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### CORKSPORT POWER SERIES INTAKE





NOTE: THESE INSTRUCTIONS WERE WRITTEN FOR REFERENCE ONLY AND THE USE OF A FACTORY SERVICE MANUAL IS RECOMMENDED. PLEASE READ THESE INSTRUCTIONS THOROUGHLY PRIOR TO STARTING INSTALLATION.



NOTE: THESE INSTALLATION INSTRUCTIONS ARE FOR USE WITH A 2010+ MODEL YEAR, IF YOU HAVE A 2004-2009, PLEASE CONTACT US FOR THE APPROPRIATE INSTRUCTIONS FOR YOUR VEHICLE.



WARNING: DISCONNECT THE NEGATIVE TERMINAL OF THE BATTERY PRIOR TO STARTING INSTALLATION. THIS PROMOTES A FRESH LEARNING CYCLE BY THE ENGINE MANAGEMENT SYSTEM WHICH WILL PROVIDE THE BEST RESULTS FOR YOUR CAR.

PART NUMBER:
AXL-6-117
TIME ESTIMATE:
15-45 MIN
WRENCH RATING:

MODEL MAZDA3 YEAR 2010+

TRIM

#### TOOLING LIST:

1/5

3/8 DRIVE RATCHET
10MM LONG SOCKET
3MM ALLEN WRENCH

SMALL PHILLIPS SCREWDRIVER

### OPTIONAL TOOLING:

10mm END WRENCH

LARGE PHILLIPS SCREWDRIVER

NEEDLE NOSE PLIERS

#### PARTS LIST:

MOLDED SILICONE COUPLER

ALUMINUM MAF HOUSING W/ 2x STAINLESS STEEL INSERTS CORKSPORT DRYFLOW AIR FILTER

2x 3.5" T-BOLT CLAMP

1x 2.75" T-BOLT CLAMP

2x M4x.7 12MM LONG SOCKET HEAD CAP SCREWS

2x M6x.7 Locking Flange Nuts

1x 5/8-3/5 LOOM CLAMP



FOR HELP WITH INSTALLATION, CALL 360-260-CORK (2675)

# INSTALLATION INSTRUCTIONS: CORKSPORT SHORT RAM INTAKE FOR 2010+ MAZDA 3

### HOW THE INSTRUCTIONS WORK

TO BEST COVER ALL OF OUR CUSTOMERS EXPERIENCE LEVELS AND FAMILIARITY WITH THE SYSTEMS ON THEIR MAZDA, WE HAVE BROKEN OUR INSTRUCTIONS DOWN INTO NUMBERED STEPS, EACH OF WHICH HAS THE CORE INFORMATION IN THE HEADER WITH ADDITIONAL DETAIL AS NEEDED DEPENDING ON YOUR EXPERIENCE. IF YOU HAVE A HIGH LEVEL OF EXPERIENCE, YOU CAN JUST USE THE CHECKLIST BELOW AND THEN SKIP TO THE STEP NUMBER WHERE YOU NEED HELP OR ASSISTANCE. VIDEO ASSISTANCE MAY ALSO BE AVAILABLE FOR CERTAIN STEPS AND IS INDICATED BY THE HD ICON: AREAS WHERE THERE IS A SAFETY CONCERN ARE INDICATED BY THE WARNING ICON: CAUTIONARY AREAS (WHERE PARTS ARE FRAGILE, ETC) ARE INDICATED BY THE CAUTION ICON: KEY TIPS ARE INDICATED WITH THE LIGHT BULB ICON:

		WHERE THERE IS A SAFETY CONCERN ARE INDICATED BY THE WARNING ICON:
•		CAUTIONARY AREAS (WHERE PARTS ARE FRAGILE, ETC) ARE INDICATED BY THE CAUTION
		ICON: (7) KEY TIPS ARE INDICATED WITH THE LIGHT BULB ICON:
	Phospharia .	MANCE PERFORMAN
0		OVERVIEW/CHECKLIST:
	46	THIS IS AN OVERVIEW OF EACH OF THE STEPS OF THE BUILD. YOU CAN USE THIS AS A
1		REFERENCE AND A CHECKLIST AS YOU BUTTON UP THE WORK ON THE CAR.
II		1A) DISCONNECT THE NEGATIVE BATTERY TERMINAL & DISCONNECT THE
	_	VALVECOVER BREATHER HOSE FROM THE FACTORY RUBBER COUPLER.
		1B) REMOVE 10MM HEX HEAD BOLT SECURING FACTORY AIRBOX.
		1c) DISCONNECT THROTTLE BODY HOSE CLAMP.
	Er FOR	TD) DISCONNECT THE MAF HOUSING HARNESS PLUG.
		1E) DISCONNECT THE MAF HARNESS CLIP FROM THE AIRBOX.
		1F) UNLATCH HOSE FROM CLIP ON FACTORY MAF HOUSING.
		1G) REMOVE THE AIRBOX ASSEMBLY, COUPLER AND MAF SENSOR FROM THE ENGINE COMPARTMENT, DISCONNECTING BOX FROM GROMMETS IN CHASSIS.
		1H) DISCONNECT FACTORY PLASTIC INLET TUBE FROM LATCH CLIPS ON RADIATOR CORE SUPPORT.
		2A) REMOVE TWO SCREWS FROM MAF SENSOR AND PULL MAF SENSOR FROM THE AIRBOX USING A ROTATING/PULLING MOTION. DO NOT DAMAGE O-RING - DON'T REMOVE THE SENSOR AT AN ANGLE, PULL STRAIGHT UP WHILE TURNING.
		28) BOLT MAF SENSOR INTO CORKSPORT MAF HOUSING ALIGNED AS SHOWN IN FIGURE 2A.
AN		2C/D) ASSEMBLE THE INTAKE AS SHOWN IN FIGURE 2C.
		3A) INSTALL INTAKE ASSEMBLY ONTO THROTTLE BODY & TIGHTEN CLAMP.
		38) PLUG THE BREATHER HOSE END INTO CORKSPORT SILICONE COUPLER.
	GE	3c) Plug the wiring harness into the MAF Sensor.
		3D) INSTALL LOOM CLAMP ONTO COOLANT HOSE.

