SP 8-600-004 Rev. 001

SERVICE PROGRAM

January, 2018

ATTENTION:

Service Managers / Parts Managers

SUBJECT:

Heater blower motor performance.

DESCRIPTION OF WORK:

This Service Program provides information regarding a performance enhancement which results in faster heater blower motor speed and increased airflow on certain model year 2010-2018 Xspotter vehicles.

PROGRAM EXPIRES:

January 31, 2019

VEHICLES AFFECTED:

There are 2,220 vehicles affected, manufactured after Nov.4, 2009. To determine if a vehicle is affected by this Serrvice Program, log in to the Autocar Warranty Management System at www.autocartruck.com. Click on the blue “Warranty Management” diamond on the right hand side of the page. From the main menu, select “Service Programs” and look for the Autocar recall number above. An excel file will be accessible with the VIN list of affected vehicles. Alternatively, to determine if a single vehicle is affected, select “VIN Profile” from the main menu. In the “Chassis Number” field, enter the last 6 of the VIN. Once the VIN profile is displayed, scroll down to the “Service Program Information” section.

SERVICE RESPONSIBILITY:

Service Programs are performed on eligible vehicles at no charge to the owner until the expiration date listed above.

SERVICE PROGRAM INFORMATION:

Service Programs are product modifications and/or product improvements that Autocar has determined will enhance the operation of the truck. In a continuing effort to inform our customers of potential service issues and avoid unnecessary down time, Autocar has identified the following operation as recommended preventive maintenance.

This Service Program should be added to your preventive maintenance and service manuals.

While being committed to continuous product improvement, Autocar is not liable for updating existing chassis after they have been placed in service.

Questions regarding this Service Program should be directed to Autocar Technical Support at 888-218-3611.

TO OBTAIN PARTS:

DO NOT submit a Solutions ticket.
Ensure that you have authorization from the customer to perform this work and send an e-mail to: warranty@autocartruck.com

Include:

1. VIN(s) (or) (last 6 digits of the VIN(s))
2. Attention To Name
3. Ship To Address.

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REQUIRED PARTS:

(1) S6031002-001 Harness
- (1) 121B20-B2M-HA circuit breaker
- (2) 32011 Waytek terminals
- (2) 31010 Waytek terminals
- (1) 100 mm convoluted tubing

CLAIMS FOR REIMBURSEMENT:

Submit a claim for reimbursement in accordance with Autocar's Warranty Administration Manual.

CLAIM CODING INFORMATION:

Repair Number (Op Code)	Time Allowance (SRT)	Description
15.20.1	1.00 HR	Heater Blower Motor Performance Enhancement

TOOLS REQUIRED:

1/4" Drive ratchet.
1/4" Drive 5/16" socket.
1/4" drive 3/8" socket.
1/4" Drive 7/16" deep socket.
Standard screwdriver
#2 Phillips screwdriver
Wire stripping pliers
Wire crimping pliers

SAFETY NOTICES:

WARNING

Allow the vehicle's engine and cooling system to cool to ambient temperature before performing the repair procedure. A hot engine or cooling assembly may cause burns or other personal injury.

WARNING

Never rely on the hydraulic pressure to hold the cab in an open position. Always use the safety pin in the cab tilt lock tube to prevent serious personal injury or death.

WARNING

To prevent eye injury, always wear eye protection when performing vehicle maintenance, service or inspection.

WARNING

Before working on a vehicle, set the parking brake, place the transmission in neutral and block the wheels. Failure to do so can result in unexpected vehicle movement and can cause serious personal injury or death.

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Working on CNG/LNG Trucks

SAFETY INSTRUCTIONS

If you store or dispense Compressed Natural Gas (CNG) or Liquefied Natural Gas (LNG), or if you work on CNG or LNG trucks, your location must be fully compliant with applicable codes, regulations and standards, including National Fire Protection Associate (NFPA) codes, Society of Automotive Engineers (SAE) standards, American National Standards Institute (ANSI) Natural Gas Vehicle (NGV) standards, the United States Code of Federal Regulations (CFR) and your state and local fire and other applicable codes (including, for example, the California Code of Regulations and the Texas Administrative Code).

