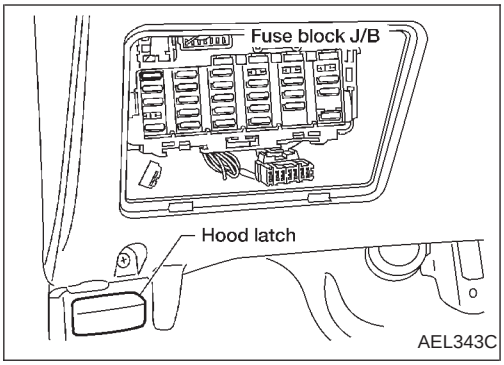
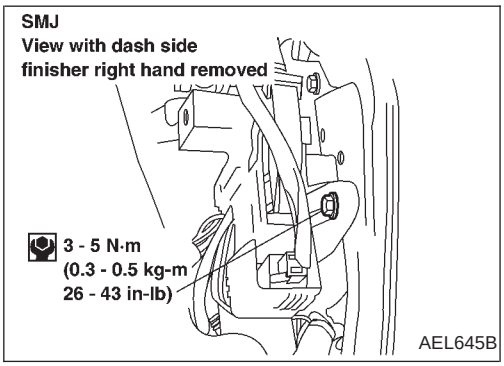




INSTALLATION

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

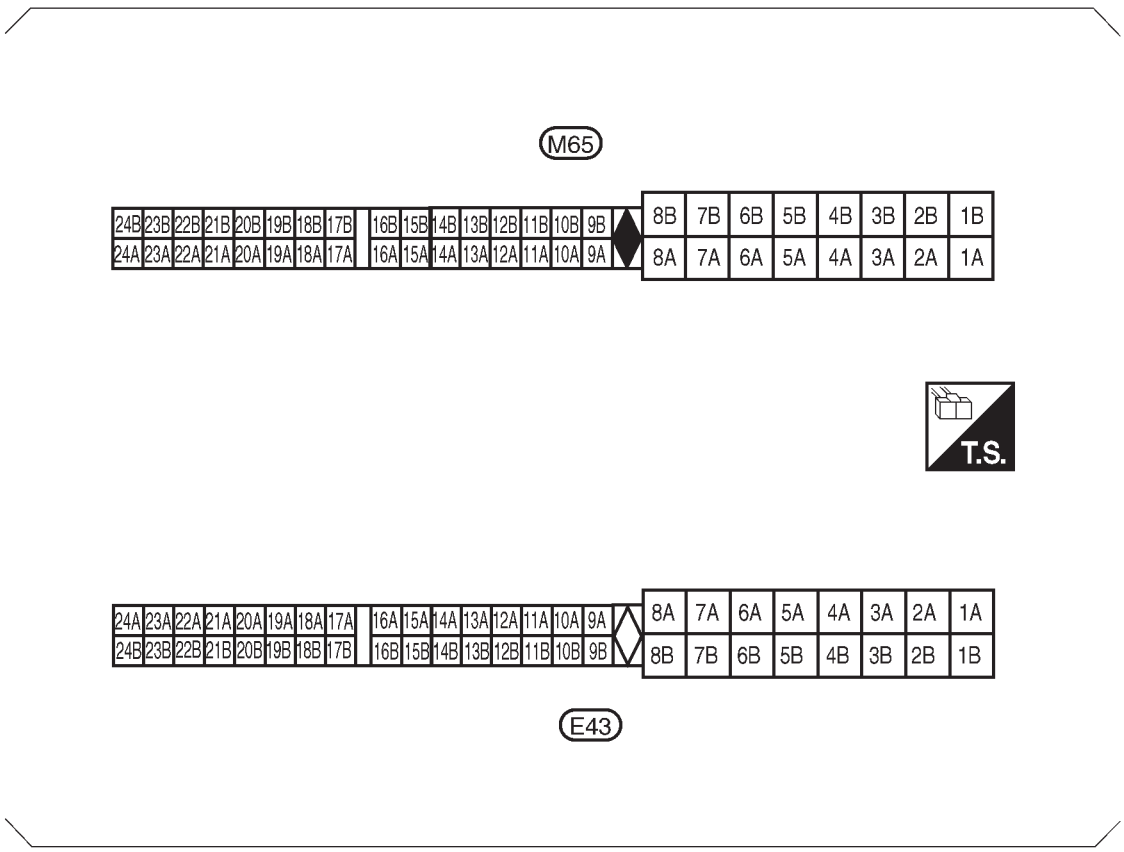
: 3 - 5 N·m
(0.3 - 0.5 kg-m, 26 - 43 in-lb)

CAUTION:

Do not overtighten bolt, otherwise, it may be damaged.

