

78720DJ INSTALLATION INSTRUCTIONS

11-26-2018 REV.A

PART #	DESCRIPTION	
78720DJ	2019-UP GM 1500 BILLET UCA KIT	

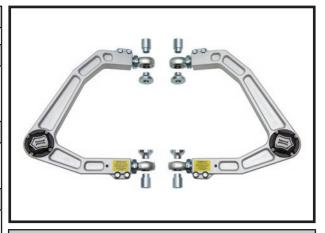
VEHICLE DYNAMICS®	PARI#	DESCRIPTION
7929 Lincoln Ave. Riverside, CA 92504 Phone: 951.689.ICON Fax: 951.689.1016	78720DJ	2019-UP GM 1500 BILLET UCA KIT

COMPONENTS INCLUDED				
(1) 177515 19-UP GM 1500 BILLET UCA (DRVR)	(1) 177516 19-UP GM 1500 BILLET UCA (PASS)			
HARDWARE INCLUDED				
(2) 155110 -032 O-RING NITRILE (2) 157507 BILLET UCA DUST COVER (2) 157517BJ DELTA JOINT (4) 157520 L-R ADJ SLEEVE 1.00-14L / .75-16 (4) 197503 HEIM SPACER RSMX12 X 14MM X 2.775	(4) 295511 ROD END JM12T F1 F1T (4) 297010 HEIM SPACER JM12 X 14MM X 1.875 (8) 605002 6-32 X .500 SHCS 18-8 (8) 605145 3/8-16 X 1.000 12PT (1) 605968 BLUE THREAD LOCKER 2ML BULLET			
TOOLS REQUIRED				
JACK JACK STANDS GRINDER W/ CUT-OFF WHEEL	3/8" 12PT SOCKET / WRENCH 10MM SOCKET / WRENCH 18MM SOCKET / WRENCH			

TECH NOTES

TORQUE WRENCH

- 1. ICON UPPER CONTROL ARMS ALLOW FOR ADDITIONAL DROOP TRAVEL WHEN PAIRED WITH ICON'S EXTENDED TRAVEL COILOVERS (PN: 71606, 71656, OR 71656C).
- 2. DO NOT EXCEED 1.875" ADJUSTMENT FROM THE CENTER OF THE ROD END TO THE EDGE OF THE BILLET UPPER CONTROL ARM. FAILURE CAUSED BY EXCESSIVE ADJUSTMENT WILL NOT BE COV-ERED UNDER ICON'S WARRANTY POLICY.
- 3. ALL ICON UPPER CONTROL ARMS HAVE BEEN ENGINEERED TO ALLOW FOR THE MOST POSSIBLE CASTER, WHILE STILL ALLOWING THE VEHICLE TO BE PROPERLY ALIGNED. NOTIFY YOUR PROFESSIONAL ALIGNMENT SHOP OF THIS INFORMATION SO THAT MAXIMUM RIDE QUALITY CAN BE ACHIEVED.
- 4. ICON DELTA JOINTS ARE PRE-GREASED FROM THE FACTORY. ICON RECOMMENDS GREASING THE DELTA JOINT EVERY 3,000 MILES (OR EVERY OIL CHANGE). ADD NEW GREASE UNTIL ALL OF THE OLD GREASE IS EXPELLED FROM THE BOTTOM OF THE DELTA JOINT ASSEMBLY, WIPE AWAY EXCESS WITH A RAG OR SHOP TOWEL.



WARNING!

- READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!
- ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.
- ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLATION TO BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN. PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY.

INSTALLATION

FIG.1

- 1. Using a properly rated jack, raise the front of the vehicle and support the frame rails with jack stands. Ensure the jack stands are secure and set properly before lowering the jack. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the front wheels.
- 2. Remove the ABS line bracket from the upper control arm (UCA) using a 10mm. [FIGURE 1]

21MM SOCKET / WRENCH





FIG.2

- 3. Loosen the taper on the upper ball joint and the tie rod end using an 18mm socket/wrench. Use a hammer to separate the upper ball joint taper and tie rod end. Take care not to damage the threads. Support the spindle (using safety wire, tie down, etc) so that it does not overextend the CV joints when detached. [FIGURE 2]
- 4. With the UCA detached from the spindle, begin to loosen the UCA from its mounts in the frame using a 21mm wrench and socket. Once completed, remove the factory UCA's from the vehicle.

5. Cut the factory droop stop off of the side of the coil bucket. Paint the bare metal to prevent corrosion. [FIGURE 3 & 4]





FIG.4

6. Each UCA is clearly labeled which side and direction it should be installed.

7. Insert the supplied heim spacers as shown. Slide the ICON UCA into place and fasten using the factory hardware. [FIGURE 5]



FIG.5

- 8. Hand tighten OEM hardware using (2) 21mm. [Torque to factory spec]
- **9**. Take care when inserting tapered pin into the spindle to not damage the threads. Hand tighten the ball joint nut onto the tapered pin to align and seat it properly. [Torque to 70 ft-lbs]
- 10. Reinstall the outer tie rod end. [Torque to factory spec]
- 11. Repeat steps on passenger side.