Contact your local fire department for guidance and additional compliance information.

Technicians working on Autocar trucks with CNG or LNG engines must be trained in the proper repair of CNG and LNG trucks and engines and the safe storage and dispensing of CNG and LNG.

Working on CNG Fuel Systems

WARNING

CNG fuel systems include a high pressure (3600 psi) system for fuel storage and a low pressure system (125 psi) for consumption by the engine. Understanding the characteristics of CNG and how the fuel system works will prevent injury and damage to persons and property.

Attempting to operate or maintain any CNG fuel system without proper training is dangerous. Complete training and consult instructional bulletins from the CNG system suppliers, such as Agility Fuel Systems' Field Service Bulletin, Safely Working on CNG Fuel Systems.

Welding and Hot Work Near CNG and LNG Trucks

WARNING

Welding, grinding and other "hot work" can be safely performed on or near a CNG or LNG vehicle, but certain precautions must be followed. Understand and perform the necessary precautions provided by the CNG system suppliers, such as Agility Fuel Systems' Field Service Bulletin, Welding and Hot Work Precautions Near CNG and LNG Vehicles.

CNG Cylinders

WARNING

CNG fuel containers must meet Federal Motor Vehicle Safety Standard (FMVSS) 304 (Compressed Natural Gas Fuel Container Integrity) and/or ANSI/CSA NGV2 (Basic Requirements for Compressed Natural Gas Vehicle Fuel Containers). Both standards specify a detailed visual examination every three years.

Ensure that every truck owner completes the required inspections, in accordance with the applicable standards and other resources, such as the Clean Vehicle Education Foundation and NGVAmerica's Compressed Natural Gas (CNG) Container Visual Inspection Advisory.

FMVSS 304 also requires that cylinders not be used after the end of life (EOL) date provided on the tank label. The EOL date is also displayed in the engine compartment and at the fueling connection of each truck. If there is any question as to proper decommissioning of a cylinder, contact the manufacturer, whose name and address is also required to be on the label.

CNG Fuel Container Pressure Relief Devices (PRDs)

WARNING

PRDs must be properly maintained and positioned for safe operation of a CNG fuel system. Missing vent caps can allow moisture into PRDs and vent lines, which can freeze and damage these safety components. Debris which clogs the PRDs and/or vent lines can prevent proper function.

PRDs must be positioned to vent upward, not outward, from a vehicle.

Ensure that every truck owner completes periodic inspections of the PRDs and vent lines and systems, in accordance with guidance provided by the system component suppliers.

Alert First Responders to CNG and LNG

DANGER

In the event of a fire or other emergency, alert first responders to the presence and location of CNG fuel systems, tanks and dispensers. Ensure that emergency personnel are aware of proper precautions, such as those provided in Agility's *First Responder Guide: CNG and LNG Vehicle Fuel Systems.*

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SERVICE PROGRAM

CAUTION

LOCKOUT/TAGOUT PROCEDURES:

Before entering the vehicle or vehicle body, read and follow OSHA regulations concerning entry and working in “CONFINED SPACE” OSHA 1910.146 and “LOCKOUT/TAGOUT” OSHA 1910.147. Follow OSHA regulations while performing any work on the vehicle. The vehicle must be disabled by the following steps before performing any work on the vehicle:

1. Place the transmission in NEUTRAL.
2. Set the parking brake.
3. Shut the engine OFF.
4. Lock cab doors, keep the key in your pocket. Block the wheels before entering the body or performing any work on the vehicle.
5. Turn the battery disconnect switch OFF, if equipped.
6. Completely drain the air from the primary/A system and secondary/B system by opening the drain valves on the air tanks themselves or by using the drain manifold if supplied. When draining the air tanks, do not look into the area where air is draining. Dirt or sludge particles may be expelled in the air stream and can cause eye injury.
7. Place magnetic “DANGER” signs on both cab doors before entering the body or performing any work on the vehicle.
8. Take proper precautions before working under the vehicle. Use ramps approved for the weight of your vehicle, or use floor jacks and stands. Never work under a vehicle supported by jacks alone. Always use jack stands to support the vehicle.

