

### **Twist Dynamics Dual Exhaust Installation Instruction**



**Dual CAT DELETE Kit Pictured above** 

**Dual CAT BACK Kit Pictured above** 

#### **Included in the kits:**

- 2x Carbon Fiber or Black Silencer cans
- 1x Y-Pipe System
- 1x Dog Leg Pipe (the shorter of your two mid pipes)
- 1x Mid Pipe (the longer of your two mid pipes)
- 1x Cat Back or Cat delete Pipe
- 3x Adjustable Band Clamps
- 1x Water relocator kit (Includes a metal position plate, mounted stud, threaded net, and small screw)
- 2x "L" Bracket kits (included two "L' Brackets and two long screws)
- 2x Silencer mounting kits (includes two small "O" ring clamps and two sets of metal clamp brackets with rubber inserts)
- 1x Spring Puller
- 1x Tube of Pipe Cement (optional for installation)
- 1x Y pipe Mounting kit (includes a Red groumet kit, and one gold threaed nut moutning system

#### **Parts Reusing From the Stock Unit:**

Only if you are Installing the Cat back system:

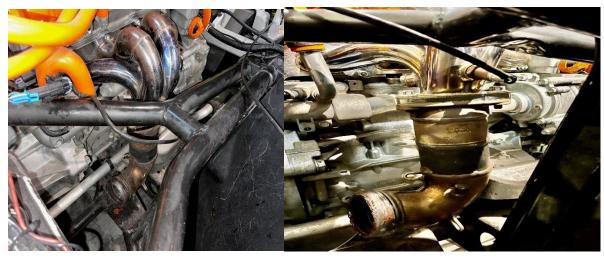
- 1x "J pipe" or "catalytic converter



#### \*AFTER YOU HAVE REMOVED YOUR STOCK SYSTEM

(Please Not: We recommend running an aftermarket header system with any after market exhaust for optimal performance. If you have any questions in compatibilty to the system you've purchased feel free to give us a call at 941-323-5912)

### STEP 1:



-Once you have removed your stock system you will be left with what we refer to as the "J" Pipe for obvious reasons; If you are installing the "Cat Back" system you will leave the J pipe installed and proceed to (Step 2). If you are running the Cat delete system you will need to proceed with removing this portion of your current exhaust. (The J pipe or Catalytic converter is currently performing as your exhaust emission control. In California this is only allowed on tracks or private roads; Please check your local motor vehicle laws if you are concerned with your state regulations.)

-To remove your Stock Catalytic converter you will need a 15mm Wrench or socket set and loosen up the downward facing Bolts, as shown in the pictures on the next page. (You will be reusing these three bolts so please put them to the side.)





-Once you have removed your three 15mm Bolts you can set them aside for later in the installation.

## STEP 2-

Once you remove your "J" Pipe (and/or have left your J Pipe in) we are going to install the water relocater kit. This kit is used to ensure that your exhaust pipes, when ran through the transmission tunnel, don't contact and melt your water pipe!

Tools needed for the water relocator kit:

- -10mm socket w/Extension
- -Alan wrench for set screw

Proceed...





-When you're uninstalling your current Water relocator you will need to loosen up your current Gold threaded nut with your 10mm socket w/extension) We normally use a pivot socket as it allows for easier access in between your water pipe and base of your engine! Once you have removed your current set up you will need to slightly lift your water pipe up so you can slide your new (silver) mounting plate and set screw to allow your water pipe to be relocated and provide additional room running down your transmission tunnel! There are no additional adjustments needed besides this one point. Once you have your new plate installed you will re-use your stock circular clamp and reinstall your threaded 10mm nut!



# **STEP 3-** (ONLY FOR CAT DELETE)

We will now be installing our Cat Delete Pipe. If you are running a cat back system please refer to Step 4, where will show you how to incorporate your J pipe in junction with your Cat back pipe!

Tools needed for this step;

-15mm Wrench and or 15mm socket







-When installing your Cat delete pipe, start by running the pipe into the vehicle through the outside pocket of space closest to the outside of the vehicle. It should run through your transmission tunnel, allowing a good fitment as we relocated the water pipe. Once you see that the Cat delete pipe is sitting in the proper position, you will re-use your J pipe mounting hardware and bolt the Cat delete pipe right onto your header, using a 15mm wrench make sure you get these as TIGHT AS POSSIBLE. (This is a very common area for air to escape once the engine gets hot that is a big reason there is a preset "O" ring on the Cat Delete pipe!) (ONCE YOU HAVE FINISHED CAT DELETE PIPE INSTALLATION JUMP TO STEP 5)

# STEP 4- (ONLY FOR CAT BACK PIPE INSTALLATION)

The Cat back installation differs from the cat delete because we re-use the "J Pipe" as it acts as our Catalytic converter!

Stock Parts being Re-used: "J-Pipe", 3x Springs, Gasket Ring for end of your "J-Pipe".

