



# INSTALLATION INSTRUCTIONS

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



STYLE 1 MODELS AND PART NUMBERS	
2002-2007 WRX / 2004 STI F-SPEC	FFA1.10173.1
2002-2007 WRX / 2004 STI FR-SPEC	FFA1.10173.2
2005-2007 STI F-SPEC	FFA1.10174.1
2005-2007 STI FR-SPEC	FFA1.10174.2

STYLE 2 MODELS AND PART NUMBERS	
2008-2014 WRX F-SPEC	FFA1.10175.1
2008-2014 WRX FR-SPEC	FFA1.10175.2
2008-2014 WRX FL-SPEC	FFA1.10175.3
2008-2014 STI F-SPEC	FFA1.10176.1
2008-2014 STI FR-SPEC	FFA1.10176.2
2008-2014 STI FL-SPEC	FFA1.10176.3
2015+ WRX / STI F-SPEC	FFA1.10177.1
2015+ WRX / STI FR-SPEC	FFA1.10177.2
2015+ WRX / STI FL-SPEC	FFA1.10177.3
2013+ FR-S / BRZ / 86 F-SPEC	FFA1.10186.1
2013+ FR-S / BRZ / 86 FR-SPEC	FFA1.10186.2

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

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

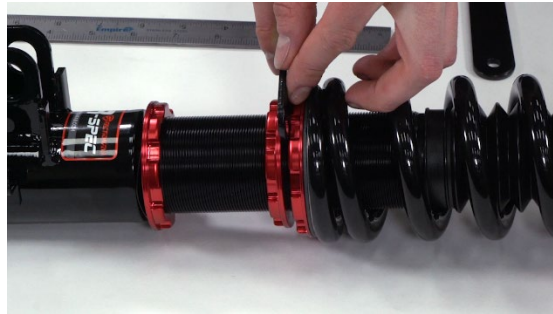
## PRELOAD AND RIDE HEIGHT ADJUSTMENT

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>

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 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.



THE CHART BELOW SHOWS THE RANGE OF ADJUSTABILITY IN RIDE HEIGHT. NOTE THAT SMALL VARIATIONS BETWEEN CARS IS ALWAYS POSSIBLE.

THE HEIGHT MEASUREMENT IS TAKEN FROM THE HUB CENTER TO THE FENDER ARCH WITH THE CAR ON THE GROUND.



THE THREAD MEASUREMENT REFERS TO THE DISTANCE ON THE COILOVER BETWEEN THE SMALL LOCKING COLLARS AFTER BEING TIGHTENED.



**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.**

	FR-S/ BRZ / 86		2015+ WRX / STI			08-14 STI			08-14 WRX			05-07 STI		02-07 WRX / 04 STI	
Type	F-Spec	FR-Spec	F-Spec	FR-Spec	FL-Spec	F-Spec	FR-Spec	FL-Spec	F-Spec	FR-Spec	FL-Spec	F-Spec	FR-Spec	F-Spec	FR-Spec
Stock Front	14.8125"		15.75"			14.625"			15.9"			14.625"		15.125"	
Stock Rear	14.625"		16"			14.75"			15.25"			14.25"		14.75"	
Max Height Front	14.75"	15"	15.5"	15.75"	15.5"	15"	15.25"	14.25"	14.75"	14.5"	14.25"	14.625"	14.875"	14.75"	15"
Max Thread Front	75mm	75mm	95mm	95mm	125mm	70mm	70mm	100mm	75mm	75mm	100mm	85mm	85mm	85mm	80mm
Min Height Front	12.375"	12.875"	12.75"	12.875"	11.5"	12.75"	13"	11.25"	13"	12.625"	11.5"	12.5"	12.375"	12.5"	12.375"
Min Thread Front	10mm	10mm	10mm	10mm	15mm	15mm	15mm	18mm	10mm	10mm	22mm	20mm	15mm	20mm	15mm
Max Height Rear	14.5"	14.5"	15.625"	15.625"	14"	15"	15"	13.5"	13.5"	13.5"	13.5"	14.75"	14.75"	14.75"	14.75"
Max Thread Rear	45mm	45mm	55mm	55mm	65mm	55mm	55mm	66mm	35mm	35mm	66mm	135mm	150mm	135mm	150mm
Min Height Rear	12.75"	12.75"	13.75"	13.75"	12"	13.5"	13.5"	11.5"	12.5"	12.5"	11.5"	12.25"	12.25"	12.75"	12.25"
Min Thread Rear	10mm	10mm	20mm	20mm	20mm	25mm	25mm	19mm	5mm	5mm	19mm	75mm	90mm	75mm	90mm

**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.

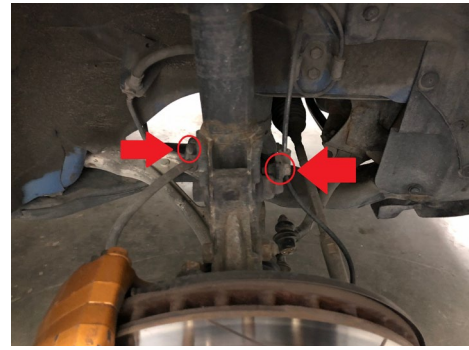
1

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.



