

## CORKSPORT POWER SERIES EXHAUST 2010 MAZDA 3



**WARNING:** MAKE SURE VEHICLE IS COMPLETELY COOLED DOWN PRIOR TO STARTING INSTALLATION. EXHAUST SYSTEMS AND ESPECIALLY CATALYTIC CONVERTERS CAN GET HOT ENOUGH TO SERIOUSLY INJURE YOU. IF YOU ARE GOING TO WORK ON YOUR CAR WITHIN AN HOUR OR TWO OF HAVING DRIVEN IT, USE OF A FAN TO COOL OFF THE EXHAUST SYSTEM AND THE CATALYST.



**WARNING:** THOROUGHLY READ THE PRECAUTIONS AND INSTRUCTIONS THAT COME WITH YOUR FLOOR JACK AND JACKSTANDS AS WELL AS YOUR VEHICLE'S OWNERS MANUAL FOR APPROPRIATE JACKING METHODS AND JACKING / SUPPORT POINTS. ALWAYS DOUBLE UP SUPPORT ON A VEHICLE - JACK STANDS AND FLOOR JACK /ETC.



**NOTE:** WHEN UNDER THE CAR, YOU SHOULD BE WEARING MECHANICS GLOVES OR OTHER FORM OF HAND PROTECTION AS WELL AS ANSI APPROVED SAFETY GLASSES.



**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.

<b>PART NUMBER:</b> AXL-6-119	<b>MODEL:</b> MAZDA3	<b>YEAR:</b> 2010	<b>TRIM:</b> 2.5L OR EQUIPPED WITH A DUAL EXIT TAILPIPE CONFIGURATION / REAR VALANCE.
<b>TIME ESTIMATE:</b> 45-90 MIN.			
<b>WRENCH RATING:</b> 2/5			

### TOOLING LIST:

3/8 DRIVE RATCHET  
BEST: DC IMPACT GUN  
6" 3/8 DRIVE EXTENSION  
17MM BOXED END WRENCH  
17MM LONG SOCKET  
BEST: WOBBLY/UNIV.  
14MM BOXED END WRENCH  
14MM LONG SOCKET  
BEST: WOBBLY/UNIV.

PRY BAR, MEDIUM  
6MM ALLEN WRENCH  
SILICONE SPRAY/WD-40  
JACK STANDS  
TORQUE WRENCH  
FLOOR JACK  
MECHANICS GLOVES  
HACK SAW/SAWZALL  
FILE/DIE GRINDER





### PARTS LIST:

CORKSPORT DUAL RESONATED  
CAT BACK EXHAUST  
CORKSPORT TWO PIECE DUAL  
EXIT TAILPIPE  
2X EXHAUST FLANGE GASKETS  
4X M10X1.25 35MM HEX BOLTS  
4X M10X1.25 HEX NUTS  
4X M10 LOCK WASHERS  
4X M10 FLAT WASHERS

CADMIUM PLATED COMPRESSION  
FITTING W/ SOCKET HEAD  
CAP SCREWS

# INSTALLATION INSTRUCTIONS: CORKSPORT POWER SERIES CATBACK EXHAUST

## 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 IS ALSO 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: 



## OVERVIEW/CHECKLIST:

THIS IS AN OVERVIEW OF EACH OF THE STEPS OF THE BUILD. YOU CAN USE THIS AS A REFERENCE AND A CHECKLIST AS YOU BUTTON UP THE WORK ON THE CAR.

