



FDNY®

FIRE TRUCK TOWER LADDER 9



Pack 05

BUILD INSTRUCTIONS

**STAGE 31: ASSEMBLING A STORAGE
COMPARTMENT**

**STAGE 35: ASSEMBLING THE BOX FRAME
SHELL**

STAGE 32: STORAGE COMPARTMENT FRAME

**STAGE 36: ASSEMBLING A STORAGE
COMPARTMENT AND A REAR DOOR**

STAGE 33: REAR RIGHT WHEEL

**STAGE 37: ASSEMBLING A STORAGE
COMPARTMENT**

**STAGE 34: FITTING THE WHEEL TO THE
CHASSIS, AND ASSEMBLING AND FITTING
THE FRONT BUMPER**

Advice from the experts

 **Please keep ALL unused screws as they will be required in a later stage.**

Please make sure you don't mix up the screws. They look quite similar, but the threads do vary slightly. Using the wrong screws may damage the parts.

When securing parts together using multiple screws, fit each screw loosely to ensure all the parts are correctly aligned before gently tightening them firmly, but not overtight, in the order in which you placed them.

The screwdriver can be magnetized by stroking it with a magnet (fridge magnet, etc.) enabling it to hold the screws and make assembly easier.

If a screw is tight going into a metal part, do not force it as you may shear the head off. Remove it and put a tiny smear of Vaseline, soap or light oil on the thread. That will lubricate it and make it easier to drive home.

During the course of this build, you will receive many pieces that you will assemble immediately – following the instructions in the corresponding stage – and other pieces that you should store safely to one side, for use in future assembly stages.

Left and Right! When building your fire truck, the left or right hand side refers to each side as you are sitting in the cab.



WARNING: Some parts are assembled using magnets. These magnets can cause serious injury if they are swallowed. Keep away from children. If you suspect a magnet has been swallowed, seek medical help straight away.

Stage 31: Assembling a Storage Compartment

In Pack 5, you'll assemble a few storage compartments that will be used for storing some of the essential tools used by FDNY fire fighters. The first compartment includes the ON/OFF switch for operating all the electronics.

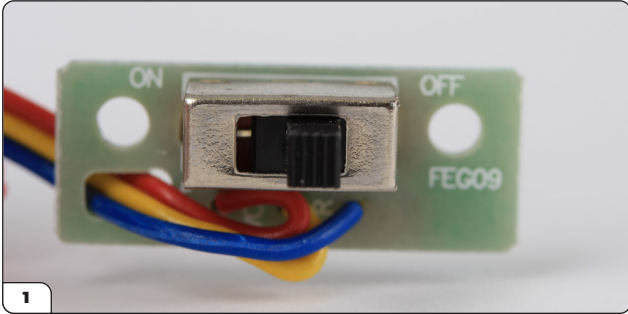
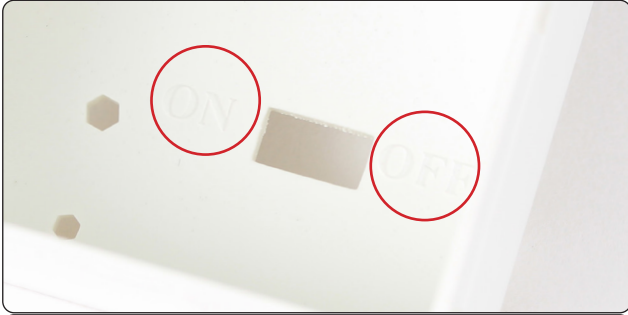


STAGE 31 PARTS LIST

Name
Compartment inner
Shelf top
Shelf bottom
Door handle
Magnet
Left-hand door front
Right-hand door front
Left-hand door back
Right-hand door back
Switch
Type H Screws x3

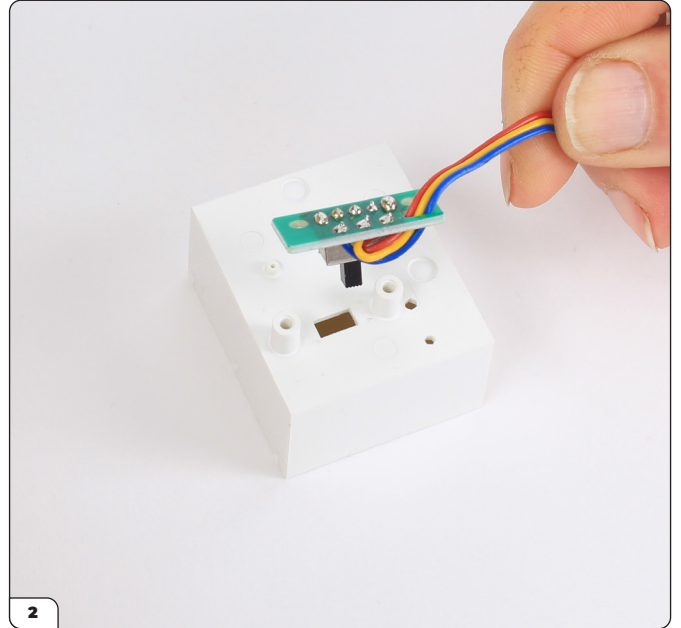


Stage 31: Assembling a Storage Compartment

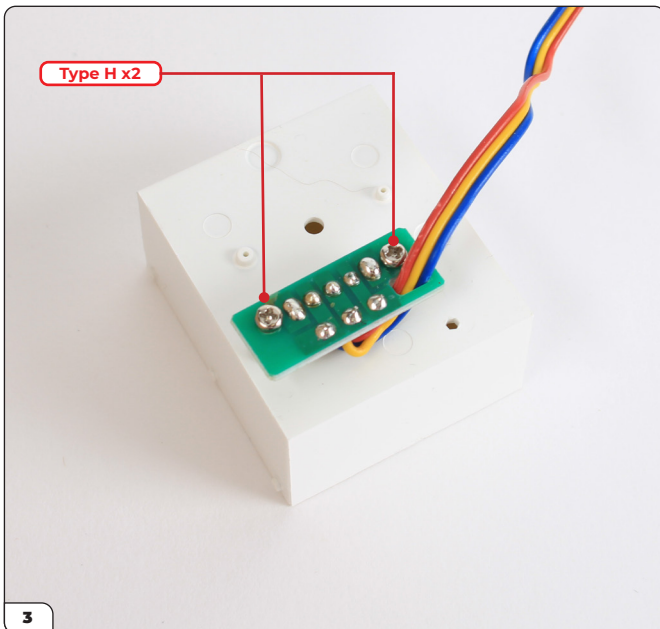


ATTACHING THE SWITCH TO THE STORAGE COMPARTMENT

Take the storage compartment and the switch. Note that they both have a label indicating the ON/OFF position.

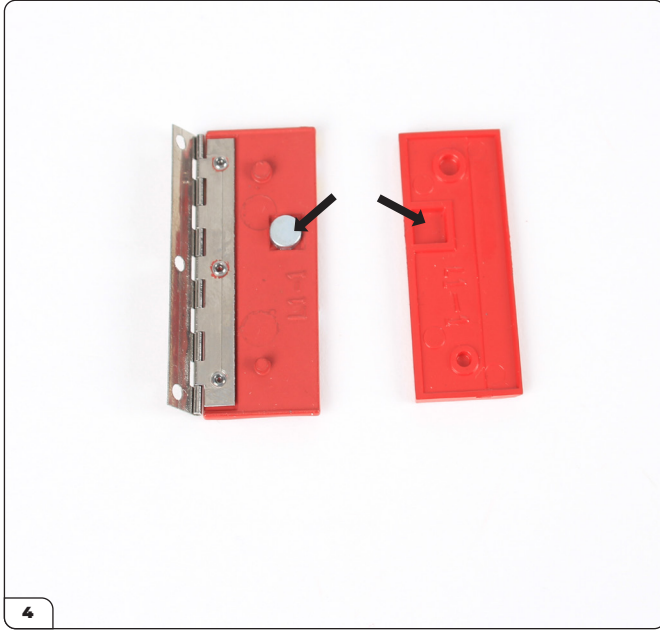


Align the switch at the rear of the storage compartment so that the ON/OFF positions correspond.



