

**Attachment 1: Verified MIRATECH® LTR™ DOC/DPF  
Off-Road Certified Engine Family List**

**Model Year 1996 Engines**

| <b>Manufacturer</b> | <b>Engine Families</b> |
|---------------------|------------------------|
| Caterpillar         | TCP14.RZDBRK           |
|                     | TCP10.RZDBRD           |
| Deutz AG            | TDZ16.RGDARA           |
|                     | TDZ16.RGDARB           |
|                     | TDZ7.1R6DARA           |
|                     | TDZ7.1R6DARB           |
| Generac             | TGN13.R6DARA           |
| Komatsu             | TKL11.RZDARB           |
| Navistar            | TNV466R6DARA           |
|                     | TNV466R6DARB           |
|                     | TNV466R6DASC           |
|                     | TNV466R6DASD           |
|                     | TNV530R6DARA           |
|                     | TNV530R6DARB           |
|                     | TNV530R6DASD           |
|                     | TNV530R8DASC           |

**Model Year 1997 Engines**

| <b>Manufacturer</b> | <b>Engine Families</b> |
|---------------------|------------------------|
| Caterpillar         | VCP10.RZDARD           |
|                     | VCP14.RZDARK           |
| Deere               | VJD10.RJDBRB           |
|                     | VJD6.8R6DBRA           |
|                     | VJD8.1R6DBRA           |
|                     | VJD8.1RBDRB            |
| Deutz AG            | VDZ16.RGDARA           |
|                     | VDZ16.RGDARB           |
|                     | VDZ7.1R6DARA           |
|                     | VDZ7.1R6DARB           |
| Generac             | VGN13.R6DARA           |
| Navistar            | VNV466R6DASC           |
|                     | VNV466R6DASD           |
|                     | VNV530R6DARB           |
|                     | VNV530R6DASC           |
|                     | VNV530R6DASD           |

**Model Year 1998 Engines**

| <b>Manufacturer</b>        | <b>Engine Families</b> |
|----------------------------|------------------------|
| AB Volvo Penta             | WVPXL09.6ACB           |
|                            | WVPXL12.0ACB           |
| Case                       | WX9XL0239ACA           |
|                            | WX9XL0359ABA           |
|                            | WX9XL0505ABA           |
|                            | WX9XL0505ABB           |
|                            | WX9XL0505ACA           |
| Caterpillar                | WCPXL07.0MRB           |
|                            | WCPXL10.5MRD           |
|                            | WCPXL10.5MRG           |
|                            | WCPXL14.6ERK           |
|                            | WCPXL14.6MRJ           |
| Cummins                    | WCEXL019.AAA           |
|                            | WCEXL0359ABA           |
|                            | WCEXL0359ABB           |
|                            | WCEXL0505ABA           |
|                            | WCEXL0505ABB           |
|                            | WCEXL0505ACA           |
|                            | WCEXL0661AAA           |
|                            | WCEXL0855AAA           |
|                            | WCEXL0855AAB           |
| Daewoo                     | WDWXL11.1BHT           |
|                            | WDWXL11.1BIA           |
| Detroit Diesel Corporation | VDDXL08.5TJD           |
|                            | WDDXL09.0TFE           |
|                            | WDDXL11.1THD           |
|                            | WDDXL12.1TFE           |
|                            | WDDXL12.1TFM           |
|                            | WDDXL12.7TGD           |
|                            | WDDXL15.9TRE           |
|                            | WDDXL23.9TRE           |
| Deere                      | WJDXL06.8012           |
|                            | WJDXL08.1007           |
|                            | WJDXL08.1008           |
|                            | WJDXL08.1009           |
|                            | WJDXL10.5003           |

## Model Year 1998 Engines Continued

| Manufacturer | Engine Families |
|--------------|-----------------|
| Deutz AG     | WDZXL07.1003    |
|              | WDZXL07.1004    |
|              | WDZXL15.9001    |
|              | WDZXL15.9002    |
| GMC          | WGNXL13.3HTA    |
| ISUZU        | WSZXL06.4DTA    |
| Komatsu      | WKDXL0239AAA    |
|              | WKDXL0359ABA    |
|              | WKLXL11.0DB1    |
|              | WKLXL11.0DC1    |
|              | WKLXL15.2EB1    |
|              | WKLXL23.2FC1    |
|              | WKLXL7.15CB1    |
|              | WKLXL7.15CC1    |
| MTU          | WMUXL12.0G2V    |
| Navistar     | WNVXL0530BNB    |
|              | WNVXL0530BND    |

## Model Year 1999 Engines

| Manufacturer   | Engine Families |
|----------------|-----------------|
| AB Volvo Penta | XVPXL07.3ABB    |
|                | XVPXL07.3ACB    |
|                | XVPXL09.6ACB    |
|                | XVPXL12.0ACB    |
| Case           | XX9XL0239ACA    |
|                | XX9XL0359ABA    |
|                | XX9XL0505ABA    |
|                | XX9XL0505ABB    |
|                | XX9XL0505ACA    |
| Caterpillar    | XCPXL07.0MRB    |
|                | XCPXL10.5MRD    |
|                | XCPXL10.5MRG    |
|                | XCPXL14.6ERK    |
| Cummins        | XCEXL019.AAA    |
|                | XCEXL0359ABA    |
|                | XCEXL0505ABA    |
|                | XCEXL0505ABB    |
|                | XCEXL0505ACA    |
|                | XCEXL0661AAA    |
|                | XCEXL0855AAA    |
|                | XCEXL0855AAB    |

## Model Year 1999 Engines Continued

| Manufacturer               | Engine Families |
|----------------------------|-----------------|
| Daewoo                     | XDWXL03.3AMN    |
|                            | XDWXL03.3BMN    |
|                            | XDWXL03.3LMN    |
|                            | XDWXL05.8AOA    |
|                            | XDWXL05.8ARN    |
|                            | XDWXL05.8ATT    |
|                            | XDWXL08.1ACN    |
|                            | XDWXL08.1ADT    |
|                            | XDWXL11.1BIA    |
|                            | XDWXL11.1BHT    |
|                            | XDWXL11.1DJA    |
|                            | XDWXL14.6AZA    |
|                            | XDWXL14.6CVT    |
|                            | XDWXL18.3ASA    |
| Detroit Diesel Corporation | XDDXL08.5TJD    |
|                            | XDDXL09.1TFE    |
|                            | XDDXL11.1THD    |
|                            | XDDXL12.1TFE    |
|                            | XDDXL12.1TFM    |
|                            | XDDXL12.7TGD    |
|                            | XDDXL14.0TLD    |
|                            | XDDXL15.9TRE    |
|                            | XDDXL23.9TRE    |
| Deere                      | XJDXL06.8012    |
|                            | XJDXL08.1007    |
|                            | XJDXL08.1008    |
|                            | XJDXL10.5022    |
| Deutz AG                   | XDZXL02.7014    |
|                            | XDZXL07.1005    |
|                            | XDZXL07.1004    |
|                            | XDZXL15.9002    |
|                            | XDZXL15.9003    |
| Generac                    | XGNXL13.3HTA    |

## Model Year 1999 Engines Continued

| Manufacturer | Engine Families |
|--------------|-----------------|
| Komatsu      | XKLXL03.3JA1    |
|              | XKLXL11.0DB1    |
|              | XKLXL11.0DC1    |
|              | XKLXL15.2EC1    |
|              | XKLXL23.2FC1    |
|              | XKLXL7.15CB1    |
|              | XKLXL7.15CC1    |
|              | XKDXL0239ACA    |
|              | XKDXL0359ABA    |
|              | XKDXL0505ABB    |
|              | XKDXL0505ACA    |
| KUBOTA       | XKBXL03.3BAC    |
|              | XKBXL03.3BCC    |
| Mitsubishi   | XMTXL07.5D6C    |
|              | XMTXL11.9D6A    |
| Navistar     | XNVXL0466BNA    |
|              | XNVXL0530ANA    |
|              | XNVXL0530ANB    |
|              | XNVXL0530ANC    |
|              | XNVXL0530AND    |
|              | XNVXL0530BNA    |
|              | XNVXL0530BNB    |
|              | XNVXL0530BNC    |
|              | XNVXL0530BND    |
| Yanmar       | XYDXL2.00D4T    |
|              | XYDXL2.78D4N    |
|              | XYDXL4.41D4N    |
|              | XYDXL4.41D4T    |

## Model Year 2000 Engines

| Manufacturer   | Engine Families |
|----------------|-----------------|
| AB Volvo Penta | YVPXL07.3ABB    |
|                | YVPXL07.3ACB    |
|                | YVPXL09.6ACB    |
|                | YVPXL12.0ACB    |
| Case           | YX9XL0239ACA    |
|                | YX9XL0239ADA    |
|                | YX9XL0359ABA    |
|                | YX9XL0359ABB    |
|                | YX9XL0505ABA    |
|                | YX9XL0505ABB    |
|                | YX9XL0505ACA    |
| Caterpillar    | YCPXL07.0MRB    |
|                | YCPXL10.5MRD    |
|                | YCPXL10.5MRG    |
|                | YCPXL14.6ERK    |
|                | YCPXL27.0MRH    |
|                | YCPXL27.0MRS    |
|                | YCPXL34.5ERK    |
|                | YCPXL69.0ERK    |
| Cummins        | YCEXL03.3AAA    |
|                | YCEXL03.3AAB    |
|                | YCEXL015.ABA    |
|                | YCEXL019.AAA    |
|                | YCEXL019.AAB    |
|                | YCEXL030.ABA    |
|                | YCEXL050.ABA    |
|                | YCEXL0239ACA    |
|                | YCEXL0239ADA    |
|                | YCEXL0359AAA    |
|                | YCEXL0359ABA    |
|                | YCEXL0359ABC    |
|                | YCEXL050.AAA    |
|                | YCEXL0505ABA    |
|                | YCEXL0505ABB    |
|                | YCEXL0505ACA    |
|                | YCEXL060.ABA    |
|                | YCEXL0661AAA    |
|                | YCEXL0855AAA    |
|                | YCEXL0855AAB    |
| Deere          | YJDXL06.8012    |
|                | YJDXL08.1007    |
|                | YJDXL08.1008    |
|                | YJDXL10.5022    |

