

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

PART #	DESCRIPTION
71670E	23 CANYON/COLORADO 2.5 VS RR CDEV COILOVER KIT

COMPONENTS INCLUDED

(1) 174961RED 23 CANYON COLORADO 2" CO 2.5 VS RR CDEV DRVR	(1) 255604-06 EXTENSION HARNESS COIL IIC CONTROLLER 6 FT
(1) 174961REP 23 CANYON COLORADO 2" CO 2.5 VS RR CDEV PASS	(1) 255604-08 EXTENSION HARNESS COIL IIC CONTROLLER 8 FT
(2) 170158 23 CANYON COLORADO FRNT RESI MOUNT	(1) 71670H 23 CANYON COLORADO COILOVER HARDWARE KIT

HARDWARE INCLUDED

(6) 605133 3/8 SAE FLAT WASHER GR8 YZINC	
71670H HARDWARE KIT	
(2) 207452 DIFF SPACER 1.375 X .625 X .500 RAW	(1) 611019 COILOVER HARDWARE KIT PAIR
(2) 605016 5/16 SAE FLAT WASHER GR8 YZINC	(1) 611051 #36 1.188-2.750 STAINLESS HOSE CLAMP KIT (4)
(2) 605080 5/16-18 X 1.000 HHCS GR8 YZINC	
(2) 605093 5/16-18 GR5 U NUT BLK PHOS (1)	
605969 VIBRATITE RED 2ML BULLET	
611019 HARDWARE KIT	
(6) 605101 3/8-16 X 1.000 HHCS GR8 YZINC	(6) 605131 3/8 SPLIT LOCK WASHER GR8 YZINC

TOOLS REQUIRED

FLOOR JACK JACK STANDS BALL JOINT SEPARATOR PLASTIC PUSH PIN PRY TOOL TORQUE WRENCH RATCHET 5/16 NUT DRIVER	T15 & T30 TORX 10MM SOCKET / WRENCH 13MM SOCKET / WRENCH 15MM SOCKET / WRENCH 18MM SOCKET / WRENCH 21MM SOCKET / WRENCH
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TECH NOTES

1. YOUR ICON COILOVER ASSEMBLIES COME FACTORY CHARGED TO 250 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" 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. ONLY COMPATIBLE WITH ULTRA WIDE STANCE TRUCKS.
4. WILL NOT WORK ON CHEVROLET COLORADO WT, LT OR Z71
5. ESTIMATED INSTALL TIME: 3-4 HOURS

INSTALLATION

1. Place the truck on a flat surface with the parking brake engaged, chock the rear tires.



FIG.1



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.**

2. Use a suitable floor jack in the manufacturer designated spot on the frame to lift the front of the truck, then place a suitable jack stand under the frame and set the truck down securely on the jack stand. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the front wheels and tires.

3. Loosen and remove the speed sensor lines from the upper control arm (Driver side pictured, Passenger side is similar). 10mm can be used to remove the 2 screws that secure the harness. A plastic clip pry tool can be used to remove the clips. [FIGURE 1 & 2]



FIG.2

4. Remove the 10mm bolts holding the brake lines and sensor wire onto the knuckle. Also remove the speed sensor itself from the front side of the knuckle, using a T30. [FIGURE 3]

FIG.3



5. Remove the tie rod nut using a 21mm and remove the tie rod of the knuckle using a ball joint separator. [FIGURE 4]

FIG.4



6. Next you will need to loosen and remove the upper joint nut using an 18mm. Then use the ball joint separator to break the ball joint taper free from the knuckle. A well-placed hit with a hammer onto the knuckle can also free the taper. Leave the nut attached so the knuckle does not fall away and pull apart the CV joints. [FIGURE 5]

FIG.5



7. Now support the knuckle with a strap to the frame to keep it from falling away and pulling apart the CV axle. Then remove the nut from the upper ball joint. The knuckle should rotate out of the way to easier access the coilover.

