

INSTRUCTION SHEET

Yellow Heat_{tm} System

Instructions on the use and maintenance of the Yellow Heat Brand **Babington Ball**

1. This quality steel ball is suitable for demonstrating the Babington Principal. The use to which the buyer makes of this babington ball is solely the decision of the user and is not the responsibility of Homestead Inc.
2. The babington ball is a carbon steel ball with a 3 inch outside diameter, 11 gauge walls. It has a 1/4" NPT tapped hole on one side and up to three 0.010" laser drilled holes spaced 2 degrees apart on the opposite side. The holes are each perpendicular to the surface.
3. The ball can be pressurized up to 100 psi maximum.
3. If this babington ball is used as an oil atomizer in a heating appliance, care should be taken not to atomize too much oil. The following chart gives an approximation of the thermal output of a babington ball burning #2 oil with 40 psi input pressure.

Number of 0.010" holes	Low Fire Position BTU's per hour	High Fire Position BTU's per hour
1	30,000	150,000
2	50,000	250,000
3	80,000	350,000

4. Individual holes may be permanently closed off by striking the hole firmly with a hammer and a prick punch. Close off outside holes before the center hole.
5. Flow over the babington ball may be concentrated by depressing the surface above the hole(s) using a hydraulic press. A 1/4" by 1" diameter dent at the 11 o'clock position when the babington holes are at the 9 o'clock position works best. This has the effect of concentrating fluid flow over the holes and not allowing it to wander elsewhere on the ball's surface.
6. Here is a list of Babington Ball sizes available from Homestead Inc. All are priced the same.

Babington Ball Dia.	Outlet Sizes (all are 1/8" NPT inlet)
1-1/2"	0.010" single hole
1-1/2"	0.006" x 0.10" slot
3"	0.010" triple hole

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