

# Photo Descriptions

Three platforms were constructed and labeled V1, V2 & V3. My design on all three models.

The prototype designated as V1 in the photos was fabricated by a local welder. By intent the design was simple and intended only to improve our garlic planting methodology. See full description of intent and results in the Proposal. Note that V1 had wheels within the working area. V2 and V3 were developed within the SARE Grant.

Version V2 was sent to Alfred State College, Mechanical Engineering Department for analysis and mechanical drawings including parts breakdown - available in the Final Report section. A professional metal shop fabricated V2 & V3.

Version V3 is a modification to V2: lighten the frame to reduce weight, A-frame elongated, tool bar extended vertically by 4" and converted to 2" vs. 2.5" diamond pattern and the working area was expanded (see working area in proposal).

**Nomenclature:** The metal frame is called the *Base-Unit* and the top (and/or other attachments) the *Functional-Unit*. The combination is a *Platform*. See proposal for details.

## Photographs

**V1.1 - Base-unit, side view - note wheels on-board**



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**V1.2 - Base Unit, Rear view** - note working-area is potentially obstructed by frame



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## V1.3 - Garlic Functional Unit

The 2 slots on the front are for placing garlic by hand and line up in the row with the furrows cut by the pulling tractor's front gang.

There are holes for the wheels on the prototype at the right (rear of unit). They are unnecessary for versions 2 & 3 as the wheels are off-board. In operation these (formally wheel) holes are generally covered by bushels of garlic when in operation. See also photographs in garlic planting operation.



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V2.1 - A-Frame



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## V2.2 - Frame & Support Struts



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## V2.3 - Gauge Wheels and Tool Bar



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V2.4 - Overall view - side, note adjustable support struts in working area



# Photo Descriptions

V2.5 - Tool Bar w/ clamp and gauge wheel





# Photo Descriptions

V3.1 - Front View showing expanded working area and struts



# Photo Descriptions

V3.2 - Rear View - Tool Bar w/ 4" elevation over V2

