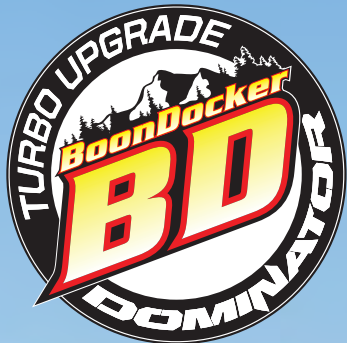


# INSTRUCTIONS



MODEL:

## *Dominator*

FITS:

*2016 Polaris RZR XPT*

*2017 Polaris RZR XPT*

*2018 Polaris RZR XPT*

*2018 Polaris RZR Turbo-S*



# DOMINATOR

TURBO UPGRADE



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# Contents List



- (1) BoonDocker Turbo
- (4) 8mm x 25mm SS, allen-head
- (7) 6mm x 10mm SS, flange-bolt
- (1) O-Ring for Oil Drain on Turbo
- (1) Muffler Gasket
- (1) Header Gasket
- (2) Copper Washer for 12mm banjo fitting
- (1) TAN Primary Spring
- (1) TEAL Secondary Spring
- (1) Set 57-87g Adjustable Magnet Weight (3 pieces total)
- (1) Charge Tube
- (1) Cold Air Intake Tube
- ((2) 16"x 20" BD Flag
- (1) PVCX Tuner
- (2) Fuel Injectors (for 2016 Dominator install ONLY, not included for 17-18)
- (2) 5" BD Sticker
- (2) 12" Sticker
- (1) BoonMints

- (1) COLD AIR KIT BAG
  - (1) 3" Silicone, 2.5" long
  - (1) 3"x 2" Silicone Reducer
  - (2) 4" Zip Ties
  - (3) Hose Clamps, #48
  - (1) Hose Clamp, #32
  - (2) Hose Clamps, #16
  - (1) 6mm x 16mm screw, button-head cap
- (1) CHARGE TUBE KIT BAG
  - (1) 2"x 1 7/8" Silicone Reducer
  - (1) 1" Heater Hose
  - (2) 4" Zip Ties
  - (2) Hose Clamps, #36
  - (2) Hose Clamp, #32
  - (3) Hose Clamps, #16
  - (1) 2.25" 45-deg Elbow
  - (1) 6mm x 16mm screw, button-head cap

## Possible KIT variations:

- (1) set of injectors, for 2016 RZR XPT (included if you ordered a kit for a 2016)
- (1) Blow-off Valve Upgrade (ordered separately)
- (1) Set of Head Studs (ordered separately)

# User Manual

## GENERAL SAFETY

1. ALWAYS wear your seatbelt, helmet, and PPE when operating your vehicle.
2. Clutching, belts, motor, exhaust components and drivetrain may be HOT enough to burn you. Do not touch until vehicle has had sufficient time to cool.
3. ALWAYS follow the safety suggestions of your owner's manual.

## OPERATION

1. ALWAYS allow your vehicle to reach proper operating temperatures before driving. Refer to your owners manual.
2. The Dominator Turbo Upgrade is a HIGH PERFORMANCE accessory. Proper fuel and maintenance is critical.
3. High performance machines are more prone to belt failure. ALWAYS carry a spare belt, and understand how to change/replace your belt BEFORE you get out in the field. Properly inspect your belt and clean your clutches before each ride. For sand use, we recommend open clutch covers which will provide adequate belt cooling. If you use the OEM enclosed cover, we suggest that you allow your belt to cool after any aggressive driving. To cool your belt, let your vehicle idle, with the gear-selector in the Park position, for at least two (2) minutes.
4. Modifying your Blow-Off Valve (BOV) to vent to atmosphere reduces the performance of your machine, and will likely allow debris (even with filter installed) into the charge system, which can cause a boost leak in the BOV, and/or may damage the internals of the turbo/motor.
5. Head studs (sold separately) are recommended for the Dominator pump-gas tune. Head studs are required for the Dominator AV/Race-Gas tune(s).
6. ANY "DET" or Detonation codes are not acceptable. If you get a DET code during normal operation, you likely have bad gas. Drain all of the fuel, and replace with fresh fuel from a different source. If the problem continues, immediately contact your dealer.

# User Manual

## FUEL

1. The Dominator Turbo Upgrade is a HIGH PERFORMANCE accessory. Proper fuel is critical.
2. Pump Gas tunes REQUIRE 91-octane fuel (or higher). Non-ethanol fuel is preferred. DO NOT use fuel with >10% Ethanol.
3. AV-Gas tunes REQUIRE 100LL (or higher)
4. Race Gas tunes REQUIRE 112-octane (or higher)
5. Fuel degrades with time. Fuel stored in plastic containers should be used within two weeks. Fuel in the tank of your vehicle will also degrade.
6. Operating your vehicle with old/degraded fuel may cause engine failure
7. Operating your vehicle with the incorrect fuel for your tune may cause engine failure.

## CLUTCHING & CLUTCH MAINTENANCE

1. A primary-clutch puller is REQUIRED for clutching installation. If you do not have one, you can have your dealer install the clutching. BoonDocker sells clutch pullers, and most dealerships also stock them, some even rent them.
2. Our clutching is engineered and validated for the Dominator. Using other clutching may cause a loss of performance, and is not supported or suggested.
3. Clutch springs wear out over time. We suggest replacing clutch springs every 500 miles.
4. Clutch maintenance is CRITICAL on high performance machines. We suggest you clean your clutches after each ride: Remove the belt. Use compressed air to blow any remaining debris from the clutch internals. Use a red scotch-brite pad to loosen any rubber/debris from the clutch-sheave faces. Dampen a rag with acetone and wipe the clutch sheave faces. Inspect belt for damage and/or wear.
5. Weights ship pre-loaded: 2-3-3-3 (from heel to toe). Total weight should be 71.5g per weight.
6. Any clutch-weight modification MUST be done to all three weights in unison. DO NOT run un-balanced weights.
7. Dominator is 8650 +/- 100 RPM's.
8. Adjusting peak RPM is possible by adding/removing weight from the toe.

# Prep Work Area



Verify kit contents against included contents list.



# Tuning



Locate the vehicle OBDII (Onboard Diagnostic Interface) port, under the hood, against the firewall.  
With the key in the "OFF" position, plug the PVCX Tuner into the OBDII Port. Ensure the cord is plugged into the PVCX Tuner. Once the connection is made, turn the key to the "ON" position, but do not start the vehicle.

# Tuning



After a series of boot-up screens, you will get a message “No Compatible Files Found”. Press the top button to begin reading the ECU and building the stock file.



# Tuning



Use the top button to begin the "ECU Read" process. This takes about 15 minutes.

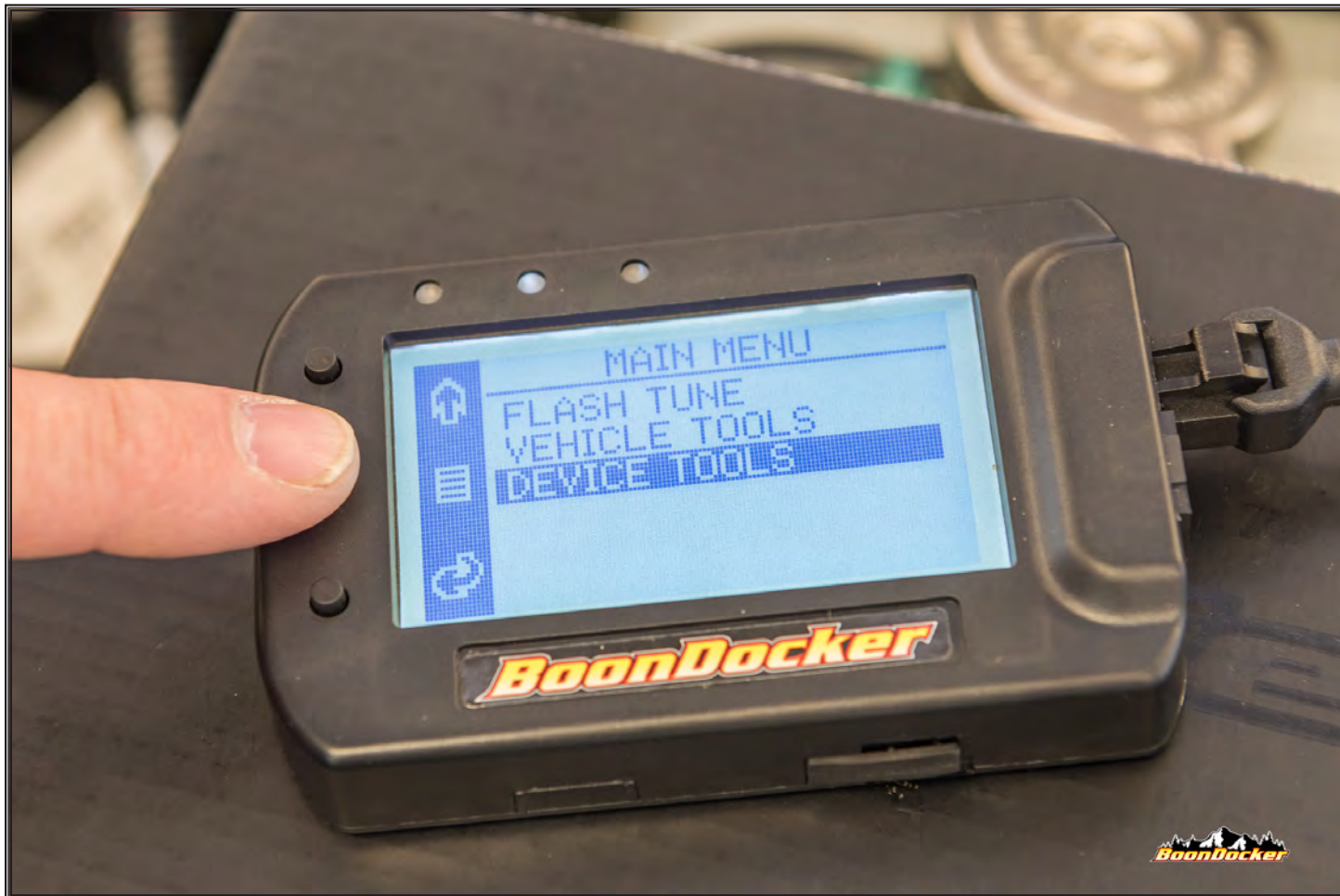
# Tuning



Once the ECU Read is complete, press the bottom button to return to the previous menu.



