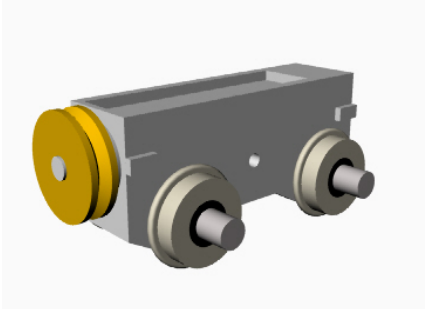
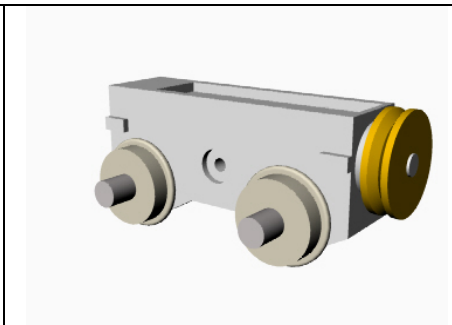
Assembling the drive unit (3D printed type block)

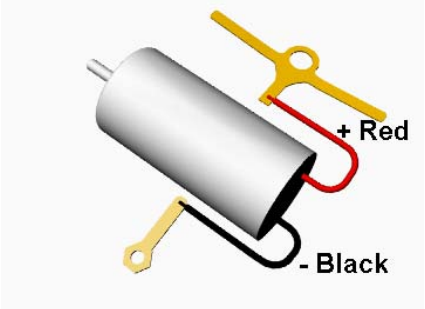
Note: Drive with extended axles shown. Your drive may vary slightly but these instructions apply to all 2 axle units.



1. The drive unit is supplied part assembled as above and is best painted before attaching the motor and pickups. Do not however paint over the motor mounting recess on top at this stage.

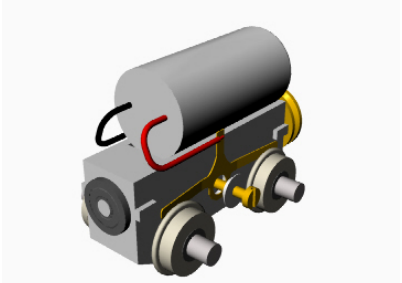


2. One side of the housing has a small counter bore to accept the insulating bush for the pickup on that side. As these drives can be mounted with the drive pulley to the rear or the front of the engine the motor polarity is selected by the user.

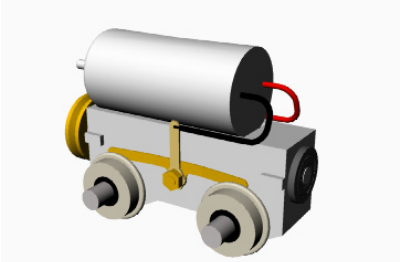


3 When unit is mounted with the pulley to the rear of the engine the above polarity will cause the model to run forward on conventional positive powered right hand rail. When unit is mounted with pulley to the front the above polarities must be reversed to maintain conventional running.

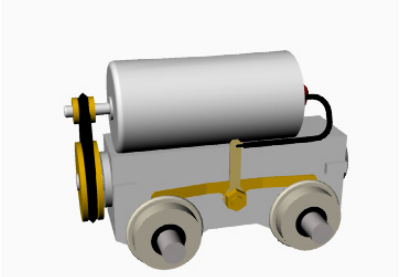
4. The pickups should be formed to stand off from the housing by a minimum of 1.5mm before fitting. Attach the motor using super glue or epoxy and allow to set before attempting to fit the pickups.



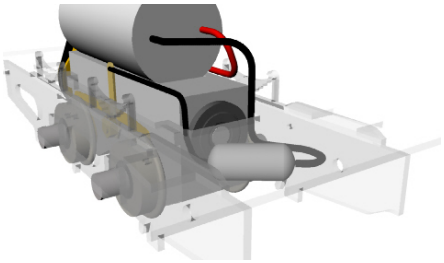
5. Thread the insulating bush part way onto the 14BA screw and assemble the left hand pickup as shown. To facilitate fitting of the right hand pickup push the bush fully home but not the screw.



6. Position the right hand pickup and push home the screw. Attach the lead from the motor and fasten with the nut.



7. Fit and align the pulley and secure with Loc-Tite or similar, allow to set before fitting belt.
The chassis can now be test run.



8. The motor is rated at 10v. With care it can be run on a pure 12v DC system, it is however recommended that a 15 ohm resistor be fitted in series with the motor. This can be mounted above the running plate or below the plate if space is limited.

9. Lubrication.
The non-drive end layshaft bearing is self lubricating molydenum disulphide impregnated nylon and requires no lubrication.

The driven end layshaft bearing is a sealed stainless steel ball race and requires no lubrication.

The worm wheels can be graphite lubricated by dragging a soft graphite pencil lead over them.

The main axle bearings should be lightly oiled using a proprietary plastic friendly oil for models

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