

## **REKAYASA KELISTRIKAN BODI DAN SISTEM PENGISIAN FIAT 124S SWAP ENGINE TOYOTA 5K**

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### **ABSTRAK**

Perkembangan didunia otomotif tidak terlepas dari inovasi yang dilakukan dari mobil ditemukan hingga sekarang, banyaknya produksi mobil baru mengakibatkan mobil lama banyak ditinggalkan. Rekayasa yang telah dilakukan FIAT 124 S yaitu *Swap engine* Toyota 5K mengakibatkan masalah kelistrikan bodi dan sistem pengisian, langkah penanganannya dilakukanlah rekayasa kelistrikan bodi. Tujuan rekayasa kelistrikan bodi agar sistem kelistrikan dan pengisian dapat bekerja kembali. Proses rekayasa kelistrikan bodi mengidentifikasi jaringan kabel bodi, pemeriksaan kontinuitas, pengecekan komponen kelistrikan, melengkapi komponen kelistrikan, setelah pengecekan, merangkai kabel bodi dan pengisian, penyambungan kabel dengan komponen, beban, fuse, pengendali, membungkus dengan pelindung kabel. Dari hasil rekayasa kelistrikan bodi arus yang mengalir pada rangkaian dihitung dengan tegangan aki 12,5 V, lampu kepala *low beam* (5,12 A), *high beam* (5,26 A), lampu sein(1,05 A), lampu kota(0,52 A), wiper(2,87 A), klakson(1,84 A), lampu rem (2,02 A), sistem pengisian(13,04 A / 14,5 V ) , semua sistem bekerja dengan baik.

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**Kata kunci :** Rekayasa, Kelistrikan Bodi FIAT 124 S, Sistem Pengisian

# **ELECTRICAL BODY AND CHARGING SYSTEM ENGINEERING ON FIAT 124S SWAP ENGINE TOYOTA 5K**

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## **ABSTRACT**

The development of the automotive world is inseparable from innovations made from cars found until now, the large number of new car production has resulted in many old cars being abandoned. The engineering that has been carried out by the FIAT 124 S, the Toyota 5K Swap engine, has resulted in a problem with the body's electricity and the charging system, with the body's electrical engineering being carried out. The purpose of body electrical engineering is that the electrical and charging systems can work again. The body's electrical engineering process identifies body cable networks, continuity checks, electrical component checks, completes electrical components, after checking, assembling body cables and charging, connecting cables with components, loads, fuses, controllers, wrapping with cable protectors. From the results of the electrical engineering body current flowing in the circuit is calculated with a battery voltage of 12.5 V, low beam head lights (5.12 A), high beam (5.26 A), turn signal lights (1.05 A), city lights (0.52 A), wipers (2,87 A), horn (1.84 A), brake lights (2.02 A), charging system (13.04 A / 14.5 V), all systems work properly.

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**Keywords:** Engineering, Electrical Body FIAT 124 S, Charging System