FIREPUNK ENGINEERING
ANTEATER PRO STANDALONE TRANSMISSION CONTROLLER

INCLUDED IN THIS BOX

- Installation Guide
- Anteater STC Controller Box
- Anteater PRO STC Remote
- Complete Wiring Harness
- Flash Drive w/ Base File (To Create Your Own Tune If You Choose)
- Anteater Device Driver File And Anteater Software For Download

INSTALLATION INSTRUCTIONS

1. Verify that all contents are in the box
2. Choose a location of your choice within 7 feet of the transmission 8 pin connector to mount your Anteater STC Controller Box. (Suggested mounting location is near or on the fuse box located on the driver side of the engine bay) Make sure this location is secure and that the Anteater STC Controller Box free of movement
3. Route the harness from the transmission to the Anteater STC Controller Box. (Be conscious of wire routing, as to not get it near any moving parts of the engine or transmission. This could cause failure to the Anteater STC or your transmission)
4. Make sure that all connectors are clean of debris and connect them to the appropriate connector on the transmission
5. Connect the wire labeled "GROUND" (Black) to a suitable ground location on the driver side of the vehicle
6. Connect the wire labeled "TPS INPUT" (Blue)
   - Any 0-5 volt ascending reference TPS sensor will work. Exceeding 6 volts will damage the controller and void your warranty
   - Any voltage range will work, but be sure to scale your throttle table accordingly in the tune file (ex. 1.2v - 2.4v will work just the same as 0.5v - 4.5v as long as scaled properly)

- 05+ Common Rail trucks will need to have this wire spliced into the APPS circuit commonly at pin 5 (second from the rear of the truck) in the 6 pin connector at your Throttle Pedal
- 98.5 - 04.5 trucks (VP44 and Common Rail) will need to have this wire spliced into the APPS circuit at pin 3 in the 6 pin connector at the APPS Sensor located under the hood on the driver's side of the engine

7. Connect the "SWITCHED POWER" (Red) wire to a 12 volt key-on ignition source on the truck (This needs to be a keyed ignition as to not run your battery dead

8. Route the Anteater STC Remote harness to a suitable location within arm's reach inside the cab of the truck

9. Connect the Anteater Pro STC Remote to the harness, taking care to observe that the connector is plugged in correctly and the wires are not pulling on the connector

10. Using a double sided piece of sticky tape or velcro tape (not provided) mount the Anteater STC Remote

11. The 2 wires coming out of the Anteater Pro STC Remote are for the Tap Shifter functions. The orientation of the wires does not matter as they will work either way
    - On a truck with a stock style shifter (either on the column shift lever or through a 1500 style floor shifter) you will need to cut off the factory plug and wire it into the factory 2 wires

12. Check to make sure the Anteater Pro STC has power by turning your key to the "RUN" position and making sure that the Anteater Pro STC Remote screen is lit up. This will indicate the Anteater STC is working properly

13. For VB's that do not have the Throttle Valve pinned for pressure you will need to set the Throttle Valve Lever to 75 - 80% of total movement. After you have done this you will need to check your line pressure. Firepunk likes to see around 130 - 140psi before lockup and around 180 - 200 after lockup in 3rd gear around 2500 RPM. Firepunk also sells a Static TV Lever to lock the Throttle Valve Lever and for easy adjustment. Check them out on our website: http://www.shop.firepunk.com

INSTALLING DRIVERS AND SOFTWARE

1. The Driver and Software are located on the Flash Drive provided inside of the box
2. Plug the flash drive into the computer and allow some time for File Explorer to automatically open
3. The first file you will open will be the setup.exe
4. Once this file is open it should load the software and drivers onto your computer automatically. (If you already have anteater software on your computer, you will need to delete it off of the device before it will allow you to install the new software)
5. The last file (Pro.tnz) will be the base tune file that all Anteater Pro's recieve during testing. This is a very good tune file to work off of as this tune file is what is used most commonly by Firepunk Diesel on all of our swap trucks. Feel free to change and edit the tune as you would like. Tune 1 is going to be a typical daily driver tune file, Tune 2 is a towing tune file with slightly streched shift points and Tune 3 is a race tune with a flat line shift point

