



BSA COMPANY LTD, UNIT 14 WINDMILL INDUSTRIAL ESTATE BIRMINGHAM ROAD COVENTRY CV5 9QE UK

VISIT WWW.BSACOMPANY.CO.UK



OWNER'S MANUAL

GOLD STAR

DEALER NAME: _____

LOCATION: _____



FOR SERVICE / ANY OTHER SUPPORT

NAME:

CONTACT:

DEALER STAMP & DATE

Dear Biker,

Welcome to the world of BSA Motorcycles. As the owner of a brand new BSA Gold Star, we are immensely proud to welcome you to our family.

You are now part of a movement steeped in history, with an exhilarating future. This owner's manual will help you arm yourself with the detail you will need to get the very best from your motorcycle, safely and confidently. To set you up with pride and the anticipation of the road ahead, on a star reborn.

Before you get back in the saddle, please take the time to familiarise yourself with all the information provided here. It is carefully designed to help you understand the exciting features and technology of your Gold Star. You can make the most of, and maintain a perfect relationship with, your new BSA Motorcycle.

Maintenance: *The ownership experience of any motorcycle product is strongly affected by its usage and maintenance. Rest assured, this motorcycle is designed and manufactured to exacting standards by BSA Motorcycles. However, it is a machine, subject to wear and tear and a well-maintained motorcycle is essential for safe, economical, and trouble-free riding. We strongly advise you to read this owner's manual carefully and follow the maintenance schedules to ensure optimum performance of your new BSA Gold Star. We want you to enjoy it for years to come.*

BSA Family: *We have included some riding tips in this manual, but they are not inclusive of all techniques needed to ride a motorcycle safely. If you have any questions, please contact your local BSA Motorcycles dealer for further information.*

We are not concerned if you were born as royalty or a rebel, no matter where you have come from or where you are going – you have a BSA Gold Star now.

NOTE



- Information contained in this owner's manual is based on the latest product information available at time of printing. BSA Company Ltd. reserves the right to make changes at any time without incurring any obligation.
- Accessories shown in the illustration may not be part of the standard equipment.
- This Owner's Manual contains important safety and maintenance information. Please read this document carefully.
- No part of this publication may be reproduced without prior written consent of BSA Company Ltd.
- All copyrights reserved with the company.

INTRODUCTION

OWNER IDENTIFICATION

Owner's Name : _____

Address : _____

City : _____ State : _____ Country : _____

Mobile No.: _____ Tel. No. : _____

E-mail : _____

STAMP OF AUTHORIZED DEALER

INTRODUCTION

Ensure to take your BSA to the nearest BSA Company dealer for regular service and check-ups. We understand your motorcycle better than anyone else.

We strongly urge you to practice safe riding and please do remember to wear a helmet at all times while riding.

Wishing you a happy and safe ride.

Thank you.

Warm Regards,

BSA Company Ltd, Athenia House, 10-14

Andover road, Winchester, Hampshire S023 7BS, UK

Visit: WWW.BSACOMPANY.CO.UK

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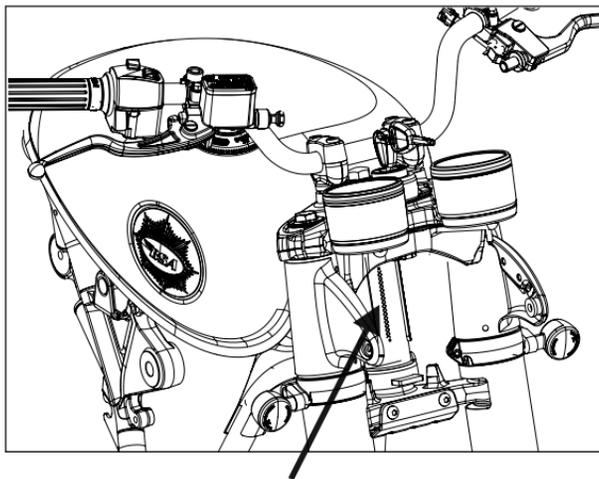
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MOTORCYCLE IDENTIFICATION

Frame No. (Alpha Numeric 17 digit)



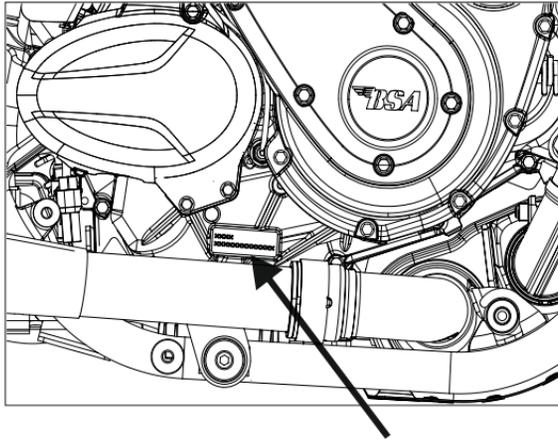
Frame No. is stamped on the right side of the steering stem of the chassis.

VIN NUMBER - 17 DIGIT																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
M	Z	D	B	1	1	C	1	5	M	1	A	0	0	0	0	1
WMI Code			Model Code		Drive	Engine	Transmission		Year Code	Plant Code	Month Code	Production Serial No				

VIN - Vehicle Identification Number

MOTORCYCLE IDENTIFICATION

Engine No. (Alpha Numeric 11 digit)



Engine No. is stamped on the lower side of crankcase at right hand side.

1	2	3	4	5	6	7	8	9	10	11
X	A	E	M	A	0	0	0	0	0	1
Model Code		Engine	Year Code	Month Code	Serial No					

TECHNICAL SPECIFICATIONS

ENGINE	
Engine Type	4 Stroke, Single Cylinder, Liquid Cooled, Spark Ignition, DOHC
Starting Type	Self-Start
Air Filter Element	Paper type
Max Torque	55 Nm @ 4000 rpm
Power	33.6 Kw/45hp @ 6500 rpm
Bore and Stroke	100 X 83 mm
Compression Ratio	11.5 ± 0.5
Displacement	652 cm ³
Spark Plug (Standard)	Champion RA7YC
Spark Plug Gap	0.8 - 0.9 mm
Valve Clearance (Cold)	Intake: 0.1 ~ 0.15 mm Exhaust: 0.25 ~ 0.3 mm
Idle rpm	1500 ± 100 rpm
Lubrication	Dry Sump, Forced Lubrication
Engine Oil Grade	MOTUL H-TECH 100 4T 10W 50 / CASTROL 10W50 JASO MA-2 [SAE 10W50 fully synthetic motorcycle engine oil that meets JASO-MA2 and API-SL (or Higher) specification]
Engine Oil Capacity- Overhauling	2.5 Litre
Engine Oil Capacity- Service Fill	2.3 Litre

TECHNICAL SPECIFICATIONS

Front Sprocket	16 Teeth
Rear Wheel Sprocket	47 Teeth
Fuel System	EFI (Electronic Fuel Injection)
Cooling System	Liquid Cooled
Coolant Capacity	1760 ml
Coolant Grade	MOTUL INUGEL EXPERT
	CASTROL REDICOOOL HD (PREMIX)
TRANSMISSION	
Clutch	Wet Multiplate
Primary Ratio	1:1.946
Final Ratio	1:2.938
Gear Box	Constant Mesh 5 Speed (Manual)
Gear Ratio	1st : 1:2.75
	2nd: 1:1.75
	3rd : 1:1.313
	4th : 1:1.045
	5th : 1:0.875

TECHNICAL SPECIFICATIONS

Final Drive	Chain Drive
Drive Chain Links	106 Links
CHASSIS AND SUSPENSION	
Chassis Type	Tubular
Front Suspension	Telescopic hydraulic fork with cover tubes, 120 mm stroke
Rear Suspension	Twin shock absorber, 5 step adjustable, 108 mm wheel travel
Fork Oil Qty	400 ml/ Leg
BRAKES - Dual Channel ABS	
Front	Disc brake 320 mm dia, Floating type caliper, ABS
Rear	Disc brake 255 mm dia, Floating type caliper, ABS
Brake Oil Grade	DOT 4
TYRES SIZE	
Front	100/90-18, Tubeless with tube, Pirelli phantom sportscomp
Rear	150/70-17, Tubeless with tube, Pirelli phantom sportscomp

TECHNICAL SPECIFICATIONS

TYRES PRESSURE	
FRONT	Solo: 1.9 kgf/cm ² (28 psi)
	With Pillion: 1.9 kgf/cm ² (28 psi)
REAR	Solo: 2.1 kgf/cm ² (30 psi)
	With Pillion: 2.39 kgf/cm ² (34 psi)
FUEL	
Fuel grade	E10 (RON 95)
Fuel tank capacity	12.0 Litre
Reserve	3.0 Litre ± 200 ml (Including dead volume)
ELECTRICALS	
Generation	Alternator/magneto (350W)
Battery	12V, (11.2 Ah)
Head Lamp	12V, (60/55 W)
Tail Lamp/ Brake Light	0.48W/ 1.68W (5 nos. LED)
Indicator	1.8W LED (1 Nos.)
Horn	12V DC
Starter Motor Power	900W
Fuse Capacity	5A, 10A, 15A, 20A & 30A
License Plate Lamp	12V LED, 0.54W (2 Nos.)

TECHNICAL SPECIFICATIONS

ELECTRICALS	
USB - A Type	2.4 A
USB - C Type	3 A
Power Socket	12V (5A max)
WEIGHTS	
Kerb Weight (With 90% Fuel, Tools etc.)	213.5 Kg
Max payload (Including Rider, Passenger, accessories and Luggage)	160.0 Kg
DIMENSIONS	
Overall Length	2206 mm
Overall Width	817 mm
Overall Height	1093 mm
Wheelbase	1425 mm
Minimum Ground Clearance	150 mm
Seat Height	782 mm
Rear Chain Slackness	25-30 mm
NOTE	
	<ul style="list-style-type: none">• Values / Dimensions given above are for your guidance only.• In view of continuous improvements being done on our products, the specifications are likely to change without prior notice.

SAFETY GUIDELINES

In this manual WARNING, CAUTION and NOTE have been depicted as shown below:

IMPORTANT INFORMATION

NOTE 	This indicates that it may cause damage to your vehicle or its allied equipments, if ignored. This also conveys what you must or must not do in order to avoid or reduce the risk to your vehicle and its allied equipment.
CAUTION 	This indicates that it may cause personal injury, if ignored. This also conveys what you must or must not do in order to avoid or reduce the risk of injury to yourself and/ or other persons.
WARNING 	Indicates a strong possibility of severe personal injury or death if the instructions are not followed.

IMPORTANCE OF SAFETY

BSA Company urges you to practice safe riding. Here are few tips:

- Familiarise yourself thoroughly with your motorcycle by reading this Owner's manual and follow operating instructions.
- Before riding your new BSA motorcycle, familiarise yourself with the contents of this manual.
- Stay within speed limits as dictated by road, weather and traffic conditions. Never ride beyond your personal abilities or faster than conditions warrant. It also helps to optimise the fuel consumption and increases the life of your vehicle.

SAFETY GUIDELINES

HELMET AND EYE PROTECTION:

Wearing an approved helmet offers proven reduction in the number and severity of head injuries. The helmet should fit your head comfortably and should be strapped securely. Always wear eye protection when riding your motorcycle.

Before every ride, ALWAYS perform the pre-ride inspection. If you detect any problem, be sure you take care of it or have it corrected by your authorised dealer.

ADDITIONAL RIDING SAFETY TIPS:

- We recommend that you wear eye protection, sturdy boots, gloves, long trousers and jacket.
 - Boots with non-slip soles.
 - Leather or similar specified material gloves.
 - Jacket or riding suit offering comfort and protection.
- Brightly coloured clothing will increase a rider's visibility to other operators of road vehicles.
- During braking, apply both the brake pedal and lever. Independent operation of only the brake lever or brake pedal reduces stopping performance.
- If riding in wet or rainy conditions, the ability to maneuver and stop will be reduced. For your safety, exercise extreme caution when braking, accelerating, or turning. All of your actions should be smooth under these road conditions.
- Rider must have a valid license to operate this motorcycle.
- Always follow the traffic rules.

