



2009 & Up HARLEY DAVIDSON® TOURING MODELS RCX HELLBENDERS



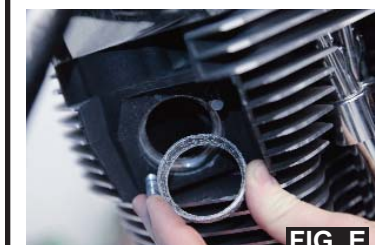
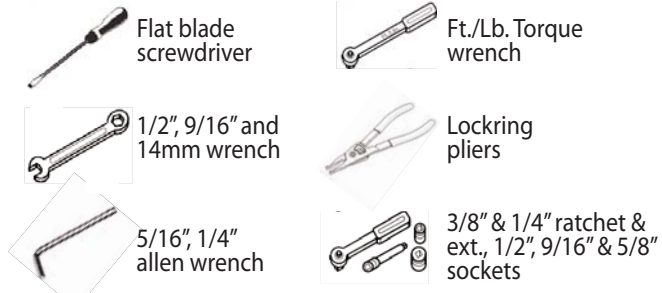
Installation Instructions Part# RCX305C and RCX305B

Congratulations on your purchase of the RCX Hellbenders 2-into-2 Exhaust System. RCX Exhaust products are designed and engineered for a perfect fit and great performance. Please follow the installation instructions below and if you need further assistance please call our tech support line at 800-360-0915 (ext 130)

PACKING LIST

RCX-305HDFRT	Front Header Pipe	.....1
RCX-305HDREAR	Rear Header Pipe	.....1
RCX-305HSFRT	Heat Shield Front	.....1
RCX-305HSREAR	Heat Shield Rear	.....1
RCX-CAN305T	3" Top Muffler	.....1
RCX-CAN305B	3" Bottom Muffler	.....1
RCX-HDRGSKT	Exhaust Gasket	.....1
RCX-HDRPLUG1.25MM	Exhaust Gasket	.....2
RCX-HDRPLUG1.5MM	Nylon Cable Tie	.....2
F04-20-04BHC	Screw 1/4-20x1/2 chrome	.....2
F05-18-04HHZ	Screw 5/16-18x1/2 zinc	.....2
505-00-LKW	Lock Washer, 5/16	.....2

TOOLS REQUIRED



Stock Exhaust System Removal

- Remove both left and right saddlebags. Remove right sidecover.
- Loosen the muffler band clamps on the front end of each muffler. (9/16" socket)
Note: save muffler clamps to be used during installation of RCX Hellbenders
- Remove the two 5/16" bolts and washers that mount the mufflers to the saddlebag brackets, remove mufflers (**Fig. A**)
- Using a 5/16" allen wrench remove the right front floorboard and bracket.
- Locate and disconnect the factory O2 sensor wire connectors (behind right side cover)
Note: pay attention to O2 wire routing for re-installation.
- Using a 1/2" socket or wrench remove exhaust hanger bolt located on the backside of the oil pan. Leave exhaust clamp attached to the OEM crossover pipe, this will not be reused. (**Fig. B**)
- Loosen exhaust clamp on crossover pipe (5/8" socket). Remove crossover section.
- Using a 9/16" socket and short extension, remove the carriage bolt and nut that attaches the head pipe to the bracket located on the transmission housing. (save bolt and nut for later use)
- Remove the 2 flange nuts from each head pipe located at the cylinder heads. (1/2" socket) Save these to reuse later. (**Fig. C**)
- Carefully remove the head pipes. *Note: make sure O2 sensor wires are not attached.*
- Carefully remove the O2 sensors from head pipes by using a 14mm wrench.
Note the colors of the front and rear O2 sensor connectors to ensure they are re-installed in the correct location on the new RCX Hellbender system.
- Remove the exhaust port flanges and circlips from the factory head pipes. *Note: if the circlip appears bent or twisted, replace them. (Fig. D)*
- Remove the factory exhaust gaskets from each cylinder head. Install the new supplied RCX exhaust gaskets. *Note: tapered side of gaskets go to the outside. (Fig. E)*

LIFETIME WARRANTY

RC Components warrants that all RCX Exhaust products are free from defects in material and workmanship for as long as the original purchaser owns the vehicle on which it was originally installed and sold within the United States. This warranty is limited to the repair or replacement of a RCX Exhaust product proven to be defective from normal use. This warranty does not cover any RCX Exhaust product subject to abuse, misuse, improper installation or modification.





