DE 04-006

ATTACHMENT 1

ARB-Approved Engine Families for the Johnson Matthey CRT diesel particulate filter system

CATERPILLAR

Model Year	Engine Family	Series
1994	RCP403DZDAAA	--
	RCP403DZDABA	--
	RCP629EZDARA	--
	RCP638EZDARA	--
	RCP893EZDARA	--
1995	SCP403DZDAAA	--
	SCP403DZDABA	--
	SCP403DZDARK	--
	SCP442DZDARK	3126
	SCP629EZDARK	--
	SCP629EZDARM	C-10, 3176
	SCP638EZDARA	--
	SCP729EZDARL	C-12
	SCP893EZDARK	--
1996	TCP403DZDAAA	3116
	TCP403DZDABA	3116
	TCP403DZDARK	3116
	TCP442DZDAAK	3126
	TCP442DZDARK	3126
	TCP629EZDARK	3176
	TCP629EZDARM	C-10
	TCP638EZDARA	3306
	TCP729EZDARL	C-12
	TCP893EZDARK	3406
1997	VCP403DZDAAA	3116
	VCP403DZDABA	3116
	VCP403DZDARK	3116
	VCP442DZDAAK	3126
	VCP442DZDARK	3126
	VCP629EZDARK	3176
	VCP629EZDARX	C-10
	VCP638EZDARA	3306
	VCP729EZDARX	C-12
	VCP893EZDARA	3406
	VCP893EZDARX	3406
	VCP967EZDARK	3406

Model Year	Engine Family	Series
1998	WCPXH0442HRK	3126
	WCPXH0442HRK	3126
	WCPXH0442HSK	3126
	WCPXH0442HSK	3126
	WCPXH0629ERK	C-10
	WCPXH0629ERK	C-10
	WCPXH0729ERK	C-12
	WCPXH0729ERK	C-12
	WCPXH0893ERK	3406
	WCPXH0893ERK	3406
	WCPXH0967ERK	3406
	WCPXH0967ERK	3406
1999	XCPXH0442HRK	3126
	XCPXH0442HSK	3126
	XCPXH0629ERK	C10
	XCPXH0729ERK	C12
	XCPXH0893ERK	3406
	XCPXH0967ERK	3406
2000	YCPXH0442HRK	3126
	YCPXH0629ERK	C-10
	YCPXH0729ERK	C-12
	YCPXH0893ERK	C-15
	YCPXH0967ERK	C-16
2001	1CPXH0442HAK	3126
	1CPXH0442HBK	3126
	1CPXH0442HRK	3126
	1CPXH0629ERK	C-10
	1CPXH0729ERK	C-12
	1CPXH0893ERK	C-15
	1CPXH0967ERK	C-16
2002	2CPXH0442HAK	3126
	2CPXH0442HBK	3126
	2CPXH0442HRK	3126
	2CPXH0629ERK	C-10
	2CPXH0729ERK	C-12
	2CPXH0893ERK	C-15
	2CPXH0967ERK	C-16

ARB-Approved Engine Families for the Johnson Matthey CRT diesel particulate filter system

CUMMINS

Model Year	Engine Family	Series
1994	RCE359D6DAAB	B5.9
	RCE359D6DAAW	B5.9
	RCE359D6DABW	B5.9
	RCE505D6DAAA	C8.3
	RCE505D6DAAB	C8.3
	RCE505D6DAAC	C8.3
	RCE505F6DAAW	C8.3
	RCE611EGDARW	L10
	RCE661EJDARA	M11
	RCE661EJDARC	M11
	RCE661EJDARW	M11
	RCE661FJDAAA	M11
	RCE855EJDARW	N14
	RCE855EJDASW	N14
1995	SCE239D6DAAA	B3.9
	SCE359D6DAAA	B5.9
	SCE359D6DAAW	B5.9
	SCE359D6DABW	B5.9
	SCE505D6DAAA	C8.3
	SCE505D6DAAW	C8.3
	SCE505D6DABW	C8.3
	SCE505F6DAAW	C8.3
	SCE611EGDARW	L10
	SCE661EJDARA	M11
	SCE661EJDARC	M11
	SCE661EJDARW	M11
	SCE661EJDASW	M11
	SCE661EJDATW	M11
	SCE661FJDAAA	M11
	SCE855EJDARA	N14
	SCE855EJDARB	N14
	SCE855EJDARW	N14
	SCE855EJDASW	N14
	SCE855EJDATW	N14

