

## FOREWORD

*This manual contains an introductory description on HYOSUNG PRIMA(SF-50) and procedures for its inspection/service and overhaul of its main components. Other information considered as generally known is not included.*

*Read GENERAL INFORMATION section to familiarize yourself with outline of the vehicle and MAINTENANCE and other sections to use as a guide for proper inspection and service.*

*This manual will help you know the vehicle better so that you can assure your customers of your optimum and quick service.*

*\* This manual has been prepared on the basis of the latest specification at the time of publication.*

*If modification has been made since then, difference may exist between the content of this manual and the actual vehicle.*

*\* Illustrations in this manual are used to show the basic principles of operation and work procedures.*

*They may not represent the actual vehicle exactly in detail.*

*\* This manual is intended for those who have enough knowledge and skills for servicing HYOSUNG vehicles. Without such knowledge and skills, you should not attempt servicing by relying on this manual only.*

*Instead, please contact your nearby authorized HYOSUNG motorcycle dealer.*

## GROUP INDEX

**GENERAL INFORMATION**

**1**

**PERIODIC MAINTENANCE**

**2**

**ENGINE**

**3**

**FUEL SYSTEM**

**4**

**ELECTRICAL SYSTEM**

**5**

**CHASSIS**

**6**

**SERVICING INFORMATION**

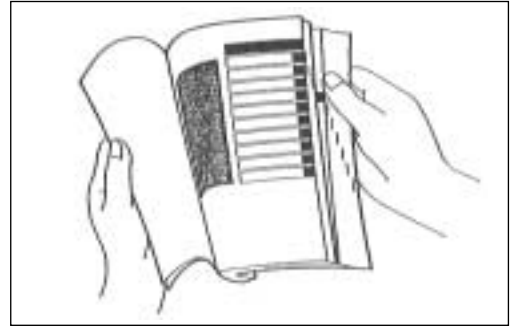
**7**

**HYOSUNG MOTORS & MACHINERY INC.**

## HOW TO USE THIS MANUAL

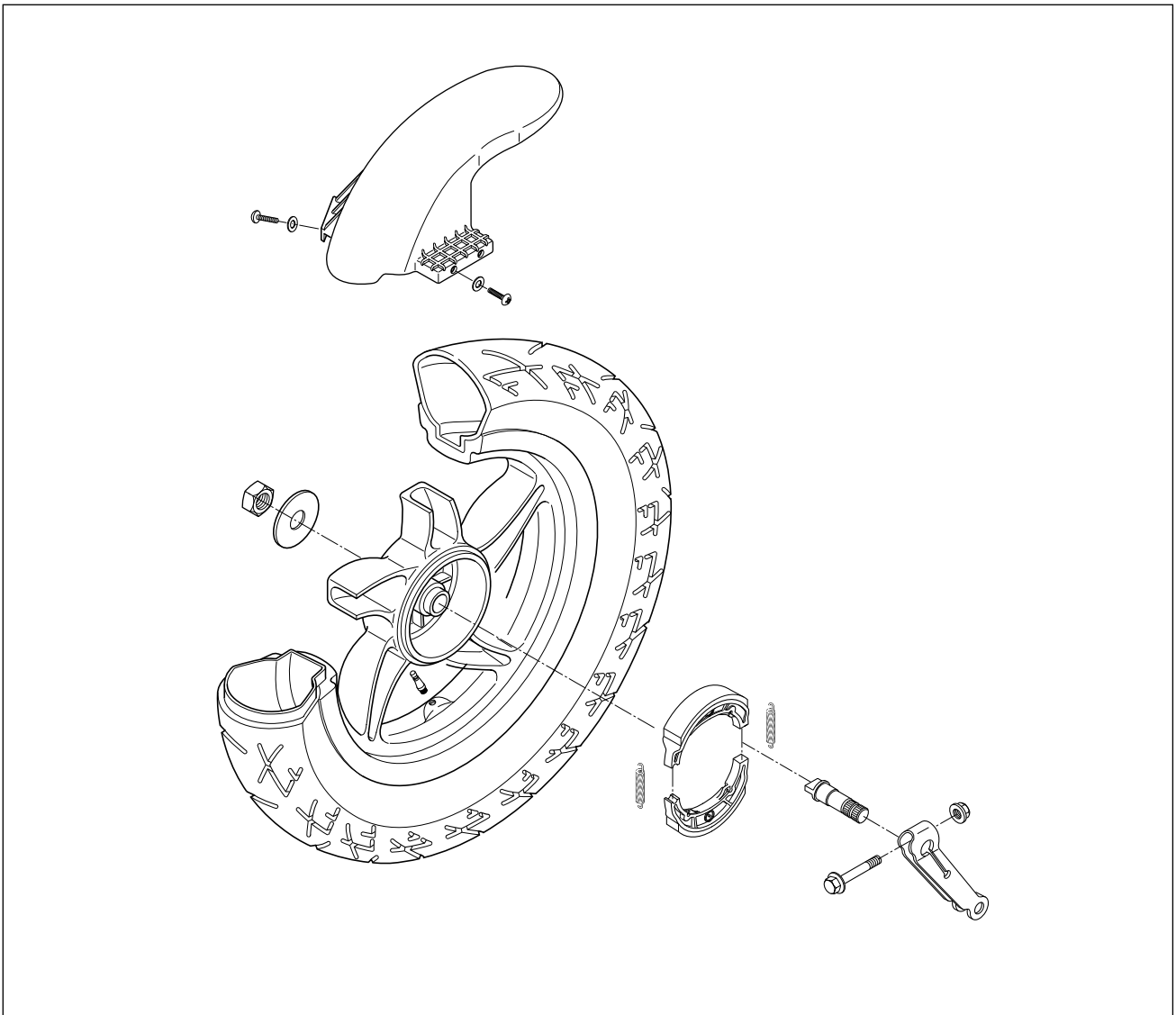
### TO LOCATE WHAT YOU ARE LOOKING FOR:

1. The text of this manual is divided into sections.
2. As the title of these sections are listed on the previous page as GROUP INDEX, select the section where what you are looking for belong.
3. Holding the manual as shown at the right will allow you to find the first page of the section easily.
4. On the first page of each section, its contents are listed. Find the item and page you need.
















## COMPONENT PARTS

Example: Rear wheel/Rear brake



## SYMBOL

Listed in the table below are the symbols indicating instructions and other information necessary for servicing and meaning associated with them respectively.

SYMBOL	DEFINITION	SYMBOL	DEFINITION
	Torque control required. Data beside it indicates specified torque.		Apply THREAD LOCK "1324".
	Apply oil. Use engine oil unless otherwise specified.		Apply or use brake fluid.
	Apply SUPER GREASE "A".		Measure in voltage range.
	Apply SUPER GREASE "C".		Measure in resistance range.
	Apply SILICONE GREASE.		Measure in current range.
	Apply MOLY PASTE.		Use special tool.
	Apply BOND "1215".		



# GENERAL INFORMATION

## CONTENTS

<b>INFORMATION LABELS</b> .....	<b>1-1</b>
<b>GENERAL PRECAUTIONS</b> .....	<b>1-1</b>
<b>SERIAL NUMBER LOCATION</b> .....	<b>1-3</b>
<b>FUEL AND OIL RECOMMENDATIONS</b> .....	<b>1-3</b>
<b>BREAK-IN PROCEDURES</b> .....	<b>1-4</b>
<b>EXTERIOR ILLUSTRATION</b> .....	<b>1-5</b>
<b>SPECIFICATIONS</b> .....	<b>1-6</b>

### WARNING / CAUTION / NOTE

Please read this manual and follow its instructions carefully. To emphasize special information, the symbol and the words WARNING, CAUTION and NOTE have special meanings. Pay special attention to the messages highlighted by these signal words.

#### **WARNING**

Indicates a potential hazard that could result in death or injury.

#### **CAUTION**

Indicates a potential hazard that could result in vehicle damage.

#### *NOTE:*

*Indicates special information to make maintenance easier or instructions cleaner.*

Please note, however, that the warning and cautions contained in this manual cannot possibly cover all potential hazards relating to the servicing, or lack of servicing, of the motorcycle. In addition to the WARNING and CAUTION stated, you must use good judgement and basic mechanical safety principles. If you are unsure about how to perform a particular service operation, ask a more experienced mechanic for advice.

