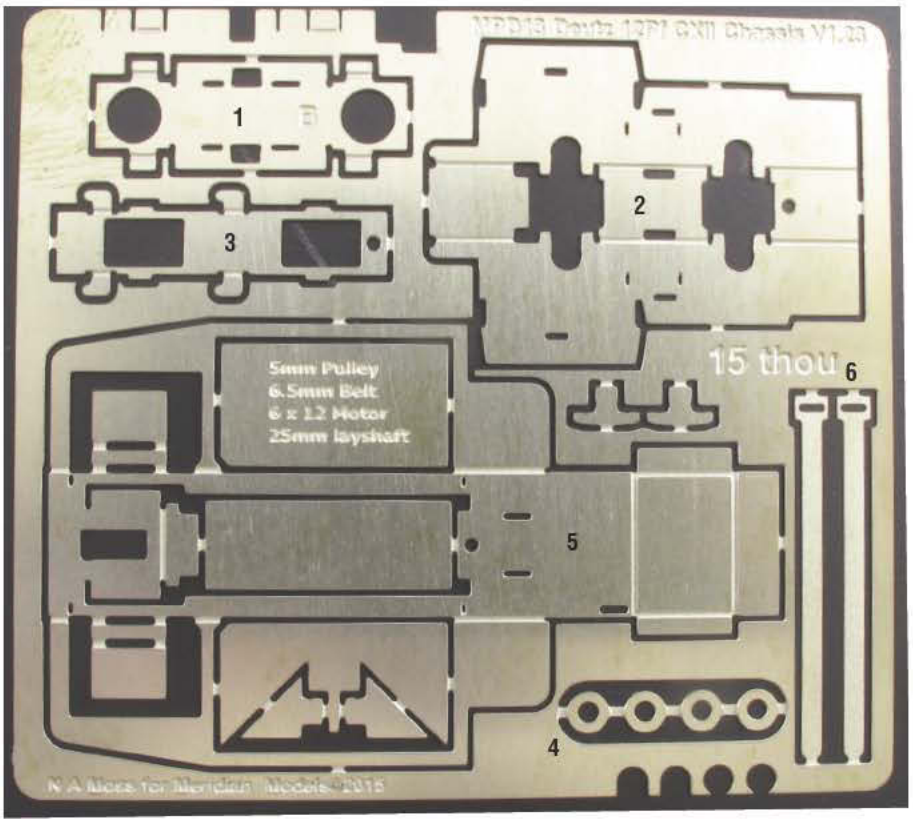
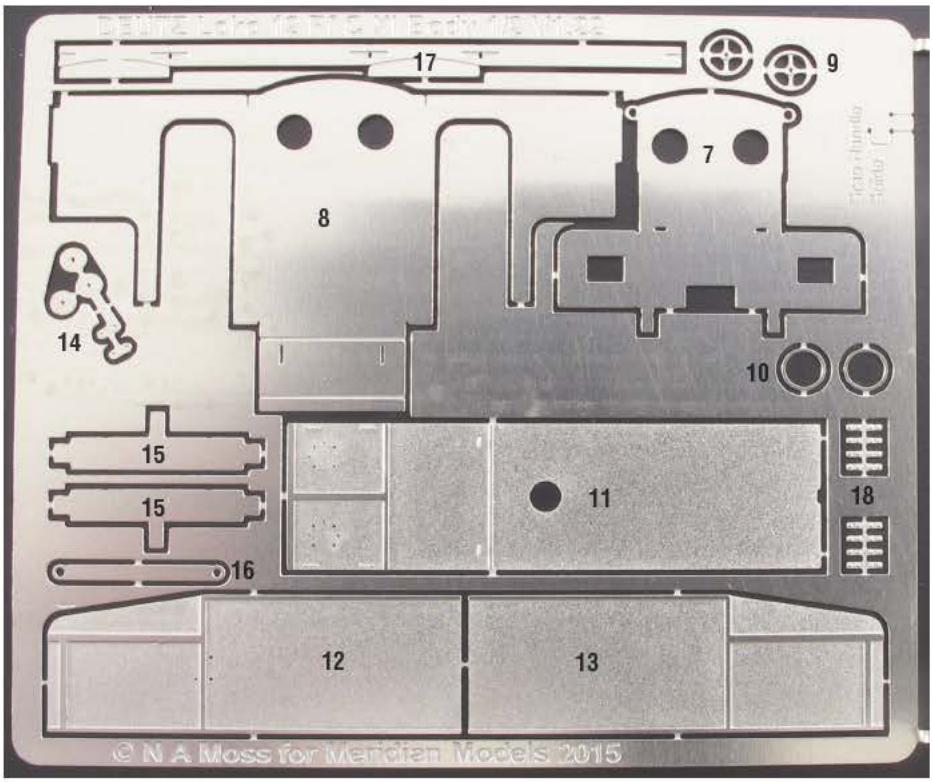
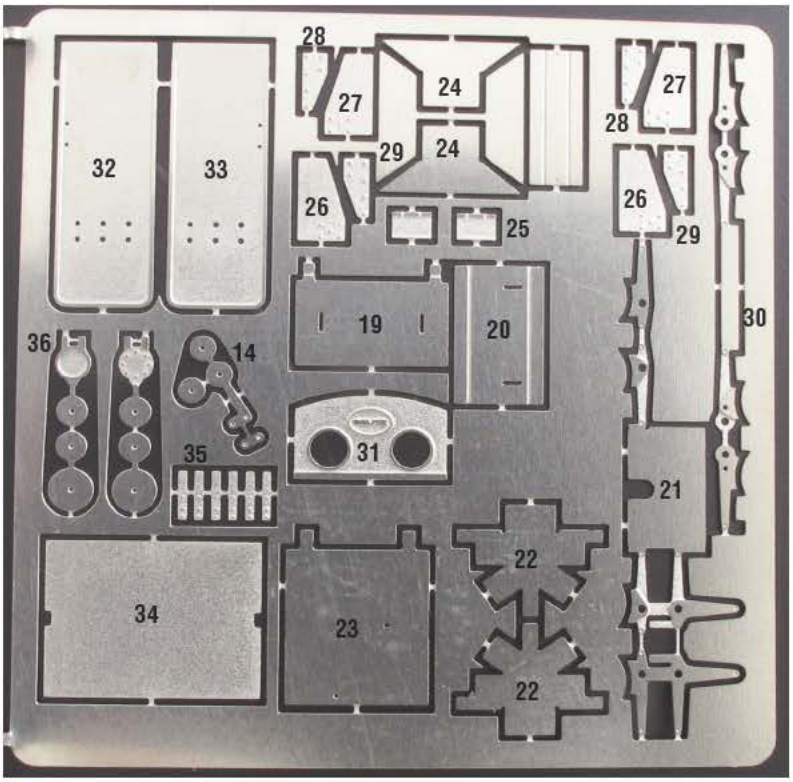
Neil Sayer Scale models

009 Deutz


1
2
3
5mm Pulley
6.5mm Belt
6 x 1.2 Motor
25mm layshaft
15 thou
6
5
4
N A Moss for Meridian Models 2015


17
9
7
8
14
10
15
15
11
18
16
12
13
© N A Moss for Meridian Models 2015



Introduction

Please read these instructions carefully, look at the photographs and familiarize yourself with all of the parts. This kit is made up from etches in nickel silver and brass. All etched parts must be carefully cut out using either a craft knife with the fret supported on a strong flat surface or a pair of very fine modelling side-cutters and the cusp removed. Only remove the parts as you need them this saves time looking for missing parts. Although the etched parts look flimsy, once soldered up have great strength. Please note that all of the half-etched fold lines appear on the inside of the fold, unless told otherwise.