Model Year	Engine Family	Series
1996	TCE239D6DAAA	B3.9
	TCE359D6DAAA	B5.9
	TCE359D6DABW	B5.9
	TCE505D6DAAA	C8.3
	TCE505D6DAAW	C8.3
	TCE505D6DABW	C8.3
	TCE661EJDARA	M11
	TCE661EJDARB	M11
	TCE661EJDARC	M11
	TCE661EJDARW	M11
	TCE661EJDASW	M11
	TCE661EJDATW	M11
	TCE661FJDABA	M11
	TCE855EJDARA	N14
	TCE855EJDARB	N14
	TCE855EJDARW	N14
	TCE855EJDASW	N14
	TCE855EJDATW	N14
1997	VCE239D6DAAA	B3.9
	VCE359D6DAAA	B5.9
	VCE359D6DABW	B5.9
	VCE359DJDARA	--
	VCE505D6DAAA	C8.3
	VCE505D6DAAW	C8.3
	VCE505D6DABW	C8.3
	VCE661EJDARB	M11
	VCE661EJDARC	M11
	VCE661EJDASA	M11
	VCE661EJDATW	M11
	VCE661FJDABA	M11
	VCE855EJDARA	N14
	VCE855EJDARB	N14
	VCE855EJDARC	N14
	VCE855EJDATW	N14

ARB-Approved Engine Families for the Johnson Matthey CRT diesel particulate filter system

CUMMINS (continued)

Model Year	Engine Family	Series
1998	WCEXA0359BAH	ISB
	WCEXH0359BAD	ISB
	WCEXH0359BAE	ISB
	WCEXH0505CAC	ISC
	WCEXH0505CAD	ISC
	WCEXH0505CAE	ISC
	WCEXH0505CAF	ISC
	WCEXH0661MAA	M11
	WCEXH0661MAB	M11
	WCEXH0661MAC	M11
	WCEXH0661MAD	ISM
	WCEXH0661MAE	ISM
	WCEXH0855NAA	N14
	WCEXH0855NAB	N14
	WCEXH0855NAC	N14
	WCEXH0912XAA	Signature
1999	XCEXH0359BAI	ISB
	XCEXH0359BAJ	ISB
	XCEXH0359BAK	ISB
	XCEXA0359BAN	ISB
	XCEXA0359BAT	ISB
	XCEXH0505CAC	ISC
	XCEXH0505CAD	ISC
	XCEXH0505CAE	ISC
	XCEXH0505CAF	ISC
	XCEXH0661MAC	M11
	XCEXH0661MAG	ISM
	XCEXH0661MAH	ISM
	XCEXH0661MAI	ISM
	XCEXH0855NAD	N14
	XCEXH0855NAE	N14
	XCEXH0855NAF	N14
	XCEXH0912XAB	Signature
	XCEXH0912XAD	ISX

