

# INSTALLATION INSTRUCTIONS...CAPRICE PPV CAT-BACK KITS

**Warning:** When Working on under or around any vehicle exercise caution. Please allow the vehicle's exhaust system to cool before removal, as exhaust system temperatures may cause severe burns. If working without a lift, always consult vehicle manual for correct lifting specifications. Always wear safety glasses and ensure safe work area. Serious injury or death could occur if safety measures are not followed. Professional installation recommended.

## **NOTES:**

- VERY IMPORTANT... Please follow the exhaust install instructions carefully. Extreme caution must be taken to ensure proper alignment of the exhaust tips. Do not tighten any of the four band clamps, or the two front flange connections until everything is in place and the tips are aligned perfectly.
  - The band clamps that we provide are a "non-stepped" band clamp. Please make sure the band clamp is equal distance over each pipe. As you snug and then tighten this clamp it will form to the shape of both pipes and will ultimately have a ridge in it where the pipes overlap. This "non-stepped" band clamp become a "stepped" band clamp once it is fully tightened.
- Solo's mid pipe sections are made to completely bottom out on the front muffler section. Slide the mid pipes over the front muffler section and work it until it bottoms out.
- The rear tail pipes are made to go onto the mid pipes. Lining up the tails properly into the cut out is more important than how far the tails go onto the mid section. Don't worry the band clamps will hold the tails solidly even if they overlap is minimal.
- The J-pipe band clamps come snug from Solo. Please swivel into position, align and tighten during your install.

#### **REMOVING STOCK EXHAUST SYSTEM:**

- 1) When disassembling the stock exhaust system, unbolt the rear mufflers at the flange connection using a 15-mm socket.
- 2) Pull down on the exhaust system by the rear of the muffler. When the rubber hangers stretch, squirt soapy water into the rubber where the hangers go. You could use WD40 or grease but that would not be good for the rubbers. It starts to deteriorate them. Using a fair size channel lock pliers, squeeze the backside of the rubber and the hanger rod. This will push the hanger knob into the rubber. Carefully remove the muffler assembly from the hangers.
- 3) Remove the four nuts using a 15mm socket at the front pipe to catalytic converter connection. Save these flared 15mm nuts for use when installing the new Solo system.
- 4) Pull down on rear of the remainder of the exhaust system. When the rubber hangers stretch, squirt soapy water into the rubber where the hangers go. You could use WD40 or grease but that would not be good for the rubbers. It starts to deteriorate them. Using a fair size channel lock pliers, squeeze the backside of the rubber and the hanger rod. This will push the hanger knob into the rubber. Carefully remove the exhaust system from all the hangers.
- 5) This section is heavy and awkward and if possible have someone help you.

6) The stock exhaust system is now disassembled and its time to put your new Solo Performance kit on!

### **INSTALLING YOUR NEW KIT:**

NOTE: If you snug everything first instead of fully tightening, it will allow for movement and adjustments once the new system is on. Snug, align, snug some more and then do your final tighten.

- 1) Being careful not to bang the rear valence, slip the left and right tail pipes (with J-Pipes) into the hangers. Approximately 1inch of the rod hanger ultimately sticks thru the rubber.
- 2) Slide the front muffler section onto the rear of the converters. Slide hanger rods into rubbers and align. Loosely hand tighten the 4 front nuts.
- 3) Assemble the four band clamps provided by SOLO and slip 2 of them onto the rear pipes of the muffler section. The band clamp bolts should face inward and upward. Slide the other two band clamps onto the tail pipe sections.
- 4) Slide the mid pipe sections over the front muffler section until it bottoms out. Manipulate each tail section over the rear portion of the mid pipes.
- 5) MANIPULATE THE EXHAUST SYSTEM INTO PLACE BEFORE YOU TIGHTEN ANYTHING. THE "WIGGLE" ROOM IS MINIMAL BUT IT IS THERE AND IT SHOULD BE USED TO YOUR ADVANTAGE BEFORE ANY TIGHTENING STARTS TO HAPPEN.
- 6) THE TAIL PIPES DO NOT HAVE TO "BOTTOM OUT" ON THE MID PIPE.
- 7) Make sure the tips are equal distance in and out and centered in the cut out of the valence. A helper with a good eye is recommended to hold the tips.
- 8) Hand tighten each of the 4 band clamps to a snug position. Make sure the SOLO band clamps are equal distance on each pipe.

NOTE: If further manipulation is needed to get the tail tips aligned you can take out the long bolts that hold the rear hangers to the body of the car. You can use a washer to shim one side only and this will "tweak" the level. You could shim each side evenly and this would adjust the height. Shimming these 4 bolts properly can do a lot to align the tail tips perfectly if needed. Since the front muffler section and the mid X-Pipe section are "tied" together there is very little forgiveness in the system. One or 2 washers between the body of the car and the top of the hanger can do wonders to level and align the tail tips.

- 9) Ensure that the tail pipes are still in perfect position and lightly snug the 4 front nuts at the converter connection and each of the 4 band clamps.
- 10) IF THERE IS ANY FURTHER ADJUSTMENT TO BE MADE IN THE TAILPIPES PLEASE REFER TO THE ABOVE NOTE...

Note: Do not over tighten the 4 front nuts. When you see the flanges flex tight, its more than enough tension.

**SOLO band clamps:** Hold the top nut with a 9/16" wrench and lightly snug the bottom bolt head with a 9/16 socket. THIS FLAT BAND CLAMP WILL FORM AROUND EACH LAYER OF PIPE.

- 11) Ensure that everything is still aligned and proper. Perform a tight snug on all 4 clamps, and the 4 front nuts.
- 12) Check again then perform your final tighten to all four band clamps.
- 13) The J-pipes only come snug FROM Solo and can be swiveled to fit your car. Swivel the j-pipes into position then tighten all four (4) band clamps to 50 60 foot pounds or until tight.

# 14) Road test ...... Enjoy Going Solo!

- 15) The j-pipes are at a "factory preset" that is good for most Caprice PPV cars. If you hear any bad RPM ranges or vibrations you can shorten or lengthen the top piece of the j-pipe to "tweak" your car to your liking.
- 16) To shorten or lengthen the j-pipes just loosen the top clamp and shorten or lengthen both sides at the end of the J-Pipe end cap.
- 17) The procedure that we use is:
  - Shorten by 1"
  - If this makes the sound more desirable move in either direction 1/2" until fully satisfied.
  - If shortening the j-pipe makes it worse, then length if from this position by 2".
  - Move in ½" increments from here until fully satisfied.

Any questions or concerns please do not hesitate to call

Jeff at (905) 703-1557 or Solo Performance (Buffalo NY) at (716) 875-SOLO Solo Performance (Mississauga Ont.) at (905) 897-6833!