

# FLOWMASTER™

## American Thunder™

### **SYSTEM #17418**

**2004-08 FORD F-150 TRUCKS (D.O.S/R)  
FITS: ALL- WHEEL BASES AND V8 ENGINES**

12/4/07

#### **Removal:**

- 1) Using a hacksaw or sawsall, cut the tailpipe off where it exits the muffler. Remove the tailpipe and set aside.
- 2) Support the muffler with a stand. Separate the three rubber hangers on the muffler and tailpipe from the rubber mounts on the vehicle (a lubricant of some kind will make this easier).
- 3) Remove the band clamp that secures the factory inlet pipe to the converter Y-Pipe. Remove the inlet pipe/muffler assembly and set aside.

**Installation:** ( If you live in a geographical area that has harsh winters or sees a great deal of precipitation, the use of high temperature paint over the welded areas can help to prevent surface rust and premature corrosion.) Note: before installing anything, prep the clamps supplied in the hardware kit by removing the nuts, and applying a thick lubricant such as white grease or anti-seize to the threads.

- 1) Based on production variations this is a list of cab designs, bed lengths, and wheel bases to cut your new inlet pipe **26242** to fit your application. Double check all measurements before cutting your inlet pipe:

#### **Regular Cab – 4x2 or 4x4**

- 6.5' Bed – 126 inch WB - Trim 19.50" off the rear of inlet pipe.
- 8.0' Bed – 144.5 inch WB - Trim 1.0" off the rear of inlet pipe.

#### **SuperCab – 4x2 or 4x4**

- 5.5' Bed – 132.5 inch WB - Trim 13.0" off the rear of the pipe.
- 6.5' Bed – 144.5 inch WB - Trim 1.0" off the rear of the pipe.
- 8.0' Bed – 163.0 inch WB - No trim on 26242, add ext. pipe 26244 and trim off 2.25".

#### **SuperCrew – 4x2 or 4x4**

- 5.5' Bed – 138.5 inch WB – Trim 7.0" off the rear of inlet pipe
- 6.5' Bed – 150.5 inch WB – No trim on 26242, add ext. pipe 26244 and trim off 14.75".

- 2) Slide a 2-1/2" ring clamp (**MC250R**) over the reduced end of inlet pipe. Then place the inlet pipe onto the back of the existing OEM head pipe (by lining up the notch). Tighten the clamp just enough to hold the pipe in place.
- 3) Now slide the inlet hanger (**292HA**) over the back of the inlet pipe and insert the hanger into the factory rubber mount. Tighten both ring clamps enough to hold,

while still allowing for some adjustment.

**Note: \*Reg Cab/6.5' Bed: This hanger is not used.**

**\*SuperCab/6.5' Bed, SuperCab/8.0' Bed and Super Crew – The rubber mount is bolted to the side of the frame, and must be relocated forward to the cross brace where you will find another factory mounting hole location.**

- 4) Slide a 3" ring clamp (**MC300R**) onto the inlet neck of the muffler (**530552**). Then place muffler onto the inlet pipe and support with a stand. Tighten the clamp just enough to hold, while still allowing for adjustment.
- 5) Using the **5/16" bolt, washers and nut** provided, secure the left hanger bracket (**211HA**) to the frame on the driver's side of the vehicle, using the factory holes on the bottom of the frame next to spare tire, place the **5/16" bolt** and a flat washer up into the square hole using a flexible head magnet thru the larger round hole in the side of the frame guide the bolt up and down into place in the round hole. Next mount the (**211HA**) onto the **5/16" bolt** sticking down and install a flat washer, lock washer and nut. Using two **1/2" wrenches** tighten firmly (do not over tighten) Once the hanger bracket is secured, slide on rubber hanger (**HA168**).
- 6) Slide a **2-1/2" ring clamp (MC250R)** onto each muffler outlet neck. Then place the right side tailpipe (**16503**) into position over the axle and into the right side muffler outlet. Place the tailpipe hanger rod into the factory rubber mount. Tighten the ring clamp enough to hold, while still allowing for some adjustment.
- 7) Place the front section of the left side tailpipe (**16444**) into the left side of muffler outlet and insert hanger welded to pipe into the factory rubber mount. Tighten the ring clamp enough to hold, while still allowing for adjustment. Place another **2-1/2" ring clamp (MC250R)** onto to rear (expanded) end of the pipe, and tighten just enough to hold it in place.
- 8) Then place the left rear tailpipe section (**16506**) into the expanded connection of the front section (**16444**). Connect the hanger rod to the rubber mount installed in step 5. Tighten the clamp down just enough to hold the pipe in place, while still allowing for adjustment.
- 9) Then slide either the side exit pipe (**16317**) or rear exit pipe (**16397**) onto the ends of both over axle pipes. Place a **2 1/2" clamp** onto these slip-fit connections, tighten enough to hold but still allow for adjustment. Place the two stainless tips (**ST396**) onto the exit pipes and tighten the hose clamps enough to hold but still allow for adjustment. Rotate the exit pipe and tip to the desired distance from the fender or bumper, so that the angle cut on the tips are in the desired location. We highly recommend tack welding the tip to the exit pipe to prevent possible slippage and loss of the tip.
- 10) Adjust the position of all the pipes and muffler to provide a satisfactory fit. **A minimum of 3/4" clearance** around all parts of the system must be maintained; while keeping suspension travel and vibration in mind. After adjustments have been made, you may now securely tighten all clamps.
- 11) After the system is secure, slide the **7/16" hanger keeper** onto the left tailpipe hangers. This keeper will prevent the hanger rods from slipping out of the rubber mount.
- 12) **We highly recommend that all connections, including the stainless tips be**

welded after final adjustment

***PACKING LIST FOR KIT #17418***

<b><u>Qty</u></b>	<b><u>Description</u></b>	<b><u>Part#</u></b>
1	Inlet Pipe	26242
1	Extension pipe	26244
1	Muffler	530552
1	Right Tailpipe	16503
1	Left Tailpipe, Front	16444
1	Left Tailpipe, Rear	16506
2	Side Exit Pipes	16317
2	Rear Exit Pipes	16397
2	Stainless Tip	ST396
1	Parts Kit	PK448
6	2 1/2" Ring Clamp	MC250R
2	3" Ring Clamp	MC300R
1	Rubber Hanger	HA168
1	Ring Clamp Hanger	292HA
1	Frame Hanger, Rear	211HA
1	5/16" Nut	HW102
1	5/16" x 1 1/4" Bolt	HW205
2	5/16" Flat Washer	HW302
1	5/16" Lock Washer	HW308
2	7/16" Hanger Keeper	HW502

# FLOWMASTER FORCE II SYSTEM #17418

2004-08 FORD F-150 TRUCKS, (D.O.S/R)

1/2 TON- ALL WHEEL BASES/(WITH V8 ENGINES)

