

VX800N ('92-MODEL)

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SPECIFICATIONS

DIMENSIONS AND DRY MASS

| | |
|------------------|---|
| Overall length | 2280 mm (89.8 in) . . . E15, 16, 17, 22, 25, 39 |
| | 2355 mm (92.7 in) . . . E18 |
| | 2265 mm E03, 33 |
| | 2255 mm (88.8 in) . . . Others |
| Overall width | 805 mm (31.7 in) |
| Overall height | 1115 mm (43.9 in) . . . E03, 28, 33 |
| | 1085 mm (42.7 in) . . . Others |
| Wheelbase | 1565 mm (61.6 in) . . . E03, 33 |
| | 1555 mm (61.2 in) . . . Others |
| Ground clearance | 145 mm (5.7 in) |
| Seat height | 800 mm (31.5 in) . . . E01, 03, 28, 33 |
| | 795 mm (31.3 in) . . . Others |
| Dry mass | 214 kg (472 lbs) . . . E33 |
| | 213 kg (470 lbs) . . . Others |

ENGINE

| | |
|---------------------|--|
| Type | Four-stroke, water-cooled, OHC, TSCC, 45° V-twin |
| Valve clearance | 0.08 — 0.13 mm (0.003 — 0.005 in) |
| Number of cylinders | 2 |
| Bore | 83.0 mm (3.268 in) |
| Stroke | 74.4 mm (2.929 in) |
| Piston displacement | 805 cm ³ (49.12 cu. in) |
| Compression ratio | 10.0 : 1 |
| Carburetor, Front | MIKUNI BDS36SS, single |
| Rear | MIKUNI BS36SS, single |
| Air cleaner | Non woven fabric element |
| Starter system | Electric starter motor |
| Lubrication system | Wet sump |

TRANSMISSION

| | |
|---------------------------|-------------------------------------|
| Clutch | Wet multi-plate type |
| Transmission | 5-speed constant mesh |
| Gearshift pattern | 1-down, 4-up |
| Primary reduction ratio | 1.690 (71/42) |
| Gear ratios, Low | 2.285 (32/14) |
| 2nd | 1.631 (31/19) |
| 3rd | 1.227 (27/22) |
| 4th | 1.000 (25/25) |
| Top | 0.851 (23/27) |
| Secondary reduction ratio | 1.133 (17/15 x 30/30) . . . E03, 33 |
| | 1.096 (17/15 x 30/31) . . . Others |
| Final reduction ratio | 3.090 (34/11) |
| Drive system | Shaft drive |

CHASSIS

| | |
|-------------------------|---|
| Front suspension | Telescopic, coil spring, oil damped |
| Rear suspension | Swingarm, coil spring, gas/oil damped, spring preload 5-way adjustable; rebound damping force 4-way adjustable ... E01, 03, 28, 33; compression damping force 4-way adjustable and rebound damping force 4-way adjustable ... Others |
| Front suspension stroke | 150 mm (5.9 in) |
| Rear wheel travel | 118 mm (4.6 in) ... E01, 03, 28, 33 119 mm (4.7 in) ... Others |
| Caster | 59° |
| Trail | 143 mm (5.63 in) ... E01, 28, 129 mm ... E03,33 142 mm (5.59 in) ... Others |
| Steering angle | 35° (right & left) |
| Turning radius | 3.2 m (10.5 ft) |
| Front brake | Disc |
| Rear brake | Disc |
| Front tire size | 110/80-18 58H, tubeless |
| Rear tire size | 150/70-17 69H, tubeless ... E03,28,33 150/70 B17 69H, tubeless ... Others |

ELECTRICAL

| | |
|-----------------------------------|--|
| Ignition type | Fully transistorized |
| Ignition timing | 5° B.T.D.C. below 1650 r/min and 30° B.T.D.C. above 3500 r/min ... E03, 33 5° B.T.D.C. below 1625 r/min. and 35° B.T.D.C. above 3500 r/min ... E-18 5° B.T.D.C. below 1625 r/min and 32° B.T.D.C. above 3750 r/min ... Others |
| Spark plug | NGK DPR8EA-9 or NIPPON DENSO X24EPR-U9 |
| Battery | 12V 57.6 kC (16Ah)/10HR |
| Fuse | 25/10/10/10A |
| Headlight | 12V 60/55W |
| Position light | 12V 4W ... except E03, 28, 33 |
| Turn signal light | 12V 21W |
| Tail/Brake light | 12V 5/21W |
| License plate light | 12V 5W |
| Speedometer light | 12V 3.4W |
| Tachometer light | 12V 1.7W |
| Neutral indicator light | 12V 3.4W |
| High beam indicator light | 12V 1.7W |
| Turn signal light indicator light | 12V 3.4W |
| Oil pressure indicator light | 12V 3.4W |
| Coolant temperature check light | 12V 3W |
| Speedometer light | 12V 3.4W |
| Tachometer light | 12V 1.7W (x2pcs.) |

CAPACITIES

| | | |
|--|---|---|
| Fuel tank, including reserve | 18.0 L (4.8/4.0 US/Imp. gal) . . . E33 | |
| | 19.0 L (5.0/4.2 US/Imp. gal) . . . Others | — |
| Reserve | 4.0 L (1.1/0.9 US/Imp. gal) | |
| Engine oil, oil change | 2400 ml (2.5/2.1 US/Imp. qt) | |
| with filter change | 2800 ml (3.0/2.5 US/Imp. qt) | |
| overhaul | 3300 ml (3.5/2.9 US/Imp. qt) | |
| Final gear oil | 200 – 220 ml (6.8/7.0 – 7.4/7.7 US/Imp. oz) | — |
| Coolant (including reserve) | 1700 ml (1.8/1.5 US/Imp. qt) | |
| Front fork oil (each leg) | 388 ml (13.1/13.7 US/Imp. oz) . . . E01, 03, 28, 33 | |
| | 392 ml (13.2/13.8 US/Imp. oz) . . . Others | |

These specifications are subject to change without notice.