8. Use a floor jack to support the lower control arm and remove the lower 15mm bolts that hold the coilover to the control arm. [FIGURE 6]

FIG.6



9. Remove the (3) 18mm nuts from the top of the coilover. There is a wire loom clip on one of the factory studs, use a screw driver or small pry bar to remove it (For easier access, half of the fender liner can be removed and folded out of the way using a T15 torx and plastic clip removal tool). [FIGURE 7-10]

FIG.7



FIG.8



FIG.9



FIG.10



10. The coilover can now be removed. [FIGURE 11]

FIG.11



11. Grab the new ICON coilover and make sure the lower bar pin is oriented correctly for ease of bolt installation. This may require using an adjustable wrench or vise to rotate the barpin/bearing as shown. [FIGURE 12]

FIG.12



12. With the new ICON UCA installed into the frame mounts, place the ICON coilover into the coil bucket and lower arm. Apply thread locker to the OEM barpin hardware and insert it through the arm and into the barpin, do this by hand so as to not cross thread the bolts. Torque to 45 ft-lbs.

13. Use the supplied 3/8 bolts, washers and split washers to secure the upper mount to the coil bucket. Torque to 35 ft-lbs. [FIGURE 13 & 14]



FIG.13



FIG.14

NOTE: The coilovers are labeled Driver/Passenger with a sticker on the upper mounting plate

14. The reservoir mount will need to attach to the lower radiator support. The skid plate or splash guard hardware will need to be removed. Depending on the model of truck, the hardware may be different. The bracket is the same for both sides. The offset side will go towards the center of the truck. [FIGURE 15]



FIG.15

15. Install the hose clamps and reservoir onto the reservoir mount and tighten. [FIGURE 16 & 17]



FIG.16



FIG.17

16. Next, you will need to install the differential drop spacers.

17. Support the differential with a floor jack, use a 21mm to remove the driver side bolt and insert the supplied spacer between the frame and diff mount. Apply thread locker to the bolt and torque the bolt to 90 ft-lbs. [FIGURE 18-21]

FIG.18



FIG.19



FIG.20



FIG.21



18. Refer to IIC instructions for wiring and routing.

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/>



ICON VEHICLE DYNAMICS®
PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

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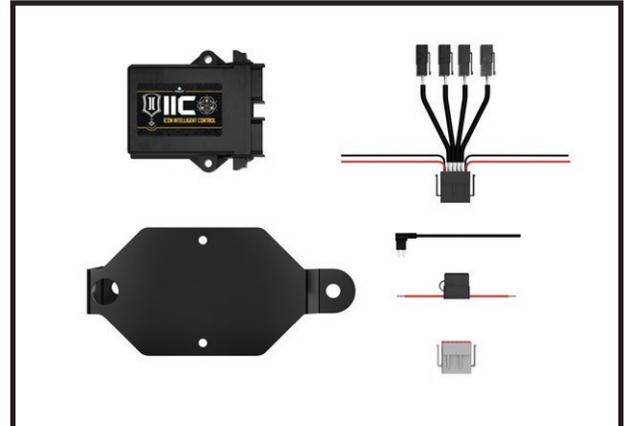
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PART #	DESCRIPTION
73000	23 GM CANYON/COLORADO IIC INSTALL KIT

COMPONENTS INCLUDED	
(1) 170159 23 CANYON COLORADO IIC MOUNT (1) 255600 IIC CONTROLLER	(1) 255601 BLOCK OFF PLUG (1) 255602 MAIN HARNESS IIC CONTROLLER
HARDWARE INCLUDED	
(1) 255605-10 FUSE HOLDER 10 AMP (1) 255607 FUSE TAP LOW PROFILE MINI (2) 605750 BUTT CONNECTOR, 18GA, HEAT SHRINK (3) 605751 TERM LUG 5/16", 18GA, HEAT SHRINK (1) 605753 FUSE, 2 AMP LOW PROFILE MINI (1) 605760 WIRE LOOM, 1/4" X 6 FT	(1) 605926-BLK 5-1/2 X 0.14 NYLON CABLE TIE, BLACK PACK OF 100 (2) RUBBER STRIP 1" X 3" X 1/32", ADHESIVE BACK, 50A (2) 605069 1/4-20 X 1.25 HHCS GR8 YZINC FULLY THREADED (2) 605052 1/4-20 NYLOCK NUT GR8 YZINC (4) 1/4 SAE FLAT WASHER GR8 YZINC
SUPPLIED WITH SHOCKS	
(1) 255604-04 4-FT WIRE HARNESS (1) 255604-08 8-FT WIRE HARNESS	(1) 255604-18 18-FT WIRE HARNESS (1) 255604-14 14-FT WIRE HARNESS
TOOLS REQUIRED	
TORQUE WRENCH WIRE STRIPPER WIRE CRIMPER FLUSH CUTS HEAT GUN	10MM 13MM 7/16 SOCKET / WRENCH 13MM SOCKET / WRENCH
TECH NOTES	
<ol style="list-style-type: none"> 1. WIRE LENGTHS ARE MEASURED FOR A CREW CAB WITH 5 FOOT BED. 2. GOLD WIRE COLOR IN FIGURES DENOTES BASIC WIRE PATH (FOR CLARITY) 3. SEE PAGE 6 FOR WIRE ROUTING DIAGRAM 	
FUSE OPTIONS	
IGN FUSE 20A	



WARNING!

