ARB-Approved Engine Families for the ESW CleanTech Phoenix System

Relating to Executive Order Series DE-13-004

Effective Date: September 6, 2013

Note 1: If the engine family includes a diesel oxidation catalyst (DOC), the DOC must be left in place on the vehicle pursuant to the terms and conditions of the Executive Order.

Note 2: The Phoenix system in only verified for engines rated from 100 to 450 horsepower.

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
1996	Case	TX9505R6DTRA	8.3	*	*	*
1996	Case	TX9505R6DTRB	8.3	*	*	*
1996	Case	TX9505R6DTRC	8.3	*	*	*
1996	Caterpillar	TCP10.RZDBRD	10.5	*	*	*
1996	Caterpillar	TCP10.RZDBRF	10.5	*	*	*
1996	Caterpillar	TCP10.RZDBRK	10.3	*	*	*
1996	Caterpillar	TCP12.RZDBRM	12.0	*	*	*
1996	Caterpillar	TCP6.6RZDBRB	6.6	*	*	*
1996	Caterpillar	TCP6.6RZDBRC	6.6	*	*	*
1996	Caterpillar	TCP7.2RZDBRB	7.2	*	*	*
1996	Caterpillar	TCP7.2RZDBRC	7.2	*	*	*
1996	Caterpillar	TCP7.2RZDBRK	7.2	*	*	*
1996	Cummins	TCE359R6DTRA	5.9	*	*	*
1996	Cummins	TCE505R6DTRA	8.3	*	*	*
1996	Cummins	TCE505R6DTRB	8.3	*	*	*
1996	Cummins	TCE505R6DTRC	8.3	*	*	*
1996	Cummins	TCE505R6DTRD	8.3	*	*	*
1996	Cummins	TCE661RGDTRA	10.8	*	*	*
1996	Deere	TJD10.R6DBRA	10.1	*	*	*
1996	Deere	TJD10.R6DBRB	10.1	*	*	*
1996	Deere	TJD10.RJDBRA	10.5	*	*	*
1996	Deere	TJD10.RJDBRB	10.5	*	*	*
1996	Deere	TJD6.8R6DBRC	6.8	*	*	*
1996	Deere	TJD6.8R6DBRD	6.8	*	*	*
1996	Deere	TJD7.6R6DBRA	7.6	*	*	*
1996	Deere	TJD7.6R6DBRB	7.6	*	*	*
1996	Deere	TJD8.1R6DBRA	8.1	*	*	*
1996	Deere	TJD8.1R6DBRB	8.1	*	*	*
1996	Deere	TJD8.1R6DBRC	8.1	*	*	*
1996	Detroit Diesel Corporation	TDD11.TJDARE	11.1	*	*	*
1996	Detroit Diesel Corporation	TDD8.5TJDARE	8.5	*	*	*
1996	Deutz	TDZ7.1R6DARA	7.1	*	*	*
1996	Deutz	TDZ7.1R6DARB	7.1	*	*	*
1996	International	TNV466R6DARA	7.6	*	*	*
1996	International	TNV466R6DARB	7.6	*	*	*
1996	International	TNV466R6DASC	7.6	*	*	*
1996	International	TNV466R6DASD	7.6	*	*	*
1996	International	TNV530R6DARA	8.7	*	*	*
1996	International	TNV530R6DARB	8.7	*	*	*
1996	International	TNV530R6DASC	8.7	*	*	*
1996	International	TNV530R6DASD	8.7	*	*	*
1996	International	TNV530R8DASE	8.7	*	*	*
1996	Iveco	TVE7.7R6DARA	7.7	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
1996	Iveco	TVE9.5R6DARA	9.5	*	*	*
1996	Iveco	TVE9.5R6DASA	9.5	*	*	*
1996	Komatsu	TKL11.RZDARA	11.0	*	*	*
1996	Komatsu	TKL11.RZDARB	11.0	*	*	*
1996	Komatsu	TKL11.RZDARC	11.0	*	*	*
1996	Komatsu Dresser	TKD505R6DTRA	8.3	*	*	*
1996	Komatsu Dresser	TKD505R6DTRC	8.3	*	*	*
1996	Liebherr Machines Bulle SA	TLH9.9R6DARA	10.0	6.6	*	*
1996	Liebherr Machines Bulle SA	TLH9.9R6DASA	10.0	6.6	*	*
1996	Mercedes-Benz	TMB13.R6DARA	9.6	*	*	*
1996	Mercedes-Benz	TMB15.R6DARA	11	*	*	*
1996	Mercedes-Benz	TMB22.R6DARA	11	*	*	*
1996	Mitsubishi Motors	TMT460D6DARA	7.5	*	*	*
1996	Mitsubishi Motors	TMT729E6DARC	11.9	*	*	*
1996	New Holland	TNH7.5R6DARA	7.5	*	*	*
1996	Volvo Construction Equipment	TVS12.R6DARA	12.0	*	*	*
1996	Volvo Construction Equipment	TVS6.7R6DARA	6.7	*	*	*
1996	Volvo Construction Equipment	TVS9.6R6DARA	9.6	*	*	*
1997	AB Volvo Penta	VVP12.R6DARA	12.0	*	*	*
1997	AB Volvo Penta	VVP5.5R6DARA	5.5	*	*	*
1997	AB Volvo Penta	VVP6.7R6DARA	6.7	*	*	*
1997	AB Volvo Penta	VVP6.7R6DASA	6.7	*	*	*
1997	AB Volvo Penta	VVP9.6R6DASA	9.6	*	*	*
1997	Case	VX9505R6DTRA	8.3	*	*	*
1997	Case	VX9505R6DTRB	8.3	*	*	*
1997	Case	VX9505R6DTRC	8.3	*	*	*
1997	Caterpillar	VCP10.RZDARD	10.5	*	*	*
1997	Caterpillar	VCP10.RZDARG	10.5	*	*	*
1997	Caterpillar	VCP10.RZDARK	10.3	*	*	*
1997	Caterpillar	VCP12.RZDARM	12.0	*	*	*
1997	Caterpillar	VCP442DZDARK	7.2	*	*	*
1997	Caterpillar	VCP6.6RZDARC	6.6	*	*	*
1997	Caterpillar	VCP7.0RZDARB	7.0	*	*	*
1997	Caterpillar	VCP7.2RZDARB	7.2	*	*	*
1997	Caterpillar	VCP7.2RZDARC	7.2	*	*	*
1997	Caterpillar	VCP7.2RZDARK	7.2	*	*	*
1997	Cummins	VCE359R6DTRB	5.9	*	*	*
1997	Cummins	VCE505R6DTRB	8.3	*	*	*
1997	Cummins	VCE505R6DTRC	8.3	*	*	*
1997	Cummins	VCE505R6DTRD	8.3	*	*	*
1997	Cummins	VCE661RGDTRA	10.8	*	*	*
1997	Daewoo	VDW11.R6DARA	11.0	*	*	*
1997	DaimlerChrysler	VMB13.R6DARA	9.6	*	*	*
1997	DaimlerChrysler	VMB15.R6DARA	11	*	*	*
1997	DaimlerChrysler	VMB22.R6DARA	11	*	*	*
1997	Deere	VJD10.R6DBRA	10.1	*	*	*
1997	Deere	VJD10.R6DBRB	10.1	*	*	*
1997	Deere	VJD10.RJDBRA	10.5	*	*	*
1997	Deere	VJD10.RJDBRB	10.1	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
1997	Deere	VJD6.8R6DBRA	6.8	4.5	*	*
1997	Deere	VJD6.8R6DBRB	6.8	*	*	*
1997	Deere	VJD6.8R6DBRC	6.8	4.5	*	*
1997	Deere	VJD6.8R6DBRD	6.8	4.5	*	*
1997	Deere	VJD7.6R6DBRA	7.6	*	*	*
1997	Deere	VJD7.6R6DBRB	7.6	*	*	*
1997	Deere	VJD8.1R6DBRA	8.1	*	*	*
1997	Deere	VJD8.1R6DBRB	8.1	*	*	*
1997	Deere	VJD8.1R6DBRC	8.1	*	*	*
1997	Detroit Diesel Corporation	VDD11.TJDARE	11.1	*	*	*
1997	Detroit Diesel Corporation	VDD8.5TJDARE	8.5	*	*	*
1997	Deutz	VDZ7.1R6DARA	7.2	*	*	*
1997	Deutz	VDZ7.1R6DARB	7.2	*	*	*
1997	International	VNV466R6DASC	7.6	*	*	*
1997	International	VNV466R6DASD	7.6	*	*	*
1997	International	VNV530R6DARA	8.7	7.6	*	*
1997	International	VNV530R6DARB	8.7	7.6	*	*
1997	International	VNV530R6DASC	8.7	*	*	*
1997	International	VNV530R6DASD	8.7	*	*	*
1997	International	VNV530R8DARA	8.7	*	*	*
1997	International	VNV530R8DASC	8.7	*	*	*
1997	International	VNV530R8DASE	8.7	*	*	*
1997	Isuzu	VSZ9.8R6DARB	9.8	*	*	*
1997	Iveco	VVE7.7R6DARA	7.7	*	*	*
1997	Iveco	VVE9.5R6DARA	9.5	*	*	*
1997	Iveco	VVE9.5R6DASA	9.5	*	*	*
1997	Komatsu	VKD505R6DTRA	8.3	*	*	*
1997	Komatsu	VKD505R6DTRC	8.3	*	*	*
1997	Liebherr Machines Bulle SA	VLH9.9R6DARA	10.0	6.6	*	*
1997	Liebherr Machines Bulle SA	VLH9.9R6DASA	10.0	6.6	*	*
1997	Mitsubishi Motors	VMT460R6DARA	7.5	*	*	*
1997	Mitsubishi Motors	VMT729R6DARC	11.9	*	*	*
1997	New Holland	VNH7.5R6DARA	7.5	*	*	*
1997	Volvo Construction Equipment	VVS12.R6DARA	12.0	*	*	*
1997	Volvo Construction Equipment	VVS6.7R6DARA	6.7	*	*	*
1997	Volvo Construction Equipment	VVS9.6R6DARA	9.6	*	*	*
1998	AB Volvo Penta	WVPXL05.5AAA	5.5	*	*	*
1998	AB Volvo Penta	WVPXL05.5ABA	5.5	*	*	*
1998	AB Volvo Penta	WVPXL06.7AAA	6.7	*	*	*
1998	AB Volvo Penta	WVPXL06.7ABA	6.7	*	*	*
1998	AB Volvo Penta	WVPXL09.6AAA	9.6	*	*	*
1998	AB Volvo Penta	WVPXL09.6ABA	9.6	*	*	*
1998	AB Volvo Penta	WVPXL09.6ACB	9.6	*	*	*
1998	AB Volvo Penta	WVPXL12.0ABA	12.0	*	*	*
1998	Case	WX9XL0239ABA	3.9	*	*	*
1998	Case	WX9XL0239ACA	3.9	*	*	*
1998	Case	WX9XL0359AAA	5.9	*	*	*
1998	Case	WX9XL0359ABA	5.9	*	*	*
1998	Case	WX9XL0505AAA	8.3	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
1998	Case	WX9XL0505ABA	8.3	*	*	*
1998	Case	WX9XL0505ABB	8.3	*	*	*
1998	Case	WX9XL0505ABC	8.3	*	*	*
1998	Case	WX9XL0505ACA	8.3	*	*	*
1998	Caterpillar	WCPXL06.6MRB	6.6	*	*	*
1998	Caterpillar	WCPXL06.6MRC	6.6	*	*	*
1998	Caterpillar	WCPXL07.0MRB	7.0	*	*	*
1998	Caterpillar	WCPXL07.2HRK	7.2	*	*	*
1998	Caterpillar	WCPXL07.2MRB	7.2	*	*	*
1998	Caterpillar	WCPXL07.2MRC	7.2	*	*	*
1998	Caterpillar	WCPXL10.3ERK	10.3	*	*	*
1998	Caterpillar	WCPXL10.5MRD	10.5	*	*	*
1998	Caterpillar	WCPXL10.5MRG	10.5	*	*	*
1998	Caterpillar	WCPXL12.0ERM	12.0	*	*	*
1998	Cummins	WCEXL0359AAA	5.9	*	*	*
1998	Cummins	WCEXL0359ABA	5.9	*	*	*
1998	Cummins	WCEXL0359ABB	5.9	*	*	*
1998	Cummins	WCEXL0505AAA	8.3	*	*	*
1998	Cummins	WCEXL0505ABA	8.3	*	*	*
1998	Cummins	WCEXL0505ABB	8.3	*	*	*
1998	Cummins	WCEXL0505ABC	8.3	*	*	*
1998	Cummins	WCEXL0505ACA	8.3	*	*	*
