

# Repair Instructions

Release 19/01/2007

## Content

---

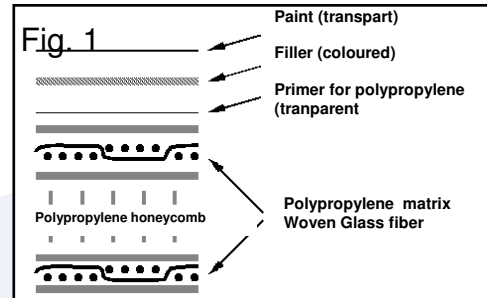
<b>Choice of repair method</b>	<b>2</b>
<b>Paints materials</b>	<b>2</b>
<b>1. Surface damage, max. 5 x 100 cm</b>	<b>3</b>
<b>2. Surface damage over 5 x 100 cm , face sheet undamaged</b>	<b>4</b>
<b>3. Through damage, max. 20 x 30 cm</b>	<b>5</b>
<b>4. Large surface area, damage of paint and face sheet</b>	<b>7</b>

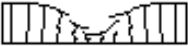

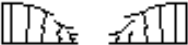
---

## Choice of repair method

The standard Omnia thermopanel are build up as shown in figure 1.

With the following table the damage can be assessed and the suitable repair method determined. Only the here indicated materials are recommended for the repair of Omnia truck body kits!



Damage	Repair set - WIHAG	Other repair materials
<b>1. Surface damage</b> <b>Max. 5 x 100 cm</b> 	<b>Manual painting set</b> see „repair instruction / datasheet “painting“	Roller Glass fibre-polyester-spatula 2 component-car-spray paint
<b>2. Surface damage</b> Face sheet undamaged over 5 x 100 cm 	<b>Paint-spray set (min. 6 m²):</b> see „repair instruction / datasheet “painting“	2 component -car-spray paint
<b>3. Through panel damage</b> <b>Max. size: 20 x 30 cm</b> 	<b>Omnia - Repairpatch + Manual painting set</b> see „repair instruction / datasheet “painting“	Roller Glass fiber-polyester-spatula 2K-car-spray paint
<b>4. Large surface damage</b> <b>All larger sizes</b>	<b>Replace entire panel</b>	Structural adhesive for the transportation industry.

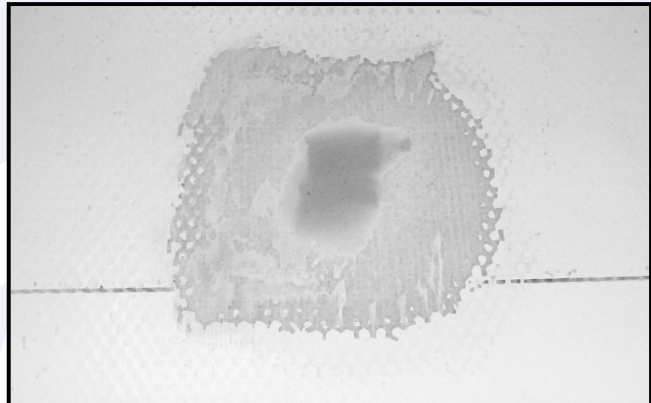
## Paints materials

Paint	Manual painting set:	Spray paint set:
<b>1. Bonding agent</b> Pehafix <b>P71975</b>	150 ml Spray can, content 75 ml	150 ml can, content 100 ml
<b>2. 2K-Filler</b> (white) Pehapol with <b>Hardener</b> <b>P81914</b> <b>P85045</b>	500 ml can, content 120 ml 100 ml can, content 30 ml	1,0 kg can, content 600 ml 150 ml can, content 150 ml
<b>3. Thinner</b> for bonding agent <b>P86001</b>	150 ml can, content 100 ml	270 ml can, content 200 ml
<b>4. Thinner</b> for filler/hardener <b>P86001</b>	-	270 ml can, content 250 ml

## 1. Surface damage, max. 5 x 100 cm

### Pre-treatment:

1. *Remove loose paint and particles thoroughly*
2. *Sand loose glass fibre ends and remove surrounding paint layer with a high pressure cleaner or by sanding carefully*
3. *Clean with thinner (e.g. with special thinner P 86001)*
4. *Apply bonding agent Pehafix PP-Primer P 71975 according to instructions (20-40 g/m<sup>2</sup>)  
Let dry/reside 30 minutes min. / 24 hours max. at 20°C*
5. *Apply fibreglass putty*
6. *Fine sanding, last stroke with grain 400, if necessary, repeat step 2-6*



### Painting the pre-treated surface:

1. *Apply bonding agent (Pehafix PP-Primer P 71975) on the complete surface*
2. *Prime with Pehapol 2K - filler P 81914 according to instructions (100-150 g/m<sup>2</sup>)  
mix ratio 6:1 (to weight) with hardener P 85045  
(thinner: Ca. 10- 15% spezial thinner P 86001)  
Dry minimally. 16 hours at 25°C*
3. *Fine sand with grain 400*
4. *Paint with usual 2C- car repair paints  
drying: see manufacturer's information*

We ask for your understanding that we cannot assume liability for this paint system, because the substrate surface is not exactly defined after removing the paint.