# Tuning



Using the buttons, scroll down to "Device Tools" and press the center button to enter that menu.

# Tuning



Use the center button to enter the "Device Info" menu



# Tuning



Use the center button to enter the "About" menu

# Tuning



Use the top button to begin writing your stock file and PV Info



# Tuning



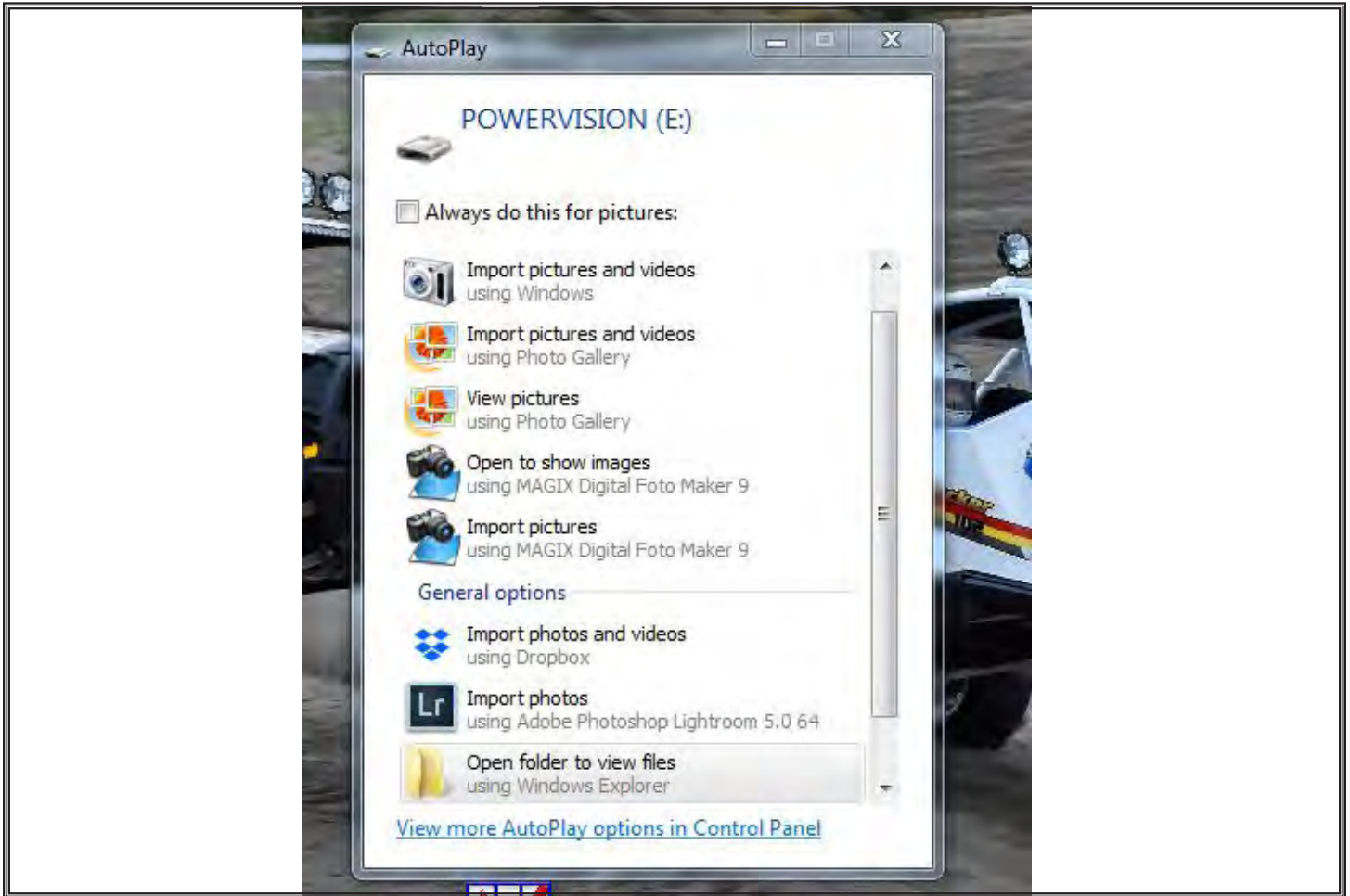
Once complete, you should see "File Created"

# Tuning



Using the supplied Micro-USB cable, plug the PVCX into your computer.

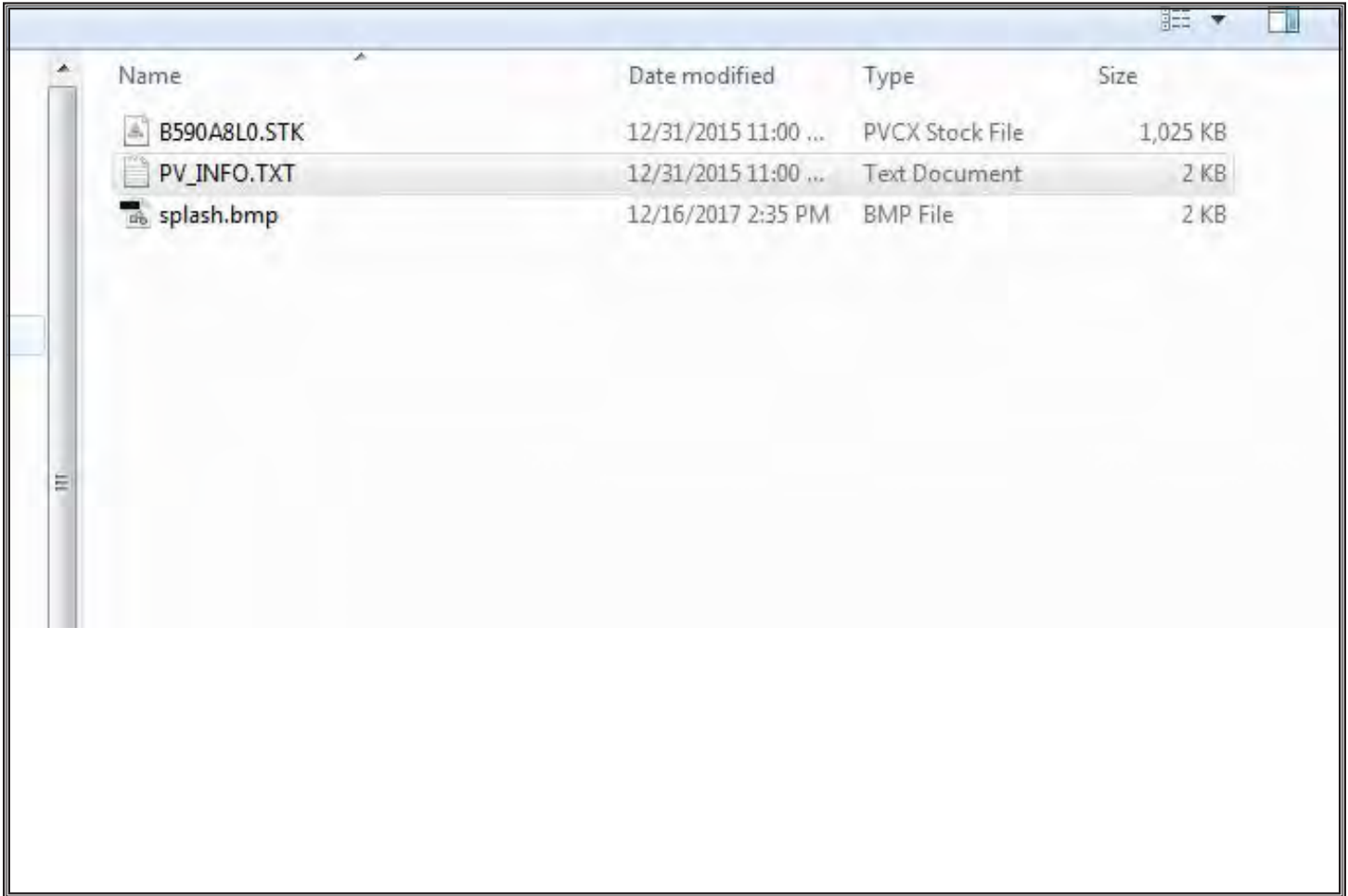
# Tuning



Once you plug the PVCX into your computer, it will bring up the auto-play window. Select "Open Folder to View Files". If auto-play doesn't come up, you can open a windows file explorer, and browse to find "Powervision" in your external devices.



