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OPERATING INSTRUCTIONS
RB-2500 AND RB-3500 CIRCLE BURNERS

Page 5 of the call outs shows both a RB-3500 and a RB-2500. Item No. 43 is a RB-3500 circle burner. When you add items No. 41 and 42, the machine becomes a RB-2500 circle burner.

The following is the difference between the two models:
The RB-3500 burning head is for mounting on manipulators, column and booms or side beam carriages. The RB-2500 circle burner is a stand alone machine, which can be moved anywhere in a shop. It is designed to burn holes on center line with 7-inch (177.8mm) of rise and fall cam action. The cutting diameters for each machine is 1 ½-inch to 42-inch (38 to 1066mm) for bevel cut holes and 4-inch to 48-inch (101 to 1219mm) for square cut holes. (Holes with no bevel.)

Rise and fall cam:
The cam is shown on page 1 of the call out pages as item No. 7. The cam on a RB-2500 is put in time by the factory when the burning head is installed on the arm and magnet assembly. If for some reason the cam has been taken out of time, you will need to do the following steps:

1. Rotate the head so that the horizontal rack is parallel to the vessel.
2. The torch should be on center line. If it is not, loosen the cap screw in item No. 19, (90-degree clamp), and position torch on center line. Also, the torch holder has to be square or 90-degrees to the horizontal rack. To check this function, put a tri-square on the horizontal rack with the blade extending toward the torch. Sight along the blade to the rod on the torch holder. If the rod is not parallel to the blade on the tri-square, loosen the top cap screw in the 90-degree clamp on the bottom of the vertical rack and bring the torch holder into alignment Lock cap screw back down.

3, Check the cam , item No. 7 on page 1 of the call out pages, and put the cam in the vertical position with the adjusting knob on top as shown. This procedure also applies to all RB-3500 circle burners.

Speed control:
The solid state speed control allows you to rotate clockwise or counter-clockwise, with variable speed adjustment.
Charts are provided for cut back dimensions, how to determine cam settings and a cam setting chart for 1 ½-inch to 42-inch (38 to 1066mm) holes into 8-inch to 144-inch (203 to 3658mm) ID vessels.

Hold down magnet:
The hold down magnet is an Eriez Manufacturing magnet, with plants in eight countries. The EPL 121 is a manually operated magnet and may be used on diameters as small as 20-inches. Any diameter under 20-inches (508mm) will not provide enough surface for the magnet to set on. This could result in damage to the machine or injury to the operator, because the magnet cannot be safely attached to the vessel surface.

Standard cutting torch for RB-2500 and RB-3500 burning machines is a Victor 2-hose machine torch with Victor adjustable head. This torch uses the Victor series-1 cutting tip, which is the most popular Victor tip with worldwide distribution. Other cutting torches may be provided on request.

NOTE:
The term cam in time refers to:
The cam must be in position to follow the curvature of a pipe or vessel. At 90-degrees from center line or the low point of the cut, the cam has to be vertical with the adjusting knob in the bottom position, or just opposite of, as shown on page 1 of call outs. If the cam is not in the vertical position, with the knob on top, with the torch on center line and the horizontal rack parallel to the vessel at the start of the cut, the cam is out of time, and must be put in time to cut a proper hole.