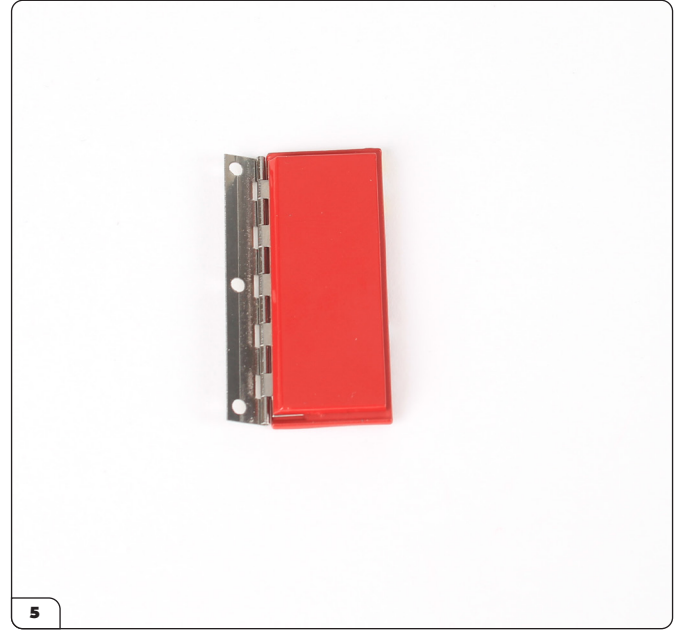
Line up the two screw holes on the switch with the two screw holes on the compartment. Fix the parts together using 2 x Type H screws.

Stage 31: Assembling a Storage Compartment

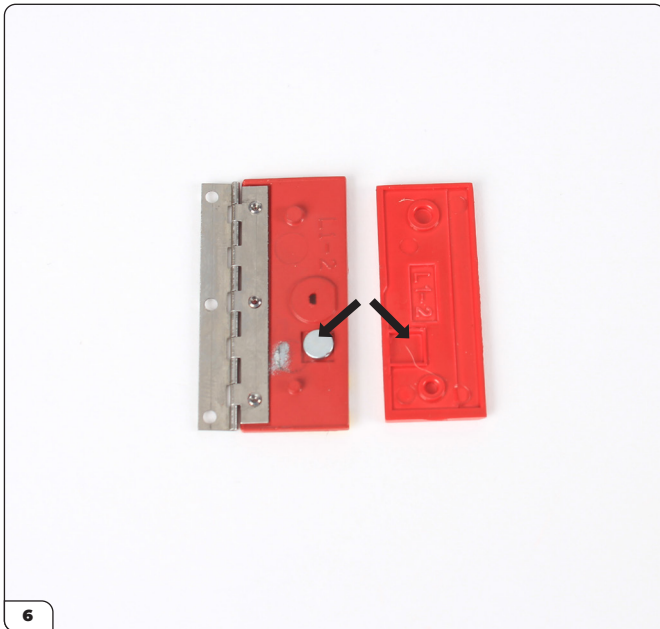


ASSEMBLING THE STORAGE COMPARTMENT

Take the left-hand door front and the left-hand door back noting the square recess for the magnet on both pieces that must be aligned (arrows).



Apply a little glue to the flat surfaces before squeezing the two parts together so that the lugs firmly fit the corresponding holes and there are no gaps around the side edges.



Repeat to fit the right-hand door front and back parts together. Again, check the square recesses for the magnet are correctly aligned on both parts (arrows).



Apply a little glue and check all the edges fit tightly together.

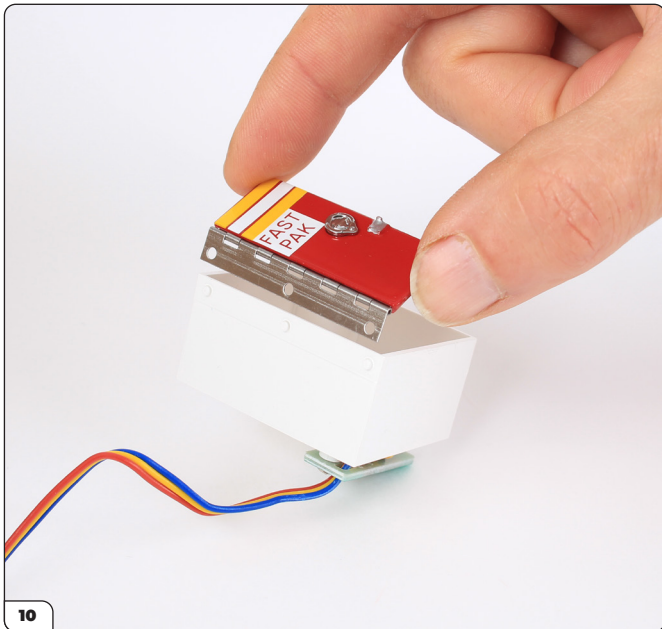
Stage 31: Assembling a Storage Compartment



Apply a drop of glue and fit the door handle to the recess on the front of the left-hand door. This is a D-shaped fitting.



Push the handle firmly into place.

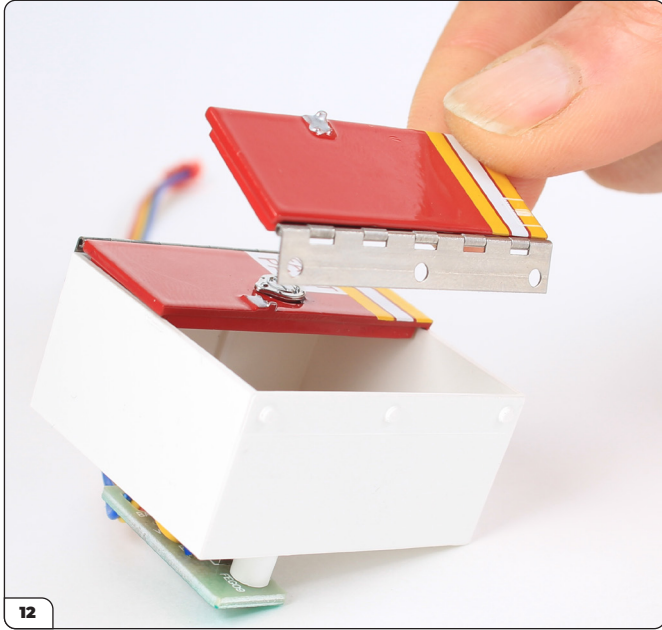


Align the three holes on the door hinge with the three lugs on the side of the compartment. Apply a little glue to the surface around the lugs.

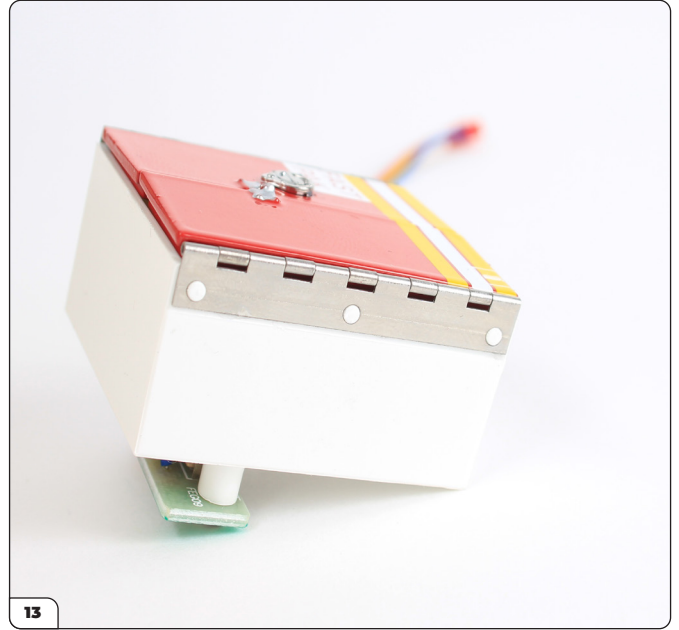


Press firmly into place, checking that the door closes in the correct position.

