



INSTALLATION INSTRUCTIONS

DODGE CUMMINS MODEL YEAR 2003–2005

www.dieselturbolifesaver.com

Diesel Turbo Lifesaver (often referred to in these instructions as "DTLS") is a computer controlled device that allows you to set an engine idle sequence to properly cool your turbocharger before engine shutdown as required by **DODGE, CUMMINS** and **all other manufacturers of turbocharged diesel engines**. Failure to follow recommended turbo cooling procedures can lead to premature bearing failure that is **NOT** covered under factory warranty. Installing your Diesel Turbo Lifesaver is easily accomplished with common hand tools in a short period of time with little (pre-lube and security features enabled) or no wire cutting (pre-lube and security features disabled). No other product is engineered specifically for your Dodge pickup, and thus requires extensive wire cutting and probing that can damage electronics or void your factory warranty. In order to make your installation go as smoothly as possible, it is recommended that you read the instructions and plan your installation before starting.

PARTS LIST:

- 1 – Diesel Turbo Lifesaver
- 2 – Yellow Scotchlok connectors
- 2 – Blue Scotchlok connectors
- 1 – Red Scotchlok connector
- 1 – "Y" adaptor wire
- 2 – Insulated female disconnect connectors
- 1 – Male insulated disconnect connector
- 1 – 1 Amp AGC Fuse
- 8 – Wire Ties (6 – 4 Inch, 2 – 8 Inch)

TOOLS REQUIRED:

- 13 mm wrench
- #2 Philips screwdriver
- Wire Cutters, Stripper and Crimpers
- Pliers
- Optional – Soldering Iron, Solder & Electrical Tape

STEP 1: DISCONNECT NEGATIVE BATTERY CABLE(S)

STEP 2: REMOVE UNDER DASH PANEL

Figure Reference: Figure 2

Tools Required: #2 Philips screwdriver

- ⇒ Remove two screws in positions indicated in Fig. 2.
- ⇒ Remove dash panel by gently pulling it towards rear of vehicle.

STEP 3: LOCATE IGNITION SWITCH WIRING HARNESS

Figure reference: Figure 3

- ⇒ Refer to Figure 3 to locate main ignition harness and plug of truck. The ignition plug can easily be found peeking out from behind the steering column shroud in the lower left corner as you are looking at the steering wheel.

STEP 4: RUN DIESEL TURBO LIFESAVER'S POWER WIRES

Figure Reference: Figure 3

- ⇒ Place Diesel Turbo Lifesaver on floor of vehicle.
- ⇒ Run main power harness of Diesel Turbo Lifesaver to ignition plug by running it through round white wire retainer shown in Fig. 5.

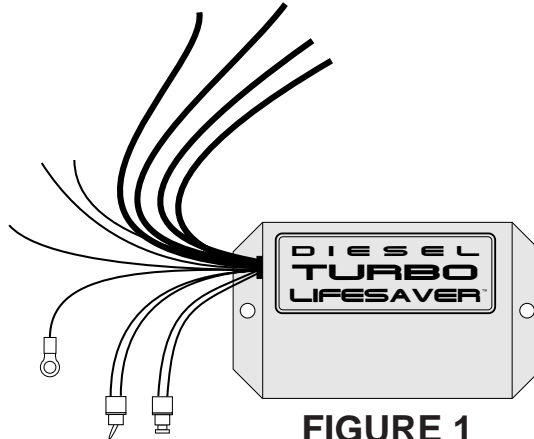
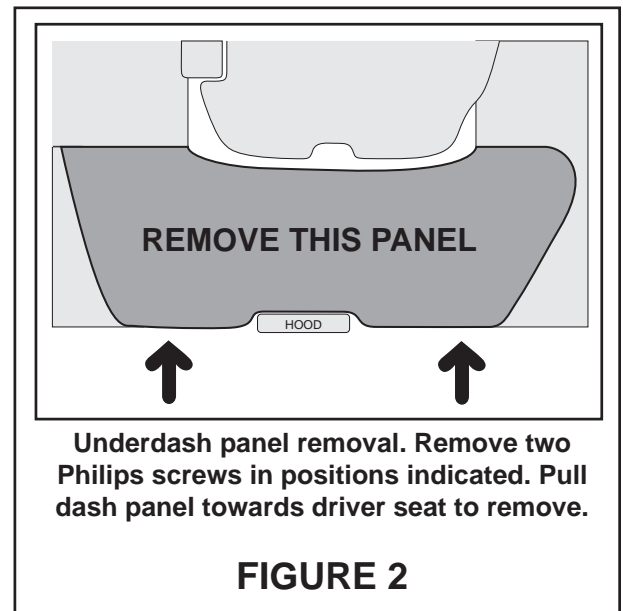


FIGURE 1



Underdash panel removal. Remove two Philips screws in positions indicated. Pull dash panel towards driver seat to remove.

