SUPPLEMENT

1980–1981 SERVICE INFORMATION

The following supplement provides procedures unique to models manufactured since 1980. All other service procedures are identical to earlier models.

The chapter headings in this supplement correspond to those in the main body of this book. If a change is not included in the supplement, there are no changes affecting models since 1980.

Since 1981 the Special has been called the Venturer 1100. It is a full-dressed touring bike complete with fairing, saddlebags and luggage rack. These items will have to be removed to gain access to some components. Removal and installation of these items is covered in Chapter Eleven of this supplement.

CHAPTER ONE

GENERAL INFORMATION

Refer to **Table 1** for General Specifications.

Table 1 GENERAL SPECIFICATIONS

Engine type	Air cooled, 4-stroke, DOHC, 4-cylinder
Bore and stroke	2.815 x 2.701 in. (71.5 x 68.6 mm)
Displacement	67.25 cu. in. (1,102 cc)
Compression ratio	9.0 to 1
Carburetion	4 Mikuni, constant velocity, 30 mm
Model G	BS34-111 3HS-00
Model SG, SH, LG, LH	BS34-111 3J6-00
Model H	BS34-111 3H5-01
Ignition	Battery, fully transistorized
Lubrication	Wet sump, filter, oil pump
Clutch	Wet, multi-plate
Transmission	5-speed, constant mesh
Transmission ratios	
1st	2.235
2nd	1.625
3rd	1.285
4th	1.032
5th	0.882
Starting	Electric only
Wheelbase	60.8 in. (1.545 mm)
Steering head angle	29.5 degrees
Trail	5.12 in. (130 mm)
Ground clearance	
Model G, H	5.9 in. (150 mm)
Model SG, SH, LG, LH	6.1 in. (155 mm)
Seat height	
Model G, H	31.5 in. (800 mm)
Model SG, SH, LG, LH	31.1 in. (790 mm)
Model G, H	46.3 in. (1.175 mm)
Model SG, SH, LG, LH	48.4 in. (1,230 mm)
Overall width	
Model G, H	36.2 in. (920 mm)
Model SG, SH, LG, LH	33.7 in. (855 mm)
Overall length	
Model G	89.0 in. (2,260 mm)
Model SG, SH, LG, LH	89.6 in. (2,275 mm)
Model H	95.7 in. (2,430 mm)
Front suspension	Telescopic fork, 6.9 in. (175 mm) travel
Rear suspension	Swing arm, adjustable shock absorbers, 4.3 in. (108 mm) travel
Front tire	
Models G, H, SG, SH, LG, LH	3.50 H-19 4PR (tubeless)
Rear tire	
Model G, H	4.50 H-17 4PR (tubeless)
Model SG, SH, LG, LH	130/90H-16 67H (tubeless)
Fuel capacity	
Model G	5.3 U.S. gal. (20 liter; 4.4 Imp. gal.)
Model SG, SH, LG, LH	4.0 U.S. gal. (15 liter; 3.1 Imp. gal.)
Model H	6.3 U.S. gal. (24 liter; 5.3 Imp. gal.)
Oil capacity	
Oil change	3.2 U.S. qt. (3.0 liter; 2.7 Imp. qt.)
Oil and filter change	3.7 U.S. qt. (3.5 liter; 3.1 Imp. qt.)
Weight (net)	
Model G	562 lb. (262 kg)
Model SG, SH, LG, LH	556 lb. (252 kg)
Model H	633 lb. (278 kg)

CHAPTER THREE

PERIODIC MAINTENANCE AND TUNE-UP

TIRES

Pressure

Tire pressure must be checked with tires cold. Correct tire pressure depends on the load you are carrying. See **Table 2**.

PERIODIC LUBRICATION

Changing Oil and Filter

Since 1981, the model XS1100H has been equipped with an oil cooler. Factory information indicates that the oil capacity is the same with or without the cooler. After changing the oil and adding the specified oil, be sure to check the oil level through the oil level window. Adjust the level if necessary.

It is not necessary to remove the oil cooler to change the oil. If you do remove the oil lines from the oil cooler, tighten the fittings to 32.5 ft.-lb. (45 N•m) upon installation.

FRONT FORK OIL CHANGE

Refer to **Table 3** for specific capacity of each fork leg.

TUNE-UP

Valve Clearance

Intake valve clearance has been decreased from the 1979 specification of 0.16-0.20 mm to 0.11-0.15 mm. This cuts down on engine noise, but is recommended only on 1980 and later models.

Valve clearance measurement and adjustment are exactly the same as on previous models. Refer to *Valve Clearance Measurement* and *Valve Clearance Adjustment* in Chapter Three in the main body of this book.

Ignition Timing (1980 Models Only)

It is no longer necessary to check the ignition timing unless the ignition advance

Table 2 TIRE PRESSURES

Load	Pressure
Models G, SG, LG, H, LH	
Up to 198 lb. (90 kg)	
Front	26 psi (1.8 kg/cm²)
Rear	28 psi (2.0 kg/cm²)
198-337 lb. (90-153 kg)	
Front	28 psi (2.0 kg/cm²)
Rear	36 psi (2.5 kg/cm²)
Maximum load limit*	
Front — 420 lb. (190 kg)	36 psi (2.5 kg/cm²)
Rear — 670 lb. (304 kg)	40 psi (2.8 kg/cm²)
Model SH (all load conditions)	
Front	40 psi (2.8 kg/cm²)
Rear	40 psi (2.8 kg/cm²)

*Maximum load includes the total weight of motorcycle with accessories, rider(s) and luggage.

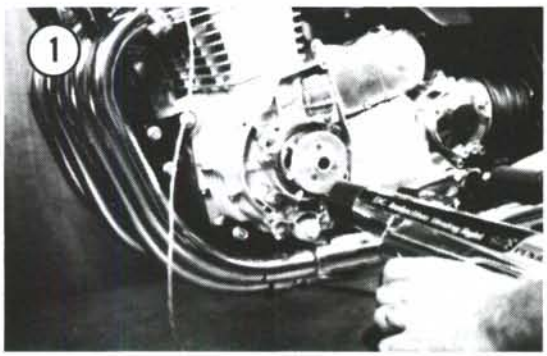
Table 3 FRONT FORK OIL CAPACITY

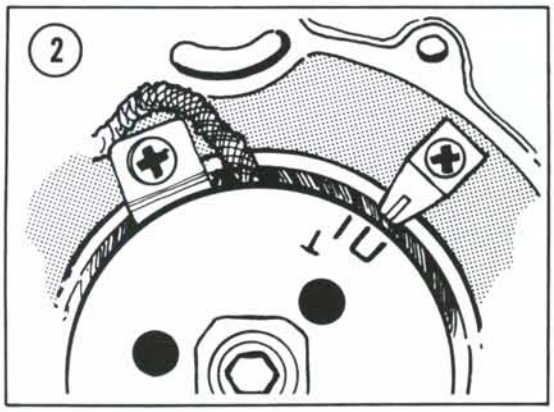
Model	Type	Quantity—Each Fork
Models G, H	SAE 10W fork oil	8.15 oz. (241 cc)
Models SH, LH	SAE 10W fork oil	7.1 oz. (210 cc)

mechanism has been removed and replaced or the engine has been disassembled.

