

RUBICON MANUFACTURING INC. 3290 MONIER CIR., RANCHO CORDOVA, CA. 95742 916-473-4600

# **INSTALLATION INSTRUCTIONS FOR:**

RE1801 Slip Yoke Eliminator Kit for YJ NP231 and PRE '96 XJ NP231, NP242 or NP207\* Transfer Cases (\* This kit will only work on an NP207 with the addition of an RE1802 bearing spacer)

Safety Warning:

Suspension systems or components that enhance the off-road performance of your vehicle may cause it to handle differently, on and off-road, than it did from the factory. Care must be taken to prevent loss of control or vehicle rollover during sudden maneuvers. Failure to drive the vehicle safely may result in serious injury or death to driver and passengers. We recommend you always wear your seatbelt, drive safely and avoid quick turns and other sudden maneuvers. Constant maintenance is required to keep your vehicle safe. Thoroughly inspect your vehicle before and after every off-road use.

#### **Installation Warning:**

We recommend that certified technicians perform the installations of our products. Attempts to install these products without knowledge or experience may jeopardize the safety of the vehicle. These instructions only cover the installation of our products and may not include factory procedures for disassembly and reassembly of factory components. Read instructions from start to finish and be sure all parts are present before disassembling the vehicle. Included instructions are guidelines only for recommended procedures and in no way are meant to be definitive. Installer is responsible to insure a safe and controllable vehicle after performing modifications. Do not perform test drives on public roads with partially completed installations. Always double and triple check your work before use.

### **KIT CONTENTS:**

- 1 DS 2-70-18X u-joint strap kit
- FED #473317 seal 1
- RM11500 SYE bearing/seal flange 1
- RM11510 4-bolt SYE CV output flange 1
- 3 M10-1.5 x 20 Allen bolts 1

1

1

1

1

- HWC10040 Bag kit #14 including;
  - 21/64 Drill bit
    - 3/8-24 Tap
  - 3/8-24 X 1 HSC Bolt
  - 3/8 Lock washer
  - 1 5/16 Flat washer through hard
  - 4 7/16-14 X 1-1/2 HSC Bolt 4
  - 7/16-14 Nylock nut
- 1 Optional RE1802 NP207 bearing spacer (sold separately)

# **REQUIRED TOOLS:**

Basic mechanics wrenches Circular saw & metal cutting blade Hammer and center punch Drill motor and high quality 3/16" drill bit Hand tap handle Cutting oil Silicone sealer and thread lock

# **INSTALLATION:**

Prior to installation please read both installation options and decide which option is right for you. The output flange in this kit is designed for use with an RE1898 type CV driveshaft.

INSTALLATION OPTION 1 - Installation on vehicle w/o splitting transfer case.

- 1 Remove drive shaft.
- 2 Remove tailcone section of transfer case.
- 3 Use duct tape or equivalent to seal bearing surface from contact with debris.
- 4 Measure and mark shaft so that 1-1/4" of splined shaft will remain for NP231's and NP242's, and 1-1/2" for NP207's.
- 5 Cut output shaft with abrasive cutting wheel.
- Grind end of shaft square, and chamfer and de-burr the splines. 6
- 7 Center punch shaft to ensure drill starts in center of shaft.
- Using drill and 3/16" drill bit, start pilot hole in end of shaft. 8
- 9 It may be helpful to remove the stock slip yoke from the driveshaft and use it as a guide. To do this, first drill a 3 /16" pilot hole centered at the dimple in the end cap of the slip yoke. Install slip voke onto shaft and drill a 3/16" hole, 1-1/4" deep into the shaft.
- 10 Next, bore out 3/16" hole with supplied 21/64" size drill bit. Remove stock slip voke if used as a guide.
- Use supplied tap to cut threads in output shaft. Use cutting oil while 11 cutting threads and keep tap clean by backing it out often. Use caution to not force the tap.
- Install oil seal in the bearing/seal flange. Use care not to damage 12 seal.
- Apply thin bead of RTV silicone to bearing side of flange. 13
- 14 Remove tape from transfer case and clean surface. If installing kit on an NP207, install RE1802 bearing spacer before seal flange. Push into housing against bearing with small step pointing outward.
- 15 Install bearing/seal flange with supplied M10x20 Allen bolts.
- Apply silicone sealer to splines of new output flange. Be sure 16 enough sealer is applied to get back into the inside corner where the splines meet the end washer.
- 17 Install output flange using supplied 3/8"-24 bolt and lock washer. Be sure to use thread lock.
- Install RE1898 type flanged CV driveshaft using supplied 7/16" 18 nuts and bolts at flange, and supplied u-joint strap kit at pinion voke.
- 19 Grease u-joints and slip splines in driveshaft.
- 20 Check transfer case fluid level.
- 21 Test drive and inspect for leaks.
- 22 Re-tighten bolts and re-grease driveshaft after first 100 miles.

INSTALLATION OPTION 2 - Modifying shaft outside of transfer case.

- 1 Refer to factory manual for instructions on removing shaft from transfer case.
- 2 Cut shaft so that 1-1/4" of splined shaft will remain for NP231's and NP242's, and 1-1/2" for NP207's (use steps 5-6 of Option 1 for reference).
- 3 Drill and tap the shaft to accept supplied 3/8"-24 bolt (use steps 7-11 of Option 1 for reference).
- 4 Reinstall shaft in transfer case.
- 5 Follow instructions in option 1 starting with #12.