FIGURE 2

INSTALLATION NOTE: INSTALLING DTLS WITH THE SECURITY AND PRE-LUBE FEATURES ENABLED REQUIRES THAT ONE OF THE VEHICLE'S WIRES BE CUT. CUTTING THIS WIRE SHOULD NOT CAUSE ANY WARRANTY PROBLEMS WITH DODGE.

HOWEVER, SOME CUSTOMERS ARE HESITANT ABOUT CUTTING WIRES, AND THUS DTLS CAN BE INSTALLED WITHOUT CUTTING THIS WIRE. THE ONLY DRAWBACK IS THAT THE SECURITY AND PRE-LUBE FEATURES OF THE UNIT WILL BE DISABLED.

WE RECOMMEND INSTALLING DTLS SO THAT THE SECURITY FEATURE IS ACTIVE SO YOUR TRUCK CAN BE SECURED WHILE IT IS RUNNING. HOWEVER, THE TRUCK'S OWNER SHOULD HAVE THE FINAL CHOICE OF WHICH INSTALLATION METHOD IS USED.

FOR STANDARD WIRE HOOKUP (SECURITY AND PRE-LUBE FEATURES ENABLED), USE STEP 5.

FOR NO WIRE CUTTING WIRE HOOKUP (SECURITY AND PRE-LUBE FEATURES DISABLED), USE STEP 5A.

STEP 5: ATTACH DIESEL TURBO LIFESAVER'S POWER WIRES TO TRUCK'S WIRES (SECURITY AND PRE-LUBE ENABLED)

Figure Reference: Figures 3 & 4

Tools Required: Wire Strippers, Wire Cutters, and Wire Crimpers.

- ⇒ Refer to FIG. 4 to identify wires in main ignition plug that are required to hook up Diesel Turbo Lifesaver.
- ⇒ Find BLUE wire (2003 trucks) or PINK / GREEN wire (2004 –2005 trucks) in main ignition plug (See Fig. 4).
- CAUTION! CUTTING THE BLUE OR PINK / GREEN WIRE TOO CLOSE TO THE IGNITION PLUG WILL MAKE CONNECTING THE WIRES FROM DTLS DIFFICULT, IF NOT IMPOSSIBLE TO DO. MAKE SURE YOU LEAVE AMPLE ROOM TO MAKE CRIMP CONNECTIONS ON THE IGNITION PLUG SIDE OF THIS WIRE!**
- ⇒ CUT blue OR pink / green wire in half approximately 1 1/2 inches from ignition plug.
- ⇒ Strip insulation from end of IGNITION PLUG SIDE of blue or pink / green wire and crimp on a FEMALE blue disconnect terminal (supplied).

 = FEMALE DISCONNECT TERMINAL (END VIEW)

- ⇒ Strip insulation from end of WIRE HARNESS SIDE of blue or pink / green wire and crimp on a MALE blue disconnect terminal (supplied).

 = MALE DISCONNECT TERMINAL (END VIEW)

- ⇒ Please note that these terminals can be connected together, thus returning the cut wire to stock at any time.
- ⇒ Plug ignition plug side of truck's blue or pink / green wire into Diesel Turbo Lifesaver's BLUE WIRE with WHITE BANDS (terminal attached at factory).
- ⇒ Plug harness side of truck's blue or pink / green wire into Diesel Turbo Lifesaver's PLAIN BLUE WIRE (terminal attached at factory).

