

SECTION MA

MODIFICATION NOTICE:

- TD42T engine has been added for Australia. For specifications other than those described here, refer to the TD42 engine of the original Service Manual.
- TB45S engine has been added except for Australia and Europe. Refer to the Y61 series Supplement-III (SM9E-Y61CG0) for maintenance information of the TB45S engine.
- Rear leaf spring model information has been added.

CONTENTS

PRECAUTIONS AND PREPARATION2	TD		AT
Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER".....2			
Special Service Tools2			
PERIODIC MAINTENANCE (Except for Europe)3			
Engine and Emission Control Maintenance3			
RECOMMENDED FLUIDS AND LUBRICANTS5			
Fluids and Lubricants5			
SAE Viscosity Number6			
		ENGINE MAINTENANCE7	
		Checking Tightening Torque7	TF
		Cleaning and Replacing Air Cleaner Filter7	
		CHASSIS AND BODY MAINTENANCE8	
		Checking Differential Gear Oil (Rear leaf spring model).....8	PD
		Changing Differential Gear Oil (Rear leaf spring model).....8	FA
		SERVICE DATA AND SPECIFICATIONS (SDS)9	RA
		Engine Maintenance (TD42).....9	

PRECAUTIONS AND PREPARATION

Supplemental Restraint System (SRS) “AIR BAG” and “SEAT BELT PRE-TENSIONER”

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER” used along with a seat belt, helps to reduce the risk or severity of injury to the driver and front passenger in a frontal collision. The SRS system composition which is available to NISSAN MODEL Y61 is as follows (The composition varies according to the destination.):

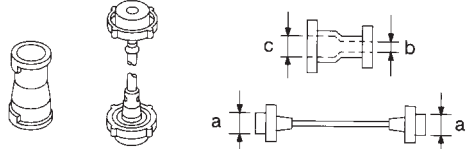
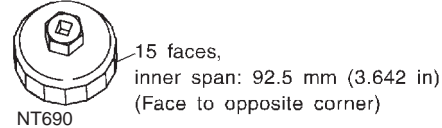
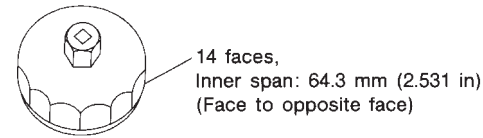
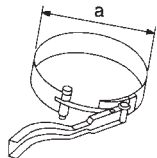
Driver air bag module (located in the center of the steering wheel), front passenger air bag module (located on the instrument panel on passenger side), seat belt pre-tensioner, a diagnosis sensor unit, warning lamp, wiring harness and spiral cable.

Information necessary to service the system safely is included in the **RS section** of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the RS section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. Spiral Cable and wiring harnesses covered with yellow insulation either just before the harness connectors or for the complete harness are related to the SRS.

Special Service Tools

Tool number Tool name	Description	Engine application				
		TB42S	TB45S	TB45E	TD42 TD42T	RD28ETi
EG17650301 Radiator cap tester adapter	 <p>NT564</p> <p>a: 28 (1.10) dia. b: 31.4 (1.236) dia. c: 41.3 (1.626) dia. Unit: mm (in)</p>	X	X	X	X	X
KV10106001 Oil filter wrench	 <p>NT690</p> <p>15 faces, inner span: 92.5 mm (3.642 in) (Face to opposite corner)</p>	X	—	—	X	—
KV10115801 Oil filter wrench	 <p>NT362</p> <p>14 faces, Inner span: 64.3 mm (2.531 in) (Face to opposite face)</p>	—	X	X	—	—
KV10113600 Fuel filter wrench Oil filter wrench	 <p>NT553</p> <p>a: Max. 100 mm (3.94 in) dia.</p>	—	—	—	X	X

PERIODIC MAINTENANCE (Except for Europe)

The following tables show the normal maintenance schedule. Depending upon weather and atmospheric conditions, varying road surfaces, individual driving habits and vehicle usage, additional or more frequent maintenance may be required.