### Remarks:

Please use the Omnia - information „**Repair instructions / Datasheet Painting**“ for further information.

The fibreglass surface is smooth and does not exhibit the typical Omnia panel texture. This can be imitated with bubble warp film or special silicone-sheets.

## 2. Surface damage over 5 x 100 cm , face sheet undamaged

### Repair painting recommendation:

1. *Remove complete damaged paint layer with a high pressure cleaner or by sanding carefully. Avoid to uncover the glass fibres.*
2. *Clean with thinner (e.g. with special thinner P 86001)*
3. *Apply bonding agent Pehafix PP-primer P 71975 according to instructions (adjust viscosity with special thinner P 86001, apply ca. 20-40 g/m<sup>2</sup>),  
Let dry/reside at least 30 Min. / max. 24 hrs. at 20°C*
4. *Fill with Pehapol 2K – filler P 81914 according instructions (100-150 g/m<sup>2</sup>)  
Mix ration 6:1 (to weight) with hardener P 85045  
(Thinner: Ca. 10 - 15% special thinner P 86001)  
Drying 16 hours min. at 25°C*
5. *Fine sand with grain 400*
6. *Paint with usual 2C - car repair paints  
drying: see paint manufacturer's information*

We ask for your understanding that we cannot assume liability for this paint system, because the substrate surface is not exactly defined after removing the paint.

### Remarks:

Please use the Omnia - information „**Repair instructions / Datasheet Painting**“ for further information.

The fibreglass surface is smooth and does not exhibit the typical Omnia panel texture. This can be imitated with bubble warp film or special silicone-sheets.

## 3. Through damage, max. 20 x 30 cm

### Pretreatment:

1. Cut out the damaged area in the exact size of the repair patch *with a jig saw* (20 x 30 cm)
2. *Sand* loose glass fibre ends and surrounding paint layer
3. *Clean* with thinner (e.g. with special thinner P 86001)
4. *Apply bonding agent* (Pehafix PP-Primer P 71975) to the honeycomb core and the sanded according instructions (20-40 g/m<sup>2</sup>)  
Let dry/reside at least 30 Min. / max. 24 hrs. at 20°C
5. Remove release film from the repair panel and apply from the inside. Press down the adhesion area firmly.  
Remark: Adhesive strength increases during the first 24 hrs. Therefore use with care in the beginning.
6. *Fill* the groove, *Sand* the filled groove, *last stroke with grain 400*, if necessary, repeat step 6-7.

See next page for illustrations.

### Painting the pre-treated surface:

1. Apply bonding agent (Pehafix PP-Primer P 71975) on the complete surface
2. *Primer with* Pehapol 2K - filler P 81914 according instructions (100-150 g/m<sup>2</sup>)  
mix ratio 6:1 (to weight) with hardener P 85045  
(thinner: Ca. 10 - 15% special thinner P 86001)  
Dry minimally. 16 hours at 25°C
3. *Fine sand* with grain 400
4. *Paint* with usual 2C- car repair paints  
drying: s. Manufacturer's information

We ask for your understanding that we cannot assume liability for this paint system, because the substrate surface is not exactly defined after removing the paint.

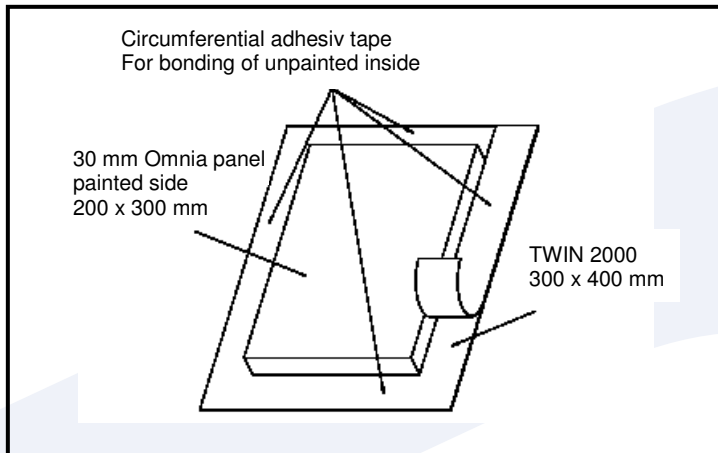
### Remarks:

Please use the Omnia - information „**Processing Information / Datasheet Varnishing**“ for further information.

