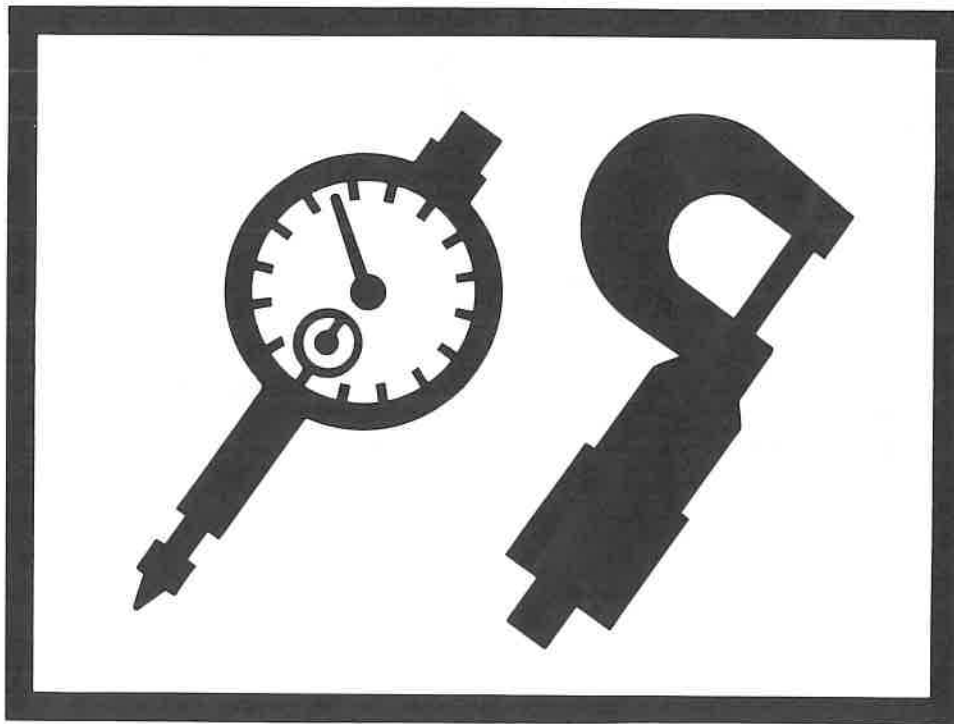




## CHAPTER 2 SPECIFICATIONS

**2**



## SPECIFICATIONS

## GENERAL SPECIFICATIONS

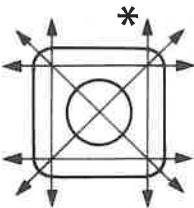
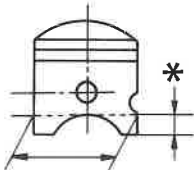
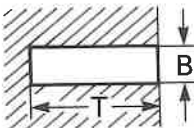
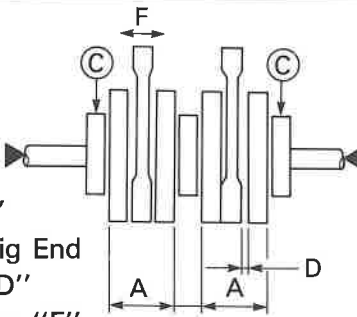
Model	TZ250
Model Name:	TZ250D1 (USA) TZ250(D) (OTHERS)
Model Code Number:	4DP1
Frame Starting Number:	4DP-000101 (OTHERS)
Vehicle Identification Number:	JJYA4DPW0*NA000101 (USA, CDN, AUS)
Engine Starting Number	4DP-000101
Dimensions:	
Overall Length	1,942 mm (76.5 in)
Overall Width	650 mm (25.6 in)
Overall Height	1,085 mm (42.7 in)
Seat Height	765 mm (30.1 in)
Wheelbase	1,328 mm (52.3 in)
Minimum Ground Clearance	130 mm (5.2 in)
Basic Weight:	
With Oil and Full Fuel Tank	120 kg (265 lb)
Engine:	
Engine Type	Liquid cooled 2-stroke, gasoline
Cylinder Arrangement	V-type, 2-cylinder
Displacement	249 cm <sup>3</sup> (8.76 Imp oz, 8.42 US oz)
Bore × Stroke	56.0 × 50.7 mm (2.205 × 1.996 in)
Compression Ratio	8.3 : 1
Starting System	Push to start
Lubrication System	Premix (30 : 1) (Castrol A747)
Oil Type or Grade (2-Cycle):	
Transmission Oil	Castrol R30
Periodic Oil Change	0.3 L (0.26 Imp qt, 0.32 US qt)
Total Amount	0.5 L (0.44 Imp qt, 0.53 US qt)
Cooling Water Capacity (Including All Routes)	1.5 L (1.32 Imp qt, 1.59 US qt)
Fuel:	
Type	Premium leaded gasoline with a research octene number of 100 or higher
Tank Capacity	23.0 L (5.06 Imp gal, 6.08 US gal)
Carburetor:	
Type/Manufacturer	TM38SS/MIKUNI



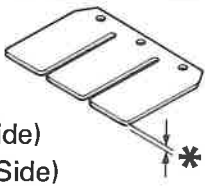
Model	TZ250
Spark plug: Type/Manufacturer Gap	R5184-105/NGK 0.5 ~ 0.6 mm (0.020 ~ 0.024 in)
Clutch Type:	Dry, multiple-disc
Transmission: Primary Reduction System Primary Reduction Ratio Secondary Reduction System Secondary Reduction Ratio Transmission Type Operation Gear Ratio: 1st 2nd 3rd 4th 5th 6th	Gear 52/20 (2.600) Chain drive 36/15 (2.400) Constant mesh, 6-speed Left foot operation 28/14 (2.000) 31/21 (1.476) 26/21 (1.238) 27/25 (1.080) 26/27 (0.963) 20/22 (0.909)
Chassis: Frame Type Caster Angle Trail	Delta Box 22.5° 81.5 mm (3.21 in)
Tire: Type Size (F) Size (R) Tire Pressure (Front and Rear)	Tubeless 3.25/4.70-R17 165/65-R17 200 kPa (2.0 kg/cm <sup>2</sup> , 29 psi)
Brake: Front Brake Type Operation Rear Brake Type Operation	Dual disc brake Right hand operation Single disc brake Right foot operation
Suspension: Front Suspension Rear Suspension	Telescopic fork Swingarm (Link type monocross suspension)
Shock Absorber: Front Shock Absorber Rear Shock Absorber	Coil spring/oil damper Gas, coil spring/oil damper
Wheel Travel: Front Wheel Travel Rear Wheel Travel	110 mm (4.33 in) 130 mm (5.12 in)
Electrical: Ignition System	CDI Magneto