## Model Year 2000 Engines Continued

| Manufacturer               | Engine Families |
|----------------------------|-----------------|
| Detroit Diesel Corporation | YDDXL08.5TJD    |
|                            | YDDXL11.1THD    |
|                            | YDDXL12.1TFE    |
|                            | YDDXL12.1TFM    |
|                            | YDDXL12.7TGD    |
|                            | YDDXL14.0TLD    |
|                            | YDDXL15.9TRE    |
|                            | YDDXL23.9TRE    |
|                            | YDDXL31.8VRE    |
|                            | YDDXL65.0VTE    |
| Deutz AG                   | YDZXL02.7014    |
|                            | YDZXL07.1004    |
|                            | YDZXL07.1005    |
|                            | YDZXL15.9002    |
|                            | YDZXL15.9003    |
|                            | YDZXL17.5001    |
| Genrac                     | YGNXL13.3HAA    |
|                            | YGNXL13.3HTA    |
|                            | YGNXL16.0MAA    |
| Komatsu                    | YKLXL0505ACA    |
|                            | YKLXL11.0DB1    |
|                            | YKLXL11.0DC1    |
|                            | YKLXL15.2EC1    |
|                            | YKLXL23.2FC1    |
|                            | YKLXL23.2FC2    |
|                            | YKLXL30.5GC1    |
|                            | YKLXL7.15CB1    |
|                            | YKLXL7.15CC1    |
| Navistar                   | YNVXL0466ANA    |
|                            | YNVXL0530ANA    |
|                            | YNVXL0530ANB    |
|                            | YNVXL0530ANC    |
|                            | YNVXL0530AND    |
| VM Motori                  | YV5XI02.1R3V    |
|                            | YV5XL02.8R2T    |

## Model Year 2001 Engines

| Manufacturer   | Engine Families |
|----------------|-----------------|
| AB Volvo Penta | 1VPXL07.3ABB    |
|                | 1VPXL07.3ACB    |
|                | 1VPXL09.6ACB    |
|                | 1VPXL12.1ACB    |
| Case           | 1X9XL0239ACA    |
|                | 1X9XL0239ADA    |
|                | 1X9XL0359ABA    |
|                | 1X9XL0359ABB    |
|                | 1X9XL0505ABA    |
|                | 1X9XL0505ABB    |
|                | 1X9XL0505ACA    |
| Caterpillar    | 1CPXL07.0MRB    |
|                | 1CPXL10.5MRD    |
|                | 1CPXL10.5MRG    |
|                | 1CPXL12.0ESK    |
|                | 1CPXL14.6ESK    |
|                | 1CPXL15.8ESK    |
|                | 1CPXL18.0HRN    |
|                | 1CPXL27.0HRK    |
|                | 1CPXL27.0MRS    |
|                | 1CPXL27.0MRT    |
|                | 1CPXL34.5ERK    |
|                | 1CPXL78.1ERK    |
| Cummins        | 1CEXL03.3AAA    |
|                | 1CEXL03.3AAB    |
|                | 1CEXL015.AAA    |
|                | 1CEXL015.ABA    |
|                | 1CEXL019.AAB    |
|                | 1CEXL0239ACA    |
|                | 1CEXL0239ADA    |
|                | 1CEXL030.ABA    |
|                | 1CEXL0359ABA    |
|                | 1CEXL0359ABB    |
|                | 1CEXL0359ABC    |
|                | 1CEXL0359ABD    |
|                | 1CEXL050.ABA    |
|                | 1CEXL0505ABA    |
|                | 1CEXL0505ABB    |
|                | 1CEXL0505ACA    |
|                | 1CEXL0505ACE    |
|                | 1CEXL0661AAA    |
|                | 1CEXL0661AAD    |

# Model Year 2001 Engines Continued

| Manufacturer               | Engine Families |
|----------------------------|-----------------|
| Cummins continued          | 1CEXL060.ABA    |
| Daewoo                     | 1DWXL2.37ANT    |
|                            | 1DWXL03.3AMN    |
|                            | 1DWXL03.3BMA    |
|                            | 1DWXL03.3LMN    |
|                            | 1DWXL05.8AOA    |
|                            | 1DWXL05.8ARN    |
|                            | 1DWXL08.1ACN    |
|                            | 1DWXL11.1BIA    |
|                            | 1DWXL14.6AZA    |
|                            | 1DWXL14.6CVT    |
|                            | 1DWXL18.3ASA    |
|                            | 1DWXL21.9AYA    |
| Detroit Diesel Corporation | 1DDXL08.5TJD    |
|                            | 1DDXL08.5YJD    |
|                            | 1DDXL12.7VGD    |
|                            | 1DDXL14.0VLD    |
|                            | 1DDXL14.0WLD    |
|                            | 1DDXL15.9WRE    |
|                            | 1DDXL23.9WRE    |
|                            | 1DDXL31.8XRE    |
|                            | 1DDXL65.0XTE    |
| Deere                      | 1JDXL06.8012    |
|                            | 1JDXL06.8038    |
|                            | 1JDXL06.8039    |
|                            | 1JDXL08.1007    |
|                            | 1JDXL08.1008    |
|                            | 1JDXL08.1036    |
|                            | 1JDXL08.1037    |
| Deutz                      | 1DZXL02.7014    |
|                            | 1DZXL02.7015    |
|                            | 1DDXL08.5TJD    |
|                            | 1DDXL08.5YJD    |
|                            | 1DZXL07.1005    |
|                            | 1DZXL15.9002    |
|                            | 1DZXL15.9003    |
| Generac                    | 1GNXL04.0HAA    |
|                            | 1GNXL04.0HNA    |
|                            | 1GNXL05.0FAA    |
| Isuzu                      | 1SZXL06.5BTA    |
|                            | 1SZXL09.8EXA    |
|                            | 1SZXL15.7ETA    |
|                            | 1SZXL15.7EXA    |

# Model Year 2001 Engines Continued

| Manufacturer  | Engine Families |
|---------------|-----------------|
| International | 1NVXL0530ANC    |
|               | 1NVXL0530AND    |
|               | 1NVXL0530ANF    |
| Komatsu       | 1KLXL0239ACA    |
|               | 1KLXL0239ADA    |
|               | 1KLXL0359ABA    |
|               | 1KLXL0359ABC    |
|               | 1KLXL0505ABB    |
|               | 1KLXL0505ACA    |
|               | 1KLXL03.3JA1    |
|               | 1KLXL03.3JB1    |
|               | 1KLXL7.15CB1    |
|               | 1KLXL7.15CC1    |
|               | 1KLXL11.0DD3    |
|               | 1KLXL15.2EC3    |
|               | 1KLXL30.5GC1    |
|               | 1KLXL30.5GD1    |
| Mitsubishi    | 1MTXL07.5D6A    |
|               | 1MTXL07.5D6C    |
|               | 1MTXL11.9D6A    |

## Model Year 2002 Engines

| Manufacturer | Engine Families |
|--------------|-----------------|
| Case         | 2X9XL0239ACA    |
|              | 2X9XL0239ADA    |
|              | 2X9XL0359ABA    |
|              | 2X9XL0359ABB    |
|              | 2X9XL0359ABE    |
|              | 2X9XL0505ABA    |
|              | 2X9XL0505ABB    |
|              | 2X9XL0505ABD    |
|              | 2X9XL0505ACA    |
| Caterpillar  | 2CPXL07.0MRB    |
|              | 2CPXL10.5MRD    |
|              | 2CPXL10.5MRG    |
|              | 2CPXL27.0MRS    |
|              | 2CPXL27.0MRT    |
|              | 2CPXL34.5ERK    |
|              | 2CPXL78.1ERK    |
| Cummins      | 2CEXL03.3AAA    |
|              | 2CEXL03.3AAB    |
|              | 2CEXL015.AAA    |
|              | 2CEXL015.AAB    |
|              | 2CEXL015.ABA    |
|              | 2CEXL019.AAB    |
|              | 2CEXL0239ACA    |
|              | 2CEXL0239ADA    |
|              | 2CEXL0359ABA    |
|              | 2CEXL0359ABB    |
|              | 2CEXL0359ABC    |
|              | 2CEXL0359ABE    |
|              | 2CEXL0505ABA    |
|              | 2CEXL0505ABB    |
|              | 2CEXL0505ABD    |
|              | 2CEXL0505ACA    |
|              | 2CEXL0505ACB    |
|              | 2CEXL0505ACE    |
|              | 2CEXL060.ABA    |
|              | 2CEXL0661AAA    |
|              | 2CEXL0661AAD    |

