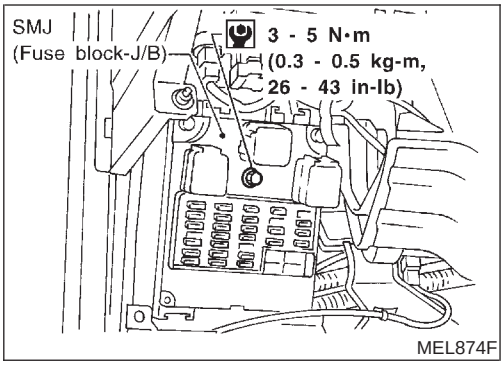
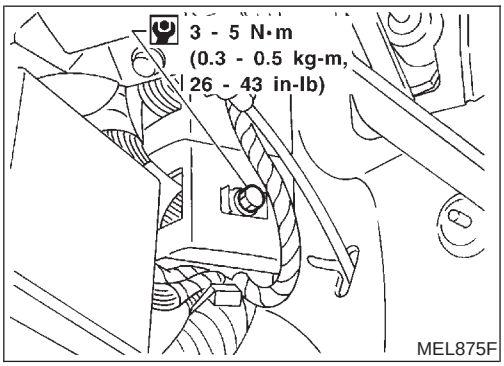


MEL874F



MEL875F

Installation

NAEL0448

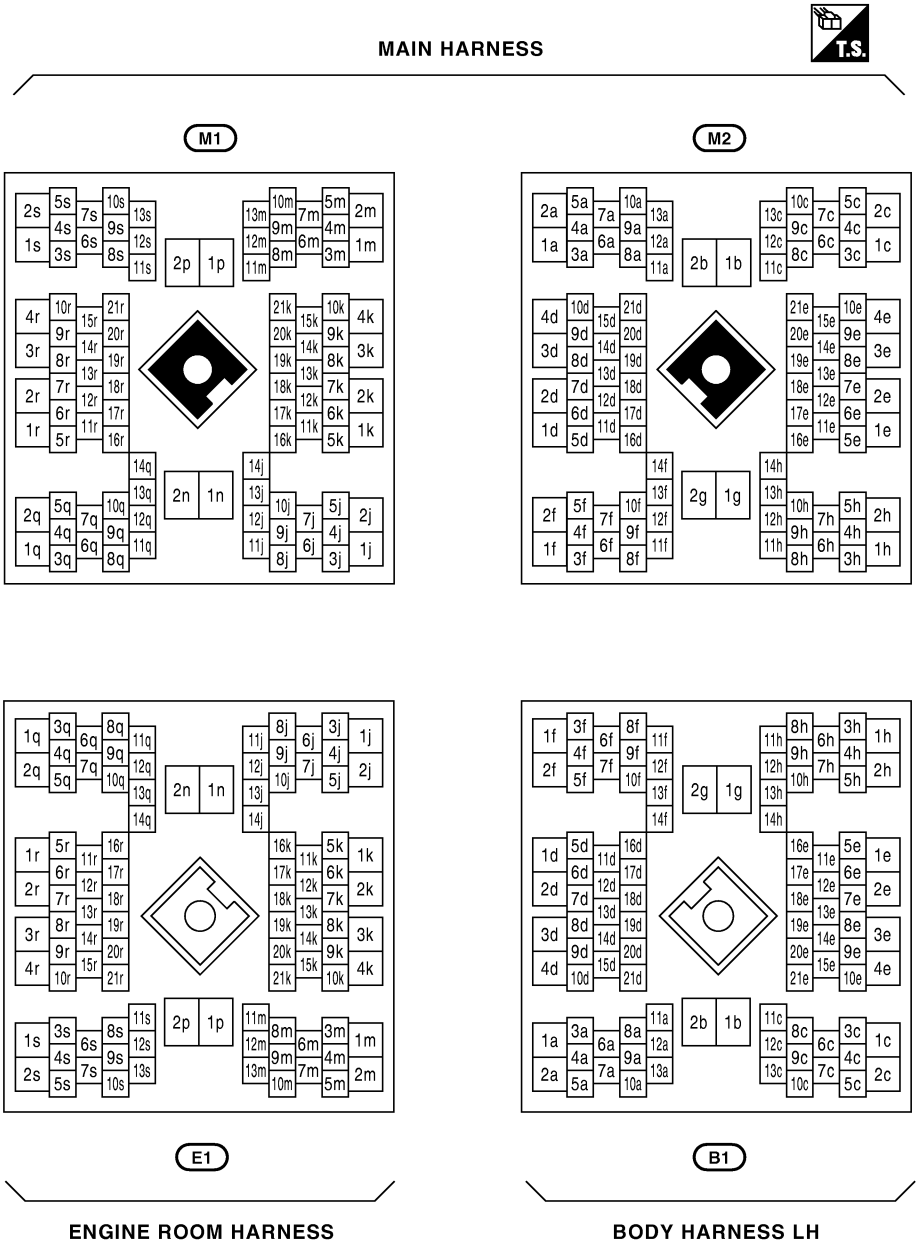
To install SMJ, tighten bolts until orange “fulltight” mark appears and then retighten to specified torque as required.