Model Year	Engine Family	Series
2000	YCEXH0359BAI	ISB
	YCEXH0359BAO	ISB
	YCEXH0359BAP	ISB
	YCEXA0359BAZ	ISB
	YCEXH0505CAF	ISC
	YCEXH0505CAG	ISC
	YCEXH0505CAH	ISC
	YCEXH0505CAI	ISC
	YCEXH0540LAA	ISL
	YCEXH0661MAG	ISM
	YCEXH0661MAH	ISM
	YCEXH0661MAI	ISM
	YCEXH0855NAD	N14
	YCEXH0855NAE	N14
	YCEXH0855NAF	N14
	YCEXH0912XAC	ISX
	YCEXH0912XAD	ISX
	YCEXH0912XAE	Signature, ISX
2001	1CEXA0359BAZ	ISB
	1CEXH0239BAD	ISB
	1CEXH0239BAE	ISB
	1CEXH0359BAO	ISB
	1CEXH0359BAU	ISB
	1CEXH0359BAV	ISB
	1CEXH0505CAM	ISC
	1CEXH0505CAN	ISC
	1CEXH0505CAO	ISC
	1CEXH0505CAP	ISC
	1CEXH0540LAA	ISL
	1CEXH0540LAB	ISL
	1CEXH0540LAC	ISL
	1CEXH0661MAP	ISM
	1CEXH0661MAQ	ISM
	1CEXH0661MAR	ISM
	1CEXH0855NAD	N14
	1CEXH0855NAE	N14
	1CEXH0855NAF	N14
	1CEXH0912XAC	ISX
	1CEXH0912XAD	ISX
	1CEXH0912XAE	Signature, ISX

ARB-Approved Engine Families for the Johnson Matthey CRT diesel particulate filter system

CUMMINS (continued)

Model Year	Engine Family	Series
2002	2CEXA0359BAZ	ISB
	2CEXH0239BAD	ISB
	2CEXH0239BAE	ISB
	2CEXH0359BAB	ISB
	2CEXH0359BAO	ISB
	2CEXH0505CAM	ISC
	2CEXH0505CAN	ISC
	2CEXH0505CAQ	ISC
	2CEXH0540LAB	ISL
	2CEXH0540LAC	ISL
	2CEXH0661MAP	ISM
	2CEXH0661MAS	ISM
	2CEXH0855NAA	N14
	2CEXH0912XAF	ISX

ARB-Approved Engine Families for the Johnson Matthey CRT diesel particulate filter system

DDC

Model Year	Engine Family	Series
1994	RDD11.EJDARA	Series 60
	RDD12.EJDARA	Series 60
	RDD8.5EJDARA	Series 50
	RDD8.5EJDARW	Series 50
	RDD8.5FJDABA	Series 50
1995	SDD11.EJDARA	Series 60
	SDD12.EJDARA	Series 60
	SDD8.5EJDABA	Series 50
	SDD8.5EJDARA	Series 50
	SDD8.5EJDARW	Series 50
1996	TDD11.EJDARA	Series 60
	TDD12.EJDARA	Series 60
	TDD12.EJDATW	Series 55
	TDD8.5EJDARA	Series 50
	TDD8.5EJDARW	Series 50
	TDD8.5FJDABA	Series 50
1997	VDD11.EJDARA	Series 60
	VDD12.EJDARA	Series 60
	VDD12.EJDATA	Series 55
	VDD3.8C8DABA	Series VM 638
	VDD8.5EJDARA	Series 50
	VDD8.5FJDABA	Series 50
1998	WDDXH11.1EHD	Series 60
	WDDXH12.7EGD	Series 60
	WDDXH08.5EJD	Series 50
	WDDXH08.5FJC	Series 50
	WDDXH03.8C1C	Turbotronic 638
1999	XDDXH11.1EHL	Series 60
	XDDXH12.7EGL	Series 60
	XDDXH14.0ELL	Series 60
	XDDXH08.5EJL	Series 50
	XDDXH08.5FJN	Series 50
	XDDXH03.8C1N	-
2000	YDDXH12.7EGL	Series 60
	YDDXH14.0ELL	Series 60
	YDDXH08.5EJB	Series 50
	YDDXH08.5EJL	Series 50
	YDDXH08.5FJN	Series 50
	YDDXH03.8C1N	Turbotronic 638
2001	1DDXH12.7EGL	Series 60
	1DDXH14.0ELL	Series 60
	1DDXH08.5EJB	Series 50
	1DDXH08.5EJL	Series 50
2002	2DDXH12.7EGL	Series 60
	2DDXH14.0ELL	Series 60
	2DDXH12.7FGN	Series 60
	2DDXH08.5EJL	Series 50

