

INSTALLATION INSTRUCTIONS

FactionFab F-Spec / FR-Spec / FL-Spec Coilovers





BILL OF MATERIALS					
Item #	Description	QTY			
1	FRONT PAIR COILOVERS	2			
2	REAR PAIR COILOVERS	2			
3	WRENCHES	2			
4	ADJUSTER KNOBS	4			
5	ADJUSTER RETAINER GROMMET	2			
NOT PICTURED	REAR DAMPER EXTENSION (02-07 FL-SPEC / FR SPEC ONLY)	2			
NOT PICTURED	ADJUSTABLE FRONT END LINKS (BRZ / FR-S / 86 FL-SPEC / FR-SPEC ONLY)	2			

TOOL LIST						
RATCHET / BREAKER BAR						
12mm, 14mm, 17mm, 19mm SOCKET / OPEN END WRENCH						
NEEDLE NOSE PLIERS						
TORQUE WRENCH						
FLAT HEAD SCREW DRIVER						

DISCLAIMER: PLEASE READ AND MAKE SURE YOU FULLY UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO INSTALLING FACTION FAB PRODUCTS AND ACCESSORIES. FAILURE TO INSTALL THE PRODUCT CORRECTLY CAN AND WILL RESULT IN IRREVERSIBLE VEHICLE DAMAGE AND OR PERSONAL HARM. IF YOU DO NOT FEEL COMFORTABLE WITH ANY OF THE REQUIRED STEPS, WE HIGHLY SUGGEST TAKING THE VEHICLE TO A QUALIFIED AND EXPERIENCED TECHNICIAN. FAILURE TO UNDERSTAND THE INSTRUCTIONS WHICH RESULTS IN DAMAGE AND OR INJURY IS THE SOLE RESPONSIBILITY OF THE INSTALLER AND ALL FAULT LIES WITH THAT PARTY AND OR INDIVIDUAL AND IS NOT IN ANY WAY, SHAPE OR FORM THE RESPONSIBILITY OF FACTION FAB.

FACTION FAB PRODUCTS ARE SOLD FOR "OFF-ROAD" USE ONLY AND MAY NOT MEET LEGAL REQUIREMENTS FOR OPERATIONS ON PUBLIC ROADS AND HIGHWAYS. WE PUT THE RESPONSIBILITY SOLELY ON THE END CONSUMER/CUSTOMER TO VERIFY THAT THE PRODUCTS DO NOT AFFECT THE VEHICLES ELIGIBILITY TO BE DRIVEN ON PUBLIC ROADS AND HIGHWAYS. INSTALLATION OF FACTION FAB PRODUCTS MAY VOID FACTORY OR AFTERMARKET WARRANTIES.

USE OF PRODUCT IN A NON-CONFIRMED APPLICATION, DISASSEMBLY OF THE PRODUCT, MODIFICATION OF THE PRODUCT, EXPOSING PRODUCT TO CORROSIVE OR PETROLIUM BASED CHEMICANS WILL VOID ANY AND ALL WARRANTY.

WE HIGHLY RECOMMEND READING THROUGH ALL INSTRUCTIONS BEFORE STARTING INSTALL

INITIAL SETUP

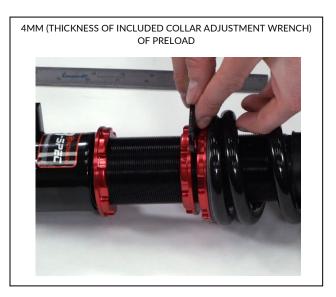
DUE TO THE ADJUSTABLE NATURE OF COILOVERS, THESE **WILL NEED** SETTING UP BEFORE INSTALLATION. FACTIONFAB COILOVERS ARE DESIGNED WITH INDEPENDENT PRELOAD AND RIDE HEIGHT ADJUSTMENT, AND THESE SETTINGS ARE CRITICAL TO PERFORMANCE AND COMFORT OF THE COILOVERS. FOR INFORMATION AND INSTRUCTION ON HOW TO PROPERLY ADJUST AND SET UP THE COILOVERS, WE HAVE ALSO PROVIDED A VIDEO EXPLAINING THE PROCESS:

