AUTO-BLiP

INTELLIGENT DOWNSHIFTS

www.AUTO-BLiP.com

User Manual

2013+ Dodge Viper

Version 1.3

WARNING:

Adjusting the settings of AUTO-BLiP while driving could lead to an accident and/or serious injuries. Changes should only be made when it is safe to do so. The primary attention of the driver should always be on safe driving. As with any gauge or instrumentation system in the vehicle, any information provided by Auto-Blip should be interacted with as part of a normal process of driving safely. Auto-Blip is intended for racing and/or off-road use only!

The mounting of AUTO-BLiP and the routing of the cable harness connecting it to the vehicle should be done withcaution.This includes but is not limited to the following restrictions:

- Do Not mount the AUTO-BLiP where it can obstruct the view of the driver
- Do Not mount the AUTO-BLiP in a manner that could cause it to be propelled through the vehicle during an accident causing injury, such as over or near an air bag
- Do Not route the cable in a manner that would interfere with the operation of the vehicle controls

INTRODUCTION:

Congratulations on your purchase of AUTO-BLiP. Please take the time to read the entire instruction manual before attempting to install. DO NOT attempt the use of AUTO-BLiP until you have completed the entire installation process and the unit has been properly calibrated.

WE STRONGLY RECOMMEND THAT AN EXPERIENCED TECHNICIAN INSTALL AUTO-BLiP!

Color chart with abbreviations:

	black	BK
	brown	BN
	red	RD
	orange	OG
	yellow	YE
	green	GN
	blue	BU
	violet	VT
	grey	GY
	white	WH
	pink	PK
	turquoise	TQ

Attention: If a wire has a stripe it will be called-out by using a forward slash (/) between the main color and the stripe color e.g.: A black wire with purple stripe = BK/PU

Tools (not all may be necessary depending on type of instal):

- Needle nose pliers
- Light (Forehead mounted recommended)
- Wire cutters / strippers - optional
- Digital Multimeter (DMM) - optional
- X-Acto knife or equivalent - optional

CONNECTIONS (IGNITION MUST BE OFF DURING INSTALLATION!):

1) When performing this installation, make sure the wire harness is securely routed away from any moving parts! If possible, secure the Auto-Blip harness to the car manufacturer's harness for added safety.

2) Some vehicle are equipped with two switches at the clutch pedal. The Cruise Control Disable switch is mounted higher up under the dashboard. The Safety Interlock switch is down lower on the pedal where it is visible. For this installation, you will only be working with the clutch Safety Interlock switch.

3) Soldering the Auto-Blip harness wires (6) to the respective car wires provides for the best results. However, due to the challenge of working under the dash, this should only be done by a professional. Auto-Blip now provides Posi-tap connectors as an alternative to soldering. Follow the separate instructions available at www.auto-blip.com/support-center/ for best results.

4) Pay special attention to the position of the wires relative to each connector, sensor or switch and not just the wire color. Pictures in this manual may not be representative of your car's year/make/model.

ATTENTION: AUTO-BLiP will not work until you complete
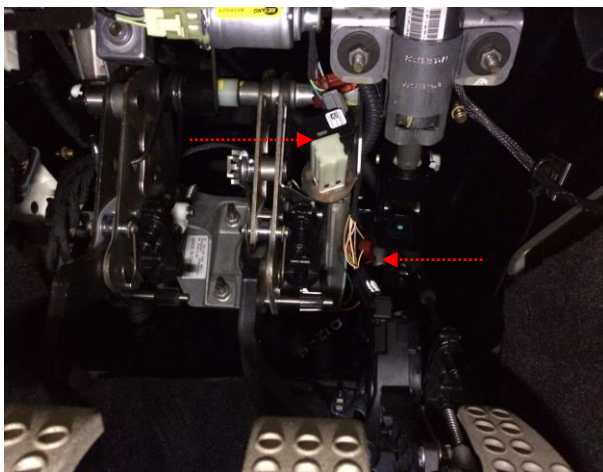the CALIBRATING UNIT process on page 10

