# C7 UPRATE - ABILITY AND COMPARISION CHART

| KAL / SAP / WAX*** | Truck Rating | | Truck Rating | | Truck Rating | | Truck Rating | | Truck Rating | | Truck Rating | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 190hp 520 ft lbs | | 210hp 520 ft lbs | | 210hp 605 ft lbs | | 230hp 540 ft lbs | | 230hp 660 ft lbs | | 250hp 660 ft lbs | |
| | 2200 / 1440 rpm | | 2200 / 1440 rpm | | 2200 / 1440 rpm | | 2200 / 1440 rpm | | 2200 / 1440 rpm | | 2200 / 1440 rpm | |
| INJECTOR VERSION | Old Inj | New Inj | Old Inj | New Inj | Old Inj | New Inj | Old Inj | New Inj | Old Inj | New Inj | Old Inj | New Inj |
| INJECTOR PART NUMBER | 233-3536* | 241-3238* | 233-3536* | 241-3238* | 233-3536* | 241-3238* | 236-6011* | 241-3239* | 236-6011* | 241-3239* | 236-6011* | 241-3239* |
| INJECOTR WITH SEALS | 236-0973* | 243-4502* | 236-0973* | 243-4502* | 236-0973* | 243-4502* | 238-9808* | 243-4503* | 238-9808* | 243-4503* | 238-9808* | 243-4503* |
| FLASH FILE | 247-4649 | 265-3311 | 247-4648 | 265-3312 | 247-4647 | 265-3313 | 247-4646 | 265-3314 | 247-4645 | 265-3315 | 247-4644 | 265-3316 |
| INTER-LOCK | 1 | 25 | 3 | 26 | 4 | 27 | 18 | 28 | 5 | 29 | 6 | 30 |
| REMAN INJ. | | | | | | | | | | | | |
| PISTON | 238-2698 | | 238-2698 | | 238-2698 | | 238-2720 | | 238-2720 | | 238-2720 | |
| TURBO | A | | A | | A | | A | | A | | A | |
| DAMPER | A** | | A** | | A** | | A** | | A** | | A** | |
| SMART WASTEGATE | No | | No | | No | | No | | No | | No | |

| KAL / SAP / WAX*** | Truck Rating | | Truck Rating | | Truck Rating | | Truck Rating | | Truck Rating | | Truck Rating |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 250hp 800 ft lbs | | 275hp 800 ft lbs | | 275hp 860 ft lbs | | 300hp 800 ft lbs | | 300hp 860 ft lbs | | 330hp 860 ft lbs |
| | 2200 / 1440 rpm | | 2200 / 1440 rpm | | 2200 / 1440 rpm | | 2200 / 1440 rpm | | 2200 / 1440 rpm | | 2400 / 1440 rpm |
| INJECTOR VERSION | Old Inj | New Inj | Old Inj | New Inj | Old Inj | New Inj | Old Inj | New Inj | Old Inj | New Inj | New Inj |
| INJECTOR PART NUMBER | 233-3535* | 238-8091* | 233-3535* | 238-8091* | 233-3535* | 238-8091* | 233-3535* | 238-8091* | 233-3535* | 238-8091* | 238-8091* |
| INJECTOR WITH SEALS | 236-0974* | 241-3400* | 236-0974* | 241-3400* | 236-0974* | 241-3400* | 236-0974* | 241-3400* | 236-0974* | 241-3400* | 241-3400* |
| FLASH FILE | 247-4643 | 265-3334 | 247-4642 | 265-3333 | 247-4640 | 265-3331 | 247-4638 | 265-3329 | 247-4636 | 265-3326 | 265-3323 |
| INTER-LOCK | 7 | 41 | 8 | 42 | 9 | 43 | 10 | 44 | 11 | 45 | 53 |
| REMAN INJ. | | | | | | | | | | | |
| PISTON | 238-2720 | | 238-2720 | | 238-2720 | | 238-2720 | | 238-2720 | | 238-2720 |
| TURBO | B | | B | | B | | B | | B | | B |
| DAMPER | A** | | B** | | B** | | B** | | B** | | B** |
| SMART WASTEGATE | Yes | | Yes | | Yes | | Yes | | Yes | | Yes |

