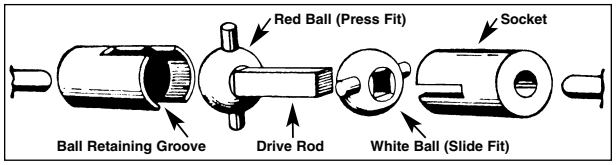
INSTRUCTIONS FOR #83290 UNIVERSAL COUPLING

4 Complete Sets



This universal coupling is of the expandable type: it allows for a normal change in the distance between the ends of the shafts being connected (resulting from a relative movement of the shafts during operation).

Holes in sockets are designed to press fit on a 3/32" shaft. For large size shafts (up to 3/16"), socket holes may be enlarged. Keep in mind that, for a press fit, holes in socket should be about .004" less than the diameter of the shaft on which it is to be pressed. Rolling a file over the end of slightly undersized shafts will insure a tight fit.

The outside diameter of the socket is 9/32", so the minimum clearance from the centerline of the drive shaft should be about 5/32". Arms on universal ball protrude beyond socket, but may be trimmed when necessary for clearance. Shaft should protrude from gear housing or motor case by at least 1/8".

The ends of the shafts being connected must be at least 1/2" apart. The length of the included drive rod limits the distance between the ends of the shafts being connected to a maximum of 3". We do not have longer shafts; however, square tubing of the same size may be substituted.

ASSEMBLY INSTRUCTIONS

1. Place socket on a flat surface and tap one of the shafts into hole in socket. Shaft should not protrude beyond end of hole inside of socket. If you cut off a piece of the shaft, be sure to chamfer end to provide a smooth lead into hole in socket. Sharp edges will cut the nylon socket instead of expanding it to provide a tight fit.
2. To put a second socket on the opposite end of the same shaft, (eg.: on the other end of motor) do not tap on end of first socket. Use the drive rod and tap on end of shaft inside of first socket.
3. Cut drive rod to a length which is 5/16" greater than the distance between ends of sockets when drive shafts are in their normal position. Remove burrs from cut end of drive rod to make it similar to ends as supplied.
4. There are two types of universal balls: the RED one has a smaller hole than the WHITE one, and is press fit on the square drive rod. Tap drive rod GENTLY into this ball, resting the ball on a hard flat surface, until its end is flush with the end of the ball. We suggest rounding off the corners of the end of the drive rod before tapping into ball to prevent splitting the ball. Snap ball end of this assembly into one of the mounted sockets. The sockets are grooved to keep the ball from falling out.
5. Snap the WHITE ball into other socket. The hole in this ball is large enough so that the square drive rod slides freely in it.

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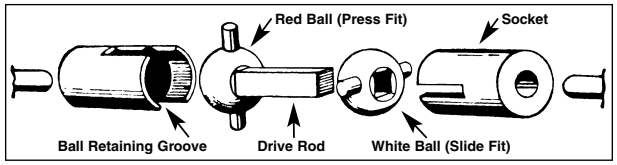

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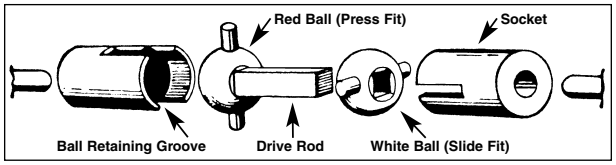

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