

J & E JUNIOR INSTRUCTIONS

Step 1

MAINEARING BLOCKS: Sheet #2

Parts: #101 and #101-L

Materials: 1" x 1" x 10" CRS.

Procedure: Use 4-jaw chuck to size material from 1" square.

Drill and tap in sets; mark for reassembly. Bore, then use mandrel to face sides.

Step 2

HOPPER and CYLINDER: Sheet #3

Parts: #102 and #103

Materials: 4" black pipe 5¼" long, 2 pieces 4" x 5" x ¼", 2 pieces 4" x 4" x ¼" HRS. 2 rings flamecut and finished to 4" O.D. x 2" I.D. x ½". 1 piece 1" black pipe 10" long, 2½" dia. x 12" cast iron bar.

Procedure: Face 4" pipe to 5" long and saw in half lengthwise.

Saw or burn and grind the 2" radius in the 4" x 4" x ¼" pieces. 1/8" 'V' and weld all outside seams, except front ring, where a fillet is required. Grind welds. With a 4-jaw chuck from back, bore, face, and etc. Turn and bore cylinder (part #103) and press in hopper. Use Loc-tite. Build hopper top from 1" black pipe and weld to hopper. Use cylinder deglazing hone, wet-hone bore to size. Use head (part #104) as drill jig for head stud holes.

Step 3

WELDING FIXTURE: Sheet #4

Parts: #X01, #X02, #X03, #X04, #X05

Part: #X07, Sheet #1

Materials: 1¼" dia. x 4¼" CRS., ¾" dia. x 11½" CRS. 5/8" dia. x 1¼" CRS., 2 pieces 2½" dia. x ½" CRS., 1½" x ½" x 12½" CRS. 3/8" dia. x 10" CRS.

