

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-161-78

Relating to Exemptions Under Section 27156  
of the California Vehicle Code

Gale Banks Engineering  
TorqueTubes

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Section 39515 and Section 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the installation of the TorqueTubes, manufactured and marketed by Gale Banks Engineering, 546 Duggan Avenue, Azusa, California 91702, has been found not to reduce the effectiveness of the applicable vehicle pollution control systems and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for the following vehicles applications.

<u>Model Year</u>	<u>Make</u>	<u>Model</u>	<u>Engine</u>	<u>Part No.</u>
2004 to 2008	Ford	Trucks	5.4L	48715
2006 to 2008	Ford	Motorhome Class A	6.8L	49170
2005 to 2008	Ford	E-350 Motorhome Class C	6.8L	49178
2005 to 2008	Ford	E-Super Duty Motorhome Class C	6.8L	49179
2004	Ford	E-Super Duty Motorhome Class C	6.8L	49185
1997 to 2004	Ford	E-350 Motorhome Class C	6.8L	49186
2007 to 2008	Jeep	Wrangler	3.8L	51319
2000 to 2006	Jeep	Wrangler	4.0L	51306
1991 to 1999	Jeep	Wrangler	4.0L	51304
1991 to 2002	Jeep	Wrangler	2.5L	51316

The TorqueTubes are shorty style headers, manufactured out of 16 gauge stainless steel tubing. For all applications, excluding motorhomes, the oxygen sensor is retained in the stock location and at a collector. Motorhome applications may include a connecting Y-pipe that is also manufactured out of 16 gauge stainless steel tubing. The oxygen sensor is in the connecting Y-pipe at a collector, similar to stock.

This Executive Order is valid provided that the installation instructions for the TorqueTubes will not recommend tuning the vehicle to specifications different from those submitted by the device manufacturer.

Changes made to the design or operating conditions of the TorqueTubes, as exempt by the Air Resources Board, which adversely affect the performance of the vehicle's pollution control system shall invalidate this Executive Order.

This Executive Order shall not apply to any TorqueTubes advertised, offered for sale, sold with, or installed on a new motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

Marketing of the TorqueTubes using any identification other than that shown in this Executive Order or marketing of the TorqueTubes for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board.

This Executive Order does not constitute any opinion as to the effect the use of the TorqueTubes may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on submitted emission test data generated on both 2007 model year 3.8L Jeep Wrangler and a 5.4L Ford F-150 vehicles, certified to the Low Emission Vehicle II Ultra Low Emission Vehicle (LEV II ULEV) emission standards and modified with the TorqueTubes. Test results showed that emission levels, with the TorqueTubes installed, met the applicable emission standards when tested using the Cold-Start CVS-75 Federal Test Procedure (FTP) test cycle for both vehicles and the Supplemental Federal Test Procedure (SFTP US06) test cycle for the Jeep Wrangler only. Examination of the OBD II system showed the TorqueTubes did not affect OBD II system operation. Results from emissions testing conducted at Quantum Technologies, Lake Forest, California, are shown below (in grams per mile with deterioration factors applied).

<b>Jeep Wrangler</b>	<b>CVS-75</b>				<b>US06</b>	
	<b>NMOG</b>	<b>CO</b>	<b>NOx</b>	<b>HCHO</b>	<b>NMHC+NOx</b>	<b>CO</b>
Standards, 50k	0.040	1.7	0.05	0.008	0.25	10.5
Device Test	0.036	0.9	0.02	0.001	0.03	1.8
<b>Ford F-150</b>	<b>CVS-75</b>					
	<b>NMOG</b>	<b>CO</b>	<b>NOx</b>	<b>HCHO</b>		
Standards, Useful life	0.070	2.1	0.04	0.011		
Device Test	0.048	1.1	0.03	0.000		

Similar effect on vehicle emissions is expected with the installation of the TorqueTubes on vehicles listed in this Executive Order.

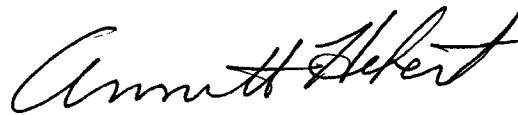
The Air Resources Board reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

**THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF THE TORQUETUBES.**

No claim of any kind, such as "Approved by the Air Resources Board", may be made with respect to the action taken herein in any advertising or other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after a ten-day written notice of intention to revoke the order, in which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request and the order may not be revoked until a determination is made after the hearing that grounds for revocation exist.

Executed at El Monte, California, this 24 day of April 2008.



Annette Hebert, Chief  
Mobile Source Operations Division