

| PART # | DESCRIPTION |
|---------|--|
| 37701CP | 99-UP FSD 4WD 3-6" REAR 2.5 VS PB CDCV PAIR |

| COMPONENTS INCLUDED | |
|--|--|
| (2) 134941PBC 99-UP FSD 4WD REAR 2.5 VS PB CDCV | |
| HARDWARE INCLUDED | |
| (1) 257161 HEIM SPACER COM10 X 14MM X 1.925 (1) 257162 HEIM SPACER COM10 X 14MM X 1.175 | (2) 257164 HEIM SPACER COM10 X .500 X 1.500 |
| TOOLS REQUIRED | |
| JACK JACK STANDS TORQUE WRENCH | 18MM SOCKET / WRENCH 21MM SOCKET / WRENCH |
| TECH NOTES | |
| <p>1. YOUR ICON SHOCK ASSEMBLIES COME FACTORY CHARGED TO 150 PSI. RELEASING NITROGEN PRESSURE MAY LEAD TO SHOCK MALFUNCTION AND REDUCED RIDE QUALITY. FAILURE CAUSED BY LOW NITROGEN PRESSURE IS NOT COVERED UNDER ICON'S WARRANTY POLICY.</p> <p>2. THE LOWER HEIM SPACERS FOR 99-16 AND 17-UP ARE INCLUDED. USE THE 14MM SPACERS FOR 17-UP APPLICATIONS.</p> | |



| WARNING! |
|---|
| <p>** 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!</p> <p>** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.</p> <p>** ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLTION TO BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN. PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY.</p> |

INSTALLATION

- Using a properly rated jack, raise the rear 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 factory shocks using 18mm and 21mm socket/wrench.
- Slide the wider spacer onto the stud on the upper shock mount. Slide the shock into the shock mount with the reservoir facing away from the axle. The driver side reservoir may need to be clocked (toward the spare tire) away from a wiring harness. Slide the narrow spacer onto the stud. [Torque to factory spec] [FIGURE 1 & 2]

FIG.1



FIG.2



4. Position the rod end in the lower mount and slide the bolt in. There are 2 sets of lower spacers provided. 99-16 FSDs have a 12mm bolt. 17-UP FSDs have 14mm bolt. Use the correct spacers for your vehicle. If using the 14mm bolt, offset the rod end toward the wheel. [Torque to factory spec] [FIGURE 3]

FIG.3



VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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

2.5 VS SERIES SHOCK & COILOVER TECHNICAL INFORMATION

MAINTENANCE

ICON shock absorbers are a high quality rebuildable race style shock absorber designed for optimal performance. With a unit of this caliber on your vehicle, routine maintenance is required to keep them looking and operating in like new condition. Residual oil and assembly lube may be present at all seal paths from the factory out of the box and is considered normal. Pooling of oil however is not acceptable at any time and one should contact the iCON dealer where purchased.

BELOW ARE GUIDELINES BASED ON HOW YOU USE YOUR VEHICLE BUT YOUR MILEAGE MAY VARY:

STREET USE:

- Send in for factory servicing every 40,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Remove any buildup of road salt, mud, or debris from shocks and coil springs anytime accrued
- Clean with mild soap and water with each oil change or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure yearly. (252004 charge needle assembly available at any iCON distributor)
- Check bearings for excessive wear yearly.
- DO NOT apply any type of lube to the upper and lower bearings.

STREET/DIRT:

- Send in for factory servicing every 15,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Clean with mild soap and water with each oil change, offroad trip, or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure each dirt outing. (252004 charge needle assembly available at any iCON distributor)
- Check bearings for excessive wear yearly.
- DO NOT apply any type of lube to the upper and lower bearings.

DIRT USE:

- Send in for factory servicing every 1,000 miles.
- Check nitrogen pressure each outing. (252004 charge needle assembly available at any iCON distributor)
- Remove any buildup of mud or debris from shocks and coil springs after every outing.

SELF-SERVICE:

- Contact iCON for service kits & tools at (951) 689-4266.

PRODUCT REGISTRATION

Please visit: <http://www.iconvehicledynamics.com/tech-support/registration/> to register your product.