Tool list
100W soldering iron (as the model gets more parts added on it will need more heat to allow the solder to flow).

Various solders (the pilot model was built using 145° solder and power flux, make sure you rinse off with water once soldered up)

Cutting broaches small drills and a 12ba tap

Craft knife

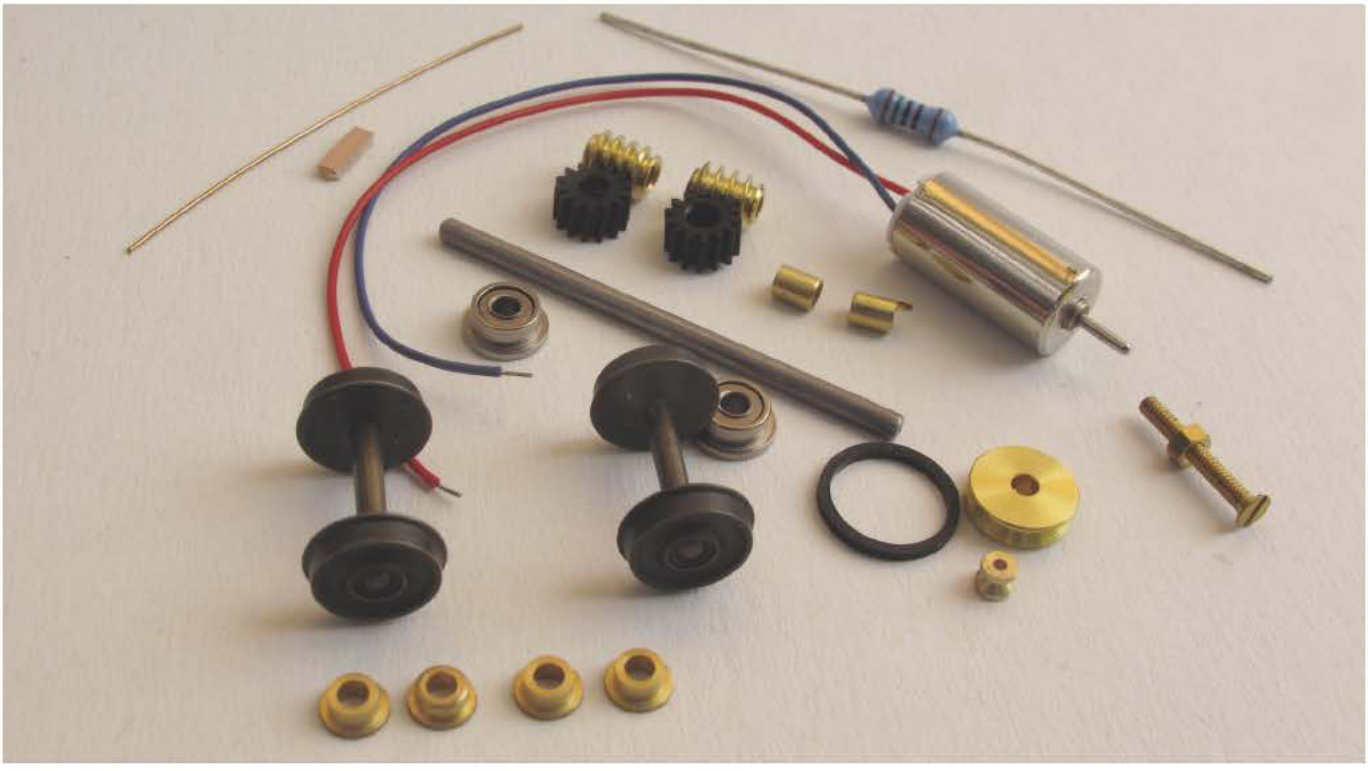
Miniature pliers flat and round nosed

Swiss needle files

Tweezers

Jewellers screwdrivers

A small mini drill of the dremel type



Chassis

Fold up part 1 (*photo 1*). Fold down the tabs on the chassis etch (*photo 2*), this is the jig for spacing out the bearings worms and large pulley wheel on part 1. (*photo 3*) You should now have an assembly that looks like this (*photo 4*).

Fold up part 2 like this (*photo 5*). the pulley/worm assembly is the slotted into the top of part 2 (photo 6) it should click into place, fold round the tabs and you should end up with an assembly looking like this (*photo 7*). Note the worm shaft is supplied over length, leave this at the pulley end and will need to be trimmed off, although this can be left on to aid with running in the chassis to remove any binds.

Now clean out the cusp in the slots on the edge of the chassis carefully using a craft knife (*photo 8*). These are used to form the slots in the axel bearings.

Place a bearing into the slot (*photo 9*) and using a triangular file run this over the bearing 3 times just to file a slot on the shoulder and not a complete flat (*photo 10*). Place the bearing in the other slot with the flat you have just filed at the bottom (*photo 11*) and run the file over 3 times. Because you have only put a slot on either side of the bearing this will allow the bearing to fit into the axel slot on part 2 without falling out side ways and will not rotate in the bearing slot.

Carefully remove the insulated wheel from the axel. Loctite the nylon gear wheel to the spacer bush. Now slide onto the axel these components in the following order a washer part 4, bearing, gear, bearing and then press on squarely the insulated wheel (*photo 12*) also see diagram on page 13.

Fold up the tabs on the keeper plate part 3 (*photo 13*).

Fold up sand boxes part 22 (*photo 14*) and attach to the chassis *(photo 15*). Fold up part 24 and attach to the top of the sand boxes (*photo 16*) add part 25 (*photo 17*) an repeat on the other side.

Fold up brake gear, part 21 (*photo 18*) and attach to the chassis (*photo 19 and 20*) Also see photos 21 and 22.

Cut off the part of the brake gear that extends beyond the chassis (*photo 23*) insert the wheels making sure that the insulated ones are on the same side and add the keeper plate (*photo 24*).

Solder a pick-up wire to the small piece of paxolinalong with one of the motor wires. Be carefull not to use to much heat (*photo 25*).