SAFETY GUIDELINES

WARNING



Follow all instructions in this manual regarding accessories and modifications.

SAFE LOADING:

Your motorcycle has been designed to carry you and one passenger. You may feel some difference during acceleration and braking when carrying a passenger.

You can safely carry loads within the given limits and guidelines if you keep your motorcycle well maintained.

It is important to remember that the weight of added accessories will reduce the maximum cargo weight you can carry.

Whenever you carry a passenger or cargo, follow these pre-ride checks:

- Check that both tyres are properly inflated (Page 6 of manual).
- You may need to adjust the rear suspension (Page 57 of manual).
- Ensure that all cargo is securely tied down before you ride away.
- Balance cargo weight between each side of the motorcycle.
- Only carry a passenger who is tall enough for their feet to reach the passenger footpegs normally.
- We do not recommend carrying pets or animals.

CAUTION



Exceeding the weight limit or carrying an unbalanced load can seriously affect the handling, braking, and stability of your motorcycle.

SAFETY GUIDELINES

ACCESSORIES & MODIFICATIONS:

BSA accessories have been specifically designed and tested for your motorcycle. We strongly recommend that you use genuine BSA accessories. When in doubt, check with your dealer and follow these guidelines:

- Ensure the accessory does not adversely affect the performance and operation of your motorcycle.
- Electrical accessories should not exceed the motorcycle's electrical system capacity. A blown fuse can cause a loss of lights or engine power.
- Your motorcycle was not designed for trailers or sidecars. Fixing these to your motorcycle will void any warranty. Use of either attachment can seriously impair your motorcycle's handling.

Modifying or removing lights, exhaust, emission control system, or other original equipment can make your motorcycle illegal. BSA strongly advises against removing or modifying any original equipment that would change its design or operation, possibly making it unsafe to ride.

WARNING



Its strictly recommended not to fit any type of accessory which will hamper performance of the vehicle.

SAFETY GUIDELINES

RECOMMENDED USAGE GUIDELINES: RUNNING IN PERIOD

During the running in period (0-1200 miles) of motorcycle, where the engine and other motorcycle parts are bedding-in, it is recommended to:

1. Maintain Engine speeds (RPM) as per Table-1
2. Enable engine oil circulation by:
 - Warming up the engine (2-3 mins of idling) during cold start.
 - Warming up the engine (1-2 mins of idling) during hot start (1-2 miles of riding).
3. Avoid moving or accelerating immediately after engine starts. (Refer point no. 2 for warm up)
Avoid over revving the engine when cold.
4. Avoid full throttle operation and rapid acceleration
5. Vary speed occasionally & not to ride at constant speed at higher engine RPM's for long duration.
6. Avoid running the engine in higher RPM's while in neutral.
7. Avoid engine struggle i.e. downshift to lower gear whenever engine starts to struggle.
8. Avoid running the engine at prolonged / constant high speeds. Make use of appropriate gear to destress the engine.

Table-1

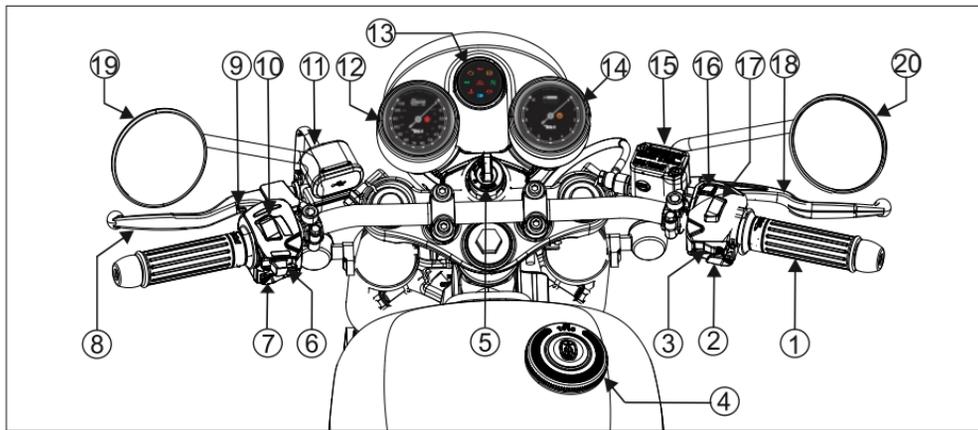
Distance Covered	Recommended maximum Engine speed (in RPM)
Up to 600 miles	3500
600 - 1200 miles	4500

Table-2

Recommended maximum vehicle speed during running in period		
Gear	Running in 0 - 600 miles	Running in 601 - 1200 miles
1st Gear	15 mph (24 kmph)	20 mph (32 kmph)
2nd Gear	20 mph (32 kmph)	25 mph (40 kmph)
3rd Gear	30 mph (48 kmph)	35 mph (56 kmph)
4th Gear	40 mph (64 kmph)	45 mph (72 kmph)
5th Gear	50 mph (81 kmph)	55 mph (89 kmph)

KNOW YOUR VEHICLE

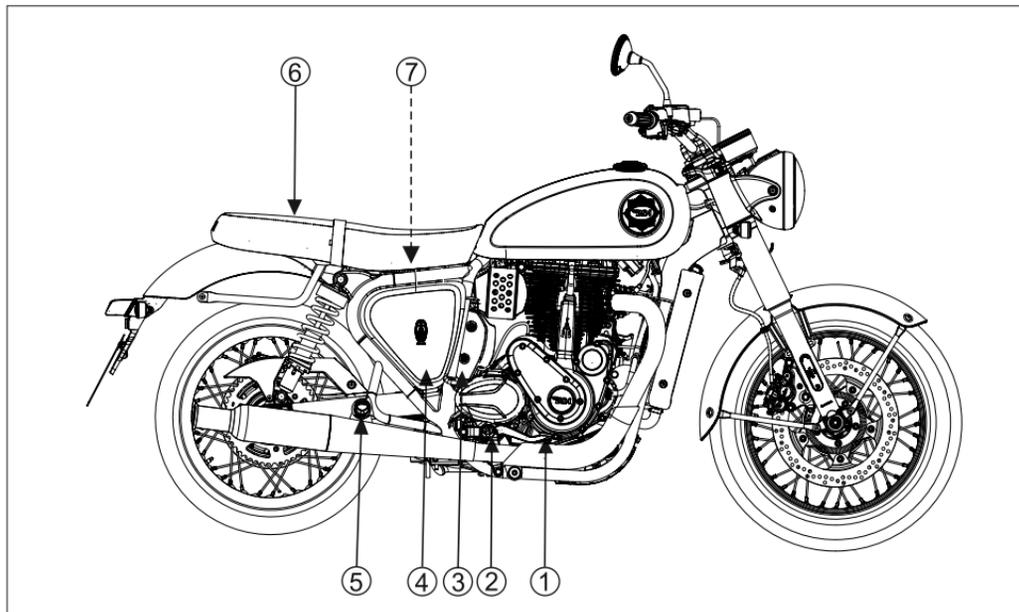
PART IDENTIFICATION



- | | | |
|-----------------------|------------------------------------|-------------------------------------|
| 1. Throttle grip | 8. Clutch lever | 14. Tachometer |
| 2. Start button | 9. Pass light switch | 15. Front brake fluid reservoir |
| 3. Hazard switch | 10. Head light dimmer switch | 16. Odometer/Tripmeter A & B button |
| 4. Fuel tank lid | 11. USB port | 17. Engine stop switch |
| 5. Ignition switch | 12. Speedometer POD | 18. Front brake lever |
| 6. Turn signal switch | 13. Additional Information display | 19. LH rear view mirror |
| 7. Horn switch | | 20. RH rear view mirror |

KNOW YOUR VEHICLE

RIGHT SIDE VIEW



1. Rear brake pedal

4. RH side cover

7. Battery / Fuse Box / Aux relay

2. Rider foot rest

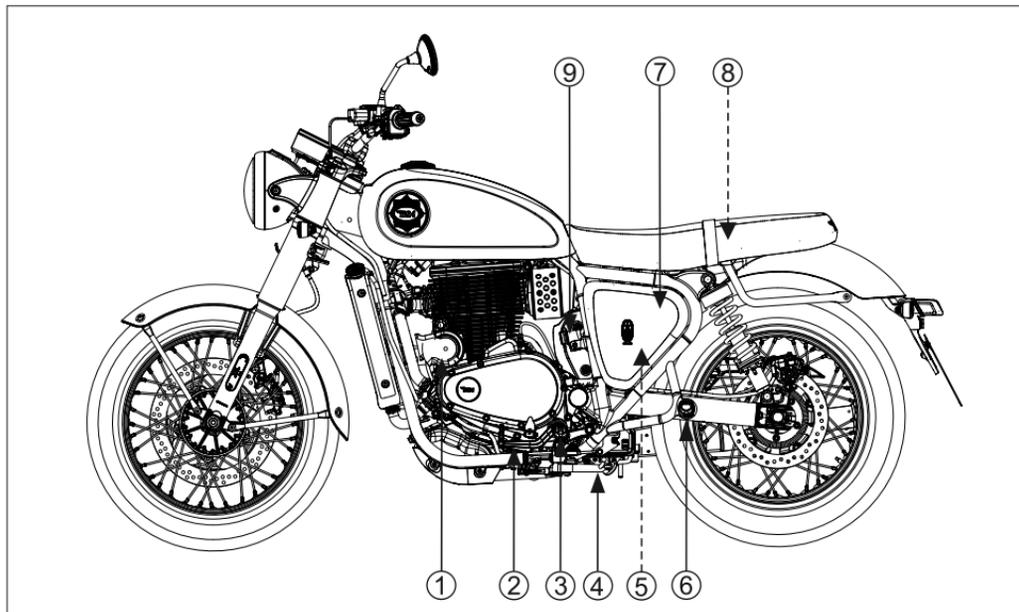
5. Pillion foot rest

3. ECU

6. Seat

KNOW YOUR VEHICLE

LEFT SIDE VIEW



1. Horn

2. Gear shift lever

3. Rider foot rest

4. Side stand

5. Oil tank reservoir

6. Pillion foot rest

7. LH side cover

8. Tool kit & First aid kit

9. 12V Socket

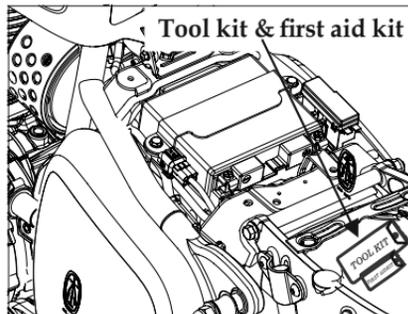
KNOW YOUR VEHICLE

Tool Kit and First Aid Kit

The tool kit & first aid kit is located below the seat assembly as shown in the fig.

To access the tool kit and first aid kit proceed as follows:

- Remove the LH side panel by grasping the panel firmly in both hands and pull the panel away from the vehicle until it clears the three retaining grommets (leaving the grommets in place)
- Pull the seat unlock cable and release it once the seat is unlock from its position.
- Take out the seat assembly away from the vehicle.



TOOL KIT

Item No.	Part Description	Qty
1	Multi-functional Screwdriver	1
2	Open Spanner of 14 X 17 MM	1
3	Open Spanner of 10 X 12 MM	1
4	Allen Key 6 MM	1
5	Allen Key 5 MM	1
6	Spare Fuse Kit Assy	1
7	Wrench Sparking Plug	1
8	Tool Bag	1



NOTE



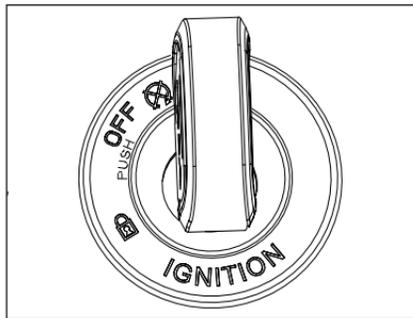
Some roadside repairs, minor adjustments and parts replacement can be performed with the tools available in the kit.