MACK

Model Year	Engine Family	Series
1994	RMK728EGDARA	E7, EM7
	RMK728EJDARA	E7, EM7
1995	SMK728EGDARA	E7, EM7
	SMK728EJDARA	E7
1996	TMK728EGDARA	E7, EM7
	TMK728EJDARA	E7
1997	VMK728EGDARA	E7, EM7
	VMK728EJDARA	E7, EM7
	VMK728EJDAYW	E7, EM7
1998	WMKXH11.9E51	E7
	WMKXH11.9E52	E7
	WMKXH11.9E53	EM7
1999	XMKXH11.9E54	E7
2000	YMKXH11.9H56	E7, EM7
	YMKXH11.9V57	E7, EM7
2001	1MKXH11.9H56	E7, EM7
	1MKXH11.9H59	E7
	1MKXH11.9V57	E7, EM7
	1MKXH11.9V60	E7
	1MKXH11.9V61	EM7
2002	2MKXH11.9H59	E7
	2MKXH11.9H63	E7
	2MKXH11.9V60	E7
	2MKXH11.9V61	EM7
	2MKXH11.9V65	E7
	2MKXH11.9V66	EM7
	2MKXH11.9V67	E7

VOLVO

Model	Engine Family	Series
1994	RVT12.EJDBRA	VE D12
	RVT6.7D6DBRA	VE D7A
1995	SVT12.EJDBRA	VE D12
	SVT6.7D6DBRA	VE D7A
1996	TVT12.EJDBRA	VE D12
	TVT6.7D6DBRA	VE D7A
1997	VVT12.EJDBRA	VE D12
	VVT6.7D6DBRA	VE D7A
1998	WVTXH12.150S	VE D12B
	WVTXH07.350S	VE D7C
1999	XVTXH12.150S	VE D12B
	XVTXH07.399B	VE D7C
	XVTXH07.350S	VE D7C
2000	YVTXH07.350S	VE D7C
	YVTXH12.150S	VE D12C
2001	1VTXH07.350S	VE D7C
	1VTXH12.150S	VE D12
2002	2VTXH07.350S	VE D7C
	2VTXH12.150S	VE D12

ARB-Approved Engine Families for the Johnson Matthey CRT diesel particulate filter system

NAVISTAR (INTERNATIONAL)

Model Year	Engine Family	Series
1994	RNV408D6DAAW	--
	RNV444C8DABA	--
	RNV466D6D0TW	--
	RNV466D6DAAA	--
	RNV466D6DABA	--
	RNV466D6DARW	DT 466HT, DT 466
	RNV466D6DASW	DT 466HT, DT 466
	RNV530D6DAAA	--
	RNV7.3C8DAAA	--
1995	SNV444C8DOAA	--
	SNV444C8DORA	--
	SNV444C8DOSA	--
	SNV466D6DARA	DT 466HT, DT 466
	SNV466D6DASA	DT 466
	SNV466D6DATA	--
	SNV466D8DARB	DT 466HT, DT 466
	SNV466D8DASB	DT 466
	SNV466D8DATB	--
	SNV530D6DARA	--
	SNV530E6DASA	--
	SNV530F6DATA	530 Bus
	SNV7.3C8DAAA	--
1996	TNV444C8DORA	--
	TNV444C8DOSA	--
	TNV466D6DARB	DT 466, DT 466HT
	TNV466D6DATB	--
	TNV466D8DARB	DT 466, DT 466HT
	TNV466D8DATB	--
	TNV530D6DARA	--
	TNV530D8DARA	--
	TNV530E6DASA	--
	TNV530E8DASA	--
	TNV7.3B8DOAA	--
	TNV7.3C8DAAA	--
1997	VNV444C8DARW	T444E
	VNV444C8DASW	T444E HT
	VNV466D6DARA	DT 466HT, DT 466
	VNV466D8DARW	DT 466E, DT 466 HT
	VNV466D8DASA	--
	VNV530D6DARA	530 MGD
	VNV530D8DARA	530E
	VNV530E6DASA	530 HVY
	VNV530E8DASA	530E
	VNV7.3C8DAAA	--
	VNV7.3C8DAAW	--
	VNV7.3W8DOAK	7.3 DIT