Thread part 6, the motor clamp, through the slots in the chassis and attach the motor. Super glue the paxolin wiper pick up onto the top of the sand box on the insulated wheel side. Then solder the other motor wire to the resistor and the resistor to the chassis. (*photos 26, 27 and 28*) Attached the small pulley wheel to the motor alining it with the main pulley and add the drive belt. You should now have a working chassis.

Body (cab)

Fold up part 5 (*photo 29 and 30*) this forms the front retaining slot for the chassis and the mounting plates for the balance weights, add the 12BA retaining nut (*photo 31*). Fold up the rest of part 5 to form the cab floor (*photo 32*). Fold up the side that form the bonnet frame (*photo 33*). Attach this to the chassis. (*photo 34*)

Glue together the Bonnet weights (*photo 35*) and test fit the inside the bonnet (*photo 36*). Sme filing will need to be done to make sure that is is a good fit and doesn't short the chassis out.

Fold up the cab front part 7 (*photo 37*) and fold up part 23 the half etched lines on the inside help to form the curve (*photo 38*), fit these parts together using the tabs on part 23 and the slots on part 7 (*photo 39*). this is then attached to part 5 (*photo 40*). Test fit this to the chassis. (*photo 41*).

Fold up part 14 to form the brake handle. The two discs are used to make up the balance weight for this. Double up the handle wheels part 9 together. Using a peice of wire for positioning add both the hand wheel and the brake leaver (*photo 42*).

Solder part 19 the front buffer beam (*photo 43*). Emboss on the rivet detail and fold up part 20, the buffer beam detail (*photo 44*).

Emboss the rivet detail and fold up part 8, the cab rear and sides, to form the rear buffer beam (*photo 45*) fold the sides and attached the cab front (*photos 46, 47 and 48*).

Fold up the coupling, part 15 (*photo 49*) and attach to the front and rear buffer beams (*photos 50 and 51*).

Insert chassis weight (*photo 52*) and fold up bonnet part 11 (*photo 53*) and solder this to the body (*photos 54 and 55*).

Solder on the cab front part 31 (*photos 56 and 57*) and bonnet sides parts 12 and 13. Insert part 16 rear top of the cab, this along with the bracket at the front of the cab is for the door sliding rail.

Take part 17 and make sure the curve out line of the roof is etched all the way through, if not just carefully cut with a craft knife. Roll the roof part 34 so that it goes through the curved etch line in part 17 (*photo 58*). Fold the frame to form the box that sits on top of the roof (*photo 59*), add the corner brackets part 18 to the roof (*photo 60*). Solder the roof onto the cab (*photo 61*).

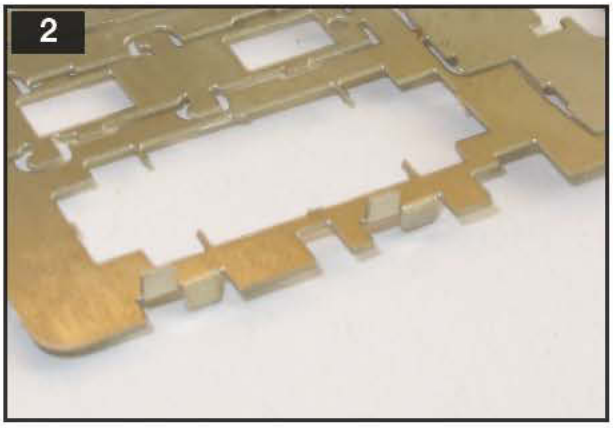
Solder on the door slider backets part 35 to the top of the door part 32 (*photo 62*) bend the brackets at right angles (*photo 63*). Using the end of the tweezers form the curve to the bracket (*photo 64*) the two holes for the handles go to the back of the door. Solder the door rail into the brackets above the door (*photo 65*).

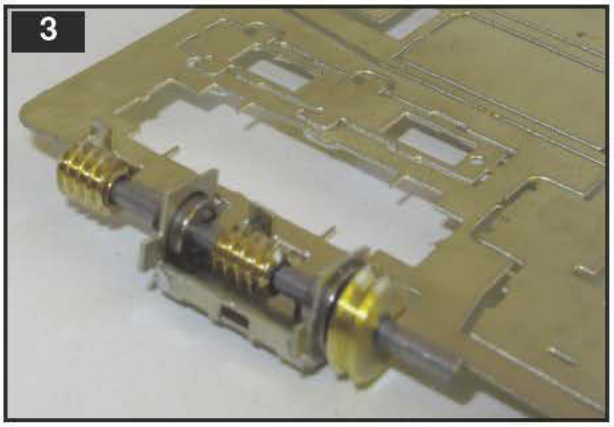
Using part 36 make up the water filler cap and fix to the top of the bonnet (*inset photo 66*).

Using the Grab handle guide make up the grab handles from 0.4mm wire for bonnet sides and the doors. Open out these holes to 0.4mm (*photos 67 and 68*).

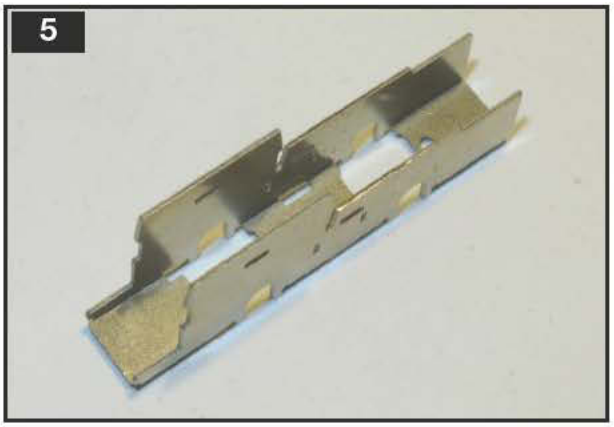
Add the cast balance weights to the tabs coming down from the footplate and the Half-tank to the top of the bonnet. (*photos 69 and 70*)