ICON VEHICLE DYNAMICS SHOCK ABSORBER WARRANTY

This shock absorber has a 1 year warranty against any manufacturer's defects. If a shock fails within the initial year of ownership, the shock must be shipped to iCON Vehicle Dynamics for inspection and service. If a shock is inspected and it has been determined the shock failed due to neglect, damage caused by improper installation or any other reason besides "normal wear and tear", the owner of said shock is responsible for all service costs. This includes labor, parts, and shipping.

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.

To send a shock in for warranty please visit our website <http://www.iconvehicledynamics.com/tech-support/shock-service/>

7929 Lincoln Ave. Riverside, CA 92504
 Phone: 951.689.ICON | Fax: 951.689.1016

| PART # | DESCRIPTION |
|--------|---|
| 61721C | 05-UP FSD 4-5.5" 2.5 VS RR CDCV BOLT IN COILOVER CONVERSION KIT |

COMPONENTS INCLUDED

| | |
|--|--|
| (2) 164949C 05+ FSD 4-5.5" 2.5 VS RR CDCV BOLT IN COILOVER | (1) 61721H HARDWARE KIT (1) 611051 HARDWARE KIT |
|--|--|

HARDWARE INCLUDED

61721H HARDWARE KIT

| | |
|--|---|
| (2) 164017 05+ FSD C/O LOWER MOUNT (2) 160085 05+ FSD CO CONV 7.5" RESI BRACKET (2) 167011 05+ FSD 4" BUMP STOP SPACER (6) 605011 5/16-18 X 0.750 SCREW (12) 605016 5/16 FLAT WASHER (6) 605076 5/16-18 LOCK NUT (6) 605108 3/8-16 X 1.250 SCREW | (6) 605131 3/8 SPLIT LOCK WASHER (2) 605308 1/2-13 X 3.000 SCREW (2) 605322 1/2-13 LOCK NUT (4) 605330 1/2 FLAT WASHER (2) 605804 M8-1.25 X 120MM SCREW (2) 605806 M14-2.00 X 30MM SCREW |
|--|---|

611051 HARDWARE KIT

| |
|--|
| (4) 605931 1/2 X 2 1/16 - 3 ID #40 SS HOSE CLAMP |
|--|

TOOLS REQUIRED

| | |
|---|---|
| JACK JACK STANDS RECIPROCATING SAW SANDER DRILL 7/16" DRILL BIT TORQUE WRENCH | 10MM SOCKET / WRENCH 22MM SOCKET / WRENCH 24MM SOCKET / WRENCH 5/16" SOCKET / WRENCH 7/16" SOCKET / WRENCH 9/16" SOCKET / WRENCH 3/4" SOCKET / WRENCH |
|---|---|

TECH NOTES

1. YOUR ICON COILOVER ASSEMBLIES COME FACTORY CHARGED TO 150 PSI. RELEASING NITROGEN PRESSURE MAY LEAD TO SHOCK MALFUNCTION AND REDUCED RIDE QUALITY. FAILURE CAUSED BY LOW NITROGEN PRESSURE IS NOT COVERED UNDER ICON'S WARRANTY POLICY.
2. YOUR ICON COILOVER ASSEMBLIES COME SHIPPED AT ICON'S RECOMMENDED RIDE HEIGHT. REDUCING DROOP TRAVEL WILL REDUCE RIDE QUALITY. DO NOT PRELOAD THE COIL BEYOND 1.5" OF EXPOSED THREADS BETWEEN THE BOTTOM OF THE TOP CAP AND THE TOP OF THE COIL ADJUSTER NUT. ADJUSTING PRELOAD BEYOND THIS SETTING WILL CAUSE THE COIL TO BIND AND DAMAGE WILL OCCUR TO COILOVER AND/OR VEHICLE.
3. RETURNING TO A STOCK COIL SPRING REQUIRES FABRICATION. IF YOU PLAN TO RETURN VEHICLE TO STOCK AT A LATER DATE DO NOT DISCARD THE COIL CENTERING CUP THAT IS REMOVED IN STEP 7.
4. TAKE CARE TO MAKE SURE THE WIRE HARNESS ABOVE THE WHEEL LINERS ARE NOT GETTING PINCHED OR CHAFED AFTER INSTALL.



WARNING!

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INSTALLATION

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.