The ignition advance mechanism is held in place with special attachment bolts and washers and cannot be loosened and adjusted as on previous models.

If you think that the ignition timing is incorrect perform Steps 1-5 of *Ignition Timing* in Chapter Three in the main body of this book. If timing is incorrect, the ignition advance mechanism must be removed as described under *Ignition Advance Mechanism Removal/Installation* in Chapter Four of this supplement and inspected as described under *Ignition Advance Mechanism* in Chapter Seven in the main body of this book.





Ignition Timing (1981 Models)

The ignition advance mechanism can be installed in one position only; there are no provisions for adjustment. The only reason to check ignition timing is if you think that the advance mechanism is not operating correctly or another component in the ignition system is operating incorrectly.

Check the timing with this procedure. If timing is incorrect, the ignition advance mechanism must be removed as described under *Ignition Advance Mechanism Removal/Installation* in Chapter Four and inspected as described under *Ignition Advance Mechanism* in Chapter Seven in the main body of this book. If the ignition advance mechanism is operating correctly, check other ignition components as described in Chapter Seven in the main body of this book.

1. Place the bike on the centerstand.
2. Connect a portable tachometer following the manufacturer's instructions. The bike's tachometer is not accurate enough in the low rpm range for this adjustment.
3. Connect a timing light to the No. 1 cylinder (left-hand side) following the manufacturer's instructions (**Figure 1**).
4. Start the engine and let it warm up to normal operating temperature. Let the engine idle (1,100 +/- 100 rpm) and aim the timing light toward the timing marks on the timing plate.
5. The stationary pointer should align within the inverted "U" mark on the timing plate (**Figure 2**).
6. Ignition timing is not adjustable. If the timing marks do not align or if they waver, check to make sure the timing plate is attached securely. If it is secure, check the ignition components as described in Chaper Seven in the main body of the book.

CHAPTER FOUR

ENGINE

ENGINE

Removal/Installation

The model XS1100H is factory-equipped with a fairing. Remove it prior to removing the engine; see *Fairing Removal/Installation* in Chapter Eleven of this supplement.

The model XS1100H since 1981 is also equipped with an oil cooler. Unscrew the fittings on the oil lines at the oil cooler. Remove the oil lines and oil filter cover assembly. When installing the hoses tighten the fittings to 32.5 ft.-lb. (45 N•m).

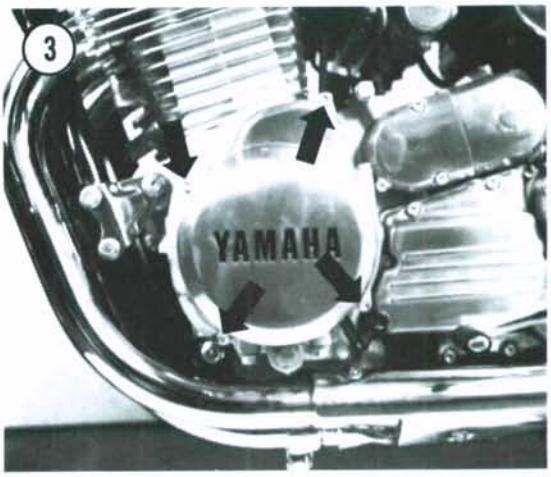
IGNITION ADVANCE MECHANISM (1980 ONLY)

Removal

NOTE

The ignition advance mechanism is attached to the crankcase with special bolts and washers only on 1980 models. Removal is only necessary if the engine is to be disassembled or the mechanism is to be removed or replaced. The procedures in the main body of the book apply to 1981 models.

1. Disconnect the negative battery lead from the battery.
2. Remove the bolts securing the ignition cover (**Figure 3**) and remove it.
3. Remove the Allen bolt (A, **Figure 4**) securing the timing plate and remove it.
4. Rotate the engine until the projection on the centrifugal advance mechanism aligns with the slot on the pickup coil plate. This is necessary for removal of the backing plate.



NOTE

When the mechanism was installed at the factory, special bolts were used. They have a head that shears off when the correct torque is achieved, thus leaving no bolt head for removal.

5. Flatten the remaining portion of the bolt (B, **Figure 4**) with a drift or flat punch.
6. Use a center punch and hammer (A, **Figure 5**) and make a deep enough impression in each bolt for a drill guide.

CAUTION

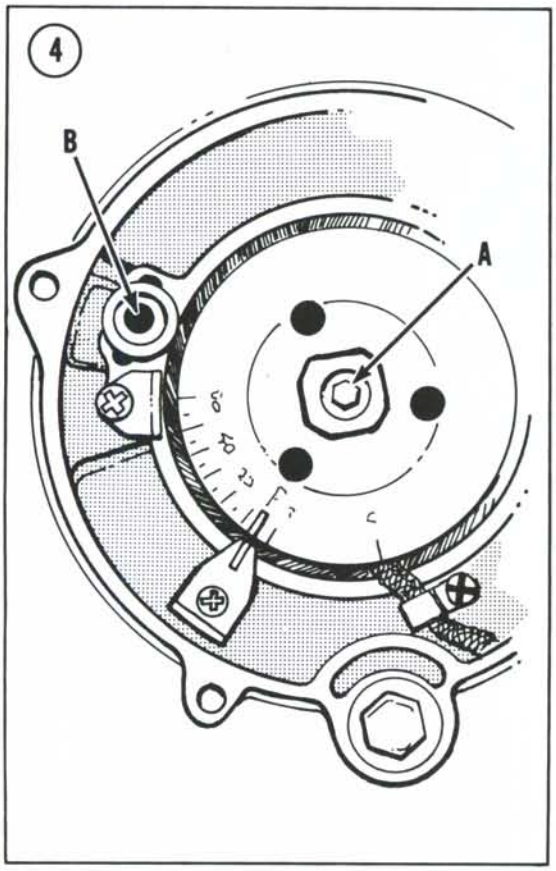
Make sure the punch mark is centered, otherwise the drilled hole will be offset and will damage the threads in the crankcase.

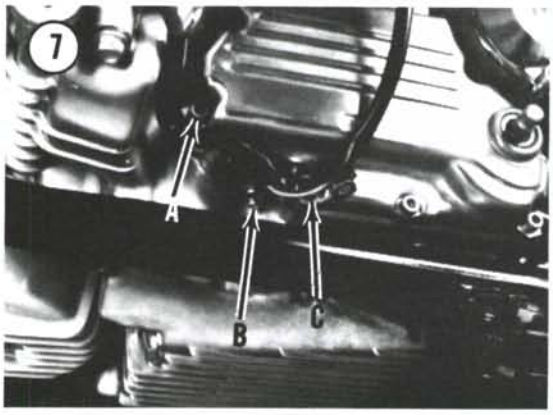
7. Drill a hole approximately 0.39 in. (10 mm) deep, using a 3 mm drill bit, in each bolt (B, **Figure 5**).
8. Tap a screw extractor into the hole with a hammer (C, **Figure 5**) and unscrew the bolt (D, **Figure 5**). Repeat for the other bolt.
9. Remove the advance mechanism assembly and carefully let it hang down.
10. Disconnect the electrical connector (**Figure 6**) to the ignition advance mechanism located under the right-hand side cover.
11. Remove the electrical cable clips (A, **Figure 7**) from the left-hand crankcase cover and remove the cable.
12. Disconnect the electrical wire to the neutral safety switch (B, **Figure 7**). Remove the advance mechanism assembly and electrical harness.

