



SERVICE BULLETIN

SB1214

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|-------------------------------|---|
| ADDRESSEES | : Owners and operators of coaches listed under 'Application' |
| COACH/BUS MODEL | : T2140, T2145, C2045 |
| BULLETIN TYPE | : Product Improvement |
| SECTION/CHAPTER | : Section 2 – Cooling Chapter 2.22 – Air intake system |
| DATE | : January 18, 2008 |
| SUBJECT | : New charge air cooler |
| TERMS & CONDITIONS | : No claims will be accepted with reference to this Bulletin. |

APPLICATION:

The product improvement subject of this Bulletin is applicable to T- and C-coaches that have charge air cooler # VH 10838305 built into the engine air intake system.
Following units meet this condition:

| Model | Engine | VIN 2140 | VIN 2145 |
|-------|----------------|---------------|---------------|
| T2100 | Cummins | 40148 → 40164 | 44301 → 44339 |
| | Detroit Diesel | 40611 → 40625 | 44620 → 44625 |
| | Caterpillar | NA | 44801 → 44855 |

| Model | Engine | VIN |
|-------|----------------|---------------|
| C2045 | Cummins | 45466 → 46101 |
| | Detroit Diesel | 46531 → 46754 |
| | Caterpillar | 47001 → 47527 |

DESCRIPTION:

1. The CAC is an air-to-air heat exchanger that is incorporated into the air intake system. It lowers the temperature of the compressed air coming from the turbocharger at approximately 465°F to approximately 70°F above ambient temperature before it reaches the intake manifold.
2. Many factors may have an influence on the service life of a charge air cooler. Charge air coolers are highly stressed because they operate in a hostile environment. They are subject to high boost pressures and considerable changes in air temperature. The operating temperature may also vary between various parts of the cooler. Engine and transmission vibrations are detrimental to the thin wall material of which the core is made in order to improve its heat conductivity. Finally, the way the cooler has been manufactured may also be of influence.
3. To ensure system performance and address structural integrity issues, charge air cooler #VH 10838305 has been superseded by charge air cooler #VH 11003917, which is designed for off-highway applications and harsh operating conditions.

The core of the new cooler no longer has seamless tubes with turbulators inside them, and fins to cool the charge air, but fusion-welded plate-and-bar tubes with turbulators inside, and fins on the outside.

This type of cooler manufacturing provides for improved rigidity and mechanical strength whilst maintaining cooling capacity.

4. Charge air cooler VH 11003917 has been cut into production as from following units:

| Model | Engine | VIN 2140 | VIN 2145 |
|-------|----------------|----------|----------|
| T2100 | Cummins | TBA | 44340 → |
| | Detroit Diesel | 40626 → | 44626 → |
| | Caterpillar | NA | TBA |

| Model | Engine | VIN |
|-------|----------------|---------|
| C2045 | Cummins | 46102 → |
| | Detroit Diesel | 46755 → |
| | Caterpillar | 47529 → |

In the “Parts and Products” section of this Bulletin and on the opposite page all relevant parts information with respect to the new charge air cooler has been provided. This information can be copied and inserted in the appropriate section of the Spare Parts Manual.

PARTS AND PRODUCTS:

Old

| VH reference | Description | Qty. |
|--------------|------------------------|------|
| VH 10838305 | Charge air cooler, AKG | |

New

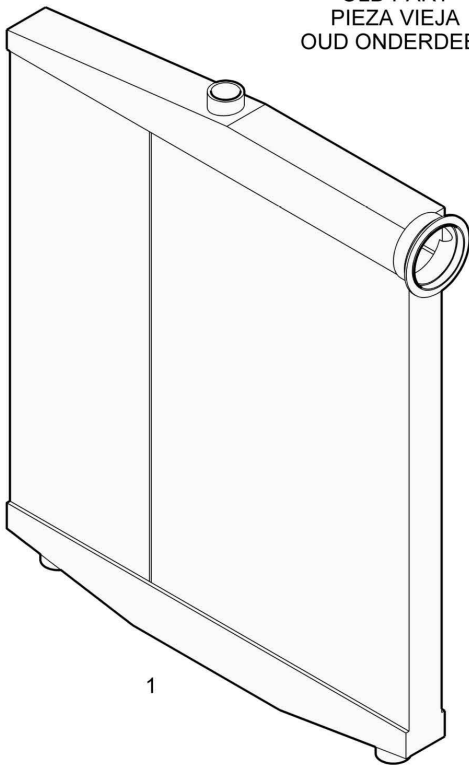
| VH reference | Description | Qty. |
|--------------|-------------------------|------|
| VH 11003917 | Charge air cooler, RAAL | |

