

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 1996 Engines

Manufacturer	Engine Families
Caterpillar	TCP14.RZDBRK
	TCP10.RZDBRD
Detroit Diesel Corporation	TDD18.TJ4ARE
Deere	TJD8.1R6DBRA
	TJD8.1R6DBRC
Deutz AG	TDZ16.RGDARA
	TDZ16.RGDARB
	TDZ7.1R6DARA
	TDZ7.1R6DARB
Generac	TGN13.R6DARA
IVECO	TVE14.R6DARA
Komatsu	TKL11.RZDARB
	TKL11.RZDARC
Navistar	TNV466R6DARA
	TNV466R6DARB
	TNV466R6DASC
	TNV466R6DASD
	TNV530R6DARA
	TNV530R6DARB
	TNV530R6DASD
	TNV530R8DASC

Model Year 1997 Engines

Manufacturer	Engine Families
Caterpillar	VCP10.RZDARD
	VCP14.RZDARJ
	VCP14.RZDARK
Cummins	VCE505R6DTRA
Detroit Diesel Corporation	VDD12.TJDARE
	VDD8.5TJDARE
	VDD9.0TJ30AE
Deere	VJD10.R6DBRA
	VJD10.R6DBRB
	VJD10.RJDARB
	VJD6.8R6DBRA
	VJD6.8R6DBRC
	VJD8.1R6DBRA
	VJD8.1R6DBRC
	VJD8.1RBDRB
Deutz AG	VDZ16.RGDARA
	VDZ16.RGDARB
	VDZ6.1R6DARC
	VDZ7.1R6DARA
	VDZ7.1R6DARB
Generac	VGN13.R6DARA
IVECO	VVE14.R6DARA
Navistar	VNV466R6DASC
	VNV466R6DASD
	VNV530R6DARB
	VNV530R6DASC
	VNV530R6DASD

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 1998 Engines

Manufacturer	Engine Families
AB Volvo Penta	WVPXL09.6ACB
	WVPXL12.0ACB
	WVPXL16.0ACB
Case	WX9XL0239ABA
Caterpillar	WCPXL07.0MRB
	WCPXL10.5MRD
	WCPXL10.5MRG
	WCPXL14.6ERK
	WCPXL14.6MRJ
Cummins	WCEXL019.AAA
	WCEXL019.AAB
	WCEXL0359AAA
	WCEXL0505AAA
	WCEXL0505ABA
	WCEXL0505ACA
	WCEXL0661AAA
	WCEXL0855AAA
Daewoo	WDWXL11.1BHT
	WDWXL11.1BIA
Detroit Diesel Corporation	VDDXL08.5TJD
	WDDXL09.0TFE
	WDDXL11.1THD
	WDDXL12.1TFE
	WDDXL12.1TFM
	WDDXL12.7TGD
	WDDXL15.9TRE
	WDDXL18.1TFE
	WDDXL23.9TRE
	WMUXL12.0G2V
Deere	WJDXL06.8012
	WJDXL06.8012
	WJDXL08.1009
Deutz AG	WDZXL06.1007
	WDZXL07.1003
	WDZXL07.1004
	WDZXL15.9001
	WDZXL15.9002
GMC	WGNXL13.3HTA
IVECO	WVEXL13.8DAR

Model Year 1998 Engines Continued

Manufacturer	Engine Families
Komatsu	WKDXL0239AAA
	WKDXL0239ABA
	WKDXL0359AAA
	WKDXL0359ABA
	WKDXL0505AAA
	WKLXL11.0DB1
	WKLXL11.0DC1
	WKLXL15.2EB1
	WKLXL23.2FC1
	WKLXL7.15CB1
	WKLXL7.15CC1
MTU	WMUXL12.0G2V
Navistar	WNVXL0530BNB
	WNVXL0530BND

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 1999 Engines

Manufacturer	Engine Families
AB Volvo Penta	XVPXL09.6ACB
	XVPXL12.0ACB
	XVPXL16.0ACB
Case	XX9XL0359ABA
	XX9XL0505AAA
	XX9XL0505ABA
	XX9XL0505ACA
Caterpillar	XCPXL07.0MRB
	XCPXL10.5MRD
	XCPXL10.5MRG
	XCPXL14.6MRJ
Cummins	XCEXL019.AAA
	XCEXL019.AAB
	XCEXL0359ABA
	XCEXL0505AAA
	XCEXL0505ABA
	XCEXL0505ABB
	XCEXL0505ACA
	XCEXL0661AAA
	XCEXL0855AAA
	XCEXL0855AAB
Daewoo	XDWXL11.1BIA
	XDWXL11.1BHT
Detroit Diesel Corporation	XDDXL04.7TAE
	XDDXL08.5TJD
	XDDXL09.1TFE
	XDDXL11.1THD
	XDDXL12.1TFE
	XDDXL12.1TFM
	XDDXL12.7TGD
	XDDXL14.0TLD
	XDDXL15.9TRE
	XDDXL18.1TFE
	XDDXL23.9TRE
Deere	XJDXL06.8012
	XJDXL06.8014
	XJDXL08.1007
	XJDXL08.1009

Model Year 1999 Engines Continued

Manufacturer	Engine Families
Deutz AG	XDZXL06.1008
	XDZXL07.1005
	XDZXL07.1004
	XDZXL15.9002
	XDZXL15.9003
Generac	XGNXL13.3HTA
	XGNXL12.0MAA
IVEC	XVEXL13.8DAR
Komatsu	XKLXL11.0DB1
	XKLXL11.0DC1
	XKLXL15.2EC1
	XKLXL23.2FC1
	XKLXL7.15CB1
	XKLXL7.15CC1
	XKDXL0359ABA
	XKDXL0505AAA
	XKDXL0505ABB
	XKDXL0505ACA
Mitsubishi	XMTXL07.5D6C
	XMTXL11.9D6A
	XMTXL11.9D6B
Navistar	XNVXL0530AND
	XNVXL0530ANC
	XNVXL0530BNB
	XNVXL0530BND

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2000 Engines

Manufacturer	Engine Families
Case	YX9XL0359ABA
	YX9XL0505ACA
Caterpillar	YCPXL07.0MRB
	YCPXL10.5MRD
	YCPXL10.5MRG
	YCPXL14.6ERK
	YCPXL14.6MRJ
	YCPXL27.0MRH
	YCPXL27.0MRS
	YCPXL34.5ERK
	YCPXL51.8ERK
	YCPXL69.0ERK
Cummins	YCEXL015.ABA
	YCEXL030.ABA
	YCEXL0359ABA
	YCEXL050.AAA
	YCEXL0505AAA
	YCEXL0505ABA
	YCEXL0505ABB
	YCEXL0505ACA
	YCEXL060.AAA
	YCEXL060.ABA
	YCEXL0661AAA
	YCEXL0855AAA
	YCEXLO50.ABA
Deere	YJDXL06.8012
	YJDXL06.8014
	YJDXL08.1007
	YJDXL08.1008
	YJDXL08.1009
	YJDXL10.5022
Detroit Diesel Corporation	YDDXL04.7TAE
	YDDXL05.2TDM
	YDDXL08.5TJD
	YDDXL09.0TFE
	YDDXL11.1THD
	YDDXL12.1TFE
	YDDXL12.1TFM
	YDDXL12.7TGD

Model Year 2000 Engines Continued

Manufacturer	Engine Families
Detroit Diesel Corporation (cont.)	YDDXL14.0TLD
	YDDXL15.9TRE
	YDDXL18.1TFE
	YDDXL23.9TRE
Deutz AG	YDZXL06.1008
	YDZXL07.1004
	YDZXL07.1005
	YDZXL15.9002
	YDZXL15.9003
	YDZXL17.5001
Genrac	YGNXL12.0MAA
	YGNXL13.3HAA
	YGNXL13.3HTA
	YGNXL16.0MAA
IVECO	YVEXL13.8DAR
Komatsu	YKLXL0505ACA
	YKLXL11.0DB1
	YKLXL11.0DC1
	YKLXL15.2EC1
	YKLXL23.2FC1
	YKLXL23.2FC2
	YKLXL30.5GC1
	YKLXL7.15CB1
	YKLXL7.15CC1
Mitsubishi	YMTXL07.5D6C
	YMTXL11.9D6A
	YMTXL11.9D6B
Navistar	YNVXL0466ANA
	YNVXL0530ANA
	YNVXL0530ANB
	YNVXL0530ANC
	YNVXL0530AND
Volvo Penta	YVPXL07.3ABB
	YVPXL07.3ACB
	YVPXL09.6ACB
	YVPXL12.0ACB
	YVPXL16.0ACB

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2001 Engines

Manufacturer	Engine Families
Case	1X9XL0239ACA
	1X9XL0359AAA
	1X9XL0359ABA
	1X9XL0505AAA
	1X9XL0505ABA
	1X9XL0505ABB
	1X9XL0505ACA
Caterpillar	1CPXL07.0MRB
	1CPXL10.5MRG
	1CPXL14.6ESK
	1CPXL14.6MRJ
	1CPXL15.8ESK
	1CPXL18.0HRN
	1CPXL27.0HRK
	1CPXL27.0MRH
	1CPXL27.0MRS
	1CPXL27.0MRT
	1CPXL34.5ERK
	1CPXL78.1ERK
Cummins	1CEXL015.AAA
	1CEXL019.AAB
	1CEXL0239ACA
	1CEXL028.AAA
	1CEXL030.ABA
	1CEXL0359AAA
	1CEXL0359ABA
	1CEXL0359ABB
	1CEXL0359ABC
	1CEXL0359ABD
	1CEXL0359ADA
	1CEXL050.AAA
	1CEXL050.ABA
	1CEXL0505AAA
	1CEXL0505ABA
	1CEXL0505ABB

Model Year 2001 Engines Continued

Manufacturer	Engine Families
Cummins continued	1CEXL0505ACB
	1CEXL0505ACD
	1CEXL0505ACE
	1CEXL060.AAA
	1CEXL060.ABA
	1CEXL0661AAA
	1CEXL0661AAD
Daewoo	1DWXL18.3ASA
	1DWXL11.1BIA
	1DWXL14.6CVT
Detroit Diesel Corporation	1DDXL04.7TAE
	1DDXL08.5TJD
	1DDXL08.5YJD
	1DDXL14.0VLD
	1DDXL14.0WLD
	1DDXL15.9WRE
	1DDXL23.9WRE
	1DDXL31.8XRE
	1DDXL65.0XTE
Deere	1JCXL06.8039
	1JDXL06.8014
	1JDXL06.8038
	1JDXL08.1007
	1JDXL08.1008
	1JDXL08.1009
Deutz	1DZXL06.1008
	1DZXL07.1005
	1DZXL15.9002
	1DZXL15.9003
	1DZXL71.0021
	YDZXL07.1004
Generac	1GNXL17.0FAA
Isuzu	1SZXL09.8EXA
	1SZXL15.7ETA
International	1NVXL0530ANA
	1NVXL0530ANC
	1NVXL0530AND
	1NVXL0530ANE
	1NVXL0530ANF

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2001 Engines Continued

Manufacturer	Engine Families
Komatsu	1KLXL0239ACA
	1KLXL0359AAA
	1KLXL0359ABA
	1KLXL0359ABC
	1KLXL0505AAA
	1KLXL0505ABB
	1KLXL0505ACA
	1KLXL060.AAA
	1KLXL11.0DD3
	1KLXL15.2EC3
	1KLXL23.2FC1
	1KLXL23.2FC2
	1KLXL30.5GC1
	1KLXL30.5GD1
	1KLXL7.15CB1
	1KLXL7.15CC1
Mitsubishi	1MTXL07.5D6A
	1MTXL07.5D6C
	1MTXL11.9D6B
	1MTXL11.9D6D
AB Volvo Penta	1VPXL07.3ABB
	1VPXL07.3ACB
	1VPXL09.6ACB
	1VPXL12.1ACB
	1VPXL16.0ACB

Model Year 2002 Engines

Manufacturer	Engine Families
Case	2X9XL0359ABA
	2X9XL0359ABB
	2X9XL0359ABE
	2X9XL0505AAA
	2X9XL0505ABA
	2X9XL0505ABB
	2X9XL0505ABD
	2X9XL0505ACA
Caterpillar	2CPXL07.0MRB
	2CPXL10.5MRD
	2CPXL10.5MRG
	2CPXL14.6MRJ
	2CPXL14.6ESK
	2CPXL27.0MRH
	2CPXL27.0MRS
	2CPXL27.0MRT
	2CPXL34.5ERK
	2CPXL78.1ERK
Cummins	2CEXL015.AAA
	2CEXL015.AAB
	2CEXL015.ABA
	2CEXL019.AAB
	2CEXL0239ACA
	2CEXL030.ABA
	2CEXL0359ABA
	2CEXL0359ABB
	2CEXL0359ABC
	2CEXL0359ABE
	2CEXL050.ABA
	2CEXL0505AAA
	2CEXL0505ABA
	2CEXL0505ABB
	2CEXL0505ABD
	2CEXL0505ACA
	2CEXL0505ACB
	2CEXL0505ACD
	2CEXL0505ACE
	2CEXL060.ABA
	2CEXL0661AAA
	2CEXL0661AAD