Tools needed: 15mm Wrench and or Socket, Spring Puller (Included in your parts kit)

(It can be very difficult to stretch some of your Exhaust springs in place and we recommend having a helping hand.)







-Make sure your J pipe is installed onto your header and tightened down using a 15mm wrench and or socket. Once you have ensured that your Stock "J-Pipe" is either reinstalled or still installed correctly we can move on to installing your Cat Back Pipe. You will need your 3x stock springs that you will be reusing, as well as your Spring Puller we have provided!





Please Proceed....





-When installing your Cat back pipe, set aside your spring puller and stock springs that you are reusing. You will run your Cat Back pipe into the vehicle from the outside pocket nearest to the passenger wall and into your transmission tunnel. Once you have "sat" your Cat back Pipe onto the "J Pipe" and onto the Silver gasket you can begin the stretch your springs into place! (IT IS VERY IMPORTANT TO ENSURE THAT WHEN YOUR SPRINGS ARE INSTALLED THAT YOU ARE GETTING EQUAL PULL FROM ALL ANGLES OF THE CURCUMFRANCE OF YOUR "J PIPE" IF NOT YOU WILL EXPERINCE AIR LEAKS AS WELL AS NOISE DISRUPTION FROM THE FRONT OF YOUR VEHICLE). Once you have all four springs installed and you have a snug fit that you are comfortable with you will be ready to proceed into the next step.

### STEP 5-

-You will now be placing the first installment of your transmission tunnel pipes into place







-When installing your Mid Pipe please make sure there are no contact points along the transmission wall and that your swaged pipe is as far back on the male end of the swage as it can be.

# **STEP 6-**

-You will now be installing your "Dog Leg pipe", as it is the second installment of the pipes running through your transmission tunnel



Proceed....





-Much like the first pipe installation, your "Dog Leg Pipe" should slide through the back side of the vehicle and the female end of your swaged pipe should slide over the male end of your Mid pipe you previously installed.

(Please note: we are not installing our band clamps just yet as we want to ensure the entire system is snug and doesn't have ANY CONTACT POINTS on the plastic walls of your vehicle before finalizing our installation.)

### **STEP 7-**

The next step is setting your mounting hole for the "Y Pipe kit"

#### **Tools needed:**

- -13mm socket (recommended with a power tool of your choice; we use a medium impact drill)
- -5/8 wrench or 16mm wrench

Proceed to example photos followed by explanation....



-You will be removing the Red Snap Gromet and only using the Expansion nut and bolt!



#### For installation:



-Place your adjustable set expansion nut in the available frame hole located right next to your battery. Using your 16mm or 5/8" wrench, hold the threaded nut side and tighten down the bolt as TIGHT AS IT WILL GO using your 13mm socket and small/medium impact drill. This will expand the interior threads, allowing a mounting point for your "Y-Pipe" kit. Once you have it tight, remove just the bolt using your 13mm Socket and small/medium impact drill and place to the side for a future step.



# **STEP 8-**

-Next we will be installing our "L-Bracket Mounting hardware" which is the upper side mounting points for your "Y-Pipe kit and silencer cans!



Proceed...

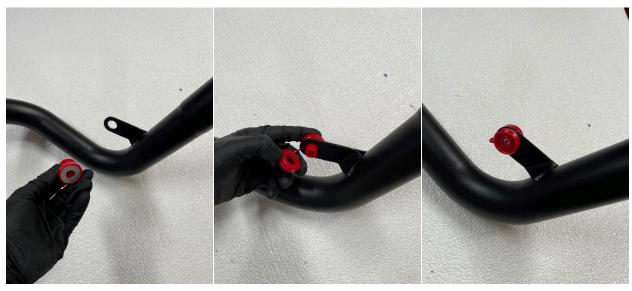


-To install your (x2) hanging L bracket tab you will need to use a T-40 bit or Allen wrench. Remove the two downward T-40 bolts and replace them with your "L bracket kits" facing inwards to allow optimal room for your silencer cans.

## STEP 9-

-We are now ready to install our "Y- Pipe.





-Your first step as shown in the pictures above is to start by installing your Red Gromet on the "Y-Pipe Hanging Tab".



-You are now ready to install your Y-Pipe". Please be sure to use caution as you don't want to scratch the top of your Ceramic Coated pipes against your hanging tabs!









-Once you have your "Y-Pipe" fitted you will need to make sure your Red Gromet is aligned with your previously installed expansion nut. Once aligned, reinstall your gold bolt using a 13mm socket and Small/Medium impact drill. Do not be concerned if the top end of your "Y-Pipe" system seems to be slightly crooked, as it will align itself once we install our Silencer cans!

### **STEP 10-**

-The Silencer Cans are ready to be installed! Whether you choose Black or Carbon Fiber, this process is always aesthetically pleasing. (We highly recommend being as careful as possible as the finish on these cans can be scratched by numerous metal obstacles!)