## Model Year 2002 Engines Continued

| Manufacturer   | Engine Families |
|----------------|-----------------|
| Detroit Diesel | 2DDXL08.5TJD    |
|                | 2DDXL08.5YJD    |
|                | 2DDXL12.7VGD    |
|                | 2DDXL14.0VLD    |
|                | 2DDXL31.8XRE    |
|                | 2DDXL65.0XTE    |
|                |                 |
| Deere          | 2JDXL06.8012    |
|                | 2JDXL06.8014    |
|                | 2JDXL06.8038    |
|                | 2JDXL06.8039    |
|                | 2JDXL06.8041    |
|                | 2JDXL06.8044    |
|                | 2JDXL06.8049    |
| Deutz AG       | 2JDXL08.1007    |
|                | 2JDXL08.1008    |
|                | 2JDXL08.1036    |
|                | 2JDXL08.1037    |
|                | 2DZXL02.7014    |
|                | 2DZXL02.7015    |
|                | 2DZXL05.7033    |
|                | 2DZXL07.1004    |
|                | 2DZXL07.1005    |
|                | 2DZXL07.1032    |
| Daewoo         | 2DZXL15.9002    |
|                | 2DZXL15.9003    |
|                | 2DWXL2.37ANT    |
|                | 2DWXL03.3AMN    |
|                | 2DWXL03.3BMA    |
|                | 2DWXL03.3LMN    |
|                | 2DWXL05.8AOA    |
|                | 2DWXL05.8ARN    |
|                | 2DWXL08.1ACN    |
|                | 2DWXL11.1BIA    |
| Generac        | 2DWXL14.6CVT    |
|                | 2DWXL21.9AYA    |
|                | 2GNXL04.0HAA    |
|                | 2GNXL04.0HNA    |
| Isuzu          | 2GNXL05.0FAA    |
|                | 2SZXL06.5BTA    |
|                | 2SZXL09.8EXA    |
|                | 2SZXL15.7ETA    |
|                | 2SZXL15.7EXA    |

## Model Year 2002 Engines Continued

| Manufacturer        | Engine Families |
|---------------------|-----------------|
| International Truck | 2NVXL0444ANA    |
|                     | 2NVXL0530ANC    |
|                     | 2NVXL0530AND    |
|                     | 2NVXL0530ANF    |
| Komatsu             | 2KLXL0239ACA    |
|                     | 2KLXL0239ADA    |
|                     | 2KLXL0359ABA    |
|                     | 2KLXL0359ABC    |
|                     | 2KLXL0505ABB    |
|                     | 2KLXL0505ABD    |
|                     | 2KLXL0505ACA    |
|                     | 2KLXL03.3JA1    |
|                     | 2KLXL03.3JB1    |
|                     | 2KLXL11.0DB1    |
|                     | 2KLXL11.0DD3    |
|                     | 2KLXL15.2EC3    |
|                     | 2KLXL30.5GC1    |
|                     | 2KLXL30.5GD1    |
|                     | 2KLXL46.3HC1    |
|                     | 2KLXL7.15CB1    |
|                     | 2KLXL7.15CC1    |
| Mitsubishi          | 2MTXL07.5D6A    |
|                     | 2MTXL07.5D6C    |
|                     | 2MTXL11.9D6A    |
|                     | 2MVXL24.5AAB    |
|                     | 2MVXL65.4ABA    |
|                     | 2MVXL65.4ABB    |
|                     | 2MVXL65.4ABC    |
| AB Volvo Penta      | 2VPXL07.3ABB    |
|                     | 2VPXL07.3ACB    |
|                     | 2VPXL09.6ACB    |
|                     | 2VPXL12.1ABA    |
|                     | 2VPXL12.1ACA    |
|                     | 2VPXL12.1ACB    |
| VM Motori           | 2V5XL02.8R2T    |

## Model Year 2003 Engines

| Manufacturer    | Engine Families |
|-----------------|-----------------|
| Caterpillar     | 3CPXL15.8ESK    |
|                 | 3CPXL18.0HRX    |
|                 | 3CPXL27.0MRS    |
|                 | 3CPXL27.0MRT    |
|                 | 3CPXL34.5ERK    |
|                 | 3CPXL58.6ERK    |
|                 | 3CPXL78.1ERK    |
| CNH Engine Corp | 3X9XL0239AAA    |
|                 | 3X9XL0239ABA    |
|                 | 3X9XL0359AAC    |
|                 | 3X9XL0359ABE    |
|                 | 3X9XL0505AAB    |
|                 | 3X9XL0505ABD    |
| Cummins         | 3CEXL015.AAB    |
|                 | 3CEXL015.ABA    |
|                 | 3CEXL023.AAA    |
|                 | 3CEXL0239AAD    |
|                 | 3CEXL0239AAF    |
|                 | 3CEXL0275AAA    |
|                 | 3CEXL0275AAB    |
|                 | 3CEXL030.ABA    |
|                 | 3CEXL0359AAB    |
|                 | 3CEXL0359AAC    |
|                 | 3CEXL0359ABC    |
|                 | 3CEXL0359ABE    |
|                 | 3CEXL050.ABA    |
|                 | 3CEXL0505ABD    |
|                 | 3CEXL0505ACB    |
|                 | 3CEXL060.ABA    |
|                 | 3CEXL0661AAD    |
|                 | 3CEXL078.AAB    |
| Daewoo Motors   | 3DWXL05.8COA    |
|                 | 3DWXL11.1DJA    |
|                 | 3DWXL21.9AYA    |

# Model Year 2003 Engines Continued

| Manufacturer        | Engine Families |
|---------------------|-----------------|
| Detroit Diesel      | 3DDXL08.5YJD    |
|                     | 3DDXL12.7VGD    |
|                     | 3DDXL14.0VLD    |
|                     | 3DDXL15.9WRE    |
|                     | 3DDXL31.8XRE    |
|                     | 3DDXL35.8GRP    |
|                     | 3DDXL65.0GTP    |
|                     | 3DDXL65.0XTE    |
| Deere               | 3JDXL06.8014    |
|                     | 3JDXL06.8038    |
|                     | 3JDXL06.8039    |
|                     | 3JDXL06.8041    |
|                     | 3JDXL06.8044    |
|                     | 3JDXL06.8048    |
|                     | 3JDXL06.8049    |
|                     | 3JDXL08.1037    |
| Deutz AG            | 3DZXL05.7033    |
|                     | 3DZXL06.1028    |
|                     | 3DZXL07.1032    |
|                     | 3DZXL15.9002    |
| Daewoo Heavy Ind.   | 3DWXL08.1CPA    |
|                     | 3DWXL18.3ASC    |
|                     | 3DWXL2.37ANT    |
| Isuzu               | 3SZXL09.8EXA    |
|                     | 3SZXL15.7ETA    |
|                     | 3SZXL15.7EXA    |
| International Truck | 3NVXL0530ANF    |
| Komatsu             | 3KLXL0239AAD    |
|                     | 3KLXL0239AAF    |
|                     | 3KLXL0359AAB    |
|                     | 3KLXL0359ABC    |
|                     | 3KLXL0505ABD    |
|                     | 3KLXL11.0DD3    |
|                     | 3KLXL15.2EC3    |
|                     | 3KLXL23.2FD4    |
|                     | 3KLXL30.5GC1    |
|                     | 3KLXL30.5GD1    |

# Model Year 2003 Engines Continued

| Manufacturer         | Engine Families |
|----------------------|-----------------|
| Lombardini Motori    | 3LBDL2.07CHT    |
| Mack Trucks          | 3MKXL11.9P69    |
| Mitsubishi Heavy Ind | 3MVXL24.5AAB    |
|                      | 3MVXL24.5ABA    |
|                      | 3MVXL24.5ABB    |
|                      | 3MVXL24.5ABD    |
|                      | 3MVXL24.5ABE    |
|                      | 3MVXL33.9ABA    |
|                      | 3MVXL33.9ABB    |
|                      | 3MVXL33.9ABD    |
|                      | 3MVXL33.9ABE    |
|                      | 3MVXL37.1ABA    |
|                      | 3MVXL37.1ABB    |
|                      | 3MVXL37.1ABC    |
|                      | 3MVXL37.1ABD    |
|                      | 3MVXL49.0ABA    |
|                      | 3MVXL49.0ABB    |
|                      | 3MVXL49.0ABC    |
|                      | 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    |

## Model Year 2004 Engines

| Manufacturer     | Engine Families |
|------------------|-----------------|
| Caterpillar      | 4CPXL15.8ERK    |
|                  | 4CPXL15.8ESK    |
|                  | 4CPXL18.0ESK    |
|                  | 4CPXL18.0HRX    |
|                  | 4CPXL27.0MRS    |
|                  | 4CPXL27.0MRT    |
|                  | 4CPXL34.5ERK    |
|                  | 4CPXL58.6ERK    |
|                  | 4CPXL78.1ERK    |
| CNH Engine Corp. | 4X9XL0239AAC    |
|                  | 4X9XL0359AAK    |
|                  | 4X9XL0359ABE    |
|                  | 4X9XL0505AAB    |
|                  | 4X9XL0505ABD    |
| Cummins          | 4CEXL015.AAB    |
|                  | 4CEXL015.ABA    |
|                  | 4CEXL023.AAA    |
|                  | 4CEXL0239AAD    |
|                  | 4CEXL0239AAF    |
|                  | 4CEXL0239AAG    |
|                  | 4CEXL0275AAB    |
|                  | 4CEXL0275AAC    |
|                  | 4CEXL0275AAF    |
|                  | 4CEXL03.3ABA    |
|                  | 4CEXL03.3ABB    |
|                  | 4CEXL030.ABA    |
|                  | 4CEXL0359AAB    |
|                  | 4CEXL0359AAC    |
|                  | 4CEXL0359AAD    |
|                  | 4CEXL0359AAE    |
|                  | 4CEXL0359AAF    |
|                  | 4CEXL0359AAH    |
|                  | 4CEXL0359ABC    |
|                  | 4CEXL0359ABE    |
|                  | 4CEXL050.ABA    |
|                  | 4CEXL0505ABD    |
|                  | 4CEXL0505ACB    |
|                  | 4CEXL060.ABA    |
|                  | 4CEXL0661AAD    |
|                  | 4CEXL078.AAB    |
|                  | 4CEXL2.28A41    |
|                  | 4CEXL2.28A42    |