KNOW YOUR VEHICLE

IGNITION SWITCH / STEERING LOCK

The ignition switch is located at the centre of steering, below the instrument panel.

NOTE	<p>If your motorcycle is stopped with the ignition switch ON and the engine is not running, the position lights, tail light, USB charger and power socket will still be ON, resulting in battery discharge.</p>
	



Key Position	Function	Key Removal
ON 	The engine can be started. Turn signals lights, Horn, Tail light and information indicators comes into function. Fuel indicator gauge, odometer, Speedometer, Side stand ON indication can be displayed.	Key cannot be removed
OFF 	Engine cannot be started. Lights and indicators cannot be operated.	Key can be removed
LOCK 	Steering is locked	Key can be removed

NOTE	<p>Ignition will perform only after the engine stop switch is in ON position.</p>
	

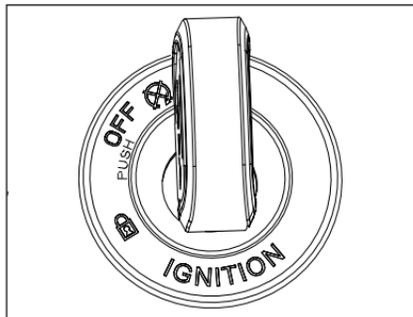
KNOW YOUR VEHICLE

ENGINE IMMOBILISER

The ignition switch housing acts as the antenna for the engine immobiliser.

When the ignition switch is turned to the OFF position and the ignition key is removed, the engine immobiliser is ON.

The engine immobiliser is turned OFF when the ignition key is in the ignition switch and it is turned to the ON position.



In addition to operating the ignition switch/steering lock, the ignition key is required to operate the fuel tank cap.

At the time of vehicle delivery, two ignition keys are supplied together with a small tag bearing the key number. Make a note of the key number and store the spare key and key number tag in a safe place away from the motorcycle.

A transponder is fitted within the ignition keys to turn OFF the engine immobiliser. To make sure the immobiliser functions correctly, always have only one of the ignition keys near the ignition switch. Having two ignition keys near the ignition switch may interrupt the signal between the transponder and the engine immobiliser. In this situation the engine immobiliser will remain active until one of the ignition keys is removed.

Always get replacement key set from your authorised dealer. It must be “paired” with the motorcycle’s immobiliser by your authorised dealer.

CAUTION



Do not store the spare key with the motorcycle as this will reduce all the aspects of security.

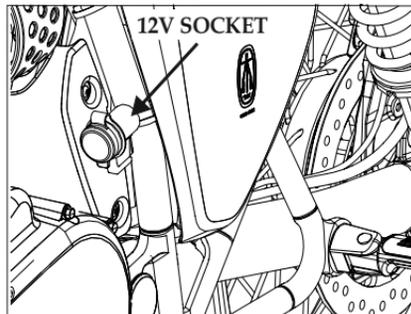
KNOW YOUR VEHICLE

12V SOCKET:

Your vehicle is provided with 12V socket and its located on the LH side of the vehicle, below the throttle body as shown in the fig.

This socket can be used as a Jacket heater/Mobile charger etc.

Socket will function only when the engine is in running condition.

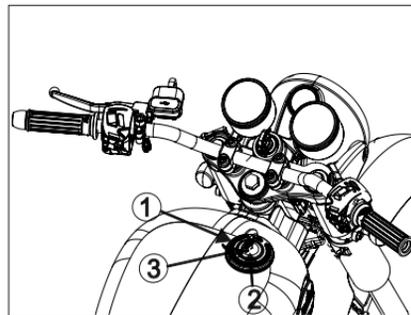


FUEL TANK

The fuel tank capacity including the reserve supply is: 12.0 Lt.

To open the fuel fill cap, open the lock cover (2), insert the ignition key (3) and turn it clockwise. The fuel fill cap (1) will pop up and can be lifted off. Do not overfill the tank. There should be no fuel above the level plate.

After refueling, to close the fuel fill cap, align the latch in the cap with the slot in the filler neck. Push the fuel fill cap into the filler neck until it snaps closed and locks. Remove the key and close the flap cover. Key must be inserted in cap to close it.



1. Fuel fill cap
2. Lock cover
3. Ignition key

WARNING



Petrol is highly flammable and explosive. It should be handled with extreme precaution to avoid any serious injury.

KNOW YOUR VEHICLE

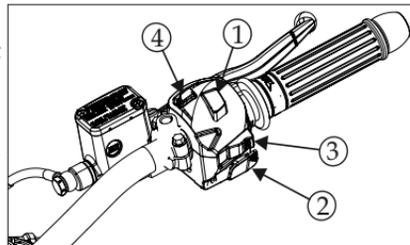
RIGHT HANDLEBAR CONTROLS

Engine Stop Switch : The engine stop switch (1) is next to the throttle grip. When the switch is in the (🔘) position, the engine will operate. When the switch is in the (🔘) position, the engine will not operate. This switch is intended primarily as an emergency switch and should normally remain in (🔘) position.

If the motorcycle is stopped with the ignition switch ON and the engine stop switch (🔘) position, the position lights, taillight, license light and speedometer will still be on, resulting in battery discharge.

Start Button

The Start button (2) is located on the lower side of the engine stop switch. The start button is used for starting the engine. Pressing the button starts the engine. When the start button is pressed, the starter motor will crank the engine and headlight will turn ON above 1000 rpm.



1. Engine stop switch
2. Start button
3. Hazard switch
4. Information button- TripA/TripB

NOTE



Clutch lever operation is required to start the engine except when gear selector is in neutral condition.

Hazard Button

To turn the hazard warning lights ON/OFF. Slide the hazard warning light button (3). The ignition must be switched ON for the hazard warning lights to function.

Information button (4) ODOMETER, TripA/ TripB (mile) -

Simply press the "4" button to change the mode in a sequence of:-

ODOMETER - Trip A - Trip B - ODOMETER

KNOW YOUR VEHICLE

LEFT HANDLEBAR CONTROLS

Headlight Dipper Switch (1)

Push the headlight Dipper switch to (☰●) position to select high beam or to (☷●) to select low beam.

Passing Light Control Switch (2)

When this switch is pressed, the headlight flashes on to signal approaching cars or when passing.

Turn Signal Switch (3)

Move to (⬅) the signal to left turn comes on, shifting to (➡) the signal to right turn comes on.

Press the switch to turn signal off.

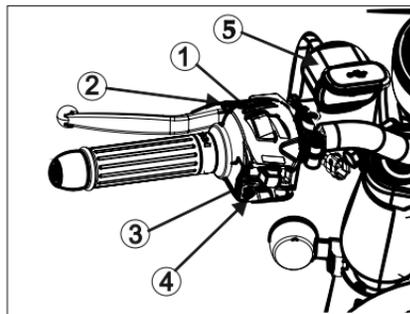
Horn Button (4)

Press the (📢) button to sound the horn.

USB Port (5)

Your vehicle is provided with USB port on the left side of the handle bar near LH switch.

- USB port will function only when the battery voltage is more than 13V & engine is in running condition.
- Same will be stop functioning, if the battery voltage is less than 12V or Engine OFF.



- (1) Headlight dipper switch
- (2) Passing light control switch
- (3) Turn signal switch
- (4) Horn button
- (5) USB port

KNOW YOUR VEHICLE

Anti-lock Braking System (ABS)

Your vehicle is equipped with ABS. The activation of ABS is as follows:

ABS Working	1. After Ignition is ON, ABS indicator continuously glows for 3 sec.
	2. After 3 sec Indicator will continuously blink until the vehicle speed reaches 3.1 mile/ hr (5 km/hr).
	3. Above vehicle speed of 3.1 mile/ hr (5 km/hr) indicator will not glow.
	4. If the vehicle speed goes below 3.1 mile/hr (5 km/hr). Below condition is applicable: - ABS indicator remains OFF till the next ignition is in ON condition
ABS Malfunction	1. After ignition is turned ON ABS indicator will continuously glow in any faulty condition.

Side Stand Switch

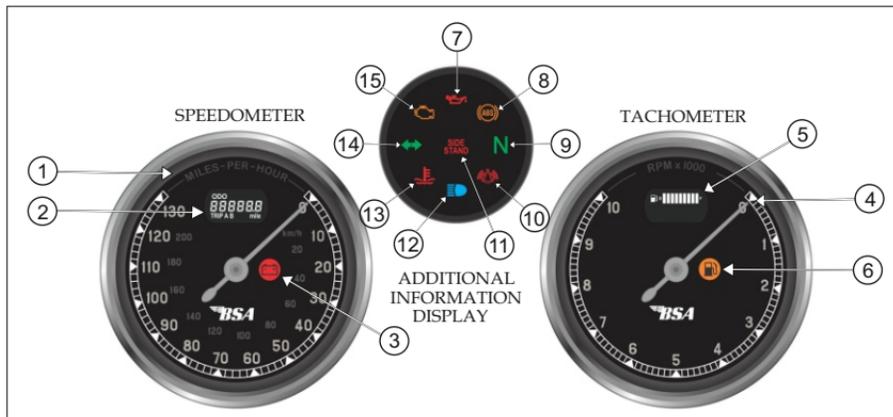
The working conditions of the side switch is as follows:

Side stand Condition (ON/OFF)	Gear Condition Neutral / Engaged	Engine Status
Side stand ON	In Neutral	Vehicle will start
Side stand ON	In Gear	Vehicle will not start / Engine will stop if running
Side stand OFF	In Neutral / Gear	Vehicle will start

KNOW YOUR VEHICLE

INSTRUMENTS AND INDICATORS

The below listed indicators are contained in the instrument panel. Their functions are described in the tables on the following pages.



- (1) Speedometer
- (2) Odometer & Tripmeter
- (3) Low Battery Indicator (Red Light ON)
- (4) Tachometer
- (5) Fuel level indicator
- (6) Low fuel indicator (Amber Light Blinks)
- (7) Low engine oil pressure indicator (Red Light ON)
- (8) ABS - Malfunction Indicator Light (Amber Light Blinks)
- (9) Neutral Indication (Green Light ON)
- (10) Immobiliser
- (11) Side stand ON indication (Amber text)
- (12) High beam indication
- (13) Engine coolant temperature indicator
- (14) Left & Right turn indicator
- (15) ECU - Malfunction Indicator Light (Amber Light ON)

KNOW YOUR VEHICLE

INSTRUMENTS AND INDICATORS

	Description	Sign	Function
1.	Speedometer		Shows riding speed in 'miles per hour'
2.	Tachometer		Shows RPM of the engine
3.	Odometer & Tripmeter		Odometer - Displays accumulated distance covered in mile & Km Tripmeter- Displays the distance covered under Trip A/ Trip B in mile & km
4.	Fuel Indicator		Shows the approximate fuel available
5.	Low Battery Indicator (Red)		Indicator turns ON when the voltage of the battery is less than 11.8V
6.	High Beam Indicator (Blue)		Lights when the headlight is on high beam
7.	Low Fuel Indicator (Amber)		Lights when the fuel is at reserve
8.	Left and Right Turn Indicators (Green)		Flashes when the left/right turn signal switch operates
9.	ECU - Malfunction Indicator Light (Amber)		Flashes if there is any abnormality in the system
10.	Neutral Indicator (Green)	N	Lights when the transmission is in neutral
11.	ABS - Malfunction Indicator Light (Amber)		Flashes if there is any abnormality in the ABS system

KNOW YOUR VEHICLE

INSTRUMENTS AND INDICATORS

	Description	Sign	Function
12.	Coolant temp warning indicator (Red)		When coolant temperature crosses optimum limit. It is a warning signal to the user.
13.	Side stand ON indicator		Displays the text "Side - Stand" in ON condition.
14.	Low engine oil pressure indicator		Lights when the engine oil pressure is low.
15.	Immobiliser		Alarm/Immobiliser indicator light.

Immobiliser indicator light:

Your motorcycle is fitted with an engine immobiliser which is activated when the ignition switch is turned to the OFF position.