Periodic maintenance beyond the last period shown on the tables requires similar maintenance.

Engine and Emission Control Maintenance

DIESEL ENGINE

Abbreviations: I = Inspect and correct or replace as necessary, R= Replace, A = Adjust, D = Drain water and inspect.

MAINTENANCE OPERATION	Months	MAINTENANCE INTERVAL										Reference page
		—	6	12	18	24	30	36	42	48		
Perform at the specified months or mileage whichever comes first.	km x 1,000 (Miles x 1,000)	1 (0.6)	10 (6)	20 (12)	30 (18)	40 (24)	50 (30)	60 (36)	70 (42)	80 (48)		
Engine compartment and under vehicle											TD	
Torque of manifolds & exhaust tube nuts		I									—	
Drive belts		I		I		I		I		I	—	
Intake & exhaust valve clearance		A		A		A		A		A	—	
Engine oil (Use API CC or CD oil)★		Replace every 5,000 km (3,000 miles) or 3 months										—
Engine oil filter★*1			R	R	R	R	R	R	R	R	—	
Engine anti-freeze coolant (Ethylene glycol base)						R				R	—	
Cooling system				I		I		I		I	—	
Air cleaner filter (Viscous paper type)★						R				R	MA-7	
Cyclone pre-air cleaner★ (TD42 engine)			I	I	I	I	I	I	I	I	—	
Fuel filter★			D	D	D	R	D	D	D	R	—	
Fuel lines						I				I	—	
Injection nozzles*2											—	
Idling speed		I		I		I		I		I	—	

NOTE: Maintenance items with “★” should be performed more frequently according to “Maintenance Under Severe Driving Conditions”.

*1: Use two filters of part No. 15208 43G00 or equivalent for TD42 engine models.

Use two filters of part No. 15208 43G00 and 15208 20N03 respectively or equivalent for TD42T engine models.

*2: If engine power decreases, black exhaust smoke is emitted or engine noise increases, check and, if necessary, adjust the fuel injection nozzle's starting pressure and the fuel spray pattern.

PERIODIC MAINTENANCE (Except for Europe)

Engine and Emission Control Maintenance (Cont'd)

GASOLINE ENGINE

Abbreviations: I = Inspect and correct or replace as necessary, R = Replace, A = Adjust, C = Clean.

MAINTENANCE OPERATION	Months	MAINTENANCE INTERVAL									Reference page
		—	6	12	18	24	30	36	42	48	
Perform at the specified months or mile- age whichever comes first.	km x 1,000 (Miles x 1,000)	1 (0.6)	10 (6)	20 (12)	30 (18)	40 (24)	50 (30)	60 (36)	70 (42)	80 (48)	
Engine compartment and under vehicle											
Torque of manifolds & exhaust tube nuts & carburetor fixing nuts*1		I									—
Intake & exhaust valve clearance				A		A		A		A	—
Drive belts		I*1		I*1		I		I*1		I	—
Engine oil (Use API SE, SF, SG or SH oil)*			R	R	R	R	R	R	R	R	—
Engine oil filter*2			R	R	R	R	R	R	R	R	—
Engine anti-freeze coolant (Ethylene glycol base)						R				R	—
Cooling system				I		I		I		I	—
Fuel filter*						R				R	—
Fuel lines						I				I	—
Air cleaner filter (Dry paper type)*			C	C	C	R	C	C	C	R	—
Air cleaner filter (Viscous paper type)*						R				R	—
Cyclone pre-air cleaner*			I	I	I	I	I	I	I	I	—
Positive crankcase ventilation (PCV) system				I		I		I		I	—
PCV filter* (TB42S, TB45S engines)						R				R	—
Automatic temperature control air cleaner (TB42S, TB45S, If so equipped)				I		I		I		I	—
Spark plugs (For leaded fuel)			I	R	I	R	I	R	I	R	—
Spark plugs (For unleaded fuel)			I*1	I*1	I*1	R	I*1	I*1	I*1	R	—
Ignition wires						I				I	—
Carburetor idle rpm & mixture ratio (TB42S, TB45S engines)*3		I*4	I	I	I	I	I	I	I	I	—
Ignition timing (TB42S, TB45S engines)			A	A	A	A	A	A	A	A	—
Vacuum hoses & connections*1				I		I		I		I	—
Heated oxygen sensor (TB45E engine)						I				I	—
EVAP vapor lines (With carbon canister)						I				I	—

NOTE: Maintenance items with “★” should be performed more frequently according to “Maintenance Under Severe Driving Conditions”.