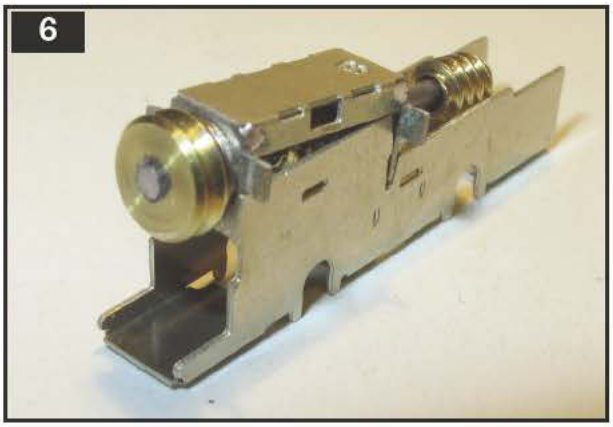

1

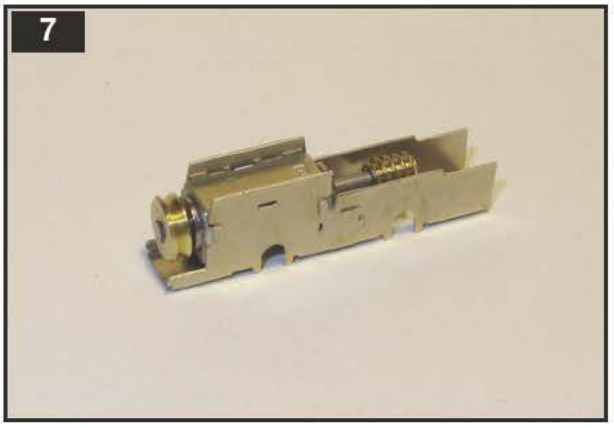

2

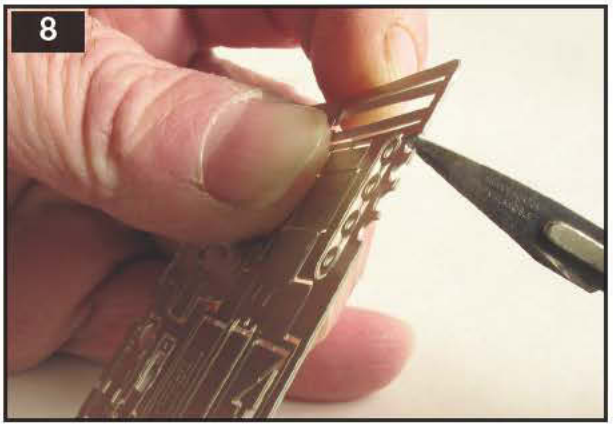

3

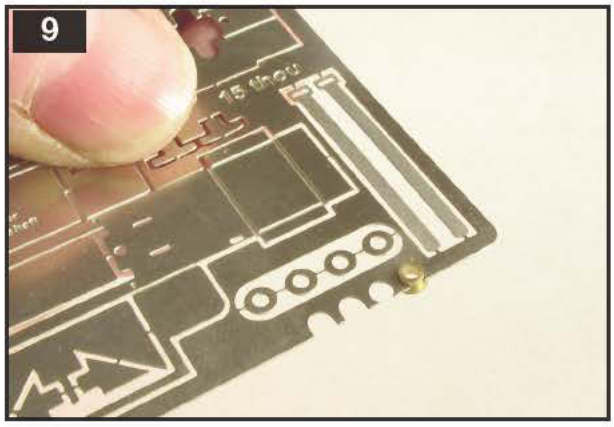

4


5


6


7

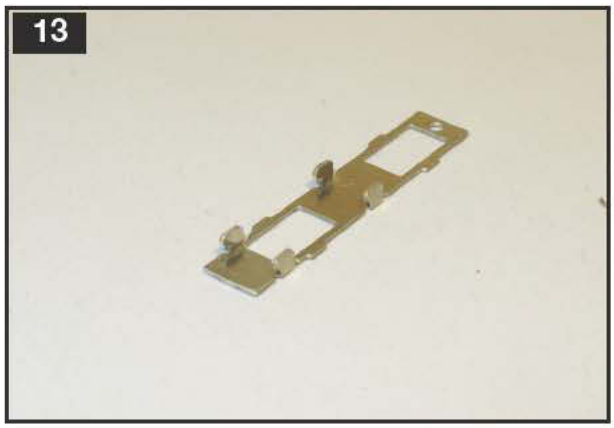

8


9

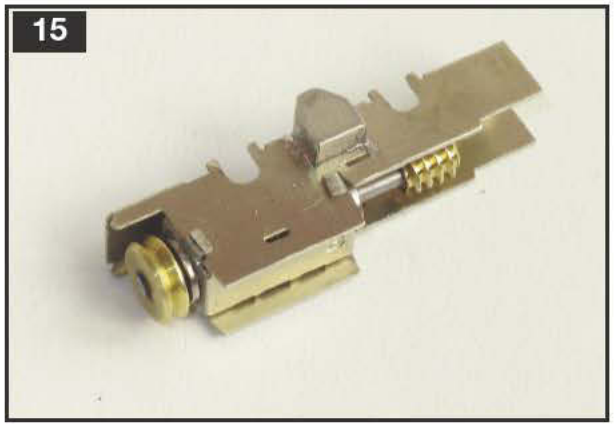

10


11


12

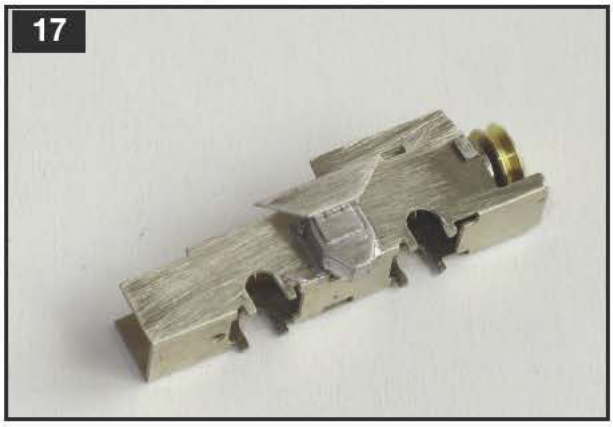

13


14

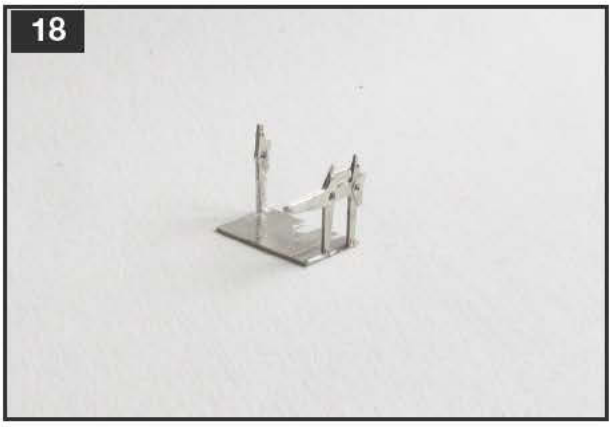

15


16

17

