

## Operator's Instructions 12 Volt Pump with Bypass System

**Read the pump manufacturer's owners manual prior to using your PBM Sprayer.**

Check the filter prior to loading chemical and/or beginning a spray session. If the filter becomes clogged when the tank is loaded, close the valve between the tank outlet and the filter. This will reduce the amount of chemical loss and spillage. Remove the bottom of the filter housing by turning counterclockwise. Rinse the filter element until clean and reassemble the filter. *The pump will not operate properly if the filter bowl is loose or the o-ring is missing or damaged. Always use protective clothing and refer to the chemical manufacturer's recommendations when handling chemicals.*

**Important Note:** When setting up your sprayer always test with clean water only.

### Starting up your sprayer

A fully charged 12 Volt source will be needed to operate the pump to its full potential. If an auxiliary battery is to be used we have had the best results using Deep Cycle type batteries. Refer to the pump manufacturer's owners manual for wiring instructions. Before you energize the pump make sure that any valves for booms, handguns or other accessories are in the closed positions. Once the 12 volt connections are installed to the 12 volt source turn the switch to the on position. To adjust the pressure turn the "T" handle on the brass pressure relief valve clockwise to increase pressure and counterclockwise to reduce the pressure. To lock in the desired pressure secure the nut on the threaded stem of the pressure relief valve.

*A general rule of thumb is to set the pressure at the gauge between 5 and 10 PSI higher than your target PSI. For best results check the pressure at the nozzle. Your local dealer or the PBM sales staff can help you put a testing device together.*

### ATEX-20 Standard accessory operation

The ATEX-20 sprayer comes with 10' of spray hose and a Spraying Systems model #22670-PP-15-1/4 spray gun. Once the pressure has been set simply squeeze the trigger to begin spraying. The spray gun comes equipped with an adjustable nozzle. By turning the tip the pattern can be adjusted from a straight stream to a conical pattern. A wide variety of tips are available from PBM or your PBM dealer. *Keep in mind the 12 volt pump on this model can only produce up to 1.8 gallons per minute when selecting a nozzle. There are 2 auxiliary plugged ports on the manifold the gauge is mounted to. These ports can be used to plumb in a boom or a second handgun.*

### ATVX-20 Standard accessory operation

The ATVX-20 sprayer comes with 25' of spray hose and a model #AA30L-1/4 spray gun with an 18" brass extension and an adjustable tip. The spray gun kit is plumbed to a manifold with three compact ball valves. One valve is already dedicated to the spray gun. The other two valves are so a boom or additional handgun can be used. Open *only* valve with the hose attached. To spray simply squeeze the trigger in the gun. The spray gun comes equipped with an adjustable nozzle. By turning the tip the pattern can be adjusted from a straight stream to a conical pattern. *A wide variety of tips are available from PBM or your PBM dealer. Keep in mind the 12 volt pump on this model can only produce up to 3.3 gallons per minute when selecting a nozzle, boom, etc.*

### Optional accessories

Spray Booms: Both the ATEX-20 and ATVX-20 sprayers have frames designed to accept a PBM brand, ATV & TC series booms.

PBM Spray Booms come equipped with a #11002 spray tip. The numbering corresponds to the angle degree of the pattern, *110 degrees*, and the volume the nozzle puts out based on 40 PSI, *2/10ths of a GPM*, in this case.

Below is a list of recommended booms by sprayer. *To ensure you get the correct mounting hardware specify the sprayer model you own when ordering.*

## **ATEX-20**

#TC-3NB Creates a 5' swath, 3 nozzles, plumbed in a single section on a 40" rigid bar with adjustable hangers.

#TC-4NB Creates a 6.5' swath, 4 nozzles, plumbed in a single section on a 60" rigid bar with adjustable hangers.

#ATV 6-9-DSB Creates two 2'-4' swaths, 2 nozzles each in adjustable swivel nozzle bodies at the end of the boom arms that adjust from a total of a 6' structure width to a 9' structure width. This boom is hinged for storage and has a breakaway feature.

#ATV 6-9-UB Creates a max 130" swath, 5 nozzles plumbed in one or two sections with a boom structure that adjusts from a total of a 6' structure width to a 9' structure width. This boom is hinged for storage and has a breakaway feature.

#ATV 6-9-UB

#ATV 7-10-UB\*

#ATV 7-10-DSB\*\*

#ATV 10-14-DSB

#ATV 12-16-DSB

\* The part number suffix DSB or Double Strip Boom refers to strip type boom plumbing.

\*\*The part number suffix UB or Utility Boom refers to our standard Broadcast plumbing.



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If you have any questions, concerns or if you would like a sprayer catalog please call toll free and reference the document number at the top of this page.

PBM – Chico 800-688-1334