FIG.1

2. Remove driver and passenger front shocks with a 3/4" socket/wrench. [FIGURE 1 & 2]



FIG.2

3. Remove trackbar bolt at frame. [FIGURE 3]

FIG.3



4. Lower the front axle until the coils can be removed from vehicle. [FIGURE 4 & 5]

FIG.4



FIG.5



5. Remove the lower coil mount with a 22mm socket/wrench and the lines attached to it using 10mm socket/wrench. [FIGURE 6 & 7]

FIG.6



FIG.7



6. Remove the inner fender liner.

7. With a reciprocating saw and a 10" blade use the coil bucket as a guide and cut out the centering cup from the upper coil mount on both driver and passenger side. [FIGURE 8]

FIG.8



FIG.9



8. Sand any material that keeps the upper coil bucket from being flat. [FIGURE 9]

9. Locate (164035) reservoir mount which is also the drill template. With a c-clamp or welding vise grips, clamp the reservoir mount so the 90 degree flange is parallel to the length of the vehicle as shown. [FIGURE 10]

FIG.10



10. Using a transfer punch, mark the locations of all 3 holes in the reservoir bracket.

11. Protecting all components in the engine compartment, using a 7/16" drill bit carefully drill the 3 holes that were marked with the reservoir bracket.

12. Spray paint the coil bucket to prevent corrosion from the removal of the cup or the drilled holes.

13. Locate (164017) lower shock mount and install using the supplied M14 hardware as shown with a 22mm socket/wrench. [Torque to 80 ft-lbs] [FIGURE 11]

FIG.11



14. Using the supplied 5/16" hardware, install the factory lines that were attached to the factory lower coil seat with a 1/2" socket/wrench. [Torque to 24 ft-lbs]

15. Remove the foam bumpstop from the factory cup and remove the factory bolt holding the cup to the chassis with a 10mm socket/wrench. Locate the billet bump stop spacer (167011) and bolt (605804). Install in between the factory cup and the frame on both the driver and passenger side. [Torque to 20 ft-lbs] [FIGURE 12 & 13]

FIG.12



FIG.13



16. Install the driver side coilover: The reservoir hose will point towards the front of the vehicle indicating the driver side. With the reservoir bracket sandwiched between the coil bucket and the coilover mount, use the supplied 3/8" hardware to fasten the coilover to the coil bucket [Torque to 45 ft-lbs]. Twist the hose and loop around to the reservoir mount as shown and attach reservoir to mount using the supplied hose clamps with a 5/16" socket/wrench. [FIGURE 14]

FIG.14



NOTE: failure to use the supplied reservoir bracket will cause the hose fitting to crash into the coil bucket.

17. With the supplied 1/2" hardware mount the lower eyelet of the shock to the axle. Use a jack to help locate the assembly. [Torque to 100 ft-lbs] [FIGURE 15]

FIG.15



FIG.16



18. Reinstall the plastic wheel liner. [FIGURE 16]

19. Repeat steps on the passenger side. Reattach the track bar. [Torque to factory spec]

20. Install wheels/tires and remove the vehicle from jack stands. [Torque lugs to factory spec]

21. Center the steering wheel by turning tie rod adjuster. [FIGURE 17]

FIG.17



22. 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.**

2.5 VS SERIES SHOCK & COILOVER TECHNICAL INFORMATION

MAINTENANCE

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BELOW ARE GUIDELINES BASED ON HOW YOU USE YOUR VEHICLE BUT YOUR MILEAGE MAY VARY:

STREET USE:

- Send in for factory servicing every 40,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Remove any buildup of road salt, mud, or debris from shocks and coil springs anytime accrued
- Clean with mild soap and water with each oil change or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure yearly. (252004 charge needle assembly available at any ICON distributor)
- Check bearings for excessive wear yearly.
- DO NOT apply any type of lube to the upper and lower bearings.

STREET/DIRT:

- Send in for factory servicing every 15,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Clean with mild soap and water with each oil change, offroad trip, or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure each dirt outing. (252004 charge needle assembly available at any ICON distributor)
- Check bearings for excessive wear yearly.
- DO NOT apply any type of lube to the upper and lower bearings.

DIRT USE:

- Send in for factory servicing every 1,000 miles.
- Check nitrogen pressure each outing. (252004 charge needle assembly available at any ICON distributor)
- Remove any buildup of mud or debris from shocks and coil springs after every outing.

SELF-SERVICE:

- Contact ICON for service kits & tools at (951) 689-4266.

PRODUCT REGISTRATION

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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.

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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.