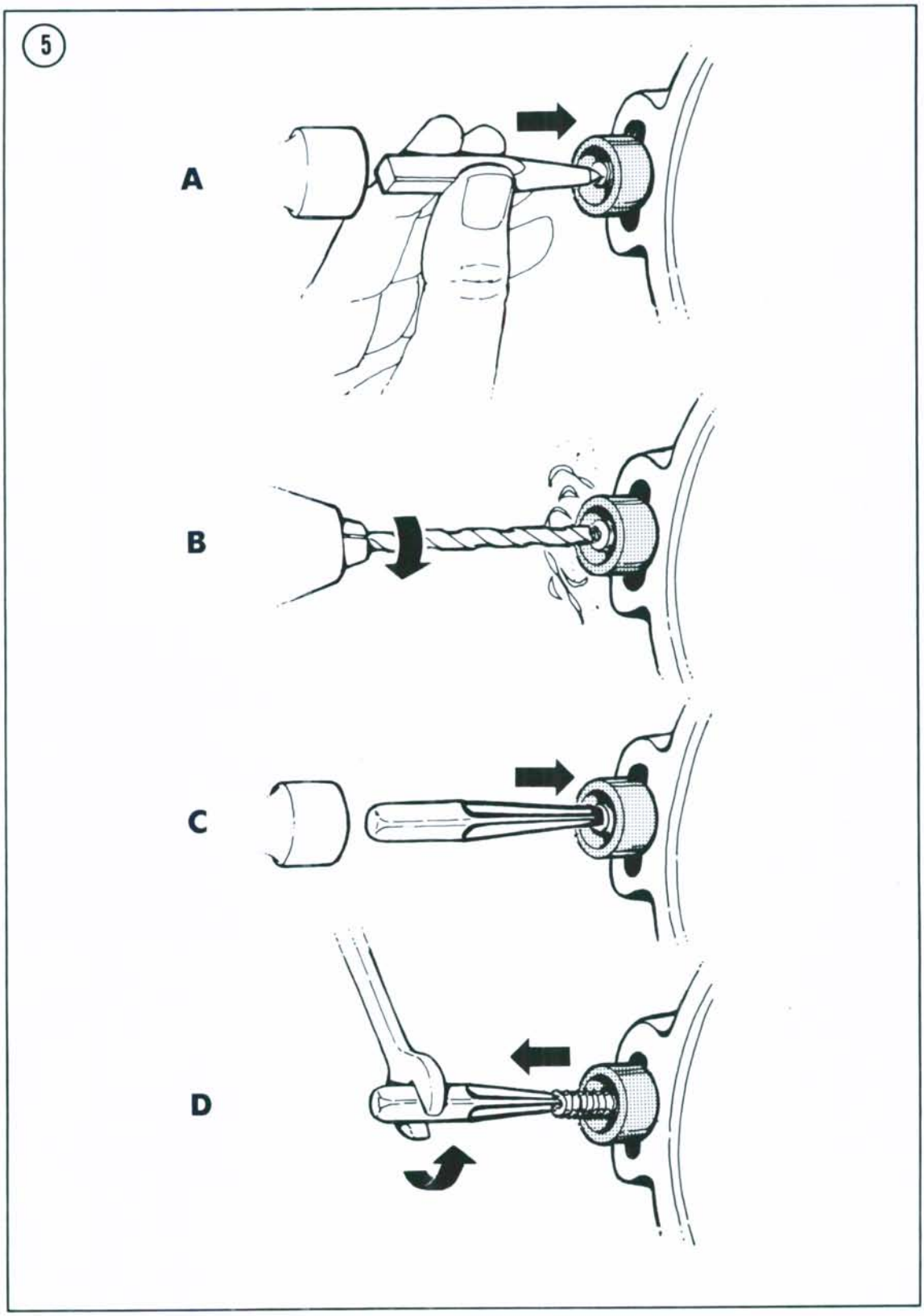
NOTE

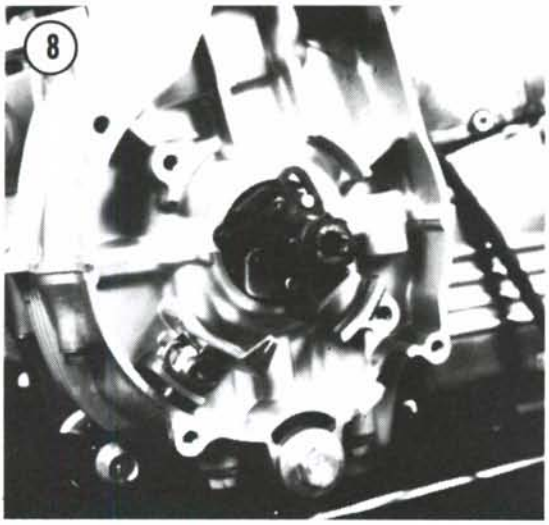
Make a drawing of the routing of the electrical cable so it will be installed in the same position.

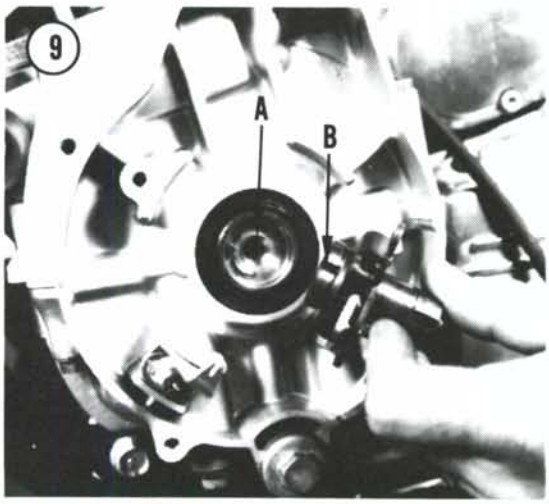
13. Remove the centrifugal advance mechanism (**Figure 8**).
14. Inspect the condition of all components as described under *Ignition Advance Mechanism* in Chapter Seven in the main body of this book.

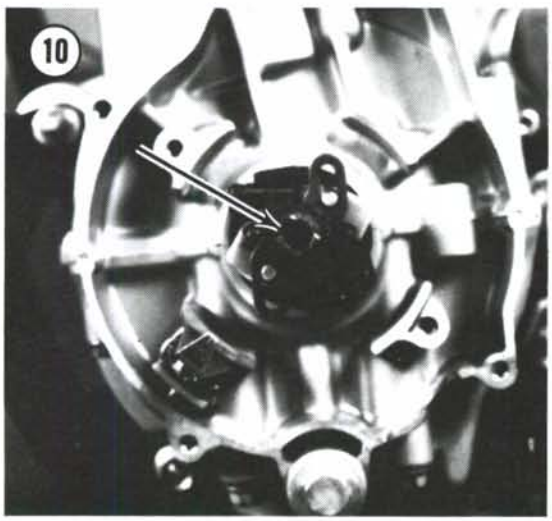





5
A
B
C
D







Installation

1. Install the centrifugal advance mechanism. Be sure to align the pin (A, **Figure 9**) on the crankshaft with the notch (B, **Figure 9**) on the centrifugal advance mechanism.

