

ADDRESSEES	: ABC Customer Care and Parts Source
VEHICLE TYPE	: AG300 First transit
CONFIGURATION GROUP	: 02.22 Engine – Air intake system
DOCUMENT TYPE	: Corrective
DATE	: September 15th, 2020
SUBJECT	: Optimization of engine air intake installation

APPLICATION

This work procedure applies to the following AG300 vehicle:

Vehicle model	Construction number
AG300	62924

INTRODUCTION

This procedure has been released to assist in successfully optimize the engine air intake installation between the turbocharger and the charge-air cooler.

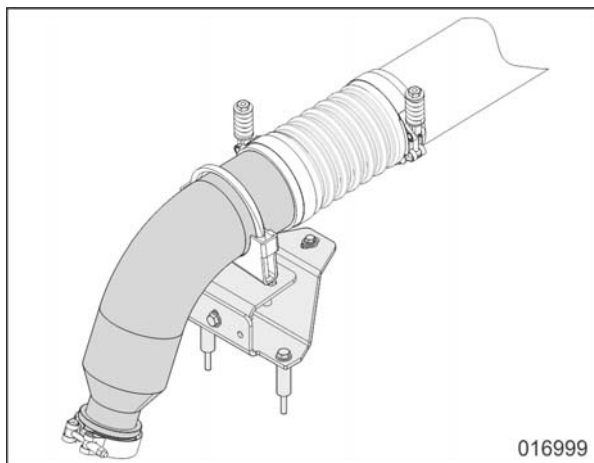


Figure 1: Current engine air intake installation between turbocharger and charge-air cooler

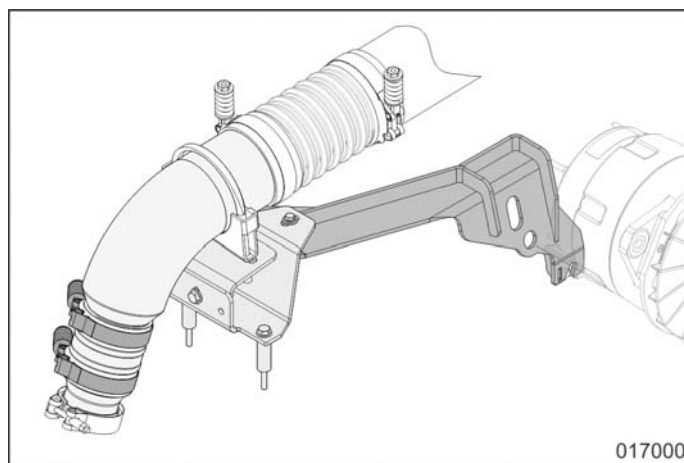


Figure 2: Optimized engine air intake installation between turbocharger and charge-air cooler

JOB QUALIFICATION:

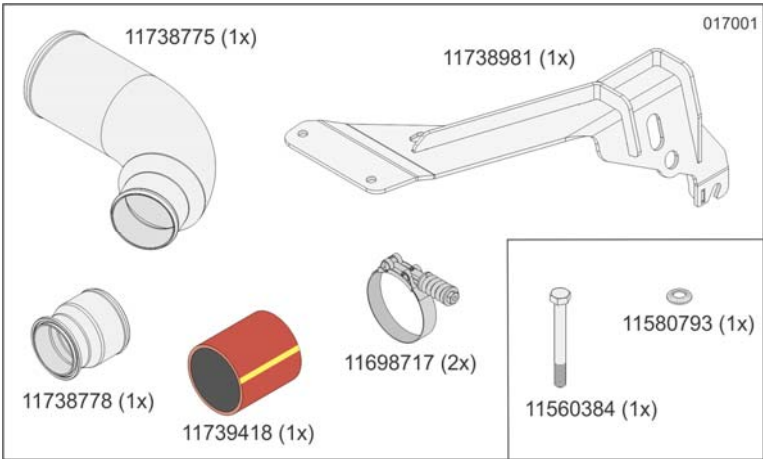
The task has to be carried out by an experienced automotive technician.

JOB TIME/JOB CODE:

5 hours/021315N

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PARTS:

Parts of retrofit kit VH11740632		
 Figure 3		
VH reference	Description	Qty
11738775	Elbow	1
11738778	Reduction	1
11739418	Silicone hose (length 90 mm/3.54 inch)	1
11698717	Hose clamp with coil spring	2
11738981	Bracket	1
11560384	Screw M12x1.75 mm; length 110 mm (4.33 inch)	1
10580793	Serrated conical spring washer M12	1

PREPARATIONS

- Park the coach on a level-surfaced service pit.
- Apply the parking brake and shut down the traction system.
- Switch off all systems and turn off the battery master switch.
- Put a “DO NOT OPERATE” tag on the instrument panel.
- **Read the entire procedure before beginning to work.**



WARNING!

Observe safe shop practices at all times.