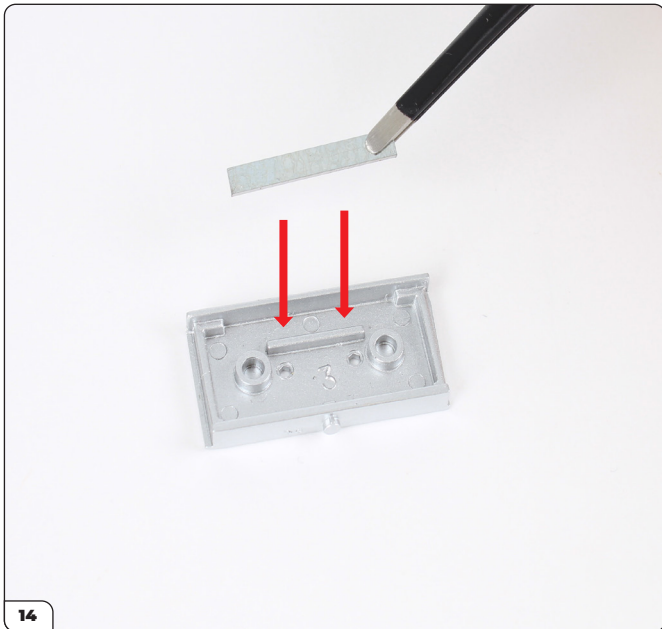
Stage 31: Assembling a Storage Compartment



Fix the right-hand door to the compartment in a similar way, applying a little glue around the lugs.



Press firmly until the glue has adhered, checking that the door closes in the correct position.

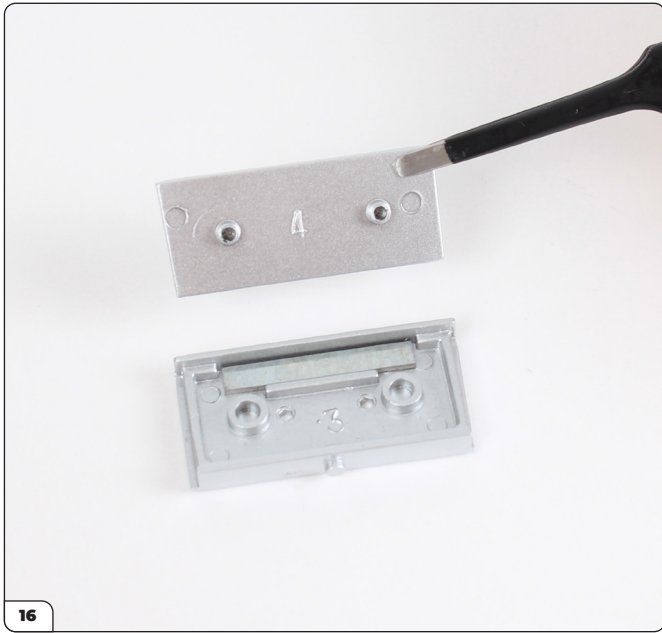


Take the magnet and the shelf top. Place the magnet in the channel along the edge of the shelf as shown.



The magnet should sit in this position.

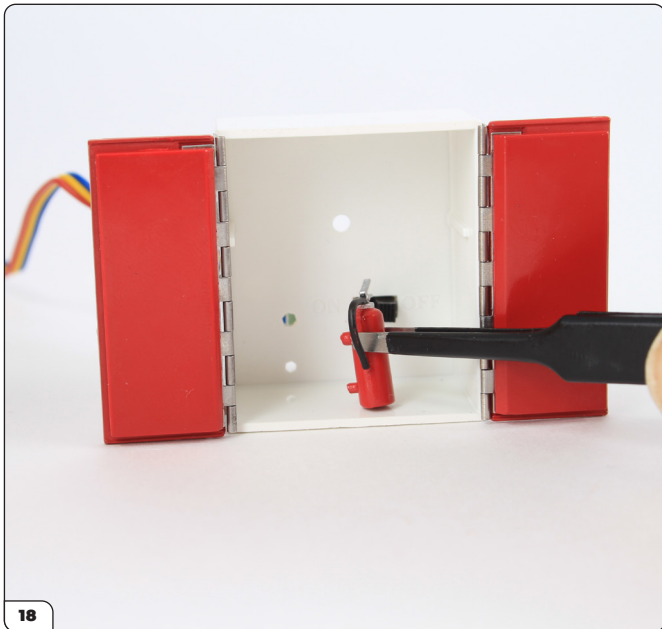
Stage 31: Assembling a Storage Compartment



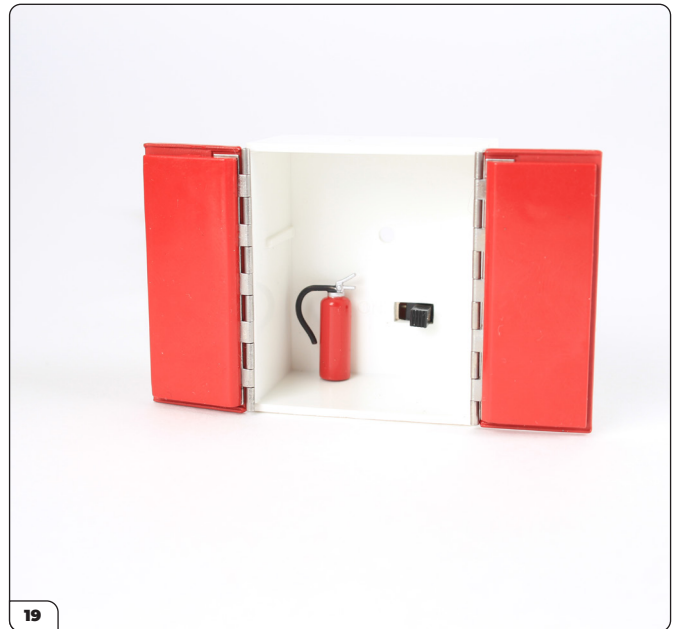
Using a little glue, take the shelf bottom and push it into the shelf top until the parts fit snugly together.



The shelf should now look like this.

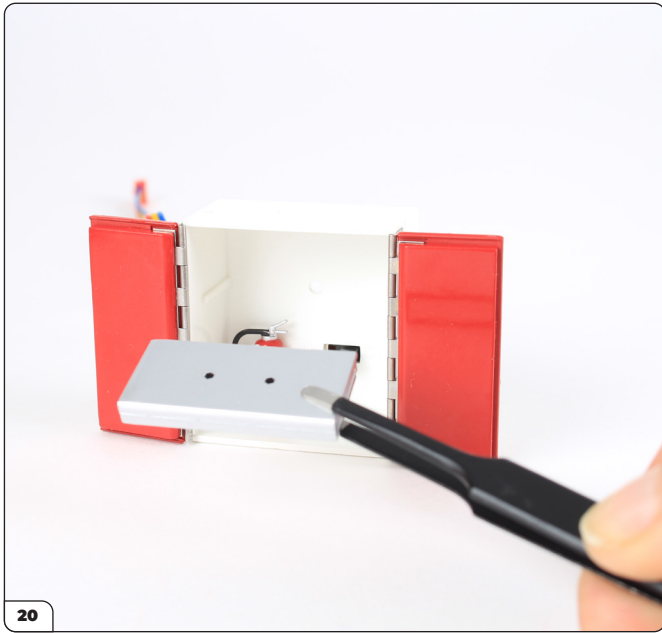


Take the fire extinguisher from stage 10 and push its two lugs into the corresponding holes at the back of the compartment.