### GENERAL PRECAUTIONS

#### **WARNING**

- Proper service and repair procedures are important for the safety of the service machanic and the safety and reliability of the vehicle.
- When 2 or more persons work together, pay attention to the safety of each other.
- When it is necessary to run the engine indoors, make sure that exhaust gas is forced outdoors.
- When working with toxic or flammable materials, make sure that the area you work in is wellventilated and that you follow all off the material manufacturer' s instructions.
- Never use gasoline as a cleaning solvent.
- To avoid getting burned, do not touch the engine, engine oil or exhaust system during or for a while after engine operation.
- After servicing fuel, oil, exhaust or brake systems, check all lines and fittings related to the system for leaks.

**⚠ CAUTION**

- If parts replacement is necessary, replace the parts with HYOSUNG Genuine Parts or their equivalent.
- When removing parts that are to be reused, keep them arranged in an orderly manner so that they may be reinstalled in the proper order and orientation.
- Be sure to use special tools when instructed.
- Make sure that all parts used in reassembly are clean, and also lubricated when specified.
- When use of a certain type of lubricant, bond, or sealant is specified, be sure to use the specified type.
- When removing the battery, disconnect the negative cable first and then positive cable. When reconnecting the battery, connect the positive cable first and then negative cable, and replace the terminal cover on the positive terminal.
- When performing service to electrical parts, if the service procedures do not require use of battery power, disconnect the negative cable at the battery.
- Tighten cylinder head and case bolts and nuts, beginning with larger diameter and ending with smaller diameter, from inside to outside diagonally, to the specified tightening torque.
- Whenever you remove oil seals, gaskets, packing, O-rings, locking washers, cotter pins, circlips, and certain other parts as specified, be sure to replace them with new ones. Also, before installing these new parts, be sure to remove any left over material from the mating surfaces.
- Never reuse a circlip. When installing a new circlip, take care not to expand the end gap larger than required to slip the circlip over the shaft. After installing a circlip, always ensure that it is completely seated in its groove and securely fitted.
- Do not use self-locking nuts a few times over.
- Use a torque wrench to tighten fasteners to the torque values when specified. Wipe off grease or oil if a thread is smeared with them.
- After reassembly, check parts for tightness and operation.

- To protect environment, do not unlawfully dispose of used motor oil and other fluids: batteries, and tires.
- To protect Earth's natural resources, properly dispose of used vehicles and parts.

## 1-3 GENERAL INFORMATION

### HYOSUNG PRIMA (SF-50)



RIGHT SIDE



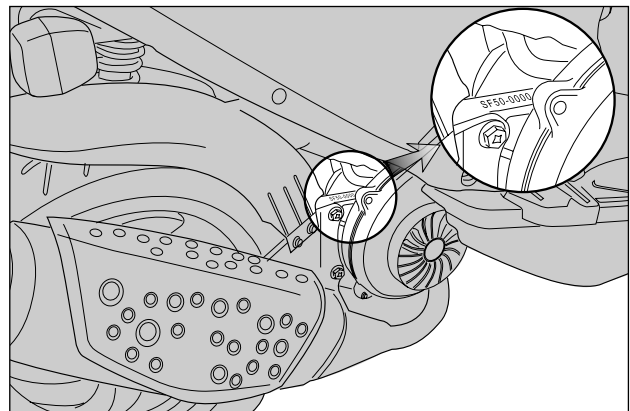
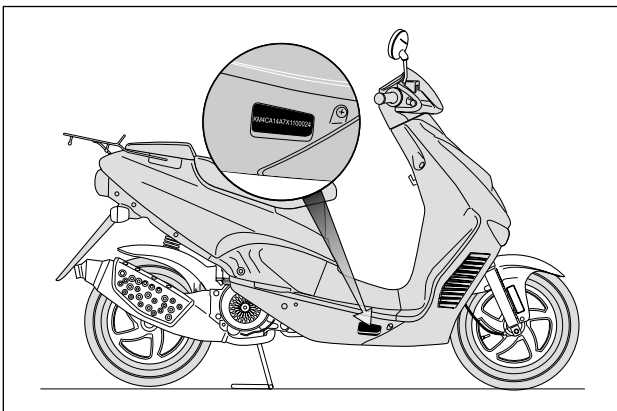
LEFT SIDE

\* Difference between photographs and actual motorcycles depends on the markets.

### SERIAL NUMBER LOCATION

The frame serial number or V.I.N. (Vehicle Identification Number) is stamped on the right side of the frame under the footboard. The engine serial number is located on the up side of the crankcase assembly.

These numbers are required especially for registering the machine and ordering spare parts.



