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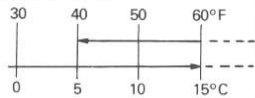
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## CHAPTER 7. APPENDICES

### 1. GENERAL SPECIFICATIONS

(Sw): for Sweden (D): for Denmark (B): for Belgium  
(FL): for Finland (S): for Switzerland (H): for Holland  
(N): for Norway (G): for Germany (F): for France  
(Ar): for Austria (E): for England (I): for Italy

Model	XS400
Model Code Number	12E, 12F(G)
Frame Starting Number	12E-000101, 12F-000101(G)
Engine Starting Number	12E-000101, 12F-000101(G)
Dimensions	
Overall Length	2,130 mm (83.9 in) (Sw) (FL) (N) (Ar) (D) (S) 2,095 mm (82.5 in) (G) 2,040 mm (80.3 in) (E) (B) (H) (F) (I)
Overall Width	730 mm (28.7 in)
Overall Height	1,110 mm (43.7 in)
Seat Height	785 mm (31.0 in)
Wheelbase	1,375 mm (54.1 in)
Minimum Ground Clearance	150 mm (5.9 in)
Basic weight	
With oil and full fuel tank	187 kg (412 lb)
Minimum Turning Radius	2,300 mm (90.6 in)
Engine	
Engine Type	D.O.H.C. Air-cooled, gasoline
Cylinder Arrangement	Two in parallel, forward inclined
Displacement	399 cm <sup>3</sup> (24.35 cu. in)
Bore × Stroke	69.0 × 53.4 mm (2.72 × 2.10 in)
Compression Ratio	9.7 : 1
Compression Pressure	930 ~ 1,080 kPa (11 kg/cm <sup>2</sup> , 135 ~ 156 psi)
Starting System	Starter
Lubrication System	Pressure lubricated, wet sump
Engine Oil Type or Grade	
	SAE 20W40 type SE Motor oil SAE 10W30 type SE Motor oil

Model	XS400
Engine Oil Capacity	
Periodic Oil Change	2.2 L (1.94 Imp qt, 2.33 US qt)
Oil Filter Replacement	2.5 L (2.20 Imp qt, 2.64 US qt)
Total Amount	2.9 L (2.55 Imp qt, 3.07 US qt)
Air Filter	Dry type element
Fuel	
Type	Regular gasoline
Tank Capacity	20 L (4.4 Imp gal, 5.3 US gal)
Reserve Amount	4.8 L (1.06 Imp gal, 1.27 US gal)
Carburetor	
Type	BS34
Manufacturer	MIKUNI
Spark Plug	
Type	DR8ES-L
Manufacturer	NGK
Gap	0.6 ~ 0.7 mm (0.023 ~ 0.028 in)
Clutch Type	Wet, multiple disc
Transmission	
Primary Reduction System	Gear
Primary Reduction Ratio	89/29 (3.068)
Secondary Reduction System	Chain
Secondary Reduction Ratio	38/16 (2.376)
Transmission Type	Constant mesh 6-speed, drum shifter
Operation	Left foot operation
Gear Ratio	1st 41/15 (2.733) 2nd 37/19 (1.947) 3rd 34/22 (1.545) 4th 31/25 (1.240) 5th 29/28 (1.035) 6th 27/29 (0.931)
Chassis	
Frame Type	Pressed backbone
Caster Angle	26°15'
Trail	95 mm (3.74 in)
Tire	
Tire Type	With tube
Tire Size (F)	3.00S18-4PR
Tire Size (R)	4.10S18-4PR

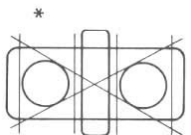
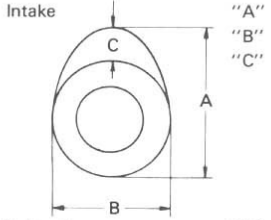
Model	XS400
Tire Pressure	(Cold tire pressure)
Up to 90 kg (198 lb) load* (F)	177 kPa (1.8 kg/cm <sup>2</sup> , 26 psi)
(R)	196 kPa (2.0 kg/cm <sup>2</sup> , 28 psi)
90 kg (198 lb) load ~ (F)	196 kPa (2.0 kg/cm <sup>2</sup> , 28 psi)
214 kg (474 lb) load* (R)	245 kPa (2.5 kg/cm <sup>2</sup> , 36 psi)
High-speed Riding (F)	196 kPa (2.0 kg/cm <sup>2</sup> , 28 psi)
(R)	225 kPa (2.3 kg/cm <sup>2</sup> , 32 psi)
*Total weight of accessories, etc. excepting motorcycle.	
Brake	
Front Brake Type	Single hydraulic disc
Operation	Right hand
Rear Brake Type	Drum brake
Operation	Right foot
Suspension	
Front Suspension	Telescopic fork
Rear Suspension	Swing arm (Monocross suspension)
Shock Absorber	
Front Shock Absorber	Oil damper, coil spring
Rear Shock Absorber	Gas Oil damper, coil spring
Wheel Travel	
Front Wheel Travel	140 mm (5.6 in)
Rear Wheel Travel	95 mm (3.8 in)
Electrical	
Ignition system	Battery ignition (Full transistor ignition)
Generator System	A.C. Generator
Battery Type or Model	12N 12A-4A
Battery Capacity	12V 12AH
Headlight Type	Sealed beam

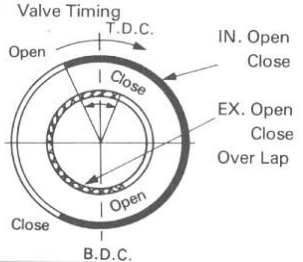
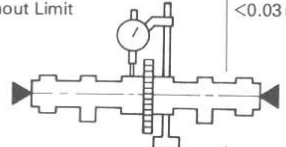
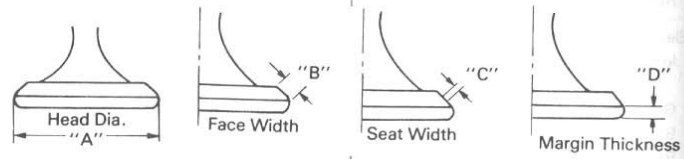
Model	XS400
Bulb Wattage × Pcs.	
Headlight	12V, 60W/55W
Tail/brake light	12V, 5W/21W
Flasher light	21W × 4
Meter light	12V, 3.4W × 2
Licence light	5W × 2
Auxiliary light	12V, 4W Except (E) 12V, 3.4 W (E)
Indicator Light	
Wattage × Pcs.	
"NEUTRAL"	12V, 3.4W
"HIGH BEAM"	12V, 3.4W
"OIL"	12V, 3.4W
"TURN"	12V, 3.4W × 2

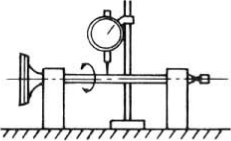
## II. MAINTENANCE SPECIFICATIONS

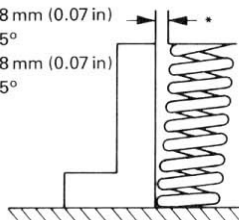
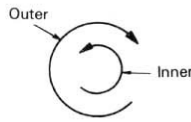
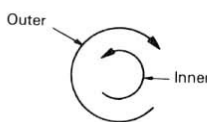
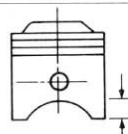
### A. Engine

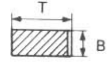
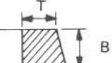
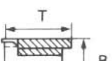
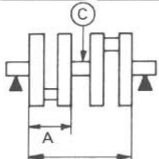
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Model	XS400
Cylinder Head Volume Warp Limit 	$34.5 \pm 0.4 \text{ cm}^3$ $<0.03 \text{ mm (0.0012 in)}>$ *Lines indicate straightedge measurement
Cylinder Material Bore Size Taper Limit	Aluminum alloy with pressed-in sleeve $69.0^{+0.005}_0 \text{ mm (2.72}^{+0.0002}_0 \text{ in)}$ $<0.005 \text{ mm (0.0002 in)}>$
Camshaft Drive Method  Cam Cap Inside Diameter Cam shaft Outside Diameter Shaft-to-cap Clearance <Limit> Cam Dimensions Intake  Exhaust	Chain drive Center $25^{+0.021}_0 \text{ mm (0.98}^{+0.008}_0 \text{ in)}$ $25^{+0.020}_0 \text{ mm (0.98}^{+0.008}_0 \text{ in)}$ $0.020 \sim 0.054 \text{ mm (0.008} \sim 0.0021 \text{ in)}$ $<0.160 \text{ mm (0.006 in)}>$  Intake $36.8 \pm 0.05 \text{ mm (1.45} \pm 0.002 \text{ in)}$ $28.13 \pm 0.05 \text{ mm (1.11} \pm 0.002 \text{ in)}$ $8.8 \text{ mm (0.35 in)}$  Exhaust $36.30 \pm 0.05 \text{ mm (1.43} \pm 0.002 \text{ in)}$ $28.13 \pm 0.05 \text{ mm (1.11} \pm 0.002 \text{ in)}$ $8.3 \text{ mm (0.33 in)}$

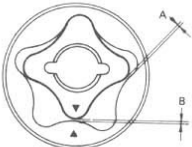
Model	XS400
Valve Timing  B.D.C.	B.T.D.C. $42^\circ$ A.B.D.C. $62^\circ$  B.B.D.C. $32^\circ$ A.T.D.C. $72^\circ$ $a = 74^\circ$
Camshaft Runout Limit 	$<0.03 \text{ mm (0.0012 in)}>$
Cam Chain Type/ Number of Links Cam Chain Adjustment Method	BF05M/ 121 Automatic
Valve, Valve Seat, Valve Guide Valve Clearance (Cold) IN. EX.	$0.11 \sim 0.15 \text{ mm (0.0063} \sim 0.0079 \text{ in)}$ $0.16 \sim 0.20 \text{ mm (0.0063} \sim 0.0079 \text{ in)}$
Valve Dimensions  Head Dia. Face Width Seat Width Margin Thickness	"A" Head Dia. IN. $36^{+0.2}_0 \text{ mm (1.4}^{+0.008}_0 \text{ in)}$ EX. $31^{+0.2}_0 \text{ mm (1.2}^{+0.008}_0 \text{ in)}$ "B" Face Width IN. $2.26 \text{ mm (0.0890 in)}$ EX. $2.26 \text{ mm (0.0890 in)}$ "C" Seat Limit Width IN. $1.1 \pm 0.1 \text{ mm (0.043} \pm 0.039 \text{ in)}$ EX. $1.1 \pm 0.1 \text{ mm (0.043} \pm 0.039 \text{ in)}$ "D" Margin Thickness Limit IN. $1.2 \pm 0.2 \text{ mm (0.047} \pm 0.008 \text{ in)}$ EX. $1.2 \pm 0.2 \text{ mm (0.047} \pm 0.008 \text{ in)}$

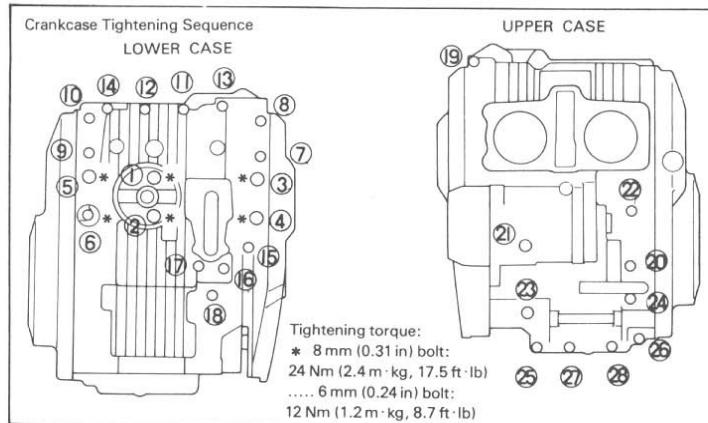
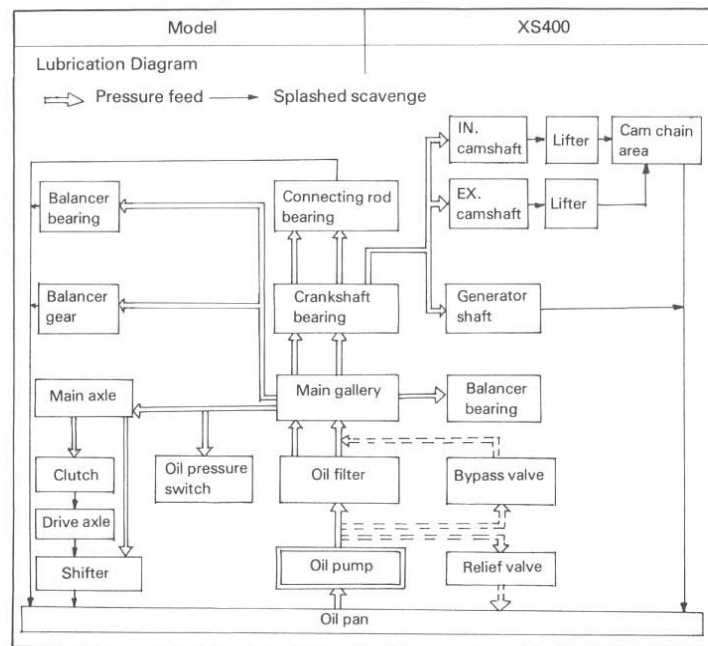
Model		XS400
Stem Outside Diameter	IN.	$7^{+0.010}_{-0.025}$ mm ( $0.2756^{+0.0004}_{-0.0010}$ in)
	EX.	$7^{+0.025}_{-0.040}$ mm ( $0.2756^{+0.0010}_{-0.0016}$ in)
Guide Inside Diameter	IN.	$7^{+0.012}_{-0}$ mm ( $0.2756^{+0.0005}_{-0}$ in)
	EX.	$7^{+0.012}_{-0}$ mm ( $0.2756^{+0.0005}_{-0}$ in)
Stem-to-Guide clearance	IN.	0.010 ~ 0.037 mm (0.0004 ~ 0.0015 in)
	EX.	0.025 ~ 0.052 mm (0.0010 ~ 0.0020 in)
Stem Runout Limit		<0.01 mm (0.0004 in)>
		