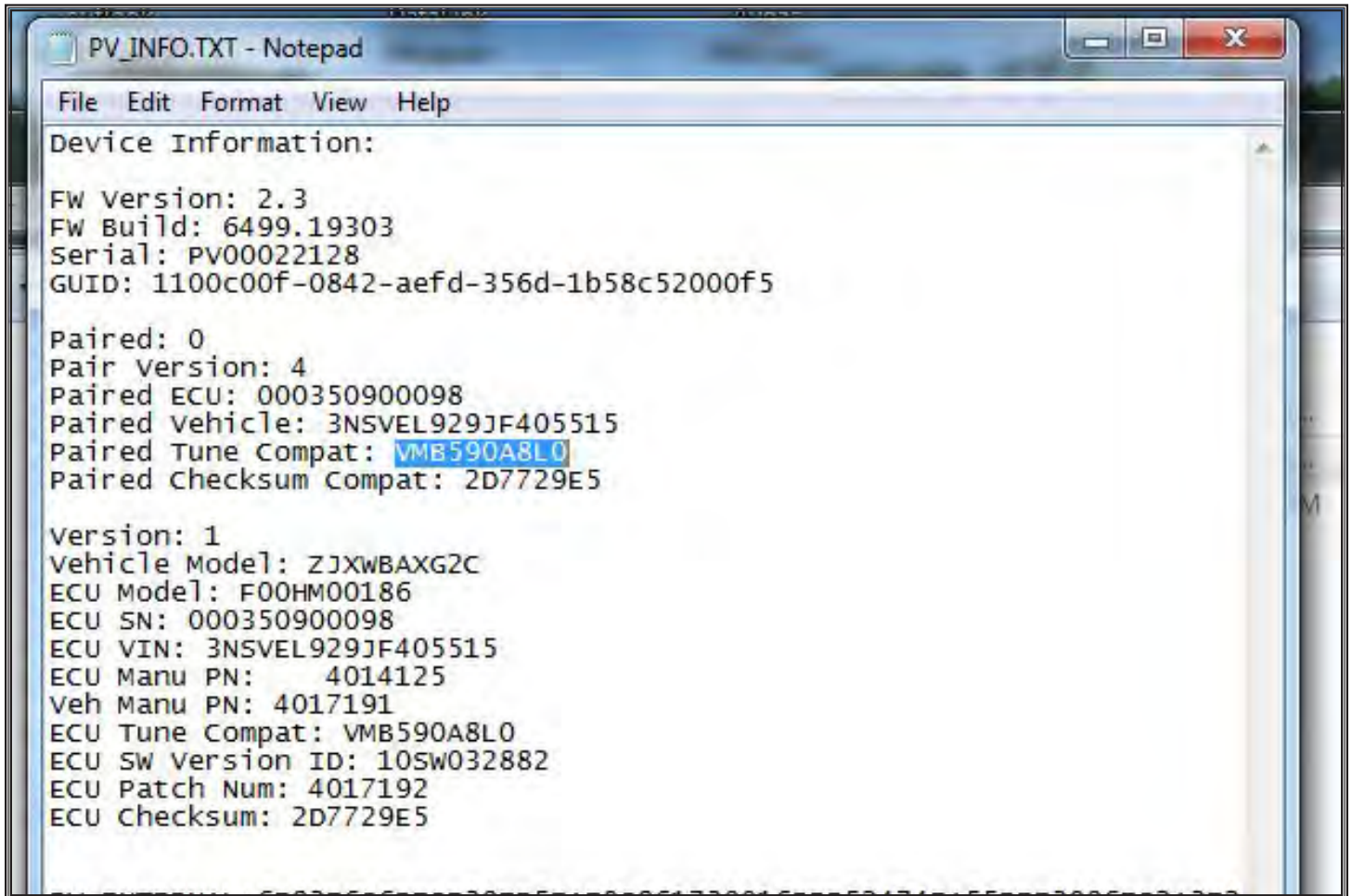
# Tuning



Once you've opened the PVCX in your file explorer, you will see several files. Open "PV\_INFO.TXT" which contains your vehicle's information and tune compatibility. Your computer may not show the file extensions (ie, ".TXT")

**NOTE:** The file that ends in ".STK" is your stock tune, if you ever need to return the car to stock. DO NOT attempt to open, modify, or delete this file.

# Tuning



```
PV_INFO.TXT - Notepad
File Edit Format View Help
Device Information:
FW Version: 2.3
FW Build: 6499.19303
Serial: PV00022128
GUID: 1100c00f-0842-aefd-356d-1b58c52000f5

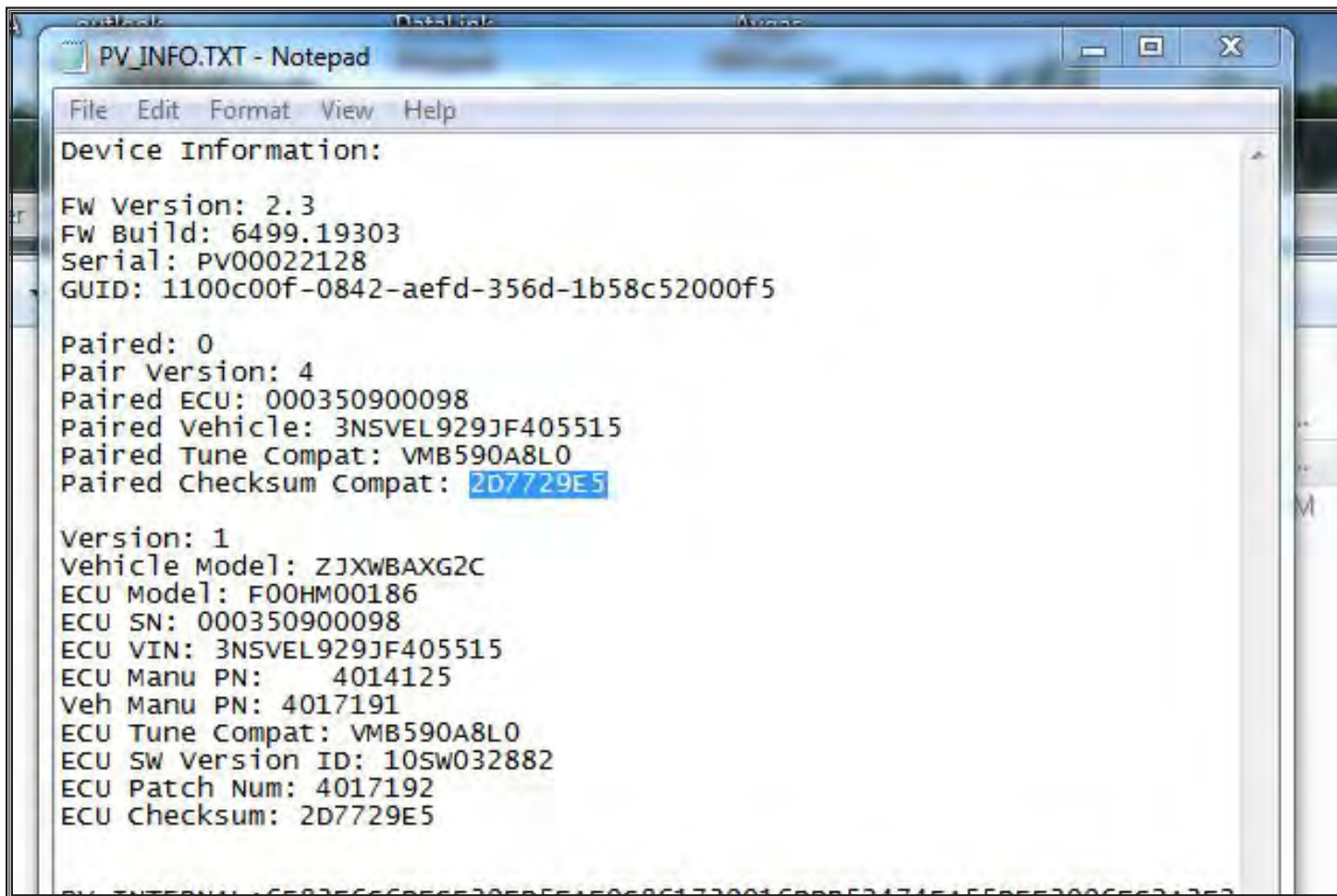
Paired: 0
Pair Version: 4
Paired ECU: 000350900098
Paired Vehicle: 3NSVEL929JF405515
Paired Tune Compat: VMB590A8L0
Paired Checksum Compat: 2D7729E5

Version: 1
Vehicle Model: ZJXWBAXG2C
ECU Model: F00HM00186
ECU SN: 000350900098
ECU VIN: 3NSVEL929JF405515
ECU Manu PN: 4014125
Veh Manu PN: 4017191
ECU Tune Compat: VMB590A8L0
ECU SW Version ID: 10SW032882
ECU Patch Num: 4017192
ECU checksum: 2D7729E5
```

In order to get you the correct tune, that will work on YOUR vehicle, we need two pieces of information from this document:

- 1) Paired Tune Compat
- 2) Paired Checksum Compat

# Tuning



```
PV_INFO.TXT - Notepad
File Edit Format View Help
Device Information:
FW Version: 2.3
FW Build: 6499.19303
Serial: PV00022128
GUID: 1100c00f-0842-aefd-356d-1b58c52000f5

Paired: 0
Pair Version: 4
Paired ECU: 000350900098
Paired Vehicle: 3NSVEL929JF405515
Paired Tune Compat: VMB590A8L0
Paired Checksum Compat: 2D7729E5

Version: 1
Vehicle Model: ZJXWBAXG2C
ECU Model: F00HM00186
ECU SN: 000350900098
ECU VIN: 3NSVEL929JF405515
ECU Manu PN: 4014125
Veh Manu PN: 4017191
ECU Tune Compat: VMB590A8L0
ECU SW Version ID: 10Sw032882
ECU Patch Num: 4017192
ECU Checksum: 2D7729E5
```

DUPLICATE SLIDE showing the "Paired Checksum Compat"



# Tuning



We produce a CUSTOM tune for YOUR SPECIFIC VEHICLE. You WILL need e-mail access, in either case, to receive your BoonDocker tune!

