



INSTALLATION INSTRUCTIONS

QA1 REV™ Series Carbon Fiber Driveshafts for 2005-2019 Mustang GT, 2015-2018 GT350,
2015-2017 Mustang EcoBoost
QA1 P/N JJ-21206 through JJ-21220

This product has been designed, manufactured and balanced to the highest standards and is intended for use in maximum performance applications where increased safety and vehicle performance are primary considerations. As a result of converting from an isolated two-piece driveshaft design, it may be possible for an increase in NVH (noise, vibration, and harshness) to occur in certain operating conditions.

To minimize this possibility, ensure that all mounting surfaces are completely clean and free of any burrs during installation. To minimize NVH, you may try rotating the installed position of the driveshaft relative to the transmission flange 180 degrees. Given that the driveshaft is part of the engine-transmission-rear axle system, minimizing NVH is an install and evaluate process.

WARNING: Be sure to inspect all components regularly, especially following an accident. Do not use any components which may have been damaged.

WARNING: Composite driveshafts are fragile and if dropped or damaged will be considered scrap and should be replaced.

TOOLS AND SUPPLIES REQUIRED

- | | | | |
|---------------|---------------------------|----------------------------|------------------------------|
| • Floor Jack | • Blue Loctite 242 | • Metric Wrench Set | • 12 mm 12 point socket |
| • Jack Stands | • Torque Wrench (lb. ft.) | • Ratchet & Metric Sockets | • 8 mm & 10 mm Allen sockets |

Removal of Factory Driveshaft

1. Raise the vehicle and support with jack stands on a stable surface. See the vehicle owner's manual for jacking locations.
2. Disconnect and remove the exhaust system between the catalytic converters and mufflers.
3. Make alignment marks on the factory driveshaft at both the front and rear yokes. This will ensure the balance should the OE driveshaft ever be reinstalled in the car.
4. Remove the three (3) or four (4) bolts from the transmission output shaft.
5. Remove the six (6) bolts from the pinion yoke.



6. Support the driveshaft and remove the two (2) hanger bearing bolts. **Caution: The OE driveshaft assembly is heavy and can cause injury if not properly supported during removal.**
7. Remove the driveshaft from the vehicle.

Installation of QA1 Carbon Fiber Driveshaft

Note: The CV joint, CV adaptor and balance weights are color coded for driveshaft balance. The orientation of these components is critical for proper balance. See **Figure 2 & 3** below.