1998	Cummins	WCEXL0661AAA	10.8	*	*	*
1998	Daewoo	WDWXL11.1AHT	11.0	*	*	*
1998	Daewoo	WDWXL11.1BHT	11.1	*	*	*
1998	Daewoo	WDWXL11.1BIA	11.1	*	*	*
1998	Daimler-Benz	WMBXL6.37DJA	6.4	*	*	*
1998	Deere	WJDXL06.8012	6.8	4.5	*	*
1998	Deere	WJDXL06.8013	6.8	*	*	*
1998	Deere	WJDXL06.8014	6.8	4.5	*	*
1998	Deere	WJDXL06.8015	6.8	4.5	*	*
1998	Deere	WJDXL07.6010	7.6	*	*	*
1998	Deere	WJDXL07.6011	7.6	*	*	*
1998	Deere	WJDXL08.1007	8.1	*	*	*
1998	Deere	WJDXL08.1008	8.1	*	*	*
1998	Deere	WJDXL08.1009	8.1	*	*	*
1998	Deere	WJDXL10.1005	10.1	*	*	*
1998	Deere	WJDXL10.1006	10.1	*	*	*
1998	Deere	WJDXL10.5003	10.5	*	*	*
1998	Deere	WJDXL10.5004	10.5	*	*	*
1998	Detroit Diesel Corporation	WDDXL08.5TJD	8.5	*	*	*
1998	Detroit Diesel Corporation	WDDXL11.1THD	11.1	*	*	*
1998	Detroit Diesel Corporation	WMUXL12.0G2V	12.0	*	*	*
1998	Deutz	WDZXL07.1003	7.1	4.8	*	*
1998	Deutz	WDZXL07.1004	7.1	4.8	*	*
1998	Deutz	WDZXL15.9002	11.9	*	*	*
1998	International	WNVXL0466BNA	7.8	*	*	*
1998	International	WNVXL0530ANA	8.7	*	*	*
1998	International	WNVXL0530ANB	8.7	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
1998	International	WNVXL0530BNA	8.8	7.8	*	*
1998	International	WNVXL0530BNB	8.7	7.6	*	*
1998	International	WNVXL0530BNC	8.7	*	*	*
1998	International	WNVXL0530BND	8.7	*	*	*
1998	Isuzu	WSZXL09.8DTB	9.8	*	*	*
1998	Iveco	WVEXL07.7DAR	7.7	*	*	*
1998	Iveco	WVEXL09.5DAR	9.5	*	*	*
1998	Iveco	WVEXL09.5DAS	9.5	*	*	*
1998	Komatsu	WKLXL11.0DA1	11.0	*	*	*
1998	Komatsu	WKLXL11.0DB1	11.0	*	*	*
1998	Komatsu	WKLXL11.0DC1	11.0	*	*	*
1998	Komatsu	WKLXL7.15CB1	7.2	*	*	*
1998	Komatsu	WKLXL7.15CC1	7.2	*	*	*
1998	Komatsu Dresser	WKDXL0239ABA	3.9	*	*	*
1998	Komatsu Dresser	WKDXL0239ACA	3.9	*	*	*
1998	Komatsu Dresser	WKDXL0359AAA	5.9	*	*	*
1998	Komatsu Dresser	WKDXL0359ABA	5.9	*	*	*
1998	Komatsu Dresser	WKDXL0505AAA	8.3	*	*	*
1998	Komatsu Dresser	WKDXL0505ABB	8.3	*	*	*
1998	Liebherr Machines Bulle SA	WLHAL9.96ARA	6.6	10	*	*
1998	Liebherr Machines Bulle SA	WLHAL9.96ASA	6.6	10	*	*
1998	Liebherr Machines Bulle SA	WLHAL9.96ATA	10.0	*	*	*
1998	Mercedes-Benz	WMBXL12.9R6A	10	*	*	*
1998	Mercedes-Benz	WMBXL14.6R6A	11	*	*	*
1998	Mercedes-Benz	WMBXL21.9R6A	11	*	*	*
1998	Mercedes-Benz	WMBXL5.96R6B	6.0	4	*	*
1998	Mitsubishi Motors	WMTXL07.5D6A	7.5	*	*	*
1998	New Holland	WNHXL07.5A3V	7.5	*	*	*
1998	Volvo Construction Equipment	WVSXL06.7CE1	6.7	*	*	*
1998	Volvo Construction Equipment	WVSXL09.6CE1	9.6	*	*	*
1998	Volvo Construction Equipment	WVSXL12.0CE1	12.0	*	*	*
1999	AB Volvo Penta	XVPXL05.5ABA	5.5	*	*	*
1999	AB Volvo Penta	XVPXL06.7AAA	6.7	*	*	*
1999	AB Volvo Penta	XVPXL06.7ABA	6.7	*	*	*
1999	AB Volvo Penta	XVPXL07.3ABB	7.3	*	*	*
1999	AB Volvo Penta	XVPXL07.3ACB	7.3	*	*	*
1999	AB Volvo Penta	XVPXL09.6AAA	9.6	*	*	*
1999	AB Volvo Penta	XVPXL09.6ABA	9.6	*	*	*
1999	AB Volvo Penta	XVPXL09.6ACB	9.6	*	*	*
1999	AB Volvo Penta	XVPXL12.0ABA	12.0	*	*	*
1999	Case	XX9XL0359ABA	5.9	*	*	*
1999	Case	XX9XL0505AAA	8.3	*	*	*
1999	Case	XX9XL0505ABA	8.3	*	*	*
1999	Case	XX9XL0505ABB	8.3	*	*	*
1999	Case	XX9XL0505ABC	8.3	*	*	*
1999	Case	XX9XL0505ACA	8.3	*	*	*
1999	Caterpillar	XCPXL06.6MRC	6.6	*	*	*
1999	Caterpillar	XCPXL07.0MRB	7.0	*	*	*
1999	Caterpillar	XCPXL07.2HRK	7.2	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
1999	Caterpillar	XCPXL07.2MRB	7.2	*	*	*
1999	Caterpillar	XCPXL07.2MRC	7.2	*	*	*
1999	Caterpillar	XCPXL10.3ERK	10.3	*	*	*
1999	Caterpillar	XCPXL10.5MRD	10.5	*	*	*
1999	Caterpillar	XCPXL10.5MRF	10.5	*	*	*
1999	Caterpillar	XCPXL10.5MRG	10.5	*	*	*
1999	Caterpillar	XCPXL12.0ERM	12.0	*	*	*
1999	Cummins	XCEXL0359ABA	5.9	*	*	*
1999	Cummins	XCEXL0359ABB	5.9	*	*	*
1999	Cummins	XCEXL0505AAA	8.3	*	*	*
1999	Cummins	XCEXL0505ABA	8.3	*	*	*
1999	Cummins	XCEXL0505ABB	8.3	*	*	*
1999	Cummins	XCEXL0505ABC	8.3	*	*	*
1999	Cummins	XCEXL0505ACA	8.3	*	*	*
1999	Cummins	XCEXL0661AAA	10.8	*	*	*
1999	Cummins	XCEXL0661AAB	10.8	*	*	*
1999	Daewoo	XDWXL11.1BHT	11.1	*	*	*
1999	Daewoo	XDWXL11.1BIA	11.1	*	*	*
1999	Daimler-Benz	XMBXL12.0RJA	11.9	*	*	*
1999	DaimlerChrysler	XMBXL12.9R6A	10	*	*	*
1999	DaimlerChrysler	XMBXL14.6R6A	11	*	*	*
1999	DaimlerChrysler	XMBXL21.9R6A	11	*	*	*
1999	DaimlerChrysler	XMBXL6.37RJA	6.4	*	*	*
1999	Deere	XJDXL06.8012	6.8	4.5	*	*
1999	Deere	XJDXL06.8013	6.8	*	*	*
1999	Deere	XJDXL06.8014	6.8	4.5	*	*
1999	Deere	XJDXL06.8015	6.8	4.5	*	*
1999	Deere	XJDXL08.1007	8.1	*	*	*
1999	Deere	XJDXL08.1008	8.1	*	*	*
1999	Deere	XJDXL08.1009	8.1	*	*	*
1999	Deere	XJDXL08.1019	8.1	*	*	*
1999	Deere	XJDXL08.1024	8.1	*	*	*
1999	Deere	XJDXL10.1006	10.1	*	*	*
1999	Deere	XJDXL10.5003	10.5	*	*	*
1999	Deere	XJDXL10.5004	10.5	*	*	*
1999	Deere	XJDXL10.5022	10.5	*	*	*
1999	Detroit Diesel Corporation	XDDXL08.5TJD	8.5	*	*	*
1999	Detroit Diesel Corporation	XDDXL11.1THD	11.1	*	*	*
1999	Deutz	XDZXL07.1004	7.2	4.8	*	*
1999	Deutz	XDZXL07.1005	7.2	4.8	*	*
1999	Deutz	XDZXL15.9002	11.9	*	*	*
1999	Deutz	XDZXL15.9003	11.9	*	*	*
1999	Hino	XHMXL08.8PTD	8.8	*	*	*
1999	International	XNVXL0466ANA	7.6	*	*	*
1999	International	XNVXL0466BNA	7.6	*	*	*
1999	International	XNVXL0530ANA	8.7	*	*	*
1999	International	XNVXL0530ANB	8.7	*	*	*
1999	International	XNVXL0530ANC	8.7	*	*	*
1999	International	XNVXL0530AND	8.7	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
1999	International	XNVXL0530BNA	8.7	7.6	*	*
1999	International	XNVXL0530BNB	8.7	7.6	*	*
1999	International	XNVXL0530BNC	8.7	*	*	*
1999	International	XNVXL0530BND	8.7	*	*	*
1999	Isuzu	XSZXL09.8DTB	9.8	*	*	*
1999	Iveco	XEVXL09.5DAR	9.5	*	*	*
1999	Iveco	XVEXL07.7DAR	7.7	*	*	*
1999	Komatsu	XKLXL11.0DA1	11.0	*	*	*
1999	Komatsu	XKLXL11.0DB1	11.0	*	*	*
1999	Komatsu	XKLXL11.0DC1	11.0	*	*	*
1999	Komatsu	XKLXL7.15CB1	7.2	*	*	*
1999	Komatsu	XKLXL7.15CC1	7.2	*	*	*
1999	Komatsu Dresser	XKDXL0359ABA	5.9	*	*	*
1999	Komatsu Dresser	XKDXL0505AAA	8.3	*	*	*
1999	Komatsu Dresser	XKDXL0505ABB	8.3	*	*	*
1999	Komatsu Dresser	XKDXL0505ACA	8.3	*	*	*
1999	Liebherr Machines Bulle SA	XLHAL9.96ARA	10.0	6.6	*	*
1999	Liebherr Machines Bulle SA	XLHAL9.96ASA	10.0	6.6	*	*
1999	Liebherr Machines Bulle SA	XLHAL9.96ATA	10.0	6.6	*	*
1999	Mitsubishi Motors	XMTXL07.5D6A	7.5	*	*	*
1999	Mitsubishi Motors	XMTXL07.5D6C	7.5	*	*	*
1999	Mitsubishi Motors	XMTXL11.9D6A	11.9	*	*	*
1999	New Holland	XNHXL07.5A3V	7.5	*	*	*
1999	Volvo Construction Equipment	XVSXL06.7CE1	6.7	*	*	*
1999	Volvo Construction Equipment	XVSXL09.6CE1	9.6	*	*	*
1999	Volvo Construction Equipment	XVSXL12.0CE1	12.0	*	*	*
2000	AB Volvo Penta	YVPXL05.5ABA	5.5	*	*	*
2000	AB Volvo Penta	YVPXL06.7AAA	6.7	*	*	*
2000	AB Volvo Penta	YVPXL06.7ABA	6.7	*	*	*
2000	AB Volvo Penta	YVPXL07.3ABB	7.3	*	*	*
2000	AB Volvo Penta	YVPXL07.3ACB	7.3	*	*	*
2000	AB Volvo Penta	YVPXL09.6AAA	9.6	*	*	*
2000	AB Volvo Penta	YVPXL09.6ABA	9.6	*	*	*
2000	AB Volvo Penta	YVPXL09.6ACB	9.6	*	*	*
2000	AB Volvo Penta	YVPXL12.0ABA	12.0	*	*	*
2000	Case	YX9XL0359ABA	5.9	*	*	*
2000	Case	YX9XL0359ABB	5.9	*	*	*
2000	Case	YX9XL0505ABA	8.3	*	*	*
2000	Case	YX9XL0505ABB	8.3	*	*	*
2000	Case	YX9XL0505ABC	8.3	*	*	*
2000	Case	YX9XL0505ACA	8.3	*	*	*
2000	Caterpillar	YCPXL06.6MRC	6.6	*	*	*
2000	Caterpillar	YCPXL07.0MRB	7.0	*	*	*
2000	Caterpillar	YCPXL07.2HRK	7.2	*	*	*
2000	Caterpillar	YCPXL07.2MRB	7.2	*	*	*
2000	Caterpillar	YCPXL10.3ERK	10.3	*	*	*
2000	Caterpillar	YCPXL10.5MRD	10.5	*	*	*
2000	Caterpillar	YCPXL10.5MRG	10.5	*	*	*
