## HOLLROCK ENGINERRING, INC. Commercial-Duty Ball Shooters Models CDBS and SCDBS USER MANUAL

The CDBS, Commercial Duty Ball Shooter, is capable of transporting golf balls up to 30 feet vertically, or 50 feet horizontally at a rate of 28,000 balls per hour.

The SCDBS, Single Commercial Duty Ball Shooter, will deliver golf balls 10 feet vertically.

The Ball Shooter is designed to be used with the 28K Commercial Washer. Performance in any other application cannot be guaranteed as advertised by Hollrock Engineering.

## SETUP INSTRUCTIONS

- 1. Insert and fasten chute divider as shown in Figure 1.
- 2. Attach support bracket to the 28K Washer as shown in steps 1 and 2 shown in Figure 2. Slip on the black "Y" pipes as shown in Figure 2.
- 3. Position the Commercial Duty Ball Shooter blowers in a clean and dry area away from the washer, as shown in Figure 3. Unscrew the screen filter from the elbow fitting. Screw the elbow fitting into the inlet ports of the blower motors. Screw the screen fitting into the top of the inlet elbow. Screw the outlet assemblies, with relief valves, into the outlet ports of the blower motors (See figure 4). Mount the two blower motors onto the mounting frame. Secure the mounting frame to the floor. Insert the ends of the hoses into the rubber couplers and tighten the hose clamps. Fasten the other ends of the hoses to the lower end of the black "Y" pipes and tighten the hose clamps (See Figure 3).
- 4. Install the system using flexible tubing, Hollrock Engineering part number "FT50" or "FT100". Install ball delivery tubes by slipping the tubes through the center of the wire mesh safety connectors on the top of each "Y" pipe. Use the hose clamps provided as shown Figure 2. Apply an elastic adhesive to the clamp screw heads to prevent loosening. When installing the ball transport tubing use the least amount of turns possible, turns will greatly reduce the ball conveying efficiency.

Transport tubes should be installed in a direct line between the Ball Shooter and the Ball Bin. Use wide sweeping turns only when absolutely necessary. Only use continuous lengths of tubing from the BAll Shooter going to the Ball Bin. If more than 100 feet of tubing is required, you will need a special coupler available from Hollrock Engineering.

5. Position the ball arrestor box in the middle of the top of the Ball Bin (See Figure 5). Trace the 8 bolt hole loactions and the four inside edges of the box unto the Ball Bin top. Remove the box and cut out the area 1/4 inch in from each of the four sides. The cut out piece should be 9-1/2 inches square. Drill out the bolt holes with a 1/4 inch drill bit.

Install the ball arrestor box using the bolts provided. Slip the ball delivery tubes through the center of the wire mesh safety connectors. The delivery tubes should extend to the inside end of the connector inside the ball arrestor box. Using the two hose clamps, on each tube, secure the wire mesh to the tubing (See Figure 5). Apply an elastic adhesive to the clamp screw heads to prevent loosening.

7. To adjust the relief valve for optimum performance, close the relief valve. With the blowers on and the 28K Washer washing golf balls, slowly open the relief valve until the balls begin clogging as they enter the ball shooter pipe. From that point, close the valve until the balls feed steadily.

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1. INSERT POINTED END OF DIVIDER INTO SPACE IN MIDDLE RAIL OF WHITE PLASTIC. BEND END SLIGHTLY TO ALLOW SPACE FOR BALLS ON EACH SIDE.

2. DRILL HOLES AND FASTEN DIVIDER

FOR SCREWS DRILL 2 HOLES 3/16" DIAMETER

1/4"

EXIT CHUTE DIVIDER

EXIT CHUTE DIVIDER

EXIT CHUTE DIVIDER

1.7/8"