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2002 Engines Continued

Manufacturer	Engine Families
Detroit Diesel	2DDXL04.7TAE
	2DDXL05.2TDM
	2DDXL08.5YJD
	2DDXL12.7VGD
	2DDXL14.0VLD
	2DDXL31.8XRE
	2DDXL65.0GTE
	2DDXL65.0XTE
Deere	2JDXL04.5040
	2JDXL04.5042
	2JDXL06.8012
	2JDXL06.8014
	2JDXL06.8038
	2JDXL06.8049
	2JDXL08.1007
	2JDXL08.1008
	2JDXL08.1009
	2JDXL08.1036
	2JDXL08.1037
Deutz AG	2DZXL06.1008
	2DZXL07.1004
	2DZXL07.1005
	2DZXL07.1032
	2DZXL15.9002
	2DZXL15.9003
	2DZXL71.0021
Daewoo	2DWXL08.1APA
	2DWXL08.1BPA
	2DWXL11.1BIA
	2DWXL14.6CVT
	2DWXL21.9AYA
Generac	2GNXL03.0KTA
	2GNXL17.0HAA
Isuzu	2SZXL15.7EXA
	2SZXL09.8EXA
	2SZXL15.7ETA

Model Year 2002 Engines Continued

Manufacturer	Engine Families
International Truck	2NVXL0444ANA
	2NVXL0530ANC
	2NVXL0530AND
	2NVXL0530ANF
Komatsu	2KLXL0359ABA
	2KLXL0359ABC
	2KLXL0505AAA
	2KLXL0505ABB
	2KLXL0505ABD
	2KLXL0505ACA
	2KLXL11.0DB1
	2KLXL11.0DD3
	2KLXL15.2EC3
	2KLXL23.2FC2
	2KLXL30.5GC1
	2KLXL30.5GD1
	2KLXL46.3HC1
	2KLXL7.15CB1
	2KLXL7.15CC1
Mitsubishi	2MTXL07.5D6A
	2MTXL11.9D6A
	2MTXL11.9D6B
Scania AB	2Y9XL09.0AAC
AB Volvo Penta	2VPXL07.3ABB
	2VPXL07.3ACB
	2VPXL09.6ACB
	2VPXL12.1ABA
	2VPXL12.1ACA
	2VPXL12.1ACB
	2VPXL16.0ACB

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2003 Engines

Manufacturer	Engine Families
Caterpillar	3CPXL04.4MRW
	3CPXL06.6MTW
	3CPXL06.6MRW
	3CPXL07.2HSK
	3CPXL07.2HSL
	3CPXL07.2MRW
	3CPXL08.8HSL
	3CPXL08.8HSK
	3CPXL10.3ESK
	3CPXL10.5MRD
	3CPXL10.5MRG
	3CPXL10.5MRW
	3CPXL12.0ESK
	3CPXL14.6ESK
	3CPXL14.6MRJ
	3CPXL14.6MRW
	3CPXL15.8ESK
	3CPXL18.0HRX
	3CPXL27.0MRH
	3CPXL27.0MRS
	3CPXL27.0MRT
	3CPXL34.5ERK
	3CPXL58.6ERK
	3CPXL78.1ERK
CNH Engine Corp	3X9XL0239ABA
	3X9XL0359AAC
	3X9XL0359ABE
	3X9XL0505AAB
	3X9XL0505ABD
Cummins	3CEXL015.AAB
	3CEXL015.ABA
	3CEXL019.AAB
	3CEXL023.AAA
	3CEXL0239AAD
	3CEXL0239AAF
	3CEXL0275AAA
	3CEXL0275AAB
	3CEXL030.ABA

Model Year 2003 Engines Continued

Manufacturer	Engine Families
Cummins (cont.)	3CEXL0359AAB
	3CEXL0359AAC
	3CEXL0359AAD
	3CEXL0359ABC
	3CEXL0359ABE
	3CEXL050.ABA
	3CEXL0505ABD
	3CEXL0505ACB
	3CEXL060.ABA
	3CEXL0661AAD
	3CEXL078.AAB
Daewoo Motors	3DWXL05.8COA
	3DWXL11.1DJA
	3DWXL21.9AYA
Detroit Diesel	3DDXL08.5YJD
	3DDXL12.7VGD
	3DDXL14.0VLD
	3DDXL15.9WRE
	3DDXL31.8XRE
	3DDXL35.8GRP
	3DDXL65.0GTE
	3DDXL65.0GTP
	3DDXL65.0XTE
Deere	3JDXL04.5040
	3JDXL06.8038
	3JDXL06.8039
	3JDXL06.8041
	3JDXL06.8044
	3JDXL06.8048
	3JDXL06.8049
	3JDXL08.1037
Deutz AG	3DZXL05.7033
	3DZXL06.1028
	3DZXL07.1032
	3DZXL15.9002
	3DZXL71.0021
Daewoo Heavy Ind.	3DWXL08.1CPA
	3DWXL18.3ASC
	3DWXL2.37ANT

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2003 Engines Continued

Manufacturer	Engine Families
Isuzu	3SZXL09.8EXA
	3SZXL15.7ETA
	3SZXL15.7EXA
International Truck	3NVXL0530ANF
Komatsu	3KLXL0239AAD
	3KLXL0239AAF
	3KLXL0359AAB
	3KLXL0359ABC
	3KLXL0505ABD
	3KLXL11.0DD3
	3KLXL15.2EC3
	3KLXL23.2FC2
	3KLXL23.2FD4
	3KLXL30.5GC1
	3KLXL30.5GD1
Lombardini Motori	3LBDL2.07CHT
Mack Trucks	3MKXL11.9P69

Model Year 2003 Engines Continued

Manufacturer	Engine Families
Mitsubishi Heavy Ind	3MVXL24.5AAB
	3MVXL24.5ABA
	3MVXL24.5ABB
	3MVXL24.5ABD
	3MVXL24.5ABE
	3MVXL33.9AAA
	3MVXL33.9ABA
	3MVXL33.9ABB
	3MVXL33.9ABC
	3MVXL33.9ABD
	3MVXL33.9ABE
	3MVXL37.1ABA
	3MVXL37.1ABB
	3MVXL37.1ABC
	3MVXL37.1ABD
	3MVXL49.0ABA
	3MVXL49.0ABB
	3MVXL49.0ABC
	3MVXL65.4AAB
	3MVXL65.4ABA
	3MVXL65.4ABB
	3MVXL65.4ABC
	3MVXL65.4ABD
	3MVXL65.4ABE
	3MVXL65.4ABF
	3MVXL65.4ABG
AB Volvo Penta	3VPXL07.3ACB
	3VPXL09.6ACB
	3VPXL12.1ABA
	3VPXL12.1ACA
	3VPXL12.1ACB
	3VPXL16.0ACB

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2004 Engines

Manufacturer	Engine Families
Caterpillar	4CPXL15.2ESK
	4CPXL15.8ERK
	4CPXL18.0ESK
	4CPXL18.0HRX
	4CPXL27.0MRH
	4CPXL27.0MRS
	4CPXL27.0MRT
	4CPXL34.5ERK
	4CPXL58.6ERK
	4CPXL78.1ERK
CNH Engine Corp.	4X9XL0239AAC
	4X9XL0359AAJ
	4X9XL0359AAK
	4X9XL0359ABE
	4X9XL0505AAB
	4X9XL0505ABD
Cummins	4CEXL015.AAB
	4CEXL015.ABA
	4CEXL019.AAB
	4CEXL023.AAA
	4CEXL0239AAD
	4CEXL0239AAF
	4CEXL0239AAG
	4CEXL0275AAB
	4CEXL0275AAC
	4CEXL0275AAD
	4CEXL0275AAF
	4CEXL03.3ABA
	4CEXL03.3ABB
	4CEXL030.ABA
	4CEXL0359AAB
	4CEXL0359AAC
	4CEXL0359AAD

Model Year 2004 Engines Continued

Manufacturer	Engine Families
Cummins (cont.)	4CEXL0359AAE
	4CEXL0359AAF
	4CEXL0359AAH
	4CEXL0359ABC
	4CEXL0359ABE
	4CEXL050.ABA
	4CEXL0505ABD
	4CEXL0505ACB
	4CEXL060.ABA
	4CEXL0661AAD
	4CEXL078.AAB
	4CEXL2.28A41
	4CEXL2.28A42
Detroit Diesel	4DDXL08.5YJD
	4DDXL12.7VGD
	4DDXL14.0VLD
	4DDXL23.9WRE
	4DDXL31.8XRE
	4DDXL31.8XRE
	4DDXL35.8GRP
	4DDXL65.0GTP
	4DDXL65.0XTE
	4DDXL90.0XTP
Deere	4JDXL02.9018
	4JDXL03.0064
	4JDXL03.0064
	4JDXL04.5040
	4JDXL04.5042
	4JDXL04.5043
	4JDXL06.8014
	4JDXL06.8038
	4JDXL06.8039
	4JDXL06.8041
	4JDXL06.8048
	4JDXL06.8049
	4JDXL08.1037

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2004 Engines Continued

Manufacturer	Engine Families
Deutz AG	4DZXL03.1039
	4DZXL03.1040
	4DZXL03.1041
	4DZXL05.7033
	4DZXL06.1038
	4DZXL06.5035
	4DZXL06.5036
	4DZXL06.5037
	4DZXL06.5042
	4DZXL06.5043
	4DZXL07.1005
	4DZXL07.1032
	4DZXL15.9002
	4DZXL71.0021
Daewoo	4DWXL05.8C5A
	4DWXL05.8COA
	4DWXL05.8CRN
	4DWXL08.1CPA
	4DWXL11.1BIA
	4DWXL11.1DJA
	4DWXL18.3ASC
	4DWXL2.37ANT
	4DWXL21.9AYA
Isuzu	4SZXL02.2DNB
	4SZXL02.2DNC
	4SZXL02.2GNA
	4SZXL03.1GTB
	4SZXL04.3GTG
	4SZXL06.5FXG
	4SZXL15.7ETA
	4SZXL15.7EXA
International Truck	4NVXL0530ANF
Iveco	4VEXL05.9DGS
	4VEXL12.9GEN
Kubota	4KBXL03.3ACD
	4KBXL03.3BAC
	4KBXL03.3BCC
	4KBXL03.8ACD

Model Year 2004 Engines Continued

Manufacturer	Engine Families
Komatsu	4KLXL0239AAD
	4KLXL0239AAF
	4KLXL0239ADA
	4KLXL0275AAC
	4KLXL0275AAD
	4KLXL03.3JA3
	4KLXL03.3JB3
	4KLXL03.3JD3
	4KLXL0359AAB
	4KLXL0359AAE
	4KLXL0359ABC
	4KLXL0505ABD
	4KLXL11.0DD3
	4KLXL15.2EC3
	4KLXL23.2FC2
	4KLXL23.2FD4
	4KLXL30.5GC1
	4KLXL30.5GD1
MACK Trucks	4MKXL11.9P69
	4MKXL11.9P72
MOTORENFABRIK HATZ	4HZXL3.43C42
	4HZXL3.43V42
Mitsubishi	4MVXL05.0AAA
	4MVXL05.0AAD
	4MVXL05.0AAE
	4MVXL24.5AAB
	4MVXL24.5ABA
	4MVXL24.5ABB
	4MVXL24.5ABD
	4MVXL24.5ABE
	4MVXL33.9AAA
	4MVXL33.9ABA
	4MVXL33.9ABB
	4MVXL33.9ABC
	4MVXL33.9ABC
	4MVXL33.9ABE
	4MVXL37.1ABB
	4MVXL37.1ABC
	4MVXL37.1ABD

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

	4MVXL49.0ABA
	4MVXL49.0ABB

Model Year 2004 Engines Continued

Manufacturer	Engine Families
Mitsubishi Heavy Ind (continued)	4MVXL49.0ABC
	4MVXL49.0ABD
	4MVXL49.0ABE
	4MVXL65.4ABA
	4MVXL65.4ABB
	4MVXL65.4ABC
	4MVXL65.4ABE
	4MVXL65.4ABF
	4MVXL65.4ABG
	4MVXL65.4ABH
MTU	4MTUL21.9R2A
Nissan Diesel	4NDXL02.7TNA
	4NDXL03.0FTA
AB Volvo Penta	4VPXL07.3ACB
	4VPXL09.4ACA
	4VPXL09.4ACB
	4VPXL09.6ACB
	4VPXL09.6ACC
	4VPXL12.1ABA
	4VPXL12.1ACA
	4VPXL12.1ACB
	4VPXL16.0ACB
Yanmar	4YDXL2.00M4T
	4YDXL3.05M4N
	4YDXL3.32J4N
	4YDXL3.32J4T
	4YDXL3.32K4N
	4YDXL3.32K4T
	4YDXL4.41K4N
	4YDXL4.41K4T
Perkins	4PKXL15.8H16
Scania AB	4Y9XL11.7BBG
	4Y9XL15.6BDA