Terminal Arrangement

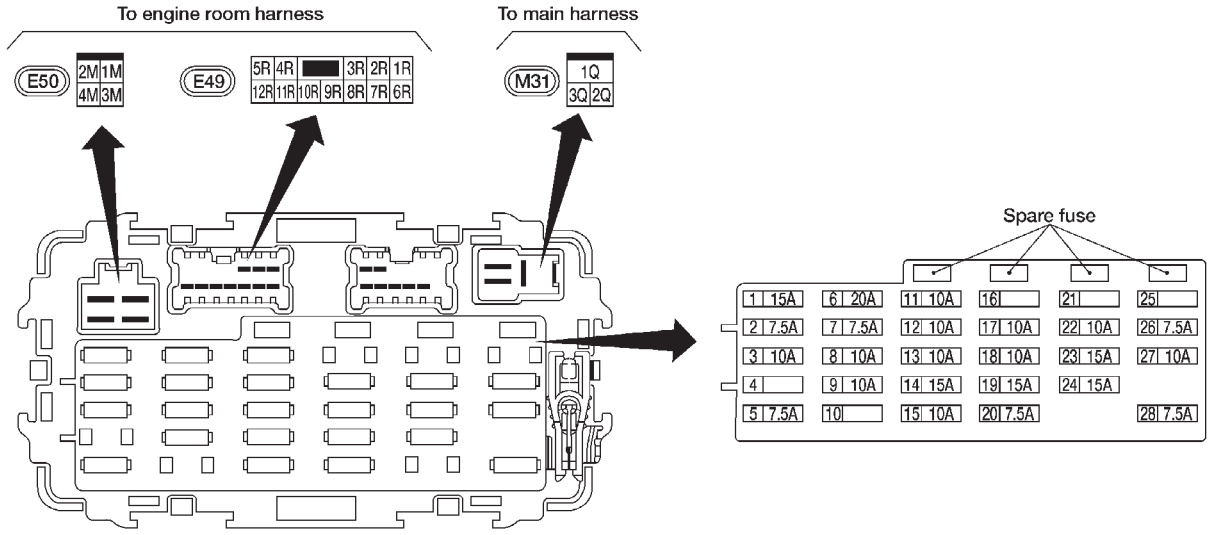
MAIN HARNESS

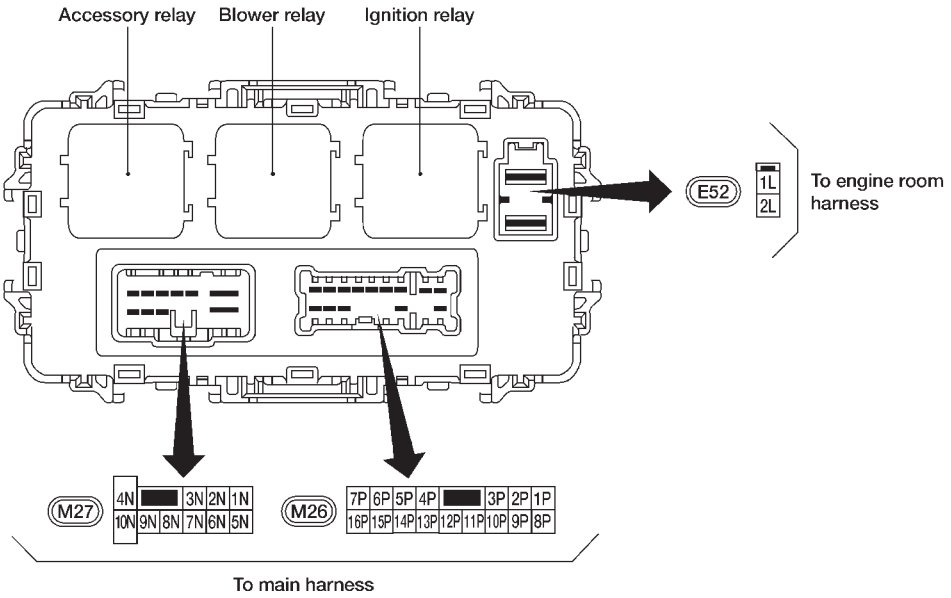


ENGINE ROOM HARNESS

AEL646B

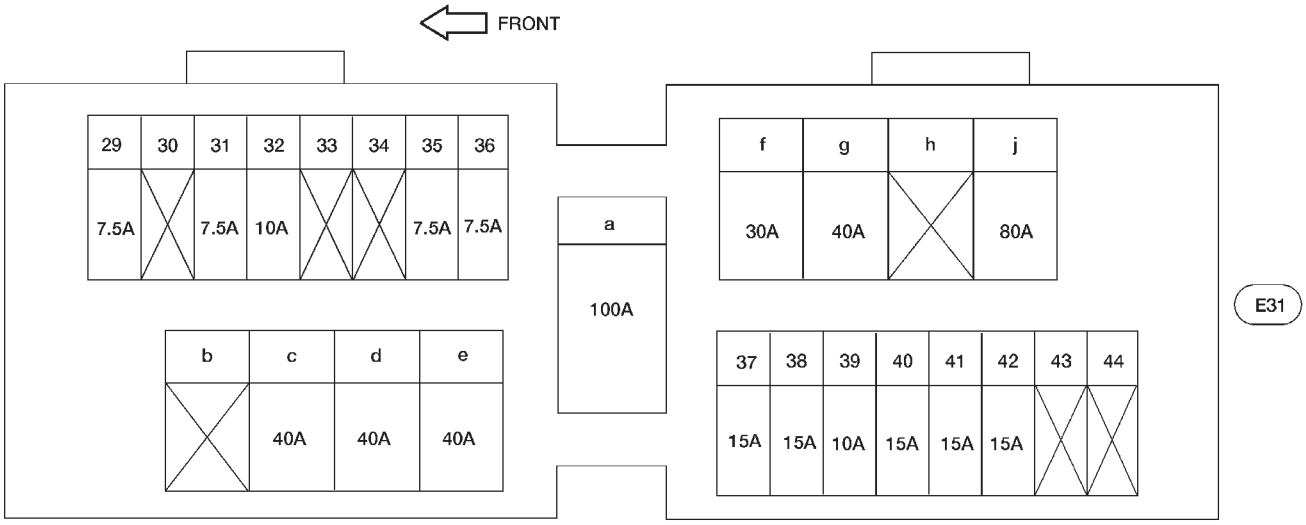
FUSE BLOCK — Junction Box (J/B)





AEL317C