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SERVICE DATA

VALVE + GUIDE

Unit: mm (in)

| ITEM | STANDARD | | LIMIT |
|--|-----------|--|-----------------|
| Valve diam. | IN. | 30 (1.18) | —— |
| | EX. | 26 (1.02) | —— |
| Valve lift | IN. | 8.5 (0.33) | —— |
| | EX. | 8.5 (0.33) | —— |
| Valve clearance (when cold) | IN. & EX. | 0.08–0.13 (0.003–0.005) | —— |
| Valve guide to valve stem clearance | IN. | 0.020–0.047 (0.0008–0.0019) | 0.35 (0.014) |
| | EX. | 0.035–0.062 (0.0014–0.0024) | 0.35 (0.014) |
| Valve guide I.D. | IN. & EX. | 5.500–5.512 (0.2165–0.2170) | —— |
| Valve stem O.D. | IN. | 5.465–5.480 (0.2152–0.2157) | —— |
| | EX. | 5.450–5.465 (0.2146–0.2152) | —— |
| Valve stem runout | IN. & EX. | —— | 0.05 (0.002) |
| Valve head thickness | IN. & EX. | —— | 0.5 (0.02) |
| Valve stem end length | IN. & EX. | —— | 4.0 (0.16) |
| Valve seat width | IN. & EX. | 0.9–1.1 (0.035–0.043) | —— |
| Valve head radial runout | IN. & EX. | —— | 0.03 (0.001) |
| Valve spring free length | INNER | —— | 38.3 (1.51) |
| | OUTER | —— | 40.1 (1.58) |
| Valve spring tension | INNER | 6.51–7.49 kg (14.35–16.51 lbs) at length 32.5 mm (1.28 in) | —— |
| | OUTER | 12.09–13.91 kg (26.65–30.67 lbs) at length 36.0 mm (1.42 in) | —— |

CAMSHAFT + CYLINDER HEAD

Unit: mm (in)

| ITEM | STANDARD | | LIMIT |
|--------------------------------|--------------------------------|----------------------------------|--------------------|
| Cam height | IN. | 35.954–35.994 (1.4155–1.4171) | 35.660 (1.4039) |
| | EX. | 36.919–36.959 (1.4535–1.4551) | 36.620 (1.4417) |
| Camshaft journal oil clearance | 0.032–0.066 (0.0013–0.0026) | | 0.150 (0.0059) |

| ITEM | STANDARD | | LIMIT |
|--------------------------------|-----------------|----------------------------------|-----------------|
| Camshaft journal holder I.D. | No.1 Left side | 20.012–20.025 | — |
| | No.2 Right side | (0.7879–0.7884) | — |
| | No.1 Right side | 25.012–25.025 | — |
| | No.2 Left side | (0.9847–0.9852) | — |
| Camshaft journal O.D. | No.1 Left side | 19.959–19.980 | — |
| | No.2 Right side | (0.7858–0.7866) | — |
| | No.1 Right side | 24.959–24.980 | — |
| | No.2 Left side | (0.9826–0.9835) | — |
| Camshaft runout | — | | 0.10 (0.004) |
| Cam chain 20-pitch length | — | | 128.9 (5.07) |
| Rocker arm I.D. | IN. & EX. | 12.000–12.018 (0.4724–0.4731) | — |
| Rocker arm shaft O.D. | IN. & EX. | 11.966–11.984 (0.4711–0.4718) | — |
| Cylinder head distortion | — | | 0.05 (0.002) |
| Cylinder head cover distortion | — | | 0.05 (0.002) |

CYLINDER + PISTON + PISTON RING

Unit: mm (in)

| ITEM | STANDARD | | | LIMIT |
|---------------------------------|---|----------------------------|-------------------------|---|
| Compression pressure | 1 300–1 600 kPa (13–16 kg/cm ²) (185–228 psi) | | | 1100 kPa (11 kg/cm ²) (156 psi) |
| Compression pressure difference | — | | | 200 kPa (2 kg/cm ²) (28 psi) |
| Piston to cylinder clearance | 0.045–0.055 (0.0018–0.0022) | | | 0.120 (0.0047) |
| Cylinder bore | 83.000–83.015 (3.2677–3.2683) | | | 83.085 (3.2711) |
| Piston diam. | 82.950–82.965 (3.2657–3.2663) Measure at 15 mm (0.6 in) from the skirt end. | | | 82.880 (3.2630) |
| Cylinder distortion | — | | | 0.05 (0.002) |
| Piston ring free end gap | 1st | R | Approx. 10.5 (0.413) | 8.4 (0.331) |
| | 2nd | R | Approx. 11.8 (0.465) | 9.4 (0.370) |
| Piston ring end gap | 1st | 0.20–0.35 (0.008–0.014) | | 0.70 (0.028) |
| | 2nd | 0.20–0.35 (0.008–0.014) | | 0.70 (0.028) |
| Piston ring groove clearance | 1st | — | | 0.180 (0.007) |
| | 2nd | — | | 0.150 (0.006) |

| ITEM | STANDARD | | LIMIT |
|--------------------------|----------------------------------|--------------------------------|--------------------|
| Piston ring groove width | 1st | 1.01–1.03 (0.0398–0.0406) | — |
| | 2nd | 1.21–1.23 (0.0476–0.0484) | — |
| | Oil | 2.51–2.53 (0.0988–0.0996) | — |
| Piston ring thickness | 1st | 0.970–0.990 (0.0382–0.0390) | — |
| | 2nd | 1.170–1.190 (0.0461–0.0469) | — |
| Piston pin bore | 20.002–20.008 (0.7875–0.7877) | | 20.030 (0.7886) |
| Piston pin O.D. | 19.996–20.000 (0.7827–0.7874) | | 19.980 (0.7866) |

