



CRP STAGE 3 41MM SUPER CORE SET F150 ECOBOOST 2.7L

INSTALLATION INSTRUCTIONS

2015-2017 F150 2.7L ECOBOOST	PART #3 527 315
2018-2020 F150 2.7L ECOBOOST	PART #3 527 318

MANUALS ALSO AVAILABLE ONLINE AT CRPENGINEERING.COM

PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION

THIS PRODUCT IS LEGAL IN CALIFORNIA FOR RACING VEHICLES ONLY, WHICH MAY NEVER BE USED UPON A HIGHWAY, UNLESS AN EO# IS LISTED.

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KIT CONTENTS

PERFORMANCE STAGE 3 SUPER CORE SET



Qty: 1 x 3527315A – DS Turbo (FORD # FL3Z-6K682-D)

Qty: 1 x 3527315B – PS Turbo (FORD # FL3Z-6K682-E)

HARDWARE

Not Included – Use Ford or equivalent standard install hardware and gaskets for a stock turbo installation

Note: If you believe you are missing any components shown above, please contact us at Contact@CRPEngineering.com

ESTIMATED INSTALL TIME

PROFESSIONAL INSTALLATION IS RECOMMENDED

The 2.7L EcoBoost Super Cores take approximately 6 hours to install with appropriate facilities.

OEM TURBOCHARGER REMOVAL

1. Pre-Installation

1. With the vehicle in Neutral, securely position it on a hoist for service.
2. Disconnect the battery negative cable.

2. Removal of Turbochargers

1. Remove both LS and RS turbochargers using the standard Ford Service procedures.

SUPERCORE INSTALL ON STOCK TURBINE HOUSINGS

3. SUPER CORE INSTALL INTO STOCK TURBINE HOUSINGS

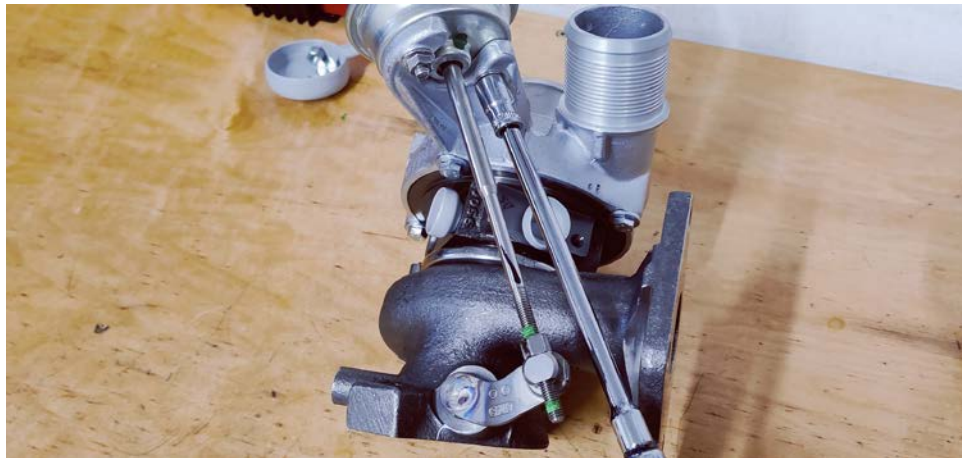
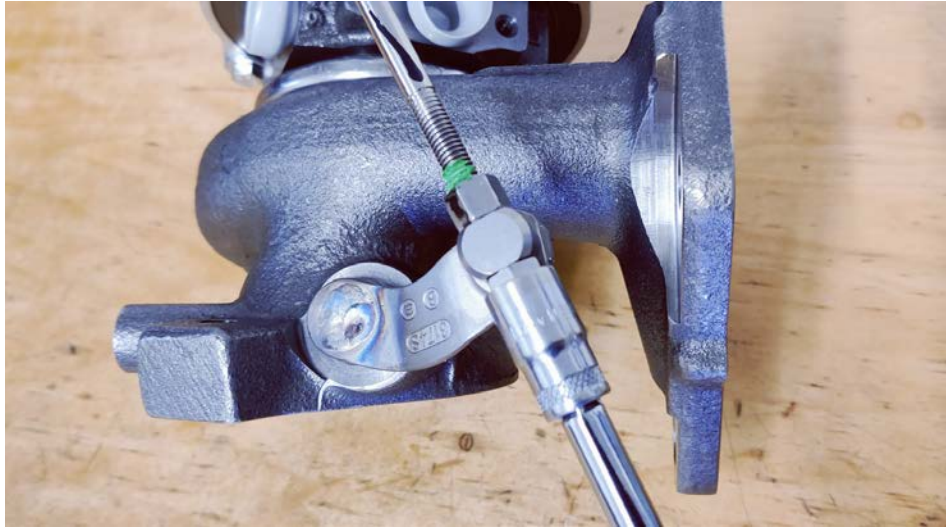
1. Place the turbochargers on a suitable work bench. For the entire installation always keep components from each side independent from the opposite side and do not mix them.



