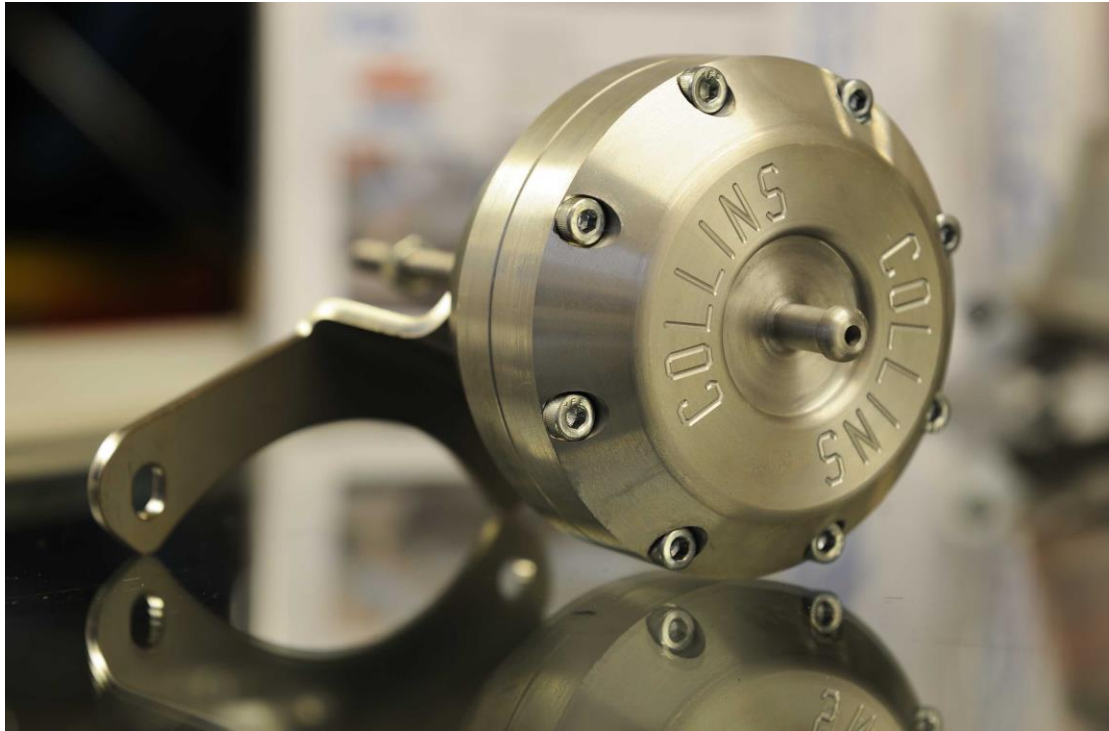


Installation Instructions

Collins Performance Actuator

2005-2011 Focus ST225 model



Installation suitable for expert DIY or professional technicians only

RECOMMENDED TOOLS

Trolley Jack & Axle Stands
10mm Socket & Ratchet
15mm Socket & Ratchet
7mm Socket, & Ratchet
18mm Socket, long extension & Ratchet
T27 Torx
10mm open ended spanner
Thread lock (Loctite)
Pressure regulator and airline
Pliers

REMOVAL

1. Place car on ramp or jack up car and support using axle stands
2. Remove the main engine under guard (7 x T27 torx)
3. Remove the turbo induction tube (2 x 10mm bolts) and cover/blank off rubber turbo feed hose



4. Remove the Windscreen wipers (2 x 15mm Nuts/washers)
5. Remove the upper windscreen scuttle plastic trim (6 x metal spring clips)