Valve Seat Width Standard <Limit>		$1.1 \pm 0.1$ mm ( $0.043 \pm 0.004$ in) <2.0 mm (0.080 in)>
Valve Spring		
Free Length		
Inner Spring	IN.	38.2 mm (1.50 in)
	EX.	38.2 mm (1.50 in)
Outer Spring	IN.	41.8 mm (1.65 in)
	EX.	41.8 mm (1.65 in)
Spring Rate		
Inner Spring	IN.	$K_1 = 17.36$ N/mm (1.77 kg/mm, 99 lb/in) $K_2 = 22.16$ N/mm (2.26 kg/mm, 127 lb/in)
	EX.	$K_1 = 17.36$ N/mm (1.77 kg/mm, 99 lb/in) $K_2 = 22.16$ N/mm (2.26 kg/mm, 127 lb/in)
Outer Spring	IN.	$K_1 = 31.68$ N/mm (3.23 kg/mm, 181 lb/in) $K_2 = 42.17$ N/mm (4.3 kg/mm, 241 lb/in)
	EX.	$K_1 = 31.68$ N/mm (3.23 kg/mm, 181 lb/in) $K_2 = 42.17$ N/mm (4.3 kg/mm, 241 lb/in)
Compressing Length (Valve Closed)		
Inner Spring	IN.	23 mm (0.91 in)
	EX.	23 mm (0.91 in)
Outer Spring	IN.	26 mm (1.02 in)
	EX.	26 mm (1.02 in)

Model		XS400
Compressed Force (Valve Closed)		
Inner Spring	IN.	31.1 ± 2.2 kg (68.6 ± 4.85 lb)
	EX.	31.1 ± 2.2 kg (68.6 ± 4.85 lb)
Outer Spring	IN.	60.2 ± 4.2 kg (132.7 ± 9.26 lb)
	EX.	60.2 ± 4.2 kg (132.7 ± 9.26 lb)
Tilt Limit		
Inner Spring	IN. & EX.	1.8 mm (0.07 in)
Outer Spring	IN. & EX.	2.5°
		1.8 mm (0.07 in)
		2.5°
Direction of winding (Top View)		
INTAKE		EXHAUST
		
Piston		
Piston Size/ Measuring Point (A)		69 <sup>-0.030</sup> <sub>-0.045</sub> mm (2.72 <sup>-0.0012</sup> <sub>+0.0018</sub> in)
		9.5 mm (0.37 in) (From bottom line of piston skirt)
Clearance between Piston & Cylinder <Limit>		0.03 ~ 0.05 mm (0.0012 ~ 0.0020 in) <0.1 mm (0.0039 in)>
Oversize	2nd	69.50 mm (2.74 in)
	4th	70.00 mm (2.76 in)
Piston Pin Hole Off-set		1.0 mm (0.04 in)/In-side

Model	XS400
<b>Piston Ring</b> <b>Sectional Sketch</b> <b>Top Ring</b>  <b>2nd Ring</b>  <b>Oil Ring</b> 	<b>Plain</b> $B = 1.2^{+0.020}_{-0.035}$ mm (0.047 $^{+0.0008}_{-0.0014}$ in) $T = 2.9 \pm 0.1$ mm (0.114 $\pm$ 0.0004 in) <b>Plain</b> $B = 1.5^{+0.01}_{-0.03}$ mm (0.059 $^{+0.0004}_{-0.0012}$ in) $T = 3.1 \pm 0.1$ mm (0.122 $\pm$ 0.0004 in) <b>Expander</b> $B = 2.5^{+0.03}_{-0.01}$ mm (0.098 $^{+0.0012}_{-0.0004}$ in) $T = 2.8 \pm 0.2$ mm (0.110 $\pm$ 0.008 in)
<b>End Gap (Installed)</b> <b>&lt;Limit&gt;</b>	
Top Ring	0.10 ~ 0.30 mm (0.004 ~ 0.012 in) <1.0 mm (0.039 in)>
2nd Ring	0.10 ~ 0.30 mm (0.004 ~ 0.012 in) <1.0 mm (0.039 in)>
Oil Ring	0.3 ~ 0.9 mm (0.012 ~ 0.035 in) <1.5 mm (0.0591 in)>
<b>Side Clearance</b> <b>&lt;Limit&gt;</b>	
Top Ring	0.04 ~ 0.075 mm (0.0016 ~ 0.0030 in) <0.15 mm (0.0059 in)>
2nd Ring	0.02 ~ 0.06 mm (0.0008 ~ 0.0024 in) <0.15 mm (0.0059 in)>
Oil Ring	0 mm (0 in)
<b>Plating or Coating</b> Top Ring 2nd Ring Oil Ring	Hard chromium plating Parkerizing Chromium plating and parkerizing
Connecting Rod Oil Clearance Color Code Corresponding Size	0.021 ~ 0.045 mm (0.0008 ~ 0.0018 in) 1. Blue, 2. Black, 3. Brown $1.5^{+0}_{-0.004}$ $1.5^{+0.004}_{-0.008}$ $1.5^{+0.008}_{-0.012}$
<b>Crankshaft</b> 	

Model	XS400
<b>Crank Width "A"</b> <b>Assembly Width "B"</b> <b>Runout Limit "C"</b> <b>Oil Clearance</b> <b>Color Code</b> <b>Corresponding Size</b> <b>Position of Thrust Bearing</b> <b>Connecting Rod Length</b>	# 1: 71.5 mm (2.81 in), # 2: 67.5 mm (2.66 in) 196 $\pm$ 0.2 mm (7.72 $\pm$ 0.008 in) <0.04 mm (0.0016 in)> 0.020 ~ 0.044 mm (0.0008 ~ 0.0017 in) 1. Blue, 2. Black, 3. Brown, 4. Green $1.5^{+0.012}_{-0.008}$ $1.5^{+0.008}_{-0.004}$ $1.5^{+0.004}_{-0.002}$ $1.5^{+0}_{-0.004}$ — 119 $\pm$ 0.05 mm (4.69 $\pm$ 0.002 in)
<b>Balancer</b> <b>Drive Method</b> <b>Clutch</b> Friction Plate Thickness/ Quantity Wear Limit Clutch Plate Thickness/ Quantity Warp Limit Clutch Spring Free Length/ Quantity <Limit> Minimum Length Primary Reduction Gear Backlash Tolerance Primary Drive Gear Backlash Number Primary Driven Gear Backlash Number Clutch Release Method	Gear 3.0 $\pm$ 0.1 mm (0.12 $\pm$ 0.004 in) / 5 pcs. <2.8 mm (0.11 in)> 2.0 mm (0.08 in) / 4 pcs. <0.05 mm (0.002 in)> 34.6 mm (1.362 in) <0.1 mm (0.0004 in)> 33.6 mm (1.323 in) 0.016 ~ 0.048 mm (0.0006 ~ 0.0019 in) A, B, C, D, E, F C, D, E, F, G Inner push
<b>Transmission</b> Main Axle Run-out Limit	<0.08 mm (0.0031 in)>
<b>Shifter</b> Shifter Type	Guide bar
<b>Carburetor</b> Type/ Manufacturer/ Quantity I.D. Mark Venturi Size Main Jet (M.J.) Main Air Jet (M.A.J.) Jet Needle (J.N.) Needle Jet (N.J.) Throttle Valve (Th. V.) Pilot Jet (P.J.) Pilot Air Jet (P.A.J.)	BS34/ MIKUNI/ 2 pcs. 16N10, 12F00(G) $\phi 30.3$ mm ( $\phi 1.193$ in) L/H # 127.5 R/H # 117.5 L/H # 132.5 R/H # 130(G) #45 4HZ20 Y-0 # 135 #45 #170

Model	XS400
Pilot Screw (P.S.)	2 1/2 turns out
Pilot Outlet Size (P.O.)	ø0.8
Starter Jet (G.S.)	#35
Valve Seat Size (V.S.)	ø2.0
Fuel Level (F.L.)	3 ± 1 mm (0.12 ± 0.04 in)
Engine Idling Speed	1,200 ± 50 r/min
Vacuum Pressure at Idling Speed	180 mm Hg (7.09 in Hg)
<b>Lubrication System</b>	
Oil Filter Type	Paper, wire mesh
Oil Pump Type	Trochoid pump
	
Tip Clearance	0.03 ~ 0.12 mm (0.001 ~ 0.0047 in)
Side Clearance	0.03 ~ 0.08 mm (0.01 ~ 0.003 in)
Bypass Valve Setting pressure	98 ± 20 kPa (1.0 ± 0.2 kg/cm², 14.2 ± 2.8 psi)
Relief Valve Operating Pressure	490 ± 59 kPa (5.0 ± 0.6 kg/cm², 7.1 ± 8.5 psi)



Tightening torque							
Part to be tightened	Part name	Thread size	Q'ty	Tightening torque			Remarks
				Nm	m · kg	ft · lb	
Camshaft cap	Bolt	M6 × 1.0	8	10	1.0	7.2	
Front cam chain case	Stud bolt	M6 × 1.0	2	5	0.5	3.6	Oil the shank and thread
Rear cam chain case	Stud bolt	M6 × 1.0	2	5	0.5	3.6	
Induction control system	Stud bolt	M8 × 1.25	2	15	1.5	11	
Exhaust pipe	Stud bolt	M8 × 1.25	4	15	1.5	11	
Cylinder head	Nut	M10 × 1.25	8	35	3.5	25	Oil the thread and bearing surface
Spark plug	Spark plug	M12 × 1.25	2	20	2.0	14	
Cylinder head cover	Bolt	M6 × 1.0	22	12	1.2	8.7	
Tachometer stopper	Hexagon bolt	M6 × 1.0	1	8	0.8	5.8	
Cam chain case — front and rear Induction control system	Nut	M6 × 1.0	4	10	1.0	7.2	
Connecting rod	Hexagon nut	M8 × 0.75	4	38	3.8	27	Apply molybdenum bisulfide grease to thread and bearing surface
Cam sprocket	Hexagon head bolt w/washer	M7 × 1.0	4	20	2.0	14	
Tensioner assembly	Bolt	M6 × 1.0	2	10	1.0	7.2	
Chain damper holder	Screw	M10 × 1.25	1	10	1.0	7.2	
Pump	Bolt	M6 × 1.0	2	10	1.0	7.2	
Filter	Union bolt	M20 × 1.25	1	15	1.5	11	
Strainer cover	Bolt	M6 × 1.0	6	10	1.0	7.2	
Drain plug	Plug	M14 × 1.5	1	43	4.3	31	
Carburetor joint	Bolt	M6 × 1.0	4	12	1.2	8.7	
Carburetor	Hose clamp	M4 × 0.7	2	4	0.4	2.9	
Exhaust pipe joint	Bolt	M8 × 1.25	1	20	2.0	14	
Exhaust pipe ring nut	Nut	M8 × 1.25	4	20	2.0	14	
Cylinder	Stud bolt	M10 × 1.25	4	20	2.0	14	Oil the thread and bearing surface
Buckle plate 1	Pan head screw	M6 × 1.0	5	7	0.7	5.1	
Crankcase mating surface	Flange bolt	M8 × 1.25	1	24	2.4	17	Rear side of crankshaft right journal
Crankcase mating surface	Flange bolt	M8 × 1.25	5	24	2.4	17	Rear side of crankshaft right journal
Crankcase mating surface	Flange bolt	M6 × 1.0	13	12	1.2	8.7	
Crankcase mating surface	Flange bolt	M6 × 1.0	1	12	1.2	8.7	Left front end of balancer shaft