2000	Caterpillar	YCPXL12.0ERM	12.0	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2000	Cummins	YCEXL0359ABA	5.9	*	*	*
2000	Cummins	YCEXL0359ABB	5.9	*	*	*
2000	Cummins	YCEXL0505AAA	8.3	*	*	*
2000	Cummins	YCEXL0505ABA	8.3	*	*	*
2000	Cummins	YCEXL0505ABB	8.3	*	*	*
2000	Cummins	YCEXL0505ABC	8.3	*	*	*
2000	Cummins	YCEXL0505ACA	8.3	*	*	*
2000	Cummins	YCEXL0661AAA	11.0	*	*	*
2000	Cummins	YCEXL0661AAB	11.0	*	*	*
2000	DaimlerChrysler	YMBXL12.0RJA	12.0	*	*	*
2000	DaimlerChrysler	YMBXL12.0RJB	12.0	*	*	*
2000	DaimlerChrysler	YMBXL12.9R6A	10.0	*	*	*
2000	DaimlerChrysler	YMBXL14.6R6A	11	*	*	*
2000	DaimlerChrysler	YMBXL21.9R6A	11	*	*	*
2000	DaimlerChrysler	YMBXL6.37RJA	6.4	*	*	*
2000	Deere	YJDXL06.8012	6.8	4.5	*	*
2000	Deere	YJDXL06.8013	6.8	*	*	*
2000	Deere	YJDXL06.8014	6.8	4.5	*	*
2000	Deere	YJDXL06.8015	6.8	4.5	*	*
2000	Deere	YJDXL08.1007	8.1	*	*	*
2000	Deere	YJDXL08.1008	8.1	*	*	*
2000	Deere	YJDXL08.1009	8.1	*	*	*
2000	Deere	YJDXL08.1019	8.1	*	*	*
2000	Deere	YJDXL08.1024	8.1	*	*	*
2000	Deere	YJDXL10.1006	10.1	*	*	*
2000	Deere	YJDXL10.5004	10.5	*	*	*
2000	Deere	YJDXL10.5022	10.5	*	*	*
2000	Detroit Diesel Corporation	YDDXL08.5TJD	8.5	*	*	*
2000	Detroit Diesel Corporation	YDDXL11.1THD	11.1	*	*	*
2000	Deutz	YDZXL07.1004	7.2	4.8	*	*
2000	Deutz	YDZXL07.1005	7.2	4.8	*	*
2000	Deutz	YDZXL15.9002	11.9	*	*	*
2000	Deutz	YDZXL15.9003	11.9	*	*	*
2000	Hino	YHMXL06.7HTD	6.7	*	*	*
2000	Hino	YHMXL08.8PTD	8.8	*	*	*
2000	International	YNVXL0466ANA	7.6	*	*	*
2000	International	YNVXL0530ANA	8.7	*	*	*
2000	International	YNVXL0530ANB	8.7	*	*	*
2000	International	YNVXL0530ANC	8.7	*	*	*
2000	International	YNVXL0530AND	8.7	*	*	*
2000	Isuzu	YSZXL06.5EXA	6.5	*	*	*
2000	Isuzu	YSZXL07.8EXA	7.8	*	*	*
2000	Isuzu	YSZXL09.8ATB	9.8	*	*	*
2000	Iveco	YVEXL07.7DAR	7.7	*	*	*
2000	Iveco	YVEXL09.5DAR	9.5	*	*	*
2000	Komatsu	YKLXL0359ABA	5.9	*	*	*
2000	Komatsu	YKLXL0505ABB	8.3	*	*	*
2000	Komatsu	YKLXL0505ACA	8.3	*	*	*
2000	Komatsu	YKLXL11.0DA1	11.0	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2000	Komatsu	YKLXL11.0DB1	11.0	*	*	*
2000	Komatsu	YKLXL11.0DC1	11.0	*	*	*
2000	Komatsu	YKLXL11.0DC1	11.0	*	*	*
2000	Komatsu	YKLXL7.15CB1	7.2	*	*	*
2000	Komatsu	YKLXL7.15CC1	7.2	*	*	*
2000	Komatsu	YKLXL7.15CD1	7.2	*	*	*
2000	Liebherr Machines Bulle SA	YLHAL9.96ARA	10.0	6.6	*	*
2000	Liebherr Machines Bulle SA	YLHAL9.96ASA	10.0	6.6	*	*
2000	Liebherr Machines Bulle SA	YLHAL9.96ATA	10.0	6.6	*	*
2000	Mitsubishi Motors	YMTXL05.8D3A	5.8	*	*	*
2000	Mitsubishi Motors	YMTXL07.5D6A	7.5	*	*	*
2000	Mitsubishi Motors	YMTXL07.5D6C	7.5	*	*	*
2000	Mitsubishi Motors	YMTXL11.9D2A	11.9	*	*	*
2000	Mitsubishi Motors	YMTXL11.9D6A	11.9	*	*	*
2000	New Holland	YNHXL07.5A3V	7.5	*	*	*
2000	Volvo Construction Equipment	YVSXL06.7CE1	6.7	*	*	*
2000	Volvo Construction Equipment	YVSXL09.6CE1	9.6	*	*	*
2000	Volvo Construction Equipment	YVSXL12.0CE1	12.0	*	*	*
2001	AB Volvo Penta	1VPXL05.5ABA	5.5	*	*	*
2001	AB Volvo Penta	1VPXL06.7AAA	6.7	*	*	*
2001	AB Volvo Penta	1VPXL06.7ABA	6.7	*	*	*
2001	AB Volvo Penta	1VPXL07.3ABB	7.3	*	*	*
2001	AB Volvo Penta	1VPXL07.3ACB	7.3	*	*	*
2001	AB Volvo Penta	1VPXL09.6AAA	9.6	*	*	*
2001	AB Volvo Penta	1VPXL09.6ABA	9.6	*	*	*
2001	AB Volvo Penta	1VPXL09.6ACB	9.6	*	*	*
2001	Case	1X9XL0359ABA	5.9	*	*	*
2001	Case	1X9XL0505ABA	8.3	*	*	*
2001	Case	1X9XL0505ABB	8.3	*	*	*
2001	Case	1X9XL0505ABC	8.3	*	*	*
2001	Case	1X9XL0505ACA	8.3	*	*	*
2001	Case	1X9XL0505ACC	8.3	*	*	*
2001	Case	1X9XL0540AAA	8.8	*	*	*
2001	Caterpillar	1CPXL06.6MRC	6.6	*	*	*
2001	Caterpillar	1CPXL07.0MRB	7.0	*	*	*
2001	Caterpillar	1CPXL07.2HRK	7.2	*	*	*
2001	Caterpillar	1CPXL07.2HSK	7.2	*	*	*
2001	Caterpillar	1CPXL08.8HSK	8.8	*	*	*
2001	Caterpillar	1CPXL10.3ESK	10.3	*	*	*
2001	Caterpillar	1CPXL10.5MRD	10.5	*	*	*
2001	Caterpillar	1CPXL10.5MRG	10.5	*	*	*
2001	Caterpillar	1CPXL12.0ESK	12.0	*	*	*
2001	Cummins	1CEXL0239ACA	3.9	*	*	*
2001	Cummins	1CEXL0359ABA	5.9	*	*	*
2001	Cummins	1CEXL0359ABB	5.9	*	*	*
2001	Cummins	1CEXL0359ABC	5.9	*	*	*
2001	Cummins	1CEXL0359ABD	5.9	*	*	*
2001	Cummins	1CEXL0505ABA	8.3	*	*	*
2001	Cummins	1CEXL0505ABB	8.3	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2001	Cummins	1CEXL0505ABC	8.3	*	*	*
2001	Cummins	1CEXL0505ACA	8.3	*	*	*
2001	Cummins	1CEXL0505ACB	8.3	*	*	*
2001	Cummins	1CEXL0505ACC	8.3	*	*	*
2001	Cummins	1CEXL0505ACE	8.3	*	*	*
2001	Cummins	1CEXL0540AAA	8.8	*	*	*
2001	Cummins	1CEXL0661AAA	10.8	*	*	*
2001	Cummins	1CEXL0661AAB	10.8	*	*	*
2001	Cummins	1CEXL0661AAC	11.0	*	*	*
2001	Cummins	1CEXL0661AAD	10.9	*	*	*
2001	Daewoo	1DWXL11.1BIA	11.1	*	*	*
2001	DaimlerChrysler	1MBXL12.0RJB	12.0	*	*	*
2001	DaimlerChrysler	1MBXL12.0RJC	12.0	*	*	*
2001	DaimlerChrysler	1MBXL12.9R6A	10.0	*	*	*
2001	DaimlerChrysler	1MBXL14.6R6A	11.0	*	*	*
2001	DaimlerChrysler	1MBXL21.9R6A	11	*	*	*
2001	DaimlerChrysler	1MBXL6.37RJA	6.4	*	*	*
2001	DaimlerChrysler	1MBXL6.37RJB	6.4	*	*	*
2001	DaimlerChrysler	1MBXL7.20RJA	7.2	*	*	*
2001	Deere	1JDXL06.8012	6.8	4.5	*	*
2001	Deere	1JDXL06.8013	6.8	*	*	*
2001	Deere	1JDXL06.8038	6.8	*	*	*
2001	Deere	1JDXL06.8039	6.8	*	*	*
2001	Deere	1JDXL08.1007	8.1	*	*	*
2001	Deere	1JDXL08.1008	8.1	*	*	*
2001	Deere	1JDXL08.1009	8.1	*	*	*
2001	Deere	1JDXL08.1019	8.1	*	*	*
2001	Deere	1JDXL08.1024	8.1	*	*	*
2001	Deere	1JDXL08.1036	8.1	*	*	*
2001	Deere	1JDXL08.1037	8.1	*	*	*
2001	Detroit Diesel Corporation	1DDXL08.5TJD	8.5	*	*	*
2001	Detroit Diesel Corporation	1DDXL08.5YJD	8.5	*	*	*
2001	Deutz	1DZXL07.1004	7.2	4.8	*	*
2001	Deutz	1DZXL07.1005	7.2	4.8	*	*
2001	Deutz	1DZXL15.9002	11.9	*	*	*
2001	Deutz	1DZXL15.9003	11.9	*	*	*
2001	International	1NVXL0466ANA	7.7	*	*	*
2001	International	1NVXL0530ANA	8.7	*	*	*
2001	International	1NVXL0530ANB	8.7	*	*	*
2001	International	1NVXL0530ANC	8.7	*	*	*
2001	International	1NVXL0530AND	8.7	*	*	*
2001	International	1NVXL0530ANE	8.7	*	*	*
2001	International	1NVXL0530ANF	8.7	*	*	*
2001	Isuzu	1SZXL06.5EXA	6.5	*	*	*
2001	Isuzu	1SZXL07.8ATA	7.8	*	*	*
2001	Isuzu	1SZXL07.8EXA	7.8	*	*	*
2001	Isuzu	1SZXL09.8EXA	9.8	*	*	*
2001	Iveco	1VEXL07.7DAR	7.7	*	*	*
2001	Iveco	1VEXL07.8CRS	7.8	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2001	Iveco	1VEXL09.5DAR	9.5	*	*	*
2001	Iveco	1VEXL10.3CRS	10.3	*	*	*
2001	Komatsu	1KLXL0359ABA	5.9	*	*	*
2001	Komatsu	1KLXL0359ABC	5.9	*	*	*
2001	Komatsu	1KLXL0505ABB	8.3	*	*	*
2001	Komatsu	1KLXL0505ACA	8.3	*	*	*
2001	Komatsu	1KLXL11.0DA1	11.0	*	*	*
2001	Komatsu	1KLXL11.0DB1	11.0	*	*	*
2001	Komatsu	1KLXL11.0DC1	11.0	*	*	*
2001	Komatsu	1KLXL11.0DD3	11.0	*	*	*
2001	Komatsu	1KLXL11.0DD4	11.0	*	*	*
2001	Komatsu	1KLXL7.15CB1	7.2	*	*	*
2001	Komatsu	1KLXL7.15CC1	7.2	*	*	*
2001	Komatsu	1KLXL7.15CD1	7.2	*	*	*
2001	Liebherr Machines Bulle SA	1LHAL9.96ARA	6.6	10	*	*
2001	Liebherr Machines Bulle SA	1LHAL9.96ASA	6.6	10	*	*
2001	Liebherr Machines Bulle SA	1LHAL9.96ATA	6.6	10	*	*
2001	Liebherr Machines Bulle SA	1LHAL9.96AUA	6.6	10	*	*
2001	Mitsubishi Motors	1MTXL05.8D3A	5.9	*	*	*
2001	Mitsubishi Motors	1MTXL07.5D6A	7.5	*	*	*
2001	Mitsubishi Motors	1MTXL07.5D6C	7.5	*	*	*
2001	Mitsubishi Motors	1MTXL11.9D6A	11.9	*	*	*
2001	Perkins	1PKXL05.9YK1	5.9	*	*	*
2001	Volvo Construction Equipment	1VSXL06.7CE1	6.7	*	*	*
2001	Volvo Construction Equipment	1VSXL09.6CE1	9.6	*	*	*
2001	Volvo Construction Equipment	1VSXL09.6CE2	9.6	*	*	*