STEP 5A: ATTACH DIESEL TURBO LIFESAVER'S POWER WIRES TO TRUCK'S WIRES (SECURITY AND PRE-LUBE DISABLED)

Figure Reference: Figures 3, 4, &5

Tools Required: Wire Strippers, Wire Cutters, Wire Crimpers, and Pliers

- ⇒ Refer to FIG. 4 to identify wires in main ignition plug that are required to hook up Diesel Turbo Lifesaver.
- ⇒ Find BLUE wire (2003 trucks) or PINK / GREEN wire (2004 – 2005 trucks) in main ignition plug (See FIG. 4).
- ⇒ Cut BLUE and BLUE with WHITE BANDS wires of DTLS so that ends of wires are even. Install supplied female disconnect connectors on ends of wires by stripping insulation and crimping connectors on.
- ⇒ Plug female disconnect connectors of DTLS's blue and blue/white wires into supplied "Y" adaptor wire.
- ⇒ Using supplied blue Scotchlok, connect remaining end of "Y" adaptor wire to BLUE (2003 trucks) or PINK / GREEN (2004 – 2005 trucks)ignition wire of truck.

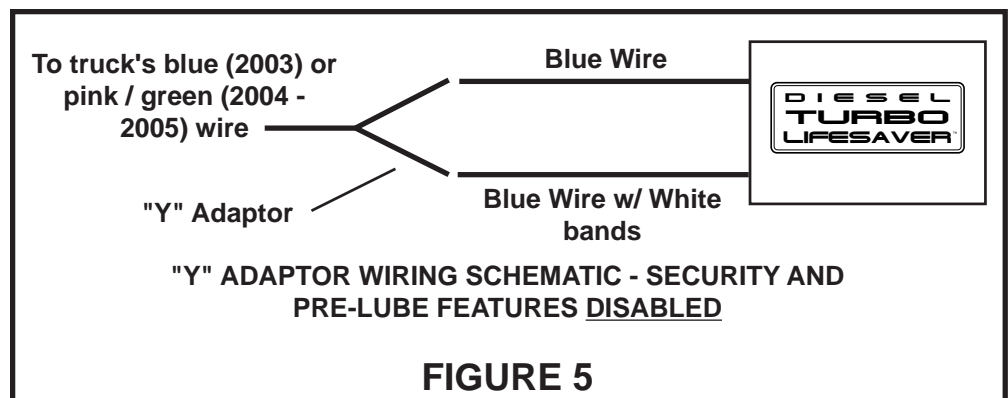
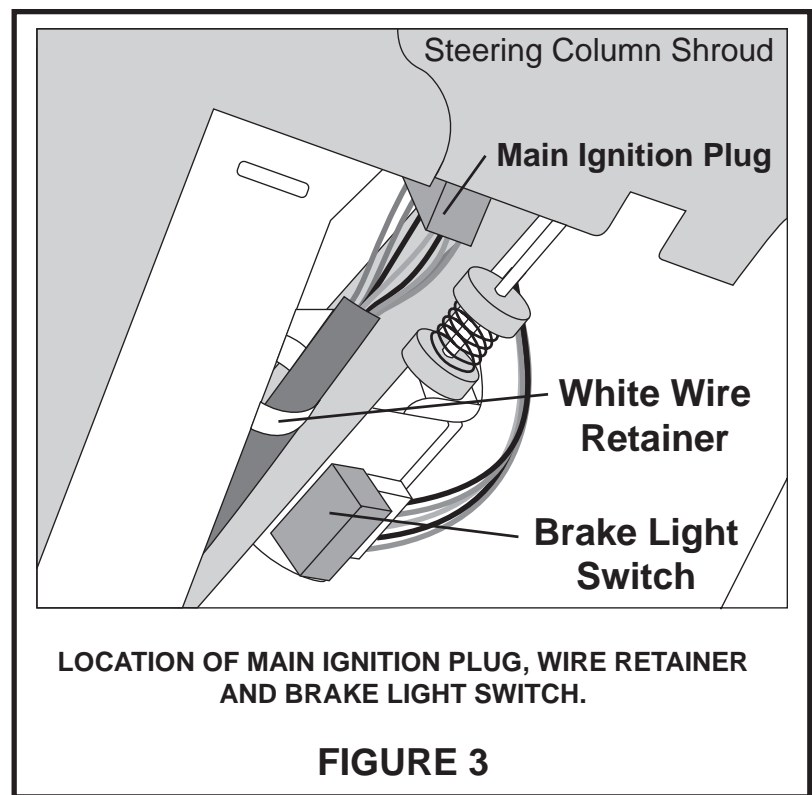
STEP 6: ATTACH REMAINING WIRES TO TRUCK'S WIRES

Figure Reference: Figure 4

Tools Required: Pliers

IN SOME VEHICLE, CUTTING BACK THE ELECTRICAL TAPE ON THE IGNITION HARNESS 1 – 2 INCHES CAN MAKE THE FOLLOWING CONNECTIONS MUCH EASIER TO PERFORM.

