## loco kit ALF

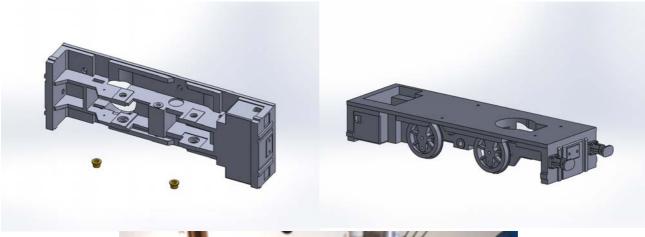
Thank you for buying this Loco kit. Please read all the instructions before assembly.

The first thing to do is to rub down all the parts you are going to paint with sandpaper and a small file in awkward places to get the worst of the grain off. Then spray paint with Halfords grey primer. Rub down with 500grit wet and dry. Spray primer again and rub down again until you get a smooth finish. Then paint the colour of your choice (Halfords paint). If there is any marks or imperfections rub down again with wet and dry. (Gloss paint will show this) then repaint.

When applying rivets at 5mm intervals before the top coat glue the rivets on with liquid poly. When dry paint with primer again and finish with top coat.

## **CHASSIS**

start off by fitting the 4 3/16 brass bearings and 2 1/8 bearings in the centre for the crank. Insert the two axle from the slaters wheel sets. Add the wheels to the axle as slaters instructions making shore that the crack pins are 90 decrees from left to right make sure the wheels true freely. (SEE BELOW FOR GEARBOX ASSEMBLY). you will see a small hole in the chassis and gear box push in a 26mm long brass wire this will hold the gearbox in place. next Screw small crack pins in to front and rear wheels. Next your need to cut the 1/8 axles to length take the outside cranks and fit a 2mm c/s bolt from the rear and a grub screw. then fit to the chassis leave loss at the time. Take two coupling rods clear holes to accept the brass crank pin bush from the wheel sets and the centre bush. Fit the coupling rod to the front and rear wheels using the 10BA nut and washers use a 2mm nut for the centre bush.





## GEARBOX AND MOTOR 6 TO 15 VOLT

Test fit the 2 3/16 brass bearings from the outside of the gearbox housing take the axle and fit in to the bearings then glue the bearings in places with superglue.

test fit the brass gear on the axle, and remove any burrs from the hole for the grub screw with a fine file.

Hold the brass gear in the centre of the gearbox, slide the axle in though one bearing, through the gear, and out of the other bearing.

Centre the axle so that equal amounts protrude from each side, then tighten the grub screw on the gear.

Test fit the steel worm gear to the motor axle, with the grub screw closest to the motor. Remove any burrs from the hole for the grub screw with a fine file if necessary.

Tighten the grub screw to fix the worm gear on the motor shaft.

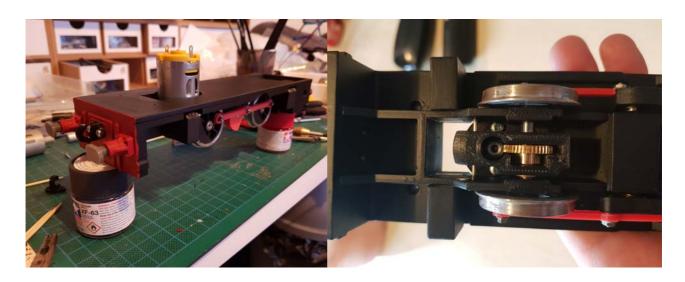
Push the motor unit in to the back of the housing, so the steel gear meshes with the brass one. Insert the 2 x 2.5mm cross-head screws through the housing and into the motor, and loosely tighten them. Oil the bearings and the gears with light engine oil.

Test the motor with a low voltage (say 3v) initially, to ensure correct meshing of the gears. The slots in the housing allow movement of the motor to get the right meshing of the gears for smooth running.

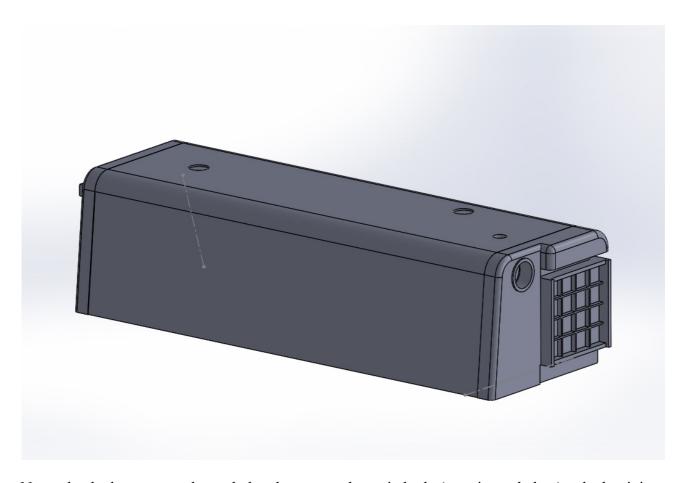
Tighten the 2 cross-head screws – and test again on full operating voltage, in forward and reverse directions.

The assembled motor / gearbox / axle unit is then ready to be installed in the model.

Next fit the buffers by glueing to the recess on the chassis. Fit the tanks to the side of the chassis you have 2 front and 2 back will only fit one way.



Next take the main body and glue on the front and rear panles onecs dry sand and paint black



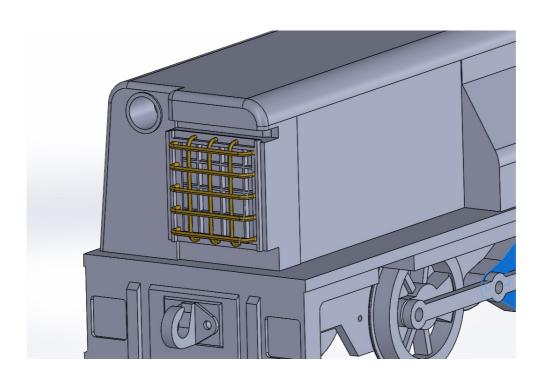
Next take the laser cut panles and glue them on to the main body (see picture below) gule the rivits and louvre as shown



use some brass wire to make handles and hinges mask up the body where it is black and paint the body the color of your choice



take the front grill bend up the brass wire to make up the gill as shown take your time in doing this. paint the grill red and glue on to the front of the main body





with the kit you have pins to make up the handles for the contrals (see picture below)



make up at seat using the laser cut wood parts shoud look like this fit the rest of the parts as seen on the pic below



