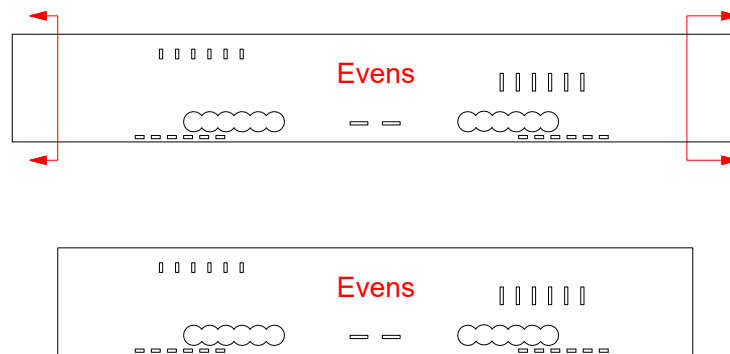




## Big Diesel Bogie

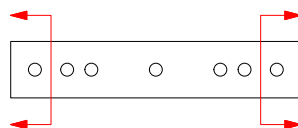
If the frames need to be modified to fit the body, this is best done when they are straight from the fret. Decide which holes will be used for the axles, see below, then trim the ends to length and make any cutouts in the top edges.



Cut off the ends of the chassis sides to suit the length of your body, measure it carefully as the overhang at each end is often different.

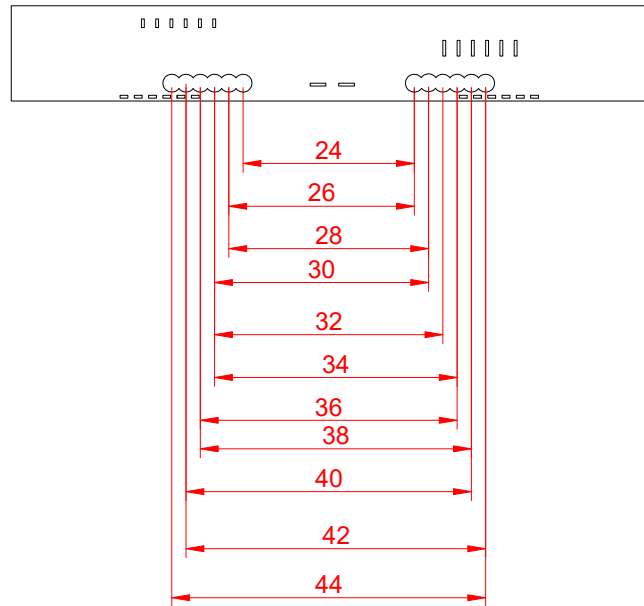


Cut out any sections required to fit in your body, you can go down to within 3mm of the bottom and almost up to the spacers if needed.

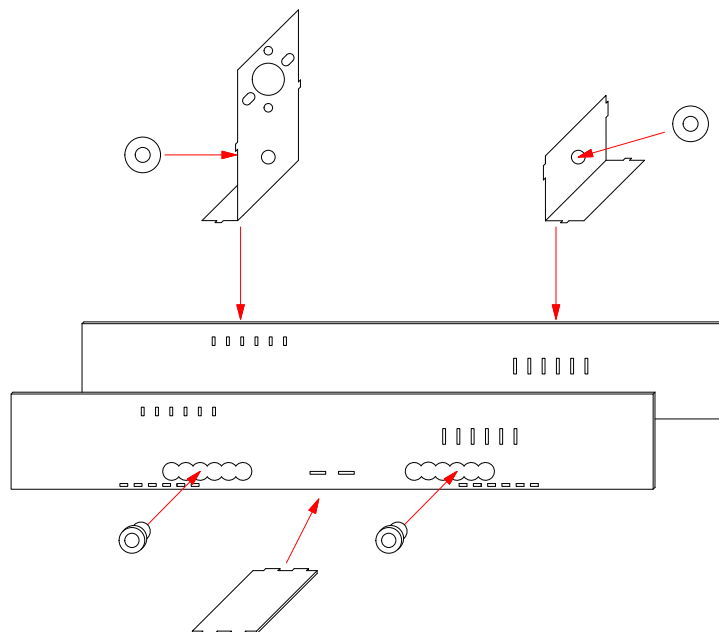


Cut off the ends of the support plates to match the internal width of your body but do not fit until later.