To send a shock in for warranty please visit our website <http://www.iconvehicledynamics.com/tech-support/shock-service/>



ICON VEHICLE DYNAMICS®
PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

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| PART # | DESCRIPTION |
|--------|--------------------------------------|
| 64038 | 2017-UP FSD ADJUSTABLE TRACK BAR KIT |

| COMPONENTS INCLUDED | |
|---|--|
| (1) 164037 2017-UP FSD ADJUSTABLE TRACK BAR (2) 167021 HEIM SPACER JM16 X .812 X 1.750 (1) 167027 LEFT/RIGHT ADJUSTER ROUND (1) 168001 05-UP TRACK BAR BALL JOINT W/NUT | (1) 295513 JM16-1T, 1-14 LH ROD END F1 FIT (2) 605145 3/8-16 X 1.000 12PT SCREW (1) 605951 SPIRAL RETAINING RING |
| HARDWARE INCLUDED | |
| N/A | |
| TOOLS REQUIRED | |
| TAPE MEASURE BALL JOINT SEPARATOR HAMMER 1/4" SPANNER WRENCH TORQUE WRENCH | 3/8" 12PT SOCKET / WRENCH 13MM SOCKET / WRENCH 27MM SOCKET / WRENCH 30MM SOCKET / WRENCH (2) |
| TECH NOTES | |
| 1. DO NOT EXCEED 3.375" OF ADJUSTMENT FROM THE CENTER OF THE ROD END TO THE EDGE OF THE TRACK BAR PINCH HOUSING. FAILURE CAUSED BY EXCESSIVE ADJUSTMENT WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY. | |



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|--|
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| ** ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLTION 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

1. Remove the stock track bar from the frame bracket using (2) 30mm sockets/wrenches. The vehicle may shift slightly.
2. Remove the track bar from the ball joint taper on the axle. Using a 27mm, remove the nut and separate the ball joint using a ball joint separator and hammer.
3. Connect the ICON track bar to the axle. Use a 13mm to keep the tapered stud from spinning while tightening the nut with a 27mm socket/wrench. [Torque to factory spec] [FIGURE 1]

FIG.1



4. Loosen the pinch bolts using a 3/8" 12pt socket/wrench.
5. Adjust the collar of the track bar while keeping the threaded bushing housing from spinning. Adjust as needed to line up in the frame bracket.

6. Install the factory upper track bar bolt using (2) 30mm sockets/wrenches. [Torque to 406 ft-lbs] [FIGURE 2]

FIG.2



NOTE: This track bar is adjustable from 36.75" - 37.75". The stock track bar measures 36.625" from eye to eye.

7. Adjust the collar to center the axle under the frame. Do not exceed the maximum adjustment range as outlined in the tech notes.

8. Tighten the pinch bolts using an alternating pattern and a 3/8" 12pt socket/wrench. [Torque to 35 ft-lbs]

9. Use the drag link adjustment to center the steering wheel before driving.

10. 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.

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| PART # | DESCRIPTION |
|---------|--|
| 67710CP | 05-17 FSD 4WD 4.5" FRONT 2.5 VS PB CDCV PAIR |

| COMPONENTS INCLUDED | |
|--|--|
| (2) 164944C 05-UP FSD 4.5" FRONT 2.5 VS PB CDCV | (2) 611006 9/16" HD STEM BUSHING KIT |
| HARDWARE INCLUDED | |
| 611006 HARDWARE KIT | |
| (2) HEAVY DUTY 9/16 ID STEM BUSHING (1) HEAVY DUTY 9/16 ID STEM WASHER (1) HEAVY DUTY 12MM ID STEM WASHER | (1) M12-1.25 NUT (1) M12-1.25 JAM NUT |
| TOOLS REQUIRED | |
| JACK JACK STANDS TORQUE WRENCH | 17MM SOCKET / WRENCH 18MM SOCKET / WRENCH 19MM SOCKET / WRENCH 21MM SOCKET / WRENCH |
| TECH NOTES | |
| <p>1. YOUR ICON SHOCK ASSEMBLIES COME FACTORY CHARGED TO 150 PSI. RELEASING NITROGEN PRESSURE MAY LEAD TO SHOCK MALFUNCTION AND REDUCED RIDE QUALITY. FAILURE CAUSED BY LOW NITROGEN PRESSURE IS NOT COVERED UNDER ICON'S WARRANTY POLICY.</p> | |



WARNING!