: 3 - 5 N·m
(0.3 - 0.5 kg-m, 26 - 43 in-lb)

CAUTION:
Do not overtighten bolts, otherwise, they may be damaged.

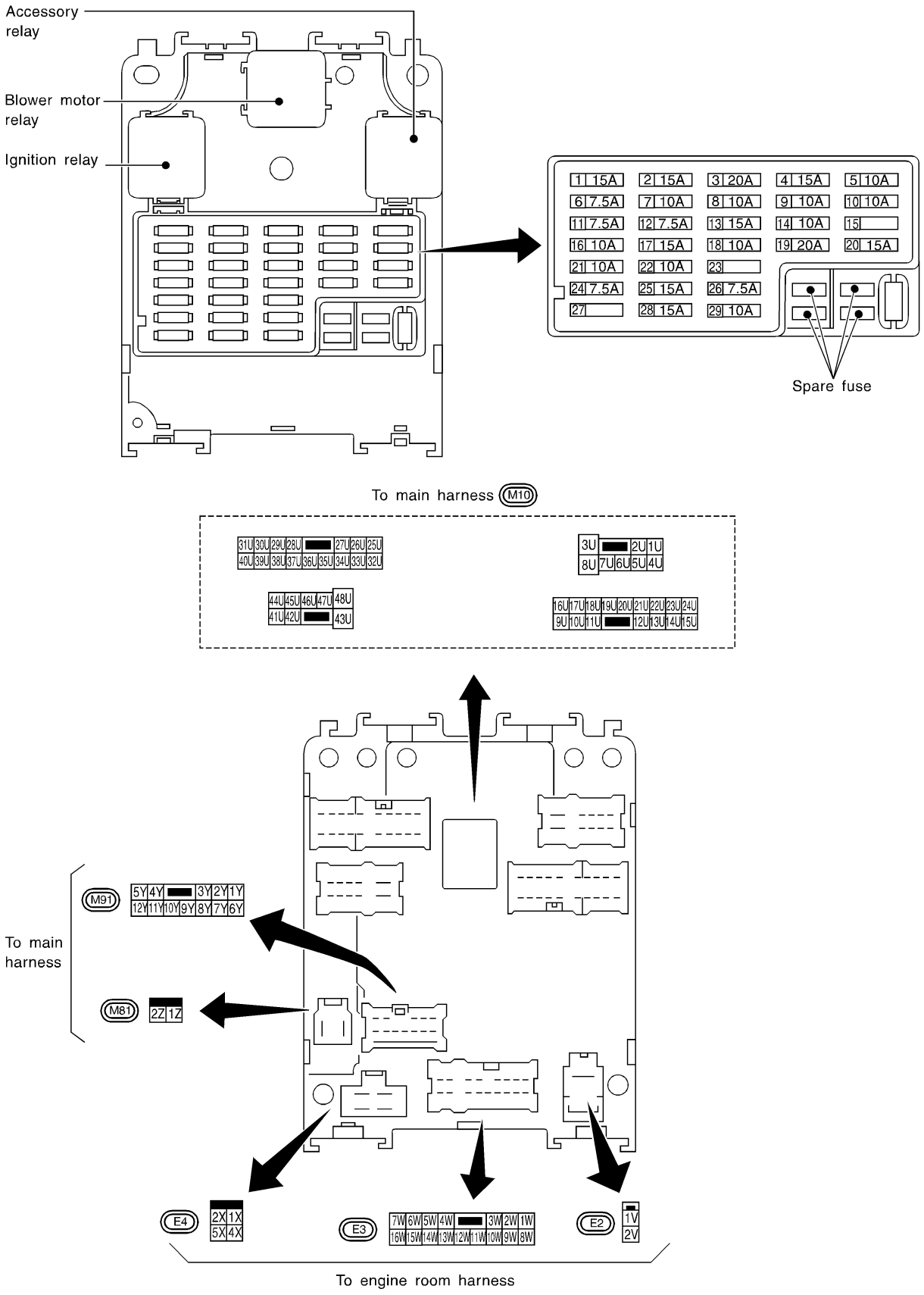
Terminal Arrangement

NAEL0449



Terminal Arrangement

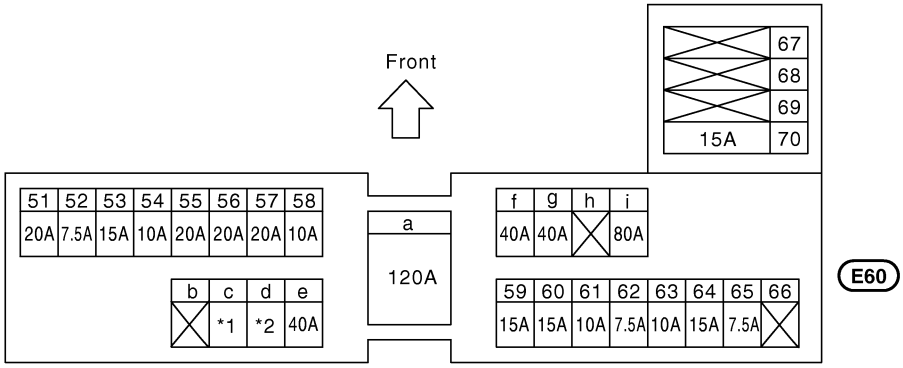
NAEL0450



MEL116S

Terminal Arrangement

NAEL0451



No. 51 - 70: FUSE a - i: FUSIBLE LINK

*1 40A: AB
50A: VD
*2 40A: AB
30A: VD

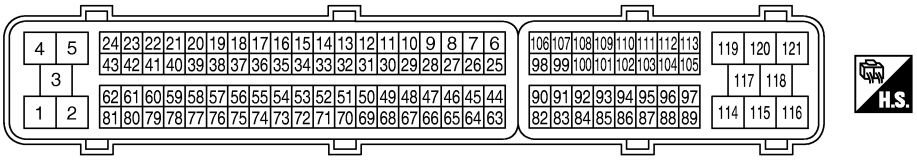
AB: With ABS
VD: With VDC

MEL130S

Terminal Arrangement

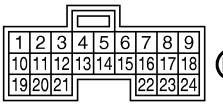
NAEL0150

ECM F203



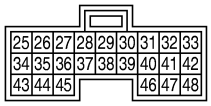
(BLACK)

TCM (TRANSMISSION CONTROL MODULE)



(WHITE)

M119 : A

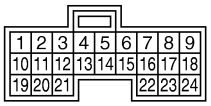


(GRAY)

M120 : A

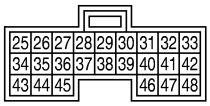
H.S.