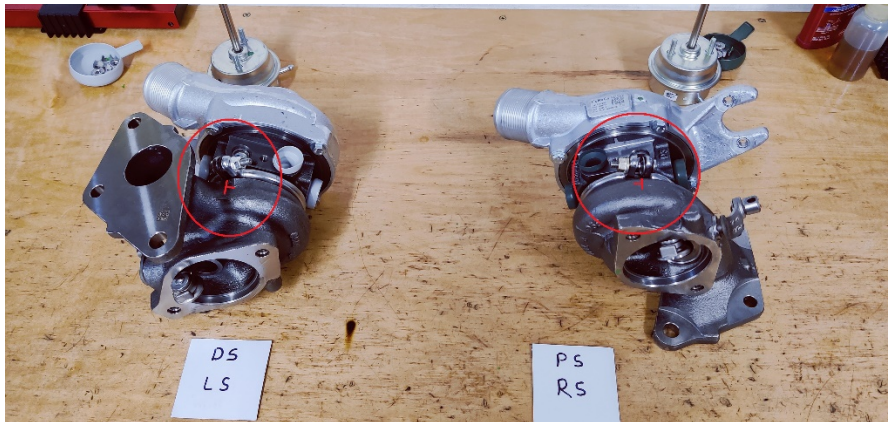
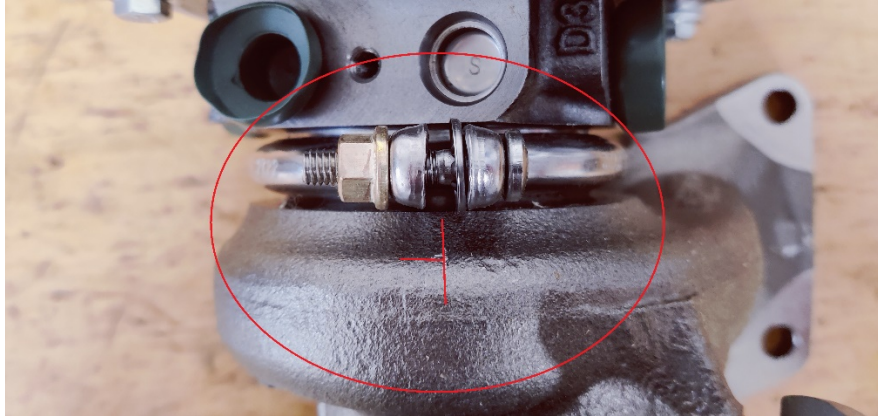
2. Remove the wastegate adjustment nuts lock clips.



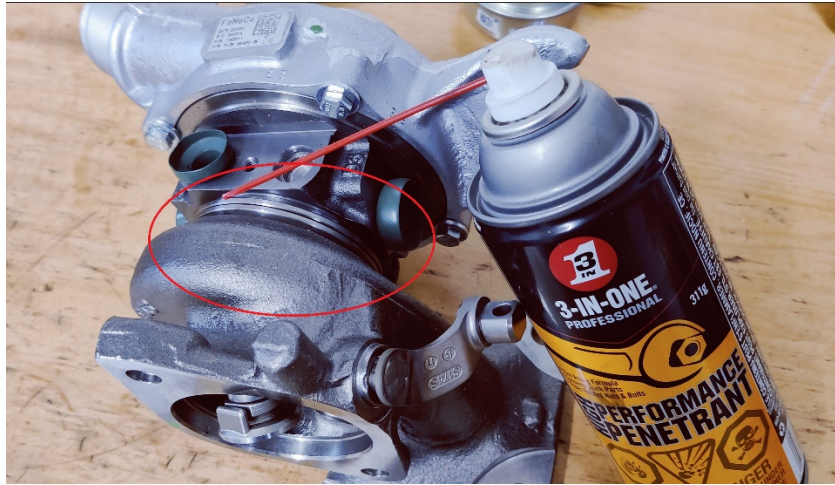
3. Remove the wastegate mounting nuts, and lower adjustment locknut and remove the wastegates from both sides. (Note LS & RS actuators are different do not mix banks)



4. Mark the V Band Clamp bolt positions on the turbine housings using an engraver or marker for alignment in reassembly.



5. Remove the V Band Clamps on each turbo and use a suitable penetrating oil if the housings are not free for ~15-30 Minutes.



6. Using a dead blow or rubber mallet remove the cartridges from the turbine housings. Tap evenly during removal on all sides. Heat may be needed on older units, if so, heat the turbine housing with a propane torch at low heat for 2-5 Min at the joint to aid in removal.



7. Once cartridges have been removed, clean the turbine housing interface with brake cleaner or suitable solvent until a clean metal surface is seen, if needed a minimal amount of sanding with a 200 or higher grit sand paper can be used.



