

**PERBAIKAN BODI DAN CAT MOBIL TIMOR DOHC TAHUN 2001
BAGIAN SISI KIRI, ATAS DAN BELAKANG**

Oleh:

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ABSTRAK

Proyek akhir ini yang berjudul perbaikan bodi dan cat mobil TIMOR DOHC tahun 2001 bagian sisi kiri, atas dan belakang bertujuan untuk: (1) mampu melakukan proses persiapan pemukaan bodi mobil sebelum dicat; (2) mampu melakukan teknik dan prosedur pengecatan mobil dengan baik dan benar; (3) mampu melakukan proses pengeringan mobil; (4) mampu melakukan proses *finishing* mobil dengan baik dan benar; (5) mengetahui hasil pengecatan mobil TIMOR DOHC tahun 2001.

Proses perbaikan bodi dan pengecatan mobil Timor DOHC tahun 2001 bagian sisi kiri, atas, dan belakang meliputi menilai perluasan permukaan yang rusak, melakukan perbaikan bodi dengan cara melakukan penggantian plat yang keropos dengan cara pengelasan, mengupas lapisan cat, mengaplikasi *epoxy primer*, melakukan pendempulan, melakukan pengamplasan dempul, melakukan *masking*, mengaplikasi *epoxy surfacer*, melakukan pengamplasan *epoxy surfacer*, mengaplikasi *top coat*, melakukan pengamplasan cepat pada *top coat*, mengaplikasi *clear*, melakukan *polishing*. Alat yang dibutuhkan meliputi: seperangkat las asetilin, kompresor, kape, *mixing plate*, *sprygun*, *air duster gun*, gerinda tangan, *hand block*, ember, *cutter*, *sander*. Bahan yang dibutuhkan meliputi: plat baja, *sandpaper*, dempul, *masking paper*, kain lap, isolasi kertas, *thinner*, *epoxy primer* dan *epoxy surfacer*, *spot putty*, cat Lessonal, *clear Sikken*, compound KIT.

Proses persiapan permukaan sebelum aplikasi *top coat* meliputi: menilai perluasan kerusakan, memperbaiki kerusakan bodi, mengupas lapisan cat, mengaplikasi *epoxy primer*, mengaplikasi dempul, dan mengaplikasi *epoxy surfacer*. Teknik pengecatan yang digunakan meliputi: pengaturan *spray gun*, gerakan *spray gun*, kecepatan *spray gun*, jarak penyemprotan, dan *overlapping*. Prosedur pengecatan meliputi: proses persiapan sebelum aplikasi *top coat* dan aplikasi *top coat*. Proses pengeringan yang digunakan untuk melakukan pengeringan menggunakan proses pengeringan udara $\pm 30^\circ\text{C}$ selama 24 jam. Proses *finishing* meliputi *polishing* dan pemasangan kembali komponen-komponen kendaraan. Hasil pengecatan mobil TIMOR DOHC tahun 2001 yang dinilai menggunakan angket penilaian secara keseluruhan termasuk dalam kategori baik (80,44%) dalam hal kualitas hasil pengecatan, sedangkan dalam hal cacat pengecatan termasuk dalam kategori sedikit (1,9%).

REPARATION AND PAINTING ON THE LEFT, UPPER, AND BACK SIDE OF TIMOR DOHC YEAR 2001 CAR'S BODY

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ABSTRACT

This final project entitled Reparation and Painting on the Left, Upper, and Back Side of Timor DOHC year 2001 car's body has several aims for the researcher. Those aims are: (1) having ability in doing process of car's surface before it is painted; (2) having ability in implementing technique and procedure of car's painting appropriately; (3) having ability in doing process of car drying; (4) having ability in doing car finishing process appropriately; (5) finding out the result of painting on TIMOR DOHC year 2001 car.

The process of reparation of Timor DOHC year 2001 car's body and painting on the left, upper, and back side which consists of assessing the expansion of destroyed surface, body reparation by changing the porous plate by welding, peeling paint layer, applying epoxy primer, doing caulking, sandpapering the caulk, masking, applying epoxy surfacer, sandpapering epoxy surface, applying top coat, doing quick sandpapering on top coat, applying clear, and polishing. The tools needed are: a set of acetylene weld, compressor, putty knife, mixing plate, spray gun, air duster gun, hand grinder, hand block, pail, cutter, sander. Materials needed consist of steel plate, sandpaper, caulk, masking paper, cloth, paper isolation, thinner, epoxy primer and epoxy surfacer, spot putty, cat Lessonal, clear Sikken, as well as compound KIT.

The process of surface preparation before the application on top coat consists of: assessing the extension of damage, reparation of destruction on the body, peeling paint layer, applying epoxy primer, applying caulk, and applying epoxy surfacer. The painting technique used consists of: the setting of spray gun, the movement of spray gun, the speed of spray gun, the distance of spray, and overlapping. The painting procedures comprise: preparation process before the application top coat and during the application of top coat. The process of drying implements air drying process which is conducted in the temperature of $\pm 30^{\circ}\text{C}$ for 24 hours. The finishing process consists of polishing andreassembling the vehicle's components. The result of painting on TIMOR DOHC year 2001 car assessed through questionnaire uses the whole assessment consisting of good category (80,44%) in the painting result quality, while in the case of painting defect it belongs to low level (1,9%).