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**** 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

1. Disconnect the positive battery terminal using a 10mm.
2. Begin by installing the shocks purchased alongside the IIC kit. Inside each shock box is the wiring needed to go from the IIC controller to the shocks.
3. Install the IIC controller onto the supplied IIC mount using the 1/4" hardware. There are 2 rubber adhesive strips that go between the mount and IIC controller, install those, then install the controller . [FIGURE 1 & 2]

NOTE: Install the bolt with the threads up for battery clearance.

4. Remove the two bolts that hold the battery clamp using a 13mm. Keep the mount in place and install the IIC mount over the top using the OEM hardware. Torque to 16 ft-lbs.

FIG.1



FIG.2



5. Install the grey block off plug into the grey port of the IIC. It will only fit one way, so do not force it in. [FIGURE 3]

FIG.3



6. Install the main harness into the remaining port of the IIC controller (Pictured controller has the secondary harness installed). [FIGURE 4]

FIG.4



7. Remove the fuse block cover by squeezing the three tabs on the front, rear and driver side.

8. First wire to be cut is the PWR 12V. It will be connected to the stud on the side of the fuse block. A 13mm socket and ratchet can remove that nut. Route the wire so as to leave some slack for future battery maintenance. You will also need to attach the supplied 10amp fuse holder to this wire using the butt connector. Cut the main wire down so the fuse holder can be crimped on and not be excessively long. Next, strip the end of the fuse wire approximately 1/4" and install the 5/16 lug and crimp. Use a lighter to shrink the rest of the terminal insulation around the wire. Install the lug onto the fuse block stud.

9. Next up is the ACC 12V wire. This one will be ran alongside the PWR wire and into the fuse block next to the stud.

10. You will need to pull the F37 (IGNITION COILS 20A) fuse and install the fuse tap in its place. The factory fuse will go in the lower portion of the fuse tap, the IIC 2amp fuse will be placed in the upper portion. As with the PWR wire, leave a little excess wire for future maintenance and install the butt connector and shrink the insulation around the wire with a lighter or heat gun.

FIG.10

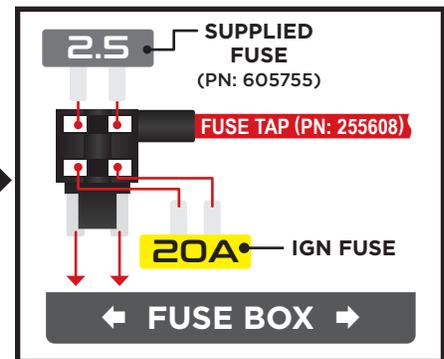
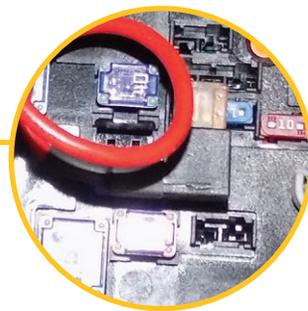
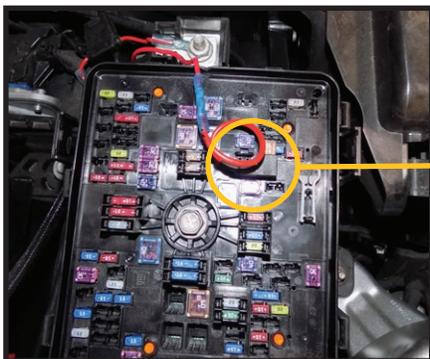


FIG.10B

11. You will need to make 3 small 'V' cuts in the fuse block and cover to allow the AUX wire to fit and the cover to close properly.

