

2014 Stage 3 Roush Phase 1 To Phase 3 Upgrade Kit

Installation Guide



List Of Tools

Lock Tight or Thread Lock
Ratchet, and Extension
8mm Socket
Pulley Puller
1/2 inch Socket
11/16 inch Socket
11/16 inch Wrench
15mm Socket
T20 Torxs Screw Driver

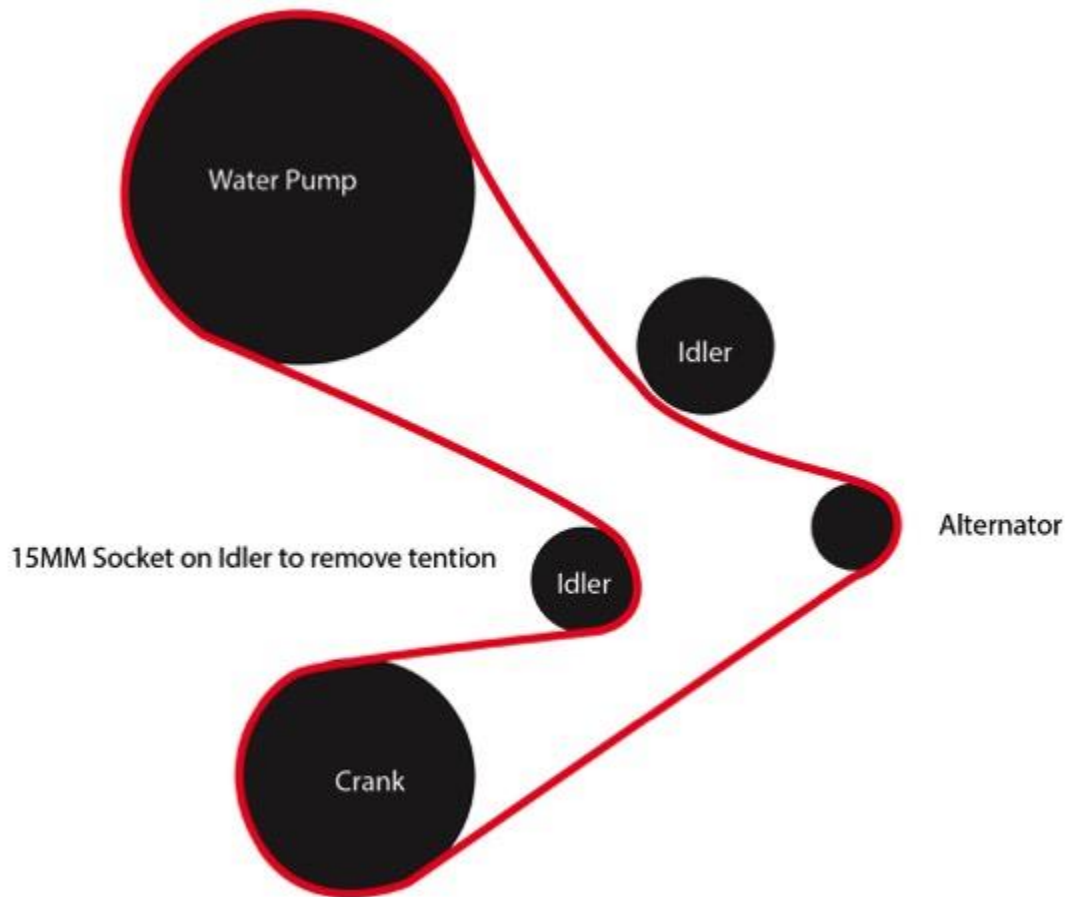
Zip Ties
Trim Tool
1/4 inch socket
14mm Wrench
Fender Cover
Extension
15/16 inch Wrench
Thread Tape
Straight Screw Driver

80mm Supercharger Pulley & 2085mm 6-rib Serpentine Belt

Use a 15mm wrench to take the tension off of tensioner on passenger's side of motor, which is the belt for water pump, alternator, and is also on the crank pulley.

Remove the belt.

Diagram below of location:



Use an 11/16-inch wrench to remove the tension from the Supercharger Serpentine Belt.

Slip Belt Off of supercharger.

