

CUSTOM PERFORMANCE[™]

engineering

Atmosphere[™] Turbo Kit

cp-e[™], Inc.
6802 Mid Cities Avenue
Beltsville, MD 20705

www.cp-e.com

By: Ben Bruno

©Copyright 2015 Custom Performance Engineering, Inc.

MATERIAL INCLUDED & DETAILS:

- ☐ (1) cp-e[™] Sticker
- ☐ (1) cp-e[™] Informational Postcard
- ☐ (1) cp-e[™] Atmosphere[™] Instruction Booklet
- ☐ (1) Tial V-Band Turbocharger *(Only one of the following)*
 - ◇ GT 2871R / .86 AR ◇ GTX 2867R / .86 AR
 - ◇ GT 3071R / .63 AR ◇ GTX 3071R / .82 AR
 - ◇ GT 3076R / .82 AR ◇ GTX 3076R / .82 AR
 - ◇ GT 3582R / .82 AR ◇ GTX 3582R / .82 AR
- ☐ (1) Tial 1 Bar MVR Wastegate with Standard hardware *(color optional)*
- ☐ (1) Tial 300 V-Band Clamp
- ☐ (1) Tial 355 V-Band Clamp
- ☐ (1) cp-e[™] Focus ST Turbo Manifold
 - Titan Finish for beauty and strength
 - Cast
 - TIG Welds for strength and reliability
 - Smooth transition design for conversion from engine to turbo/wastegate
 - CNC lathed heatshield bungs TIG welded onto the manifold
 - CNC lathed Tial VBand flanges TIG welded onto the manifold
 - Machine finished front face for a secure, leak free fitment onto engine
- ☐ (1) cp-e[™] Upper Turbo Manifold Heatshield
 - Stainless Steel bolt-on heatshield to hold heat within the manifold and keep out of the engine bay
 - Laser cut, and CNC bent
 - TIG welds to secure heatshield in shape and provide rattle free installation
- ☐ (1) cp-e[™] Lower Turbo Manifold Heatshield
 - Stainless Steel bolt-on heatshield to hold heat within the manifold and keep out of the engine bay
 - Laser cut, and CNC bent
 - TIG welds to secure heatshield in shape and provide rattle free installation
- ☐ (1) cp-e[™] Focus ST DownScream[™] Downpipe
 - Stainless Steel tubing with Titan finish
 - Stainless Steel CNC lathe VBand flange
 - Laser cut exhaust flange
 - Stainless Steel flex pipes with inner liner to add strength and durability
 - TIG Welds throughout for strength and reliability
 - 3.00" all the way through
 - Includes wastegate merge back in to the downpipe
 - Laser cut downpipe bracket for support and strength during engine rotation
- ☐ (1) cp-e[™] 3" to 4" Custom Transition Silicone Intake Hose
 - Designed to fit any 3.00" intake
 - We only guarantee fitment with cp-e[™] Intake
 - 4-ply and wire reinforced for strength against expansion and collapse due to vacuum
 - CAD designed smooth transition from 3.00" intake to 4.00" turbo inlet
- ☐ (1) cp-e[™] 2.5" Custom Silicone Turbo Outlet Elbow
 - Designed for smooth transition from turbo to cp-e HOTcharge[™] pipe
 - We only guarantee fitment with cp-e HOTcharge[™]



Ford Focus ST ('13-)



- CAD designed
- 4-ply and fiber reinforced to protect against expansion
- (1) cp-e™ 2.50" 90° Elbow silicone hose coupler
 - CAD designed
 - 4-ply and fiber reinforced
 - Supplied to help installers accommodate other brand charge pipes
 - Fitment not guaranteed with any specific charge pipe system
- (1) cp-e™ 10" steel braided -6AN coolant return line with heatshielding
 - Steel braided hose for strength and durability
 - Crimp-on hose-end for reliability
 - Swivel hose-end to allow easiest and best install
 - Heatshielding to protect the line from heat
- (1) cp-e™ 19" steel braided -8AN coolant feed line with heatshielding
 - Steel braided hose for strength and durability
 - Crimp-on hose-end for reliability
 - Swivel hose-end to allow easiest and best install
 - Heatshielding to protect the line from heat
- (1) cp-e™ 16.25" steel braided -4AN oil feed line with heatshielding
 - Steel braided hose for strength and durability
 - Crimp-on hose-end for reliability
 - Swivel hose-end to allow easiest and best install
 - Heatshielding to protect the line from heat
- (1) cp-e™ 2.75" steel braided -8AN oil return line with heatshielding
 - CAD designed hose with CNC flanges, and CNC tubing
 - TIG welded
 - Flexible Push-Lock Hose to allow easy install
 - Secured with crimp clamps to ensure durability and reliability
 - Heatshielding to protect the line from heat
- (1) cp-e™ CNC Lathed Oil Feed Block-Side Adapter Fitting
- (2) cp-e™ Oil Drain Gasket
- (1) CNC lathed Oil Feed Turbo-Side Restrictor Fitting
- (1) -8AN to Banjo Adapter Fitting
- (1) M14 x 1.5mm Banjo Bolt (includes two crush washers)
- (1) -6AN to M14 x 1.5 Adapter Fitting
- (1) -8AN to ½" Barb Adapter Fitting
- (1) .71" OD Copper crush washers
- (1) O2 Bung Cap
- (1) 1/8" NPT EGT plug
- (1) #6 Hose Clamp
- (1) #64 Hose Clamp
- (1) 3.00" Stainless Exhaust Gasket
- (2) 7" Black Zip Tie
- (2) 2.75" T-Bolt Clamps
- (2) M8-1.25 x 20mm SHCS
- (2) ½-13 Split Lock Washer
- (2) ½-13 x 1½" Bolt
- (2) ½-13 Hex Nut
- (3) .80" OD Copper crush washers
- (4) 5/16" External Lock Washer
- (4) 5/16-18 x 3/8" Hex Cap Bolt