HEATER BLOWER MOTOR PERFORMANCE ENHANCEMENT:

1. Locate the heater blower motor access cover at the base of the heater case *(see Figure 1)*.

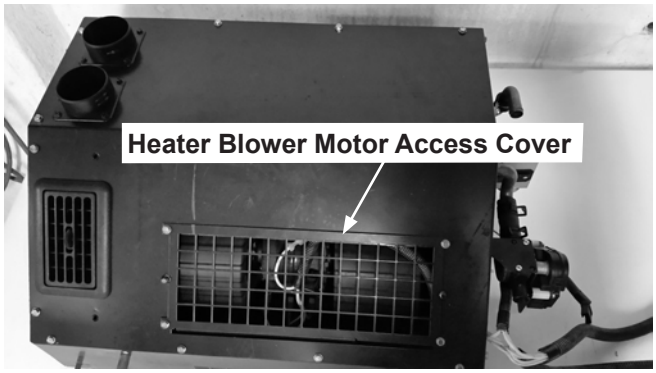

Figure 1

2. Remove the four screws attaching the cover to the heater case, remove the cover and set the screws and cover aside for reinstallation *(see Figure 2)*.

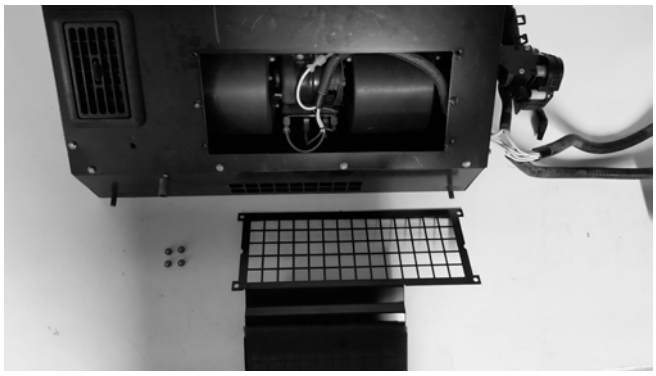

Figure 2

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3. Locate the wiring pass through port on the inboard side of the heater case *(see Figure 3)*.