TRANSFER CONTROL UNIT



(BLUE)

M142 : AW

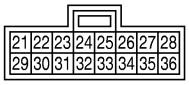


(GREEN)

M143 : AW

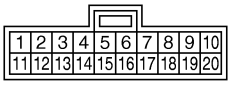
H.S.

A/C AUTO AMP.



(GRAY)

M102

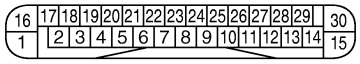


(GRAY)

M103

H.S.

ABS ACTUATOR AND ELECTRIC UNIT



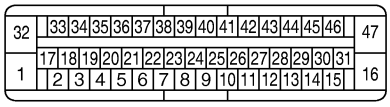
(GRAY)

E111 : OV

T.S.

A : With A/T
AW : With all-mode 4-wheel drive
OV : Without VDC
VD : With VDC

ABS ACTUATOR AND ELECTRIC UNIT

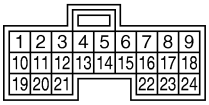


(BLACK)

E142 : VD

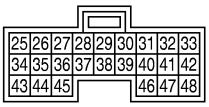
T.S.

SMART ENTRANCE CONTROL UNIT



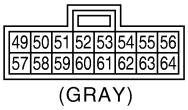
(WHITE)

M121



(GRAY)

M122



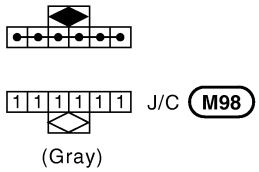
(GRAY)

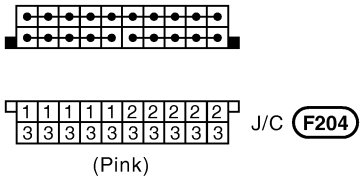
M123

H.S.

Terminal Arrangement

NAEL0484





QUICK REFERENCE CHART: PATHFINDER 2004

ENGINE TUNE-UP DATA

Engine model		VQ35DE		
Firing order		1-2-3-4-5-6		
Idle speed rpm	M/T	750±50		
	A/T (in "N" position)	750±50		
Ignition timing (degree BTDC at idle speed)		15°±5°		
CO% at idle		Idle mixture screw is preset and sealed at factory.		
Drive belt deflection (Cold) mm (in)		Used belt		Deflection of new belt
		Limit	Deflection after adjustment	
Alternator Power steering oil pump Fan		7 (0.28)	4 - 5 (0.16 - 0.20)	3.5 - 4.5 (0.138 - 0.177)
Air conditioner compressor		12 (0.47)	9 - 10 (0.35 - 0.39)	8 - 9 (0.31 - 0.35)
Applied pressed force N (kg, lb)		98 (10, 22)		
Drive belt tension adjustment (Cold) N (kg, lb)		Used belt		New belt
		Limit	After adjustment	
Alternator Power steering pump Fan		294 (30, 66)	730 - 818 (74.4 - 83.5, 164 - 184)	838 - 926 (85.4 - 94.5, 188 - 208)
Air conditioner compressor		196 (20, 44)	348 - 436 (35.5 - 44.5, 78 - 98)	470 - 559 (47.9 - 57.0, 106 - 126)
Radiator cap relief pressure kPa (kg/cm^2, psi)		78 - 98 (0.8 - 1.0, 11 - 14)		
Cooling system leakage testing pressure kPa (kg/cm^2, psi)		157 (1.6, 23)		
Compression pressure kPa (kg/cm^2, psi)/rpm	Standard	1,275 (13.0, 185)/300		
	Minimum	981 (10.0, 142)/300		
Spark plug	Standard	PLFR5A-11		
	Cold	PLFR6A-11		
	Hot	PLFR4A-11		

CLUTCH PEDAL

Unit: mm (in)

Clearance "C" between pedal stopper rubber and clutch interlock switch threaded while clutch pedal is fully depressed.	0.1 - 1.0 (0.004 - 0.039)

