Instructions for Installing and Adjusting
C-59 Preheat Compensator Valve

This assembly (33Y64) replaces the bleeder valve cap (31Z55) located on the C-59 body, just below the preheat-oxygen valve stem. The assembly consists of three parts: body (83Z26), adjustable stem (48Z41), and "O" sealing ring (85W10). When assembled to the torch, the adjustable stem, in conjunction with spring (28Z52) and ball (53A61), provides a means of compensating for wide variations in cutting-oxygen pressures, so that stable preheat flames can be maintained with any nozzle used with the C-59 torch.

A. TO INSTALL

1. Remove and discard cap (31Z55). (The spring and ball remain in the torch.)

2. Screw the body (83Z26) into the torch and tighten, making sure the spring is properly aligned in the body.

3. Screw the stem (48Z41), with the "O" ring (85W10) assembled to it, into the body.
B. TO ADJUST

1. Using a screwdriver in the slot provided, turn the adjustable stem in (clockwise) as far as it will go.

2. Set the oxygen and acetylene pressures, and light the torch in the usual manner.

3. Open the acetylene valve wide, and adjust the preheat-oxygen valve until a neutral flame is obtained.

4. Open the torch cutting-oxygen valve. The preheat flames will become carburizing, indicating an excess of acetylene. Hold the cutting-oxygen valve open and adjust the compensator stem outward (counter-clockwise), until the preheat flames return to neutral. If the flames leave the nozzle, turn the compensator stem inward until the flames return to the nozzle.

5. Any change in the cutting-oxygen pressure at the torch will require readjustment of the compensator stem. An increase in pressure will require an inward (clockwise) adjustment, a decrease in pressure will require an outward (counter-clockwise) adjustment.