*1: Models without three way catalyst

*2: Use part No. 15208 31U00 or equivalent for TB45S, TB45E engine models.

Use part No. 15208 W1106 or equivalent for TB42S engine models.

*3: Check mixture ratio only on models bound for areas affected by emission regulations.

*4: Only on models for areas of no emission regulations

RECOMMENDED FLUIDS AND LUBRICANTS

Fluids and Lubricants

	Capacity (Approximate)		Recommended Fluids/Lubricants		
	Liter	Imp measure			
Engine oil (Refill)					
With oil filter	TB45E, TB45S	7.6	6-3/4 qt	Gasoline engine: API SE, SF, SG or SH*1 except for Europe Diesel engine: API CC or CD*1 CCMC PD1 or PD2*4 for RD28ETi	
	TB42S	7.5	6-5/8 qt		
	TD42, TD42T	10.5	9-1/4 qt		
	RD28ETi	6.4	5-5/8 qt		
Without oil filter	TB45E, TB45S	7.3	6-3/8 qt		
	TB42S	7.0	6-1/8 qt		
	TD42, TD42T	9.3	8-1/8 qt		
	RD28ETi	5.8	5-1/8 qt		
Cooling system (with reservoir tank)					
With front heater	TB45E, TB45S	M/T	12.0	10-5/8 qt	Genuine Nissan anti-freeze coolant or equivalent*5
		A/T			
	TB42S	M/T	13.0	11-1/2 qt	
	TD42, TD42T	M/T	15.1	13-1/4 qt	
RD28ETi	M/T	RHD	11.8	10-3/8 qt	
		LHD	11.6	10-1/4 qt	
Without front heater	TB45E, TB45S	M/T	11.3	10 qt	
		A/T			
	TB42S	M/T	12.3	10-7/8 qt	
	TD42, TD42T	M/T	14.4	12-5/8 qt	
RD28ETi	M/T	RHD	11.1	9-3/4 qt	
		LHD	10.9	9-5/8 qt	
With rear heater	RD28ETi	M/T	RHD	12.9	11-3/8 qt
			LHD	12.7	11-1/8 qt
Manual transmission					
	FS5R50B	3.8	6-3/4 pt	API GL-4, Viscosity SAE 75W-90 only	
	FS5R30A	5.1	9 pt		
Differential carrier gear oil (without limited slip differential)					
		—	—	API GL-5*1	
Differential carrier gear oil (with limited slip differential)					
Except Europe					
		—	—	Gear Oil Hypoid LSD (Part No.: KLD31-14002) or equivalent*2	
Transfer fluid					
	TX12A	1.9	1-5/8 qt	Genuine Nissan ATF or equivalent*3 or API GL-4*1	
Automatic transmission fluid					
		11.8	10-3/8 qt	Genuine Nissan ATF or equivalent*3	
Power steering fluid					
		Refill to the proper oil level according to the instructions in the "Do-it-yourself operations" section		Type DEXRON TM III or equivalent	
Brake and clutch fluid					
				DOT 3 (US FMVSS No. 116) except for Europe	
Multi-purpose grease					
		—	—	NLGI No. 2 (Lithium soap base)	
Propeller shaft grease					
				NLGI No. 2 (Molybdenum disulphide lithium soap base)	
Air conditioning system refrigerant					
		—	—	HFC-134a (R-134a)	
Air conditioning system lubricants					
		—	—	Nissan A/C System Oil Type S or exact equivalent	

*1: For further details, see "SAE viscosity number".

