

## 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.

PART NUMBER: AXL-6-119	MODEL MAZDA3	YEAR 2010	TRIM 2.5L OR EQUIPPED WITH A DUAL EXIT TAILPIPE CONFIGURATION / REAR VALENCE.
TIME ESTIMATE: 45-90 MIN.			
WRENCH RATING: 2/5			
<b>TOOLING LIST:</b> 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 HAND DRILL / 1/4" BIT OR TIN SNIPS	<b>PARTS LIST:</b> CORKSPORT DUAL RESONATED CAT BACK EXHAUST CORKSPORT TWO PIECE DUAL EXIT TAILPIPE 3X EXHAUST FLANGE GASKETS 6X M10X1.25 35MM HEX BOLTS 6X M10X1.25 HEX NUTS 6X M10 LOCK WASHERS 6X M10 FLAT WASHERS	HIGH FLOW CAT OR RACEPIPE 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: REMOVE 2X 14MM NUTS OFF OF FACTORY MIDPIPE STUDS. USE PENETRATING OIL AS NECESSARY.
- 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: BOLT UP CORKSPORT RACEPIPE OR HIGH FLOW CATALYST ONTO THE HEADER FLANGE USING THE INCLUDED M10 FASTENERS, WASHERS, LOCK WASHERS, AND NUTS.
- 6A: WITH COMPRESSION FITTING IN PLACE, INSTALL CS MIDPIPE HANGERS INTO RUBBER BUSHINGS.
- 6B: SLIDE CS MIDPIPE OVER RACEPIPE UNTIL HANGERS ARE VERTICAL AND TIGHTEN COMPRESSION FITTING WITH 6MM ALLEN WRENCH.
- 7: REINSTALL CHASSIS BRACES AND TORQUE 8X BOLTS TO 22 FT.LB.
- 8A: REMOVE HEATSHIELD FROM ABOVE FACTORY MUFFLER OR CUT AWAY FORWARD DRIVERS SIDE CORNER WITH A PAIR OF TIN SNIPS.
- 8B: RUN INLET OF TAILPIPE OVER SUBFRAME FROM BEHIND THE CAR AND RUN HANGERS THROUGH RUBBER EXHAUST BUSHINGS.
- 8C: INSTALL GASKET AND M10 BOLTS, WASHERS, LOCK WASHERS, NUTS TO ATTACH REAR FLANGE OF MIDPIPE TO FORWARD FLANGE OF TAILPIPE.
- 8D: INSTALL PASSENGER SIDE TAILPIPE SECTION AND GASKET, ALIGN FLANGES AND TIGHTEN M10 BOLTS, WASHERS, LOCK WASHERS AND NUTS.
- 9A: INSPECT THE LOCATION OF THE TAILPIPE AND ADJUST HANGERS AS NECESSARY (FURTHER INFORMATION ON FULL INSTRUCTIONS)
- 9B: TAKE VEHICLE OFF OF SUPPORT SYSTEM (JACKSTANDS/LIFT), START AND CHECK FOR LEAKS. (LEAK CHECK PROCEDURE / TROUBLESHOOTING ON FULL INSTRUCTIONS)

CHECK  
LIST

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



# INSTALLATION INSTRUCTIONS: CORKSPORT POWER SERIES CATBACK EXHAUST AND CATALYST RACEPIPE

## 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: REMOVE MIDPIPE FLANGE FASTENERS & CROSSMEMBERS.

A) USING THE 14MM LONG SOCKET ON A 6" 3/8 DRIVE EXTENSION, REMOVE THE TWO 14MM NUTS OFF OF THE FACTORY MIDPIPE STUDS SHOWN IN **FIGURE 2A**. THESE ARE LOCKING NUTS FROM THE FACTORY AND CAN BE VERY TIGHT. USE PENETRATING OIL AS NECESSARY.



FIGURE 2A

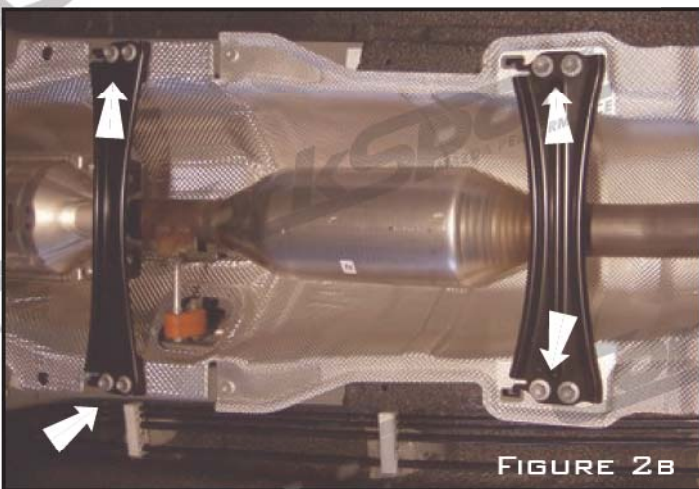


FIGURE 2B

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 AND FRONT MIDPIPE STUDS THAT ARE PERMANENTLY WELDED TO THE MIDPIPE.