INSTALLATION CHART:

Signal Description	AUTO-BLiP harness color wire below, connects to….	…. Viper harness color coded wire	Viper wire in harness plug	Location of harness plug
Accelerator Pedal Position Sensor1	Red (or Green)	BROWN/white	#2	**Under Dash**- Black oval plug to upper left above pedal.
Accelerator Pedal Position Sensor2	Green (or Red)	WHITE/brown	#5	**Under Dash**- Black oval plug to upper left above pedal.
Brake Activation Sensor	Blue	LT BLUE/green	#2	**Under Dash**- Light gray flat plug above brake pedal facing in-upwards on switch/plunger assembly.
12-Volt <u>constant on</u> source Positive (+)	White	RED	#1	**Under Dash**- Light gray flat plug above brake pedal facing in-upwards on switch/plunger assembly.
Clutch Activation Interlock Switch	Yellow	YELLOW/orange	#2 - middle	**Engine Bay** – Directly below ECU harness exit from firewall.
Negative (-)	Black	BLACK	#5	**Under Dash**- Light gray flat plug above brake pedal facing in-upwards on switch/plunger assembly.

The following are tips courtesy of 2015 Viper GT installer:

- **Remove the driver seat for easier access**. (5-10mins). Accomplish this by removing the (2) 15mm bolts at seat-front base, remove (2) 15mm nuts at seat-rear track end, and unplug the wiring harness (if you have electric seats) from the rear. (Position the seat mid-track with the seatback in a vertical position before unplugging harness). Wrap the rear track with a microfiber towel(s) to prevent any possible moving mishaps.

- **Dry-Fit the harness**. The harness has (3) pairs of wires that exit the harness, and are separated down the length of the harness. Place the harness high above all pedals over the aluminum brace so the wires for the Accelerator and Brake drop directly down, and the Clutch wires which are at the end, will pass thru the firewall above/thru the current ECU master harness grommet.

- **Keep the wires away from moving parts**. When you lay out the harness, and drop the wires near their destination, keep them away from any moving components AND mentally think of dropping a wire "down" from above and the Posi-tap connector should be facing the wire to connect. Keep the off-angle connections minimal at best. (On the Viper, the moving pedal assembly and cables make the areas tighter than most cars)

- **Give yourself extra room on the Viper's wire loom ends.** Carefully cut-up on the loom sheathing to open up the wire spacing a little. This gives more room for the WireTap to be installed w/o stressing the wires.

- **Posi-tap connectors: Auto-Blip now provides Posi-tap connectors as an alternative to soldering. Follow the separate instructions available at www.auto-blip.com/support-center/for best results.**