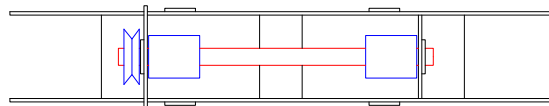
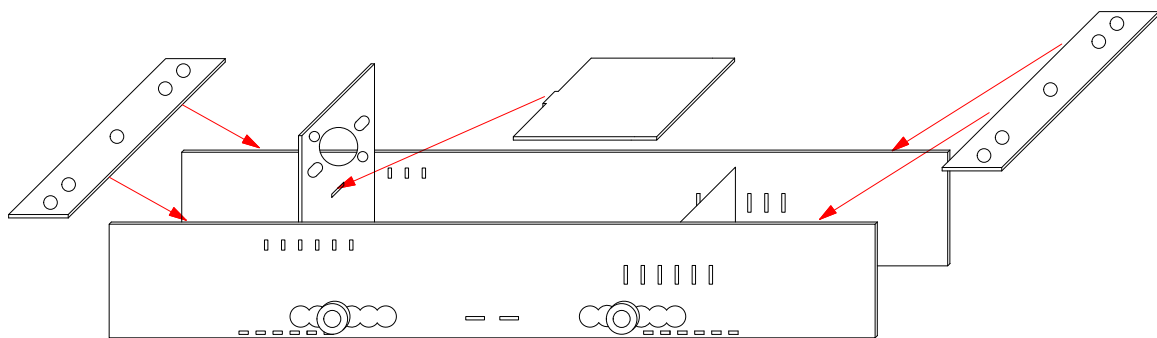
Select your wheelbase and fit the bushes in the holes to match. The holes are spaced at 2mm intervals, the one shown here is even numbers from 24 to 44mm, the other option is the Odds chassis that covers 25 to 45mm.



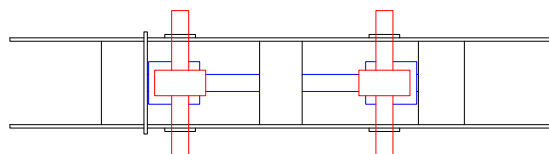
Solder the bushes first then select the spacers for your gauge 12, 14, 16.5 or 21mm and solder in place, add the reinforcing washers last. The bottom spacer is for the pcb and can be sprung into place and soldered last. The bushes are a push fit and are to be fitted with the heads outside, make sure the frames finish as a matched pair of opposites before assembling.



The motor mount is optional and cannot be used with larger motors, fit it in the slot and solder to the frame tops. The 2 side tags are for 21mm only and can be broken off for narrower gauges. The body mounting strips can be fitted anywhere on the top edges where they do not foul any other parts, fit them last after the bogie is running and tested.

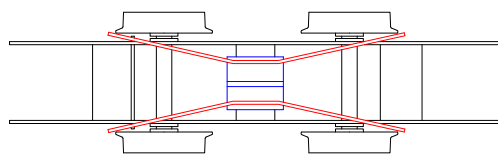
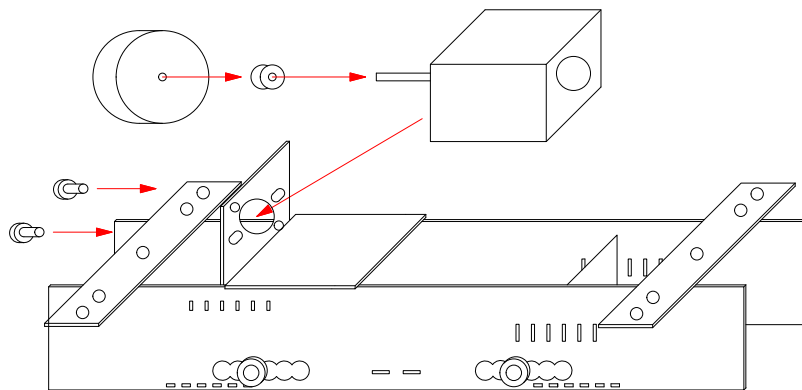


Top view showing worms and pulley in blue and layshaft in red. Above is a 14mm version, fit both pulleys at the same time to ensure they line up.



View from underneath showing the layshaft and worms in blue and the axles and gears in red. The gears, worms and pulleys are fitted with threadlock, if you make a mistake, the bond can be broken by applying heat with a soldering iron for a second attempt.

Use whichever screw holes suit the motor, they will need easing with a fine round file, the motor can be glued to the base if you fitted it. If you fit the motor with the tag marked +ve on the left viewed from the rear, the wires will connect to the pickups on the same side for normal model train running directions. The wire supplied is self stripping enameled copper, tin with flux and a hot iron at the end and the enamel will burn off as it tins. Fit both pulleys so they line up and test the chassis before fitting the flywheel as the motor cannot then be removed easily. Double ended motors can have the flywheel on the other end if there is room in the body.



2 options for the pickups. Above shows a gapped pcb under the center spacer with PB wire rubbing on the back of the wheels. Below shows a separate pcb on each side with a PB wire rubbing on the wheel treads. Both methods work well but the top one is not so good with wheels smaller than 10.5mm as the pickups will be very close to the track.