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2005 Engines

Manufacturer	Engine Families
Caterpillar	5CPXL15.2ESK
	5CPXL15.8ERK
	5CPXL18.0ESK
	5CPXL27.0MRH
	5CPXL27.0MRS
	5CPXL27.0MRT
	5CPXL34.5ERK
	5CPXL58.6ERK
	5CPXL78.1ERK
CNH Engine Corp.	5X9XL0239AAC
	5X9XL0359AAJ
	5X9XL0359AAK
	5X9XL0359ABE
	5X9XL0505AAB
	5X9XL0505ABD
	5X9XL0540AAB
Cummins	5CEXL015.AAB
	5CEXL015.ABA
	5CEXL019.AAB
	5CEXL023.AAA
	5CEXL0239AAD
	5CEXL0239AAF
	5CEXL0239AAG
	5CEXL0275AAB
	5CEXL0275AAC
	5CEXL0275AAD
	5CEXL0275AAF
	5CEXL03.3ABA
	5CEXL03.3ABB
	5CEXL030.ABA
	5CEXL0359AAB
	5CEXL0359AAC
	5CEXL0359AAD
	5CEXL0359AAE
	5CEXL0359AAF
	5CEXL0359AAH
	5CEXL0359ABC
	5CEXL0359ABE
	5CEXL0409AAB
	5CEXL0409AAC

Model Year 2005 Engines (Continued)

Manufacturer	Engine Families
Cummins	5CEXL050.ABA
	5CEXL0505AAE
	5CEXL0505ABD
	5CEXL0505ACB
	5CEXL0540AAB
	5CEXL060.ABA
	5CEXL078.AAB
	5CEXL2.28A41
	5CEXL2.28A42
Detroit Diesel Corporation	5DDXL08.5YJD
	5DDXL15.9WRE
	5DDXL31.8XRR
	5DDXL35.8GRP
	5DDXL65.0GTE
	5DDXL65.0GTP
	5DDXL65.0XTE
	5DDXL90.0XTP
Deere	5JDXL02.9018
	5JDXL02.9050
	5JDXL04.5042
	5JDXL04.5051
	5JDXL04.5057
	5JDXL04.5076
	5JDXL04.5083
	5JDXL06.8014
	5JDXL06.8038
	5JDXL06.8039
	5JDXL06.8041
	5JDXL06.8048
	5JDXL06.8049
	5JDXL06.8078
	5JDXL06.8079
	5JDXL06.8082
	5JDXL06.8101
	5JDXL08.1037
	5JDXL08.1059
	5JDXL09.0102
	5DZXL06.1038

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2005 Engines (Continued)

Manufacturer	Engine Families
Deutz	5DZXL02.3048
	5DZXL03.1039
	5DZXL03.1040
	5DZXL05.7033
	5DZXL06.1038
	5DZXL06.5035
	5DZXL06.5036
	5DZXL06.5037
	5DZXL06.5042
	5DZXL06.5043
	5DZXL07.1005
	5DZXL07.1032
	5DZXL15.9002
	5DZXL71.0021
Daewoo Heavy Ind.	5DWXL08.1CPA
	5DWXL18.3ASC
	5DWXL21.9AYA
MotorenFabrik HATZ GMBH	5HZXL3.43C42
	5HZXL3.43V42
Isuzu	5SZXL02.2GNA
	5SZXL03.1GTB
	5SZXL04.3GTG
	5SZXL06.5FXG
	5SZXL09.8EXA
	5SZXL15.7ETA
	5SZXL15.7EXA
Iveco	5VEXL05.9DGS
	5VEXL06.7DGA
	5VEXL12.9GEN
Komatsu	5KLXL0239AAD
	5KLXL0239AAF
	5KLXL0239ADA
	5KLXL0275AAC
	5KLXL0275AAD
	5KLXL03.3JA3
	5KLXL03.3JB3
	5KLXL03.3JD3
	5KLXL0359AAB
	5KLXL0359AAE

	5KLXL0359AAL
	5KLXL0359ABC
	5KLXL0409AAB

Model Year 2005 Engines (Continued)

Manufacturer	Engine Families
Komatsu	5KLXL0409AAC
	5KLXL0505ABD
	5KLXL11.0DD3
	5KLXL15.2EC3
	5KLXL23.2FC2
	5KLXL23.2FD4
	5KLXL30.5GC1
	5KLXL30.5GD1
Kubota	5KBXL03.3ACD
	5KBXL03.3BAC
	5KBXL03.3BCC
	5KBXL03.8ACD
KUKJ	5KMCL2.28A41
	5KMCL2.28A42
Lombardini Motori	5LBDL2.19CHT
Mitsubishi Heavy Industries	5MVXL05.0AAA
	5MVXL05.0AAC
	5MVXL05.0AAD
	5MVXL05.0AAE
	5MVXL24.5ABB
	5MVXL33.9ABB
	5MVXL37.1ABC
	5MVXL49.0ABD
	5MVXL65.4ABB
	5MVXL65.4ABH
MITF	5MFTL07.5D6A
MTU- Friedrichshafen	5MTUL21.9R2A
Nissan Diesel	5NDXL02.7TNA
	5NDXL03.0FTA
Power Systems	5JCBL04.40TC
VMMI	5V5XL02.8R6V
	5V5XL03.0R6T
	5V5XL03.0R6W
	5V5XL04.2S5V

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2005 Engines (Continued)

Manufacturer	Engine Families
AB Volvo Penta	5VPXL07.3ACB
	5VPXL09.4ACA
	5VPXL09.4ACB
	5VPXL09.4ACC
	5VPXL09.6ACB
	5VPXL12.1ABA
	5VPXL12.1ACA
	5VPXL12.1ACB
	5VPXL16.1ACB
	5VPXL16.1ACC
	5VPXL16.1ACD
	5VPXL16.1ACE
	5VPXL16.1ACF
Yanmar	5YDXL2.00M4T
	5YDXL3.05M4N
	5YDXL3.32J4N
	5YDXL3.32J4T
	5YDXL3.32K4N
	5YDXL3.32K4T
	5YDXL4.41K4N
	5YDXL4.41K4T

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2006 Engines

Manufacturer	Engine Families
AB Volvo Penta	6VPXL12.1BAA
	6VPXL16.1ACB
	6VPXL9.4BAA
Caterpillar	6CPXL15.2ESK
	6CPXL18.0ESK
	6CPXL18.1ESK
	6CPXL18.1ESL
	6CPXL32.0ESK
	6CPXL34.5E2T
	6CPXL34.5T2E
	6CPXL58.6E2T
	6CPXL58.6T2E
	6CPXL78.1E2T
	6CPXL78.1T2E
CNH Engine Corp.	6X9XL0239AAC
	6X9XL0359AAJ
	6X9XL0359AAM
	6X9XL0359ABE
	6X9XL0505ABD
	6X9XL0540AAB

Model Year 2006 Engines (Continued)

Manufacturer	Engine Families
Cummins	6CEXK0505AAE
	6CEXL015.AAB
	6CEXL019.AAB
	6CEXL019.AAC
	6CEXL023.AAA
	6CEXL0239AAD
	6CEXL0239AAF
	6CEXL0239AAG
	6CEXL0275AAB
	6CEXL0275AAC
	6CEXL0275AAD
	6CEXL0275AAF
	6CEXL0275AAG
	6CEXL0275AAH
	6CEXL0275AAI
	6CEXL03.3ABB
	6CEXL03.3ABC
	6CEXL030.AAB
	6CEXL030.AAD
	6CEXL030.ABA
	6CEXL0359AAB
	6CEXL0359AAC
	6CEXL0359AAD
	6CEXL0359AAF
	6CEXL0359AAN
	6CEXL0359ABC
	6CEXL0359ABE
	6CEXL0409AAB
	6CEXL0409AAC
	6CEXL050.AAD
	6CEXL050.ABA
	6CEXL0505ABD
	6CEXL0540AAB
	6CEXL060.AAD
	6CEXL078.AAB
	6KLXL0359AAL

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2006 Engines (Continued)

Manufacturer	Engine Families
DAIMLERCHRYSLER	6MBXL7.20RJA
	6MBXL12.8RJB
Deere	6JDXL02.9050
	6JDXL03.0063
	6JDXL03.0064
	6JDXL04.5042
	6JDXL04.5043
	6JDXL04.5051
	6JDXL04.5057
	6JDXL04.5076
	6JDXL04.5083
	6JDXL06.8001
	6JDXL06.8004
	6JDXL06.8006
	6JDXL06.8014
	6JDXL06.8038
	6JDXL06.8039
	6JDXL06.8041
	6JDXL06.8048
	6JDXL06.8049
	6JDXL06.8078
	6JDXL06.8082
	6JDXL06.8101
	6JDXL08.1037
	6JDXL09.0102
	6JDXL12.5035
	6JDXL12.5073
	6JDXL13.5103
Detroit Diesel Corporation	6DDXL31.8XRR
Deutz	6DZXL02.3048
	6DZXL03.1039
	6DZXL03.1040
	6DZXL03.1066
	6DZXL05.7033
	6DZXL06.1028
	6DZXL06.1038
	6DZXL06.5035

Model Year 2006 Engines (Continued)

Manufacturer	Engine Families
Deutz	6DZXL06.5036
	6DZXL06.5037
	6DZXL06.5042
	6DZXL06.5043
	6DZXL07.1005
Hino	6HMXL07.7JTM
Isuzu	6SZXL04.3GTG
	6SZXL05.2HXA
	6SZXL05.2IXA
	6SZXL06.5FXG
	6SZXL07.8HXA
	6SZXL15.7HXA
Iveco	6VEXL04.5DGT
	6VEXL04.5DGN
	6VEXL06.7DGA
	6VEXL06.7DGB
	6VEXL06.7DGS
JCB	6JBCL04.40NA
	6JBCL04.40TC
	6JBCL04.40TC
Komatsu	6KLXL0239AAD
	6KLXL0239AAF
	6KLXL0239ADA
	6KLXL0275AAC
	6KLXL0275AAD
	6KLXL0275AAG
	6KLXL0275AAH
	6KLXL0275AAI
	6KLXL03.3JB3
	6KLXL03.3JD3
	6KLXL0359AAB
	6KLXL0359AAE
	6KLXL0359AAL
	6KLXL0359ABC
	6KLXL0409AAB
	6KLXL0409AAC
	6KLXL0505ABD

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2006 Engines (Continued)

Manufacturer	Engine Families
Kubota	6KBXL03.3ACD
	6KBXL03.3CCD
	6KBXL03.8ACD
Mitsubishi Fuso Truck & Bus Corp	6MFTL05.8D3A
Mitsubishi Heavy Industries	6MVXL03.3DDE
	6MVXL04.2AAA
	6MVXL05.0AAA
	6MVXL05.0AAD
	6MVXL05.0AAE
	6MVXL05.0DDD
	6MVXL06.4AAB
	6MVXL06.4DDD
	6MVXL06.4EEE
MotorenFabrik HATZ GMBH	6HZXL3.43C42
	6HZXL3.43V42
Nissan	6NDXL02.7TNA
	6NDXL03.0FTA
VMMI	6V5XL03.0R6T
	6V5XL04.2G5V
	6V5XL04.2S5V
Yanmar	6YDXL3.32J4T
	6YDXL3.32K4T
	6YDXL4.41K4N
	6YDXL4.41K4T

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2007 Engines

Manufacturer	Engine Families
AB Volvo Penta	7VPXL09.4BAA
	7VPXL12.1BAA
	7VPXL16.1ACB
Anhui Quanchai	7ANH3.86QCD
Caterpillar	7CPXL07.2ESL
	7CPXL08.8ESK
	7CPXL11.1ESK
	7CPXL12.5ESK
	7CPXL15.2ESK
	7CPXL15.2ESL
	7CPXL18.1ESK
	7CPXL18.1ESL
	7CPXL27.0ESK
	7CPXL32.0ESK
	7CPXL51.8E2W
	7CPXL78.1ERK
	7CPXL34.5T2E
	7CPXL58.6T2E
	7CPXL78.1T2E
CNH Engine Corp.	7X9XL0505AAE
	7X9XL0540AAB
	7X9XL0239AAB
	7NHXL04.5DAA
	7NHXL04.5DCA
	7NHXL04.5DNA
	7NHXL06.7DAA
	7NHXL06.7DCA
	7NHXL06.7DCB
	7NHXL06.7DTA
	7NHXL06.7DTC
Cummins	7CEXL015.AAA
	7CEXL015.AAB
	7CEXL015.AAE
	7CEXL019.AAD
	7CEXL023.AAA
	7CEXL0239AAG
	7CEXL0275AAC
	7CEXL0275AAD
	7CEXL0275AAF
	7CEXL0275AAG
	7CEXL0275AAH

	7CEXL03.3ABA
	7CEXL03.3ABB

Model Year 2007 Engines (Continued)

