

# INSTALLATION GUIDE

2018+ KIA STINGER GT INTERCOOLER KIT | SKU: MMINT-STNGR-18



SCAN CODE OR <u>CLICK HERE</u> TO WATCH THE INSTALLATION VIDEO

#### **TABLE OF CONTENTS**

Pg 01 RESOURCES & CONTACT INFORMATION

- Pg 02 EXPLODED DIAGRAM
- Pg 03 PARTS BREAKDOWN
  - IMPORTANT SAFETY INFORMATION TOOLS NEEDED INSTALLATION TIME INSTALLATION DIFFICULTY
- Pg 04 INSTALLATION INSTRUCTIONS
- Pg 13 DISPOSAL INSTRUCTIONS WARRANTY INFORMATION

CALL 1-877-GOMISHI CUSTOMER SERVICE HOURS: MON-FRI 8:30AM-5:00PM EST

Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2">Image: Colspan="2"

Image: Colspan="2"
Image: Colspan="2"

Image: Colspan="2"
Image: Colspan="2"

Image: Colspan="2">Image: Colspan="2"

Image: Colspan="2"
Image: Colspan="2"

Image: Colspan="2">Image: Colspan="2"

Image: Colspan="2"
Image: Colspan="2"

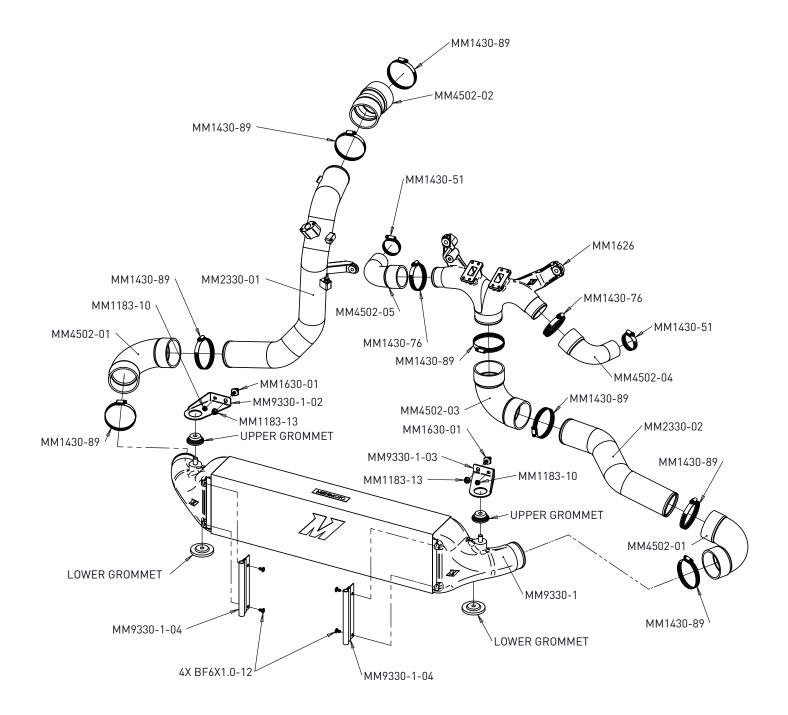
Image: Col

> WEBSITE www.mishimoto.com

> > ENGINEERING BLOG



#### 2018+ KIA STINGER GT PERFORMANCE INTERCOOLER KIT EXPLODED DIAGRAM



- 2



# 2018+ KIA STINGER GT PERFORMANCE INTERCOOLER KIT PARTS BREAKDOWN AND SAFETY INFORMATION

PARTS BREAKDOWN		
INTERCOOLER ASSEMBLY		
DESCRIPTION	QTY	
INTERCOOLER	1	
DIVERTER	2	
BOLT	4	
REUSE OEM GROMMET	2	
REUSE OEM GROMMET	2	
BRACKET	1	
BRACKET	1	
STANDOFF	2	
NUT	2	
NUT	2	
COLD-SIDE ASSEMBLY		
COLD-SIDE PIPE	1	
INTERCOOLER COUPLER	1	
TB COUPLER	1	
HD WORM GEAR CLAMP	4	
HOT-SIDE ASSEMBLY		
HOT-SIDE PIPE	1	
INTERCOOLER COUPLER	1	
HS MANIFOLD COUPLER	1	
MANIFOLD	1	
DS TURBO COUPLER	1	
PS TURBO COUPLER	1	
HD WORM GEAR CLAMP	2	
HD WORM GEAR CLAMP	2	
HD WORM GEAR CLAMP	4	
	LER ASSEMBLYDESCRIPTIONINTERCOOLERINTERCOOLERDIVERTERBOLTREUSE OEM GROMMETREUSE OEM GROMMETBRACKETBRACKETSTANDOFFSTANDOFFNUTDE ASSEMBLYCOLD-SIDE PIPEINTERCOOLER COUPLERTB COUPLERHD WORM GEAR CLAMPHOT-SIDE PIPEINTERCOOLER COUPLERBRANIFOLD COUPLERHS MANIFOLD COUPLERPS TURBO COUPLERHD WORM GEAR CLAMPHD WORM GEAR CLAMPMANIFOLDNUTBO COUPLERHD WORM GEAR CLAMPHD WORM GEAR CLAMPHD WORM GEAR CLAMP	