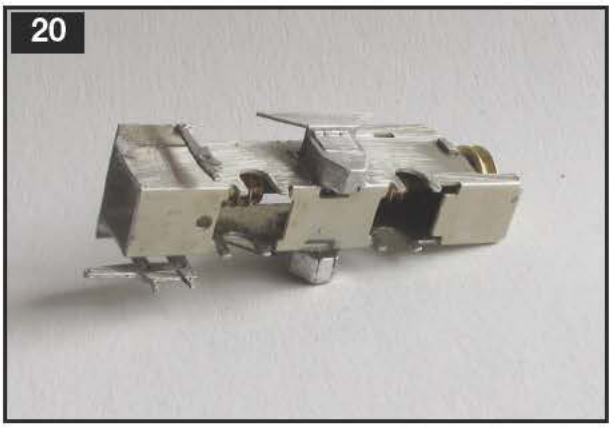


18

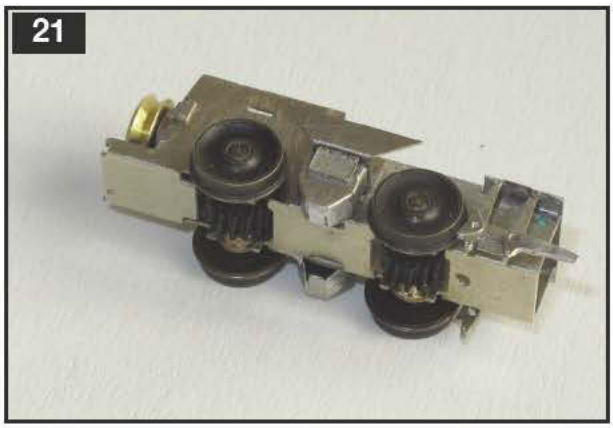


19

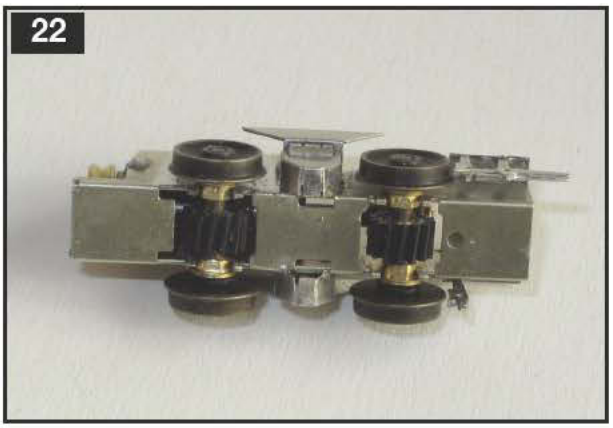
20



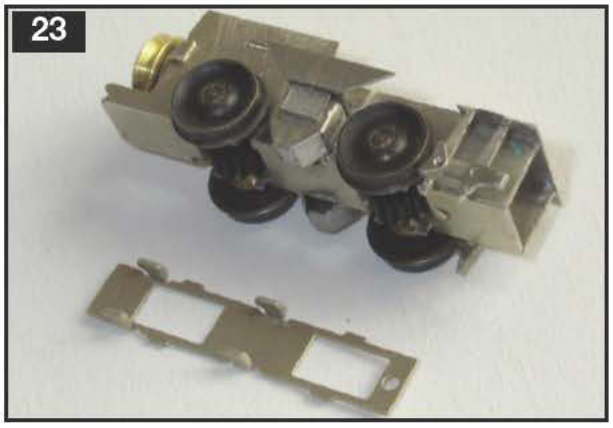
21



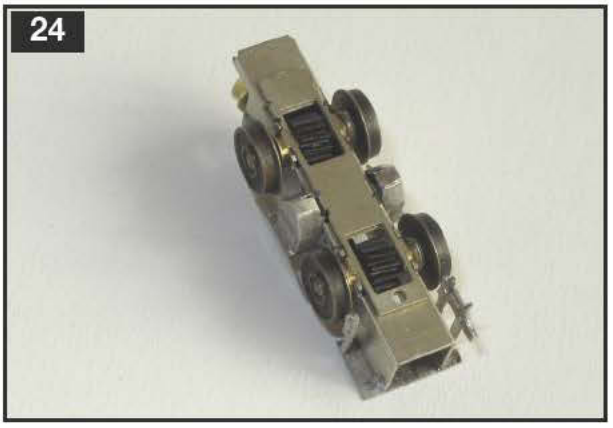
22



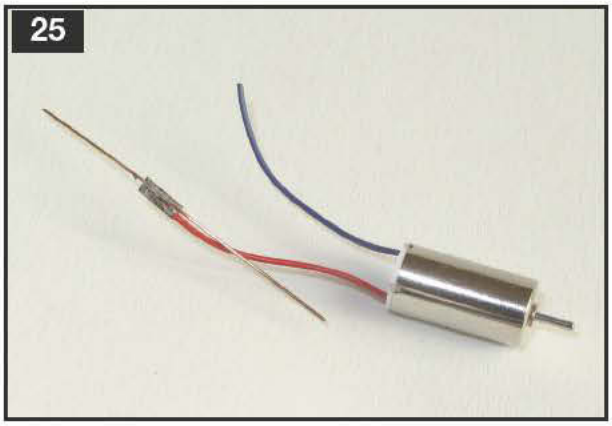
23



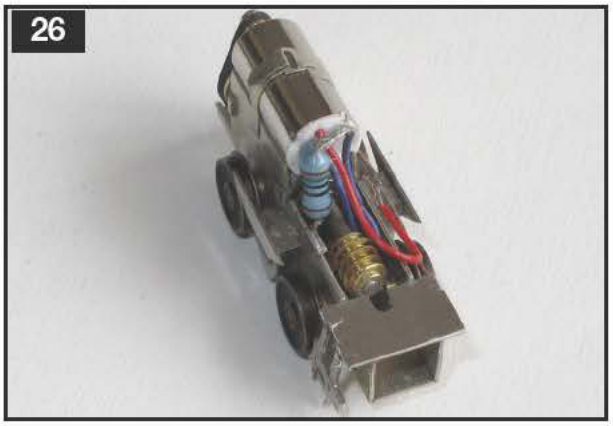
24



25

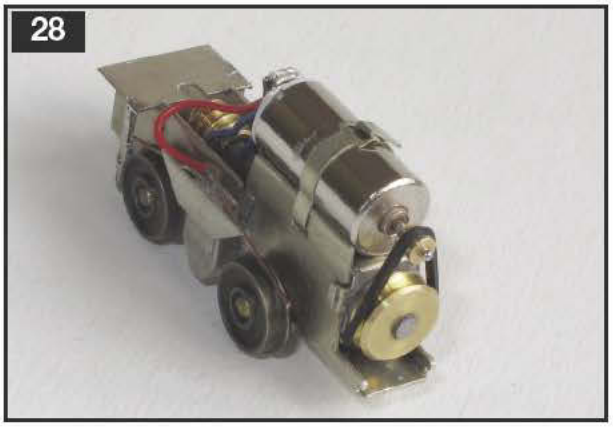


26

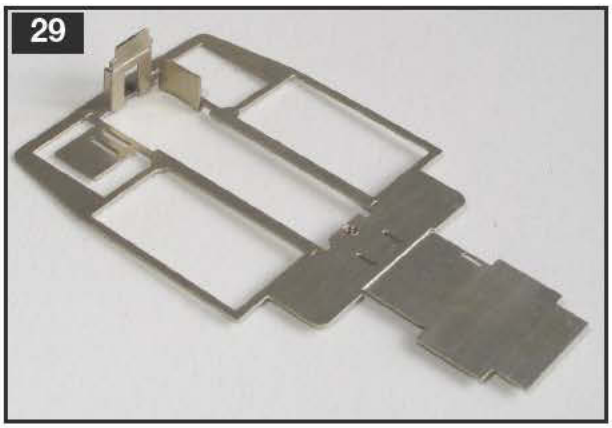


