



Owner's Manual

Model:
Can Am Commander™

Caution:

Before using this product, read this manual and follow all safety instructions.



Heater for BRP Commander™

- Safety Instructions
- Kit Contents
- Tool Requirement
- Installation Instructions

* DefenderCab™ and accessories are in no way affiliated with Can Am, BRP. Any use of these or the Commander name(s) is only to identify their utility vehicle as it pertains to our accessories. Can Am and Commander are registered trademarks of BRP (Bombardier Recreational Product Inc.)

Warning: Failure to heed all safety and operating instructions and / or warnings regarding use of this product can result in serious bodily injury.

SAFETY INSTRUCTIONS

Read entire assembly instructions prior to commencing work.

Install all parts indicated in assembly instructions. Failure to fully assemble product before use could result in personal injury.

Assembly of product requires use of hand and/or power tools. If you are not experienced in using these types of tools, have product dealer do the installation for you.

Some parts contain sharp edges; wear protective gloves if necessary.

Dress for safety. Do not wear loose clothing, neckties or jewelry if using power tools to assemble this product.

Always keep your assembly area clean, uncluttered and well lit.

Keep visitors and children a safe distance away from the assembly area. Visitors should wear the same safety equipment described above.

NEVER OPERATE YOUR UTV WITH THE CAB DOORS OPEN. FAILURE TO PROPERLY LATCH THE DOORS PRIOR TO MOVING THE VEHICLE COULD RESULT IN SERIOUS INJURY.

Additional Safety Note(s):

Some installation steps require that some original equipment be modified and/or removed; consult your dealer to ensure these steps will not void your warranty. Some operations may cause some fluid to be expelled forcefully. ALWAYS protect your eyes and mouth while cutting through hoses. **NEVER ATTEMPT TO INSTALL THIS UNIT WHILE COOLING SYSTEM IS HOT!**

Heater Kit Contents

Your DefenderCab™ Heater Kit should contain the parts listed below. Separate all parts from packing materials. Do not discard packing material until assembly is complete. Item quantities are listed in parenthesis below.

Kit Contents:

- (1) Heater Unit Assembly
- (1) Wiring Harness c/w Switch
- (10Ft) 5/8" Heater Hose
- (6Ft) 2" Defroster Duct Hose
- (2) Aluminium Y-Adapter
- (2) 3" Louver for 2" Hose
- (4) Hose Bender Coil
- (4) Large Hose Clamp
- (4) Small Hose Clamp
- (4) Hose Half Clamp
- (4) Push Type Retainer
- (2) Self Drilling Screw
- (6) Nylon Zip Tie

Tools Required for Assembly

Ensure that you have the following tools available before you begin the installation of your DefenderCab™ Heater Kit. *** **Assembly May require an assistant*****

- Torx set (25, 27 and 30)
- Metric wrench and socket sets
- Electric drill
- 3/16", 1/4" and 9/16" drill bits
- Utility knife
- Utility clamps or Hose Pinchers
- 1", 2 1/4" and 3" Hole saws
- Flat Screw Driver
- Side Cutters
- Staple Remover or Push Pin Pliers



Kit Installation

1. Vehicle Preparation

- A) Your vehicle's cooling system is a critical system in ensuring top performance. In order to minimize the chances of contamination to the cooling system, pressure wash your vehicle around areas of operation prior to cutting into hoses.
- B) If you have a Defender Cab installed, remove doors and set them aside.
- C) Remove seats from the vehicle and set them aside.
- D) Empty glove box and center dash console of their contents.