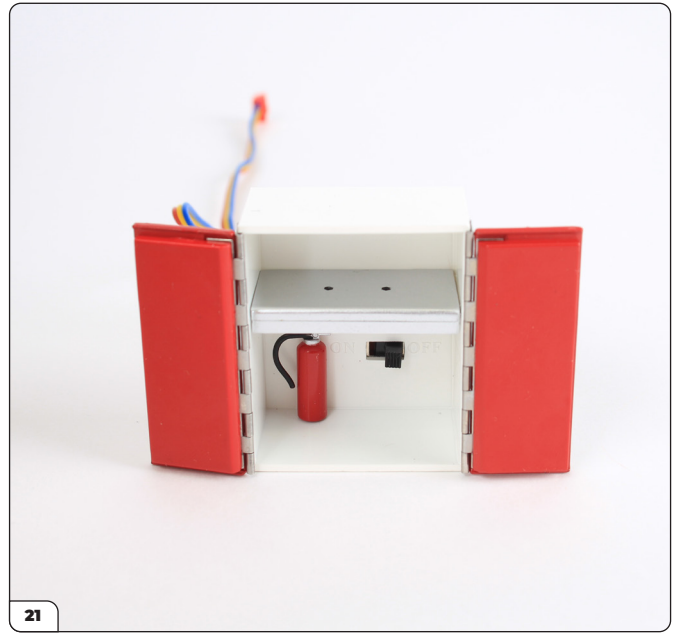


The fire extinguisher is fitted next to the switch.

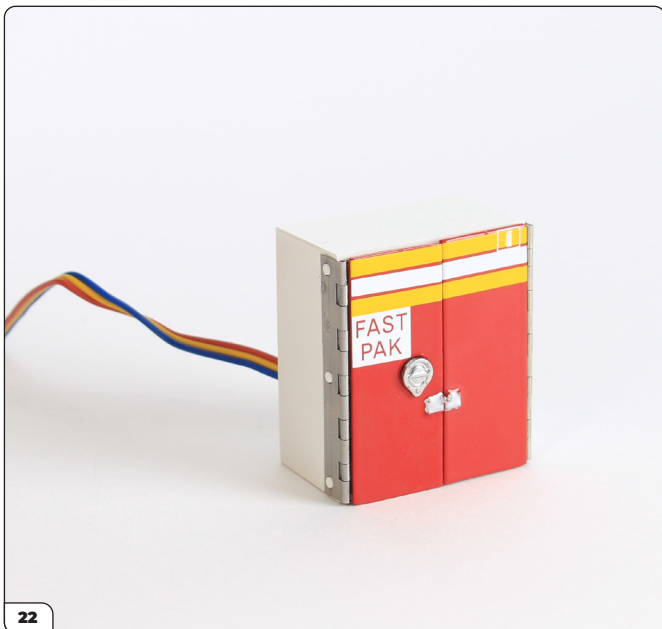
Stage 31: Assembling a Storage Compartment



There are grooves on both sides of the shelf that fit over two channels in the compartment. Hold the shelf with the tool-holes facing up, then push the shelf-grooves over the channels to fit.



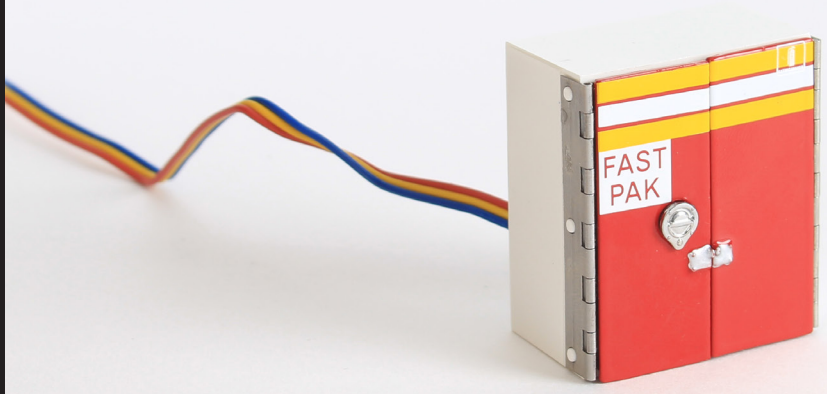
When correctly fitted, the shelf should look like this.



Check the doors close in the correct position.

Stage 31: Assembling a Storage Compartment

STAGE COMPLETE



Stage 32: Storage Compartment Frame

There is no assembly in this stage. Unpack the parts and move straight to stage 33 to continue with your build.



STAGE 32 PARTS LIST

Name
Storage compartment frame
Type D screws x6
Type H screws x3



Stage 33: Rear Right Wheel

Next you'll fit more tires to their wheel hubs. Prepare a hot-water bath to soften the tires before fitting, just as you did in earlier stages.



STAGE 33 PARTS LIST

Name
Tire
Tire
Inner wheel
Outer wheel

Tire



Tire



Inner wheel



Outer wheel



Stage 33: Rear Right Wheel



After soaking the tire in hot water for a minute, push the inner wheel into the tire so that the tire rim tucks snugly around the groove on the wheel.



Push the outer wheel into the remaining tire (after soaking) and tuck the tire rim into the groove around the wheel.



Apply a drop of glue to the flat surface of the inner wheel, then align it with the four fixing pins on the outer wheel before pressing the two wheels together. Press firmly.



Check the four pins project through the corresponding four holes.

Stage 33: Rear Right Wheel



Also check that both wheels fit evenly all the way round.



Stage 34: Fitting the Wheel to the Chassis, and Assembling and Fitting the Front Bumper

Now you can fix the wheel to the chassis before moving focus to the front of the fire truck, completing assembly of the front bumper and fixing it to the cab.



STAGE 34 PARTS LIST

Name
Front left stabilizer
Hubcap
Type J screws x2
Type L screws x2



Front left stabilizer



Type J screws x2



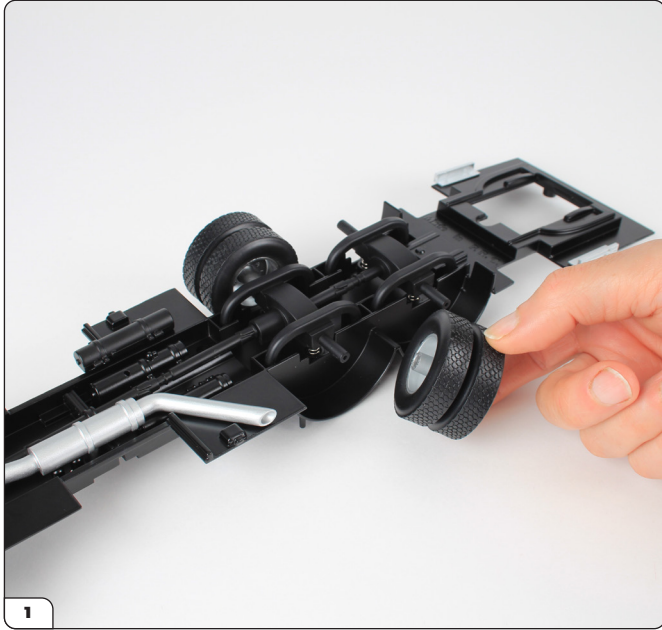
Type L screws x2



Hubcap

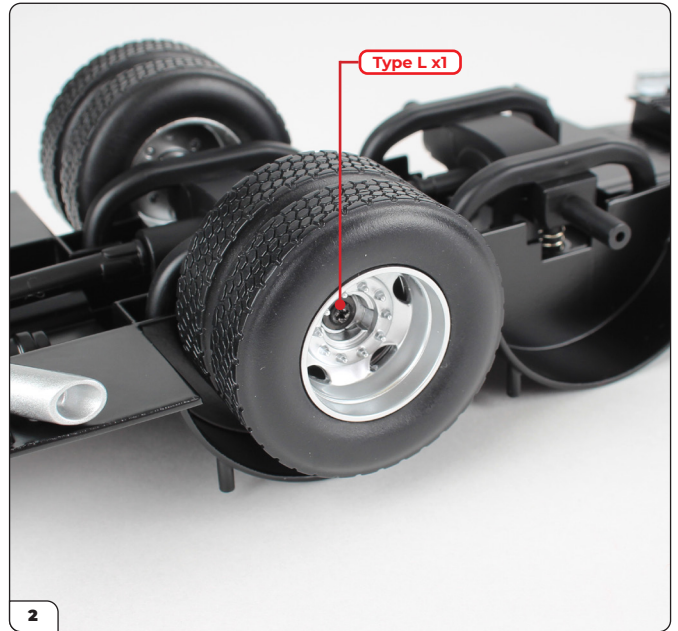


Stage 34: Fitting the Wheel to the Chassis, and Assembling and Fitting the Front Bumper



FITTING THE WHEEL

Take the assembled wheel from stage 33 and align the inner wheel hub with the rear left axle post as shown.