# **MAINTENANCE SPECIFICATIONS** **ENGINE**

Model	TZ250
Cylinder Head: Warp Limit 	$<0.03 \text{ mm (0.0012 in)}>$ *Lines indicate straightedge measurement.
Cylinder: Bore Size Wear Limit Taper Limit Out of Round Limit	$56.000 \sim 56.020 \text{ mm (2.2047} \sim 2.2055 \text{ in)}$ $56.1 \text{ mm (2.209 in)}$ $<0.05 \text{ mm (0.0020 in)}>$ $<0.01 \text{ mm (0.0004 in)}>$
Piston: Piston Size/ Measuring Point* Piston Clearance $<\text{Limit}>$ Piston Offset	 $55.950 \sim 55.970 \text{ mm (2.2028} \sim 2.2035 \text{ in)}/$ $19 \text{ mm (0.75 in)}$ $0.045 \sim 0.055 \text{ mm (0.0018} \sim 0.0022 \text{ in)}$ $<0.1 \text{ mm (0.004 in)}>$ $1.0 \text{ mm (0.039 in), EX-side}$
Piston Pin: Piston Pin Outside Diameter/ $<\text{Limit}>$	$15.995 \sim 16.000 \text{ mm (0.6297} \sim 0.6299 \text{ in)}/$ $<15.975 \text{ mm (0.6289 in)}>$
Piston Ring: Sectional Sketch  End gap (Installed)/ $<\text{Limit}>$ Side Clearance (Installed)/ $<\text{Limit}>$	Plain $B = 1.0 \text{ mm (0.039 in)}$ $T = 2.2 \text{ mm (0.087 in)}$ $0.15 \sim 0.35 \text{ mm (0.006} \sim 0.014 \text{ in)}/$ $<0.4 \text{ mm (0.016 in)}>$ $0.03 \sim 0.07 \text{ mm (0.0012} \sim 0.0028 \text{ in)}/$ $<0.1 \text{ mm (0.0039 in)}>$
Crankshaft:  Crank Width "A" Run Out Limit "C" Connecting Rod Big End Side Clearance "D" Small End Free Play "F"	$49.975 \sim 50.025 \text{ mm (1.968} \sim 1.969 \text{ in)}$ $<0.03 \text{ mm (0.0012 in)}>$ $0.25 \sim 0.75 \text{ mm (0.010} \sim 0.030 \text{ in)}$ $0.8 \sim 1.0 \text{ mm (0.031} \sim 0.039 \text{ in)}$
Clutch: Friction Plate Thickness/Quantity $<\text{Wear Limit}>$ Clutch Plate Thickness/Quantity $<\text{Warp Limit}>$	$2.9 \sim 3.1 \text{ mm (0.114} \sim 0.122 \text{ in)} \times 5$ $<2.6 \text{ mm (0.102 in)}>$ $1.9 \sim 2.1 \text{ mm (0.075} \sim 0.083 \text{ in)} \times 4$ $<0.05 \text{ mm (0.002 in)}>$



Model	TZ250
Clutch Spring Free Length/Quantity < Limit > Clutch Housing Thrust Clearance Clutch Housing Radial Clearance Clutch Release Method	36.4 mm (1.433 in) × 6 < 35.4 mm (1.394 in) > 0.07 ~ 0.18 mm (0.003 ~ 0.007 in) 0.009 ~ 0.071 mm (0.0004 ~ 0.0028 in) Inner push, cam push
Transmission: Main Axle Deflection Limit  Drive Axle Deflection Limit	 < 0.01 mm (0.0004 in) >  < 0.01 mm (0.0004 in) >
Shifter: Shifting Type Guide Bar Bending Limit	Cam drum and guide bar ≤ 0.04 mm (0.0016 in) >
Carburetor Type/Manufacturer I.D. Mark (Left Side/Right Side) Main Jet (M.J.) Jet Needle-clip Position (J.N.) Needle Jet (N.J.) Cutaway (C.A.) Pilot Jet (P.J.) Pilot Air Screw (P.A.S.) Valve Seat Size (V.S.) Starter Jet (G.S.) Float Lever Height (F.H.)	TM38SS/MIKUNI 4DP00L/4DP00R #540 6FI80-61-3 R-6 3.5 #20 1-1/2 φ3.5 1.0 15.2 ~ 17.2 mm (0.60 ~ 0.68 in)
Reed Valve: Thickness* Reed Valve 1 Reed Valve 2 Valve Stopper Height (Left Side) (Right Side) Valve Bending Limit	 0.42 mm (0.017 in) 0.34 mm (0.013 in) 2.8 ~ 3.0 mm (0.110 ~ 0.118 in) 6.5 ~ 6.9 mm (0.256 ~ 0.272 in) 0.2 mm (0.008 in)
Cooling: Radiator Core Size: Width Height Thickness Radiator Cap Opening Pressure  Radiator Capacity Water Pump: Type	  380 mm (14.96 in) 197.8 mm (7.79 in) 38 mm (1.50 in) 95 ~ 125 kPa (0.95 ~ 1.25 kg/cm <sup>2</sup> , 13.5 ~ 17.8 psi) 0.6 L (0.53 Imp qt, 0.63 US qt)  Single-suction centrifugal pump

