

# RUBICON EXPRESS

3315 MONIER CIRCLE, RANCHO CORDOVA, CA. 95742 (916) 858-8575 Fax (916) 858-8575

## INSTALLATION INSTRUCTIONS FOR TJ ('97+ WRANGLER) SUSPENSION LIFT.

### KIT CONTENTS:

RE3700 LOWER FRONT CONTROL ARMS  
RE3780\* UPPER FRONT CONTROL ARMS  
RE1355 FRONT COIL SPRINGS PAIR  
RE1553 FRONT BRAKE LINE SET  
RE1165 SWAY BAR DISCONNECTS  
RE1170\* SWAY BAR DISCONNECTS  
RE1172 DISCONNECT ADAPTERS  
RE1600\* ADJUSTABLE TRACK BAR  
RE1380 FRONT BUMPSTOP EXTENSIONS

RE3700 LOWER REAR CONTROL ARMS  
RE3783\* UPPER REAR CONTROL ARMS  
RE1360 REAR COIL SPRINGS PAIR  
RE1155 SWAY BAR END LINKS  
RE1603 REAR TRACK BAR BRACKET  
RE1385 REAR BUMPSTOP EXTENSIONS

RE1363 3" FRONT COIL SPRINGS  
RE1360 3" REAR COIL SPRINGS

\*parts not included in 3" kit

### REQUIRED TOOLS:

BASIC MECHANICS HAND TOOLS  
JACK STANDS AND FLOOR JACK  
SPRING COMPRESSORS  
9/16" DRILL BIT

### INSTALLATION:

1. RAISE VEHICLE AND SUPPORT WITH STANDS.
2. REMOVE WHEELS.
3. REMOVE FRONT SHOCKS.
4. REMOVE FRONT SWAY BAR END LINKS.
5. REMOVE FRONT TRACK BAR. IT MAY BE HELPFUL TO DISCONNECT STEERING AT PITMAN ARM.
6. REMOVE FRONT SPRINGS. SPRING COMPRESSORS MAY BE HELPFUL.
7. SUPPORT THE FRONT AXLE WITH JACK STANDS.
8. REMOVE FRONT UPPER AND LOWER CONTROL ARMS. (3" SEE ADDENDUM)

9. REMOVE FACTORY BRAKE LINES AND REPLACE WITH SUPPLIED LINES.
10. DRILL 5/16" HOLE IN CENTER OF LOWER SPRING PADS.
11. USE SELF-TAPPING BOLT THROUGH SPACER TO CUT THREADS IN LOWER SPRING PAD. REMOVE BOLT AND SPACER, IT WILL BE INSTALLED WITH THE SPRING
12. INSTALL THE LOWER CONTROL ARMS WITH THE RUBBER BUSHING AT THE FRAME. RE-USE THE FACTORY HARDWARE. OFFSET TUBE ON CONTROL ARM WILL MOUNTED AS LOW AS POSSIBLE.
13. INSTALL THE UPPER CONTROL ARMS. RE-USE THE FACTORY HARDWARE. ADJUST UPPER ARMS TO 1/4"-3/8" LONGER THAN STOCK. TIGHTEN JAM NUT.
14. INSTALL THE FRONT SPRINGS WITH THE 2" BUMP STOP EXTENSION INSIDE OF THE COIL. COIL SPRING COMPRESSORS MAY BE USEFUL. ONCE THE SPRING IS IN PLACE, THREAD THE BOLT INTO THE LOWER SPRING PAD. (SEE #11) ROTATE THE COIL TO INDEX THE PIGTAIL END OF THE SPRING WITH THE INDENT IN THE LOWER SPRING PAD.
15. INSTALL THE SPRING CLAMP REMOVED IN #5.
16. INSTALL THE SUPPLIED 2.5" BAR PINS THROUGH THE BOTTOM SHOCK EYES AND INSTALL SHOCKS.
17. INSTALL ADJUSTABLE FRONT TRACKBAR PER INSTRUCTIONS SUPPLIED WITH TRACKBAR. DO NOT ATTEMPT TO ADJUST BAR UNTIL LIFT IS INSTALLED AND WEIGHT IS ON VEHICLE.
18. INSTALL SWAY BAR QUICK DISCONNECTS PER INSTRUCTIONS SUPPLIED WITH DISCONNECTS.

#### REAR AXLE:

19. REMOVE THE REAR SHOCKS.
20. REMOVE THE REAR SWAY BAR END LINKS.
21. SUPPORT THE REAR AXLE.
22. REMOVE THE PLASTIC DUST SHIELD THAT COVERS THE BOLT SECURING THE REAR TRACK BAR TO THE MOUNT ON THE AXLE HOUSING AND DISCARD.
23. REMOVE THE TORX HEAD BOLT (T55) AND DISCONNECT AXLE END OF TRACK BAR.
24. REMOVE THE REAR SPRINGS
25. REMOVE THE LOWER AND UPPER REAR CONTROL ARMS AND SUPPORT THE REAR AXLE.