## Model Year 2004 Engines Continued

| Manufacturer   | Engine Families |
|----------------|-----------------|
| Detroit Diesel | 4DDXL08.5YJD    |
|                | 4DDXL12.7VGD    |
|                | 4DDXL14.0VLD    |
|                | 4DDXL23.9WRE    |
|                | 4DDXL31.8XRE    |
|                | 4DDXL35.8GRP    |
|                | 4DDXL65.0GTP    |
|                | 4DDXL65.0XTE    |
|                | 4DDXL90.0XTP    |
| Deere          | 4JDXL03.0064    |
|                | 4JDXL06.8038    |
|                | 4JDXL06.8041    |
|                | 4JDXL06.8048    |
|                | 4JDXL06.8049    |
|                | 4JDXL08.1037    |
| Deutz AG       | 4DZXL03.1039    |
|                | 4DZXL03.1040    |
|                | 4DZXL03.1041    |
|                | 4DZXL05.7033    |
|                | 4DZXL06.1038    |
|                | 4DZXL06.5036    |
|                | 4DZXL06.5037    |
|                | 4DZXL06.5042    |
|                | 4DZXL06.5043    |
|                | 4DZXL07.1032    |
|                | 4DZXL15.9002    |
| Daewoo         | 4DZXL71.0021    |
|                | 4DWXL05.8COA    |
|                | 4DWXL05.8CRN    |
|                | 4DWXL08.1CPA    |
|                | 4DWXL11.1BIA    |
|                | 4DWXL11.1DJA    |
|                | 4DWXL18.3ASC    |
|                | 4DWXL2.37ANT    |
|                | 4DWXL21.9AYA    |
| Isuzu          | 4SZXL03.1GTB    |
|                | 4SZXL06.5FXG    |
|                | 4SZXL15.7ETA    |
|                | 4SZXL15.7EXA    |

# Model Year 2004 Engines Continued

| Manufacturer             | Engine Families |
|--------------------------|-----------------|
| International Truck      | 4NVXL0530ANF    |
| Iveco                    | 4VEXL05.9DGS    |
|                          | 4VEXL12.9GEN    |
| Kubota                   | 4KBXL03.3ACD    |
|                          | 4KBXL03.3BAC    |
|                          | 4KBXL03.3BCC    |
|                          | 4KBXL03.8ACD    |
| Komatsu                  | 4KLXL0239AAD    |
|                          | 4KLXL0239AAF    |
|                          | 4KLXL0239ADA    |
|                          | 4KLXL0275AAC    |
|                          | 4KLXL03.3JA3    |
|                          | 4KLXL03.3JB3    |
|                          | 4KLXL03.3JD3    |
|                          | 4KLXL0359AAB    |
|                          | 4KLXL0359AAE    |
|                          | 4KLXL0359ABC    |
|                          | 4KLXL0505ABD    |
|                          | 4KLXL11.0DD3    |
|                          | 4KLXL15.2EC3    |
|                          | 4KLXL23.2FD4    |
|                          | 4KLXL30.5GC1    |
|                          | 4KLXL30.5GD1    |
| MACK Trucks              | 4MKXL11.9P69    |
|                          | 4MKXL11.9P72    |
| MOTORENFABRIK<br>HATZ    | 4HZXL3.43C42    |
|                          | 4HZXL3.43V42    |
| Mitsubishi Heavy<br>Ind. | 4MVXL05.0AAA    |
|                          | 4MVXL05.0AAD    |
|                          | 4MVXL24.5AAB    |
|                          | 4MVXL24.5ABA    |
|                          | 4MVXL24.5ABB    |
|                          | 4MVXL24.5ABD    |
|                          | 4MVXL24.5ABE    |
|                          | 4MVXL33.9ABB    |
|                          | 4MVXL33.9ABE    |
|                          | 4MVXL37.1ABB    |
|                          | 4MVXL37.1ABC    |
|                          | 4MVXL37.1ABD    |
|                          | 4MVXL49.0ABA    |
|                          | 4MVXL49.0ABB    |

# Model Year 2004 Engines Continued

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

## Model Year 2005 Engines

| Manufacturer     | Engine Families |
|------------------|-----------------|
| Caterpillar      | 5CPXL15.2ESK    |
|                  | 5CPXL15.8ERK    |
|                  | 5CPXL18.0ESK    |
|                  | 5CPXL27.0MRS    |
|                  | 5CPXL27.0MRT    |
|                  | 5CPXL34.5ERK    |
|                  | 5CPXL58.6ERK    |
|                  | 5CPXL78.1ERK    |
| CNH Engine Corp. | 5X9XL0239AAC    |
|                  | 5X9XL0359AAK    |
|                  | 5X9XL0359ABE    |
|                  | 5X9XL0505AAB    |
|                  | 5X9XL0505ABD    |
|                  | 5X9XL0540AAB    |
| Cummins          | 5CEXL015.AAB    |
|                  | 5CEXL015.ABA    |
|                  | 5CEXL019.AAB    |
|                  | 5CEXL023.AAA    |
|                  | 5CEXL0239AAD    |
|                  | 5CEXL0239AAF    |
|                  | 5CEXL0239AAG    |
|                  | 5CEXL0275AAB    |
|                  | 5CEXL0275AAC    |
|                  | 5CEXL0275AAF    |
|                  | 5CEXL03.3ABA    |
|                  | 5CEXL03.3ABB    |
|                  | 5CEXL030.ABA    |
|                  | 5CEXL0359AAB    |
|                  | 5CEXL0359AAC    |
|                  | 5CEXL0359AAD    |
|                  | 5CEXL0359AAE    |
|                  | 5CEXL0359AAF    |
|                  | 5CEXL0359AAH    |
|                  | 5CEXL0359ABC    |
|                  | 5CEXL0359ABE    |
|                  | 5CEXL0409AAB    |
|                  | 5CEXL0409AAC    |
|                  | 5CEXL050.ABA    |
|                  | 5CEXL0505AAE    |
|                  | 5CEXL0505ABD    |
|                  | 5CEXL0505ACB    |

## Model Year 2005 Engines (Continued)

| Manufacturer               | Engine Families |
|----------------------------|-----------------|
| Cummins                    | 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                      | 5JDXL04.5083    |
|                            | 5JDXL06.8038    |
|                            | 5JDXL06.8041    |
|                            | 5JDXL06.8048    |
|                            | 5JDXL06.8049    |
|                            | 5JDXL06.8078    |
|                            | 5JDXL06.8101    |
|                            | 5JDXL08.1037    |
|                            | 5JDXL08.1059    |
|                            | 5JDXL09.0102    |
| Deutz                      | 5DZXL03.1039    |
|                            | 5DZXL03.1040    |
|                            | 5DZXL05.7033    |
|                            | 5DZXL06.1038    |
|                            | 5DZXL06.5036    |
|                            | 5DZXL06.5037    |
|                            | 5DZXL06.5042    |
|                            | 5DZXL06.5043    |
|                            | 5DZXL07.1032    |
|                            | 5DZXL15.9002    |
|                            | 5DZXL71.0021    |
| Daewoo Heavy Ind.          | 5DWXL08.1CPA    |
|                            | 5DWXL18.3ASC    |
|                            | 5DWXL21.9AYA    |
| MotorenFabrik HATZ GMBH    | 5HZXL3.43C42    |

# Model Year 2005 Engines (Continued)

| Manufacturer                | Engine Families |
|-----------------------------|-----------------|
| Isuzu                       | 5SZXL03.1GTB    |
|                             | 5SZXL04.3GTG    |
|                             | 5SZXL06.5FXG    |
|                             | 5SZXL09.8EXA    |
|                             | 5SZXL15.7ETA    |
|                             | 5SZXL15.7EXA    |
| Iveco                       | 5VEXL05.9DGS    |
|                             | 5VEXL06.7DGA    |
|                             | 5VEXL12.9GEN    |
| Komatsu                     | 5KLXL0239AAD    |
|                             | 5KLXL0239AAF    |
|                             | 5KLXL0239ADA    |
|                             | 5KLXL0275AAC    |
|                             | 5KLXL03.3JA3    |
|                             | 5KLXL03.3JB3    |
|                             | 5KLXL03.3JD3    |
|                             | 5KLXL0359AAB    |
|                             | 5KLXL0359AAE    |
|                             | 5KLXL0359AAL    |
|                             | 5KLXL0359ABC    |
|                             | 5KLXL0409AAB    |
|                             | 5KLXL0409AAC    |
|                             | 5KLXL0505ABD    |
| Komatsu                     | 5KLXL23.2FD4    |
|                             | 5KLXL30.5GC1    |
|                             | 5KLXL30.5GD1    |
| Kubota                      | 5KBXL03.3BAC    |
|                             | 5KBXL03.3BCC    |
| KUKJ                        | 5KMCL2.28A41    |
|                             | 5KMCL2.28A42    |
| Lombardini Motori           | 5LBDL2.19CHT    |
| Mitsubishi Heavy Industries | 5MVXL05.0AAA    |
|                             | 5MVXL05.0AAC    |
|                             | 5MVXL05.0AAD    |
|                             | 5MVXL24.5ABB    |
|                             | 5MVXL33.9ABB    |
|                             | 5MVXL37.1ABC    |
|                             | 5MVXL49.0ABD    |
|                             | 5MVXL65.4ABB    |
|                             | 5MVXL65.4ABH    |

# Model Year 2005 Engines (Continued)

| Manufacturer        | Engine Families |
|---------------------|-----------------|
| MITF                | 5MFTL07.5D6A    |
| MTU-Friedrichshafen | 5MTUL21.9R2A    |
| Nissan Diesel       | 5NDXL02.7TNA    |
|                     | 5NDXL03.0FTA    |
| 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              | 5YDXL3.05M4N    |
|                     | 5YDXL3.32J4N    |
|                     | 5YDXL3.32J4T    |
|                     | 5YDXL3.32K4N    |
|                     | 5YDXL3.32K4T    |
|                     | 5YDXL4.41K4T    |