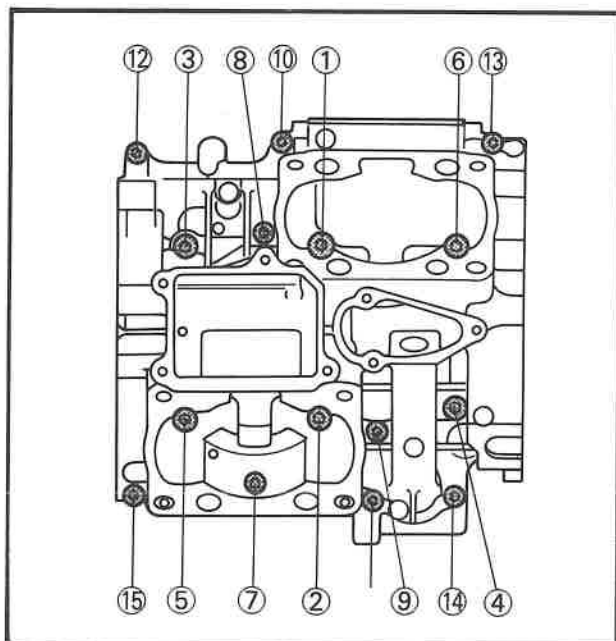


Parts to be tightened	Thread size	Q'ty	Tightening torque		
			Nm	m•kg	ft•lb
Spark plug	M14S×1.25	2	19	1.9	13
Cylinder head (bolt)	M 6×1.0	12	11	1.1	8.0
Cylinder (nut)	M 8×1.25	8	20	2.0	14
Cylinder (stud)	M 8×1.25	8	15	1.5	11
Power valve Cover	M 5×0.8	8	4	0.4	2.9
Holder 1	M 5×0.8	2	4	0.4	2.9
Pulley	M 5×0.8	2	4	0.4	2.9
Cable stay	M 5×0.8	4	7	0.7	5.1
Air bleed bolt (cylinder)	M 6×1.0	2	8	0.8	5.8
Crank balance weight	M 6×1.0	6	10	1.0	7.2
Bearing plate cover (balance shaft)	M 6×1.0	1	8	0.8	5.8
Balance weight gear	M14×1.0	1	50	5.0	36
Water pump housing	M 6×1.0	5	11	1.1	8.0
Radiator	M 6×1.0	3	7	0.7	5.1
Radiator and thermo sensor	M16×1.5	1	17	1.7	12
Radiator hose joint	—	6	2	0.2	1.4
Oil pump cover	M 5×0.8	3	8	0.8	5.8
Delivery pipe	M 5×0.8	2	4	0.4	2.9
Union bolt	M 6×1.0	2	9	0.9	6.5
Carburetor joint	M 6×1.0	8	11	1.1	8
Clamp (carburetor joint)	M 4×0.7	2	2	0.2	1.4
Reed valve	M 3×0.5	12	1	0.1	0.7
Muffler	M 8×1.25	2	21	2.1	15
Silencer	M 6×1.0	4	11	1.1	8.0
Crankcase	M 8×1.25	6	Refer to NOTE		
Crankcase	M 6×1.0	9			
Transmission housing	M 6×1.0	7	14	1.4	10
Oil check bolt	M 6×1.0	1	9	0.9	6.5
Oil drain bolt	M12×1.25	1	20	2.0	14
Chankcase cover (right)	M 6×1.0	10	11	1.1	8.0
Crankcase cover (front)	M 6×1.0	3	11	1.1	8.0
Primary drive gear	M10×1.25	1	55	5.5	40
Clutch boss	M20×1.0	1	75	7.5	54
Clutch spring	M 6×1.0	6	9	0.9	6.5
Push rod adjuster	M 6×1.0	1	6	0.6	4.3
Seat plate	M 5×0.8	1	7	0.7	5.1
Clutch cable holder	M 6×1.0	2	8	0.8	5.8
Bearing plate cover (drive axle)	M 6×1.0	2	8	0.8	5.8
Plate cover	M 5×0.8	2	7	0.7	5.1
Drive sprocket	M20×1.0	1	75	7.5	54
Stopper plate	M 5×0.8	1	4	0.4	2.9
Segment	M 8×1.25	1	23	2.3	17
Shift guide	M 6×1.0	2	11	1.1	8.0
Shift lever adjuster	M 6×1.0	12	9	0.9	6.5



Parts to be tightened	Thread size	Q'ty	Tightening torque		
			Nm	m•kg	ft•lb
Stopper screw	M 8×1.25	1	8	0.8	5.8
Shift arm	M 6×1.0	1	14	1.4	10
Joint rod 1 (shift rod)	M 6×1.0	1	9	0.9	6.5
Joint rod 2 (shift rod)	M 6×1.0	1	9	0.9	6.5
Joint rod 1, 2	M 6×1.0	2	11	1.1	8.0
Shift pedal pivot bolt	M 8×1.25	1	22	2.2	16
Shift pedal	M 6×1.0	1	11	1.1	8.0

## Crankcase tightening sequence



## NOTE:

Tighten all bolts in 2 steps as follows and be sure to tighten in numbered order as shown.

- First: ① ~ ⑥ (M8) 10 Nm (1.0 m•kg, 7.2 ft•lb)  
⑦ ~ ⑮ (M5) 5 Nm (0.5 m•kg, 3.6 ft•lb)

- Final: ① ~ ⑥ (M8) 25 Nm (2.5 m•kg, 18 ft•lb)  
⑦ ~ ⑮ (M6) 11 Nm (1.1 m•kg, 8 ft•lb)

# 2



## CHASSIS

Model	TZ250
Steering System: Steering Bearing Type	Taper roller bearing
Front Suspension: Front Fork Travel Fork Spring Free Length/ < Limit > Spring Rate, STD Optional Spring Oil Capacity Oil Level < Min. Max > (From top of outer tube with inner tube and damper rod fully compressed without spring.) Oil Grade Inner Tube Outer Diameter Front Fork Top End	110 mm (4.33 in) 212.5 mm (8.73 in)/210.5 mm (8.29 in) K≐7 N/mm (0.7 kg/mm, 39 lb/in) No 406 cm <sup>3</sup> (14.3 Imp oz, 13.7 US oz) 127 mm (5.00 in)  Suspension oil "01" 41 mm (1.61 in) 13 mm (0.57 in)
Rear Suspension: Shock Absorber Travel Spring Free Length Fitting Length < Min. ~ Max. > Spring Rate, STD Optional Spring Enclosed Gas Pressure	57.5 mm (2.26 in) 170 mm (6.69 in) 158.5 mm (6.24 in) 150 ~ 163 mm (5.91 ~ 6.42 in) 75 N/mm (7.5 kg/mm, 420 lb/in) No 1,200 kPa (12 kg/cm <sup>2</sup> , 171 psi)
Swingarm: Swingarm Free Play Limit End Side Clearance	< 1.0 mm (0.04 in) > < 0.1 ~ 0.3 mm (0.004 ~ 0.012 in) >
Wheel: Front Wheel Type Rear Wheel Type Front Rim Size/Material Rear Rim Size/Material Rim Runout Limit: Vertical Lateral	Cast wheel Cast wheel 3.75×17/Aluminum 5.25×17/Aluminum  < 1.0 mm (0.04 in) > < 0.5 mm (0.02 in) >





Model	TZ250
<b>Drive Chain:</b> Type/Manufacturer Number of Links Chain Slack	RK520TRZ2/TAKASAGO 107 links + Joint 30 ~ 40 mm (1.2 ~ 1.6 in)
<b>Front Disc Brake:</b> Disc Outside Dia. × Thickness Pad Thickness < Limit > Master Cylinder Inside Dia. Caliper Cylinder Inside Dia. Brake Fluid Type	282 × 4.0 mm (11.10 × 0.16 in) 5.3 mm (0.21 in) < 1.0 mm (0.04 in) > 15.87 mm (0.625 in) 33.96 + 30.23 mm (1.337 + 1.190 in) DOT #4
<b>Rear Disc Brake:</b> Disc Outside Dia. ~ Thickness Pad Thickness < Limit > Master Cylinder Inside Dia. Caliper Cylinder Inside Dia. Brake Fluid Type	185 × 4.0 mm (7.28 ~ 0.16 in) 4.0 mm (0.16 in) < 1.0 mm (0.04 in) > 12.7 mm (0.500 in) 25.4 mm (1.000 in) DOT #4
<b>Brake Lever &amp; Brake Pedal:</b> Brake Lever Free Play Brake Pedal Free Play/Position	5 ~ 8 mm (0.2 ~ 0.3 in) (at lever end) 13 ~ 15 mm (0.5 ~ 0.6 in) / 109 ~ 113 mm (4.3 ~ 4.4 in)
<b>Clutch Lever Free Play/Position:</b>	2 ~ 3 mm (0.08 ~ 0.12 in) / at lever pivot