Tightening torque							
Part to be tightened	Part name	Thread size	Q'ty	Tightening torque			Remarks
				Nm	m · kg	ft · lb	
Crankcase mating surface	Flange bolt	M6 × 1.0	3	12	1.2	8.7	Left front end of main axle, rear rear end of balancer shaft
Crankcase mating surface	Flange bolt	M6 × 1.0	2	12	1.2	8.7	Rear end of drive axle
Crankcase mating surface	Flange bolt	M6 × 1.0	1	12	1.2	8.7	Left rear end of main axle
Crankcase mating surface	Flange bolt	M6 × 1.0	1	12	1.2	8.7	Right front end of main axle
Crankcase mating surface	Flange bolt	M8 × 1.25	1	24	2.4	17	Left front end of drive axle
Plug	Plug	M22 × 1.5	1	12	1.2	8.7	
A.C. generator housing bearing	Screw	M6 × 1.0	3	10	1.0	7.2	Use Loctite
Generator cover	Pan head screw	M6 × 1.0	3	7	0.7	5.1	
Crankcase cover	Pan head screw	M6 × 1.0	5	7	0.7	5.1	
Timing mark window	Screw	M14 × 1.5	1	—	—	—	
Crankcase cover 2	Pan head screw	M6 × 1.0	2	7	0.7	5.1	
Crankcase cover 2	Pan head screw	M6 × 1.0	3	7	0.7	5.1	
Crankcase cover 3	Pan head screw	M6 × 1.0	14	7	0.7	5.1	
Clamp	Pan head screw	M6 × 1.0	2	7	0.7	5.1	One each, at two places, to hold leads
Starter clutch, outer	Bolt	M8 × 1.25	3	30	3.0	22	Use Loctite
Chain guide upper	Bolt	M6 × 1.0	3	10	1.0	7.2	
Clutch boss	Hexagon nut	M20 × 1.0	1	70	7.0	50	
Pressure plate	Screw/w/washer	M6 × 1.0	6	12	1.2	8.7	
Primary drive gear	Hexagon nut	M20 × 1.0	1	70	7.0	50	Use lock washer
Push lever assembly	Pan head screw	M5 ×	2	5	0.5	3.6	
Clutch adjuster	Nut (for locking)	M8 × 1.25	1	12	1.2	8.7	
Drive sprocket	Hexagon bolt	M6 × 1.0	2	10	1.0	7.2	
Guide bar	Flat head screw	M6 × 1.0	2	6	0.6	4.3	Use Loctite
Shift pedal	Hexagon bolt	M6 × 1.0	1	10	1.0	7.2	
A.C. generator	Bolt	M10 × 1.25	1	55	5.5	40	
Pick-up coil base	Pan head screw w/washer	M6 × 1.0	2	8	0.8	5.8	
Starter motor	Flange bolt	M6 × 1.0	2	10	1.0	7.2	
Oil pressure switch	Oil pressure switch		1	17.5	1.75	13	
Crankcase cover	Pan head screw	M6 × 1.0	2	7	0.7	5.1	

## II. MAINTENANCE SPECIFICATIONS

### B. Chassis

(Sw): for Sweden (D): for Denmark (B): for Belgium  
(FL): for Finland (S): for Switzerland (H): for Holland  
(N): for Norway (G): for Germany (F): for France  
(A): for Austria (E): for England (I): for Italy

Model	XS400
Steering System	
Steering Bearing Type	Ball bearing
No./ Size of Steel Balls	
Upper	19 pcs./ 1/4 in
Lower	19 pcs./ 1/4 in
Lock-to-lock Angle	43°
Front Suspension	
Front Fork Travel	140 mm (5.5 in)
Fork Spring Free Length	561.7 mm (22.1 in)
Spring Rate/ Stroke	4.3 Nm (0.44 kg/mm, 24.6 lb/in)/ 0 ~ 140 mm (0 ~ 5.5 in)
Optional Spring	No.
Oil Capacity	263 ± 4 cm <sup>3</sup> (9.3 ± 0.141 Imp oz, 8.9 ± 0.135 Imp oz)
Oil Level	145 mm (5.7 in)
Oil Grade	(From top of inner tube fully compressed without spring.) Yamaha fork oil 10 wt or SAE 10W30 SE motor oil
Rear Suspension	
Shock Absorber Travel	55 mm (2.17 in)
Spring Free Length	234 mm (9.21 in)
Spring Rate/ Stroke	K <sub>1</sub> = 85.3 N/mm (8.7 kg/mm, 487.0 lb/in)/ 0 ~ 33 mm (0 ~ 1.30 in) K <sub>2</sub> = 102.0 N/mm (10.4 kg/mm, 582.2 lb/in)/ 33 ~ 55 mm (1.30 ~ 2.17 in)
Enclosed Gas Pressore	1471 kPa (15 kg/cm <sup>2</sup> , 213 psi)
Optional Spring	No.
Rear Arm	
Swing Arm Free Play Limit	
— End	1.0 mm (0.04 in)
— Side	1.0 mm (0.04 in)
Wheel	
Front Wheel Type	Cast wheel
Rear Wheel Type	Cast wheel
Front Rim Size/ Material	MT1.85 × 18/ Aluminum
Rear Rim Size/ Material	MT2.15 × 18/ Aluminum

Model	XS400
Rim-Run-out Limit	
— Vertical	<2.0 mm (0.08 in)>
— Lateral	<2.0 mm (0.08 in)>
Drive chain	
Chain type	50 HDSS
No. of links	102
Chain free play	30 mm (0.18 in)
Disc Brake	
Type	Front
Outside Dia. × Thickness	Single disc
Pad Thickness	267 × 5 mm (10.5 × 0.2 in)
<Limit>	6.8 mm (0.27 in)
	<0.8 mm (0.03 in)>
	
Master Cylinder Inside Dia.	Front
Caliper Cylinder Inside Dia.	Front
Brake Fluid Type	DOT #3
Drum Brake	
Type	Rear
Drum Inside Dia.	Rear
<Limit>	Leading trailing
Lining Thickness	160 mm (6.3 in)
<Limit>	<161 mm (6.34 in)>
Shoe Spring Free Length Rear	4 mm (0.16 in)
	<2 mm (0.08 in)>
Brake Lever & Brake Pedal	
Brake Lever Free Play	5.0 ~ 8.0 mm (0.2 ~ 0.3 in)
Brake Pedal Free Play	20 ~ 30 mm (0.8 ~ 1.2 in)
Brake Pedal Position	30 mm (1.18 in)
	(Vertical height below footrest top)
Clutch Lever Free Play	2 ~ 3 mm (0.08 ~ 0.12 in)

Tightening torque								
Part to be tightened		Part name	Thread size	Q'ty	Tightening torque			Remarks
					Nm	m · kg	ft · lb	
CHASSIS:								
Engine Mounting Bolt	Rear upper	Bolt	M10 × 1.25	1	55	5.5	40	
	Rear under	Bolt	M12 × 1.25	1	90	9.0	65	
Engine Mounting stay	Front	Bolt	M8 × 1.25	4	55	5.5	40	
Handle crown & Steering shaft		Bolt	M14 × 1.25	1	54	5.4	39	
Handle crown & Inner tube		Nut cap	M8 × 1.25	1	20	2.0	14	
Handle crown & Handle holder		Bolt	M8 × 1.25	2	20	2.0	14	
Front fork								
Under bracket & Inner tube		Bolt	M8 × 1.25	4	20	2.0	14	
Front wheel shaft		Nut castle	M14 × 1.5	1	105	10.5	75	
Front wheel Axle pinch bolt		Nut salt	M8 × 1.25	2	20	2.0	14	
Pivot shaft		Bolt	M14 × 1.5	1	65	6.5	47	
Rear wheel shaft		Nut castle	M10 × 1.5	1	105	10.5	75	
Rear shock absorber (Upper)		Nut	M10 × 1.25	1	25	2.5	18	
Footrest		Nut	M10 × 1.25	2	29	2.9	21	
Tension bar & Brake plate		Bolt	M8 × 1.25	1	20	2.0	14	
Tension bar & Rear arm		Bolt	M8 × 1.25	1	20	2.0	14	
Camshaft lever & Camshaft		Bolt	M6 × 1.0	1	9	0.9	6.5	
Disc brake section								
Brake hose & Joint		Bolt union	M10 × 1.25	1	26	2.6	19	
Caliper & Brake hose		Bolt union	M10 × 1.25	1	26	2.6	19	
Caliper & Front fork (Front)			M10 × 1.25	2	35	3.5	25	
Caliper bleed screw (Front)			M8 × 1.25	1	6	0.6	4.3	
Front fender		Bolt	M8 × 1.25	4	10	1.0	7.2	
Master cylinder cap		Screw	M5 × 0.8	2	1.8	0.18	1.3	
Master cylinder & Master cylinder bracket		Bolt	M6 × 1.0	2	9	0.9	6.5	

## C. Electrical

(Sw): for Sweden (DI): for Denmark (B): for Belgium  
(FL): for Finland (SI): for Switzerland (H): for Holland  
(NL): for Norway (G): for Germany (F): for France  
(Ar): for Austria (E): for England (I): for Italy

Model	XS400
Voltage	12V
Ignition System	
Ignition Timing (B.T.D.C.)	10°/1,200 r/min
Advanced Timing (B.T.D.C.)	35°/7,000 r/min, 39° ± 2°/5,500 r/min (G)
<p>Ignition Timing (B.T.D.C.)</p> <p>Engine Speed (<math>\times 10^3</math> r/min)</p> <p>10° ± 1°/1,200 r/min</p> <p>35° ± 2°/7,000 r/min</p> <p>39° ± 2°/5,500 r/min (G)</p> <p>4,350 ± 375/37° (G)</p> <p>6,150 ± 650/33°</p> <p>1,950 ± 275/12° (G)</p> <p>2,150 ± 450/12°</p>	
Advancer Type	Electrical
T.C.I.	
Pick up Coil Resistance (Color)	120Ω ± 10% at 20°C (68°F) (O — B, Gy — B)
T.C.I. Unit — Model/Manufacturer	TID 12-07/HITACHI (G) TID 12-08/HITACHI
Ignition Coil — Model/Manufacturer	CM11-55/HITACHI
Primary Winding Resistance	2.75Ω ± 10% at 20°C (68°F)
Secondary Winding Resistance	7.9kΩ ± 20% at 20°C (68°F)
Charging System	
Type	A.C. Generator
Model/Manufacturer	LD117-06/HITACHI
Out Put	14V 18A at 5,000 r/min
Field (Inner) Coil Resistance (Color)	4.5Ω ± 10% at 20°C (68°F) (Green — Brown)
Armature (Outer)	0.49Ω ± 10% at 20°C (68°F)
Coil Resistance (Color)	(White — White)

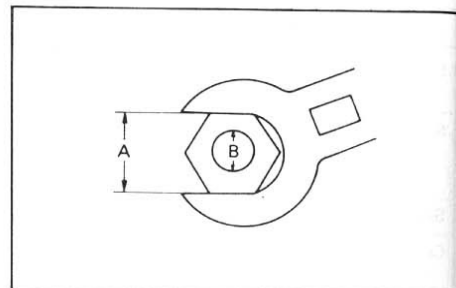
Model	XS400
Brush — Overall Length	17 mm (0.67 in)
— Wear Limit	7 mm (0.28 in)
— Spring Pressure	360 g (12.7 oz)
Voltage Regulator — Type	I.C. type
— Model/Manufacturer	SH233/SHINDENGEN
— No Load Regulated Voltage	14.5V
Rectifier — Model/Manufacturer	SH233/SHINDENGEN
— Capacity	15A
— Withstand Voltage	300V
Battery	
Capacity	12V 12AH
Specific Gravity	1.280
Electric Starter System	
Type	Constant mesh type
Starter Motor — Model/Manufacturer	SM-7/MITSUBA
— Output	0.4 kw
Armature Coil Resistance	0.014Ω ± 6% at 20°C (68°F)
Brush — Overall Length	10.5 mm (0.41 in)
<Limit>	<5 mm (0.20 in)>
— Spring Pressure	600 ± 150 g (21.16 ± 5.29 oz)
Commutator Dia.	23 mm (0.906 in)
<Wear Limit>	<22 mm (0.866 in)>
— Mica Undercut	0.8 mm (0.031 in)
Starter Switch Manufacturer	HONDA LOCK
Amperage Rating	150A
Horn	
Type	Plain type
Quantity	1 pc.
Model/Manufacturer	CF-12/NIKKO
Maximum Amperage	2.5A
Flasher Relay	
Type	Condenser type, Semi transistor type (G)
Model/Manufacturer	FU249CD/NIPPON DENSO, FJ245ED/NIPPON DENSO (G)
Self Cancelling Device	Yes, No (G)
Flasher Frequency	85 ± 10 cycle/min
Wattage	21W × 2 + 3.4W

Model	XS400
Self Cancelling Unit Model/ Manufacturer	MATSUSHITA
Starting Circuit Cut off Relay Model/ Manufacturer Coil Winding Resistance	Yes TATEISHI 100Ω ± 10% at 20°C (68°F)
Sidestand Relay	No
Circuit Breaker Type Amperage for Individual circuit Main Head Light Signal Ignition	Fuse  20A/ 1 pc. 10A/ 1 pc. 10A/ 1 pc. 10A/ 1 pc.

