

5-4-2016 REV.A



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PART #	DESCRIPTION
78550	01-10 GM HD TUBULAR UCA KIT

COMPONENTS INCLUDED			
(1) 174028 01-10 GM HD UCA (DRVR)	(1) 174029 01-10 GM HD UCA (PASS)		
HARDWARE INCLUDED			
(2) 177058 TAPERED PIN (2) 157506 BEARING CAP, .500 ID (2) 605337 1/2-20 X .875 12PT (2) 295550 COMHIGT STAINLESS BEARING F1 FIT (2) 605838 M12-1.75 FLANGED LOCK NUT (1) 605969 VIBRATITE RED 2ML BULLET	(2) 605950 WHT-200 SPIRAL RET RING (4) 605903 1/4-28 X 90 DEG STEEL ZERK FITTING (8) 297034 HAT BUSHING 1.625 X 1.000 X .850 (4) 179106 SLEEVE 1.000 X .563 X 2.130 (2) 605052 1/4-20 LOCK NUT (2) 605053 1/4 FLAT WASHER (4) 297043 POLY RING 1.590 X 1.005 X .450		
TOOLS REQUIRED			
JACK JACK STANDS TORQUE WRENCH	18MM SOCKET / WRENCH 21MM SOCKET / WRENCH 1/2" 12PT SOCKET		
TECH NOTES			

1. ICON RECOMMENDS OPTIONAL BILLET UNIBALL DUST COVER SET (191011) TO PREVENT DEBRIS

2. 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



#### **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

BE ACHIEVED.

FROM ENTERING THE UNIBALL CUP.

- 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. Using a 21mm socket/wrench, loosen torsion bar preload bolt and release tension.
- 3. Using a jack, slightly lift the lower control arm to prevent the suspension from being at full droop.
- 4. Turning the steering wheel to the driver side will allow easy access to the nut on the upper control arm ball joint that connects the spindle and upper control arm. Remove the safety cotter pin and loosen the ball joint nut.
- 5. Support the spindle so that it does not over extend the CV joints when detached.
- **6**. With the upper control arm disconnected from the spindle, loosen the upper control arm from its mounts in the frame using a 21mm wrench/socket. Remove OEM upper control arm.
- 7. Before installing your new upper control arms, care must be taken to grease the bushings (liberally) prior to installing assembly. Failure to grease properly will cause premature bushing wear and increased noise. [FIGURE 1]

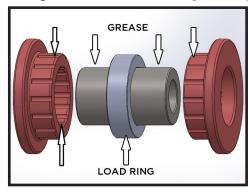


FIG.1

8. Install the tapered pin adapter. Carefully loosen components and slide the pin into the uniball pivot. Insert the dome cap and 1/2" 12pt bolt and hand tightening the tapered pin assembly. The 1/2" 12pt bolt will be removed later to apply RED thread locker.

- 9. Each arm is clearly labeled which side and direction it should be installed.
- 10. With greased bushings installed, place the driver side upper control arm into the arm mounts on the chassis and hand tighten OEM hardware.
- 11. Install the taper pin adapter up into the uniball, install the upper dome on top and install the 1/2" 12pt bolt in the top. Make sure the radius of the taper adapter and upper dome meet the diameter of the inner ball of the uniball. Hand tighten the upper bolt for now. It will be torqued with thread locker later.
- 12. Pivot the uniball stem assembly so that the stem is inline with the taper bore in the spindle. The new uniball will be very stiff the first time you move it.
- 13. Rotate the upper control arm downward and install the stem through the spindle taper. Use a 18mm socket/wrench to install the supplied flanged lock nut on the taper pin. As you begin to tighten the stem nut the stem may want to spin. If so you can keep it from spinning by holding the upper 12pt bolt. Once the taper has seated, friction will keep it from spinning. [Torque to 65 ft-lbs]
- 14. Tighten the upper control arm mounts on the chassis using a 21mm socket/wrench. [Torque to factory spec]
- 15. Install wheels and lower vehicle to the ground. [Torque to factory spec]
- **16**. Remove the 12pt 1/2" bolt that holds the taper dome on the top of the uniball from step 11. Apply RED thread locker and reinstall. [Torque to 90 ft-lbs]
- 17. Repeat steps on opposite side.
- 18. Have the vehicle professionally aligned.

#### VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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

### 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.

# **ICON** VEHICLE DYNAMICS

PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

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