- 1: SUPPORT CAR ON FLOOR JACK/JACKSTANDS OR LIFT.
- 2A: CUT FACTORY EXHAUST 16" AFT OF FRONT MIDPIPE FLANGE (JUST FORWARD OF THE FACTORY HANGER BRACKET).
- 2B: REMOVE TWO EXHAUST TUNNEL CROSSBRACES (8X 12MM BOLTS)
- 2C: DISCONNECT REAR FLANGE OF MIDPIPE (2X 14MM BOLTS)
- 3: REMOVE MIDPIPE EXHAUST HANGER BUSHINGS (2X) AND EXTRACT MIDPIPE.
- 4: REMOVE TAILPIPE & MUFFLER EXHAUST HANGER BUSHINGS (4X) AND EXTRACT MUFFLER ASSEMBLY.  
NOTE: THERE IS A FLEXIBLE HEATSHIELD TO MOVE OUT OF THE WAY.
- 5A: INSTALL MIDPIPE ONTO FACTORY HANGER BUSHINGS.
- 5B: INSTALL COMPRESSION FITTING FROM MIDPIPE TO FACTORY CATALYST.
- 6: INSTALL CHASSIS CROSSBRACES AND TORQUE TO 22 LB FT.
- 7A: INSTALL TAILPIPE OVER SUBFRAME AND ATTACH HANGERS TO TWO EXHAUST HANGER BUSHINGS.
- 7B: INSTALL GASKET AND CONNECT FLANGES FROM MIDPIPE TO TAILPIPE (2X 17MM HEAD HEX BOLTS)
- 7C: INSTALL THE GASKET BETWEEN THE MIDPIPE AND TAILPIPE, INSTALL BOLTS AND TIGHTEN.
- 7D: INSTALL PASSENGER SIDE TAILPIPE W/ GASKET, INSTALL BOLTS AND TIGHTEN.
- 8A: INSPECT LOCATION OF TAILPIPE AND ADJUST TO WITHIN .625"-.750" OF BUMPER.  
NOTE: FURTHER TROUBLESHOOTING INFO IN THIS SECTION.
- 8B: INSPECT EXHAUST FOR LEAKS AND HOW TO COMBAT LEAKS.



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



# INSTALLATION INSTRUCTIONS: CORKSPORT POWER SERIES CATBACK DUAL EXHAUST 2010 MAZDA3 2.5L

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## 1: SUPPORT CAR ON FLOOR JACK/JACKSTANDS OR LIFT.

USE A FLOOR JACK AND JACKSTANDS TO GAIN ACCESS TO THE UNDERSIDE OF THE VEHICLE. **⚠️ ALWAYS REFER TO THE FLOOR JACK AND JACKSTAND MANUFACTURERS INSTRUCTIONS AS WELL AS THE FACTORY OWNERS MANUAL FOR YOUR VEHICLE TO DETERMINE JACKING POINTS AND SUPPORT POINTS. ALTERNATELY, USE AN AUTOMOTIVE LIFT TO GAIN ACCESS TO THE UNDERSIDE OF THE VEHICLE. REDUNDANT SUPPORT MECHANISMS ARE RECOMMENDED.**

## 2: CUT CATALYST, REMOVE REAR MIDPIPE FLANGE FASTENERS & CROSSMEMBERS.

A) USING A HACKSAW OR SAWZALL, CUT THE FACTORY EXHAUST PIPING AT DIRECTLY FORWARD OF THE HANGER BRACKET. **Ⓜ THIS SHOULD BE ~16" AFT OF THE FLANGE.** MAKE SURE TO CUT AS PERPENDICULAR AS POSSIBLE TO

THE PIPE AS SHOWN IN **FIGURE 2A** CLEAN UP THE EDGE OF THE PIPE WITH A FILE OR DIE GRINDER.

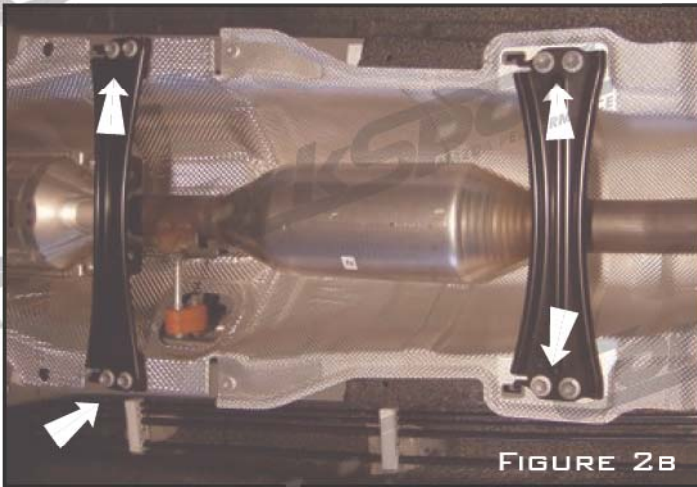
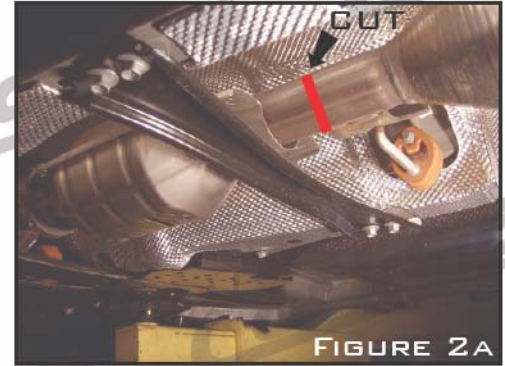


FIGURE 2B

B) USING THE 12MM SOCKET AND RATCHET (OR ALTERNATELY A BATTERY POWERED IMPACT WRENCH), REMOVE THE EIGHT 12MM BOLTS SHOWN IN **FIGURE 2B** OUT OF THE EXHAUST TUNNEL CHASSIS BRACES. SLIDE THE CROSSMEMBERS FORWARD OFF THEIR HOOKS AND OUT OF THE VEHICLE.