2001	Volvo Construction Equipment	1VSXL12.0CE1	12.0	*	*	*
2002	AB Volvo Penta	2VPXL05.5ABA	5.5	*	*	*
2002	AB Volvo Penta	2VPXL06.7AAA	6.7	*	*	*
2002	AB Volvo Penta	2VPXL06.7ABA	6.7	*	*	*
2002	AB Volvo Penta	2VPXL07.3ABB	7.3	*	*	*
2002	AB Volvo Penta	2VPXL07.3ACB	7.3	*	*	*
2002	AB Volvo Penta	2VPXL09.6AAA	9.6	*	*	*
2002	AB Volvo Penta	2VPXL09.6ABA	9.6	*	*	*
2002	AB Volvo Penta	2VPXL09.6ACB	9.6	*	*	*
2002	Case	2X9XL0359ABA	5.9	*	*	*
2002	Case	2X9XL0359ABB	5.9	*	*	*
2002	Case	2X9XL0359ABE	5.9	*	*	*
2002	Case	2X9XL0505ABA	8.3	*	*	*
2002	Case	2X9XL0505ABB	8.3	*	*	*
2002	Case	2X9XL0505ABC	8.3	*	*	*
2002	Case	2X9XL0505ABD	8.3	*	*	*
2002	Case	2X9XL0505ACA	8.3	*	*	*
2002	Case	2X9XL0505ACC	8.3	*	*	*
2002	Case	2X9XL0540AAA	8.8	*	*	*
2002	Caterpillar	2CPXL06.6MRC	6.6	*	*	*
2002	Caterpillar	2CPXL07.0MRB	7.0	*	*	*
2002	Caterpillar	2CPXL07.2HRK	7.2	*	*	*
2002	Caterpillar	2CPXL07.2HSX	7.2	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2002	Caterpillar	2CPXL08.8HSK	8.8	*	*	*
2002	Caterpillar	2CPXL08.8HSX	8.8	*	*	*
2002	Caterpillar	2CPXL10.3ESK	10.3	*	*	*
2002	Caterpillar	2CPXL10.3ESX	10.3	*	*	*
2002	Caterpillar	2CPXL10.5MRD	10.5	*	*	*
2002	Caterpillar	2CPXL12.0ESK	12.0	*	*	*
2002	Cummins	2CEXL0239ACA	3.9	*	*	*
2002	Cummins	2CEXL0359ABA	5.9	*	*	*
2002	Cummins	2CEXL0359ABB	5.9	*	*	*
2002	Cummins	2CEXL0359ABC	5.9	*	*	*
2002	Cummins	2CEXL0359ABE	5.9	*	*	*
2002	Cummins	2CEXL0505ABA	8.3	*	*	*
2002	Cummins	2CEXL0505ABB	8.3	*	*	*
2002	Cummins	2CEXL0505ABC	8.3	*	*	*
2002	Cummins	2CEXL0505ABD	8.3	*	*	*
2002	Cummins	2CEXL0505ACA	8.3	*	*	*
2002	Cummins	2CEXL0505ACB	8.3	*	*	*
2002	Cummins	2CEXL0505ACC	8.3	*	*	*
2002	Cummins	2CEXL0505ACE	8.3	*	*	*
2002	Cummins	2CEXL0540AAA	8.8	*	*	*
2002	Cummins	2CEXL0661AAA	10.8	*	*	*
2002	Cummins	2CEXL0661AAB	10.8	*	*	*
2002	Cummins	2CEXL0661AAC	10.8	*	*	*
2002	Cummins	2CEXL0661AAD	10.3	*	*	*
2002	Daewoo	2DWXL11.1BIA	11.1	*	*	*
2002	DaimlerChrysler	2MBXL12.0RJB	12.0	*	*	*
2002	DaimlerChrysler	2MBXL12.0RJC	12.0	*	*	*
2002	Deere	2JDXL06.8012	4.5	6.8	*	*
2002	Deere	2JDXL06.8013	4.5	6.8	*	*
2002	Deere	2JDXL06.8038	6.8	*	*	*
2002	Deere	2JDXL06.8039	6.8	*	*	*
2002	Deere	2JDXL06.8049	6.8	*	*	*
2002	Deere	2JDXL08.1007	8.1	*	*	*
2002	Deere	2JDXL08.1008	8.1	*	*	*
2002	Deere	2JDXL08.1009	8.1	*	*	*
2002	Deere	2JDXL08.1019	8.1	*	*	*
2002	Deere	2JDXL08.1024	8.1	*	*	*
2002	Deere	2JDXL08.1036	8.1	*	*	*
2002	Deere	2JDXL08.1037	8.1	*	*	*
2002	Deere	2JDXL08.1045	8.1	*	*	*
2002	Detroit Diesel Corporation	2DDXL08.5YJD	8.5	*	*	*
2002	Deutz	2DZXL06.1028	4.0	6.1	*	*
2002	Deutz	2DZXL07.1004	7.1	4.8	*	*
2002	Deutz	2DZXL07.1005	7.1	4.8	*	*
2002	Deutz	2DZXL07.1032	7.1	4.8	*	*
2002	Deutz	2DZXL15.9002	11.9	*	*	*
2002	Deutz	2DZXL15.9003	11.9	*	*	*
2002	International	2NVXL0444ANA	7.3	*	*	*
2002	International	2NVXL0466ANA	7.6	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2002	International	2NVXL0530ANA	8.7	*	*	*
2002	International	2NVXL0530ANB	8.7	*	*	*
2002	International	2NVXL0530ANC	8.7	*	*	*
2002	International	2NVXL0530AND	8.7	*	*	*
2002	International	2NVXL0530ANE	8.7	*	*	*
2002	International	2NVXL0530ANF	8.7	*	*	*
2002	Isuzu	2SZXL06.5EXA	6.5	*	*	*
2002	Isuzu	2SZXL07.8ATA	7.8	*	*	*
2002	Isuzu	2SZXL07.8EXA	7.8	*	*	*
2002	Isuzu	2SZXL09.8EXA	9.8	*	*	*
2002	Iveco	2VEXL05.9DCR	5.9	*	*	*
2002	Iveco	2VEXL07.7DAR	7.7	*	*	*
2002	Iveco	2VEXL07.8CRS	7.8	*	*	*
2002	Iveco	2VEXL10.3CRS	10.3	*	*	*
2002	Komatsu	2KLXL0239ACA	3.9	*	*	*
2002	Komatsu	2KLXL0359ABA	5.9	*	*	*
2002	Komatsu	2KLXL0359ABC	5.9	*	*	*
2002	Komatsu	2KLXL0505ABB	8.3	*	*	*
2002	Komatsu	2KLXL0505ABD	8.3	*	*	*
2002	Komatsu	2KLXL0505ACA	8.3	*	*	*
2002	Komatsu	2KLXL11.0DA1	11.0	*	*	*
2002	Komatsu	2KLXL11.0DB1	11.0	*	*	*
2002	Komatsu	2KLXL11.0DC1	11.0	*	*	*
2002	Komatsu	2KLXL11.0DC3	11.0	*	*	*
2002	Komatsu	2KLXL11.0DD3	11.0	*	*	*
2002	Komatsu	2KLXL11.0DD4	11.0	*	*	*
2002	Komatsu	2KLXL11.0DD5	11.0	*	*	*
2002	Komatsu	2KLXL11.0DD6	11.0	*	*	*
2002	Komatsu	2KLXL7.15CB1	7.2	*	*	*
2002	Komatsu	2KLXL7.15CC1	7.2	*	*	*
2002	Komatsu	2KLXL7.15CD1	7.2	*	*	*
2002	Liebherr Machines Bulle SA	2LHAL9.96ARA	6.6	10.0	*	*
2002	Liebherr Machines Bulle SA	2LHAL9.96ASA	6.6	10.0	*	*
2002	Liebherr Machines Bulle SA	2LHAL9.96ATA	6.6	10.0	*	*
2002	Liebherr Machines Bulle SA	2LHAL9.96AUA	6.6	10.0	*	*
2002	Mitsubishi Fuso	2MFTL05.8D3B	5.9	*	*	*
2002	Mitsubishi Motors	2MTXL05.8D3A	5.8	*	*	*
2002	Mitsubishi Motors	2MTXL07.5D6A	7.5	*	*	*
2002	Mitsubishi Motors	2MTXL07.5D6C	7.5	*	*	*
2002	Mitsubishi Motors	2MTXL07.5D6D	7.5	*	*	*
2002	Mitsubishi Motors	2MTXL11.9D2C	11.9	*	*	*
2002	Mitsubishi Motors	2MTXL11.9D6A	11.9	*	*	*
2002	New Holland	2NHXL07.5A3A	7.5	*	*	*
2002	New Holland	2NHXL07.5A3F	7.5	*	*	*
2002	Perkins	2PKXL05.9YK1	6.0	*	*	*
2002	Volvo Construction Equipment	2VSXL06.7CE1	6.7	*	*	*
2002	Volvo Construction Equipment	2VSXL09.6CE2	9.6	*	*	*
2003	AB Volvo Penta	3VPXL07.3ACB	7.3	*	*	*
2003	AB Volvo Penta	3VPXL09.6ACB	9.6	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2003	Caterpillar	3CPXL06.6MTW	6.6	*	*	*
2003	Caterpillar	3CPXL07.2HSK	7.2	*	*	*
2003	Caterpillar	3CPXL07.2HSL	7.2	*	*	*
2003	Caterpillar	3CPXL08.8HSK	8.8	*	*	*
2003	Caterpillar	3CPXL08.8HSL	8.8	*	*	*
2003	Caterpillar	3CPXL10.3ESK	10.3	*	*	*
2003	Caterpillar	3CPXL10.5MRW	10.5	*	*	*
2003	Caterpillar	3CPXL12.0ESK	12.0	*	*	*
2003	CNH Engine Corporation	3X9XL0359AAC	5.9	*	*	*
2003	CNH Engine Corporation	3X9XL0505AAB	8.3	*	*	*
2003	CNH Engine Corporation	3X9XL0505ABC	8.3	*	*	*
2003	CNH Engine Corporation	3X9XL0505ABD	8.3	*	*	*
2003	CNH Engine Corporation	3X9XL0505ACC	8.3	*	*	*
2003	CNH Engine Corporation	3X9XL0540AAA	8.8	*	*	*
2003	CNH UK Limited	3NHXL06.7DCR	3.9	4.5	5.9	6.7
2003	CNH UK Limited	3NHXL06.7DTA	3.9	6.7	*	*
2003	CNH UK Limited	3NHXL07.5B2H	7.5	*	*	*
2003	CNH UK Limited	3NHXL07.5B3A	7.5	*	*	*
2003	CNH UK Limited	3NHXL07.5B3C	7.5	*	*	*
2003	CNH UK Limited	3NHXL07.5B3F	7.5	*	*	*
2003	Cummins	3CEXL0239AAD	3.9	*	*	*
2003	Cummins	3CEXL0239AAF	3.9	*	*	*
2003	Cummins	3CEXL0275AAA	4.5	*	*	*
2003	Cummins	3CEXL0275AAB	4.5	*	*	*
2003	Cummins	3CEXL0359AAB	5.9	*	*	*
2003	Cummins	3CEXL0359AAC	5.9	*	*	*
2003	Cummins	3CEXL0359AAD	5.9	*	*	*
2003	Cummins	3CEXL0359ABC	5.9	*	*	*
2003	Cummins	3CEXL0359ABE	5.9	*	*	*
2003	Cummins	3CEXL0409AAA	6.7	*	*	*
2003	Cummins	3CEXL0505ABC	8.3	*	*	*
2003	Cummins	3CEXL0505ABD	8.3	*	*	*
2003	Cummins	3CEXL0505ACB	8.3	*	*	*
2003	Cummins	3CEXL0505ACC	8.3	*	*	*
2003	Cummins	3CEXL0540AAA	8.8	*	*	*
2003	Cummins	3CEXL0661AAC	10.8	*	*	*
2003	Cummins	3CEXL0661AAD	10.8	*	*	*
2003	Cummins	3CEXL0661AAE	10.8	*	*	*
2003	Daewoo	3DWXL05.8COA	5.8	*	*	*
2003	Daewoo	3DWXL08.1CPA	8.1	*	*	*
2003	Daewoo	3DWXL11.1DJA	11.1	*	*	*
2003	DaimlerChrysler	3MBXL12.0RJB	12.0	*	*	*
2003	DaimlerChrysler	3MBXL12.0RJC	12.0	*	*	*
2003	DaimlerChrysler	3MBXL4.25RJB	4.3	*	*	*
2003	DaimlerChrysler	3MBXL6.37RJB	6.4	*	*	*
2003	DaimlerChrysler	3MBXL7.20RJA	7.2	*	*	*
2003	Deere	3JDXL06.8038	6.8	*	*	*
2003	Deere	3JDXL06.8039	6.8	*	*	*
2003	Deere	3JDXL06.8041	6.8	4.5	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2003	Deere	3JDXL06.8044	6.8	4.5	*	*
2003	Deere	3JDXL06.8048	6.8	*	*	*
2003	Deere	3JDXL06.8049	6.8	*	*	*
2003	Deere	3JDXL06.8052	6.8	*	*	*
2003	Deere	3JDXL06.8053	6.8	*	*	*
2003	Deere	3JDXL08.1037	8.1	*	*	*
2003	Deere	3JDXL08.1045	8.1	*	*	*
2003	Deere	3JDXL08.1058	8.1	*	*	*