NOTE

*Rotate the engine so the projection on the centrifugal advance mechanism (**Figure 10**) is positioned at the 10 o'clock position so the pickup plate can be installed.*

2. Install the ignition advance mechanism and install the special washers and new special bolts. Tighten the bolts only lightly at this time, just tight enough to hold the mechanism in place but not tight enough to shear off their heads.

NOTE

A special tool is required for tightening these special bolts. It is a Torx bolt driver (Yamaha part No. 90890-01308-00).

3. Install the timing plate and tighten the Allen bolt to 14.5 ft.-lb. (20 N•m).
4. Check and adjust the ignition timing; refer to *Ignition Timing* in Chapter Three in the main body of this book. In Step 6 the 2 Phillips head screws have been replaced with these special Torx bolts.
5. Make sure the ignition timing is correct prior to tightening the special bolts—if it isn't, the bolts will have to be removed as previously described. *They cannot be loosened and retightened after the heads are sheared off.*
6. After ignition timing is correct, tighten the special bolts until the heads shear off.
7. Continue to install by reversing removal Steps 1, 2, 10, 11 and 12.
8. Be sure to route the electrical wires in the same location, especially in the clips shown in **Figure 7**.

KICKSTARTER

The kickstarter assembly has been eliminated on all models since 1980. Disregard any mention of it in the main body of this book when working on your bike.

CHAPTER SIX

FUEL AND EXHAUST SYSTEMS

CARBURETORS

Refer to **Table 4** for complete carburetor specifications.

You will notice that the main jets vary in size from the inner pair to the outer pair of carburetors. The inner carburetors (Nos. 2 and 3) have larger jets.

Float Adjustment (1980)

The float adjustment procedure is the same as on previous models but the correct height is changed to 0.906 +/- 0.020 in. (23.0 +/- 0.5 mm); refer to **Figure 11**. Refer to *Carburetor Float Adjustment* in Chapter Six in the main body in this book.

Fuel Level Measurement (1981)

The bike must be *exactly level* for this measurement to be accurate. Place pieces of wood or shims under either side of the centerstand or place a suitable size jack under the engine and position the bike so that the carburetor assembly is level from side to side.

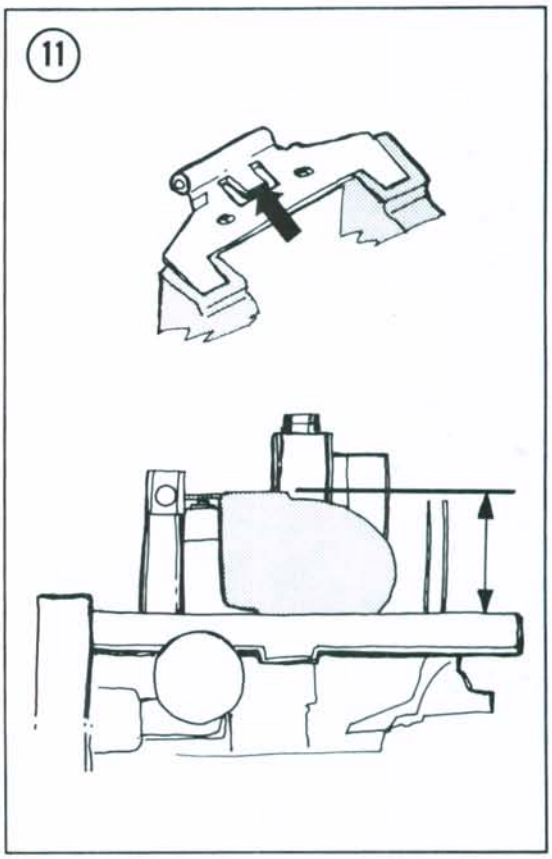


Table 4 CARBURETOR SPECIFICATIONS

	XS1100G	XS1100SG, LG
Manufacturer	Mikuni	Mikuni
Model No.	BS34-111 3H5-00	BS34-111 3J6-00
Main jet No.		
Cylinders No. 1 and 4	115	110
Cylinders No. 2 and 3	120	120
Needle jet No.	X-2	X-2
Starter jet No.	25	25
Pilot jet No.	42.5	42.5
Air jet—main	140	140
Air jet—pilot	185	185
Jet needle	51 Z7	5 GL 16
Float needle height*	0.906 ± 0.20 in. (23.0 ± 0.5 mm)	0.906 ± 0.20 in. (23.0 ± 0.5 mm)
Idle mixture screw**	Pre-set	Pre-set
Fuel valve seat	0.079 in. (2.0 mm)	0.079 in. (2.0 mm)
Throttle valve No.	135	135
Engine idle speed	1,100 rpm	1,100 rpm

*Above gasket surface.
**Pre-set at factory — do not reset

	XS1100H	XS1100SH, LH
Manufacturer	Mikuni	Mikuni
Model No.	BS34-111 3H5-01	BS34-111 3J6-00
Main jet No.		
Cylinders No. 1 and 4	115	110
Cylinders No. 2 and 3	120	120
Needle jet No.	X-2	X-2
Starter jet No.	25	25
Pilot jet No.	42.5	42.5
Air jet—main	140	140
Air jet—pilot	185	185
Jet needle	51 Z7	5 GL 16
Float level*	0.12 ± 0.04 in. (3 ± 1 mm)	0.12 ± 0.04 in. 3 ± 1 mm)
Idle mixture screw**	Pre-set	Pre-set
Fuel valve seat	0.079 in. (2.0 mm)	0.079 in. (2.0 mm)
Throttle valve No.	135	135
Engine idle speed	1,100 rpm	1,100 rpm

*Below top surface of the float bowl
**Pre-set at factory — do not reset

Use either the Yamaha special level gauge or a piece of clear vinyl tubing with an inside diameter of 0.24 in. (6 mm). The length of the tubing should be long enough to reach from one side of the carburetor assembly to the other, approximately 24 in. (600 mm) long.

