

Dingo Servo Mounts

Small Uncoupler Kit for magnetic couplings

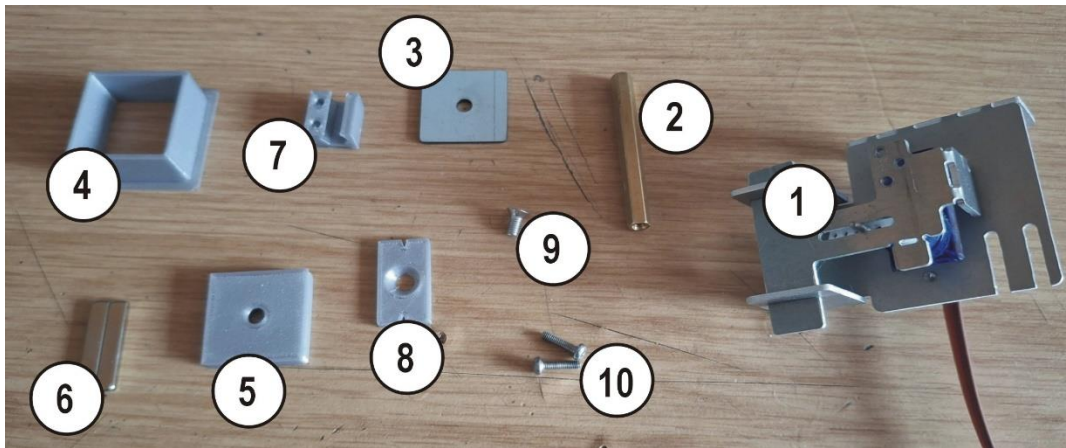
Safety Precautions.

Before installing this product, make sure that you have read the full instruction guide and are comfortable with the requirements.

Make sure that all parts, especially plastic packets and magnets, are kept away from young children. These units are not toys, but serious modelling parts.

Description and Origin

This Uncoupler Unit is designed to operate under the track for uncoupling magnetic couplers like Kaydee style couplers. It is much smaller than the original uncoupler but needs a square hole in the baseboard



1	Dingo Signal Mount Ver 1B with servo	NOT Included
2	3mm Hex Bar	1
3	Steel Carrier Plate	1
4	3D Printed sleeve	1
5	3D Printed base plate	1
6	20 x 4 x 2mm Magnets (N42)	2
7	3D Printed Clamp Plate	1
8	3D printed top Spacer	1
9	M3 x 6mm CSK Screw	1
10	M2 x 8mm Pozi Panhead Screws	2

Please Note: Neodymium Magnets are hard and brittle they look like steel but have properties more like glass, if allowed to jump to steel or other magnets they will likely shatter.

They can also cause injury when they come together and trap fingers etc.

We recommend handling one at a time and sliding them carefully off of a metal surface like a biscuit tin or something similar.

Dingo Servo Mounts

Small Uncoupler Kit for magnetic couplings

Note that they can have serious impacts on mobile phones or laptops, so keep them far away from all electronic devices.

**Finally keep the magnets away from the control boards as we have had some issues where chips have been wiped by close proximity to magnets.
Please handle with care.**

NOTE: I shot most of these pictures with my phone and they may look a little squiff!

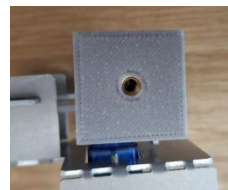
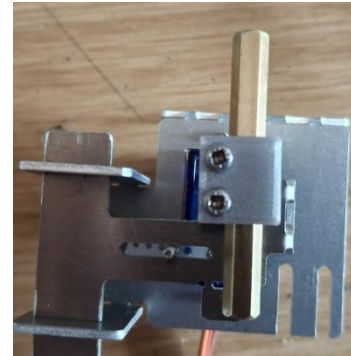
Assembly

Assemble the Signal Mount as per the instructions and fit a Fitec FS90 servo or similar to the unit.