2003	Deere	3JDXL08.1059	8.1	*	*	*
2003	Detroit Diesel Corporation	3DDXL08.5YJD	8.5	*	*	*
2003	Deutz	3DZXL05.7019	3.8	5.7	*	*
2003	Deutz	3DZXL05.7033	5.7	3.8	*	*
2003	Deutz	3DZXL06.1028	4.0	6.1	*	*
2003	Deutz	3DZXL07.1032	7.2	4.8	*	*
2003	Deutz	3DZXL07.1034	7.2	*	*	*
2003	Deutz	3DZXL15.9002	11.9	*	*	*
2003	International	3NVXL0365AFA	6.0	*	*	*
2003	International	3NVXL0530ANE	8.7	*	*	*
2003	International	3NVXL0530ANF	8.7	*	*	*
2003	Isuzu	3SZXL04.3FTA	4.3	*	*	*
2003	Isuzu	3SZXL06.5EXA	6.5	*	*	*
2003	Isuzu	3SZXL06.5FTA	6.5	*	*	*
2003	Isuzu	3SZXL06.5FXA	6.5	*	*	*
2003	Isuzu	3SZXL07.8ETA	7.8	*	*	*
2003	Isuzu	3SZXL07.8EXA	7.8	*	*	*
2003	Isuzu	3SZXL09.8EXA	9.8	*	*	*
2003	Iveco	3VEXL06.7DCR	3.9	4.5	5.9	6.7
2003	Iveco	3VEXL07.8CRS	7.8	*	*	*
2003	Iveco	3VEXL10.3CRS	10.3	*	*	*
2003	Komatsu	3KLXL0239AAD	3.9	*	*	*
2003	Komatsu	3KLXL0239AAF	3.9	*	*	*
2003	Komatsu	3KLXL0359AAB	5.9	*	*	*
2003	Komatsu	3KLXL0359ABC	5.9	*	*	*
2003	Komatsu	3KLXL0505ABD	8.3	*	*	*
2003	Komatsu	3KLXL11.0DC3	11.0	*	*	*
2003	Komatsu	3KLXL11.0DD3	11.0	*	*	*
2003	Komatsu	3KLXL11.0DD5	11.0	*	*	*
2003	Liebherr Machines Bulle SA	3LHAL9.96ARA	6.6	10	*	*
2003	Liebherr Machines Bulle SA	3LHAL9.96ASA	6.6	10	*	*
2003	Liebherr Machines Bulle SA	3LHAL9.96ATA	6.6	10	*	*
2003	Liebherr Machines Bulle SA	3LHAL9.96AUA	6.6	10	*	*
2003	Mitsubishi Fuso	3MFTL03.9D3A	3.9	*	*	*
2003	Mitsubishi Fuso	3MFTL05.8D3A	5.9	*	*	*
2003	Mitsubishi Fuso	3MFTL05.8D3B	5.9	*	*	*
2003	Mitsubishi Fuso	3MFTL07.5D6A	7.5	*	*	*
2003	Mitsubishi Fuso	3MFTL07.5D6D	7.5	*	*	*
2003	Mitsubishi Fuso	3MFTL07.5D6E	7.5	*	*	*
2003	Mitsubishi Fuso	3MFTL07.5D6E	7.5	*	*	*
2003	Mitsubishi Heavy Industries	3MVXL05.0DDD	3.3	5	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2003	Mitsubishi Heavy Industries	3MVXL06.4DDD	6.4	*	*	*
2003	Mitsubishi Motors	3MTXL11.9D2A	11.9	*	*	*
2003	Perkins	3PKXL04.4RH2	4.4	*	*	*
2003	Perkins	3PKXL04.4RK1	4.4	*	*	*
2003	Perkins	3PKXL06.0VK1	6.0	*	*	*
2003	Volvo Construction Equipment	3VSXL09.6CE2	9.6	*	*	*
2004	AB Volvo Penta	4VPXL07.3ACB	7.3	*	*	*
2004	AB Volvo Penta	4VPXL09.4ACA	9.4	*	*	*
2004	AB Volvo Penta	4VPXL09.4ACB	9.4	*	*	*
2004	AB Volvo Penta	4VPXL09.4ACC	9.4	*	*	*
2004	AB Volvo Penta	4VPXL09.6ACB	9.6	*	*	*
2004	Caterpillar	4CPXL07.2HSK	7.2	*	*	*
2004	Caterpillar	4CPXL07.2HSL	7.2	*	*	*
2004	Caterpillar	4CPXL08.8ESK	8.8	*	*	*
2004	Caterpillar	4CPXL08.8HSK	8.8	*	*	*
2004	Caterpillar	4CPXL08.8HSL	8.8	*	*	*
2004	Caterpillar	4CPXL10.3ESK	10.3	*	*	*
2004	Caterpillar	4CPXL10.5MRW	10.5	*	*	*
2004	Caterpillar	4CPXL11.1ESK	11.1	*	*	*
2004	Caterpillar	4CPXL12.0ESK	12.0	*	*	*
2004	Caterpillar	4CPXL12.5ESK	11.1	*	*	*
2004	CNH Engine Corporation	4X9XL0239AAB	3.9	*	*	*
2004	CNH Engine Corporation	4X9XL0239AAB	3.9	*	*	*
2004	CNH Engine Corporation	4X9XL0239AAC	3.9	*	*	*
2004	CNH Engine Corporation	4X9XL0359AAK	5.9	*	*	*
2004	CNH Engine Corporation	4X9XL0359ABE	5.9	*	*	*
2004	CNH Engine Corporation	4X9XL0505AAB	8.3	*	*	*
2004	CNH Engine Corporation	4X9XL0505ABC	8.3	*	*	*
2004	CNH Engine Corporation	4X9XL0505ABD	8.3	*	*	*
2004	CNH Engine Corporation	4X9XL0505ACC	8.3	*	*	*
2004	CNH Engine Corporation	4X9XL0540AAA	8.8	*	*	*
2004	CNH UK Limited	4NHXL06.7DCR	6.7	5.9	4.5	3.9
2004	CNH UK Limited	4NHXL07.5B2H	7.5	*	*	*
2004	CNH UK Limited	4NHXL07.5B3A	7.5	*	*	*
2004	CNH UK Limited	4NHXL07.5B3C	7.5	*	*	*
2004	CNH UK Limited	4NHXL07.5B3F	7.5	*	*	*
2004	Cummins	4CEXL0239AAD	3.9	*	*	*
2004	Cummins	4CEXL0239AAF	3.9	*	*	*
2004	Cummins	4CEXL0275AAB	4.5	*	*	*
2004	Cummins	4CEXL0359AAB	5.9	*	*	*
2004	Cummins	4CEXL0359AAC	5.9	*	*	*
2004	Cummins	4CEXL0359AAD	5.9	*	*	*
2004	Cummins	4CEXL0359AAF	5.9	*	*	*
2004	Cummins	4CEXL0359AAH	5.9	*	*	*
2004	Cummins	4CEXL0359ABC	5.9	*	*	*
2004	Cummins	4CEXL0359ABE	5.9	*	*	*
2004	Cummins	4CEXL0409AAA	6.7	*	*	*
2004	Cummins	4CEXL0505ABC	8.3	*	*	*
2004	Cummins	4CEXL0505ABD	8.3	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2004	Cummins	4CEXL0505ACB	8.3	*	*	*
2004	Cummins	4CEXL0505ACC	8.3	*	*	*
2004	Cummins	4CEXL0540AAA	8.8	*	*	*
2004	Cummins	4CEXL0661AAC	10.8	*	*	*
2004	Cummins	4CEXL0661AAD	10.8	*	*	*
2004	Cummins	4CEXL0661AAE	10.8	*	*	*
2004	Daewoo	4DWXL05.8COA	5.8	*	*	*
2004	Daewoo	4DWXL05.8CRN	5.8	*	*	*
2004	Daewoo	4DWXL08.1CPA	8.1	*	*	*
2004	Daewoo	4DWXL11.1BIA	11.1	*	*	*
2004	Daewoo	4DWXL11.1DJA	11.1	*	*	*
2004	DaimlerChrysler	4MBXL12.0RJB	12.0	*	*	*
2004	DaimlerChrysler	4MBXL12.0RJC	12.0	*	*	*
2004	DaimlerChrysler	4MBXL4.25RJB	4.3	*	*	*
2004	DaimlerChrysler	4MBXL6.37RJB	6.4	*	*	*
2004	DaimlerChrysler	4MBXL7.20RJA	7.2	*	*	*
2004	Deere	4JDXL06.8038	6.8	*	*	*
2004	Deere	4JDXL06.8039	4.5	6.8	*	*
2004	Deere	4JDXL06.8039	4.5	6.8	*	*
2004	Deere	4JDXL06.8041	4.5	6.8	*	*
2004	Deere	4JDXL06.8044	4.5	6.8	*	*
2004	Deere	4JDXL06.8048	4.5	6.8	*	*
2004	Deere	4JDXL06.8049	4.5	6.8	*	*
2004	Deere	4JDXL06.8052	6.8	*	*	*
2004	Deere	4JDXL06.8053	6.8	*	*	*
2004	Deere	4JDXL06.8072	6.8	*	*	*
2004	Deere	4JDXL08.1037	8.1	*	*	*
2004	Deere	4JDXL08.1045	8.1	*	*	*
2004	Deere	4JDXL08.1058	8.1	*	*	*
2004	Deere	4JDXL08.1059	8.1	*	*	*
2004	Detroit Diesel Corporation	4DDXL08.5YJD	8.5	*	*	*
2004	Deutz	4DZXL05.7019	3.8	5.7	*	*
2004	Deutz	4DZXL05.7033	5.7	3.8	*	*
2004	Deutz	4DZXL06.1028	4.0	6	*	*
2004	Deutz	4DZXL06.1038	6.1	4.0	*	*
2004	Deutz	4DZXL06.5036	6.5	*	*	*
2004	Deutz	4DZXL06.5037	6.5	*	*	*
2004	Deutz	4DZXL07.1032	7.2	4.8	*	*
2004	Deutz	4DZXL07.1034	7.2	*	*	*
2004	Deutz	4DZXL15.9002	11.9	*	*	*
2004	International	4NVXL0365AFA	6.0	*	*	*
2004	International	4NVXL0530ANE	8.7	*	*	*
2004	International	4NVXL0530ANF	8.7	*	*	*
2004	Isuzu	4SZXL04.3FTA	4.3	*	*	*
2004	Isuzu	4SZXL04.3FTA	4.3	*	*	*
2004	Isuzu	4SZXL06.5EXA	6.5	*	*	*
2004	Isuzu	4SZXL06.5FTA	6.5	*	*	*
2004	Isuzu	4SZXL06.5FXA	6.5	*	*	*
2004	Isuzu	4SZXL06.5FXG	6.5	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2004	Isuzu	4SZXL06.8ETA	7.8	*	*	*
2004	Isuzu	4SZXL07.8EXA	7.8	*	*	*
2004	Isuzu	4SZXL09.8EXA	9.8	*	*	*
2004	Iveco	4VEXL05.9DGS	5.9	*	*	*
2004	Iveco	4VEXL06.7DCR	6.7	5.9	4.5	3.9
2004	Iveco	4VEXL07.8CRS	7.8	*	*	*
2004	Iveco	4VEXL10.3CRS	10.3	*	*	*
2004	Komatsu	4KLXL0239AAD	3.9	*	*	*
2004	Komatsu	4KLXL0239AAF	3.9	*	*	*
2004	Komatsu	4KLXL0359AAB	5.9	*	*	*
2004	Komatsu	4KLXL0359ABC	5.9	*	*	*
2004	Komatsu	4KLXL0505ABC	8.3	*	*	*
2004	Komatsu	4KLXL0505ABD	8.3	*	*	*
2004	Komatsu	4KLXL11.0DC3	11.0	*	*	*
2004	Komatsu	4KLXL11.0DD3	11.0	*	*	*
2004	Komatsu	4KLXL11.0DD5	11.0	*	*	*
2004	Liebherr Machines Bulle SA	4LHAL9.96ARA	6.6	10.0	*	*
2004	Liebherr Machines Bulle SA	4LHAL9.96ASA	6.6	10.0	*	*
2004	Liebherr Machines Bulle SA	4LHAL9.96ATA	6.6	10.0	*	*
2004	Liebherr Machines Bulle SA	4LHAL9.96AUA	6.6	10.0	*	*
2004	Mitsubishi Fuso	4MFTL03.9D3A	3.9	*	*	*
2004	Mitsubishi Fuso	4MFTL05.8D3A	5.9	*	*	*
2004	Mitsubishi Fuso	4MFTL05.8D3B	5.9	*	*	*
2004	Mitsubishi Fuso	4MFTL07.5D6A	7.5	*	*	*
2004	Mitsubishi Fuso	4MFTL07.5D6D	7.5	*	*	*
2004	Mitsubishi Fuso	4MFTL07.5D6E	7.5	*	*	*
2004	Mitsubishi Fuso	4MFTL11.9D2A	11.9	*	*	*
2004	Mitsubishi Heavy Industries	4MVXL05.0DDD	3.3	5.0	*	*
2004	Mitsubishi Heavy Industries	4MVXL06.4DDD	6.4	*	*	*
2004	Perkins	4PKXL04.4RH2	4.4	*	*	*
2004	Perkins	4PKXL04.4RH2	4.4	*	*	*
2004	Perkins	4PKXL04.4RK1	4.4	*	*	*
2004	Perkins	4PKXL06.0VK1	6.0	*	*	*
2004	Volvo Construction Equipment	4VSXL09.4CE2	9.4	*	*	*