	Parts to be tightened	Thread size	Q'ty	Tightening torque		
				Nm	m•kg	ft•lb
Δ	Handle crown and outer tube	M 8×1.25	2	20	2.0	14
Δ	Under bracket and outer tube	M 8×1.25	4	20	2.0	14
Δ	Handle crown and steering shaft	M14×1.25	1	54	5.4	39
Δ	Steering shaft pinch bolt	M 8×1.25	1	20	2.0	14
Δ	Handlebar and outer tube	M 6×1.0	4	7	0.7	5.1
Δ	Steering ring nut	M25×1.0	1	Refer to NOTE		
	Front fork and cap bolt	M44×1.0	2	23	2.3	17
	Front fork and damper rod	M12×1.25	2	40	4.0	29
	Cap bolt and damper rod	M10×1.0	2	15	1.5	11
	Damper rod and locknut	M10×1.0	2	10	1.0	7.2
	Front fork and front fender	M 6×1.0	4	7	0.7	5.1
Δ	Front brake master cylinder and master cylinder bracket	M 6×1.0	2	7	0.7	5.1
Δ	Brake hose (front and rear) and union bolt	M10×1.25	2	26	2.6	19
Δ	Brake hose (front and rear) and adapter	M10×1.25	3	14	1.4	10
Δ	Caliper (front and rear) and adapter	M10×1.25	3	26	2.6	19
Δ	Front brake caliper and axle bracket	M10×1.25	4	45	4.5	32
Δ	Front brake union bolt and bleeding screw	M 8×1.25	1	6	0.6	4.3
Δ	Front brake caliper and pad pin	M10×1.25	2	18	1.8	13
Δ	Caliper (front and rear) and bleeding screw	M 8×1.25	3	6	0.6	4.3
Δ	Front wheel axle and nut	M18×1.0	1	115	11.5	85
Δ	Front wheel axle holder	M 8×1.25	4	11	1.1	8.0
Δ	Front brake disc and wheel hub	M 8×1.25	6	20	2.0	14
	Footrest bracket and frame	M 8×1.25	4	23	2.3	17
	Footrest and footrest bracket	M 6×1.0	2	9	0.9	6.5
	Brake pedal and master cylinder	M 6×1.0	2	10	1.0	7.2
Δ	Rear brake master cylinder and footrest bracket	M 8×1.25	2	20	2.0	14
	Rear brake reservoir tank and frame	M 6×1.0	1	7	0.7	5.1
Δ	Rear brake caliper and caliper bracket	M 8×1.25	2	23	2.3	17
Δ	Rear wheel axle and nut	M18×1.5	1	115	11.5	85
	Chain puller adjuster	M 8×1.25	2	2	0.2	1.4
	Chain puller adjuster and locknut	M 8×1.25	2	16	1.6	11
Δ	Rear wheel sprocket and sprocket damper	M 8×1.25	5	32	3.2	23
Δ	Rear brake disc and wheel hub	M 8×1.25	3	20	2.0	14

## NOTE:

1. First, tighten the ring nut approximately 46 Nm (4.6 m•kg, 33 ft•lb) by using the torque wrench, then loosen the ring nut one turn.
2. Retighten the ring nut 3 Nm (0.3 m•kg, 2.2 ft•lb).



Parts to be tightened	Thread size	Q'ty	Tightening torque		
			Nm	m•kg	ft•lb
Engine mounting:					
△ Engine and frame (upper)	M10×1.25	1	35	3.5	25
△ Engine and frame (lower)	M10×1.25	1	35	3.5	25
△ Pinch bolt (engine mounting bolt)	M 6×1.0	2	12	1.2	8.7
△ Engine bracket and frame	M10×1.25	2	35	3.5	25
△ Engine bracket and engine	M 8×1.25	4	23	2.3	17
△ Pivot shaft and nut	M18×1.5	1	115	11.5	85
△ Relay arm and frame	M10×1.25	1	35	3.5	25
△ Relay arm and connecting rod	M10×1.25	1	35	3.5	25
△ Connecting rod and swingarm	M10×1.25	1	35	3.5	25
△ Rear shock absorber and upper bracket	M10×1.25	1	35	3.5	25
△ Rear shock absorber and relay arm	M10×1.25	1	35	3.5	25
Rear shock absorber and locknut (preload)	M46×1.5	1	40	4.0	29
△ Seat height adjuster and locknut	M22×1.25	1	38	3.8	27
△ Seat height adjuster and upper bracket	M10×1.25	1	30	3.0	22
Lever holder and clutch bracket	M 6×1.0	2	7	0.7	5.1
Cowling stay (front) and frame	M 6×1.0	1	12	1.2	8.7
Cowling stay (left and right) and frame	M 6×1.0	2	7	0.7	5.1
Steering damper and frame	M 8×1.25	1	18	1.8	13
Steering damper stay and outer tube	M 6×1.0	1	7	0.7	5.1
△ Fuel tank and fuel cock	M 6×1.0	2	7	0.7	5.1
Seat (upper and rear) and frame	M 6×1.0	3	10	1.0	7.2
Seat (front) and frame	M 8×1.25	2	23	2.3	17

## NOTE:

△ -marked portion shall be checked for torque tightening after break-in or before each race.



## ELECTRICAL

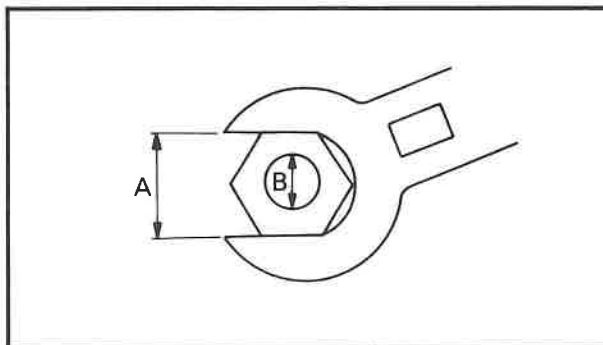
Model	TZ250
Ignition System: Ignition Timing (B.T.D.C) Advancer Type	1.5 mm (0.059 in) Electrical
CDI: Magneto-Model/Manufacturer Source Coil Resistance (Color) Pickup Coil Resistance (Color) (Left Cylinder) (Right Cylinder) CDI Unit-Model/Manufacturer	TLIZ02/NIPPONDENSO 1.3 ~ 1.9Ω at 20°C (68°F) (White-White) 94 ~ 140Ω at 20°C (68°F) (White/Black-White/Blue) 94 ~ 140Ω at 20°C (68°F) (White/Black-White/Green) 4DP/NIPPONDENSO
Ignition Coil: Model/Manufacturer (Left Cylinder) (Right Cylinder) Minimum Spark Gap Primary Winding Resistance Secondary Winding Resistance	TJ0294/NIPPONDENSO TJ0295/NIPPON DENSO 5 mm (0.20 in) or more 0.14 ~ 0.18Ω at 20°C (68°F) 5.0 ~ 7.4kΩ at 20°C (68°F)