CONROD + CRANKSHAFT

Unit: mm (in)

| ITEM | STANDARD | LIMIT |
|-------------------------------------|----------------------------------|--------------------|
| Conrod small end I.D. | 20.010–20.018 (0.7878–0.7881) | 20.040 (0.7890) |
| Conrod big end side clearance | 0.10–0.20 (0.004–0.010) | 0.30 (0.012) |
| Conrod big end width | 21.95–22.00 (0.864–0.866) | — |
| Crank pin width | 22.10–22.15 (0.870–0.872) | — |
| Conrod big end oil clearance | 0.024–0.042 (0.0009–0.0017) | 0.080 (0.0031) |
| Crank pin O.D. | 40.982–41.000 (1.6135–1.6142) | — |
| Crankshaft journal oil clearance | 0.020–0.050 (0.0008–0.0020) | 0.080 (0.0031) |
| Crankshaft journal O.D. | 47.965–47.980 (1.8884–1.8890) | — |
| Crankshaft thrust bearing thickness | 1.925–2.175 (0.0758–0.0856) | — |
| Crankshaft thrust clearance | 0.05–0.10 (0.0020–0.0040) | — |
| Crankshaft runout | — | 0.05 (0.002) |

OIL PUMP

| ITEM | STANDARD | LIMIT |
|-------------------------------|---|-------|
| Oil pump reduction ratio | 1.859 (71/42 x 32/29) | — |
| Oil pressure (at 60°C, 140°F) | Above 350 kPa (3.5 kg/cm ² , 50 psi) Below 650 kPa (6.5 kg/cm ² , 92 psi) at 3 000 r/min. | — |

CLUTCH

Unit: mm (in)

| ITEM | | STANDARD | LIMIT |
|---------------------------|-------|--------------------------------|-----------------|
| Clutch cable play | | 4 (0.2) | — |
| Clutch release screw | | ¼ – ½ turn back | — |
| Drive plate thickness | No. 1 | 2.65 – 2.95 (0.104 – 0.116) | 2.35 (0.093) |
| | No. 2 | 3.45 – 3.55 (0.136 – 0.140) | 3.15 (0.124) |
| Drive plate claw width | | 15.8 – 16.0 (0.62 – 0.63) | 15.0 (0.59) |
| Driven plate thickness | | 1.60 ± 0.05 (0.063 ± 0.002) | — |
| Driven plate distortion | | — | 0.10 (0.004) |
| Clutch spring free length | No. 1 | — | 24.6 (0.97) |
| | No. 2 | — | 23.3 (0.92) |

TRANSMISSION

Unit: mm (in) Except ratio

| ITEM | | STANDARD | LIMIT |
|--------------------------------|--------------|--------------------------------|-----------------|
| Primary reduction ratio | | 1.690 (71/42) | — |
| Secondary reduction ratio | U.S.A. model | 1.133 (30/30 x 17/15) | — |
| | Other models | 1.096 (30/31 x 17/15) | — |
| Final reduction ratio | | 3.090 (34/11) | — |
| Gear ratios | Low | 2.285 (32/14) | — |
| | 2nd | 1.631 (31/19) | — |
| | 3rd | 1.227 (27/22) | — |
| | 4th | 1.000 (25/25) | — |
| | Top | 0.851 (23/27) | — |
| Shift fork to groove clearance | No. 1 | 0.10 – 0.30 (0.004 – 0.012) | 0.50 (0.020) |
| | No. 2 | 0.10 – 0.30 (0.004 – 0.012) | 0.50 (0.020) |
| Shift fork groove width | No. 1 | 5.50 – 5.60 (0.217 – 0.220) | — |
| | No. 2 | 4.50 – 4.60 (0.177 – 0.181) | — |
| Shift fork thickness | No. 1 | 5.30 – 5.40 (0.209 – 0.213) | — |
| | No. 2 | 4.30 – 4.40 (0.169 – 0.173) | — |

SHAFT DRIVE

Unit: mm (in)

| ITEM | STANDARD | | LIMIT |
|-------------------------------|----------------------------|-----------------------------|-------|
| Secondary bevel gear backlash | 0.05–0.32 (0.002–0.013) | | — |
| Final bevel gear backlash | Drive side | 0.03–0.064 (0.001–0.025) | — |

CARBURETOR

| ITEM | SPECIFICATION | |
|------------------------|--------------------------------------|--------------------------------------|
| | E-02,04,16,21,25,28,34 | |
| Carburetor type | MIKUNI BS36SS (No.1) | MIKUNI BDS36SS (No.2) |
| Bore size | 36 mm | ← |
| I.D. No. | 45C00 | ← |
| Idle r/min. | 1100 ± 100 r/min. | ← |
| Float height | 27.7 ± 1.0 mm (1.09 ± 0.04 in) | 9.1 ± 1.0 mm (0.36 ± 0.04 in) |
| Main jet (M.J.) | # 132.5 | # 120 |
| Main air jet (M.A.J.) | 1.8 mm | ← |
| Jet needle (J.N.) | 5F108-3rd | 5D49-3rd |
| Needle jet (N.J.) | P-4 | ← |
| Throttle valve (Th.V.) | # 115 | ← |
| Pilot jet (P.J.) | # 47.5 | # 40 |
| By-pass (B.P.) | 0.8 mm x 2PCS | 0.8 mm x 3PCS |
| Pilot outlet (P.O.) | 0.8 mm | 1.0 mm |
| Valve seat (V.S.) | 1.5 mm | ← |
| Starter jet (G.S.) | # 25 | # 22.5 |
| Pilot screw (P.S.) | (PRE-SET) 1 $\frac{3}{8}$ turns back | (PRE-SET) 1 $\frac{1}{8}$ turns back |
| Pilot air jet (P.A.J.) | No.1:(# 70), No.2:(2.0 mm) | No.1:(# 65), No.2:(1.2 mm) |
| Throttle cable play | 0.5–1.0 mm (0.02–0.04 in) | ← |
| Choke cable play | 0.5–1.0 mm (0.02–0.04 in) | ← |