2004	Volvo Construction Equipment	4VSXL09.6CE2	9.6	*	*	*
2004	Yanmar	4YDXL4.41K4T	4.4	*	*	*
2005	AB Volvo Penta	5VPXL07.3ACB	7.3	*	*	*
2005	AB Volvo Penta	5VPXL09.4ACA	9.4	*	*	*
2005	AB Volvo Penta	5VPXL09.4ACB	9.4	*	*	*
2005	AB Volvo Penta	5VPXL09.4ACC	9.4	*	*	*
2005	AB Volvo Penta	5VPXL09.6ACB	9.6	*	*	*
2005	Caterpillar	5CPXL07.2ESL	7.2	*	*	*
2005	Caterpillar	5CPXL07.2HSK	7.2	*	*	*
2005	Caterpillar	5CPXL07.2HSL	7.2	*	*	*
2005	Caterpillar	5CPXL08.8ESK	8.8	*	*	*
2005	Caterpillar	5CPXL08.8ESL	8.8	*	*	*
2005	Caterpillar	5CPXL08.8HSL	8.8	*	*	*
2005	Caterpillar	5CPXL10.3ESK	10.3	*	*	*
2005	Caterpillar	5CPXL10.5MRW	10.5	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2005	Caterpillar	5CPXL11.1ESK	11.1	*	*	*
2005	Caterpillar	5CPXL12.0ESK	12.0	*	*	*
2005	CNH Engine Corporation	5X9XL0239AAB	3.9	*	*	*
2005	CNH Engine Corporation	5X9XL0239AAC	3.9	*	*	*
2005	CNH Engine Corporation	5X9XL0359AAK	5.9	*	*	*
2005	CNH Engine Corporation	5X9XL0359ABE	5.9	*	*	*
2005	CNH Engine Corporation	5X9XL0505AAB	8.3	*	*	*
2005	CNH Engine Corporation	5X9XL0505AAE	8.3	*	*	*
2005	CNH Engine Corporation	5X9XL0505ABC	8.3	*	*	*
2005	CNH Engine Corporation	5X9XL0505ABD	8.3	*	*	*
2005	CNH Engine Corporation	5X9XL0505ACC	8.3	*	*	*
2005	CNH Engine Corporation	5X9XL0540AAA	8.8	*	*	*
2005	CNH Engine Corporation	5X9XL0540AAB	8.8	*	*	*
2005	CNH UK Limited	5NHXL06.7DCR	3.9	4.5	5.9	6.7
2005	CNH UK Limited	5NHXL07.5B2H	7.5	*	*	*
2005	CNH UK Limited	5NHXL07.5B3A	7.5	*	*	*
2005	CNH UK Limited	5NHXL07.5B3C	7.5	*	*	*
2005	CNH UK Limited	5NHXL07.5B3F	7.5	*	*	*
2005	Cummins	5CEXL0239AAD	3.9	*	*	*
2005	Cummins	5CEXL0239AAF	3.9	*	*	*
2005	Cummins	5CEXL0275AAB	4.5	*	*	*
2005	Cummins	5CEXL0359AAB	5.9	*	*	*
2005	Cummins	5CEXL0359AAC	5.9	*	*	*
2005	Cummins	5CEXL0359AAD	5.9	*	*	*
2005	Cummins	5CEXL0359AAF	5.9	*	*	*
2005	Cummins	5CEXL0359AAG	5.9	*	*	*
2005	Cummins	5CEXL0359AAH	5.9	*	*	*
2005	Cummins	5CEXL0359ABC	5.9	*	*	*
2005	Cummins	5CEXL0359ABE	5.9	*	*	*
2005	Cummins	5CEXL0409AAA	6.7	*	*	*
2005	Cummins	5CEXL0409AAB	6.7	*	*	*
2005	Cummins	5CEXL0409AAC	6.7	*	*	*
2005	Cummins	5CEXL0505AAE	8.3	*	*	*
2005	Cummins	5CEXL0505ABC	8.3	*	*	*
2005	Cummins	5CEXL0505ABD	8.3	*	*	*
2005	Cummins	5CEXL0505ACB	8.3	*	*	*
2005	Cummins	5CEXL0540AAA	8.8	*	*	*
2005	Cummins	5CEXL0540AAB	8.8	*	*	*
2005	Cummins	5CEXL0661AAE	10.8	*	*	*
2005	Cummins	5CEXL0661AAF	10.8	*	*	*
2005	Daewoo	5DWXL05.8COA	5.8	*	*	*
2005	Daewoo	5DWXL08.1CPA	8.1	*	*	*
2005	Daewoo	5DWXL11.1BIA	11.1	*	*	*
2005	Daewoo	5DWXL11.1DJA	11.1	*	*	*
2005	DaimlerChrysler	5MBXL12.0RJB	12.0	*	*	*
2005	DaimlerChrysler	5MBXL12.0RJC	12.0	*	*	*
2005	DaimlerChrysler	5MBXL4.25RJB	4.3	*	*	*
2005	DaimlerChrysler	5MBXL6.37RJB	6.4	*	*	*
2005	DaimlerChrysler	5MBXL7.20RJA	7.2	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2005	Deere	5JDXL06.8038	6.8	*	*	*
2005	Deere	5JDXL06.8039	4.5	6.8	*	*
2005	Deere	5JDXL06.8041	4.5	6.8	*	*
2005	Deere	5JDXL06.8044	6.8	*	*	*
2005	Deere	5JDXL06.8048	6.8	*	*	*
2005	Deere	5JDXL06.8049	4.5	6.8	*	*
2005	Deere	5JDXL06.8052	6.8	*	*	*
2005	Deere	5JDXL06.8053	6.8	*	*	*
2005	Deere	5JDXL06.8072	6.8	*	*	*
2005	Deere	5JDXL06.8078	4.5	6.8	*	*
2005	Deere	5JDXL06.8080	6.8	*	*	*
2005	Deere	5JDXL06.8084	4.5	6.8	*	*
2005	Deere	5JDXL08.1037	8.1	*	*	*
2005	Deere	5JDXL08.1045	8.1	*	*	*
2005	Deere	5JDXL08.1058	8.1	*	*	*
2005	Deere	5JDXL08.1059	8.1	*	*	*
2005	Detroit Diesel Corporation	5DDXL08.5YJD	8.5	*	*	*
2005	Deutz	5DZXL05.7019	3.8	5.7	*	*
2005	Deutz	5DZXL05.7033	5.7	3.8	*	*
2005	Deutz	5DZXL06.1028	4.0	6	*	*
2005	Deutz	5DZXL06.1038	6.1	4	*	*
2005	Deutz	5DZXL06.5036	6.5	*	*	*
2005	Deutz	5DZXL06.5037	6.5	*	*	*
2005	Deutz	5DZXL06.5042	6.5	*	*	*
2005	Deutz	5DZXL07.1032	7.2	4.8	*	*
2005	Deutz	5DZXL07.1034	7.2	*	*	*
2005	Deutz	5DZXL15.9002	11.9	*	*	*
2005	International	5NVXL0365AFA	6.0	*	*	*
2005	Isuzu	5SZXL04.3FTA	4.3	*	*	*
2005	Isuzu	5SZXL04.3FXA	4.3	*	*	*
2005	Isuzu	5SZXL06.5EXA	6.5	*	*	*
2005	Isuzu	5SZXL06.5FTA	6.5	*	*	*
2005	Isuzu	5SZXL06.5FXA	6.5	*	*	*
2005	Isuzu	5SZXL06.5FXG	6.5	*	*	*
2005	Isuzu	5SZXL07.8ETA	7.8	*	*	*
2005	Isuzu	5SZXL07.8EXA	7.8	*	*	*
2005	Isuzu	5SZXL09.8EXA	9.8	*	*	*
2005	Iveco	5VEXL05.9DGS	5.9	*	*	*
2005	Iveco	5VEXL06.7DCR	3.9	4.5	5.9	6.7
2005	Iveco	5VEXL06.7DGA	6.7	*	*	*
2005	Iveco	5VEXL07.8CRS	7.8	*	*	*
2005	Iveco	5VEXL10.3CRS	10.3	*	*	*
2005	Iveco	5VEXL10.3TR3	10.3	*	*	*
2005	Iveco	5VEXL10.3VGT	10.3	*	*	*
2005	Komatsu	5KLXL0239AAD	3.9	*	*	*
2005	Komatsu	5KLXL0239AAF	3.9	*	*	*
2005	Komatsu	5KLXL0359AAB	5.9	*	*	*
2005	Komatsu	5KLXL0359AAL	5.9	*	*	*
2005	Komatsu	5KLXL0359ABC	5.9	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2005	Komatsu	5KLXL0409AAB	6.7	*	*	*
2005	Komatsu	5KLXL0409AAC	6.7	*	*	*
2005	Komatsu	5KLXL0505AAE	8.3	*	*	*
2005	Komatsu	5KLXL0505ABC	8.3	*	*	*
2005	Komatsu	5KLXL0505ABD	8.3	*	*	*
2005	Komatsu	5KLXL11.0DC3	11.0	*	*	*
2005	Komatsu	5KLXL11.0DD3	11.0	*	*	*
2005	Komatsu	5KLXL11.0DD5	11.0	*	*	*
2005	Liebherr Machines Bulle SA	5LHAL10.5LPA	10.5	*	*	*
2005	Liebherr Machines Bulle SA	5LHAL9.96ARA	6.6	10.0	*	*
2005	Liebherr Machines Bulle SA	5LHAL9.96ASA	6.6	10.0	*	*
2005	Liebherr Machines Bulle SA	5LHAL9.96ATA	6.6	10.0	*	*
2005	Liebherr Machines Bulle SA	5LHAL9.96AUA	6.6	10.0	*	*
2005	Mitsubishi Fuso	5MFTL03.9D3A	3.9	*	*	*
2005	Mitsubishi Fuso	5MFTL05.8D3A	5.9	*	*	*
2005	Mitsubishi Fuso	5MFTL05.8D3B	5.9	*	*	*
2005	Mitsubishi Fuso	5MFTL07.5D6A	7.5	*	*	*
2005	Mitsubishi Fuso	5MFTL07.5D6D	7.5	*	*	*
2005	Mitsubishi Fuso	5MFTL07.5D6E	7.5	*	*	*
2005	Mitsubishi Fuso	5MFTL11.9D2A	11.9	*	*	*
2005	Mitsubishi Heavy Industries	5MVXL05.0DDD	3.3	5.0	*	*
2005	Mitsubishi Heavy Industries	5MVXL06.4DDD	6.4	*	*	*
2005	Perkins	5PKXL04.4RH2	4.4	*	*	*
2005	Perkins	5PKXL04.4RK1	4.4	*	*	*
2005	Perkins	5PKXL06.0VK1	6.0	*	*	*
2005	Perkins	5PKXL06.6PJ1	6.6	*	*	*
2005	Perkins	5PKXL06.6PJ2	6.6	*	*	*
2005	Sisu Diesel	5SIDL06.6I2A	6.6	*	*	*
2005	Sisu Diesel	5SIDL07.4G4A	7.4	*	*	*
2005	Sisu Diesel	5SIDL07.4G4B	7.4	*	*	*
2005	Sisu Diesel	5SIDL07.4G5A	7.4	*	*	*
2005	Sisu Diesel	5SIDL07.4G5B	7.4	*	*	*
2005	Sisu Diesel	5SIDL08.4H4A	8.4	*	*	*
2005	Sisu Diesel	5SIDL08.4H5A	8.4	*	*	*
2005	Sisu Diesel	5SIDL08.4H5B	8.4	*	*	*
2005	Volvo Construction Equipment	5VSXL09.4CE2	9.4	*	*	*
2005	Yanmar	5YDXL4.41K4T	4.4	*	*	*
2006	AB Volvo Penta	6VPXL9.4BAA	9.4	*	*	*
2006	Caterpillar	6CPXL07.2ESL	7.2	*	*	*
2006	Caterpillar	6CPXL07.2HSK	7.2	*	*	*
2006	Caterpillar	6CPXL08.8ESK	8.8	*	*	*
2006	Caterpillar	6CPXL11.1ESK	11.1	*	*	*
2006	CNH Engine Corporation	6X9XL0239AAB	3.9	*	*	*
2006	CNH Engine Corporation	6X9XL0239AAC	3.9	*	*	*
2006	CNH Engine Corporation	6X9XL0359AAM	5.9	*	*	*
2006	CNH Engine Corporation	6X9XL0359ABE	5.9	*	*	*
2006	CNH Engine Corporation	6X9XL0505AAE	8.3	*	*	*
2006	CNH Engine Corporation	6X9XL0505ABD	8.3	*	*	*
2006	CNH Engine Corporation	6X9XL0540AAB	8.8	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2006	CNH Engine Corporation	6X9XL0540AAC	8.8	*	*	*
2006	CNH UK Limited	6NHXL06.7DCA	6.7	*	*	*
2006	CNH UK Limited	6NHXL06.7DCB	6.7	*	*	*
2006	CNH UK Limited	6NHXL06.7DCC	6.7	*	*	*
2006	CNH UK Limited	6NHXL06.7DCR	3.9	4.5	5.9	6.7
2006	CNH UK Limited	6NHXL07.5B2H	7.5	*	*	*
2006	Cummins	6CEXL0239AAD	3.9	*	*	*
2006	Cummins	6CEXL0239AAF	3.9	*	*	*
2006	Cummins	6CEXL0275AAB	4.5	*	*	*
2006	Cummins	6CEXL0275AAG	4.5	*	*	*