## 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.

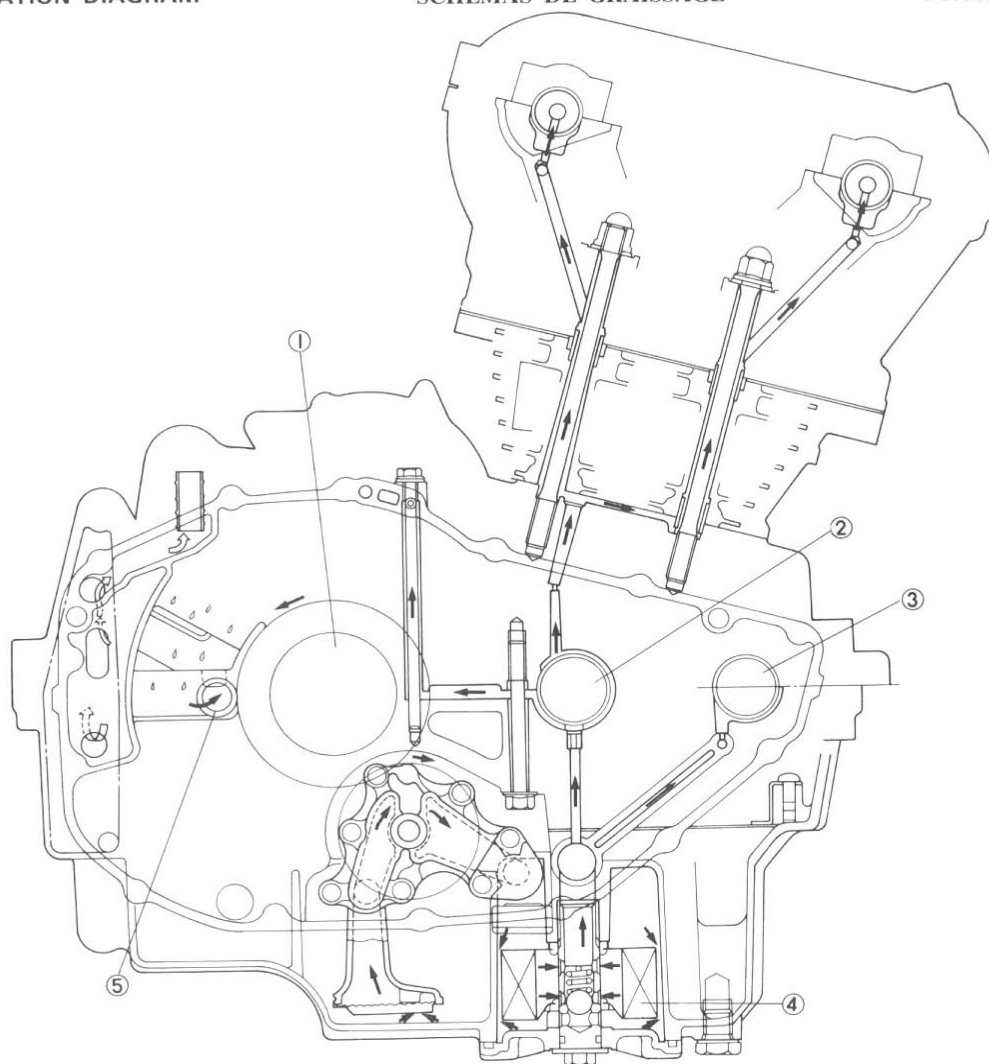
A (Nut)	B (Bolt)	General torque specifications		
		Nm	m · kg	ft · lb
10 mm	6 mm	6	0.6	4.3
12 mm	8 mm	15	1.5	11
14 mm	10 mm	30	3.0	22
17 mm	12 mm	55	5.5	40
19 mm	14 mm	85	8.5	61
22 mm	16 mm	130	13.0	94



A: Distance across flats  
B: Outside thread diameter

## DEFINITION OF UNITS

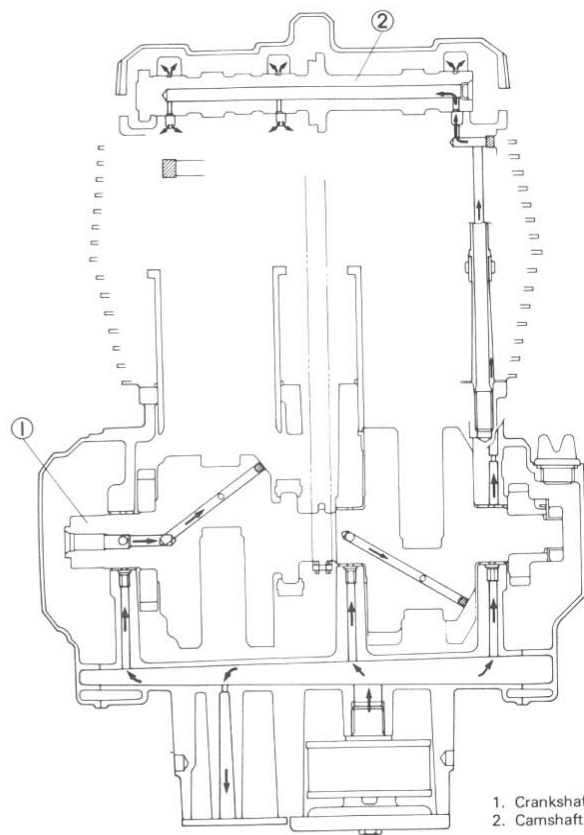
Unit	Read	Definition	Measure
mm	millimeter	$10^{-3}$ meter	Length
cm	centimeter	$10^{-2}$ meter	Length
kg	kilogram	$10^3$ gram	Weight
N	Newton	$1 \text{ kg} \times \text{m}/\text{sec}^2$	Force
Nm	Newton meter	$\text{N} \times \text{m}$	Torque
m · kg	Meter kilogram	$\text{m} \times \text{kg}$	Torque
Pa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



1. Main axle
2. Crankshaft
3. Balancer shaft
4. Oil filter
5. Drive axle

1. Arbre primaire
2. Vilebrequin
3. Arbre de balancier
4. Filtre à huile
5. Arbre secondaire

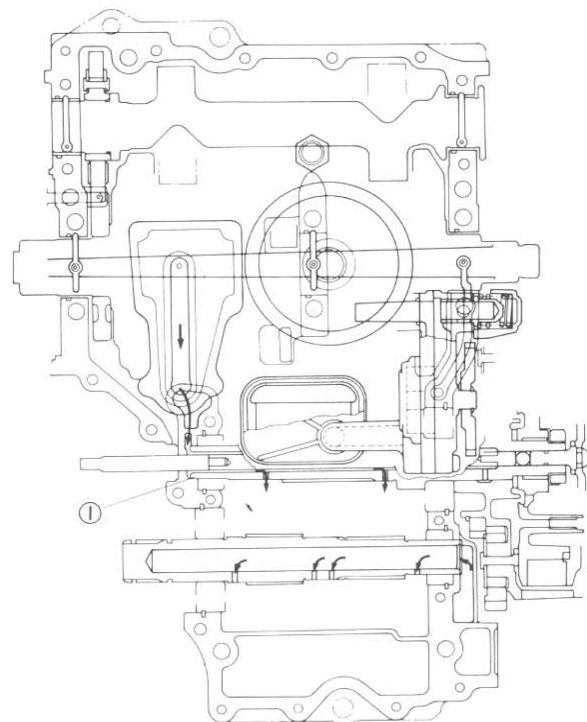
1. Hauptwelle
2. Kurbelwelle
3. Ausgleichswelle
4. Ölfilter
5. Antriebswelle



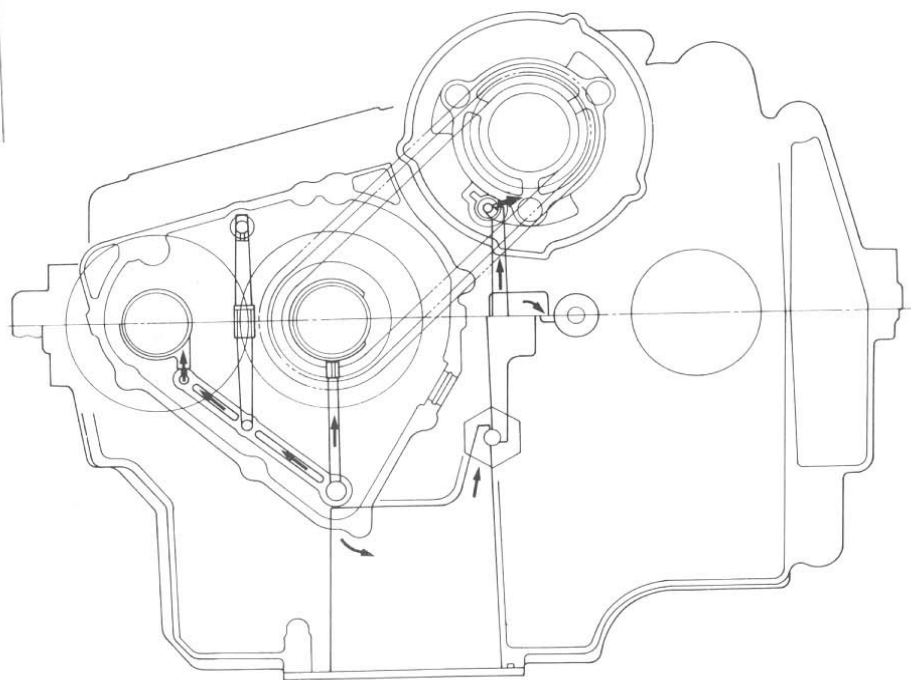
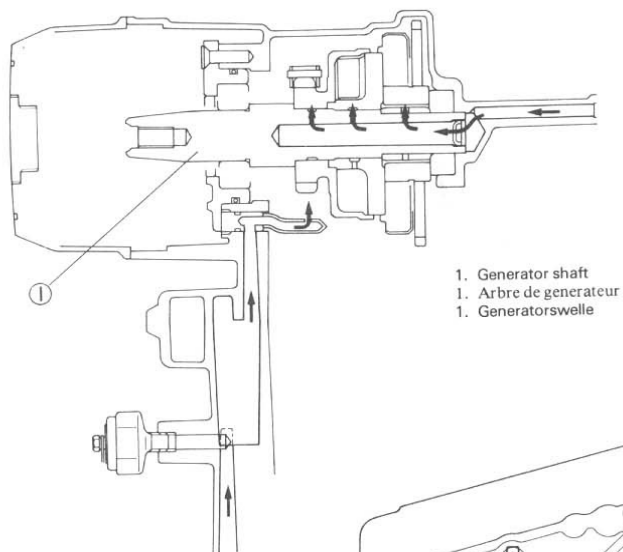
- 1. Crankshaft
- 2. Camshaft

- 1. Vilebrequin
- 2. Arbre à cames

- 1. Kurbelwelle
- 2. Nockenwelle



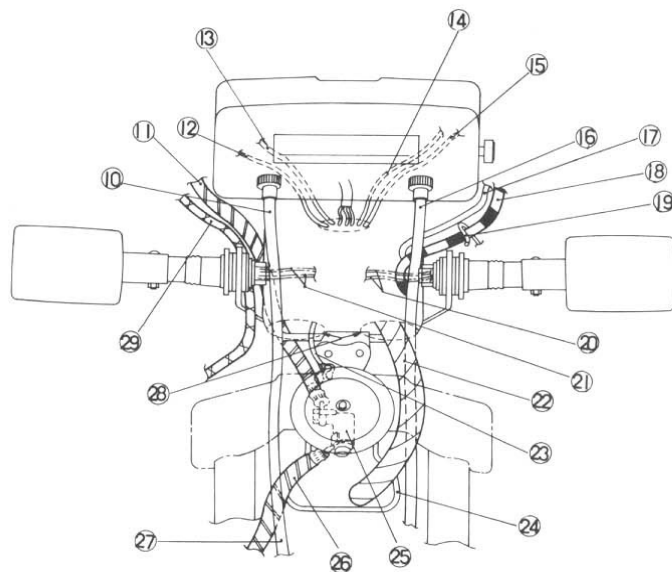
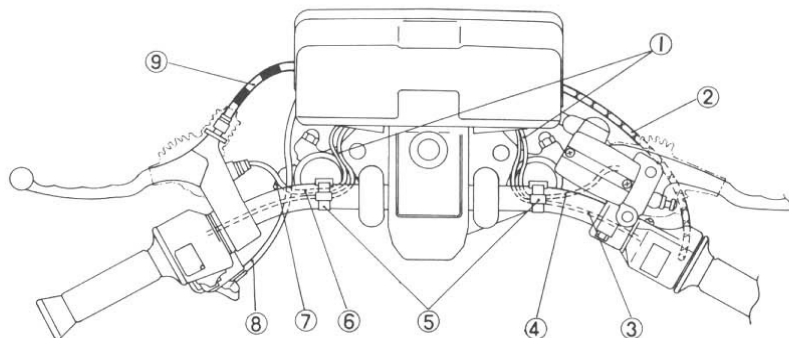
- 1. Main axle
- 1. Arbre primaire
- 1. Hauptwelle