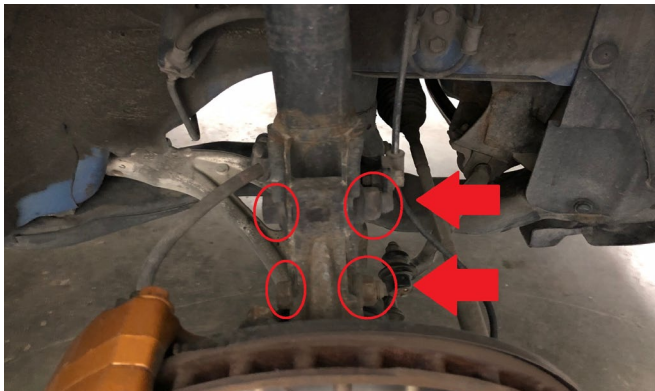
2

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



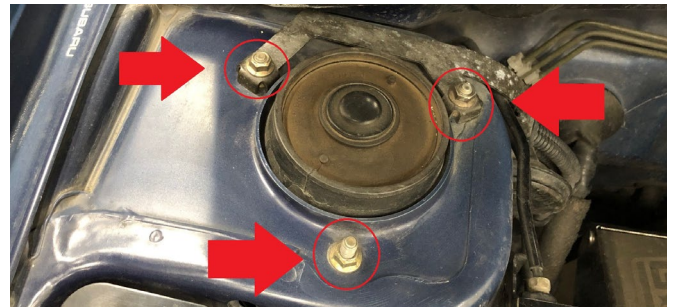
3

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



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.



5

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



6

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





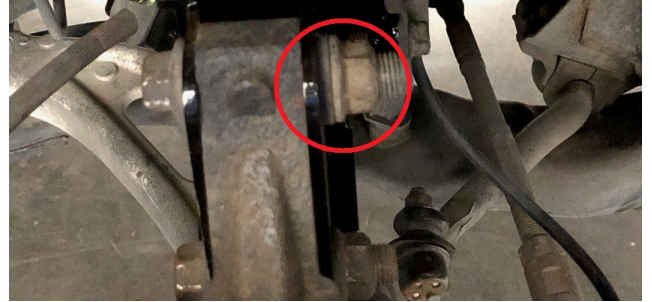
**7**

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.



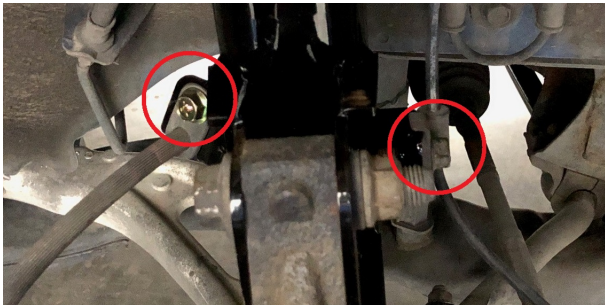
**8**

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.



**9**

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)



**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 (FR-SPEC): 16.2 ft·lbs

**11**

REPEAT ON THE OPPOSITE SIDE OF THE VEHICLE.

FOR REAR STYLE 1, GO TO STEP 12-1.

FOR REAR STYLE 2, GO TO STEP 12-2.

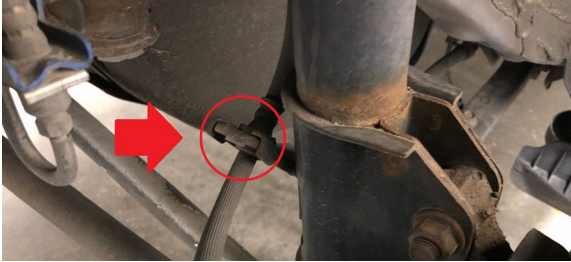
**12-1 STYLE 1 REAR**

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.



### 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.



### 14-1

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



### 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.



### 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.



### 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.



+



### 19-1

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

TOP HAT NUTS: 14.5 ft·lbs

LOWER MOUNT NUTS: 145 ft·lbs

GO TO STEP 17.

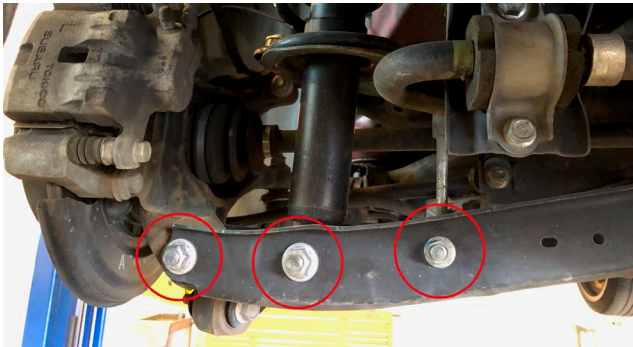
### 12-2 STYLE 2 REAR

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



### 13-2

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.

### 16-2

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

TOP HAT NUTS: 22.1 ft·lbs

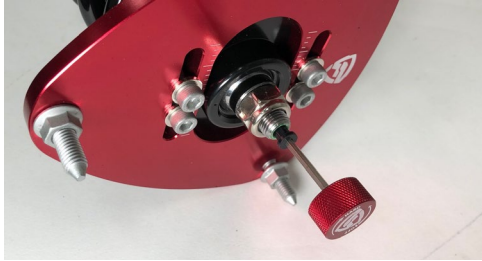
LOWER END LINK NUT: 33.2 ft·lbs

LOWER STRUT NUT: 88.5 ft·lbs

OUTER CONTROL ARM NUT: 88.5 ft·lbs

17

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.



18

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.**