

**MODERATE** - Installation requires metric tools and possibly cutting and drilling. The ability to closely follow instructions is imperative. If your mechanical experience is limited to simple jobs like changing oil and rotating tires, a Moderate installation will likely prove challenging.

**ESTIMATED INSTALLATION TIME** - Installation times are for a professional installer. Times may vary based on the skill level of the installer.

ESTIMATED INSTALL TIME - 1.4 hrs

## PART NOS. M31030, M31031, M31032, & M31033

### 1996-2004 Mustang GT/Cobra X-Pipe with Catalytic Converters or with Race Pipes

#### PACKING LIST - 1996-98 X-PIPE W/CATS (M31030) & W/RACE PIPES (M31031)

Item #	Check	Quantity	Part Number	Description
1	<input type="checkbox"/>	1	310306786	X-Pipe Assembly
2	<input type="checkbox"/>	1	310307782	Driver Side Head Pipe
3	<input type="checkbox"/>	1	310307781	Passenger Side Head Pipe
4	<input type="checkbox"/>	1	312362390	Passenger Side Exhaust Gasket
5	<input type="checkbox"/>	4	308144380	2.5" Exhaust Band Clamp
6	<input type="checkbox"/>	4	307315800	3/8-16 x 2.5" Bolt
7	<input type="checkbox"/>	4	30000R	3/8-16 Nut
8	<input type="checkbox"/>	8	605742869	3/8-16 Flat Washer
9	<input type="checkbox"/>	4	30033B	3/8-16 Lock Washer
10	<input type="checkbox"/>	2	M310193500	Catalytic Converter (M31030)
or				
	<input type="checkbox"/>	2	310306784	Race Pipe (M31031)
11	<input type="checkbox"/>	1	*****	Installation Instructions

#### PACKING LIST - 1999-2004 X-PIPE W/CATS (M31032) & W/RACE PIPES (M31033)

Item #	Check	Quantity	Part Number	Description
1	<input type="checkbox"/>	1	310306786	X-Pipe Assembly
2	<input type="checkbox"/>	1	310306782	Driver Side Head Pipe
3	<input type="checkbox"/>	1	310306781	Passenger Side Head Pipe
4	<input type="checkbox"/>	1	312362390	Passenger Side Exhaust Gasket
5	<input type="checkbox"/>	4	308144380	2.5" Exhaust Band Clamp
6	<input type="checkbox"/>	4	307315800	3/8-16 x 2.5" Bolt
7	<input type="checkbox"/>	4	30000R	3/8-16 Nut
8	<input type="checkbox"/>	8	605742869	3/8-16 Flat Washer
9	<input type="checkbox"/>	4	30033B	3/8-16 Lock Washer
10	<input type="checkbox"/>	2	940400005	M10-1.5 x 30mm Bolt
11	<input type="checkbox"/>	2	M310193500	Catalytic Converter (M31032)
or				
	<input type="checkbox"/>	2	310306784	Race Pipe (M31033)
12	<input type="checkbox"/>	1	*****	Installation Instructions

**Warning: SLP recommends allowing the vehicle to cool (not running) for five hours before beginning the installation. SLP recommends wearing safety glasses for the complete installation.**

**Warning: To avoid the chance of electrical shock or damage to your vehicle's electrical system, disconnect both the negative and positive battery leads (in that order) at the battery.**

## **INSTALLATION INSTRUCTIONS**

1. Raise the vehicle to allow for a sufficient work area underneath the vehicle. A vehicle lift will make this installation much easier, however, raising the vehicle can be accomplished using ramps or a jack with jack stands.
2. Disconnect the tailpipe and muffler assembly by unbolting the 2 flanges from the H-pipe and removing the exhaust hangers from the rubber insulators. If you are retaining your old tailpipes and mufflers you can just move them out of the way to allow enough clearance for removal of the old h-pipe and installation of the new x-pipe.