CARBURETOR

| ITEM | SPECIFICATION | |
|------------------------|-----------------------------------|----------------------------------|
| | E-03 | |
| Carburetor type | MIKUNI BS36SS (No.1) | MIKUNI BDS36SS (No.2) |
| Bore size | 36 mm | ← |
| I.D. No. | 45C10 | ← |
| Idle r/min. | 1200 ± 50 r/min. | ← |
| Float height | 27.7 ± 1.0 mm (1.09 ± 0.04 in) | 9.1 ± 1.0 mm (0.36 ± 0.04 in) |
| Main jet (M.J.) | # 132.5 | # 122.5 |
| Main air jet (M.A.J.) | 1.8 mm | ← |
| Jet needle (J.N.) | 5E72-1st | 5D47-1st |
| Needle jet (N.J.) | P-7 | P-2 |
| Throttle valve (Th.V.) | # 125 | # 110 |
| Pilot jet (P.J.) | # 45 | # 40 |
| By-pass (B.P.) | 0.8 mm x 2PCS | 0.8 mm x 3PCS |
| Pilot outlet (P.O.) | 0.8 mm | 1.0 mm |

| ITEM | SPECIFICATION | |
|------------------------|------------------------------|----------------------------|
| | E-03 | |
| Valve seat (V.S.) | 1.5 mm | ← |
| Starter jet (G.S.) | # 25 | # 22.5 |
| Pilot screw (P.S.) | (PRE-SET) | (PRE-SET) |
| Pilot air jet (P.A.J.) | No.1:(# 65), No.2:(2.0 mm) | No.1:(# 65), No.2:(1.2 mm) |
| Throttle cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |
| Choke cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |

CARBURETOR

| ITEM | SPECIFICATION | |
|------------------------|-----------------------------------|----------------------------------|
| | E-33 | |
| Carburetor type | MIKUNI BS36SS (No.1) | MIKUNI BDS36SS (No.2) |
| Bore size | 36 mm | ← |
| I.D. No. | 45C20 | ← |
| Idle r/min. | 1200 ± 50 r/min. | ← |
| Float height | 27.7 ± 1.0 mm (1.09 ± 0.04 in) | 9.1 ± 1.0 mm (0.36 ± 0.04 in) |
| Main jet (M.J.) | # 132.5 | # 122.5 |
| Main air jet (M.A.J.) | 1.8 mm | ← |
| Jet needle (J.N.) | 5E72-1st | 5D47-1st |
| Needle jet (N.J.) | P-7 | P-2 |
| Throttle valve (Th.V.) | # 125 | # 110 |
| Pilot jet (P.J.) | # 45 | # 40 |
| By-pass (B.P.) | 0.8 mm x 2PCS | 0.8 mm x 3PCS |
| Pilot outlet (P.O.) | 0.8 mm | 1.0 mm |
| Valve seat (V.S.) | 1.5 mm | ← |
| Starter jet (G.S.) | # 25 | # 22.5 |
| Pilot screw (P.S.) | (PRE-SET) | (PRE-SET) |
| Pilot air jet (P.A.J.) | No.1:(# 65), No.2:(2.0 mm) | No.1:(# 65), No.2:(1.2 mm) |
| Throttle cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |
| Choke cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |

CARBURETOR

| ITEM | SPECIFICATION | |
|-----------------------|--|----------------------------------|
| | E-18 | |
| Carburetor type | MIKUNI BS36SS (No.1) | MIKUNI BDS36SS (No.2) |
| Bore size | 36 mm | ← |
| I.D. No. | 45C30 | ← |
| Idle r/min. | 1200 ± ¹⁰⁰ / ₅₀ r/min. | ← |
| Float height | 27.7 ± 1.0 mm (1.09 ± 0.04 in) | 9.1 ± 1.0 mm (0.36 ± 0.04 in) |
| Main jet (M.J.) | # 135 | # 125 |
| Main air jet (M.A.J.) | 1.8 mm | ← |
| Jet needle (J.N.) | 5F107-3rd | 5D48-3rd |

| ITEM | SPECIFICATION | |
|------------------------|------------------------------|----------------------------|
| | E-18 | |
| Needle jet (N.J.) | P-4 | P-2 |
| Throttle valve (Th.V.) | # 115 | ← |
| Pilot jet (P.J.) | # 45 | # 40 |
| By-pass (B.P.) | 0.8 mm x 2PCS | 0.8 mm x 3PCS |
| Pilot outlet (P.O.) | 0.8 mm | 1.0 mm |
| Valve seat (V.S.) | 1.5 mm | ← |
| Starter jet (G.S.) | # 25 | # 22.5 |
| Pilot screw (P.S.) | (PRE-SET) 2 turns back | (PRE-SET) 1¼ turns back |
| Pilot air jet (P.A.J.) | No.1:(# 55), No.2:(1.85 mm) | No.1:(# 65), No.2:(1.2 mm) |
| Throttle cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |
| Choke cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |

