

Shepperton Design Studios

Stormtrooper armour assembly

Tools for the job

- 1 Electric drill with M3 (3mm dia) drill bit
- 2 Glue gun
- 3 Strong scissors
- 4 Stanley knife
- 5 Small screwdriver
- 6 Half round file
- 7 Electric belt sander (not essential but very handy)
- 8 Deburring tool (not essential but very handy)

The plastic dispensing bottle for the ABS glue is included with the kit.

White ABS glue and MEK solvent is also included.

PLEASE READ THE ENCLOSED-
HEALTH & SAFETY DATA SHEET
FOR THIS MATERIAL.
(Ethyl Methyl Ketone)



The armour comes with a full set of straps already made up and ample supply of tough adhesive backed Velcro. (The soft side is called the `LOOP` and the coarse side is called the `HOOK`)
Stud connectors are already mounted on ABS washers that can be glued to the inside of the armour.



Red dots are the right hand side of the armour and green dots are the left.

Assembly of legs - Calf

Glue the front edge of one of the sets of calf mouldings



Place joining strip, with shiny side uppermost, onto the wet glue. Hold down in the centre.



Use clothes pegs to hold the joining strip in position



Leave for about 30 mins with the pegs in position.
The glue will be cured then and the pegs can be removed.



Assembly of legs - Thigh

Glue the front edge of one of the sets of thigh Mouldings.



Place the joining strip, with shiny side uppermost, onto the wet glue. Hold down in the centre.



Use clothes pegs to hold the joining strip in position. Leave for about 30 mins with the pegs in position. The glue will be cured then and the pegs can be removed.



Second half—Calf



After the joining strip has cured, glue the inside face of the joining strip and offer the other half up to the glued face.



Second half - Thigh

After the joining strip has cured, glue the inside of the Joining strip and offer the other half up to the glued face.



Hold in position with clothes pegs. A small clamp might be more suitable if the joint required more pressure.



Leave to cure for about 30 mins.



Glue the stud connectors where pre-marked.



Stud Connectors.

The stud connectors are already pre-assembled onto ABS washers. These can be glued onto the inside face of the mouldings where required, The mouldings are marked with an oblong where the connectors should be glued.



Stud Connectors

Glue the back side of the ABS washer, just two strips of glue at either end.



Place the glued washer onto the pre-marked location. Hold for a few seconds and it will support itself.



Glue one edge of the washer to reinforce the bond.

NOTE: If you use too much glue it will eat into the moulding and distort the other side.



Assembly of arms - Forearm

The outside part of the forearm overlaps the inside part and is glued on the top side in the same manner as the legs. The underside is joined with Velcro as explained later.



Upper Arm

The outside of the upper arm moulding overlaps the inside.



Glue the edge of the inside moulding. The glued edge is the one that faces forward

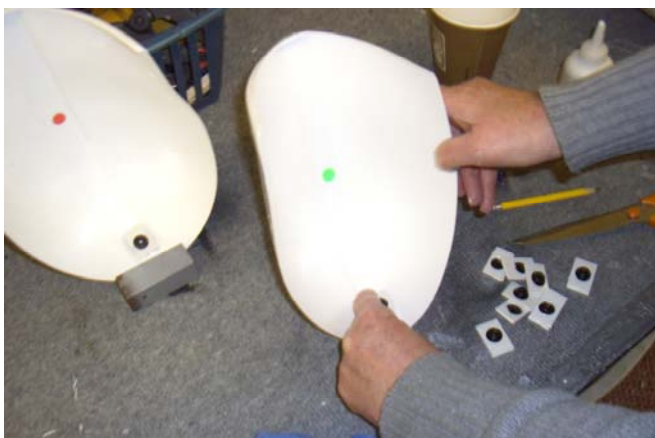


Fix glued parts together with clothes pegs and leave to cure for about 30 mins.



The other side is joined with Velcro as explained later.

Glue in the stud connector to the position marked.



Shoulders

Glue the stud connectors into the Inside top as pre-marked.

NOTE: Be careful not to use too much glue as it might eat into the

Abdominal front. - Crotch reinforcement

Glue liberally over the back side of the crotch reinforcement moulding. Its is best to roughen up the surface of this item.



Spread the glue evenly to ensure that the chemical weld does not distort the other side.



Press the reinforcement moulding into position. and let cure for about 30 min.



Electronic plate moulding.

The electronic plate is pre-made with the coloured buttons already in place.

Glue the edges of the back of the moulding.



Fit in position and let cure for about 30 mins.