ANTEATER SOFTWARE

1. Open the Anteater STC Software
2. When you open the software you will see the screen as pictured below in Figure 1
3. Click the "Connect" button in the upper left hand of the screen to connect to the Anteater Pro STC (key must be on and connected to your computer)
4. This will activate the screen to show MPH and TPS and allow you to upload your calibrations
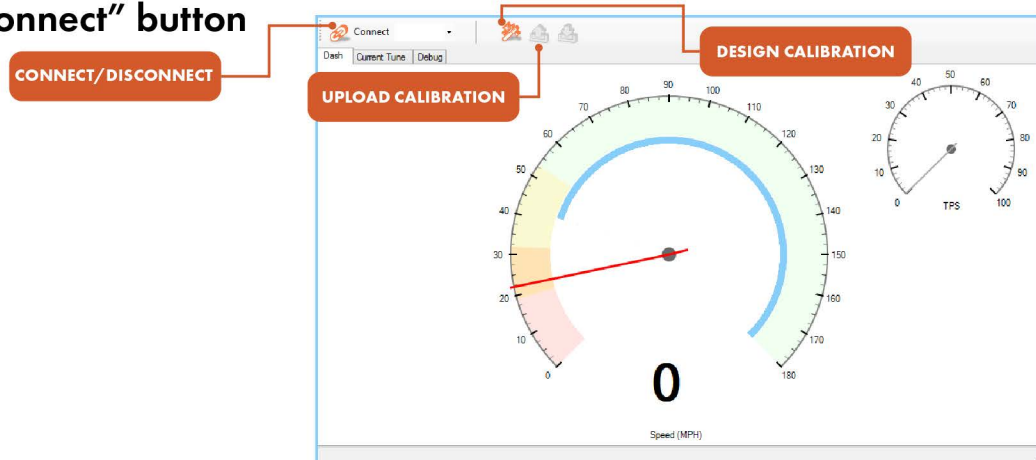5. When you have finished with the STC Pro Dash make sure to hit the "Disconnect" button

FIGURE 1

DESIGNING CALIBRATIONS

1. Open the Anteater STC Software
2. Click on the "Design Calibration" as shown in Figure 1
3. It will open a second screen as shown in Figure 2
4. With this screen you can open an existing Calibration by clicking
   - File > Open and browse to where you may have any files saved (usually saved on the desktop for easy access)
5. Once this is open, you can adjust your shift point MPH for each upshift and downshift
6. This is also where Tire Size, Diff Ratio, Governor Pressure Modifier and TPS Voltages will need to be adjusted for your specific vehicle
7. Once the tuning is completed, click
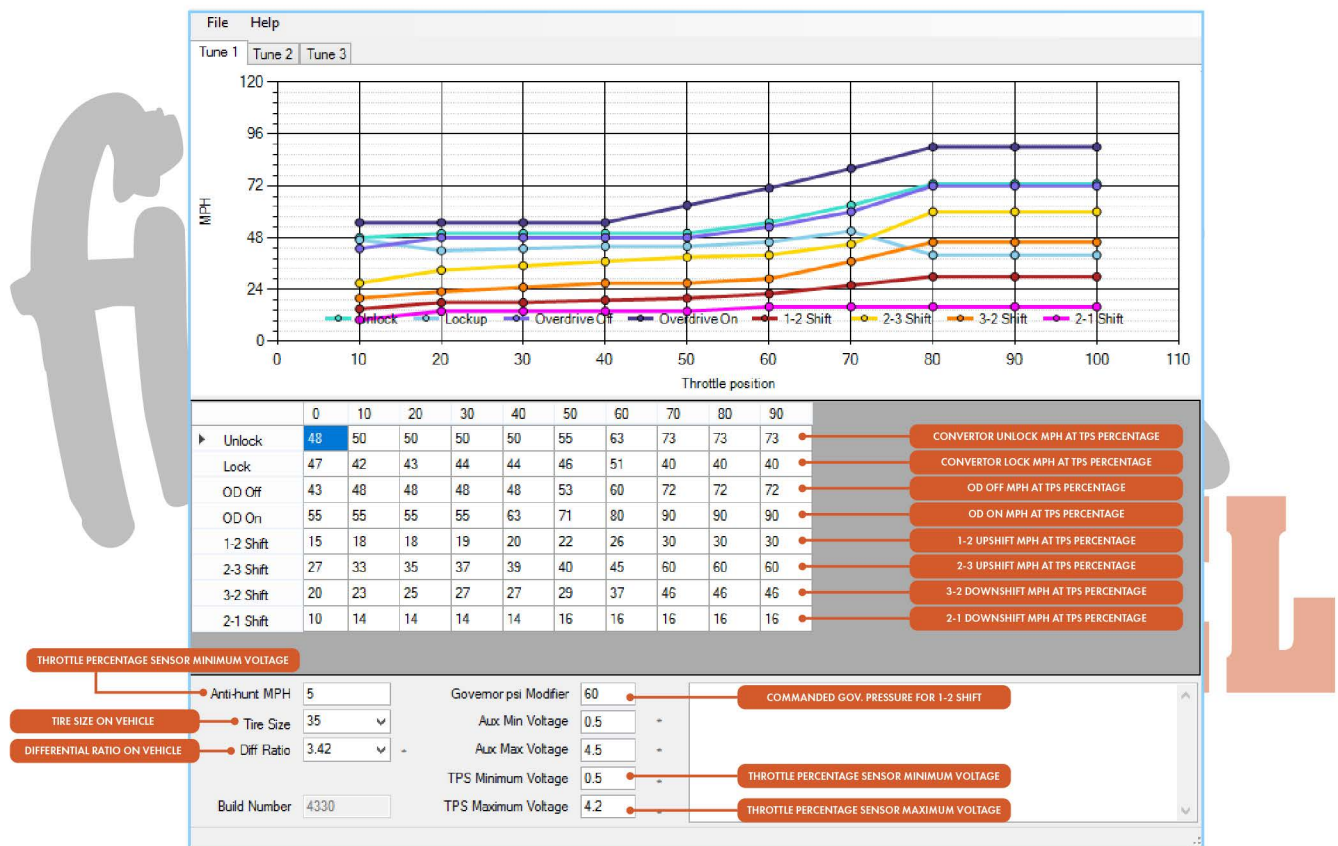   - File > Save As and save the new tune file for future use

