

**DEVELOPMENT AND CONSTRUCTION OF AN
IMPROVISED HYDRAULIC PRESS**

Undergraduate Design Project
Submitted to the Faculty of the
Cavite State University
Indang, Cavite

In partial fulfillment
of the requirements for the degree of
Bachelor of Industrial Technology
(Major in Automotive Technology)

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ABSTRACT

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The Development and Construction of an Improvised Hydraulic Press was conducted in Tres Cruces Tanza, Cavite. It was tested and evaluated at the College of Engineering and Information Technology on February 6 to 16, 2006. The study was conducted to show that it is possible to fabricate a Hydraulic Press that is low cost and can match the performance of commercially available pressing machine. The system has three major parts: the frame, the hydraulic jack and spring. The frame of the machine consists of posts, ram, and base. The machine design can be used as an alternative from commercially available pressing machine. Also it is a good instructional material in acquainting students on else of the press. The machine approximately weighs 400 kilograms and can release 15 tons of force needed to press fitted parts. Maximum stroke of the jack reaches approximately nine inches. The total cost of the project was Php. 28,505. The only problem observed during testing is in adjusting the ram. It is recommended to install a motored pulley for easy adjustment of the ram.

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