

# Gaugemaster PM20 Fitting

## Instructions

### **FITTING A PM20 MOTOR TO YOUR POINTS:**

Installation of the PM20 Motor and its Accessory Decoder are simplicity itself because the harness is pre-terminated and the PM20 Tie-bar linkage just drops over the Point "Tie-Bar" pin. PM20 also has manual operation, so you can test it before fixing.

**First choose the PM20's Position:** The PM20 is mounted parallel to the point and can be mounted facing in either direction. Choose the most convenient orientation in relation to other track.

**If you fix your Points directly to the board:** You can simply place and fix the motor directly onto the board with the screws provided after placing the link over the end of the Point "Tie-Bar"

**If you use Track-bed under your Points:** If the track-bed is thin, then you may be able to mount PM20 directly, but test first. If not, make a pad from card or similarly firm material to raise the PM20 to the correct height before mounting it.

Glue this pad to the baseboard and let dry. Before fixing, drill the hole for the wiring: Mark the position of the motor, noting the end with the 3 pins. Mark 15mm from that end and then drill an 8mm hole - then clean up or counter-sink the hole edges.

**Testing before fixing:** The manual operation lever makes this easy. Place PM20 in position and lightly fix via the slotted screw positions. This will allow easy adjustment.

Operate and confirm smooth PM20 operation with the manual lever and once free operation of your PM20 is confirmed, add the other two screws. Don't over tighten the screws as this may affect PM20 operation.

**Applying Power to PM20:** This product is for low voltage use between 16 and 24v (AC or DC are both OK). Please use a 1amp supply or greater. Ideally also use a Capacitor Discharge Unit such as the GMC-CDU or similar for optimum performance.

As with all solenoids, this motor is designed for use with passing contact switches such as the GM510 Miniature Toggle Switch.

Please remember these motors only need a short burst or pulse of power. Connection to a standard On-On switch (or a permanent connection or power source) will lead to irreversible damage.

**Wiring the PM20:** PM20 is made easy as it features a simple, reversible 3-way plug-in connector. Standard wire colours are used:

**RED = RIGHT, GREEN = COMMON, BLACK = LEFT.**

**If your Point works backwards, you can simply reverse the 3-pin harness.**