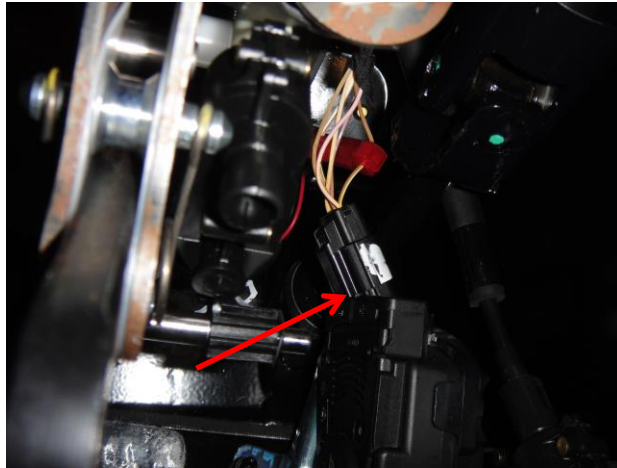## Sensor Area Locations (detailed on next few pages)
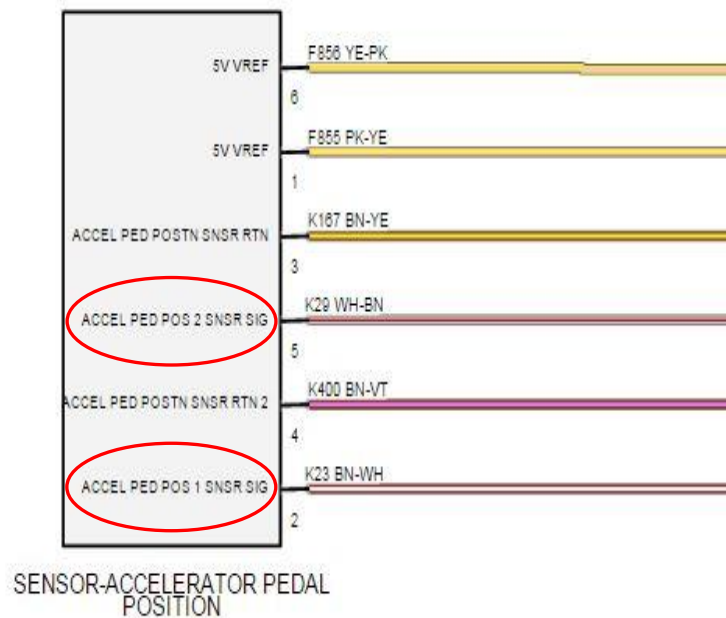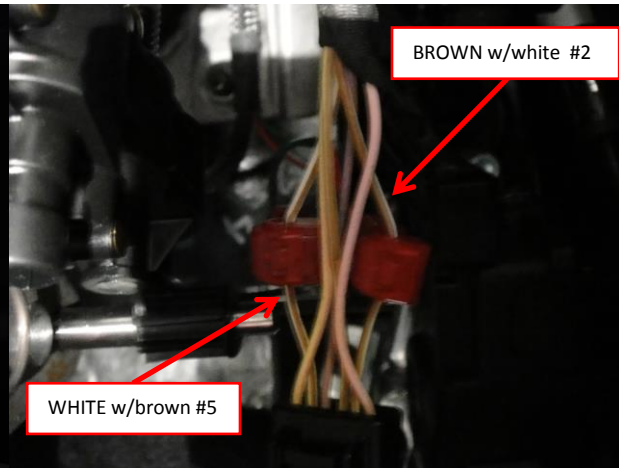

Under Dash (Brake & Accelerator)

Engine Bay (Clutch Interlock)

Accelerator Pedal Position Sensor - Installation

View from under sensor w/plug attached

View of wires (#2 & #5) w/RED or GREEN used

BROWN w/white #2

WHITE w/brown #5

5V VREF	F856 YE-PK
6	
5V VREF	F855 PK-YE
1	
ACCEL PED POSTN SNSR RTN	K167 BN-YE
3	
ACCEL PED POS 2 SNSR SIG	K29 WH-BN
5	
ACCEL PED POSTN SNSR RTN 2	K400 BN-VT
4	
ACCEL PED POS 1 SNSR SIG	K23 BN-WH
2	