WHEEL ALIGNMENT (Unladen*)

Camber	Minimum	−0°35′ (−0.58°)
	Nominal	0°10′ (0.17°)
	Maximum	0°55′ (0.92°)
Degree minute (Decimal degree)	Left and right difference	45′ (0.75°) or less
Caster	Minimum	2°15′ (2.25°)
	Nominal	3°00′ (3.00°)
	Maximum	3°45′ (3.75°)
Degree minute (Decimal degree)	Left and right difference	45′ (0.75°) or less
Kingpin inclination	Minimum	13°35′ (13.58°)
	Nominal	14°20′ (14.33°)
Degree minute (Decimal degree)	Maximum	15°05′ (15.08°)
Total toe-in	Minimum	1 (0.04)
Distance (A − B)	Nominal	2 (0.08)
mm (in)	Maximum	3 (0.12)
Angle (left plus right)	Minimum	5′ (0.08°)
	Nominal	10′ (0.17°)
Degree minute (Decimal degree)	Maximum	15′ (0.25°)
Wheel turning angle (Full turn)	Minimum	30°00′ (30.00°)
Inside	Nominal	33°00′ (33.00°)
Degree minute (Decimal degree)	Maximum	34°00′ (34.00°)
Outside	Minimum	28°00′ (28.00°)
Degree minute (Decimal degree)	Nominal	31°00′ (31.00°)
	Maximum	32°00′ (32.00°)

* Fuel, radiator coolant and engine oil full.
Spare tire, jack, hand tools and mats in designated positions.

BRAKE

Unit: mm (in)

Front brake	
Pad wear limit	2.0 (0.079)
Rotor repair limit	26.0 (1.024)
Rear brake	
Lining wear limit	1.5 (0.059)
Drum repair limit	296.5 (11.67)
Pedal free height	
M/T	165 - 175 (6.50 - 6.89)
A/T	175 - 185 (6.89 - 7.28)
Pedal depressed height*1	
M/T	65 (2.56)
A/T	70 (2.76)
Parking brake	
Number of notches*2	6 - 8

*1 Under force of 490 N (50 kg, 110 lb) with engine running
*2 At pulling force: 196 N (20 kg, 44 lb)

REFILL CAPACITIES

Unit			Liter	US measure
Coolant with reservoir			9.2	9-3/4 qt
Engine*	With oil filter		5.0	5-1/4 qt
	Without oil filter		4.8	5-1/8 qt
	Dry engine (engine overhaul)		6.8	7-1/4 qt
Transmission	M/T	4WD	5.1	10-3/4 pt
	A/T	2WD	8.5	9 qt
		4WD		
Transfer	Part-time 4WD		2.2	2-3/8 qt
	All-mode 4WD		3.0	3-1/8 qt
Differential carrier		Front	1.85	3-7/8 pt
		Rear	2.8	5-7/8 pt
Power steering system			0.9	1 qt
Air conditioning system		Refrigerant	0.45 kg	0.99 lb
		Compressor oil	0.18	6.3 fl oz

* For further details, see "Changing Engine Oil" in MA section.

FRONT WHEEL BEARING

Preload (At hub bolt) N (kg, lb)	Wheel bearing lock nut Tightening torque N·m (kg-m, ft-lb)	78 - 98 (8 - 10, 58 - 72)
	Retightening torque after loosening wheel bearing lock nut N·m (kg-m, in-lb)	0.5 - 1.5 (0.05 - 0.15, 4.3 - 13.0)
	Axial end play mm (in)	0 (0)
	Starting force at wheel hub bolt N (kg, lb)	A
	Turning angle degree	15° - 30°
	Starting force at wheel hub bolt N (kg, lb)	B
	Wheel bearing preload at wheel hub bolt B − A N (kg, lb)	7.06 - 20.99 (0.72 - 2.14, 1.59 - 4.72)

NOTES