Conditioning of RF Cavities and RF Input Couplers for SPring-8, H. EGO, M. HARA, N. HOSODA, Y. KAWASHIMA, Y. OHASHI, T. OSHIMA, H. SUZUKI, F. WANG, H. YONEHARA, SPring-8 - We have carried out the conditioning of 5-cell RF cavities and RF input couplers for booster synchrotron of SPring-8. The conditioning of a cavity is baked out at 150 _C for 5 days. In an X-ray shield room an input coupler is attached to the cavity. The RF input power to the cavity is controlled by a personal computer using CAMAC modules. The power is increased paying attention not to exceed the limit of the vacuum pressure. In case of extremely bad vacuum or a large reflected RF power from the cavity, the RF switch is immediately turned off by an interlock module. If the vacuum pressure becomes lower than the threshold value, a reset signal is sent from the computer to continue the cavity conditioning. Usually the power reaches to 270 kW for two or three days, and is kept for more than one day. We have successfully finished the conditioning of eight cavities and eleven input couplers. The conditioning of cavities and couplers for storage ring is underway.