27

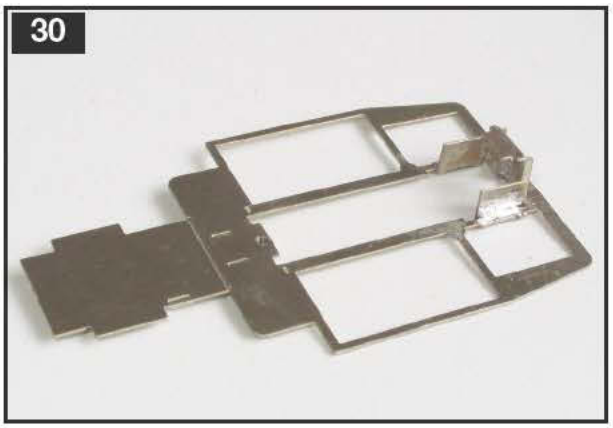
28



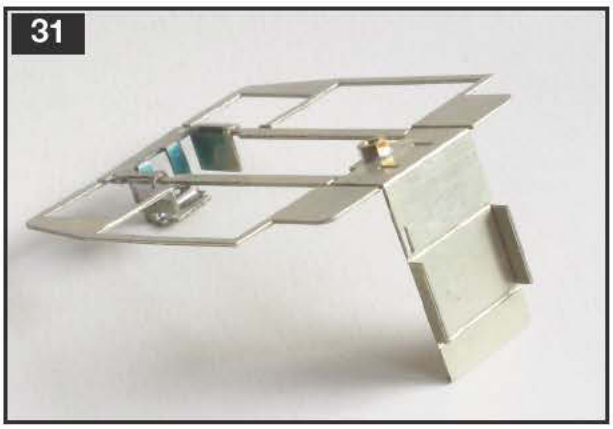
29



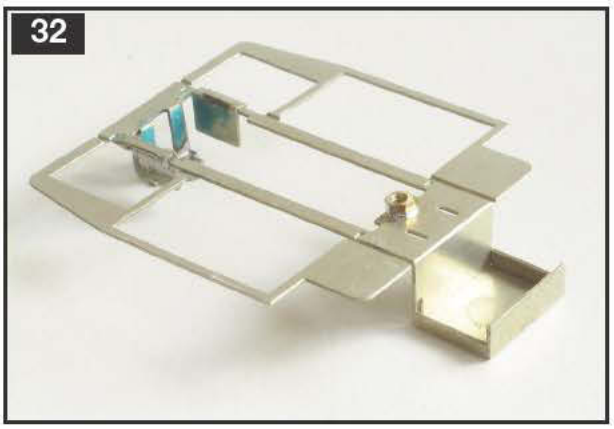
30



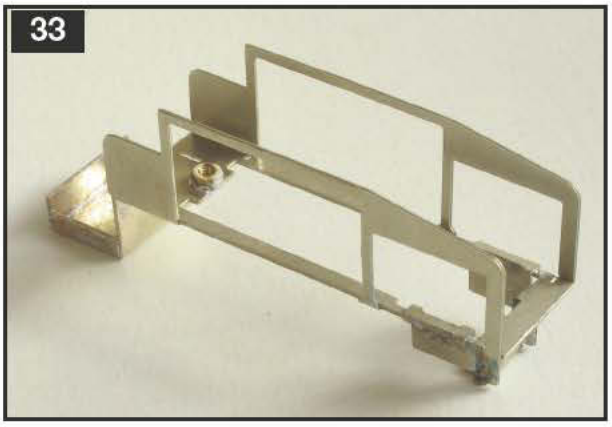
31



32



33

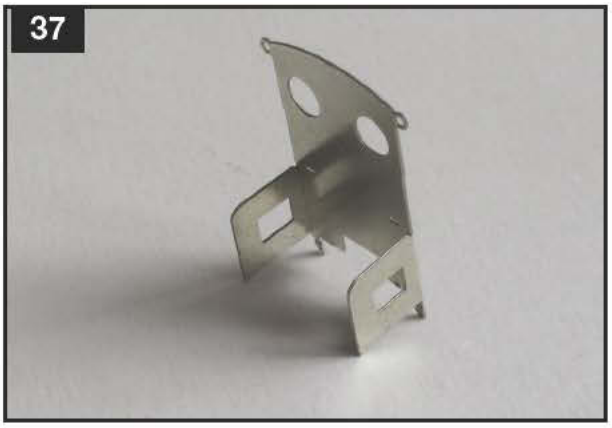


34

35

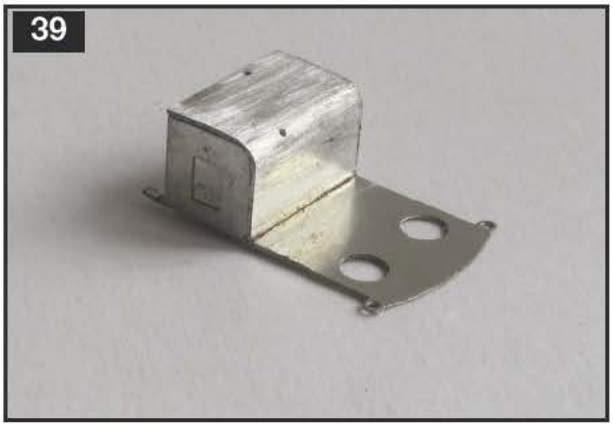
36

37

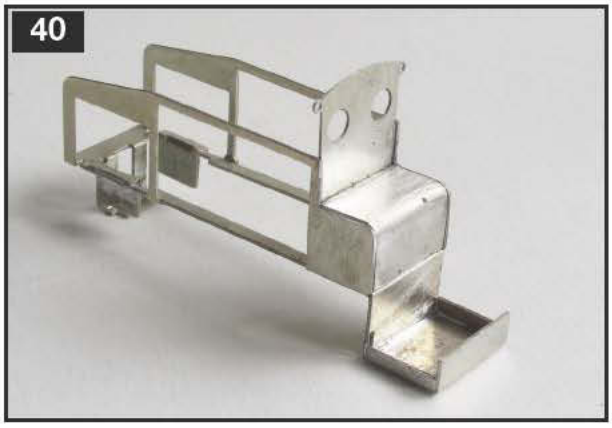


38

39



40

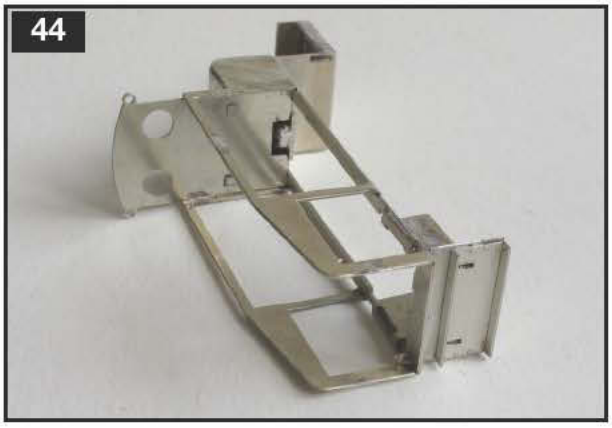