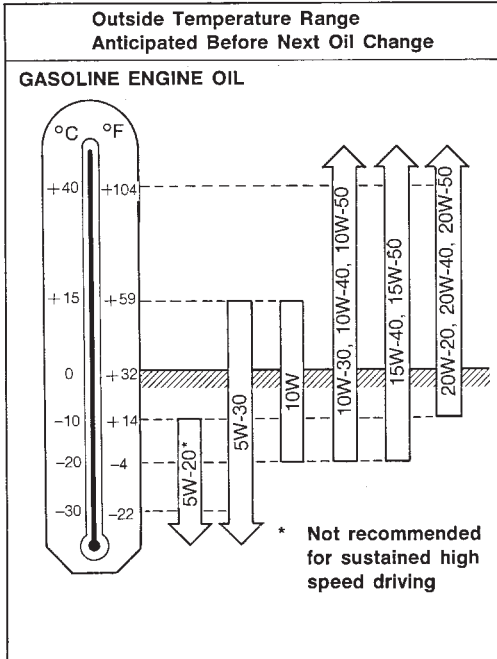
*2: API GL-5, SAE 140 and 10% volume of LSD Friction Modifier (Part No.: 38469-C6000) is an equivalent.

*3: For more information regarding suitable fluids, contact a Nissan dealer for correct brands of DEXRONTMIII ATF.

*4: If CCMC oils are not available, API CD may be used. However, CCMC oils are strongly recommended if at all possible.

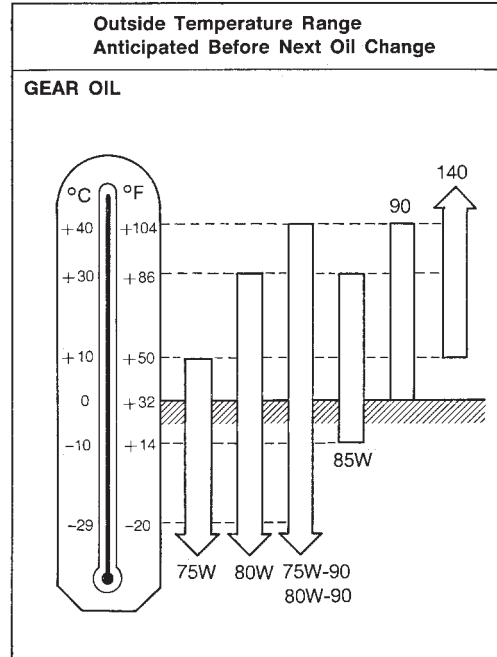
*5: Contact a Nissan dealership for more information regarding suitable anti-freeze coolant.

SAE Viscosity Number



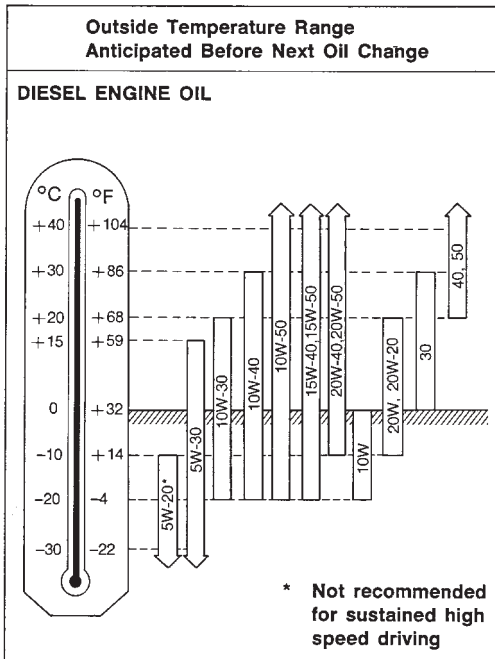
TI0005

- For cold and warm areas: 10W-30 is preferable for ambient temperatures above -20°C (-4°F).
- For hot areas: 20W-40 and 20W-50 are suitable.