If the indicator light remains ON it indicates that the immobiliser has a malfunction that requires investigation. Contact your authorised BSA dealer as soon as possible to have the fault checked and rectified.

KNOW YOUR VEHICLE

INSTRUMENTS AND INDICATORS

Limp Home Mode:

If coolant temperature warning indicator & Malfunction Indicator Light is ON and if the engine rpm is not going beyond 4000 rpm, it means the vehicle is in Limp Home Mode & needs to stop until engine temperature cools down.

It is recommended to visit to nearest dealership for inspection.

In this condition, engine will not run beyond 4000 rpm. This function is for safety of engine and vehicle preventing from damage.

Different Modes of Limp Home Mode Activation:

- If the Engine coolant temperature crosses the threshold limit.
- If the Coolant temperature sensor fails:
 - Short Circuit condition / Open Circuit condition
- If TPS sensor fails - Short circuit / Open circuit condition

Fuel Gauge

The fuel gauge displays the approx amount of fuel available in the fuel tank by means of bar indicator.

When the fuel gauge displays all “9 bars” towards “F” it indicates fuel tank is full.



The fuel tank capacity is: **12.0 Litres.** (Including reserve)

When the fuel gauge displays only “1 bar” toward “E” it indicates reserve level and you must refuel at the earliest.

NOTE



While fuelling always keep the ignition switch in OFF condition.

PRE-RIDE INSPECTION

For your safety, it is very important to have a few checks before each ride. Take a walk around your motorcycle and check its condition. If you detect any problem, be sure you take care of it, or get it corrected by your nearest authorised dealer.

WARNING



Improper maintenance of the motorcycle or failing to correct a problem before riding may hamper the performance of the vehicle.
Always perform a pre-ride check using the list below.

PRE-RIDE CHECK LIST

- Fuel level: Fill fuel tank when necessary (Page 19). Check for leaks.
- Coolant level: Add coolant if required. (Page 40 & 41).
- Engine oil level: Should be in between “MAX” & “MIN” level of oil dipstick. Top up if necessary. Do not overfill the engine oil tank. (Page 37)
- Front and rear brakes: Check operation; make sure there is no brake fluid leakage.
- Cables: Check for kinks or signs of wear.
- Steering: Free movement of handlebars all the way to the left and right.
- Battery: Fully charged.
- Tyres: Check condition and pressure. (Page 53)
- Drive chain: Check condition and slack. Adjust and lubricate if necessary. (Pages 49 – 50)
- Throttle: Check for smooth opening and full closing in all steering positions
- Lights and horn: Check that headlight, brake/tail light, position lights, license plate light, turn signals, and horn function normally.
- Engine stop switch: Check for proper function.
- Side stand switch: Check status on LDC display when side stand is up.

STARTING AND RIDING

Always follow the proper starting procedure described below.

- Your motorcycle's exhaust contains poisonous carbon monoxide gas. High levels of carbon monoxide can collect rapidly in enclosed areas such as a garage.
- Do not run the engine with the garage door closed. Even with the door open, run the engine only long enough to move your motorcycle out of the garage.
- Do not use the electric starter for more than 3 seconds at a time. Release the start button for approximately 10 seconds before pressing it again.

STARTING PROCEDURE:

BSA motorcycle has a fuel-injected engine with an automatic choke. Ensure the side stand is raised up before pressing start button. To start the engine press the start button with the throttle completely closed.

Preparation

Before starting, insert the key in the ignition switch, turn the ignition switch ON and confirm the following:

- Transmission in neutral (neutral indicator "N" is ON).
- Engine kill switch is at ON position.
- EFI malfunction indicator lamp (MIL) is OFF.
- ABS malfunction indicator initially ON for 3 sec, then starts blinking up to vehicle speed reaches 3 miles/ hour (5 km/hour) Malfunction Indicator Lamp goes OFF.

NOTE



The engine will not start for the below two condition:

- If the vehicle is in gear & side stand is in the lowered position.
- If the throttle is partially or fully open (because the electronic control module cuts off the fuel supply).

STARTING AND RIDING

Flooded Engine

- Press the clutch lever and then press self start button.
- Do not give throttle while starting.
- Follow the normal starting procedure.
- If the engine starts with unstable idle, open the throttle slightly.
- If the engine does not start, wait for 10 seconds, then follow steps again.

Ignition Cut Off

Your motorcycle is designed to automatically stop the engine and fuel pump if the motorcycle is over tilted or fallen down (a rollover sensor cuts off the ignition system).

Before restarting the engine, you must turn the ignition switch to the OFF position and then back to ON.

Running-in

Helps you to assure your motorcycle's future reliability and performance by paying extra attention to how you ride during the first 1200 Miles (As mentioned on page no. 12). During this period, avoid full-throttle starts and rapid acceleration.

Riding

This entire manual is filled with important information – please read it carefully. Make sure the side stand is fully retracted position before riding the motorcycle.

If the side stand comes to its extended lowered position then the engine will stop.

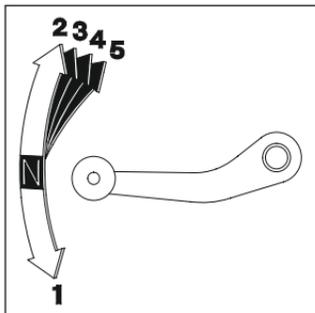
STARTING AND RIDING

Make sure flammable materials such as dry grass or leaves do not come in contact with the exhaust system when riding, idling, or parking your motorcycle

1. After the engine has been warmed up, the motorcycle is ready for riding.
2. While the engine is in idling, engage the clutch lever and press the gear shift lever down to shift into 1st (low) gear.
3. Slowly release the clutch lever and at the same time gradually increase engine speed by opening the throttle. Coordination of the throttle and clutch lever will assure a smooth positive start.
4. When the motorcycle attains a moderate speed, close the throttle, engage in the clutch lever and shift to 2nd gear by raising the shift lever in upward direction.

This sequence is repeated to progressively shift to 3rd, 4th and 5th (top) gear.

5. Coordinate the throttle and brakes for smooth deceleration.
6. Both the front and rear brakes should be applied at the same time to have effective braking.



STARTING AND RIDING

BRAKING

For normal braking, apply both the front and rear brake while down-shifting to match your road speed. For maximum braking, close the throttle and firmly apply the pedal and lever; pull in the clutch lever before coming to a complete stop to prevent stalling of the engine.

Important Safety Reminders:

- Independent application of only one brake reduces stopping performance.
- Whenever possible, reduce speed or brake before entering a turn; closing the throttle or braking in mid-turn may cause wheel slip. Wheel slip will reduce control of the motorcycle.
- When riding in wet or rainy conditions, or on loose surfaces, the ability to manoeuvre and stop will be reduced. All of your actions should be smooth under these conditions. Rapid acceleration, braking or turning may cause loss of control. For your safety, exercise extreme caution when braking, accelerating or turning.
- When descending a long, steep grade, use engine compression braking by downshifting, with intermittent use of both brakes. Continuous brake application can overheat the brakes and reduce their effectiveness.
- Riding with your foot resting on the brake pedal or your hand on the brake lever may actuate the brake light, giving a false indication to other road users. It may also overheat the brakes, reducing effectiveness.

STARTING AND RIDING

PARKING

1. After stopping the motorcycle, shift the transmission into neutral, apply side stand to support the motorcycle for parking.
2. Turn the handlebar fully to the left, turn the ignition switch OFF and lock the steering.

CAUTION



Park the motorcycle on firm, level ground to prevent it from falling over. When parking on a slight incline, ensure that the front wheel of the motorcycle is uphill position to reduce the possibility of rolling off the side stand or overturning.

NOTE



Make sure flammable materials such as dry grass or leaves do not come in contact with the exhaust system when parking your motorcycle.

ANTI-THEFT TIPS

1. Always lock the steering and never leave the key in the ignition switch.
2. Ensure the registration information for your motorcycle is accurate and current.
3. Park your motorcycle in a locked garage whenever possible.
4. Fill all information details: Your name, address, and phone number in this Owner's Manual and keep it with your motorcycles at all times.

NAME :

ADDRESS :

PHONE NO :

MAINTENANCE AND SERVICING

THE IMPORTANCE OF MAINTENANCE

A well-maintained motorcycle is essential for safe, economical and trouble-free riding. It will also help reduce air pollution.

To take proper care for your motorcycle, the following pages 64 - 66 include a Maintenance Schedule and a Maintenance Record for regularly scheduled maintenance.

These instructions are based on the assumption that the motorcycle will be used exclusively for its designed purpose. Sustained high speed operation or operation in unusually wet or dusty conditions will require more frequent service than specified in the Maintenance Schedule. Consult your dealer for recommendations applicable to your individual needs and use.

WARNING



If your motorcycle overturns or becomes involved in a crash, be sure your dealer inspects all major parts, even if you are able to make some repairs.

WARNING



Improperly maintaining this motorcycle or failing to correct a problem before you ride can cause a crash in which you can be seriously hurt.

WARNING



Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

MAINTENANCE AND SERVICING

SAFETY PRECAUTION FOR MAINTENANCE

This section includes instructions on some important maintenance tasks. You can perform activities like ; Chain clean and lube, rear shocker adjustment and lubrication points.

Other tasks that are more difficult and require special tools are best performed by professionals. Wheel removal should normally be handled only by BSA dealership technician or other qualified mechanic; instructions are included in this manual only to assist in emergency service.

Some of the most important safety precautions follow. However, we cannot warn the user of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a specific task.

WARNING



Failure to properly follow maintenance instructions and precautions can affect vehicle performance.

Always follow the procedures and precautions given in this Owner's manual.

MAINTENANCE AND SERVICING

SAFETY PRECAUTIONS

- Make sure the engine is off before you begin any maintenance or repairs. This will help eliminate several potential hazards:
 - **Carbon monoxide poisoning from engine exhaust**
Be sure there is adequate ventilation available whenever you operate the engine.
 - **Burns from hot parts**
Let the engine and exhaust system cool before touching.
 - **Injury from moving parts**
Do not run the engine unless instructed to do so.
- Read the instructions before you begin, and make sure that you have the tools and skills required.
- To prevent the motorcycle from falling over, park it on a firm and level surface.
- To reduce the possibility of a fire or explosion, be careful when working around fuel or batteries. Use only nonflammable solvent, not petrol, to clean parts. Keep cigarettes, sparks and flames away from the battery and all fuel-related parts.

Remember that your BSA Company dealer knows your motorcycle best and is fully equipped to maintain and repair it.

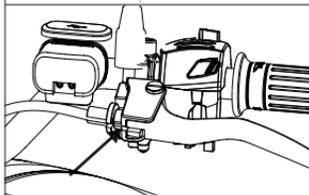
To ensure the best quality and reliability, use only Genuine Parts for repair and replacement.

MAINTENANCE AND SERVICING

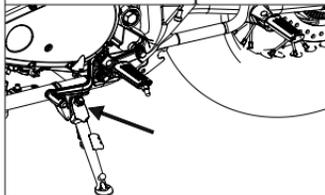
LUBRICATION

Clean and lubricate after using the motorcycle in rain, snow and after water wash or if used in dusty conditions on the below following parts:

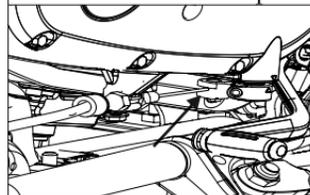
Clutch Lever



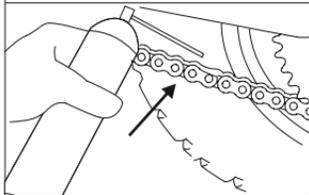
Side stand pivot



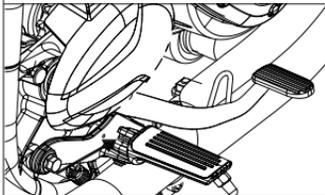
Clutch Lifter Clamp



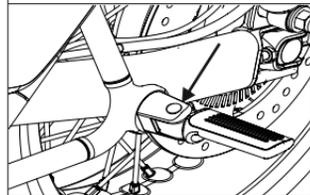
Drive Chain



Front RH & LH foot rest



Rear RH & LH foot rest



MAINTENANCE AND SERVICING

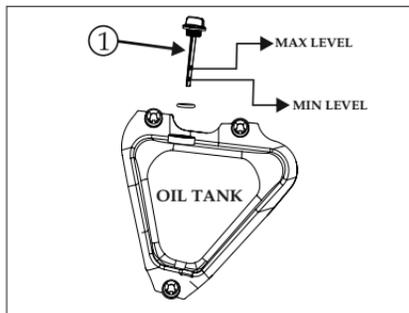
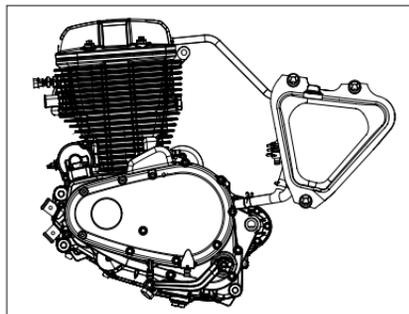
ENGINE OIL

Engine Oil Level Check

Check the engine oil level each day before riding the motorcycle.