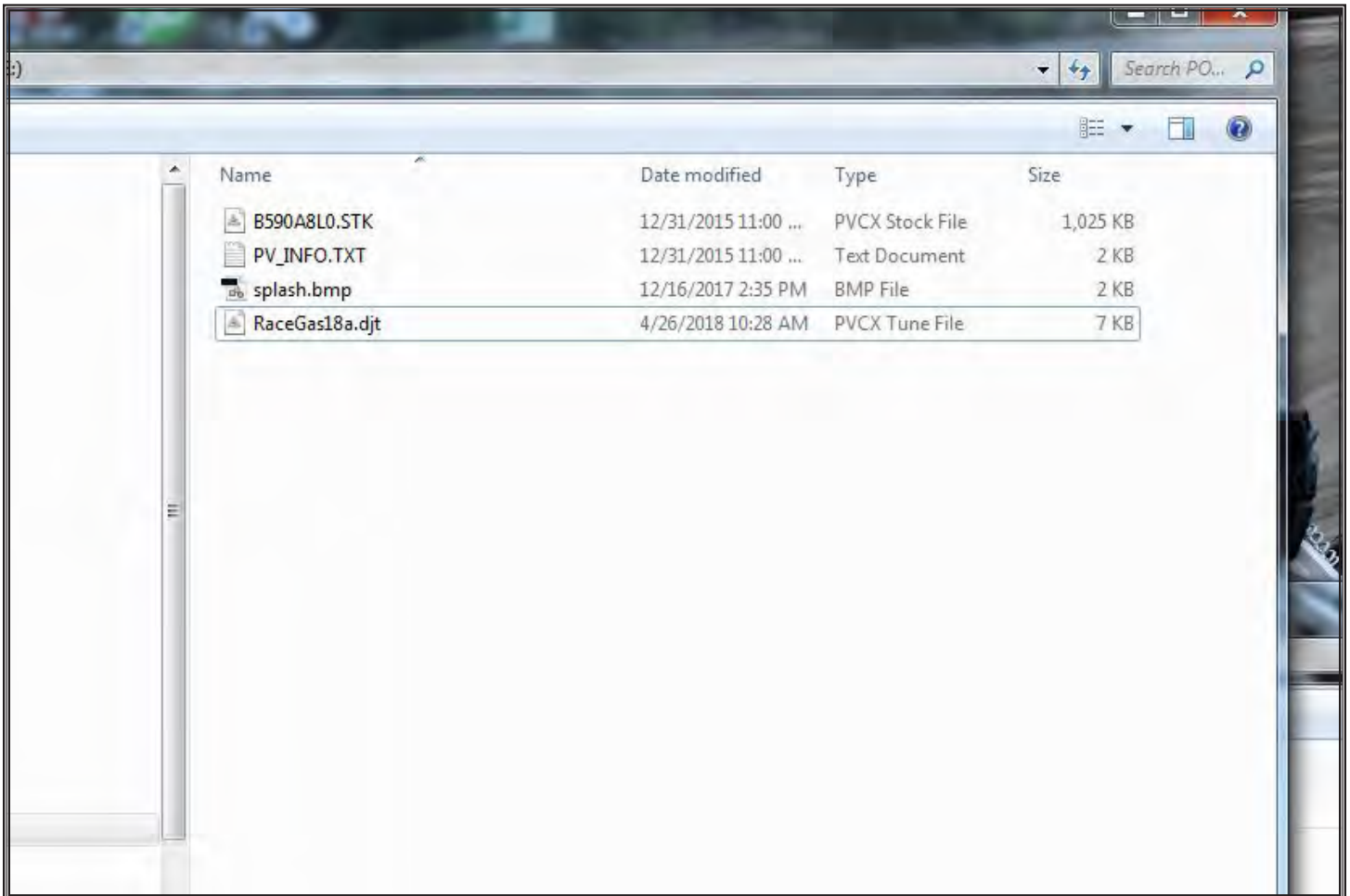
## EASIEST AND MOST ACCURATE:

Email your PV INFO file (pulled in steps above) WITH YOUR VEHICLE YEAR, MAKE, and MODEL, to [Tunes@BoonDockers.com](mailto:Tunes@BoonDockers.com). Please also include your contact information. During business hours, we'll turn around your tune file very quickly. Attach the PV\_INFO file to your email. That has all of the info for us to get your custom-tune processed!

## PHONE

We are always available by phone. Call 208-542-4411 and ask for Kyle. Email is the best solution because we can verify your PV\_INFO data, and ensure no mistakes. Even by phone, we still need to e-mail your tune.

# Tuning



You will receive your new tune(s) via email. To save your new tune(s), simply save them (or drag-and-drop from your email) to your PVCX (Powervision) device. The new tune file(s) will end in ".DJT".

Disconnect the PVCX from your computer and bring the PVCX back to your vehicle

# Tuning



Plug the PVCX into the OBDI port as done previously. Use the buttons to select "Flash Tune"



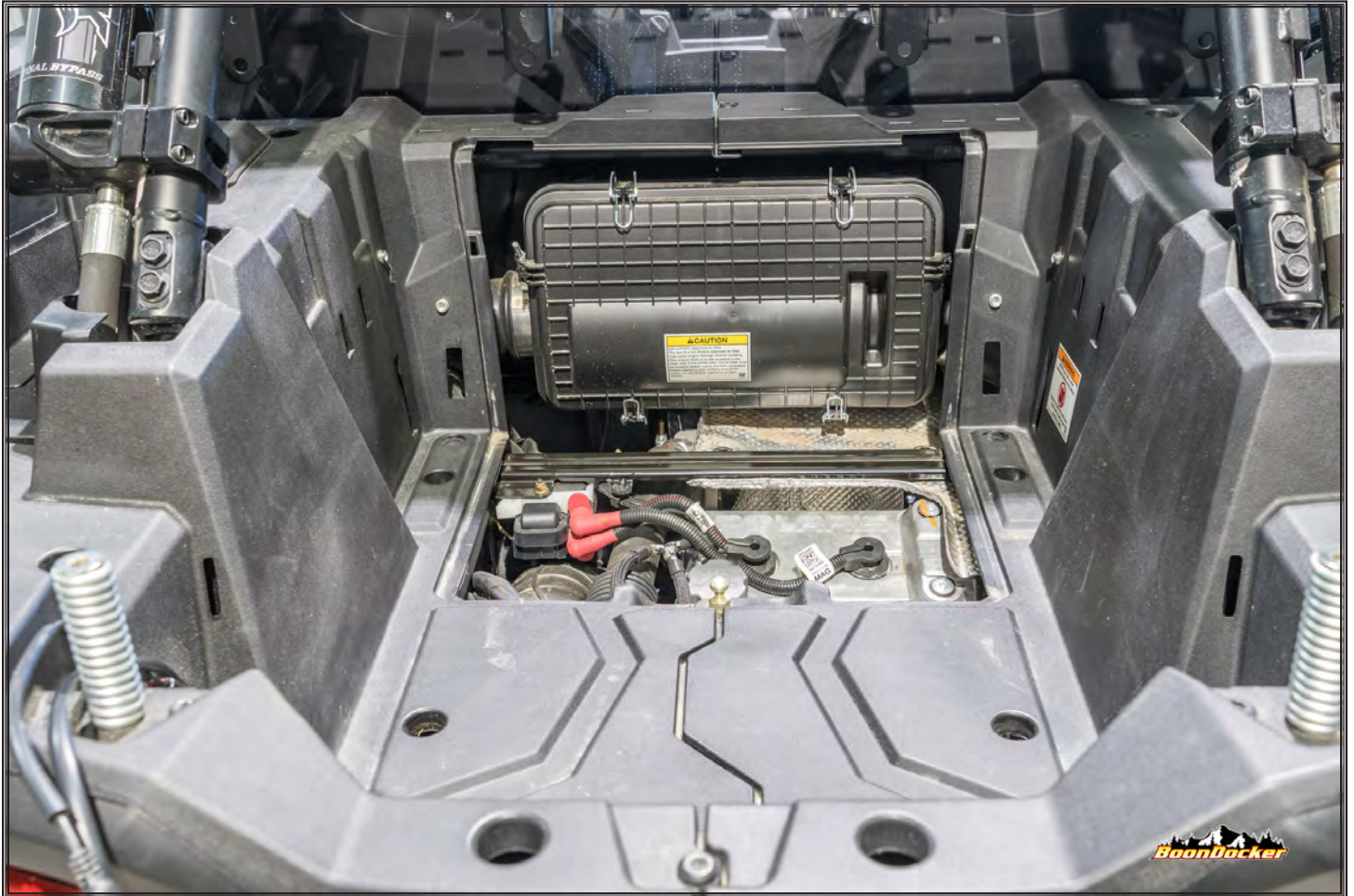
# Tuning



Load your Dominator tune! Use the buttons to scroll down to the tune you wish to load. Use the button to select the tune. Writing to the ECU may take 15+ minutes.

NOTE: The file that ends in ".STK" is your stock tune, if you ever need to return the car to stock.

# *Initial Teardown*



Remove "trunk" compartment plastics as shown



# Initial Teardown



Remove plastic clutch vent ❶ and clutch cover ❷



# Initial Teardown



Remove aluminum heat shields ①, including the piece on top of the motor, accessed from the trunk compartment. Remove exhaust pipe ②. Muffer can be left in place.