2. Installation Procedures

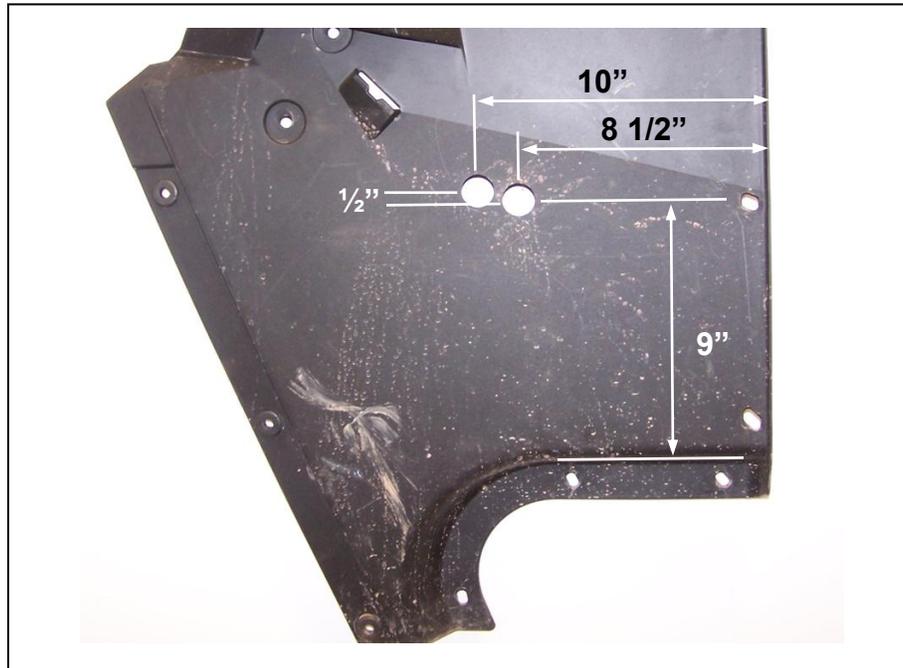
- 1) Open glove box and remove upper trim piece by firmly pulling towards the inside of the vehicle.
- 2) Remove glove box by unscrewing (2) 10mm bolts from upper front corners. Firmly pull box away from fire wall. ***Take care not to damage attached wiring harness***
Practice installing and removing glove box at this point.
- 3) Follow wiring harness and disconnect plug, set glove box aside.
- 4) If you do not have an OEM type tool, Use a *Staple Removal Tool* (shown in tools section above), remove all OEM push type retainers from inner passenger side panel. Remove (2) remaining Torx screws and pull panel from vehicle:



5) Remove (2) Torx screws and (2) retainers from center dash switch console and gently set it aside to gain access to dash interior. **Note: Switches need not be disconnected.**

6) Locate an appropriate switch location (dash area to the right of the steering wheel is ideal) and pierce a 9/16" hole. Install switch and knob. Securely run green and black wires back to the battery and remaining portion of harness to recently uncovered center dash area. Do not connect to battery at this time.

7) Using 1" hole saw, cut holes into panel as shown below:



8) From inside of vehicle, pinch coolant hose as shown and cut through hose as neatly as possible. **NOTE: Coolant will be expelled; protect yourself!** Install (1) Y-Adapter in the orientation shown and secure with larger hose clamps. Install shorter 5/8" coolant hose and secure with small hose clamp. **ELEVATE LOOSE END OF HOSE TO A HIGHER LEVEL THAN THAT OF RADIATOR FILLER CAP BEFORE REMOVING "HOSE PINCHERS"**.



9) Repeat step 8 on radiator hose located above driver's side front wheel. Note Y-Adapter orientation. Attach and route longer heater hose through center of vehicle and out through passenger side "foot well" area. Elevate hose and keep together with previously installed heater hose. Using 2 or 3 zip ties, secure hoses to vehicle to prevent chafing.

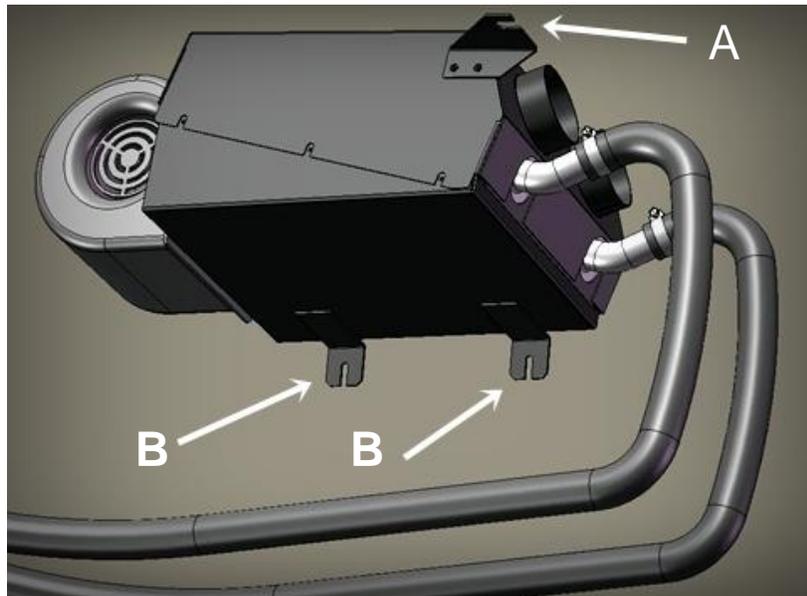


10) Keeping hose ends elevated, feed them through 1" holes of inner side panel and pinch them to prevent coolant loss. Set the hoses down into the passenger seat area in order to reinstall the side panel in it's proper location. Note: Continue to pull hoses through panel ensuring they are not binding and/or kinking. Reinstall OEM hardware onto inner side panel.

11) Feed hose benders onto each heater hose as shown and bend them as shown.

