

**SIGNATURE SERIES 7075 ALUMINUM LOWER  
CONTROL ARM INSTRUCTIONS**4<sup>TH</sup> & 5<sup>TH</sup> Gen Toyota Platform, 07<sup>+</sup> + FJ, 03+ 4Runner  
RM43001-TTL**PARTS LIST –**

<b>QTY</b>	<b>Description</b>	<b>Length</b>
2	7075 ALUMINUM CONTROL ARMS	-
2	5/16" BUTTON HEAD BOLTS	5/8"
2	5/16" SPLIT WASHERS	-
2	5/16" WASHERS	-

**PRE INSTALLATION:**

BEFORE INSTALLING YOUR CONTROL ARMS IT IS BEST TO PREP THEM PROPERLY.

**ANTISEIZE:** ON A CLEAN BENCH REMOVE EACH JOINT COMPLETELY FROM THE ARMS. COAT THE THREADED ENDS OF THE JOINTS LIBERALLY WITH ANTISEIZE ENSUREING ALL THE THREADS ARE COMPLETELY COVERED. REINSTALL THE JOINTS INTO THE ARMS AND CLEAN OFF ANY EXCESS ANTISEIZE THAT SQUEEZES OUT. REMOVE THE EBRAKE MOUNTING BOLT IN THE CENTER OF THE ARM AND PLACE SOME ANTISEIZE ON THE BOLT THREADS TOO. (FIGURE 1)

**GREASE:** THE JOINTS DO NOT COME GREASED. THE GREASE YOU SEE IS ASSEMBLY GREASE ONLY. IT'S BEST TO INITIALLY GREASE THEM WHEN THEY ARE OFF THE VEHICLE. PLACE EACH ARM IN A BENCH VICE BY GRIPPING THE ENDS OF THE BALL BETWEEN THE JAWS. GREASE THE JOINT WITH 3-4 PUMPS. WORK THE ARM AROUND THROUGH ITS RANGE OF MOTION SO GREASE IS EVENLY DISRIBUTED AROUND THE BALL. PLACE ONE FINAL PUMP OF GREASE INTO THE JOINT. CLEAN OFF EXCESS GREASE AND MOVE ON TO INSTALLATION. USING A QUALITY MARINE GRADE GREASE IS RECOMMENDED (FIGURE 2)

**INSTALLATION PROCEDURE –**

- 1.** PARK VEHICLE ON LEVEL SURFACE. REMOVE ONLY 1 LOWER CONTROL ARM AT A TIME – NOT BOTH.
- 2.** SET THE NEW TOYTEC CONTROL ARM LENGTH AS CLOSE TO THE SAME LENGTH AS THE ONE YOU REMOVED. OR YOU CAN ALSO SET THE ARMS TO THE SPECIFIC LENGTH YOU WANT NOW. MAKE SURE THE MOUNTING FOR THE EBRAKE CABLE AND LOGO IS FACING OUT. ALSO DECIDE IF YOU WANT THE GREASE ZERKS FACING UP OR DOWN. DOWN MAKES FOR EASIER SERVICE BUT IF YOU PLAN ON WHEELING HARD YOU MAY WANT TO INSTALL THEM UP SO THEY DO NOT GET BROKEN OFF ON ROCKS. DO NOT TIGHTEN THE JAM NUTS AT THIS TIME.
- 3.** IF THIS IS THE FINAL LENGTH YOU WANT YOUR ARMS SET TO MOVE ON TO **BENCH TIGHTENING** AND FINAL INSTALLATION. IF YOU WANT TO ADJUST THE LENGTH ON THE VEHICLE CONTINUE TO STEP 4.
- 4.** REINSTALL THE NEW TOYTEC CONTROL ARM ON YOUR VEHICLE AND REPEAT THE PROCEDURE FOR THE OTHER SIDE.
- 5.** ADJUST THE CONTROL ARMS ON THE VEHICLE TO GET THE DESIRED LENGTH BY ADJUSTING BOTH LOWERS AT THE SAME TIME. **DO NOT ADJUST THE ARMS BY USING A WRENCH THE WRENCH FLAT IS FOR TIGHTENING THE JAM NUTS ONLY.** IF THE ARM IS TOO TIGHT TO ADJUST BY HAND THEN IT IS BINDING AND CARE SHOULD BE TAKEN TO FIND OUT WHY. MORE OFTEN THAN NOT IT IS BECAUSE ONE ARM HAS BEEN ADJUSTED TOO FAR BY ITSELF WHICH WILL BIND THE SUSPENSION GEOMETRY.
- 6.** WITH THE ARMS ADJUSTED TO THE PROPER LENGTH IT IS BEST TO REMOVE THEM ONE AT A TIME FROM THE VEHICLE AND BENCH TIGHTEN THE ARMS. IT CAN BE DIFFICULT TO TRY FINAL TIGHTENING THE JAM NUTS WHILE ON THE VEHICLE DUE TO THE DESIGN AND LOCATION OF THE MOUNTING POINTS. (SEE BENCH TIGHTENING BELOW)