https://www.youtube.com/watch?v=4BNt36sNOTU

PRELOAD ADJUSTMENT IS REQUIRED BEFORE INSTALL OR HEIGHT ADJUSTMENT

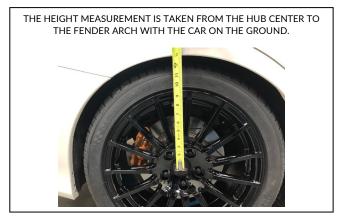
TO SET **PRELOAD**, PLACE THE BOTTOM SPRING SEAT COLLAR SNUG AGAINST THE SPRING WITH NO COMPRESSION. MOVE THE LOCKING COLLAR TO TOUCH THE BOTTOM SPRING SEAT COLLAR. HOLD THE **LOCKING COLLAR** IN PLACE WHILE SPINNING THE **BOTTOM SPRING SEAT COLLAR** UP THE SHAFT TO COMPRESS THE SPRING UNTIL THERE IS A 4MM (OR THE THICKNESS OF THE COLLAR ADJUSTMENT WRENCH) GAP BETWEEN THE LOCKING COLLAR AND THE BOTTOM SPRING SEAT COLLAR. MOVE THE LOCKING COLLAR UP TO THE BOTTOM SPRING SEAT COLLAR AND TIGHTEN.

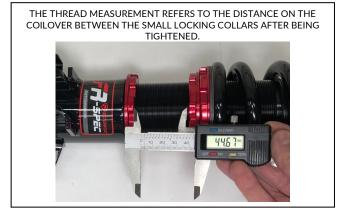
THE LOCKING COLLARS SHOULD ONLY BE TIGHTED TO A SNUG FIT. OVERTIGHTENING CAN LEAD TO DAMAGE OF THE THREADS AND THE COLLARS.



RIDE HEIGHT ADJUSTMENT

THE CHART BELOW SHOWS THE RANGE OF ADJUSTABILITY IN RIDE HEIGHT FOR EACH LINE AND MODEL FITMENT. NOTE THAT VARIATIONS BETWEEN CARS IS ALWAYS POSSIBLE AND THE MEASUREMENTS BELOW SHOULD ONLY BE USED AS A BEGINNING <u>BALLPARK REFERENCE</u> AND <u>DOES NOT GUARANTEE FINAL RIDE</u> <u>HEIGHT ACCURACY</u>. WE **HIGHLY** RECOMMEND PLANNING A 2ND AND POSSIBLE 3RD ADJUSTMENT TO DIAL IN YOUR PREFERRED RIDE HEIGHT.





DO NOT GO OUTSIDE THE MAXIMUM AND MINIMUM RANGE DUE TO THE RISK OF DAMAGE TO THE COILOVERS, AXLES, OR OTHER SUSPENSION AND BODY COMPONENTS. ALWAYS CHECK CLEARANCE AFTER INSTALL.

YOUR CAR WILL NEED AN ALIGNMENT IMMEDIATELY FOLLOWING INSTALLATION OR RIDE HEIGHT ADJUSTMENT OF THE COILOVERS.

	02-07 WRX / 04 STI			05-07 STI			08-14 WRX		
Stock Front	15.125"			14.625"			15.9"		
Stock Rear	14.75"			14.25"			15.25"		
Туре	F-Spec	FR-Spec	FL-Spec	F-Spec	FR-Spec	FL-Spec	F-Spec	FR-Spec	FL-Spec
Max Height Front	14.75"	14.25″	13.5″	14.625"	14.25″	13.5″	14.75"	15"	14.5"
Max Thread Front	75mm	120mm	120mm	85mm	120mm	120mm	75mm	130mm	130mm
Min Height Front	12.375"	12.5″	11.5″	12.5"	12.5″	11.5″	13"	12.5"	11.5"
Min Thread Front	10mm	65mm	55mm	20mm	65mm	55mm	10mm	65mm	45mm
Max Height Rear	14.5"	14.25″	13.5″	14.75"	14.25″	13.5″	13.5"	15.5"	13.5"
Max Thread Rear	45mm	155mm	155mm	135mm	155mm	155mm	35mm	80mm	65mm
Min Height Rear	12.75"	11.75"	10.5″	12.25"	11.75"	10.5″	12.5"	13"	11.75"
Min Thread Rear	10mm	10mm	90mm	75mm	10mm	90mm	5mm	35mm	25mm

	08-14 STI			2015+ WRX / STI			BRZ / FR-S / GR86		
Stock Front	14.625"			15.75"			14.8125"		
Stock Rear	14.75"			16"			14.625"		
Туре	F-Spec	FR-Spec	FL-Spec	F-Spec	FR-Spec	FL-Spec	F-Spec	FR-Spec	FL-Spec
Max Height Front	15"	15"	14.5"	15.5"	15.75"	14.75"	14.75"	14.8"	14.8"
Max Thread Front	70mm	130mm	130mm	95mm	137mm	125mm	75mm	90	75mm
Min Height Front	12.75	12.5"	11.5"	12.75"	12.875"	11.5"	12.375"	12.375"	12"
Min Thread Front	15mm	65mm	45mm	10mm	60mm	40mm	10mm	15mm	1mm
Max Height Rear	15"	15.5"	13.5"	15.625"	16"	14"	14.5"	14.625"	14.625"
Max Thread Rear	55mm	80mm	65mm	55mm	80mm	75mm	45mm	70mm	75mm
Min Height Rear	13.5"	13"	11.75"	13.75"	12.875"	12.5"	12.75"	12.5"	12"
Min Thread Rear	25mm	35mm	25mm	20mm	15mm	30mm	10mm	15mm	18mm

1

RAISE THE VEHICLE AND REMOVE WHEELS. ALWAYS ENSURE PROPER SAFETY PROCEDURE IS FOLLOWED WHEN WORKING UNDERNEATH YOUR CAR, INCLUDING THE USE OF JACK STANDS OR OTHER EQUIPMENT.