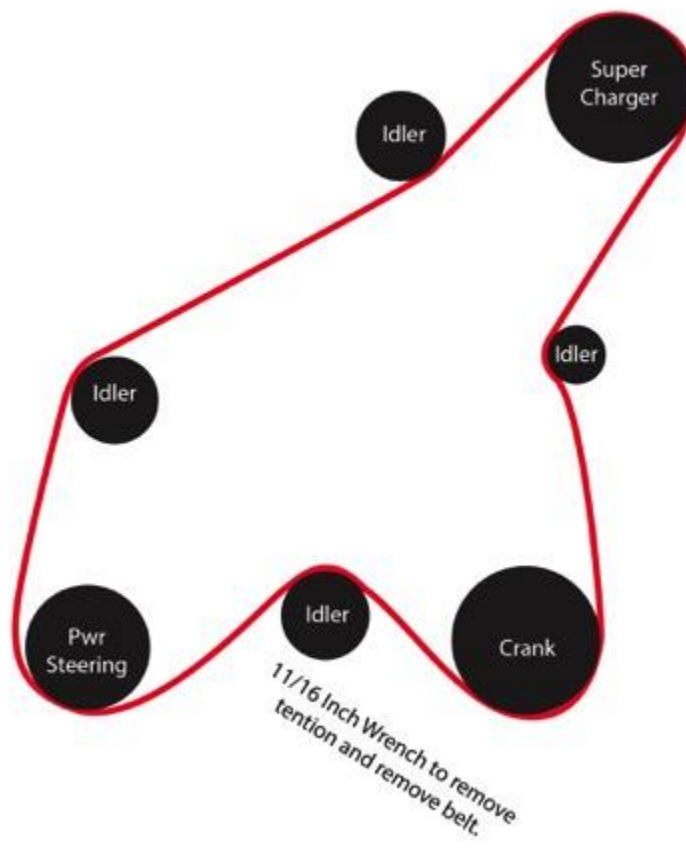
Remove the bolt with the spacer on it so that you can slip the old belt out.

½ Inch Bracket bolt Below:



(You may need to take other 2 bolts loose on Idler bracket to allow movement)
Slide the new (2085 6 Rib) Belt On.

Diagram of Supercharger belt below:



Remove belt by fishing it out of other pulleys.

Slip Old Belt out, and Remove the 6 - 8mm bolts on the front of existing Supercharger Pulley.

Image below:



Use a Pulley Puller tool, to remove stock pulley.

Place new Supercharger Pulley on Engine, and tighten the 6 bolts to 10 foot Pounds.

(Recommend using Lock Tight on bolts).

Reinstall supercharger belt, and tighten the ½ in bolts to the idler bracket.

Reinstall Drive belt for Alternator and Water pump and crank shaft as well.

Cold Air Intake System with 110mm MAF

Loosen the 8mm bolt on the clamp, on top of throttle body side of intake, on throttle body.

Image below:



Loosen 8mm bolt clamp on bottom air box side. (Red Highlight) And remove the Mass Air Flow Sensor with a T20 TORX screwdriver. (Green Highlight) set aside for new intake.

Image below:

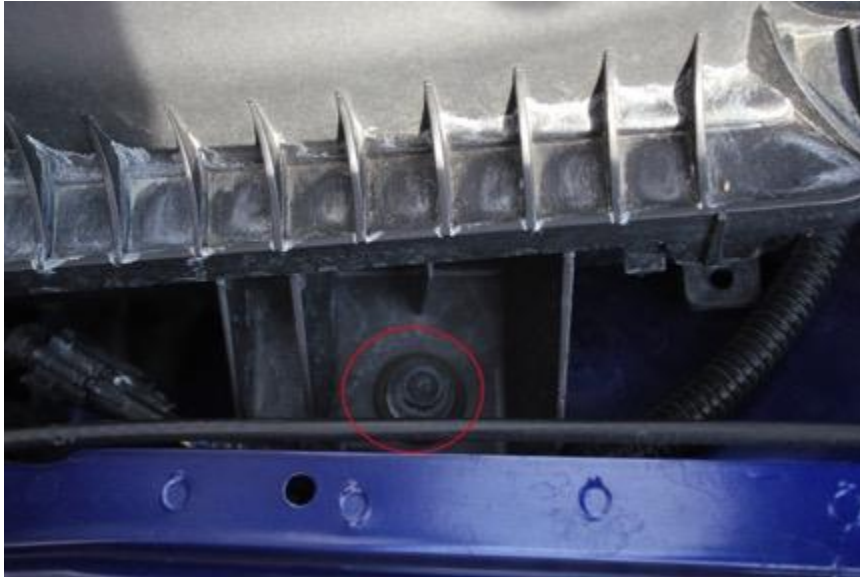


Remove the PCV Tube from passenger's side of intake tube, and the one small vacuum line from driver's side.



