



SERVICE BULLETIN No.1184

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COACH/BUS MODEL	: All
BULLETIN TYPE	: Service Information
SECTION	: Section 4 – Axles, wheels, tires
DATE	: May 18, 2006
SUBJECT	: Top coating wheels
TERMS & CONDITIONS	: No claims will be accepted with reference to this Bulletin.

APPLICATION:

The service information subject of this Bulletin is applicable to all units equipped with steel wheels.

DESCRIPTION:

1. **Paint thickness (see Figures 1.3 and 1.4)**

Wheels are periodically painted in the field. This Bulletin is being issued to emphasize the importance of paint thickness and hardness in relation to torque retention on wheel mounting nuts of transit buses and coaches.

Paint thickness specification has been established at a total of 2.36 mils (60 µ) maximum.

2. **Curing time**

Tests have shown that freshly painted wheels lose torque at the wheel mounting nut very quickly. It is important to allow sufficient time for the paint to cure, making it hard and durable.

Baking the wheels will accelerate the curing. Cure time is approximately seven days for air-dried paint.

3. **Excessive thick coats of paint (see Figures 1.5 and 1.6)**

If the wheels are painted with excessively thick coats of paint, there can also be excessive loss of torque on the wheels mounting nuts. The torque loss is due to the wearing away of the paint, creating a reduction in the thickness of the parts that are bolted together.

Dual wheels are especially prone to this.

Description continued on page 3/6.

Service personnel: please read, initial and circulate.

Service Manager	Parts Manager	Warranty Administrator	Workshop Foreman	Service Technician



Figure 1.1: In production the wheel to hub mounting surface are masked off before painting

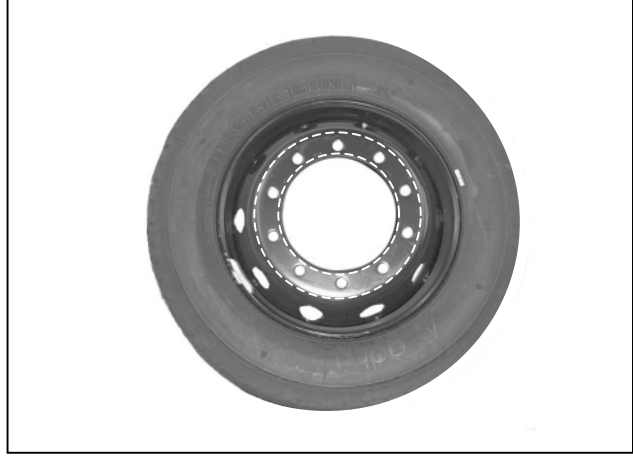


Figure 1.2: In production the flanged nut to wheel surface the stud holes are masked off with decals VH 10539192



Figure 1.3: OE supplied wheels come in two colors - white and silver. Paint thickness has been established at a total of 2.36 mils



Figure 1.4: OE supplied wheels come in two colors - white and silver. Paint thickness has been established at a total of 2.36 mils