- Old and new parts are interchangeable, but only the new will be offered as service replacements.
- To identify: old parts have two adjacent cores and have the brand name “AKG” embossed on the top and bottom tank. The lower tank is stepped in relation to the core. A label on the core frame provides the VH and manufacturers part number and production data.
- To identify: new parts have a single core and have the brand name “RAAL” embossed on the top and bottom tank. The lower tank is flush in relation to the core. A label on the core frame provides the VH and manufacturers part number and production data.
- Parts may be purchased from your nearest ABC Customer Care & Parts Source service center.
- Parts/Waste disposal: discard old parts and products according to applicable environmental regulations.

SERVICE INFORMATION:

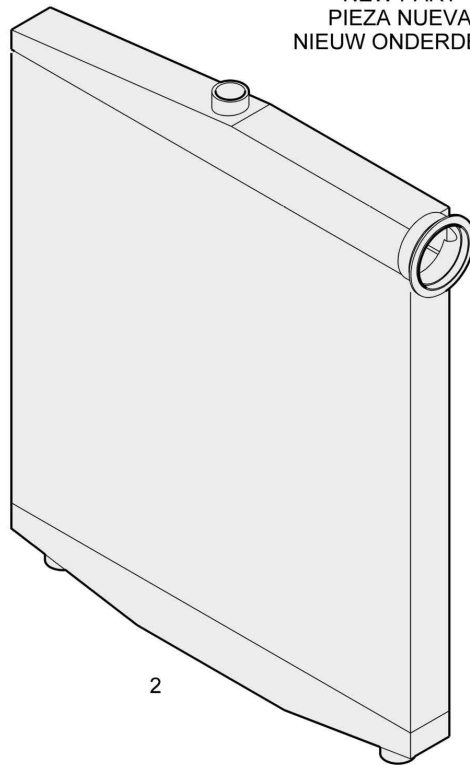
Service Bulletins are issued to supplement or supersede information in the Van Hool manuals. Note Service Bulletin number, date and subject on the register at the end of the relevant chapter(s). File Service Bulletin separately for future reference.

OLD PART
PIEZA VIEJA
OUD ONDERDEEL



1

NEW PART
PIEZA NUEVA
NIEUW ONDERDEEL



2

| | | | |
|-------|----------------|-----|---------------|
| C2045 | Cummins | VIN | 45466 - 46101 |
| | Detroit Diesel | | 46531 - 46754 |
| | Caterpillar | | 47001 - 47527 |

| | | | |
|-------|----------------|-----|---------------|
| T2140 | Cummins | VIN | 40148 - 40164 |
| | Detroit Diesel | | 40611 - 40625 |
| | Caterpillar | | N/A |

| | | | |
|-------|----------------|-----|---------------|
| T2145 | Cummins | VIN | 44301 - 44339 |
| | Detroit Diesel | | 44620 - 44625 |
| | Caterpillar | | 44801 - 44855 |

| | | | |
|-------|----------------|-----|---------|
| C2045 | Cummins | VIN | 46102 - |
| | Detroit Diesel | | 46755 - |
| | Caterpillar | | 47529 - |

| | | | |
|-------|----------------|-----|---------|
| T2140 | Cummins | VIN | TBA |
| | Detroit Diesel | | 40626 - |
| | Caterpillar | | N/A |

| | | | |
|-------|----------------|-----|---------|
| T2145 | Cummins | VIN | 44340 - |
| | Detroit Diesel | | 44626 - |
| | Caterpillar | | TBA |

| Pos. | Q. | Ref.N° | Description | Denominación | Spec. |
|------|----|----------|-------------------------------|-----------------------------------|-------|
| 1 | 1 | 10838305 | Charge air cooler | Refrigeración de aire de admisión | |
| | | | 10838305 replaced by 11003917 | 10838305 reemplazado a 11003917 | |
| 2 | 1 | 11003917 | Charge air cooler | Refrigeración de aire de admisión | |



Charge air cooler
Refrigeración de aire de admisión

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