Parts to be tightened	Thread size	Q'ty	Tightening torque		
			Nm	m•kg	ft•lb
Stator	M 6×1.0	2	7	0.7	5.1
Rotor	M12×1.0	1	53	5.3	38
Pickup coil (right cylinder)	M 4×0.7	2	2	0.2	1.4
C.D.I. unit	M 6×1.0	2	8	0.8	5.8
Servo motor pulley	M 5×0.8	1	8	0.8	5.8
Servo motor	M 6×1.0	2	7	0.7	5.1
Ignition coil	M 6×1.0	4	8	0.8	5.8
Rectifier/Regulator	M 6×1.0	2	7	0.7	5.1



## GENERAL TORQUE SPECIFICATIONS

This chart specifies torque for standard fasteners with standard I.S.O. pitch threads. Torque specifications for special components or assemblies are included in the applicable sections of this book. To avoid warpage, tighten multi-fastener assemblies in a crisscross fashion, in progressive stages, until full torque is reached. Unless otherwise specified, torque specifications call for clean, dry threads. Components should be at room temperature.



A: Distance across flats  
B: Outside thread diameter

A (Nut)	B (Bolt)	TORQUE SPECIFICATION		
		Nm	m•kg	ft•lb
10 mm	6 mm	6	0.6	4.3
12 mm	8 mm	15	1.5	11.0
14 mm	10 mm	30	3.0	22.0
17 mm	12 mm	55	5.5	40.0
19 mm	14 mm	85	8.5	61.0
22 mm	16 mm	130	13.0	94.0

# 2

## DEFINITION OF UNITS

Unit	Read	Definition	Measure
mm	millimeter	$10^{-3}$ meter	Length
cm	centimeter	$10^{-2}$ meter	Length
kg	kilogram	$10^3$ gram	Weight
N	Newton	$1 \text{ kg} \times \text{m}/\text{sec}^2$	Force
Nm	Newton meter	$\text{N} \times \text{m}$	Torque
m•kg	Meter kilogram	$\text{m} \times \text{kg}$	Torque
Pa	Paskal	$\text{N}/\text{m}^2$	Pressure
N/mm	Newtom per millimeter	N/mm	Spring rate
L	Liter	—	Volume or Capacity
$\text{cm}^3$	Cubic centimeter	—	Volume or Capacity
r/min	Revolution per minute	—	Engine speed

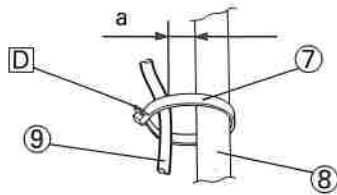


## CABLE ROUTING DIAGRAM

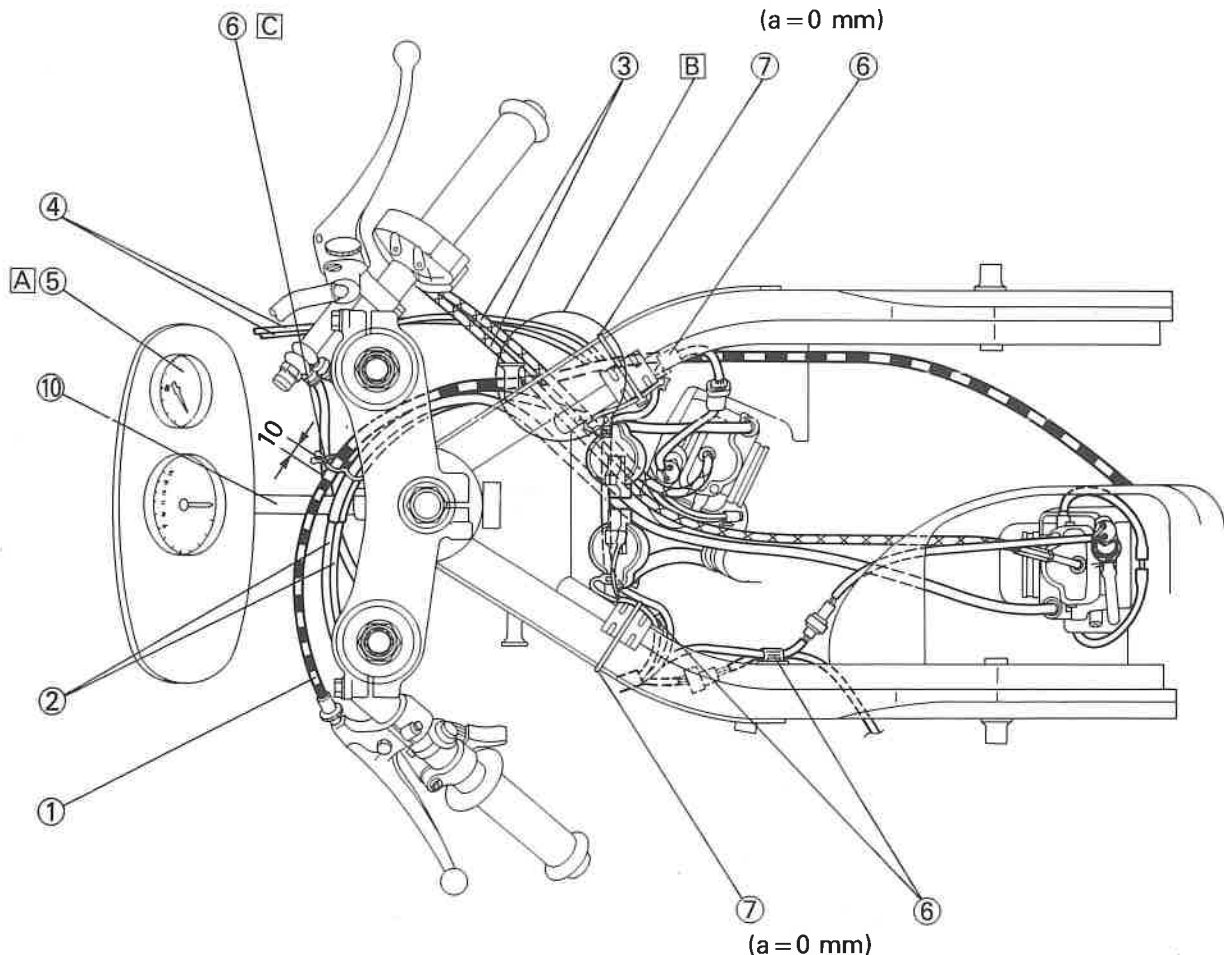
- ① Clutch cable
- ② Starter cable
- ③ Throttle c cable
- ④ YPVS cable
- ⑤ Water temperature gauge
- ⑥ Clamp
- ⑦ Band
- ⑧ Frame
- ⑨ Cable
- ⑩ Cowling stay

- A** Be sure to position the "80°C" mark upward.
- B** Position the cables from top to bottom in the following.
  - Throttle cables
  - Clutch cable
  - Starter (CHOKE) cables
  - YPVS cables
- C** Clamp the clutch cable to the starter cables. Position the clamp 10 mm (0.39 in) from the end of the clutch cable protector.
- D** Cut the band so that the protruding portion is less than 5 mm (0.20 in).