C) USING A 14MM SOCKET AND END WRENCH, REMOVE THE 14MM NUTS ATTACHING THE REAR FLANGE SHOWN IN **FIGURE 3**. THE PIPE WILL STAY IN PLACE ON THE FACTORY EXHAUST HANGERS.

## 3: SUPPORT MIDPIPE AND REMOVE RUBBER EXHAUST HANGERS

THERE ARE TWO EXHAUST HANGERS THAT SUPPORT THE MIDPIPE IN THE VEHICLE SHOWN IN **FIGURE 3**. SPRAY SOME SILICONE SPRAY ON THE AREA WHERE THE HANGER MEETS THE BUSHING AND PRY THE BUSHINGS OFF THE HANGER WITH ONE HAND WHILE SUPPORTING THE PIPE WITH THE OTHER HAND. IF YOU NEED MORE LEVERAGE, YOU CAN USE A PRY-BAR IN A FEW DIFFERENT WAYS TO REMOVE THE HANGER. **FOR VIDEO INSTRUCTIONS ON WAYS TO**

### HD REMOVE EXHAUST HANGER

**BUSHINGS, VISIT OUR KNOWLEDGEBASE AT [HTTP://BIT.LY/54PPDA](http://bit.ly/54ppda)** **💡 BE PREPARED - WHEN IT LETS GO, IT'S GOING TO MOVE QUICKLY. YOU MAY NEED A FRIEND TO HELP SUPPORT THE EXHAUST WHILE YOU REMOVE THE HANGER BUSHINGS. EXTRACT THE MIDPIPE FROM THE CAR, PULLING IT TOWARD THE REAR OF THE CAR TO REMOVE THE MIDPIPE STUDS FROM THE HOLES IN THE HEADER / DOWNPIPE. Ⓜ TAKE CARE NOT TO DROP OR STRIKE THE FACTORY CATALYTIC CONVERTER.**



FIGURE 3



# INSTALLATION INSTRUCTIONS: CORKSPORT POWER SERIES CATBACK DUAL EXHAUST 2010 MAZDA3 2.5L

## 4: REMOVE TAILPIPE & MUFFLER ASSEMBLY

THE REAR TAILPIPE AND MUFFLER ASSEMBLY ARE HELD IN PLACE BY FOUR RUBBER EXHAUST HANGER BUSHINGS SHOWN IN **FIGURE 4**. SUPPORT THE MUFFLER FROM BELOW WITH A STURDY JACKSTAND OR BLOCKS OR HAVE A FRIEND HOLD IT UP WHILE YOU REMOVE THE HANGERS. REMOVE EACH OF THE FOUR RUBBER HANGER BUSHINGS FROM THEIR LOCATIONS AND EXTRACT THE TAILPIPE. THE HEATSHIELD OVER THE SUBFRAME MAY NEED TO BE MOVED A OUT OF THE WAY SLIGHTLY, BUT IT IS PLIABLE AND CAN BE MOVED IN AND OUT OF PLACE AS NECESSARY WITHOUT CUTTING IT OUT.

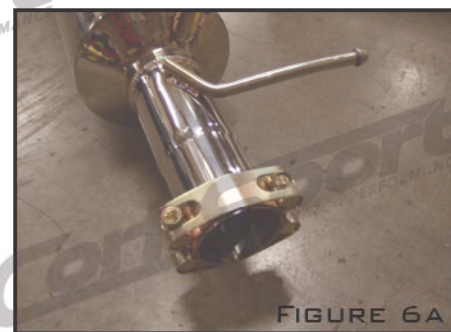
DUAL EXHAUST SHOWN



## 5: INSTALLATION OF MIDPIPE

A) WITH THE COMPRESSION FITTING IN PLACE AS SHOWN IN **FIGURE 6A**, INSTALL THE MIDPIPE HANGERS INTO THE RUBBER BUSHINGS (OR REPLACE WITH CORKSPORT POLYURETHANE EXHAUST HANGER BUSHINGS). USE SILICONE SPRAY IF NECESSARY TO LUBRICATE THE BUSHINGS.