## 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 REMOVE EXHAUST HANGER BUSHINGS, VISIT OUR KNOWLEDGEBASE AT**

**HD** [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.

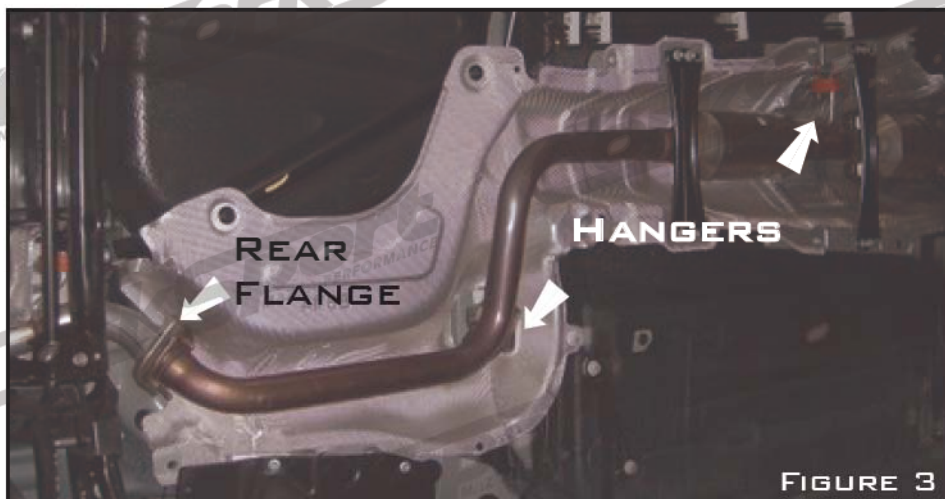


FIGURE 3

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



# INSTALLATION INSTRUCTIONS: CORKSPORT POWER SERIES CATBACK EXHAUST AND CATALYST RACEPIPE

## 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



FIGURE 4



FIGURE 5

RACEPIPE SHOWN

SLIGHTLY, BUT IT IS PLIABLE AND CAN BE MOVED IN AND OUT OF PLACE AS NECESSARY WITHOUT CUTTING IT OUT.

## 5: INSTALLATION OF CATALYST OR RACEPIPE

A) BOLT THE CORKSPORT RACEPIPE OR HIGH FLOW CATPIPE ONTO THE HEADER FLANGE USING THE INCLUDED 17MM HEAD M10X1.25 X 35MM LONG FASTENERS, FLAT WASHERS, LOCK WASHERS AND NUTS AS SHOWN IN **FIGURE 5**.

## 6: 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.

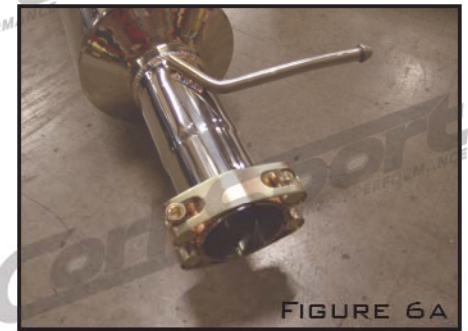


FIGURE 6A

B) SWING THE ENTIRE EXHAUST REARWARD ON THE HANGERS AND SLIDE THE SLIT PIPE AND COMPRESSION FITTING OVER THE AFT SECTION OF MIDPIPE 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.

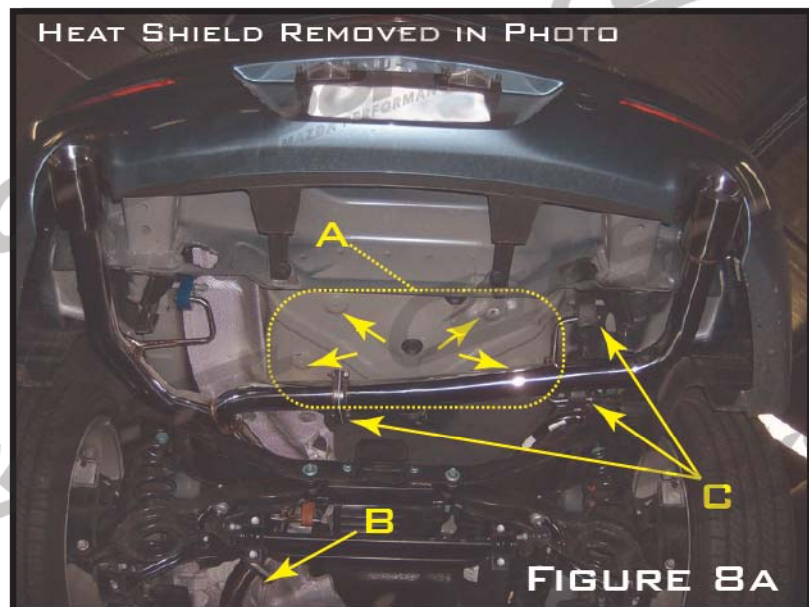
## 7: REINSTALLATION OF CHASSIS BRACES

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

## 8: 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 8A**, 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

FIGURE 8A



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


## 8: 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 8A, 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 8A, 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 8A, ITEM C.

## 9: 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 RACEPIPE 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.