Figure 1 Exit Chute Divider Detail

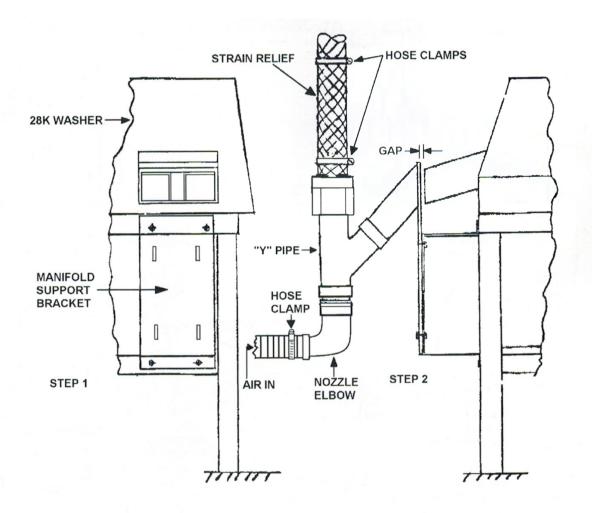


Figure 2 Manifold Support Bracket and "Y" Pipe Assembly

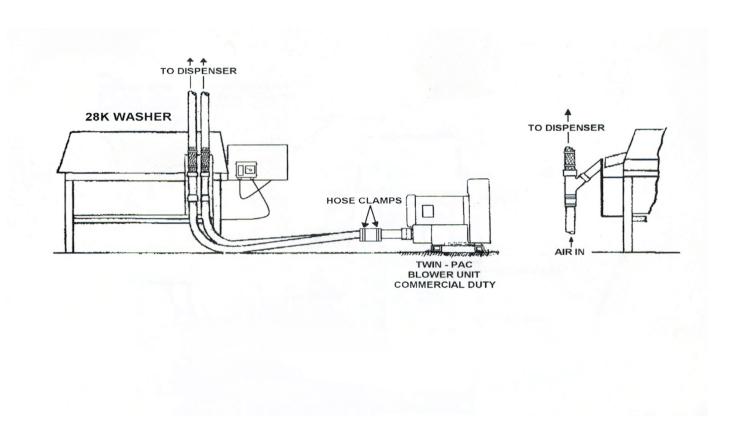


Figure 3 Shooter Layout

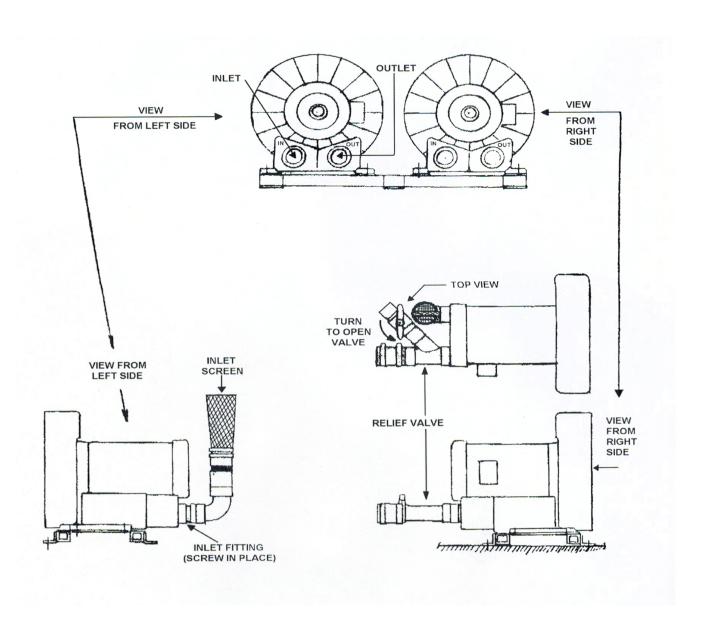


Figure 4 Blower Motor Detail

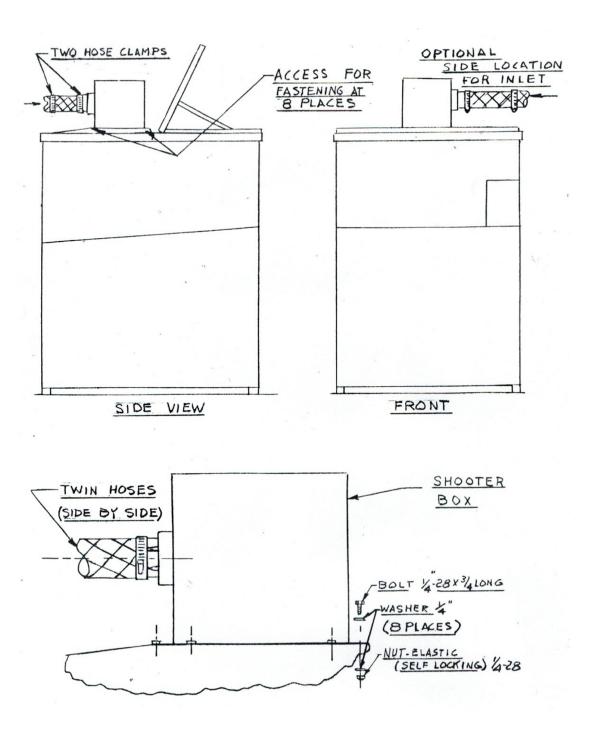


Figure 5
Ball Arrestor Box Attachment