## 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    |
|                  | 6X9XL0359AAM    |
|                  | 6X9XL0359ABE    |
|                  | 6X9XL0505ABD    |
|                  | 6X9XL0540AAB    |
| Cummins          | 6CEXK0505AAE    |
|                  | 6CEXL015.AAB    |
|                  | 6CEXL019.AAB    |
|                  | 6CEXL019.AAC    |
|                  | 6CEXL023.AAA    |
|                  | 6CEXL0239AAD    |
|                  | 6CEXL0239AAF    |
|                  | 6CEXL0239AAG    |
|                  | 6CEXL0275AAB    |
|                  | 6CEXL0275AAC    |
|                  | 6CEXL0275AAG    |
|                  | 6CEXL0275AAH    |
|                  | 6CEXL030.AAB    |
|                  | 6CEXL030.AAD    |
|                  | 6CEXL030.ABA    |
|                  | 6CEXL03.3ABC    |
|                  | 6CEXL0359AAB    |
|                  | 6CEXL0359AAC    |
|                  | 6CEXL0359AAD    |
|                  | 6CEXL0359AAF    |
|                  | 6KLXL0359AAL    |
|                  | 6CEXL0359AAN    |
|                  | 6CEXL0359ABC    |
|                  | 6CEXL0359ABE    |

## Model Year 2006 Engines (Continued)

| Manufacturer    | Engine Families |
|-----------------|-----------------|
| Cummins (cont.) | 6CEXL0409AAB    |
|                 | 6CEXL0409AAC    |
|                 | 6CEXL050.AAD    |
|                 | 6CEXL050.ABA    |
|                 | 6CEXL0505ABD    |
|                 | 6CEXL0540AAB    |
|                 | 6CEXL060.AAD    |
|                 | 6CEXL078.AAB    |
| DAIMLERCHRYSLER | 6MBXL7.20RJA    |
|                 | 6MBXL12.8RJB    |
| Deere           | 6JDXL03.0064    |
|                 | 6JDXL04.5083    |
|                 | 6JDXL06.8038    |
|                 | 6JDXL06.8041    |
|                 | 6JDXL06.8048    |
|                 | 6JDXL06.8049    |
|                 | 6JDXL06.8078    |
|                 | 6JDXL08.1037    |
|                 | 6JDXL12.5035    |
|                 | 6JDXL12.5073    |
|                 | 6DDXL31.8XRR    |
| Deutz           | 6DZXL06.1038    |
|                 | 6DZXL06.1028    |
|                 | 6DZXL05.7033    |
|                 | 6DZXL06.5036    |
|                 | 6DZXL06.5037    |
|                 | 6DZXL06.5042    |
|                 | 6DZXL03.1066    |
|                 | 6DZXL03.1039    |
|                 | 6DZXL03.1040    |
| Isuzu           | 6SZXL04.3GTG    |
|                 | 6SZXL06.5FXG    |
|                 | 6SZXL05.2HXA    |
|                 | 6SZXL05.2IXA    |
|                 | 6SZXL07.8HXA    |
|                 | 6SZXL15.7HXA    |

Model Year 2006 Engines (Continued)

| <b>Manufacturer</b>                 | <b>Engine Families</b> |
|-------------------------------------|------------------------|
| IVECO                               | 6VEXL04.5DGT           |
|                                     | 6VEXL04.5DGN           |
|                                     | 6VEXL06.7DGA           |
|                                     | 6VEXL06.7DGB           |
|                                     | 6VEXL06.7DGS           |
| Komatsu                             | 6KLXL0239AAD           |
|                                     | 6KLXL0239AAF           |
|                                     | 6KLXL0239ADA           |
|                                     | 6KLXL0275AAC           |
|                                     | 6KLXL0275AAG           |
|                                     | 6KLXL0275AAH           |
|                                     | 6KLXL03.3JD3           |
|                                     | 6KLXL0359AAB           |
|                                     | 6KLXL0359AAE           |
|                                     | 6KLXL0359AAL           |
|                                     | 6KLXL0359ABC           |
|                                     | 6KLXL0409AAB           |
|                                     | 6KLXL0409AAC           |
|                                     | 6KLXL0505ABD           |
| Kubota                              | 6KBXL03.3CCD           |
| Mitsubishi Fuso<br>Truck & Bus Corp | 6MFTL05.8D3A           |
| Mitsubishi Heavy<br>Industries      | 6MVXL05.0AAA           |
|                                     | 6MVXL05.0AAD           |
|                                     | 6MVXL05.0DDD           |
|                                     | 6MVXL06.4DDD           |
|                                     | 6MVXL06.4EEE           |
| MotorenFabrik<br>HATZ GMBH          | 6HZXL3.43C42           |
|                                     | 6HZXL3.43V42           |
| Nissan                              | 6NDXL03.0FTA           |
| VMMI                                | 6V5XL04.2G5V           |
| Yanmar                              | 6YDXL3.32J4T           |
|                                     | 6YDXL3.32K4T           |
|                                     | 6YDXL4.41K4T           |

## Model Year 2007 Engines

| Manufacturer     | Engine Families |
|------------------|-----------------|
| AB Volvo Penta   | 7VPXL09.4BAA    |
|                  | 7VPXL12.1BAA    |
|                  | 7VPXL16.1ACB    |
| 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    |
|                  | 7NHXL06.7DAA    |
|                  | 7NHXL06.7DCA    |
|                  | 7NHXL06.7DCB    |
|                  | 7NHXL06.7DTA    |
|                  | 7NHXL06.7DTC    |
| Cummins          | 7CEXL015.AAA    |
|                  | 7CEXL015.AAB    |
|                  | 7CEXL015.AAE    |
|                  | 7CEXL019.AAD    |
|                  | 7CEXL023.AAA    |
|                  | 7CEXL0239AAG    |
|                  | 7CEXL0275AAC    |
|                  | 7CEXL0275AAG    |
|                  | 7CEXL0275AAH    |
|                  | 7CEXL03.3ABA    |
|                  | 7CEXL03.3ABB    |
|                  | 7CEXL03.3ACA    |
|                  | 7CEXL03.3ACB    |
|                  | 7CEXL030.AAB    |
|                  | 7CEXL030.AAD    |

## Model Year 2007 Engines (Continued)

| Manufacturer    | Engine Families |
|-----------------|-----------------|
| Cummins (cont.) | 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           | 7JDXL03.0064    |
|                 | 7JDXL04.5075    |
|                 | 7JDXL04.5076    |
|                 | 7JDXL04.5081    |
|                 | 7JDXL04.5083    |
|                 | 7JDXL06.8038    |
|                 | 7JDXL06.8039    |
|                 | 7JDXL06.8041    |
|                 | 7JDXL06.8044    |
|                 | 7JDXL06.8048    |
|                 | 7JDXL06.8049    |
|                 | 7JDXL06.8078    |
|                 | 7JDXL06.8080    |
|                 | 7JDXL06.8084    |
|                 | 7JDXL06.8101    |
|                 | 7JDXL06.8104    |
|                 | 7JDXL06.8105    |
|                 | 7JDXL06.8106    |
|                 | 7JDXL08.1037    |
|                 | 7JDXL09.0102    |
|                 | 7JDXL12.5035    |
|                 | 7JDXL12.5073    |

Model Year 2007 Engines (Continued)

| Manufacturer                    | Engine Families |
|---------------------------------|-----------------|
| 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    |
|                                 | 7DZXL07.1051    |
|                                 | 7DZXL07.1053    |
|                                 | 7DZXL07.1055    |
|                                 | 7DZXL15.9065    |
| Doosan Infracore                | 7DWXL05.8CRN    |
|                                 | 7DWXL05.8UTA    |
|                                 | 7DWXL07.6UPA    |
|                                 | 7DWXL11.0UJA    |
|                                 | 7DWXL21.9UYA    |
| GNH UK LTD                      | 7NHXL06.7DCC    |
| Hino Motors                     | 7HMXL05.1JTA    |
|                                 | 7HMXL07.7JTM    |
|                                 | 7HMXL10.5PUN    |
| Ishikawajima-Shibaura Machinery | 7H3XL2.22N4L    |
| Isuzu                           | 7SZXL03.0IXA    |
|                                 | 7SZXL03.1GNA    |
|                                 | 7SZXL03.1GNB    |
|                                 | 7SZXL03.1GTB    |
|                                 | 7SZXL04.3GTG    |
|                                 | 7SZXL04.3GXA    |
|                                 | 7SZXL05.2HXA    |
|                                 | 7SZXL05.2IXA    |
|                                 | 7SZXL07.8HXA    |
|                                 | 7SZXL07.8HXB    |
|                                 | 7SZXL09.8HXA    |
|                                 | 7SZXL15.7HXA    |