Manufacturer	Engine Families
Cummins (cont.)	7CEXL03.3ACA
	7CEXL03.3ACB
	7CEXL030.AAB
	7CEXL030.AAD
	7CEXL030.ABA
	7CEXL038.AAA
	7CEXL0409AAB
	7CEXL0409AAC
	7CEXL045.AAA
	7CEXL050.AAC
	7CEXL050.AAD
	7CEXL050.ABA
	7CEXL0505AAE
	7CEXL0540AAB
	7CEXL060.AAB
	7CEXL060.AAD
	7CEXL0661AAF
	7CEXL0661AAG
	7CEXL0661AAH
	7CEXL0661AAJ
	7CEXL078.AAA
	7CEXL078.AAB
DAIMLERCHRYSLER	7MBXL12.8RJB
	7MBXL15.9RJA
Deere	7JDXL02.4074
	7JDXL02.9017
	7JDXL02.9050
	7JDXL02.9088
	7JDXL03.0063
	7JDXL03.0064
	7JDXL04.5040
	7JDXL04.5042
	7JDXL04.5043
	7JDXL04.5051
	7JDXL04.5057
	7JDXL04.5062
	7JDXL04.5075
	7JDXL04.5076

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

	7JDXL04.5081
	7JDXL04.5083
	7JDXL06.8014
	7JDXL06.8038
	7JDXL06.8039

Model Year 2007 Engines (Continued)

Manufacturer	Engine Families
Deere (continued)	7JDXL06.8041
	7JDXL06.8044
	7JDXL06.8048
	7JDXL06.8049
	7JDXL06.8078
	7JDXL06.8080
	7JDXL06.8082
	7JDXL06.8084
	7JDXL06.8101
	7JDXL06.8104
	7JDXL06.8105
	7JDXL06.8106
	7JDXL08.1037
	7JDXL09.0102
	7JDXL12.5035
	7JDXL12.5073
	7JDXL13.5103
Detroit Diesel Corporation	7DDXL14.0WLD
Deutz	7DZXL03.1039
	7DZXL03.1040
	7DZXL03.1066
	7DZXL06.1038
	7DZXL06.1059
	7DZXL06.1060
	7DZXL06.1061
	7DZXL06.1063
	7DZXL06.5042
	7DZXL06.5043
	7DZXL07.1005
	7DZXL07.1051
	7DZXL07.1053
	7DZXL07.1055
	7DZXL15.9065
Doosan Infracore	7DWXL05.8CRN
	7DWXL05.8UTA

	7DWXL07.6UPA
	7DWXL11.0UJA
	7DWXL21.9UYA

Model Year 2007 Engines (Continued)

Manufacturer	Engine Families
GNH UK LTD	7NHXL06.7DCC
Hino Motors	7HMXL04.0WDH
	7HMXL05.1JTA
	7HMXL07.7JTM
	7HMXL10.5PUN
Ishikawajima-Shibaura Machinery	7H3XL2.00N4T
	7H3XL2.22N4L
	7H3XL2.22N4T
	7H3XL2.22TIC
Isuzu	7SZXL02.2GNA
	7SZXL03.0IXA
	7SZXL03.1GNA
	7SZXL03.1GNB
	7SZXL03.1GTB
	7SZXL04.3GTA
	7SZXL04.3GTG
	7SZXL04.3GXA
	7SZXL05.2HXA
	7SZXL05.2IXA
	7SZXL07.8HXA
	7SZXL07.8HXB
	7SZXL09.8HXA
	7SZXL15.7HXA
IVECO	7VEXL03.9B1X
	7VEXL03.9B1Z
	7VEXL04.5DAA
	7VEXL04.5DGN
	7VEXL04.5DGT
	7VEXL04.5DNA
	7VEXL06.7DAA
	7VEXL06.7DCA
	7VEXL06.7DCB
	7VEXL06.7DCC
	7VEXL06.7DGB
	7VEXL06.7DGS

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

	7VEXL06.7DTA
	7VEXL06.7DTC
	7VEXL08.7TR3
	7VEXL10.3MLR

Model Year 2007 Engines (Continued)

Manufacturer	Engine Families
IVECO (continued)	7VEXL12.9IGR
	7VEXL12.9MLR
	7VEXL12.9TR3
	7VEXL20.1DSL
JCB Power	7JCBL04.40NA
	7JCBL04.40TC
Komatsu	7KLXL0239ADA
	7KLXL0275AAC
	7KLXL0275AAD
	7KLXL0275AAG
	7KLXL0275AAH
	7KLXL03.3JA3
	7KLXL03.3JB3
	7KLXL03.3JD3
	7KLXL03.3JD6
	7KLXL03.3JD7
	7KLXL0359AAE
	7KLXL038.AAA
	7KLXL0409AAB
	7KLXL0409AAC
	7KLXL045.AAA
	7KLXL050.AAC
	7KLXL0505AAE
	7KLXL060.AAB
	7KLXL078.AAA
	7klxl11.0DD6
	7KLXL11.0DD6
	7KLXL15.2ED6
	7klxl15.2ED6
	7KLXL15.2ED7
	7KLXL23.2FD6
	7KLXL30.5GD3

Model Year 2007 Engines (Continued)

Manufacturer	Engine Families
Kubota	7KBXL02.0EAD
	7KBXL02.0FAD
	7KBXL02.4EAD
	7KBXL02.4FAD
	7KBXL02.4GCD
	7KBXL02.4HCD
	7KBXL02.8BCD
	7KBXL03.3AAD
	7KBXL03.3ACD
	7KBXL03.3BAC
	7KBXL03.3BAD
	7KBXL03.3BBD
	7KBXL03.3BCC
	7KBXL03.3BCD
	7KBXL03.3CCD
	7KBXL03.8AAD
	7KBXL03.8ACD
	7KBXL03.8AHD
Lombardini S.R.L.	7LBDL2.19CHT
MAHINDRA & MAHINDRA LTD.,	7MMLL03.1NEF
	7MMLL03.2NEF
	7MMLL03.2NET
	7MMLL03.4NEF
	7MMLL03.5NEF
Mitsubishi Fuso Truck & Bus Corp	7MFTL02.8M4A
	7MFTL04.9M5A
	7MFTL07.5M6A
	7MFTL12.9M7A

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2007 Engines (Continued)

Manufacturer	Engine Families
Mitsubishi Heavy Industries	7MVXL02.5CCC
	7MVXL03.3DDE
	7MVXL04.2AAA
	7MVXL05.0AAA
	7MVXL05.0AAC
	7MVXL05.0AAD
	7MVXL05.0AAE
	7MVXL06.4FFF
	7MVXL24.5BBA
	7MVXL33.9BBA
	7MVXL37.1BBA
	7MVXL49.0BBA
	7MVXL65.4BBA
MotorenFabrik HATZ GMBH	7HZXL2.57C41
	7HZXL3.43C42
	7HZXL3.43V42
MTU Detroit Diesel, Inc.	7MDDL31.8XRR
	7MDDL95.4XTR
Nissan	7NDXL02.7TNA
	7NDXL03.0FTA
	7NDXL03.2TNA
Perkins Engines	7PKXL03.3DD1
	7PKXL04.4NH1
	7PKXL04.4RE1
	7PKXL04.4RH1
	7PKXL04.4RG1
	7PKXL06.6PJ1
	7PKXL06.6PJ2
	7PKXL15.2TA2
	7PKXL15.2TAG
	7PKXL18.1TAG
SCANIA CV AB	7Y9XL11.7BBA
	7Y9XL11.7BBB
	7Y9XL15.6BDE

Model Year 2007 Engines (Continued)

Manufacturer	Engine Families
Shandong Weichai Huafeng Power	7SDWL4.33AAA
	7SDWL4.33BBB
	7SDWL7.52AAA
Sisu Diesel	7SIDL03.3G4A
	7SIDL04.4J2A
	7SIDL07.4G4D
	7SIDL07.4G4E
	7SIDL07.4G5B
	7SIDL07.4G5C
	7SIDL08.4H5B
Toyota	7TALL02.51DZ
	7TALL04.613Z
VM Motori	7V5XL02.8R6V
	7V5XL03.0R6T
Volvo Construction Equipment AB	7VSXL09.4CE3
	7VSXL12.1CE3
	7VSXL16.1CE3
Yanmar	7YDXL2.00M4T
	7YDXL3.05M4N
	7YDXL3.05P4N
	7YDXL3.32J4N
	7YDXL3.32J4T
	7YDXL3.32K4T
	7YDXL3.32P4N
	7YDXL4.41K4N
	7YDXL4.41K4T
Zetor North America	76AXL4.16IUH
	76AXL4.16TUL

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2008 Engines

Manufacturer	Engine Families
AB Volvo Penta	8VPXL09.4BAA
	8VPXL12.1BAA
	8VPXL12.8BCA
	8VPXL16.1ACB
	8VPXL16.1ACW
Caterpillar	8CPXL07.2ESL
	8CPXL08.8ESK
	8CPXL106.T2E
	8CPXL11.1ESK
	8CPXL12.5ESK
	8CPXL15.2ELW
	8CPXL15.2ESW
	8CPXL18.1ESK
	8CPXL18.1ESW
	8CPXL18.1ESX
	8CPXL27.0ESK
	8CPXL27.0ESW
	8CPXL27.0ESX
	8CPXL32.0ESW
	8CPXL32.0ESX
	8CPXL34.5E2W
	8CPXL34.5T2E
	8CPXL51.8E2W
	8CPXL58.6T2E
	8CPXL58.6T2X
	8CPXL78.1E2W
	8CPXL78.1T2E
CNH Engine	8X9XL0540AAB
CNH UK LTD	8NHXL04.5DAA
	8NHXL04.5DAB
	8NHXL04.5DCA
	8NHXL04.5DCB
	8NHXL06.7DAA
	8NHXL06.7DCA
	8NHXL06.7DCB
	8NHXL06.7DCC
	8NHXL06.7DCD

Model Year 2008 Engines (Continued)

Manufacturer	Engine Families
Cummins	8CEXL015.AAA
	8CEXL015.AAB
	8CEXL015.AAE
	8CEXL015.AAH
	8CEXL015.AAJ
	8CEXL019.AAD
	8CEXL023.AAA
	8CEXL023.AAB
	8CEXL023.AAC
	8CEXL0275AAG
	8CEXL0275AAH
	8CEXL0275AAK
	8CEXL03.3ACA
	8CEXL03.3ACB
	8CEXL03.3ACC
	8CEXL03.3ACD
	8CEXL03.3ACE
	8CEXL030.AAB
	8CEXL030.AAD
	8CEXL030.ABA
	8CEXL0409AAB
	8CEXL0409AAC
	8CEXL0409AAD
	8CEXL045.AAA
	8CEXL050.AAA
	8CEXL050.AAC
	8CEXL050.AAD
	8CEXL050.ABA
	8CEXL0505AAE
	8CEXL0540AAB
	8CEXL060.AAB
	8CEXL060.AAD
	8CEXL0661AAF
	8CEXL0661AAG
	8CEXL0661AAH
	8CEXL0661AAJ
	8CEXL078.AAA
	8CEXL078.AAB
	8CEXL2.28A41

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2008 Engines (Continued)

Manufacturer	Engine Families
DAIMLERCHRYSLER	8MBXL07.2RJA
	8MBXL12.8RJB
	8MBXL15.9RJA
Deutz	8DZXL02.3048
	8DZXL02.3099
	8DZXL02.7096
	8DZXL03.2088
	8DZXL03.6081
	8DZXL03.6082
	8DZXL03.6084
	8DZXL03.6086
	8DZXL03.6097
	8DZXL03.6098
	8DZXL04.1069
	8DZXL04.1070
	8DZXL04.1076
	8DZXL04.1078
	8DZXL04.1079
	8DZXL04.1080
	8DZXL04.8064
	8DZXL04.8068
	8DZXL04.8071
	8DZXL05.4087
	8DZXL06.1057
	8DZXL06.1059
	8DZXL06.1060
	8DZXL06.1061
	8DZXL06.1063
	8DZXL06.1067
	8DZXL06.1077
	8DZXL06.5074
	8DZXL06.5075
	8DZXL06.5095
	8DZXL07.1051
	8DZXL07.1053
	8DZXL07.1055
	8DZXL07.1056
	8DZXL15.9065

Model Year 2008 Engines (Continued)

Manufacturer	Engine Families
DOOSAN	8DWXL05.8UTA
INFRACORE	8DWXL07.6UPA
	8DWXL11.0UJA
	8DWXL21.9UYA
HINO MOTORS	8HMXL05.1JTA
Ishikawajima	8H3XL2.00N4T
	8H3XL2.22N4L
	8H3XL2.22N4T
Isuzu	8SZXL02.2UTA
	8SZXL02.2UXA
	8SZXL03.0IXA
	8SZXL03.0JTA
	8SZXL03.0JXA
	8SZXL03.0JXB
	8SZXL03.0UTB
	8SZXL05.2HXA
	8SZXL05.2IXA
	8SZXL05.2IXB
	8SZXL07.8HXA
	8SZXL07.8HXB
	8SZXL09.8HXA
	8SZXL09.8HXB
	8SZXL15.7HXA
	8SZXL15.7HXB

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2008 Engines (Continued)