41

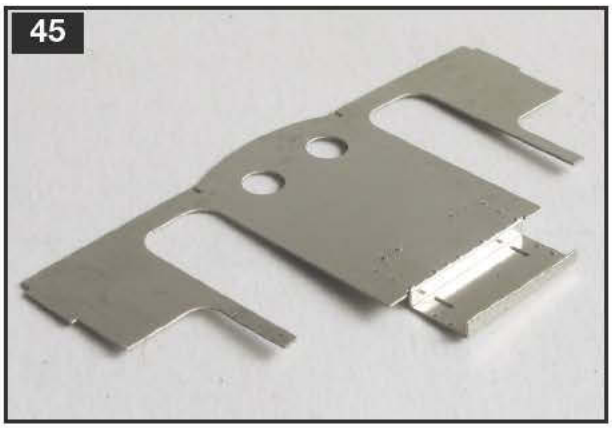
42

43

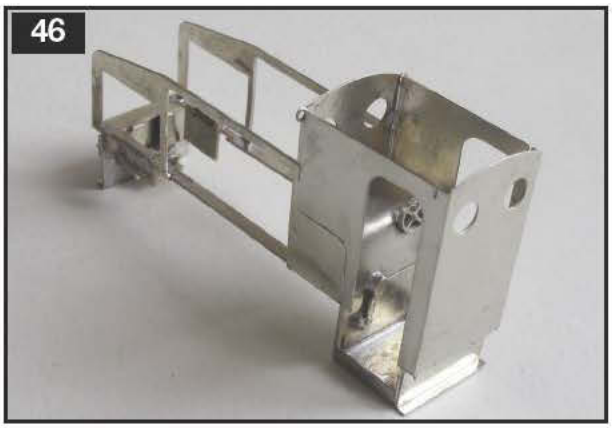
44



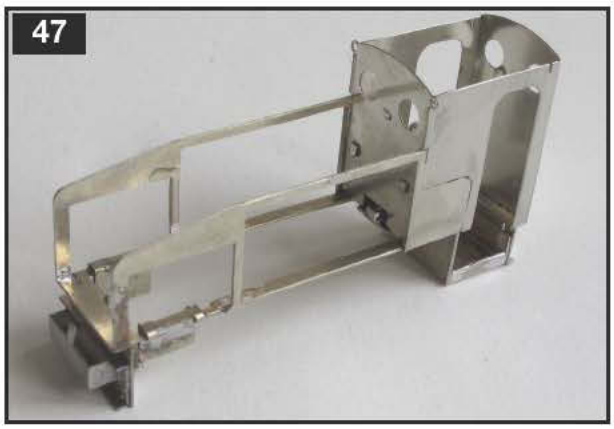
45



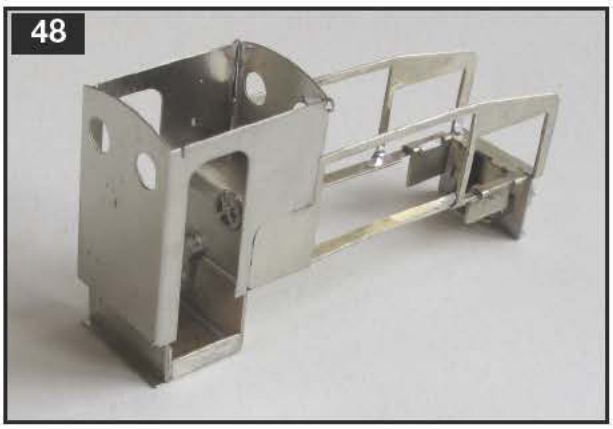
46



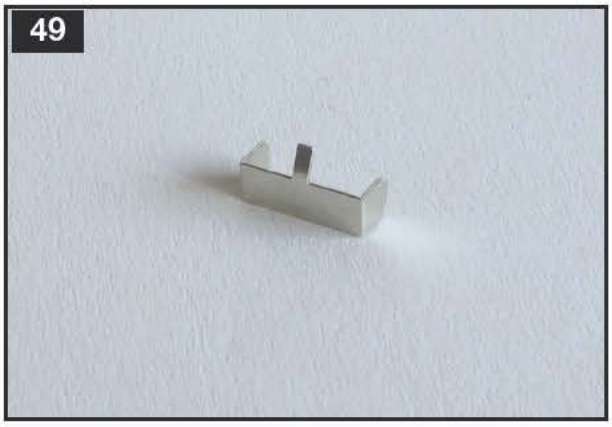
47



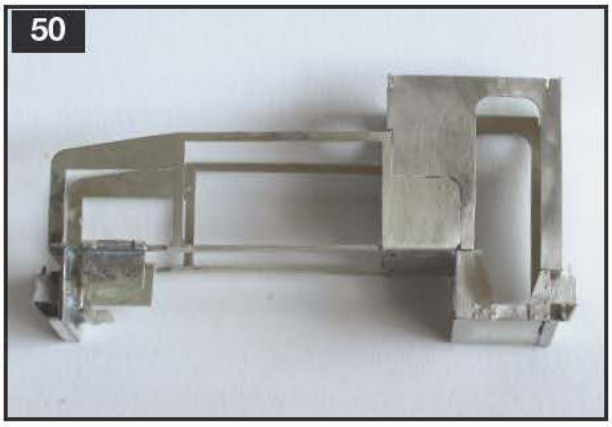
48



49



50



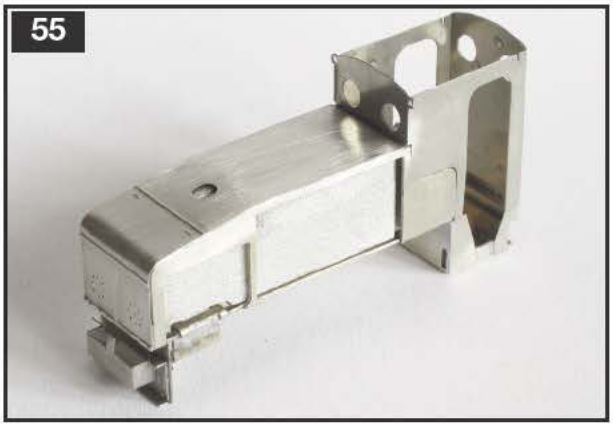
51

52

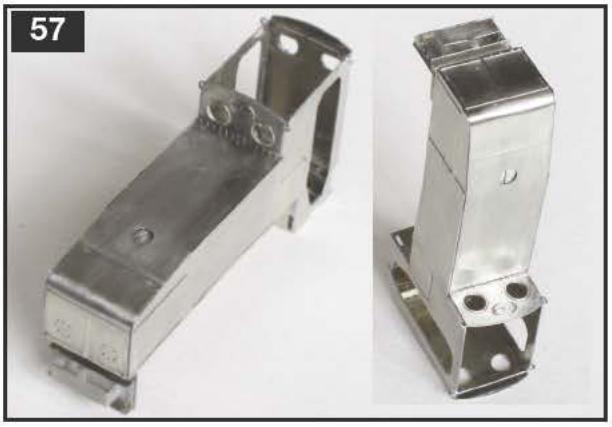
53