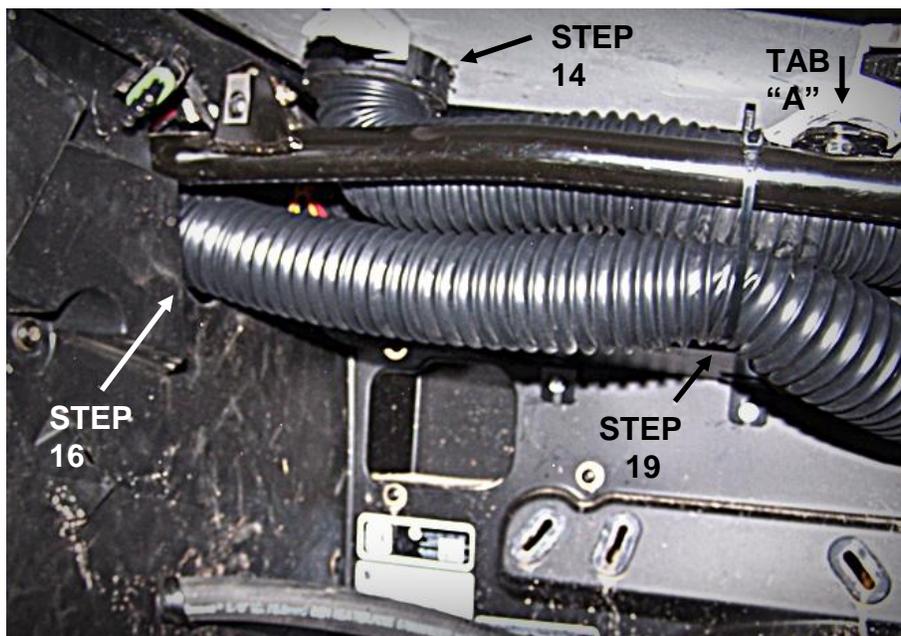


12) Attach heater hoses to heater core as shown below.



13) Temporarily locate heater unit in area above glove box as shown above. Ensure unit is as high up as possible and as tight to fire wall as possible. Note mounting point locations "A" and "B". Loosen 10mm bolt closest to mounting tab "A" and mark location of mounting tabs "B". Drill a 1/8" pilot hole in tab "B" locations. Note that this may require drilling through frame components.

14) Temporarily mount heater unit with proper hardware. Using 3" hole saw, carefully chose a location for the passenger side louver by working from underside of dash. Watch for windshield location, body lines and glove box mounting tabs during this step as the overall louver diameter is slightly larger when installed. **Double check before drilling!**



- 15) Repeat step for driver side louver.
- 16) Using 2 1/4" hole saw, carefully cut a hole through side panel to allow defrost duct to reach driver's side.
- 17) Stretch out the supplied defrost duct hose and measure out a length to fit between heater outlet duct and passenger louver. Ensure you will have enough to cover the driver's side with remaining duct length BEFORE cutting.
- 18) Loosen the heater unit and attach defrost ducting to it. Permanently mount heater unit to fire wall and dash panel when done.
- 19) Run defroster hoses and mount to louvers. Secure them to frame as shown above.
- 20) Push blower wiring harness through to center dash area and connect to supplied wiring harness while matching wire colours. Push spades onto blades inside blower connector.
- 21) Connect harness to battery and ensure proper function. Secure wiring harness when done.
- 22) Reinstall center dash panel with OEM hardware. **NOTE: It is strongly recommended that the air vent built into this dash panel be covered up during cold winter months as it flows massive amounts of exterior air at speeds.**
- 23) Raise front of vehicle enough that filler caps are above heater unit. (roughly 1.5~2 feet). Remove pressure cap and fill system slowly. Start engine and warm up while topping off as required. Turn heater on, heat should be felt within a minute or two. Rev engine to 3000rpm for a few seconds and top off overflow bottle to "upper level". Re- install caps and lower vehicle. Confirm there are no leaks. Turn vehicle off.
- 23) Lubricate rubber grommets located in firewall. Align glove box tabs and push glove box upwards followed by a push towards fire wall. Resistance will be felt as defrost ducting is being slightly deformed. Practice that was recommended under step 2 will pay off here! Re-install hardware and dash trim.
- 24) Wrap protector around hoses where they penetrate the side panel.
- 25) Using 1/4" drill bit, remaining hose half clamps and push type retainers, neatly secure hoses to bottom of glove box.
- 26) Consider tightening all clamps after several heat cycles as hoses will soften up.

To order replacement parts, contact the Parts Department at:

LB Manufacturing Inc.
247 Arsenault Road,
Dieppe, N.B Canada
E1A 7J5
Ph: (506) 388-9334 Fax (506) 388-3325
www.defendercab.com
parts@defendercab.com

Manual Revision: 1.1

Date: 31 October, 2012