



TECHNICAL BULLETIN

Nissan Diesel America, Inc
P.O. Box 152034, Irving, Texas 75015

DATE: JULY 1, 1994
MODEL YEAR: 1986 - 1994
CHASSIS: ALL
BULLETIN#: EN - 013 (REV.)
FILE IN THE ENGINE SECTION

TUNE-UP SPECIFICATIONS FOR ALL UD TRUCK DIESEL ENGINES

PURPOSE:

To provide tune-up specifications for every available diesel engine configuration found in UD Trucks manufactured between 1986 and 1994.

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.

LOW IDLE, NO LOAD (RPM)

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
700 ± 50	725 ± 25	600 ± 25	600 ± 25	600 ± 25	550 ± 25	525 ± 25	575 ± 25

MAXIMUM HIGH IDLE, NO LOAD (RPM)

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
4000 ± 100	4200 ± 100	3500 ± 100	3500 ± 100	3500 ± 100	3150 ± 100	3150 ± 100	3250 ± 100

AIR FILTER RESTRICTION ("H₂O)

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
20.9	25.6	25	29.5	29.5	25	29.5	29.5

WASTEGATE ACTUATOR SETTING (PSI/INCH)

FD35T	TD42T	FE6TA
<u>15.3 - 16.3</u>	<u>7.8 - 9.5</u>	<u>17.7 - 18.5</u>
.059	.059	.015

TURBO RELIEF VALVE OPENING PRESSURE (PSI)

FD35T	TD42T	FE6TA
14.9 ± 0.9	12.8 ± 0.6	14.2 ± 0.9

INTAKE MANIFOLD PRESSURE ("Hg)

1986/1987

FE6	NE6	NE6T
-0.83 to	-0.98 to	Fed: 23.62 to 27.56
-0.43	-0.59	(11.6 to 13.5 psi)
		Cal: 27.56 to 31.5
		(13.5 to 15.5 psi)

1988/1994

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
11.9 - 13.7	6.8	-0.83 to	17.72 to	14.5	-0.98 to	27.56 to	21.28
(3500 rpm)	(3500 rpm)	-0.43	21.65	(2800 rpm)	-0.59	31.5	(2800 rpm)

CYLINDER COMPRESSION PRESSURE AT 200 RPM (PSI)**MAINTENANCE STANDARD**

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
427	427	427	427	427	427	427	427

MINIMUM ALLOWABLE

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
356	356	356	356	356	284	284	284

MAXIMUM DIFFERENCE BETWEEN CYLINDERS

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
43	43	57	57	57	57	57	57

FUEL FEED PUMP INLET RESTRICTION ("H₂O)

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
NOT	NOT	81.48	81.48	81.48	81.48	81.48	81.48
AVAILABLE	AVAILABLE	(6" Hg)	(6" Hg)	(6" Hg)	(6" Hg)	(6" Hg)	(6" Hg)

FUEL OVERFLOW PRESSURE (PSI) (TEST AT FUEL FILTER OUTLET)

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
18.5 ± 2.8	NOT	28.5 ± 2.0	28.5 ± 2.0	37.0	20 ± 2	20 ± 2	37.0
	APPLICABLE						

FUEL INJECTION TIMING (°BTDC)

1986/1987

FE6	NE6	NE6T
Fed 19 ± 1	17 +2,-1	Fed 16 +2,-1
Cal 13 ± 1		Cal 11 +2,-1

1988/1994

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
14	4	15 ± 1	12 ± 1	5	17 +2,-1	13 ± 1	5

INJECTION NOZZLE OPENING PRESSURE (PSI)**NEW INJECTOR**

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
3201 to	1493 to	2915 to	3200 to	1st: 2489	2915 to	2915 to	1st: 2489
3315	1635	2986	3271	to 2602	2986	2986	to 2602
				2nd: 3527			2nd: 3527
				to 3612			to 3612

INJECTION NOZZLE OPENING PRESSURE(PSI) CONTINUED**USED INJECTOR (MINIMUM PSI)**

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
3130 to 3201	1422 to 1493	2844 to 2915	3128 to 3200	1st: 2417 to 2489 2nd: 3128 to 3527	2844 to 2915	2844 to 2915	1st: 2417 to 2489 2nd: 3128 to 3527

COLD VALVE CLEARANCE, INTAKE AND EXHAUST (INCHES)

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014

EXHAUST BACK PRESSURE, FULL RATED LOAD AND SPEED, NEW MUFFLER ("Hg)**1986/1987**

FE6	NE6	NE6T
4.0 (1.97 psi)	8.0 (3.93 psi)	8.0 (3.93 psi)

1988/1994

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
4.13 (2.04 psi)	7.09 (3.49 psi)	5.51 (2.71 psi)	8.66 (4.25 psi)	4.53 (2.23 psi)	8.0 (3.93 psi)	4.33 (2.13 psi)	5.67 (2.79 psi)

SMOKE DENSITY, FULL RATED LOAD AND SPEED (BOSCH METER SE-2580)**1986/1987**

FE6	NE6	NE6T
Fed: 2.5 to 3.5 Cal: 3.0 to 4.5	3.0 to 4.0	1.5 to 2.5

1988/1994

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
2.5 - 3.0	0 - 0.5	3.0 to 4.5	1.0 to 1.5	0 - 1.0	3.0 to 4.0	1.0 to 1.5	0 - 1.0

CRANKCASE PRESSURE ("H₂O)

FD35T	TD42T	FE6	FE6T	FE6TA	NE6	NE6T	NE6TA
0.39 - 0.59	0.59 - 0.79	2.36 - 4.72	0.39 - 0.79	0.39 - 0.79	2.36 - 4.72	<u>1986/1987</u> 0.59 - 1.18 <u>1988/1993</u> 0.20 - 0.39	0.39 - 0.79