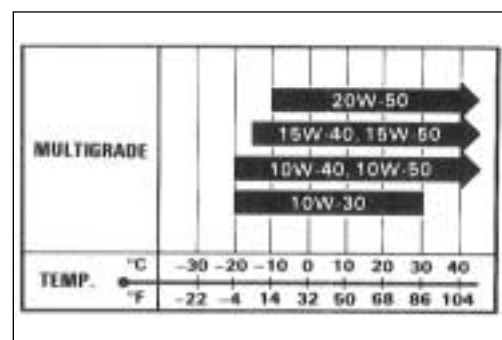
### FUEL AND OIL RECOMMENDATION

#### FUEL

Gasoline used should be graded 85-95 octane (Research Method) or higher. An unleaded gasoline type is recommended.

#### TRANSMISSION OIL

Make sure that the transmission oil you use comes under API classification of SH, SG or SF and that its viscosity rating is SAE 10W/30 or 10W/40. If an SAE 10W/30 or 10W/40 motor oil is not available, select an alternate according to the right chart.





## ENGINE OIL

Specification and classification: APOLLOIL BIKE-K, HYPOL HS

## BRAKE FLUID

Specification and classification: DOT4

### **⚠ WARNING**

Since the brake system of this motorcycle is filled with a glycol-based brake fluid by the manufacturer, do not use or mix different types of fluid such as silicone-based and petroleum-based fluid for refilling the system, otherwise serious damage will result.

Do not use any brake fluid taken from old or used or unsealed containers.

Never re-use brake fluid left over from a previous servicing, which has been stored for a long period.

## FRONT FORK OIL

Use fork oil : TELLUS #37

## BREAK-IN PROCEDURES

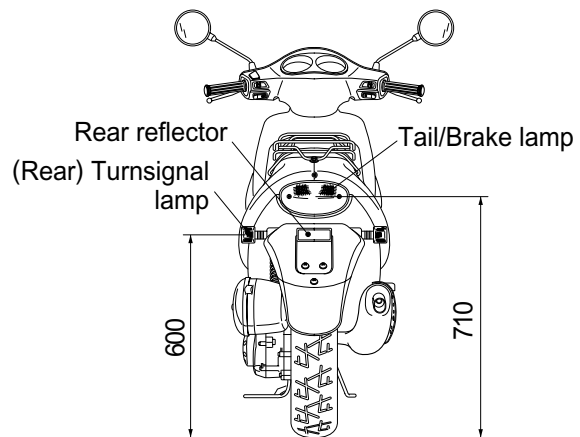
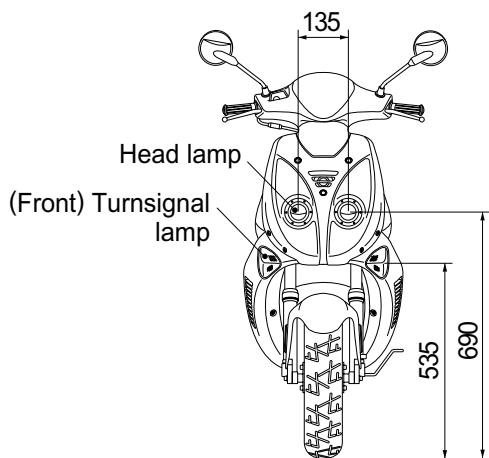
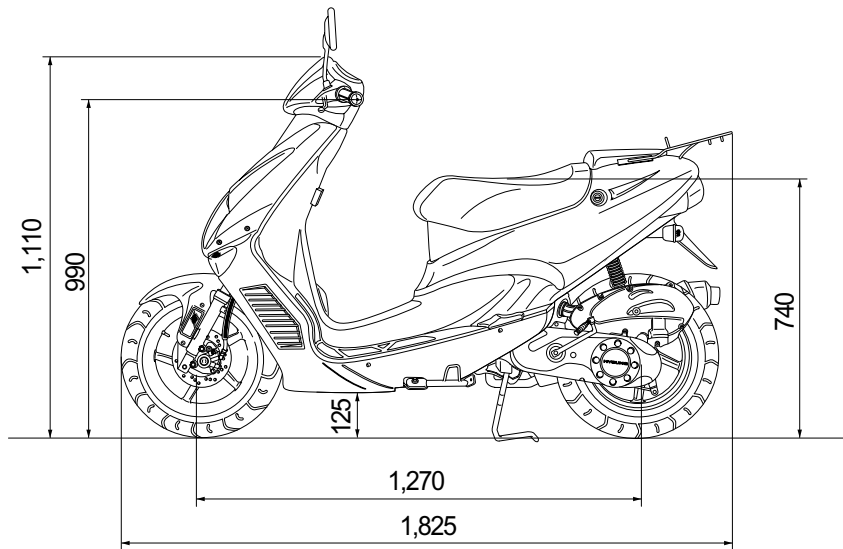
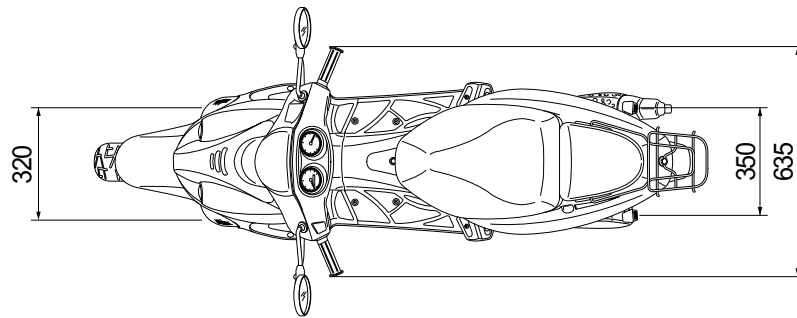
During manufacture only the best possible materials are used and all machined parts are finished to a very high standard but it is still necessary to allow the moving parts to “BREAK-IN” before subjecting the engine to maximum stresses. The future performance and reliability of the engine depends on the care and restraint exercised during its early life. The general rules are as follows:

