

## 8300 North Austin Avenue · Morton Grove IL 60053 · 847-663-1701 · Fax 847-663-1702 · www.strangeengineering.net

Instructions for Strange axles, bearings, and stud kits. Strange C-clip axles, C-clip eliminator kits, and brakes have separate instructions.

**Before you begin installation:** Read these instructions thoroughly and save for future reference. Installation should be performed by a professional & qualified mechanic. If after reading these instructions, you have any questions or comments, please do not hesitate to call us.

Note: 40 s pline axle shown with A1019 bearing



- 1.) Inspect the housing for straightness. If the housing has been narrowed, inspect the housing ends for squareness.
- 2.) Clean bolts or studs and install into axle flange (head type bolts must use included washers underneath head of bolt) until only 0.250" of threads remain. Apply red Loctite® to the remaining 0.250" of studs and torque to specification.
  - a.) A 1025 & A 1026 (Bolts) 1/2" bolts should be torqued to 85 ft-lbs.
  - b.) A1027 (Bolts) 5/8" bolts should be torqued to 95 ft-lbs.
- c.) A1036, A1037, A1037MD, A1038, A1039, & A1041 (Studs) These 5/8" stud kits have the shoulder machined onto the stud & have a jam nut instead of a bolt head. This type of 5/8" stud should be torqued to 95 ft-lbs from the wheel side of the axle. After the studs are properly torqued, torque the jam nut (inside of the axle flange) to 70 ft-lbs.
- 3.) With 40 spline axle applications, install the radius ring by hand with the large 0.165" radius facing the axle flange.
- 4.) Slip the bearing retainer plate over the axle. This plate is replaced by the caliper mounting bracket if you are using a Strange brake kit (The exception being the B1704WC Mopar kit which uses both the retaining plate and caliper mounting bracket, but not the fiber gasket).
- a.) Strange A1022OB (old style Mopar bearing) should be installed with bearing retaining plate towards the axle flange. (NOTE: this bearing has the retaining plate attached to the bearing; the A1022 (new style Mopar bearing) has a spirolox & the retaining plate is not attached to the bearing).
- b.) Strange A1013 tapered bearing is designed for the seal to be on the outside of bearing (i.e. between the axle retaining plate & bearing). The retaining plate will push the seal in once you tighten the nuts on the housing end studs.
- 5.) Pressing only on the inner race, use a hydraulic press to install the new bearing on the axle. Apply a slight coating of oil to the axle shaft bearing surface to aid in bearing installation. (NOTE: make sure the bearing is pressed on evenly and check to ensure the bearing is resting squarly on the axle's bearing shoulder there should not be any gap between inner bearing race and axle shoulder). When installing Strange A1019, A1020, or A 1021 the O-ring side of the bearing goes towards the axle flange. When installing Strange A1023 (Mustang) or A1022 (Mopar) the O-ring goes towards the axle's splines. If you are unsure of which bearing you have, one side of the inner race will have a much larger radius which should be pressed on so it mates with the axle's bearing shoulder.
- 6.) Use a hydraulic press to install the wedding ring. Press evenly and check that the wedding ring seats on the axle bearing. The wedding ring is a press fit and should seat firmly against the bearing there should not be any gap between the bearing and the wedding ring. (Do NOT weld the wedding rings to the axle axle failure may occur).
- 7.) Check the engagement of the axle splines. Coat the axle splines with grease and install the axles into the axle housing and carrier. Remove the axles and measure the amount of spline engagement. Minimum spline engagement is one inch. (NOTE: Some brands of posiunits will only allow 7/8" engagement; which is acceptable for posiunit applications.
- 8.) Lug nuts should be torqued after every round. Clean and lightly lubricate threads. Torque 1/2" and 5/8" lug nuts to 80 ft-lbs. (NOTE: 5/8" lug nuts should be torqued to 90 ft-lbs, however, some a luminum wheels will begin to crush consult with your wheel manufacture to see if you can torque the 5/8" lug nuts to the optimal 90 ft-lbs).
- S/T Series 35 spline axles are warranted against breakage to the original buyer for a period of three years. Strange Pro Race 33, 35, & 40 spline axles are warranted against spline breakage to the original buyer for a period of five years. This warranty shall not apply to any product which has been repaired or altered in anyway so as in our judgement affects its performance; nor which has been subject to misuse, abuse, negligence or any other occurrence beyond the control of Strange Engineering. Strange axles are designed for competition purposes. Accordingly, use of said product, or modification to or construction of a vehicle for those purposes may create dangerous conditions which could cause bodily injury, and the buyer hereby assumes all risks associated with any such modifications.