

**Step 15 (cont.)**

**Procedure:** Part #127: Slot can be made by sawing from short end then welding end closed. Part #131: To make lobe turn ring 2¼" O.D. x 2" I.D. x 3/8" wide. Cut 75 degrees + ¼" section (approx. 1<sup>13</sup>/<sub>16</sub>" measure outside with flex scale). Silver solder to body.

Part #136: Drill and tap together.

For other parts, follow the prints.

**Step 16**

**FLYWHEELS:** Sheet #8

**Parts:** #143 and #143-L (Sheet #8)

**Materials:** 2" dia. x 5" CRS., 2 each 12<sup>1</sup>/<sub>8</sub>" O.D. x 8<sup>7</sup>/<sub>8</sub>" I.D. x 1½" HRS. rings (flamecut), ½" dia. x 3" CRS., and ½" black pipe x 60".

**Procedure:** Check the capacity of your lathe before cutting the tires from 1½" plate. Some 12" lathes will vary as much as ½". Most steel supply or steel fabricators can burn these rings very reasonably. Machine the tires and hubs. Cut pipe spokes, 3 or 4 extras will help. Face and debur both ends 3¾". Flatten the pipe (seam on flat side) in press or large vise, use 5/8" stops. Build swedge part #X10: Swedge one end of spoke to 1<sup>3</sup>/<sub>8</sub>+". Use white lead or Neverseiz. Build turning fixture #X12: Mount on face plate as shown on sheet #12 and radius hub end of spokes. Make fixture #X13: Bolt hub in place, clamp spokes and weld around hub and as far as you can between spokes. Remove from fixture, weld the other side. Turn and grind welds. Make governor weight bosses with ¼" holes. Use welding fixture #X11, clamp to hub and weld or braze. Drill and ream bosses 5/16". There are no governor weight bosses on flywheel part #143. Use ¾" mandrel, turn spoke end 0.008" - 0.012" larger than bore of tire. Bolt hub to flat table or plate, place three or four 7/16" spacers in an 11" circle around it. Heat tire (325 - 375 degrees) and set in place. After cooling, tack weld opposite spokes - *take your time and do not get tires too hot or it will crack your welds*. Grind welds. Chuck in 4-jaw, indicate tire, bore hub 0.876". Cut keyway as shown, drill and tap for set screws. Balancing: Part #143-L drill spoke and fill with lead and drill three ½" holes as shown.  
(procedure continued on next page)