Type※	BS	BS
Ride Height Adjustability mm	-35 ~ 0	-35 ~ 0



■ Remarks : 2WD, 4WD Compatible. Unchecked with PHEV/HYBRID X/Special Lounge / well cab.

Rear damping force dials located inside wheel well. Ride height from AAHH45W (ALPHARD HYBRID).

※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 HYBRID	AAHH45W	2023年7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)	2290		
	軸重(kg) (Axle Weight)	1200	1090	
	タイヤサイズ (Tire Size)	245/45 R20	245/45 R20	
	ホイールサイズ (Wheel Size)	20inch 8.5J Inset35	20inch 8.5J Inset35	
	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°03'	
	キャンバー (Camber)	-1°04'	-1°55'	
	キャスター (Caster)	+5°40'	-	

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	220	
	スプリング内径(mm) (Spring Inner Diameter)	φ107.5 - (φ175) - φ62.5	φ91.5 - (φ148) - 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)	740	741	
	基準車高(mm) (Difference from Stock)	-18	-16	
	車高調整範囲(mm) (Height Adjustment Range)	-35 ~ 0	-35 ~ 0	
	最低地上高(mm) (Minimum Ground Clearance)	118mm (リアサスペンションメンバー下マフラーパイプ)		※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)		24段	28段	左記に記載の減衰に合わせて からご使用ください

※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.

DAMPER ZZ-R L Spec & Vehicle Information



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メーカー (Manufacturer)	車名 (Vehicle Name)	型式 (Model)	年式 (Model Year)	グレード (Grade)
TOYOTA	VELLFIRE	TAHA40W	2023年9月	Z Premier

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)	2180		
	軸重(kg) (Axle Weight)	1200	980	
	タイヤサイズ (Tire Size)	245/40 R21	245/40 R21	
	ホイールサイズ (Wheel Size)	21inch 9.0J Inset35	21inch 9.0J Inset35	
	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°01'	+0°05'	
	キャンバー (Camber)	-1°11'	-1°45'	
	キャスター (Caster)	+5°19'	-	

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	220	
	スプリング内径(mm) (Spring Inner Diameter)	φ107.5 - (φ175) - φ62.5	φ91.5 - (φ148) - 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)	749	753	
	基準車高(mm) (Difference from Stock)	-17	-21	
	車高調整範囲(mm) (Height Adjustment Range)	-30 ~ 0	-30 ~ 0	
	最低地上高(mm) (Minimum Ground Clearance)	128mm (マフラーパイプ)		※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)	26段	26段	左記に記載の減衰に合わせて てからご使用ください
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メーカー (Manufacturer)	車名 (Vehicle Name)	型式 (Model)	年式 (Model Year)	グレード (Grade)
TOYOTA	ALPHARD	AGH45W	2024年1月	Z

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)	2120		
	軸重(kg) (Axle Weight)	1120	1000	
	タイヤサイズ (Tire Size)	225/65 R17	225/65 R17	
	ホイールサイズ (Wheel Size)	17inch 6.5J Inset40	17inch 6.5J 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°01'	+0°18'	
	キャンバー (Camber)	-2°04'	-1°47'	
	キャスター (Caster)	+4°59'	-	

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	220	
	スプリング内径(mm) (Spring Inner Diameter)	φ107.5 - (φ175) - φ62.5	φ91.5 - (φ148) - 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)	743	745	
	基準車高(mm) (Difference from Stock)	-16	-13	
	車高調整範囲(mm) (Height Adjustment Range)	-30 ~ 0	-20 ~ 0	
	最低地上高(mm) (Minimum Ground Clearance)	121mm (マフラーパイプ(フランジ後ろ))		※ホイールベース3000mmの為、 最低地上高100mm以上
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