48) RECONNECT THE NEGATIVE LEAD OF THE BATTERY TO THE TERMINAL

4A) ENSURE RADIATOR HOSES ARE SECURE.

AND START THE CAR.

### INSTALLATION INSTRUCTIONS: CORKSPORT POWER SERIES INTAKE 2010+ MAZDA 3

1: REMOVE FACTORY AIRBOX ASSEMBLY.

A) DISCONNECT THE VALVECOVER BREATHER HOSE (A ON FIGURE 1) FROM THE FACTORY

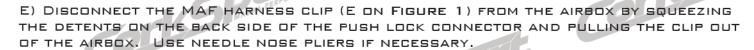
RUBBER COUPLER. PULL IT OUT BY HAND.

B) REMOVE 10MM HEX HEAD BOLT (B ON FIGURE 1) SECURING FACTORY AIRBOX TO BRACKET ON RADIATOR CROSSMEMBER.

MANC

- C) DISCONNECT HOSE CLAMP (C ON FIGURE 1) THAT ATTACHES FACTORY RUBBER COUPLER AND THE THROTTLE BODY WITH 10MM SOCKET OR PHILLIPS SCREWDRIVER.
- D) DISCONNECT THE MAF HOUSING HARNESS PLUG (D ON FIGURE 1) FROM MASS AIRFLOW SENSOR BY PUSHING THE THUMB LATCH AND PULLING THE PLUG OUT OF THE SENSOR. THERE

PULLING THE PLUG OUT OF THE SENSOR. THERE IS SOME SURFACE TENSION HERE SO YOU HAVE TO PULL HARD. LEAVE THE SENSOR IN THE AIRBOX FOR NOW.



- F) UNLATCH HOSE (F ON FIGURE 1) FROM CLIP ON FACTORY MAF HOUSING.
- G) PULL UP ON THE FACTORY AIRBOX, PULLING THE PLASTIC LUGS IN THE BOTTOM OF THE AIRBOX FROM THE ISOLATION GROMMETS IN THE CHASSIS AS INDICATED IN FIGURE 1G. REMOVE THE AIRBOX ASSEMBLY, COUPLER

AND MAF SENSOR
FROM THE ENGINE
COMPARTMENT.



LATCH CLIPS ON RADIATOR CORE SUPPORT AND REMOVE FROM VEHICLE. THERE IS ONE LATCH ABOVE AND ANOTHER BELOW AS SHOWN IN FIGURE 1H.





A) USING THE SMALL PHILLIPS SCREWDRIVER, REMOVE THE TWO SCREWS THAT CONNECT THE MAF SENSOR TO THE AIRBOX, SHOWN IN FIGURE 2A AND REMOVE THE SENSOR FROM THE AIRBOX USING A

TWISTING/PULLING MOTION. TURNING WHILE PULLING WILL ENSURE THAT THE O-RING DOES NOT GET DAMAGED.

B) PLACE MAF SENSOR INTO CORKSPORT MAF HOUSING ALIGNED AS SHOWN IN FIGURE 2C ON PAGE 2, USING THE SAME TURNING MOTION WHILE PRESSING THE SENSOR BACK IN PLACE. ENSURE THAT THE O-RING IS ENTIRELY SEATED IN THE HOUSING AND FASTEN THE TWO SOCKET HEAD CAP SCREWS INTO THE STAINLESS THREADED BOSSES ON THE MAF

HOUSING. ODO NOT PINCH THE O-RING - IF NECESSARY A LITTLE DAB OF GREASE GOES A LONG WAY. DOUBLE CHECK THE ALIGNMENT OF THE SENSOR AND TIGHTEN THE SOCKET HEAD CAP SCREWS DOWN WITH A 3MM ALLEN WRENCH.