- Keep to these break-in engine speed limits:

*Up to 1,000km(600miles): Less than 1/2 throttle.*

- Upon reaching an odometer reading of 1,000 km you can subject the motorcycle to full throttle operation.
- Do not maintain constant engine speed for an extended period during any portion of the break-in. Try to vary the throttle position.

## EXTERIOR ILLUSTRATION



## SPECIFICATIONS

### DIMENSIONS AND DRY MASS

Overall length .....	1,825 mm (71.9 in)
Overall width .....	635 mm (25.0 in)
Overall height .....	1,110 mm (43.7 in)
Wheelbase .....	1,270 mm (50.0 in)
Ground clearance .....	125 mm (4.9 in)
Dry mass .....	88 kg (194 lbs)

### ENGINE

Type .....	Two-stroke, forced air cooled
Number of cylinder .....	1
Bore .....	41 mm (1.6 in)
Stroke .....	37.4 mm (1.5 in)
Piston displacement .....	49 cm <sup>3</sup> (3.0 cu.in)
Carburetor .....	SIDE DRAFT VARIABLE VENTURI (PISTON)
Air cleaner .....	Wet filter type
Starter system .....	Kick/self starter
Corrected compression ratio .....	7.4 : 1
Intake system .....	Reed valve

### TRANSMISSION

Clutch .....	Dry shoe, automatic, centrifugal type
Reduction ratio .....	2.997~0.813
Drive system .....	V-belt drive

### CHASSIS

Front suspension .....	Telescopic type
Rear suspension .....	Coil spring type
Caster .....	25°
Trail .....	75mm (2.95in)
Steering angle .....	45° (right & left)
Front tire size .....	110/70-12 47J
Rear tire size .....	120/70-12 51J
Front brake .....	Disc
Rear brake .....	Drum

## 1-7 GENERAL INFORMATION

---

### ELECTRICAL

Ignition type .....	“CDI” type
Ignition timing .....	20° B.T.D.C. at 1,000 rpm
Spark plug .....	BR8HSA
Battery .....	12V 3Ah/10HR
Generator .....	Magneto
Fuse .....	10A
Headlamp .....	15W×2
Turn signal lamp .....	10W×4
Tail/Brake lamp .....	5/10W
Speedometer lamp .....	1.7W×2
Oil level indicator lamp .....	1.7W
Turn signal indicator lamp .....	1.7W

### CAPACITIES

Fuel tank .....	4.8 ℓ
Engine oil tank .....	1.0 ℓ
Transmission oil .....	110cc (Replace) 130cc (Overhaul)

**NOTE:**

*The specifications are subject to change without notice.*