Manufacturer	Engine Families
IVECO	8VEXL03.2TAI
	8VEXL03.2TCE
	8VEXL03.2TCI
	8VEXL04.5DAA
	8VEXL04.5DAB
	8VEXL04.5DCA
	8VEXL04.5DCB
	8VEXL04.5DTD
	8VEXL06.7DAA
	8VEXL06.7DCA
	8VEXL06.7DCB
	8VEXL06.7DCC
	8VEXL06.7DGB
	8VEXL06.7DGS
	8VEXL08.7TR3
	8VEXL10.3MLR
	8VEXL10.3TR3
	8VEXL12.9IGR
	8VEXL12.9MLR
	8VEXL12.9TCD
	8VEXL20.1DSL
JCB Power Systems	8JCBL04.4TA7
	8JCBL04.4TA8
	8JCBL04.4TAE
	8JCBL04.4TC6

Model Year 2008 Engines (Continued)

Manufacturer	Engine Families
John Deere Power	8JDXL02.9088
	8JDXL03.0063
	8JDXL03.0064
	8JDXL03.0113
	8JDXL03.0208
	8JDXL04.5042
	8JDXL04.5043
	8JDXL04.5057
	8JDXL04.5062
	8JDXL04.5075
	8JDXL04.5083
	8JDXL04.5107
	8JDXL04.5112
	8JDXL06.8038
	8JDXL06.8039
	8JDXL06.8041
	8JDXL06.8049
	8JDXL06.8078
	8JDXL06.8080
	8JDXL06.8101
	8JDXL06.8104
	8JDXL06.8105
	8JDXL06.8106
	8JDXL08.1037
	8JDXL09.0102
	8JDXL09.0114
	8JDXL12.5035
	8JDXL13.5103

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2008 Engines (Continued)

Manufacturer	Engine Families
Komatsu	8KLXL0275AAG
	8KLXL0275AAH
	8KLXL03.3JA6
	8KLXL03.3JB6
	8KLXL03.3JD6
	8KLXL03.3JD7
	8KLXL03.3JD8
	8KLXL03.3JD9
	8KLXL0409AAB
	8KLXL0409AAC
	8KLXL050.AAA
	8KLXL050.AAC
	8KLXL0505AAE
	8KLXL060.AAA
	8KLXL060.AAB
	8KLXL078.AAA
	8KLXL11.0DD6
	8KLXL15.2ED6
	8KLXL15.2ED7
	8KLXL23.2FD5
	8KLXL23.2FD6
	8KLXL23.2FD7
	8KLXL30.5GD3
Kubota	8KBXL02.4FAD
	8KBXL02.4HAD
	8KBXL02.6EAD
	8KBXL03.3CAD
	8KBXL03.6BAC
	8KBXL03.6BAD
	8KBXL03.6BCD
	8KBXL03.6DAD
	8KBXL03.8AAC
	8KBXL03.8AAD
	8KBXL03.8AGD
Kukje Machinery	8KMCL2.28A41
M/S. SIMPSON & C.	8SCLL02.7V50

Model Year 2008 Engines (Continued)

Manufacturer	Engine Families
Liebherr Machines	8LHAL10.5LPA
	8LHAL10.5LPE
	8LHAL12.0KPA
	8LHAL12.8RMC
	8LHAL24.2VCE
	8LHAL9.54SPA
Liebherr Werk	8LHAL21.9VMR
Mitsubishi	8MVXL02.5HHH
	8MVXL03.3AAC
	8MVXL03.3AAD
	8MVXL03.3AAE
	8MVXL03.3DDE
	8MVXL04.2BBB
	8MVXL04.2CCC
	8MVXL05.0AAA
	8MVXL05.0AAD
	8MVXL05.0AAG
	8MVXL06.4FFF
	8MVXL24.5BBA
	8MVXL33.9BBA
	8MVXL37.1BBA
	8MVXL49.0BBA
	8MVXL65.4BBA
MAHINDRA & MAHINDRA	8MMLL02.5N52
	8MMLL02.5N57
	8MMLL02.5N59
	8MMLL02.5N62
	8MMLL02.5N64
	8MMLL02.7M30
	8MMLL03.3N75
	8MMLL03.3N79

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2008 Engines (Continued)

Manufacturer	Engine Families
MOTORENFABRIK	8HZXL3.43C42
	8HZXL3.43V42
MTU DETROIT DIESEL,	8MDDL31.8XRR
	8MDDL35.8GRR
	8MDDL95.4XTR
NISSAN DIESEL	8NDXL03.2TNA
	8NDXL04.2TNA
Perkins Engines	8PKXL03.3XL1
	8PKXL04.4NH1
	8PKXL04.4NJ1
	8PKXL04.4NJ2
	8PKXL04.4NM1
	8PKXL04.4NM2
	8PKXL04.4RG3
	8PKXL06.6PJ1
	8PKXL06.6PJ2
	8PKXL15.2TA2
	8PKXL15.2TAG
	8PKXL18.1TAG
Scania	8Y9XL11.7BBA
	8Y9XL11.7BBB
	8Y9XL15.6BDE
Volvo	8VSXL09.4CE3
	8VSXL12.1CE3
	8VSXL16.1CE3
Yanmar	8YDXL2.00N4T
	8YDXL3.32C4N
	8YDXL3.32C4T
	8YDXL3.32R4N
	8YDXL3.32M4N
	8YDXL3.32M4T

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2009 Engines

Manufacturer	Engine Families
AB Volvo Penta	9VPXL09.4BAA
	9VPXL12.1BAA
	9VPXL12.8BCA
	9VPXL16.1ACB
	9VPXL16.1ACW
	9VPXL16.1BEA
	9VSXL09.4CE3
	9VSXL12.1CE3
	9VSXL16.1CE3
Caterpillar	9CPXL07.2ESL
	9CPXL08.8ESK
	9CPXL106.T2E
	9CPXL11.1ESK
	9CPXL12.5ESK
	9CPXL12.5ESX
	9CPXL14.2ELW
	9CPXL15.2ESW
	9CPXL18.1ESK
	9CPXL18.1ESW
	9CPXL18.1ESX
	9CPXL27.0ESK
	9CPXL27.0ESW
	9CPXL27.0ESX
	9CPXL27.0ESX
	9CPXL32.0ESP
	9CPXL32.0ESW
	9CPXL32.0ESX
	9CPXL34.5T2C
	9CPXL34.5T2E
	9CPXL58.6T2E
	9CPXL58.6T2X
	9CPXL58.6T2Y
	9CPXL78.1E2W
	9CPXL78.1T2E
CNH UK LTD	9NHXL04.5DAA
	9NHXL04.5DAB
	9NHXL04.5DCA
	9NHXL04.5DCB
	9NHXL06.7DAA
	9NHXL06.7DCA
	9NHXL06.7DCB

	9NHXL06.7DCC
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Model Year 2009 Engines (Continued)

Manufacturer	Engine Families
Cummins	9CEXL015.AAA
	9CEXL015.AAE
	9CEXL015.AAH
	9CEXL015.AAJ
	9CEXL019.AAD
	9CEXL023.AAA
	9CEXL023.AAB
	9CEXL023.AAC
	9CEXL0275AAG
	9CEXL0275AAH
	9CEXL0275AAK
	9CEXL03.3ACA
	9CEXL03.3ACB
	9CEXL03.3ACD
	9CEXL03.ACE
	9CEXL030.AAB
	9CEXL030.AAD
	9CEXL030.ABA
	9CEXL0409AAB
	9CEXL0409AAC
	9CEXL0409AAD
	9CEXL045.AAA
	9CEXL050.AAA
	9CEXL050.AAC
	9CEXL050.AAD
	9CEXL050.AAF
	9CEXL050.ABA
	9CEXL0505AAE
	9CEXL0540AAB
	9CEXL0540AAD
	9CEXL060.AAB
	9CEXL060.AAD
	9CEXL0661AAF
	9CEXL0661AAG
	9CEXL0661AAH
	9CEXL0661AAJ
	9CEXL078.AAA
	9CEXL2.28A41

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2009 Engines (Continued)

Manufacturer	Engine Families
Deutz	9DXZL04.8071
	9DZL04.8073
	9DZXL02.3048
	9DZXL02.3099
	9DZXL02.7096
	9DZXL03.2088
	9DZXL03.6081
	9DZXL03.6082
	9DZXL03.6084
	9DZXL03.6086
	9DZXL03.6097
	9DZXL03.6098
	9DZXL04.1069
	9DZXL04.1070
	9DZXL04.1072
	9DZXL04.1076
	9DZXL04.1078
	9DZXL04.1079
	9DZXL04.1080
	9DZXL04.8064
	9DZXL04.8068
	9DZXL06.1057
	9DZXL06.1059
	9DZXL06.1060
	9DZXL06.1061
	9DZXL06.1063
	9DZXL06.1067
	9DZXL06.1077
	9DZXL06.5074
	9DZXL07.1051
	9DZXL07.1053
	9DZXL07.1055
	9DZXL07.1056
	9DZXL15.9065
DOOSAN	
INFRACORE	9DICL05.8UTA
	9DICL07.6UPA
	9DICL11.0UJA

Model Year 2009 Engines (Continued)

Manufacturer	Engine Families
HINO MOTORS	9HMXL04.0NUA
	9HMXL05.1JTA
	9HMXL07.7JTM
	9HMXL10.5PUN
	9HMXL10.5PUP
	9HXML12.9EUV
Isuzu	9SZXL02.2UXA
	9SZXL03.0IXA
	9SZXL03.0JTA
	9SZXL03.0JXA
	9SZXL03.0JXB
	9SZXL03.0UTB
	9SZXL05.2HXA
	9SZXL05.2IXA
	9SZXL05.2IXB
	9SZXL07.8HXA
	9SZXL07.8HXB
	9SZXL09.8HXA
	9SZXL09.8HXB
	9SZXL15.7HXA
	9SZXL15.7HXB
IVECO	9VEXL03.2TCE
	9VEXL03.2TCI
	9VEXL04.4DCB
	9VEXL04.5DAA
	9VEXL04.5DAB
	9VEXL04.5DCA
	9VEXL06.7DAA
	9VEXL06.7DCA
	9VEXL06.7DCB
	9VEXL06.7DCC
	9VEXL06.7DGB
	9VEXL06.7DGS
	9VEXL08.7TR3
	9VEXL10.3MLR
	9VEXL10.3TR3
	9VEXL12.9IGR
	9VEXL12.9MLR
	9VEXL12.9TCD
	9VEXL20.1DSL

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2009 Engines (Continued)

Manufacturer	Engine Families
JCB Power Systems	9JCBL04.4TA7
	9JCBL04.4TA8
	9JCBL04.4TAE
	9JCBL04.4TC6
John Deere Power	9JDXL03.0064
	9JDXL03.0113
	9JDXL03.0203
	9JDXL03.0208
	9JDXL04.5083
	9JDXL04.5107
	9JDXL06.8049
	9JDXL06.8080
	9JDXL06.8101
	9JDXL06.8104
	9JDXL06.8105
	9JDXL06.8106
	9JDXL08.1037
	9JDXL09.0102
	9JDXL09.0114
	9JDXL13.5103
Komatsu	9KLXL0275AAG
	9KLXL0275AAH
	9KLXL03.3JA6
	9KLXL03.3JB6
	9KLXL03.3JD6
	9KLXL03.3JD7
	9KLXL0409AAB
	9KLXL0409AAC
	9KLXL050.AAA
	9KLXL050.AAC
	9KLXL0505AAE
	9KLXL060.AAA
	9KLXL060.AAB
	9KLXL11.0DD6
	9KLXL15.2ED7
	9KLXL15.2ED6
	9KLXL23.2FD5
	9KLXL23.2FD6
	9KLXL23.2FD7
	9KLXL30.5GD3
	9XLXL03.3JD9

Model Year 2009 Engines (Continued)

Manufacturer	Engine Families
Kubota	9KBXL02.4FAD
	9KBXL02.4HAD
	9KBXL02.6EAD
	9KBXL03.3CAD
	9KBXL03.6BAC
	9KBXL03.6BAD
	9KBXL03.6BCD
	9KBXL03.6DAD
	9KBXL03.8AAC
	9KBXL03.8AGD
	9KBXL03.8AHD
	9KBXL06.1AHD
Kukje Machinery	9KMCL2.28A41
Liebherr Machines	9LHAL10.5LPA
	9LHAL10.5LPE
	9LHAL12.0KPA
	9LHAL12/8RMC
	9LHAL24.2VCE
	9LHAL24.2VCI
LOMBARDINI	
MOTORI	9LBDL2.19CH2
Mitsubishi	9MFTL02.8M4B
	9MFTL04.9M5A
	9MFTL07.5M6A
	9MFTL12.9M7A
	9MVXL03.3AAC
	9MVXL03.3AAH
	9MVXL04.2BBB
	9MVXL04.2CCC
	9MVXL05.0AAD
	9MVXL06.4FFF
	9MVXL24.5BBA
	9MVXL33.9BBA
	9MVXL37.1BBA
	9MVXL49.0BBA
	9MVXL65.4BBA

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2009 Engines (Continued)