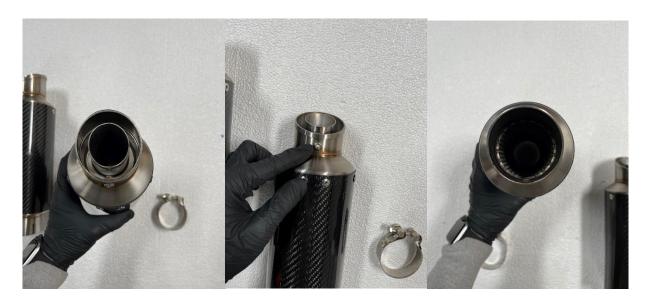




-You will need to start by making sure your Silencer end clamps are pre set (not tightened yet but they must be pre-installed to correctly fit on the pipe!)



-Every Silencer Can includes a "DB Killer", which is also known as a Decibel killer. You have the option to either keep yours in (for a low sporty sound) or remove (for a throatier sporty sound). To remove, use an Allen wrench and remove the set screw on the bottom end of the tip of your silencer can. (Please do this before you install on the vehicle.)



-Next, as previously discussed, we recommend using either Towel, Micro Fiber Cloth, or other protective surface cover. See pictures below.



Proceed...



-You are now ready to install your Silencer Cans on the end of your "Y-Pipe". Using a 10mm Socket and either Ratchet Wrench or Automatic handheld tool you will lock your cans into place on both sides of the "Y-Pipe". (As shown below, our Micro Fiber Cloth protects our cans from hitting the ends of our lower hanging clamps.)





Proceed...



# **STEP 11-**

-We now need to mount our cans in place.



-Start by pre-installing the rubber fitting on each of your silencer hanging clamps. To install around your Silencer cans, you will need a 13mm Ratchet wrench and the appropriate Allen wrench.



Proceed...



-As you are installing your Silencer cans, you will want to make sure the system is sitting the way you want. If you are having issues on how it is lined up, be sure to consider the following: (The angle of how the Silencer cans are installed onto the "Y-Pipe" itself, the angel of your transmission tunnel pipes, and the position of your hanging "L-bracket tabs".) If you are satisfied with the look, move on!

### **STEP 12-**

-You will need to check that your "Y-Pipe" is not contacting the rear Plastic paneling. See the pictures shown below.



## **STEP 13-**

-Once the fitment of the system is where you want it/need it to be you are ready to install your three Lap Band Clamps (1 for each of the connecting point of your pipes).

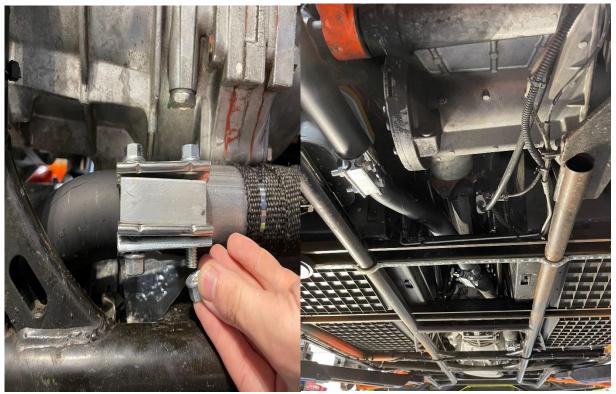


-Start by disassembling your clamps for easier installation underneath the vehicle.



-Once you've done this, you can start reinstalling around the connecting joints of each of your pipes. Be sure to understand where the lap band indent overlays over the swaged area of your pipe for best fitment. To install these, we recommend an automatic hand tool with a 14mm socket and a 15mm wrench. It is very important to get these locked in as tight as you can.





-Once you have ensured that all your clamps are as TIGHT AS POSSIBLE to eliminate any possibilities of leaking air you are ready for the final several steps!



### **STEP 14-**

Your final step in the installation process is to make sure all nuts/bolts are completely tight. Even the best installation experts have to double check their work! When you are confident that nothing is loose throughout your system, you are ready to check for air leaks. You do this by starting the engine and running your hand around any areas you may hear air leaking. The most common area would be around your Header base and/or Cat back/Cat Delete pipe such as the springs needing to be adjusted. BE CAREFUL WHEN PERFORMING THIS PORTION OF THE PROCESS!!! Pipes heat up quickly in this area of the bike and can cause serious injury to exposed skin on contact. Always wear protective gloves when feeling around this portion of the bike.



### **STEP 15-**

You are now ready to Ride!

Please drive safe and if you are concerned with your state's exhaust regulations then be sure to contact your local DMV or emissions office to avoid ticketing.

If you have any questions regarding the installation process, from tech help to warrantee needs, please contact us at:

 $(941\text{-}323\text{-}5912) \mid \underline{Sales@twistdynamics.com}$ 

www.twistdynamics.com