FIG. F



FIG. G



FIG. H



FIG. I



FIG. J

RCX Hellbender Exhaust Installation

- Carefully unpack and remove all RCX Exhaust components from packaging.
- The RCX Hellbenders are setup to use either the factory 12mm narrow band or aftermarket 18mm wide band O2 sensors. Install the O2 sensors into their correct locations on the front and rear head pipes. *Note: use a small amount of anti-sieze compound on the threads of each O2 sensor. (Fig. F)*
- Install the exhaust port flanges and circlips onto RCX header pipes. (Fig. G)
Note: circlips must seat flush into the recessed areas on each exhaust flange.
- Attach the front and rear head pipe to the engine using the stock 1/2" flange nuts. *Finger tighten only at this time. (Fig. H)*
- Build the muffer assembly separately by attaching the top 3" muffer body (with RCX logo) to the bottom 3" muffer body (Fig. I) by aligning the mounting tab on each muffer and inserting the supplied 1/4-20x1/2 screws. (Fig. J) *Note: do not fully tighten.*
- Using the supplied 5/16-18x1/2 bolts and lock washers, attach the supplied mounting bracket to the muffer assembly. (Fig. K) *Note: do not fully tighten.*
- Install the factory muffer band clamps that were previously removed with nut facing downward on the inlet of each muffer.
- Slide the RCX Hellbender muffer assembly onto the front and rear head pipes.
- Align the muffer support bracket under the factory transmission mount.** Reinstall the carriage bolt from the top side and attach 9/16" lock nut. *Finger tighten only at this time. (Fig. L)*
- Tighten the front and rear head pipe flange nuts using a 1/2" socket and a 1/4" drive ratchet and extension. (Torque 18-22 ft. lbs.)
- Tighten the 9/16" lock nut on the support bracket below the transmission housing.
- Tighten the 5/16" bolts on the muffer bracket (Fig. K) (Torque 20 ft. lbs.)
- Tighten the 1/4" muffer assembly bolts (Fig. J)
- Tighten the exhaust clamps on the inlet of each muffer. (Torque 31 ft. lbs.)
- Route O2 sensor wires away from hot areas and reconnect back into the factory harness.
- Loop the supplied hose clamps through the mounting clips on the backside of the heat shields. (Fig. M) *Note: hose clamp adjuster nuts should be on the bottom side of shields.*
- Lay the front heat shield over top of the front head pipe. Tighten hose clamps with 5/16 socket or flat head screw driver. Do not tighten all the way at this time.
- Repeat the above step for the rear heat shield and head pipe.
- Fully tighten all heat shield clamps. Pay attention to alignment with other heat shields and mufflers. Some readjusting may be necessary. (Fig. N)
- Using a 5/16" allen wrench re-install the right front floor board. Check clearance between floor board and heat shield as you tighten the head shield hose clamps. (Torque 55-60 ft.lbs.)
- Re-attach saddle bags and right side cover.
- After installation and before starting the motorcycle, completely clean pipes and mufflers with cleaning solvent and a clean soft cloth that will not leave residue. **NOTE:** Any residue, oil, or fingerprints will stain the chrome when the metal heats up.



FIG. K



FIG. L




FIG. M



FIG. N



Watch the RCX Hellbender video by visiting our YouTube Channel 
<https://www.youtube.com/rccomponents1989>



• SCAN this code with your smart phone to watch the RCX Hellbenders video.

The California Air Resources Board (CARB) does not permit the use of aftermarket parts that remove or alter OEM emission control devices unless certified by CARB, other than on racing vehicles for competition use only.
 Check your local laws and manufacturer's information. Visit the California Air Resources Board's web page at <http://www.arb.ca.gov>