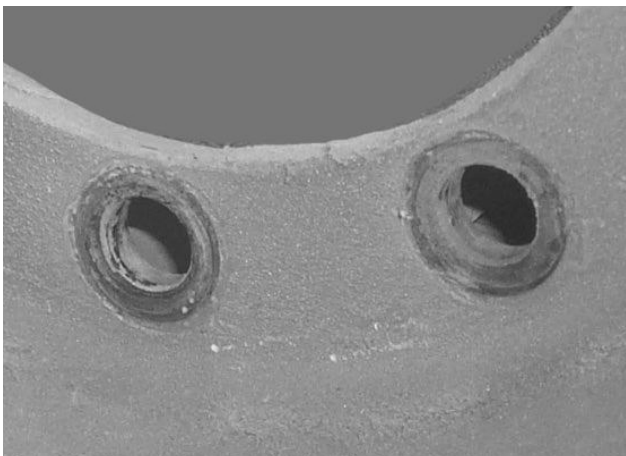


Figure 1.5: Wheel fastener torque loss is due to the wearing away of paint

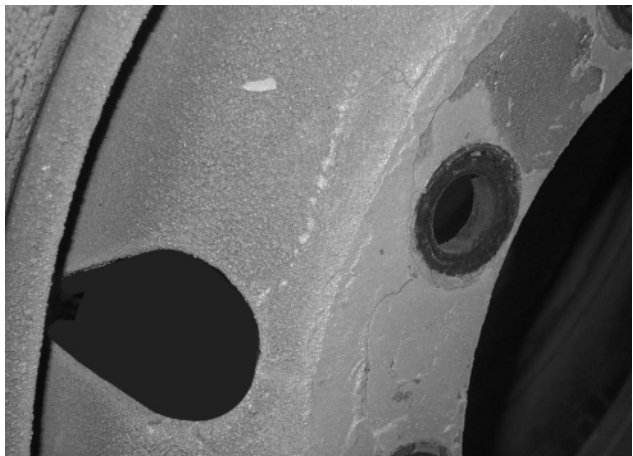


Figure 1.6: Repainting is not recommended without first removing the old paint from the critical surfaces. Loss of wheel fastener torque will result

Continued from page 1.

4. Critical surfaces (see Figures 1.1, 1.2, 3 and 4)

Repainting the Van Hool powder coated steel wheels is permissible. Repainting is not recommended without first removing the old paint from the critical surfaces. These surfaces include, but are not limited to – the flanged nut to wheel surface, the wheel to hub mounting surfaces, dual wheel to wheel mounting surfaces and wheel to drum mounting surfaces. It is not recommended that the hub and drum mounting surfaces be painted. These surfaces do not show in the final assembly and the paint will wear off in any case.

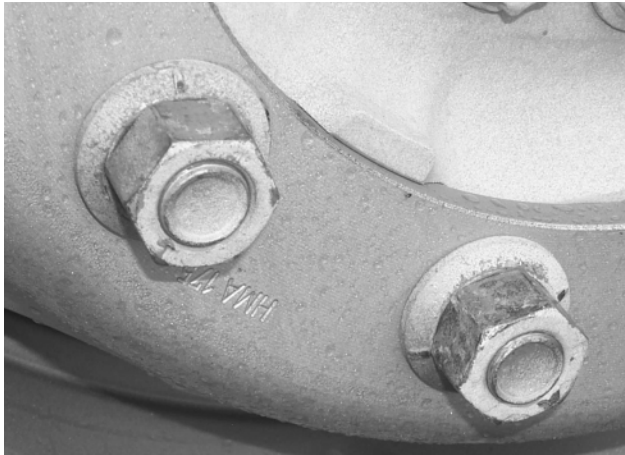


Figure 2: Paint thickness and hardness are important in relation to torque retention on wheel mounting nuts

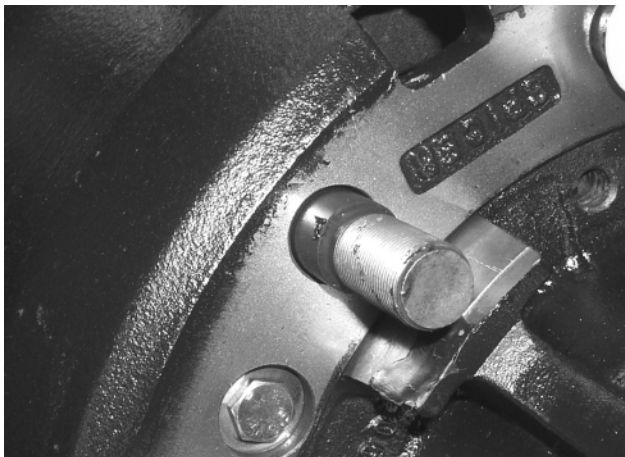


Figure 3: It is not recommended that the hub and drum mounting surfaces be painted

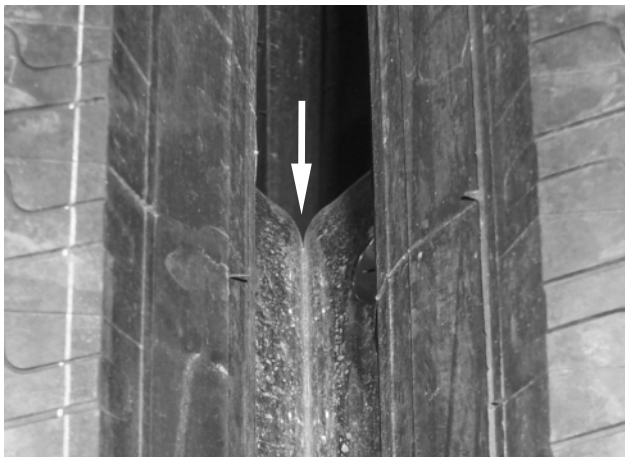


Figure 4: Old paint should first be removed from the dual wheel to wheel mounting surfaces