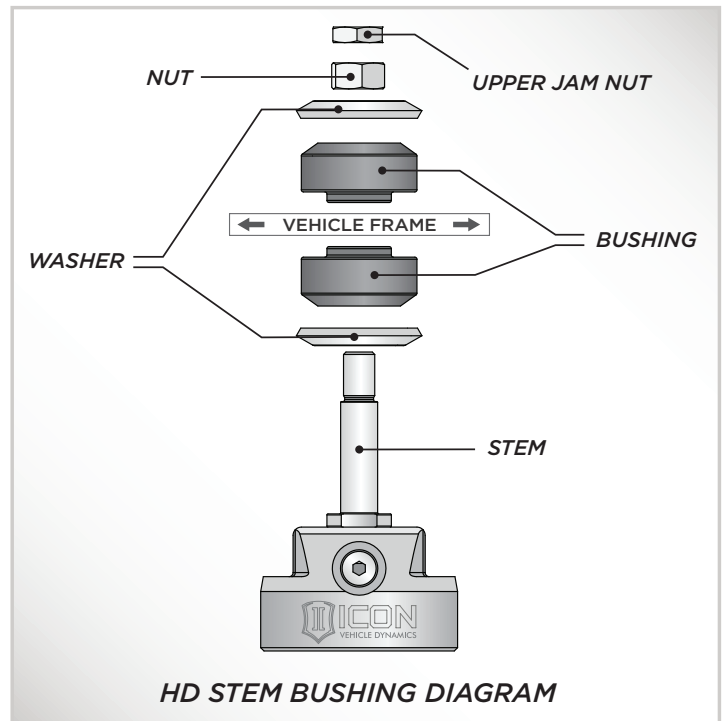
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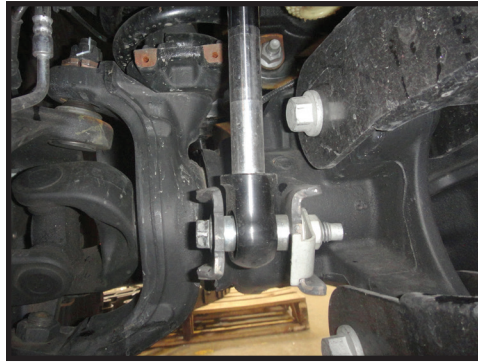
INSTALLATION

- 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.
- Use a jack to support the axle and then remove the factory shock using a 17mm and 18mm socket/wrench.
- Install upper shock mount: Install stem hardware as seen in diagram. Install tall nut and fasten bushing assembly until 3-4 threads are exposed for the jam nut. Install nut and torque to 50 ft-lbs while holding with a 19mm wrench. Do not overtighten bushing assembly as this can lead to premature bushing wear. Failure caused by incorrect installation of bushings is not covered under ICON's warranty policy. [SEE DIAGRAM] ➔



4. Install the lower shock mount: Install the wide heim spacer so that it orients the shock further away from the frame. Install the factory lower bolt using an 18mm socket/wrench. [Torque to factory spec] **[FIGURE 1]**

FIG.1



5. Install wheels and lower vehicle to the ground. [Torque to factory spec]

6. Have the vehicle professionally aligned.

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STREET USE:

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- Remove any buildup of road salt, mud, or debris from shocks and coil springs anytime accrued
- Clean with mild soap and water with each oil change or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure yearly. (252004 charge needle assembly available at any ICON distributor)
- Check bearings for excessive wear yearly.
- DO NOT apply any type of lube to the upper and lower bearings.

STREET/DIRT:

- Send in for factory servicing every 15,000 miles or if a leak develops, ride quality decreases, or they begin to make excessive noise.
- Clean with mild soap and water with each oil change, offroad trip, or anytime you notice build up.
- Wax the cylinders yearly with automotive wax to prevent corrosion.
- Check nitrogen pressure each dirt outing. (252004 charge needle assembly available at any ICON distributor)
- Check bearings for excessive wear yearly.
- DO NOT apply any type of lube to the upper and lower bearings.

DIRT USE:

- Send in for factory servicing every 1,000 miles.
- Check nitrogen pressure each outing. (252004 charge needle assembly available at any ICON distributor)
- Remove any buildup of mud or debris from shocks and coil springs after every outing.

SELF-SERVICE:

- Contact ICON for service kits & tools at (951) 689-4266.

PRODUCT REGISTRATION

Please visit: <http://www.iconvehicledynamics.com/tech-support/registration/> to register your product.

