



Air System

The JACK 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 UNLESS THE AIR SYSTEM IS SPECIFICALLY DESIGNED TO FILTRATE AND REGULATE SUCH PROPELLANTS.**

Installation

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

To correctly adjust the dwell, first set your dP to the maximum setting of 99 and then adjust your air pressure until the desired velocity is reached with the BB weight you will be using. Start reducing the dP until you see the velocity decrease or become noticeably inconsistent. This indicates that air flow is being shut off before the BB reaches the end of the barrel. Finally, increase the dP until the velocity returns to where it was originally set and then set the dP 2 higher than that point as a safety buffer to account for any inconsistencies. The system is now using the minimum amount of air required to achieve the desired velocity with that BB weight. If the pressure or BB weight is changed, repeat this process.

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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