



## **Air System**

The F1 system is designed to operate with input pressure between 50 and 130 PSI using either HPA (High Pressure Air) or Nitrogen. A suitable air system will be required. This includes a compressed air tank, regulator(s), remote line and fittings.

**DO NOT APPLY PRESSURE GREATER THAN 130PSI.  
DO NOT USE LIQUID PROPELLANTS SUCH AS CO2 OR PROPANE.**

## **Installation**

The best results are usually obtained when the replica body and gearbox are the same brand and model.

Before installing the F1 the unused components must be removed from the gearbox and the remaining grease should be cleaned out. In most cases, the only remaining parts will be the trigger, safety mechanism, selector plate, spring guide (if applicable) and cutoff lever (if applicable).

Once the gearbox has been prepared, install the switchboard and plug in the wire harness. The switchboard should sit flat against the gearbox shell.

Place F1 in the cylinder window of the gearbox and plug the solenoid into the switchboard. If the spring guide is needed by the replica (most M4 buffer tubes), reinstall it in the gearbox, otherwise it can be omitted.

Route the airline and wire harness out of the gearbox and carefully replace the other half of the gearbox shell, making sure that no wires are pinched between the halves. Once the gearbox is reassembled it can be installed into the replica body.

## **Velocity and Dwell Adjustment**

Set the dwell (dP setting) to the maximum value, then adjust the air rig output pressure until the desired velocity is reached. Once the velocity is set, reduce the dwell until velocity begins to drop. This is the point at which any additional dwell is unnecessary because the air is not being used to accelerate the round.

Velocity and cyclic rate are independently adjustable; however, due to the nature of pneumatic systems the maximum potential cyclic rate is related to input pressure. As input pressure is increased, the maximum potential cyclic rate will also increase.



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