2



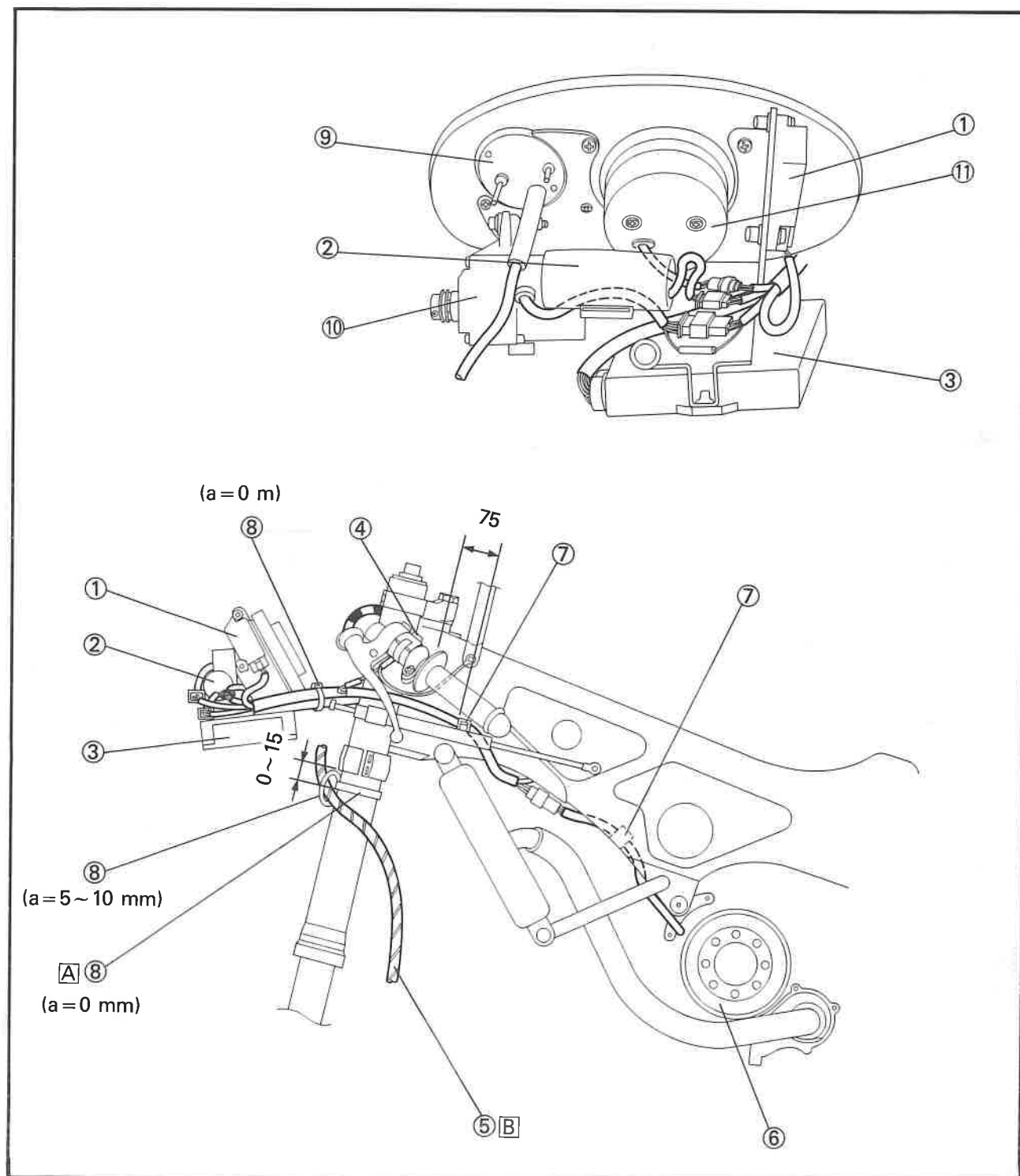
Band





- ① Regular
- ② Condenser
- ③ CDI unit
- ④ "ENGINE STOP" switch
- ⑤ Front brake hose (left side)
- ⑥ CDI magneto
- ⑦ Clamp
- ⑧ Band
- ⑨ Water temperature gauge
- ⑩ Servo motor
- ⑪ Tachometer

- A Position the end of the band to the rear of the front fork.
- B Be sure the brake hose is not twisted.



