

GLOBAL DIESEL EMISSIONS REGULATIONS-AT-

U.S. EPA OFF-HIGHWAY STANDARDS

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
175 + hp	Tier 3					Tier 4				
75-175	Tier 2	Tier 2-3 *		Tier 3			Tier 4			
< 75 hp	Tier 2		Tier 4							

* 100-175 hp Tier 3, 75-100 hp Tier 2

U.S. EPA ON-HIGHWAY STANDARDS

	2004-2006	2007-2009	2010
>33,000 lb. GVWR	US'04	US'07	US'10
19,500 to 33,000 lb. GVWR			
8500 to <19,500 lb. GVWR*			
Light Duty**	Tier 2 (phase-in 2004-2009)		

* Note: Heavy-duty vehicles between 8500-14,000 lb. GVW have the option of certifying engines or doing a whole vehicle certification using a chassis dynamometer (starting in 2008).

**Medium-duty passenger vehicles in the 8500-10,000 lb. GVW range are included in Tier 2 requirements.

EUROPEAN UNION (EU) OFF-ROAD STANDARDS

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
130-560 kW	Stage 3a					Stage 3b				Stage 4
56-130 kW	Stage 2	Stage 2/3a *	Stage 3a			Stage 3b		Stage 4 (October 2014)		
18-56 kW	Stage 2	Stage 2/3a **	Stage 3a				Stage 3b			

* 75-130 kW Stage 3a, 56-75 kW Stage 2

** 37-56 kW Stage 2, 18-37 kW Stage 3a

EUROPEAN UNION (EU) ON-HIGHWAY STANDARDS

	2000-2004	2005-2007	2008-2009
Light-Duty Vehicles	Euro 3	Euro 4	Euro 5 *
Heavy-Duty Vehicles	Euro 3	Euro 4	Euro 5

* Euro 5 to start in September 2009

JAPAN STANDARDS

	2003-2004	2005-2008	2009-2010
Light-Duty Vehicles	Japan 2003	Japan 2005	Japan 2009
Heavy-Duty Vehicles	Japan 2003	Japan 2005	Japan 2009 (2010 over 12 tons)

BRAZIL STANDARDS

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Light-Duty Vehicles (No diesel cars allowed)											
Heavy-Duty Vehicles	Euro 3	(Phase in 2004-2006)				Euro 4					

CHINA STANDARDS

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Light-Duty Vehicles											
Major Cities	Euro 3		Euro 4						Euro 5		
Nationwide	Euro 2		Euro 3			Euro 4			Euro 5		
Heavy-Duty Vehicles	Euro 2			Euro 3		Euro 4				Euro 5	

INDIA STANDARDS

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Light-Duty Vehicles											
Major Cities	Euro 3					Euro 4					
Nationwide	Euro 2					Euro 3					
Heavy-Duty Vehicles	Euro 2					Euro 3					

KOREA STANDARDS

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Light-Duty Vehicles	Euro 3	Euro 4									
Heavy-Duty Vehicles	Euro 3		Euro 4								

RUSSIA STANDARDS

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Light-Duty Vehicles		Euro 2		Euro 3		Euro 4					
Heavy-Duty Vehicles				Euro 3		Euro 4					