Fit the hex bar into the Signal Mount with the 3D printed clamp and the 2 M2 x 8mm screws – This is temporary as the plate can be straight or offset depending on the alignment of the bar.

Take the 3D printed base plate and fit to the hex bar so that it is straight with the mount.

Now put a couple of drops of superglue onto the baseplate and fit the steel plate on top using the M3 x 6mm CSK screw to hold it straight until the glue sets.



I use this Powerbond which has about 3 secs wet time so you can move things if you are very quick, but once you apply pressure it bonds for life!.

Remove the screw and then screw the spacer to the top of the steel plate and into the hex bar making sure that the hex bar locates properly into the base plate and that the spacer is centred and straight with the mount.



You can use a drop of superglue to hold these together but try not to get glue on the screw threads. Now fit the magnets carefully to the spaces on top of the steel plate.

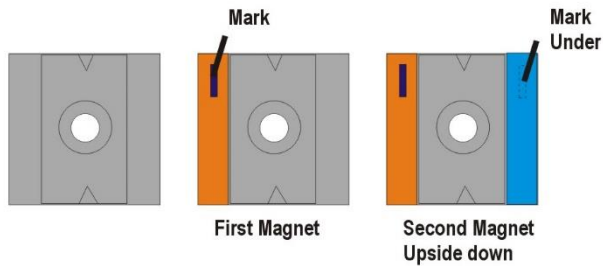
Careful not to let them jump onto the plate as the magnets might shatter.



Make sure that the magnets are on opposite poles (Might be worth trying them out before glueing in place) ie. one north and one south.

Dingo Servo Mounts

Small Uncoupler Kit for magnetic couplings



I start by fitting one magnet and glueing it in place

Now make a mark on one end of the magnet

Carefully put the other magnet on top of the first and make a similar mark.

Now remove the second magnet and invert it so that the mark is on the

underside as per the diagram.

This should be correct in terms of poles. – You can check this under your layout before glueing the second magnet in place. (the steel sheet will hold the magnet sufficiently while doing this test.

Attaching to the layout

Drill a 24mm square hole through the centre of your track where the uncoupler will be.

The sleeve will cover up any irregularities in the cutting.

The flange is only 0.2mm thick so should not create too much of a problem

Alternatively, the sleeve can be fitted to the underside of the baseboard and a thin piece of card or paper could cover the holes and be scened to camouflage the cutout.

Now fit the lifter assembly through the hole making sure that it is square to the track and not fouling in any way. The magnets need to be parallel to the track.

Now carefully fit the Signal mount assembly to the bottom of the layout such that the magnet holder is central to the sleeve

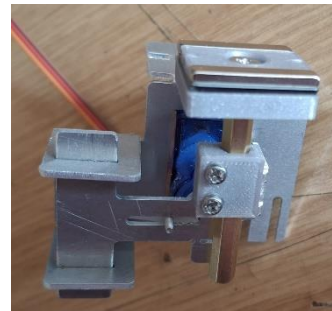
Once in position tighten the mounting screws lightly check that everything moves correctly

Once everything is operating correctly you can finalise the fixing screws and the clamping screws.

The signal mount should be adjusted to operate so that the magnets just come to the underside of the track when in the top position.

A switch may be fitted to the mount to indicate the operation.

Although the mount is designed to fit just below the ties / sleepers, you can introduce a thin card piece to allow the application of ballast to conceal the unit.

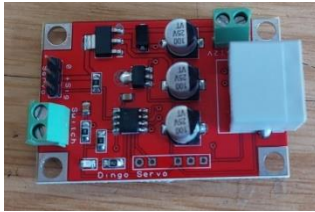


Dingo Servo Mounts

Small Uncoupler Kit for magnetic couplings

Dingo Servo Mounts have a single servo board unit and a Twin servo controller board which will operate this unit.

It can also be operated by our Simplex board



I hope you have many trouble free hours operating this unit.

As this is a new product, I welcome feedback to improve the units as we move forward.

Dave Ingoldby

Mobile 07754901324

www.dingoservo.co.uk