FIG.3

- 12. Install wheels and lower vehicle to the ground. [Torque lugs to factory spec]
- 13. ICON billet upper control arms utilize heim joints at each pivot to allow alignment using the adjusters on the upper control arms as well as cam adjusters on the lower control arms. The heims can be extended or contracted by turning the adjustment collar. Make sure that the slit in the collar lines up with the slit in the housing and then tighten the pinch bolts evenly in an oppossing pattern at least 3 times. Do not exceed 1.875" of adjustment from the center of the rod end to the edge of the billet UCA. [Torque to 40 ft-lbs]
- 14. Have the vehicle professionally aligned.
- 15. Once aligned, apply BLUE thread locker to the outer pinch bolts located on the sides of the arm. Tighten the pinch bolts in an oppossing pattern at least 3 times. [Torque to 40 ft-lbs]

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 100 MILES AND PERIODICALLY THEREAFTER.



ALIGNMENT NOTE

ICON SHIPS THE BILLET UPPER CONTROL ARM AT THE MOST COMMON ALIGNMENT SETTING. ONE OF THE MAJOR PERFORMANCE ADVANTAGES OF AN ICON BILLET ADJUSTABLE UPPER CONTROL ARM IS THE ABILITY TO IMPROVE WHEEL POSITION. IMPROVING WHEEL POSITION IMPROVES FIREWALL CLEARANCE ALLOWING FOR LARGER TIRES AS THE SUSPENSION CYCLES. IN ORDER TO TAKE ADVANTAGE OF THIS FEATURE, DISCUSS WITH YOUR PROFESSIONAL ALIGNMENT SHOP THAT YOU WOULD LIKE TO CAM THE LOWER CONTROL ARM TO MAXIMIZE WHEEL POSITION FORWARD AND THEN ADJUST CAMBER AND CASTER WITH THE UPPER THREADED ADJUSTERS.

A MAJOR PERFORMANCE ADVANTAGE OF ALL ICON UPPER CONTROL ARMS IS INCREASED CASTER OVER STOCK. DISCUSS WITH A PROFESSIONAL ALIGNMENT SHOP THAT YOU WANT THE VEHICLE ALIGNED WITH THE CASTER AT THE MAX OF THE FACTORY RECOMMENDED SETTINGS IF YOU WANT TO TAKE ADVANTAGE OF THE DYNAMIC EFFECTS OF INCREASED CASTER.

ICON VEHICLE DYNAMICS LIABILITY DISCLAIMER

ICON does not make any representations or warranties regarding the fitness of any ICON product for a particular installation or conformance of any ICON product with a particular vehicle application. Installation of any ICON suspension system is at the sole discretion of the end user and in making a purchase of any ICON suspension system, the purchaser assumes the responsibility and liability for any and all damage or injury, of any kind or nature whatsoever, caused by, resulting from, arising out of, or occurring in connection with the use or installation of any ICON suspension system. ICON is not liable for and specifically disavows any installation that is not in conformance with original equipment manufacturer's recommendations or instructions. Purchaser agrees that in the event of any claim or lawsuit arising out of the installation or use of an ICON suspension system, purchaser shall indemnify and hold harmless ICON, its agents, employees, officers and owners from and against any and all loss, expense, damage or injury that ICON may sustain as the result of such claim. [If applicable, ICON defers to and recommends recalibration of any/all vehicle stability systems after suspension installation.]

ICON VEHICLE DYNAMICS LIMITED LIFETIME WARRANTY

ICON Vehicle Dynamics warrants to the original retail purchaser who owns the vehicle on which the product was originally installed. ICON Vehicle Dynamics does not warrant the product for finish, alterations, modifications and/or installation contrary to ICON Vehicle Dynamics instructions. ICON Vehicle Dynamics products are not designed, nor are they intended to be installed on vehicles used in race applications, for racing purposes or for similar activities. (A "race" is defined as any contest between two or more vehicles, or a contest of one or more vehicles against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America and Canada.

ICON Vehicle Dynamics' obligation under this warranty is limited to the repair or replacement, at ICON Vehicle Dynamics' discretion, of the defective product. Any and all costs of removal, installation or re-installation, freight charges and incidental or consequential damages are expressly excluded from this warranty. Items that are subject to wear are not considered defective when worn and are not covered.

ICON Vehicle Dynamics components must be installed as a complete kit as shown in our current application guide. Any substitutions or exemptions of required components will immediately void the warranty. Some finish damage may happen to parts during shipping and is not covered under warranty.

This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been improperly installed, modified or customized subject to accident, negligence, abuse or misuse.



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