CARBURETOR

| ITEM | SPECIFICATION | |
|------------------------|-------------------------------|------------------------------|
| | E-01 | |
| Carburetor type | MIKUNI BS36SS (No.1) | MIKUNI BDS36SS (No.2) |
| Bore size | 36 mm | ← |
| I.D. No. | 45C40 | ← |
| Idle r/min. | 1100±100 r/min. | ← |
| Float height | 27.7±1.0 mm (1.09±0.04 in) | 9.1±1.0 mm (0.36±0.04 in) |
| Main jet (M.J.) | # 135 | # 122.5 |
| Main air jet (M.A.J.) | 1.8 mm | ← |
| Jet needle (J.N.) | 5F108-3rd | 5D49-3rd |
| Needle jet (N.J.) | P-4 | ← |
| Throttle valve (Th.V.) | # 115 | ← |
| Pilot jet (P.J.) | # 47.5 | # 40 |
| By-pass (B.P.) | 0.8 mm x 2PCS | 0.8 mm x 3PCS |
| Pilot outlet (P.O.) | 0.8 mm | 1.0 mm |
| Valve seat (V.S.) | 1.5 mm | ← |
| Starter jet (G.S.) | # 25 | # 22.5 |
| Pilot screw (P.S.) | (PRE-SET) 1½ turns back | (PRE-SET) 1⅞ turns back |
| Pilot air jet (P.A.J.) | No.1:(# 70), No.2:(2.0 mm) | No.1:(# 65), No.2:(1.2 mm) |
| Throttle cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |
| Choke cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |

CARBURETOR

| ITEM | SPECIFICATION | |
|-----------------|----------------------|-----------------------|
| | E-15,22,24,39 | |
| Carburetor type | MIKUNI BS36SS (No.1) | MIKUNI BDS36SS (No.2) |
| Bore size | 36 mm | ← |
| I.D. No. | 45C50 | ← |
| Idle r/min. | 1100±100 r/min. | ← |

| ITEM | SPECIFICATION | |
|------------------------|-----------------------------------|----------------------------------|
| | E-15,22,24,39 | |
| Float height | 27.7 ± 1.0 mm (1.09 ± 0.04 in) | 9.1 ± 1.0 mm (0.36 ± 0.04 in) |
| Main jet (M.J.) | # 132.5 | # 120 |
| Main air jet (M.A.J.) | 1.8 mm | ← |
| Jet needle (J.N.) | 5F108-3rd | 5D49-3rd |
| Needle jet (N.J.) | P-4 | ← |
| Throttle valve (Th.V.) | # 115 | ← |
| Pilot jet (P.J.) | # 47.5 | # 40 |
| By-pass (B.P.) | 0.8 mm x 2PCS | 0.8 mm x 3PCS |
| Pilot outlet (P.O.) | 0.8 mm | 1.0 mm |
| Valve seat (V.S.) | 1.5 mm | ← |
| Starter jet (G.S.) | # 25 | # 22.5 |
| Pilot screw (P.S.) | (PRE-SET) 1 1/8 turns back | (PRE-SET) 1 turn back |
| Pilot air jet (P.A.J.) | No.1:(# 70), No.2:(2.0 mm) | No.1:(# 65), No.2:(1.2 mm) |
| Throttle cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |
| Choke cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |

CARBURETOR

| ITEM | SPECIFICATION | |
|------------------------|-----------------------------------|----------------------------------|
| | U-type of E-22 | |
| Carburetor type | MIKUNI BS36SS (No.1) | MIKUNI BDS36SS (No.2) |
| Bore size | 36 mm | ← |
| I.D. No. | 45C60 | ← |
| Idle r/min. | 1100 ± 100 r/min. | ← |
| Float height | 27.7 ± 1.0 mm (1.09 ± 0.04 in) | 9.1 ± 1.0 mm (0.36 ± 0.04 in) |
| Main jet (M.J.) | # 135 | # 122.5 |
| Main air jet (M.A.J.) | 1.8 mm | ← |
| Jet needle (J.N.) | 5F108-3rd | 5D49-3rd |
| Needle jet (N.J.) | P-4 | P-6 |
| Throttle valve (Th.V.) | # 115 | ← |
| Pilot jet (P.J.) | # 47.5 | # 40 |
| By-pass (B.P.) | 0.8 mm x 2PCS | 0.8 mm x 3PCS |
| Pilot outlet (P.O.) | 0.8 mm | 1.0 mm |
| Valve seat (V.S.) | 1.5 mm | ← |
| Starter jet (G.S.) | # 25 | # 22.5 |
| Pilot screw (P.S.) | (PRE-SET) 1 1/8 turns back | (PRE-SET) 1 1/16 turns back |
| Pilot air jet (P.A.J.) | No.1:(# 70), No.2:(2.0 mm) | No.1:(# 65), No.2:(1.2 mm) |
| Throttle cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |
| Choke cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |

CARBURETOR

| ITEM | SPECIFICATION | |
|------------------------|-----------------------------------|----------------------------------|
| | E-17 | |
| Carburetor type | MIKUNI BS36SS (No.1) | MIKUNI BDS36SS (No.2) |
| Bore size | 36 mm | ← |
| I.D. No. | 45C70 | ← |
| Idle r/min. | 1100 ± 100 r/min. | ← |
| Float height | 27.7 ± 1.0 mm (1.09 ± 0.04 in) | 9.1 ± 1.0 mm (0.36 ± 0.04 in) |
| Main jet (M.J.) | # 135 | # 122.5 |
| Main air jet (M.A.J.) | 1.8 mm | ← |
| Jet needle (J.N.) | 5F108-3rd | 5D49-3rd |
| Needle jet (N.J.) | P-4 | P-6 |
| Throttle valve (Th.V.) | # 115 | ← |
| Pilot jet (P.J.) | # 47.5 | # 40 |
| By-pass (B.P.) | 0.8 mm x 2PCS | 0.8 mm x 3PCS |
| Pilot outlet (P.O.) | 0.8 mm | 1.0 mm |
| Valve seat (V.S.) | 1.5 mm | ← |
| Starter jet (G.S.) | # 25 | # 22.5 |
| Pilot screw (P.S.) | (PRE-SET) 1 3/8 turns back | (PRE-SET) 1 1/4 turns back |
| Pilot air jet (P.A.J.) | No.1:(# 70), No.2:(2.0 mm) | No.1:(# 65), No.2:(1.2 mm) |
| Throttle cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |
| Choke cable play | 0.5—1.0 mm (0.02—0.04 in) | ← |