- ⇒ Find Dodge's GREEN wire (2003 trucks) or BLUE wire (2004 –2005 trucks) in main ignition plug (Position #1 in FIG. 4). Use supplied yellow Scotchlok to connect GREEN wire of DTLS to wire of vehicle.
- ⇒ Find Dodge's PINK / BLACK wire (2003 trucks) or RED wire (2004 –2005 trucks) in main ignition plug (Position #2 in FIG. 4). Use supplied yellow Scotchlok to connect SOLID RED wire of DTLS to wire of vehicle.
- ⇒ Find Dodge's RED / WHITE wire (2003 trucks) or PINK / WHITE wire (04 –05 trucks) in main ignition plug (Position #3 in FIG. 4). Use supplied blue Scotchlok to connect RED / WHITE BANDS wire of DTLS to wire of vehicle.
- ⇒ **2004 – 2005 vehicles only:** Find Dodge's PINK / YELLOW wire in main ignition plug (Position #5 in FIG. 4). Use supplied blue Scotchlok to connect SOLID YELLOW wire of DTLS to wire of vehicle.
- ⇒ Secure all wires used in this step in a neat and tidy manner using supplied cable ties. Clip excess ends of cable ties off.



DODGE IGNITION PLUG WIRE POSITIONS / DTLS HOOK UP CHART

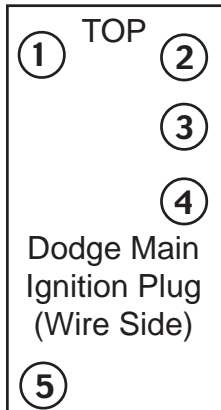


FIGURE 4

| Position No. | 2003 Wire Color | 2004 Wire Color | 2005 Wire Color | DTLS Wire Color |
|--------------|-----------------|-----------------|-----------------|-------------------------------|
| 1 | Green | Blue | Blue | Green |
| 2 | Pink / Black | Plain Red | Plain Red | Plain Red |
| 3 | Red / White | Pink / White | Pink / White | Red / White Bands |
| | | | Pink / Green | Blue & Blue / White (05) |
| 4 | Blue | Pink / Green | NO Hook Up | Blue & Blue / White (03 - 04) |
| 5 | NO Hook Up | Pink / Yellow | Pink / Yellow | Solid Yellow |

STEP 7: GROUND BLACK WIRE

Tools Required: #2 Philips Screwdriver

⇒ Attach black wire to solid ground. To insure a quality ground, make every attempt to ground this wire at a point where Dodge has grounded factory wires.

STEP 8: CONNECT WHITE WIRE (BRAKE VOLTAGE WIRE)

Figure Reference: Figure 3 & 6

Tools Required: Pliers *Optional* – Soldering Iron, Solder & Electrical Tape

⇒ Locate wire harness coming from brake light switch of vehicle by referring to FIGS. 3 & 7.

⇒ Connect WHITE wire of DTLS to WHITE / BROWN wire in truck's brake light switch harness. Solder wires together and insulate (preferred) or use supplied red scotchlok .

STEP 9: TEST FOR PROPER OPERATION

Tools Required: Wrench to fit battery cable clamps

⇒ Reattach negative battery cables and insert 1 Amp AGC fuse into Diesel Turbo Lifesaver. Make sure vehicle is parked where there is adequate ventilation and that security switch of Diesel Turbo Lifesaver is in the OFF position. Read operating instructions and test for proper operation.

NOTE: If unit DOES NOT operate properly, check fuse, ground wire, and brake input wire connections. IF DTLS'S WHITE WIRE IS RECEIVING CONSTANT +12 VOLTAGE NO TURBO COOLING CYCLES CAN BE SET. RECONNECT WHITE WIRE TO BRAKE WIRE THAT RECEIVES VOLTAGE ONLY WHEN BRAKE PEDAL IS DEPRESSED. If unit is still not operating properly, call our technical services department at (970) 879-4201 Monday – Friday 9:00AM to 4:00PM MST.