Push the wheel onto the axle and fix it in place with a TYPE L screw.

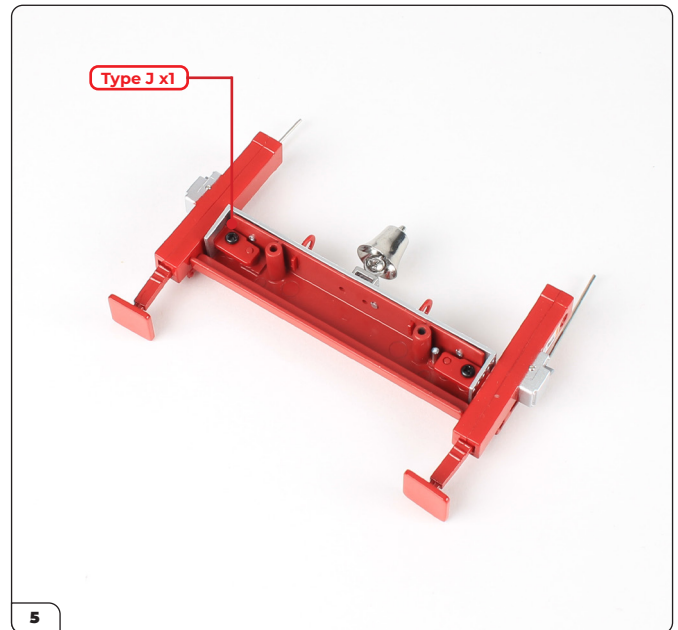


Push the hubcap over the screw fixed in picture 2.

Stage 34: Fitting the Wheel to the Chassis, and Assembling and Fitting the Front Bumper



FITTING THE LEFT STABILIZER TO THE FRONT BUMPER
Take the front bumper assembly and align the fixing tab on the left stabilizer with the corresponding fixing point at the rear of the bumper. See picture 5.



Secure the stabilizer in place using a **TYPE J screw that came with stage 12.**

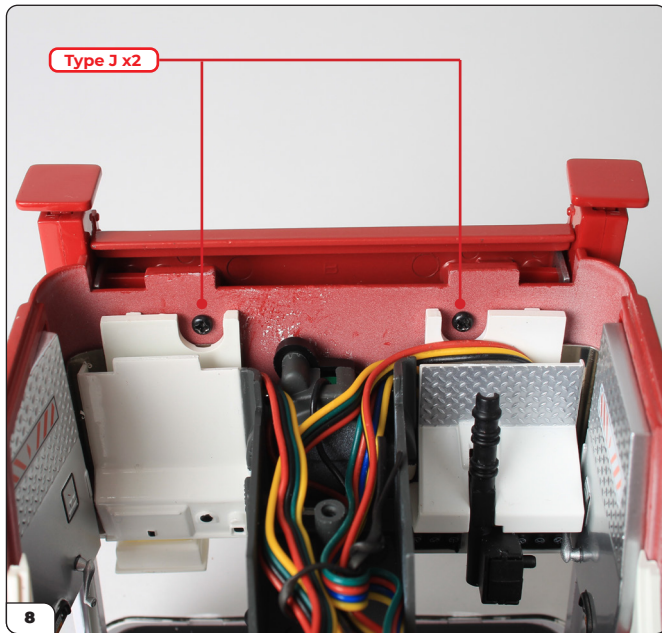


Take the cab assembly and align it with the front bumper assembly as shown. The two raised screw holes on the bumper will fit into the corresponding holes in the cab (arrows).



Fit the bumper to the front of the cab.

Stage 34: Fitting the Wheel to the Chassis, and Assembling and Fitting the Front Bumper



Secure the bumper in place using 2 x Type J screws that came with this stage.



The front bumper is now securely attached to the cab. The picture below shows how the cab is now able to rest on the chassis.

STAGE COMPLETE



Stage 35: Assembling the Box Frame Shell

In this next stage, you'll start to assemble the box frame that forms the central core towards the rear of the truck.

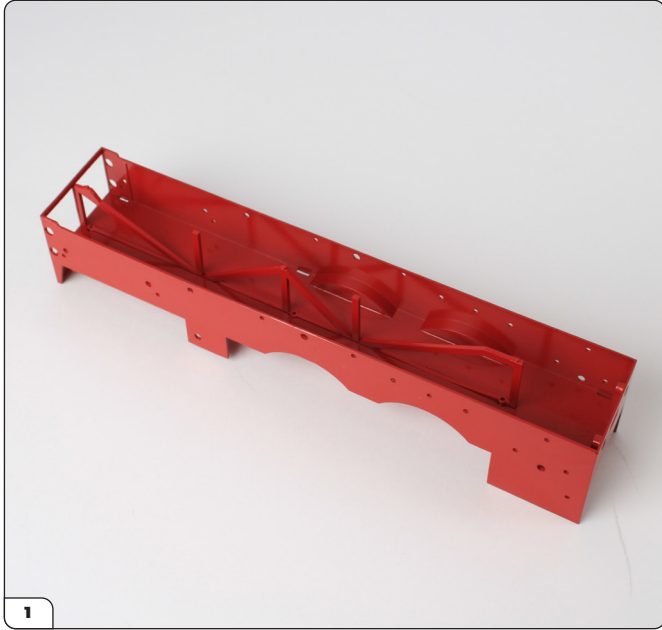


STAGE 35 PARTS LIST

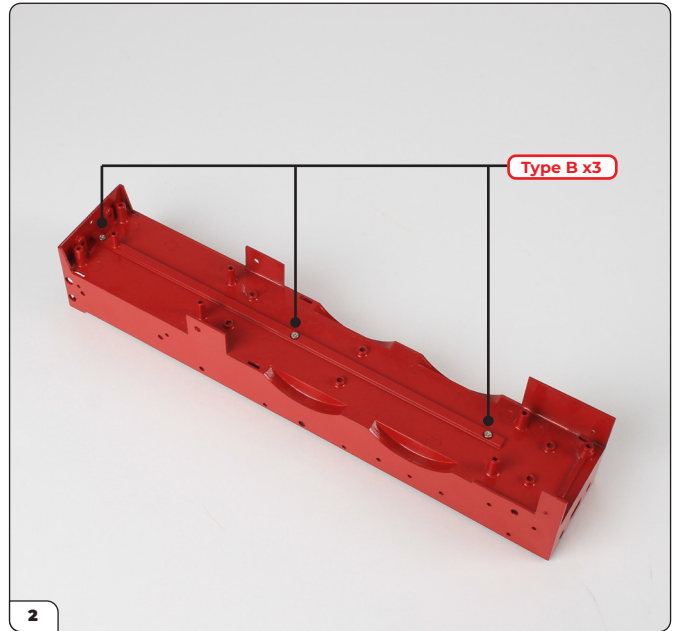
Name
Box Frame Shell
Box Frame Reinforcement
Type H screws x4
Type B screws x4
Type K screws x3



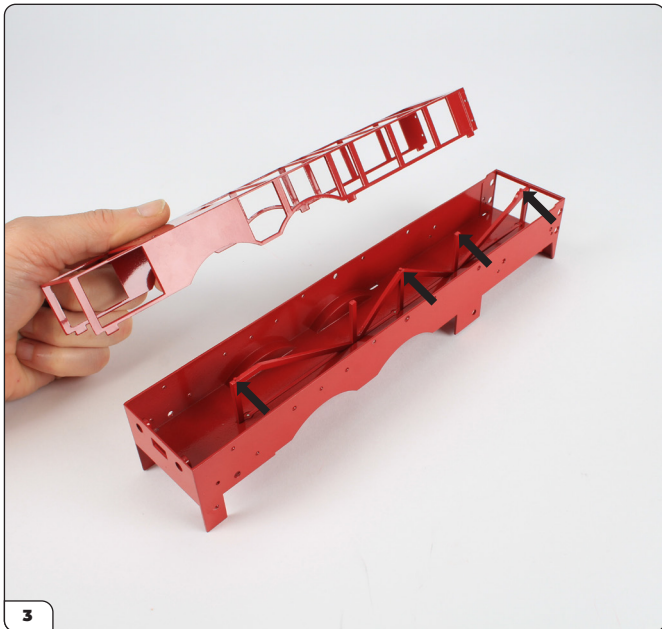
Stage 35: Assembling the Box Frame Shell



Place the box frame reinforcement inside the box frame shell as shown. The flat edge rests along the frame and the zig-zag edge projects up.