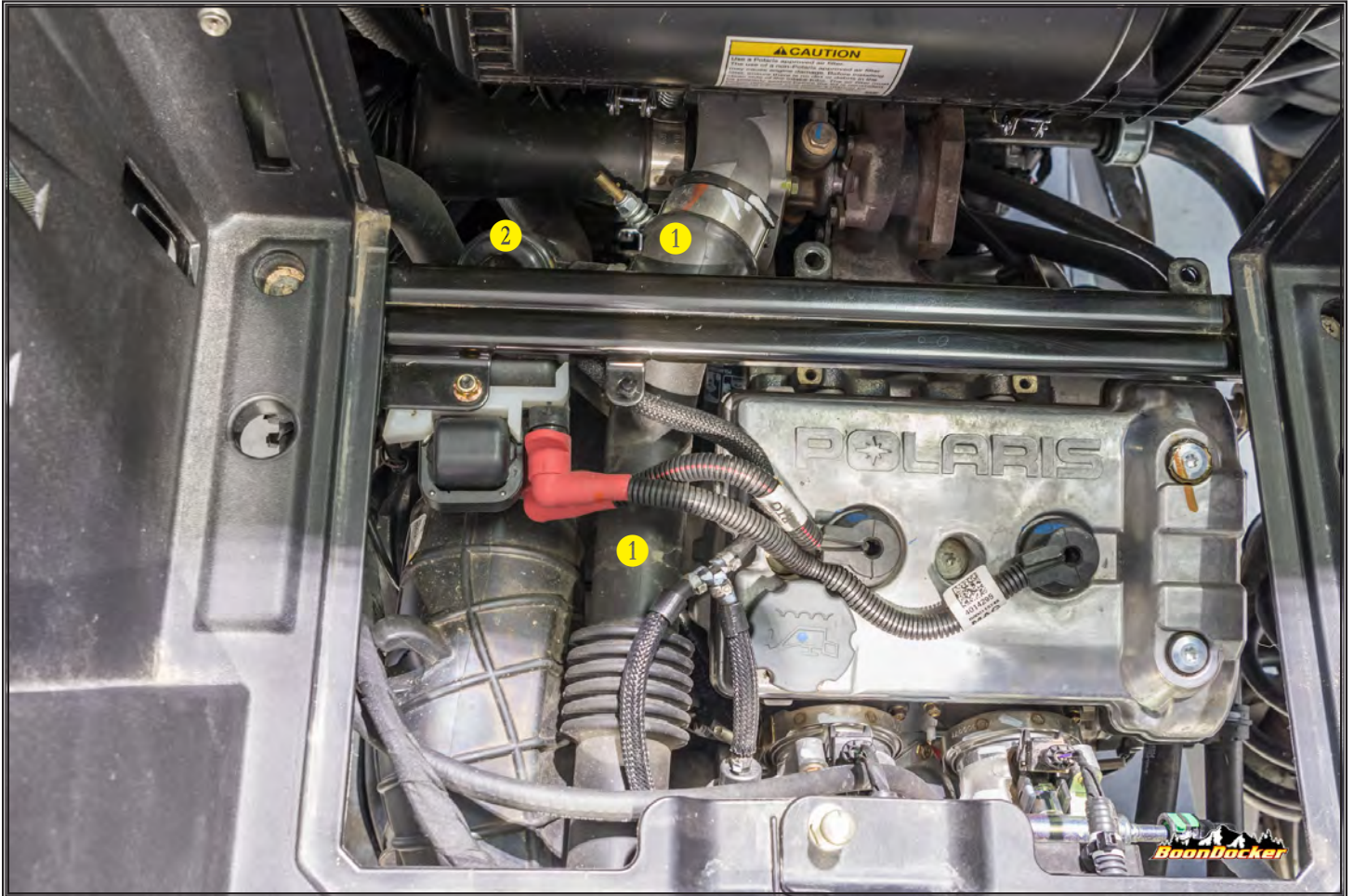
# Initial Teardown



Remove cold air intake ❶. Cut the oetiker clamps from cold air, charge tube, and blow-off valve (BOV)



# Initial Teardown



Remove charge tube ① and BOV ②



# Initial Teardown



Unbolt exhaust manifold from motor. There are (4) studs with nuts, and (2) bolts. Unbolt turbo bracket from frame (easiest to access from panel behind seats/console).

# ***Initial Teardown***



Uninstall factory turbo from bracket. Cut oetiker clamps from factory boost actuator



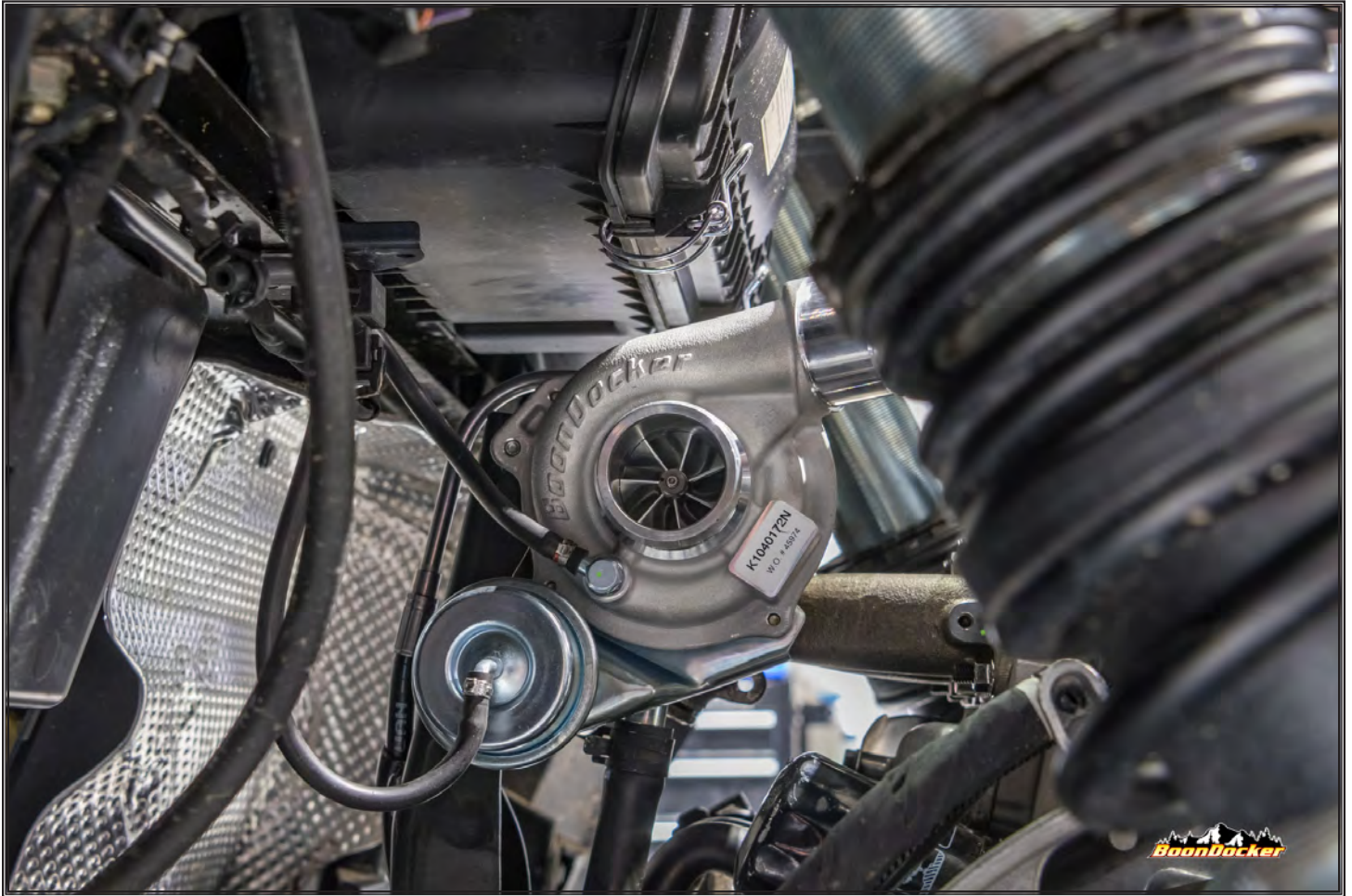
# ***Install Turbo***



Install BoonDocker Turbo onto factory bracket as shown. Use supplied zip ties to fasten tubing around barbs on turbo and wastegate.



# ***Install Turbo***



Install turbo & bracket back to car, using factory hardware. Fasten exhaust manifold to factory torque spec. Connect oil-lines to turbo. Use NEW copper gaskets for banjo fittings.