B) SWING THE ENTIRE EXHAUST REARWARD ON THE HANGERS AND SLIDE THE SLIT PIPE AND COMPRESSION FITTING OVER THE AFT SECTION OF THE FACTORY CATALYST UNTIL THE EXHAUST HANGERS ARE IN A VERTICAL ORIENTATION. USE A 6MM ALLEN WRENCH TO TIGHTEN THE TWO SOCKET HEAD CAP SCREWS IN THE COMPRESSION FITTING. **⚡**ALTERNATELY, YOU CAN REMOVE THE TWO 14MM FASTENERS ATTACHING THE FACTORY CATALYST TO THE HEADER AND COMBINE THE CATALYST AND MIDPIPE ON THE FLOOR OF YOUR SHOP AND THEN INSTALL THE ENTIRE ASSEMBLY AS A UNIT, BUT YOU WILL HAVE TO LEAVE THE COMPRESSION FITTING LOOSE ENOUGH TO BE ABLE TO CLOCK THE EXHAUST ROTATIONALLY ONCE IT IS UP IN PLACE.



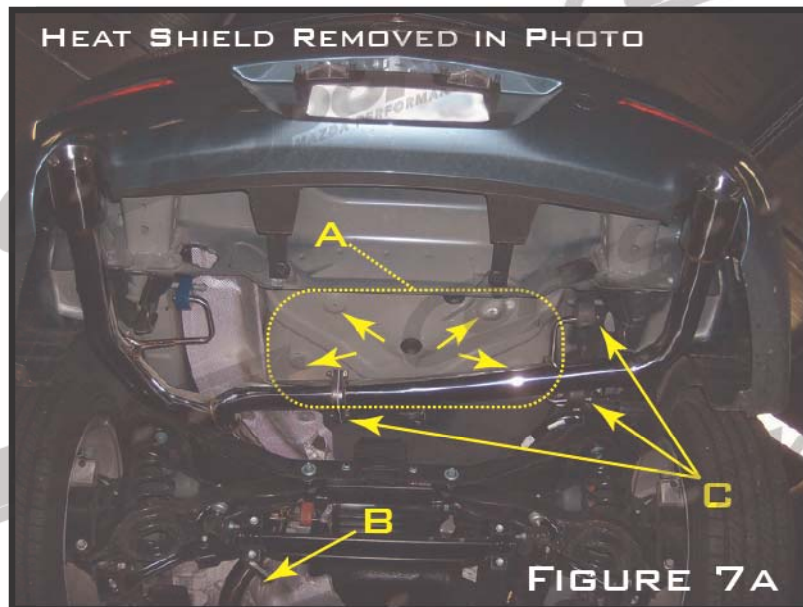
## 6: REINSTALLATION OF CHASSIS BRACES

REINSTALL THE TWO CHASSIS BRACES UNDER THE EXHAUST TUNNEL. TORQUE TO 22 LB FT OF TORQUE. (FIG. 2B)

## 7: INSTALLATION OF TAILPIPE

A) THE FACTORY MUFFLER HEAT SHIELD MUST BE REMOVED FOR INSTALLATION OF THE DUAL EXHAUST. WITHOUT THE FACTORY MUFFLER, THERE IS FAR LESS CONCENTRATION OF HEAT AGAINST THE UNDERSIDE OF THE TRUNK AND THE HEAT SHIELD IS NOT REQUIRED. **OPTION 1:** USE YOUR HAND DRILL WITH A 1/4 BIT AND DRILL OUT THE CENTERS OF THE FOUR RIVETS HOLDING THE HEAT SHIELD IN THE AREA SHOWN IN **FIGURE 7A**, ITEM A. **OPTION 2:** USE A PAIR OF TIN SNIPS AND CUT THE CORNER OFF WHERE IT COLLIDES WITH THE Y-PIPE. PRETTY EASY ALSO, **VIDEO ON OUR KNOWLEDGEBASE HERE:** [HTTP://BIT.LY/7DWZMZ](http://bit.ly/7dwzmz)