ELECTRICAL

Unit: mm (in)

| ITEM | SPECIFICATION | | NOTE |
|---|---|-----------------------------------|--------------------|
| Ignition timing | 5° B.T.D.C. Below 1 650 r/min. and 30° B.T.D.C. Above 3 500 r/min. | | U.S.A. model |
| | 5° B.T.D.C. Below 1 625 r/min. and 32° B.T.D.C. Above 3 750 r/min. | | Other models |
| Firing order | 1-2 | | |
| Spark plug | Type | N.G.K.: DPR8EA-9 ND: X24EPR-U9 | |
| | Gap | 0.8—0.9 (0.031—0.035) | |
| Spark performance | Over 8 (0.3) at 1 atm. | | |
| Signal coil resistance | Approx. 117 Ω (G—BI) | | U.S.A. model |
| | Approx. 230 Ω (G—BI) | | Other models |
| Ignition coil resistance | Primary | 2—6 Ω | ⊕ tap—⊖ tap |
| | Secondary | 19—27 kΩ | Plug cap— ⊕ tap |
| Generator no-load voltage (When engine cold) | More than 65V (AC) at 5 000 r/min. | | U.S.A. model |
| | More than 75 V (AC) at 5 000 r/min. | | Other models |
| Regulated voltage | 13.5—15.5 V at 5 000 r/min. | | |
| Starter motor brush length | Limit: 9 (0.35) | | N.D. |

| ITEM | STANDARD | | NOTE |
|--------------------------|---------------------------|-----------------------|------|
| Commutator under-cut | Limit: 0.2 (0.008) | | |
| Starter relay resistance | 2—6 Ω | | |
| Battery | Type designation | YB16B-A | |
| | Capacity | 12V57.6kC (16Ah)/10HR | |
| | Standard electrolyte S.G. | 1.28 at 20°C (68°F) | |
| Fuse size | Headlight | 10 A | |
| | Ignition/Fan | 10 A | |
| | Signal | 10 A | |
| | Main | 25 A | |

WATTAGE

Unit:W

| ITEM | | SPECIFICATION |
|------------------------------|----|------------------------------|
| Headlight | HI | 60 |
| | LO | 55 |
| Tail/Brake light | | 5/21 |
| Turn signal light | | 21 |
| Speedometer light | | 3.4 |
| Tachometer light | | 1.7 x 2PCS |
| Water temp. indicator light | | 3 |
| Turn signal indicator light | | 3.4 |
| High beam indicator light | | 1.7 |
| Neutral indicator light | | 3.4 |
| Oil pressure indicator light | | 3.4 |
| License light | | 5 |
| Position light | | 4 (Execpt E-03,28,33 models) |

BRAKE + WHEEL

Unit: mm (in)

| ITEM | STANDARD | | LIMIT |
|------------------------------|-------------|----------------------------------|-----------------|
| Rear brake pedal height | 35 (1.4) | | — |
| Brake disc thickness | Front | 5.5 ± 0.2 (0.197 ± 0.008) | 5.0 (0.20) |
| | Rear | 6.0 ± 0.2 (0.236 ± 0.008) | 5.5 (0.22) |
| Brake disc runout | Front | — | 0.30 (0.012) |
| | Rear | | |
| Master cylinder bore | Front | 12.700—12.743 (0.5000—0.5017) | — |
| | Rear | | |
| Master cylinder piston diam. | Front | 12.657—12.684 (0.4983—0.4993) | — |
| | Rear | | |
| Brake caliper cylinder bore | Front | 33.960—34.036 (1.3370—1.3400) | — |
| | | 27.000—27.076 (1.0630—1.0660) | — |
| | Rear | 42.850—42.926 (1.6870—1.6900) | — |

| ITEM | | STANDARD | | LIMIT |
|----------------------------|------------|----------------------------------|--|-----------------|
| Brake caliper piston diam. | Front | 33.884–33.934 (1.3340–1.3360) | | — |
| | | 26.920–26.970 (1.0598–1.0618) | | — |
| | Rear | 42.770–42.820 (1.6839–1.6858) | | — |
| Wheel rim runout | Axial | — | | 2.0 (0.08) |
| | Radial | — | | 2.0 (0.08) |
| Wheel axle runout | Front | — | | 0.25 (0.010) |
| | Rear | — | | 0.25 (0.010) |
| Tire size | Front | 110/80-18 58H | | — |
| | E-03,28,33 | Rear 150/70-17 69H | | — |
| | Others | Rear 150/70 B17 69H | | — |
| Tire tread depth | Front | — | | 1.6 (0.06) |
| | Rear | — | | 2.0 (0.08) |

SUSPENSION

Unit: mm (in)

| ITEM | STANDARD | LIMIT | NOTE |
|-------------------------------|---------------|-----------------|----------------------|
| Front fork stroke | 150 (5.9) | — | |
| Front fork spring free length | — | 353 (13.9) | E-01,03,28,33 models |
| | — | 348 (13.7) | Other models |
| Front fork oil level | 142 (5.59) | — | E-01,03,28,33 models |
| | 138 (5.43) | — | Other models |
| Rear wheel travel | 118 (4.64) | — | E-01,03,28,33 models |
| | 119 (4.68) | — | Other models |
| Swingarm pivot shaft runout | — | 0.30 (0.012) | |

TIRE PRESSURE

| COLD INFLATION TIRE PRESSURE | NORMAL RIDING | | | | | |
|---------------------------------|---------------|--------------------|-----|-------------|--------------------|-----|
| | SOLO RIDING | | | DUAL RIDING | | |
| | kPa | kg/cm ² | psi | kPa | kg/cm ² | psi |
| FRONT | 225 | 2.25 | 33 | 225 | 2.25 | 33 |
| REAR | 250 | 2.50 | 36 | 280 | 2.80 | 41 |