2006	Cummins	6CEXL0359AAB	5.9	*	*	*
2006	Cummins	6CEXL0359AAC	5.9	*	*	*
2006	Cummins	6CEXL0359AAD	5.9	*	*	*
2006	Cummins	6CEXL0359AAF	5.9	*	*	*
2006	Cummins	6CEXL0359AAN	5.9	*	*	*
2006	Cummins	6CEXL0359ABC	5.9	*	*	*
2006	Cummins	6CEXL0359ABE	5.9	*	*	*
2006	Cummins	6CEXL0409AAB	6.7	*	*	*
2006	Cummins	6CEXL0409AAC	6.7	*	*	*
2006	Cummins	6CEXL0505AAE	8.3	*	*	*
2006	Cummins	6CEXL0505ABD	8.3	*	*	*
2006	Cummins	6CEXL0540AAB	8.8	*	*	*
2006	Cummins	6CEXL0661AAF	10.8	*	*	*
2006	DaimlerChrysler	6MBXL4.25RJB	4.3	*	*	*
2006	DaimlerChrysler	6MBXL7.20RJA	4.3	7.2	6.4	*
2006	Deere	6JDXL06.8038	6.8	*	*	*
2006	Deere	6JDXL06.8039	4.5	6.8	*	*
2006	Deere	6JDXL06.8041	4.5	6.8	*	*
2006	Deere	6JDXL06.8044	6.8	*	*	*
2006	Deere	6JDXL06.8048	6.8	*	*	*
2006	Deere	6JDXL06.8049	4.5	6.8	*	*
2006	Deere	6JDXL06.8052	6.8	*	*	*
2006	Deere	6JDXL06.8078	4.5	6.8	*	*
2006	Deere	6JDXL06.8080	6.8	*	*	*
2006	Deere	6JDXL06.8084	4.5	6.8	*	*
2006	Deere	6JDXL06.8104	6.8	*	*	*
2006	Deere	6JDXL06.8105	4.5	6.8	*	*
2006	Deere	6JDXL08.1037	8.1	*	*	*
2006	Deutz	6DZXL05.7019	3.8	5.7	*	*
2006	Deutz	6DZXL05.7033	5.7	3.8	*	*
2006	Deutz	6DZXL06.1028	6.1	4	*	*
2006	Deutz	6DZXL06.1038	6.1	4	*	*
2006	Deutz	6DZXL06.1061	6.1	*	*	*
2006	Deutz	6DZXL06.5035	6.5	*	*	*
2006	Deutz	6DZXL06.5036	6.5	*	*	*
2006	Deutz	6DZXL06.5037	6.5	*	*	*
2006	Deutz	6DZXL06.5042	6.5	*	*	*
2006	Deutz	6DZXL07.1034	7.2	*	*	*
2006	Deutz	6DZXL07.1053	7.1	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2006	Doosan Infracore	6DWXL05.8COA	5.8	*	*	*
2006	Doosan Infracore	6DWXL05.8UTA	5.8	*	*	*
2006	Doosan Infracore	6DWXL07.6UPA	7.6	*	*	*
2006	Doosan Infracore	6DWXL08.1BDA	8.1	*	*	*
2006	Doosan Infracore	6DWXL11.0UJA	11.0	*	*	*
2006	Isuzu	6SZXL04.3FTA	4.3	*	*	*
2006	Isuzu	6SZXL04.3FXA	4.3	*	*	*
2006	Isuzu	6SZXL06.5FTA	6.5	*	*	*
2006	Isuzu	6SZXL06.5FXA	6.5	*	*	*
2006	Isuzu	6SZXL06.5FXG	6.5	*	*	*
2006	Iveco	6VEXL06.7DCA	6.7	*	*	*
2006	Iveco	6VEXL06.7DCB	6.7	*	*	*
2006	Iveco	6VEXL06.7DCC	6.7	*	*	*
2006	Iveco	6VEXL06.7DCR	3.9	4.5	5.9	6.7
2006	Iveco	6VEXL06.7DGA	6.7	*	*	*
2006	Iveco	6VEXL06.7DGB	6.7	*	*	*
2006	Iveco	6VEXL06.7DGS	6.7	*	*	*
2006	Iveco	6VEXL08.7TR3	8.7	*	*	*
2006	Iveco	6VEXL10.3MLR	10.3	*	*	*
2006	Iveco	6VEXL10.3TR3	10.3	*	*	*
2006	JCB Power Systems	6JCBL04.4TA1	4.4	*	*	*
2006	Komatsu	6KLXL0239AAD	3.9	*	*	*
2006	Komatsu	6KLXL0239AAF	3.9	*	*	*
2006	Komatsu	6KLXL0275AAG	4.5	*	*	*
2006	Komatsu	6KLXL0359AAB	5.9	*	*	*
2006	Komatsu	6KLXL0359AAL	5.9	*	*	*
2006	Komatsu	6KLXL0359ABC	5.9	*	*	*
2006	Komatsu	6KLXL0409AAB	6.7	*	*	*
2006	Komatsu	6KLXL0409AAC	6.7	*	*	*
2006	Komatsu	6KLXL0505AAE	8.3	*	*	*
2006	Komatsu	6KLXL0505ABD	8.3	*	*	*
2006	Liebherr Machines Bulle SA	6LHAK9.96ASA	6.6	10	*	*
2006	Liebherr Machines Bulle SA	6LHAL10.5LPA	10.5	*	*	*
2006	Liebherr Machines Bulle SA	6LHAL12.0KPA	12.0	*	*	*
2006	Liebherr Machines Bulle SA	6LHAL9.54SPA	9.5	*	*	*
2006	Liebherr Machines Bulle SA	6LHAL9.96ARA	6.6	10	*	*
2006	Liebherr Machines Bulle SA	6LHAL9.96ATA	6.6	10	*	*
2006	Mitsubishi Fuso	6MFTL03.9D3A	3.9	*	*	*
2006	Mitsubishi Fuso	6MFTL05.8D3A	5.9	*	*	*
2006	Mitsubishi Fuso	6MFTL07.5D6E	7.5	*	*	*
2006	Mitsubishi Heavy Industries	6MVXL05.0DDD	3.3	5	*	*
2006	Mitsubishi Heavy Industries	6MVXL06.4DDD	6.4	*	*	*
2006	Mitsubishi Heavy Industries	6MVXL06.4EEE	6.4	*	*	*
2006	Perkins	6PKXL04.4NH1	4.4	*	*	*
2006	Perkins	6PKXL04.4NJ1	4.4	*	*	*
2006	Perkins	6PKXL04.4RH2	4.4	*	*	*
2006	Perkins	6PKXL04.4RK1	4.4	*	*	*
2006	Perkins	6PKXL06.0VK1	6.0	*	*	*
2006	Perkins	6PKXL06.6PJ1	6.6	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2006	Perkins	6PKXL06.6PJ2	6.6	*	*	*
2006	Sisu Diesel	6SIDL06.6I2A	6.6	*	*	*
2006	Sisu Diesel	6SIDL07.4G4B	7.4	*	*	*
2006	Sisu Diesel	6SIDL07.4G4D	7.4	*	*	*
2006	Sisu Diesel	6SIDL07.4G5B	7.4	*	*	*
2006	Sisu Diesel	6SIDL08.4H5B	8.4	*	*	*
2006	Yanmar	6YDXL4.41K4T	4.4	*	*	*
2007	Caterpillar	7CPXL07.2ESL	7.2	*	*	*
2007	Caterpillar	7CPXL08.8ESK	8.8	*	*	*
2007	Caterpillar	7CPXL11.1ESK	11.1	*	*	*
2007	CNH Engine Corporation	7X9XL0239AAB	3.9	*	*	*
2007	CNH Engine Corporation	7X9XL0505AAE	8.3	*	*	*
2007	CNH Engine Corporation	7X9XL0540AAB	8.8	*	*	*
2007	CNH UK Limited	7NHXL06.7DTA	4.5	6.7	*	*
2007	Cummins	7CEXL0275AAB	4.5	*	*	*
2007	Cummins	7CEXL0275AAG	4.5	*	*	*
2007	Cummins	7CEXL0275AAK	4.5	*	*	*
2007	Cummins	7CEXL0409AAB	6.7	*	*	*
2007	Cummins	7CEXL0409AAC	6.7	*	*	*
2007	Cummins	7CEXL0409AAD	6.7	*	*	*
2007	Cummins	7CEXL0505AAE	8.3	*	*	*
2007	Cummins	7CEXL0540AAB	8.8	*	*	*
2007	Cummins	7CEXL0661AAF	11.0	*	*	*
2007	Cummins	7CEXL0661AAJ	10.8	*	*	*
2007	DaimlerChrysler	7MBXL15.9RJA	12.0	*	*	*
2007	Deere	7JDXL06.8038	6.8	*	*	*
2007	Deere	7JDXL06.8039	4.5	6.8	*	*
2007	Deere	7JDXL06.8041	4.5	6.8	*	*
2007	Deere	7JDXL06.8044	6.8	*	*	*
2007	Deere	7JDXL06.8048	6.8	*	*	*
2007	Deere	7JDXL06.8049	6.8	*	*	*
2007	Deere	7JDXL06.8078	4.5	6.8	*	*
2007	Deere	7JDXL06.8080	6.8	*	*	*
2007	Deere	7JDXL06.8084	4.5	*	*	*
2007	Deere	7JDXL06.8104	6.8	*	*	*
2007	Deere	7JDXL06.8105	4.5	6.8	*	*
2007	Deere	7JDXL08.1037	8.1	*	*	*
2007	Deutz	7DZXL06.1038	6.1	4	*	*
2007	Deutz	7DZXL06.1063	5.7	*	*	*
2007	Deutz	7DZXL06.5042	6.5	5.4	4.3	3.2
2007	Deutz	7DZXL06.5043	6.5	5.4	4.3	3.2
2007	Deutz	7DZXL07.1034	7.2	*	*	*
2007	Doosan Infracore	7DWXL05.8UTA	5.9	*	*	*
2007	Doosan Infracore	7DWXL07.6UPA	7.6	*	*	*
2007	Doosan Infracore	7DWXL11.0UJA	11.0	*	*	*
2007	Iveco	7VEXL06.7DGB	4.5	6.7	*	*
2007	Iveco	7VEXL06.7DGS	6.7	*	*	*
2007	Iveco	7VEXL06.7DTA	4.5	6.7	*	*
2007	Iveco	7VEXL10.3MLR	10.3	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2007	Komatsu	7KLXL0275AAG	4.5	*	*	*
2007	Komatsu	7KLXL0409AAB	6.7	*	*	*
2007	Komatsu	7KLXL0409AAC	6.7	*	*	*
2007	Komatsu	7KLXL0505AAE	8.3	*	*	*
2007	Liebherr Machines Bulle SA	7LHAL10.5LPA	10.5	*	*	*
2007	Liebherr Machines Bulle SA	7LHAL12.0KPA	12.0	*	*	*
2007	Liebherr Machines Bulle SA	7LHAL9.54SPA	9.5	*	*	*
2007	Mitsubishi Heavy Industries	7MVXL06.4FFF	6.4	*	*	*
2007	Perkins	7PKXL04.4NH1	4.4	*	*	*
2007	Perkins	7PKXL04.4NJ1	4.4	*	*	*
2007	Perkins	7PKXL06.6PJ1	6.6	*	*	*
2007	Perkins	7PKXL06.6PJ2	6.6	*	*	*
2007	Sisu Diesel	7SIDL07.4G4D	7.4	*	*	*
2007	Sisu Diesel	7SIDL07.4G5B	7.4	*	*	*
2007	Sisu Diesel	7SIDL08.4H5B	8.4	*	*	*
2007	Yanmar	7YDXL4.41K4T	4.4	*	*	*
2008	Caterpillar	8CPXL07.2ESL	7.2	*	*	*
2008	Caterpillar	8CPXL08.8ESK	8.8	*	*	*
2008	Caterpillar	8CPXL11.1ESK	11.1	*	*	*
2008	CNH Engine Corporation	8X9XL0505AAE	8.3	*	*	*
2008	CNH Engine Corporation	8X9XL0540AAB	8.8	*	*	*
2008	CNH Engine Corporation	8X9XL0540AAC	8.8	*	*	*
2008	CNH Engine Corporation	8X9XL0540AAD	8.8	*	*	*
2008	Cummins	8CEXL0275AAG	4.5	*	*	*
2008	Cummins	8CEXL0275AAK	4.5	*	*	*
2008	Cummins	8CEXL0409AAB	6.7	*	*	*
2008	Cummins	8CEXL0409AAC	6.7	*	*	*
2008	Cummins	8CEXL0409AAD	6.7	*	*	*
2008	Cummins	8CEXL0505AAE	8.3	*	*	*
2008	Cummins	8CEXL0540AAB	8.8	*	*	*
2008	Cummins	8CEXL0661AAF	11.0	*	*	*
2008	Cummins	8CEXL0661AAJ	11.0	*	*	*
2008	DaimlerChrysler	8MBXL15.9RJA	12.0	*	*	*
2008	Deere	8JDXL06.8038	6.8	*	*	*
2008	Deere	8JDXL06.8039	4.5	*	*	*
2008	Deere	8JDXL06.8041	4.5	6.8	*	*
2008	Deere	8JDXL06.8049	6.8	*	*	*
2008	Deere	8JDXL06.8078	4.5	6.8	*	*
2008	Deere	8JDXL06.8080	6.8	*	*	*
2008	Deere	8JDXL06.8104	4.5	6.8	*	*
2008	Deere	8JDXL06.8105	4.5	6.8	*	*
2008	Deere	8JDXL08.1037	8.1	*	*	*
2008	Deere	8JDXL09.0114	9.0	*	*	*