ICON VEHICLE DYNAMICS SHOCK ABSORBER WARRANTY

This shock absorber has a 1 year warranty against any manufacturer's defects. If a shock fails within the initial year of ownership, the shock must be shipped to ICON Vehicle Dynamics for inspection and service. If a shock is inspected and it has been determined the shock failed due to neglect, damage caused by improper installation or any other reason besides "normal wear and tear", the owner of said shock is responsible for all service costs. This includes labor, parts, and shipping.

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.

To send a shock in for warranty please visit our website <http://www.iconvehicledynamics.com/tech-support/shock-service/>



ICON VEHICLE DYNAMICS®
PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

7929 Lincoln Ave. Riverside, CA 92504 Phone: 951.689.ICON Fax: 951.689.1016
www.iconvehicledynamics.com



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| DESCRIPTION |
|------------------------------------|
| 2017-UP FORD SUPER DUTY 4 LINK KIT |

| COMPONENTS INCLUDED | |
|--|--|
| 164501 (BOX 2 OF 3) | |
| (2) 164013 05-UP FSD UPPER LINK (4) 167018 HEIM SPACER COM16 X .750 X 2.80 | (2) 295501 COM16T BEARING (2) 605945 WHT-175 SPIRAL RET RING |
| 164502 (BOX 3 OF 3) | |
| (2) 164012 05-UP FSD LOWER LINK (2) 167014 L/R ADJ SLEEVE 1.25-12L / 1.00-14 (4) 167017 HEIM SPACER JM16 X .750 X 2.750 | (2) 295510 JM16-1T 1-14 RH ROD END (4) 605145 3/8-16 X 1.00 12PT FLANGED SCREW |
| 164504 (BOX 1 OF 3) | |
| (1) 164040 17-UP FSD 4-LINK BRACKET (DRVR) (1) 164041 17-UP FSD 4-LINK BRACKET (PASS) | (1) 164504H 17-UP FSD 4-LINK HARDWARE KIT |
| 164504H HARDWARE KIT | |
| (1) 164042 17-UP FSD FRAME NUT PLATE (DRVR) (1) 164043 17-UP FSD FRAME NUT PLATE (PASS) (4) 167029 SLEEVE 1.50 X .525 X .625 (1) 294008 WASHER 2.25 X .650 X .250 (4) 605230 7/16" FLAT WASHER (8) 605357 WASHER 1.50 X .531 X .046 (2) 605518 5/8-11 X 1.50 BOLT (2) 605527 5/8 SPLIT LOCK WASHER (2) 605601 3/4-10 X 5.50 BOLT | (2) 605602 3/4-10 X 5.00 BOLT (4) 605620 3/4-10 NYLOCK NUT (8) 605630 3/4" FLAT WASHER (2) 605823 M12-1.75 NYLOCK NUT (2) 605849 M12-1.75 X 180MM BOLT (4) 605851 M18-2.50 X 30MM BOLT (4) 605852 M18 SPLIT LOCK WASHER (2) 605925 PLASTIC PUSH IN CLIP - ABS |
| TOOLS REQUIRED | |
| JACK JACK STANDS TORQUE WRENCH 3/8" 12PT SOCKET / WRENCH 1/2" SOCKET / WRENCH 15/16" SOCKET / WRENCH 1 1/16" SOCKET / WRENCH 1 1/8" SOCKET / WRENCH 8MM SOCKET / WRENCH | 10MM SOCKET / WRENCH 13MM SOCKET / WRENCH 15MM SOCKET / WRENCH 18MM SOCKET / WRENCH 19MM SOCKET / WRENCH 21MM SOCKET / WRENCH 24MM SOCKET / WRENCH 27MM SOCKET / WRENCH 30MM SOCKET / WRENCH |
| TECH NOTES | |
| <p>1. ICON 4-LINK KIT INTENDED FOR USE WITH ICON 4.5" OR 7" LIFTS.</p> <p>2. ICON TRACK BAR (64038) REQUIRED FOR INSTALLATION.</p> <p>3. EXTENDED BRAKE LINE KIT AVAILABLE (61110) AS AN OPTION INSTEAD OF BRAKE LINE DROP BRACKETS.</p> | |



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 INSTALLTION 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

- 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.
- Remove the sway bar links from the sway bar using an 8mm & 18mm. Leave them connected to the axle. [FIGURE 1]