# CABLE ROUTING

## CHEMINEMENT DES CABLES ET FILS

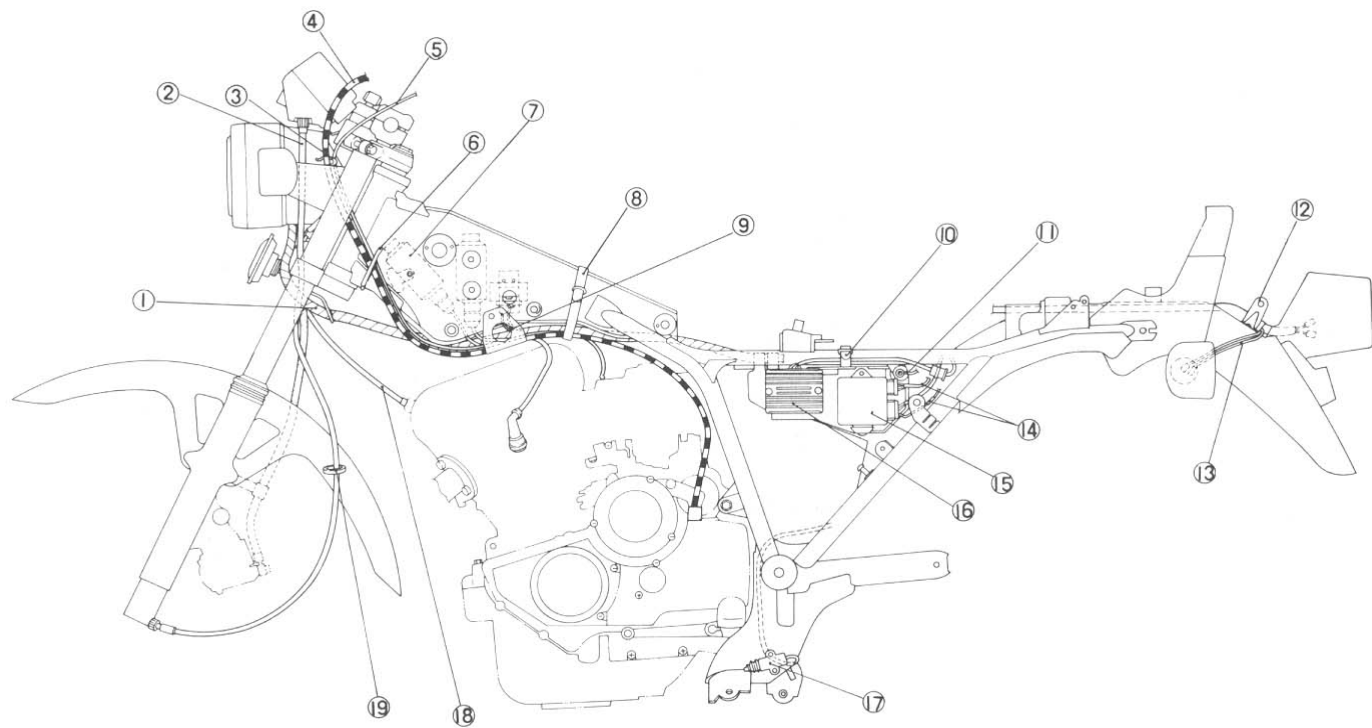
## KABELFÜHRUNGSÜBERSICHT



1. Handlebar switch leads (right and left), clutch switch lead and front brake switch: Route the handlebar switch leads and other leads around the outer side of the meter stay.
2. Throttle cable
3. Handlebar switch lead (R)
4. Front brake switch lead
5. Band
6. Handlebar switch lead (L)
7. Clutch switch lead
8. Starter cable
9. Clutch cable
10. Tachometer cable
11. Route the brake hose behind the tachometer cable and headlight stay.
12. Front brake switch lead
13. Handlebar switch lead (R)
14. Handlebar switch lead (L)
15. Clutch switch lead
16. Speedometer cable
17. Starter cable
18. Clutch cable
19. Clamp
20. Front flasher light lead (L)
21. Front flasher light lead (R)
22. Wire harness
23. Horn lead
24. Cable guide
25. Joint
26. Brake hose
27. Route the tachometer cable on this side of the bracket hose.
28. Lower hole in the headlight body.
29. Throttle cable

1. Fils de commutateur sur guidon (droit et gauche), fil du contacteur d'embrayage et fil du contacteur du frein avant: Passer les fils de commutateur sur guidon et les autres fils sur l'extérieur du support de compteur.
2. Câble d'accélération
3. Fil du commutateur sur guidon (D)
4. Fil du contacteur du frein avant
5. Collier
6. Fil du commutateur sur guidon (G)
7. Fil du contacteur d'embrayage
8. Câble de starter
9. Câble d'embrayage
10. Câble du compte-tours
11. Passer le tuyau de frein derrière le câble du compte-tours et le support du phare.
12. Fil du contacteur de frein avant
13. Fil du commutateur sur guidon (D)
14. Fil du commutateur sur guidon (G)
15. Fil du contacteur d'embrayage
16. Câble de l'indicateur de vitesse
17. Câble de starter
18. Câble d'embrayage
19. Bride
20. Fil de clignoteur avant (G)
21. Fil de clignoteur avant (D)
22. Faisceau électrique
23. Fil d'avertisseur
24. Guide de câble
25. Raccord
26. Tuyau de frein
27. Passer le câble du compte-tours sur ce côté du tuyau de frein.
28. Trou inférieur du corps du phare
29. Câble d'accélération

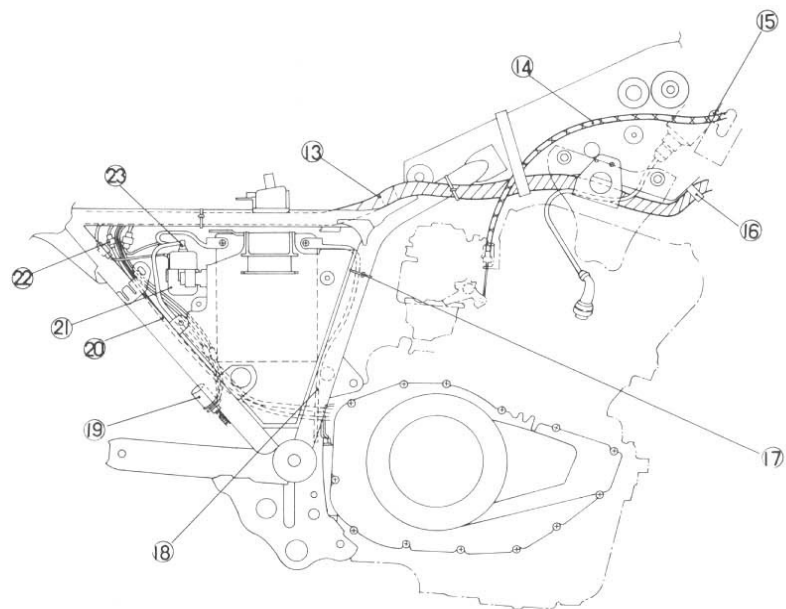
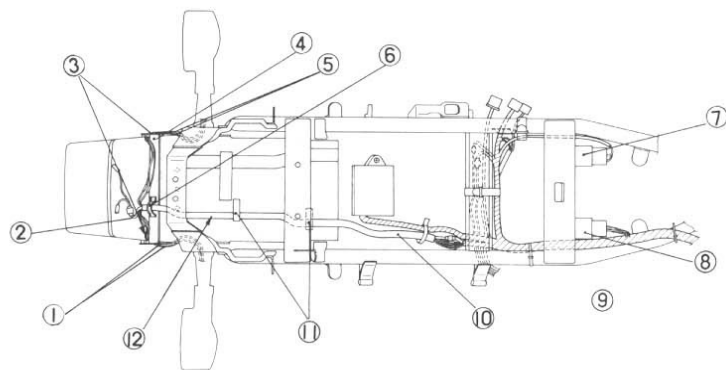
1. Lenkerschalter-Leitungsdrähte (rechts und links), Kupplungsschalter-Leitungsdraht und Vorderrad-Bremslichtschalter: Die Lenkerschalter-Leitungsdrähte und andere Leitungsdrähte an der Außenseite der Instrumentenstütze herumführen.
2. Gaskabel
3. Lenkerschalter-leitungsdraht (R)
4. Leitungsdraht des Vorderrad-Dremslichtschalters
5. Band
6. Lenkerschalter-leitungsdraht (L)
7. Leitungsdraht für Kupplungsschalter
8. Anlasserkabel
9. Kupplungskabel
10. Drehzahlmesserwelle
11. Bremsschlauch hinter der Drehzahlmesserwelle und der Scheinwerferstütze durchführen.
12. Leitungsdraht des Vorderrad-Bremslichtschalters
13. Lenkerschalter-leitungsdraht (R)
14. Lenkerschalter-leitungsdraht (L)
15. Leitungsdraht für Kupplungsschalter
16. Geschwindigkeitsmesserwelle
17. Anlasserkabel
18. Kupplungskabel
19. Klemme
20. Leitungsdraht für vorderen Blinklicht (L)
21. Leitungsdraht für vorderen Blinklicht (R)
22. Kabelbaum
23. Leitungsdraht für Signalhorn
24. Kabelführung
25. Verbindung
26. Bremsschlauch
27. Drehzahlmesserwelle an dieser Seite der Schlauchkonsole vorbeiführen.
28. Untere Bohrung im Scheinwerfergehäuse
29. Gasseilzug



1. Wire harness
2. Speedometer cable
3. Pass the clutch cable through the clamp.
4. Clutch cable
5. Starter cable
6. Pass the clutch cable and the starter cable through the guide.
7. Pass the clutch cable and the starter cable under the reflector bracket.
8. Secure all cables and leads with the band, excepting the high-tension cord.
9. Pass all cables and leads through the clamp.
10. Band: Fasten the regulator lead and starter safety relay lead.
11. Earth lead
12. Bracket 3
13. Route both right and left rear flasher light leads behind bracket 3.
14. To engine
15. To ignitor unit
16. Rectifier
17. Sidestand switch
18. Tachometer cable
19. Pass the speedometer cable through the cable holder.

1. Faisceau électrique
2. Câble d'indicateur de vitesse
3. Passer le câble d'embrayage dans la bride.
4. Câble d'embrayage
5. Câble de starter
6. Passer le câble d'embrayage et le câble de starter dans le guide.
7. Passer le câble d'embrayage et le câble de starter sous l'étrier de catadioptré.
8. Attacher tous les câbles et fils, excepté le câble haute tension, avec le collier.
9. Passer tous les câbles et fils dans la bride.
10. Collier: Attacher le fil de régulateur et le fil du relais de démarreur.
11. Fil de masse
12. Etrier 3
13. Passer les fils des clignoteurs arrière droit et gauche derrière l'étrier 3.
14. Au moteur
15. Au bloc allumeur
16. Redresseur
17. Contacteur de la béquille latérale
18. Câble du compte-tours de vitesse
19. Passer le câble de l'indicateur à travers le support de câble.

1. Kabelbaum
2. Geschwindigkeitmesserkabel
3. Kupplungsseil durch Klemme durch führen
4. Kupplungskabel
5. Anlasserkabel
6. Kupplungsseil und Anlasserkabel durch die Führung führen.
7. Kupplungsseil und Anlasserkabel unter der Reflektor-Konsole durchführen.
8. Alle Kabel und Seilzüge mit Band sichern, ausgenommen das Hochspannungskabel
9. Alle Kabel und Seilzüge durch die Klemme führen.
10. Band: Spannungsreglerkabel und Anlasser-Sicherheitsrelaiskabel befestigen.
11. Massekabel
12. Konsole 3
13. Kabel für linke und rechte hintere Blinkleuchten hinter Konsole 3 anordnen.
14. Zum Motor
15. Zur Zündungseinheit
16. Gleichrichter
17. Seitenständer-Schalter
18. Drehzahlmesserwelle
19. Die Geschwindigkeitsmesserwelle durch den Kabelhalter führen.



1. Rear flasher light lead (Right)
2. Taillight lead
3. Route both right and left rear flasher light leads behind bracket 3.
4. Bracket 3
5. Rear flasher light end (L)
6. Hold the sub-lead with the clamp on bracket 3.
7. Starter safety switch
8. Sidestand safety relay
9. To the engine
10. Sub-lead
11. Hold the sub-lead with the clamp on the reinforcement
12. Pass both right and left leads through the slot on the right side of the reinforcement.
13. Tape position indicating the main harness position
14. Route the throttle cable over the engine stay, and route under the fuel tank locating damper.
15. Route the throttle cable over the reflector bracket.
16. Secure the wire harness by bending the clamp.
17. Band:  
Hold the negative lead at as high a position as possible.
18. Route the negative lead behind the cross-pipe.
19. Rear brake switch
20. Route the wire harness through the inner side of the frame bracket and between the air cleaner and mudguard.
21. Starter switch
22. After connecting the couplers, put them in.
23. Inner side: To the battery  
Outer side: To the starter motor

1. Fil du clignoteur arrière (D)
2. Fil du feu arrière
3. Passer les fils des clignoteurs arrière droit et gauche derrière l'étrier 3.
4. Etrier 3
5. Fil du clignoteur arrière (G)
6. Attacher le fil auxiliaire avec la bride de l'étrier 3.
7. Relais du démarreur
8. Relais de la béquille latérale
9. Au moteur
10. Fil auxiliaire
11. Attacher le fil auxiliaire avec la bride du renfort.
12. Passer les fils droit et gauche dans la fente du côté droit du renfort.
13. Bande indiquant la position du faisceau principal
14. Passer le câble d'accélération sur le support de moteur puis sous le silent-bloc de positionnement du réservoir à carburant.
15. Passer le câble d'accélération sur l'étrier de catadioptr.
16. Fixer le faisceau électrique en courbant la bride.
17. Collier:  
Attacher le câble négatif le plus haut possible.
18. Passer le câble négatif derrière le tube transversal.
19. Contacteur du frein arrière.
20. Passer le faisceau électrique à l'intérieur de l'étrier de cadre puis entre le filtre à air et le garde-boue.
21. Relais du démarreur
22. Après avoir branché les coupleurs, les mettre à l'intérieur.
23. Côté interne: A la batterie  
Côté externe: Au démarreur électrique

1. Leitungsdraht für hinteres Blinklicht (R)
2. Leitungsdraht für Schlußlicht
3. Kabel für rechte und linke hintere Blinkleuchte hinter Konsole 3 anordnen.
4. Konsole 3
5. Leitungsdraht für hinteres Blinklicht (L)
6. Hilfskabelbaum mit Klemme an Konsole 3 befestigen.
7. Anlasser-Sicherheitsschalter
8. Seitenständer-Relais
9. Zum Motor
10. Hilfskabelbaum
11. Hilfskabelbaum mit Klemme an Verstärkung befestigen.
12. Rechtes und linkes Kabel durch Nut an rechter Seite der Verstärkung durch führen.
13. Gasseil über Motorstütze anordnen und unter dem Dämpfer des Kraftstofftanks durchführen.
14. Die Position des Bandes gibt die Position des Hauptkabelbaums an.
15. Gasseil über Reflektor-Konsole anordnen.
16. Kabelbaum durch umbiegen der Klemme sichern.
17. Band:  
Negatives Kabel möglichst hoch befestigen.
18. Negatives Kabel hinter dem Querrohr anordnen.
19. Hinterradbremsschalter
20. Kabelbaum an Innenseite der Rahmenkonsole und zwischen Luftfilter und Schlammenschutz durchführen.
21. Anlasserschalter
22. Die Stecker anschließen und danach hineindrücken.
23. Innenseite: Zur Batterie  
Außenseite: Zum Anlasser