FIG.6

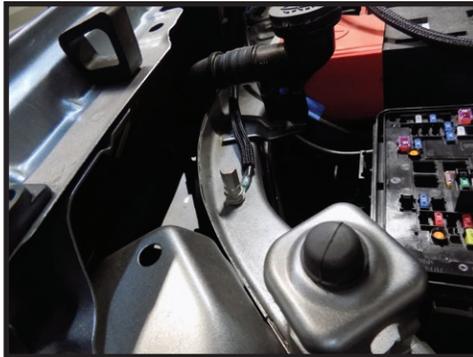


FIG.7

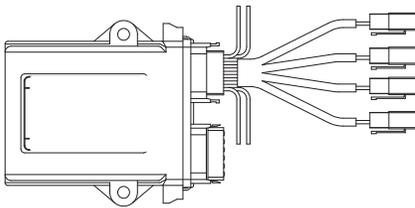


12. The ground wires will be tied together and hooked up just behind the passenger headlight on the factory ground lug. Use a 10mm to remove the lug and stud. Take the two black wires, cut them down to a reasonable length, strip them back about 1/4" and crimp the 5/16" terminal lug onto the end. Use the heat gun or lighter to shrink the terminal around the wire. Install the wire loom over the pair of ground wires and route them along the chassis, under the washer bottle filler neck. Install the terminal loop thru the stud, tighten it down to the chassis, then reinstall the grounding lug. [FIGURE 8]

FIG.8



13. With that wiring complete, you can move onto routing the shock solenoid wires.



PLUG	POSITION	WIRE LENGTH	PART #
#4	DRIVER FRONT	8-FT WIRE	255604-08
#3	PASSENGER FRONT	4-FT WIRE	255604-04
#2	DRIVER REAR	18-FT WIRE	255604-18
#1	PASSENGER REAR	14-FT WIRE	255604-14

CONNECT 255604-08 wire to the #4 plug. Use a Marker, write DF on the connectors.

CONNECT 255604-04 wire to the #3 plug. Use a marker, write PF on the connectors.

CONNECT 255604-18 wire to the #2 plug. Use a marker, write DR on the connectors.

CONNECT 255604-14 wire to the #1 plug. Use a marker, write PR on the connectors.

14. When connecting the plugs to the solenoids, loop the harness back and zip-tie the harness to the solenoid as an added strain relief to the plug.

15. Route the #1 harness down beside the fuse block. Follow the factory harness across the front cross member to the driver shock reservoir. [FIGURE 9 & 10]

FIG.9



FIG.10



16. Route the #2 harness down beside the fuse block, run it down the inside of the frame rail and connect it to the passenger shock reservoir. [FIGURE 11 & 12]

FIG.11



FIG.12

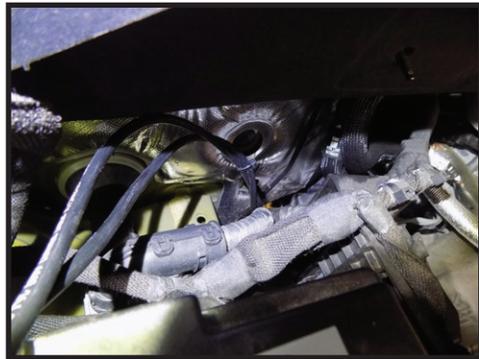


17. Route the #3 and #4 harness down behind the battery, securing it to the harness and brake lines along the firewall. [FIGURE 13 & 14]

FIG.13



FIG.14



18. Continue along the passenger frame rail, following the main wiring loom all the way back to the passenger rear shock. Connect the PR harness to the passenger rear coil. [FIGURE 15 - 17]

FIG.15



FIG.16



FIG.17



19. Continue to route the DR rear harness along the factory wiring loom, securing it along the way until it reaches the shock and connect it to the coil. [FIGURE 18 - 20]

FIG.18



FIG.19

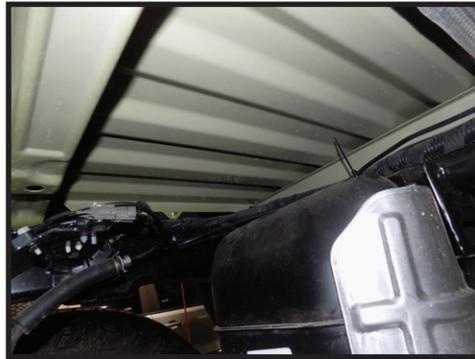


FIG.20



FIG.21



20. Make sure all the added wires are secured with the supplied cable ties and use flush cuts to cut the excess tie. If flush cuts are not available, a regular side cutter or sharp razor blade can be used as well.