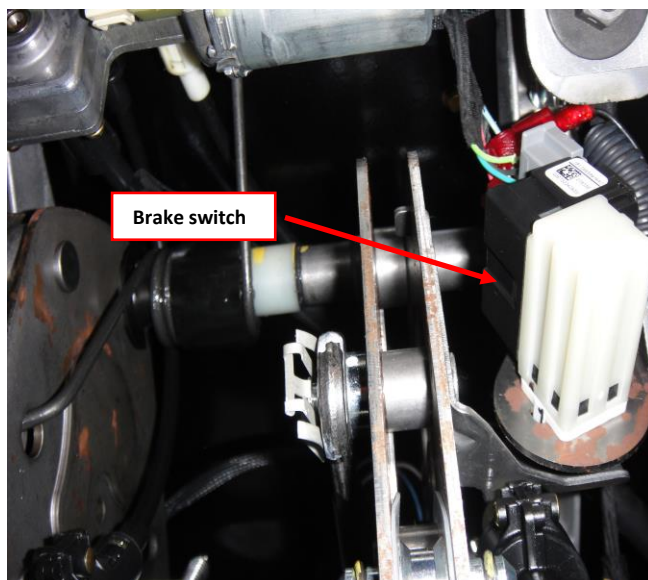SENSOR-ACCELERATOR PEDAL
POSITION

CAUTION: The wires in the schematic are <u>NOT in the pictured</u> order as **physically** in the Viper. Wire#2 (BN/wh) & Wire#5 (WH/bn) are your Pedal Position Sensor #1 and #2 signals. These are shown above in the picture in actual physical positions. **You can attach RED -or- GREEN to either.**
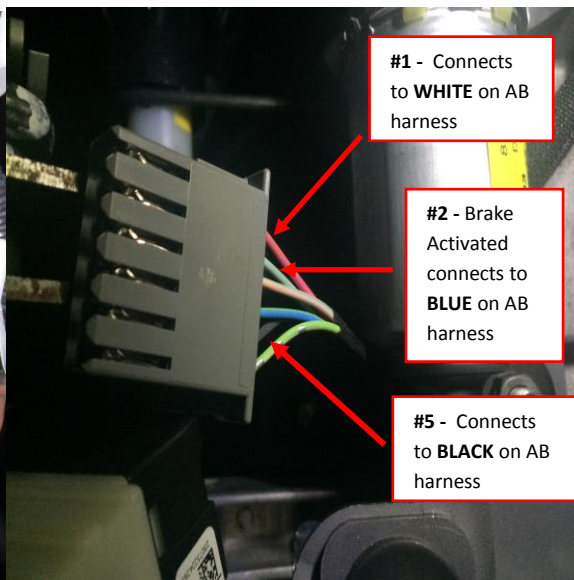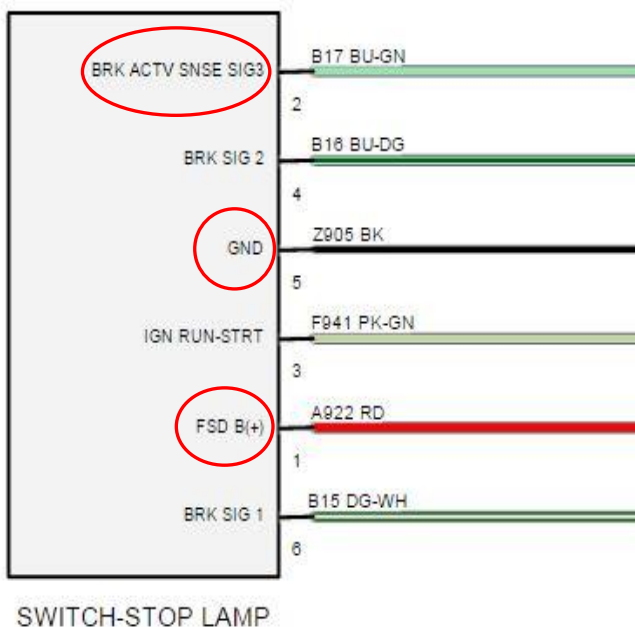
Brake Pedal Position Sensor – Installation