8. The Super Cores can now be installed, NOTE the alignment pins and the correct housing for each side as follows. (Rear turbo has a tab with tapped hole on the turbine housing inlet flange)

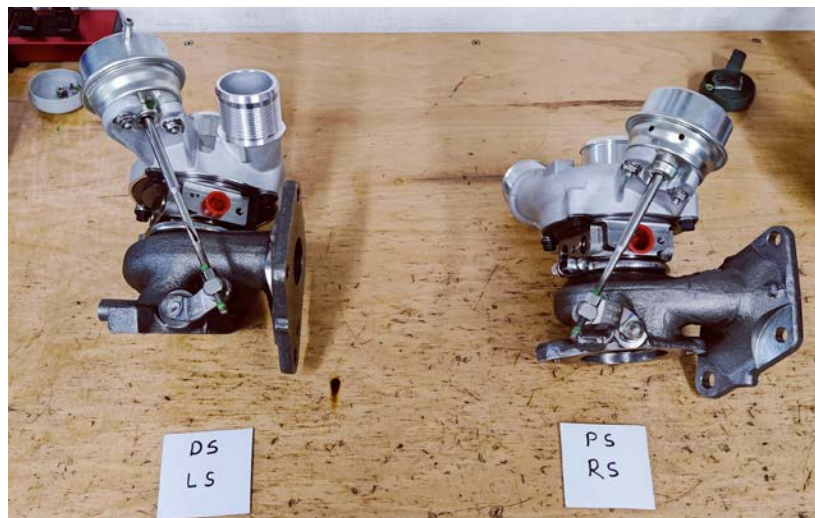
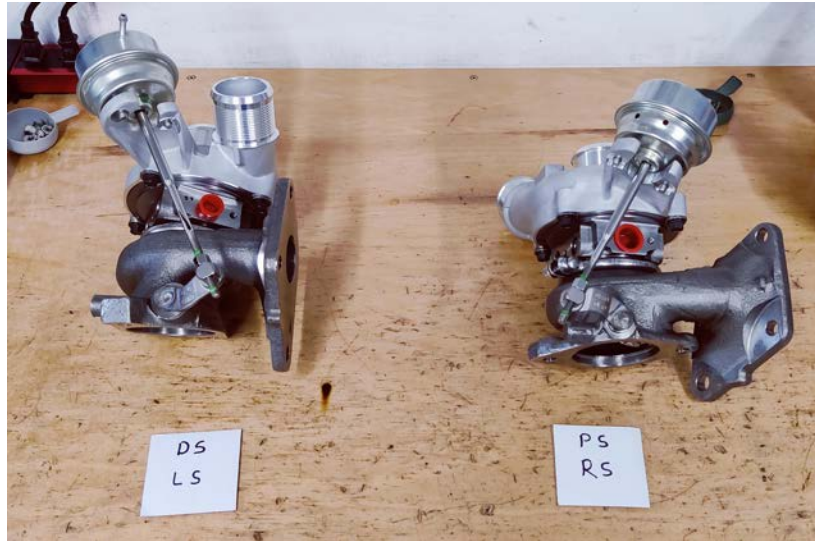


9. Install the V Band Clamps to the correct alignment marked earlier. Use blue Loctite and torque to 65 Inch-Lbs.



IMPORTANT NOTICE: Failure to seat the CHRA correctly and torque the V Band nuts to specification can cause damage or failure of the turbocharger, this type of damage is not covered by warranty.

10. Using 4x nuts removed earlier install the stock or aftermarket wastegates as shown using blue Loctite and torque to 85 Inch-Lbs



11. Set the wastegates to open at 9-9.5 Inches of Mercury (inHg) Vacuum applied to the actuator, this can be done with a quality hand vacuum pump and applying the 9 inHg. Hold the wastegate puck and lever shut. Then adjust the two adjustment locknuts by hand until the lever is locked in place at the correct 9 inHg. The wastegate puck should just start to free from the housing at this 9-9.5 inHg. Check by cycling from 15 inHg down to 0 slowly, motion of the lever should stop at 9-9.5 inHg.



12. The wastegate puck should just start to free from the housing at this 9-9.5 inHg. Check by cycling from 15 inHg down to 0 slowly, motion of the lever should stop at 9-9.5 inHg.



13. When wastegate adjustments are set correctly, torque the lower adjustment nut to 85 Inch-lbs use blue Loctite. Then install the locking circlips.



14. The super cores are now complete turbochargers and ready to install.



15. We recommend pre-oiling of the turbo inlets as shown before final installation, add a small amount of oil before oil line installation.



IMPORTANT NOTICE: Failure to seat the CHRA correctly and torque the V Band nuts to specification can cause damage or failure of the turbocharger, this type of damage is not covered by warranty.

IMPORTANT NOTICE: A Tune to support this product is needed, assure to work with your Tune supplier to provide adequate fuel flow to avoid lean conditions and or poor performance.

TURBOCHARGER INSTALLATION

4. Installation of Turbochargers

1. Install both LS and RS turbochargers using the standard Ford Service procedures.
2. reconnect the battery negative cable.
3. Road Test and recheck fluids.

WE RECOMMEND RE-TORQUE ALL ACCESSIBLE MAIN COMPONENTS AFTER ONE HEAT CYCLE

**THANK YOU AND PLEASE CONTACT US IF YOU HAVE ANY INSTALL QUESTIONS
SALES@CRPENGINEERING.COM**