

ABSTRACT

Provided is an ultrasonic joining apparatus capable of easily changing the elliptical ratio and the amplitude of a complex vibration. An ultrasonic joining apparatus (1) includes an ultrasonic LT horn (4) transmitting an ultrasonic vibration to a horn tip (6), in which the horn tip (6) is attached to a lower side of a tip portion (4b) of the ultrasonic LT horn (4) and detachable adjustment screws (5) are attached to positions (screw holes 4b1, 4b2, 4b4) not interfering with the horn tip (6) of the tip portion (4b).