WARNING

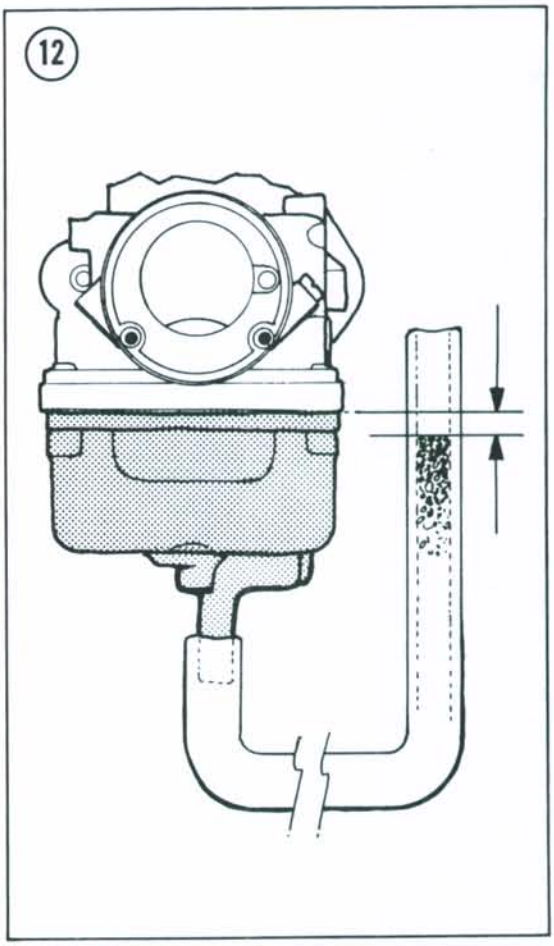
Before starting any procedure involving gasoline have a class B fire extinguisher rated for gasoline or chemical fires within reach. Do not smoke, allow anyone to smoke or work where there are any open flames. The work area must be well-ventilated.

1. Turn both fuel shutoff valves to the ON or RESERVE position.
2. Start with the No. 1 carburetor (left-hand side). Place a small container under the carburetor to catch any fuel that may drip from the float bowl.
3. Connect the tube to the float bowl nozzle.
4. Hold the loose end of the tube up above the float bowl level and loosen the drain screw. Fuel will flow into the tube. Be sure to hold the loose end up or the fuel will flow out of the tube.
5. Start the engine and let it run for 2-3 minutes. This is necessary to make sure the fuel level is at normal operating level in the float bowl.
6. Hold the loose end of the tube up against the No. 1 carburetor body (**Figure 12**). Check the fuel level in the tube and mark it with a grease pencil or a piece of masking tape.
7. Insert a golf tee into the open end of the tube so fuel will not drain out when moving the tube from side to side.
8. Move the tube to the other side of the bike and remove the golf tee. Repeat Step 6, holding the tube up against the No. 4 (right-hand) carburetor body. The dimension should be the same; if not the bike and carburetor assembly are not level.

NOTE

Always insert the golf tee in the tube whenever moving the tube with gasoline in it.

9. Readjust the shims under the centerstand or adjust the jack until exactly level—*this is necessary to obtain correct measurements.* Repeat Steps 6-8 until the bike is level.



10. After the carburetor assembly is level hold the loose end of the tube up against the No. 1 carburetor body. Check the fuel level in the tube. It should be 0.12 +/- 0.04 in. (3 +/- 1 mm) below the top surface of the float bowl (**Figure 12**).
11. Tighten the drain screw and hold both ends of the tube at the same height so fuel will not drain out. Remove the tube from the carburetor float bowl nozzle. Immediately wipe up any spilled fuel on the engine.

WARNING

Do not let any fuel spill on the exhaust system as it is warm.

12. Repeat Steps 2-6, 10 and 11 for the No. 2, 3 and 4 carburetors. Record the measurements of all 4 carburetors.

13. If the fuel level is incorrect on any of the carburetors, remove the carburetor assembly and adjust the float as described under *Float Adjustment* in Chapter Six in the main body of the book. Do not use the float level specification listed in Step 5; it is for pre-1980 models.
14. Adjust the float tang on affected carburetor(s). If the fuel level on one or more of the carburetors is correct, use that as a guide for correct float height.
15. Bend the float tang upward very slightly to lower the fuel level; bend the float tang downward to raise the fuel level.
16. Install the carburetor assembly and repeat this procedure until all fuel levels are correct.

CAUTION

The floats on all 4 carburetors must be adjusted to exactly the same position to maintain the same fuel/air mixture to all 4 cylinders.

CHAPTER SEVEN

ELECTRICAL SYSTEM

LIGHTING SYSTEM

Refer to **Table 5** for replacement bulbs.

License Plate Light (Special Models)

Remove the 2 nuts and lockwashers securing the chrome cover and lens and remove it. Wash out the inside of the lens with a mild detergent. Replace the bulb(s) and install the lens and cover.

EMERGENCY FLASHER SYSTEM

The emergency flasher system operates all 4 directional signals simultaneously when the switch is turned on. The switch is located on the lower left-hand side of the handlebar switch assembly and the flasher is located under the seat, on the left-hand side, above the leading edge of the rear fender.

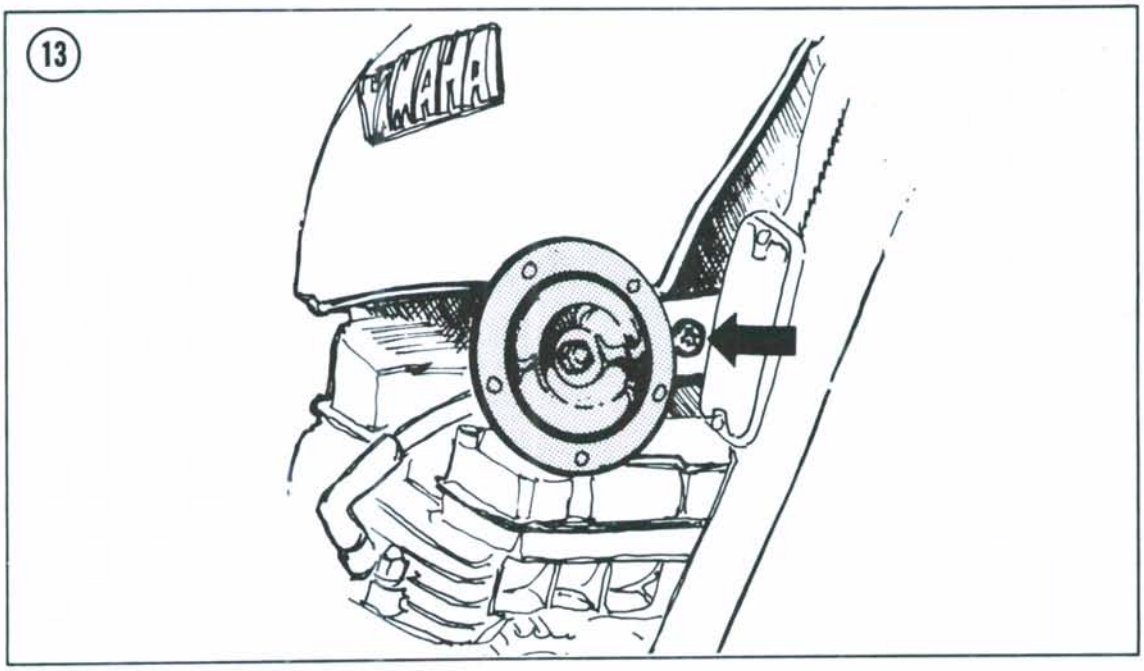
The flasher system will work with the ignition switch in any position (ON, OFF or P).

12

Table 5 REPLACEMENT BULBS

Item	Wattage	Candlepower
Headlight		
Model H, G	55/65 (quartz)	—
Model SG, SH, LG, LH	55/60 (quartz)	—
Tail/brakelight (2)	8/27	3/32
Directional lights (4)	27	32
License plate light (2)*	3.8	—
Indicator lights (7)	3.4	1
Meter light	3.4	1
Parking light	8	4

*Special models only (SG, SH, LG, LH)



Flasher Replacement

1. Remove the seat and disconnect the battery negative lead from the battery.
2. Disconnect the electrical wires to the flasher and pull it out of the rubber mounting on the frame.
3. Transfer wires to the new relay and install the relay in the rubber mount.
4. Connect the battery negative lead and install the seat.