Model Year 2007 Engines (Continued)

| Manufacturer | Engine Families |
|--------------|-----------------|
| IVECO        | 7VEXL03.9B1Z    |
|              | 7VEXL04.5DAA    |
|              | 7VEXL04.5DGN    |
|              | 7VEXL04.5DGT    |
|              | 7VEXL06.7DAA    |
|              | 7VEXL06.7DCA    |
|              | 7VEXL06.7DCB    |
|              | 7VEXL06.7DCC    |
|              | 7VEXL06.7DGB    |
|              | 7VEXL06.7DGS    |
|              | 7VEXL06.7DTA    |
|              | 7VEXL06.7DTC    |
|              | 7VEXL08.7TR3    |
|              | 7VEXL10.3MLR    |
|              | 7VEXL12.9IGR    |
|              | 7VEXL12.9MLR    |
|              | 7VEXL12.9TR3    |
|              | 7VEXL20.1DSL    |
| Komatsu      | 7KLXL0239ADA    |
|              | 7KLXL0275AAC    |
|              | 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                              | 7KBXL02.0FAD    |
|                                     | 7KBXL02.4HCD    |
|                                     | 7KBXL03.3BAC    |
|                                     | 7KBXL03.3BAD    |
|                                     | 7KBXL03.3BBB    |
|                                     | 7KBXL03.3BCC    |
|                                     | 7KBXL03.3BCD    |
|                                     | 7KBXL03.3CCD    |
|                                     | 7KBXL03.8AHD    |
| Lombardini S.R.L.                   | 7LBDL2.19CHT    |
| MAHINDRA &<br>MAHINDRA LTD.,        | 7MMLL03.1NEF    |
|                                     | 7MMLL03.2NEF    |
|                                     | 7MMLL03.2NET    |
|                                     | 7MMLL03.4NEF    |
|                                     | 7MMLL03.5NEF    |
| Mitsubishi Fuso<br>Truck & Bus Corp | 7MFTL02.8M4A    |
|                                     | 7MFTL04.9M5A    |
|                                     | 7MFTL07.5M6A    |
|                                     | 7MFTL12.9M7A    |
| Mitsubishi Heavy<br>Industries      | 7MVXL05.0AAA    |
|                                     | 7MVXL05.0AAC    |
|                                     | 7MVXL05.0AAD    |
|                                     | 7MVXL06.4FFF    |
|                                     | 7MVXL24.5BBA    |
|                                     | 7MVXL33.9BBA    |
|                                     | 7MVXL37.1BBA    |
|                                     | 7MVXL49.0BBA    |
|                                     | 7MVXL65.4BBA    |
| MotorenFabrik<br>HATZ GMBH          | 7HZXL2.57C41    |
|                                     | 7HZXL3.43C42    |
|                                     | 7HZXL3.43V42    |
| MTU Detroit Diesel,<br>Inc.         | 7MDDL31.8XRR    |
|                                     | 7MDDL95.4XTR    |
| Nissan                              | 7NDXL02.7TNA    |
|                                     | 7NDXL03.0FTA    |
|                                     | 7NDXL03.2TNA    |

Model Year 2007 Engines (Continued)

| Manufacturer                       | Engine Families |
|------------------------------------|-----------------|
| Perkins Engines                    | 7PKXL03.3DD1    |
|                                    | 7PKXL04.4NH1    |
|                                    | 7PKXL04.4RE1    |
|                                    | 7PKXL06.6PJ1    |
|                                    | 7PKXL06.6PJ2    |
|                                    | 7PKXL15.2TA2    |
|                                    | 7PKXL15.2TAG    |
|                                    | 7PKXL18.1TAG    |
| SCANIA CV AB                       | 7Y9XL11.7BBA    |
|                                    | 7Y9XL11.7BBB    |
|                                    | 7Y9XL15.6BDE    |
| Shandong Weichai<br>Huafeng Power  | 7SDWL4.33BBB    |
|                                    | 7SDWL7.52AAA    |
| Sisu Diesel                        | 7SIDL03.3G4A    |
|                                    | 7SIDL04.4J2A    |
|                                    | 7SIDL07.4G4D    |
|                                    | 7SIDL07.4G4E    |
|                                    | 7SIDL07.4G5B    |
|                                    | 7SIDL07.4G5C    |
|                                    | 7SIDL08.4H5B    |
| Volvo Construction<br>Equipment AB | 7VSXL09.4CE3    |
|                                    | 7VSXL12.1CE3    |
|                                    | 7VSXL16.1CE3    |
| Yanmar                             | 7YDXL3.05M4N    |
|                                    | 7YDXL3.05P4N    |
|                                    | 7YDXL3.32J4N    |
|                                    | 7YDXL3.32J4T    |
|                                    | 7YDXL3.32K4T    |
|                                    | 7YDXL3.32P4N    |
|                                    | 7YDXL4.41K4T    |

## 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    |

## 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    |
|              | 8CEXL03.3ACD    |
|              | 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    |

Model Year 2008 Engines (Continued)

| Manufacturer     | Engine Families |
|------------------|-----------------|
| DAIMLERCHRYSLER  | 8MBXL07.2RJA    |
|                  | 8MBXL12.8RJB    |
|                  | 8MBXL15.9RJA    |
| Deutz            | 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    |
|                  | 8DZXL07.1051    |
|                  | 8DZXL07.1053    |
|                  | 8DZXL07.1055    |
|                  | 8DZXL07.1056    |
|                  | 8DZXL15.9065    |
| DOOSAN INFRACORE | 8DWXL05.8UTA    |
|                  | 8DWXL07.6UPA    |
|                  | 8DWXL11.0UJA    |
|                  | 8DWXL21.9UYA    |
| HINO MOTORS      | 8HMXL05.1JTA    |

Model Year 2008 Engines (Continued)

| Manufacturer      | Engine Families |
|-------------------|-----------------|
| 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    |
| IVECO             | 8VEXL03.2TAI    |
|                   | 8VEXL03.2TCE    |
|                   | 8VEXL03.2TCI    |
|                   | 8VEXL04.5DAA    |
|                   | 8VEXL04.5DAB    |
|                   | 8VEXL04.5DCA    |
|                   | 8VEXL04.5DCB    |
|                   | 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 | 8JDXL03.0064    |
|                  | 8JDXL03.0208    |
|                  | 8JDXL04.5075    |
|                  | 8JDXL04.5083    |
|                  | 8JDXL04.5107    |
|                  | 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    |
| Komatsu          | 8KLXL0275AAG    |
|                  | 8KLXL0275AAH    |
|                  | 8KLXL03.3JA6    |
|                  | 8KLXL03.3JB6    |
|                  | 8KLXL03.3JD6    |
|                  | 8KLXL03.3JD7    |
|                  | 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    |

Model Year 2008 Engines (Continued)

| Manufacturer        | Engine Families |
|---------------------|-----------------|
| Kubota              | 8KBXL02.4FAD    |
|                     | 8KBXL02.4HAD    |
|                     | 8KBXL02.6EAD    |
|                     | 8KBXL03.3CAD    |
|                     | 8KBXL03.6BAC    |
|                     | 8KBXL03.6BAD    |
|                     | 8KBXL03.6BCD    |
|                     | 8KBXL03.6DAD    |
|                     | 8KBXL03.8AAC    |
|                     | 8KBXL03.8AGD    |
| Kukje Machinery     | 8KMCL2.28A41    |
| M/S. SIMPSON & C.   | 8SCLL02.7V50    |
| Liebherr Machines   | 8LHAL10.5LPA    |
|                     | 8LHAL10.5LPE    |
|                     | 8LHAL12.0KPA    |
|                     | 8LHAL12.8RMC    |
|                     | 8LHAL24.2VCE    |
|                     | 8LHAL9.54SPA    |
| Liebherr Werk       | 8LHAL21.9VMR    |
| Mitsubishi          | 8MVXL02.5HHH    |
|                     | 8MVXL03.3AAC    |
|                     | 8MVXL04.2BBB    |
|                     | 8MVXL04.2CCC    |
|                     | 8MVXL05.0AAD    |
|                     | 8MVXL05.0AAG    |
|                     | 8MVXL06.4FFF    |
|                     | 8MVXL24.5BBA    |
|                     | 8MVXL33.9BBA    |
|                     | 8MVXL37.1BBA    |
| MAHINDRA & MAHINDRA | 8MVXL49.0BBA    |
|                     | 8MVXL65.4BBA    |
|                     | 8MMLL02.5N52    |
|                     | 8MMLL02.5N57    |
|                     | 8MMLL02.5N59    |
|                     | 8MMLL02.5N62    |
|                     | 8MMLL02.5N64    |
|                     | 8MMLL02.7M30    |
|                     | 8MMLL03.3N75    |
|                     | 8MMLL03.3N79    |

## 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    | 8PKXL04.4NH1    |
|                    | 8PKXL04.4NJ1    |
|                    | 8PKXL04.4NJ2    |
|                    | 8PKXL04.4NM1    |
|                    | 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    |

## 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    |

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    |

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    |
| HINO MOTORS      | 9HMXL04.0NUA    |
|                  | 9HMXL05.1JTA    |
|                  | 9HMXL07.7JTM    |
|                  | 9HMXL10.5PUN    |
|                  | 9HMXL10.5PUP    |
|                  | 9HXML12.9EUV    |

Model Year 2009 Engines (Continued)

| Manufacturer      | Engine Families |
|-------------------|-----------------|
| 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    |
| JCB Power Systems | 9JCBL04.4TA7    |
|                   | 9JCBL04.4TA8    |
|                   | 9JCBL04.4TAE    |
|                   | 9JCBL04.4TC6    |

Model Year 2009 Engines (Continued)

| Manufacturer     | Engine Families |
|------------------|-----------------|
| 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    |
| 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    |

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    |

## Model Year 2010 Engines

| Manufacturer     | Engine Families |
|------------------|-----------------|
| Cummins          | ACEXL0275AAG    |
|                  | ACEXL0275AAH    |
|                  | ACEXL0275AAK    |
|                  | ACEXL0409AAB    |
|                  | ACEXL0409AAC    |
|                  | ACEXL0409AAD    |
|                  | ACEXL0505AAE    |
|                  | ACEXL078.AAA    |
|                  | ACEXL060.AAD    |
|                  | ACEXL060.AAB    |
|                  | ACEXL050.AAA    |
|                  | ACEXL050.ABA    |
|                  | ACEXL050.AAD    |
|                  | ACEXL050.AAF    |
|                  | ACEXL019.AAD    |
|                  | ACEXL050.AAC    |
|                  | ACEXL0540AAB    |
|                  | ACEXL0540AAC    |
|                  | ACEXL0540AAD    |
|                  | ACEXL015.AAE    |
|                  | ACEXL015.AAH    |
|                  | ACEXL015.AAJ    |
|                  | ACEXL030.AAB    |
|                  | ACEXL030.AAD    |
|                  | ACEXL030.ABA    |
|                  | ACEXL045.AAA    |
|                  | ACEXL0661AAF    |
|                  | ACEXL0661AAG    |
|                  | ACEXL0661AAH    |
|                  | ACEXL0661AAJ    |
|                  | ACEXL023.AAA    |
|                  | ACEXL023.AAB    |
|                  | ACEXL023.AAC    |
|                  | ACEXL03.3ACA    |
|                  | ACEXL03.3ACB    |
|                  | ACEXL03.3ACD    |
|                  | ACEXL03.3ACE    |
| Doosan Infracore | ADICL05.8UTA    |
|                  | ADICL11.0UJA    |