Holding the frame reinforcement in place, turn the frame shell over and drive three Type B screws through the frame to hold the reinforcement struts in place.



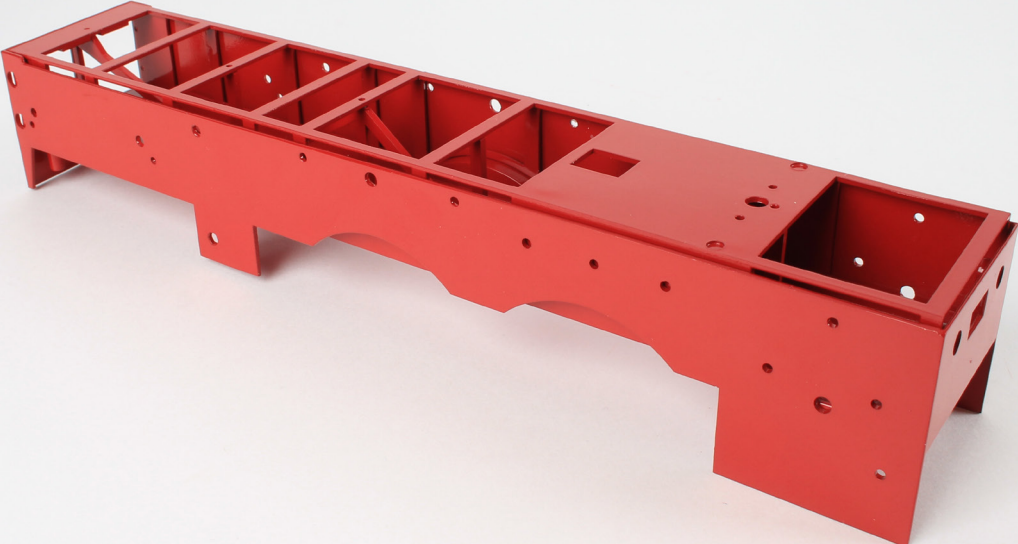
Take the box frame that came with stage 30 and place it inside the box frame shell. The four projecting pins on the reinforcement struts should fit into the corresponding holes in the box frame (arrows).



Press the reinforcement firmly into the box frame until the sides are evenly located within the frame.

Stage 35: Assembling the Box Frame Shell

STAGE COMPLETE



Stage 36: Assembling a Storage Compartment and a Rear Door

You'll continue to assemble another storage compartment that will eventually be fixed to the storage compartment frame from stage 33, and fix a door to the box frame.



STAGE 36 PARTS LIST

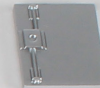
Name
Compartment inner
Left-hand rear door front
Left-hand rear door back
Compartment door front
Compartment door back
Door handles x2
Type D screws x3



Compartment inner



Left-hand rear door front



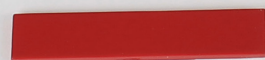
Left-hand rear door back



Compartment door front



Door handles x2



Compartment door back

Type D screws x3



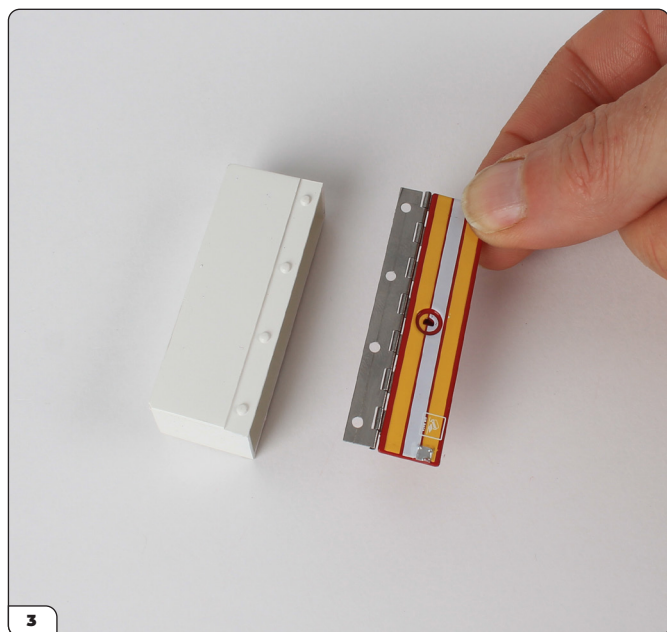
Stage 36: Assembling a storage compartment and a Rear Door



Take the compartment door front and back parts, checking that the square recesses for the magnets are aligned.



Apply glue, then push the parts firmly together until all four sides sit flush.



Align the hinge of the compartment door assembly with the compartment inner, applying a little glue between the four lugs.



Glue the hinge over the lugs as shown, checking that the door closes correctly.

Stage 36: Assembling a storage compartment and a Rear Door



The door for this compartment pulls down, so check you have it in the correct orientation, then prepare to fit the handle. The handle is a D-shaped fitting.



Apply a drop of glue before firmly pushing the handle into the fitting.



ASSEMBLING A REAR DOOR FOR THE FIRE TRUCK MAIN BODY.

Take the left-hand rear door front and back parts, aligning them as shown. The two pairs of lugs and fitting holes are different sizes to ensure the correct fit.

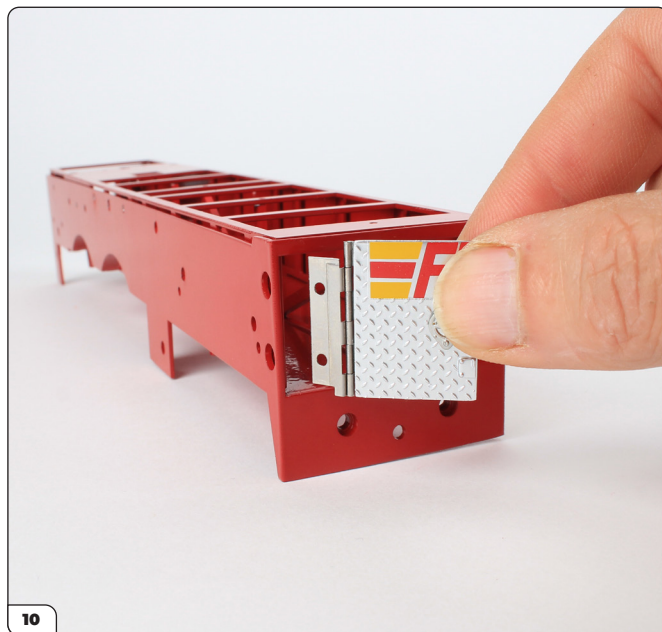


Apply a little glue before firmly pressing the parts together.

Stage 36: Assembling a storage compartment and a Rear Door



Turn the door the right way up and fix the handle in place in the D-shaped hole. Prepare to fix the door to the box frame shell.



The door hinge fits inbetween the box frame and the box frame shell. Holding the door, gently push the hinge into the gap until the screw holes are lined up.

