

2001 SUBARU WRX FRONT-MOUNT INTERCOOLER PARTS LIST AND INSTALLATION GUIDE



PARTS LIST

- 1 PC | BAR-AND-PLATE INTERCOOLER
 - 1 PC | STEEL CRASH BAR W/ MOUNTING HARDWARE
 - 2 PC | HOT-SIDE INTERCOOLER PIPES
 - 2 PC | COLD-SIDE INTERCOOLER PIPES
 - 1 PC | BYPASS VALVE FLANGE ADAPTER
 - 1 PC | RESISTOR BLOCK RELOCATION BRACKET WITH MOUNTING HARDWARE
 - 2 PC | LOWER INTERCOOLER BRACKETS W/ MOUNTING HARDWARE
 - 1 PC | ALUMINUM OVERFLOW CAN W/ MOUNTING HARDWARE
 - 1 PC | TURBO TO HOT-PIPE COUPLER (FOR STOCK TURBO)
 - 1 PC | TURBO TO HOT-PIPE COUPLER (FOR AFTERMARKET TURBO)
 - 1 PC | 2.25" STRAIGHT COUPLER
 - 2 PC | 2.75" STRAIGHT COUPLERS
 - 1 PC | 2.75" STRAIGHT COUPLER, 3.25" LONG
 - 1 PC | 2"-2.75" TRANSITION COUPLER
 - 1 PC | BPV RECIRCULATION HOSE
 - 1 PC | PCV HOSE
 - 1 PC | 2" T-BOLT CLAMP
 - 4 PC | 2.5" T-BOLT CLAMPS
 - 4 PC | 3" T-BOLT CLAMPS
 - 1 PC | 1.5" WORM-GEAR CLAMP
 - 1 PC | BYPASS VALVE GASKET
 - 1 PC | BLACK NYLON STRAIGHT FITTING, 3/4" I.D.
 - 1 PC | BLACK NYLON T-FITTING, 3/4" I.D.
 - 1 PC | 12" OF THERMAL WRAP
- MOUNTING HARDWARE

TOOLS NEEDED

- | | |
|--|------------------------------------|
| 10MM, 12MM, 13MM,
14MM SOCKETS | POP-CLIP PLIERS |
| 3/8" DRIVE 6"
EXTENSION | DIAGONAL-CUTTING
PLIERS (DIKES) |
| 10MM, AND 12MM WRENCHES
(PREFERABLY
SELF-RATCHETING) | NEEDLENOSE PLIERS |
| 3/8" DRIVE RATCHET | SMALL CHANNELLOCK PLIERS |
| FLATHEAD SCREWDRIVER | CUT-OFF TOOL OR SAW |
| | FILE OR SANDING BLOCK |

INSTALLATION TIME 5 HOURS

INSTALL DIFFICULTY

DISCLAIMER

- Raise vehicle only on jack stands or on a vehicle lift.
- Allow vehicle to cool completely prior to attempting installation.
- Do not run the engine or drive the vehicle while overheating; serious damage can occur.
- Please dispose of any liquids properly.
- Mishimoto is not responsible for any vehicle damage or personal injury due to installation errors, misuse, or removal of Mishimoto products.
- Mishimoto suggests that a trained professional install all Mishimoto products.

INSTALLATION INSTRUCTIONS

01. Remove the stock inlet hose by disconnecting the two worm-gear clamps.
02. Disconnect the mass airflow (MAF) sensor plug and set aside.
03. Remove the airbox from the vehicle by removing the two lower bolts. (2x 12mm bolts)
04. Transfer the MAF sensor to the Mishimoto air intake pipe (if configured with the Mishimoto intake).
05. Install the supplied Mishimoto air filter onto the intake pipe (if configured with the Mishimoto intake).
06. Attach the air intake pipe and filter onto the turbo inlet pipe (if equipped with the Mishimoto intake). The standard coupler is used with the stock induction hose, whereas the transition coupler is used with some aftermarket silicone induction hoses.

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- 07.** Remove the plastic cover in front of the passenger-side strut tower. Release the two integrated twist-lock fasteners on top to release the cover.



- 08.** Unbolt the solenoid from the bracket. (2x 10mm nuts)
- 09.** Remove the harness plugs from the bracket by squeezing the mounting clips from behind and pulling them out.
- 10.** Remove the bracket from the vehicle. (3x 10mm bolts)
- 11.** Install the solenoid using one of the bolts that secured the bracket. (1x 10mm bolt)



- 12.** Disconnect the resistor near the passenger-side strut tower.



- 13.** Locate the Mishimoto resistor relocation bracket in your kit (the small bracket with two welded studs attached). Install the Mishimoto resistor relocation bracket onto the stock resistor mounting bracket. Then reinstall the brackets where the resistor was originally mounted.

- 14.** Zip-tie the wiring harness connectors together to tuck them out of the way.