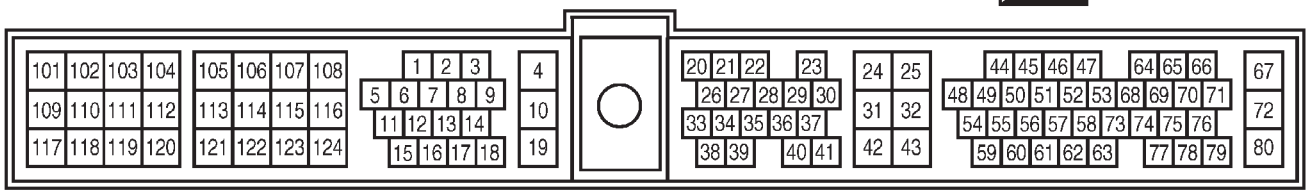
Fuse Arrangement



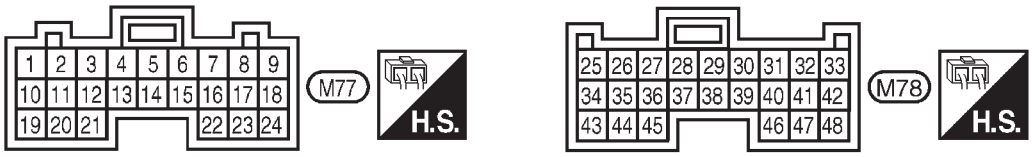
No 29 - 44: FUSE

a - j: FUSIBLE LINK

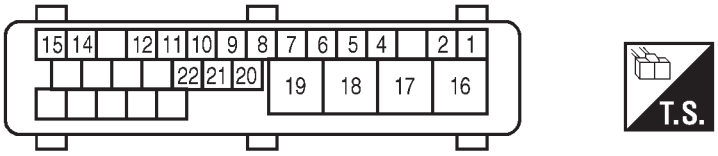
ECM F29



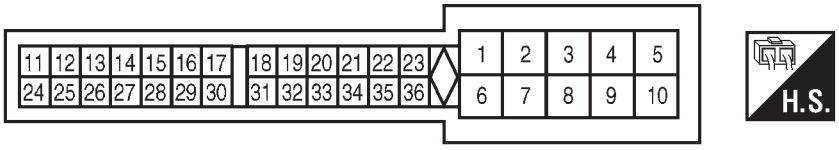
TCM (TRANSMISSION CONTROL MODULE)