Figure 2

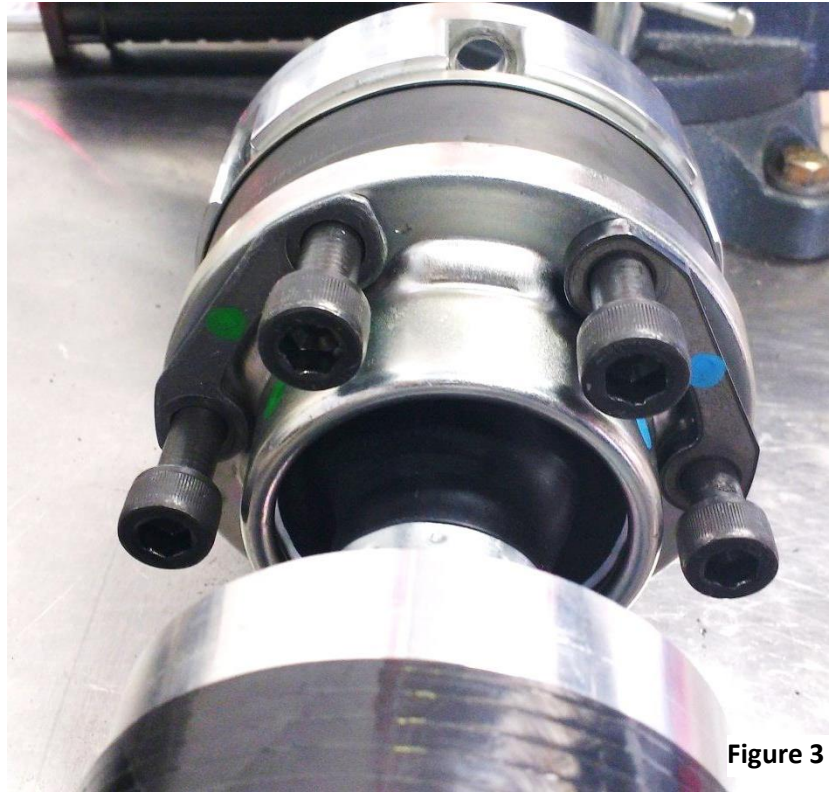


Figure 3

1. Thoroughly clean the mating surfaces on the pinion yoke and transmission output shaft of dirt, grease and corrosion. **Figure 4**
2. Remove the aluminum CV joint adapter from the driveshaft and install it on the vehicle's pinion flange using thread locker and the M10 x 35mm bolts supplied in the package. Ensure the adapter is fully seated in the pinion flange as the bolts are tightened. **Torque these bolts to 47 lb. ft.** Applying the parking brake will help prevent the pinion from rotating.
3. Attach the front of the driveshaft to the transmission using thread locker and the M12 bolts supplied in the package. Ensure the driveshaft flange yoke is properly seated against the transmission output as the bolts are tightened. **Torque these bolts to 85 lb. ft.**

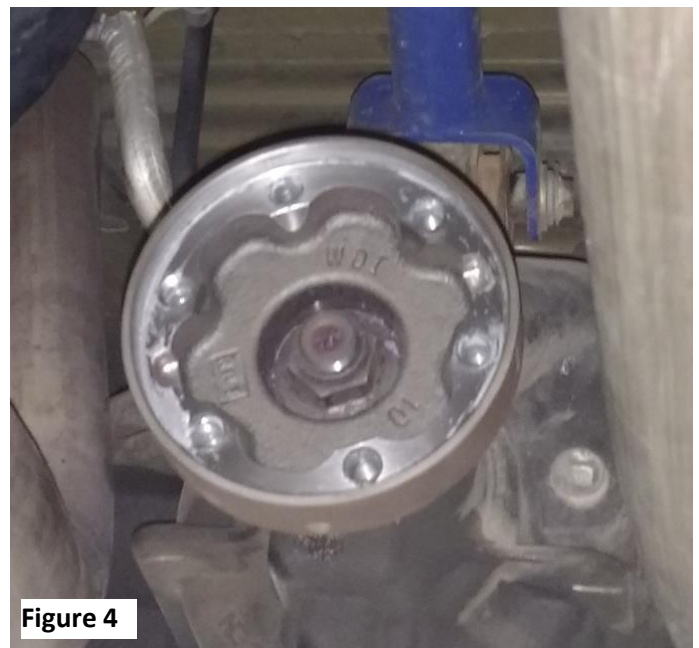
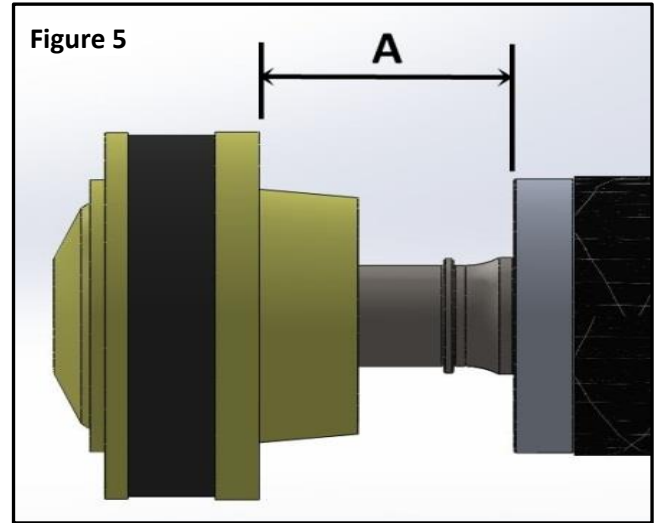


Figure 4

4. Apply thread locker to the remaining six (6) 10 mm bolts and bolt the CV joint to the adaptor on the pinion flange. Ensure the colored marks on the adapter and the CV joint are lined up. **See Figure 2. Torque the bolts to 47 lb. ft.**
5. With the rear suspension at ride height (or unloaded for '15-'18 car with IRS), check the distance from the tube end to the CV joint as shown in **Figure 5**. This should be measured at either side of the shaft rather than the bottom due to driveline angles affecting the measurement. Ensure the measurement is in the range listed below. See the **Table 1** for the specification according to the model year.
6. Rotate the driveshaft and check for clearance around the driveshaft.
7. Reinstall the exhaust system and verify there is clearance between the driveshaft and exhaust.

Table 1

Year	Dimension 'A' Range
2005 to 2010	2 ²⁵ / ₃₂ " to 2 ²⁹ / ₃₂ "
2011 to 2014	2 ²⁷ / ₃₂ " to 2 ³¹ / ₃₂ "
2015 to 2018	2 ¹ / ₂ " to 3"



Washing Recommendations

It is recommended to wash the composite driveshaft with soap and water only. Avoid contact with chemicals.

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