21. Reconnect the ground cable to the battery.

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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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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PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

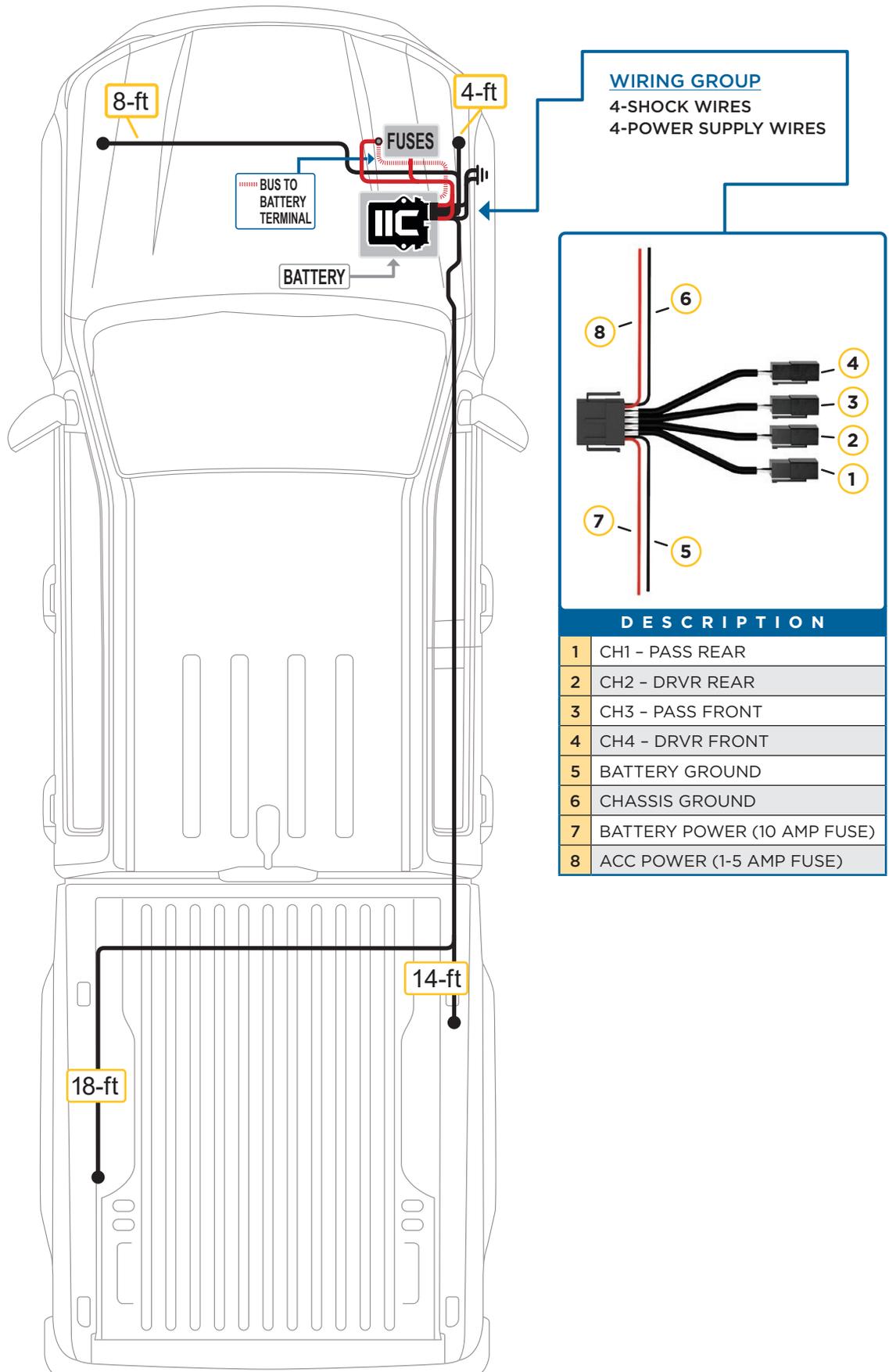
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WIRE ROUTING DIAGRAM: 23 GM CANYON/COLORADO



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PART #	DESCRIPTION
77751EP	GM 31XX-2 CANYON COLORADO 0-1" REAR 2.5 VS PB CDEV

