

*Installation manual for
Lotus Elise S3 2ZR performance
pulley*



Our pulleys are designed for use with the Lotus Elise S3 2ZR engine.

By spinning the supercharger faster, we are increasing boost pressure and thus the power output of the engine.

Pulley has to be used ONLY with remapped stock ECU or properly calibrated standalone ECU.

Bigger injectors are also a necessity.

RRR Engineering do not take any responsibility for engine damage as result using our pulley without re-calibrated ECU. Please ensure there is no lean conditions on high loads.

Our solution although requires the removal of the supercharger (only to remove the OEM pulley later pulleys can be changed without the need to remove the supercharger) it is far better than increasing the diameter of the crank pulley as the alternator and water pump are still spinning the same speed as the Lotus factory specified.

What is in the kit:

1. Pulley
2. Clamping hub
3. Shorter high-performance serpentine belt. (optional)

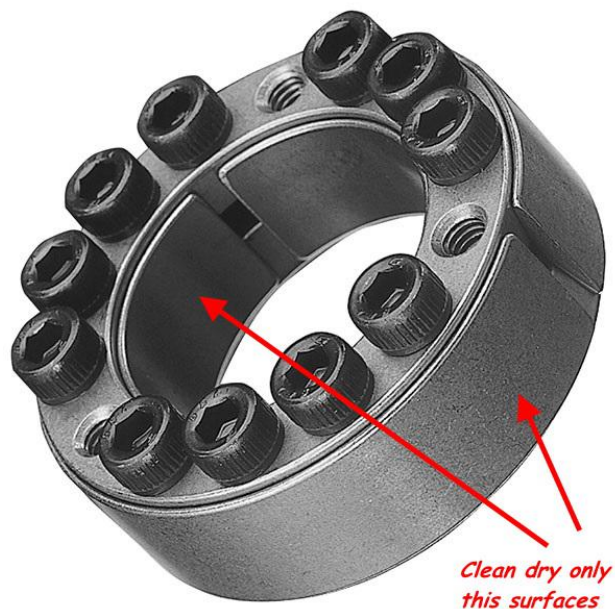
Tools Required

1. Set of sockets and spanners
2. Torque wrench (14Nm must be in range)
3. 5mm hex Allen socket suitable for torque wrench
4. Supercharger pulley removal tool
5. Consumables

1. Disconnect the car battery
2. Remove the serpentine belt
3. Disconnect and remove the alternator
4. Remove the plain belt idler pulley
5. Remove the nut from bottom support of the supercharger
6. Remove the bolt supporting the supercharger
7. Remove the fuel rail and injectors - take extra care for possible fuel spillage
8. Disconnect the charge cooler hoses
9. Remove the intake hose and throttle body
10. Remove the screw from bottom support of the supercharger
11. Disconnect all hoses and electrical connectors.
12. Lift the supercharger out
13. Place it on a bench and use puller to remove OEM pulley – DO NOT attempt to do it without a puller you can damage the supercharger
14. Once removed clean the shaft of the supercharger



15. Clean the clamping hub - only surfaces in the picture below. Use paper or rag soaked with brake cleaner or other degreaser, **DO NOT SPRAY ALL HUB AS THERE IS NEEDED INTERNAL LUBRICATION DURING INSTALLATION USE RAG OR PAPER FOR CLEANING.**



16. Slide the hub on the supercharger shaft and pulley

17. Start slowly tightening the M6 bolts. Is important to do it that in order like the picture.



18. Slowly keep tightening clamp bolts - hub will clamp firstly in the pulley but still allow movement on the shaft

19. Make sure the face of hub is about 1 mm below face of pulley

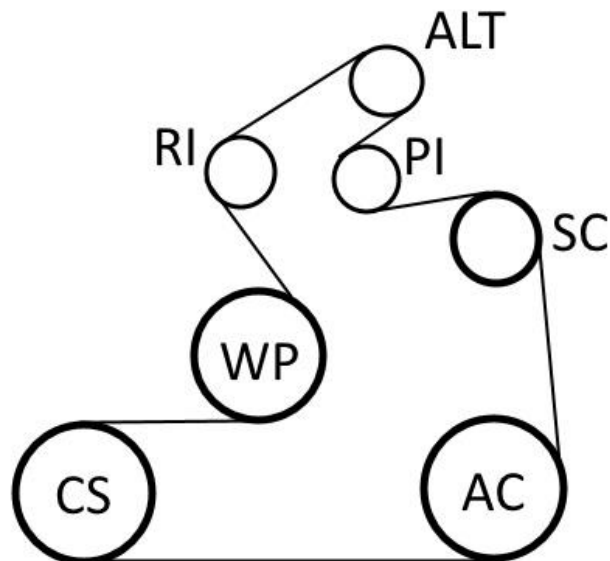


19. Keep tightening the clamp and as soon as they become slightly tight to move on the shaft use a metal ruler or other straight piece of steel and make sure face of pulley is aligned with the face of the supercharger shaft.





20. Keep tightening bolts and use a torque wrench for final step, set for 14Nm and once done double check them again make sure all are properly tight.
21. Install supercharger in reverse order to removal
22. With our stage 2 pulley shorter belt have to be used with stage 1 is optional but advisable.
23. Make sure belt routing is as below.



- CS- crankshaft pulley
- WP- water pump
- RI- ribbed idler
- ALT- alternator
- PI-plain idler
- SC-supercharger
- AC- air condition compressor

24. Start engine and check if belt is properly aligned and doesn't slip (squealing noise)

25. Recheck belt tension after drive as new belt may stretch slightly



26.