## PARTS ILLUSTRATIONS

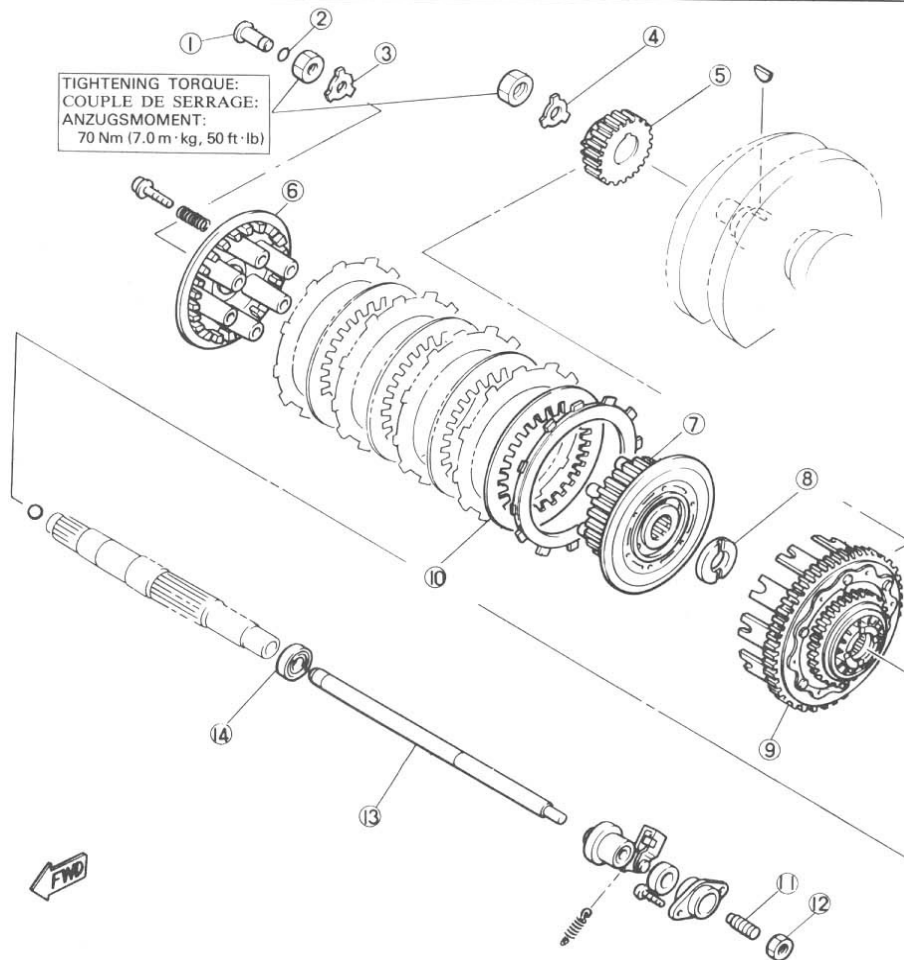
## CLUTCH

ILLUSTRATIONS DES DIFFERENTES  
PARTIES  
EMBRAYAGE

## ABBILDUNG DER BAUTEILE

## KUPPLUNG

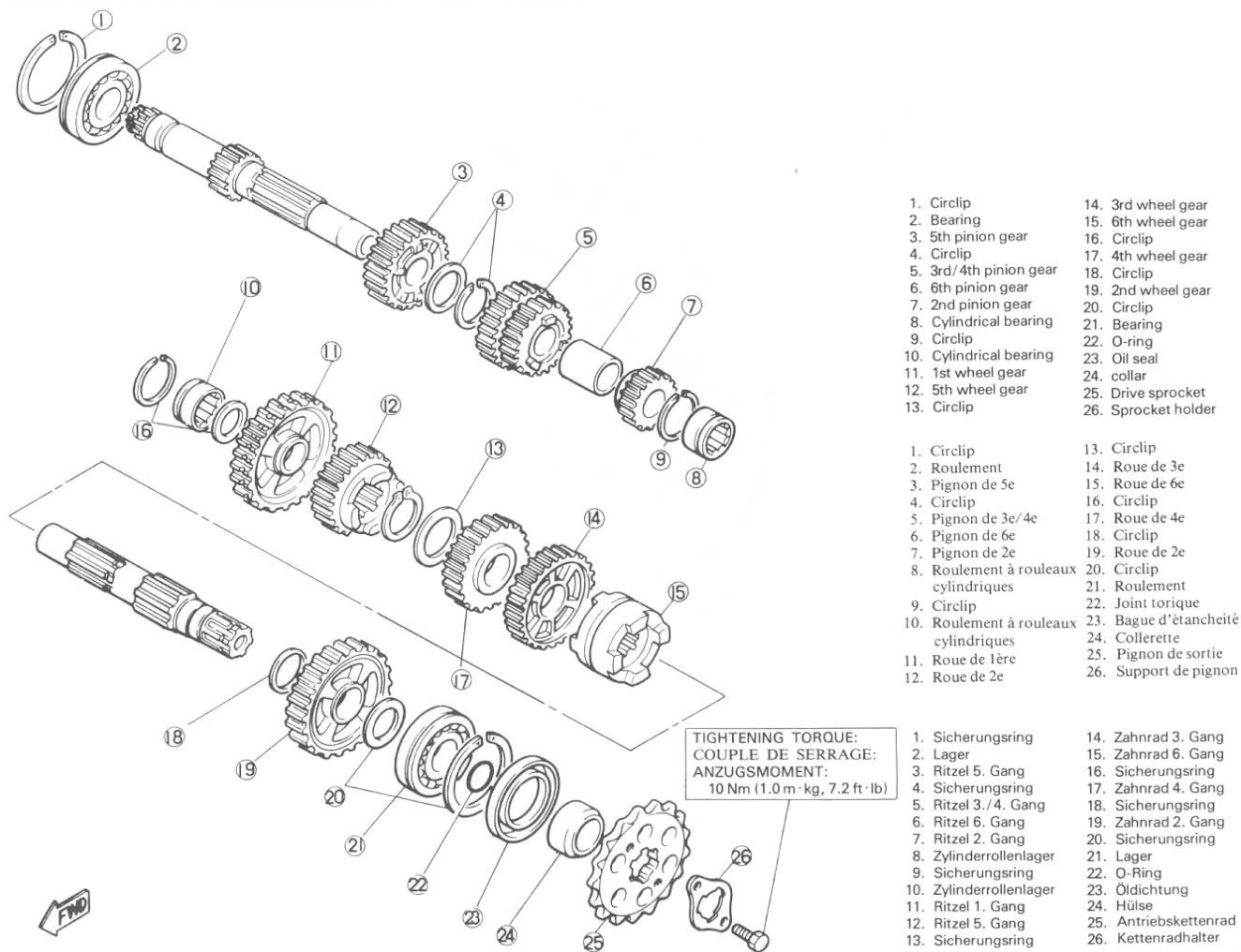
TIGHTENING TORQUE:  
COUPLE DE SERRAGE:  
ANZUGSMOMENT:  
70 Nm (7.0 m·kg, 50 ft·lb)



1. Push rod
2. O-ring
3. Lock washer
4. Lock washer
5. Drive gear
6. Clutch pressure plate
7. Clutch boss
8. Thrust plate
9. Clutch housing
10. Friction plate
11. Adjusting screw
12. Locknut
13. Push rod
14. Oil seal

1. Champignon de débrayage
2. Joint torique
3. Rondelle frein
4. Rondelle frein
5. Pignon de transmission
6. Pateau de pression
7. Noix d'embrayage
8. Plaque de butée
9. Cloche d'embrayage
10. Disque de friction
11. Vis de réglage
12. Contre-écrou
13. Champignon de débrayage
14. Bague d'étanchéité

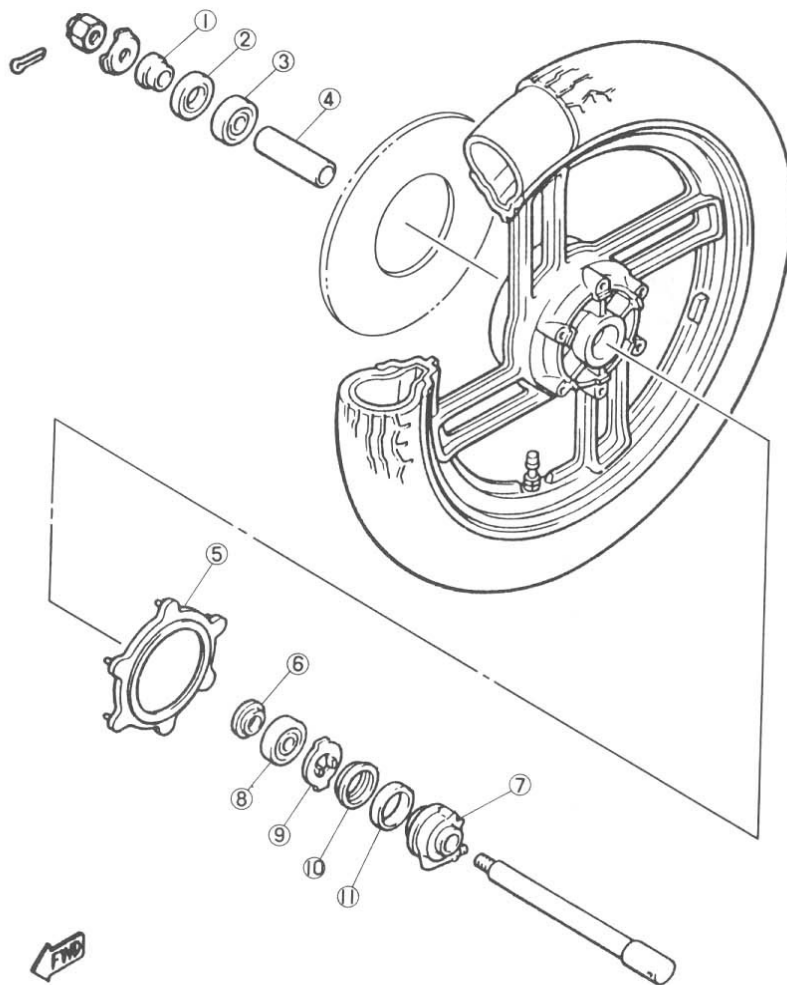
1. Schubstange
2. O-Ring
3. Sicherungsscheibe
4. Sicherungsscheibe
5. Antriebsritzel
6. Kupplungs-Andruckscheibe
7. Kupplungsnahe
8. Druckplatte
9. Kupplungsgehäuse
10. Reibscheibe
11. Einstellschraube
12. Befestigungsmutter
13. Schubstange
14. Öldichtung



# FRONT WHEEL

# ROUE AVANT

# VORDERRAD



1. Collar
2. Oil seal
3. Bearing
4. Spacer
5. Housing cover
6. Spacer flange
7. Gear unit assembly
8. Bearing
9. Meter clutch
10. Clutch retainer
11. Oil seal

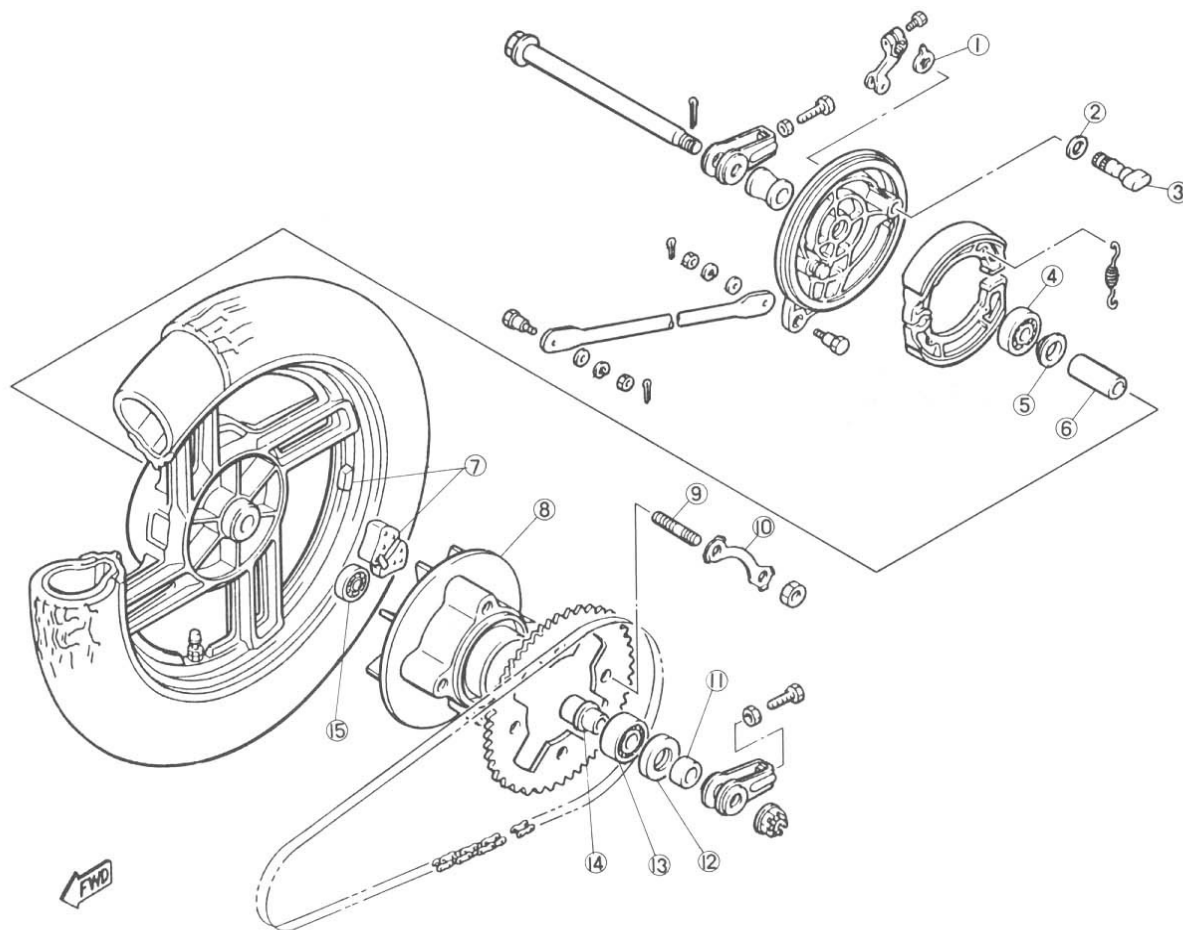
1. Collerette
2. Bague d'étanchéité
3. Roulement
4. Entretoise
5. Cache de boîtier
6. Collerette d'entretoise
7. Ensemble bloc d'engrenage
8. Roulement
9. Prise de compteur
10. Retenue de prise
11. Bague d'étanchéité