COMPONENTS INCLUDED	
(2) 174962EP-AL GM 31XX-2 CANYON COLORADO 0-1" REAR 2.5 AL PB CDEV UPKG	
HARDWARE INCLUDED	
(4) 257161 HEIM SPACER COM10 X 14MM X 1.925 CZINC (4) 257168 HEIM SPACER COM10 X 14MM X 1.375 CZINC	(1) 255604-14 EXTENSION HARNESS COIL IIC CONTROLLER 14FT (1) 255604-18 EXTENSION HARNESS COIL IIC CONTROLLER 18FT
TOOLS REQUIRED	
FLOOR JACK JACK STANDS	TORQUE WRENCH 21MM SOCKET / WRENCH
TECH NOTES	
<p>1. YOUR ICON SHOCK ASSEMBLIES COME FACTORY CHARGED TO 250 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. ESTIMATED INSTALL TIME: 1-2 HOURS</p>	



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INSTALLATION

1. Place the truck on a flat surface with the parking brake engaged, chock the front tires.
2. Use a suitable floor jack in the manufacturer designated spot on the frame to lift the rear of the truck, then place a suitable jack stand under the frame and set the truck down securely on the jack stand. NEVER WORK UNDER AN UNSUPPORTED VEHICLE.
3. Begin by supporting the rear axle with a floor jack, as you may need to lift or lower it to assist in the shock removal and installation.

4. Use a 21mm to remove the upper and lower bolts securing the shock in place. [FIGURE 1 & 2]

FIG.1



FIG.2



5. With both rear shocks removed, you can install the driver side ICON shock now. The supplied heim spacers should offset the shock inward, away from the frame. Torque the bolts to 110 ft-lbs. [FIGURE 3 & 4]

FIG.3



FIG.4



6. The passenger upper mount will need to be sanded to fit. A barrel sander is the best option but a 90° sander can be used also. Mark out the mount as pictured and begin sanding away. ALWAYS WEAR PERSONAL PROTECTIVE EQUIPMENT. [FIGURE 5 & 6]

FIG.5



FIG.6



7. Apply a layer of spray paint to the sanded area to prevent rust and corrosion.

8. Install the new ICON shock with the spacers offset to push the shock away from the frame. Torque the bolts to 110 ft-lbs. [FIGURE 7 & 8]

FIG.7



FIG.8



9. Refer to IIC controller instructions for wire routing.

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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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/>



ICON VEHICLE DYNAMICS®
PERFORMANCE SUSPENSION SYSTEMS AND SHOCK ABSORBERS

7929 Lincoln Ave. Riverside, CA 92504 Phone: 951.689.ICON Fax: 951.689.1016
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PART #	DESCRIPTION
78660DJ	23 GM CANYON/COLORADO TUBULAR UCA DJ PRO KIT

COMPONENTS INCLUDED	
(1) 174082 GM 31XX-2 DRVR TUBULAR UCA (1) 174083 GM 31XX-2 PASS TUBULAR UCA	(2) 290023 UCA CAP 3M DBL STICK 2.6 X 2.2 X 5MIL
HARDWARE INCLUDED	
4) 177092 SLEEVE 1.000 X .565 X 2.550 CZINC (8) 297034 HAT BUSHING 1.625 X 1.000 X .850 (4) 297043 POLY RING 1.590 X 1.005 X .450 75D BLK (4) 605903 1/4-28 X 90 DEG STEEL ZERK FITTING CZINC	(1) 605969 VIBRATITE RED 2ML BULLET (2) 605862 M6-1.0 X 25MM SHSS 18-8 RAW (2) 605053 1/4 SAE FLAT WASHER GR8 YZINC (2) 605800 M6-1.0 FLANGE NUT GR10.9 YZINC
TOOLS REQUIRED	
JACK JACK STANDS HAMMER ADJUSTABLE WRENCH TORQUE WRENCH T15 T27 TORX 10MM SOCKET / WRENCH 15MM SOCKET / WRENCH	18MM SOCKET / WRENCH 21MM SOCKET / WRENCH PLASTIC PUSH PIN REMOVAL TOOL SMALL FLAT BLADE SCREWDRIVER SMALL PRY BAR BALL JOINT SEPARATOR
TECH NOTES	
<ol style="list-style-type: none"> ONLY COMPATIBLE WITH ULTRA WIDE STANCE TRUCKS. WILL NOT WORK ON CHEVROLET COLORADO WT, LT AND Z71 WORKS ON ALL GMC CANYON MODELS ESTIMATED INSTALL TIME: 4-5 HOURS 	



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

- Place the truck on a flat surface with the parking brake engaged, chock the rear tires.
- Use a suitable floor jack in the manufacturer designated spot on the frame to lift the front of the truck, then place a suitable jack stand under the frame and set the truck down securely on the jack stand. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the front wheels and tires.
- Loosen and remove the speed sensor lines from the upper control arm (Driver side pictured, Passenger side is similar). 10mm can be used to remove the 2 screws that secure the harness. A plastic clip pry tool can be used to remove the clips. [FIGURE 1 & 2]

FIG.1



FIG.2



- Remove the 10mm bolts holding the brake lines and sensor wire onto the knuckle. Also remove the speed sensor itself from the front side of the knuckle, using a T27.