## Model Year 2010 Engines (Continued)

| Manufacturer      | Engine Families |
|-------------------|-----------------|
| John Deere Power  | AJDXL02.9050    |
|                   | 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    |
|                   | AJDXL08.1037    |
|                   | AJDXL09.0114    |
| Komatsu, Ltd.     | AKLXL050.AAA    |
|                   | AKLXL050.AAC    |
|                   | AKLXL060.AAA    |
|                   | AKLXL060.AAB    |
|                   | AKLXL078.AAA    |
|                   | AKLXL0275AAG    |
|                   | AKLXL0275AAH    |
|                   | AKLXL0409AAB    |
|                   | AKLXL0409AAC    |
|                   | AKLXL0505AAE    |
|                   | AKLXL03.3JA6    |
|                   | AKLXL03.3JB6    |
|                   | AKLXL03.3JD6    |
|                   | AKLXL03.3JD8    |
|                   | AKLXL03.3JD9    |
|                   | AKLXL30.5GD3    |
|                   | AKLXL23.2FD5    |
|                   | AKLXL23.2FD6    |
|                   | AKLXL23.2FD7    |
| Liebherr Machines | ALHAL10.5LPA    |
|                   | ALHAL12.0KPA    |

## Model Year 2010 Engines (Continued)

| Manufacturer       | Engine Families |
|--------------------|-----------------|
| Mitsubishi         | AMVXL03.3AAH    |
|                    | AMVXL04.2BBB    |
|                    | AMVXL04.2CCC    |
|                    | AMVXL05.0AAD    |
|                    | AMVXL05.0AAG    |
|                    | AMVXL06.5FFF    |
|                    | AMVXL24.5BBA    |
|                    | AMVXL33.9BBA    |
|                    | AMVXL37.1BBA    |
|                    | AMVXL49.0BBA    |
|                    | AMVXL65.4BBA    |
| MTU Detroit Diesel | AMDDL31.8XRR    |
| Perkins Engines    | APKXL06.6PJ2    |
|                    | APKXL15.2TA2    |
|                    | APKXL15.2TAG    |
|                    | APKXL18.1TAG    |

## Model Year 2011 Engines

| Manufacturer             | Engine Families |
|--------------------------|-----------------|
| AGCO Sisu Power          | BSIDL07.4G5C    |
|                          | BSIDL07.4G4E    |
| Caterpillar              | BCPXL08.8NZS    |
|                          | BCPXL11.1ESK    |
|                          | BCPXL12.5ESK    |
|                          | BCPXL15.2ESW    |
|                          | BCPXL15.2NYS    |
|                          | BCPXL18.1ESK    |
|                          | BCPXL27.0NZS    |
|                          | BCPXL32.0NZS    |
| CNH UK LTD.              | BNHXL04.5DAA    |
|                          | BNHXL04.5DAB    |
|                          | BNHXL04.5DCA    |
|                          | BNHXL06.7DAA    |
|                          | BNHXL06.7DCC    |
|                          | BNHXL06.7DCA    |
|                          | BNHXL06.7DCB    |
| Cummins                  | BCEXL050.AAB    |
|                          | BCEXL050.AAC    |
|                          | BCEXL0275AAG    |
|                          | BCEXL0275AAH    |
|                          | BCEXL03.3ACA    |
|                          | BCEXL03.3ACB    |
|                          | BCEXL03.3ACD    |
|                          | BCEXL03.3ACE    |
|                          | BCEXL0409AAC    |
| Hyundai Motor Co         | BHYXL03.9TDI    |
| Ishikawajima<br>Shibaura | BH3XL2.22N4L    |
| IVECO                    | BVEXL04.5DAA    |
|                          | BVEXL04.5DAB    |
|                          | BVEXL04.5DCA    |
|                          | BVEXL06.7DAA    |
|                          | BVEXL06.7DCC    |
|                          | BVEXL03.2 TCI   |
|                          | BVEXL03.2TAI    |
|                          | BVEXL06.7DCB    |
|                          | BVEXL06.7DCA    |
| JCB Power Systems        | BJCBL04.4TA7    |
|                          | BJCBL04.4TA8    |
|                          | BJCBL04.4TAE    |
|                          | BJCBL04.4TC6    |

## Model Year 2011 Engines (Continued)

| Manufacturer                | Engine Families |
|-----------------------------|-----------------|
| John Deere Power            | BJDXL02.9050    |
|                             | BJDXL03.0064    |
|                             | BJDXL03.0113    |
|                             | BJDXL03.0203    |
|                             | BJDXL03.0206    |
|                             | BJDXL03.0208    |
|                             | BJDXL04.5107    |
|                             | BJDXL06.8078    |
|                             | BJDXL06.8104    |
|                             | BJDXL06.8105    |
|                             | BJDXL06.8106    |
| Komatsu, Ltd.               | BKLXL0275AAG    |
|                             | BKLXL0275AAH    |
|                             | BKLXL0409AAC    |
|                             | BKLXL03.3JA6    |
|                             | BKLXL03.3JB6    |
|                             | BKLXL03.3JD6    |
|                             | BKLXL03.3JD7    |
| Kubota                      | BKBXL02.4HAD    |
|                             | BKBXL03.6BCD    |
| Kukje Machinery             | BKMCL2.28A41    |
|                             | BKMCL2.39A44    |
| Mitsubishi Fuso Truck       | BMFTL02.8M4B    |
| Mitsubishi Heavy Industries | BMVXL022.5HHH   |
|                             | BMVXL03.3AAC    |
|                             | BMVXL03.3AAH    |
|                             | BMVXL04.2BBB    |
|                             | BMVXL05.0AAG    |
|                             | BMVXL04.2CCC    |
|                             | BMVXL05.0AAD    |
|                             | BMVXL06.4FFF    |
| Perkins                     | BPKXL04.4NJ1    |
|                             | BPKXL04.4NJ2    |
|                             | BPKXL04.4NM1    |
|                             | BPKXL04.4NM2    |
|                             | BPKXL04.4RG3    |
|                             | BPKXL06.6PJ2    |
|                             | BPKXL06.6PJ3    |
| Toyota Industrial           | BTALL02.51DZ    |
| UD Trucks Corp.             | BNDXL03.2TNA    |
|                             | BNDXL04.2TNA    |
| VM Motori S.P.A.            | BV5XL04.5T60    |

## Model Year 2012 Engines

| Manufacturer | Engine Families |
|--------------|-----------------|
| Caterpillar  | CCPXL07.2ESJ    |
|              | CCPXL08.8ESJ    |
|              | CCPXL08.8NZS    |
|              | CCPXL106.NZS    |
|              | CCPXL11.1ESJ    |
|              | CCPXL11.1ESK    |
|              | CCPXL12.5ESJ    |
|              | CCPXL12.5ESK    |
|              | CCPXL15.2ESJ    |
|              | CCPXL15.2ESW    |
|              | CCPXL15.2NYS    |
|              | CCPXL15.2NZS    |
|              | CCPXL18.1ESJ    |
|              | CCPXL18.1ESK    |
|              | CCPXL18.1NYS    |
|              | CCPXL18.1NZS    |
|              | CCPXL27.0ESJ    |
|              | CCPXL27.0NZS    |
|              | CCPXL32.0NZS    |
|              | CCPXL78.1NZS    |
| Cummins      | CCEXL015.AAH    |
|              | CCEXL015.AAJ    |
|              | CCEXL019.AAD    |
|              | CCEXL023.AAB    |
|              | CCEXL0275AAG    |
|              | CCEXL0275AAK    |
|              | CCEXL03.3ACD    |
|              | CCEXL03.3ACE    |
|              | CCEXL030.AAD    |
|              | CCEXL0409AAB    |
|              | CCEXL0409AAC    |
|              | CCEXL0409AAD    |
|              | CCEXL050.AAD    |
|              | CCEXL0505AAE    |
|              | CCEXL0540AAB    |
|              | CCEXL060.AAD    |
|              | CCEXL15.0AAI    |

Model Year 2012 Engines (Continued)

| Manufacturer          | Engine Families |
|-----------------------|-----------------|
| John Deere Power      | CJDXL03.0113    |
|                       | CJDXL03.0203    |
|                       | CJDXL04.5107    |
|                       | CJDXL04.5119    |
|                       | CJDXL04.5141    |
|                       | CJDXL06.8120    |
|                       | CJDXL09.0114    |
|                       | CJDXL09.0140    |
|                       | CJDXL13.5132    |
| Detroit Diesel        | CDDXL14.0VLD    |
|                       | CDDXL14.0WLD    |
| Deutz                 | CDZXL03.1041    |
| DOOSAN INFRACORE      | CDICL18.3USA    |
|                       | CDICL21.9UYA    |
| FPT INDUSTRIAL S.P.   | CFPXL03.2TAI    |
|                       | CFPXL06.7DGB    |
|                       | CFPXL06.7DGS    |
|                       | CFPXL08.7TR3    |
|                       | CFPXL10.3TR3    |
|                       | CFPXL12.9IGR    |
| Komatsu, Ltd.         | CKLXL03.3JA6    |
|                       | CKLXL03.3JD9    |
|                       | CKLXL23.2FD5    |
| Kubota                | CKBXL02.4HAD    |
|                       | CKBXL03.6BCD    |
| Kukje Machinery       | CKMCL3.41D43    |
| Mitsubishi Fuso Truck | CMFTL02.8M4B    |
| MTU Detroit Diesel    | CMDDL14.0ZWK    |
|                       | CMDDL21.0ZWR    |
|                       | CMDDL31.8XRR    |
|                       | CMDDL35.8GRR    |
|                       | CMDDL95.4XTR    |
| Perkins               | CPKXL04.4NH1    |
|                       | CPKXL04.4NJ1    |
|                       | CPKXL06.6PJ1    |
|                       | CPKXL06.6PJ2    |
|                       | CPKXL06.6PJ3    |
|                       | CPKXL12.5TAG    |
|                       | CPKXL15.2TA2    |
|                       | CPKXL15.2TAG    |
|                       | CPKXL18.1TAG    |