Manufacturer	Engine Families
MOTORENFABRIK	9HZXL2.57C41
	9HZXL2.57V41
	9HZXL3.43C42
	9HZXL3.43V42
MTU DETROIT DIESEL	9MDDL31.8XRR
	9MDDL35.8GRR
NAVISTAR	9NVXL0466ANA
NISSAN DIESEL	9NDXL03.2TNA
	9NDXL04.2TNA
Perkins Engines	9PKXL04.4NJ1
	9PKXL04.4NJ2
	9PKXL04.4NM1
	9PKXL04.4NM2
	9PKXL04.4RG3
	9PKXL06.6PJ1
	9PKXL06.6PJ2
	9PKXL12.5TAG
	9PKXL15.2TAG
	9PKXL15.2TAG
	9PKXL18.1TAG
Scania	9Y9XL11.7BBA
	9Y9XL11.7BBB
	9Y9XL15.6BDE
TOYOTA INDUSTRIAL	9TALL02.51DZ
Yanmar	9YDXL2.00N4T
	9YDXL3.05K4N
	9YDXL3.32C4N
	9YDXL3.32C4T
	9YDXL3.32M4N
	9YDXL3.32M4T

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2010 Engines

Manufacturer	Engine Families
AB Volvo Penta	AVPXL16.1ACB
	AVPXL16.1ACG
	AVPXL16.1ACW
AGCO Sisu	ASIDL07.4G5C
CATERPILLAR	ACPXL07.2ESL
	ACPXL08.8ESK
	ACPXL08.8ESL
	ACPXL08.8ESX
	ACPXL10.3ESL
	ACPXL11.1ESK
	ACPXL12.5ESK
	ACPXL12.5ESX
	ACPXL14.6ESK
	ACPXL15.2ELW
	ACPXL15.2ESW
	ACPXL15.2ESX
	ACPXL18.1ESK
	ACPXL18.1ESW
	ACPXL18.1ESX
	ACPXL27.0ESK
	ACPXL27.0ESW
	ACPXL27.0ESX
	ACPXL32.0ESP
	ACPXL32.0ESW
	ACPXL32.0ESX
	ACPXL34.5T2C
	ACPXL34.5T2E
	ACPXL58.6T2E
	ACPXL58.6T2X
	ACPXL58.6T2Y
	ACPXL78.1E2W
	ACPXL78.1ERK
	ACPXL78.1T2E
	ACPXL78.1T2X
	ACPXL106.T2E
	ACPXL106.T2M
CNH UK	ANHXL04.5DCB

Model Year 2010 Engines (Continued)

Manufacturer	Engine Families
Cummins	ACEXL2.28A41
	ACEXL03.3ACA
	ACEXL03.3ACB
	ACEXL03.3ACD
	ACEXL03.3ACE
	ACEXL03.3BAA
	ACEXL015.AAE
	ACEXL015.AAH
	ACEXL015.AAJ
	ACEXL019.AAD
	ACEXL023.AAA
	ACEXL023.AAB
	ACEXL023.AAC
	ACEXL030.AAB
	ACEXL030.AAD
	ACEXL030.ABA
	ACEXL045.AAA
	ACEXL050.AAA
	ACEXL050.AAC
	ACEXL050.AAD
	ACEXL050.AAF
	ACEXL050.ABA
	ACEXL060.AAB
	ACEXL060.AAD
	ACEXL060.AAE
	ACEXL078.AAA
	ACEXL078.AAE
	ACEXL0275AAG
	ACEXL0275AAH
	ACEXL0275AAK
	ACEXL0409AAB
	ACEXL0409AAC
	ACEXL0409AAD
	ACEXL0505AAE
	ACEXL0540AAB
	ACEXL0540AAC
	ACEXL0540AAD
	ACEXL0661AAF
	ACEXL0661AAG
	ACEXL0661AAJ

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2010 Engines (Continued)

Manufacturer	Engine Families
Daimler AG	AMBXL07.2RJA
	AMBXL12.8RJB
	AMBXL15.9RJA
Detroit Diesel	ADDXL14.0WLD
DEUTZ AG	ADZXL07.1052
Doosan Infracore	ADICL05.8UTA
	ADICL07.6UPA
	ADICL11.0UJA
	ADICL18.3USA
	ADICL21.9UYA
Hyundai	AHYXL03.9TDI
IHI Shibaura	AH3XL2.00N4T
	AH3XL2.22N4L
IVECO	AVEXL04.5DCB
	AVEXL06.7DGB
	AVEXL06.7DGS
	AVEXL08.7TR3
	AVEXL10.3MLR
	AVEXL10.3TR3
	AVEXL12.9IGR
	AVEXL12.9MLR
	AVEXL12.9TCD
	AVEXL20.1DSL
JCB	AJCBL04.4TA7
	AJCBL04.4TA8
	AJCBL04.4TAE
	AJCBL04.4TC6
John Deere	AJDXL03.0064
	AJDXL03.0113
	AJDXL03.0203
	AJDXL03.0206
	AJDXL03.0208
	AJDXL04.5083
	AJDXL04.5107
	AJDXL06.8049
	AJDXL06.8078
	AJDXL06.8080
	AJDXL06.8104
	AJDXL06.8105
	AJDXL06.8106
	AJDXL06.8117

Model Year 2010 Engines (Continued)

Manufacturer	Engine Families
John Deere (cont)	AJDXL08.1037
	AJDXL09.0114
Komatsu	AKLXL0409AAB
	AKLXL050.AAC
	AKLXL0505AAE
	AKLXL060.AAB
	AKLXL0275AAG
	AKLXL0275AAH
	AKLXL03.3JA6
	AKLXL03.3JB6
	AKLXL03.3JD6
	AKLXL03.3JD7
	AKLXL03.3JD9
	AKLXL0409AAC
	AKLXL050.AAA
	AKLXL060.AAA
	AKLXL078.AAA
	AKLXL23.2FD5
	AKLXL23.2FD6
	AKLXL23.2FD7
	AKLXL30.5GD3
KUBOTA	AKBXL02.4HAD
	AKBXL03.6BCD
Kukje	AKMCL2.28A41
	AKMCL2.39A44
Liebherr	ALHAL10.5LPA
	ALHAL12.0KPA
	ALHAL24.2VCI
	ALHAL9.54SPA
Mitsubishi Fuso	AMFTL02.8M4B
Mitsubishi	AMVXL02.5HHH
	AMVXL03.3AAC
	AMVXL03.3AAE
	AMVXL03.3AAH
	AMVXL04.2BBB
	AMVXL04.2CCC
	AMVXL05.0AAD
	AMVXL05.0AAG
	AMVXL06.4FFF
	AMVXL24.5BBA
	AMVXL33.9BBA

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2010 Engines (Continued)

Manufacturer	Engine Families
Mitsubishi (cont)	AMVXL37.1BBA
	AMVXL49.0BBA
	AMVXL65.4BBA
	AMVXL65.4BBB
MTU Detroit Diesel	AMDDL21.0GWR
	AMDDL31.8XRR
	AMDDL35.8GRR
	AMDDL90.0GTP
	AMDDL95.4GTP
	AMDDL95.4XTR
Nissan Diesel	ANDXL02.7TNA
	ANDXL03.2TNA
	ANDXL04.2TNA
Perkins	APKXL04.4NJ1
	APKXL04.4NJ2
	APKXL04.4NM1
	APKXL04.4NM2
	APKXL04.4RG3
	APKXL06.6PJ1
	APKXL06.6PJ2
	APKXL12.5TAG
	APKXL15.2TA2
	APKXL15.2TAG
	APKXL18.1TAG
SCANIA	AY9XL11.7BBA
	AY9XL11.7BBB
	AY9XL15.6BDE
TOYOTA	ATALL02.51DZ
	ATALL03.503Z
	ATALL05.215Z
VM Motori	AV5XL04.5T60
Yanmar	AYDXL3.32R4N
Zhejiang Xinchai	AZHXL3.17AAA

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2011 Engines

Manufacturer	Engine Families
AB Volvo Penta	BVPXL16.1ACB
	BVPXL16.1ACG
	BVPXL16.1ACW
AGCO Sisu	BSIDL07.4G4E
	BSIDL07.4G5C
Caterpillar Inc.	BCPXL08.8NZS
	BCPXL106.NZS
	BCPXL11.1ESK
	BCPXL12.5ESK
	BCPXL15.2ESW
	BCPXL15.2NYS
	BCPXL15.2NZS
	BCPXL18.1ESK
	BCPXL18.1NYS
	BCPXL18.1NZS
	BCPXL27.0NZS
	BCPXL32.0NZS
	BCPXL78.1NZS
CNH UK LTD	BNHXL04.5DCB
	BNHXL06.7DCA
	BNHXL06.7DCB
Cummins Inc.	BCEXL015.AAH
	BCEXL015.AAJ
	BCEXL023.AAB
	BCEXL0275AAG
	BCEXL0275AAH
	BCEXL0275AAK
	BCEXL03.3ACA
	BCEXL03.3ACB
	BCEXL03.3ACD
	BCEXL03.3ACE
	BCEXL030.AAD
	BCEXL0409AAB
	BCEXL0409AAC
	BCEXL0409AAD
	BCEXL050.AAC
	BCEXL050.AAD
	BCEXL0505AAE
	BCEXL0540AAB
	BCEXL060.AAB
	BCEXL060.AAD

Model Year 2011 Engines (Continued)

Manufacturer	Engine Families
Daimler AG	BMBXL04.3RJA
Detroit Diesel	BDDXL14.0WLD
Doosan Infracore	BDICL05.8UTA
	BDICL18.3USA
	BDICL21.9UYA
Hyundai	BHYXL03.9TDI
IHI Shibaura	BH3XL2.00N4T
	BH3XL2.22N4L
Iseki Matsuyama	BICLL2.96D4H
	BICLL3.37D4H
	BICLL3.37D4I
IVECO S.p.A.	BVEXL03.2TAI
	BVEXL04.5DAA
	BVEXL04.5DAB
	BVEXL04.5DCA
	BVEXL04.5DCB
	BVEXL06.7DAA
	BVEXL06.7DCA
	BVEXL06.7DCB
	BVEXL06.7DCC
	BVEXL06.7DGB
	BVEXL06.7DGS
	BVEXL08.7TR3
	BVEXL10.3TR3
	BVEXL12.9IGR
JCB	BJCBL04.4TA7
	BJCBL04.4TA8
	BJCBL04.4TAE
	BJCBL04.4TC6
John Deere	BJDXL03.0064
	BJDXL03.0113
	BJDXL03.0203
	BJDXL03.0206
	BJDXL03.0208
	BJDXL04.5107
	BJDXL04.5130
	BJDXL06.8078
	BJDXL06.8104
	BJDXL06.8105
	BJDXL06.8106
	BJDXL06.8117

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2011 Engines (Continued)

Manufacturer	Engine Families
John Deere	BJDXL06.8120
	BJDXL09.0114
	BJDXL13.5132
Komatsu Ltd	BKLXL0275AAG
	BKLXL0275AAH
	BKLXL03.3JA6
	BKLXL03.3JB6
	BKLXL03.3JD6
	BKLXL03.3JD7
	BKLXL03.3JD9
	BKLXL0409AAC
	BKLXL050.AAC
	BKLXL060.AAB
	BKLXL23.2FD5
KUBOTA	BKBXL02.4HAD
	BKBXL03.6BCD
Kukje	BKMCL2.28A41
	BKMCL2.39A44
	BKMCL3.41D42
Mitsubishi	BMVXL02.5HHH
	BMVXL03.3AAC
	BMVXL03.3AAH
	BMVXL04.2BBB
	BMVXL04.2CCC
	BMVXL05.0AAD
	BMVXL05.0AAG
	BMVXL06.4FFF
	BMVXL24.5BBA
	BMVXL33.9BBA
	BMVXL37.1BBA
	BMVXL49.0BBA
	BMVXL65.4BBA
	BMVXL65.4BBB
Mitsubishi Fuso	BMFTL02.8M4B
MTU Detroit Diesel	BMDDL14.0ZWK
	BMDDL21.0ZWR
	BMDDL31.8XRR
	BMDDL35.8GRR
	BMDDL95.4XTR

Model Year 2011 Engines (Continued)

Manufacturer	Engine Families
Perkins	BPKXL04.4NJ1
	BPKXL04.4NJ2
	BPKXL04.4NM1
	BPKXL04.4NM2
	BPKXL04.4RG3
	BPKXL06.6PJ1
	BPKXL06.6PJ2
	BPKXL06.6PJ3
	BPKXL12.5TAG
	BPKXL15.2TA2
	BPKXL15.2TAG
	BPKXL18.1TAG
Simpson & Co	BSCLL02.7V58
	BSCLL03.6V74
TOYOTA	BTALL02.51DZ
	BTALL05.215Z
UD Trucks	BNDXL02.7TNA
	BNDXL03.2TNA
	BNDXL04.2TNA
VM Motori	BV5XL04.5T60
Yanmar	BYDXL3.32R4N