The oil level should be maintained between min & max level mark of dip stick as shown in the fig.

1. Start the engine and let it idle for 3~5 minutes.
2. Stop the engine and ensure that the motorcycle is in an upright position on firm, level ground.
3. After 2~3 minutes, check the oil level is between min & max level mark of dip stick (1).
4. If the oil level is below the min level mark of the dip stick. Top up with the recommended oil and recheck the oil level using the dip stick, oil level must be between min & max level mark. Do not overfill.
5. Reinstall the oil dip stick. Check for oil leaks.



NOTE



Running the engine with insufficient oil may cause serious engine damage.

MAINTENANCE AND SERVICING

ENGINE OIL AND FILTER CHANGE

WARNING



Changing the oil is a more difficult task and is best performed by professionals. We strongly recommend that you have the oil and filter changed by your authorised BSA dealer.

Engine oil quality is the main factor affecting engine service life. Change the engine oil as specified in the maintenance schedule.

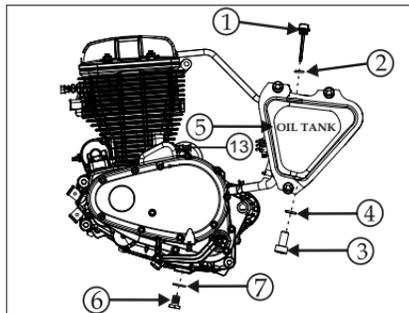
When running in dusty conditions, oil changes should be performed more frequently than specified in the maintenance schedule.

Change the engine oil with the engine at normal operating temperature.

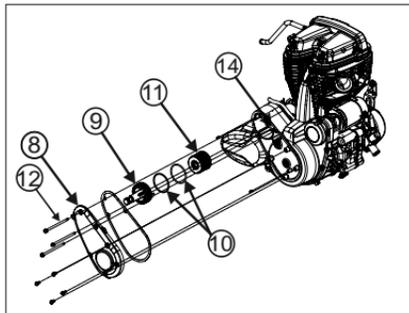
Engine Oil and Filter Replacement Procedure:

Engine oil needs to be drained from two different locations. One is from the engine oil reservoir tank and from the engine sump as shown in the fig.

- Place motorcycle on paddock stand on a firm flat surface.
- Start the engine and warm up for 2 minute.
- Stop the engine, wait for 2-3 min for oil to settle down and then drain the oil.
- Use a clean tray/ jar to collect the used oil.
- To drain the oil from the oil reservoir tank, remove the oil filler cap/oil dip stick (1) & drain bolt (3) along with the sealing washer (4).



- (1) Oil dip stick/ Oil filler cap
(2) O-ring (3) Drain bolt
(4) Sealing washer (5) Oil tank



MAINTENANCE AND SERVICING

- To drain the oil from the engine sump, remove the drain plug (6) along with the sealing washer (7).
- Remove the cap magneto cover (8), by unscrewing the cover bolts (12).
- Pull and take out the Oil filter holder assembly (9) with the oil filter element (11).
- Remove the used oil filter element from the oil filter holder lock. Install the new O-rings oil filter (10) and new oil filter (11) into the Oil filter holder (9). Installation of oil filter needs to be done after oil bleeding procedure as mentioned in the below points of oil bleeding. Ensure the oil filter rubber side face must be installed facing towards the engine side.
- Ensure the assembly of oil filter holder and oil filter (Arrow mark) vertically up.
- Use only Genuine oil filter as recommended. Using the non-genuine filter which is not of equivalent quality may cause engine damage.
- Ensure the cap magneto cover bolts (12) are tighten securely to the specified torque. Cap magneto cover bolts torque:- 9-11 N.m
- Check that the sealing washer (As per recommended maintenance schedule) on the drain bolt is in good condition and install the bolt. Replace the sealing washer every other time the oil is changed, or each time if necessary.
Engine oil drain bolt torque: - 40-48 N.m
- Initially fill the oil in the oil reservoir tank with recommended grade oil; Approximately:-1700 ml and install the oil dip stick/ oil filler cap.
- After filling the oil; Bleeding needs to be carried out from banjo bolt (13). Once the oil is coming out from the banjo bolt, tighten the banjo bolt with specified torque.
- Do cranking (remove the ignition cable from one spark plug) and check oil from oil filter holder location (14). Once oil starts coming out, assemble oil filter holder and other parts in reverse order.
- Start the engine and let it idle for 3~5 minutes.

MAINTENANCE AND SERVICING

- Shut off the engine and refill the oil reservoir tank again with 600 ml and install the oil dip stick/ oil filler cap. (Total Engine Oil capacity for service fill is 2300 ml)
- Check the engine oil level, it must be between min & max level mark of dip stick. Make sure there is no oil leakage.
- Check the O-ring of oil dip stick for any damage and install the dip stick/ oil filler cap.
Recommended Oil: MOTUL H-TECH 100 4T 10W 50 / CASTROL - 10W50 JASO MA-2 [SAE 10W50 fully synthetic motorcycle engine oil that meets JASO-MA2 and API-SL (or Higher) specification]

NOTE



Improper installation of the oil filter can cause serious engine damage.

Coolant Inspection

The reserve tank is located below the swing arm, in front of rear tyre.

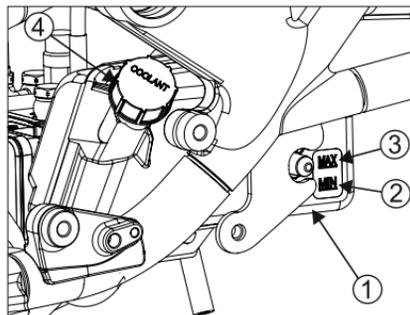
Check the coolant level in the reserve tank (1) while the engine is at the normal operating temperature with the motorcycle in an upright position.

If the coolant level is below the MIN level mark (2) add coolant mixture until it reaches the MAX level mark (3).

Always add coolant to the reserve tank, open the reserve tank cap (4) to add the coolant.

Do not attempt to add coolant by removing the radiator cap.

If the reserve tank is empty, or if coolant loss is excessive, check for leaks and visit dealer for repair.



1. Reserve tank
2. MINIMUM level mark
3. MAXIMUM level mark
4. Reserve tank cap

MAINTENANCE AND SERVICING

WARNING 	Removing the radiator cap while the engine is hot can cause the coolant to spray out, seriously injuring you. Always let the engine and radiator cool down before removing the radiator cap.
--	---

Coolant Recommendation

Use only approved COOLANT containing corrosion inhibitors, specifically recommended for aluminum engines when adding or replacing the coolant.

Coolant Specification:-

- Motul Inugel Expert (Qty - 1760 ml.) / Castrol Redicool HD (Premix) (Qty - 1760 ml.)

NOTE 	Do not use non-ethylene glycol coolant, tap water, nor mineral water while adding or replacing the coolant. Use of improper coolant may cause damage, such as corrosion in the engine, blockage of the cooling passage or radiator and premature wear of the water pump seal. Use any approved COOLANT without diluting with water.
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MAINTENANCE AND SERVICING

BRAKE FLUID

If the brake lever/ pedal free travel becomes excessive and the brake pads are not worn beyond the recommended limit, there may be air in the brake pipes and hoses or the brakes may need servicing. Your authorised dealer must correct the fault before riding.

WARNING



Riding with defective brakes may lead to loss of motorcycle control and an accident.

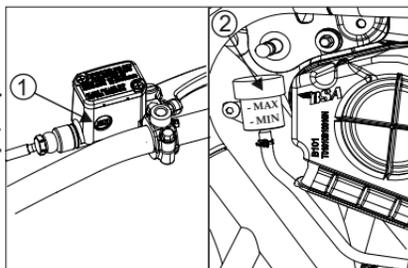
Front & Rear Brake Fluid Level:

With the motorcycle in an upright position (secured on a firm and level surface), check the fluid level (1). The fluid level should be above the MIN level mark. If the level is at or below check the brake pads for wear (page 61).

Check the rear brake fluid level (2). It should be between MIN & MAX. If the level is on or below the MIN level mark, check the brake pads for wear (page 61).

Worn pads should be replaced. If the pads are not worn, have your brake system inspected for leaks.

The required brake fluid to be used: **DOT 4** (From a sealed container).



(1) Front fluid level gauge

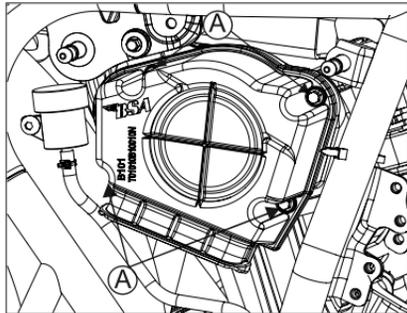
(2) Rear fluid level gauge

MAINTENANCE AND SERVICING

AIR CLEANER

Your BSA is fitted with dry paper filter. The air filter should be serviced at regular intervals (page 65). Service more frequently when riding in unusually wet or dusty areas. The air filter element is located inside the right hand side box. To access the filter element proceed as follows:

1. Remove the RH side box cover by pulling it outwards gently from its three locks.
2. Unscrew the four screws (A), remove the air filter cover.
3. Remove the gasket located on the air filter cover.
4. Takeout the filter element from the air filter box.
5. Clean the air filter element. If the element is damaged, replace with new air filter element and install. Ensure that air filter element is properly installed.



Use the Genuine air cleaner element specified for your model. Using the non-genuine air cleaner element which is not of equivalent quality may cause premature engine wear or performance variations.

6. Install the removed parts in reverse order of removal.

NOTE



This motorcycle is equipped with a paper type air cleaner element. Do not apply any type of oil on it.

MAINTENANCE AND SERVICING

THROTTLE OPERATION

1. Check for smooth rotation of the throttle grip from the fully open to the fully closed position at both full steering positions.
2. Measure the throttle grip freeplay at the throttle grip flange. The standard freeplay should be approximately: 3~5 mm.

To adjust the freeplay, slide the throttle cable boot (1), then loosen the lock nut (2) and turn turn the adjuster (3).

After adjustment, tighten the lock nut and return the throttle cable boot securely.