View from under sensor w/plug attached

View of harness and wires to tap into

Brake switch

#1 - Connects to **WHITE** on AB harness

#2 - Brake Activated connects to **BLUE** on AB harness

#5 - Connects to **BLACK** on AB harness

NOTE: Because the Viper interlock switch is outside the firewall you will need to use (2) of the provided wire extenders for the set of wires that travel down to the clutch pedal area **FOR THIS STEP**. This allows the AB harness to be used as-is for the next step which is the clutch interlock switch.
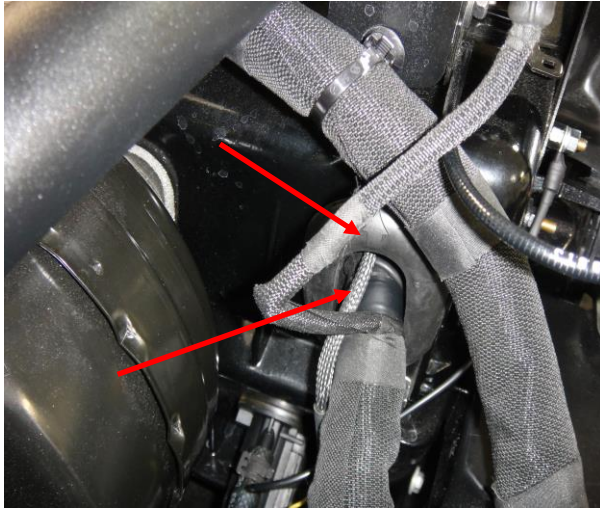
BRK ACTV SNSE SIG3   B17 BU-GN

2

BRK SIG 2   B16 BU-DG

4

GND   Z905 BK

5

IGN RUN-STRT   F941 PK-GN

3

FSD B(+)   A922 RD

1

BRK SIG 1   B15 DG-WH

6

SWITCH-STOP LAMP

CAUTION: The wires in the schematic are NOT in the **pictured** order as **physically** in the Viper. Wire#1 (RED) is your constant (12v+). Wire#2 (LtBlue) is your Brake Activation signal. Wire #5 (BLACK) is your ground connection.

TIP: Due to the limited size of the wire loom space between wires, install the wire-tap inner wire 1st (Lt Blue). Install the outer wire for the positive 2nd. ALSO. Because these are adjacent to each other, attempt to shift/stack one above the other side-by-side.

Clutch Interlock Switch / Sensor – Installation

ECU grommet & AB harness pass-thru   **View of switch from above**
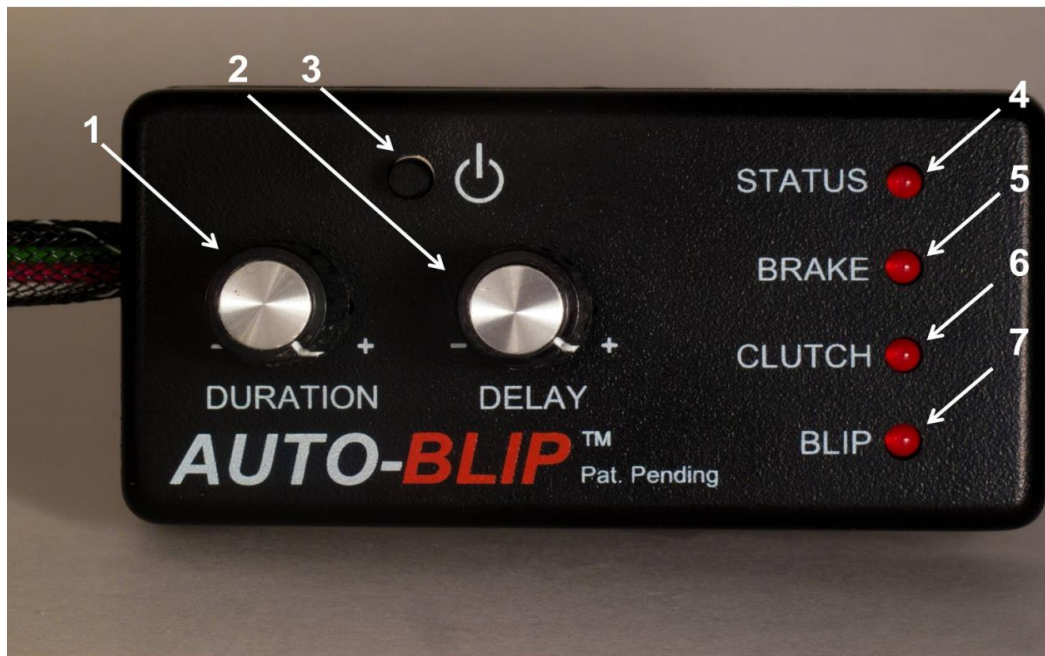

TIP: Pry out the upper section of the grommet and pull-away from the firewall. Cut a small "X" in the upper portion for the AB harness to pass thru. The switch is directly below the grommet and seen in the pic to your right above. Then pass the harness thru the grommet while pried from the firewall. Push back into place afterwards.