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2012 Engines

Manufacturer	Engine Families
Caterpillar Inc.	CCPXL07.2ESJ
	CCPXL08.8ESJ
	CCPXL08.8NZS
	CCPXL106.NZS
	CCPXL11.1ESJ
	CCPXL11.1ESK
	CCPXL12.5ESJ
	CCPXL12.5ESK
	CCPXL15.2ESJ
	CCPXL15.2ESW
	CCPXL15.2HZA
	CCPXL15.2NYS
	CCPXL15.2NZS
	CCPXL18.1ESJ
	CCPXL18.1ESK
	CCPXL18.1HZA
	CCPXL18.1NYS
	CCPXL18.1NZS
	CCPXL27.0ESJ
	CCPXL27.0HYA
	CCPXL27.0HZA
	CCPXL27.0NZS
	CCPXL32.0HZA
	CCPXL32.0NZS
	CCPXL78.1NZS
Cummins Inc.	CCEXL15.0AAI
	CCEXL015.AAH
	CCEXL015.AAJ
	CCEXL019.AAD
	CCEXL023.AAB
	CCEXL0275AAG
	CCEXL0275AAH
	CCEXL0275AAK
	CCEXL03.3ACD
	CCEXL03.3ACE
	CCEXL030.AAD
	CCEXL0409AAB
	CCEXL0409AAC
	CCEXL0409AAD
	CCEXL050.AAD
	CCEXL0505AAE

	CCEXL0540AAB
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Model Year 2012 Engines (continued)

Manufacturer	Engine Families
Cummins cont.	CCEXL060.AAD
	CCEXL0661AAH
DAEDONG	CDCLL02.2D7T
	CDCLL02.4B7T
DEERE	CJDXL03.0113
	CJDXL03.0203
	CJDXL03.0206
	CJDXL03.0208
	CJDXL04.5107
	CJDXL04.5119
	CJDXL04.5130
	CJDXL04.5141
	CJDXL04.5212
	CJDXL06.8115
	CJDXL06.8116
	CJDXL06.8117
	CJDXL06.8120
	CJDXL09.0114
	CJDXL09.0140
	CJDXL13.5103
	CJDXL13.5132
Detroit Diesel	CDDXL14.0VLD
	CDDXL14.0WLD
DEUTZ AG	CDZXL02.3099
	CDZXL02.7096
	CDZXL03.6081
	CDZXL03.6082
	CDZXL03.6084
	CDZXL03.6085
	CDZXL05.4087
Doosan Infracore	CDICL18.3USA
	CDICL21.9UYA
FPT INDUSTRIAL	CFPXL03.2SCE
	CFPXL03.2TAI
	CFPXL03.2TCI
	CFPXL06.7DGB
	CFPXL06.7DGS
	CFPXL08.7TR3

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2012 Engines (continued)

Manufacturer	Engine Families
FPT INDUSTRIAL	CFPXL10.3TR3
(continued)	CFPXL12.9IGR
ISEKI	CICLL2.96D4H
	CICLL3.37D4H
ISM	CH3XL2.00N4T
	CH3XL2.22N4L
ISUZU	CSZXL02.2UTA
	CSZXL02.2UXA
	CSZXL03.0UTA
	CSZXL03.0UTB
JCB POWER SYS	CJCBL04.4TC5
KOMATSU LTD.	CKLXL03.3JA6
	CKLXL03.3JB6
	CKLXL03.3JD9
	CKLXL23.2FD5
KUBOTA	CKBXL02.4FAD
	CKBXL02.4HAD
	CKBXL02.6EAD
	CKBXL03.3CAD
	CKBXL03.6BAC
	CKBXL03.6BCD
	CKBXL03.6DAD
	CKBXL03.8AAC
	CKBXL03.8CGD
KUKJE	CKMCL2.28A41
	CKMCL3.41D43
M&M	CMMLL02.5N52
	CMMLL02.5N59
	CMMLL02.5N62
	CMMLL02.5N64
MFTA	CMFTL02.8M4B
MITSUBISHI	CMVXL02.5HHH
	CMVXL03.3AAC
	CMVXL03.3AAH
	CMVXL05.0AAD
MOTORENFABRI K HATZ	CHZXL3.43C42
	CHZXL3.43V42
MTU DD	CMDDL14.0ZWK
	CMDDL21.0ZWR
	CMDDL31.8XRR

	CMDDL35.7XNC
	CMDDL35.8GRR

Model Year 2012 Engines (continued)

Manufacturer	Engine Families
MTU DD (cont.)	CMDDL57.2XTC
	CMDDL95.4XTR
NISSAN DIESEL	CNDXL02.7TNA
	CNDXL03.2TNA
PERKINS	CPKXL04.4NH1
	CPKXL04.4NJ1
	CPKXL04.4NJ2
	CPKXL04.4NM1
	CPKXL04.4NM2
	CPKXL06.6PJ1
	CPKXL06.6PJ2
	CPKXL06.6PJ3
	CPKXL12.5TAG
	CPKXL15.2TA2
	CPKXL15.2TAG
	CPKXL18.1TAG
SIMPSON & CO	CSCLL02.7V58
	CSCLL03.6V74
TIEM	CTIEL02.51DZ
	CTIEL05.26CA
VOLKSWAGEN	CVWXL02.0CBJ
VPX	CVPXL09.4BAA
	CVPXL12.8BCA
	CVPXL16.1ACB
	CVPXL16.1ACG
	CVPXL16.1ACW
	CVPXL16.1ADA
	CVPXL16.1BDA
	CVPXL16.1BEA
YANGDONG	CYNDL2.55AAA
YANMAR	CYDXL2.00N4T
	CYDXL3.32C4N
	CYDXL3.32C4T
	CYDXL3.32F4T
	CYDXL3.32M4N
	CYDXL3.32R4N

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2013 Engines

Manufacturer	Engine Families
Caterpillar Inc.	DCPXL07.2ESJ
	DCPXL08.8ESJ
	DCPXL08.8NZS
	DCPXL106.NZS
	DCPXL11.1ESJ
	DCPXL12.5ESJ
	DCPXL15.2NYS
	DCPXL15.2NZS
	DCPXL18.1ESJ
	DCPXL18.1NYS
	DCPXL18.1NZS
	DCPXL27.0NZS
	DCPXL32.0NZS
	DCPXL78.1NZS
Cummins Inc.	DCEXL015.AAH
	DCEXL015.AAJ
	DCEXL019.AAD
	DCEXL023.AAB
	DCEXL0275AAG
	DCEXL0275AAH
	DCEXL0275AAK
	DCEXL030.AAD
	DCEXL0409AAB
	DCEXL0409AAC
	DCEXL0409AAD
	DCEXL050.AAD
	DCEXL0505AAE
	DCEXL0540AAB
	DCEXL060.AAD
	DCEXL0661AAH
DEERE	DJDXL03.0208
	DJDXL04.5111
	DJDXL04.5119
	DJDXL04.5130
	DJDXL04.5141
	DJDXL04.5212
	DJDXL04.5214
	DJDXL06.8104
	DJDXL06.8105
	DJDXL06.8106
	DJDXL06.8120

Model Year 2013 Engines (continued)

Manufacturer	Engine Families
DEERE (cont.)	DJDXL09.0114
	DJDXL13.5132
DETROIT DIESEL	DDDXL14.0WLD
DOOSAN	DDICL18.3USA
	DDICL21.9UYA
FPT INDUSTRIAL	DFPXL04.5DTD
	DFPXL06.7DGB
	DFPXL06.7DGS
	DFPXL08.7TR3
	DFPXL10.3TR3
ISM	DH3XL2.22N4L
KOMATSU LTD.	DKLXL060.AAE
	DKLXL23.2FD5
KUKJE MACHINERY	DKMCL3.41D43
MITSUBISHI	DMVXL24.5BBA
	DMVXL33.9BBA
	DMVXL37.1BBA
	DMVXL49.0BBA
	DMVXL65.4BBA
	DMVXL65.4BBB
MTU DD	DMDDL14.0ZWK
	DMDDL21.0ZWR
	DMDDL31.8XRR
	DMDDL35.8GRR
	DMDDL95.4XTR
PERKINS	DPKXL04.4NH1
	DPKXL04.4NJ1
	DPKXL04.4NJ2
	DPKXL04.4NM1
	DPKXL04.4NM2
	DPKXL06.6PJ1
	DPKXL06.6PJ2
	DPKXL06.6PJ3
	DPKXL12.5TAG
	DPKXL15.2TA2
	DPKXL15.2TAG
	DPKXL18.1TAG
VPX	DVPXL16.1ACB
	DVPXL16.1ACG
	DVPXL16.1ACW

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2014 Engines

Manufacturer	Engine Families
Caterpillar Inc.	ECPXL08.8NZS
	ECPXL106.NZS
	ECPXL12.5NYS
	ECPXL15.2NYS
	ECPXL15.2NZS
	ECPXL18.1NYS
	ECPXL18.1NZS
	ECPXL27.0NZS
	ECPXL32.0NZS
	ECPXL78.1NZS
Cummins Inc.	ECEXL015.AAH
	ECEXL015.AAJ
	ECEXL019.AAD
	ECEXL0275AAG
	ECEXL0275AAH
	ECEXL0275AAK
	ECEXL03.3ACF
	ECEXL03.3ACG
	ECEXL03.3ACH
	ECEXL03.3ACK
	ECEXL030.AAD
	ECEXL0409AAB
	ECEXL0409AAC
	ECEXL0409AAD
	ECEXL050.AAD
	ECEXL0505AAE
	ECEXL0540AAB
	ECEXL060.AAD
	ECEXL0661AAH
	ECEXL13.0AAA
DEERE	EJDXL03.0208
	EJDXL04.5119
	EJDXL04.5130
	EJDXL04.5141
	EJDXL04.5212
	EJDXL04.5214
	EJDXL06.8105
	EJDXL06.8120
	EJDXL09.0114
	EJDXL13.5132
	EJDXL13.5146

Model Year 2014 Engines (continued)

Manufacturer	Engine Families
DETROIT DIESEL	EDDXL14.0WLD
DOOSAN	EDICL18.3USA
	EDICL21.9UYA
FPT INDUSTRIAL	EFPXL08.7TR3
	EFPXL06.7DGS
	EFPXL10.3TR3
	EFPXL06.7DGB
ISM	EH3XL2.22CN3
	EH3XL2.22N4L
KOMATSU LTD.	EKLXL23.2FD5
	EKLXL060.AAE
KUKJE MACHINERY	EKMCL3.41D43
MITSUBISHI	EMVXL24.5BBA
	EMVXL33.9BBA
	EMVXL37.1BBA
	EMVXL49.0BBA
	EMVXL65.4BBA
	EMVXL65.4BBB
MTU DD	EMDDL14.0ZWK
	EMDDL21.0ZWR
	EMDDL31.8XRR
	EMDDL35.8GRR
	EMDDL95.4XTR
PERKINS	EPKXL04.4NH1
	EPKXL04.4NH3
	EPKXL04.4NJ1
	EPKXL04.4NJ2
	EPKXL04.4NJ3
	EPKXL04.4NM1
	EPKXL04.4NM2
	EPKXL06.6PJ1
	EPKXL06.6PJ2
	EPKXL07.0PW1
VPX	EVPXL16.1ACB
	EVPXL16.1ACG
	EVPXL16.1ACW

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2015 Engines

Manufacturer	Engine Families
Caterpillar Inc.	FCPXL08.8NZS
	FCPXL106.NZS
	FCPXL12.5NYS
	FCPXL15.2NYS
	FCPXL15.2NZS
	FCPXL18.1NYS
	FCPXL18.1NZS
	FCPXL27.0NZS
	FCPXL32.0NZS
	FCPXL78.1NZS
Cummins Inc.	FCEXL015.AAH
	FCEXL015.AAJ
	FCEXL019.AAD
	FCEXL023.AAB
	FCEXL0275AAG
	FCEXL0275AAH
	FCEXL0275AAK
	FCEXL030.AAD
	FCEXL0409AAB
	FCEXL0409AAC
	FCEXL0409AAD
	FCEXL050.AAD
	FCEXL0505AAE
	FCEXL0540AAB
	FCEXL060.AAD
	FCEXL0661AAH
	FCEXL13.0AAA
	FCEXL95.0AAA
DEERE	FJDXL04.5119
	FJDXL04.5141
	FJDXL04.5212
	FJDXL04.5214
	FJDXL06.8120
	FJDXL09.0114
	FJDXL13.5132
	FJDXL13.5146
DETROIT DIESEL	FDDXL14.0WLD

Model Year 2015 Engines (continued)

Manufacturer	Engine Families
FPT INDUSTRIAL	FFPXL03.2TCI
	FFPXL04.5DCB
	FFPXL06.7DGB
	FFPXL06.7DGS
	FFPXL08.7TR3
	FFPXL10.3TR3
ISM	FH3XL2.22N4L
KOMATSU LTD.	FKLXL23.2FD5
KUKJE MACHINERY	FKMCL3.41D43
MERCEDES-BENZ	FMBXL07.2RJC
MITSUBISHI	FMVXL24.5BBA
	FMVXL33.9BBA
	FMVXL37.1BBA
	FMVXL49.0BBA
	FMVXL65.4BBA
MTU DD	FMDDL14.0ZWK
	FMDDL21.0ZWR
	FMDDL31.8XRR
	FMDDL35.8GRR
	FMDDL40.1GNR
	FMDDL95.4XTR
PERKINS	FPKXL04.4NH1
	FPKXL04.4NJ1
	FPKXL04.4NM1
	FPKXL04.4NM2
	FPKXL04.4NR2
	FPKXL06.6PJ1
	FPKXL06.6PJ2
	FPKXL07.0PW1
	FPKXL07.0PW2
VPX	FVPXL16.1ACB
	FVPXL16.1ACG
	FVPXL16.1ACW