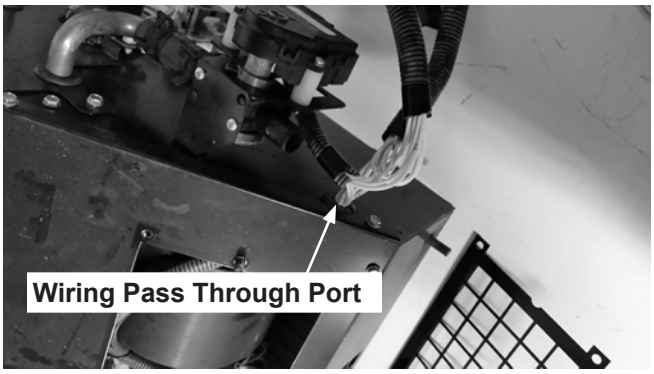

Figure 3

4. Remove the grommet from the pass through port *(see Figure 4)*.

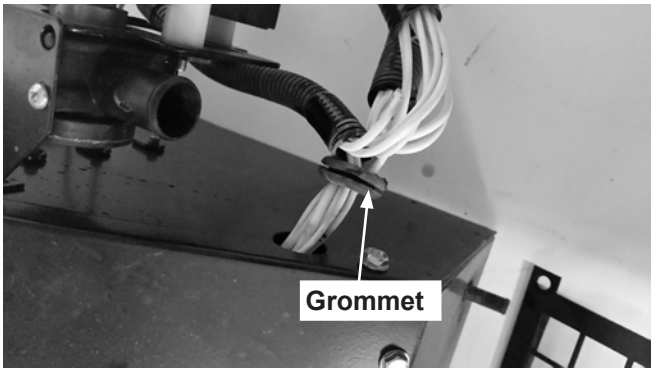

Figure 4

5. Insert the four-wire section of the new harness (S6031002-001), containing wires numbers 8, 9, 10 and 11, through the grommet and through the port *(see Figure 5)*.

Note: *The harness as depicted in the Figures have the terminals already installed (ref. steps 7-11).*

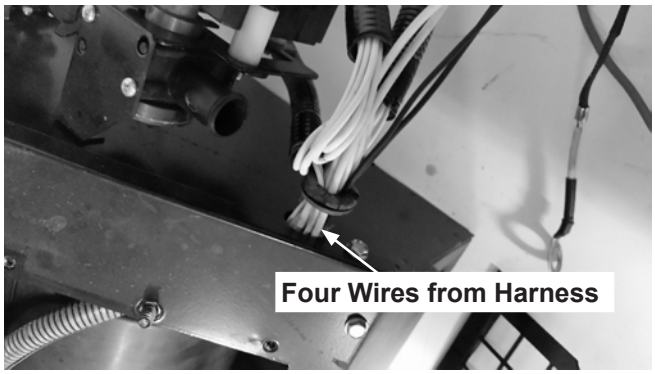

Figure 5

6. Un-plug wire 26 (in some cases, wire 26 will be colored red) from the blower motor connection *(see Figure 6)*.

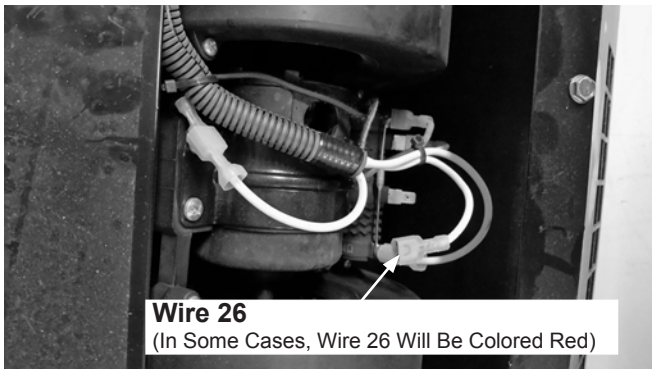

Figure 6

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7. Install the new Waytek terminal (32011) onto wire 9 of the new harness (S6031002-001) and connect wire 9 to the open terminal at the blower motor connection *(see Figure 7)*.
8. Install the new Waytek terminal (31010) onto wire 10 of the new harness (S6031002-001) and connect wire 10 to wire 26 (in some cases, wire 26 will be colored red) *(see Figure 7)*.