Model Year 2012 Engines (Continued)

| Manufacturer   | Engine Families |
|----------------|-----------------|
| SIMPSON & C.   | CSCLL03.6V74    |
| TIEM           | CTIEL05.26CA    |
| AB Volvo Penta | CVPXL12.8BCA    |
|                | CVPXL16.1ACB    |
|                | CVPXL16.1ACG    |
|                | CVPXL16.1ACW    |
|                | CVPXL16.1ADA    |
|                | CVPXL16.1BDA    |
| Yanmar         | CYDXL3.32R4N    |

## Model Year 2013 Engines

| Manufacturer | Engine Families |
|--------------|-----------------|
| CATERPILLAR  | 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      | DCEXL015.AAH    |
|              | DCEXL015.AAJ    |
|              | DCEXL019.AAD    |
|              | DCEXL023.AAB    |
|              | DCEXL0275AAG    |
|              | DCEXL0275AAH    |
|              | DCEXL0275AAK    |
|              | DCEXL030.AAD    |
|              | DCEXL0409AAB    |
|              | DCEXL0409AAC    |
|              | DCEXL0409AAD    |
|              | DCEXL050.AAD    |
|              | DCEXL0505AAE    |
|              | DCEXL0540AAB    |
|              | DCEXL060.AAD    |
|              | DCEXL0661AAH    |

## Model Year 2013 Engines (Continued)

| Manufacturer        | Engine Families |
|---------------------|-----------------|
| John Deere Power    | DJDXL03.0208    |
|                     | DJDXL04.5119    |
|                     | DJDXL04.5141    |
|                     | DJDXL04.5212    |
|                     | DJDXL06.8104    |
|                     | DJDXL06.8105    |
|                     | DJDXL06.8106    |
|                     | DJDXL06.8120    |
|                     | DJDXL09.0114    |
|                     | DJDXL13.5132    |
| DETROIT DIESEL      | DDDXL14.0WLD    |
| DOOSAN              | DDICL18.3USA    |
|                     | DDICL21.9UYA    |
| FPT INDUSTRIAL S.P. | DFPXL06.7DGB    |
|                     | DFPXL06.7DGS    |
|                     | DFPXL08.7TR3    |
|                     | DFPXL10.3TR3    |
|                     | DFPXL12.9IGR    |
| KOMATSU LTD.        | DKLXL060.AAE    |
|                     | DKLXL23.2FD5    |
| KUKJE MACHINERY     | DKMCL3.41D43    |
| MITSUBISHI          | DMVXL24.5BBA    |
|                     | DMVXL33.9BBA    |
|                     | DMVXL37.1BBA    |
|                     | DMVXL49.0BBA    |
|                     | DMVXL65.4BBA    |
|                     | DMVXL65.4BBB    |
| MTU Detroit Diesel  | DMDDL14.0ZWK    |
|                     | DMDDL21.0ZWR    |
|                     | DMDDL31.8XRR    |
|                     | DMDDL35.8GRR    |
|                     | DMDDL95.4XTR    |

## Model Year 2013 Engines (Continued)

| Manufacturer   | Engine Families |
|----------------|-----------------|
| 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    |
| AB Volvo Penta | DVPXL16.1ACB    |
|                | DVPXL16.1ACG    |
|                | DVPXL16.1ACW    |

## Model Year 2014 Engines

| Manufacturer | Engine Families |
|--------------|-----------------|
| CATERPILLAR  | ECPXL08.8NZS    |
|              | ECPXL106.NZS    |
|              | ECPXL12.5NYS    |
|              | ECPXL15.2NYS    |
|              | ECPXL15.2NZS    |
|              | ECPXL18.1NYS    |
|              | ECPXL18.1NZS    |
|              | ECPXL27.0NZS    |
|              | ECPXL32.0NZS    |
|              | ECPXL78.1NZS    |
| Cummins      | ECEXL015.AAH    |
|              | ECEXL015.AAJ    |
|              | ECEXL019.AAD    |
|              | ECEXL023.AAB    |
|              | 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    |

Model Year 2014 Engines (Continued)

| Manufacturer        | Engine Families |
|---------------------|-----------------|
| John Deere Power    | EJDXL13.5146    |
|                     | EJDXL04.5119    |
|                     | EJDXL04.5141    |
|                     | EJDXL04.5214    |
|                     | EJDXL06.8105    |
|                     | EJDXL06.8120    |
|                     | EJDXL09.0114    |
|                     | EJDXL13.5132    |
| DETROIT DIESEL      | EDDXL14.0WLD    |
| DOOSAN              | EDICL18.3USA    |
|                     | EDICL21.9UYA    |
| FPT INDUSTRIAL S.P. | EFPXL06.7DGB    |
|                     | EFPXL06.7DGS    |
|                     | EFPXL08.7TR3    |
|                     | EFPXL10.3TR3    |
|                     | EFPXL12.9IGR    |
| ISM                 | EH3XL2.22N4L    |
| KOMATSU LTD.        | EKLXL060.AAE    |
|                     | EKLXL23.2FD5    |
| KUKJE MACHINERY     | EKMCL3.41D43    |
| MITSUBISHI          | EMVXL24.5BBA    |
|                     | EMDDL31.8XRR    |
|                     | EMVXL33.9BBA    |
|                     | EMVXL37.1BBA    |
|                     | EMVXL49.0BBA    |
|                     | EMVXL65.4BBA    |
|                     | EMVXL65.4BBB    |
| MTU                 | EMDDL14.0ZWK    |
|                     | EMDDL21.0ZWR    |
|                     | EMDDL31.8XRR    |
|                     | EMDDL35.8GRR    |
|                     | EMDDL95.4XTR    |

Model Year 2014 Engines (Continued)

| Manufacturer   | Engine Families |
|----------------|-----------------|
| PERKINS        | EPKXL04.4NH1    |
|                | EPKXL04.4NH3    |
|                | EPKXL04.4NJ1    |
|                | EPKXL04.4NJ2    |
|                | EPKXL04.4NJ3    |
|                | EPKXL04.4NM1    |
|                | EPKXL04.4NM2    |
|                | EPKXL06.6PJ1    |
|                | EPKXL06.6PJ2    |
|                | EPKXL07.0PW1    |
| AB Volvo Penta | EVPXL16.1ACB    |
|                | EVPXL16.1ACG    |
|                | EVPXL16.1ACW    |

# Model Year 2015 Engines

| Manufacturer     | Engine Families |
|------------------|-----------------|
| CATERPILLAR      | FCPXL08.8NZS    |
|                  | FCPXL106.NZS    |
|                  | FCPXL12.5NYS    |
|                  | FCPXL15.2NYS    |
|                  | FCPXL15.2NZS    |
|                  | FCPXL18.1NYS    |
|                  | FCPXL18.1NZS    |
|                  | FCPXL27.0NZS    |
|                  | FCPXL32.0NZS    |
|                  | FCPXL78.1NZS    |
| Cummins          | FCEXL015.AAH    |
|                  | FCEXL015.AAJ    |
|                  | FCEXL019.AAD    |
|                  | FCEXL023.AAB    |
|                  | FCEXL0275AAG    |
|                  | FCEXL0275AAH    |
|                  | FCEXL0275AAK    |
|                  | FCEXL03.3BAA    |
|                  | FCEXL030.AAD    |
|                  | FCEXL0409AAB    |
|                  | FCEXL0409AAC    |
|                  | FCEXL0409AAD    |
|                  | FCEXL050.AAD    |
|                  | FCEXL0505AAE    |
|                  | FCEXL0540AAB    |
|                  | FCEXL060.AAD    |
|                  | FCEXL0661AAH    |
|                  | FCEXL13.0AAA    |
|                  | FCEXL95.0AAA    |
| John Deere Power | FJDXL02.9142    |
|                  | FJDXL04.5119    |
|                  | FJDXL04.5141    |
|                  | FJDXL04.5214    |
|                  | FJDXL06.8120    |
|                  | FJDXL09.0114    |
|                  | FJDXL13.5132    |
|                  | FJDXL13.5146    |

# Model Year 2015 Engines (continued)

| Manufacturer    | Engine Families |
|-----------------|-----------------|
| DETROIT DIESEL  | FDDXL14.0WLD    |
| FPT INDUSTRIAL  | FFPXL06.7DGB    |
|                 | FFPXL06.7DGS    |
|                 | FFPXL08.7TR3    |
|                 | FFPXL10.3TR3    |
| ISM             | FH3XL2.22N4L    |
| KOHLER CO       | FKHXL3.36EST    |
| KOMATSU LTD.    | FKLXL23.2FD5    |
| KUKJE MACHINERY | FKMCL3.41D43    |
| MERCEDES-BENZ   | FMBXL04.8RJC    |
|                 | 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    |
| AB Volvo Penta  | FVPXL16.1ACB    |
|                 | FVPXL16.1ACG    |
|                 | FVPXL16.1ACW    |