TI0003

- For cold and warm areas: 75W-90 for transfer and 80W-90 for differential are preferable.
- For hot areas: 90 is suitable for ambient temperatures below 40°C (104°F).




TI0006

- For cold areas: 10W-30 is preferable for ambient temperature above -20°C (-4°F). On turbocharger models, 5W-20 is not recommended. Use 5W-30 only below 0°C (32°F).
- For hot and warm areas: 20W-40 and 20W-50 are suitable.

Checking Tightening Torque

Checking should be performed while engine is cold [approximately 20°C (68°F)].

Exhaust tube nuts for TD42T:

: 41 - 48 N·m (4.1 - 4.9 kg-m, 30 - 35 ft-lb)

Cleaning and Replacing Air Cleaner Filter

GI

MA

EM

LC

EC

FE

CL

MT

AT

TF

PD

FA

RA

BR

ST

RS

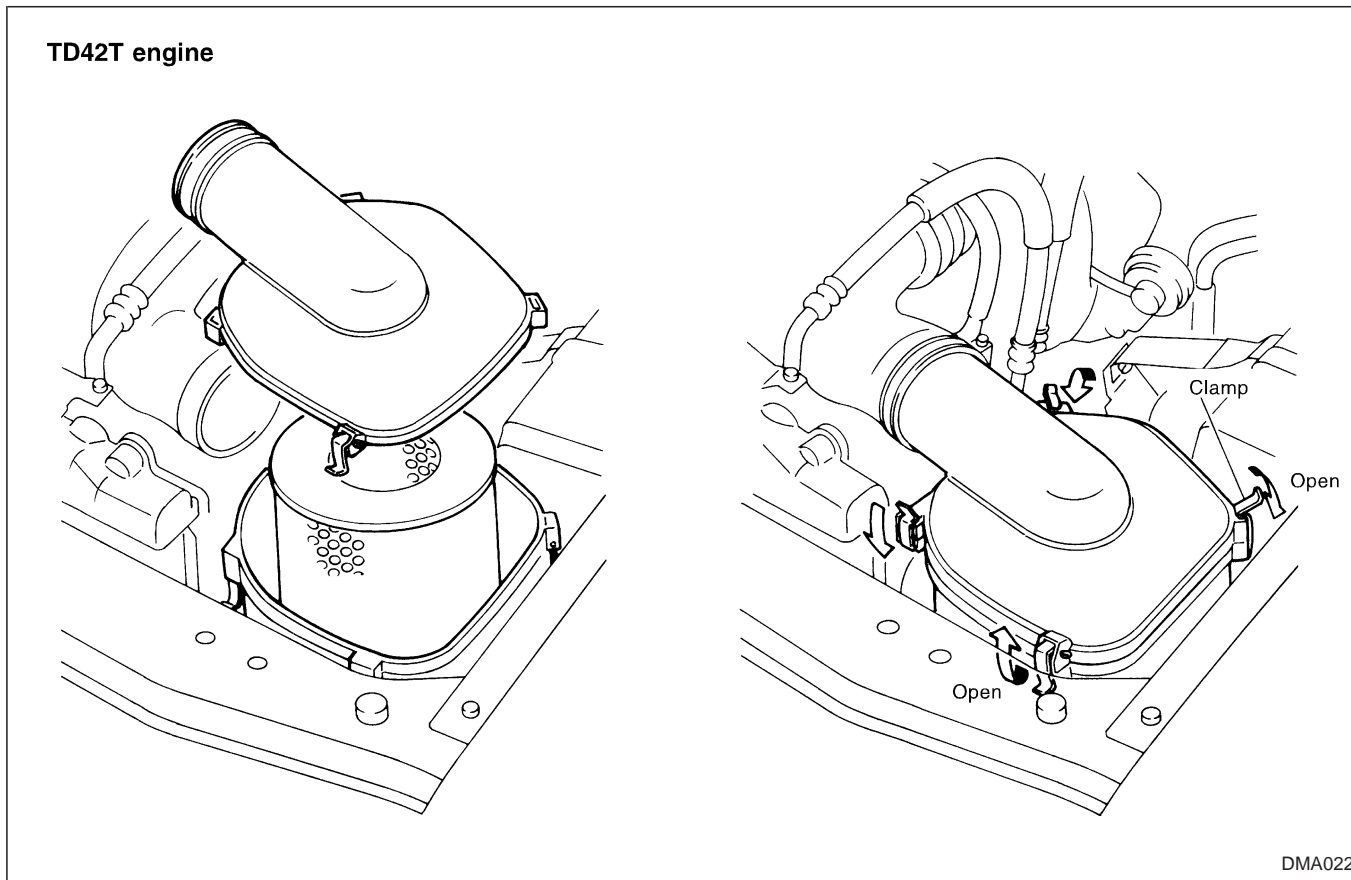
BT

HA

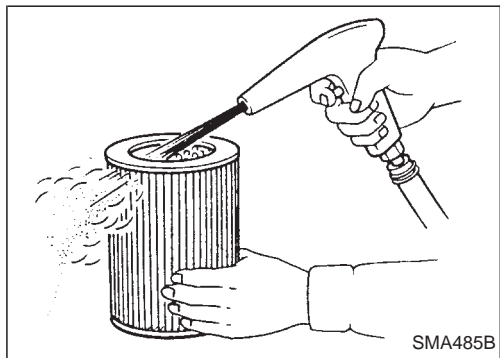
EL

SE

IDX



To properly tighten wing nuts, clamp air cleaner housing cover and tighten wing nuts until they touch the cover. Then tighten them three more turns.