STEP 10: MOUNT DIESEL TURBO LIFESAVER ENCLOSURE

Tools Required: Wire Cutters

⇒ Use supplied 8 inch wire ties to tie Diesel Turbo Lifesaver's enclosure to an existing wire harness under the dash. Loop the wire ties through the mounting feet on the enclosure and around an existing wiring harness.

BE ABSOLUTELY SURE THERE IS NO WAY THE ENCLOSURE OF DIESEL TURBO LIFESAVER CAN FALL (OR SAG) AND INTERFERE WITH THE OPERATION OF THE PEDALS – ESPECIALLY THE BRAKE PEDAL! Clip excess ends off cable ties.

STEP 11: SECURE WIRES WITH WIRE TIES

Tools Required: Wire Cutters

⇒ Let both switches (toggle & pushbutton) rest on floor at this time

⇒ Use supplied wire ties to secure all other wires in a neat and tidy manner. Make sure wires are not touching any sharp metal edges that can wear through insulation over time and cause short circuits. Clip excess ends off wire ties.

STEP 12: REINSTALL UNDER DASH PANEL (REMOVED IN STEP 2)

Figure Reference: Figure 2

⇒ Snap top clips of under dash panel into place.

⇒ **DO NOT** INSTALL PHILIPS HEAD SCREWS INTO BOTTOM OF PANEL AT THIS TIME!

STEP 13: MOUNT ACTIVATOR (PUSHBUTTON) SWITCH

Figure Reference: Figure 6

Tools Required: Philips Screwdriver

⇒ Mount activator switch bracket between under dash panel and metal dash piece as shown in FIG. 6.

⇒ Install right side Dodge screw to secure bracket and dash panel.

STEP 14: MOUNT SECURITY (TOGGLE) SWITCH

Figure Reference: Figure 7

Tools Required: Philips Screwdriver

⇒ Mount security switch bracket between under dash panel and metal dash piece as shown in FIG. 7.

⇒ Install left side Dodge screw to secure bracket and dash panel.

⇒ Once the switch bracket is secured, you can bend it up to hide the switch.

STEP 15: SECURE SWITCH WIRES WITH WIRE TIES

Tools Required: Wire Cutters

⇒ Use supplied wire ties to secure switch wires in a neat and tidy manner. Make sure wires are not touching any sharp metal edges that can wear through insulation over time and cause short circuits. Clip excess ends off wire ties.

ALARM INTERFACING

Diesel Turbo Lifesaver provides you with two auxiliary outputs (purple wires) to allow interface with alarm systems. Interfacing with alarm systems may be required if: 1) Alarm will not arm when turbo is cooling off OR 2) Alarm arms but false alarms (due to motor vibrations) when turbo is cooling off.

Due to the variables in alarm systems, how they operate, and differences in installation techniques, it is recommended that you have your alarm installer perform any interfacing that may be required. If you installed your own alarm system, please obtain wiring schematic and call our tech line for assistance.

Output Specifications For Interface Wires:

Output Type: NEGATIVE

Maximum current draw (each) – 500 Milliamps

DO NOT, UNDER ANY CIRCUMSTANCES, APPLY 12 VOLTS TO INTERFACE WIRES. DOING SO MAY CAUSE DAMAGE TO THE UNIT THAT IS NOT COVERED UNDER WARRANTY.

Diesel Turbo Lifesaver is Manufactured By:

Baker Auto Accessories

2955 Village Dr. #5 / P.O. Box 880707

Steamboat Springs, CO 80488

TECHNICAL Mon – Fri 9:00 AM to 5:00 PM MST: (970) 879-4201

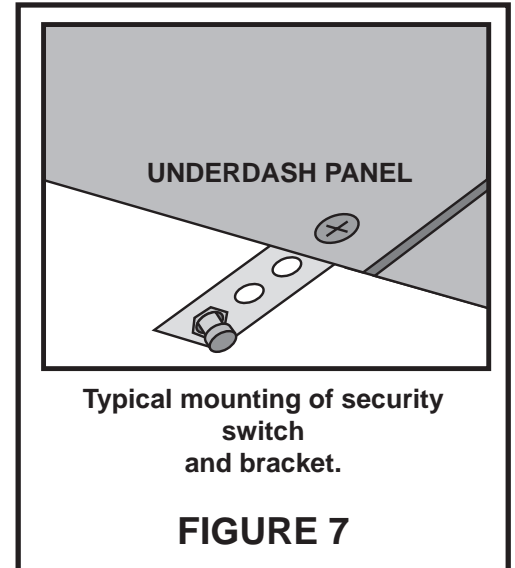
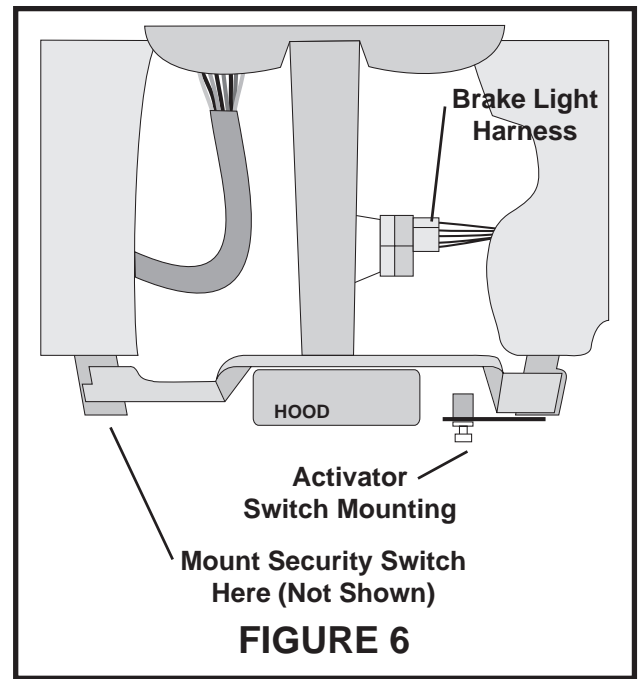
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DIESEL TURBO LIFESAVER

IS ALSO AVAILABLE FOR:

**FORD POWERSTROKE TRUCKS, GM DURAMAX TRUCKS,
MOTORHOMES AND OTHER DIESEL EQUIPMENT**



DIESEL TURBO LIFESAVER LIMITED WARRANTY

Baker Auto Accessories (B.A.A.) warrants Diesel Turbo Lifesaver to be free from manufacturing defects under normal use and conditions for three years from date of original user purchase. Baker Auto Accessories, at its sole discretion, will either repair the product or replace the product, provided the manufacturing defect is verified along with proof of purchase. To obtain warrant service call 1-970-879-4201.

This warranty is void if the product is:

- A) Damaged through negligence, misuse, abuse or accident.
- B) Modified, repaired, or tampered with by anyone other than B.A.A.
- C) Units on which the serial number has been defaced, modified or removed.

This warranty does not cover:

- A) Damage due to improper installation.
- B) Water, smoke, or heat damage.
- C) Damage or improper operation of unit caused by customer abuse, misuse, negligence, or failure to follow correct installation procedures as provided with product.
- D) Costs of shipping of the product to and from B.A.A.

This warranty is non-transferable and applies only to the original purchaser and does not extend to subsequent owners of the product. Any applicable implied warranties, including the warranty of merchantability, are limited in duration to a period of the expressed warranty as provided herein beginning with the date of original purchase at retail and no warranties, whether expressed or implied, shall apply to the product thereafter. Baker Auto Accessories makes no warranty as to the fitness of the product for any particular purpose or use.

The extent of Baker Auto Accessories' liability under this limited warranty is the repair or replacement provided above and, in no event, shall Baker Auto Accessories' liability exceed the purchase price paid by the purchaser of the product. Under no circumstances shall Baker Auto Accessories be liable for any loss, direct, indirect, incidental, special, or consequential damage arising out of or in connection with the use of this product.

STEP 1 : Set Parking Brake

WHEN YOU COME TO A STOP, LEAVE ENGINE RUNNING WITH KEY AND . . .