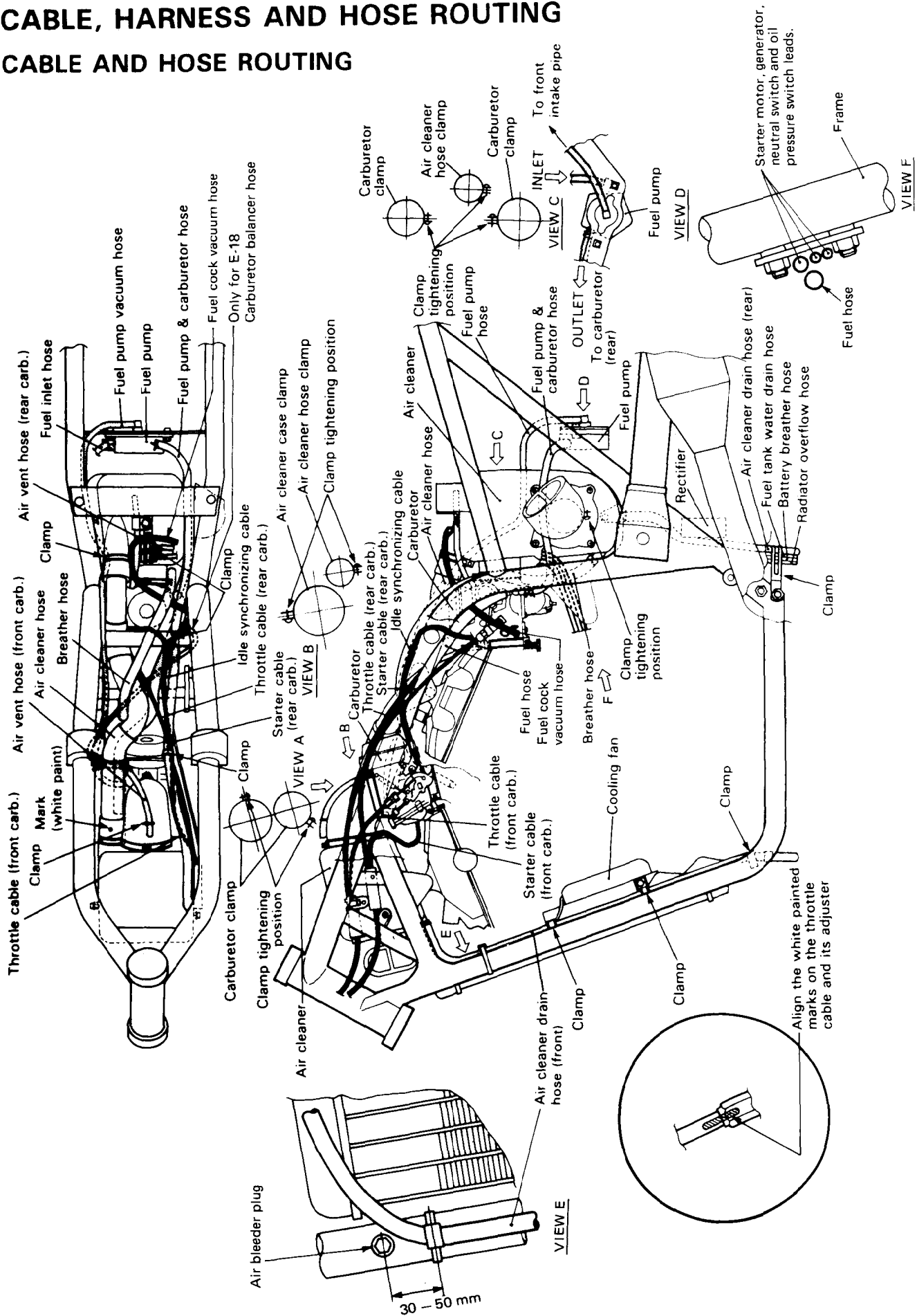
FUEL + OIL + COOLANT

| ITEM | SPECIFICATION | | NOTE |
|--|--|---------------------------------|-----------------------|
| Fuel type | Use only unleaded gasoline of at least 87 pump octane ($\frac{R+M}{2}$) or 91 octane or higher rated by the research method. Gasoline containing MTBE (Methyl Tertiary Butyl Ether), less than 10% ethanol, or less than 5% methanol with appropriate cosolvents and corrosion inhibitor is permissible. | | U.S.A.model |
| | Use only unleaded gasoline of at least 87 pump octane ($\frac{R+M}{2}$ method) or 91 octane or higher rated by the Research Method. | | Canada model |
| | Gasoline used should be graded 85-95 octane or higher. An unleaded gasoline is recommended. | | Other models |
| Fuel tank including reserve reserve | 18.0 L (4.8/4.0 US/lmp gal) | | California model only |
| | 19.0 L (5.0/4.2 US/lmp gal) | | Other models |
| | 4.0 L (1.1/0.9 US/lmp gal) | | |
| Engine oil type | SAE 10W/40, API SE or SF | | |
| Engine oil capacity | Change | 2 400 ml (2.5/2.1 US/lmp qt) | |
| | Filter change | 2 800 ml (3.0/2.5 US/lmp qt) | |
| | Overhaul | 3 300 ml (3.5/2.9 US/lmp qt) | |
| Front fork oil type | Fork oil # 10 | | |
| Front fork oil capacity (each leg) | 388 ml (13.1/13.7 US/lmp oz) | | E-01,03,28,33, models |
| | 392 ml (13.2/13.8 US/lmp oz) | | Other models |
| Final bevel gear oil type | SAE 90 hypoid gear oil with GL-5 under API classification | | |
| Final bevel gear oil capacity | 200–220 ml (6.8/7.0–7.4/7.7 US/lmp oz) | | |
| Brake fluid type | DOT4 | | |
| Coolant capacity | 1 700 ml (1.8/1.5 US/lmp qt) | | |