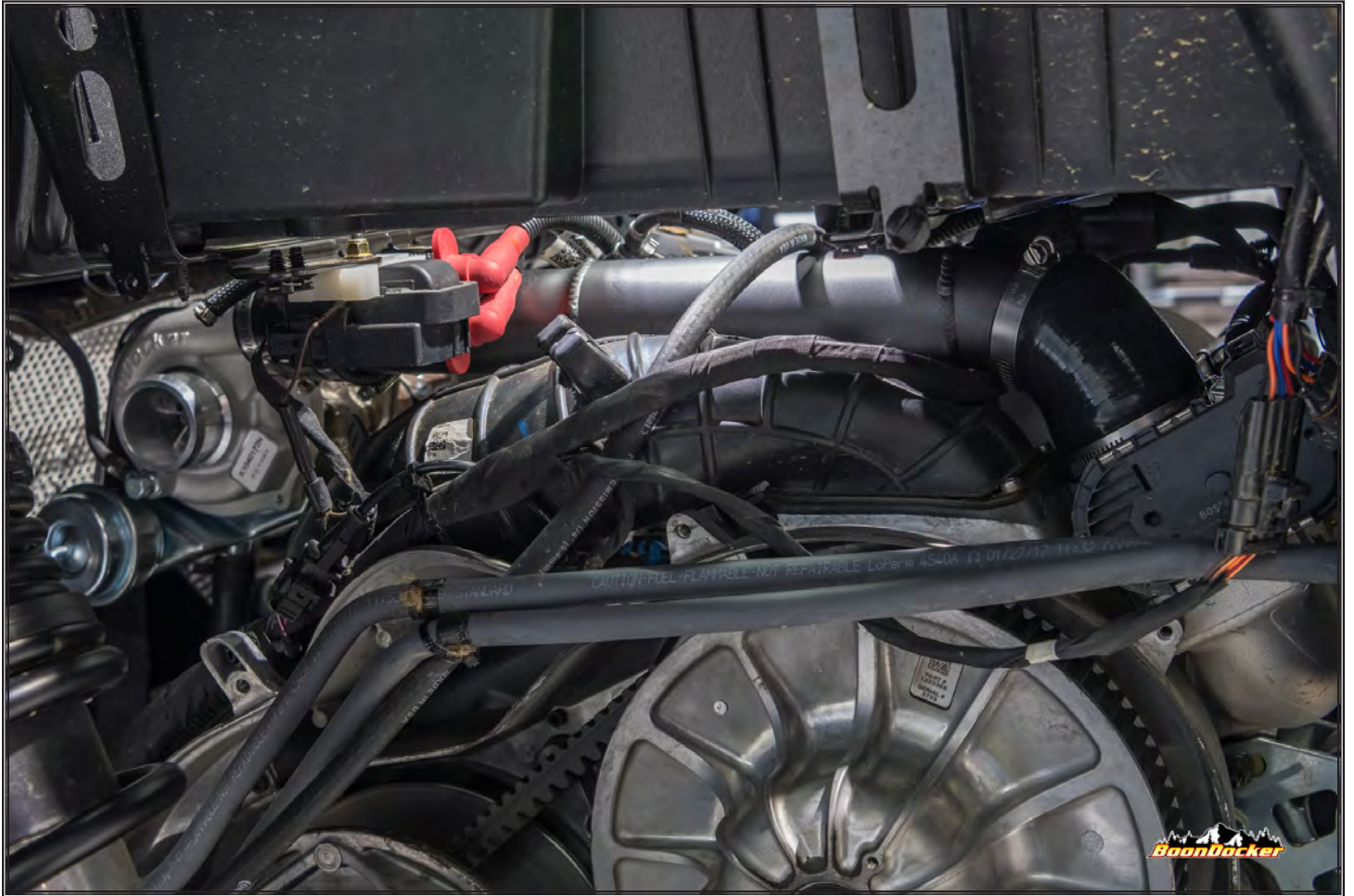
# ***Install Air Intake***



Loosely install hose clamps on silicone fittings. Install silicone fittings on blow-off valve, cold air intake, and charge tube as shown.



# ***Install Air Intake***



Install charge tube as shown. Verify routing of spark plug lines. Install BOV.

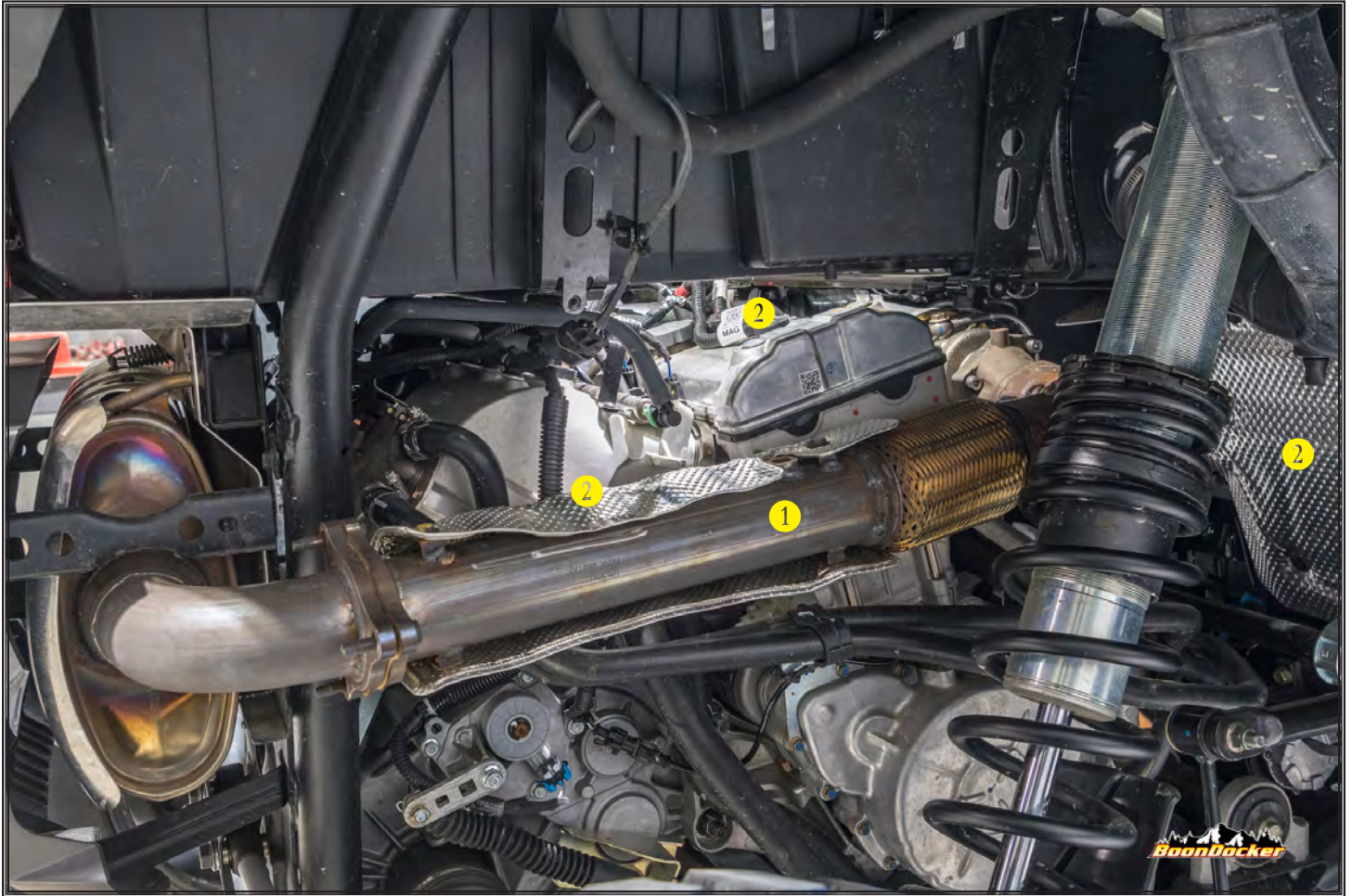


# Install Air Intake



Install cold-air intake as shown ①. Tighten all hose clamps. Verify alignment, and prevent hose clamps from rubbing. Verify boost reference line is not in a bind or pinched (line not shown, but is wrapped in a nylon-webbed sheathing).