1. Automatic transmission vehicles: Place transmission in PARK.
2. Stick shift vehicles: Place transmission in NEUTRAL.
3. Engage parking brake securely, remove foot from brake pedal and **MAKE SURE VEHICLE DOES NOT ROLL OR CREEP!**

If vehicle rolls or creeps, reapply parking brake. **IF PARKING BRAKE CANNOT PREVENT VEHICLE FROM ROLLING, DO NOT USE DIESEL TURBO LIFESAVER UNTIL YOU HAVE A QUALIFIED MECHANIC ADJUST YOUR PARKING BRAKE.**

STEP 2: Set Turbo Cooling Cycle

NOTE: For safety reasons, Diesel Turbo Lifesaver **WILL NOT** allow you to set a turbo cool down time when the brake pedal is depressed. **THE BRAKE PEDAL (NOT PARKING BRAKE!) MUST BE RELEASED IN ORDER TO INSURE THAT THE VEHICLE DOES NOT ROLL OR CREEP. SEE STEP 1!**

1A: TO SET COOL DOWN CYCLES BETWEEN 1 – 10 MINUTES:

With engine running, set idle time by depressing and holding the activator switch in while counting the "beeps" emitted by Diesel Turbo Lifesaver. Release activator to set run time. Example . . . Press button, "beep", "beep", "beep", release button equals three minutes of run time.

1B: TO SET 20 – 250 MINUTES OF RUN TIME (IN TEN MINUTE INTERVALS): Follow steps in 1A, but continue to hold activator switch in after the 10th "beep". Each subsequent "high pitched" beep will add ten minutes of run time to the original 10 minutes programmed in step 1A.

2. Remove ignition key – if you want to activate security feature, turn security switch to on position.
3. Exit vehicle, engine will idle to cool turbo and automatically shut off when time you set elapses. If security function was activated, the engine will now be disabled.

NOTE: You will hear a short "beep" from Diesel Turbo Lifesaver once every ten seconds when it is idling your engine. Ten seconds before your engine shuts off, you will hear a series of rapid "beeps".

**D I E S E L
TURBO
LIFESAVER™**

DODGE CUMMINS EXTENDED RUN TIME OPERATING INSTRUCTIONS

To Cancel A Cooling Cycle Or Emergency Engine Stop:

Diesel Turbo Lifesaver can be shut off in the following manner:
Pressing on brake pedal will turn unit off.

Additional Features:

ANTI THEFT FUNCTION

When security switch is on, your vehicle cannot be started . . . Even if the thief has a key! You can turn the switch on after a timing cycle is set and Diesel Turbo Lifesaver will turn the security function on automatically after shutting off your engine. To set security function, move security switch lever to the on position. **NOTE:** Security switch has on and off stamped into the side of switch body.

ENGINE PRE LUBE FUNCTION

Prolong engine life by eliminating dry starts after oil changes or long periods of inactivity. To pre lube your engine, turn security switch ON and crank engine (with key) for 5 – 7 seconds (engine will crank, but will not start). Turn security switch off and start vehicle. Observe how quickly oil pressure builds when engine starts.

NOTES ON 2004 – 2005 CUMMINS "600" ENGINES AND PRE-LUBING:

If you use the pre-lube function on 2004 – 2005 model year vehicles with the "600" engine, the self diagnostics of the truck will occasionally set some warning lights on the dash immediately after pre lubing. Most commonly this will be your ABS and / or brake warning lights. This is a normal condition as this is a side effect of using the pre lube function. After restarting your truck a few times with the key, the warning lights will turn off when the vehicle's computers sense all is well.

Diesel Turbo Lifesaver

Is designed and manufactured in the USA by:

Baker Auto Accessories

970.879.4201

www.dieselturbolifesaver.com

HOW LONG SHOULD I COOL MY TURBOCHARGER?

Turbo temperature is dependent on these variables:

- What is the air temperature?
- How "hard" are you working your engine?
- Are you driving in hills or mountains?
- Is there a headwind?
- Are you towing a load? How large?
- Has your engine been modified for higher performance?

As a rule of thumb, increasing any of these variables will cause turbo temperatures to rise. The higher the turbo temperature, the longer the turbo should be cooled down. Generally speaking, match these cool down times to your driving conditions:

1–2 Minutes: Light throttle, non towing situations at moderate speeds in cold to moderate temperatures. Example: City driving.

2–4 Minutes: Medium throttle, non towing situations or when towing moderate loads. Medium to high speed driving with moderate headwind or hills in all temperatures. Example City or interstate driving.

4–5 Minutes: Driving conditions with any of the following: Heavy loads, heavy throttle, long or steep hill climbs or high headwinds.

If ever in doubt, set an extra minute or two of cool down time. Diesels use very little fuel when idling, and a few pennies in fuel can save a turbocharger worth thousands of dollars and prevent you from being stranded with an inoperative turbo!