PROCEDURE

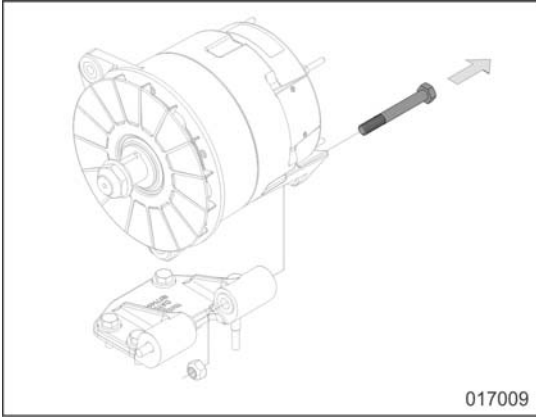
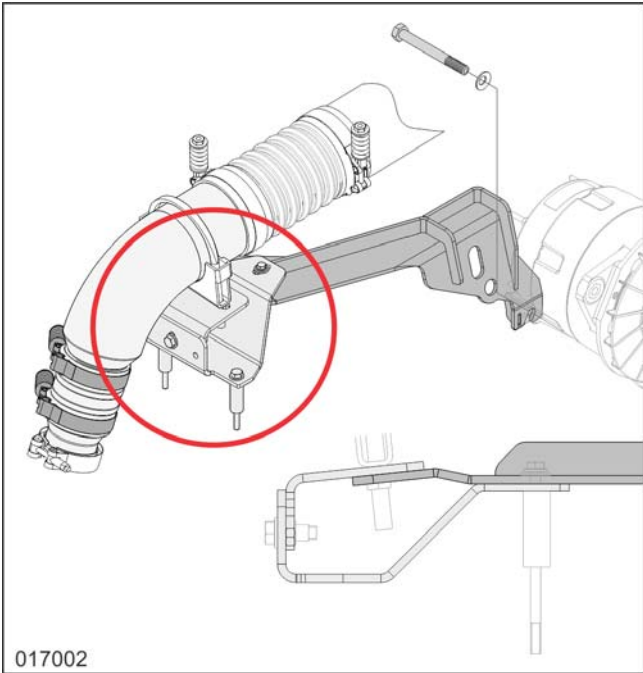


CAUTION!

When working in the engine compartment, turn the starter motor inhibitor switch to “starter motor disabled”.

Step	Action
1	Locate the affected elbow (Figure 1).
2	Slacken the hose clamp securing the flex hose to the affected elbow.
3	Remove the guillotine-type U-clamp securing the elbow.
4	Slacken the elbow V-band clamp so it can be lifted over the elbow. Detach the elbow and remove it from the vehicle. Discard the elbow. Recover the V-band clamp, and the O-ring fitted between the elbow and the turbocharger.

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5	Remove the outer fixation screw of the U-clamp bracket, and slacken the two other fixation screws to facilitate the installation of bracket 11738981 further on.
6	Remove the alternator drive belt.
7	Remove the rear pivoting screw from the upper alternator. 
8	Secure the bracket from the kit to the existing U-clamp bracket and to the alternator. Use the longer screw 11560384 and serrated conical spring washer 10580793 from the kit to secure the bracket to the alternator. The convex side of the serrated conical spring washer must be oriented towards the screw head. Tightening torques: • Alternator pivoting screw: 70 ± 10 Nm (50 ± 7 ft.lbf) • U-clamp bracket M6 fixation screw: 8.6 ± 1 Nm (6.3 ± 0.7 ft.lbf) • U-clamp bracket M8 fixation screws: 21 ± 3 Nm (15.5 ± 2 ft.lbf) 
9	Slip elbow 11738775 from the kit into the flex hose. Do not tighten the hose clamp yet!
10	Slip silicone hose 11739418 from the kit on the new elbow. Slip the two hose clamps with coil spring from the kit over the silicone hose but do not yet tighten them.

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11	Slip reduction 11738778 from the kit into the silicone hose and attach it loosely to the turbocharger using the recovered O-ring and the V-band clamp.
12	Line-up the elbow and hoses, so that the installation is free of stress and strain.
13	Re-install the guillotine-type U-clamp. Tighten the nuts to a torque of 40 Nm (30 ft.lbf).
14	Tighten the V-band clamp nut at the turbocharger side. Make sure the V-band is properly seated before it is tightened. Torque value: 8.5 Nm (75 in.lbf).
15	Tighten the hose clamps with coil spring to 9 + 1 Nm (6.6 + 0.7 ft.lbf).
16	Re-install the alternator drive belt.
17	Register through the registration button located behind Work Procedure W1315 on the Van Hool customer portal. Write the text "WP1315 completed" in the field "Remark".

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.

VAN HOOL CUSTOMER PORTAL:

Consult the Van Hool customer portal for the latest service documentation. Beside the maintenance manual, you will also find the operating manual and the spare parts catalogue of your vehicle on the customer portal. The customer portal is accessible through www.vanhool.be, and only with a code (password) from Van Hool. If you do not have a password yet, request it by using the link on the Van Hool website.