1. Hülse
2. Öldichtung
3. Lager
4. Abstand
5. Gehäusedeckel
6. Abstandsring
7. Geschwindigkeitsmessergetriebe
8. Lager
9. Geschwindigkeitsmesserkupplung
10. Kupplungshalter
11. Öldichtung

# REAR WHEEL

# ROUE ARRIERE

# HINTERRAD



1. Indicator plate
2. Camshaft shim
3. Camshaft
4. Bearing
5. Spacer flange
6. Spacer
7. Damper
8. Clutch hub
9. Stud bolt
10. Lock washer
11. Collar
12. Oil seal
13. Bearing
14. Collar
15. Bearing

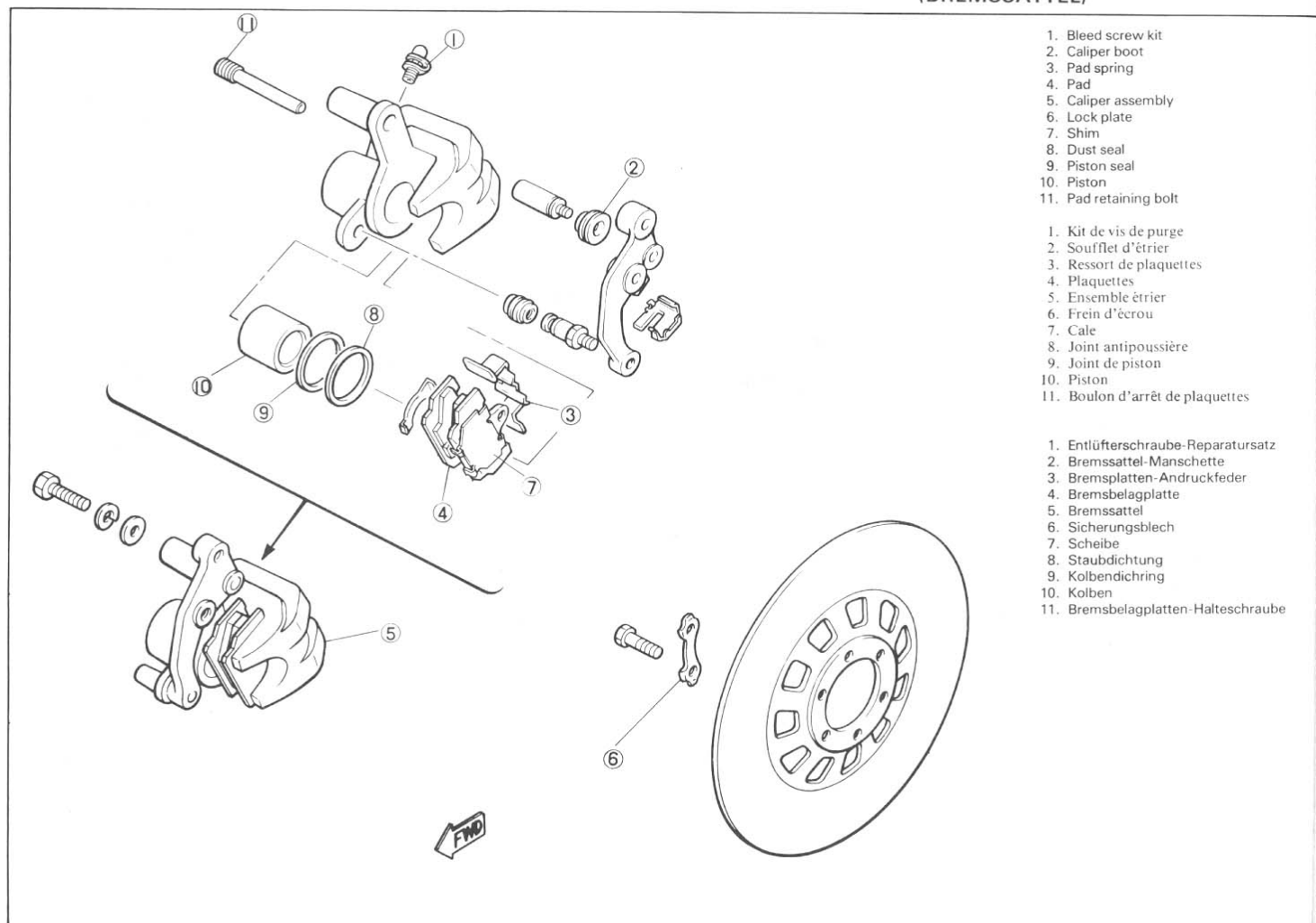
1. Plaque indicateur
2. Cale d'axe à came
3. Axe à came
4. Roulement
5. Colletette d'entretoise
6. Entretoise
7. Amortisseur
8. Embrayage de moyeu
9. Goujon
10. Rondelle-frein
11. Colletette
12. Bague d'étanchéité
13. Roulement
14. Colletette
15. Roulement

1. Anzeigeplatte
2. Bremsnockenwellen-Beilegescheibe
3. Bremsnockenwelle
4. Lager
5. Abstandsring
6. Abstand
7. Dämpfer
8. Kupplungsnahe
9. Stehbolzen
10. Sicherungsscheibe
11. Hülse
12. Öldichtung
13. Lager
14. Hülse
15. Lager

# FRONT BRAKE (CALIPER)

# FREIN AVANT (ETRIER)

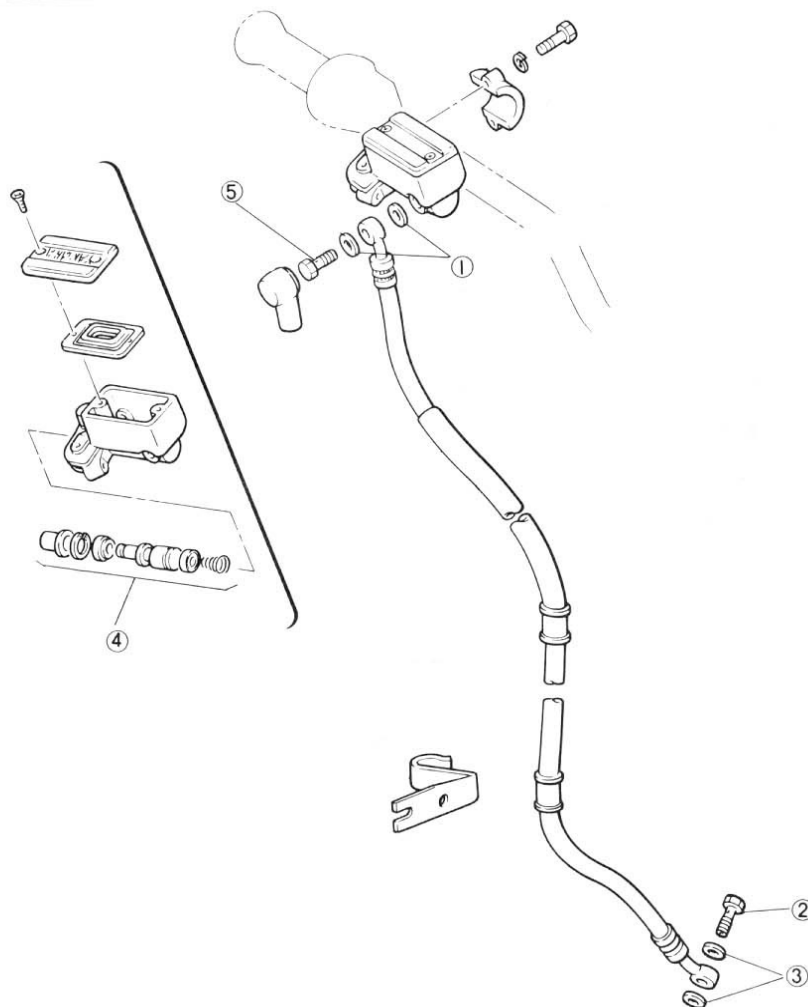
# VORDERRAD-BREMSE (BREMSSATTEL)



**FRONT BRAKE  
(MASTER CYLINDER)**

**FREIN AVANT  
(MAÎTRE-CYLINDRE)**

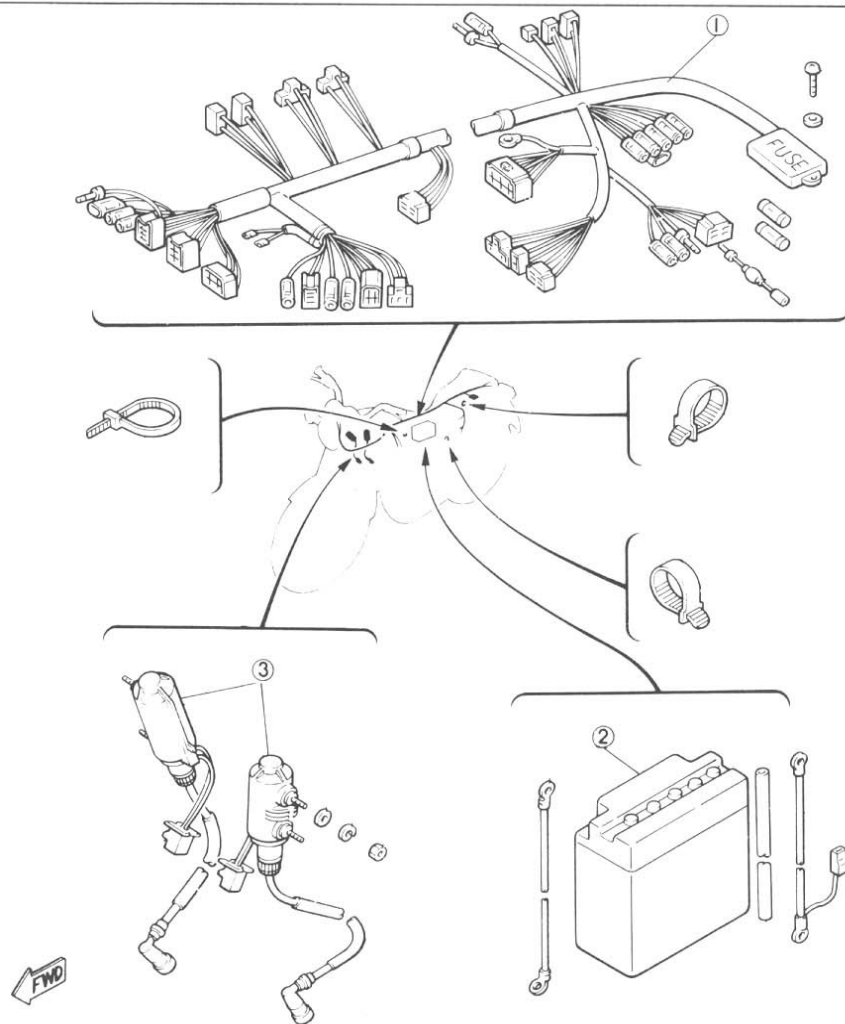
**VORDERRADBREMSE  
(HAUPTBREMSZYLINDER)**