**Note: If you are removing the original tailpipes and mufflers you may need to cut the old pipes in the vicinity of the rear axle or disconnect the shocks to gain enough suspension clearance to remove them.**

3. Disconnect the wires from all the oxygen sensors.
4. Remove the nuts from the exhaust manifold to h-pipe studs and remove the original h-pipe assembly.\* Save the original manifold nuts, as you will need to reuse them.\*\*

**\*96-98 VEHICLES: You will need to unbolt the additional hanger from the transmission cross member prior to removing the h-pipe. You can discard this hanger, as you will not be reusing it.**

**\*\*99-04 vehicles: Remove the studs from the driver side exhaust manifold because you will be replacing them with the M10-1.5 x 30mm bolts.**

5. You may want to remove the oxygen sensors from your old h-pipe and install them in your new system now while access to them is easier. Be sure to reinstall the sensors in the same locations as in the original h-pipe.

**Note: On 1999 vehicles there is an additional bracket on the transmission mount that the oxygen sensor wire harness attaches to. This bracket may interfere with the oxygen sensors on the SLP x-pipe. You may either trim this bracket to obtain the necessary clearance or simply remove it. Removal can be accomplished fairly easily by first supporting the transmission with a jack. Then simply remove the four bolts retaining the transmission cross member and mount to the floor followed by the 2 bolts retaining it to the transmission itself. Lower the cross member and mount, remove the bracket, and reinstall the cross member and mount in the reverse procedure. Whether you decide to trim the bracket or remove it you must make sure the wire harness is clear of any exhaust parts when the installation is complete. Using tie wraps to secure the harness to the cross member is a good idea.**

6. Place the Driver Side Head Pipe onto the driver side exhaust manifold outlet. On 96-98 vehicles slide the flange onto the manifold studs and thread the nuts into the studs. On 99-04 vehicles insert the two M10-1.5 x 30mm bolts through the flange and thread them into the exhaust manifold. Leave the nuts/bolts loose enough to allow for later adjustment.
7. If it has not already been removed then remove the old passenger side exhaust manifold gasket from the manifold flange and place the new gasket onto the flange. Tabs on the gasket should hold it in place on the studs.

8. Place the Passenger Side Head Pipe onto the passenger side manifold flange and loosely tighten the nuts.
9. Slide a band clamp over the inlet (notched) end of one of the catalytic converters, and then slide the inlet over the end of one of the head pipes. The side of the converter with the heat shield should face upward towards the floor pan of the vehicle. Loosely tighten the clamp. Repeat this procedure on the other head pipe.

**If you are installing the Race X-Pipe (M31031 or M31033) just insert the supplied race pipes in place of the catalytic converters.**

10. Slide a band clamp onto each side of the inlet end of the X-Pipe Assembly and slide the whole assembly onto the converter outlets. Loosely tighten the clamps.
11. Reconnect the tailpipes to the new X-Pipe using the provided 3/8-16 x 2.5" bolts, nuts, flat washers, & lock washers. Place a flat washer under the head of each bolt and slide it into the flanges with the threaded end towards the rear of the vehicle. Then put a flat washer, lock washer, & nut (in that order) onto each bolt and loosely tighten the bolts.
12. Now adjust all the pipes until the tailpipe tips are located as desired and all the pipes have enough clearance from all suspension, brake lines, fuel tank, driveline, and body parts. The pipes should be parallel with the rocker panels (not the floor pan or sub frames) when viewed from the side. The multi-piece modular design allows the center of the exhaust to sag when all the joints are loose and when tightened in this relaxed position can decrease ground clearance. You may need to support the center of the pipes while tightening them to assure the pipes remain parallel to the rocker panels.
13. Tighten all the clamps and fasteners working from the exhaust manifolds back, while checking and maintaining correct tip location along the way. The exhaust manifold to head pipe nuts should be tightened to 30 ft/lbs and the X-pipe flange bolts/nuts should be tightened to 26 lb/ft.
14. If you have not already done so reinstall the oxygen sensors and reconnect the electrical connectors for each of them. Make sure all wires are clear of the exhaust parts.

**On 2004 GTs you will probably need a pair of oxygen sensor wire extension harnesses (Part # M31037) to connect the rear oxygen sensors. Route the extension harness over the transmission crossmember to keep them away from the exhaust pipes.**

**NOTE: You will likely need to install oxygen sensor simulators (PN M31038) on the two rear oxygen sensors if you are using the race pipe to avoid setting a diagnostic trouble code (DTC) and illuminating the vehicle's malfunction indicator lamp (MIL).**

15. Start the vehicle and inspect for leaks.
16. Double check all fasteners and clearances after test driving. Adjust as necessary.