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Installation Manual v1.2: ATS Ported Shroud Compressor Housing 1999½-2003 Ford 7.3L Powerstroke Diesel

The ATS PORTED SHROUD COMPRESSOR HOUSING is a direct bolt on replacement housing designed to eliminate the compressor surge that is present in all 1999 ½ through 2003 7.3L Ford Power Stroke Diesel.

REMOVAL

- 1. Loosen the (2) band clamps that attach the air intake hose located between the air box and the air cleaner duct and remove the hose.
- 2. Remove the plastic air duct cleaner that is located midway between the two sections of rubber intake hose by first loosening the band clamp. Next use a 8mm wrench or socket to remove the two bolts that attach the air duct cleaner to the bracket.
- 3. Remove the section of cold air intake hose that attaches to the compressor housing.
- **4.** Remove the v-band clamp that attaches the compressor housing to the intake manifold.
- 5. Remove the c-clip holding the actuator arm to the waste gate. Now disconnect the actuator arm from the wastegate.
- 6. Using a 10mm thin wall socket, remove the actuator assembly from the compressor housing by undoing the (2) recessed nuts.
- 7. Remove the (5) bolts that fasten the compressor housing to the turbo. (use a 5/16 or 8mm 12 point wrench and socket).
- **8.** Carefully remove the compressor housing so that you do not damage the fins on the wheel. Retain the (2) o-rings for installation of the new housing.

ASSEMBLY



NOTE! Before reinstalling the new housing, place both the new and old housing on a flat surface and check to see that the actuator mounting tab is the same height on both housings. On 1999 $\frac{1}{2}$ and most 2000 model trucks, you will need to shorten the waste gate actuator rod $\frac{1}{2}$ inch to compensate for the mounting height difference. To shorten the rod you will first need to make a reference mark indicating $\frac{1}{2}$ inch shorter than stock setting. Now place the male portion of the rod in a vise and unscrew the female portion from the rod. Now cut $\frac{1}{2}$ inch off of the threaded portion of the rod. In order to loosen the tight threads caused by the factory dimple, you will need to re-tap the female portion of the rod using a $\frac{1}{4}$ x 28 NF tap. Now thread the rod back together using your reference mark to obtain the right length.

- 1. Install the new compressor housing using the (5) stock bolts and the (2) stock o-rings. Use extreme caution not to bump or touch the fins of the turbo wheel. Tighten bolts in sequence as to not bind the housing against the fins.
- 2. Check the clearance by rotating the wheel by hand. (the fins should not touch at any point)
- 3. Reconnect the actuator assembly to the compressor housing. Now reconnect the actuator arm to the waste gate and secure with the c-clip.
- **4.** Reconnect the v-band clamp and tighten.



ASSEMBLY (cont.)

- **5.** Install the new compressor housing intake hose and clamp so the accordion side of the hose is attached to the new compressor intake and the hole in the new hose for the green vacuum line is toward the front of the vehicle.
- **6.** Attach the other end of the new intake hose to the plastic air duct cleaner, then using an 8mm wrench or socket, reattach the air duct cleaner to the bracket.
- 7. Reinstall the green vacuum line into the new section of intake hose and tighten both band clamps.
- 8. Reinstall the section of intake hose from the air duct cleaner to the air box and tighten both band clamps.

Have Any Questions?

Thank you for purchasing the ATS Diesel Performance Ported Shroud Compressor Housing for the 1999½-2003 Ford 6.7L Powerstroke. Please check our website at www.atsdiesel.com for technical support and other performance products such as our Aurora Turbo Systems turbocharger line, IntelliBoost Turbo Contol Module, DynoLAB Pro Custom Tuning, ATS Billet Transmissions, and Five-Star Torque Converters along with our full line of power enhancers. Please call or email our Technical Service Department, 8:00 am to 5:30 pm, MST, Monday through Friday.

Contact Information

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We strive to make our instructions as clear and complete as possible. To achieve this, our instructions are under constant revision. We encourage you to visit our website to ensure that you are using the most current manuals and diagrams, as well as other information. We welcome all suggestions to improve this installation manual. Suggestions can be emailed to support@atsdiesel.com.