Model Year	Engine Family	Series
1998	WNVXH0444CCB	T 444E
	WNVXH0444CCD	T 444E
	WNVXH0466CCB	DT 466E
	WNVXH0466CCD	DT 466E
	WNVXH0530CCB	530E
	WNVXH0530CCD	530E
1999	XNVXH0444ANA	T 444E
	XNVXH0444ANB	T 444E
	XNVXH0466ANA	DT 466E
	XNVXH0466ANB	DT 466E
	XNVXH0530ACT	530E
	XNVXH0530ANA	530E
	XNVXH0530ANB	530E
	XNVXH07.3ACA	7.3 DIT
	XNVXH07.3ACB	7.3 DIT
	XNVXH07.3ACC	7.3 DIT
	XNVXH07.3ANE	7.3 DIT
	XNVXH07.3ANF	7.3 DIT
	XNVXA07.3CCD	7.3 DIT
	XNVXA07.3CNJ	7.3 DIT
2000	YNVXH0444ACT	T 444E
	YNVXH0444ANA	444 P
	YNVXH0444ANB	T 444E
	YNVXH0444ANC	T 444E
	YNVXH0466ANA	DT 466E, DT 466E HT
	YNVXH0466ANB	DT 466E, DT 466E HT
	YNVXH0530ACT	530E
	YNVXH0530ANA	DT 530E
	YNVXH0530ANB	DT 530E, DT 530E HT
	YNVXH07.3ANA	7.3 DIT
2001	1NVXH0444ANA	444 P
	1NVXH0444ANB	T 444E
	1NVXH0444ANC	T 444E
	1NVXH0466ANA	DT 466, DT 466 HT
	1NVXH0466ANB	DT 466, DT 466 HT
	1NVXH0466ANB	DT 466, DT 466 HT
	1NVXH0530ACT	DT 530
	1NVXH0530ANA	DT 530
	1NVXH0530ANB	DT 530, DT 530 HT
	1NVXH07.3ACE	7.3 DIT
	1NVXH07.3ACF	7.3 DIT
	1NVXH07.3ANA	7.3 DIT
	1NVXH07.3ANC	7.3 DIT
	1NVXA07.3CND	7.3 DIT

ARB-Approved Engine Families for the Johnson Matthey CRT diesel particulate filter system

NAVISTAR (INTERNATIONAL) (continued)

Model Year	Engine Family	Series
	2NVXH0444ANA	T 444E
	2NVXH0444ANB	T 444E
	2NVXH0444ANC	T 444E
	2NVXH0466ANA	DT 466, DT 466 HT
	2NVXH0466ANB	DT 466, DT 466 HT
	2NVXH0530ANA	DT 530
	2NVXH0530ANB	DT 530, DT 530 HT
	2NVXH0530ANC	DT 530
	2NVXH07.3ACE	7.3 DIT
	2NVXA07.3ACF	7.3 DIT
	2NVXH07.3ANA	7.3 DIT
	2NVXH07.3ANC	7.3 DIT
	2NVXA07.3CND	7.3 DIT

ARB-Approved Engine Families for the Johnson Matthey CRT diesel particulate filter system

GENERAL ENGINE PRODUCTS

Model Year	Engine Family
1994-2000	none
2001	1GEPH06.5521
2002	2GEPH06.5521 2GEPH06.5527

GENERAL MOTORS

Model Year	Engine Family
1994	RGM6.5C6DAAC
1995	none
1996	TGM6.5C6DABA TGM6.5C6DABW
1997	VGM6.5C6DABA VGM6.5C6DABW VGM6.5C6DARW
1998	WGMXH06.5521 WGMXH06.5522 WGMXH06.5523
1999	XGMXH06.5521 XGMXH06.5523 XGMXH06.5526
2000	YGMXH06.5521
2001	1GMXH06.5521
2002	2GMXH06.5521 2GMXH06.5527