HORN

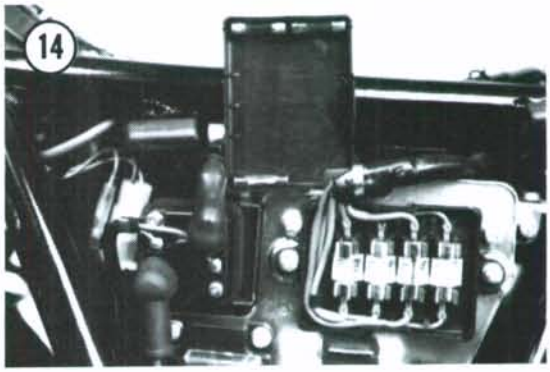
Removal/Installation

1. Disconnect the horn connector from the electrical harness.
2. Remove the bolt securing the horn to the frame bracket (**Figure 13**).
3. Repeat for the other horn if necessary.

FUSES

There are 5 fuses used on the XS1100 since 1980. Four are located in the fuse panel located under the right-hand side panel (**Figure 14**).

In the 4-fuse panel, the taillight fuse (10A) is located on the left-hand side of the panel; continuing from left to right are the headlight (10A), turn signal (20A) and ignition (10A).



The main fuse (30A) is located in a holder under the left-hand side panel.

There are 2 spare fuses located within the fuse panel and one spare within the main fuse holder; always carry spares.

Whenever a fuse blows, find out the reason for the failure before replacing the fuse. Usually, the trouble is a short circuit in the wiring. This may be caused by worn-through insulation or a disconnected wire shorting to ground.

CAUTION

Never substitute aluminum foil or wire for a fuse. Never use a higher amperage fuse than specified. An overload could result in fire and complete loss of the bike.

CHAPTER EIGHT

FRONT SUSPENSION AND STEERING

FRONT WHEEL (EXCEPT SPECIAL MODEL)

Removal

1. Place a wooden block under the crankcase to lift the front of the bike off the ground.
2. Unscrew the speedometer cable (A, **Figure 15**) and pull it out.
3. Remove the axle nut cotter pin and nut (**Figure 16**). Discard the cotter pin.

NOTE

Never reuse a cotter pin.

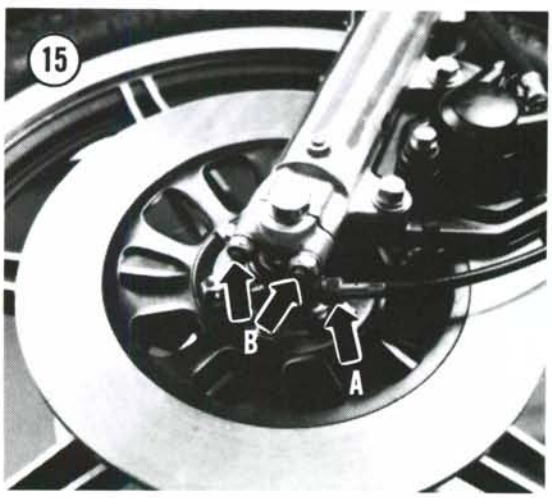
4. Remove the 2 nuts (B, **Figure 15**) securing the front axle holder and remove it.
5. Remove the 4 bolts securing the front fender and remove it.
6. Push the axle out with a drift or screwdriver and remove it.
7. Slowly lower the wheel and remove it. Rotate the front forks slightly so the brake calipers will pivot outward leaving room for the wheel to pass by. Be careful not to damage either the wheel rim or the caliper assembly.

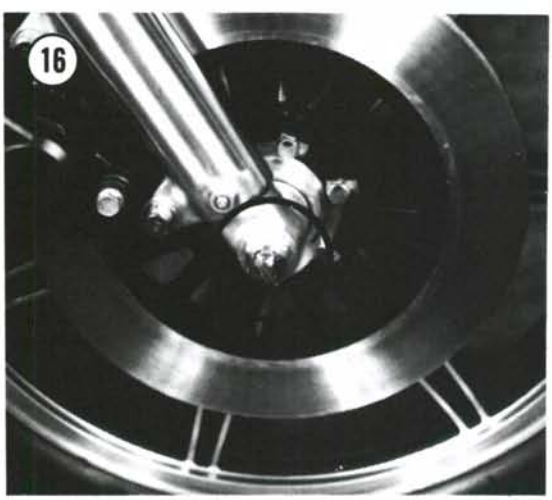
CAUTION

*Do not set the wheel down on the disc surface as it may get scratched or warped. Place it on a couple of wood blocks (**Figure 17**).*

NOTE

Insert a piece of wood in both calipers in place of the disc. That way, if the brake lever is inadvertently squeezed, the piston will not be forced out of the cylinder. If this does happen, the caliper might have to be disassembled to reseat the piston and the system will have to be bled. By using the wood, bleeding the brake is not necessary when installing the wheel.





Inspection

Measure the lateral and vertical runout of the wheel rim with a dial indicator as shown in **Figure 18**. The maximum lateral runout is 0.04 in. (1 mm) and the maximum vertical runout is 0.08 in. (2 mm). If the runout exceeds these dimensions, check the wheel bearing condition and/or replace the wheel. The stock aluminum wheel cannot be serviced, but must be replaced.

Installation

1. When installing the wheel, carefully insert the discs into the caliper assemblies—do not damage the leading edge of the brake pads.
2. Make sure the locating slot in the speedometer gear case is aligned with the boss on the fork tube (**Figure 19**).
3. Insert the axle and install it. Then install the axle nut; do not tighten it at this time.
4. Install the axle holder, washers and self-locking nuts; do not tighten the nuts at this time. Tighten the axle nut to 76 ft.-lb. (105 N•m). Install a new cotter pin. Move the forks up and down several times. Move the left-hand fork leg back and forth sideways until the left-hand disc is centered within the caliper assembly (**Figure 20**). Tighten the front axle holder nut first and then the rear nut to 14.5 ft.-lb. (20 N•m).