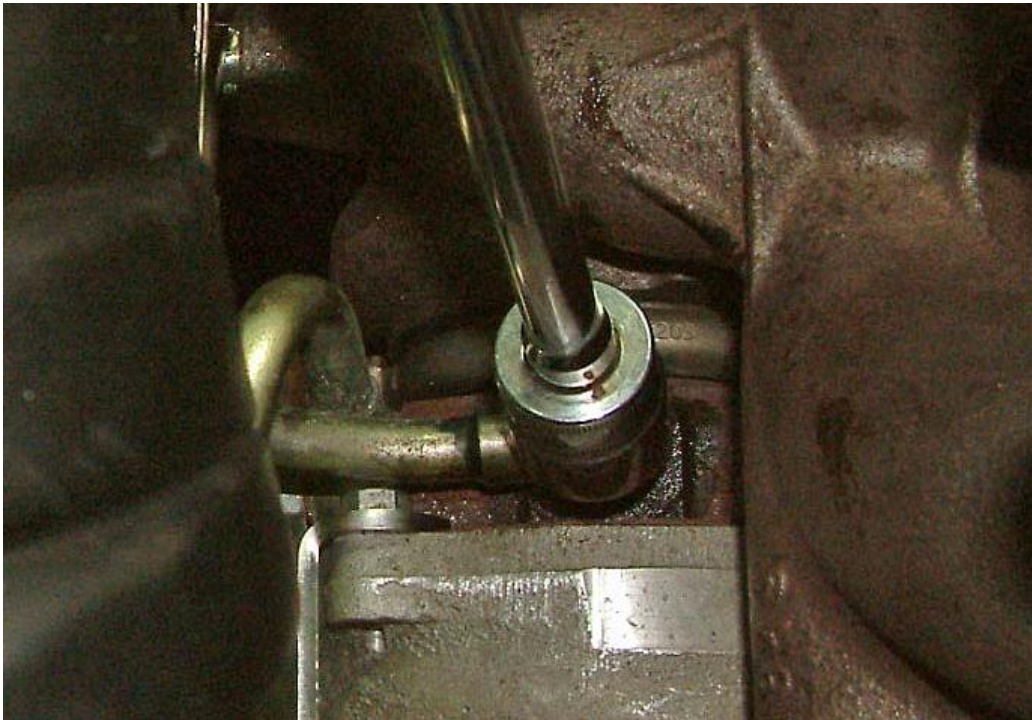


6. Remove lower windscreen scuttle plastic trim (2 x T27 torx)
7. Remove Turbo heat shield (3 x 10mm bolts)



8. Remove Turbo Oil Feed Banjo (18mm + 2 x copper washers)

CAUTION – please ensure no dirt or debris enters the turbo oil feed hole



9. Loosen the 10mm adjuster lock nut and undo the actuator rod using the knurled adjuster – remove the 10mm locking nut from rod

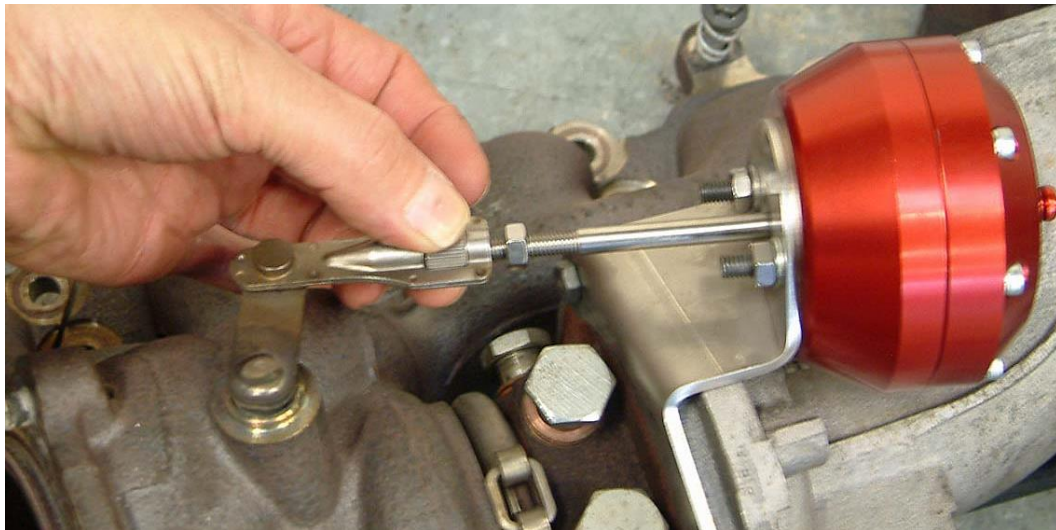


10. Remove the top 10mm actuator retaining bolt – note you will have to move the oil feed pipe to one side to allow this
11. Remove the lower 10mm actuator retaining bolt
12. Remove the actuator and disconnect pressure feed hose

INSTALLATION

1. Locate the new Collins actuator into position and locate using the original 2 x 10mm bolts
2. Install the original 10mm locking nut onto the actuator rod
3. Reassemble the actuator rod to the wastegate lever and adjuster
4. Adjust the knurled adjuster until the wastegate valve is fully closed and resistance is felt - then tighten adjuster a further 2 turns (approx 2mm)

CAUTION – over adjustment of the actuator can result in poor running, engine going into limp mode or damage to the engine.



5. Reinstall Turbo Oil Feed Banjo & copper washers(18mm + 2 x copper washers)
6. Reinstall Turbo heat shield (3 x 10mm bolts)
7. Reinstall lower windscreen scuttle plastic trim (2 x T27 torx)
8. Reinstall the upper windscreen scuttle plastic trim (6 x metal spring clips)
9. Reinstall the Windscreen wipers (2 x 15mm Nuts/washers)
10. Reinstall the turbo induction tube (2 x 10mm bolts)

SETUP

1. Connect an adjustable regulated pressure feed air to the actuator
2. Set the actuator for an **opening pressure off 4-5 psi** (fully open should be approx between 16-19psi)



3. Use the knurled adjuster to make any small changes.
CAUTION – over adjustment of the actuator can result in poor running, engine going into limp mode or damage to the engine.
4. Remove the setup equipment

5. Apply thread lock to threads and tighten the 10mm locking nut.



6. Connect the actuator pressure hose
7. Reinstall the main engine under guard (7 x T27 torx)

Initial Drive Procedure and Warnings:

Once completed be sure to closely monitor boost pressure when reaching the maximum boost target. If any inconsistencies or improper boost levels are reached, stop immediately and have a qualified technician inspect the vehicle for any of the following potential issues.

1. **Incorrect wastegate setting**
2. **Boost tubing leaks**
3. **Vacuum line leaks**
4. **Stored codes in the engine control module**
5. **Proper installation of the Actuator**

Correct any problems and/or diagnose any on board trouble codes before continuing.

If you experience any inconsistencies or improper boost levels, re-install the factory valve and call our customer service line at **01260 279604** for assistance.



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