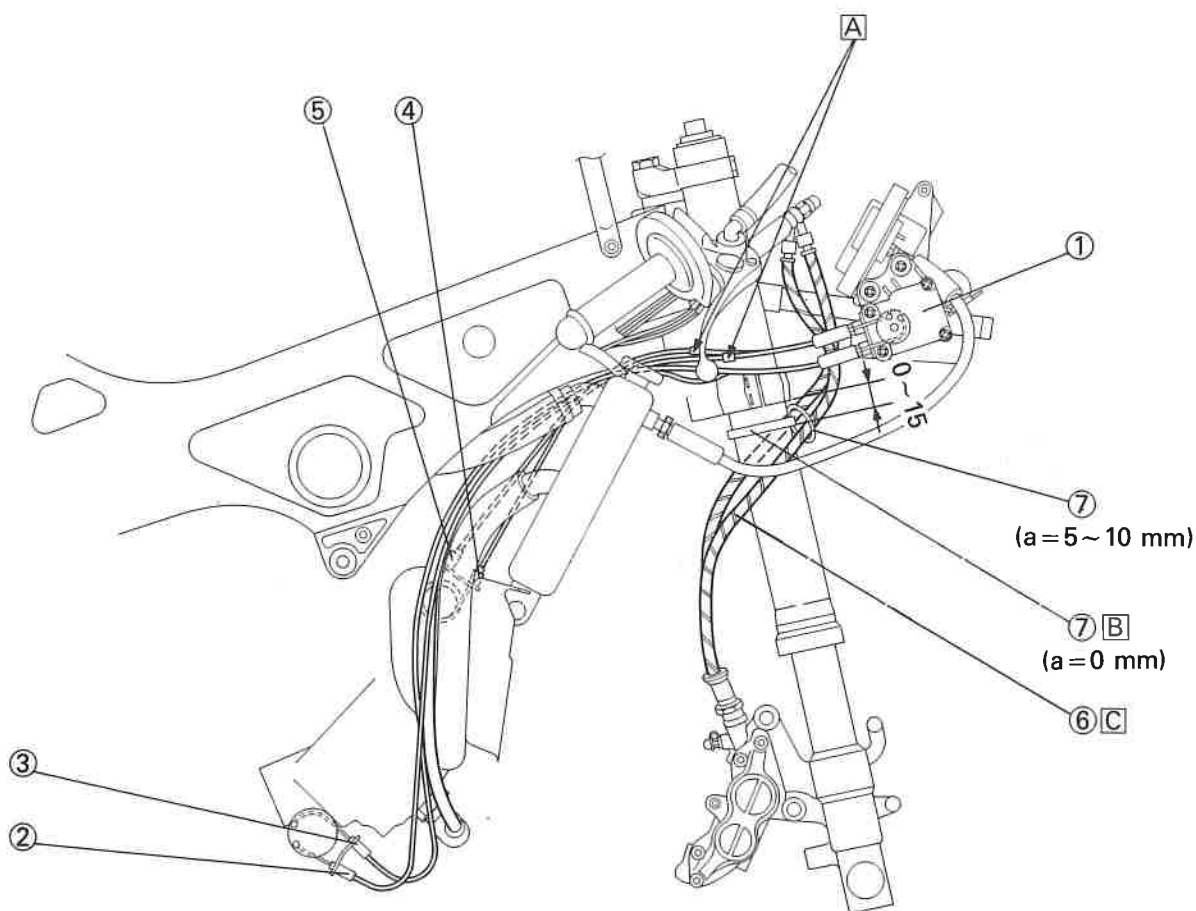
2



- ① Servo motor
- ② YPVS cable (right cylinder, close side)
- ③ YPVS cable (right cylinder, open side)
- ④ YPVS cable (left cylinder, close side)
- ⑤ YPVS cable (left cylinder, open side)
- ⑥ Front brake hose (right side)
- ⑦ Band

- Ⓐ Connect the left cylinder YPVS cables (silver cables) to the inner YPVS servomotor pulley and right cylinder YPVS cables (black cables) to the outer. The sleeved cables must be connected to the top side of the YPVS servomotor.
- Ⓑ Position the end of the band to the rear of the front fork.
- Ⓒ Be sure the brake hose is not twisted.

2





## CABLE ROUTING DIAGRAM

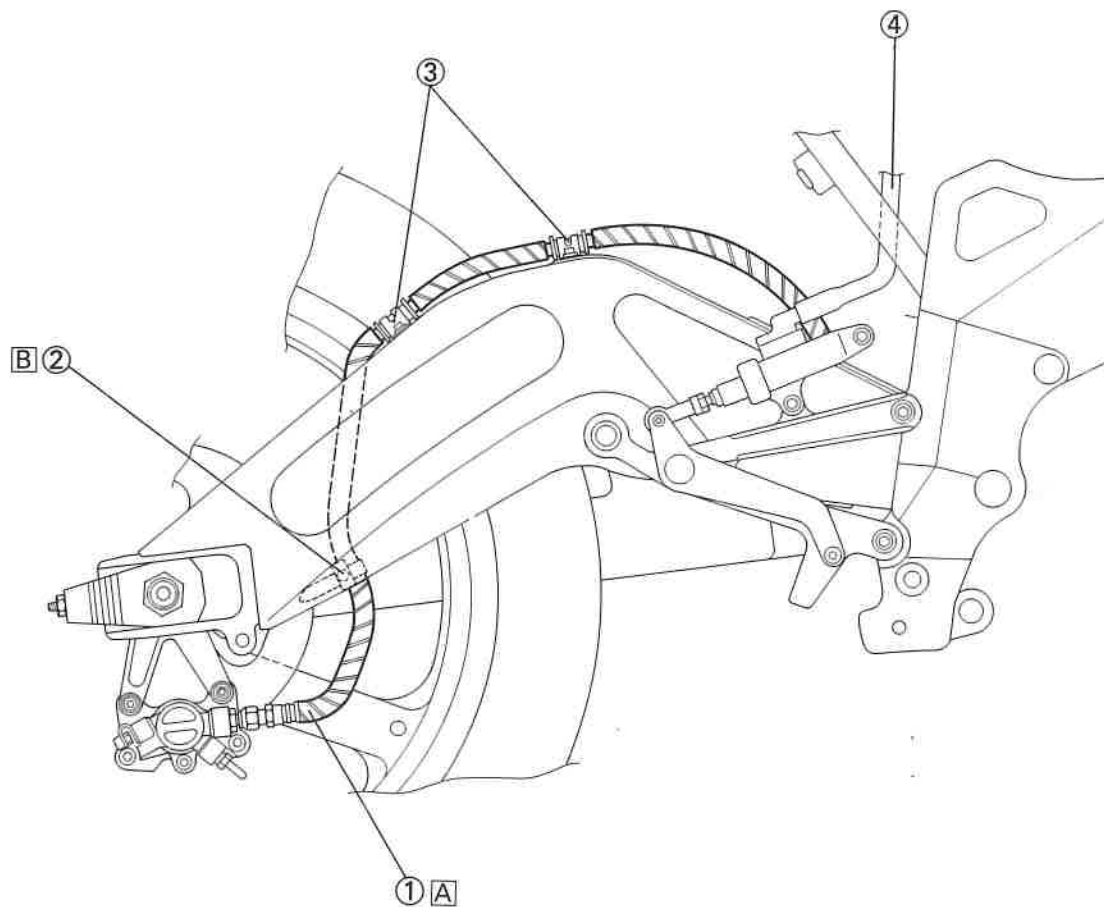
SPEC



- ① Rear brake hose
- ② Clamp
- ③ Brake hose holder
- ④ Reservoir hose

- A Be sure the brake hose is not twisted.
- B Do not cut the end of the band.

2





## SETTING PARTS

## NOTE:

For detail setting, refer to TUNING section in CHAPTER 7.

## CARBURETOR

Part name	Size	Part number
Main jet ①	# 330	137-14143-66
	# 340	137-14143-68
	# 350	137-14143-70
	# 360	137-14143-72
	# 370	137-14143-74
	# 380	137-14143-76
	# 390	137-14143-78
	# 400	137-14143-80
	# 410	137-14143-82
	# 420	137-14143-84
	# 430	137-14143-86
	# 440	137-14143-88
	# 450	137-14143-90
	# 460	137-14143-92
	# 470	137-14143-94
	# 480	137-14143-96
	# 490	137-14143-98
	# 500	137-1414K-00
	# 520	137-1414K-04
	# 540	137-1414K-08
Pilot jet ② (STD)	*	
	# 17.5	193-14142-17
	# 20	193-14142-20
	# 22.5	193-14142-22
Main nozzle ③	R-3	3TC-14141-R3
	R-4	3TC-14141-R4
	R-6	3TC-14141-R6
	*	
Power jet ④ (STD)	# 50	3G2-14231-10
	# 60	3G2-14231-12
	# 70	3G2-14231-14