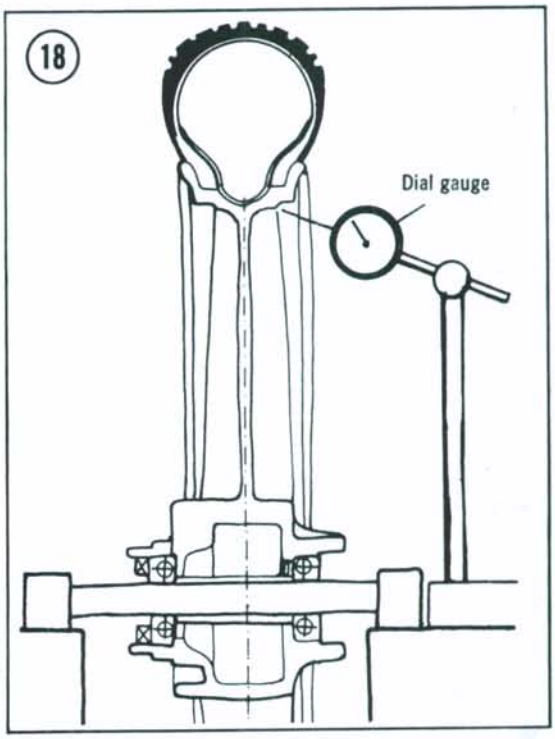
WARNING

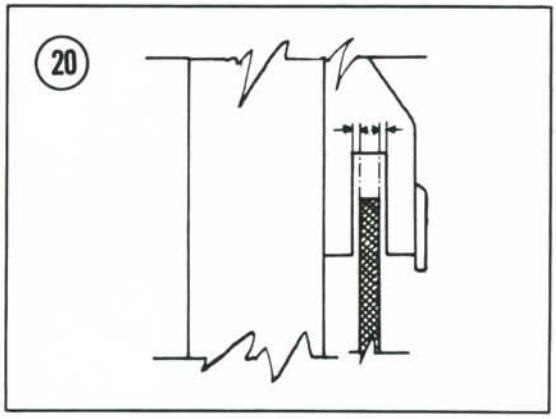
*The clamp nuts must be tightened in this manner and to this torque value. After installation is complete, there will be a slight gap (**Figure 21**) at the rear, with no gap at the front. If done incorrectly, the studs could fail, resulting in loss of control of the bike when riding. Be sure to install the axle holder with the arrow facing forward.*

NOTE

Never reuse a cotter pin on the axle nut; always install a new one and bend the ends over completely.

5. Install the front fender and tighten the 4 bolts securely.
6. Insert the speedometer cable.





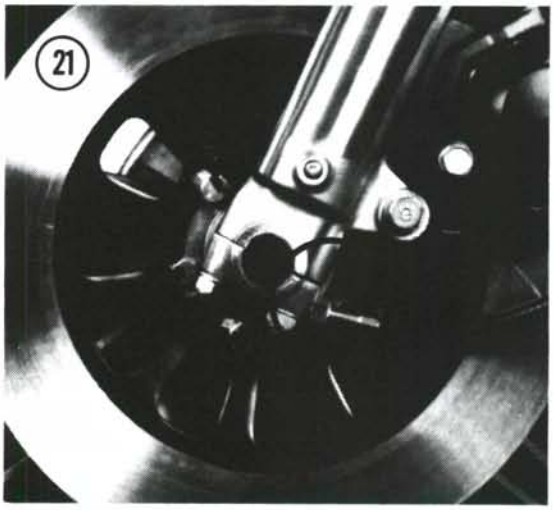
NOTE

Rotate the wheel slowly when inserting the cable so that it will engage properly.

7. After the wheel is installed, completely rotate it and apply the brake several times to make sure it rotates freely.

FRONT FORKS

The front forks on both models are now the air/oil type. Follow the same procedures as described under *Front Forks, Removal/Installation* and *Disassembly, Inspection, Assembly* in Chapter Eight in the main body of this book. Refer to **Table 6** for fork spring free length.



When assembling the fork, fill each fork tube with the correct amount of fresh fork oil. Refer to **Table 3**.

Table 6 FRONT FORK SPRING FREE LENGTH

Model	Free Length
Model G, H	20.31 in. (516 mm)
Model SG, SH, LG, LH	24.10 in. (612.2 mm)

CHAPTER NINE

REAR SUSPENSION AND FINAL DRIVE

REAR WHEEL

Removal/Installation

On model XS1100H (since 1981), in order to remove the rear wheel, the saddlebag assembly must be removed. Refer to *Saddlebag Removal/Installation* in Chapter Eleven of this supplement.

CHAPTER TEN

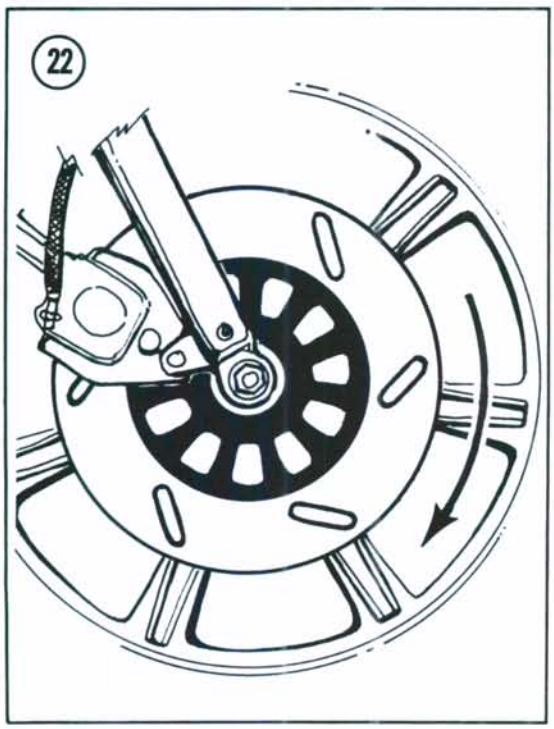
BRAKES

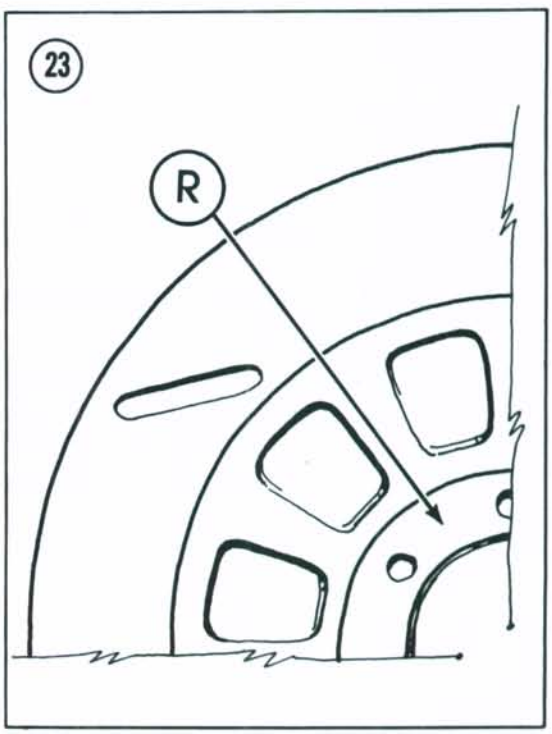
BRAKE DISC (FRONT AND REAR)

Removal/Installation

The brake discs are slotted to aid in cooling, to remove water from the disc and to lower unsprung weight. The specifications are the same as on discs without slots.