1) Connect the YELLOW wire from the AB harness to the YELLOW w/orange stripe wire **(#2 – middle of the three)**.

HOW IT WORKS

1. The "DURATION" dial sets the desirable RPM blip level by opening the throttle. Turn dial clockwise to increase RPM blip level.
2. The "DELAY" dial allows for the insertion of a constant time delay from the time a downshift event is sensed to when the unit blips the throttle. Turn dial clockwise to increase delay. Range from 0 to 0.5 seconds.
3. The ON/OFF button will toggle between the ON and OFF mode. The unit will default to the ON state upon power up.
Note: This button is also use to enable the calibration mode. Refer to the Calibrating Unit section below for more details.
4. The "STATUS" LED turns on when the unit is ON.
5. The "BRAKE" LED turns on when the brake pedal is pressed.
6. The "CLUTCH" LED turns on when the clutch pedal is pressed.
7. The "BLIP" LED turns on when a throttle blip event occurs.

Note: The *AUTO-BLIP* will automatically turn OFF after 6 hours of inactivity. It will remain OFF until the ON/OFF button is pressed or power to the unit is removed and re-applied.

The *AUTO-BLiP* monitors your automobile's accelerator pedal, brake pedal, and clutch pedal, blipping the throttle only when the clutch pedal is being depressed while simultaneously braking.

CALIBRATING UNIT

In order for your AUTO-BLiP unit to function properly, you must first perform the calibration sequence outlined in this section!!!

1. Turn on ignition, but do not start engine. *AUTO-BLiP* "STATUS" LED light will light up. If not, turn ignition off and verify the power supply and ground connectors are fully seated.
2. Set both the "DURATION" and "DELAY" adjusting dials on the *AUTO-BLiP* unit completely counter clockwise (-).
3. To enter the calibration mode, press and hold down the ON/OFF button (about **10** seconds) until the "STATUS" LED continuously blinks **(1)** time followed by a short pause.
4. Fully press and hold down the accelerator pedal. While holding the accelerator pedal wide open, press and release the ON/OFF button once, continue to hold the accelerator pedal down. This step records your vehicle's full open throttle pedal position.
5. At this point the "STATUS" LED light will blink **(2)** times followed by a short pause. Completely release the accelerator pedal. With the accelerator pedal completely released, press and release the ON/OFF button once. This step records your vehicle's close throttle pedal position.
6. At this point the "STATUS" LED light will blink **(3)** times followed by a short pause. Completely press the brake pedal. With the brake pedal completely pressed, press and release the ON/OFF button once, continue to hold the brake pedal down. This step records your vehicle's brake pedal pressed position.
7. At this point the "STATUS" LED light will blink **(4)** times followed by a short pause. Completely release the brake pedal. With the brake pedal completely released, press and release the ON/OFF button once. This step records your vehicle's brake pedal released position.
8. At this point the "STATUS" LED light will blink **(5)** times followed by a short pause. Completely press the clutch pedal. With the clutch pedal completely pressed, press and release the ON/OFF button once, continue to hold the clutch pedal down. This step records your vehicle's clutch pedal pressed position.
9. At this point the "STATUS" LED light will blink **(6)** times followed by a short pause. Completely release the clutch pedal. With the clutch pedal completely released, press and release the ON/OFF button once. This step records your vehicle's clutch pedal released position.
10. This completes calibration of the *AUTO-BLiP* unit!