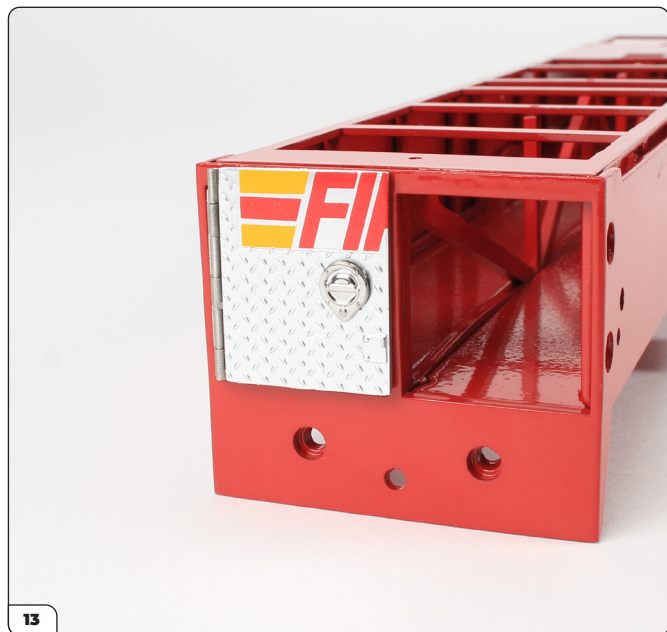


You can see here how the screw holes are in the correct position.

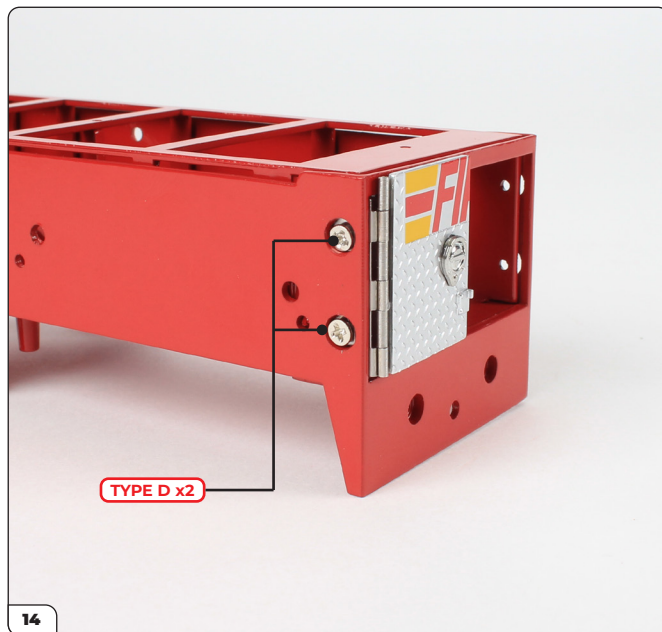


Check that the hinge is in the gap between the box frame and shell.

Stage 36: Assembling a storage compartment and a Rear Door

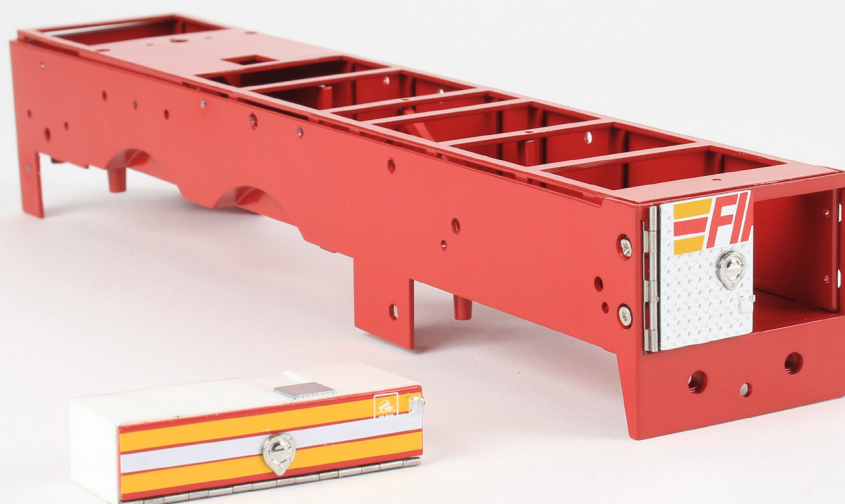


Once in position, check that the door closes correctly.



With the door in the closed position, secure it in place using 2 x TYPE D screws, driving them in from the outside of the frame.

STAGE COMPLETE



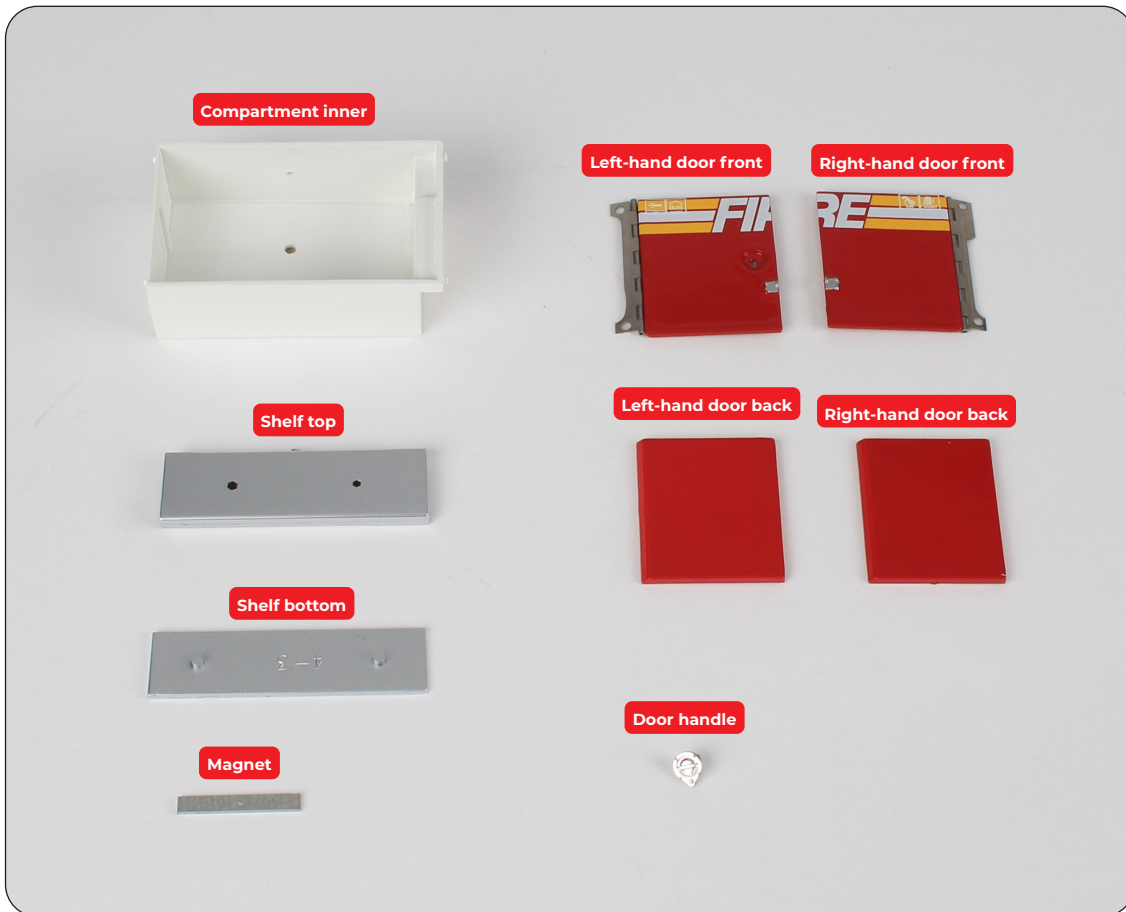
Stage 37: Assembling a Storage Compartment

Now you're an expert in storage compartment assembly – its time to build another one!



STAGE 37 PARTS LIST

Name
Compartment inner
Left-hand door front
Right-hand door front
Left-hand door back
Right-hand door back
Shelf top
Shelf bottom
Magnet
Door handle



Stage 37: Assembling a Storage Compartment



Assemble the right-hand door in the same way as previous doors. Align the front and back parts, ensuring the magnet recesses are lined up correctly.



Apply glue before pressing the front and back firmly together.