PARTS NOT INCLUDED & WHY:

Reading through this list it will become apparent that all cp-e™ products are made to be bolt-on and so are able to integrate together seamlessly. Installing this kit with cp-e™ products is by far the simplest “1-2-3” install possible, though, technically it is not the only way.

- ☐ Boost Control Solenoid
 - The stock solenoid can work if installed correctly.
 - A 3-port setup is recommended.
 - This is typically a preference on the tuner and owner, we cannot guess what that preference will be.
- ☐ New vacuum source for wastegate / BOV / etc.
 - Customers have different solutions already installed on their vehicle.
 - cp-e™ BlockD™ Symposer Delete and AirStation™ recommended depending on setup.
- ☐ Hot Side Charge Pipe
 - Customer needs better than stock charge pipe.
 - Customers have different solutions already installed on their car; we cannot accommodate all of them.
 - cp-e™ HOTcharge™ recommended for easiest, most straight forward install.
 - If customers have alternative charge pipe, a 90° 2.50" silicone is provided to help accommodate a competitor's system, however cp-e™ cannot guarantee fitment on any other charge pipe setup, and some custom work by the customer may be needed.
- ☐ Bypass Valve / Blow-Off Valve
 - THIS IS REQUIRED. By removing the stock turbo, customers are removing the stock bypass valve. An alternative solution must be installed to accommodate this change.
 - This is not included because customers have other solutions previously installed on their car such as the cp-e™ Exhale™ BOV kit.
 - Installation of the cp-e™ Exhale BOV kit is highly recommended.
 - If running a Tial Q BOV, it is recommended to attach the vacuum line to a boost source that is directly off of the intake manifold. When doing this, the customer also will need to replace the spring inside the valve with a WHITE – 9psi spring. cp-e™ has tested many different springs in development of this turbo kit, and the 9psi spring provides the best characteristics all around.
- ☐ Intercooler
 - An intercooler that is better than stock is required. The stock intercooler will not be able to withstand the flow and pressure that the turbo kit will be able to provide, and the stock intercooler will be a choking point if not replaced.
 - Customers have many other solutions installed on their cars already, so an intercooler is not included in the kit.
 - cp-e™ recommends the cp-e™ ΔCore™ Front Mount Intercooler to be installed.
 - This will provide the best cooling capacity, fitment, and performance available for the turbo kit.
- ☐ Catalytic Converter
 - This is not included, and is not an option.
 - We cannot include a catalytic converter in this kit for many reasons. The largest reason is that in a big turbo setup, the cat itself will get eaten up and cause warranty concerns for cp-e™. Also, people installing this turbo kit understand it is for off-road use only, and that modifying or removing the stock catalytic converter in any way is illegal.
- ☐ Tuning Device / Professional Tune
 - A tuning device is not included because many customers already have devices purchased and installed in their car.
 - A tune is not included because each customer will install this kit with different parts, different boost control solenoids, different turbos, and with different engine internals. cp-e™ cannot predict all of these variables.
 - For the most reliable install and tune, we recommend customers contact cp-e™ Installs and cp-e™ Tuning for the best install and tune available.
 - A PROFESSIONAL DYNO TUNE is required for a safe, reliable install.
- ☐ Exhaust
 - An exhaust is not supplied, and not necessarily required.
 - For the best performance, cp-e™ recommends a 3.00" exhaust.
 - cp-e™ recommends the cp-e™ Austenite™ Catback Exhaust System for the Focus ST.
- ☐ Motor Mounts
 - Motor Mounts are not required, but are highly recommended.
 - For the best performance, cp-e™ recommends the cp-e™ xFlex™ Motor Mounts.

- Intake
 - *An intake is not supplied since customers have many different setups already.*
 - *A 3.00" intake is required. The silicone provided has been designed to match the stock location and fit a 3.00" tube.*
 - *Though it has been designed to fit any 3.00" intake, cp-e™ does not guarantee fitment with any competitor's intake.*
 - *For the easiest install, guaranteed fitment, and cleanest look, cp-e™ recommends the cp-e™ aIntake™ System for the Focus ST.*
- Coolant / Oil / Other Replacement Maintenance Items
 - *Customers use different types of oil, filters, etc. and cp-e™ cannot predict them all.*
 - *Customers may need a gallon of coolant during install.*
 - *cp-e™ recommends a fresh oil change before running on the new turbo install.*
 - *It is a good idea to replace studs, nuts, gaskets, etc. when doing the install to ensure the most reliable, leak-free setup. However, this is not required.*