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2016 Engines

Manufacturer	Engine Families
Caterpillar Inc.	GCPXL08.8NZS
	GCPXL106.NZS
	GCPXL12.5NYS
	GCPXL15.2NYS
	GCPXL15.2NZS
	GCPXL18.1NYS
	GCPXL18.1NZS
	GCPXL27.0NZS
	GCPXL32.0NZS
	GCPXL78.1NZS
Cummins Inc.	GCEXL015.AAH
	GCEXL015.AAJ
	GCEXL019.AAD
	GCEXL023.AAB
	GCEXL0275AAG
	GCEXL0275AAH
	GCEXL0275AAK
	GCEXL030.AAD
	GCEXL0409AAB
	GCEXL0409AAC
	GCEXL0409AAD
	GCEXL050.AAD
	GCEXL0505AAE
	GCEXL0540AAB
	GCEXL060.AAD
	GCEXL0661AAH
	GCEXL13.0AAA
	GCEXL95.0AAA
DEERE	GJDXL04.5119
	GJDXL04.5141
	GJDXL04.5212
	GJDXL04.5214
	GJDXL06.8120
	GJDXL09.0114
	GJDXL13.5132
	GJDXL13.5146
DETROIT DIESEL	GDDXL14.0WLD
FPT INDUSTRIAL	GFPXL04.5DCB
	GFPXL06.7DGB
	GFPXL06.7DGS
	GFPXL08.7TR3

	GFPXL10.3TR3
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Model Year 2016 Engines (continued)

Manufacturer	Engine Families
ISM	GH3XL2.22N4L
KUBOTA.	GKBXL03.6BAC
KUKJE MACHINERY	GKMCL3.41D43
MERCEDES-BENZ	GMBXL07.2RJC
MITSUBISHI	GMVXL03.3AAJ
	GMVXL03.3CBA
	GMVXL24.5BBA
	GMVXL33.9BBA
	GMVXL37.1BBA
	GMVXL49.0BBA
	GMVXL65.4BBA
MTU DD	GMDDL14.0ZWK
	GMDDL21.0ZWR
	GMDDL31.8XRR
	GMDDL35.8GRR
	GMDDL40.1GNR
	GMDDL95.4XTR
PERKINS	GPKXL04.4NH1
	GPKXL04.4NJ1
	GPKXL04.4NM1
	GPKXL04.4NM2
	GPKXL04.4NR1
	GPKXL04.4NR2
	GPKXL06.6PJ1
	GPKXL06.6PJ2
	GPKXL07.0PW1
	GPKXL07.0PW2
VPX	GVPXL16.1ACB
	GVPXL16.1ACG
	GVPXL16.1ACW

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2017 Engines

Manufacturer	Engine Families
Caterpillar Inc.	HCPXL08.8NZS
	HCPXL106.NZS
	HCPXL12.5NYS
	HCPXL15.2NYS
	HCPXL15.2NZS
	HCPXL18.1NYS
	HCPXL18.1NZS
	HCPXL27.0NZS
	HCPXL32.0NZS
	HCPXL78.1NZS
Cummins Inc.	HCEXL015.AAH
	HCEXL015.AAJ
	HCEXL019.AAD
	HCEXL023.AAB
	HCEXL0275AAG
	HCEXL0275AAH
	HCEXL0275AAK
	HCEXL030.AAD
	HCEXL0409AAB
	HCEXL0409AAC
	HCEXL0409AAD
	HCEXL050.AAD
	HCEXL0505AAE
	HCEXL0540AAB
	HCEXL060.AAD
	HCEXL0661AAH
	HCEXL95.0AAA
DEERE	HJDXL04.5119
	HJDXL04.5141
	HJDXL04.5212
	HJDXL04.5214
	HJDXL06.8120
	HJDXL09.0114
	HJDXL13.5132
	HJDXL13.5146
DETROIT DIESEL	HDDXL14.0WLD
FPT INDUSTRIAL	HFPXL04.5DCB
	HFPXL06.7DGB
	HFPXL06.7DGS
	HFPXL08.7TR3
	HFPXL10.3TR3

Model Year 2017 Engines (continued)

Manufacturer	Engine Families
ISM	HH3XL2.22N4L
KUBOTA.	HKBXL03.6BAC
KUKJE MACHINERY	HKMCL3.41D43
LMB	HLHAL45.0ESP
	HLHAL103.ESP
MERCEDES-BENZ	HMBXL07.2RJC
MITSUBISHI	HMVXL03.3AAJ
	HMVXL03.3CBA
	HMVXL24.5BBA
	HMVXL33.9BBA
	HMVXL37.1BBA
	HMVXL49.0BBA
	HMVXL65.4BBA
MTU DD	HMDDL14.0ZWK
	HMDDL21.0ZWR
	HMDDL35.8GRR
	HMDDL40.1GNR
	HMDDL95.4XTR
PERKINS	HPKXL04.4NL1
	HPKXL04.4NM1
	HPKXL04.4NM2
	HPKXL04.4NP1
	HPKXL04.4NR1
	HPKXL04.4NR2
	HPKXL07.0PW1
	HPKXL07.0PW2
VPX	HVPXL16.1ACB
	HVPXL16.1ACG
	HVPXL16.1ACW

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2018 Engines

Manufacturer	Engine Families
Caterpillar Inc.	JCPXL08.8NZS
	JCPXL106.NZS
	JCPXL12.5NYS
	JCPXL15.2NYS
	JCPXL15.2NZS
	JCPXL18.1NYS
	JCPXL18.1NZS
	JCPXL27.0NZS
	JCPXL32.0NZS
	JCPXL78.1NZS
Cummins Inc.	JCEXL015.AAH
	JCEXL015.AAJ
	JCEXL019.AAD
	JCEXL023.AAB
	JCEXL0275AAG
	JCEXL0275AAH
	JCEXL0275AAK
	JCEXL030.AAD
	JCEXL0409AAB
	JCEXL0409AAC
	JCEXL0409AAD
	JCEXL050.AAD
	JCEXL0505AAE
	JCEXL0540AAB
	JCEXL060.AAD
	JCEXL0661AAH
	JCEXL95.0AAA
DEERE	JJDXL02.9142
	JJDXL04.5119
	JJDXL04.5141
	JJDXL04.5214
	JJDXL06.8120
	JJDXL09.0114
	JJDXL13.5132
	JJDXL13.5146
FPT INDUSTRIAL	JFPXL06.7DGB
	JFPXL06.7DGS
	JFPXL08.7TR3
	JFPXL10.3TR3
	JFPXL12.9IGR

Model Year 2018 Engines (continued)

Manufacturer	Engine Families
KUBOTA.	JKBXL03.6BAC
KUKJE MACHINERY	JKMCL3.41D43
LMB	JLHAL103.ESP
	JLHAL45.0ESP
MERCEDES-BENZ	JMBXL07.2RJC
MITSUBISHI	JMVXL03.3AAJ
	JMVXL03.3CBA
	JMVXL24.5BBA
	JMVXL33.9BBA
	JMVXL37.1BBA
	JMVXL49.0BBA
	JMVXL65.4BBA
MTU DD	JMDDL14.0ZWK
	JMDDL21.0ZWR
	JMDDL35.8GRR
	JMDDL40.1GNR
	JMDDL95.4GTR
PERKINS	JPKXL04.4NL1
	JPKXL04.4NM1
	JPKXL04.4NM2
	JPKXL04.4NP1
	JPKXL04.4NR1
	JPKXL04.4NR2
	JPKXL07.0PW1
	JPKXL07.0PW2
VPX	JVPXL16.1ACB
	JVPXL16.1ACG
	JVPXL16.1ACW

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2019 Engines

Manufacturer	Engine Families
Caterpillar Inc.	KCPXL08.8NZS
	KCPXL106.NZS
	KCPXL12.5NYS
	KCPXL15.2NYS
	KCPXL15.2NZS
	KCPXL18.1NYS
	KCPXL18.1NZS
	KCPXL27.0NZS
	KCPXL32.0NZS
	KCPXL78.1NZS
Cummins Inc.	KCEXL015.AAH
	KCEXL015.AAJ
	KCEXL019.AAD
	KCEXL023.AAB
	KCEXL0275AAG
	KCEXL0275AAH
	KCEXL0275AAK
	KCEXL030.AAD
	KCEXL0409AAB
	KCEXL0409AAC
	KCEXL0409AAD
	KCEXL050.AAD
	KCEXL0505AAE
	KCEXL0540AAB
	KCEXL060.AAD
	KCEXL0661AAH
	KCEXL95.0AAA
DEERE	KJDXL02.9142
	KJDXL04.5119
	KJDXL04.5141
	KJDXL04.5214
	KJDXL06.8120
	KJDXL09.0114
	KJDXL13.5132
	KJDXL13.5146
FPT INDUSTRIAL	KFPXL06.7DGB
	KFPXL06.7DGS
	KFPXL06.7LIM
	KFPXL08.7TR3
	KFPXL10.3TR3
	KFPXL12.9IGR

Model Year 2019 Engines (continued)

Manufacturer	Engine Families
KUBOTA.	KKBXL03.6BAC
KUKJE MACHINERY	KKMCL3.41D43
LMB	KLHAL103.ESP
	KLHAL45.0ESP
MITSUBISHI	KMVXL03.3AAJ
	KMVXL03.3CBB
	KMVXL24.5BBA
	KMVXL33.9BBA
	KMVXL37.1BBA
	KMVXL49.0BBA
	KMVXL65.4BBA
MTU DD	KMDDL14.0ZWK
	KMDDL21.0ZWR
	KMDDL35.8GRR
	KMDDL40.1GNR
	KMDDL95.4GTR
PERKINS	KPKXL04.4NL1
	KPKXL04.4NM1
	KPKXL04.4NM2
	KPKXL04.4NP1
	KPKXL04.4NR1
	KPKXL04.4NR2
	KPKXL07.0PW1
	KPKXL07.0PW2
VPX	KVPXL16.1ACB
	KVPXL16.1ACG
	KVPXL16.1ACW

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2020 Engines

Manufacturer	Engine Families
Caterpillar Inc.	LCPXL08.8NZS
	LCPXL106.NZS
	LCPXL12.5NYS
	LCPXL15.2NYS
	LCPXL15.2NZS
	LCPXL18.1NYS
	LCPXL18.1NZS
	LCPXL27.0NZS
	LCPXL32.0NZS
	LCPXL78.1NZS
Cummins Inc.	LCEXL015.AAH
	LCEXL015.AAJ
	LCEXL019.AAD
	LCEXL023.AAB
	LCEXL0275AAG
	LCEXL0275AAH
	LCEXL0275AAK
	LCEXL030.AAD
	LCEXL0409AAB
	LCEXL0409AAC
	LCEXL0409AAD
	LCEXL050.AAD
	LCEXL0505AAE
	LCEXL0540AAB
	LCEXL060.AAD
	LCEXL0661AAH
	LCEXL13.0AAA
	LCEXL95.0AAA
DEERE	LJDXL02.9142
	LJDXL04.5119
	LJDXL04.5141
	LJDXL04.5214
	LJDXL06.8120
	LJDXL09.0114
	LJDXL13.5132
	LJDXL13.5146
FPT INDUSTRIAL	LFPXL06.7DGB
	LFPXL06.7DGS
	LFPXL06.7LIM
	LFPXL08.7TR3
	LFPXL10.3TR3

	LFPXL12.9IGR
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Model Year 2020 Engines (continued)

Manufacturer	Engine Families
JCB	LJCBL04.4TAE
KUBOTA.	LKBXL03.6BAC
KUKJE MACHINERY	LKMCL3.41D43
KOEL	LKOEL3.24TAX
LMB	LLHAL103.ESP
	LLHAL45.0ESP
MERCEDES-BENZ	LMBXL07.2RJC
MITSUBISHI	LMVXL03.3AAJ
	LMVXL03.3CBB
	LMVXL24.5BBA
	LMVXL33.9BBA
	LMVXL37.1BBA
	LMVXL49.0BBA
	LMVXL65.4BBA
MTU DD	LMDDL14.0ZWK
	LMDDL21.0ZWR
	LMDDL35.8GRR
	LMDDL40.1GNR
	LMDDL95.4GTR
	LMDDL95.4GTZ
PERKINS	LPKXL04.4NL1
	LPKXL04.4NM1
	LPKXL04.4NM2
	LPKXL04.4NP1
	LPKXL04.4NR1
	LPKXL04.4NR2
	LPKXL07.0PW1
	LPKXL07.0PW2
VPX	LVPXL16.1ACC
	LVPXL16.1ACG
	LVPXL16.1ACW
WEICHAH	LWEHL52.3EMS

**Attachment: RYPOS RTG Crane ActiveDPF/C3+™
Off-Road Certified Engine Family List**

Model Year 2021 Engines

Manufacturer	Engine Families
Cummins Inc.	MCEXL019.AAD
	MCEXL023.AAB
	MCEXL050.AAD
FPT INDUSTRIAL	MFPXL06.7DGB