- 15.** Remove the upper grille piece. (4x clips on top, 2x pop-clips on lower back side)
- 16.** Remove the three bolts that secure each headlight housing. (3x10mm bolts per side)
- 17.** Disconnect the headlight wiring harness, and remove the headlight assembly. Do this on both sides.
- 18.** Remove the seven pop-clips from the top of the front bumper. (7x pop-clips)
- 19.** Disconnect the fender liners from the front bumper cover. (2x pop-clips per side)
- 20.** Remove the plastic airbox resonator from the inner fender. (2x 12mm nuts)
- 21.** Disconnect the fog light wiring harness.
- 22.** Remove three pop-clips from the bottom of the front bumper. (3x pop-clips)
- 23.** Remove the front bumper cover by sliding it forward from the vehicle.
- 24.** Remove the foam piece covering the crash bar.
- 25.** Remove the stock crash beam. (8x 14mm bolts)

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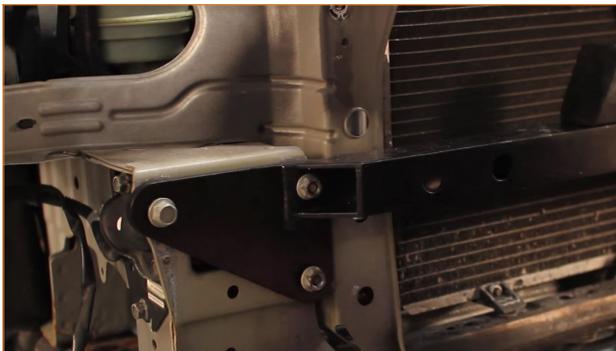
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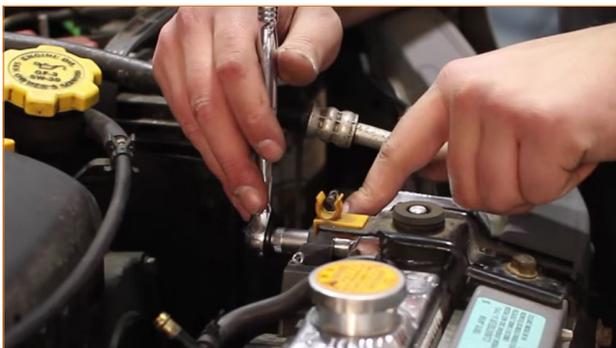
- 26.** Bend the three tabs along the radiator support bracket upward to make room for the intercooler.



- 27.** Position the supplied crash bar/ intercooler mounting bar where the stock crash beam was previously located, and secure with the stock hardware. (4x 14mm nuts, 2x 14mm bolts)



- 28.** Remove the two bolts from the top of the coolant reservoir tank, and disconnect the hose.
- 29.** Remove the coolant reservoir tank from the engine bay by sliding it upward and out of the bracket. (2x 10mm bolts)
- 30.** Remove one bolt from the fan shroud near the reservoir location. The supplied mounting bracket will attach here. (1x 10mm bolt)



- 31.** Remove the three bolts that secure the vent tube to the front of the stock top-mount intercooler. (3x 10mm bolts)
- 32.** Disconnect the rubber hoses from the vent tube in front of the top-mount intercooler.
- 33.** Remove the two bolts that secure the stock bypass valve (BPV) to the intercooler. Slide the BPV out of the intercooler, but leave the other hoses attached. (2x 12mm bolts)
- 34.** Loosen the clamp from the turbocharger outlet.
- 35.** Loosen the clamp on the intercooler outlet, where it attaches to the intake manifold.
- 36.** Remove the two bolts securing the intercooler on each side. (2x 12mm bolts)
- 37.** Remove the intercooler from the vehicle.
- 38.** Remove both intercooler mounting brackets from the intake manifold. Each bracket is secured by two bolts. (4x 12mm bolts)
- 39.** Install two black fittings into the Mishimoto silicone hose. (1x straight fitting, 1x T-fitting)
- 40.** Connect the Mishimoto silicone hose to the stock PCV hose. The straight fitting goes on the driver side, while the T-fitting goes on the passenger side. This hose replaces the vent tube you removed earlier.



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- 41.** Wrap the upper fuel line using the provided fireproof heat wrap. (Note: Always wear gloves when working with this wrap, as it contains fiberglass.)

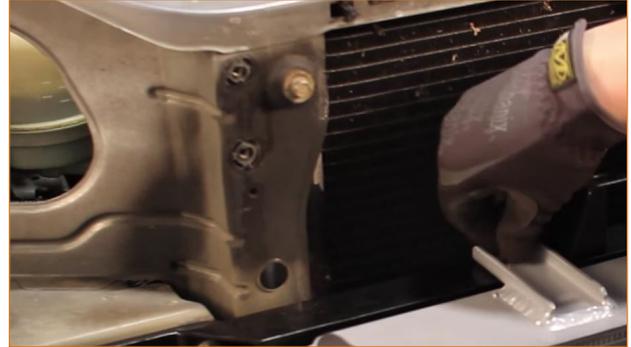


- 42.** Secure the Mishimoto charge pipe onto the turbocharger outlet using the provided coupler and clamps. Snug the clamps, but do not fully tighten. You may need to reposition this pipe when installing the rest of the piping. Note: stock TD04 or VF series turbochargers will use the smaller outlet hose, whereas aftermarket 16G or 18G turbos will use the larger outlet hose. (2x clamps)