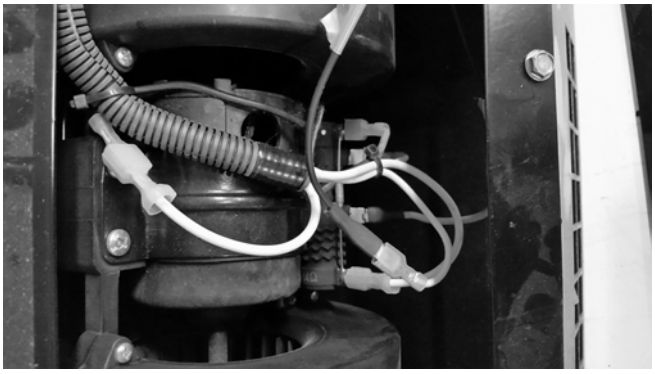

Figure 7

9. Un-plug wire 27 (in some cases, wire 27 will be colored orange) from the blower motor connection *(see Figure 8)*.

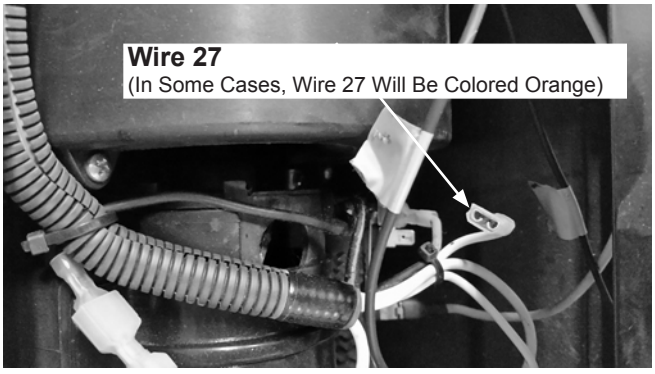

Figure 8

10. Install the new Waytek terminal (32011) onto wire 8 of the new harness (S6031002-001) and connect wire 8 to the open terminal at the blower motor connection *(see Figure 9)*.

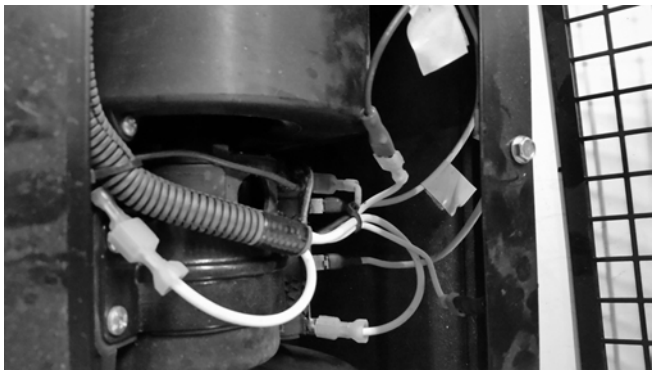

Figure 9

11. Install the new Waytek terminal (31010) onto wire 11 of the new harness (S6031002-001) and connect wire 11 to wire 27 (in some cases, 27 will be colored orange).
12. Route the new harness (S6031002-001) and secure to the existing harness with cable ties.

13. Reinstall the heater blower motor access cover using the four screws which were set aside in step 2 *(see Figure 10)*.

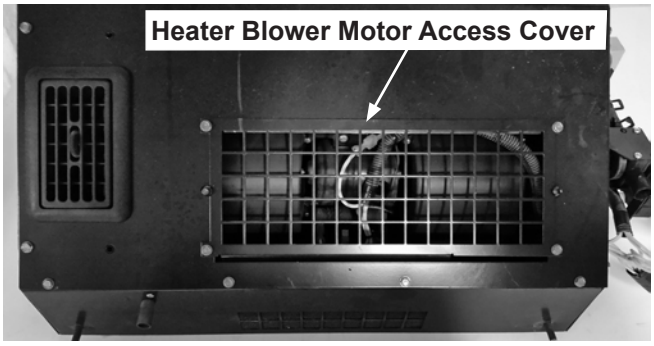

Figure 10

14. Locate the blower motor circuit breaker at the base of the dash *(see Figure 11)*.

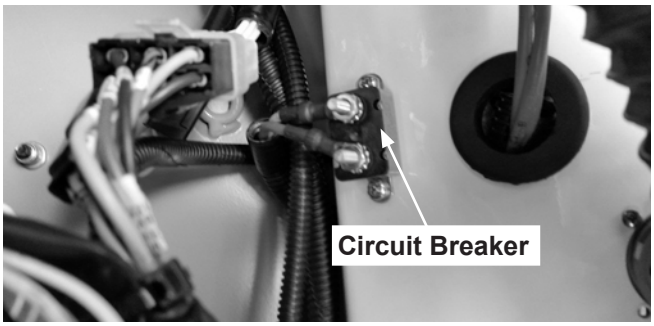

Figure 11

15. Remove the terminal retaining nuts and mounting screws and set aside for reinstallation.
16. Remove and discard the existing circuit breaker and install the new circuit breaker (121B20-B2M-HA) using the same mounting screws.
17. Locate the cab circuit breaker at the base of the dash. Remove the output terminal nut and set aside. Install wire PWR of the new harness (S6031002-001) and secure with the same nut *(see Figure 12)*.