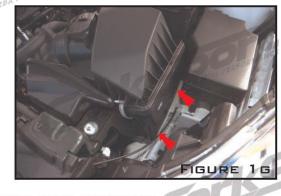


FIGURE 1



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# INSTALLATION INSTRUCTIONS: CORKSPORT POWER SERIES INTAKE 2010+ MAZDA 3

### 2: ASSEMBLY (CONTINUED).

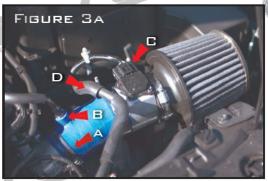
C) INSTALL THE SILICONE COUPLER TO THE MAF HOUSING AS SHOWN IN FIGURE 2C, WITH BOTH OF THE T-BOLT BAND CLAMPS LOOSELY FIT OVER THE ENDS OF THE COUPLER. THE

3.5 INCH CLAMP GOES OVER THE MAF HOUSING SIDE OF THE COUPLER, AND THE 2.75 INCH CLAMP GOES OVER THE THROTTLE BODY SIDE OF THE COUPLER. TIGHTEN THE LARGER OF THE TWO BAND CLAMPS OVER THE MAF HOUSING UNTIL THE SILICONE IS SNUG TO THE HOUSING WITH THE 3/8 DRIVE RATCHET AND 1 OMM LONG SOCKET. NOTE THAT THE AIRFLOW DESIGNATION ON THE MAF SENSOR POINTS TOWARD THE SILICONE COUPLER AND AWAY FROM THE AIR FILTER SIDE OF THE MAF HOUSING.



D) INSTALL THE CORKSPORT AIR FILTER

AND 3.5" T-BOLT BAND CLAMP AROUND THE MAF HOUSING AS SHOWN IN FIGURE 2C AND TIGHTEN THE 10 MM FASTENER ON THE CLAMP UNTIL SNUG WITH THE 3/8 DRIVE RATCHET AND 10MM LONG SOCKET.



### 3: Installing the Power Series Intake System

A) INSTALL THE SILICONE COUPLER AND 3" T-BOLT BAND CLAMP OVER THE THROTTLE BODY AND TIGHTEN THE BAND CLAMP UNTIL SNUG. TEST TO ENSURE THAT ALL THREE BAND CLAMP CONNECTIONS ARE FIRMLY CONNECTED AND CANNOT BE PULLED APART BY HAND. IF YOU CAN PULL ANY OF THE CONNECTIONS APART, RESEAT THEM AND TIGHTEN THE BAND CLAMP NUT DOWN 1-2 MORE TURNS AND TEST IT AGAIN. THE ENTIRE ASSEMBLY SHOULD BE TIGHT AND NOT COME APART WHEN PRESSURE IS PUT ON IT.

- B) INSTALL THE FACTORY VALVECOVER BREATHER HOSE END INTO THE NIPPLE ON THE TOP OF THE CORKSPORT SILICONE COUPLER AS SHOWN IN FIGURE 3A. IT IS A PRESS FIT AND REQUIRES NO CLAMP.
- C) PLUG THE FACTORY MAF SENSOR HARNESS INTO THE MAF SENSOR AS SHOWN IN FIGURE 3A AND DOUBLE CHECK THAT THE MAF SENSOR IS FULLY SEATED INTO THE MAF HOUSING. LOOSEN IT, RESEAT IT AND TIGHTEN THE SOCKET HEAD CAP SCREWS IF NECESSARY.
- D) WRAP THE PROVIDED LOOM CLAMP OVER THE FACTORY THROTTLE WARMER CODALNT HOSE (D, FIGURE 3A). THE ADEL CLAMP GETS RETAINED TO THE T-BOLT CLAMP STUD AS SHOWN IN FIGURE 2C WITH ONE OF THE 6MM FLANGE NUTS ON EITHER SIDE OF THE CLAMP.

#### 4: STARTUP & TROUBLESHOOTING

A) MAKE SURE THAT THE TWO HOSES ABOVE THE RADIATOR ARE BOTH WELL SEATED IN THEIR CLIPS IF YOU PULLED THEM OUT OF THE WAY WHEN YOU REMOVED THE FACTORY INLET TUBE.

B) RECONNECT THE NEGATIVE LEAD OF THE BATTERY TO THE TERMINAL AND START THE CAR.

IF YOU SEE A CHECK ENGINE LIGHT OR EXPERIENCE A ROUGH IDLE, IT IS PROBABLY DUE TO A

DISCONNECTED MAF SENSOR OR A LOOSE CONNECTION CAUSING A VACUUM LEAK THAT IS

DISRUPTING AIRFLOW AROUND THE MAF SENSOR. CHECK THAT ALL CONNECTIONS ARE

TIGHT, THAT THE VALVECOVER BREATHER HOSE IS ATTACHED TO THE NIPPLE ON THE SILICONE

COUPLER AND THAT THE MAF SENSOR IS FULLY PLUGGED AND LATCHED INTO THE FACTORY

WIRING HARNESS.