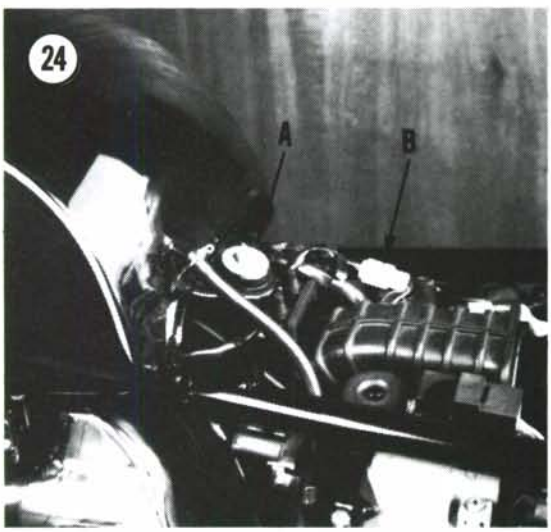
When installing the disc onto the wheel the direction of the slots must be positioned in relation to the wheel as shown in **Figure 22**. They are marked R (right-hand side) or L (left-hand side) and must be installed on the correct side of the wheel (**Figure 23**). Torque values are the same as on previous models.

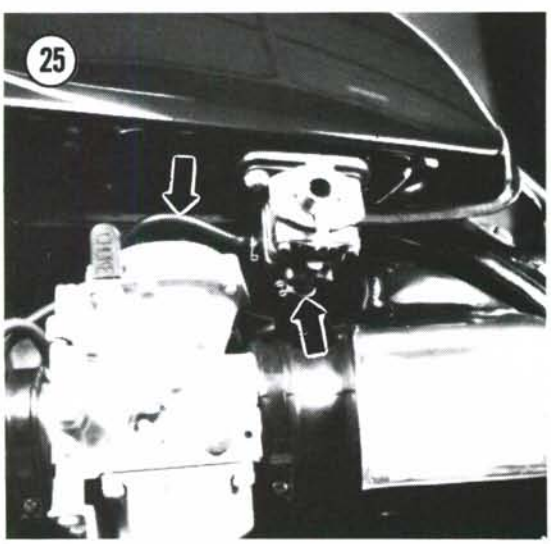




CHAPTER ELEVEN

FRAME AND REPAINTING





TOURING COMPONENTS

Since 1981 the Special has been called the Venturer 1100. It is a full-dressed touring bike complete with fairing, saddlebags and luggage rack. These items will have to be removed to gain access to some components.

Fairing Removal

1. Place the bike on the centerstand; remove the right- and left-hand side covers.
2. Remove the seat and disconnect the battery negative lead.
3. Remove the rear bolt (A, **Figure 24**) securing the rear of the fuel tank. Disconnect the fuel gauge electrical connector (B, **Figure 24**).
4. Turn both fuel shutoff valves to the ON or RES position, lift up on the rear of the tank and remove the fuel lines to the carburetors and vacuum lines to the intake manifolds (**Figure 25**).
5. Pull the tank to the rear and remove it.
6. Disconnect the electrical harness from the fairing.
7. Carefully remove the screws and washers securing both lower sections to the fairing.

NOTE

The next step requires the aid of a helper. The fairing is not that heavy but is bulky and could be damaged if you try to remove it by yourself.

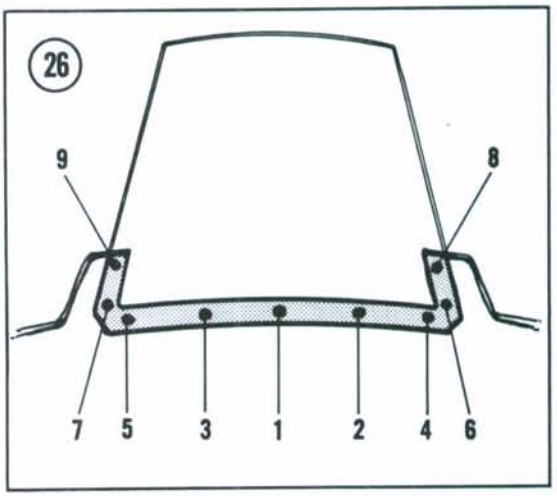
8. Remove the fairing mounting bolts and remove the fairing.

Fairing Installation

1. Have a helper hold the fairing in position and install the fairing mounting bolts. Tighten the bolts securely.
2. Hold the lower section in place and start the special screw and washer into the inner hole, adjacent to the fork tube. Maintain an even inward pressure on the screw so that the well-nut in the fairing will not pull out. Start all screws evenly and when the screw starts to tighten, one or two full turns are required to make the rubber swell out on the inside of the fairing wall. DO NOT overtighten the screws as the well-nuts will pull out of the fairing. Install both lower sections.
3. Plug in the wiring harness; make sure the connection is tight.
4. Install the fuel tank and connect the fuel and vacuum lines.
5. Connect the battery negative cable and connect the fuel gauge connector.
6. Install the seat and side covers.

Windshield Replacement

1. Remove all fasteners, both clips and the old windshield.
2. Remove all traces of the old foam tape from the fairing where the windshield was attached. The surface must be clean to achieve a watertight seam for the new windshield.
3. On the new windshield, puncture the foam tape at each attachment bolt hole. Use one of the nylon attachment bolts for this purpose. Do not use a metal bolt as it may fracture the hole, cause a crack and damage the windshield.
4. Position the 2 clips on the windshield about 4 5/8 in. (118 mm) above the upper hole on each side of the windshield.
5. Place the windshield on the fairing and slightly bend the windshield inward so that the clip studs will align with the holes in the fairing.
6. Insert the studs of the 2 clips through the top fairing mounting holes. Install a black bushing and a 6 mm keeper nut on each stud.
7. From the outside (or front of the fairing) install a nylon bolt through the windshield and fairing. Slide a small nylon washer onto the bolt from the inside and install the nut.



Tighten the nut only finger-tight. Repeat for all remaining bolts.
8. Tighten the bolts in the torque sequence shown in **Figure 26**.
9. Install a rubber protective tip over the exposed clip studs.

NOTE

Always remove the windshield from the fairing when moving the bike on a trailer or open bed truck. Never use the fairing as a tie-down point when securing the bike to the trailer or truck.

Windshield Cleaning

Be very careful cleaning the windshield as it can be easily scratched or damaged. Do not use a cleaner with an abrasive, a combination cleaner and wax or any solvent that contains ethyl or methyl alcohol. Never use gasoline or cleaning solvent. These products will either scratch or totally destroy the surface of the windshield.

To remove oil, grease or road tar use isopropyl alcohol, naptha or kerosene. Then wash the windshield with a solution of mild soap and water. Dry gently with a soft cloth or chamois—do not press hard.

NOTE

When removing grungy road tar make sure there are no small stones or sand imbedded in it. Carefully remove any abrasive particles prior to performing any rubbing action with a cleaner. This will help minimize scratching.

Many commercial windshield cleaners are available (such as Yamaha Windscreen Cleaner). If using a cleaner other than the one from Yamaha, make sure it is safe for use on plastic and test it on a small area first.

Saddlebag
Removal/Installation

1. Remove the seat and the rear footpegs.
2. Remove the upper shock absorber mounting nuts.
3. Remove the side plate mounting plate bolts.
4. Open up both saddlebag lids.
5. Slide the saddlebag assembly to the rear and off the bike. Both saddlebags and all mounting hardware will come off as an assembly.
6. If the saddlebag assembly is going to be left off for some length of time, reinstall the mounting nuts on the shock absorbers.
7. Install by reversing these removal steps. Tighten the shock absorber nuts to 23 ft.-lb. (32 N•m).