Note: When properly calibrated, the "BRAKE" and "CLUTCH" LEDs will turn on when the corresponding pedal is pressed.
The AUTO-BLiP features a diagnostic function that will warn the user when the AUTO-BLiP's calibration routine fails to properly recognize the accelerator pedal position sensor (APPS), BRAKE, and/or CLUTCH signals. Failures related to the BRAKE and/or CLUTCH will prevent the unit from exiting the calibration sequence. This is done to prevent AUTO-BLiP from blipping the throttle at the incorrect time. When a failure is detected the AUTO-BLiP will continuously blink the "BRAKE", "CLUTCH", and/or "BLIP" LEDs, signaling a failure during calibration of the respective signals. Press and release the ON/OFF button once to re-start the calibration sequence from the beginning.

TECH SUPPORT

In the event of a malfunction, please check the following:

1. Turn off ignition then verify all connectors are fully seated.
2. Make sure the unit is properly powered. When unit is properly powered the "STATUS" LED will remain continuously lid.
3. Be sure the unit has been calibrated, as outlined in the calibration section, according to your vehicle's model and year.
4. Check harness for cuts, scrapes or abrasions.
5. Technical support: call (713)289-4015 (Mon-Fri from 9A-3P CST); email al@auto-blip.com

AUTO-BLiP LIMITED WARRANTY

Tractive Technology, LLC warrants this product against defects in material and workmanship for the period of 90 days. The warranty period begins with the date of original retail purchase.

This limited warranty is made only to the original end user purchaser ("you") of the product and does not extend to any subsequent purchasers or owners of the product. The "original end user" is the first user to put the product into service in any fashion. It is your responsibility to establish the warranty period by verifying the original purchase date.

If you discover a defect, Tractive Technology, LLC will, at its option, repair or replace this product with a new or reconditioned product at no charge to you, provided you return it during the warranty period, with transportation charges prepaid, to Tractive Technology, LLC. (You can obtain additional information by contacting Tractive Technology, LLC at the address printed on the card). Please attach your name, address, telephone number, and a copy of the bill of sale as proof of date of original retail purchase, as well as a detailed description of the problem for which service is requested. Prior to returning the product, you must obtain from Tractive Technology, LLC a Return Merchandise Authorization Number (RMA#). You are responsible for packing the product to be returned. If the repairs are covered by the Limited Warranty and if the product was properly shipped to Tractive Technology, LLC, Tractive Technology, LLC will pay the return shipping charges. This warranty applies only to AUTO-BLiP product manufactured by Tractive Technology, LLC that can be identified by the "AUTO-BLiP" trademark, trade name, or logo affixed to them. This warranty does not cover damage resulting from an accident, misuse, abuse, or neglect and/or damage during any type of transportation resulting from improper packaging; damage to any product which has been altered in any fashion, including the alteration or removal of any Tractive Technology, LLC serial number; damage resulting from causes other than product defects, including and not by way of limitation, lack of technical skill, competence, or experience of the user, and/or failure to use the product in accordance with the instructions provided in the User's Manual; and service performance by an unauthorized person or entity. Any implied warranties including fitness for use and merchantability are limited in during to the period of the expressed warranty set forth above. The remedies provided under this warranty are exclusive and in lieu of all others. Tractive Technology, LLC hereby expressly disclaims liability and shall not be responsible for incidental, consequential and contingent damages or any kind of nature, including, without limitation: damages to persons or property, whether a claim for such damages is based upon warranty, contract, tort or otherwise; damages to persons or property, whether a claim for such damages is based upon warranty, contract, tort or otherwise; damages due to or arising out of the loss of date; or lost of profits. Tractive Technology, LLC shall not be responsible for any damages caused by the presence of error or omission in any of its manuals, instructions or related materials.

For warranty claims
contact:
Latitude 305, LLC
(713)289-4015
or email:
al@auto-blip.com