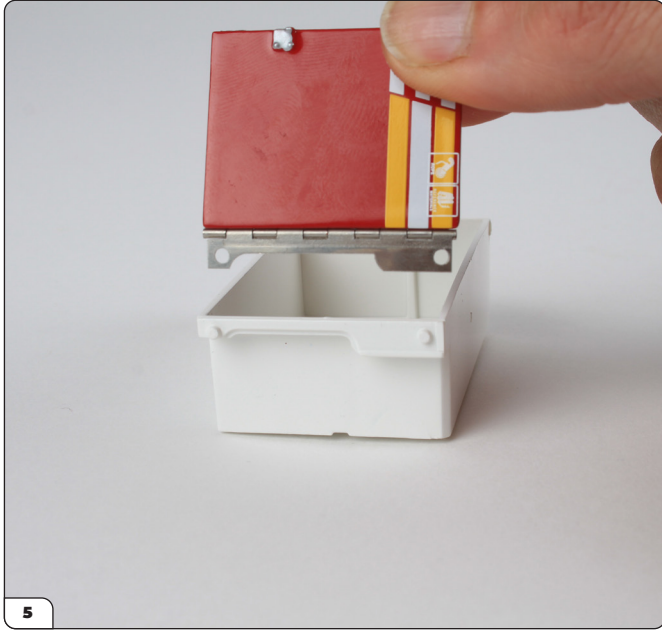


Do the same for the left-hand door. Align the front and back parts.



Glue, then push them together.

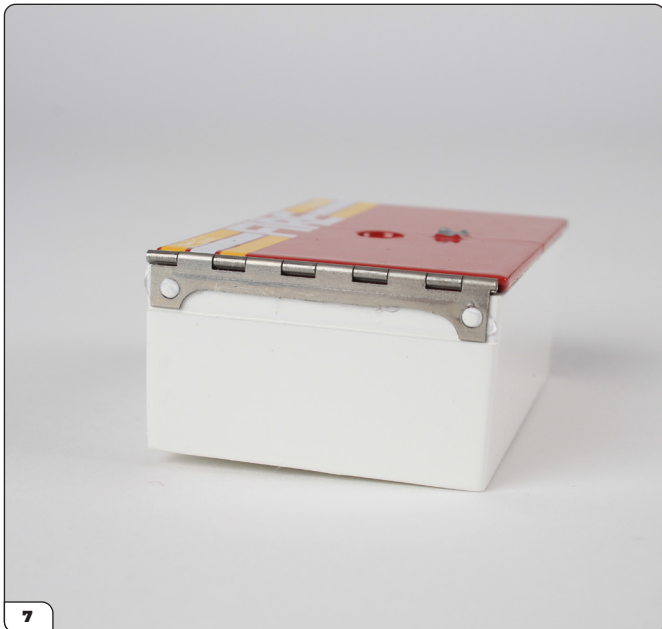
Stage 37: Assembling a Storage Compartment



Take the compartment inner and note the different shapes of the hinges correspond to the shaped hinge-mounts on the compartment. Apply a little glue to the hinge mount.



Fit the hinge onto the mount, checking the door closes correctly.



Repeat to fix the left-hand door in place, applying a little more glue to the hinge-mount surface.

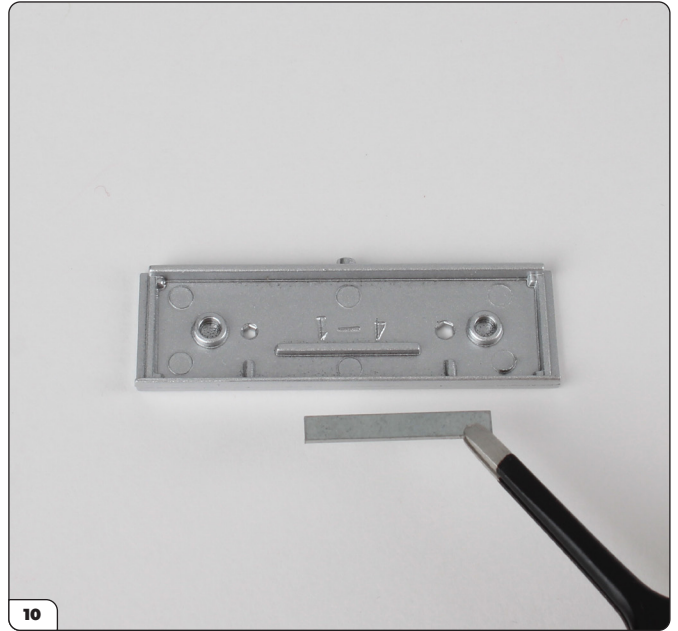


Glue and fit the handle to the left-hand door.

Stage 37: Assembling a Storage Compartment



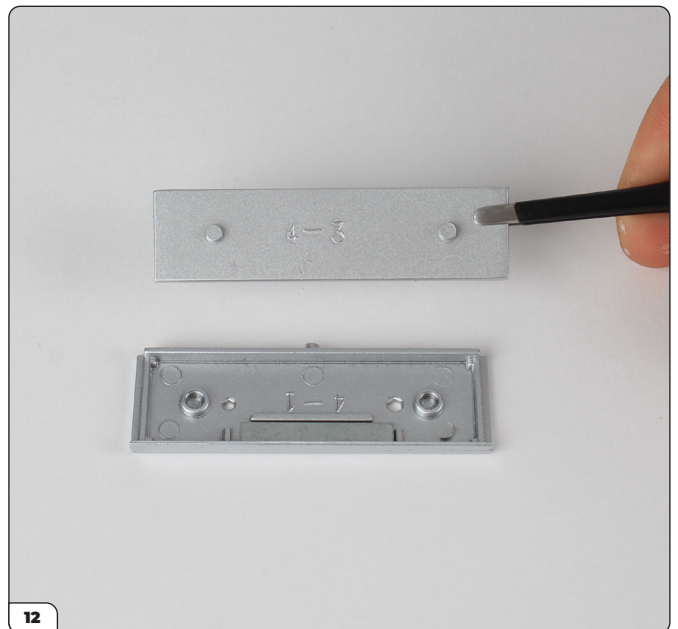
The compartment doors are now assembled.



To assemble the shelf, place the magnet in the channel at the front edge of the shelf top. See picture 11.



This shows the magnet in place.

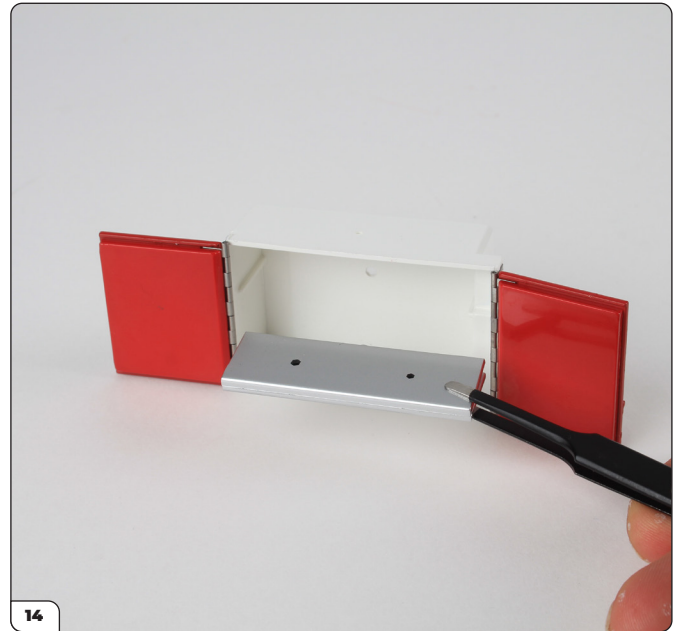


Take the shelf bottom and line up the lugs with the fixing points in the shelf top.

Stage 37: Assembling a Storage Compartment



Apply glue before pressing the bottom part firmly into the top part.



Slide the sides of the shelf over the channels in the compartment. The two holes in the shelf should face upwards and will be used for storing a tool at a later stage. Check that the small lug on the back of the shelf is located within the hole at the back of the compartment.



This is how the shelf should look when correctly installed.



Check that the doors close correctly.

Stage 37: Assembling a Storage Compartment