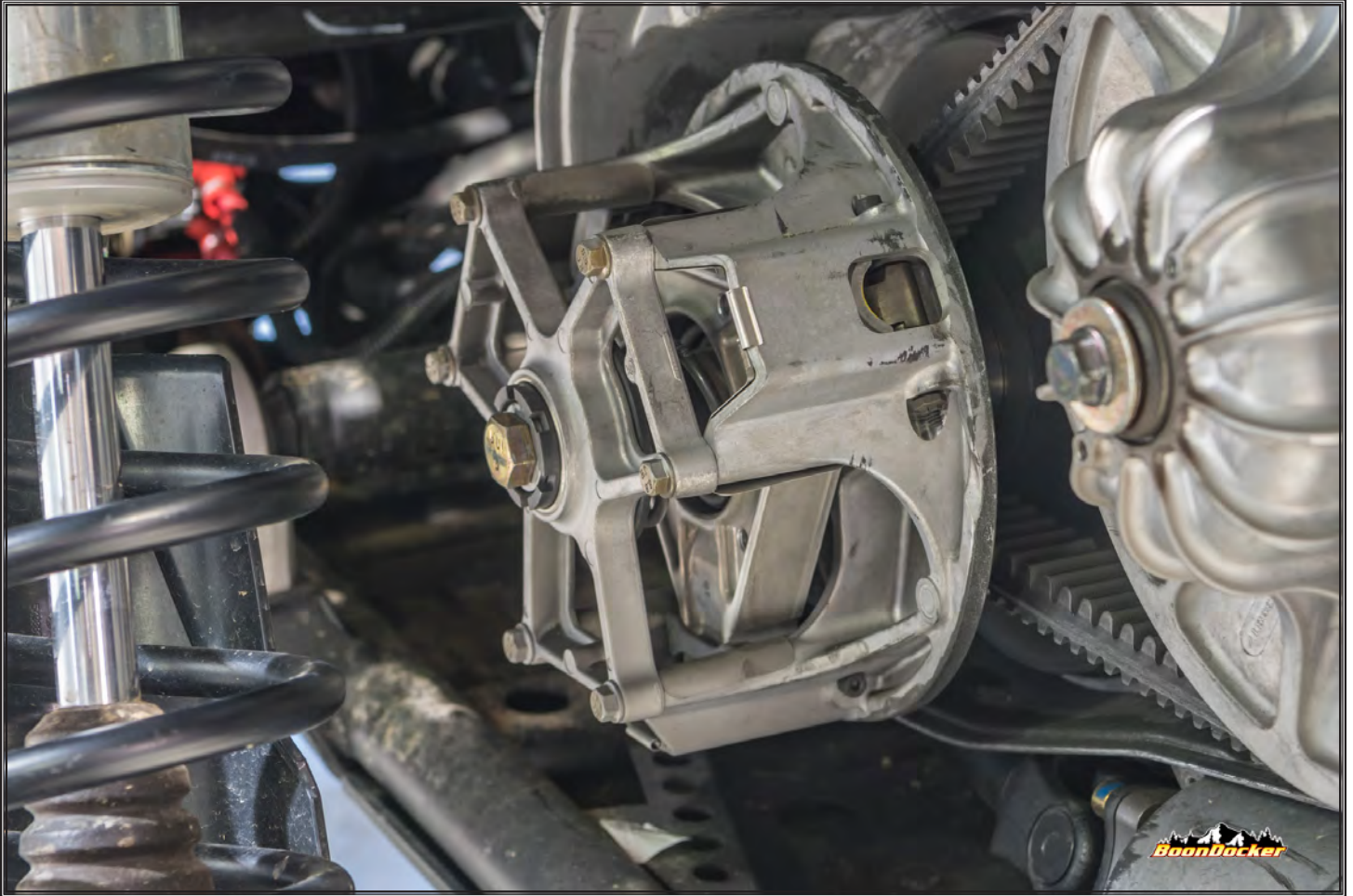
# Install Exhaust



Reinstall exhaust piping ①. Reinstall factory heat shields ②.



# Clutching



Remove primary and secondary clutches. Primary clutch WILL REQUIRE a special tool for removal.  
Consult your dealer if you don't own the correct tool.



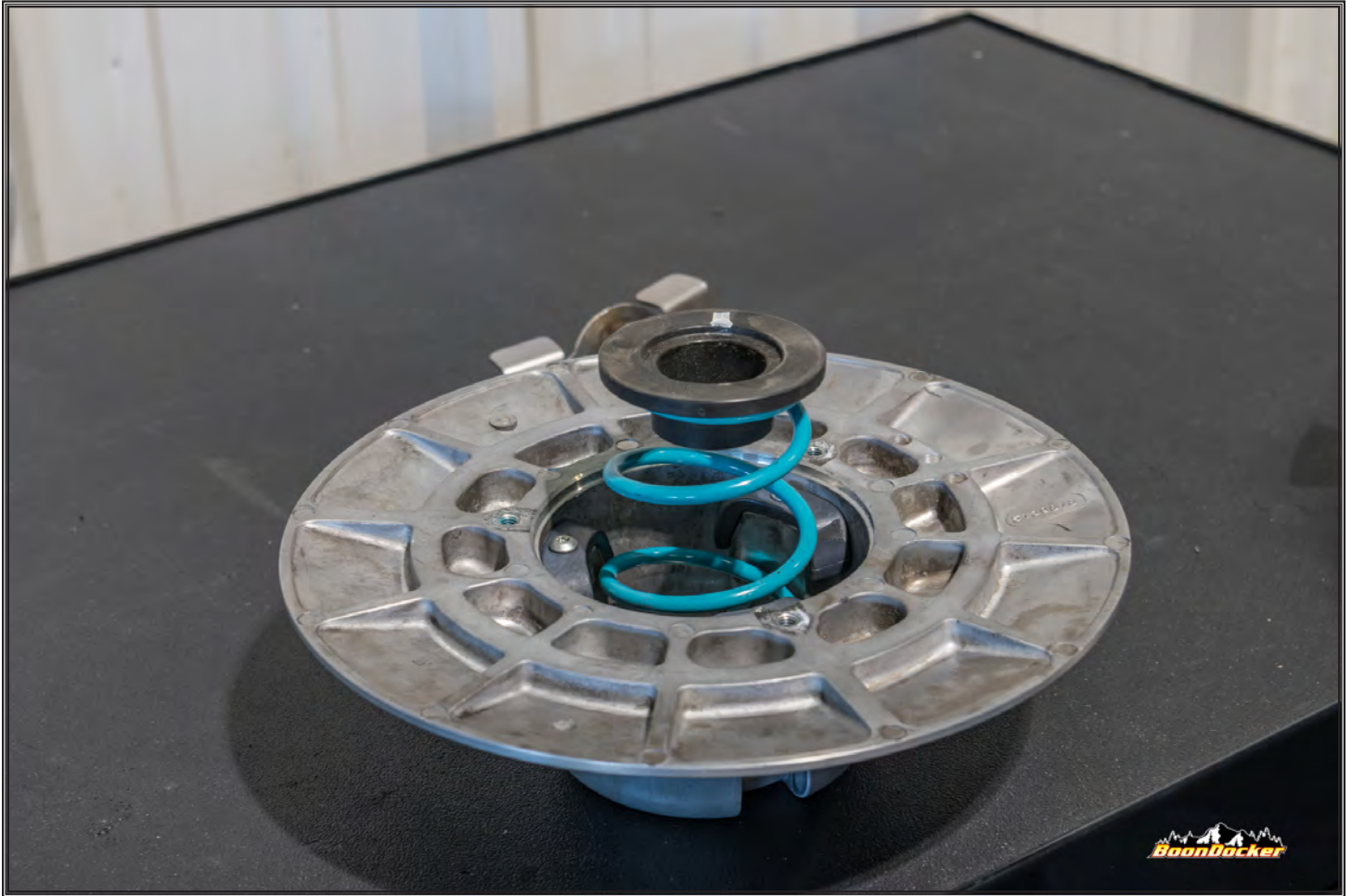
# Clutching



Remove (3) screws to split the sheaves ①.

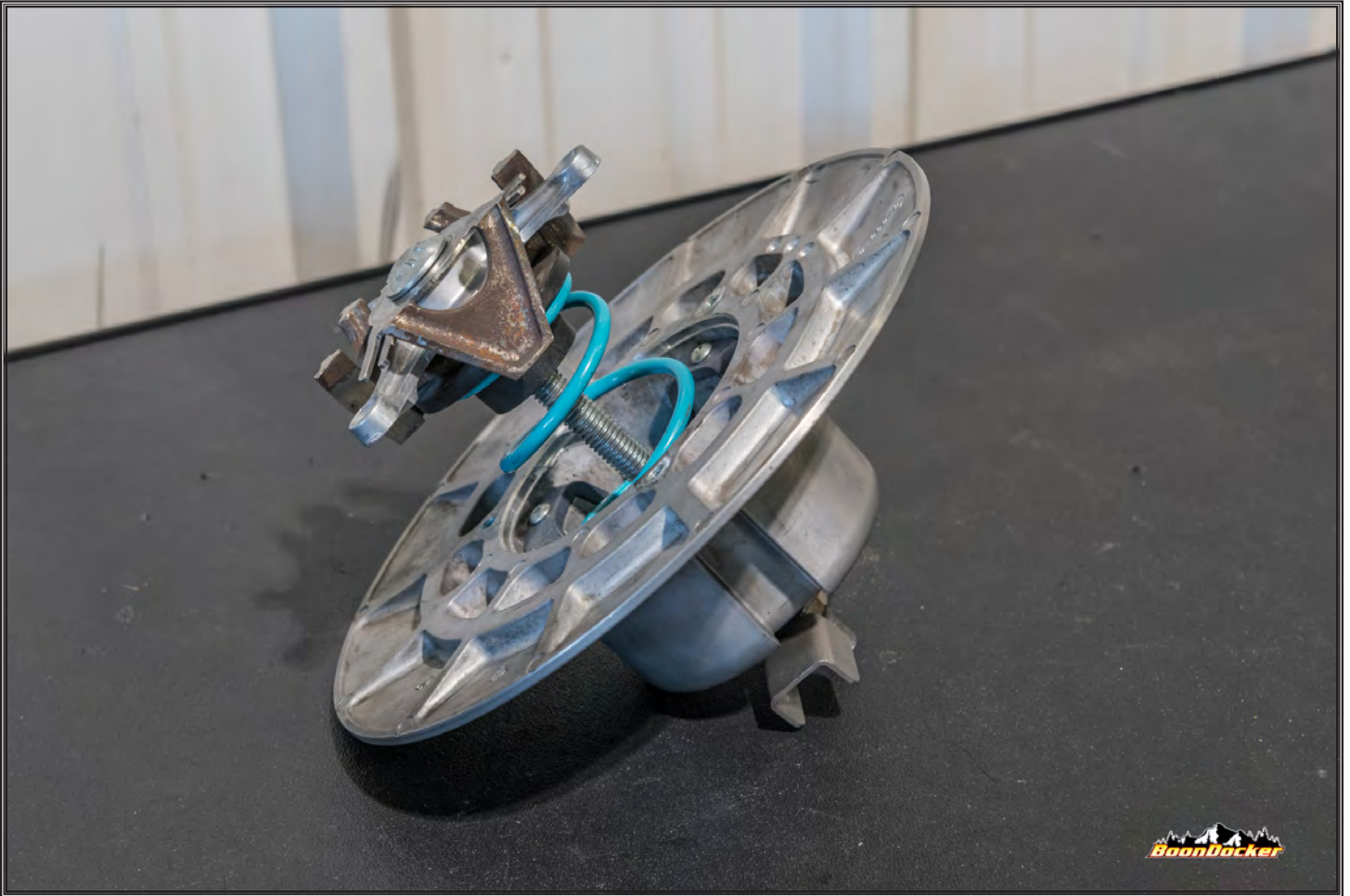
BE CAREFUL! Spring pressure can cause injury. It is preferred to use a spring tool (available for purchase from BoonDocker).

