



TRUCKS

TECHNICAL BULLETIN # EN - 013

DATE: JULY 20, 1999**MODEL YEAR:** 1995 ~ 1999**CHASSIS:** ALL**BULLETIN#:** EN - 013 (Rev.)**FILE IN THE ENGINE SECTION OF THE TECHNICAL BULLETIN BINDER**

**TUNE-UP SPECIFICATIONS FOR
1995 AND AFTER MODEL YEAR UD TRUCK DIESEL ENGINES**

PURPOSE: To provide tune-up specifications for every available diesel engine configuration found in 1995 model year and after UD Trucks.

NOTICE:

FEDERAL AND STATE CLEAN AIR LAWS PROHIBIT ENGINE ADJUSTMENTS TO THE FUEL AND AIR INTAKE SYSTEM THAT ARE NOT WITHIN THE SPECIFICATIONS OF THE ENGINE MANUFACTURER.

TUNE-UP SPECIFICATION ↓	MODEL YEAR → ENGINE				
	1995 ~ 1998 TD42TI	1999 & AFTER FD46TA (145HP)	1999 & AFTER FD46TA (175HP)	1995 ~ 1998 FE6TA	1999 & AFTER FE6TA (24 VALVE)
LOW IDLE, NO-LOAD (RPM)	725 ± 25	650 ± 25	650 ± 25	700 ± 20	700 ± 20
MAXIMUM HIGH IDLE, NO-LOAD (RPM)	4200 ± 100	3500 ± 100	3500 + 50 - 100	3600 + 0 - 100	3600 + 0 - 100
AIR FILTER RESTRICTION (^o H ₂ O)	24.4	25.6	25.6	29.5	29.5
WASTEGATE ACTUATOR SETTING (PSI/INCH)	8.1 ~ 8.0 0.059	16.2 ~ 17.2 0.015	17.6 ~ 18.6 0.015	17.7 ~ 18.5 0.015	19.6 ~ 20.6 0.015
TURBO RELIEF VALVE OPENING PRESSURE (PSI)	12.8 ± 0.6	18.4 ± 0.97	18.4 ± 0.97	18.85 ± 1.0	18.85 ± 1.0
INTAKE MANIFOLD PRESSURE (mmHg AT RPM)	380 @ 3500	610 @ 2800	695 @ 2800	730 @ 2800	788 @ 2600
CYLINDER COMPRESSION PRESSURE (PSI AT 200 RPM) MAINTENANCE STANDARD	427	427	427	427	427
MINIMUM ALLOWABLE	356	356	356	356	356
MAX. DIFFERENCE BETWEEN CYLINDERS	43	43	43	57	57

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FUEL FEED PUMP INLET RESTRICTION ("H ₂ O)	N/A	83.0	83.0	81.48	81.48	
FUEL OVERFLOW PRESSURE (PSI AT FUEL FILTER OUTLET)	N/A	37	37	37	37	37
FUEL INJECTION PUMP STATIC TIMING	4 °BTDC	2 °ATDC	2 °ATDC	3 °BTDC	0 °BTDC	
INJECTION NOZZLE OPENING PRESSURE NEW INJECTOR (PSI)	1914 ~ 2059	2915 ~ 3060	2915 ~ 3060	2915 ~ 3031	2915 ~ 3060	
USED INJECTOR (MINIMUM PSI)	1841	2842	2842	2784	2842	
VALVE CLEARANCE, COLD (INCHES, INTAKE AND EXHAUST)	0.014	0.014	0.014	0.014	INT: 0.014	EXH: 0.018
EXHAUST BACK PRESSURE, NEW MUFFLER ("Hg AT FULL RATED LOAD & SPEED)	7.40	4.72	5.51	7.20	4.33	
SMOKE DENSITY, BOSCH METER SE-2580 (AT FULL RATED LOAD & SPEED)	0 ~ 0.5	0 ~ 0.5	0 ~ 1.0	0 ~ 1.0	0 ~ 1.0	
CRANKCASE PRESSURE ("H ₂ O)	0.59 ~ 0.79	0.39 ~ 0.79	0.39 ~ 0.79	0.39 ~ 0.79	0.39 ~ 0.79	

CONVERSION FACTORS

LENGTH: 1 inch (in) = 2.54 centimeters (cm) = 25.40 millimeters (mm)

PRESSURE: 1 kilopascal (kPa) = 0.145 pound/inch² (psi) = 0.0102 kilogram/centimeter² (kg/cm²)
 1 pound/inch² (psi) = 2.03 inches of mercury ("Hg) = 27.6 inches of water ("H₂O)

TORQUE: 1 Newton·meter (N·m) = 0.738 foot·pound (ft·lb) = 0.102 kilogram·meter (kg·m)

WEIGHT: 1 pound (lb) = 0.4536 kilogram (kg)

THE INFORMATION CONTAINED IN THIS BULLETIN SHOULD NOT BE INTERPRETED
 AS THE BASIS FOR CLAIMS UNLESS SO DESIGNATED.