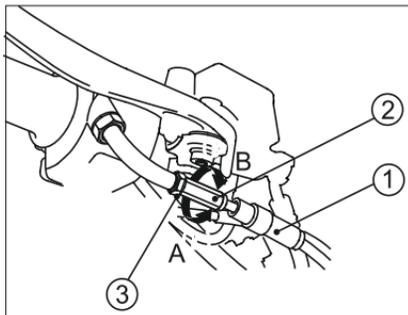
(1) Throttle cable boot

(2) Adjuster

(3) Lock nut

(A) Increase

(B) Decrease



MAINTENANCE AND SERVICING

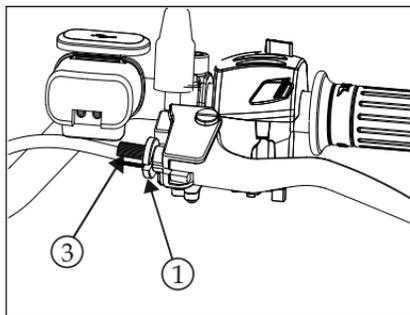
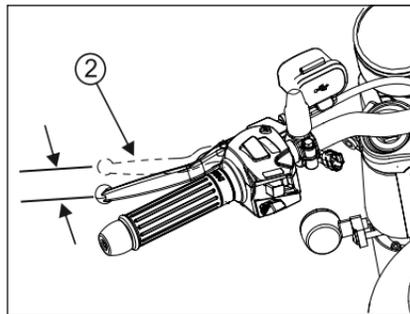
CLUTCH

Clutch adjustment may be required if the motorcycle stalls when shifting into gear or tends to creep; or if the clutch slips, causing acceleration to lag behind engine speed.

Minor adjustments can be made with the clutch cable adjuster nut (1) at the clutch lever (2).

Normal clutch lever free play is: **(10 ~ 12.5 mm)**
(2.5~3 mm at pivot end)

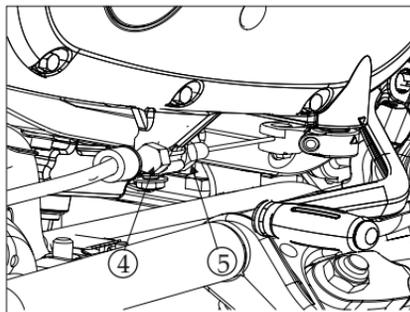
1. Loosen the lock nut (1) and turn the clutch cable adjuster (3). Tighten the lock nut and check the adjustment.
2. If the adjuster is threaded out near its limit or if the correct free play cannot be obtained, using the clutch cable adjuster, loosen the lock nut and turn the clutch cable adjuster completely and tighten the lock nut.



- (1) Clutch cable lock nut
- (2) Clutch lever
- (3) Clutch cable adjuster

MAINTENANCE AND SERVICING

3. Loosen the lock nut (4) at the lower end of the cable. Turn the adjusting nut (5) to obtain the specified free play. Tighten the lock nut and check the adjustment.
4. Start the engine, engage the clutch lever and shift into gear. Make sure the engine does not stall and the motorcycle does not creep. Gradually release the clutch lever and open the throttle. The motorcycle should begin to move smoothly and accelerate gradually.



(4) Lock nut (5) Adjusting nut

If proper adjustment cannot be obtained or the clutch does not work correctly, visit your dealer for proper adjustments.

Other Checks:

Check the clutch cable for links or signs of wear that could cause sticking or failure. Lubricate the clutch cable with a commercially available cable lubricant to prevent premature wear and corrosion.

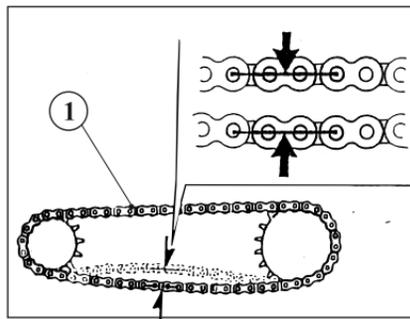
MAINTENANCE AND SERVICING

DRIVE CHAIN

The service life of the drive chain (1) is dependent upon proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain and sprockets. The drive chain should be checked, adjusted and lubricated as part of the periodic inspection. Under severe usage, or when the motorcycle is used in unusually dusty or muddy areas, more frequent maintenance will be necessary.

Inspection:

1. Turn the engine off, place the motorcycle on paddock and shift the transmission to neutral.
2. Check slack in the lower drive chain run between the sprockets. Drive chain slack should be adjusted to allow the following vertical movement by hand.
3. Move the motorcycle forward, Stop. Check the drive chain slack. Repeat this procedure several times. Drive chain slack should remain certain constant. If the chain is slack only in certain sections, some links are kinked and binding. Binding and kinking can frequently be eliminated by lubrication. Chain Slackness:- 25~30 mm



(1) Drive chain

MAINTENANCE AND SERVICING

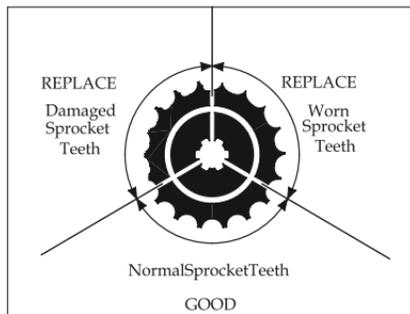
4. Roll the motorcycle forward. Stop and park it on its stand. Repeating this procedure, inspect the drive chain and sprockets for any of the following conditions:

DRIVE CHAIN

- Damaged Rollers
- Loose Pins
- Dry or Rusted Links
- Kinked or Binding Links
- Excessive Wear
- Improper Adjustment
- Damaged or Missing O-rings

SPROCKETS

- Excessively Worn Teeth
- Broken or Damaged Teeth



CAUTION



Drive chain with damaged rollers, loose pins, or missing O-rings must be replaced. A chain which appears dry, or shows signs of rust, requires supplementary lubrication. Kinked or binding links should be thoroughly lubricated and worked free. If links cannot be freed, the chain must be replaced.

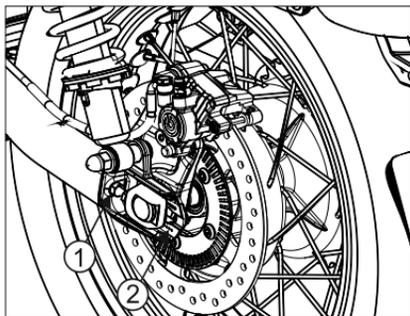
MAINTENANCE AND SERVICING

Drive Chain Adjustment:

Drive chain slack should be checked and adjusted, if necessary, every 1,000 km. When operated at sustained high speeds or under conditions of frequent rapid acceleration, the chain may require more frequent adjustment.

If the drive chain requires any adjustment, the procedure is as follows:

1. Place and secure the motorcycle on a firm, level surface with the transmission in neutral and the ignition switch OFF.
 2. Loosen the rear axle nut from RH side.
 3. Turn both drive chain adjustment nuts (1) an equal number of turns until the correct drive chain slack is obtained. Turn the drive chain adjusting screws clockwise to tighten the chain, or counterclockwise to provide more slack. Adjust the chain slack at a point midway between the drive sprocket and the rear wheel sprocket. Roll the rear wheel in forward direction and check the slackness.
 4. Check rear axle alignment by making sure the chain adjuster index marks (2) align with the rear edge of the adjuster.
- Both left and right marks should correspond. If the axle is misaligned, turn the left or right adjusting screws until the marks correspond on the rear edge of the adjuster and recheck chain slack.
5. Tighten the rear axle nut to the specified torque. Rear axle torque: 75~80 Nm



1. Drive chain adjustment nut
2. Chain adjuster index mark

MAINTENANCE AND SERVICING

6. Tighten the drive chain adjusting screws slightly, then tighten the drive chain lock nuts by holding the drive chain adjusting screws with a spanner.
8. Recheck drive chain slack (Slackness should be 25 ~ 30 mm).

Damage to the bottom part of the frame may be caused by excessive drive chain slack of more than: 50 mm (2.0 inch)

Chain: 520NASR (106 links)

If necessary, replace the drive chain at your nearest authorised dealer.

MAINTENANCE AND SERVICING

Cleaning and Lubrication:

Lubricate the drive chain at every 600 mile or sooner if chain appears to dry.

After inspecting the slack, clean the chain and sprockets while rotating the rear wheel.

Use dry cloth with chain cleaner designed specifically for O-ring chains, or neutral detergent.

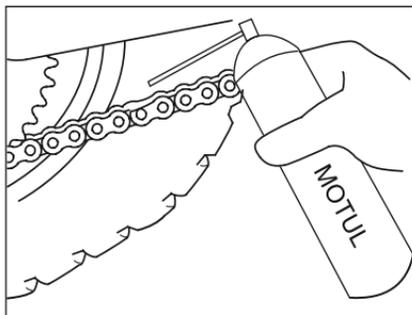
Use a soft brush if the chain is dirty.

After cleaning, wipe dry and lubricate with drive chain lubricant:

MOTUL CHAIN CLEAN and **MOTUL CHAIN LUBE**.

Do not use a steam cleaner, a high pressure cleaner, wire brush, volatile solvent such as gasoline and benzene, abrasive cleaner, chain cleaner or lubricant not designed specifically for O-ring chains as these can damage the rubber O-ring seals.

Avoid getting lubricant on the brakes or tyres. Avoid applying excess chain lubricant to prevent spray onto your clothes and the motorcycle.



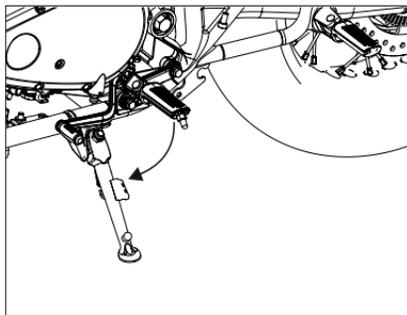
MAINTENANCE AND SERVICING

INSPECTION OF FRONT SUSPENSION

1. Check the front fork assembly by locking the front brake and pumping the fork up and down vigorously. Suspension action should be smooth and there must be no oil leakage.
2. Carefully inspect the front and rear suspension fasteners for tightness.

INSPECTION OF SIDE STAND

Check the side stand spring for any damage and loss of tension, and the side stand assembly for free movement.



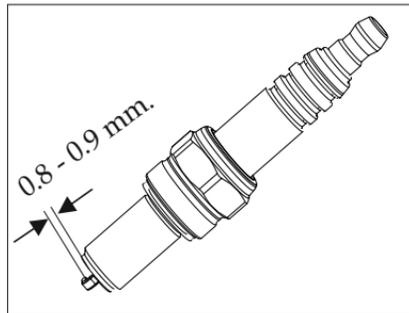
SPARK PLUG

Your BSA is designed with twin spark plugs.

1. Primary Spark plug.
2. Secondary Spark plug.

Cleaning and adjusting Plug gap:

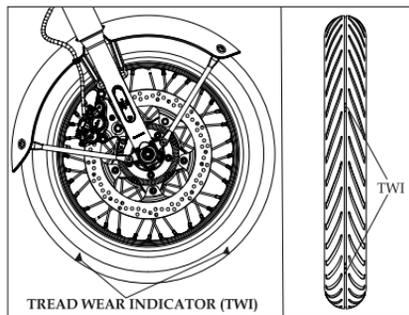
- Remove the spark plug using the plug spanner.
- Clean the insulator tip and electrodes of the plug carefully using a pointed scraper or spark plug cleaner.
- Set the gap 0.8 - 0.9 mm.
- Refit the spark plugs on the cylinder head.
- Ensure the spark plugs primary & secondary connections are fitted properly.



MAINTENANCE AND SERVICING

INSPECTION OF TYRES AND WHEELS

- Inspect the tyres periodically for tread wear, cracks and cuts.
- Minimum tread depth (TWI): Front tyre and rear tyre - 1.0 mm
- Always check air pressure when your tyres are 'cold'; when the motorcycle has been parked for at least three hours.
- Tyres with excessive tread wear, bumps, or bulges in the tread or side should be replaced.
- Replace tyres when the tread depth has reached reached the minimum as specified.
- Periodically inspect wheels for damage to spokes or rim. We recommend you take motorcycle to your authorised dealer for closer inspection.



