

<b>Fixed Voltage Alternators</b>	<b>Temperature Compensating Alternators</b>	<b>Variable Voltage Alternators</b>
<p>Generally most Pre 2000 Vehicles have fixed Voltage Alternators that will provide a sufficient state of charge to an auxiliary battery, depending on the battery chemistry type and the fixed voltage level of the alternator.</p> <p>For these vehicles, the SBI can be used successfully for dual or multi auxiliary battery systems.</p> <p>An advantage of using the BCDC in these vehicles is when there is a long cable run from the main battery to the auxiliary battery, the BCDC will overcome voltage drop and provide a boosted voltage.</p>	<p>Some Post 2000 Vehicles have Temperature Compensating Alternators. Mainly vehicles fitted with Common Rail Diesel engines utilise this style of alternator.</p> <p>The Temperature Compensating Alternator will charge at approximately 14V when the engine is cold, and decreases to as low as 13.2V when the engine reaches operating temperature.</p> <p>For this reason, the alternator may only charge a dual or multi auxiliary battery system to 60-70% state of charge at best, depending on the battery chemistry type used.</p>	<p>Some Vehicles released in late 2010 onwards with Common Rail Diesel and Petrol engines have Variable Voltage Alternators that are on the vehicle CANBUS. These alternators vary output based on driving conditions at the time.</p> <p>The range of voltage can be between 12.3V and 15V.</p> <p>For this reason, the alternator may not charge a dual or multi auxiliary battery bank at all at times, and may apply too high a voltage for the auxiliary battery chemistry type at other times.</p>
<b>Known Vehicle with Fixed Voltage Alternators</b>	<b>Known Vehicles with Temperature Compensating Alternators</b>	<b>Known Vehicles with Variable Voltage Alternators</b>
Most Pre 2000 Vehicle	Toyota Hilux D4D Common Rail Diesel	VE Commodore onwards
VW Amarok up to 2014	Toyota Prado D4D Common Rail Diesel	Nissan D40 Navara 2011 onwards
Isuzu Dmax up to 2014	Toyota L/C 200 Series D4D Common Rail Diesel	Nissan R51 Pathfinder 2011 onwards
Holden Colorado up to 2014	Toyota L/C 76/79 Series D4D Common Rail Diesel	Hyundai Santa Fe 2010 onwards
Mitsubishi Triton up to 2014	Toyota Kluger 2010 onwards	Range Rover 4 2011 onwards
	BF Falcon onwards	BMW X5 2010 onwards
		Ford Ranger 2011 onwards
		Mitsubishi Pajero 2012 onwards
		Mazda Spirit 2012 onwards
		Mazda BT50 2011 onwards – some models
		Land Rover Disco 4
		Subaru Forester 2012 onwards
		Nissan Patrol V8 2012 onwards
		Jeep Grand Cherokee 2013 onwards