FIG.1

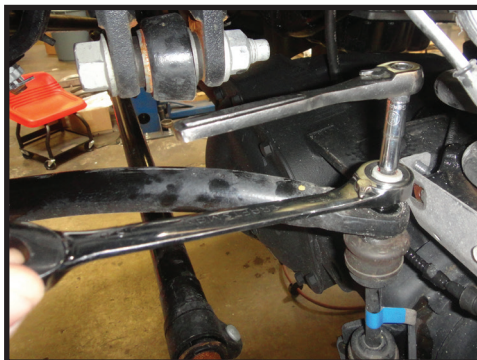


FIG.2



- Disconnect the upper brake line brackets from the frame using a 13mm and lower brake line brackets from the axle with a 10mm. [FIGURE 2]

4. Remove the factory track bar using a 27mm and 30mm. (Refer to track bar instructions) [FIGURE 3]

FIG.3



5. Support the axle with a floor jack and remove the front shocks. The shocks are limiting droop so make sure that the axle is supported or it will drop when the shocks are removed. Only remove the lower bolt using an 18mm.

6. Lower the axle until the coil springs are unloaded from their mounts. Be careful not to stretch or damage any lines connected to the axle or radius arms. Remove the coils. [FIGURE 4]

FIG.4



7. Some trucks have a transfer case skid plate that must be removed using a 15mm. Remove the nut clips from the frame.

8. Lift the axle enough to reconnect the shocks and then lower the axle back down. [FIGURE 5]

FIG.5

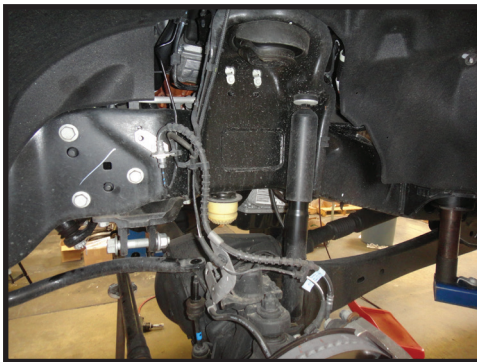


FIG.6



9. With both coils removed, the radius arms don't have much force on them and can be safely removed from the frame mount using a 24mm & 27mm. [FIGURE 6]

10. Once the bolts are removed from the radius arms, lift up on the tie rod to rotate the axle rearward which will then rotate the radius arms out of their pockets. [FIGURE 7]

FIG.7



FIG.8



11. Remove the outside crossmember bolt on both sides using an 18mm. [FIGURE 8]

12. Disconnect the radius arms from the axle using a 24mm. [FIGURE 9]

FIG.9



FIG.10

13. Connect the upper link to the axle and let it hang while the 4-link bracket is being installed. The driver side upper radius arm/axle bolt uses one of the nuts from the factory radius arm/frame bolts as they will not be reused. [FIGURE 10]

14. Position the driver side 4-link bracket into the stock radius arm pocket. Loosely install the two supplied 2.50" X 30mm bolts with lock washers into the forward radius arm pocket holes. [FIGURE 11]

FIG.11



15. Spacers, shims, and longer 12mm bolts are supplied to mount the 4-link bracket to the crossmember. The shims are used to account for the variances in crossmember placement in relation to the radius arm pockets. Position the supplied spacers and shims between the crossmember and 4-link bracket. 1 spacer must go on both sides of the crossmember. Position the shims as needed. 4 shims must be used on each side of the truck. The shim positioning may vary from one side to the other. Use the supplied 7/16" washers on the 12mm bolts and fasten using a 19mm. [Torque to 65 ft-lbs] [FIGURE 12 & 13]

FIG.12



FIG.13



Slide the nut plate in the end of the crossmember and align over the hole. Using the supplied 5/8" bolts, start the bolts in the nut plate, mounting the 4-link bracket to the crossmember. Use the supplied 1/4" washer between the bracket and crossmember on the driver side only. [FIGURE 14]

FIG.14



16. With the 4-link brackets installed loosely on the vehicle, mount the upper links to the bracket using the supplied 3/4" x 5.5" bolts.

17. Mount the lower links to the axle using the factory bolts. [FIGURE 15]

FIG.15



FIG.16

18. Mount the lower links to the 4-link bracket using the supplied 3/4" X 5" bolt. [FIGURE 16]

19. Tighten all bolts on the 4-link brackets. Torque M12 bolts to 65 ft-lbs using a 19mm. Torque 5/8" bolts to 150 ft-lbs using a 15/16". Torque 3/4" bolts to 260 ft-lbs using an 1 1/8" & 1 1/16". Torque M18 bolts to 225 ft-lbs using a 27mm.