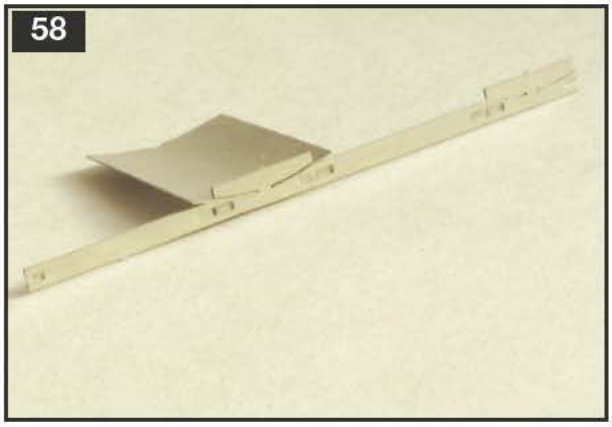
54

55



56

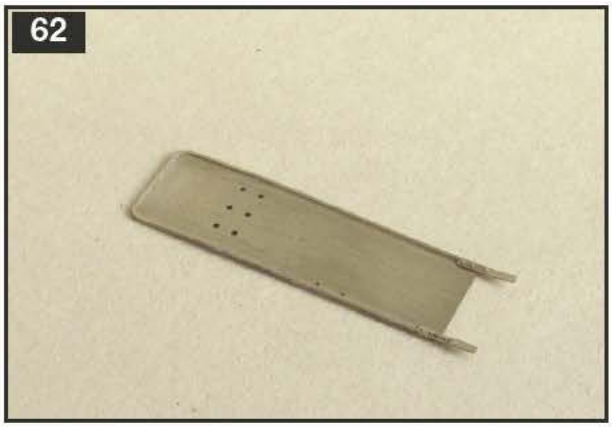

57

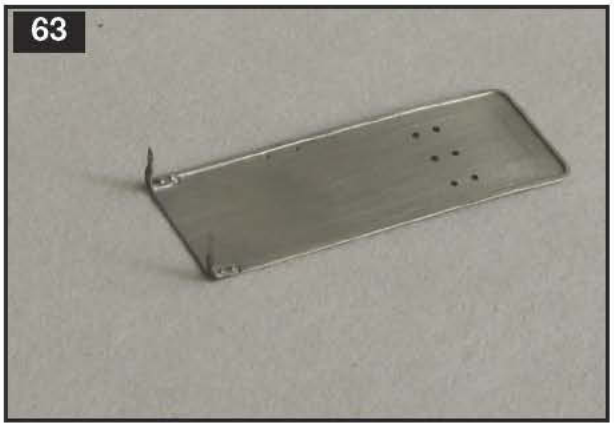

58

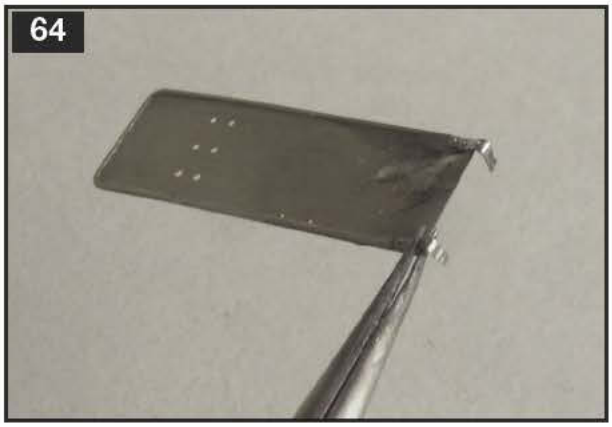

59

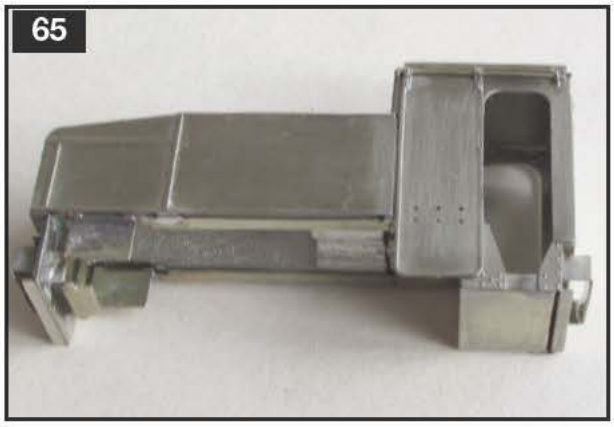

60


61


62


63


64


65

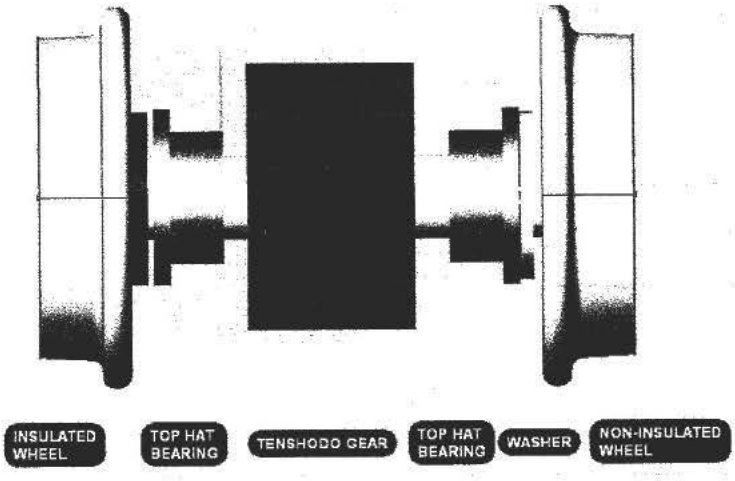

66


67


68


69


70


INSULATED WHEEL
TOP HAT BEARING
TENSHODO GEAR
TOP HAT BEARING
WASHER
NON-INSULATED WHEEL