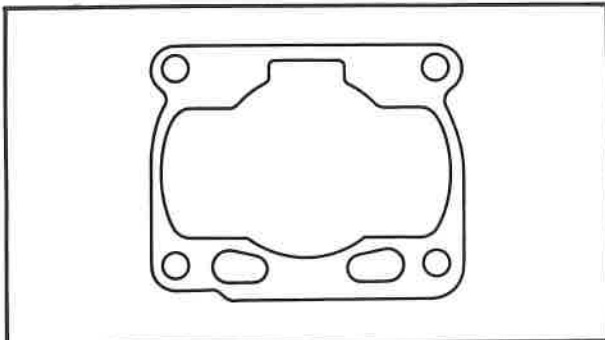
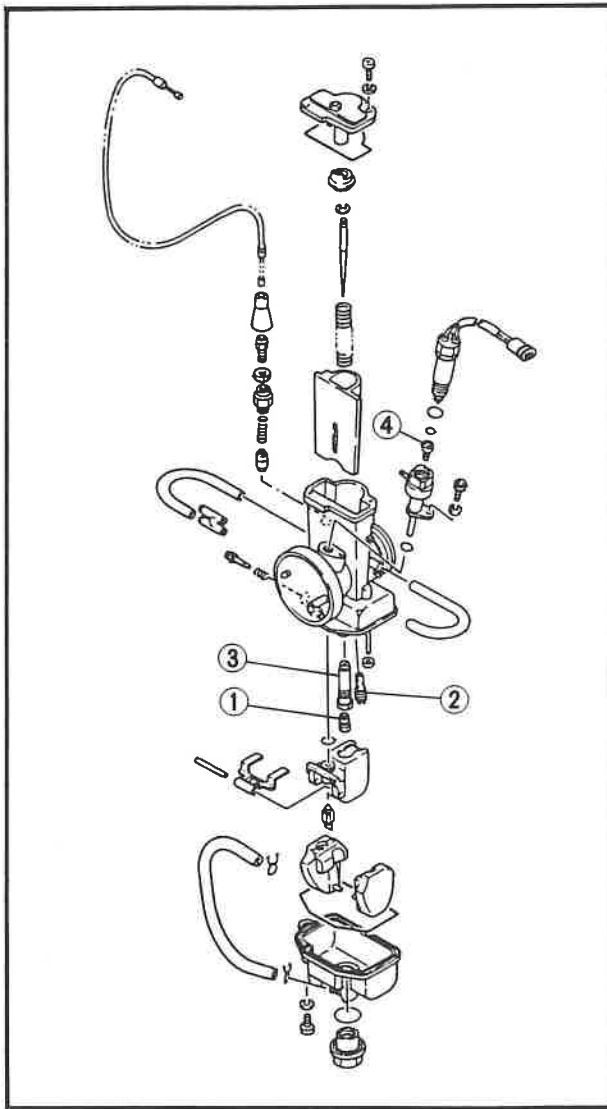
\* Factory installed

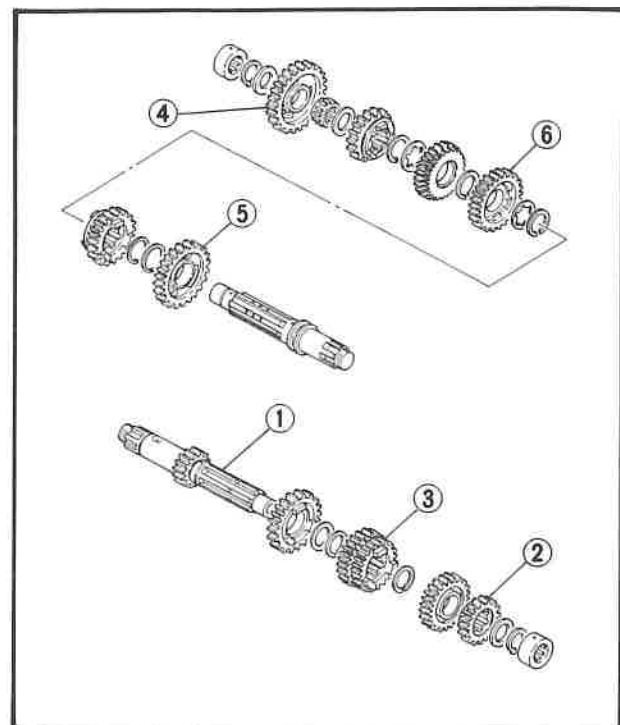
## CYLINDER GASKET

Part number	Size (thickness)
3YL-11351-00 *	t=0.8 mm
3YL-11351-10	t=0.7 mm
3YL-11351-20	t=0.6 mm
3YL-11351-30	t=0.5 mm

\* Factory installed

2

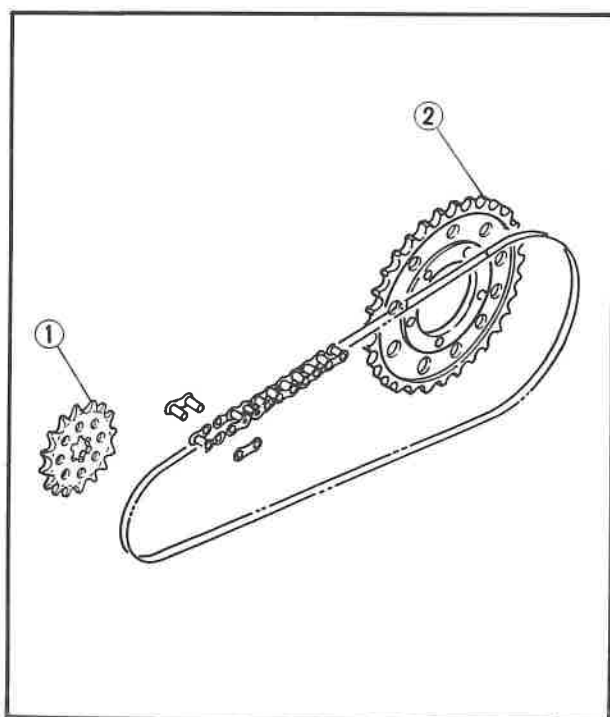




### TRANSMISSION

Part name	Size	Part number
Main axle ① *	14T 18T	3YL-17411-10 3YL-17411-20
2nd pinion gear ② *	19T 21T	5F7-17121-21 4DP-17121-10
3rd pinion gear ③ *	21T/25T (φ53.1) 21T/25T (φ53.8)	5F7-17131-20 5F7-17131-10
1st wheel gear ④ *	28T 34T	5F7-17211-10 5F7-17211-20
2nd wheel gear ⑤ *	27T 31T	5F7-17221-21 4DP-17221-10
3rd wheel gear ⑥ *	25T 26T	5F7-17231-20 5F7-17231-10

\* Factory installed



### DRIVE/DRIVEN SPROCKET

Part name	Size	Part number
Drive sprocket ① *	14T 15T 16T	93834-14178 93834-15077 93834-16099
Driven sprocket ② *	36T 37T 38T 39T 40T 41T	3YL-25436-00 3YL-25437-00 3YL-25438-00 3YL-25439-00 3YL-25440-00 3YL-25441-00

\* Factory installed

# 2



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## MEMO

# 2