20. Remove the shocks and lower the axle enough to install the new coil springs. [FIGURE 17]

FIG.17

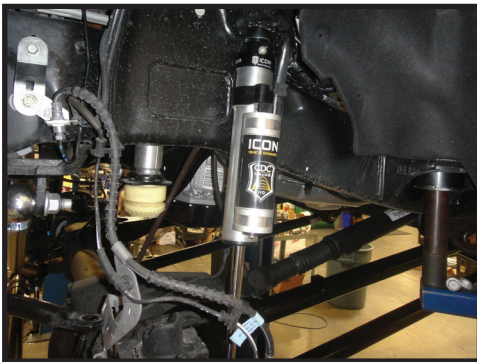


FIG.18

21. Once the coil springs are set in place, install the shocks using an 18mm & 19mm. Be careful not to lift the truck off of its supports. [Torque to factory spec] [FIGURE 18]

22. Reconnect the sway bar to the sway bar links using an 8mm & 18mm. [Torque to factory spec] [FIGURE 19]

FIG.19

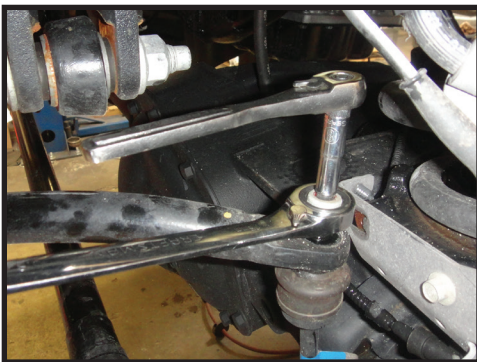
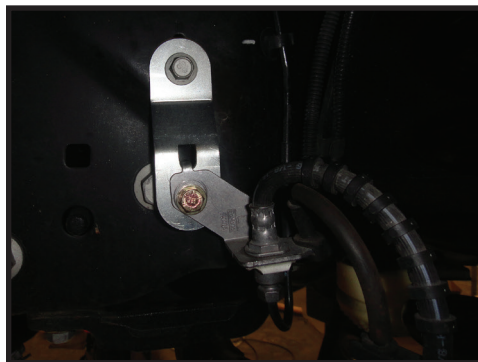


FIG.20

23. Connect the ICON adjustable track bar (64038) using a 30mm. (Refer to track bar instructions) [FIGURE 20]

24. Mount the upper brake line drop brackets with the factory bolt using a 13mm. [Torque to factory spec] [FIGURE 21]

FIG.21



25. Mount the brake line to the supplied drop bracket using a 1/2". [Torque to 13 ft-lbs] [FIGURE 21] (Extended brake line kit (61110) available from ICON)

26. Mount the lower brake line brackets with the factory bolt and fasten using a 10mm. [Torque to factory spec] [FIGURE 22]

FIG.22



27. Ensure that the vacuum line is routed down and to the side of the bumpstop. Failure to check and adjust routing will allow the vacuum line to be crushed by the bumpstop. This will cause the auto locking feature of the hubs to not work. [FIGURE 23 & 24]

FIG.23

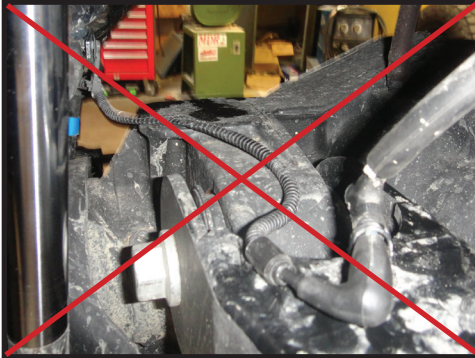


FIG.24



28. Install the front wheels and lower the vehicle back to the ground. [Torque lugs to factory spec]

29. Adjust caster using the double adjusters on the lower links. Line up the slit in the double adjuster sleeve with the slit in the link. Using an alternating pattern to ensure even clamping force, torque the pinch bolts back and forth three times to 45 ft-lbs.

30. Center the front axle under the truck using the adjustable track bar and then center the steering wheel. Refer to (64038) track bar instructions.

31. 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

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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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