1. Copper washer
2. Union bolt
3. Copper washer
4. Master cylinder kit
5. Union bolt

1. Rondelle en cuivre
2. Boulon de raccordement
3. Rondelle en cuivre
5. Boulon de raccordement

1. Kupferscheibe
2. Schlauchverbindungen
3. Kupferscheibe
4. Hauptbremszylinder-Reparaturatz
5. Schlauchverbindungen



1. Wire harness assembly
2. Battery
3. Ignition coil

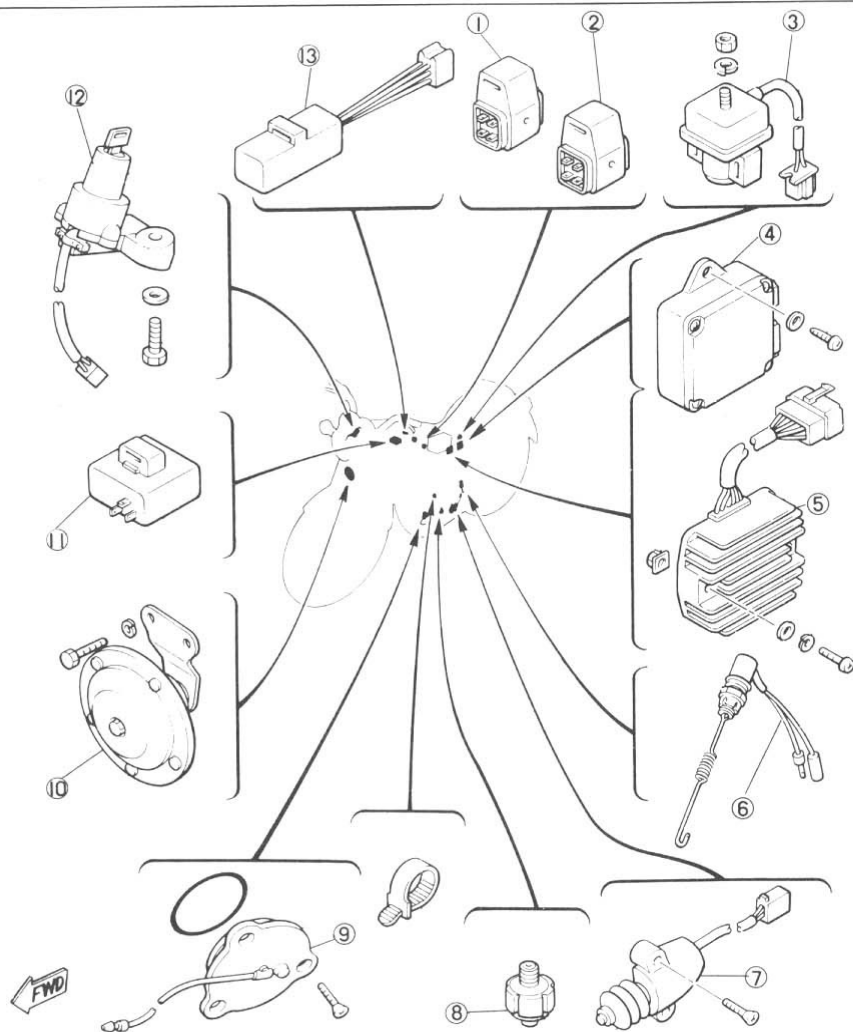
1. Ensemble faisceau de fils
2. Batterie
3. Bobines d'allumage

1. Kabelbaum
2. Batterie
3. Zündspule

## ELECTRICAL COMPONENTS

## COMPOSANTS ELECTRIQUES

## ELEKTRISCHE BAUTEILE



1. Sidestand relay
2. Starter circuit cutoff relay
3. Starter relay
4. T.C.I. unit
5. Rectifier with regulator
6. Rear brake switch
7. Sidestand switch
8. Oil pressure switch
9. Neutral switch
10. Horn
11. Flasher relay
12. Main switch
13. Cancelling unit

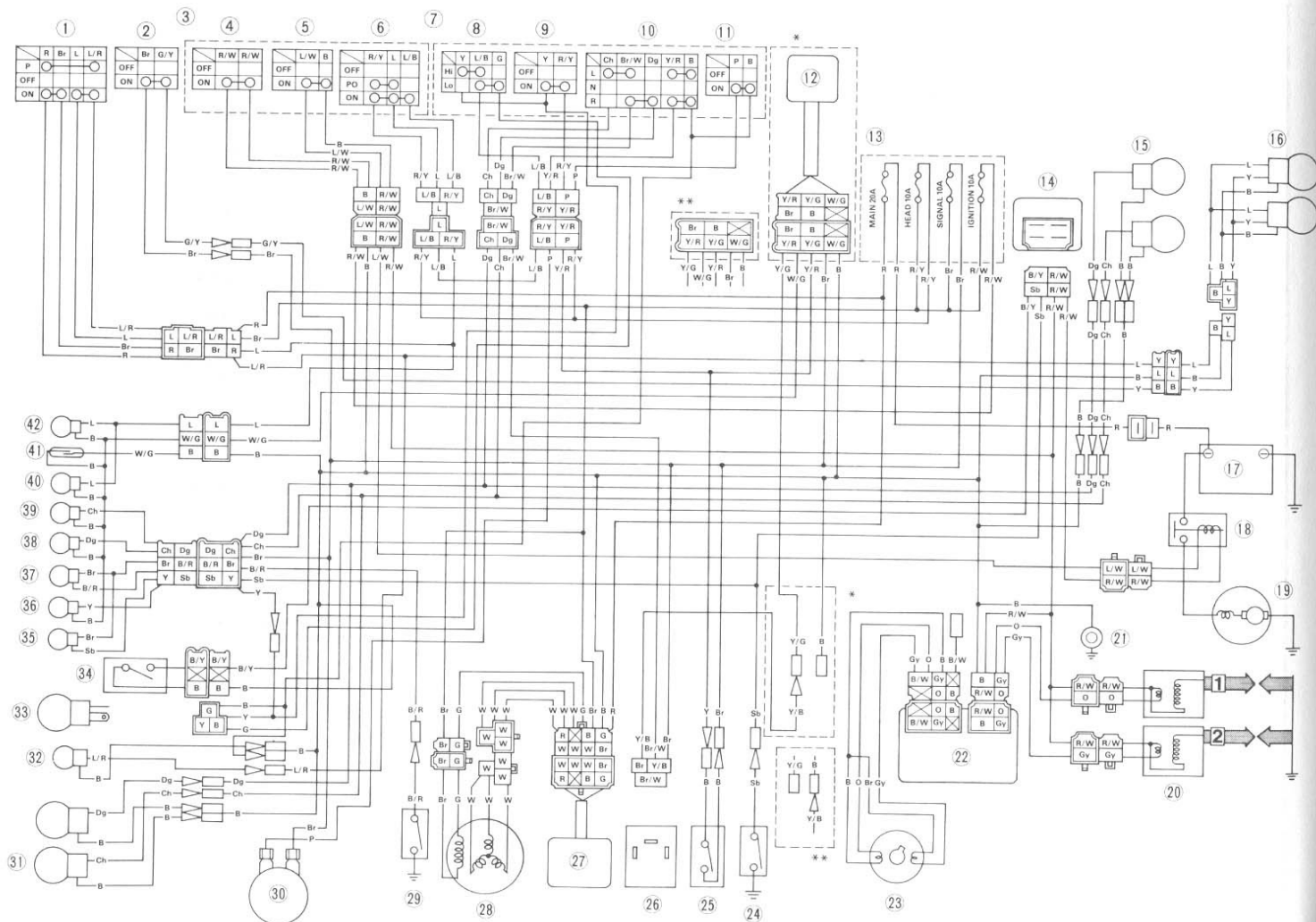
1. Relais de la b  quille lat  rale
2. Relais de coupure du circuit du d  marreur
3. Relais du d  marreur
4. Bloc TCI
5. Redresseur avec r  gulateur
6. Contacteur du frein arri  re
7. Contacteur de la b  quille lat  rale
8. Contacteur de pression d'huile
9. Contacteur de point-mort
10. Avertisseur
11. Relais des clignotants
12. Contacteur    cl  
13. Unit   d'arr  t

1. Seitenst  nder-Relais
2. Unterbrechungsrelais des Anla  stromkreises
3. Anlasserrelais
4. TCI-Einheit
5. Gleichrichter mit Spannungsregler
6. Hinterrad-Bremslichtschalter
7. Seitenst  nder-Schalter
8.   ldruckschalter
9. Leerlaufschalter
10. Hupe
11. Blinkerrelais
12. Hauptschalter
13. Selbsttausschalteinheit

# WIRING DIAGRAM

# PLAN DE CABLAGE

# SCHALTPLAN



## WIRING DIAGRAM

1. Main switch
  2. Front brake switch
  3. Handlebar switch (R)
  4. Engine stop switch
  5. Starter switch
  6. Light switch
  7. Handlebar switch (L)
  8. Dimmer switch
  9. Passing switch
  10. Flasher switch
  11. Horn switch
  12. Cancelling unit
  13. Fuse box
  14. Starting circuit cut-off relay
  15. Rear flasher light
  16. Tail/Brake light
  17. Battery
  18. Starter switch
  19. Starting motor
  20. Ignition coil
  21. Frame earth
  22. Ignitor unit
  23. Pick up
  24. Neutral switch
  25. Rear brake switch
  26. Flasher relay
  27. Rectifier/Regulator
  28. A.C generator
  29. Oil pressure switch
  30. Horn
  31. Front flasher light
  32. Auxiliary light
  33. Head light
  34. Clutch switch
  35. NEUTRAL
  36. HIGH BEAM
  37. OIL
  38. TURN (R)
  39. TURN (L)
  40. Speedometer
  41. Reed switch
  42. Tachometer
- \* Except for Germany  
\*\* For Germany

## COLOR CODE

G	Green	L/R	Blue/Red
R	Red	G/Y	Green/Yellow
Br	Brown	R/W	Red/White
L	Blue	L/W	Blue/White
B	Black	Br/W	Brown/White
Ch	Chocolate	L/B	Blue/Black
Dg	Dark green	Y/R	Yellow/Red
P	Pink	R/Y	Red/Yellow
Sb	Sky blue	L/B	Blue/Black
Y	Yellow	W/G	White/Green
W	White	B/R	Black/Red
O	Orange	Y/B	Yellow/Black
Gy	Gray	Y/G	Yellow/Green
		B/Y	Black/Yellow

## PLAN DE CABLAGE

1. Contacteur à cle
  2. Contacteur du feu stop (avant)
  3. Commutateur sur guidon (D)
  4. Coupe-circuit de sécurité
  5. Bouton du démarreur
  6. Contacteur d'éclairage
  7. Commutateur sur guidon (G)
  8. Commutateur feu de route
  9. Bouton de dépassement
  10. Commande de clignotant
  11. Bouton d'avertisseur
  12. Unité
  13. Boîte à fusibles
  14. Relais de coupure du circuit de démarrage
  15. Clignoteur arrière
  16. Feu arrière/stop
  17. Batterie
  18. Bouton de démarreur
  19. Démarreur électrique
  20. Bobines d'allumage
  21. Masse
  22. Bloc allumeur
  23. Exploratrice
  24. Contacteur de point-mort
  25. Contacteur du feu stop (arrière)
  26. Relais des clignotants
  27. Redresseur/Régulateur
  28. Alternateur
  29. Contacteur de pression d'huile
  30. Avertisseur
  31. Clignoteur avant
  32. Témoin auxiliaire
  33. Phare
  34. Contacteur d'embrayage
  35. NEUTRAL
  36. HIGH BEAM
  37. OIL
  38. TURN (D)
  39. TURN (G)
  40. Indicateur de vitesse
  41. Commutateur à lames
  42. Compte tours
- \* Excepté pour la Allemagne  
\*\* Pour la Allemagne

## CODE DE COULEUR

G	Vert	L/R	Bleu/Rouge
R	Rouge	G/Y	Vert/Jaune
Br	Brun	R/W	Rouge/Blanc
L	Bleu	L/W	Bleu/Blanc
B	Noir	Br/W	Brun/Blanc
Ch	Chocolat	L/B	Bleu/Noir
Dg	Vert foncé	Y/R	Jaune/Rouge
P	Rose	R/Y	Rouge/Jaune
Sb	Bleu ciel	L/B	Bleu/Noir
Y	Jaune	W/G	Blanc/Vert
W	Blanc	B/R	Noir/Rouge
O	Orange	Y/B	Jaune/Noir
Gy	Gris	Y/G	Jaune/Vert
		B/Y	Noir/Jaune

## SCHALTPLAN

1. Hauptschalter
  2. Vorderradbremsschalter
  3. Lenkerschalter (Rechts)
  4. Motorstoppschalter
  5. Anlaßschalter
  6. Beleuchtungsschalter
  7. Lenkerschalter (Links)
  8. Abblendschalter
  9. Lichthupenknopf
  10. Blinkerschalter
  11. Signalhornschalter
  12. Selbstauschalteinheit
  13. Sicherungskasten
  14. Unterbrechungsrelais des Anlaßstromkreises
  15. Blinklicht hinten
  16. Schluß/Bremslicht
  17. Batterie
  18. Anlaßschalter
  19. Anlasser
  20. Zündspule
  21. Rahmenerde
  22. Zündstabeinheit
  23. Aufnahme
  24. Leerlaufschalter
  25. Hinterradbremsschalter
  26. Blinkerrelais
  27. Gleichrichter/ Spannungsregler
  28. Wechselstrom-Lichtmaschine
  29. Öldruckanzeiger
  30. Signalhorn
  31. Blinklicht vorn
  32. Zusatzleuchte
  33. Scheinwerfer
  34. Kupplungsschalter
  35. NEUTRAL
  36. HIGH BEAM
  37. OIL
  38. TURN (R)
  39. TURN (L)
  40. Geschwindigkeitsmesser
  41. Zungenschalter
  42. Drezahlmesser
- \* Ausgenommen für Deutschland  
\*\* Für Deutschland

## FARBKODIERUNG

G	Grün	L/R	Blau/Rot
R	Rot	G/Y	Grün/Gelb
Br	Braun	R/W	Rot/Weiß
L	Blau	L/W	Blau/Weiß
B	Schwarz	Br/W	Braun/Weiß
Ch	Schokoladefarbig	L/B	Blau/Schwarz
Dg	Schwarzgrün	Y/R	Gelb/Rot
P	Rosa	R/Y	Rot/Gelb
Sb	Himmelblau	L/B	Blau/Schwarz
Y	Gelb	W/G	Weiß/Grün
W	Weiß	B/R	Schwarz/Rot
O	Orange	Y/B	Gelb/Schwarz
Gy	Grau	Y/G	Gelb/Grün
		B/Y	Schwarz/Gelb