#### **IMPORTANT SAFETY INFORMATION**

- Mishimoto recommends you use safety glasses and protective gloves during the install of their products
- > 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
- If you need any assistance while installing our products, reach out to our Customer Service Team at 1-877-GOMISHI

#### **TOOLS NEEDED**

ANGLE GRINDER	1/4" DRIVE RATCHET & EXTENSIONS
8MM SOCKET	EXTENSIONS
10MM SOCKET	POP-CLIP REMOVAL TOOL
	PICK TOOL & LARGER PICK TOOL
12MM SOCKET	SCISSORS
14MM SOCKET	
21MM SOCKET	PLIERS
	FLATHEAD SCREWDRIVER
3/8" DRIVE RATCHET & EXTENSIONS	4MM ALLEN KEY

# INSTALLATION TIME 4.5 HOURS

CONTINUED ON FOLLOWING PAGE



#### **INSTALLATION INSTRUCTIONS**

**!!!** Read all important safety information prior to installing our products.

Note: This install does require you to cut your stock radiator shrouding.

**Note:** This diagram should be used to establish the correct locations for all the included couplers. You can find a copy of the diagram on the product page of our website.

**01.** Remove the clips that secure the front edge of the bumper. (5x pop-clips)



02. Lift the corner trim pieces from the edges of the engine bay.



03. Remove the bolts that secure the top corners of the bumper. (2x

#### 10mm bolts)



**04.** Remove the clips that secure each wheel well liner and the bolts on the upper edge of the bumper. (6x pop-clips, 2x 10mm bolts)

- 05. Remove the splash shield from under the vehicle. (10x pop-clips, 6x 10mm bolts)
- **06.** Turn the plastic nut by hand to release the lower splash shield.



**07.** Disconnect the electrical harnesses behind the bumper on the driver side.

- **08.** Pull on the corners of the front bumper to release them.
- 09. Pull the front bumper from the vehicle.

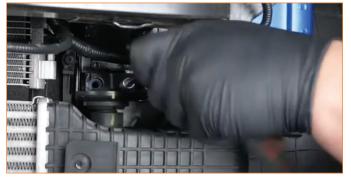
**10.** Release the clip on the hot-side pipe and clamp on the cold-side pipe to separate them from the intercooler. (1x spring clip, 1x worm gear clamp)



CONTINUED ON FOLLOWING PAGE



11. Loosen the upper intercooler brackets. Support the intercooler so it does not fall. (2x 12mm bolts, 2x 10mm nuts)



Pull the intercooler out of the vehicle.

13. Remove the bolts that secure the intake ducting. (6x 10mm bolts)

14. Remove the bolts that secure the shrouding above the crash beam. (2x 10mm nuts, 4x 10mm bolts)

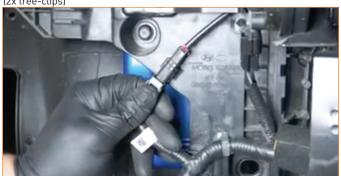
A. Note: The shrouding shown here is already cut and may appear differently on your vehicle.

15. Disconnect the ambient temperature sensor.



**16.** Disconnect the electrical harnesses for both horns and the hood latch.

(2x tree-clips)



A. Note to remove clip securing harness to body on passenger side

17. Release the lock and depress the tab on the remaining electrical harness to disconnect it. (1x tree-clip)



18. Disconnect the electrical harness for the smart cruise control radar

unit at the top center of the grille.



- 19. Remove the loose shrouding.
- 20. Lift the cover off the engine.
- **21.** Separate the vacuum line from the cold-side intercooler pipe.

(1x spring clamp)



CONTINUED ON FOLLOWING PAGE



**22.** Remove the blow-off valve solenoid attached to the cold-side intercooler pipe. (1x 10mm bolt)

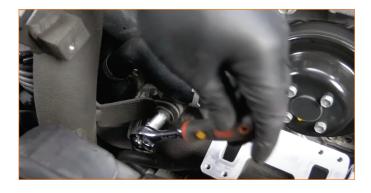


- 23. Separate the hoses from the blow-off valves. (2x spring clamps)
- 24. Remove the blow-off valves. (8x 10mm bolts)





**25.** Remove the bolt that secures the bracket for the cold-side pipe. (1x 10mm bolt)



26. Disconnect the TMAP sensor on the cold-side pipe.



**27.** Loosen the clamp where the cold-side coupler meets the throttle body. (1x tamper-proof cap, 1x worm gear clamp)

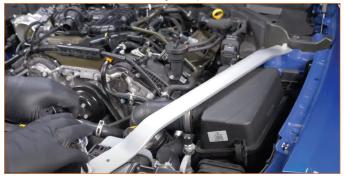
28. Remove the cold-side pipe from the engine bay.