FIGURE 1



FIGURE 2



FIGURE 3



FIGURE 4

### **FINAL INSTALLATION:**

7. ONCE BENCH TIGHTENING OF THE JAM NUTS IS COMPLETE REINSTALL EACH ARM ON THE VEHICLE AND TORQUE TO FACTORY SPEC. THEN INSTALL THE EBRAKE BRACKET WITH THE HARDWARE PROVIDED TO THE DIRILLED AND TAPPED LOCATION ON THE CENTER OF THE ARMS. THE ORDER THE HARDWARE GOES IS – ARM, WASHER, EBRAKE BRACKET, LOCK WASHER, AND THEN BOLT. (FIGURE 4)

NOTE: WE HAVE NOTICED SIGNIFICANT DIFFERENCES VEHICLE TO VEHICLE IN THE EBRAKE CABLE ALIGNMENT THROUGH THE BRACKET. THIS IS A GOOD TIME TO STRAIGHTEN OUT YOUR EBRAKE BRACKET FOR BETTER PASS THROUGH OF THE CABLE. DO THIS BY USING TWO WRENCHES AND HOLDING THE BRACKET WITH ONE WRENCH AND BENDING WITH THE OTHER. **DO NOT BEND THIS BRACKET WHEN IT IS ATTACHED TO THE ARM** OR YOU MAY DAMMAGE THE THREADS IN THE ARM. (FIGURE 3 & 5)

### **MAINTENANCE:**

- FOR LONG JOINT LIFE IT IS RECOMMENDED THAT THE JOINTS BE GREASED EVERY OTHER OIL CHANGE. A QUALITY MARINE GRADE GREASE IS RECOMMENDED.

- CHECK YOUR JAM NUTS AFTER THE FIRST COUPLE HUNDRED MILES TO ENSURE THEY ARE STILL TIGHT. THEN CHECK THEM AFTER WHEELING TRIPS, AND MAKE CHECKING THEM PART OF YOUR ROUTINE MAINTENANCE PROCEDURES. LOOSE JAM NUTS CAN BE DANGEROUS AND WILL CAUSE THREAD DAMMAGE TO THE ARM AND IS NOT COVERED UNDER WARRANTY.

- ALUMINUM POLISH CAN BE USED ON THE ARMS TO KEEP THEM LOOKING GREAT. FOR A BRUSHED LOOK SCOTCHBRITE PADS CAN ALSO BE USED.

### **BENCH TIGHTENING:**

BY NOW YOU HAVE PROBABLY NOTICED THAT IT CAN BE DIFFICULT TO TIGHTEN THE JAM NUTS WITH THE CONTROL ARMS MOUNTED ON YOUR VEHICLE. IT IS ALWAYS RECOMMENDED THAT ONCE YOUR ADJUSTMENTS ARE DONE THAT YOU TIGHTEN THE JAM NUTS ON A BENCH WITH THE ARMS OFF THE VEHICLE. THIS IS SIGNIFICANTLY EASIER THAN DOING IT IN THE TIGHT CONFINES OF THE VEHICLE.

WHEN TIGHTENING THE JAM NUTS YOU ARE TRYING TO ACCOMPLISH TWO THINGS:

- FIRST IS TO TIGHTEN THE JAM NUTS FULLY SO THEY WILL NOT LOOSEN.  
- SECOND IS TO MAKE SURE THE TWO JOINTS STAY IN PARALLEL ALIGNMENT WITH EACH OTHER ELIMINATING PREMATURE BINDING AND PROVIDING FOR MAXIMUM ARTICULATION.

1 - PLACE THE CONTROL ARM ON THE EDGE OF A BENCH. USE SOME SORT OF SPACER UNDER EACH JOINT. THE SPACER SHOULD HAVE A HOLE IN THE CENTER SO THE EAR OF THE BALL CAN RECESS INTO IT AND THE BODY OF THE JOINT CAN SIT FLAT AGAINST IT. IN THIS PICTURE WE ARE USING TWO BIG NUTS AS SPACERS. BUT WE'VE SEEN MANY PEOPLE JUST USE A PIECE OF 2X4 WITH A HOLE DRILLED INTO IT. (FIGURE 6)

2 – WITH THE ARM SITTING ON THE SPACERS CLAMP THE JONTS TO THE BENCH. NOW THE ARM WILL STAY PUT WHEN YOU TIGHTEN IT, THIS WILL AUTOMATICALLY BRING THE JOINTS IN PARALLEL ALIGNMENT WITH EACH OTHER AND KEEP THEM ALIGNED WHEN TIGHTENED. (FIGURE 7)

3 – HOLD ONTO THE MAIN BODY WITH A WRENCH AND TIGHTEN THE JAM NUTS WITH ANOTHER WRENCH. LARGE CRESCENT WRENCHES WORK WELL.(FIGURE 7)

NOW THE ARMS ARE READY FOR FINAL INSTALLATION STEP 7.



FIGURE 5



FIGURE 6



FIGURE 7