| KAL / SAP / WAX*** | EMER RAT. | | EMER RAT. | | EMER RAT. | | EMER RAT. | | EMER RAT. | | RV RAT. | | RV RAT. | EMER RAT. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 275hp 800 ft lbs | | 275hp 860 ft lbs | | 300hp 800 ft lbs | | 300hp 860 ft lbs | | 330hp 860 ft lbs | | 330hp 860 ft lbs | | 350hp 860 ft lbs | 350hp 860 ft lbs |
| | 2200 / 1440 rpm | | 2200 / 1440 rpm | | 2200 / 1440 rpm | | 2200 / 1440 rpm | | 2400 / 1440 rpm | | 2400 / 1440 rpm | | 2400 / 1440 rpm | 2400 / 1440 rpm |
| INJECTOR VERSION | Old Inj | New Inj | Old Inj | New Inj | Old Inj | New Inj | Old Inj | New Inj | Old Inj | New Inj | Old Inj | New Inj | New Inj | New Inj |
| INJECTOR PART NUMBER | 233-3535* | 238-8091* | 233-3535 * | 238-8091* | 233-3535* | 238-8091* | 233-3535* | 238-8091* | 233-3535 * | 238-8091* | 233-3535* | 238-8091* | 238-8091* | 238-8091* |
| INJECTOR WITH SEALS | 236-0974* | 241-3400* | 236-0974* | 241-3400* | 236-0974* | 241-3400* | 236-0974* | 241-3400* | 236-0974* | 241-3400* | 236-0974* | 241-3400* | 241-3400* | 241-3400* |
| FLASH FILE | 247-4641 | 265-3332 | 247-4639 | 265-3330 | 247-4637 | 265-3327 | 247-4635 | 265-3324 | 247-4634 | 265-3322 | 247-4633 | 265-3321 | 265-3320 | 272-1428 |
| INTER-LOCK | 12 | 46 | 13 | 47 | 14 | 48 | 15 | 49 | 16 | 50 | 17 | 51 | 52 | 54 |
| REMAN INJ. | | | | | | | | | | | | | | |
| PISTON | 238-2720 | | 238-2720 | | 238-2720 | | 238-2720 | | 238-2720 | | 238-2720 | | 238-2720 | 238-2720 |
| TURBO | B | | B | | B | | B | | B | | B | | B | B |
| DAMPER | B** | | B** | | B** | | B** | | B** | | B** | | B** | B** |
| SMART WASTEGATE | Yes | | Yes | | Yes | | Yes | | Yes | | Yes | | Yes | Yes |

| Turbocharger Chart | | | | Part Number |
|---|---|---|---|---|
| Low Hp and Mid Hp | | A | | Fld Repl 195-6000 |
| High Hp | | B | | Fld Repl 228-3228 |

| Description | | Part Number |
|---|---|---|
| Lines Gp Turbo Air | | 229-8836 |
| Inlet Cover Gp. | | See SIS for application |
| Wastegate Solenoid | | 230-9944 |
| Piston A cooling jet | | 173-0143 |
| Piston B cooling jet | | 197-9364 |

**Notify the Truck Engine Call Center at 800-447-4986 for any corrections that may need to be made. Thank You.**

***Early injector part number must be used with early injector flashfile and new injector part number must be used with new injector flashfile. Refer to SEBD6764 for serial number breaks. Check SIS for latest flashfile. Check injector part number in engine**

****All ratings above 250 HP must use a viscous damper. Exception noted for 10" rubber damper used in some Ford applications due to historical space constraints and established load acceptability (with the understanding that Caterpillar does not expressly endorse the use of this rubber damper in any application above 250 HP).**

***** KAL1 - 12897 were shipped from the factory with old injectors.**
**KAL12897- 99999 were shipped from the factory with the new injectors.**

**SAP1 - UP were shipped from the factory with the new injectors.**

**WAX1 - UP were shipped from the factory with the new injectors.**

**Ratings will show last known current part number for "As Shipped" Iron for the particular serial number ranges. Some part numbers can be canceled and replaced by a later version in a different serial number range.**