2008	Deutz	8DZXL06.1063	5.7	6.1	*	*
2008	Doosan Infracore	8DWXL05.8UTA	5.9	*	*	*
2008	Doosan Infracore	8DWXL07.6UPA	7.6	*	*	*
2008	Doosan Infracore	8DWXL11.0UJA	11.0	*	*	*
2008	Iveco	8VEXL06.7DGB	4.5	6.7	*	*
2008	Iveco	8VEXL06.7DGS	6.7	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2008	Iveco	8VEXL10.3MLR	10.3	*	*	*
2008	Komatsu	8KLXL0275AAG	4.5	*	*	*
2008	Komatsu	8KLXL0409AAB	6.7	*	*	*
2008	Komatsu	8KLXL0409AAC	6.7	*	*	*
2008	Komatsu	8KLXL0505AAE	8.3	*	*	*
2008	Liebherr Machines Bulle SA	8LHAL10.5LPA	10.5	*	*	*
2008	Liebherr Machines Bulle SA	8LHAL12.0KPA	12.0	*	*	*
2008	Liebherr Machines Bulle SA	8LHAL9.54SPA	9.5	*	*	*
2008	Mitsubishi Heavy Industries	8MVXL06.4FFF	6.4	4.2	*	*
2008	Perkins	8PKXL04.4NH1	4.4	*	*	*
2008	Perkins	8PKXL04.4NJ1	4.4	*	*	*
2008	Perkins	8PKXL04.4NM1	4.4	*	*	*
2008	Perkins	8PKXL06.6PJ1	6.6	*	*	*
2008	Perkins	8PKXL06.6PJ2	6.6	*	*	*
2008	Scania	8Y9XL11.7BBA	8.9	11.7	*	*
2008	Scania	8Y9XL11.7BBB	11.7	8.9	*	*
2009	Caterpillar	9CPXL07.2ESL	7.2	*	*	*
2009	Caterpillar	9CPXL08.8ESK	8.8	*	*	*
2009	Caterpillar	9CPXL11.1ESK	11.1	*	*	*
2009	Cummins	9CEXL0275AAG	4.5	*	*	*
2009	Cummins	9CEXL0275AAK	4.5	*	*	*
2009	Cummins	9CEXL0409AAB	6.7	*	*	*
2009	Cummins	9CEXL0409AAC	6.7	*	*	*
2009	Cummins	9CEXL0409AAD	6.7	*	*	*
2009	Cummins	9CEXL0505AAE	8.3	*	*	*
2009	Cummins	9CEXL0540AAB	8.8	*	*	*
2009	Cummins	9CEXL0540AAD	8.8	*	*	*
2009	Cummins	9CEXL0661AAF	11.0	*	*	*
2009	Cummins	9CEXL0661AAJ	11.0	*	*	*
2009	DaimlerChrysler	9MBXL07.2RJA	7.2	6.4	4.3	*
2009	Deere	9JDXL06.8049	6.8	*	*	*
2009	Deere	9JDXL06.8078	4.5	*	*	*
2009	Deere	9JDXL06.8080	6.8	*	*	*
2009	Deere	9JDXL06.8104	6.8	*	*	*
2009	Deere	9JDXL06.8105	6.8	4.5	*	*
2009	Deere	9JDXL06.8117	6.8	4.5	*	*
2009	Deere	9JDXL08.1037	8.1	*	*	*
2009	Deere	9JDXL09.0114	9.0	*	*	*
2009	Deutz	9DZXL06.1063	5.7	*	*	*
2009	Doosan Infracore	9DICL05.8UTA	5.9	*	*	*
2009	Doosan Infracore	9DICL07.6UPA	7.6	*	*	*
2009	Doosan Infracore	9DICL11.0UJA	11.0	*	*	*
2009	Iveco	9VEXL06.7DGB	6.7	4.5	*	*
2009	Iveco	9VEXL06.7DGS	6.7	*	*	*
2009	Iveco	9VEXL10.3MLR	10.3	*	*	*
2009	Komatsu	9KLXL0275AAG	4.5	*	*	*
2009	Komatsu	9KLXL0409AAB	6.7	*	*	*
2009	Komatsu	9KLXL0409AAC	6.7	*	*	*
2009	Komatsu	9KLXL0505AAE	8.3	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2009	Liebherr Machines Bulle SA	9LHAL10.5LPA	10.5	*	*	*
2009	Liebherr Machines Bulle SA	9LHAL12.0KPA	12.0	*	*	*
2009	Liebherr Machines Bulle SA	9LHAL9.54SPA	9.5	*	*	*
2009	Mitsubishi Heavy Industries	9MVXL06.4FFF	6.4	4.2	*	*
2009	Perkins	9PKXL04.4NJ1	4.4	*	*	*
2009	Perkins	9PKXL04.4NM1	4.4	*	*	*
2009	Perkins	9PKXL04.4NM2	4.4	*	*	*
2009	Perkins	9PKXL04.4RG3	4.4	*	*	*
2009	Perkins	9PKXL04.4RJ3	4.4	*	*	*
2009	Perkins	9PKXL06.6PJ1	6.6	*	*	*
2009	Perkins	9PKXL06.6PJ2	6.6	*	*	*
2009	Scania	9Y9XL11.7BBA	11.7	8.9	*	*
2009	Scania	9Y9XL11.7BBB	11.7	8.9	*	*
2009	Sisu Diesel	9SIDL07.4G4D	7.4	6.6	*	*
2009	Sisu Diesel	9SIDL07.4G5B	7.4	6.6	*	*
2009	Sisu Diesel	9SIDL08.4H5B	8.4	*	*	*
2010	AGCO SISU Power Inc.	ASIDL07.4G4D	7.4	6.6	*	*
2010	AGCO SISU Power Inc.	ASIDL07.4G4E	7.4	6.6	4.9	4.4
2010	AGCO SISU Power Inc.	ASIDL07.4G5B	7.4	6.6	*	*
2010	AGCO SISU Power Inc.	ASIDL07.4G5C	7.4	6.6	4.9	4.4
2010	AGCO SISU Power Inc.	ASIDL08.4H5B	8.4	*	*	*
2010	Caterpillar	ACPXL07.2ESL	7.2	*	*	*
2010	Caterpillar	ACPXL08.8ESK	8.8	*	*	*
2010	Caterpillar	ACPXL08.8ESL	8.8	*	*	*
2010	Caterpillar	ACPXL08.8ESX	8.8	*	*	*
2010	Caterpillar	ACPXL10.3ESL	10.3	*	*	*
2010	Caterpillar	ACPXL11.1ESK	11.1	*	*	*
2010	CNH UK Limited	ANHXL06.7DCB	6.7	*	*	*
2010	Cummins	ACEXL0275AAG	4.5	*	*	*
2010	Cummins	ACEXL0275AAK	4.5	*	*	*
2010	Cummins	ACEXL0409AAB	6.7	*	*	*
2010	Cummins	ACEXL0409AAC	6.7	*	*	*
2010	Cummins	ACEXL0409AAD	6.7	*	*	*
2010	Cummins	ACEXL0505AAE	8.3	*	*	*
2010	Cummins	ACEXL0540AAB	8.8	*	*	*
2010	Cummins	ACEXL0540AAC	8.8	*	*	*
2010	Cummins	ACEXL0540AAD	8.8	*	*	*
2010	Cummins	ACEXL0661AAF	11.0	*	*	*
2010	Cummins	ACEXL0661AAJ	11.0	*	*	*
2010	DaimlerChrysler	AMBXL07.2RJA	7.2	6.37	4.8	4.25
2010	DaimlerChrysler	AMBXL15.9RJA	12.0	*	*	*
2010	Deere	AJDXL06.8049	6.8	*	*	*
2010	Deere	AJDXL06.8078	4.5	*	*	*
2010	Deere	AJDXL06.8080	6.8	*	*	*
2010	Deere	AJDXL06.8104	6.8	4.5	*	*
2010	Deere	AJDXL06.8105	6.8	4.5	*	*
2010	Deere	AJDXL06.8117	6.8	4.5	*	*
2010	Deere	AJDXL08.1037	8.1	*	*	*
2010	Deere	AJDXL09.0098	9.0	*	*	*

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2010	Deere	AJDXL09.0114	9.0	*	*	*
2010	Deere	AJDXL09.0901	6.8	9.0	*	*
2010	Doosan Infracore	ADICL05.8UTA	5.9	*	*	*
2010	Doosan Infracore	ADICL07.6UPA	7.6	*	*	*
2010	Doosan Infracore	ADICL11.0UJA	11.0	*	*	*
2010	Iveco SPA	AVEXL06.7DGB	4.5	6.7	*	*
2010	Iveco SPA	AVEXL06.7DGS	6.7	*	*	*
2010	Iveco SPA	AVEXL10.3MLR	10.3	*	*	*
2010	Komatsu	AKLXL0275AAG	4.5	*	*	*
2010	Komatsu	AKLXL0409AAB	6.7	*	*	*
2010	Komatsu	AKLXL0409AAC	6.7	*	*	*
2010	Komatsu	AKLXL0505AAE	8.3	*	*	*
2010	Liebherr Machines Bulle SA	ALHAL10.5LPA	11.0	*	*	*
2010	Liebherr Machines Bulle SA	ALHAL12.0KPA	12.0	*	*	*
2010	Liebherr Machines Bulle SA	ALHAL9.54SPA	10.0	*	*	*
2010	Mitsubishi Heavy Industries	AMVXL06.4FFF	6.4	4.2	*	*
2010	Navistar	ANVXL0466OFA	7.6	*	*	*
2010	Perkins	APKXL04.4NJ1	4.4	*	*	*
2010	Perkins	APKXL04.4NM1	4.4	*	*	*
2010	Perkins	APKXL04.4NM2	4.4	*	*	*
2010	Perkins	APKXL04.4RG3	4.4	*	*	*
2010	Perkins	APKXL04.4RJ3	4.4	*	*	*
2010	Perkins	APKXL06.6PJ1	6.6	*	*	*
2010	Perkins	APKXL06.6PJ2	6.6	*	*	*
2010	Scania AB	AY9XL11.7BBA	11.7	8.9	*	*
2010	Scania AB	AY9XL11.7BBB	11.7	8.9	*	*
2011	AGCO SISU Power Inc.	BSIDL07.4G4E	7.4	6.6	4.9	4.4
2011	AGCO SISU Power Inc.	BSIDL07.4G5C	7.4	6.6	4.9	4.4
2011	Caterpillar	BCPXL11.1ESK	11.1	*	*	*
2011	Cummins	BCEXL0275AAG	4.5	*	*	*
2011	Cummins	BCEXL0409AAC	6.7	*	*	*
2011	Deere	BJDXL06.8078	6.8	4.5	*	*
2011	Deere	BJDXL06.8104	6.8	*	*	*
2011	Deere	BJDXL06.8105	6.8	4.5	*	*
2011	Deere	BJDXL06.8117	6.8	4.5	*	*
2011	Doosan Infracore	BDICL05.8UTA	5.9	*	*	*
2011	Iseki Matsuyama	BICLL3.37D4I	3.4	*	*	*
2011	Komatsu	BKLXL0275AAG	4.5	*	*	*
2011	Komatsu	BKLXL0409AAC	6.7	*	*	*
2011	Mitsubishi Heavy Industries	BMVXL06.4FFF	6.4	4.2	*	*
2011	Perkins	BPKXL04.4NJ1	4.4	*	*	*
2011	Perkins	BPKXL04.4NM1	4.4	*	*	*
2011	Perkins	BPKXL04.4NM2	4.4	*	*	*
2011	Perkins	BPKXL04.4RG3	4.4	*	*	*
2011	Perkins	BPKXL04.4RJ3	4.4	*	*	*
2011	Perkins	BPKXL06.6PJ2	6.6	*	*	*
2011	Perkins	BPKXL06.6PJ3	6.6	*	*	*
2012	Caterpillar	CCPXL07.2ESJ	7.2	*	*	*
2012	Caterpillar	CCPXL08.8ESJ	8.8	*	*	*

ARB-Approved Engine Families for the ESW CleanTech Phoenix System

Relating to Executive Order Series DE-13-004

Effective Date: September 6, 2013

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2012	Caterpillar	CCPXL11.1ESJ	11.1	*	*	*
2012	Caterpillar	CCPXL11.1ESK	11.1	*	*	*
2012	Deere	CJDXL06.8117	4.5	6.8	*	*
2012	Perkins	CPKXL06.6PJ3	6.6	*	*	*
2013	Caterpillar	DCPXL07.2ESJ	7.2	*	*	*
2013	Caterpillar	DCPXL08.8ESJ	8.8	*	*	*
2013	Caterpillar	DCPXL11.1ESJ	11.1	*	*	*
2013	John Deere Power Systems	DJDXL06.8104	6.8	*	*	*
2013	John Deere Power Systems	DJDXL06.8105	6.5	4.5	*	*
2013	Perkins	DPKXL06.6PJ3	6.6	*	*	*
2014	Perkins	EPKXL04.4NJ3	4.4	*	*	*

Additional ARB-Approved Engine Family for the Cleaire Phoenix

Model Year	Manufacturer	Engine Family	Displacement (L)			
			1	2	3	4
2001	Cummins	1CEXH0359BAV*	5.9	*	*	*

* Approved only when used to power off-road vehicles or equipment.