THERMOSTAT + RADIATOR + FAN

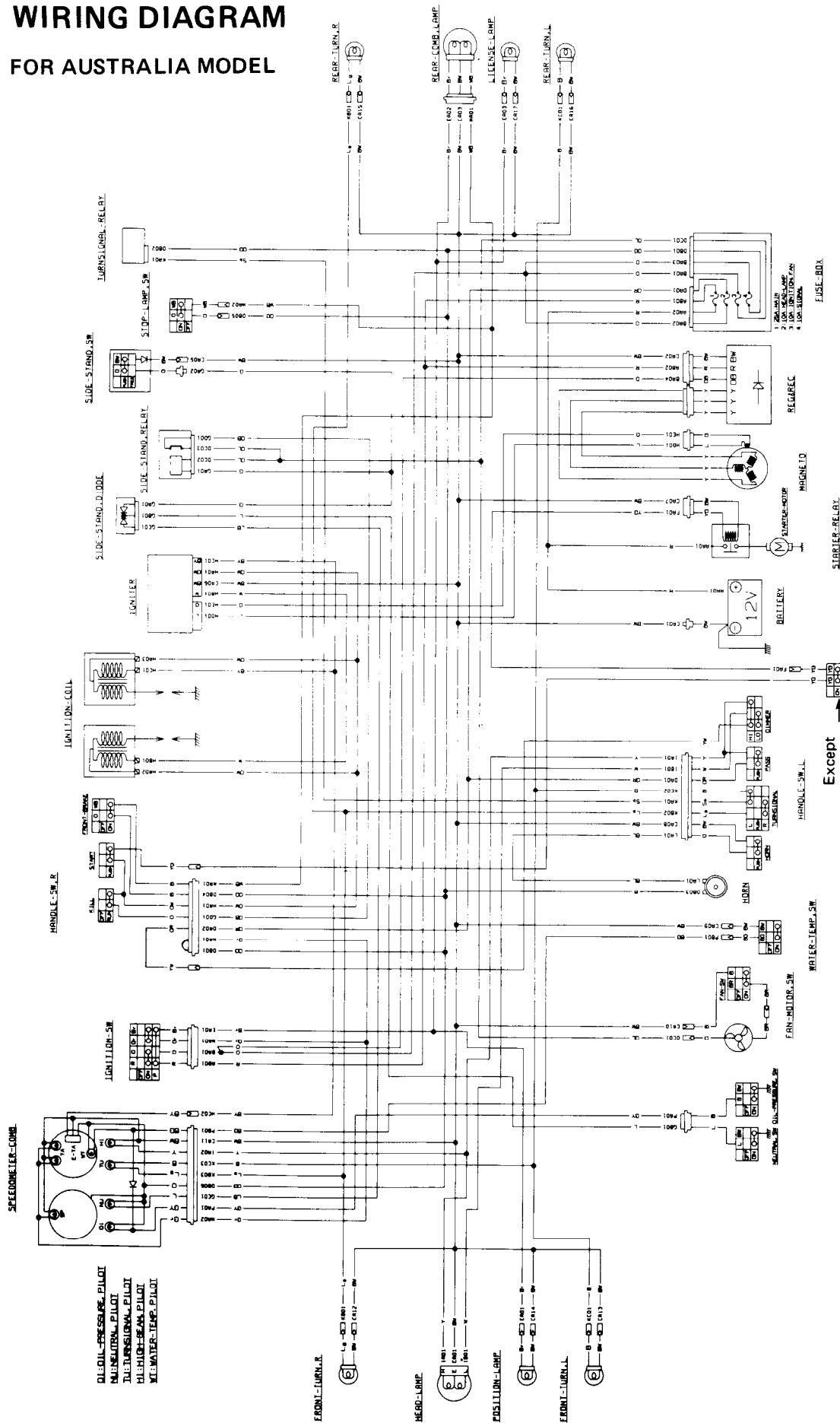
| ITEM | | STANDARD | LIMIT |
|--|-----|---|-------|
| Thermostat valve opening temperature | | 75.0±1.5°C (167±2.7°F) | — |
| Thermostat valve lift | | Over 6 mm (0.24 in) at 90°C (194°F) | — |
| Radiator cap valve release pressure | | 1.1±0.15 kg/cm ² (15.6±2.1 psi, 110±15 kPa) | — |
| Electric fan thermo-switch operating temperature | ON | Approx. 105° C (221°F) | — |
| | OFF | Approx. 100°C (212°F) | — |

CABLE, HARNESS AND HOSE ROUTING CABLE AND HOSE ROUTING



WIRING DIAGRAM

FOR AUSTRALIA MODEL



WIRE COLOR

| | |
|------|-------------------------|
| B | Black |
| Bl | Blue |
| Br | Brown |
| G | Green |
| Gr | Gray |
| Lbl | Light blue |
| Lg | Light green |
| O | Orange |
| R | Red |
| W | White |
| Y | Yellow |
| B/Br | Black with Brown tracer |
| B/G | Black with Green tracer |
| B/R | Black with Red tracer |

Except
Australia

SWITCH-SW

| | |
|------|--------------------------|
| B/W | Black with White tracer |
| B/Y | Black with Yellow tracer |
| Bl/W | Blue with White tracer |
| G/Y | Green with Yellow tracer |
| O/B | Orange with Blue tracer |
| O/G | Orange with Green tracer |
| O/R | Orange with Red tracer |
| O/W | Orange with White tracer |
| R/W | Red with White tracer |
| W/B | White with Black tracer |
| Y/G | Yellow with Green tracer |

STARTER-RELAY

MAGNETO

REGREC

FUSE BOX

AIR SUPPLY HOSE ROUTING

FOR SWITZERLAND AND AUSTRIA MODELS