NOTE

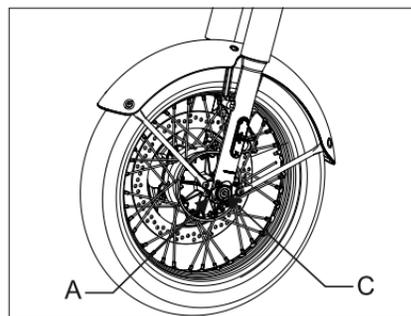
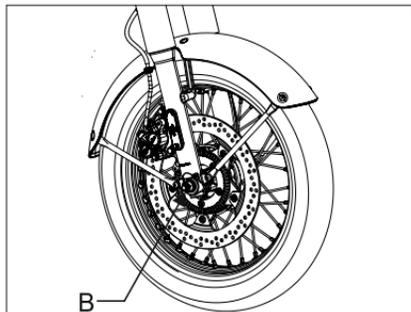


If you check air pressure when your tyres are 'warm' (when the motorcycle has been ridden for even a few miles) the readings will be higher than if the tyres were 'cold'. This is normal, so do not let air out of the tyres to match the recommended cold air pressures, otherwise the tyres will be underinflated.

MAINTENANCE AND SERVICING

FRONT WHEEL REMOVAL

- Park the vehicle and secure upright on firm and level surface.
- Place a suitable jack below the bash plate at front.
- Raise the vehicle to the suitable height. Until the front wheel is off the ground.
- Loosen the pinch bolt(A) on the LH fork.
- Remove the axle nut (B) along with washer.
- Tap and remove the front wheel axle bolt (C).
- Take out the wheel along RH side spacer.
- Place a 4 mm thick wooden piece or cardboard sheet between the brake pads to avoid brake pads contacting each other.



CAUTION

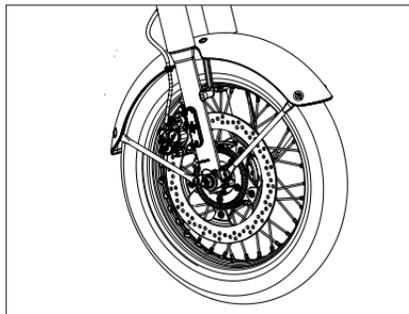


- Do not press the front brake lever when the wheel is removed as this will result in brake shoes getting locked.
- Always protect the disc, after removing wheel assembly from vehicle. Do not support wheel on disc while working on wheel.
- Protect disc from oil & grease. Oil /Grease on disc may reduce braking.

MAINTENANCE AND SERVICING

FRONT WHEEL REASSEMBLY

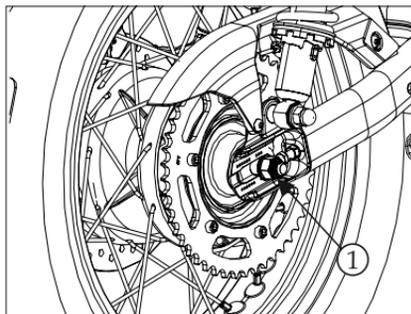
- Remove the wooden piece / card board sheet placed between the brake pads.
- Insert the wheel along with RH spacer between the front fork ends ensuring that the brake disc is located between the brake pads.
- Insert and tap the front wheel axle gently inside.
- Refit the washer and tighten the nut firmly with the tightening torque of 75-80 Nm.
- Lower the vehicle and take out the jack.
- Pump the front fork by sitting on the bike for few times to align both the fork legs.
- Tighten the pinch bolt on the LH fork guide with the tightening torque of 23 - 25 Nm.
- Rotate the wheel and check for smooth rotation.



MAINTENANCE AND SERVICING

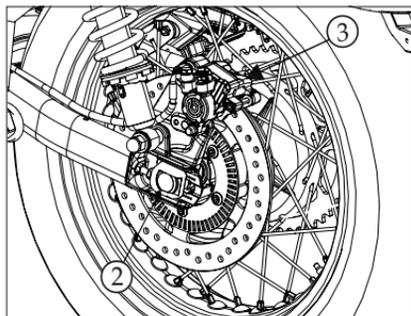
REAR WHEEL REMOVAL

- Place and secure the motorcycle on firm, level surface.
- Note and mark the position of the chain adjuster
- Remove the lock nut (1) of the axle bolt from RH side.
- Tap and remove the axle bolt (2) from LH side.
- Push the wheel forward and remove the chain from wheel sprocket.
- Pull the rear caliper bracket assembly (3) outward.
- Take out the wheel.
- Place a 4 mm thick wooden piece or cardboard sheet between the brake pads to avoid brake pads contacting each other.



REAR WHEEL REASSEMBLY

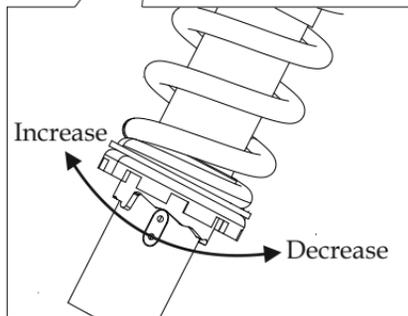
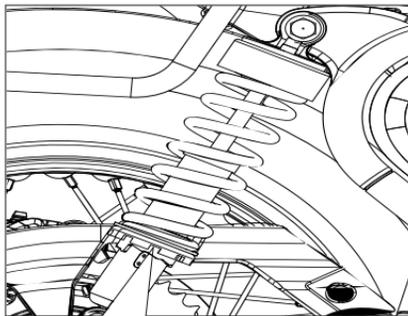
- Place the wheel in its position.
- Remove the wooden piece / card board sheet placed between the brake pads.
- Put the axle bolt (2), LH outer spacer from LH side along with chain adjuster.
- Push the rear caliper bracket assembly (3) and slide it forward along the stopper lug on swing arm to align with the hole on caliper bracket.
- Push axle bolt (2) completely, along with chain adjuster tighten the lock nut with tightening torque of 75-80Nm.
- Reassemble the chain with sprocket and ensure the free rotation of the wheel.
- Ensure the chain slackness is between (25-30 mm), adjust if required.



MAINTENANCE AND SERVICING

ADJUSTMENT OF REAR SHOCK ABSORBERS

- The rear shock absorbers are of adjustable type i.e., the spring preload can be increased or decreased.
- Increase the spring compression for high load operation.
- Decrease the spring compression for low load operation.
- The adjuster provided on the bottom of the spring has five notches.
 - Insert Special 'C' Spanner on the bottom adjuster and rotate to change notch position
 - Turn the adjuster such that the adjuster moves up to increase the spring compression and vice versa to reduce the spring compression.
- Adjust both the left hand and right hand shock absorbers to same position.
- Standard position is at second notch



WARNING



Riding the motorcycle with the notches adjusted in different position on LH and RH shock absorber can cause loss of control and may hamper the riding performance.

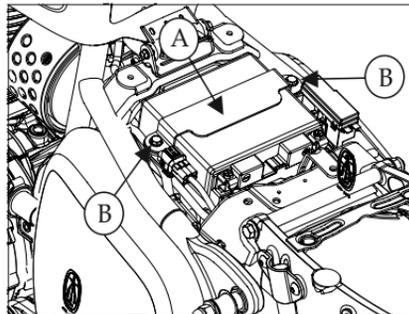
MAINTENANCE AND SERVICING

REMOVAL OF BATTERY FROM THE VEHICLE

The battery is located below the seat.

To remove the battery follow the below procedure:

- Remove the LH side panel
- Pull the seat unlock cable and release it once the seat is unlock from its position.
- Take out the seat assembly away from the vehicle.
- Disconnect both the terminals wires (Negative first and then positive).
- Remove the battery holding clamp (A), by unscrewing two screws (B).
- Carefully takeout the battery from battery carrier by holding the rubber straps.



BATTERY MAINTENANCE

- The vehicle is provided with 12V - 11.2 Ah.
- The battery must be periodically checked for cleanliness and corrosion free terminals.

NOTE



For checking the battery voltage and electrolyte specific gravity, contact authorized battery service centre.

MAINTENANCE AND SERVICING

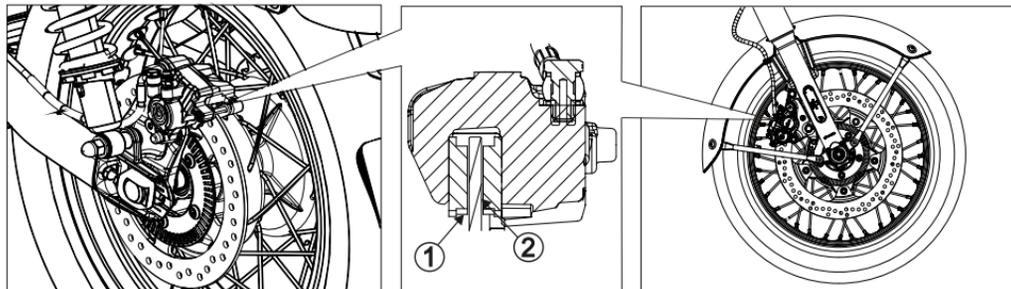
REASSEMBLY OF BATTERY ON VEHICLE

- Place the battery in the battery carrier by means of rubber strap.
- Connect the positive terminal (Red wire).
- Connect the negative terminal (Black wire).
- Smear the terminals with petroleum jelly. (Do not use grease).
- Refit the battery clamp to hold the battery in its position.
- Place the seat assembly on vehicle in its position, and gently press the seat at the rear side a click sound will give a positive indication of seat is locked.
- Refit the LH side panel by positioning the three locating dowels to the grommets, then firmly press to secure the panel in its position.
- Finally, grasp the panel and make sure that it is fully retained.

MAINTENANCE AND SERVICING

BRAKE PAD INSPECTION

Brake pad wear depends upon the severity of usage, the type of riding, and road conditions. Inspect the pads at each regular maintenance interval.



(1) Wear indicator grooves (2) Brake disc

Front and Rear Brake

Check the wear indicator grooves (1) in each pad. If either pad is worn to the bottom of the grooves, replace both pads as a set. Visit your nearest authorised dealer for this service.

Checking and Monitoring of Disc:-Disc wear

- Check the thickness of brake disc at several places.
- Thickness should be more than 4.5 mm.
- If disc thickness is less than above values, change the disc.

Also, check disc for any damage, cracking and deformation. If it shows the above defects, change the disc.

MAINTENANCE AND SERVICING

ELECTRICAL COMPONENTS REPLACEMENT PROCEDURE

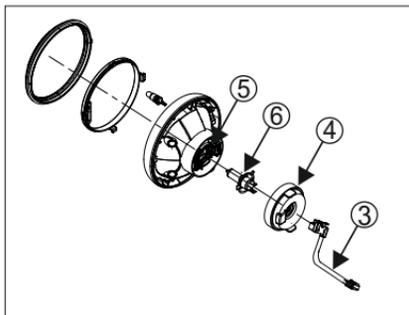
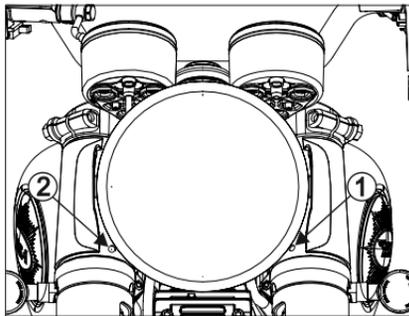
CAUTION



Never touch the bulb with your finger. Finger prints will etch the glass and decrease bulb life. Hence, it is recommended to grab the bulb with paper or clean dry cloth during handling.

HEADLAMP BULB REPLACEMENT

1. Unscrew the screws (1 and 2) mounted on the headlamp housing.
2. Tilt the headlamp assembly outwards from the bottom and then lift the assembly upwards to unlock from the notch.
3. Carefully take out the head lamp assembly from head lamp housing.
4. Remove the couplers of head lamp wiring harness (3) from the main wiring harness.
5. Remove the rubber cap (4) from the housing end.
6. Press the bulb holding clamp (5) downwards and take out the bulb (6) from its position.



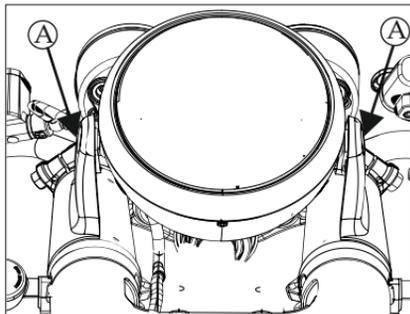
MAINTENANCE AND SERVICING

REASSEMBLING THE HEAD LAMP

1. Follow the reverse procedure of the removal.
2. Adjust the headlamp focus if required. (Head lamp focus is pre adjusted as per the standards)

HEAD LAMP ADJUSTMENT

1. The head lamp focus can be adjusted by loosening the two screws (A). Setting the head lamp assembly at the required angle will set the head lamp focus.
2. Once the focus is set, tighten the two screws (A).