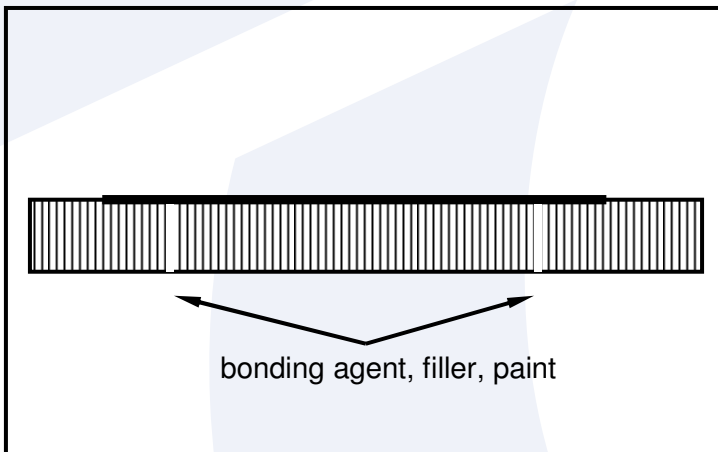
**The distance from the edge of the repair panel to any side of the body, including the floor, or to the load tracks should at least be 10 cm.**

The filled surface is smooth and does not have the typical Omnia panel - texture.

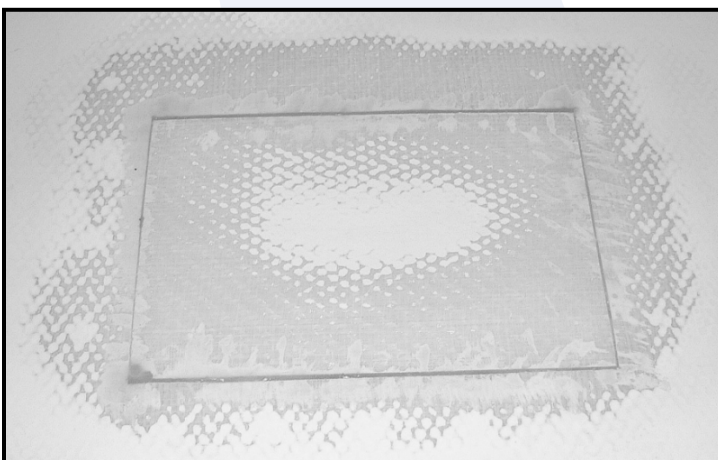
## Representation of a through panel damage repair



Remove release film from the adhesive tape



Apply bonding agent on panel edges,  
Apply repair panel and apply pressure from the inside.



Bonding agent, filler, bonding agent in groove, paint

## 4. Large surface area, damage of paint and face sheet

The repair of a larger surface damage, exceeding the damage described above, is done with a complete replacement panel (painted outside, including welding connectors).

For correct provision of the panel type and repair material please indicate the exact body type and outer dimensions.

### Removing the damaged panel:

#### Preparation:

1. Cut out the damaged panel around the contour with a jig saw, staying away from profiles and other sides app. 10-20 cm to enable entry of the welding connectors

#### Panel removal by welding

1. Connect the resistive wires of the welding strip to the welding unit
2. Activate the unit with the barcode. Pull out the rest pieces of the panel, during heating. Also pull of the welding strip. (Welding ends after 2 Min.)
3. Disconnect the welding unit and proceed with the next welding strip (Step 1)

#### Panel removal in adhesion:

1. Remove the panel from the profiles mechanically  
Remove adhesive parts from the profiles and clean thoroughly and in case of paint damage apply a suitable bonding agent.

### Inserting a new panel:

1. Clean the adhesion or welding surfaces of panels and profiles with a standard cleansing agent.
2. Welding / Adhesion according to the Assembly instructions / Processing-information of the body kits and according application instructions of adhesive supplier.

The specifications in this data sheet represent the current state of our technical knowledge and its purpose is to inform about the Omnia Panel and its applications. The specifications therefore do not guarantee particular properties or suitability for a specific application. We reserve the right to make changes in accordance with technological processes and other developments. We guarantee faultless quality in accordance with our conditions of sale.