



## **770-8 LGB<sup>®</sup>/Aristo-Craft<sup>®</sup>/U.S.A.<sup>®</sup>/Bachmann<sup>®</sup> to E-Z Air<sup>®</sup> Conversion Kit**



Actuators, Conversion Units, Toggle Valves, fittings and 200' of tubing are included for the installation. You need to supply a source of clean compressed air at 40 psi.

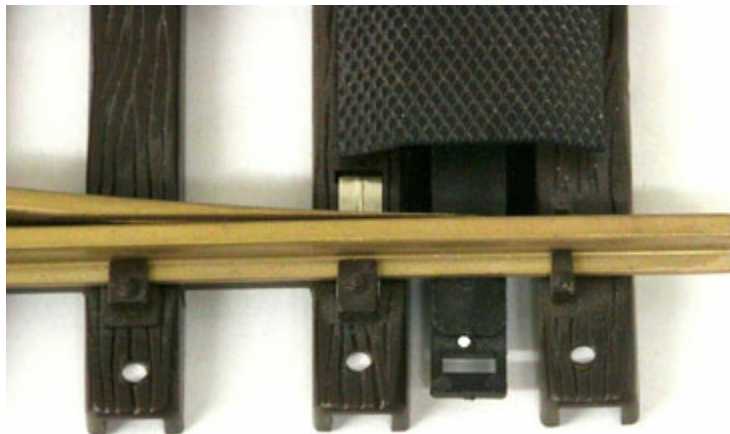
We recommend that an air filter be included in your system, such as our 600 35 micron filter.

A 1/8"NPTM to 1/16" barb fitting is included to convert from your source of air to the standard E-Z Air tubing size. A 262 12 Station Manifold is included to split the air line for connecting to the 610 Toggle Valves. A 210K barb plug is supplied to plug an unused barb on the manifold. Use a "U" shaped piece of tubing to plug 2 unused barbs.

The air from a manifold barb is input to the black barb fitting on the 610 valve. Run the connecting airline from the white fitting on the 610 to the black fitting on the 500 Actuator in the conversion unit.

The available throw of the Actuator is approximately 1/2" . This is sufficient for most turnouts in 45mm gauge (G, #1).

LGB<sup>®</sup> 1200 series turnout with new holes in tie end and tie bar.

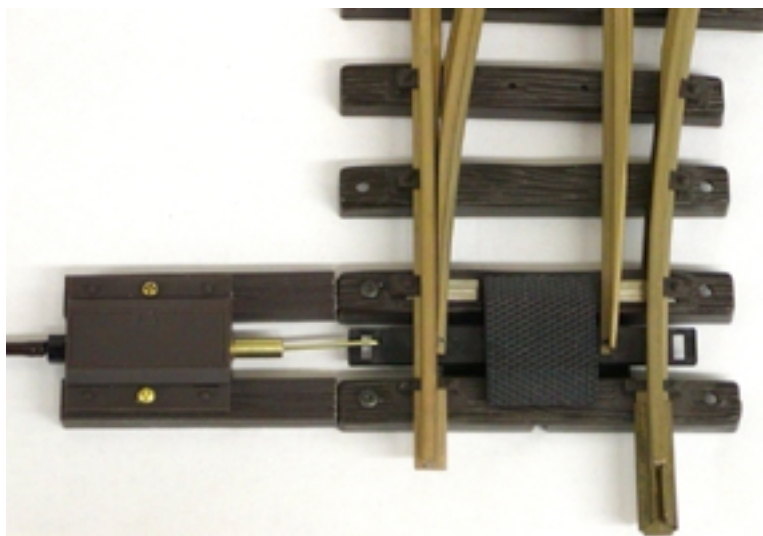


Tools needed will be a small hand drill or pin vise, drills of the size #35 and #53, a sharp knife, a pair of small pliers and a screwdriver to fit the screws holding the current turnout motor or manual throw to your turnout.

The E-Z Air actuator is strongly sprung in the closed position. Trains cannot push the points open as they pass through. If the train tries to go through the turnout that is set “against” it, it will derail. The E-Z Air unit is only activated by air in the “reverse” position. Mount the unit on the side of your turnout that will provide the “normal” route with no air applied. This is usually the main line route.

If you are converting an LGB 1200 series turnout from manual to E-Z Air, you won't need to drill any mounting holes in the turnout. The conversion unit will screw in place of the old manual unit. Otherwise, you must cut out the end of the tie between the two ties with mounting holes already in them. Drill the top end of the tie with the #35 drill back about 0.160" from the end, making a pair of mounting holes in the two ties that bracket the end of the points as shown on the previous page. Aristo-Craft turnouts have the correct mounting holes already. Bachmann turnouts must have one hole drilled. The other is already there. Remove the diamond patterned “hump” between the points on the Bachmann turnout. It is a stop mechanism which will prevent the Actuator from moving the points. On the Bachmann turnout, remove the manual grip from the end of the tie bar. Cut it off at the point it starts to increase in thickness from the size that slides under the points.

#570 installed on an LGB® 1200 series turnout, curved route “normal”.



Drill a #53 hole in the end of the plastic tie bar (just inboard of the rectangular hole, if present) as shown on the previous page.

Mount the conversion unit temporarily, using the black screws supplied, with the wire above the tie bar. Hold the points over against the side of the turnout the conversion unit is mounted on, the "normal" route. Grasp the end wire just outboard of the #53 hole with the pliers. Bend the wire at a right angle. Make this bend so that the wire will have to be pulled out slightly (1/32" to 1/16") against the spring tension to fit in the #53 hole. This provides positive holding of the points in the "normal" position.

Take the conversion unit off and remount it with the wire in the #53 hole. Turn the turnout over and grasp the wire with the pliers. Bend the wire over against the tie bar to prevent it coming out of the hole. If the excess wire interferes with movement of the points, cut it off 1/4" or so from the bend.

Turn the assembly over. Test the conversion with 40 psi air to make sure it works. Install on your layout.

Parts included in the 770-8 Kit:

- (8) 570 Actuators (Actuator & Conversion Carrier, wire linkage, screws)
- (8) 610 Toggle Valves
- (1) 402N 200' 1/16" id brown E-Z Air tubing
- (1) 050 1/8"NPTM to 1/16" barb fitting
- (1) 262 12 Station Manifold
- (1) 210K barb plug
- (1) 770-8 Instructions