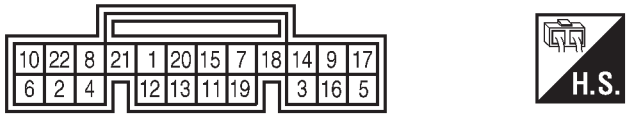
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) E39



SMART ENTRANCE CONTROL UNIT M10

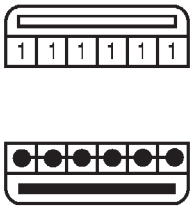


AIR BAG DIAGNOSIS SENSOR UNIT Z6

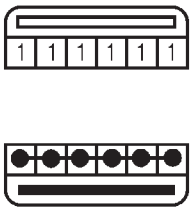


Location

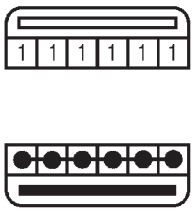
JOINT CONNECTOR - 1 (F31)



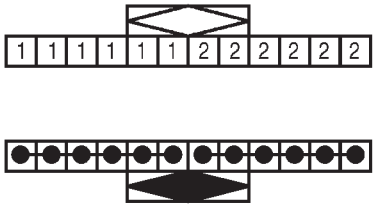
JOINT CONNECTOR - 2 (F32)



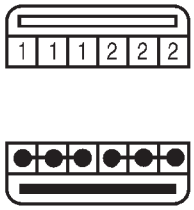
JOINT CONNECTOR - 3 (F33)



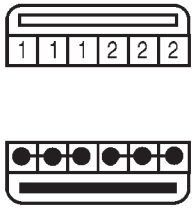
JOINT CONNECTOR - 4 (F34)



JOINT CONNECTOR - 5 (M84)



JOINT CONNECTOR - 6 (M85)



QUICK REFERENCE CHART: FRONTIER 085 [ ] 2000

EQUIPPED WITH 3.3L, VG ENGINE

ENGINE TUNE-UP DATA

Engine model		VG33E		
Firing order		1-2-3-4-5-6		
Idle speed rpm				
MT		750° ± 50		
A/T (in "N" position)		750° ± 50		
Ignition timing (degree B.T.D.C. at idle speed)		15° ± 2°		
CO% at idle		Idle mixture screw is preset and sealed at factory		
Spark plug Type	Standard	FR5AP-10		
	Cold	FR6AP-10		
	Hot	FR4AP-10		
Gap mm (in)		1.0 - 1.1 (0.039 - 0.043)		
Drive belt deflection (Cold) mm (in)		Used belt		
		Limit	Deflection after adjustment	Deflection of new belt
Generator		11 (0.43)	7 - 8 (0.24 - 0.31)	6 - 7 (0.24 - 0.28)
Air conditioner compressor		18 (0.71)	12 - 13 (0.47 - 0.51)	10.5 - 11.5 (0.413 - 0.453)
Power steering oil pump		15 (0.59)	9.5 - 10.5 (0.374 - 0.413)	8 - 9 (0.31 - 0.35)
Drive belt tension N (kg, lb)		Used belt		
		Limit	Tension after adjustment	Tension of new belt
Generator		226 (23, 51)	554.1-642.4 (56.5-65.5, 124.6-144.4)	671.8-760.0 (68.5-77.5, 151.0-170.9)
Air conditioner compressor		196 (20, 44)	495.3-583.5 (50.5-59.5, 111.4-131.2)	603.1-691.4 (61.5-70.5, 135.6-155.5)
Power steering oil pump		275 (28, 62)	554.1-642.4 (56.5-65.5, 124.6-144.4)	671.8-760.0 (68.5-77.5, 151.0-170.9)
Applied pressed force N (kg, lb)		98 (10, 22)		
Radiator cap relief pressure kPa (kg/cm², psi)		78 - 98 (0.8 - 1.0, 11 - 14)		
Cooling system leakage testing pressure kPa (kg/cm², psi)		157 (1.6, 23)		
Compression pressure kPa (kg/cm², psi)/rpm	Standard	1,196 (12.2, 173)/300		
	Minimum	883 (9.0, 128)/300		
Tightening torque		N·m	kg-m	ft-lb
Spark plug		20 - 29	2.0 - 3.0	14 - 22
Oil pan drain plug		29 - 39	3.0 - 4.0	22 - 29