Remove the 10mm Bolt on Drivers side between fender and air box.

Image below:



Pull air box up to release from grommet from bottom of air box.

Remove air Intake system from car.

Image of removed air box below:



Assemble new air box, air cone, through metal box, and clamp it on the angled pipe, and screw it to the metal box, with a 8mm socket.

Image Below:



Install new air box and clamp it on throttle body. With the 8mm Hose Clamp.

Image below:



Under the Roush letter on air box, there a slot for a bolt to go through on radiator, and there is a nut supplied with the bit, also a 8mm.



Remove the rubber grommets from old airbus.

Press the new air box into grommets on bottom, and replace the bolt on fender side of air box, with a 10mm socket.

Image Below:



Reconnect the Mass Air Flow and the vacuum line on top end of intake, and oil return line as well.

Mass Air Flow Below:



Fuel Pump Voltage Regulator (Plug-n-Play Wiring Harness)

Remove rear trunk cargo cover.

Image Below:



Remove spare tire

Remove the rear trim panel.

Remove rear dome light.

Remove back seats, by pulling clips underneath the outside of the seat closest to the windows.

Image below:



Remove drivers side sill panel, by pulling up on the outer edge, but be sure to disconnect the illumination wiring.

Image below:



Remove the Drivers side kicker panel by using a trim too on the small clip holding it in place
Pull carpet up so it exposes factory wiring.

Image Below:



Remove the boost gauge from the passenger's side of the intake, and unthread the fitting, with a 14mm wrench.

Image of location below:



Set boost line aside, where it won't get crushed.

Running New Wiring

Access the cargo space, remove factory wiring and run new wiring along old wiring, placing it under the three clips and reinstalling factory harness over it.

Image below:



Locate the Fuel Pump Module, at rear of spare tire hole on drivers side, unplug the harness and plug the splitter wire in and plug harness into splitter.

Plug Roush Voltage Regulator into existing plug.

Image Below:



With wiring up under the sill of the trunk plug the Roush Instrument box in, and screw it in with the 4 self tapping screw supplied above the rear fender, located the hole in the sheet metal and place it over the hole, use a ¼ socket to secure the box.

Image Below:



Route the wiring up through the back seat and down the drivers side door sill, under the carpet, and along floor of the back side of the dash and pull the boost line through though.

Image Below:



Connect the pressure switch, supplied in the upgrade, to the T fitting, and reconnect the existing fitting to the T also. Us Teflon tape on all fitting threads.

Images below:





Thread the switch into intake hole we removed boost line from earlier.

Tighten with a 15/16 inch wrench.

Run wiring across the firewall to the switch and plug in harness.

Secure new wiring to existing wiring.

Fuse Supplied with Kit.

Replace the F13 Fuse in the fuse box a 20 amp fuse with the new 30 amp fuse supplied.

Image below:

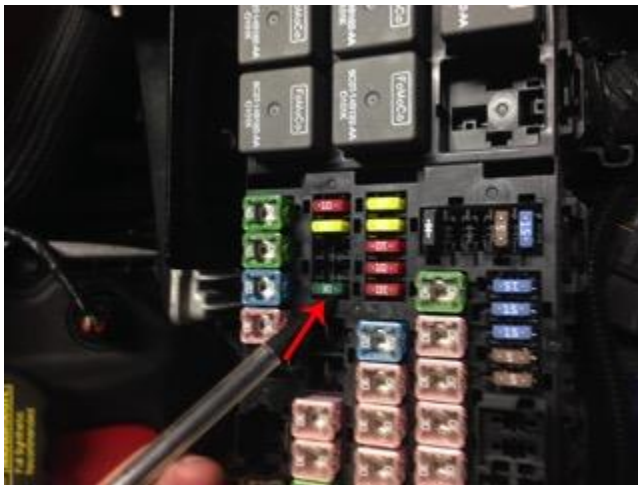


Image of factory Part Removed below:



Roush PCM Flash Tune

Roush PCM Flash Voucher Card Included with purchase of kit is used to obtain the specific calibration needed for the Phase 3 Kit. Its required that you send Roush your PCM, or you have the tune installed by a shop with an approved pass through device.

Contact them at 800-597-6874 or www.roushperformance.com

Location of PCM, Passengers side front of engine Compartment, next to Fuse box.

Image of pcm location below:



Finished Product:



Installation Guide Created by AmericanMuscle Customer Keifer Mitchell on 9.23.2015