#### CONTINUED ON FOLLOWING PAGE



29. Remove the strut bars in the engine bay. (4x 12mm bolts)



**30.** Loosen the hose clamp on the passenger-side intake tube. (1x worm gear clamp)

**31.** Undo the four clips that secure the airbox, and then remove the passenger-side intake. (4x clips)

**32.** Separate the vacuum line connected to the driver-side intake.

(1x spring clamp)



**33.** Separate the second vacuum line attached to the intake from the engine port. (1x spring clamp)



**34.** Loosen the hose clamp on the driver-side intake tube. (1x worm gear clamp)

**35.** Undo the four clips that secure the airbox, and then remove the driver-side intake. (4x clips)

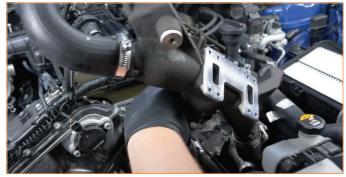
**36.** Loosen the clamps at the turbo outlets and slide the couplers off those ports. (2x tamper-proof caps, 2x worm clamps)



37. Remove the nuts that secure the blow-off valve pipe. (2x 14mm nuts)



38. Remove BOV and Hot-Side pipe



#### CONTINUED ON FOLLOWING PAGE



39. Mark the shrouding removed earlier as shown here.





**40.** Cut the foam from the shrouding.

41. Mark the lower tabs on the shrouding as shown here.



42. Cut the lower tabs where marked.

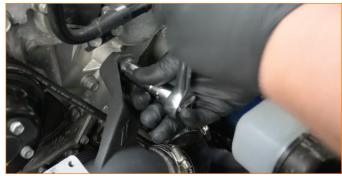


43. Cut across the lines drawn on the sides of the ducting.

- 44. Sand the areas where you made your cuts.
- **45.** Attach the couplers to the Mishimoto blow-off valve pipe. Leave the clamps loose for now. (2x worm gear clamps)



**46.** Install the couplers on the Mishimoto blow-off valve pipe to the turbo outlets and align the grommets on the pipe to the studs on the front of the engine. (2x 14mm nuts, 2x worm gear clamps)



#### CONTINUED ON FOLLOWING PAGE



- **47.** Tighten the nuts on the studs and all the clamps on the couplers.
- **48.** Attach the Mishimoto coupler to the bottom of the blow-off valve pipe. Leave this clamp loose. (1x worm gear clamp)



49. Slide the hot-side pipe into the coupler installed in the previous step.

Leave this clamp loose. (1x worm gear clamp)



50. Attach the next coupler to the other end of the hot-side pipe. Leave

this clamp loose. (1x worm gear clamp)



51. Tighten the clamp at the bottom of the blow-off valve pipe.

52. Reinstall the driver-side intake and reattach the hoses. (4x clips, 2x spring clamps, 1x worm gear clamp)

**53.** Reinstall the passenger-side intake and reattach the hoses. (4x clips, 1x worm gear clamp)

**54.** Transfer the TMAP sensor on the stock pipe to the Mishimoto coldside pipe. (2x 10mm bolts)

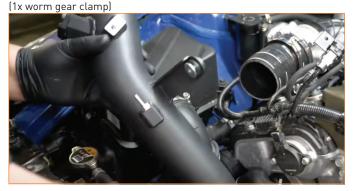
A. Note: If necessary, replace the O-ring on the TMAP sensor with the one provided in your kit.



55. Install a coupler to the throttle body. (1x worm gear clamp)



**56.** Feed the cold-side intercooler pipe down toward the intercooler.



CONTINUED ON FOLLOWING PAGE



57. Secure the bracket for the cold-side pipe. (1x 10mm bolt)



58. Tighten all the clamps on the pipe.

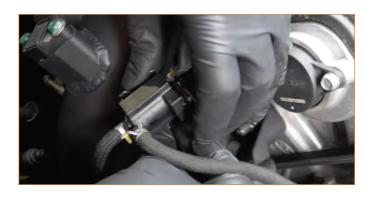
59. Reinstall the blow-off valves and hoses. (8x 10mm bolts, 2x spring