HEAT SHIELD REMOVED IN PHOTO



HD

**KNOWLEDGEBASE HERE:**  
[HTTP://BIT.LY/7DWZMZ](http://bit.ly/7dwzmz)

# INSTALLATION INSTRUCTIONS: CORKSPORT POWER SERIES CATBACK DUAL EXHAUST 2010 MAZDA3 2.5L


## 7: CONTINUED.

B) RUN THE INLET OF THE TAILPIPE UP THROUGH THE GAP BETWEEN THE BODY AND SUBFRAME, TAKING CARE NOT TO CATCH THE HANGER BAR ON ANY OF THE HEATSHIELDS. ONCE THE INLET OF THE TAILPIPE IS ROUGHLY IN PLACE AND MORE OR LESS ALIGNED WITH THE OUTLET OF THE MIDPIPE AS SHOWN IN **FIGURE 7A**, INSTALL THE REAR AND FORWARD TAILPIPE HANGERS THROUGH THE HOLES IN THE RUBBER EXHAUST HANGER BUSHINGS.



C) INSTALL THE GASKET BETWEEN THE MIDPIPE AND TAILPIPE AND INSTALL THE TWO 17MM HEAD M10X1.25 X 35MM LONG FASTENERS INTO THE FLANGE JUNCTION BETWEEN THE AFT SECTION OF MIDPIPE AND FORWARD SECTION OF TAILPIPE AND TIGHTEN AS SHOWN IN **FIG 7A, ITEM B**.

D) INSTALL PASSENGER SIDE TAILPIPE SECTION AND GASKET, CAREFULLY ALIGNING THE FLANGES PRIOR TO TIGHTENING DOWN THE TWO 17MM HEAD M10X1.25 X 35MM LONG BOLTS, NUTS AND LOCKWASHERS. INSTALL PASSENGER SIDE HANGERS. **FIG 7A, ITEM C.**

## 8: VISUAL INSPECTION AND LEAK CHECK

A) INSPECT THE LOCATION OF THE TAILPIPE AS IT COMES THROUGH THE REAR VALENCE/BUMPER CUTOUT. THERE SHOULD BE APPROXIMATELY .625"-.750" CLEARANCE BETWEEN THE PERIMETER OF THE TAILPIPE EXHAUST TIP AND THE VALENCE CUTOUT ON THE VEHICLE.  IF YOU NEED TO ADJUST THE HEIGHT OF THE TAILPIPE TIP, YOU CAN DO SO BY ADJUSTING THE REAR METAL HANGER USING A LARGE BOX END WRENCH. ADJUST THE METAL HANGER UPWARD FOR THE TAILPIPE TO COME DOWN, ADJUST THE METAL HANGER DOWNWARD FOR THE TAILPIPE TO COME UP. IF THERE ARE OTHER CLEARANCE ISSUES, THIS IS GENERALLY DUE TO MISALIGNED FLANGE CONNECTIONS - CHECK TO MAKE SURE THAT THE FLANGES ARE CENTERED ON ONE ANOTHER BEFORE RETIGHTENING THE FASTENERS.

**HD** FOR VIDEO SUPPORT ON ADJUSTING THE EXHAUST HANGERS, VISIT OUR KNOWLEDGEBASE AT [HTTP://BIT.LY/7DWZMZ](http://bit.ly/7DWZMZ)

B) LET THE VEHICLE DOWN OFF OF THE JACKSTANDS AND START IT UP, LISTENING FOR EXHAUST LEAKS IN THE SYSTEM.  THIS SYSTEM HAS VERY FEW POTENTIAL LOCATIONS FOR EXHAUST LEAKS. IF YOU HAVE THE REAR HALF OF THE MIDPIPE TOO FAR BACK OFF OF THE REARPIPE OR FACTORY CATALYST PIPE, THE CUTOUTS IN THE EXPANSION FITTING MAY NOT FULLY COVER THE PIPE AND MAY LEAK. THAT IS THE FIRST PLACE TO LOOK. OTHERWISE, FOLLOW YOUR EARS AND TIGHTEN THE FITTINGS FROM THE LOCATIONS THAT THE NOISE IS COMING. IF YOU CANNOT IDENTIFY THE LOCATION OF THE MINOR LEAKS, YOU CAN  DRIVE IT AROUND AND LOOK FOR SOOT MARKS AROUND THE FLANGES TO DETERMINE WHERE THE LEAK IS COMING FROM. FOR THE MOST PART, WITH FLAT STYLE GASKETS, A TIGHT SEAL SHOULD BE SUCCESSFUL.