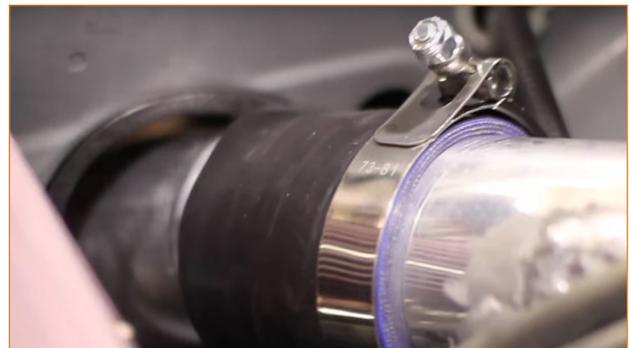


- 43.** Maneuver the second portion of the charge pipe up through the bottom of the car and behind the frame on the driver side, until it meets the other segment of the Mishimoto charge pipe, next to the battery. If needed, disconnect the battery and move to the side for better access. (Note: Always disconnect the negative terminal first when removing a battery.)
- 44.** Join the two hot-side pipes near the battery using the supplied coupler and clamps. Snug the clamps, but do not fully tighten. (2x clamps)

- 45.** Position the intercooler onto the previously installed intercooler bracket, and install the supplied hardware for the upper bolts, but do not fully tighten. (2x 13mm bolts)



- 46.** Attach the charge pipe to the driver-side end tank of the intercooler using the supplied coupler and clamps. (2x clamps)
- 47.** Now that the charge pipe is fully installed, go back and fully tighten all the clamps. (6x clamps)
- 48.** Install the Mishimoto cool-side charge pipe onto the throttle body of the car using the supplied coupler. Snug the clamps, but do not fully tighten.
- 49.** Maneuver the second cold-side intercooler pipe in front of the wheel well and up through the circular cutout of the well.



- 50.** Join the two segments of cold-side piping together in the engine bay using the supplied coupler and clamps. Snug the clamps, but do not fully tighten. (2x clamps)
- 51.** Join the cold-side pipe to the end tank of the intercooler using the supplied coupler and clamps. (2x clamps)
- 52.** Fully tighten all the clamps on the cold-side piping. (6x clamps)

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- 53.** Install the BPV adapter onto the BPV, ensuring that the gasket is placed between the adapter and valve to prevent any leaks. Secure with the stock hardware. Adjust the position of the BPV by squeezing the spring clamp and twisting the valve. (2x 12mm bolts)



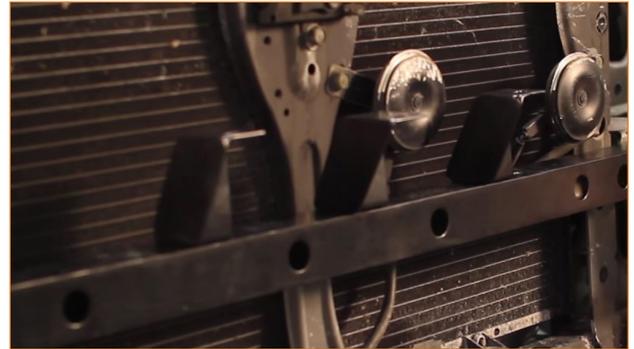
- 54.** Attach the Mishimoto BPV hose from the BPV adapter to the port on the cold-side pipe, near the throttle body. Secure with the supplied worm-gear clamps. (2x worm-gear clamps)



- 55.** Install the lower intercooler mounting brackets on the bottom of the intercooler. They attach to the vehicle using the existing two 12mm bolts on the subframe. (2x 12mm bolts, 2x 10mm bolts)



- 56.** You can now tighten the upper intercooler mounting bolts.
- 57.** Attach the overflow reservoir and bracket to the fan shroud. Reinstall the overflow hose, and swap the overflow cap from the stock reservoir. (2x 10mm bolts)
- 58.** Install the three supplied brackets onto the crash bar using six bolts. The larger holes of the brackets should face upward. The bumper cover will be attached to these brackets. (6x 10mm bolts)



- 59.** The front bumper cover must be modified to fit the intercooler. Use a cutoff wheel to cut away the center vent and fog light housings. This may take several tries to get the correct fitment. (Remember, you can always cut off a little more, but you can't add it back.)
- 60.** You can now reinstall the front bumper cover. The pop-clips in the middle of the front bumper will attach to the Mishimoto crash bar.
- 61.** Reattach the fender liners to the bumper cover. (2x pop-clips per side)
- 62.** Reattach the headlights, and reconnect all harnesses. (3x 10mm bolts each side)
- 63.** Reattach the upper grille to the vehicle. (4x clips on top, 2x clips on the lower back side)

Congrats! You just finished installing the 2001 Subaru WRX Front Mount Intercooler.