



DETAIL "A"  
MIXING VALVE

DETAIL "B"  
METERING DEVICE

AIR BOAT INTAKE SYSTEM

## Vacuum System Used To Fill Chemical Tanks

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For sometime there has been a need for a quick and efficient method of filling chemical tanks for spraying. We believe that the vacuum system shown on the drawing is an answer to this problem.

Prior to the use of the Vac-all valve, 50-gallon drums were filled by dipping water with a bucket from the streams, requiring about 10 minutes per drum. With the Vac-all system a 200-gallon tank can be filled in approximately 5 minutes.

### OPERATING INSTRUCTIONS

Install 3/8" pipe thread nipple in intake manifold of truck. Many manifolds are already drilled and tapped this size; others can be easily drilled and tapped.

- Place Vac-All in top opening of tank in a vertical position.
- Connect nipple in manifold to Vac-All,
- Connect suction hose from tank to liquid supply,
- Connect chemical funnel,

Put desired amount of chemical in tank, Close all openings except suction line to liquid supply.

Start motor and run steadily at fast idle speed. Open Vac-All shut-off valve slowly; in a few moments tank will start to fill.

Vac-All shuts off automatically when tank is full.

### IMPORTANT

Tank and connections must be air tight.

Run motor steadily at fast idle. If motor is raced intermittently, valve inside Vac-All may close. If this occurs, reset by closing shut-off valve until inside valve releases and reopen shut-off valve slowly. Keep small air vent in top clear. Do not use Stilson wrench on Vac-All. Vac-All must be used in a vertical position. In case of freezing use hot water as intense heat will destroy rubber valve inside.

**CAUTION:** Tanks should be reinforced to avoid the danger of collapsing. The intake hose should be well screened and not laid on the bottom when filling tank; the vacuum will pick up sand, small rocks, and vegetation.