Water Intake System For Airboats

April 1965

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Prior to the use of the intake system, 50-gallon tanks were filled by dipping water from overboard with buckets; when the tank was filled it added over 400 lbs. to the weight of the airboat. With the use of the intake system this excess weight is eliminated, allowing the boat to go into areas which could not previously be sprayed.

The system works as follows: Water is taken into a well which is mounted into the stern of the airboat. Water enters this well through 3/16" holes drilled in the bottom of the airboat. The forward movement of the boat makes it self-cleaning. The water is then picked up by the spray pump and pulled through the mixing valve. The spray pump mixes it and delivers it out as a concentrated spray.

The chemical system works as follows: The chemical is supplied by a 10-gallon tank mounted above the spray pump. As the water goes through the mixing valve the chemical is pulled through the metering disc into the water intake line to the pressure pump, mixing the correct amount of chemical and water together. For details see drawing.