26. INSTALL TRACK BAR BRACKET USING THE SUPPLIED 1 1/2" BOLT. (THE BOLT GOES THROUGH THE ORIGINAL TRACK BAR BOLT HOLE.)
27. WITH THE TRACK BAR BRACKET IN PLACE, DRILL 5/16" HOLES IN THE AXLE MOUNT WHERE THE PLASTIC DUST SHIELD WAS PREVIOUSLY LOCATED. SOME MODELS MAY NOT REQUIRE DRILLING.
28. INSTALL THE 5/16" HARDWARE IN THE HOLES DRILLED IN #28.
29. INSTALL THE LOWER CONTROL ARMS WITH THE RUBBER BUSHING AT THE FRAME. RE-USE THE FACTORY HARDWARE.
30. INSTALL THE UPPER CONTROL ARMS RE-USING THE FACTORY SUPPLIED HARDWARE. ADJUST CONTROL ARMS 1/4" LONGER THAN STOCK FOR STD. DRIVELINE AND 3/4" LONGER THAN STOCK FOR C.V. JOINT DRIVELINES. TIGHTEN JAM NUT.
31. REMOVE THE RUBBER INSERT FROM THE REAR BUMP STOP. REMOVE THE BUMP STOP CUP. PLACE THE 1 3/4" SPACER BETWEEN THE BUMP STOP CUP AND THE FRAME USING THE SUPPLIED LONGER METRIC HARDWARE.
32. INSTALL SPRINGS. SPRING COMPRESSORS MAY BE HELPFUL.
33. INSTALL REPLACEMENT SWAY BAR END LINKS.
34. INSTALL REAR SHOCKS WITH SUPPLIED 3" BAR PIN.
35. INSTALL TIRES.
36. LOWER VEHICLE TO GROUND AND ADJUST FRONT TRACK BAR TO CENTER FRONT AXLE PER INSTRUCTIONS SUPPLIED WITH TRACK BAR.
37. THOROUGHLY BLEED BRAKE LINES AND CHECK FOR LEAKS.
38. DOUBLE-CHECK ALL NUTS AND BOLTS.
39. TEST DRIVE AND NOTE LOCATION OF STEERING WHEEL.
40. ADJUST DRAG LINK TO CENTER STEERING WHEEL. LENGTHEN TIE ROD TO SET TOE.
41. ALIGN VEHICLE AS SOON AS PRACTICABLE. SET CASTOR TO FACTORY MINIMUM AND MODERATE TOE IN.

### TROUBLE SHOOTING

#### **DRIVELINE VIBRATION:**

ACCELERATION VIBRATION: CAUSED BY THE PINION BEING TOO HIGH IN RELATION TO THE TRANSFER CASE OUTPUT SHAFT. TO CORRECT, SHORTEN THE UPPER ARM TO LOWER THE PINION.

DECELLERATION VIBRATION: CAUSED BY THE PINION BEING TOO LOW IN RELATION TO THE TRANSFER CASE OUTPUT SHAFT. TO CORRECT, LENGTHEN THE UPPER ARMS TO RAISE THE PINION.

SLIP YOKE VIBRATION: CAUSED BY EXCESSIVE WEAR ON THE TRANSFER CASE SLIP YOKE. COMMONLY OCCURS ON LIFTED VEHICLES WITH

MORE THAN 30,000 MILES. TO CORRECT, INSTALL A SLIP YOKE ELIMINATOR KIT AND REPLACEMENT DRIVESHAFT.

BUMP STEER: CAUSED BY IMPROPER RELATIONSHIP OF DRAG LINK AND TRACK BAR. TO CORRECT, CENTER AXLE AGAIN FOLLOWING THE INSTRUCTIONS SUPPLIED WITH THE TRACK BAR. NEXT DETERMINE THE NEUTRAL POSITION OF THE STEERING WHEEL. ADJUST THE DRAG LINK TO CENTER THE STEERING WHEEL.

#### **TJ 3" KIT ADDENDUMS:**

- A. UPPER ARMS ARE NOT INCLUDED.
- B. TRANSFER CASE LOWERING KIT IS RECOMMENDED.
- C. FRONT TRACK BAR IS NOT INCLUDED. THE LOWER MOUNTING HOLE ON AXLE WILL NEED TO BE DRILLED OVER TOWARD DRIVER SIDE 3/4" TO ALLOW FRONT AXLE TO CENTER UNDER VEHICLE.
- D. DO NOT INSTALL TIRES LARGER THAN 33"
- E. 231 KIT AND DRIVESHAFT NOT INCLUDED.