Shoulder Straps

The shoulder straps are provided in curved format but need reinforcing as this items takes the most wear of all the armour parts.

Glue the oblong pieces of ABS into the for extremities of the shoulder strap



The stud connector is glued nearer the front of the shoulder strap than the back. The two dots show the position. Run the glue down the flutes of the mudding.



Place the stud connectors onto the glued surface.



Reinforce the ends of the ABS washers with another dab of glue.

Fill the valleys in with hot melt glue, this reinforces the whole structure further.



Lower Back & Bottom

The lower back is marked (TOP) indication which way up it should go.. Glue the stud connectors in the positions marked.



The bottom has one stud connector at the crotch.



Velcro and Straps

The Velcro is adhesive backed...just peel off the backing paper.

The course side of Velcro is called `HOOK`

The fuzzie side is called `LOOP`



Abdominal front

Glue the backs of the buttons, just to soften the sharpness of the fixings.

Before sticking the adhesive backed Velcro on, it is best to clean the surface with MEK.



Stick the black `HOOK` side of the 50mm wide Velcro onto the inner sides of the moulding.

Stick a small piece of white 25mm wide `LOOP` Velcro on the front to secure the belt.



Install the two (34cm) straps with buckles, from the top of the moulding .

Install the two (15cm) straps from the centre to suspend the thighs.

Velcro and Straps

Shoulders

Stick the white 25mm `HOOK` Velcro on the inside edges of the mouldings.



The black thin straps with the `LOOP` Velcro
Secure the shoulders in place.



Chest

Stick the Black 50mm wide `HOOK` Velcro on the inner sides of the moulding.



Stick the White 50mm wide Velcro on the front at the shoulders.

Trim excess with scissors.

Velcro and Straps

Back

Stick the Black 50mm wide Velcro `HOOK` to the inside edges of the moulding.



Stick the White 50mm wide Velcro `HOOK` to the outside of the moulding by the shoulders.

Trim the excess off with scissors.



Install the two stud connectors with two studs at one end onto the inside shoulder of the back moulding.



Attach the Black elasticated straps with `LOOP` Velcro to the bottom of the back moulding.



Shoulder Straps

Stick the White 50mm wide Velcro `LOOP`, either side of the stud connector on the inside of the shoulder strap.



The completed shoulder straps will now Velcro in position onto the back moulding.



Trimming and Finishing



Calf

Finish the uneven joint at the bottom of the Calf to suit your ankle fit. This is a good time to accommodate short legged people. You can trim a good inch (25mm) Off the bottom of the calf to drop it down and leave more room at the knee.



The left calf has the knee plate attached.

Make sure it is central by lining up the two centre blips with the centre strip on the front of the calf.



Attach the knee plate with M3 x 10mm screws and nuts.

Trimming and Finishing

Thighs

Trim the excess or uneven bits of moulding with strong scissors.



For tighter more accurate trimming, use a belt linisher or file.



The right thigh accommodates the knee amo pack.

Fix in a central position using the M3 x 10mm screws and nuts.

The amo pack moulding is pre drilled, note the holes out of line

To make the moulding sit square when worn.



Drill the second fixing (make sure your fingers are out of the way from the drill as it penetrates the plastic) Fix with M3 x 10mm screw and nut.



Stick a small piece of white `HOOK` Velcro at the bottom of the front of the thigh.



Stick another small piece of white `LOOP` Velcro on the inside of the amo pack moulding. Swing the moulding over the bottom of the calf and this Velcro fixing will stop the amo pack from moving.



Arms

The forearms can be trimmed with scissors and then a touch up with a linisher or file.. Make sure there are no sharp edges that could scratch you when trooping.

The upper arms can be trimmed in the same way.



Thermal Detanator

The end caps just press on and the `Greeble` moulding glues on.



Amo Drop Boxes

The boxes are pre trimmed but need glueing together Just a spot of glue in the corners is adequate.



The back of the boxes have 25mm wide white Velcro `HOOK` stuck onto the moulding. The `LOOP` side of the Velcro fixes to the Velcro on the box and then onto the belt.

Belt

The amo pack that fixes to the front of the belt is secured by M3 x 10mm screws and nuts. Drill a 3mm hole through the amo pack and through the belt The anmo pack is positioned 15.5 ins from one end to the edge of the moulding.



With the screw head on the back of the belt and the nut on the front, cover the nut with the small square washer Mouldings and glue in position.



Three strips of white 25mm `LOOP` Velcro stick to one end of the back of the belt. Two strips of Black 50mm `HOOK` stick on the other end.