

TOYOTA 1HZ

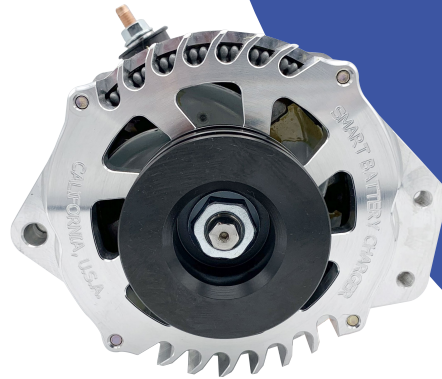
4.2L
Diesel

SBC-T4.2-250XP
SBC-T4.2-270XP
SBC-T4.2-350XP
SBC-T4.2-390XP

The **OEM alternators** for the Toyota 1HZ (4.2L Diesel) are rated up to 150 Amps & only produce 90 Amps at idle.

The **SBC heavy-duty alternators** generate a maximum of **250-390 Amps** at normal driving speeds & 185-220 Amps at idle, depending on the alternator model.

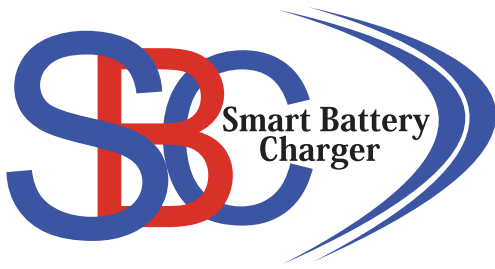
SBC alternators are designed & manufactured in the **USA** from Aircraft-Grade 6061 aluminum for maximum strength & heat dissipation. The alternators feature a larger housing while still retaining OEM fitment without any modification required.



The **XP series** of SBC alternators are assembled using DENSO components and produce the **highest output** at low RPM.

Each alternator is supplied with a precision-machine, hard-anodized pulley made from Aircraft Certified 7075 aluminum for maximum durability & performance.





XP-SERIES

250-390 Amps
12 Volts

Technology

This sophisticated charging system features an advanced proprietary stator winding that maximizes efficiency with nearly 80 % sectional density of the winding coupled with very low coil resistance. This gives the alternator maximum low speed output as well as a 90 % reduction of magnetic pulsation. The stator windings are built in a cancel circuit to minimize electrical noise. The internal regulator is a proprietary design, advanced multifunction digital regulator that completely integrates into a vehicle's PCM through the OEM wiring harness retaining all vehicle specific functions such as internal temperature compensation, lamp terminal monitoring, load response control, & alternator load factoring.

The rectifier is mounted on-board the alternator & consists of twelve 40 Amp press-fit diodes. The brush holder assembly & slip ring are environmentally protected & the bearings & premium, heavy-duty high RPM, & oversized.

The alternator housing is precision-machined aluminium.

All components exceed OEM or Military specifications & are selected for maximum performance & reliability.



Mounting

All XP series alternators are specially designed to fit directly in the OEM mounting location with no modification. All electrical connections also retain OEM fitment & remain in original locations.

The alternator features a custom machined drive pulley that is 5 % smaller than the OEM diameter for increased idle output while retaining OEM belt length.

The pulley is precision CNC 7075 aluminium & has a 0.002 hard anodized coating for increased wear resistance and durability.

Durability

The supplied XP alternator is manufactured to the highest quality standards. It is designed & manufactured in the USA using only components made in the USA or Japan. All parts are carefully chosen & used for their durability, dependability & proven performance in the field.

