SERVICE BULLETIN No.1178

COACH MODEL	**:** T2145 and C2045
BULLETIN TYPE	**:** Field Change Program
SECTION	**:** Maintenance Manual: Chapter 9 - Electrical system
DATE	**:** February 16, 2006
SUBJECT	**: ZF Astronic transmission - Kibes software upgrade**
TERMS & CONDITIONS	**:** Labor will be covered by the Van Hool normal warranty.

APPLICATION:

This Bulletin is applicable to following units:

Model	Engine	VIN
C2045	Cummins	45462, 46025 → 46026
	Detroit Diesel	46587 → 46606, 46634 → 46638, 46640 → 46641, 46643 → 46646
	Caterpillar	47001 → 47040, 47066 → 47118, 47125, 47127

DESCRIPTION:

1. On the above-mentioned coaches the starter inhibitor function is controlled by a switch (VH 10856336) on the transmission, which allows starter operation only with the transmission in neutral.

2. In order to improve the reliability of the system it is necessary to have an updated multiplex program installed that bypasses the switch and retrieves the " neutral gear" information from the transmission CAN-bus.
   A minor wiring change in the main junction box is also required.
   VIN cut-in for the new program is as follows:

Model	Engine	VIN	Model	Engine	VIN
T2145	Cummins	44316 →	C2045	Cummins	46027 →
	Detroit Diesel	44644 →		Detroit Diesel	46647 →
	Caterpillar	44806 →		Caterpillar	47128 →

Description continued on next page.

Service personnel: please read, initial and circulate.

Service Manager	Parts Manager	Warranty Administrator	Workshop Foreman	Service Technician

3. The procedure, which has been attached to this Bulletin, shows how to identify the software that is actually installed on the coach.
   If the software is an older version (see below) contact your nearest ABC facility or field service technician, who will make the necessary arrangements to have it upgraded.

SOFTWARE:

Old software

VH reference	Description	Qty.
VH 10909508	C2045 Kibes software, version P	1
VH 10944963	T2145 Kibes software, version B	1

New software

VH reference	Description	Qty.
VH 10909508	C2045 Kibes software, version Q	1
VH 10944963	T2145 Kibes software, version C	1

- Only the new software can be used for service replacement.

PROCEDURE:

1. General:

- Reprogramming should be done by an ABC employee having received formal training on Van Hool multiplex systems.

2. Special tools, equipment or services:

- No special tools, equipment or services are required.

3. Preparations:

- Park the coach on a level surface with the front wheels straight.
  Apply the parking brake and shut down the engine.
- Switch off all systems and leave the battery master switch on.
- Read the entire procedure before beginning to work.

4. To identify the coach multiplex software version:

- Refer to attached document "Multiplex system – Identification of the programs"

Procedure complete.

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.
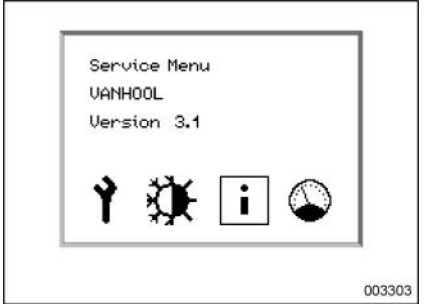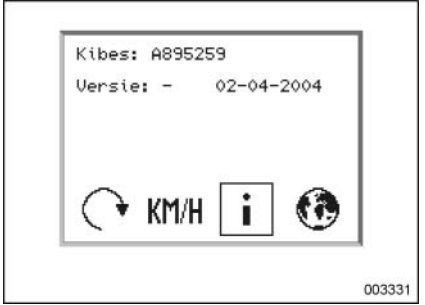
Identification of the programs

Introduction The program for the computer module and that for the dashboard node have unique identification numbers. Both numbers can be called up via the display.

Equipment condition
- Engine off
- Battery isolating switch on

Procedure

Step	Action	Result
1	Press and hold the far left button under the display for longer than 5 seconds.	The service menu appears on the display. Service Menu VANHOOL Version 3.1 003303
2	Press the button under the "i" symbol.	The miscellaneous menu appears on the display. Kibes: A895259 Versie: – 02-04-2004 KM/H i 003331

Step	Action	Result
3	Press the button under the symbol for calling up identification data.	The identification data of the programs appear on the display.
4	Press the button under the symbol for calling up identification data again.	The miscellaneous menu appears on the display again.

Recognizing the identification data

After ...	the display shows ...
"Kibes:"	the program identification number in the computer module.
"Version:" (under "Kibes:")	the change code (letter) of the computer module program.
"Cavtan:"	the program identification number in the dashboard node.
"Version:" (under "Cavtan:")	the change code (letter) of the program in the dashboard node.

To exit miscellaneous menu

Briefly press the far left button under the multifunctional display as many times as necessary to return to the service menu.