# Clutching



Replace secondary spring with "Teal" provided spring. Install hardware.

# Clutching



Using a clutch spring compression tool, compress the spring to allow re-installation of the (3) screws to re-assemble clutch.



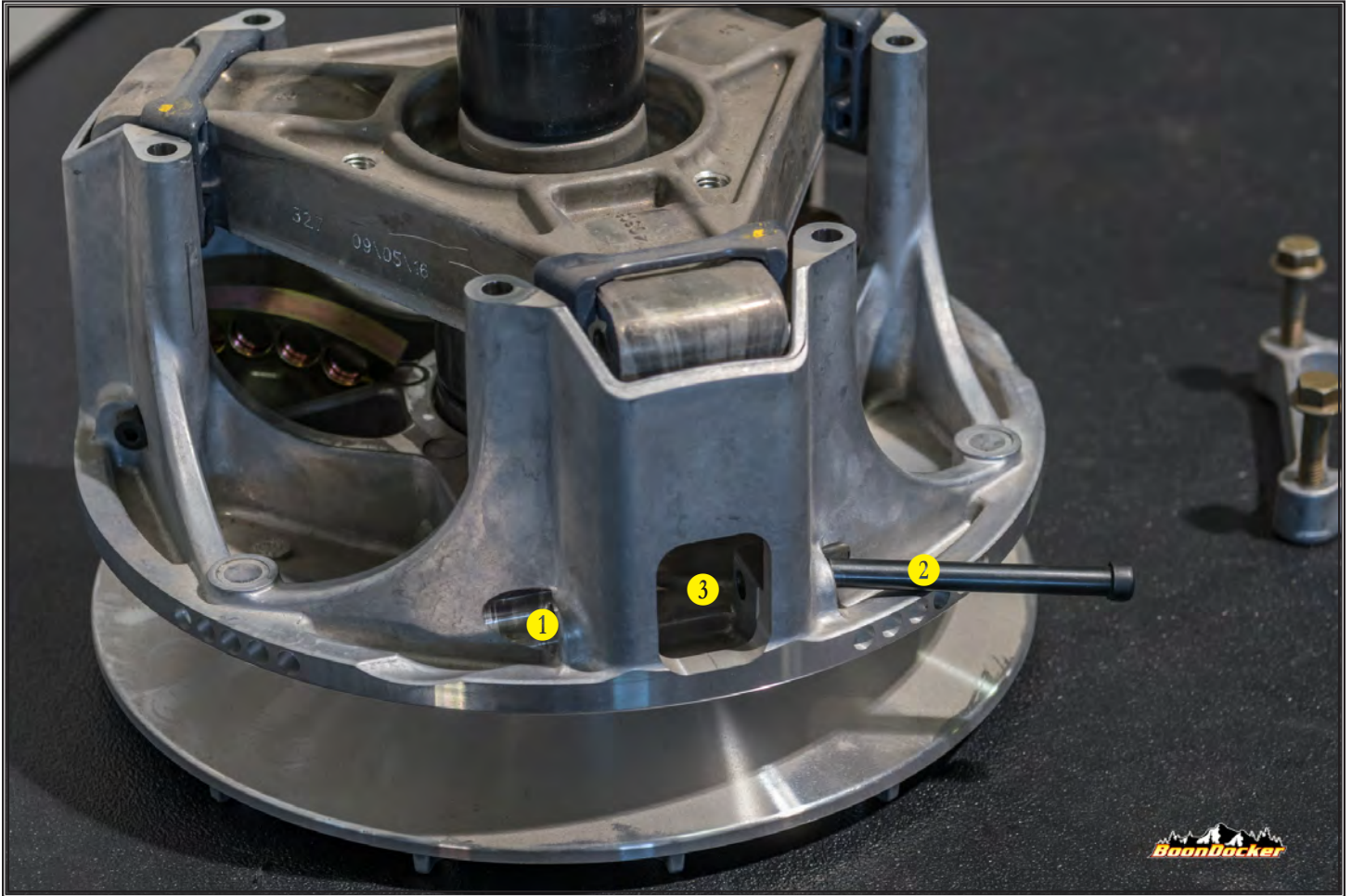
# Clutching



Loosen bolts to remove cover from primary clutch.

**BE CAREFUL!** Springs are under tension.

# Clutching



PERFORM ONE AT A TIME, FOR EACH OF THE (3) WEIGHTS:  
Loosen nut ① and partially remove bolt ② to allow removal of weight ③.



# Clutching



Verify placement of magnets inside of supplied weights. Weights should be loaded from BoonDocker (2-3-3-3, weights, from heel to toe)



# Clutching



Install new weights as shown. Use original nut and bolt. Tighten to OEM spec.

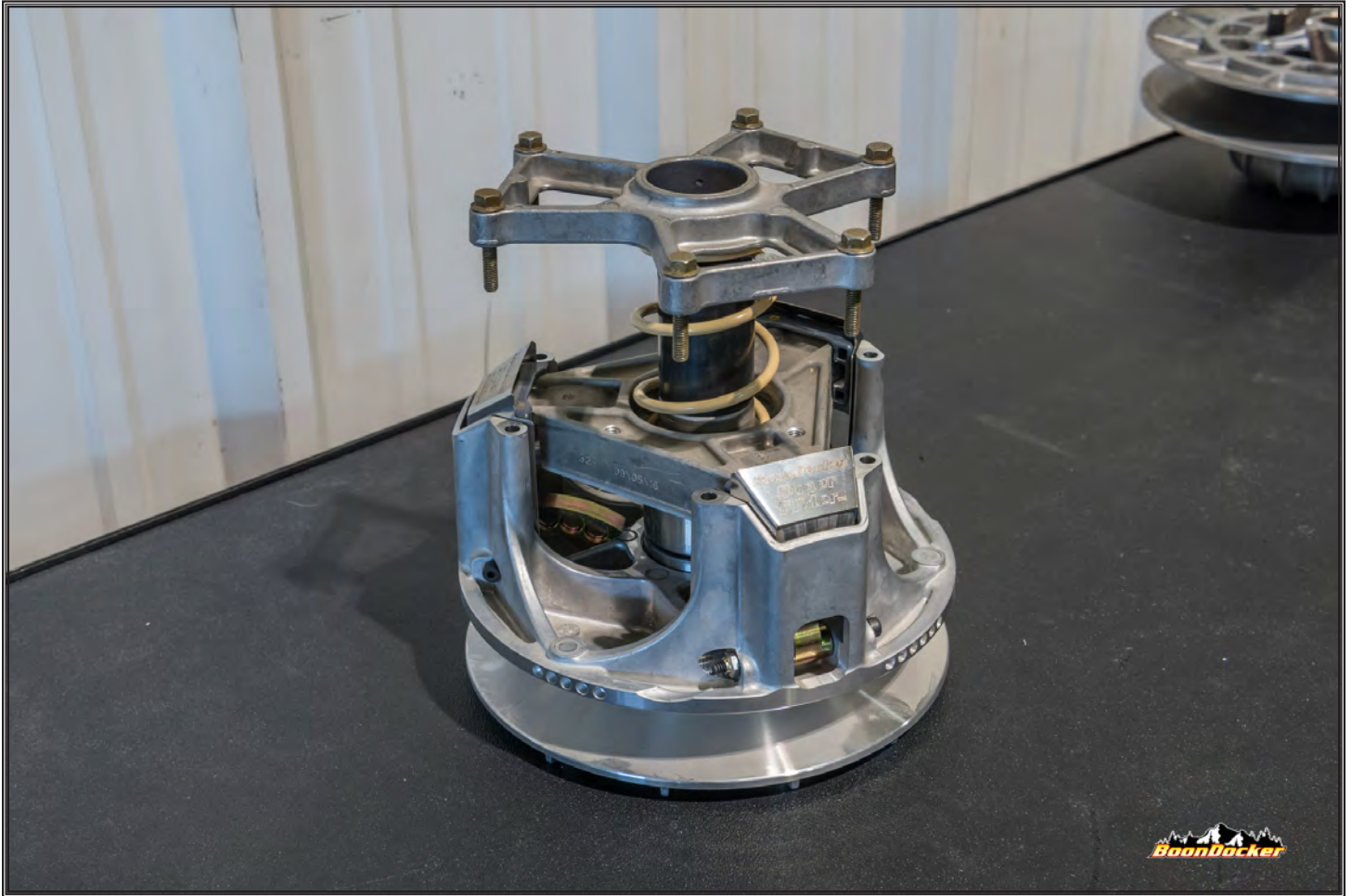
# Clutching



Install stock shims.

(photo shows our optional "Super Slider" kit, available for purchase, not required)

# Clutching



Reinstall cover to primary clutch, using supplied Tan spring. Tighten all fasteners to factory spec.

**IMPORTANT:** Permanent damage can occur from incorrect installation of primary cover. Incorrect alignment or uneven tensioning of bolts will cause cover to bind, and will cause damage to bushing. Damaged cover bushings must be replaced to allow for proper clutch operation.



# Startup Procedure



For the initial startup: 1) Ensure you're using the correct fuel. If you have old/incorrect fuel, drain the tank and fill with the correct fuel. 2) Allow the motor to reach an operating temperature of at least 174F. You may notice a small amount of smoke coming from the engine bay. This is normal, as the residual packing oil on the turbo burns off. 3) Inspect the installation - look for any leaks and/or insecure wires/hoses.