FRONT: REMOVE BRAKE LINE BOLT WITH 12mm. REMOVE ABS WIRE BOLT WITH 12mm (STYLE 1) OR PLIERS (STYLE 2).

2



3

REMOVE LOWER MOUNT BOLTS WITH A 19mm SOCKET AND WRENCH.



5

AFTER SETTING PRELOAD AND RIDE HEIGHT, INSERT COILOVER TOP HAT INTO STRUT TOWER USING SUPPLIED 12mm NUTS.



4

REMOVE UPPER TOP HAT NUTS (AND HORN BRACKET ON SOME MODELS) WITH 12mm. MAKE SURE TO HOLD THE STRUT WHEN THE LAST NUT IS REMOVED.



6

NOTE THAT ORIENTATION OF THE SLOTS ON THE FR-SPEC SHOULD BE PARALLEL TO THE FIREWALL.

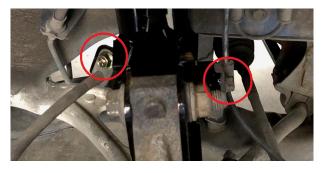


INSERT LOWER MOUNT BOLTS. CAMBER BOLT GOES IN THE TOP HOLE, AND BOTH BOLTS INSERT FROM THE REAR AND POINT TOWARDS THE FRONT OF THE CAR.



SECURE BRAKE LINE TO BRACKET USING SUPPLIED BOLT AND NUT. SECURE ABS LINE TO BRACKET USING OEM 12mm BOLT (STYLE 1) OR CLIP (STYLE 2)

9



PUT WASHER ON THE TOP BOLT, THEN THREAD BOTH TOP AND BOTTOM NUTS. THE TOP CAMBER BOLT ALIGNMENT SHOULD BE SET USING PROPER EQUIPMENT BY A PROFESSIONAL.



10

TORQUE FRONT SUSPENSION BOLTS TO THE FOLLOWING SPECS:

TOP HAT NUTS: 14.5 ft·lbs

LOWER MOUNT NUTS: 129 ft·lbs

BRAKE LINE BRACKET: 23.6 ft·lbs

ABS LINE BRACKET (STYLE 1): 24.3 ft·lbs

CAMBER PLATE BOLTS (FL/FR-SPEC): 16.2 ft-lbs

11

REPEAT ON THE OPPOSITE SIDE OF THE VEHICLE.

FOR REAR STYLE 1 (02-07) GO TO STEP 12-1 ON PAGE 6

FOR REAR STYLE 2 (08+) GO TO STEP 12-2 ON PAGE 8

12-1 STYLE 1 (02-07 MODELS) REAR

FOR SEDAN MODELS, THE REAR SEAT MUST BE REMOVED. 2 12mm BOLTS ON SEAT BOTTOM, THEN 3 12mm BOLTS UNDERNEATH THE BOTTOM TO REMOVE THE SEAT BACK. FOR WAGON MODELS, REMOVE THE STRUT CAP OF THE QUARTER TRIM.



14-1

REMOVE THE LOWER MOUNT BOLTS WITH A 19mm SOCKET AND WRENCH.



16-1

AFTER SETTING PRELOAD AND RIDE HEIGHT, INSERT COILOVER TOP HAT INTO STRUT TOWER USING SUPPLIED 12mm NUTS. DO NOT INSTALL THE OEM METAL CAP, IT WILL NOT FIT WITH THE ADJUSTER KNOBS.



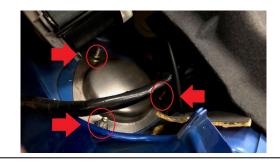
13-1

DISCONNECT BRAKE LINE FROM STRUT. THE RETAINING CLIP VISIBLE HERE WILL NEED TO SLIDE UP. USE PLIERS TO PULL OR A FLAT HEAD / PICK TO PRY BETWEEN THE CLIP AND THE BRACKET.



