

FRS BRZ Carbon Fiber Driveshaft

Installation Manual



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Document Revisions

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01	08/13/2016	E. Hazen	Issued for Release
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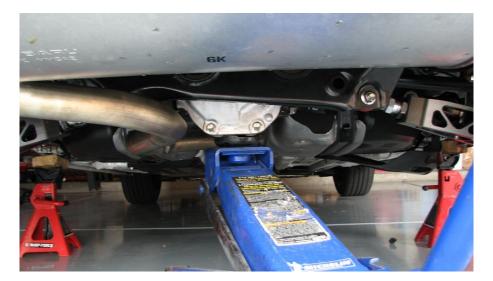
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- 1. Introduction
 - 1.1. **Overview:** Detailed instructions on installing the Carbon fiber Driveshaft Install
 - 1.2. Difficulty: Beginner
 - 1.3. Time Required: 1.5-2.5 hours

1.4. Tools Needed:

- Jack
- Jack stands
- 14mm wrench
- 14mm sockets
- Ratchet
- Small crowbar
- 1.5. Assembly Components:
 - Driveshaft
- 2. Install
 - 2.1. We are not responsible for damage to you, your vehicle, or others by following this manual and/or installing Verus Engineering products.
 - 2.2. We begin by jacking up the rear of the car. It is wise to use chocks on the front wheels to ensure the vehicle doesn't roll away and to do this on a flat surface. We typically use the rear differential to jack up the rear and then place jack stands on either side of the car.



2.3. Remove the exhaust from the front pipe backward. Depending on your exhaust, this will be 12mm or 14mm bolts on the front and whatever is on the rear.





2.4. With the exhaust removed, we start with removing the center part of the driveshaft by removing the two 14mm bolts circled in yellow below. This will cause the driveshaft to droop in the middle.



2.5. We now need to remove the 14mm that connect the driveshaft to the rear differential. There are (4) of these, you will want to use a wrench on each side to remove these. You will likely have to use the e-brake to stop the driveshaft from spinning and do this twice to reach all (4) bolts/nuts. Place these bolts/nuts to the side as we will need to reuse them!





2.6. Using the small pry bay, pry the driveshaft off the rear differential. When this happens, the yoke will want to slide out of the transmission so be careful.



- 2.7. Carefully remove the front of the shaft from the rear of the transmission. A bit of transmission fluid may come out but it should not be a lot.
- 2.8. You'll want to use some gear oil on the slip yoke of the new driveshaft to ensure the seal doesn't run dry initially and break. Ensure the seal has a decent bit of gear oil on it as well before sliding the new carbon driveshaft into the rear of the transmission.





2.9. Bolt the (4) bolts and nuts on the rear differential. Do not use lubricant on the rear of the driveshaft. Install torque is 55 ft-lbs for all four of these bolts/nut combos.



- 2.10. Reinstall the exhaust and drop the car on the ground.
- 2.11. Congratulations on installing the carbon fiber driveshaft. Enjoy the extreme reduction in rotational drivetrain weight. Please contact Verus Engineering with any questions or comments via e-mail, <u>sales@verus-engineering.com</u>.