HINO

Model Year	Engine Family
1994	RHM3.8C7DARW RHM6.5D7DARW
1995	SHM3.8C7DARW SHM6.5D7DARW
1996	THM3.8C7DARW THM6.5D7DARW
1997	VHM8.0DHDARA
1998	WHMXH08.0JTR
1999	XHMXH08.0JTR
2000	YHMXH05.3JTD YHMXH08.0JTP YHMXH08.0JTR
2001	1HMXH05.3JTD 1HMXH08.0JTP 1HMXH08.0JTR
2002	2HMXH05.3JTD 2HMXH08.0JTP 2HMXH08.0JTR

ISUZU

Model Year	Engine Family
1994	RSZ3.9C6DARW
1995	SSZ3.9C6DARW SSZ7.1D6DAAA
1996	TSZ3.9C6DARW TSZ7.1D6DAAA
1997	VSZ3.9C6DARA VSZ7.1D6DAAA VSZ7.1D6DAAW
1998	WSZXH07.84RA
1999	XSZXH07.84RA
2000	YSZXH07.84RA
2001	1SZXH06.63RK
2002	2SZXH06.64RA 2SZXH07.84RA

MERCEDES BENZ
(or DAIMLERCHRYSLER)

Model Year	Engine Family
1994	RMB6.0D6DAAA RMB6.0D6DARA
1995	SMB6.0D6DAAA SMB6.0D6DARA
1996	none
1997	VMBXH4.25DJA
1998	WMBXH4.25DJA
1999	XMBXH4.25DJA XMBXH6.37DJA
2000	YMBXH4.25DJA YMBXH6.37DJA
2001	1MBXH12.0DJA 1MBXH12.8DJA 1MBXH4.25DJA 1MBXH6.37DJA 1MBXH6.37DJC
2002	2MBXH12.0DJA 2MBXH12.8DJA 2MBXH15.9DJB 2MBXH4.25DJA 2MBXH6.37DJA 2MBXH6.37DJC

ARB-Approved Engine Families for the Johnson Matthey CRT diesel particulate filter system

MITSUBISHI

Model Year	Engine Family
1994	RMT238B7DAAA
1995	SMT460D7DAAA
1996	TMT238C7DBAA TMT358D7DBAA TMT460D7DBAA
1997	VMT238C7DBAA VMT358D7DBAA VMT460D7DBAA
1998	none
1999	XMTXH03.9D4A XMTXH05.8D6A XMTXH07.5D6A
2000	YMTXH03.9D4A YMTXH05.8D6A YMTXH07.5D6A
2001	1MTXH03.9D4A 1MTXH04.8M5A 1MTXH05.8D6A 1MTXH07.5D6A
2002	2MTXH03.9D4A 2MTXH04.8M5A 2MTXH05.8D6A 2MTXH07.5D6A

NISSAN

Model Year	Engine Family
1994	RND254C6DAAA RND423D6DAAA
1995	SND254C6DAAA SND423D6DAAA
1996	TND254C6DAAA TND423D6DAAA
1997	VND254C6DAAA VND423D6DAAA
1998	WNDXH04.2TAB WNDXH06.9FAB
1999	XNDXH04.6FAB XNDXH06.9FAB
2000	YNDXH04.6FAB YNDXH06.9FAB
2001	1NDXH04.6FAB 1NDXH06.9FAB
2002	2NDXH04.6FAB 2NDXH06.9FAB

PERKINS

Model Year	Engine Family
1994	RPK243C6DAAA RPK365D6DAAA
1995	SPK243C6DAAA SPK365D6DAAA
1996	TPK243C6DAAA TPK365D6DAAA
1997-2002	none

RENAULT

Model Year	Engine Family
1994	none
1995	SR3377D8DAAW SR3377D8DABW
1996	TR3377D8DAAW TR3377D8DABW
1997	VR3377D8DAAW VR3377D8DABW
1998	none
1999	XR3XH0377KWC XR3XH0377LWC
2000	YR3XH0377KWC
2001-2002	none