PARTS AND PRODUCTS:

- It is recommended to use quality automotive products and paints, all of the same brand. Van Hool does not recommend a particular brand, but paints and products should be used having the same composition (properties) as the Sikkens line of paints and products referred to in the procedure.
- Parts and products disposition: discard according to applicable environmental regulations.

PROCEDURE:

1. General:

- This job should be executed by a technician experienced in bodywork and painting.
- For more information on products and paint mixture ratios, and paint application refer to the manufacturer's instructions for use.
- Spraying should be done in a dust-free environment, preferably in a spray booth.
- Drying time may be accelerated using infrared lamps.
- Observe safe shop practices at all times. In addition to observing the safety instructions on the product and paint packaging, the following safety precautions should be taken:
 - No smoking in the paint room or any adjacent area exposed to residue fumes.
 - Only approved respirators should be used.
 - Adequate ventilation must be maintained.
 - Wash hands prior to eating.
 - Wear protective clothing and a safety mask during all phases of painting and handling of chemicals.
 - Operator- supplied air should be used, if available.
- Read the entire procedure before beginning to work.

NOTE: Once it has been established that the wheel contact surfaces are free of old paint, wheels may be painted either on or off the coach/transit bus.

2. Special tools, equipment or services:

- This job requires the use of sanding and spraying equipment.

3. Preparations – wheel off the coach/transit bus:

CAUTION: Sandblasting is not recommended. Steel wheels on Van Hool coaches have been zinc-phosphated and subsequently base coated by means of electrophoretic priming. Do not remove these coatings.

- 1) Using P60 to P80 grit sandpaper, remove all old paint until the wheel powder coating shows through.
- 2) Once the sanding has been completed, remove all grit and dust from the wheel.
- 3) Roughen the surface with P120 grit sandpaper.
- 4) Rub down all sharp edges and corners with Scotch Brite red.

- 5) Degrease the surface to be painted with Sikkens Antistatic Degreaser.
Clean the surface with a tack rag.
- 6) Mask off the stud holes that show with decals VH 10539192 (1-25/32 inch - 45 mm Ø).
Mask off the wheel contact surfaces referred to in the description in their entirety.
- 7) To apply Sikkens Autocryl Sealer (2-pack adhesive primer wet-on-wet) blend:

100 parts by volume Autocryl sealer
50 parts by volume 1.2.3 hardener
30 parts by volume 1.2.3 thinner
- 8) Apply two 10µ to 15 µ coats of Autocryl Sealer.
Maximum total thickness: 30 µ.
Allow 5 minutes between coats.
- 9) Allow to dry for minimum 20 minutes to a maximum of three hours at 50°F (20°C).
This primer can be finish painted without rubbing down.
- 10) Finish paint in the desired color using Sikkens 2-pack Autocryl or similar.
Maximum total thickness: 30 µ.
For blending, application and curing refer to the specifications and instructions on the tins.
Remove all decals, masking tape and paper.
Sikkens 2-pack Autocryl will take 1 hour at 140°F (60°C) in a low bake oven to cure.

Procedure complete.

DISCLAIMER:

The procedures contained herein are not exclusive. Van Hool cannot possibly know, evaluate, or advise the transportation industry of all conceivable ways in which a procedure may be undertaken or of the possible consequences of each such procedure. Other procedures may be as good, or better, depending upon the particular circumstances involved.

Each carrier who uses the procedures herein must first satisfy itself thoroughly that neither the safety of its employees or agents, nor the safety or usefulness of any products, will be jeopardized by any procedure selected.

SERVICE INFORMATION:

Service Bulletins are issued to supplement or supersede information in the Van Hool manuals. Note Service Bulletin number, date and subject on the register at the end of the relevant chapter(s). File Service Bulletin separately for future reference.

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