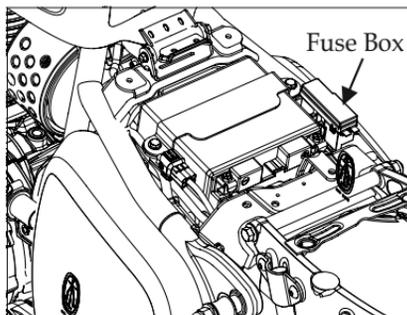


MAINTENANCE AND SERVICING

FUSE

Fuse box is located below the seat assembly on the RH side of battery box.

- To gain the access for fuse box, remove the seat assembly.
- Replace the required fuse with the spare fuse available in the fuse carrier.



CAUTION



To remove the fuse use the fuse removal tool provided along with the tool kit. Usage of any other tool for fuse removal may damage the fuse and other electrical components.

Fuse No.	Function	Color Code	Rating
F1	Charging Fuse	Green	30A
F2	Ignition, Radiator fan	Green	30A
F3	HECU	Yellow	20A
F4	Lamps	Blue	15A
F5	Ignition coil (Coil 1 & 2)	Blue	15A
F6	Speedo. ECU, Immobiliser	Red	10A
F7	EFI loads	Red	10A
F8	Accessories	Red	10A
F9	Ignition 2	Orange	5A

MAINTENANCE SCHEDULE

I : Inspect, C : Clean, R : Replace, L : Lubricate, D : Drain , A : Adjust , T : Tighten

ITEM	FREQUENCY	WHICH EVER COMES FIRST							
		SERVICE SCHEDULE							
		SERVICES	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th
		MONTHS	6	12	24	36	48	60	72
		MILES	500	3500	7500	11000	14500	18000	22500
	KMS	1000	6000	12000	18000	24000	30000	36000	
**	FUELLINE	I	I	I	I	I	I	I	
**	THROTTLE OPERATION	I	I	I	I	I	I	I	
***	THROTTLE BODY CLEANING	I, C	I, C	I, C	I, C	I, C	I, C	I, C	
**	AIR CLEANER	C	C	R	C	R	C	R	
**	SPARK PLUG (Refer page no. 53)	-	I, C	I, C	I, C	I, C	I, C	I, C	
***	# VALVE CLEARANCE					I			
**	ENGINE OIL	R	R	R	R	R	R	R	
***	ENGINE OIL FILTER & O-RING OIL FILTER HOLDER	R	R	R	R	R	R	R	
**	MAGNETIC DRAIN BOLT WASHER	R	R	R	R	R	R	R	
***	FUEL PUMP FILTER			I/R*					
**	FUEL FILTER (SECONDARY)	-	-	I	I	R	-	I	
**	RADIATOR COOLANT LEVEL	I	I	I	I	I	I	R	
**	COOLING SYSTEM (HOSE)/ RADIATOR FAN	I	I	I	I	I	I	I	
**	DRIVE CHAIN SLACKNESS/ WEAR	EVERY 500 MILES / 1000 KMS I, L (Adjust if Required)							
***	DRIVE CHAIN SLIDER CONDITION			I		I		I	
**	BRAKE FLUID LEVEL/ LEAKAGE	I	I	I	R	I	I	R	
**	FRONT & REAR BRAKE PAD WEAR		I	I/R	I/R	I/R	I/R	I/R	
**	BRAKE LIGHT SWITCH WORKING			I		I		I	
***	FRONT & REAR DISK MTG. BOLTS	I, T	I, T	I, T	I, T	I, T	I, T	I, T	

MAINTENANCE SCHEDULE

I : Inspect, C : Clean, R : Replace, L : Lubricate, D : Drain , A : Adjust , T : Tighten

ITEM	FREQUENCY	WHICH EVER COMES FIRST	SERVICE SCHEDULE							
			SERVICES	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th
			MONTHS	6	12	24	36	48	60	72
			MILES	500	3500	7500	11000	14500	18000	22500
			KMS	1000	6000	12000	18000	24000	30000	36000
**	CLUTCH SYSTEM / FREE PLAY	I, A	I, A	I, A	I, A	I, A	I, A	I, A		
**	SUSPENSION OPERATION	I	I	I	I	I	I	I		
**	NUTS, BOLTS, FASTENERS	I	I	I	I	I	I	I		
***	WHEELS/TYRES			I		I		I		
***	CUSH DRIVE	I/R	I/R	I/R	I/R	I/R	I/R	I/R		
***	STEERING HEAD BEARINGS	I		I	R	I		R		
**	CHECK ALL THE CABLES FOR DAMAGE / ROUTED WITHOUT SHARP BENDS AND SET CORRECTLY	I	I	I	I	I	I	I		
**	CHECK BATTERY VOLTAGE/ TERMINALS (APPLY PETROLEUM JELLY)	I	I	I	I	I	I	I		
**	FRONT FORK OIL LEAK	INSPECT AT EVERY SERVICE AND REPLACE AFTER 22,500 MILES / 36000 KMS								
**	SIDE STAND OPERATION	I	I	I	I	I	I	I		
***	SWING ARM BEARING			I	I					
**	SIDE STAND PIVOT AND RIDER FOOT REST	L	L	L	L	L	L	L		
***	EFI (ELECTRONIC FUEL INJECTION)	I/R	I/R	I/R	I/R	I/R	I/R	I/R		
***	CHECK THE WHEEL BEARING FOR PLAY			I	I					
***	SPOKE TIGHTNESS AND RIM RUN OUT	I, T	I, T	I, T	I, T	I, T	I, T	I, T		

MAINTENANCE SCHEDULE

I : Inspect, C : Clean, R : Replace, L : Lubricate, D : Drain , A : Adjust , T : Tighten

FREQUENCY ITEM	WHICH EVER COMES FIRST	SERVICE SCHEDULE						
		SERVICES	1 st	2 nd	3 rd	4 th	5 th	6 th
	MONTHS	6	12	24	36	48	60	72
	MILES	500	3500	7500	11000	14500	18000	22500
	KMS	1000	6000	12000	18000	24000	30000	36000
**	EXHAUST GUARD BOLT TIGHTENING	I	I	I	I	I	I	I

- 1) Service more frequently when riding in dusty area
- 2) For higher odometer reading, repeat at the frequency.

RECOMMENDED ENGINE OIL:

- MOTUL H-TECH 100 4T 10W 50 / CASTROL - 10W50 JASO MA-2

[SAE 10W50 fully synthetic motorcycle engine oil that meets JASO-MA2 and API-SL (or Higher) specification]

- # If any abnormal noise is observed from tappets before the specified maintenance schedule in that case cylinder head cover can be opened to inspect valve clearance else to be checked only at specified maintenance schedule.

- ✱ ✱ We recommend that these items are to be attended by Authorised Service Centre.
- ✱ ✱ ✱ These items must be attended only by Authorised Service Centre as they require special tools/Expertise/lubricants.

VEHICLE CARE CLEANING

Clean your motorcycle regularly to protect the surface finishes and inspect for damage, wear, and oil, coolant or brake fluid leakage.

Special care needs to be taken for the vehicles driven in the areas where salt is spread on road during winter season.

Avoid cleaning with products that are not specifically designed for motorcycle or automobile surfaces. They may contain harsh detergents or chemical solvents that could damage the metal, paint, and plastic on your motorcycle.

CAUTION



Use of high pressure water jet is not recommended. When using pressure washers, water may be forced into bearing and other components causing premature wear from corrosion and loss of lubrication.

Preparation for Washing:

1. Avoid cleaning the vehicle in warm condition. If your motorcycle is still warm from recent operation, allow the engine and exhaust system time to cool down.
2. Cover the Silencer and control switches with suitable plastic bags and tie it firmly to prevent water entry into them.
3. Remove the ignition key and seal key ignition switch using adhesive tape.
4. Use low pressure jet of water to clean the vehicle or engine.
5. Never spray water jet with great force on head lamp, speedometer, flasher lights, front and rear wheel hubs, electrical connections and wires, control cables, fuel ignition system, sparkplug, battery, brake cylinders, brake caliper, under seat storage, radiator fins etc.
6. Do not apply kerosene or diesel on painted parts or rubber parts.
7. Use luke warm water and mild detergent on the painted components to remove dirt, etc.
8. Remove any items of jewellery such as rings, watches, zips or belt buckles, which may scratch or otherwise damage painted or polished surfaces.

VEHICLE CARE

During Washing

1. Rinse the motorcycle thoroughly with cool water to remove loose dirt.
2. Clean the motorcycle with a sponge or soft cloth using cool water.
3. Clean the plastic parts using a cloth or sponge dampened with a solution of mild detergent and water. Rub the soiled area gently rinse it frequently with fresh water.
4. The headlight lens may be clouded immediately after washing the motorcycle. Run the engine while keeping the headlight ON moisture gradually disappears.
5. After cleaning, rinse the motorcycle thoroughly with plenty of clean water. Strong detergents residue can corrode metal parts.

After Washing

1. Remove the plastic bags and tape from Silencer, Control switches and Ignition switch.
2. Dry the motorcycle, start the engine, and let it run for several minutes. Ensure adequate ventilation for the exhaust fumes.
3. Test the brakes before riding the motorcycle. Several applications may be necessary to restore normal braking performance.
4. Lubricate the drive chain immediately after washing and drying the motorcycle.
5. Braking efficiency may be temporarily impaired immediately after washing the motorcycle. Anticipate longer stopping distance to avoid a possible accident.

Finishing Touches

After washing your motorcycle, consider using a commercially-available spray cleaner/polish or quality liquid or paste wax to finish the job. Use only a non-abrasive polish or wax made specifically for motorcycles or automobiles. Apply the polish or wax according to the instructions given on the container.

VEHICLE CARE

STORAGE GUIDELINES

- Extended storage, requires that you take certain steps to reduce the effects of deterioration from non-use of the motorcycle.
- In addition, necessary repairs should be made before reuse of the motorcycle.

Preparation for Storage

1. Make sure the fuel tank is as empty as possible. So that you can fill fresh fuel when the motorcycle is back in operation.
2. Make sure the cooling system is filled with a genuine Coolant:
 - Motul Inugel Expert / Castrol Redicool HD (PREMIX)
3. Change the engine oil.
4. Remove the battery. Store in an area protected from freezing temperatures and direct sunlight.
5. Lubricate the drive chain.
6. Inflate the tyres to their recommended pressures.
7. Store the vehicle in a dry location that is not subject to large fluctuations in temperature.

WARNING



Petrol is highly flammable and explosive. You can be burned or seriously injured when handling fuel.

- Stop the engine and keep heat, sparks, and flame away.
- Refuel only outdoors.
- Wipe up spills immediately.

VEHICLE CARE

BEFORE REUSING THE VEHICLE AFTER LONG STORAGE:

1. Uncover and clean the motorcycle.
2. Change the engine oil.
3. Charge the battery as required. Install the battery.
4. Perform all Pre-ride Inspection checks.

Test ride the motorcycle at low speeds in a safe riding area away from traffic.

NOTE	If your motorcycle overturns or becomes involved in a crash, be sure your BSA dealer inspects all major parts, even if you are able to make some repairs.
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DELIVERY CERTIFICATE :

Frame No. :



Engine No.:

- Above motorcycle was inspected / test driven by me / my representative at the time of delivery and found to be acceptable and free from any operational/visual defects.
- A copy of Owner's manual contains warranty certificate and a tool kit was given to me along with motorcycle at the time of delivery.
- I understand that my warranty claims if any, will be considered by the manufacturer in accordance with the specified scope and limit of the warranty.

Place:

Date:

Customer Signature

Date of sale:

Customer name:

Dealer Name & Address:

Address:

(To be retained by selling dealer)