FRONT WHEEL ALIGNMENT (Unladen*1)

Camber		Minimum	0°06' (0.10°)	
		Nominal	0°36' (0.60°)	
		Maximum	1°06' (1.10°)	
	Degree minute (Decimal degree)	Left and right difference	45' (0.75°) or less	
Caster		Minimum	1°40' (1.67°)	
		Nominal	2°10' (2.17°)	
		Maximum	2°40' (2.67°)	
	Degree minute (Decimal degree)	Left and right difference	45' (0.75°) or less	
Kingpin inclination		Minimum	10°18' (10.30°)	
		Nominal	10°48' (10.80°)	
	Degree minute (Decimal degree)	Maximum	11°8' (11.30°)	
Total toe-in		Minimum	3 (0.12)	
	Distance (A - B)	Nominal	4 (0.16)	
	mm (in)	Maximum	5 (0.20)	
	Angle (left plus right)	Minimum	15' (0.25°)	
	Degree minute	Nominal	10°48' (10.80°)	
	(Decimal degree)	Maximum	11°8' (11.30°)	
			Except P235/70R15	P235/70R15
Wheel turning angle	Inside	Minimum	33°06' (33.10°)	31°00' (31.00°)
	Degree minute	Nominal	35°06' (35.10°)	33°00' (33.00°)
	(Decimal degree)	Maximum	35°06' (35.10°)	33°00' (33.00°)
Full turn *2	Outside	Minimum	31°12' (31.20°)	29°00' (29.00°)
	Degree minute	Nominal	33°12' (33.20°)	31°00' (31.00°)
	(Decimal degree)	Maximum	33°12' (33.20°)	31°00' (31.00°)

*1 Fuel, radiator coolant and engine oil full. Spare tire, jack, hand tools and mats in designated positions.
*2 On power steering models, wheel turning force (at circumference of steering wheel) of 98 to 147 N (10 to 15 kg, 22 to 33 lb) with engine idle.

CLUTCH PEDAL

Unit: mm (in)

Pedal height	227 - 237 (8.94 - 9.33)
Pedal free play	7 - 14 (0.27 - 0.55)

BRAKE

Unit: mm (in)

Disc brake	
Pad minimum thickness	2.0 (0.079)
Rotor repair limit Runout	0.07 (0.0028)
Minimum thickness	24.0 (0.945), CL28VD
Drum brake	
Lining minimum thickness	1.5 (0.0059)
Drum repair limit Maximum inner diameter	296.5 (11.67), LT30A
Parking brake	
Number of notches*2	10 - 12

*1 At pulling force: 196 N (20 kg, 44 lb)

FRONT WHEEL BEARING

Preload (At hub bolt)	
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, ft-lb)	0.5 - 1.5 (0.05 - 0.15, 0.4 - 1.1)
Axial end play mm (in)	0 (0)
Start 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)

REFILL CAPACITIES

Unit			Metric measure	US measure
Fuel tank			80ℓ	21.1 gal
Coolant (with reservoir)			10.6ℓ	11-1/4 qt
Engine	With oil filter		3.3ℓ	3-1/2 qt
	Without oil filter		3.0ℓ	3-1/8 qt
	Dry engine (engine overhaul)		3.8ℓ	4 qt
Transmission		M/T	5.1ℓ	10-3/4 qt
		A/T	8.5ℓ	9 qt
Transfer			2.2ℓ	2-3/8 qt
Final drive	Rear	H233B	0.2ℓ	6.8 fl oz
	Front *	R200A	0.6 - 0.7 kg	1.32 - 1.54 lb
Power steering system		PB59K	1.0 - 1.1ℓ	33.8 - 35.2
Air conditioning system		Lubricant	0.2ℓ	6.8 fl oz
		Refrigerant *	0.6 - 0.7 kg	1.32 - 1.54 lb

*R-134a