60. Reconnect the vacuum line to the cold-side pipe. (1x spring clamp)



**61.** Attach the blow-off valve solenoid to the cold-side pipe. (1x 10mm bolt)



62. Reconnect the TMAP sensor.



**63.** Install a coupler to the cold-side intercooler pipe. (1x worm gear clamp)



#### CONTINUED ON FOLLOWING PAGE

- 10



**64.** Reinstall the upper shrouding piece. (2x 10mm nuts, 4x 10mm bolts)



- **65.** Reinstall the two intake ducting pieces. (6x 10mm bolts)
- 66. Reconnect the electrical harnesses by the crash beam.
- 67. Use one of the provided standoffs on each side of the crash beam.(2x 21mm standoffs)



**68.** Transfer the top grommets from the stock intercooler to the Mishimoto intercooler.



69. Place the bottom grommets in the brackets on the vehicle.



- 70. Place a clamp on both the inlet and outlet of the intercooler.(2x worm gear clamps)
- 71. Release the ambient temperature sensor from the bracket.(1x tree-clip)
- 72. Bend the ambient temperature sensor bracket forward.

A. Note: If you do not want to bend the bracket, you may remove the crash beam instead.



73. Install the Mishimoto intercooler.



CONTINUED ON FOLLOWING PAGE

- 11



74. Secure each side of the intercooler with the provided brackets and

hardware. (2x 10mm nuts, 2x 12mm nuts)



**75.** Bend the ambient temperature sensor bracket back to its original position.

- 76. Secure the ambient temperature sensor to the bracket. (1x tree-clip)
- **77.** Tighten the clamps on the intercooler and piping. (5x worm gear clamps)
- 78. Attach the provided ducting to the intercooler. (4x 4mm Allen bolts)



- 79. Reinstall the strut bars. (4x 12mm bolts)
- 80. Place the bumper over the front of the vehicle.
- 81. Reconnect the electrical harnesses within the bumper.
- 82. Reinstall the lower splash shield. (10x pop-clips, 6x 10mm bolts)

**83.** Secure the wheel well liners and edges of the bumper. (2x 10mm bolts, 6x pop-clips)

84. Secure the top corners of the bumper. (2x 10mm bolts)

- 85. Reinstall the corner trim pieces to the edges of the engine bay.
- 86. Secure the front edge of the bumper. (5x pop-clips)
- 87. Reinstall the engine cover.

Congratulations! You have finished installing the Mishimoto 2018+ Kia Stinger GT Performance Intercooler Kit.

\*For **Care & Maintenance, Disposal Instructions**, and **Warranty Information** continue to the following page.



# 2018+ KIA STINGER GT **PERFORMANCE INTERCOOLER KIT DISPOSAL INSTRUCTIONS AND** WARRANTY INFORMATION

#### **DISPOSAL INSTRUCTIONS**

- > Do not dispose of any product as unsorted municipal waste. Use separate collection facilities. Contact your local authority for information regarding the collection systems available.
- > Never improperly dispose of any coolant, oil, or other chemicals.

#### WARRANTY INFORMATION



- > All claims must be accompanied with a picture of the Mishimoto product showing the issue for which the claim is being submitted.
- Mishimoto asks that the customer inspect their purchased item for any damage immediately upon arrival.
- > Any product deemed dead on arrival (DOA) must be claimed within 14 business days of delivery. Claims outside of this time frame will not be covered under the Mishimoto Lifetime Warranty.
- > This warranty does not include payment and/or reimbursement of the cost of labor in connection with the removal of any product returned pursuant to the warranty policy or in connection with the installation of any replacement items provided under the warranty policy.
- > Mishimoto has the right to refuse a claim at any time.
- > When Mishimoto accepts a claim, Mishimoto retains full discretion to choose if it will: (i) repair or replace purchaser's original Mishimoto product; (ii) replace purchaser's original Mishimoto product with the most current available model; or (iii) provide the purchaser with a gift card redeemable on Mishimoto.com in the amount of the original purchase price of the original Mishimoto product. The provision of a replacement of a Mishimoto product is subject to availability and Mishimoto retains the right to substitute any warranty claim item with a comparable item or credit at any time.

- > If Mishimoto determines that it will provide a replacement item in connection with a claim under this warranty policy, and such item is out of stock, Mishimoto will place the customer on backorder and ship the replacement product to the purchaser once it becomes available.
- > Mishimoto is not liable for incorrect shipments in connection with a claim if a claim form is completed incorrectly, or if a model number is not included in a claim.
- > If you have a vehicle equipped with an automatic transmission, please make sure to specify this within the text box on the claim form. Mishimoto is not responsible for incorrect replacement shipments if transmission type is not indicated.



**Reproductive Harm** www.P65Warnings.ca.gov

This product can expose you to chemicals which are known to the state of California to cause cancer. For more information visit: www.p65warnings.ca.gov