15-1

REMOVE TOP HAT NUTS WITH 12mm. A WOBBLE, UNIVERSAL JOINT, AND / OR RATCHETING WRENCH WILL BE HELPFUL IN THE TIGHT SPACE. MAKE SURE TO HOLD THE STRUT WHEN THE LAST NUT IS REMOVED.



17-1

INSERT LOWER MOUNT BOLTS. BOTH BOLTS INSERT FROM THE FRONT AND POINT TOWARDS THE REAR OF THE CAR. THREAD NUTS.



18-1

INSERT BRAKE LINE INTO MOUNTING BRACKET, LINING UP THE HEX WITH THE BRACKET. SLIDE RETAINING CLIP ONTO BRAKE LINE TO HOLD LINE IN PLACE. REPEAT ON OTHER SIDE.



TORQUE REAR SUSPENSION BOLTS TO THE FOLLOWING SPECS (STYLE 1):

TOP HAT NUTS: 14.5 ft·lbs

LOWER MOUNT NUTS: 145 ft·lbs

NOTE: IT'S ADVISED TO LEAVE SEAT UNBOLTED UNTIL AFTER ALIGNMENT SERVICE

GO TO STEP 17 ON PAGE 9

12-2 STYLE 2 (08+ MODELS) REAR

REMOVE TRUNK MAT AND / OR STRUT CAP IN THE QUARTER TRIM TO GAIN ACCESS TO STRUT MOUNT. REMOVE NUTS WITH 14mm.



REMOVE LOWER END LINK BOLT WITH 14mm, LOWER STRUT BOLT WITH 17mm, AND OUTER CONTROL ARM BOLT WITH 17mm.



14-2

PIVOT THE CONTROL ARM DOWN AND REMOVE STRUT FROM THE CONTROL ARM AND BODY. AFTER SETTING PRELOAD AND RIDE HEIGHT, INSERT COILOVER TOP HAT INTO STRUT TOWER USING SUPPLIED 14mm NUTS.

NOTE THAT THE STRUT CAP OR QUARTER TRIM MAY NEED TO BE MODIFIED OR REMOVED ON SOME MODELS DUE TO THE ADJUSTER KNOB POSITION.

15-2

REINSTALL BOLTS FOR THE LOWER STRUT, LOWER END LINK, AND OUTER CONTROL ARM (WE FIND IT IS EASIEST IN THAT ORDER). BOLTS SHOULD GO IN FROM THE FRONT AND POINT TOWARDS THE REAR OF THE CAR. THREAD NUTS ON THE BOLTS AND TIGHTEN ONLY AFTER ALL BOLTS ARE IN PLACE.

16-2

TORQUE REAR SUSPENSION BOLTS TO THE FOLLOWING SPECS (STYLE 2):

TOP HAT NUTS: 22 ft·lbs

LOWER END LINK NUT: 33 ft·lbs

08-14 MODELS: LOWER STRUT AND OUTER ARM NUT: 89 ft·lbs

15+ / 86 MODELS: LOWER STRUT AND OUTER ARM NUT: 60 ft·lbs

GO TO STEP 17 ON PAGE 9

13-2

ENSURE ALL LOCKING COLLARS ON THE COILOVERS ARE TIGHT. INSERT ADJUSTER KNOBS INTO THE TOP OF THE COILOVER, WITH THE RETAINER GROMMETS IN THE FRONT COILOVERS TO PROTECT AGAINST DIRT AND DUST IN ENGINE BAY.



18

FOR REAR EXTENDERS ON THE 07-07 MODELS

SECURE EXTENDERS TO TOP HAT NUT WITH THE INCLUDED SET SCREW AND A 2mm HEX KEY (easier before installation in vehicle)



20

END LINK ASSEMBLED EXAMPLE:



19

FOR FRONT END LINKS ON 86 MODELS

MAKE NOTE OF SWAY BAR ANGLE / POSITION BEFORE COILOVER INSTALL. THE ADJUSTABLE END LINK LENGTH SHOULD BE SET TO KEEP THIS SAME ANGLE AND SHOULD MATCH ON BOTH SIDES.

ATTACH END LINK TO SWAY BAR AND COILOVER MOUNT WITH 19MM SOCKET AND INCLUDED LOCK NUTS.

21

INSTALL WHEELS BACK ON THE CAR AND LOWER VEHICLE. CHECK CLEARANCE OF ALL AREAS AROUND THE COILOVER, INCLUDING AXLES, WHEELS, FENDERS, FENDER LINERS, ETC.

THE CAR WILL NOW REQUIRE AN ALIGNMENT TO BE DONE BY A PROFESSIONAL. FAILURE TO DO SO COULD DRASTICALLY AFFECT HANDLING CHARACTERISTICS AND RESULT IN DAMAGE TO WHEELS, TIRES, OR OTHER SUSPENSION COMPONENTS.