File   Help

Tune 1 | Tune 2 | Tune 3

MPH vs Throttle position — Unlock, Lockup, Overdrive Off, Overdrive On, 1-2 Shift, 2-3 Shift, 3-2 Shift, 2-1 Shift

	0	10	20	30	40	50	60	70	80	90	
Unlock	48	50	50	50	50	55	63	73	73	73	CONVERTOR UNLOCK MPH AT TPS PERCENTAGE
Lock	47	42	43	44	44	46	51	40	40	40	CONVERTOR LOCK MPH AT TPS PERCENTAGE
OD Off	43	48	48	48	48	53	60	72	72	72	OD OFF MPH AT TPS PERCENTAGE
OD On	55	55	55	55	63	71	80	90	90	90	OD ON MPH AT TPS PERCENTAGE
1-2 Shift	15	18	18	19	20	22	26	30	30	30	1-2 UPSHIFT MPH AT TPS PERCENTAGE
2-3 Shift	27	33	35	37	39	40	45	60	60	60	2-3 UPSHIFT MPH AT TPS PERCENTAGE
3-2 Shift	20	23	25	27	27	29	37	46	46	46	3-2 DOWNSHIFT MPH AT TPS PERCENTAGE
2-1 Shift	10	14	14	14	14	16	16	16	16	16	2-1 DOWNSHIFT MPH AT TPS PERCENTAGE

THROTTLE PERCENTAGE SENSOR MINIMUM VOLTAGE

Anti-hunt MPH	5		Governor psi Modifier	60	COMMANDED GOV. PRESSURE FOR 1-2 SHIFT
TIRE SIZE ON VEHICLE — Tire Size	35		Aux Min Voltage	0.5	
DIFFERENTIAL RATIO ON VEHICLE — Diff Ratio	3.42		Aux Max Voltage	4.5	
			TPS Minimum Voltage	0.5	THROTTLE PERCENTAGE SENSOR MINIMUM VOLTAGE
Build Number	4330		TPS Maximum Voltage	4.2	THROTTLE PERCENTAGE SENSOR MAXIMUM VOLTAGE

FIGURE 2

FOR TECHNICAL SUPPORT/TUNING INFO CONTACT:

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