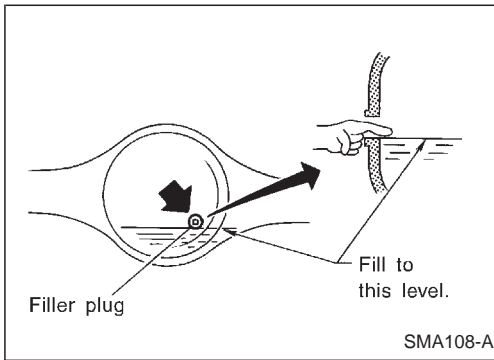


DRY PAPER TYPE

Clean or replace element more often under dusty driving conditions.

VISCOUS PAPER TYPE

The viscous paper type air cleaner filter does not require any cleaning operation between renewal.

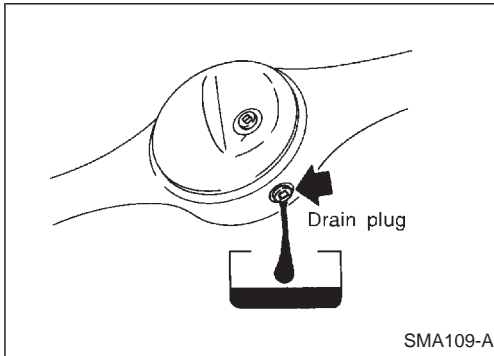


Checking Differential Gear Oil (Rear leaf spring model)

1. Check differential carrier for oil leakage.
2. Check oil level.

Filler plug:

: 59 - 98 N·m (6 - 10 kg·m, 43 - 72 ft·lb)



Changing Differential Gear Oil (Rear leaf spring model)

Oil capacity:

Front

5.4 liters (9-1/2 Imp pt)

Rear

H260 (With LSD)

4.9 liters (8-5/8 Imp pt)

Drain plug:

: 59 - 98 N·m (6 - 10 kg·m, 43 - 72 ft·lb)

Engine Maintenance (TD42)

INSPECTION AND ADJUSTMENT

Idle speed for pick-up models (for the Middle East)

		FICD OFF	FICD ON
Idle speed	rpm	700 ⁺⁵⁰ ₀	1,000±50

GI

MA

EM

LC

EC

FE

CL

MT

AT

TF

PD

FA

RA

BR

ST

RS

BT

HA

EL

SE

IDX