5. Remove the tie rod nut using a 21mm and remove the tie rod of the knuckle using a ball joint separator. [FIGURE 3]

FIG.3



6. Next you will need to loosen and remove the upper joint nut using an 18mm. Then use the ball joint separator to break the ball joint taper free from the knuckle. A well-placed hit with a hammer onto the knuckle can also free the taper. Leave the nut attached so the knuckle does not fall away and pull apart the CV joints. [FIGURE 4]

FIG.4



7. Now support the knuckle with a strap to the frame to keep it from fall away and pulling apart the CV axle. Then remove the nut from the upper ball joint. The knuckle should rotate out of the way to easier access the coilover.

8. Use a floor jack to support the lower control arm and remove the lower 15mm bolts that hold the coilover to the control arm. [FIGURE 5]

FIG.5



9. Remove the (3) 18mm nuts from the top of the coilover. There is a wire loom clip on one of the factory studs, use a screw driver or small pry bar to remove it. (For easier access, half of the fender liner can be removed and folded out of the way using a T15 torx and plastic clip removal tool.) [FIGURE 6 - 9]

FIG.6



FIG.7



FIG.8



FIG.9



10. The coilover can now be removed and access to the upper control arm pivot bolts is possible. [FIGURE 10]

FIG.10



11. Using a 21mm ratchet and 21mm wrench, loosen and remove the upper control arm from the frame mounts. Two ratchets are shown but a wrench can be used inside the coil bucket. [FIGURE 11 & 12]

FIG.11

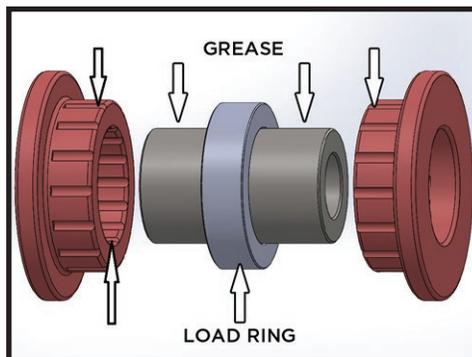


FIG.12



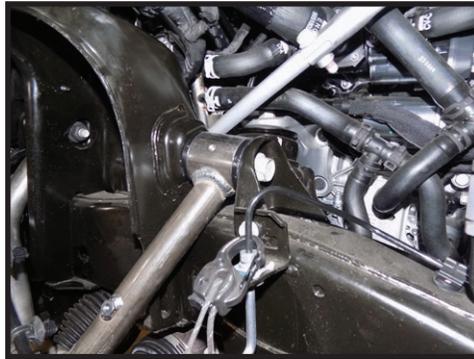
12. Now the ICON Tubular UCA can be prepped and assembled. You will want to apply a high quality Moly grease to the inner and outer diameter of each bushing before installing them into the UCA. Once installed with the sleeve and load ring, Apply a layer of grease to the outer surface that will contact the frame mount pockets. Install the supplied 90° grease zerks so that the zerk faces out when installed. [FIGURE 13]

FIG.13



13. Slip the UCA into the pockets and reinstall the OEM hardware as it was removed. Apply thread locker to the nuts and torque to 120 ft-lbs. Rotate the arm up so the coilover can be installed. [FIGURE 14]

FIG.14



14. Slip the coilover into place and secure with OEM hardware if using the OEM coilover or refer to ICON Coilover instructions for specific hardware.

15. Make sure the harness is routed on top of the arm then reconnect the upper ball joint into the knuckle and secure with supplied nylock nut. Torque to 60 ft-lbs. [FIGURE 15]

FIG.15



16. Secure the harness to the UCA with the supplied M6 hardware and push the clips into the arm. Install dust cover with the supplied 3M tape. [FIGURE 16]

FIG.16



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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