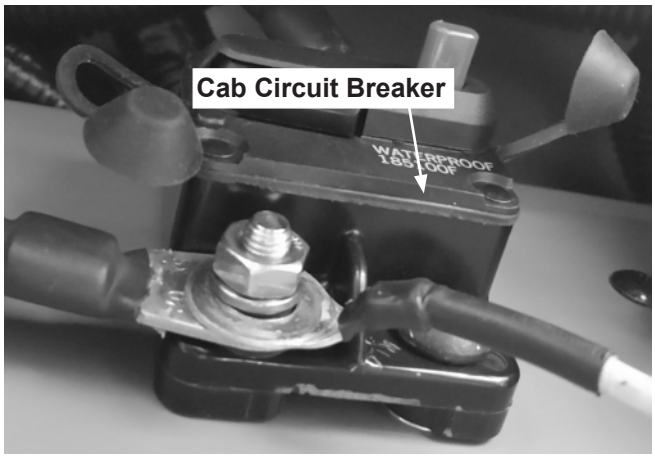

Figure 12

18. Locate the cab ground stud located at the forward side or the engine tunnel and forward of the throttle pedal *(see Figure 13)*.

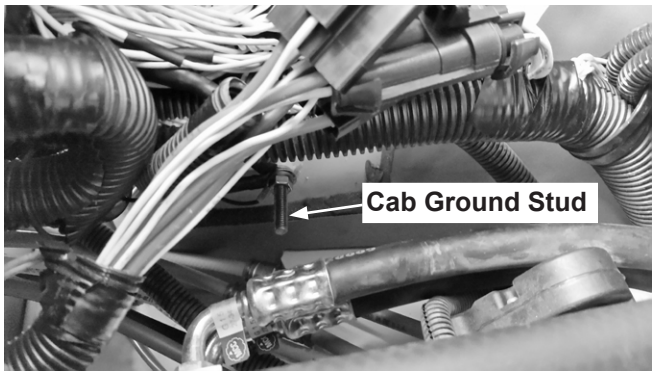

Figure 13

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19. Remove the nut from the cab ground stud and set aside for reinstallation. Install wire OC-FZ of the new harness (S6031002-001) and reinstall the nut *(see Figure 14)*.

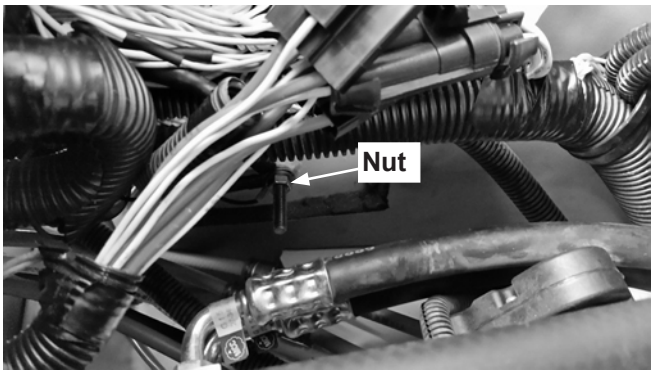

Figure 14

20. Install the 100 MM convoluted tubing onto the new harness (S6031002-001) and secure it to the existing cab harness to prevent chafing or interference with control functions.
21. Start the engine and verify that all blower motor functions are operational.
22. Repairs are complete.